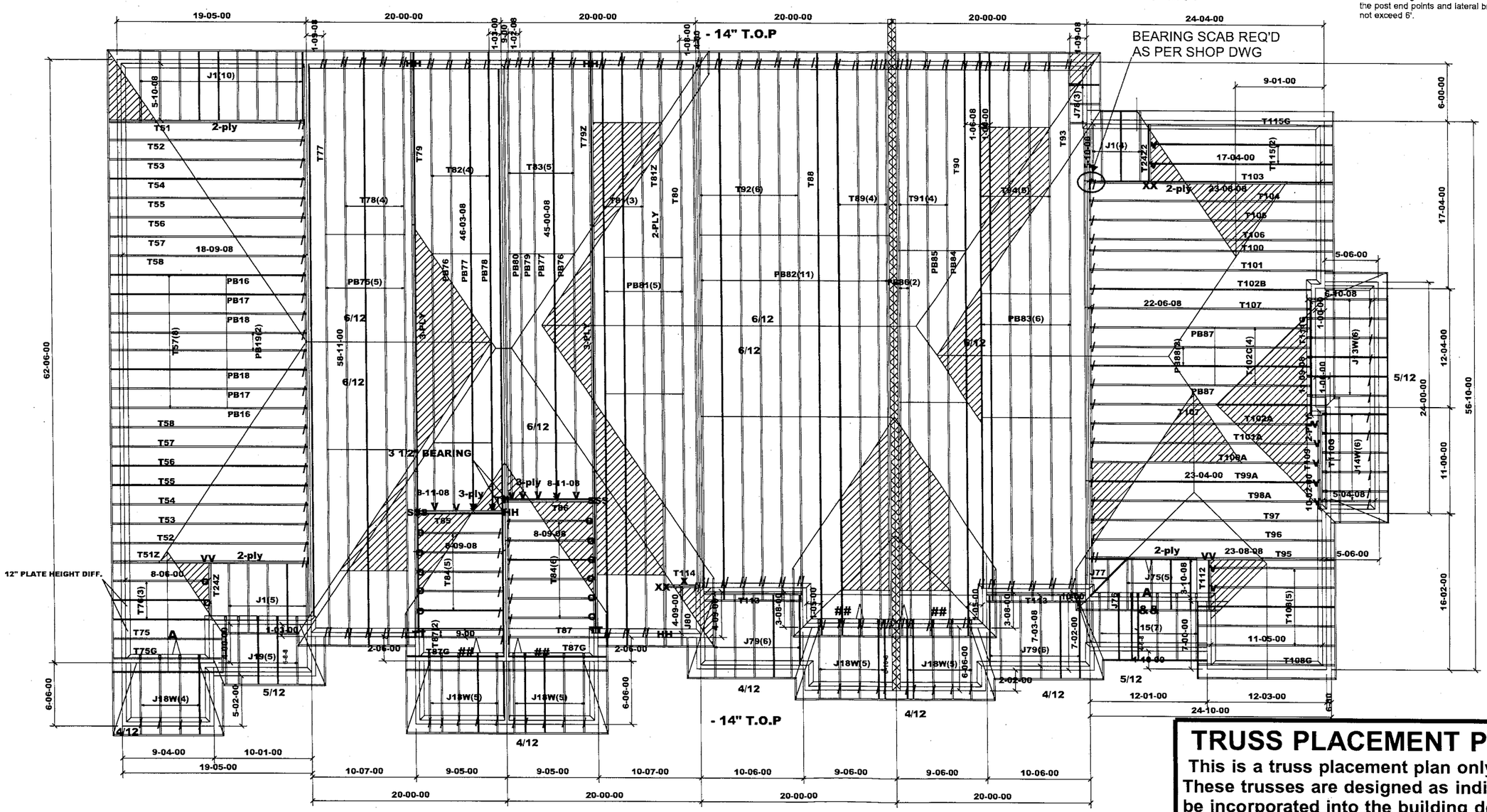
TH-7	TH-8	TH-9	TH-10	FIRE WALL	TH-11	TH-12
CHERRY 3E	CHERRY 2	CHERRY 2	CHERRY 1		CHERRY 1	CHERRY 12
EL-1	EL-1	EL-1	EL-1		EL-1	EL-1
428364	428365	428366	428367		428368	428370

All conventional framing to conform with Part 9 of O.B.C. 2012 (2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.



ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 33.4 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 26.7 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

HARDWARE:
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
HGUS28-3-(SSS)
HGUS26- (X)
LUS26-2 (VV)
H2.5A- (/)
HTS16 -(T)
H8-(H)

DENOTES: CONVENTIONAL FRAMING

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

TRUSS PLACEMENT PLAN.

This is a truss placement plan only, NOT a final roof framing plan. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss drawings for each component identified on this placement plan.

Please verify that all dimensions match the dimensions found on the job. The Building designer is responsible for the temporary/ permanent bracing of the roof and floor system and its integration into the bracing of the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsability of the building designer unless otherwise noted in this plan. Building designer to review and aprove this plan to acertain comformity to his overall structural plan.

9/12 ROOF PITCH UNLESS NOTED OTHERWISE

A- 12" RAISED PLATE AND CEILING

1-8-0 RAISE PLATE AND CEILING

&& 1-8-0 RAISED FASCIA

NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.

E22085242 - E22085252
E22085254 - E22085269
E22085276 - E22085330
E22085342 - E22085350

M15084

TAMARACK ROOF TRUSSES INC.

Job Track: 52956	Builder / Location: GREEN PARK HOMES / CAMBRIDGE	Model / Elevation: BLOCK 121 (CHERRY) / TH-7 ~ TH-12 (EL.1)	Mitek ver 8.5.3.233
Layout ID: 428334	Project: BARLASSINA		
Plan Log: 206513	Date: 2022-08-04 Designer: YPG		

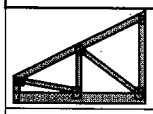
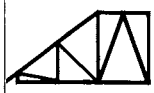
THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428364
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-7 (CHERRY 3E,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

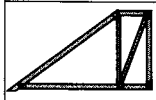
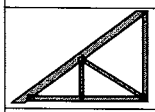
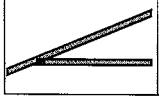
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T24Z Jack-Closed Girder	6 /12	**5-10-08**	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.64 37.00		
	1 2-ply	T51 Half Hip Girder	9 /12	**18-09-08**	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	177.93 112.00		
	1 2-ply	T51Z Half Hip Girder	9 /12	**18-09-08**	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	177.93 112.00		
	2	T52 Half Hip	9 /12	**18-09-08**	5-01-04	2 x 4	1-03-08	1-06-04 5-01-04	153.85 98.33		
	2	T53 Half Hip	9 /12	**18-09-08**	6-01-04	2 x 4	1-03-08	1-06-04 6-01-04	166.98 106.67		
	2	T54 Half Hip	9 /12	**18-09-08**	7-01-04	2 x 4	1-03-08	1-06-04 7-01-04	176.84 113.33		
	2	T55 Half Hip	9 /12	**18-09-08**	8-01-04	2 x 4	1-03-08	1-06-04 8-01-04	191.55 121.67		
	2	T56 Half Hip	9 /12	**18-09-08**	9-01-04	2 x 4	1-03-08	1-06-04 9-01-04	202.89 127.00		
	10	T57 Half Hip	9 /12	**18-09-08**	10-01-04	2 x 4	1-03-08	1-06-04 10-01-04	1062.03 670.00		
	2	T58 Half Hip	9 /12	**18-09-08**	11-01-04	2 x 4	1-03-08	1-06-04 11-01-04	208.02 128.67		
	1	T75 Common	9 /12	**8-06-00**	4-06-04	2 x 4	1-03-08 1-03-08	6-04 6-04	29.36 20.00		
	1	T75G GABLE	9 /12	**8-06-00**	4-06-04	2 x 4	1-03-08 1-03-08	6-04 6-04	31.13 20.67		
	3	T76 Common	9 /12	**8-06-00**	4-08-08	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	114.84 77.50		
	2	PB16 Piggyback	9 /12	**8-02-13**	2-08-00	2 x 4		2-08-00	53.17 33.67		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428364
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	2 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-7 (CHERRY 3E,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	PB17 Piggyback	9 /12	**8-02-13**	3-08-00	2 x 4		3-08-00	57.01 37.33		
	2	PB18 Piggyback	9 /12	**8-02-13**	4-08-00	2 x 4		4-08-00	61.89 39.67		
	2	PB19 Piggyback	9 /12	**8-02-13**	5-08-00	2 x 6 2 x 4		5-08-00	74.76 46.67		
	15	J1 Jack-Open	6 /12	**5-10-08**	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	251.92 160.00		
	4	J18W Jack-Open	4 /12	**6-10-08**	3-00-06	2 x 4	1-03-08	3-15 2-07-07	78.76 48.67		
	5	J19 Jack-Open	5 /12	**5-08-08**	3-02-13	2 x 4	1-03-08	4-01 2-08-09	76.47 46.67		

TOTAL # TRUSS= **65** TOTAL BFT OF ALL TRUSSES= **2157.52** BFT. TOTAL WEIGHT OF ALL TRSSES **3404.98** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
32	Hardware	H2.5A	
2	Hardware	LUS24	
1	Hardware	LUS26-2	

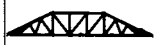
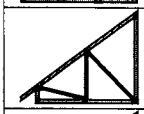
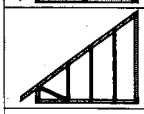
TOTAL NUMBER OF ITEMS= **35**

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428365
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-8 (CHERRY 2,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T77 Piggyback Base	6 /12	**58-11-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	388.95 236.33		
	4	T78 Piggyback Base	6 /12	**58-11-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1598.57 970.67		
	1 3-ply	T79 Hip Girder	6 /12	**58-11-00**	9-05-14	2 x 6 2 x 8	1-03-08 1-03-08	1-02-00 1-02-00	1371.41 812.00		
	4	T82 Hip	6 /12	**46-03-08**	10-11-14	2 x 6	1-03-08	1-02-00 7-05-12	1311.23 782.67		
	5	T84 Jack-Closed	9 /12	**8-09-08**	9-09-06	2 x 4		3-02-04 9-09-06	254.62 160.83		
	1 3-ply	T85 Flat Girder	0 /12	**8-11-08**	7-03-08	2 x 6		7-03-08 7-03-08	246.32 154.50		
	2	T87 Monopitch	9 /12	**8-09-08**	8-01-06	2 x 4	1-03-08	1-06-04 8-01-06	91.92 58.67		
	1	T87G GABLE	9 /12	**8-09-08**	8-01-06	2 x 4	1-03-08	1-06-04 8-01-06	47.61 30.83		
	5	PB75 Piggyback	6 /12	**22-04-00**	5-07-00	2 x 4			329.86 201.67		
	1	PB76 Piggyback	6 /12	**19-07-08**	1-06-00	2 x 4			55.92 35.17		
	1	PB77 Piggyback	6 /12	**19-07-08**	3-00-00	2 x 4			56.54 36.17		
	1	PB78 Piggyback	6 /12	**19-07-08**	4-06-00	2 x 4			64.27 41.00		
	5	J18W Jack-Open	4 /12	**6-10-08**	3-00-06	2 x 4	1-03-08	3-15 2-07-07	98.45 60.83		

TOTAL # TRUSS= **36** TOTAL BFT OF ALL TRUSSES= **3581.34** BFT. TOTAL WEIGHT OF ALL TRSSES **5915.69** LBS

DELIVERY SHIPLIST

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428365
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	2 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-8 (CHERRY 2,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

HARDWARE

QTY	TYPE	MODEL	LENGTH
5	Hardware	LUS24	
40	Hardware	H2.5A	
4	Hardware	H8	
1	Hardware	HGUS28-3	
2		HTS16	
4	Hardware	LJS26DS	

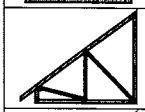
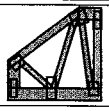
TOTAL NUMBER OF ITEMS= **56**

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428366
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-9 (CHERRY 2,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

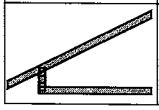
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 3-ply	T79Z Hip Girder	6 /12	**58-11-00**	9-05-14	2 x 6 2 x 8	1-03-08 1-03-08	1-02-00 1-02-00	1371.41 812.00		
	1	T80 Piggyback Base	6 /12	**53-11-00**	10-00-00	2 x 6	1-03-08	1-02-00 2-08-02	353.69 216.83		
	3	T81 Piggyback Base	6 /12	**58-11-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1186.35 737.00		
	1 2-ply	T81Z Piggyback Base Girder	6 /12	**58-11-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	790.9 491.33		
	5	T83 Hip	6 /12	**45-00-08**	10-11-14	2 x 6	1-03-08	1-02-00 8-01-04	1627.02 975.00		
	6	T84 Jack-Closed	9 /12	**8-09-08**	9-09-06	2 x 4		3-02-04 9-09-06	305.55 193.00		
	1 3-ply	T86 Flat Girder	0 /12	**8-11-08**	7-11-00	2 x 6		7-11-00 7-11-00	260.37 159.00		
	1	T87 Monopitch	9 /12	**8-09-08**	8-01-06	2 x 4	1-03-08	1-06-04 8-01-06	45.96 29.33		
	1	T87G GABLE	9 /12	**8-09-08**	8-01-06	2 x 4	1-03-08	1-06-04 8-01-06	47.61 30.83		
	1 2-ply	T114 Half Hip Girder	9 /12	**3-06-08**	3-06-08	2 x 4 2 x 6		1-06-04 3-06-08	45.3 31.33		
	1	PB76 Piggyback	6 /12	**19-07-08**	1-06-00	2 x 4			55.92 35.17		
	1	PB77 Piggyback	6 /12	**19-07-08**	3-00-00	2 x 4			56.54 36.17		
	1	PB79 Piggyback	6 /12	**19-07-08**	4-00-12	2 x 4			62.56 40.50		
	1	PB80 Piggyback	6 /12	**19-07-08**	4-10-14	2 x 4			57.44 35.67		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428366
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	2 of 2
Lot #:		Date:	08-16-2022
Elevation:	TH-9 (CHERRY 2,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	5	**PB81 Piggyback**	6 /12	**14-02-00**	3-06-08	2 x 4			171.29 104.17		
	5	**J18W Jack-Open**	4 /12	**6-10-08**	3-00-06	2 x 4	1-03-08	3-15 2-07-07	98.45 60.83		
	**1**	**J80 Jack-Open**	6 /12	**4-09-00**	3-06-08	2 x 4	1-03-08	1-02-00 3-06-08	14.08 8.67		

TOTAL # TRUSS= **42** TOTAL BFT OF ALL TRUSSES= **3996.83** BFT. TOTAL WEIGHT OF ALL TRSSES **6550.46** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
40	Hardware	H2.5A	
4	Hardware	H8	
1	Hardware	HGUS28-3	
4		HTS16	
5	Hardware	LJS26DS	
6	Hardware	LUS24	
1	Hardware	HGUS26	

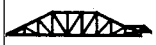
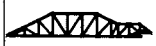
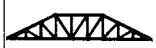
TOTAL NUMBER OF ITEMS= **61**

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428367
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 1
Lot #:		Date:	08-16-2022
Elevation:	TH-10 (CHERRY 1,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T88 Piggyback Base	6 /12	**57-10-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	400.75 245.00		
	4	T89 Piggyback Base	6 /12	**57-10-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1639.64 988.00		
	6	T92 Piggyback Base	6 /12	**54-02-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	2192.17 1312.00		
	1	T113 Half Hip Girder	12 /12	**10-00-00**	2-09-02	2 x 4 2 x 6		1-08-12 2-09-02	50.76 33.00		
	11	PB82 Piggyback	6 /12	**18-10-00**	4-08-08	2 x 4			604.47 374.00		
	5	J18W Jack-Open	4 /12	**6-10-08**	3-00-06	2 x 4	1-03-08	3-15 2-07-07	98.45 60.83		
	6	J79 Jack-Open	4 /12	**7-03-08**	3-02-00	2 x 4	1-03-08	3-15 2-09-02	129.22 84.00		

TOTAL # TRUSS= **34** TOTAL BFT OF ALL TRUSSES= **3096.83** BFT. TOTAL WEIGHT OF ALL TRSSES **5115.47** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
50	Hardware	H2.5A	

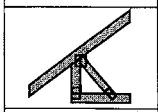
TOTAL NUMBER OF ITEMS= **50**

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428368
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 1
Lot #:		Date:	08-16-2022
Elevation:	TH-11 (CHERRY 1,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T90 Roof Special	6 /12	**57-10-00**	10-09-04	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	404.53 244.33		
	4	T91 Piggyback Base	6 /12	**57-10-00**	10-11-02	2 x 6	1-03-08 1-03-08	1-02-00 1-06-04	1613.12 961.33		
	1	T93 Piggyback Base Girder	6 /12	**54-02-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	367.04 222.67		
	5	T94 Piggyback Base	6 /12	**54-02-00**	10-00-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1805.23 1096.67		
	1	T113 Half Hip Girder	12 /12	**10-00-00**	2-09-02	2 x 4 2 x 6		1-08-12 2-09-02	50.76 33.00		
	6	PB83 Piggyback	6 /12	**12-10-00**	3-02-08	2 x 4			184.59 117.00		
	1	PB84 Piggyback	6 /12	**15-09-00**	1-06-00	2 x 4			43.96 27.83		
	1	PB85 Piggyback	6 /12	**15-09-00**	3-00-00	2 x 4			42.33 26.83		
	2	PB86 Piggyback	6 /12	**15-09-00**	3-11-04	2 x 4			76.81 46.67		
	5	J18W Jack-Open	4 /12	**6-10-08**	3-00-06	2 x 4	1-03-08	3-15 2-07-07	98.45 60.83		
	3	J78 Jack-Open	9 /12	**1-09-08**	2-10-06	2 x 4	1-03-08	1-06-04 2-10-06	27.43 21.00		
	6	J79 Jack-Open	4 /12	**7-03-08**	3-02-00	2 x 4	1-03-08	3-15 2-09-02	129.22 84.00		

TOTAL # TRUSS= **36** TOTAL BFT OF ALL TRUSSES= **2942.16** BFT. TOTAL WEIGHT OF ALL TRSSES **4843.48** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
50	Hardware	H2.5A	

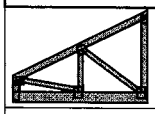
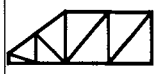
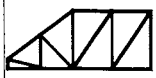
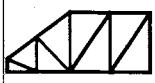
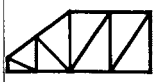
TOTAL NUMBER OF ITEMS= **50**

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428370
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	1 of 3
Lot #:		Date:	08-16-2022
Elevation:	TH-12 (CHERRY 12,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

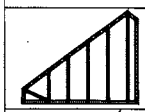
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T24Z2 Jack-Closed Girder	6 /12	**5-10-08**	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.64 37.00		
	1 2-ply	T95 Hip Girder	9 /12	**23-08-08**	6-01-02	2 x 4 2 x 6	1-03-08	1-06-04 2-04-02	248.85 157.33		
	1	T96 Hip	9 /12	**23-08-08**	7-07-02	2 x 4	1-03-08	1-06-04 3-04-02	111.74 71.33		
	1	T97 Hip	9 /12	**23-08-08**	9-01-02	2 x 4		1-06-04 3-04-02	115.57 71.50		
	1	T98A Hip	9 /12	**23-04-00**	10-07-02	2 x 4		1-09-10 3-04-02	129.77 81.83		
	1	T99A Common	9 /12	**23-04-00**	11-03-14	2 x 4		1-09-10 3-04-02	110.24 69.33		
	1	T100 Half Hip	9 /12	**23-08-08**	7-08-04	2 x 4	1-03-08	1-06-04 7-08-04	117.41 75.00		
	1	T100A Half Hip	9 /12	**23-04-00**	7-08-04	2 x 4		1-09-10 7-08-04	114.72 73.67		
	1	T101 Half Hip	9 /12	**23-08-08**	8-08-04	2 x 4	1-03-08	1-06-04 8-08-04	119.37 74.83		
	1	T101A Half Hip	9 /12	**23-04-00**	8-08-04	2 x 4		1-09-10 8-08-04	116.66 73.50		
	1	T102A Half Hip	9 /12	**23-04-00**	9-08-04	2 x 4		1-09-10 9-08-04	122.56 76.67		
	1	T102B Half Hip	9 /12	**22-08-08**	9-08-04	2 x 4		2-03-04 9-08-04	121.14 74.83		
	4	T102C Piggyback Base	9 /12	**22-06-08**	9-08-04	2 x 4		2-04-12 9-08-04	483.08 299.33		
	1 2-ply	T103 Half Hip Girder	9 /12	**23-08-08**	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	225.23 139.67		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428370
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	2 of 3
Lot #:		Date:	08-16-2022
Elevation:	TH-12 (CHERRY 12,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

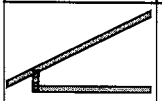
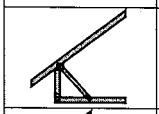
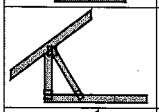
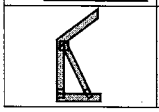
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T104 Half Hip	9 /12	**23-08-08**	5-01-04	2 x 4	1-03-08	1-06-04 5-01-04	97.08 60.67		
	1	T105 Half Hip	9 /12	**23-08-08**	6-01-04	2 x 4	1-03-08	1-06-04 6-01-04	105.08 66.00		
	1	T106 Half Hip	9 /12	**23-08-08**	7-01-04	2 x 4	1-03-08	1-06-04 7-01-04	111.49 71.33		
	2	T107 Half Hip	9 /12	**22-06-08**	10-08-04	2 x 4		2-04-12 10-08-04	267.33 167.33		
	5	T108 Common	9 /12	**11-05-00**	5-09-10	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	244.83 158.33		
	1	T108G GABLE	9 /12	**11-05-00**	5-09-10	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	52.6 34.67		
	1 2-ply	T109 Common Girder	9 /12	**10-02-00**	5-04-00	2 x 4 2 x 6		1-06-04 1-06-04	96.34 65.67		
	1	T110G GABLE	9 /12	**10-02-00**	5-04-00	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	46.81 32.50		
	1	T111G GABLE	9 /12	**11-09-08**	9-07-00	2 x 4		1-06-04 8-09-10	68.03 44.00		
	1 2-ply	T112 Jack-Closed Girder	9 /12	**3-10-08**	6-01-02	2 x 4 2 x 6	1-03-08	3-02-04 6-01-02	53.84 34.33		
	2	T115 Common	9 /12	**17-04-00**	8-00-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	161.32 102.00		
	1	T115G GABLE	9 /12	**17-04-00**	8-00-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	82.93 53.00		
	2	PB87 Piggyback	9 /12	**12-09-13**	2-00-00	2 x 4		2-00-00	81.48 54.00		
	2	PB88 Piggyback	9 /12	**12-09-13**	3-00-00	2 x 4		3-00-00	87.02 56.00		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52956
Builder:	GREEN PARK HOMES	PlanLog:	206513
Project:	BARLASSINA	Layout ID:	428370
Location:	CAMBRIDGE	Ref #	
Model:	BLOCK 121 (CHERRY)	Page:	3 of 3
Lot #:		Date:	08-16-2022
Elevation:	TH-12 (CHERRY 12,EL-1)	Designer:	
		Sales Rep:	Rick DiCiano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	4	J1 Jack-Open	6 /12	**5-10-08**	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	67.18 42.67		
	6	J13W Jack-Open	5 /12	**6-10-08**	3-08-10	2 x 4	1-03-08	5-06 3-03-12	126.93 77.00		
	6	J14W Jack-Open	5 /12	**5-04-08**	3-01-02	2 x 4	1-03-08	5-06 2-08-04	91.81 60.00		
	7	J15 Jack-Open	5 /12	**5-06-08**	3-01-15	2 x 4	1-03-08	5-06 2-09-01	109.88 70.00		
	5	J75 Jack-Open	9 /12	**3-10-08**	5-01-02	2 x 4	1-03-08	2-02-04 5-01-02	80.09 50.83		
	1	J76 Jack-Open	9 /12	**1-09-07**	3-06-05	2 x 4	1-03-08 2-01-01	2-02-04 3-06-05	12.77 8.83		
	1	J77 Jack-Open	9 /12	**1-08-00**	3-06-05	2 x 4		2-04-02 3-07-02	8.35 6.17		

TOTAL # TRUSS= **74** TOTAL BFT OF ALL TRUSSES= **2691.15** BFT. TOTAL WEIGHT OF ALL TRSSES **4247.16** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
35	Hardware	H2.5A	
1	Hardware	HGUS26-2	
9	Hardware	LJS26DS	
1	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= **46**

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T24Z		2	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085276

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MiTek Industries, Inc. Thu Aug 11 08:45:48 2022 Page 1
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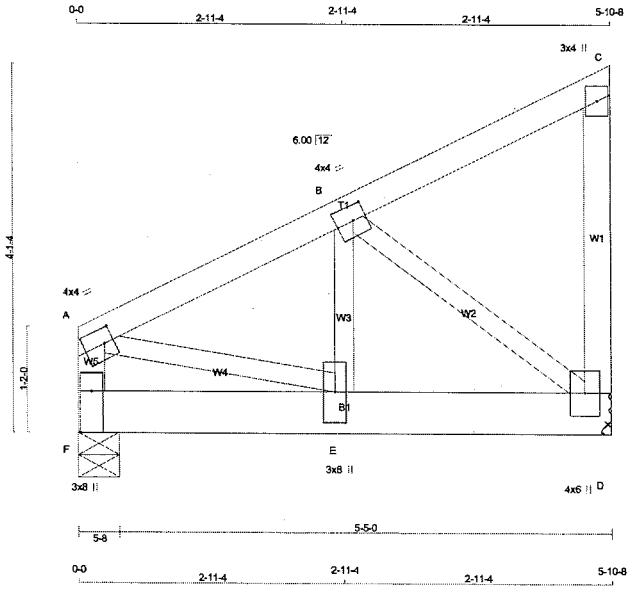

TOTAL WEIGHT = 2 X 29 = 58 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	12	SIDE(92.4)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-t	MT20	4.0	4.0	2.00	1.25
B	TMWW-t	MT20	4.0	4.0	2.00	1.75
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW+t	MT20	3.0	8.0		
F	BMV1+p	MT20	3.0	8.0	Edge	1.50

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	877	0	877	0	0	IN-SX	IN-SX
D	877	0	877	0	0	5-8	1-8
						MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	619	412 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0
D	619	412 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
F- A	-621 / 0	0.0	0.0	0.03 (1)	7.81
A- B	-735 / 0	-95.2	-95.2	0.07 (1)	6.25
B- C	-13 / 0	-95.2	-95.2	0.07 (1)	6.25
D- C	-110 / 0	0.0	0.0	0.01 (1)	7.81
F- E	0 / 0	-203.3	-203.3	0.06 (1)	10.00
E- D	0 / 669	-203.3	-203.3	0.10 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 692	0.09 (1)
E- B	0 / 507	0.06 (1)
B- D	-842 / 0	0.10 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 8-6-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 8-6-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.07/1.00 (A-B:1) , BC=0.10/1.00 (D-E:1) , WB=0.10/1.00 (B-D:1) , SSI=0.11/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (A) (INPUT = 0.90)
JSI METAL= 0.20 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T24Z2		2	TRUSS DESC.	JT 53080	E22085277

Alpa Roof Truss, Maple

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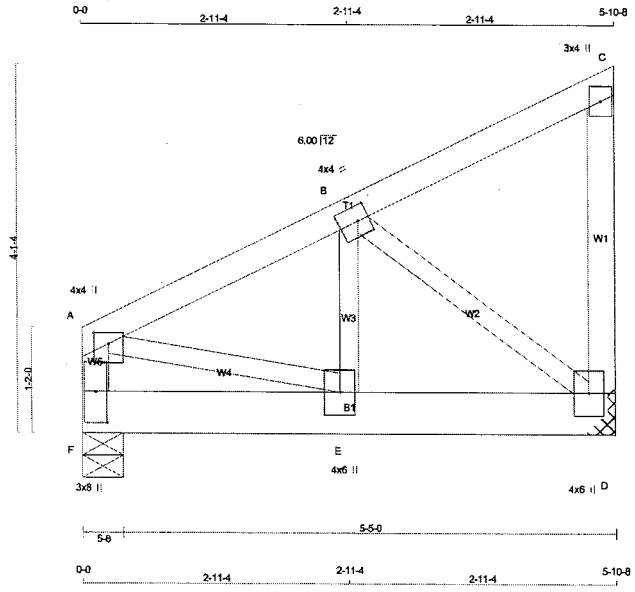


TOTAL WEIGHT = 2 X 29 = 58 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	12	SIDE(217.9)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

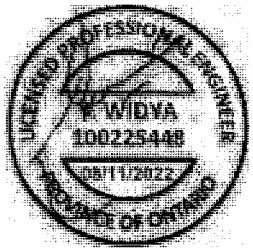
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	4.0	1.50	2.00
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW+t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	8.0	4.25	1.50

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	1614	0	1614	0	0	5-8	1-8
D	1614	0	1614	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1140	759 / 0	0 / 0	0 / 0	0 / 0	381 / 0	0 / 0
D	1140	759 / 0	0 / 0	0 / 0	0 / 0	381 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-1053 / 0	0.0	0.0	0.06 (1)	7.81
A- B	-1363 / 0	-95.2	-95.2	0.06 (1)	6.25
B- C	-11 / 0	-95.2	-95.2	0.06 (1)	6.25
D- C	-115 / 0	0.0	0.0	0.01 (1)	7.81
F- E	0 / 0	-454.4	-454.4	0.13 (1)	10.00
E- D	0 / 1229	-454.4	-454.4	0.21 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 1271	0.18 (1)
E- B	0 / 1223	0.15 (1)
B- D	-1546 / 0	0.18 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 17-4-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 17-4-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.06/1.00 (A-B:1) , BC=0.21/1.00 (D-E:1) , WB=0.18/1.00 (B-D:1) , SSI=0.26/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (A) (INPUT = 0.90)
JSI METAL= 0.28 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T51		2	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085278

Alpa Roof Truss, Maple

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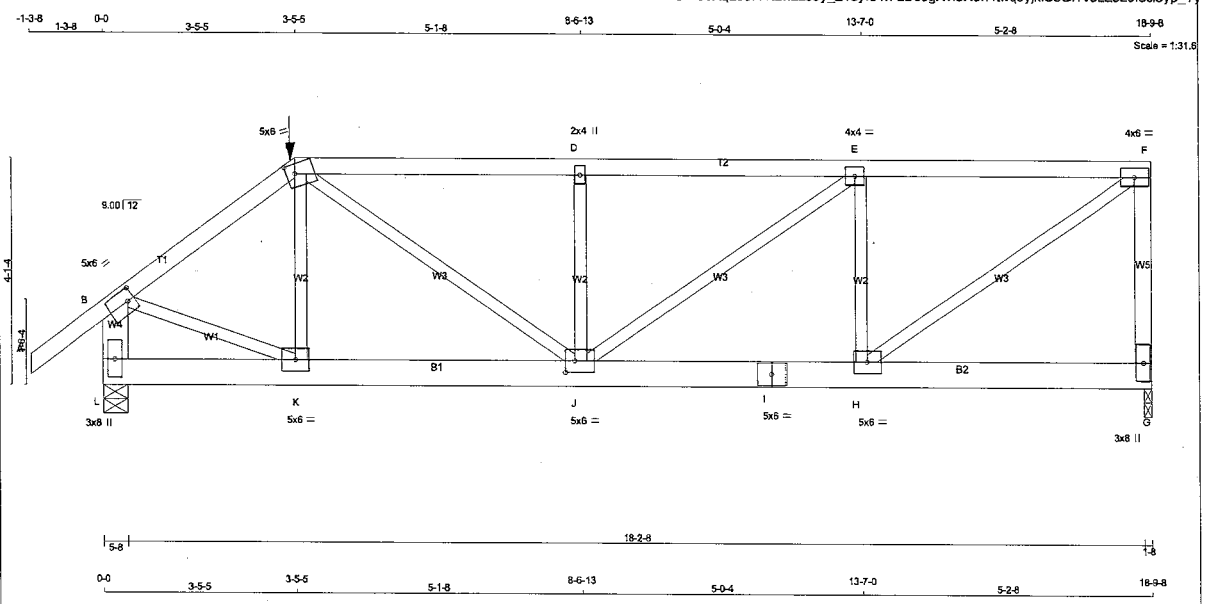

TOTAL WEIGHT = 2 X 89 = 178 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
L - I	2x6	DRY	No.2	SPF
I - G	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-C	1	12	SIDE(61.0)
C-F	1	12	SIDE(46.1)
F-G	1	12	TOP
L-B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
L-I	2	12	SIDE(10.0)
I-G	2	12	SIDE(10.0)
WEBS : (0.122"X3") SPIRAL NAILS			
K-C	1	6	SIDE(16.3)
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	2.50	1.50
C	TTWW-m	MT20	5.0	6.0	2.00	1.75
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	8.0		
H	BMWW-t	MT20	5.0	6.0		
I	BS-t	MT20	5.0	6.0		
J	BMWWW-t	MT20	5.0	6.0	2.50	2.00
K	BMWW-t	MT20	5.0	6.0		
L	BMV1+p	MT20	3.0	8.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	2118	0	2118	0	0	1-8	1-8
L	2141	0	2141	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	1495	997 / 0	0 / 0	0 / 0	0 / 0	498 / 0	0 / 0
L	1511	1010 / 0	0 / 0	0 / 0	0 / 0	501 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, L

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH
FR-TO		FROM	TO		
A- B	0 / 39	-95.2	-95.2	0.07 (1)	10.00
B- C	-2116 / 0	-95.2	-95.2	0.13 (1)	5.96
C- D	-2780 / 0	-187.4	-187.4	0.40 (1)	5.00
D- E	-2780 / 0	-187.4	-187.4	0.41 (1)	4.97
E- F	-2281 / 0	-187.4	-187.4	0.40 (1)	5.38
G- F	-2030 / 0	0.0	0.0	0.25 (1)	7.74
L- B	-2098 / 0	0.0	0.0	0.08 (1)	7.81
L- K	0 / 0	-36.4	-36.4	0.04 (4)	10.00
K- J	0 / 1679	-36.4	-36.4	0.15 (1)	10.00
J- I	0 / 2281	-36.4	-36.4	0.19 (1)	10.00
I- H	0 / 2281	-36.4	-36.4	0.19 (1)	10.00
H- G	0 / 0	-36.4	-36.4	0.05 (4)	10.00

WEBS

MEMB.	FORCE (LBS)	MAX CSI (LC)
K- C	-327 / 26	0.04 (1)
B- K	0 / 1769	0.22 (1)
H- F	0 / 2805	0.35 (1)
C- J	0 / 1360	0.17 (1)
H- E	-1426 / 0	0.18 (1)
J- D	-1024 / 0	0.13 (1)
J- E	0 / 622	0.08 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-5-5	-239	-239	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-5-5
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.41/1.00 (D-E:1) , BC=0.19/1.00 (H-J:1) , WB=0.35/1.00 (F-H:1) , SSI=0.25/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (F) (INPUT = 0.90)
JSI METAL= 0.31 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T51Z		2	TRUSS DESC.	JT 53080	E22085279

Alpa Roof Truss, Maple

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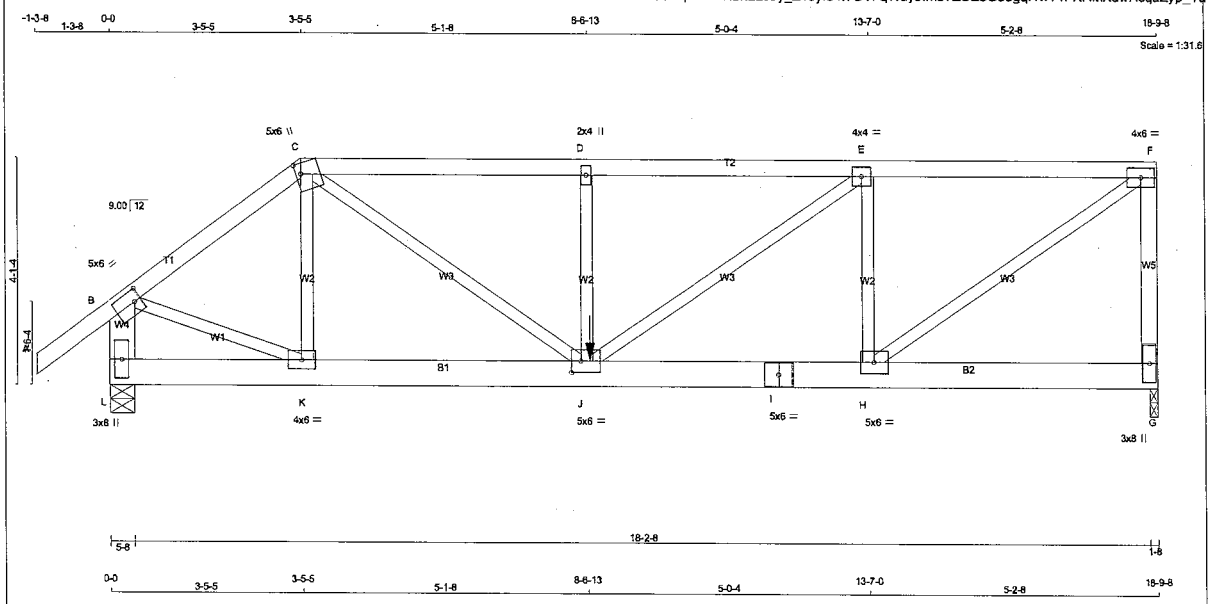

TOTAL WEIGHT = 2 X 89 = 178 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
L - I	2x6	DRY	No.2	SPF
I - G	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	TOP
C- F	1	12	SIDE(46.1)
F- G	1	12	TOP
L- B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
L- I	2	12	SIDE(174.2)
I- G	2	12	SIDE(10.0)
WEBS : (0.122"X3") SPIRAL NAILS			
J- D	1	6	SIDE(54.6)
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	5.0	6.0	2.50	1.50
C	TTWW+m	MT20	5.0	6.0	2.25	1.00
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	8.0		
H	BMWW-t	MT20	5.0	6.0		
I	BS-t	MT20	5.0	6.0		
J	BMWWW-t	MT20	5.0	6.0	2.50	2.00
K	BMWW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	8.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
H. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REORD BRG IN-SX
G	2288	0	2288	0	0	1-8	1-8
L	1983	0	1983	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	1515	1076 / 0	0 / 0	0 / 0	0 / 0	539 / 0	0 / 0
L	1398	945 / 0	0 / 0	0 / 0	0 / 0	453 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, L

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.54 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
A- B	0 / 39	-95.2	-95.2	0.07 (1)	10.00	K- C	-356 / 0	0.05 (1)
B- C	-1966 / 0	-95.2	-95.2	0.12 (1)	6.12	B- K	0 / 1644	0.20 (1)
C- D	-3184 / 0	-95.2	-95.2	0.27 (1)	4.92	H- F	0 / 3112	0.39 (1)
D- E	-3185 / 0	-187.4	-187.4	0.46 (1)	4.64	C- J	0 / 2007	0.25 (1)
E- F	-2530 / 0	-187.4	-187.4	0.44 (1)	5.11	H- E	-1590 / 0	0.20 (1)
G- F	-2201 / 0	0.0	0.0	0.27 (1)	7.51	J- D	-712 / 0	0.09 (1)
L- B	-1971 / 0	0.0	0.0	0.07 (1)	7.81	J- E	0 / 815	0.10 (1)
L- K	0 / 0	-18.5	-18.5	0.03 (1)	10.00			
K- J	0 / 1559	-18.5	-18.5	0.14 (1)	10.00			
J- I	0 / 2530	-36.4	-36.4	0.22 (1)	10.00			
I- H	0 / 2530	-36.4	-36.4	0.22 (1)	10.00			
H- G	0 / 0	-36.4	-36.4	0.05 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
J	8-7-8	-877	-877	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-5-5
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 10-2-0 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.46/1.00 (D-E:1) , BC=0.22/1.00 (H-J:1) , WB=0.39/1.00 (F-H:1) , SSI=0.25/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.34 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T52		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085280

Alpa Roof Truss, Maple

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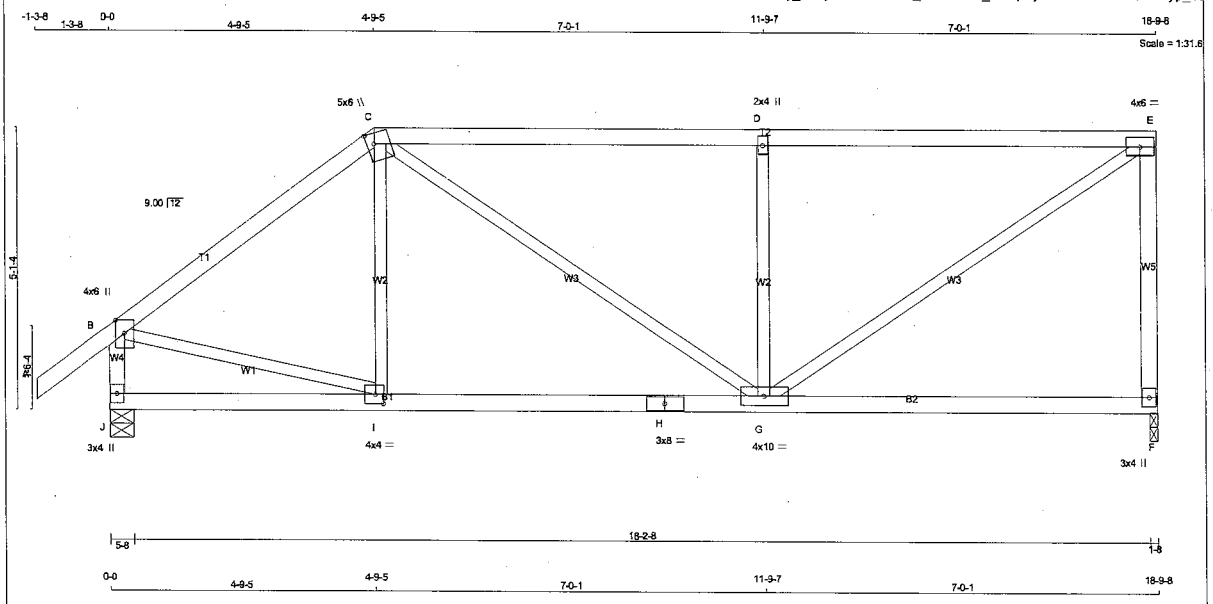


TOTAL WEIGHT = 2 X 77 = 154 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

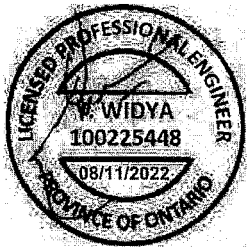
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge	
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW-t	MT20	4.0	10.0		
H	BS-t	MT20	3.0	8.0		
I	BMWW-t	MT20	4.0	4.0	2.00	1.75
J	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	1068	0	1068	0	0	1-8	1-8
J	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
J	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1013 / 0	-95.2	-95.2	0.41 (1)	5.65
C- D	-1113 / 0	-95.2	-95.2	0.89 (1)	4.26
D- E	-1113 / 0	-95.2	-95.2	0.89 (1)	4.26
F- E	-1015 / 0	0.0	0.0	0.45 (1)	7.77
J- B	-1166 / 0	0.0	0.0	0.12 (1)	7.39
J- I	0 / 0	-18.5	-18.5	0.13 (4)	10.00
I- H	0 / 807	-18.5	-18.5	0.29 (4)	10.00
H- G	0 / 807	-18.5	-18.5	0.29 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.22 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
I- C	-81 / 61	0.03 (1)
C- G	0 / 372	0.08 (1)
G- D	-827 / 0	0.32 (1)
G- E	0 / 1348	0.30 (1)
B- I	0 / 833	0.19 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.89/1.00 (D-E:1) , BC=0.29/1.00 (G-I:4) , WB=0.32/1.00 (D-G:1) , SSI=0.32/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (B) (INPUT = 0.90)
JSI METAL= 0.54 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T53		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085281

Alpa Roof Truss, Maple

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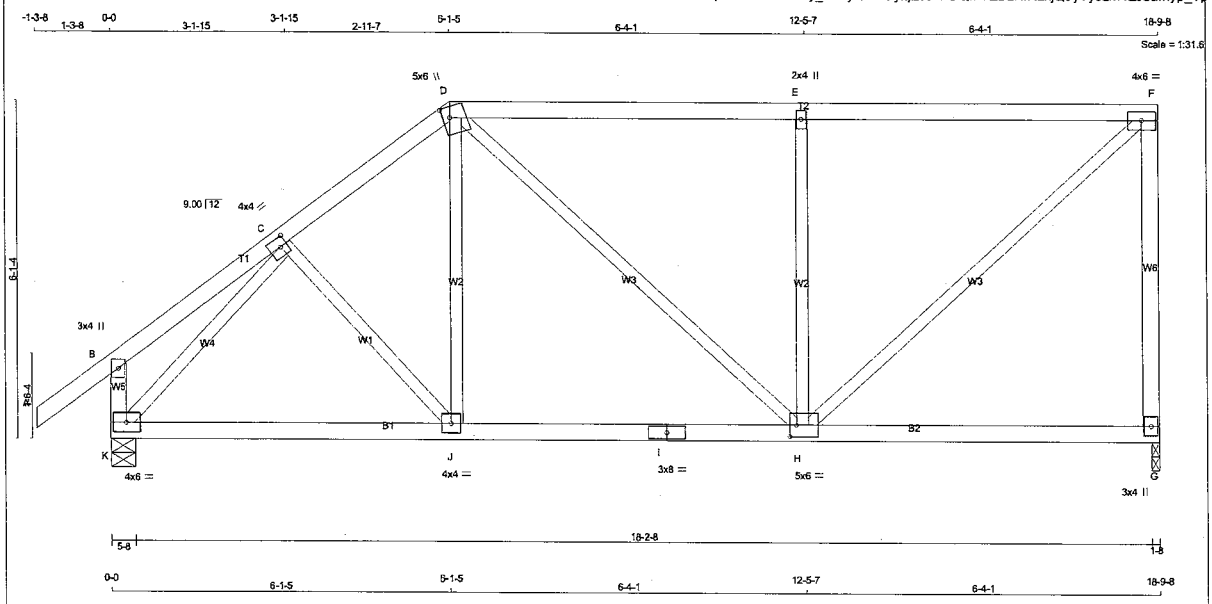

TOTAL WEIGHT = 2 X 83 = 167 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWWW-t	MT20	5.0	6.0	2.50	1.50
I	BS-t	MT20	3.0	6.0		
J	BMWW-t	MT20	4.0	4.0		
K	BMVW1-t	MT20	4.0	6.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
K. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1068	0	1068	0	0	1-8	1-8
K	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, K

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	0 / 19	-95.2	-95.2	0.13 (1)	10.00
C- D	-984 / 0	-95.2	-95.2	0.14 (1)	6.12
D- E	-866 / 0	-95.2	-95.2	0.69 (1)	5.32
E- F	-866 / 0	-95.2	-95.2	0.69 (1)	5.32
G- F	-1019 / 0	0.0	0.0	0.74 (1)	7.76
K- B	-245 / 0	0.0	0.0	0.03 (1)	7.81
K- J	0 / 795	-18.5	-18.5	0.22 (4)	10.00
J- I	0 / 773	-18.5	-18.5	0.23 (4)	10.00
I- H	0 / 773	-18.5	-18.5	0.23 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.17 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
C- J	-36 / 27	0.01 (1)
J- D	0 / 152	0.04 (4)
D- H	0 / 127	0.03 (1)
H- E	-748 / 0	0.44 (1)
H- F	0 / 1171	0.26 (1)
K- C	-1207 / 0	0.41 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.74/1.00 (F-G:1) , BC=0.23/1.00 (H-J:4) , WB=0.44/1.00 (E-H:1) , SSI=0.29/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.40 (C) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T54		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085282

Alpa Roof Truss, Maple

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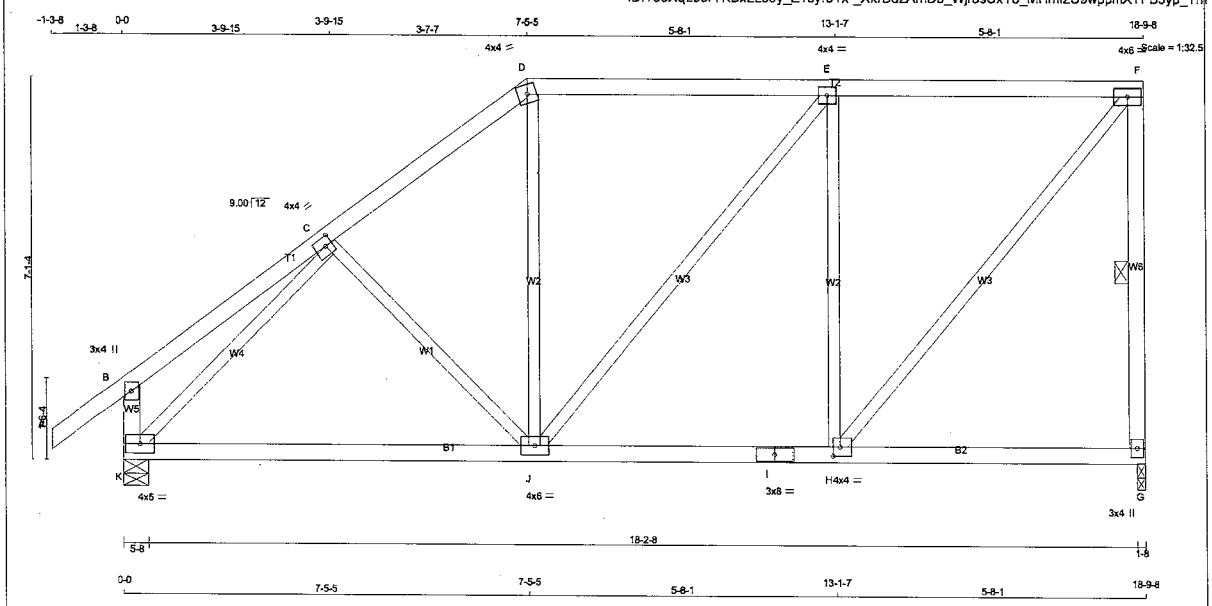

TOTAL WEIGHT = 2 X 88 = 177 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	4.0	4.0	2.00	1.50
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	4.0	6.0		
K	BMVW1-t	MT20	4.0	6.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
G	1068	0	1068	0	0	1-8	1-8
K	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, K

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	0 / 24	-95.2	-95.2	0.21 (1)	10.00
C- D	-923 / 0	-95.2	-95.2	0.22 (1)	6.15
D- E	-720 / 0	-95.2	-95.2	0.54 (1)	6.10
E- F	-685 / 0	-95.2	-95.2	0.54 (1)	6.21
G- F	-1023 / 0	0.0	0.0	0.23 (1)	6.20
K- B	-267 / 0	0.0	0.0	0.03 (1)	7.81
K- J	0 / 816	-18.5	-18.5	0.28 (4)	10.00
J- I	0 / 685	-18.5	-18.5	0.27 (4)	10.00
I- H	0 / 685	-18.5	-18.5	0.27 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- J	-142 / 2	0.07 (1)
J- D	0 / 199	0.04 (1)
J- E	0 / 56	0.01 (4)
H- E	-713 / 0	0.62 (1)
H- F	0 / 1066	0.24 (1)
K- C	-1196 / 0	0.57 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.54/1.00 (D-E:1) , BC=0.28/1.00 (J-K:4) , WB=0.62/1.00 (E-H:1) , SSI=0.26/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	768	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (H) (INPUT = 0.90)
JSI METAL= 0.40 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T55		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085283

Alpa Roof Truss, Maple

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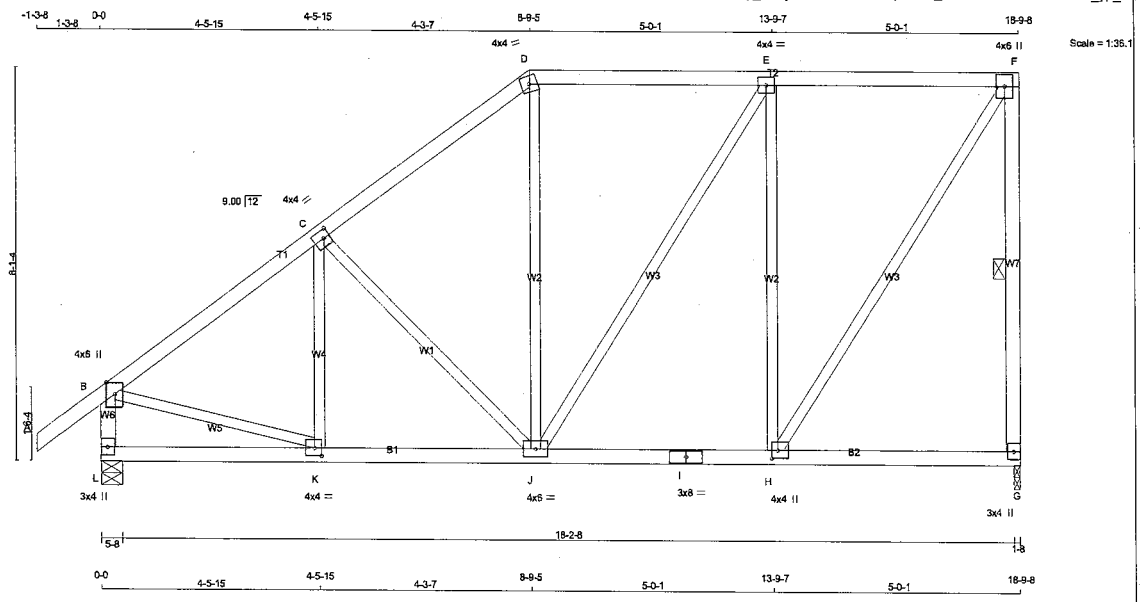


TOTAL WEIGHT = 2 X 96 = 192 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

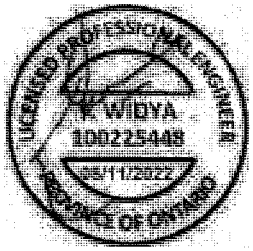
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW+p	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW+t	MT20	4.0	4.0	2.00	1.50
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	4.0	6.0		
K	BMWW-t	MT20	4.0	4.0	2.00	1.75
L	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1068	0	1068	0	0	1-8	1-8
L	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
L	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, L

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.72 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1039 / 0	-95.2	-95.2	0.34 (1)	5.72
C- D	-833 / 0	-95.2	-95.2	0.32 (1)	6.21
D- E	-643 / 0	-95.2	-95.2	0.41 (1)	6.25
E- F	-547 / 0	-95.2	-95.2	0.41 (1)	6.25
G- F	-1030 / 0	0.0	0.0	0.31 (1)	6.18
L- B	-1164 / 0	0.0	0.0	0.12 (1)	7.39
L- K	0 / 0	-18.5	-18.5	0.08 (4)	10.00
K- J	0 / 855	-18.5	-18.5	0.18 (1)	10.00
J- I	0 / 547	-18.5	-18.5	0.16 (4)	10.00
I- H	0 / 547	-18.5	-18.5	0.16 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.11 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-137 / 28	0.05 (1)
C- J	-309 / 0	0.22 (1)
J- D	0 / 150	0.04 (4)
J- E	0 / 161	0.04 (1)
H- E	-742 / 0	0.94 (1)
H- F	0 / 1008	0.23 (1)
B- K	0 / 885	0.20 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.41/1.00 (D-E:1) , BC=0.18/1.00 (J-K:1) , WB=0.94/1.00 (E-H:1) , SSI=0.23/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (H) (INPUT = 0.90)
JSI METAL= 0.55 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T56		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085284

Alpa Roof Truss, Maple

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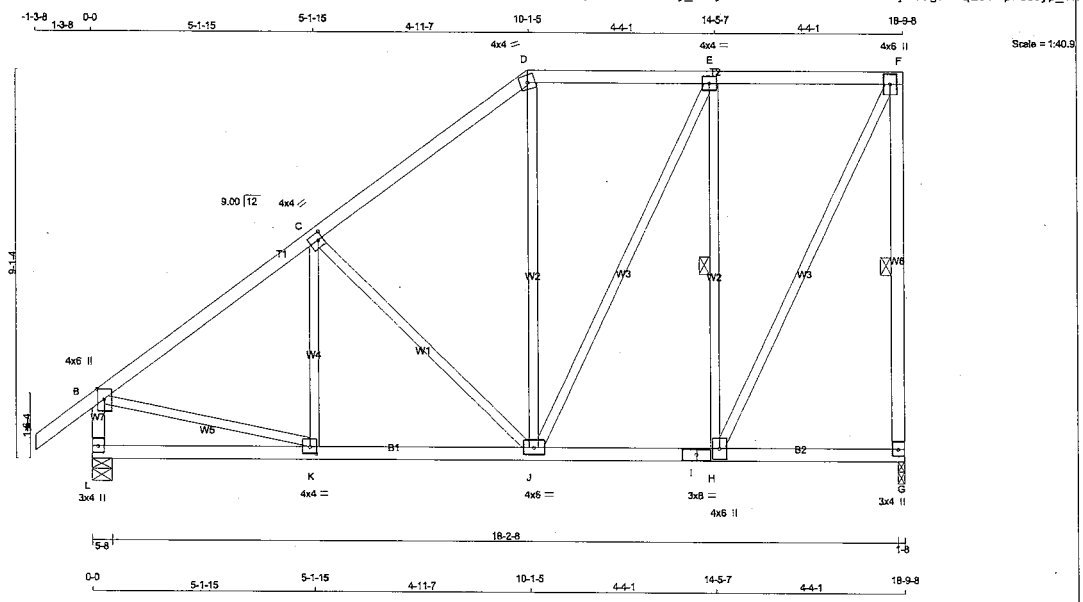

TOTAL WEIGHT = 2 X 101 = 203 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW+p	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW+t	MT20	4.0	6.0		
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	4.0	6.0		
K	BMWW-t	MT20	4.0	4.0	2.00	1.75
L	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1068	0	1068	0	0	1-8	1-8
L	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
L	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, L

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.76 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G, E-H.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1037 / 0	-95.2	-95.2	0.33 (1)	5.76
C- D	-745 / 0	-95.2	-95.2	0.32 (1)	6.25
D- E	-567 / 0	-95.2	-95.2	0.23 (1)	6.25
E- F	-435 / 0	-95.2	-95.2	0.22 (1)	6.25
G- F	-1035 / 0	0.0	0.0	0.40 (1)	6.18
L- B	-1160 / 0	0.0	0.0	0.12 (1)	7.39
L- K	0 / 0	-18.5	-18.5	0.12 (4)	10.00
K- J	0 / 857	-18.5	-18.5	0.20 (1)	10.00
J- I	0 / 435	-18.5	-18.5	0.11 (4)	10.00
I- H	0 / 435	-18.5	-18.5	0.11 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.08 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-91 / 57	0.04 (1)
C- J	-412 / 0	0.41 (1)
J- D	0 / 93	0.03 (4)
J- E	0 / 308	0.07 (1)
H- E	-786 / 0	0.42 (1)
H- F	0 / 977	0.22 (1)
B- K	0 / 880	0.20 (1)

[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.40/1.00 (F-G:1) , BC=0.20/1.00 (J-K:1) , WB=0.42/1.00 (E-H:1) , SSI=0.20/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	550	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T57		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085285

Alpa Roof Truss, Maple

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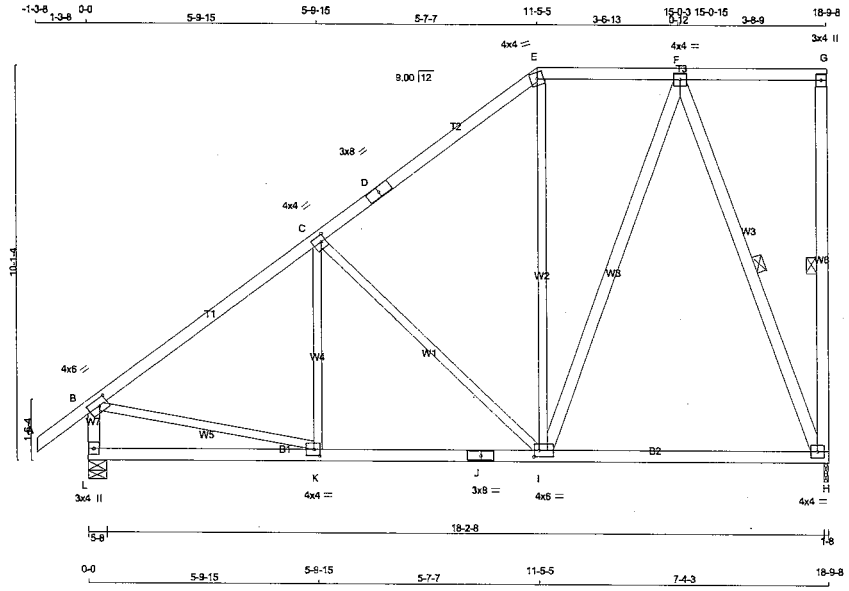

TOTAL WEIGHT = 10 X 106 = 1062 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	2.00	2.75
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	8.0		
E	TTW-m	MT20	4.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMV+p	MT20	3.0	4.0		
H	BMVW1-t	MT20	4.0	4.0		
I	BMWWW-t	MT20	4.0	6.0	2.00	1.50
J	BS-t	MT20	3.0	8.0		
K	BMWW-t	MT20	4.0	4.0	2.00	1.75
L	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	1113	0	1113	0	0	1-8	1-8
L	1210	0	1210	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	790	502 / 0	0 / 0	0 / 0	0 / 0	287 / 0	0 / 0
L	853	576 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, L

BRACING
FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF G-H, F-H.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1036 / 0	-95.2	-95.2	0.43 (1)	5.60
C- D	-673 / 0	-95.2	-95.2	0.41 (1)	6.25
D- E	-673 / 0	-95.2	-95.2	0.41 (1)	6.25
E- F	-505 / 0	-102.7	-102.7	0.18 (1)	2.00
F- G	0 / 0	-102.7	-102.7	0.23 (1)	10.00
H- G	-145 / 0	0.0	0.0	0.07 (1)	6.25
L- B	-1164 / 0	0.0	0.0	0.12 (1)	7.39
L- K	0 / 0	-18.5	-18.5	0.13 (4)	10.00
K- J	0 / 860	-18.5	-18.5	0.28 (4)	10.00
J- I	0 / 860	-18.5	-18.5	0.28 (4)	10.00
I- H	0 / 345	-18.5	-18.5	0.24 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-69 / 63	0.04 (1)
C- I	-495 / 0	0.66 (1)
I- E	0 / 67	0.02 (4)
I- F	0 / 474	0.08 (1)
F- H	-976 / 0	0.55 (1)
B- K	0 / 878	0.20 (1)

DESIGN CRITERIA [M][F]

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.53")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.53")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.43/1.00 (B-C:1) , BC=0.28/1.00 (I-K:4) , WB=0.66/1.00 (C-I:1) , SSI=0.21/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.29 (K) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T58		1	TRUSS DESC.	JT 53080	E22085286

Alpa Roof Truss, Maple

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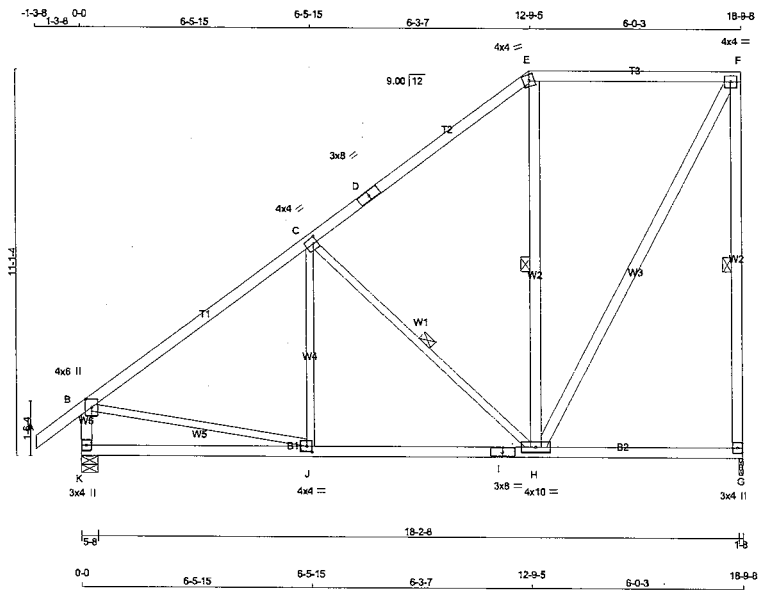

TOTAL WEIGHT = 2 X 104 = 208 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - E	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	8.0		
E	TTW-m	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWWW-t	MT20	4.0	10.0		
I	BS-t	MT20	3.0	8.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1068	0	1068	0	0	1-8	1-8
K	1200	0	1200	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, K

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G, C-H, E-H.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1005 / 0	-95.2	-95.2	0.55 (1)	5.44
C- D	-552 / 0	-95.2	-95.2	0.52 (1)	6.25
D- E	-552 / 0	-95.2	-95.2	0.52 (1)	6.25
E- F	-401 / 0	-95.2	-95.2	0.44 (1)	6.25
G- F	-1025 / 0	0.0	0.0	0.65 (1)	6.20
K- B	-1151 / 0	0.0	0.0	0.12 (1)	7.42
K- J	0 / 0	-18.5	-18.5	0.18 (4)	10.00
J- I	0 / 840	-18.5	-18.5	0.25 (4)	10.00
I- H	0 / 840	-18.5	-18.5	0.25 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.16 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- C	-22 / 99	0.03 (4)
C- H	-599 / 0	0.32 (1)
H- E	-206 / 13	0.13 (1)
H- F	0 / 842	0.14 (1)
B- J	0 / 854	0.19 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.65/1.00 (F-G:1) , BC=0.25/1.00 (H-J:4) , WB=0.32/1.00 (C-H:1) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
K. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T75		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085287

Alpa Roof Truss, Maple

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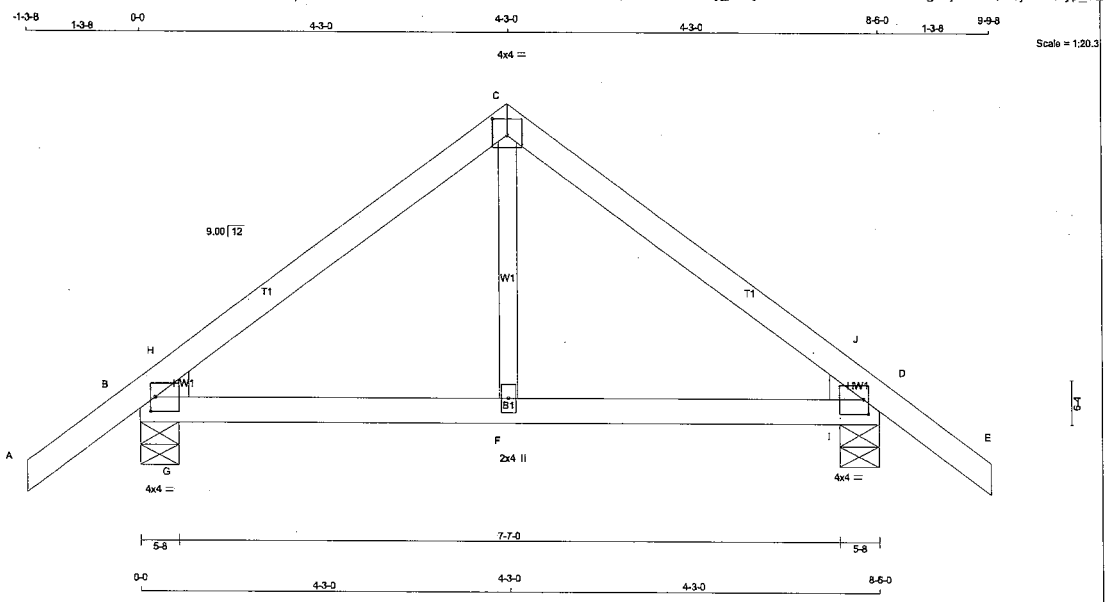

TOTAL WEIGHT = 29 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	4.0	4.0	2.00	0.75
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMBH1-I	MT20	4.0	4.0	2.00	0.75
F	BMW+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	515	0	515	0	0	5-8	1-8	2x4 L
D	515	0	515	0	0	5-8	1-8	2x4 R

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	431	301 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
D	431	301 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 34	-95.2	-95.2	0.13 (1)	10.00
B- H	-377 / 0	-95.2	-95.2	0.08 (1)	6.25
H- C	-427 / 0	-95.2	-95.2	0.18 (1)	6.25
C- J	-427 / 0	-95.2	-95.2	0.18 (1)	6.25
J- D	-377 / 0	-95.2	-95.2	0.08 (1)	6.25
D- E	0 / 34	-95.2	-95.2	0.13 (1)	10.00
B- G	0 / 332	-18.5	-18.5	0.20 (1)	10.00
G- F	0 / 332	-18.5	-18.5	0.20 (1)	10.00
F- I	0 / 332	-18.5	-18.5	0.20 (1)	10.00
I- D	0 / 332	-18.5	-18.5	0.20 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	0 / 174	0.04 (1)
G- H	-258 / 0	0.00 (1)
I- J	-258 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.18/1.00 (C-H:1) , BC=0.20/1.00 (B-G:1) , WB=0.04/1.00 (C-F:1) , SSI=0.19/1.00 (D-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.93 (D) (INPUT = 0.90)
JSI METAL= 0.16 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
K. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T75G		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085288

Alpa Roof Truss, Maple

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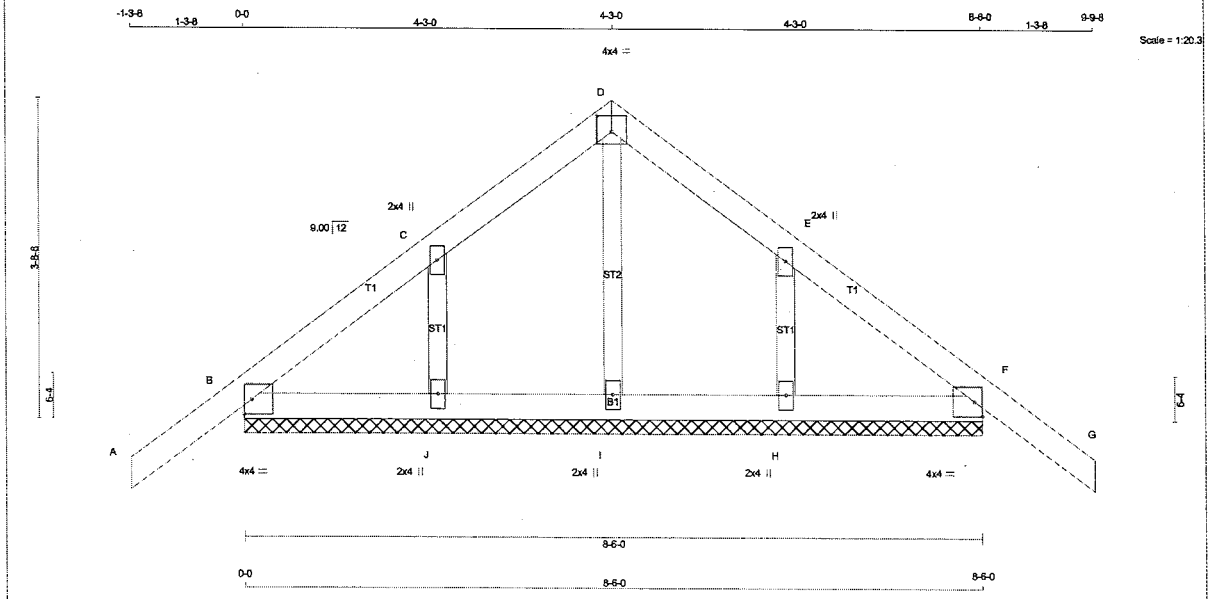


TOTAL WEIGHT = 31 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

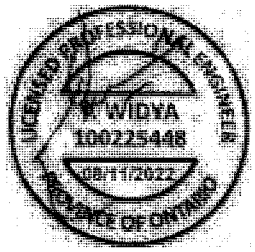
GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	4.0	4.0		Edge
C	TMW+w	MT20	2.0	4.0		
D	TTW-p	MT20	4.0	4.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	4.0	4.0		Edge
H, I, J						
H	BMW1+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 34	-95.2	-95.2	0.13 (1)	10.00
B- C	-35 / 0	-95.2	-95.2	0.07 (1)	6.25
C- D	-49 / 0	-95.2	-95.2	0.07 (1)	6.25
D- E	-49 / 0	-95.2	-95.2	0.07 (1)	6.25
E- F	-35 / 0	-95.2	-95.2	0.07 (1)	6.25
F- G	0 / 34	-95.2	-95.2	0.13 (1)	10.00
B- J	0 / 39	-18.5	-18.5	0.02 (4)	10.00
J- I	0 / 27	-18.5	-18.5	0.02 (4)	10.00
I- H	0 / 27	-18.5	-18.5	0.02 (4)	10.00
H- F	0 / 39	-18.5	-18.5	0.02 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- D	-107 / 0	0.02 (1)
J- C	-240 / 0	0.04 (1)
H- E	-240 / 0	0.04 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (F-G:1) , BC=0.02/1.00 (B-J:4) , WB=0.04/1.00 (E-H:1) , SSI=0.09/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (F) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T76		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085289

Alpa Roof Truss, Maple

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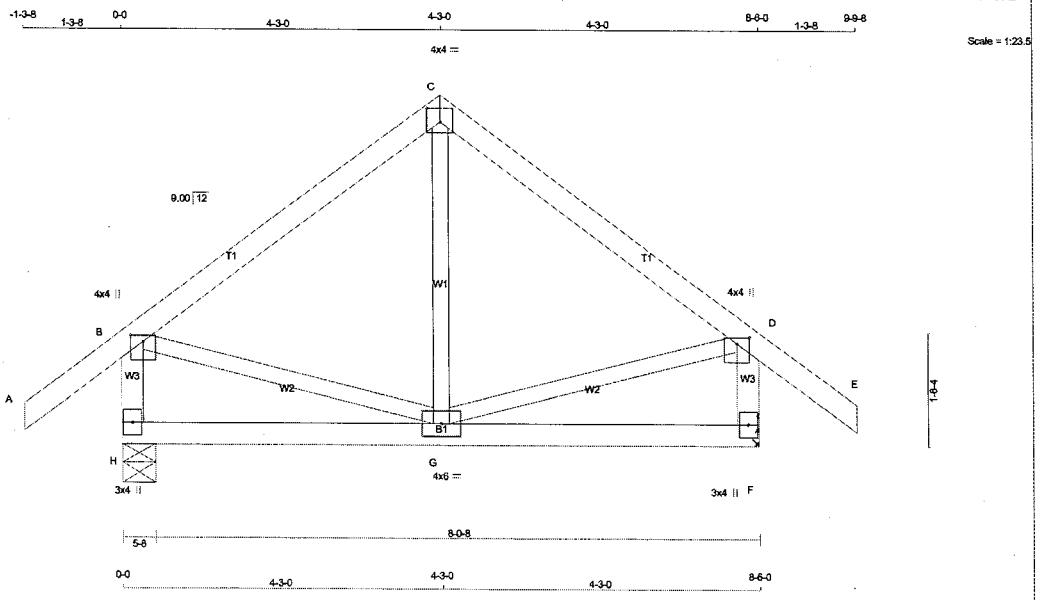

TOTAL WEIGHT = 3 X 38 = 115 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW+p	MT20	4.0	4.0	1.00	2.00
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	615	0	615	0	0	5-8	1-8
F	615	0	615	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	431	301 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
F	431	301 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-304 / 0	-95.2	-95.2	0.22 (1)	6.25
C- D	-304 / 0	-95.2	-95.2	0.22 (1)	6.25
D- E	0 / 39	-95.2	-95.2	0.13 (1)	10.00
H- B	-584 / 0	0.0	0.0	0.06 (1)	7.81
F- D	-584 / 0	0.0	0.0	0.06 (1)	7.81
H- G	0 / 0	-16.5	-16.5	0.09 (4)	10.00
G- F	0 / 0	-16.5	-16.5	0.09 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
G- C	-40 / 60	0.02 (4)
B- G	0 / 252	0.06 (1)
G- D	0 / 252	0.06 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	28.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.09/1.00 (G-H:4) , WB=0.06/1.00 (D-G:1) , SSI=0.13/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1967	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (D) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T77		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085290

Alpa Roof Truss, Maple

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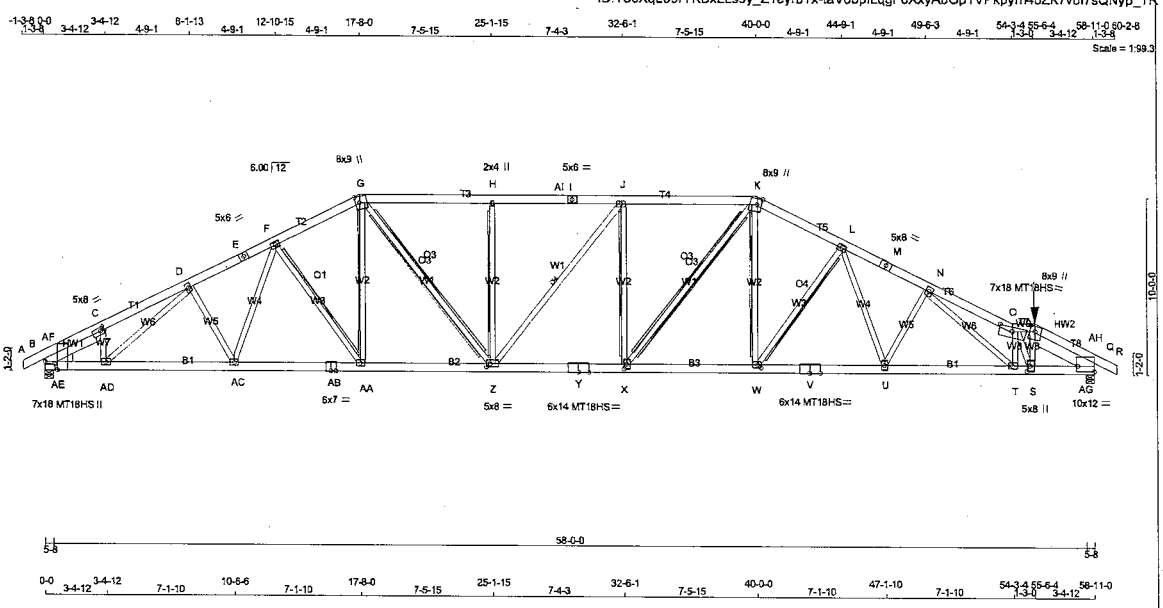

TOTAL WEIGHT = 392 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	1650F 1.5E	SPF
I - K	2x6	DRY	1650F 1.5E	SPF
K - M	2x6	DRY	No.2	SPF
M - O	2x6	DRY	No.2	SPF
O - P	2x6	DRY	No.2	SPF
P - R	2x6	DRY	No.2	SPF
B - AB	2x6	DRY	2100F 1.8E	SPF
AB- Y	2x6	DRY	2100F 1.8E	SPF
Y - V	2x6	DRY	2100F 1.8E	SPF
V - Q	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF
ALL WEBS	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1+I	MT18HS	7.0	18.0	Edge	8.00
B	TP-t	MT20	4.0	6.0	1.50	5.00
C	TMWW-t	MT20	5.0	8.0	2.25	2.25
D	TMWW+t	MT20	4.0	6.0		
E	TS-t	MT20	5.0	6.0		
F, J, L						
F	TMWW-t	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	4.25	3.00
H	TMW+w	MT20	2.0	4.0		
I	TS-t	MT20	5.0	6.0		
K	TTWW+m	MT20	8.0	9.0	Edge	3.25
M	TS-t	MT20	5.0	8.0		
N	TMWW+t	MT20	4.0	6.0		
O	TTWW-m	MT18HS	7.0	18.0	3.25	9.00
P	TTWW+m	MT20	8.0	9.0	3.75	3.50
Q	TMBMW1-I	MT20	10.0	12.0	3.75	Edge
S	BMWW+t	MT20	5.0	8.0	3.75	2.00
T, AA, AC, AD						
T	BMWW-t	MT20	4.0	6.0		
U	BMWW+t	MT20	4.0	6.0		
V	BS-t	MT18HS	6.0	14.0		
W	BMWW-t	MT20	4.0	6.0	2.00	2.50
X	BMWW+t	MT20	4.0	6.0	3.00	1.75
Y	BS-t	MT18HS	6.0	14.0		
Z	BMWWW-t	MT20	5.0	8.0	2.25	2.50
AB	BS-t	MT20	6.0	7.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	5019	0	5019	141	-217	5-8	5-8	2x6 L
Q	5048	0	5048	0	-237	5-8	5-8	

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 217 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 237 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3706	2166 / 0	619 / 0	0 / 0	96 / -747	920 / 0	0 / 0
Q	3725	2187 / 0	619 / 0	0 / 0	103 / -760	919 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q

BRACING
FOR SECTION G-K, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF J-Z.
2x4 DRY SPF No.2 T-BRACE AT F-AA, G-AA, K-W, L-W, J-X, H-Z
2x4 DRY SPF No.2 I-BRACE AT K-X, G-Z

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.10 (2)	10.00
B-AF	-5360 / 206	-120.3	-120.3	0.36 (1)	3.47
AF- C	-3044 / 161	-120.3	-120.3	0.25 (1)	4.58
C- D	-7165 / 355	-120.3	-120.3	0.56 (1)	2.86
D- E	-7933 / 337	-120.3	-120.3	0.61 (1)	2.68
E- F	-7933 / 337	-120.3	-120.3	0.61 (1)	2.68
F- G	-7166 / 289	-120.3	-120.3	0.53 (1)	2.89
G- H	-7536 / 246	-132.8	-132.8	0.59 (1)	2.00
H-AI	-7536 / 246	-132.8	-132.8	0.60 (1)	2.00
AI- I	-7536 / 246	-132.8	-132.8	0.60 (1)	2.00
I- J	-7536 / 246	-132.8	-132.8	0.60 (1)	2.00
J- K	-7624 / 262	-132.8	-132.8	0.61 (1)	2.00
K- L	-7432 / 309	-120.3	-120.3	0.54 (1)	2.81
L- M	-8669 / 380	-120.3	-120.3	0.66 (1)	2.47
M- N	-8669 / 380	-120.3	-120.3	0.66 (1)	2.47
N- O	-9627 / 452	-120.3	-120.3	0.76 (1)	2.20
O- P	-6822 / 316	-120.3	-120.3	0.24 (1)	3.18
P-AH	-3658 / 214	-120.3	-120.3	0.13 (1)	4.36
AH- Q	-5632 / 228	-120.3	-120.3	0.21 (1)	3.52
Q- R	0 / 1	-120.3	-120.3	0.10 (3)	10.00
B-AE	-227 / 2680	-39.5	-39.5	0.17 (1)	6.25
AE-AD	-327 / 6430	-39.5	-39.5	0.38 (1)	6.25
AD-AC	-300 / 7205	-39.5	-39.5	0.47 (1)	6.25
AC-AB	-198 / 6930	-39.5	-39.5	0.44 (1)	6.25
AB-AA	-198 / 6930	-39.5	-39.5	0.44 (1)	6.25
AA- Z	-73 / 6400	-39.5	-39.5	0.41 (1)	6.25
Z- Y	0 / 7625	-39.5	-39.5	0.46 (1)	10.00
Y- X	0 / 7625	-39.5	-39.5	0.46 (1)	10.00
X- W	0 / 6643	-39.5	-39.5	0.41 (1)	10.00
W- V	-86 / 7403	-39.5	-39.5	0.46 (1)	6.25
V- U	-86 / 7403	-39.5	-39.5	0.46 (1)	6.25
U- T	-209 / 8132	-39.5	-39.5	0.57 (1)	6.25
T- S	-265 / 8592	-39.5	-39.5	0.57 (1)	6.25
S-AG	-216 / 6557	-39.5	-39.5	0.41 (1)	6.25
AG- Q	-121 / 3253	-39.5	-39.5	0.24 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AD- C	0 / 948	0.17 (1)
AD- D	-1088 / 0	0.62 (1)
D-AC	-423 / 175	0.13 (2)
AC- F	-58 / 698	0.12 (2)
F-AA	-1182 / 223	0.54 (2)
AA- G	-88 / 1277	0.23 (2)
W- K	-101 / 1575	0.28 (3)
W- L	-1566 / 241	0.72 (3)
L- U	-86 / 1240	0.22 (3)
U- N	-933 / 203	0.31 (3)
N- T	-93 / 852	0.15 (3)
T- O	-829 / 179	0.10 (3)
O- S	-4224 / 98	0.53 (1)
S- P	-125 / 4358	0.77 (1)
X- K	-64 / 1717	0.30 (2)
G- Z	-69 / 1906	0.34 (3)
X- J	-1061 / 148	0.62 (2)
Z- H	-1192 / 146	0.70 (2)
Z- J	-1231 / 1016	1.00 (3)
P-AG	-4432 / 126	0.42 (1)
AE-AF	-71 / 3006	0.00 (1)
AE- C	-4876 / 130	0.62 (1)
AG-AH	-30 / 2721	0.00 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
P	55-6-4	-40	-41	7	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	35.1	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 17-8-0
RIGHT SETBACK = 3-4-12
END SETBACK = 2-0-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 100 % OF GSL. LOADS APPLIED TO FIRST 3-4-12 OF SPAN MEASURED FROM THE RIGHT.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.42")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.61")

CSI: TC=0.76/1.00 (N-O:1) , BC=0.57/1.00 (T-U:1) , WB=1.00/1.00 (J-Z:3) , SSI=0.45/1.00 (J-K:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Z) (INPUT = 0.90)
JSI METAL= 0.99 (AB) (INPUT = 1.00)

CONTINUED ON PAGE 2

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T78		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085291

Alpa Roof Truss, Maple

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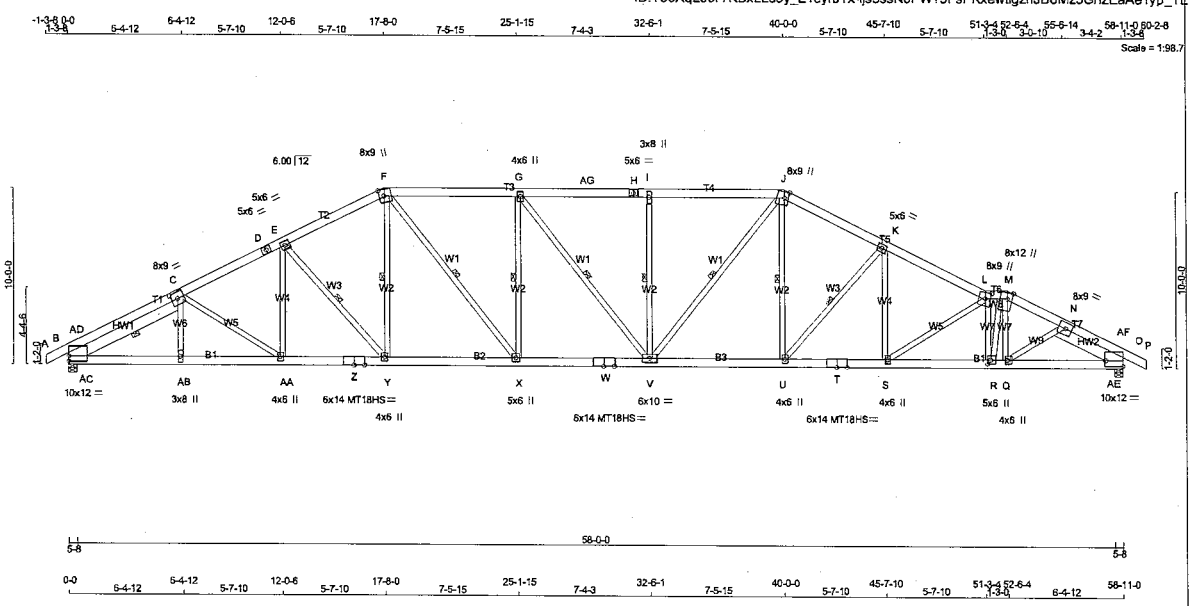

TOTAL WEIGHT = 4 X 400 = 1599 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - M	2x6	DRY	No.2	SPF
M - P	2x6	DRY	No.2	SPF
B - Z	2x6	DRY	2100F 1.8E	SPF
Z - W	2x6	DRY	2100F 1.8E	SPF
W - T	2x6	DRY	2100F 1.8E	SPF
T - O	2x6	DRY	2100F 1.8E	SPF

REINFORCING MEMBERS

HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF

ALL WEBS 2x4 DRY No.2 SPF
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	10.0	12.0	3.50	
C	TMWWW-t	MT20	8.0	9.0	4.00	4.25
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW+m	MT20	8.0	9.0	4.25	3.00
G	TMWW+t	MT20	4.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMW+w	MT20	3.0	8.0		
J	TTWW+m	MT20	8.0	9.0	4.25	3.00
K	TMWW-t	MT20	5.0	6.0		
L	TTWW+m	MT20	8.0	9.0	4.50	3.50
M	TTWW+m	MT20	8.0	12.0	Edge	3.25
N	TMWW-t	MT20	8.0	9.0		
O	TMBMW1-I	MT20	10.0	12.0	3.75	Edge
Q, S, U, Y, AA						
Q	BMWW+t	MT20	4.0	6.0		
R	BMWW+t	MT20	5.0	6.0	2.75	2.00
T, W, Z						
T	BS-t	MT18HS	6.0	14.0		
V	BMWWW-t	MT20	6.0	10.0		
X	BMWW+t	MT20	5.0	6.0		
AB	BMW+w	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
F. WIDYA
100225448
AUG 11 2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	5017	0	5017	141	-217	5-8	5-7
O	5011	0	5011	0	-231	5-8	5-7

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 217 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT O FOR 231 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3704	2165 / 0	619 / 0	0 / 0	56 / -747	920 / 0	0 / 0
O	3699	2165 / 0	619 / 0	0 / 0	101 / -753	916 / 0	0 / 0

HORIZONTAL REACTIONS

B	—	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, O

BRACING

FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Y, F-Y, F-X, G-X, G-V, I-V, J-V, J-U, K-U, C-AC.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00	
B-AD	-5867 / 183	-120.3	-120.3	0.36 (1)	3.37	
AD- C	-3934 / 248	-120.3	-120.3	0.30 (2)	4.13	
C- D	-7861 / 306	-120.3	-120.3	0.65 (1)	2.72	
D- E	-7861 / 306	-120.3	-120.3	0.65 (1)	2.72	
E- F	-7165 / 281	-120.3	-120.3	0.58 (1)	2.91	
F- G	-7537 / 246	-132.8	-132.8	0.96 (1)	2.00	
G-AG	-7610 / 259	-132.8	-132.8	0.96 (1)	2.00	
AG- H	-7610 / 259	-132.8	-132.8	0.96 (1)	2.00	
H- I	-7610 / 259	-132.8	-132.8	0.96 (1)	2.00	
I- J	-7610 / 259	-132.8	-132.8	0.95 (1)	2.00	
J- K	-7432 / 303	-120.3	-120.3	0.60 (1)	2.80	
K- L	-8422 / 333	-120.3	-120.3	0.69 (1)	2.53	
L- M	-7861 / 346	-120.3	-120.3	0.27 (1)	2.99	
M- N	-8072 / 339	-120.3	-120.3	0.39 (1)	2.83	
N-AF	-3586 / 168	-120.3	-120.3	0.12 (1)	4.44	
AF- O	-5487 / 172	-120.3	-120.3	0.19 (1)	3.63	
O- P	0 / 1	-120.3	-120.3	0.09 (3)	10.00	
B-AC	-271 / 3514	-39.5	-39.5	0.19 (1)	6.25	
AC-AB	-321 / 7209	-39.5	-39.5	0.41 (1)	6.25	
AB-AA	-323 / 7204	-39.5	-39.5	0.40 (1)	6.25	
AA- Z	-214 / 7041	-39.5	-39.5	0.39 (1)	6.25	
Z- Y	-214 / 7041	-39.5	-39.5	0.39 (1)	6.25	
Y- X	-73 / 6393	-39.5	-39.5	0.36 (1)	6.25	
X- W	-21 / 7537	-39.5	-39.5	0.41 (1)	6.25	
W- V	-21 / 7537	-39.5	-39.5	0.41 (1)	6.25	
V- U	0 / 6634	-39.5	-39.5	0.37 (1)	10.00	
U- T	-105 / 7568	-39.5	-39.5	0.42 (1)	6.25	
T- S	-105 / 7568	-39.5	-39.5	0.42 (1)	6.25	
S- R	-212 / 8247	-39.5	-39.5	0.50 (1)	6.25	
R- Q	-180 / 7231	-39.5	-39.5	0.46 (1)	6.25	
Q-AE	-230 / 6414	-39.5	-39.5	0.42 (1)	6.25	
AE- O	-87 / 3183	-39.5	-39.5	0.23 (1)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AB- C	0 / 300	0.05 (17)
C-AA	-410 / 152	0.25 (2)
AA- E	0 / 438	0.07 (5)
E- Y	-1243 / 217	0.46 (2)
Y- F	-76 / 1223	0.20 (2)
F- X	-68 / 1915	0.31 (3)
X- G	-1207 / 152	0.54 (3)
G- V	-1034 / 1212	0.83 (2)
V- I	-1192 / 146	0.53 (3)
V- J	-62 / 1715	0.28 (2)
U- J	-94 / 1536	0.25 (3)
U- K	-1650 / 238	0.61 (3)
S- K	0 / 808	0.13 (3)
S- L	-965 / 130	0.59 (3)
R- L	-3661 / 150	0.65 (1)
R- M	-80 / 2996	0.48 (1)
Q- M	-22 / 435	0.07 (3)
Q- N	0 / 995	0.16 (1)
AC-AD	0 / 2554	0.00 (1)
AC- C	-4480 / 61	0.53 (1)
N-AE	-4339 / 192	0.38 (1)
AE-AF	-18 / 2617	0.00 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.42")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.61")

CSI: TC=0.96/1.00 (F-G:1) , BC=0.50/1.00 (R-S:1) , WB=0.83/1.00 (G-V:2) , SSI=0.49/1.00 (Q-R:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.82 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T79		3	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085292

Alpa Roof Truss, Maple

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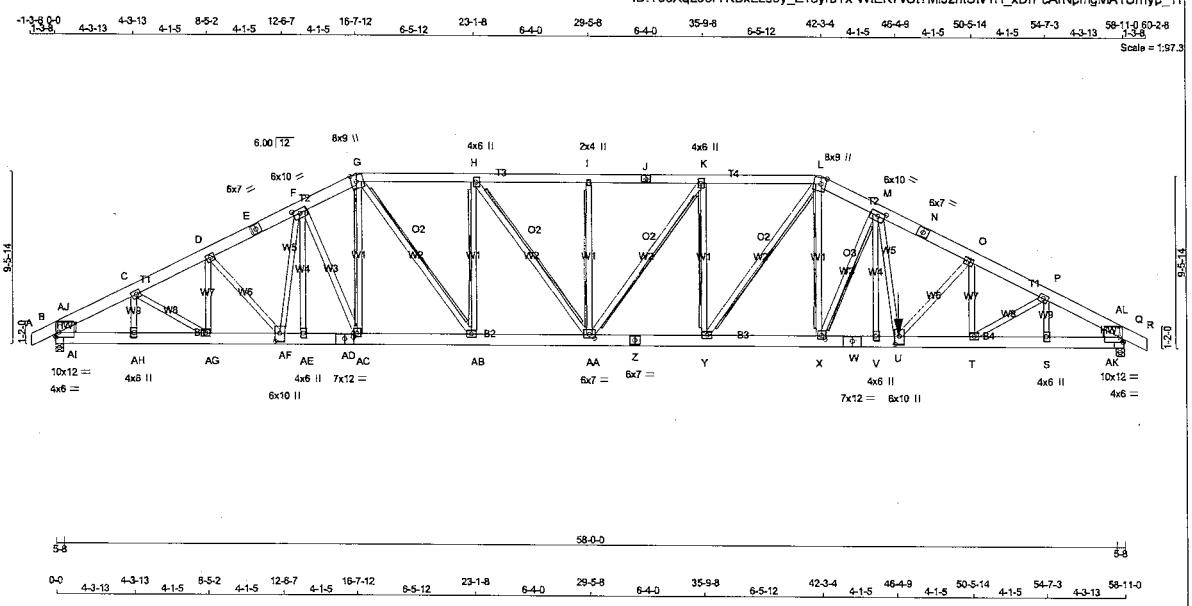

TOTAL WEIGHT = 3 X 465 = 1394 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x8	DRY	No.2	SPF
E - G	2x8	DRY	No.2	SPF
G - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x8	DRY	No.2	SPF
N - R	2x8	DRY	No.2	SPF
B - AD	2x8	DRY	1950F 1.7E	SPF
AD- Z	2x8	DRY	1950F 1.7E	SPF
Z - W	2x8	DRY	1950F 1.7E	SPF
W - Q	2x8	DRY	1950F 1.7E	SPF
ALL WEBS	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS		SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- E	2	12	TOP
E- G	2	12	TOP
L- N	2	12	TOP
N- R	2	12	TOP
G- J	2	12	TOP
J- L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- AD	2	12	TOP
AD- Z	2	12	TOP
Z- W	2	12	TOP
W- Q	3	4	SIDE(1754.3)
WEBS : (0.122"X3") SPIRAL NAILS			
M- U	2	4	SIDE(2566.1)
2x4	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	10.0	12.0	3.25	2.00
B	TP-t	MT20	4.0	6.0	2.75	2.75
C, D, O, P						
C	TMWW-t	MT20	5.0	6.0		
E	TS-t	MT20	6.0	7.0		
F	TMWWW-t	MT20	6.0	10.0	3.00	4.50
G	TTWW+m	MT20	8.0	9.0	Edge	3.25
H	TMWW+t	MT20	4.0	6.0		
I	TMW+w	MT20	2.0	4.0		
J	TS-t	MT20	5.0	6.0		
K	TMWW+t	MT20	4.0	6.0		
L	TTWW+m	MT20	8.0	9.0	Edge	3.25
M	TMWWW-t	MT20	6.0	10.0	3.00	4.50
N	TS-t	MT20	6.0	7.0		
Q	TMBH1-I	MT20	10.0	12.0	3.25	2.00
Q	TP-t	MT20	4.0	6.0	3.25	2.75

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	7280	0	7280	135	-318	5-8	2-10	2x6 L
Q	14886	0	15477	0	-312	5-8	5-8	2x6 R

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 318 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 312 LBS FACTORED UPLIFT

PROVIDE FOR 135 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	5365	3167 / 0	871 / 0	0 / 0	167 / -1080	1327 / 0	0 / 0
Q	10897	7012 / 0	1556 / 0	0 / 0	353 / -1973	2723 / 0	0 / 0
HORIZONTAL REACTIONS							
B	--	0 / 0	0 / 0	0 / 0	96 / -96	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q
BEARING SIZE FACTOR = 1.15 AT JNT(S) Q (BASED ON SUPPORT DEPTH = 1-8)

BRACING

FOR SECTION G-L, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x6 DRY SPF No.2 T-BRACE AT G-AC, L-X, M-X, L-Y, G-AB, K-Y, H-AB, K-AA, H-AA, I-AA

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 13	-120.3	-120.3	0.02 (2)	10.00
B-AJ	-13359 / 482	-120.3	-120.3	0.35 (1)	4.30
AJ- C	-11585 / 473	-120.3	-120.3	0.33 (1)	4.58
C- D	-12733 / 523	-120.3	-120.3	0.22 (1)	4.55
D- E	-12541 / 524	-120.3	-120.3	0.10 (2)	4.71
E- F	-12541 / 524	-120.3	-120.3	0.10 (2)	4.71
F- G	-12180 / 526	-120.3	-120.3	0.07 (1)	4.79
G- H	-13516 / 525	-132.8	-132.8	0.27 (2)	2.00
H- I	-15530 / 523	-132.8	-132.8	0.30 (2)	2.00
I- J	-15530 / 523	-132.8	-132.8	0.30 (3)	2.00
J- K	-15530 / 523	-132.8	-132.8	0.30 (3)	2.00
K- L	-16800 / 677	-132.8	-132.8	0.35 (3)	2.00
L- M	-19350 / 859	-120.3	-120.3	0.27 (3)	3.77
M- N	-25602 / 1095	-120.3	-120.3	0.40 (3)	3.23
N- O	-25602 / 1095	-120.3	-120.3	0.40 (3)	3.23
O- P	-26812 / 901	-120.3	-120.3	0.62 (3)	2.86
P-AL	-24605 / 617	-120.3	-120.3	0.81 (3)	2.57
AL- Q	-28497 / 614	-120.3	-120.3	0.85 (3)	2.22
Q- R	0 / 13	-120.3	-120.3	0.02 (3)	10.00
B-AI	-475 / 10022	-39.5	-39.5	0.26 (1)	6.25
AI-AH	-475 / 10022	-39.5	-39.5	0.26 (1)	6.25
AH-AG	-475 / 10022	-39.5	-39.5	0.23 (1)	6.25
AG-AF	-462 / 11519	-39.5	-39.5	0.18 (1)	6.25
AF-AE	-355 / 11142	-39.5	-39.5	0.18 (1)	6.25
AE-AD	-355 / 11142	-39.5	-39.5	0.17 (1)	6.25
AD-AC	-355 / 11142	-39.5	-39.5	0.17 (1)	6.25
AC-AB	-279 / 10836	-39.5	-39.5	0.17 (1)	6.25
AB-AA	-312 / 13617	-39.5	-39.5	0.21 (1)	6.25
AA- Z	-330 / 16800	-39.5	-39.5	0.25 (1)	6.25
Z- Y	-330 / 16800	-39.5	-39.5	0.25 (1)	6.25
Y- X	-453 / 17466	-39.5	-39.5	0.25 (3)	6.25
X- W	-674 / 21312	-39.5	-39.5	0.33 (3)	6.25
W- V	-674 / 21312	-39.5	-39.5	0.33 (3)	6.25
V- U	-674 / 21312	-39.5	-39.5	0.48 (3)	6.25
U- T	-666 / 24244	-282.8	-282.8	0.52 (3)	6.25
T- S	-461 / 21285	-282.8	-282.8	0.48 (3)	6.25
S-AK	-461 / 21285	-282.8	-282.8	0.56 (3)	6.25
AK- Q	-461 / 21285	-282.8	-282.8	0.56 (3)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AH- C	-1006 / 87	0.04 (1)
C-AG	-4 / 1789	0.10 (1)
AG- D	-445 / 56	0.03 (10)
AE- F	-54 / 54	0.01 (10)
F-AC	-1012 / 200	0.29 (2)
AC- G	-119 / 1284	0.07 (2)
X- L	-473 / 9488	0.51 (3)
V- M	-148 / 2704	0.14 (3)
T- O	0 / 842	0.05 (3)
T- P	-270 / 3535	0.19 (3)
S- P	-1481 / 318	0.06 (3)
X- M	-10308 / 590	0.76 (3)
M- U	-391 / 9336	0.50 (3)
U- O	-2217 / 0	0.33 (3)
AF- F	-116 / 421	0.03 (10)
D-AF	-651 / 150	0.10 (2)
Y- L	-1947 / 209	0.29 (3)
G-AB	-162 / 4851	0.26 (3)
Y- K	-85 / 1907	0.10 (3)
AB- H	-3652 / 216	0.35 (3)
AA- K	-3585 / 270	0.53 (3)
H-AA	-240 / 4408	0.24 (3)
AA- I	-773 / 54	0.07 (1)
AI-AJ	-35 / 2836	0.00 (1)
AK-AL	-23 / 5438	0.00 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
U	46-5-12	-9050	-10186	804	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL =	35.1	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.29")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.40")

CSI: TC=0.86/1.00 (Q-AL:3) , BC=0.56/1.00 (Q-AK:3) , WB=0.76/1.00 (M-X:3) , SSI=0.75/1.00 (Q-AK:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.89 (W) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T79	.	3	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085292(2)

Alpa Roof Truss, Maple

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S, V, AE, AH						
S	BMW+w	MT20	4.0	6.0		
T, Y, AB, AG						
T	BMWW-t	MT20	5.0	6.0		
U	BMWW+t	MT20	6.0	10.0	5.50	3.00
W	BS-t	MT20	7.0	12.0		
X	BMWW+t	MT20	5.0	6.0	2.50	2.25
Z	BS-t	MT20	6.0	7.0		
AA	BMWWW-t	MT20	6.0	7.0	2.50	3.50
AC	BMWW+t	MT20	5.0	6.0	2.50	2.25
AD	BS-t	MT20	7.0	12.0	3.50	5.75
AF	BMWW+t	MT20	6.0	10.0	5.50	3.00

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM),INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T79Z		3	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085293

Alpa Roof Truss, Maple

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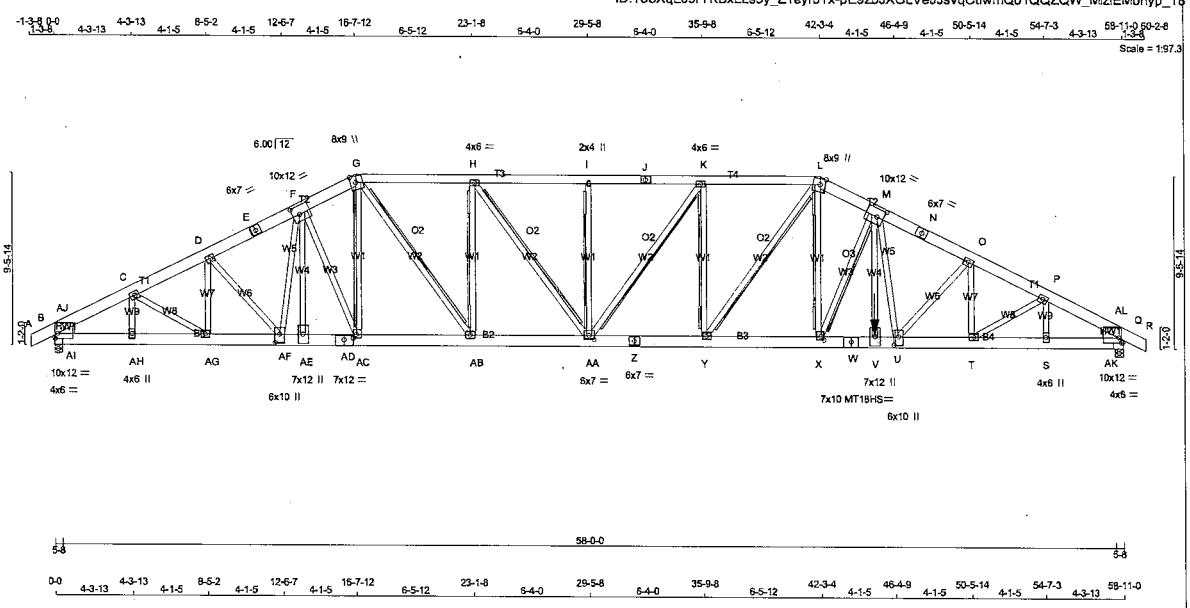


LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x8	DRY	No.2	SPF
E - G	2x8	DRY	No.2	SPF
G - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x8	DRY	No.2	SPF
N - R	2x8	DRY	No.2	SPF
B - AD	2x8	DRY	1950F 1.7E	SPF
AD- Z	2x8	DRY	1950F 1.7E	SPF
Z - W	2x8	DRY	1950F 1.7E	SPF
W - Q	2x8	DRY	1950F 1.7E	SPF
ALL WEBS	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- E	2	12	TOP
E- G	2	12	TOP
L- N	2	12	TOP
N- R	2	12	TOP
G- J	2	12	TOP
J- L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- AD	2	12	TOP
AD- Z	2	12	TOP
Z- W	2	12	TOP
W- Q	2	12	SIDE(280.1)
WEBS : (0.122"X3") SPIRAL NAILS			
M- V	2	5	SIDE(1690.1)
M- U	2	5	SIDE(2477.1)
2x4	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	10.0	12.0	3.25	1.75
B	TP-t	MT20	4.0	6.0	2.75	2.75
C, D, O, P						
C	TMWW-t	MT20	5.0	6.0		
E	TS-t	MT20	6.0	7.0		
F	TMWWW-t	MT20	10.0	12.0	5.50	4.50
G	TTWW+m	MT20	8.0	9.0	Edge	3.25
H	TMWW-t	MT20	4.0	6.0		
I	TMW+w	MT20	2.0	4.0		
J	TS-t	MT20	5.0	6.0		
K	TMWW-t	MT20	4.0	6.0		
L	TTWW+m	MT20	8.0	9.0	Edge	3.25
M	TMWWW-t	MT20	10.0	12.0	5.50	4.50
N	TS-t	MT20	6.0	7.0		
Q	TMBH1-I	MT20	10.0	12.0	3.25	1.75

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	FACTORED UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	7321	0	7683	134	-507	5-8	2-12	2x6 L
Q	14614	0	15571	0	-427	5-8	5-8	2x6 R

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 507 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 427 LBS FACTORED UPLIFT

PROVIDE FOR 134 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	5383	3500 / 0	889 / 0	0 / 0	444 / -1157	1236 / 0	0 / 0
Q	10678	7217 / 0	1512 / 0	0 / 0	787 / -1968	2587 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	96 / -96	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q
BEARING SIZE FACTOR = 1.15 AT JNT(S) Q (BASED ON SUPPORT DEPTH = 1-8)

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.17 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x6 DRY SPF No.2 T-BRACE AT G-AC, L-X, M-X, L-Y, G-AB, K-Y, H-AB, K-AA, H-AA, I-AA

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 13	-120.3	-120.3	0.02 (2)	10.00
B-AJ	-14021 / 851	-120.3	-120.3	0.37 (2)	4.19
AJ- C	-12156 / 795	-120.3	-120.3	0.35 (2)	4.46
C- D	-13310 / 895	-120.3	-120.3	0.23 (2)	4.46
D- E	-13049 / 912	-120.3	-120.3	0.11 (2)	4.62
E- F	-13049 / 912	-120.3	-120.3	0.11 (2)	4.62
F- G	-12517 / 924	-120.3	-120.3	0.08 (2)	4.72
G- H	-14048 / 994	-120.3	-120.3	0.25 (2)	3.89
H- I	-16062 / 1064	-120.3	-120.3	0.29 (2)	3.64
I- J	-16062 / 1064	-120.3	-120.3	0.30 (3)	3.63
J- K	-16062 / 1064	-120.3	-120.3	0.30 (3)	3.63
K- L	-17863 / 1145	-120.3	-120.3	0.35 (3)	3.43
L- M	-21084 / 1262	-120.3	-120.3	0.34 (2)	3.57
M- N	-26277 / 1370	-120.3	-120.3	0.43 (3)	3.15
N- O	-26277 / 1370	-120.3	-120.3	0.43 (3)	3.15
O- P	-26867 / 1117	-120.3	-120.3	0.63 (3)	2.84
P-AL	-24815 / 817	-120.3	-120.3	0.82 (3)	2.53
AL- Q	-28697 / 840	-120.3	-120.3	0.87 (3)	2.17
Q- R	0 / 13	-120.3	-120.3	0.02 (3)	10.00
B-AI	-751 / 10518	-39.5	-39.5	0.27 (2)	6.25
AI-AH	-751 / 10518	-39.5	-39.5	0.27 (2)	6.25
AH-AG	-751 / 10518	-39.5	-39.5	0.24 (2)	6.25
AG-AF	-797 / 12043	-39.5	-39.5	0.19 (2)	6.25
AF-AE	-703 / 11583	-39.5	-39.5	0.18 (2)	6.25
AE-AD	-703 / 11583	-39.5	-39.5	0.18 (2)	6.25
AD-AC	-703 / 11583	-39.5	-39.5	0.18 (2)	6.25
AC-AB	-632 / 11224	-39.5	-39.5	0.18 (2)	6.25
AB-AA	-781 / 14048	-39.5	-39.5	0.22 (2)	6.25
AA- Z	-868 / 17863	-39.5	-39.5	0.27 (3)	6.25
Z- Y	-868 / 17863	-39.5	-39.5	0.27 (3)	6.25
Y- X	-818 / 19048	-39.5	-39.5	0.32 (3)	6.25
X- W	-983 / 22591	-39.5	-39.5	0.55 (3)	6.25
W- V	-983 / 22591	-39.5	-39.5	0.55 (3)	6.25
V- U	-983 / 22591	-282.8	-282.8	0.55 (3)	6.25
U- T	-864 / 24321	-282.8	-282.8	0.37 (3)	6.25
T- S	-633 / 21457	-282.8	-282.8	0.48 (3)	6.25
S-AK	-633 / 21457	-282.8	-282.8	0.56 (3)	6.25
AK- Q	-633 / 21457	-282.8	-282.8	0.56 (3)	6.25

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		
AH- C	-1058 / 121	0.04 (2)
C-AG	-89 / 1927	0.10 (3)
AG- D	-574 / 88	0.04 (10)
AE- F	-78 / 52	0.02 (10)
F-AC	-980 / 188	0.28 (2)
AC- G	-114 / 1271	0.07 (2)
X- L	-478 / 10344	0.55 (3)
V- M	-373 / 6011	0.32 (3)
T- O	-256 / 445	0.02 (13)
T- P	-315 / 3525	0.19 (2)
S- P	-1265 / 320	0.05 (3)
X- M	-9555 / 461	0.71 (3)
M- U	0 / 4906	0.26 (3)
U- O	-1455 / 0	0.21 (3)
AF- F	-186 / 386	0.04 (10)
D-AF	-612 / 204	0.09 (2)
Y- L	-2013 / 229	0.30 (3)
G-AB	-362 / 5524	0.30 (3)
Y- K	-96 / 1796	0.10 (3)
AB- H	-4217 / 380	0.40 (3)
AA- K	-3120 / 142	0.46 (3)
H-AA	-227 / 4214	0.23 (3)
AA- I	-746 / 159	0.07 (2)
AI-AJ	-117 / 2953	0.00 (1)
AK-AL	-69 / 6427	0.00 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
V	45-2-12	-8850	-9960	786	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 9.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.32")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.43")

CSI: TC=0.87/1.00 (Q-AL:3) , BC=0.56/1.00 (S-AK:3) , WB=0.71/1.00 (M-X:3) , SSI=0.75/1.00 (O-AK:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (AC) (INPUT = 0.90)
JSI METAL= 0.96 (AD) (INPUT = 1.00)

CONTINUED ON PAGE 2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Q	TP-t	MT20	4.0	6.0	3.25	2.75
S	BMW+w	MT20	4.0	6.0		
T, Y, AB, AG						
T	BMWW-t	MT20	5.0	6.0		
U	BMWW+t	MT20	6.0	10.0	5.50	3.00
V	BMW+w	MT20	7.0	12.0		
W	BS-t	MT18HS	7.0	10.0		
X	BMWW+t	MT20	5.0	6.0	2.50	2.00
Z	BS-t	MT20	6.0	7.0		
AA	BMWWW-t	MT20	6.0	7.0	2.75	3.50
AC	BMWW+t	MT20	5.0	6.0	2.50	2.00
AD	BS-t	MT20	7.0	12.0		
AE	BMW+w	MT20	7.0	12.0		
AF	BMWW+t	MT20	6.0	10.0	5.50	3.00
AH	BMW+w	MT20	4.0	6.0		

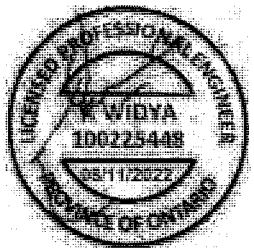
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF {7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T80		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085345

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MiTek Industries, Inc. Thu Aug 11 10:33:29 2022 Page 1
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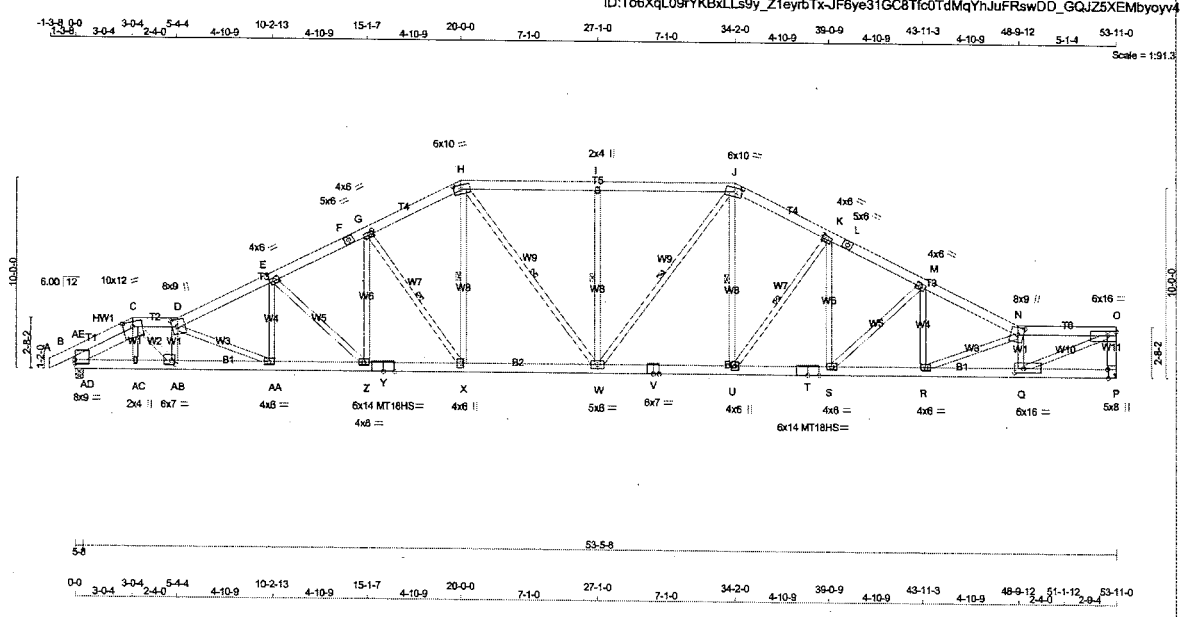


TOTAL WEIGHT = 353 lb
[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x6	DRY	No.2	SPF
N - O	2x6	DRY	No.2	SPF
P - O	2x6	DRY	No.2	SPF
B - Y	2x6	DRY	2100F 1.8E	SPF
Y - V	2x6	DRY	2100F 1.8E	SPF
V - T	2x6	DRY	2100F 1.8E	SPF
T - P	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	2100F 1.8E	SPF

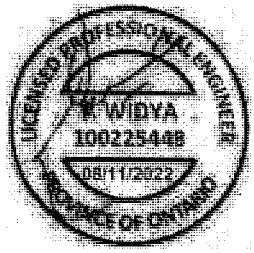
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	8.0	9.0	2.25	
C	TTWWW-m	MT20	10.0	12.0	3.00	5.75
D	TTWW+m	MT20	8.0	9.0	4.50	3.25
E	TMWW-t	MT20	4.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW-t	MT20	4.0	6.0	2.00	2.50
H	TTWW-m	MT20	6.0	10.0	2.75	4.25
I	TMW+w	MT20	2.0	4.0		
J	TTWW-m	MT20	6.0	10.0	2.75	4.25
K	TMWW-t	MT20	4.0	6.0	2.00	2.75
L	TS-t	MT20	5.0	6.0		
M	TMWW-t	MT20	4.0	6.0		
N	TTWW+m	MT20	8.0	9.0	4.50	3.50
O	TMW-t	MT20	6.0	16.0	2.50	Edge
P	BMV1+t	MT20	5.0	8.0	Edge	0.50
Q	BMWW-t	MT20	6.0	16.0	2.50	5.50
R, S, Z, AA						
R	BMWW-t	MT20	4.0	6.0		
T	BS-t	MT18HS	6.0	14.0		
U	BMWW+t	MT20	4.0	6.0		
V	BS-t	MT20	6.0	7.0		
W	BMWWW-t	MT20	5.0	8.0		
X	BMWW+t	MT20	4.0	6.0		
Y	BS-t	MT18HS	6.0	14.0		
AB	BMWW-t	MT20	6.0	7.0	2.25	2.25
AC	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
P	4396	0	4396	0	-207	MECHANICAL	
B	4563	0	4563	154	-234	5-8	4-15

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT P. MINIMUM BEARING LENGTH AT JOINT P = 5-0.

PROVIDE ANCHORAGE AT BEARING JOINT P FOR 207 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 234 LBS FACTORED UPLIFT

PROVIDE FOR 154 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	3252	1892 / 0	566 / 0	0 / 0	93 / -658	794 / 0	0 / 0
B	3365	1990 / 0	568 / 0	0 / 0	89 / -688	810 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	110 / -75	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B

BRACING

FOR SECTION H-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF G-X, H-X, H-W, I-W, J-W, J-U, K-U.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00	
B-AE	-4673 / 192	-120.3	-120.3	0.24 (1)	3.85	
AE- C	-2661 / 172	-120.3	-120.3	0.18 (1)	4.33	
C- D	-9216 / 425	-120.3	-120.3	0.40 (1)	2.62	
D- E	-8870 / 387	-120.3	-120.3	0.82 (1)	2.54	
E- F	-7645 / 349	-120.3	-120.3	0.49 (1)	2.89	
F- G	-7645 / 349	-120.3	-120.3	0.49 (1)	2.89	
G- H	-6585 / 308	-120.3	-120.3	0.42 (1)	3.17	
H- I	-6394 / 253	-132.8	-132.8	0.84 (1)	2.00	
I- J	-6394 / 253	-132.8	-132.8	0.84 (1)	2.00	
J- K	-6552 / 302	-120.3	-120.3	0.41 (1)	3.18	
K- L	-7568 / 339	-120.3	-120.3	0.48 (1)	2.91	
L- M	-7568 / 339	-120.3	-120.3	0.48 (1)	2.91	
M- N	-8705 / 371	-120.3	-120.3	0.60 (1)	2.58	
N- O	-8798 / 380	-120.3	-120.3	0.65 (1)	2.44	
P- O	-4221 / 228	0.0	0.0	0.32 (1)	5.25	
B-AD	-234 / 2339	-39.5	-39.5	0.16 (1)	6.25	
AD-AC	-359 / 5731	-39.5	-39.5	0.33 (1)	6.25	
AC-AB	-359 / 5760	-39.5	-39.5	0.41 (1)	6.25	
AB-AA	-498 / 9459	-39.5	-39.5	0.59 (1)	6.25	
AA- Z	-366 / 7958	-39.5	-39.5	0.42 (1)	6.25	
Z- Y	-232 / 6841	-39.5	-39.5	0.38 (1)	6.25	
Y- X	-232 / 6841	-39.5	-39.5	0.38 (1)	6.25	
X- W	-96 / 5889	-39.5	-39.5	0.33 (1)	6.25	
W- V	0 / 5859	-39.5	-39.5	0.33 (1)	10.00	
V- U	0 / 5859	-39.5	-39.5	0.33 (1)	10.00	
U- T	-115 / 6772	-39.5	-39.5	0.38 (1)	6.25	
T- S	-115 / 8772	-39.5	-39.5	0.38 (1)	6.25	
S- R	-244 / 7811	-39.5	-39.5	0.41 (1)	6.25	
R- Q	-347 / 9056	-39.5	-39.5	0.57 (1)	6.25	
Q- P	-10 / 25	-39.5	-39.5	0.14 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AC- C	0 / 432	0.07 (1)
C-AB	-179 / 4908	0.79 (1)
AB- D	-3681 / 199	0.41 (1)
D-AA	-1685 / 144	0.57 (2)
AA- E	0 / 985	0.18 (2)
E- Z	-1650 / 185	0.92 (2)
Z- G	-64 / 1286	0.21 (2)
G- X	-1855 / 238	0.65 (2)
X- H	-115 / 1777	0.29 (2)
H- W	-208 / 1403	0.23 (3)
W- I	-1141 / 97	0.50 (1)
W- J	-177 / 1440	0.23 (2)
U- J	-111 / 1725	0.28 (3)
U- K	-1791 / 233	0.63 (3)
S- K	-57 / 1216	0.20 (3)
S- M	-1548 / 177	0.86 (3)
R- M	0 / 878	0.14 (3)
R- N	-1425 / 114	0.49 (3)
Q- N	-3913 / 243	0.43 (1)
Q- O	-390 / 9639	0.72 (1)
C-AD	-4487 / 165	0.49 (1)
AD-AE	-34 / 2598	0.00 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.45")
ALLOWABLE DEFL.(TL)= L/180 (3.59")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.64")

CSI: TC=0.84/1.00 (H-I:1) , BC=0.59/1.00 (AA-AB:1) , WB=0.92/1.00 (E-Z:2) , SSI=0.37/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (X) (INPUT = 0.90)
JSI METAL= 0.91 (Q) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T81		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085346

Alpa Roof Truss, Maple

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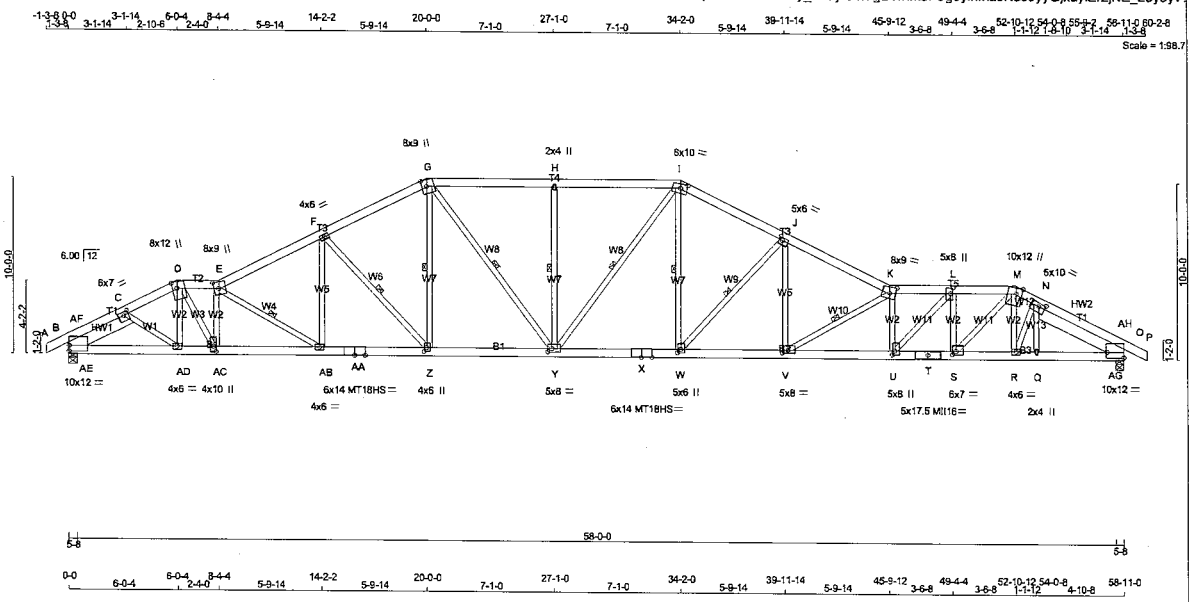


TOTAL WEIGHT = 3 X 395 = 1186 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
K - M	2x6	DRY	No.2	SPF
M - P	2x6	DRY	No.2	SPF
B - AA	2x6	DRY	2100F 1.8E	SPF
AA- X	2x6	DRY	2100F 1.8E	SPF
X - T	2x6	DRY	2100F 1.8E	SPF
T - O	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
D - AC	2x4	DRY	2100F 1.8E	SPF
W - J	2x4	DRY	2100F 1.8E	SPF
V - K	2x4	DRY	2100F 1.8E	SPF

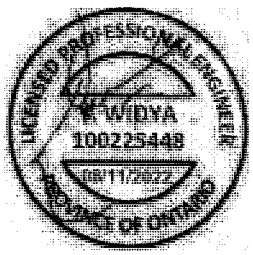
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	10.0	12.0	3.75	
C	TMWW-t	MT20	6.0	7.0	2.25	3.50
D	TTWW+m	MT20	8.0	12.0	4.25	3.00
E	TTWW+m	MT20	8.0	9.0	4.50	3.25
F	TMWW-t	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	Edge	3.25
H	TMW+w	MT20	2.0	4.0		
I	TTWW-m	MT20	6.0	10.0	2.75	4.50
J	TMWW-t	MT20	5.0	6.0	2.00	2.00
K	TTWW-m	MT20	8.0	9.0	4.50	4.00
L	TMWW+t	MT20	5.0	8.0	3.75	1.75
M	TTWW+m	MT20	10.0	12.0	4.00	4.00
N	TMWWW-t	MT20	6.0	10.0	2.25	4.25
O	TMBMW1-I	MT20	10.0	12.0	3.75	Edge
Q	BMW+w	MT20	2.0	4.0		
R, AB, AD						
R	BMWW-t	MT20	4.0	6.0		
S	BMWW-t	MT20	6.0	7.0	2.25	2.25
T	BS-t	MII16	5.0	17.5		
U	BMWW+t	MT20	5.0	8.0	2.75	1.75
V	BMWW-t	MT20	5.0	8.0	2.00	3.75
W	BMWW+t	MT20	5.0	6.0	2.25	2.25
X	BS-t	MT18HS	6.0	14.0		
Y	BMWWW-t	MT20	5.0	8.0	2.25	2.50
Z	BMWW+t	MT20	4.0	6.0	2.75	2.00
AA	BS-t	MT18HS	6.0	14.0		
AC	BMWW+t	MT20	4.0	10.0	3.50	1.75

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4970	0	4970	141	-237	5-8	5-6
O	4955	0	4955	0	-283	5-8	5-6

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 237 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT O FOR 283 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3666	2165 / 0	619 / 0	0 / 0	89 / -737	883 / 0	0 / 0
O	3655	2165 / 0	619 / 0	0 / 0	107 / -762	871 / 0	0 / 0
HORIZONTAL REACTIONS							
B	---	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, O

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 1.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-AB, F-Z, G-Z, G-Y, H-Y, I-Y, I-W, J-W, K-V.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B-AF	-5510 / 180	-120.3	-120.3	0.18 (1)	3.64
AF- C	-3591 / 170	-120.3	-120.3	0.12 (1)	4.44
C- D	-7918 / 352	-120.3	-120.3	0.37 (1)	2.87
D- E	-9136 / 398	-120.3	-120.3	0.40 (1)	2.64
E- F	-8847 / 351	-120.3	-120.3	0.77 (1)	2.38
F- G	-7551 / 308	-120.3	-120.3	0.65 (1)	2.73
G- H	-7549 / 309	-132.8	-132.8	0.95 (1)	2.00
H- I	-7549 / 309	-132.8	-132.8	0.95 (1)	2.00
I- J	-8174 / 379	-120.3	-120.3	0.70 (1)	2.57
J- K	-10534 / 477	-120.3	-120.3	0.96 (1)	1.93
K- L	-13040 / 632	-120.3	-120.3	0.83 (1)	1.55
L- M	-10340 / 561	-120.3	-120.3	0.57 (1)	2.27
M- N	-7926 / 471	-120.3	-120.3	0.26 (1)	2.98
N-AH	-3757 / 270	-120.3	-120.3	0.21 (3)	4.28
AH- O	-5665 / 269	-120.3	-120.3	0.26 (3)	3.51
O- P	0 / 1	-120.3	-120.3	0.09 (3)	10.00
B-AE	-231 / 3187	-39.5	-39.5	0.22 (1)	6.25
AE-AD	-376 / 6247	-39.5	-39.5	0.37 (1)	6.25
AD-AC	-337 / 7068	-39.5	-39.5	0.40 (1)	6.25
AC-AB	-403 / 9275	-39.5	-39.5	0.53 (1)	6.25
AB-AA	-267 / 7949	-39.5	-39.5	0.43 (1)	6.25
AA- Z	-267 / 7949	-39.5	-39.5	0.43 (1)	6.25
Z- Y	-98 / 6743	-39.5	-39.5	0.37 (1)	6.25
Y- X	-21 / 7316	-39.5	-39.5	0.40 (1)	6.25
X- W	-21 / 7316	-39.5	-39.5	0.40 (1)	6.25
W- V	-239 / 9460	-39.5	-39.5	0.50 (1)	6.25
V- U	-496 / 13154	-39.5	-39.5	0.75 (1)	6.25
U- T	-418 / 10340	-39.5	-39.5	0.59 (1)	6.25
T- S	-418 / 10340	-39.5	-39.5	0.59 (1)	6.25
S- R	-274 / 7047	-39.5	-39.5	0.39 (1)	6.25
R- Q	-284 / 6866	-39.5	-39.5	0.39 (1)	6.25
Q-AG	-283 / 6865	-39.5	-39.5	0.39 (1)	6.25
AG- O	-160 / 3343	-39.5	-39.5	0.20 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-AD	0 / 1039	0.17 (1)
AD- D	-273 / 24	0.04 (1)
D-AC	-116 / 4068	0.30 (1)
AC- E	-3533 / 162	0.58 (1)
E-AB	-1638 / 160	0.37 (2)
AB- F	-8 / 1134	0.18 (2)
F- Z	-2002 / 256	0.75 (2)
Z- G	-105 / 1751	0.28 (2)
G- Y	-131 / 1879	0.30 (3)
Y- H	-1136 / 97	0.50 (1)
Y- I	-589 / 1170	0.44 (3)
W- I	-159 / 2752	0.44 (3)
W- J	-3358 / 329	0.78 (3)
V- J	-84 / 2626	0.42 (1)
V- K	-4379 / 304	0.61 (1)
U- K	-2891 / 150	0.48 (1)
U- L	-106 / 4004	0.64 (1)
S- L	-3312 / 190	0.55 (1)
S- M	-209 / 4766	0.77 (1)
R- M	-154 / 0	0.03 (2)
Q- N	-108 / 66	0.01 (8)
R- N	0 / 512	0.08 (1)
AE-AF	-25 / 2651	0.00 (1)
AE- C	-4173 / 198	0.34 (1)
AG-AH	-13 / 2563	0.00 (1)
AG- N	-4395 / 165	0.80 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	35.1	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.65")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 773 (0.91")

CSI: TC=0.96/1.00 (J-K:1) , BC=0.75/1.00 (U-V:1) , WB=0.80/1.00 (N-AG:1) , SSI=0.37/1.00 (G-H:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.99 (AC) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T81Z		2	GREEN PARK HOMES JT 53080	E22085347

Alpa Roof Truss, Maple

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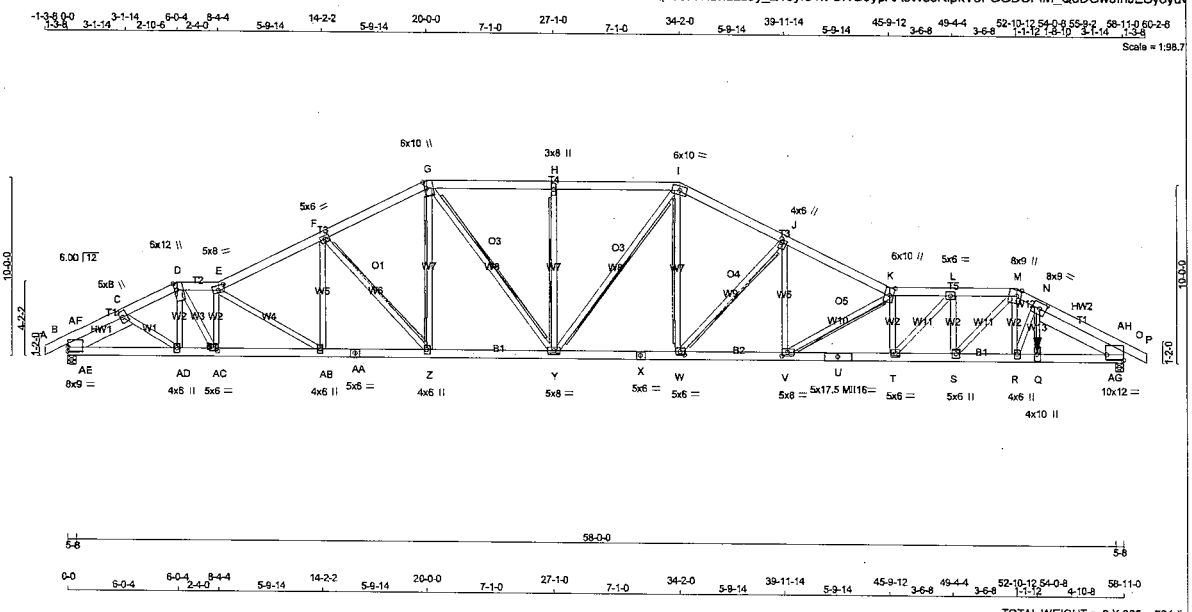


LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
K - M	2x6	DRY	No.2	SPF
M - P	2x6	DRY	No.2	SPF
B - AA	2x6	DRY	2100F 1.8E	SPF
AA- X	2x6	DRY	2100F 1.8E	SPF
X - U	2x6	DRY	2100F 1.8E	SPF
U - O	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
D - AC	2x4	DRY	2100F 1.8E	SPF
W - J	2x4	DRY	2100F 1.8E	SPF
V - K	2x4	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- D	2	12	TOP
D- E	2	12	TOP
E- G	2	12	TOP
G- I	2	12	TOP
I- K	2	12	TOP
K- M	2	12	TOP
M- P	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- AA	2	12	TOP
AA- X	2	12	TOP
X- U	2	12	TOP
U- O	2	12	SIDE(227.4)
WEBS : (0.122"X3") SPIRAL NAILS			
N- Q	2	2	SIDE(1166.4)
2x4	1	6	
2x8	2	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

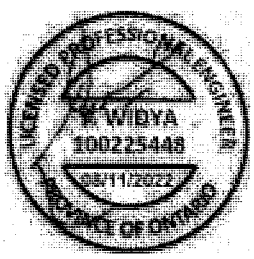
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	8.0	9.0	2.75	
C	TMWW+t	MT20	5.0	8.0	4.00	2.00
D	TTWW+m	MT20	6.0	12.0	4.50	1.75
E	TTWW-m	MT20	5.0	8.0	3.25	4.00
F	TMWW-t	MT20	5.0	6.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	5354	0	5354	141	-271	5-8	2-14
O	9217	0	9591	0	-661	5-8	5-3

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 271 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT O FOR 661 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3950	2334 / 0	669 / 0	0 / 0	103 / -803	947 / 0	0 / 0
O	6802	4286 / 0	1179 / 0	0 / 0	259 / -1492	1586 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, O

BRACING

FOR SECTION G-I, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.54 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x4 DRY SPF No.2 T-BRACE AT F-Z, G-Z, H-Y, I-W, K-V
2x6 DRY SPF No.2 T-BRACE AT G-Y, I-Y, J-W

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.05 (2)	10.00	
B-AF	-5889 / 217	-120.3	-120.3	0.10 (1)	4.80	
AF- C	-3898 / 196	-120.3	-120.3	0.07 (1)	5.68	
C- D	-6523 / 415	-120.3	-120.3	0.16 (1)	4.03	
D- E	-9981 / 473	-120.3	-120.3	0.15 (1)	3.79	
E- F	-9767 / 433	-120.3	-120.3	0.33 (1)	3.69	
F- G	-8454 / 388	-120.3	-120.3	0.28 (1)	3.97	
G- H	-8640 / 406	-132.8	-132.8	0.43 (1)	2.00	
H- I	-8640 / 406	-132.8	-132.8	0.43 (1)	2.00	
I- J	-9696 / 514	-120.3	-120.3	0.32 (3)	3.71	
J- K	-13130 / 708	-120.3	-120.3	0.45 (1)	3.11	
K- L	-17781 / 1054	-120.3	-120.3	0.48 (1)	2.54	
L- M	-15410 / 1012	-120.3	-120.3	0.38 (3)	2.86	
M- N	-14123 / 997	-120.3	-120.3	0.43 (3)	2.91	
N-AH	-7650 / 590	-120.3	-120.3	0.28 (3)	4.11	
AH- O	-11387 / 744	-120.3	-120.3	0.32 (3)	3.38	
O- P	0 / 1	-120.3	-120.3	0.05 (3)	10.00	
B-AE	-253 / 3444	-39.5	-39.5	0.14 (1)	6.25	
AE-AD	-422 / 6754	-39.5	-39.5	0.23 (1)	6.25	
AD-AC	-393 / 7701	-39.5	-39.5	0.24 (1)	6.25	
AC-AB	-479 / 10135	-39.5	-39.5	0.32 (1)	6.25	
AB-AA	-341 / 8773	-39.5	-39.5	0.25 (1)	6.25	
AA- Z	-341 / 8773	-39.5	-39.5	0.26 (1)	6.25	
Z- Y	-169 / 7551	-39.5	-39.5	0.23 (1)	6.25	
Y- X	-144 / 8694	-39.5	-39.5	0.26 (1)	6.25	
X- W	-144 / 8694	-39.5	-39.5	0.26 (1)	6.25	
W- V	-446 / 11783	-39.5	-39.5	0.33 (1)	6.25	
V- U	-916 / 17882	-39.5	-39.5	0.55 (1)	6.25	
U- T	-916 / 17882	-39.5	-39.5	0.55 (1)	6.25	
T- S	-869 / 15410	-39.5	-39.5	0.48 (1)	6.25	
S- R	-767 / 12883	-39.5	-39.5	0.42 (3)	6.25	
R- Q	-850 / 13547	-39.5	-39.5	0.50 (3)	6.25	
Q-AG	-856 / 13637	-39.5	-39.5	0.50 (3)	6.25	
AG- O	-441 / 6761	-39.5	-39.5	0.20 (3)	6.25	

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-AD	0 / 1200	0.11 (1)
AD- D	-320 / 29	0.03 (1)
D-AC	-154 / 4485	0.18 (1)
AC- E	-3920 / 196	0.34 (1)
E-AB	-1687 / 164	0.53 (2)
AB- F	-8 / 1162	0.10 (2)
F- Z	-2030 / 258	0.68 (2)
Z- G	-107 / 1773	0.16 (2)
G- Y	-174 / 2414	0.21 (3)
Y- H	-1131 / 96	0.46 (1)
Y- I	-1128 / 633	0.25 (3)
W- I	-254 / 3949	0.35 (3)
W- J	-4972 / 456	0.42 (3)
V- J	-221 / 4326	0.38 (3)
V- K	-7522 / 557	0.98 (3)
T- K	-2554 / 120	0.22 (1)
T- L	-52 / 3516	0.31 (1)
S- L	-2882 / 152	0.25 (1)
S- M	-147 / 4073	0.36 (1)
R- M	-287 / 3137	0.28 (3)
Q- N	-305 / 4379	0.39 (2)
R- N	-2172 / 259	0.17 (3)
AE-AF	-43 / 2761	0.00 (1)
AE- C	-4513 / 231	0.20 (1)
AG-AH	-242 / 5216	0.00 (1)
AG- N	-8581 / 518	0.80 (3)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
Q	54-0-8	-4646	-5229	413	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.96")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.42")
ALLOWABLE DEFL.(TL)= L/180 (3.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.59")

CSI: TC=0.48/1.00 (K-L:1) , BC=0.55/1.00 (T-V:1) , WB=0.98/1.00 (K-V:3) , SSI=0.30/1.00 (Q-R:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (V) (INPUT = 0.90)
JSI METAL= 0.91 (K) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T81Z		2	GREEN PARK HOMES JT 53080 (TRUSS DESC.)	E22085347(2)

Alpa Roof Truss, Maple

ID:To6XqL09rYKBxLLs9y_Z1eyrbTx-N8WdoBDhgIMXvK7VkUJCQ3N5hzMM?1GW0wfWNDyoyu

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
G	TTWW+m	MT20	6.0	10.0	4.50	1.50
H	TMW+w	MT20	3.0	8.0		
I	TTWW-m	MT20	6.0	10.0		
J	TMWW+t	MT20	4.0	6.0	2.25	1.00
K	TTWW+m	MT20	6.0	10.0	5.25	2.50
L	TMWW-t	MT20	5.0	6.0		
M	TTWW+m	MT20	8.0	9.0	4.25	2.75
N	TMWWW-t	MT20	8.0	9.0	4.00	4.00
O	TMBMW1-l	MT20	10.0	12.0	3.75	Edge
Q	BMW+w	MT20	4.0	10.0		
R, Z, AB, AD						
R	BMWW+t	MT20	4.0	6.0		
S	BMWW+t	MT20	5.0	6.0		
T	BMWW-t	MT20	5.0	6.0		
U	BS-t	MI116	5.0	17.5		
V	BMWW-t	MT20	5.0	8.0	2.50	3.75
W	BMWW-t	MT20	5.0	6.0	2.25	3.00
X	BS-t	MT20	5.0	6.0		
Y	BMWWW-t	MT20	5.0	8.0		
AA	BS-t	MT20	5.0	6.0		
AC	BMWW-t	MT20	5.0	6.0	2.00	3.00

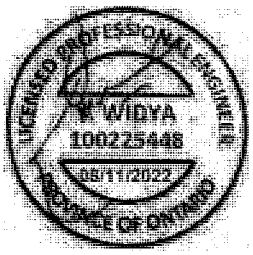
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T82		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085294

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MiTek Industries, Inc. Thu Aug 11 08:46:50 2022 Page 1
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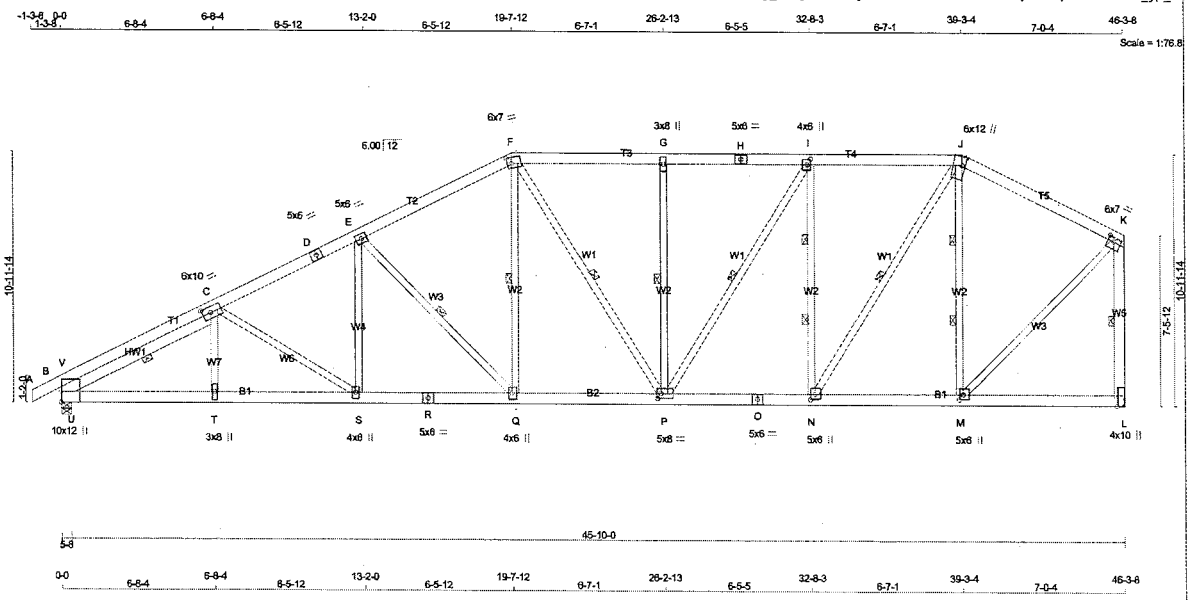

TOTAL WEIGHT = 4 X 328 = 1311 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - K	2x6	DRY	No.2	SPF
L - K	2x6	DRY	No.2	SPF
B - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1+t	MT20	10.0	12.0	5.50	
C	TMWWW-t	MT20	6.0	10.0	3.00	4.25
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW-m	MT20	6.0	7.0	3.25	2.00
G	TMW+w	MT20	3.0	8.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0	3.00	1.75
J	TTWW+m	MT20	6.0	12.0	4.50	1.50
K	TMVW-t	MT20	6.0	7.0	2.50	3.25
L	BMV1+t	MT20	4.0	10.0	Edge	1.50
M	BMWW+t	MT20	5.0	6.0	2.50	2.00
N	BMWW+t	MT20	5.0	6.0	2.75	2.25
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0	2.50	1.75
Q	BMWW+t	MT20	4.0	6.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMW+w	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
B	3955	0	4071	294	-228	5-8	5-8
L	3854	0	3854	0	-67	IN-SX	IN-SX
						MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT L. MINIMUM BEARING LENGTH AT JOINT L = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 228 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 150 LBS FACTORED UPLIFT

PROVIDE FOR 294 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	2917	1799 / 0	486 / 0	0 / 0	94 / -618	708 / 0	0 / 0
L	2858	1624 / 0	486 / 0	0 / 0	38 / -527	745 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	210 / -75	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B
BEARING SIZE FACTOR = 1.15 AT JNT(S) B (BASED ON SUPPORT DEPTH = 1-8)

BRACING

FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 3.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Q, F-Q, K-L, J-N, F-P, G-P, I-P, C-U.
2 LATERAL BRACE(S) AT 1/ 3 LENGTH OF J-M, I-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B- V	-4779 / 146	-120.3	-120.3	0.46 (2)	3.55
V- C	-2959 / 258	-120.3	-120.3	0.42 (2)	4.46
C- D	-5647 / 323	-120.3	-120.3	0.66 (2)	3.16
D- E	-5647 / 323	-120.3	-120.3	0.66 (2)	3.16
E- F	-4667 / 287	-120.3	-120.3	0.59 (2)	3.59
F- G	-4246 / 261	-132.8	-132.8	0.52 (2)	2.00
G- H	-4246 / 261	-132.8	-132.8	0.51 (2)	2.00
H- I	-4246 / 261	-132.8	-132.8	0.51 (2)	2.00
I- J	-3609 / 185	-132.8	-132.8	0.46 (1)	2.00
J- K	-2514 / 114	-120.3	-120.3	0.64 (3)	4.50
L- K	-3743 / 106	0.0	0.0	0.57 (1)	4.43
B- U	-301 / 2633	-39.5	-39.5	0.37 (2)	6.25
U- T	-358 / 5520	-39.5	-39.5	0.74 (2)	6.25
T- S	-360 / 5516	-39.5	-39.5	0.74 (2)	6.25
S- R	-243 / 5069	-39.5	-39.5	0.69 (1)	6.25
R- Q	-243 / 5069	-39.5	-39.5	0.69 (1)	6.25
Q- P	-75 / 4158	-39.5	-39.5	0.59 (1)	6.25
P- O	0 / 3609	-39.5	-39.5	0.50 (1)	10.00
O- N	0 / 3609	-39.5	-39.5	0.50 (1)	10.00
N- M	0 / 2221	-39.5	-39.5	0.41 (1)	10.00
M- L	-40 / 83	-39.5	-39.5	0.19 (17)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	0 / 301	0.05 (17)
C- S	-610 / 140	0.45 (2)
S- E	0 / 606	0.10 (5)
E- Q	-1548 / 244	0.75 (2)
Q- F	-88 / 1391	0.22 (2)
M- J	-1874 / 83	0.48 (1)
M- K	0 / 3140	0.50 (1)
N- J	-90 / 2614	0.42 (1)
F- P	-258 / 516	0.22 (2)
N- I	-1982 / 156	0.51 (1)
P- G	-1059 / 129	0.61 (2)
P- I	-146 / 1787	0.29 (2)
U- V	0 / 2244	0.00 (1)
U- C	-3481 / 68	0.65 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.54")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.21")
ALLOWABLE DEFL.(TL)= L/180 (3.09")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.30")

CSI: TC=0.66/1.00 (C-E:2) , BC=0.74/1.00 (T-U:2) , WB=0.75/1.00 (E-Q:2) , SSI=0.36/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)
JSI METAL= 0.97 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T83		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085295

Alpa Roof Truss, Maple

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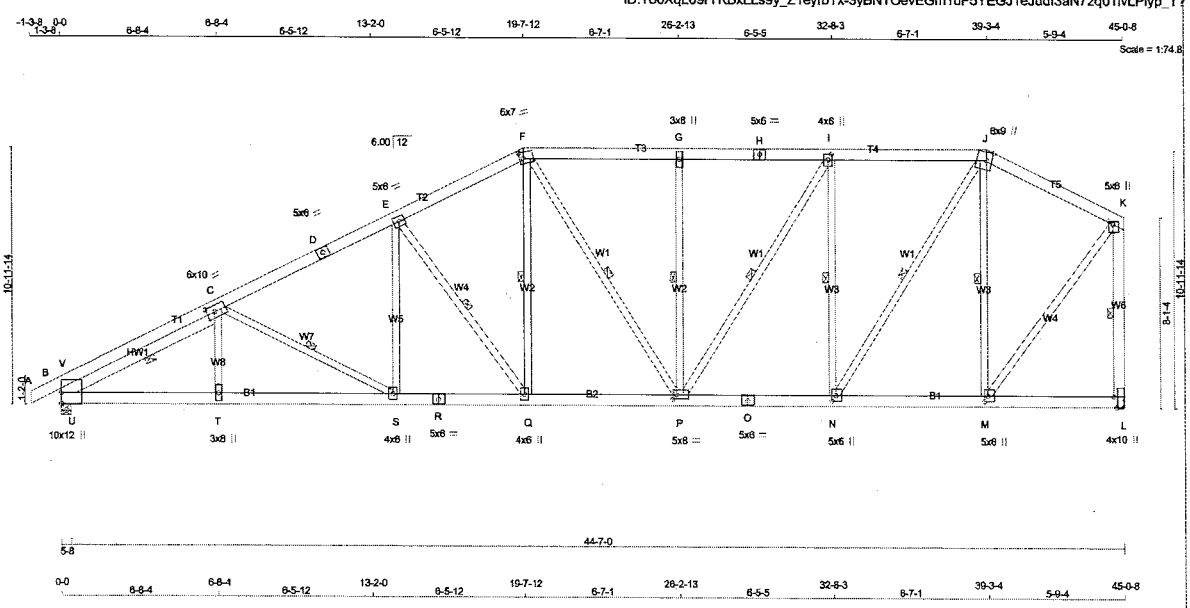

TOTAL WEIGHT = 5 X 325 = 1627 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - K	2x6	DRY	No.2	SPF
L - K	2x6	DRY	No.2	SPF
B - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
M - J	2x4	DRY	2100F 1.8E	SPF
N - I	2x4	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMWW1+t	MT20	10.0	12.0	5.50	
C	TMWWW-t	MT20	6.0	10.0	3.00	4.00
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW-m	MT20	6.0	7.0	3.25	2.00
G	TMW+w	MT20	3.0	8.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0	3.00	1.75
J	TTWW+m	MT20	8.0	9.0	4.25	2.75
K	TMVW+p	MT20	5.0	8.0	1.75	2.25
L	BMV1+t	MT20	4.0	10.0	Edge	1.50
M	BMWW+t	MT20	5.0	6.0	2.75	1.75
N	BMWW+t	MT20	5.0	6.0	2.75	2.00
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0	2.25	2.00
Q	BMWW+t	MT20	4.0	6.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMW+w	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	3851	0	3999	310	-227	5-8	5-8
L	3758	0	3758	0	-53	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT L. MINIMUM BEARING LENGTH AT JOINT L = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 227 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 150 LBS FACTORED UPLIFT

PROVIDE FOR 310 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	2839	1778 / 0	473 / 0	0 / 0	93 / -604	688 / 0	0 / 0
L	2785	1580 / 0	473 / 0	0 / 0	37 / -508	732 / 0	0 / 0
HORIZONTAL REACTIONS							
B	---	0 / 0	0 / 0	0 / 0	221 / -74	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B

BRACING

FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 3.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-S, E-Q, F-Q, J-M, K-L, J-N, F-P, I-N, G-P, I-P, C-U.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B- V	-4660 / 159	-120.3	-120.3	0.41 (2)	3.66
V- C	-2818 / 243	-120.3	-120.3	0.39 (2)	4.60
C- D	-5284 / 306	-120.3	-120.3	0.67 (2)	3.30
D- E	-5284 / 306	-120.3	-120.3	0.67 (2)	3.30
E- F	-4451 / 301	-120.3	-120.3	0.53 (2)	3.67
F- G	-3987 / 258	-132.8	-132.8	0.51 (2)	2.00
G- H	-3987 / 258	-132.8	-132.8	0.50 (2)	2.00
H- I	-3987 / 258	-132.8	-132.8	0.50 (2)	2.00
I- J	-3287 / 181	-132.8	-132.8	0.45 (1)	2.00
J- K	-2078 / 115	-120.3	-120.3	0.42 (3)	5.18
L- K	-3670 / 83	0.0	0.0	0.66 (1)	4.47
B- U	-293 / 2522	-39.5	-39.5	0.36 (2)	6.25
U- T	-364 / 5456	-39.5	-39.5	0.72 (2)	6.25
T- S	-366 / 5450	-39.5	-39.5	0.76 (2)	6.25
S- R	-213 / 4732	-39.5	-39.5	0.84 (1)	6.25
R- Q	-213 / 4732	-39.5	-39.5	0.64 (1)	6.25
Q- P	-75 / 3959	-39.5	-39.5	0.54 (1)	6.25
P- O	0 / 3287	-39.5	-39.5	0.46 (1)	10.00
O- N	0 / 3287	-39.5	-39.5	0.46 (1)	10.00
N- M	0 / 1827	-39.5	-39.5	0.33 (1)	10.00
M- L	-43 / 90	-39.5	-39.5	0.15 (17)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	0 / 353	0.06 (17)
C- S	-851 / 175	0.29 (2)
S- E	0 / 680	0.11 (2)
E- Q	-1553 / 239	0.69 (2)
Q- F	-119 / 1490	0.24 (2)
M- J	-2107 / 70	0.76 (1)
M- K	0 / 3027	0.49 (1)
N- J	-88 / 2749	0.44 (1)
F- P	-331 / 428	0.28 (2)
N- I	-2088 / 158	0.75 (1)
P- G	-1059 / 129	0.61 (2)
P- I	-147 / 1871	0.30 (2)
U- V	0 / 2222	0.00 (1)
U- C	-3492 / 85	0.65 (2)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF {7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1,000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.20")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")

CSI: TC=0.67/1.00 (C-E:2) , BC=0.76/1.00 (S-T:2) , WB=0.76/1.00 (J-M:1) , SSI=0.36/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)
JSI METAL= 0.96 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T84		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085296

Alpa Roof Truss, Maple

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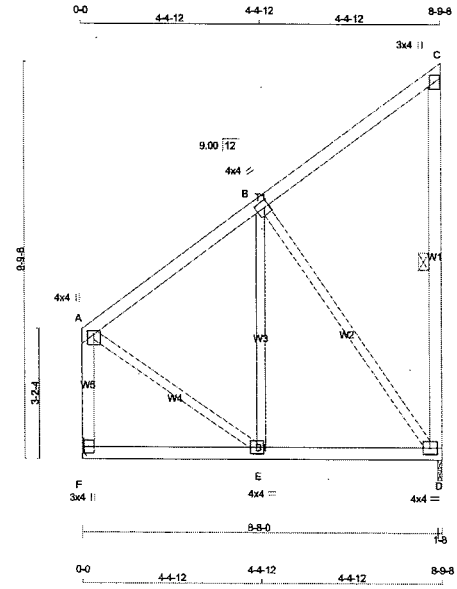


TOTAL WEIGHT = 11 X 51 = 560 lb

[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	4.0	1.00	2.00
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TMV+p	MT20	3.0	4.0		
D	BMVW1-t	MT20	4.0	4.0		
E	BMWW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	500	0	500	0	0	MECHANICAL	
D	500	0	500	0	0	1-8	1-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX /MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	353	235 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
D	353	235 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-D.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-468 / 0	0.0	0.0	0.08 (1)		7.81
A- B	-246 / 0	-95.2	-95.2	0.24 (1)		6.25
B- C	-31 / 0	-95.2	-95.2	0.24 (1)		6.25
D- C	-158 / 0	0.0	0.0	0.07 (1)		6.25
F- E	0 / 0	-18.5	-18.5	0.10 (4)		10.00
E- D	0 / 222	-18.5	-18.5	0.12 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 265	0.06 (1)
E- B	-45 / 65	0.03 (1)
B- D	-382 / 0	0.42 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (A-B:1) , BC=0.12/1.00 (D-E:4) , WB=0.42/1.00 (B-D:1) , SSI=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

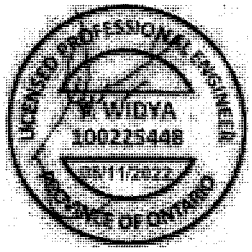
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (A) (INPUT = 0.90)
JSI METAL= 0.09 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T85		3	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085297

Alpa Roof Truss, Maple

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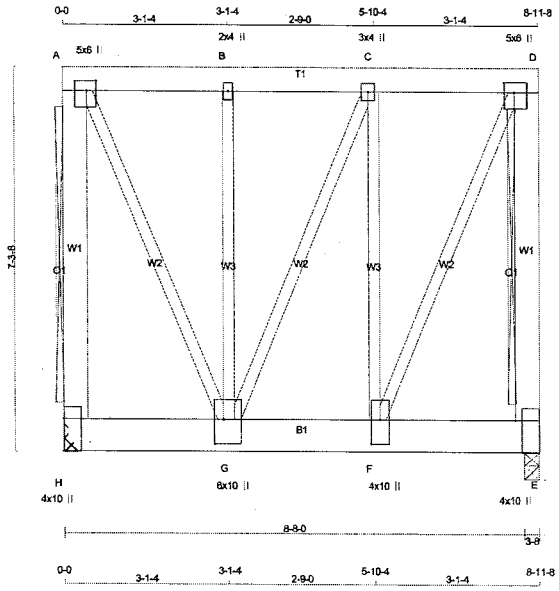


TOTAL WEIGHT = 3 X 86 = 258 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
H - A	2x6	DRY	No.2	SPF
A - D	2x6	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
H - E	2x8	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
H- A	2	12	TOP
A- D	2	12	SIDE(35.0)
D- E	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
H- E	4	4	SIDE(1270.8)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

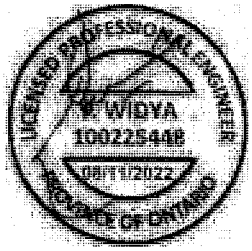
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	5.0	6.0	2.25	2.25
B	TMW+w	MT20	2.0	4.0		
C	TMWW+t	MT20	3.0	4.0		
D	TMWW+p	MT20	5.0	6.0	2.25	2.25
E	BMV1+t	MT20	4.0	10.0	Edge	1.50
F	BMWW+t	MT20	4.0	10.0	5.50	2.00
G	BMWWW+t	MT20	6.0	10.0	5.50	2.00
H	BMV1+t	MT20	4.0	10.0	7.25	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	9019	0	9109	-194	0	MECHANICAL	
E	9019	0	9109	0	0	3-8	3-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 4-0.

PROVIDE FOR 194 LBS FACTORED HORIZONTAL REACTION AT JOINT H

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	6683	3855 / 0	1133 / 0	0 / 0	43 / -123	1755 / 0	0 / 0
E	6683	3855 / 0	1133 / 0	0 / 0	78 / -133	1755 / 0	0 / 0
HORIZONTAL REACTIONS							
H	---	0 / 0	0 / 0	0 / 0	139 / -139	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x6 DRY SPF No.2 T-BRACE AT A-H, D-E

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
H- A	-6335 / 0	0.0	0.0	0.28 (2)	7.81
A- B	-2811 / 0	-67.8	-67.8	0.06 (2)	6.25
B- C	-2811 / 0	-67.8	-67.8	0.07 (2)	6.25
C- D	-2820 / 0	-67.8	-67.8	0.06 (2)	6.25
E- D	-6349 / 0	0.0	0.0	0.28 (2)	7.81
H- G	-125 / 167	-1945.8	-1945.8	0.30 (2)	6.25
G- F	0 / 2820	-1945.8	-1945.8	0.25 (2)	10.00
F- E	-29 / 75	-1945.8	-1945.8	0.29 (2)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	CSI (LC)
F- D	0 / 6759	0.51 (2)
A- G	0 / 6736	0.51 (2)
F- C	-170 / 126	0.04 (2)
G- B	-181 / 97	0.05 (9)
G- C	-69 / 79	0.02 (12)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

[M]

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/180 (0.60")
CALCULATEO VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.28/1.00 (D-E:2) , BC=0.30/1.00 (G-H:2) , WB=0.51/1.00 (D-F:2) , SSI=0.58/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (D) (INPUT = 0.90)
JSI METAL= 0.42 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T86		3	TRUSS DESC.	JT 53080	E22085298

Alpa Roof Truss, Maple

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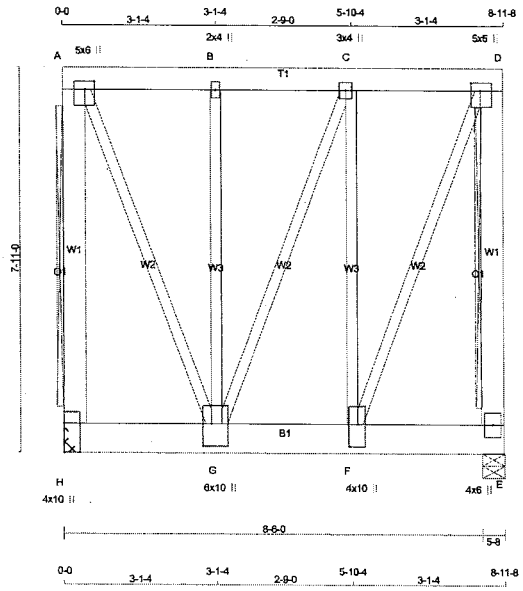


Scale = 1:36.0

TOTAL WEIGHT = 3 X 91 = 272 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
H - A	2x6	DRY	No.2	SPF
A - D	2x6	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
H - E	2x8	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS		
H- A 2	12	TOP
A- D 2	12	SIDE(35.0)
D- E 2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS		
H- E 4	4	SIDE(1240.5)
WEBS : (0.122"X3") SPIRAL NAILS		
2x3 1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

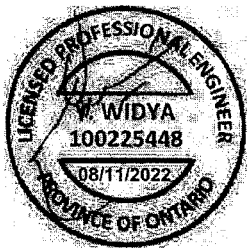
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	5.0	6.0	2.00	2.25
B	TMW+w	MT20	2.0	4.0		
C	TMWW+t	MT20	3.0	4.0		
D	TMWW+p	MT20	5.0	6.0	2.00	2.25
E	BMV1+p	MT20	4.0	6.0		
F	BMWW+t	MT20	4.0	10.0	5.50	2.00
G	BMWWW+t	MT20	6.0	10.0	5.50	2.00
H	BMV1+t	MT20	4.0	10.0	7.25	

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	8815	0	8905	-212	0	MECHANICAL	
E	8815	0	8905	0	0	5-8	4-2

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 4-0.

PROVIDE FOR 212 LBS FACTORED HORIZONTAL REACTION AT JOINT H

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	6535	3756 / 0	1111 / 0	0 / 0	53 / -123	1728 / 0	0 / 0
E	6535	3756 / 0	1111 / 0	0 / 0	88 / -143	1728 / 0	0 / 0
HORIZONTAL REACTIONS							
H	---	0 / 0	0 / 0	0 / 0	152 / -152	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x6 DRY SPF No.2 T-BRACE AT A-H, D-E

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
H- A	-6182 / 0	0.0	0.0	0.32 (2)	7.81
A- B	-2508 / 0	-67.8	-67.6	0.06 (2)	6.25
B- C	-2508 / 0	-67.8	-67.8	0.07 (2)	6.25
C- D	-2517 / 0	-67.8	-67.8	0.06 (2)	6.25
E- D	-6196 / 0	0.0	0.0	0.32 (2)	7.81
H- G	-136 / 182	-1900.2	-1900.2	0.29 (2)	6.25
G- F	0 / 2517	-1900.2	-1900.2	0.24 (2)	10.00
F- E	-32 / 82	-1900.2	-1900.2	0.29 (2)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- D	0 / 6496	0.49 (2)
A- G	0 / 6473	0.49 (2)
F- C	-169 / 138	0.06 (2)
G- B	-179 / 97	0.06 (9)
G- C	-82 / 93	0.03 (12)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/180 (0.60")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.32/1.00 (D-E:2) , BC=0.29/1.00 (G-H:2) , WB=0.49/1.00 (D-F:2) , SSI=0.57/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (D) (INPUT = 0.90)
JSI METAL= 0.41 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T87		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085299

Alpa Roof Truss, Maple

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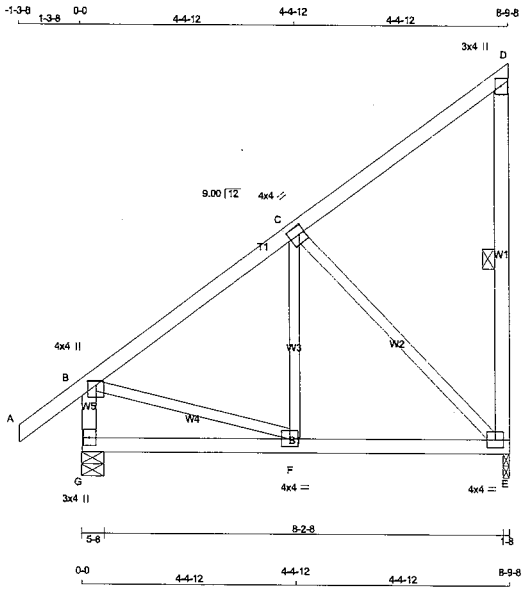


TOTAL WEIGHT = 3 X 46 = 138 lb

[MI][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - B	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TMV+p	MT20	3.0	4.0		
E	BMVW1-t	MT20	4.0	4.0		
F	BMWW-t	MT20	4.0	4.0		
G	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	500	0	500	0	0	1-8	1-8
G	631	0	631	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	353	235 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
G	443	309 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF D-E.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-349 / 0	-95.2	-95.2	0.24 (1)	6.25	
C- D	-31 / 0	-95.2	-95.2	0.24 (1)	6.25	
E- D	-158 / 0	0.0	0.0	0.05 (1)	6.25	
G- B	-599 / 0	0.0	0.0	0.06 (1)	7.81	
G- F	0 / 0	-18.5	-18.5	0.10 (4)	10.00	
F- E	0 / 304	-18.5	-18.5	0.12 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	0 / 86	0.03 (4)
C- E	-434 / 0	0.29 (1)
B- F	0 / 315	0.07 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.12/1.00 (E-F:4) , WB=0.29/1.00 (C-E:1) , SSI=0.16/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

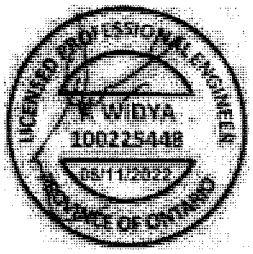
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T87G		1	TRUSS DESC.	JT 53080	E22085300

Alpa Roof Truss, Maple

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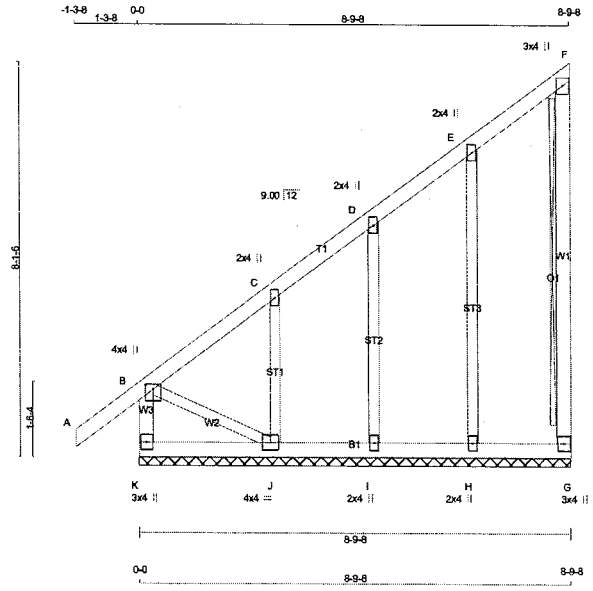

TOTAL WEIGHT = 2 X 48 = 95 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
K - B	2x4	DRY	No.2	SPF
A - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C, D, E						
C	TMV+w	MT20	2.0	4.0		
F	TMV+p	MT20	3.0	4.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BMWW1-t	MT20	4.0	4.0		
K	BMV1+p	MT20	3.0	4.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x3 DRY SPF No.2 T-BRACE AT F-G

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
K- B	-252 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-2 / 0	-95.2	-95.2	0.09 (1)	10.00
C- D	-20 / 0	-95.2	-95.2	0.09 (1)	6.25
D- E	0 / 0	-95.2	-95.2	0.05 (1)	10.00
E- F	-11 / 0	-95.2	-95.2	0.05 (1)	6.25
G- F	-80 / 0	0.0	0.0	0.06 (1)	7.81
K- J	0 / 0	-18.5	-18.5	0.03 (4)	10.00
J- I	0 / 6	-18.5	-18.5	0.03 (4)	10.00
I- H	0 / 3	-18.5	-18.5	0.02 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.02 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- E	-219 / 0	0.16 (1)
I- D	-160 / 0	0.06 (1)
J- C	-262 / 0	0.06 (1)
B- J	0 / 14	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (A-B:1) , BC=0.03/1.00 (I-J:4) , WB=0.16/1.00 (E-H:1) , SSI=0.10/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.14 (C) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T88		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085348

Alpa Roof Truss, Maple

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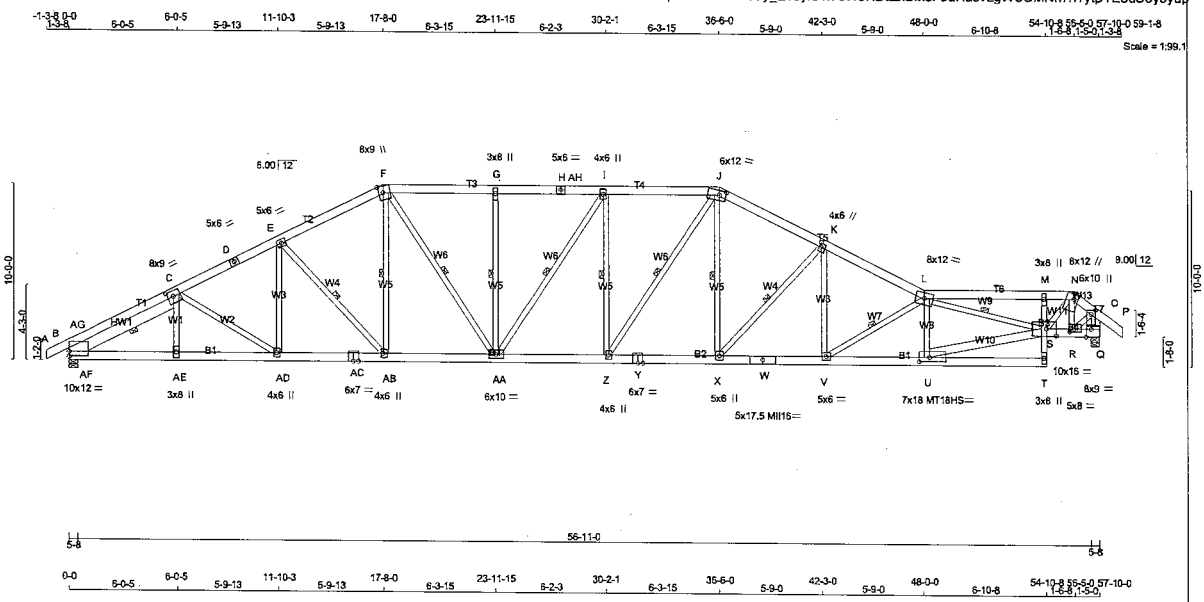

TOTAL WEIGHT = 401 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x6	DRY	No.2	SPF
N - P	2x6	DRY	No.2	SPF
Q - O	2x6	DRY	No.2	SPF
B - AC	2x6	DRY	2100F 1.8E	SPF
AC- Y	2x6	DRY	2100F 1.8E	SPF
Y - W	2x6	DRY	2100F 1.8E	SPF
W - T	2x6	DRY	2100F 1.8E	SPF
T - M	2x4	DRY	No.2	SPF
S - Q	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
U - S	2x6	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	10.0	12.0	3.50	
C	TMWWW-t	MT20	8.0	9.0	3.75	4.00
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW+m	MT20	8.0	9.0	Edge	3.25
G	TMW+w	MT20	3.0	8.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0		
J	TTWW-m	MT20	6.0	12.0	2.75	4.25
K	TMWW+t	MT20	4.0	6.0	3.00	1.25
L	TTWWW-m	MT20	8.0	12.0		
M	TMV+p	MT20	3.0	8.0		
N	TTWW+m	MT20	8.0	12.0	3.75	2.50
O	TMVW+p	MT20	6.0	10.0	2.75	2.75
Q	BMV1-t	MT20	8.0	9.0	Edge	3.50
R	BMWW-t	MT20	5.0	8.0	2.00	3.25
S	BVMWWW-I	MT20	10.0	16.0	5.00	6.50
T	BMV+p	MT20	3.0	8.0		
U	BMWW-t	MT18HS	7.0	18.0	3.00	7.00
V	BMWW-t	MT20	5.0	6.0		
W	BS-t	MII16	5.0	17.5		
X	BMWW+t	MT20	5.0	6.0		
Y	BS-t	MT20	6.0	7.0		
Z, AB, AD						
Z	BMWW+t	MT20	4.0	6.0		
AA	BMWWW-t	MT20	6.0	10.0		
AC	BS-t	MT20	6.0	7.0		
AE	BMW+w	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4911	0	4911	175	-214	5-8	5-5
Q	4904	0	4904	0	-253	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 214 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 253 LBS FACTORED UPLIFT

PROVIDE FOR 175 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3625	2126 / 0	607 / 0	0 / 0	89 / -726	892 / 0	0 / 0
Q	3619	2131 / 0	607 / 0	0 / 0	128 / -747	881 / 0	0 / 0
HORIZONTAL REACTIONS							
B	---	0 / 0	0 / 0	0 / 0	125 / -79	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q
BEARING SIZE FACTOR = 1.15 AT JNT(S) Q (BASED ON SUPPORT DEPTH = 1-8)

BRACING
FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.31 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-AB, F-AB, J-X, K-X, L-V, L-S, J-Z, F-AA, I-Z, G-AA, I-AA, C-AF.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B-AG	-5714 / 182	-120.3	-120.3	0.33 (1)	3.44
AG- C	-3820 / 240	-120.3	-120.3	0.27 (2)	4.21
C- D	-7669 / 300	-120.3	-120.3	0.65 (1)	2.75
D- E	-7669 / 300	-120.3	-120.3	0.65 (1)	2.75
E- F	-6944 / 275	-120.3	-120.3	0.59 (1)	2.95
F- G	-7134 / 248	-132.8	-132.8	0.65 (1)	2.00
G-AH	-7134 / 249	-132.8	-132.8	0.67 (1)	2.00
AH- H	-7134 / 249	-132.8	-132.8	0.67 (1)	2.00
H- I	-7134 / 249	-132.8	-132.8	0.67 (1)	2.00
I- J	-7335 / 288	-132.8	-132.8	0.69 (1)	2.00
J- K	-7589 / 329	-120.3	-120.3	0.64 (1)	2.73
K- L	-9181 / 387	-120.3	-120.3	0.78 (1)	2.31
L- M	-6619 / 382	-120.3	-120.3	0.66 (3)	2.93
M- N	-6675 / 384	-120.3	-120.3	0.49 (3)	3.02
N- O	-4228 / 230	-120.3	-120.3	0.16 (1)	4.11
O- P	0 / 53	-120.3	-120.3	0.09 (3)	10.00
Q- O	-5019 / 271	0.0	0.0	0.33 (1)	4.84
B-AF	-291 / 3412	-39.5	-39.5	0.19 (1)	6.25
AF-AE	-344 / 7015	-39.5	-39.5	0.40 (1)	6.25
AE-AD	-346 / 7010	-39.5	-39.5	0.39 (1)	6.25
AD-AC	-239 / 6873	-39.5	-39.5	0.38 (1)	6.25
AC-AB	-239 / 6873	-39.5	-39.5	0.38 (1)	6.25
AB-AA	-95 / 6194	-39.5	-39.5	0.35 (1)	6.25
AA- Z	0 / 7335	-39.5	-39.5	0.39 (1)	10.00
Z- Y	-25 / 6782	-39.5	-39.5	0.37 (1)	6.25
Y- X	-25 / 6782	-39.5	-39.5	0.37 (1)	6.25
X- W	-206 / 8249	-39.5	-39.5	0.44 (1)	6.25
W- V	-206 / 8249	-39.5	-39.5	0.44 (1)	6.25
V- U	-359 / 10224	-39.5	-39.5	0.56 (1)	6.25
U- T	-5 / 76	-39.5	-39.5	0.10 (4)	10.00
T- S	0 / 160	0.0	0.0	0.19 (1)	10.00
S- M	-847 / 190	0.0	0.0	0.18 (1)	7.81
S- R	-90 / 3184	-39.5	-39.5	0.23 (1)	6.25
R- Q	-5 / 11	-39.5	-39.5	0.08 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AE- C	0 / 291	0.05 (17)
C-AD	-391 / 176	0.24 (2)
AD- E	0 / 442	0.07 (5)
E-AB	-1273 / 217	0.48 (2)
AB- F	-81 / 1209	0.19 (2)
X- J	-121 / 2036	0.33 (3)
X- K	-2390 / 273	0.89 (3)
V- K	-28 / 1563	0.25 (3)
V- L	-2423 / 183	0.54 (3)
U- L	-2318 / 185	0.39 (1)
U- S	-358 / 10376	0.49 (1)
L- S	-3685 / 69	0.84 (1)
S- N	-317 / 5572	0.90 (1)
R- N	-1777 / 75	0.19 (1)
R- O	-127 / 3933	0.63 (1)
Z- J	-67 / 1323	0.21 (2)
F-AA	-81 / 1848	0.30 (3)
Z- I	-886 / 136	0.38 (9)
AA- G	-997 / 122	0.44 (2)
AA- I	-1321 / 788	0.91 (3)
AF-AG	0 / 2504	0.00 (1)
AF- C	-4384 / 66	0.49 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2018
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.45")
ALLOWABLE DEFL.(TL)= L/180 (3.86")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.64")

CSI: TC=0.78/1.00 (K-L:1) , BC=0.56/1.00 (U-V:1) , WB=0.91/1.00 (I-AA:3) , SSI=0.34/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.99 (AC) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T89		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085349

Alpa Roof Truss, Maple

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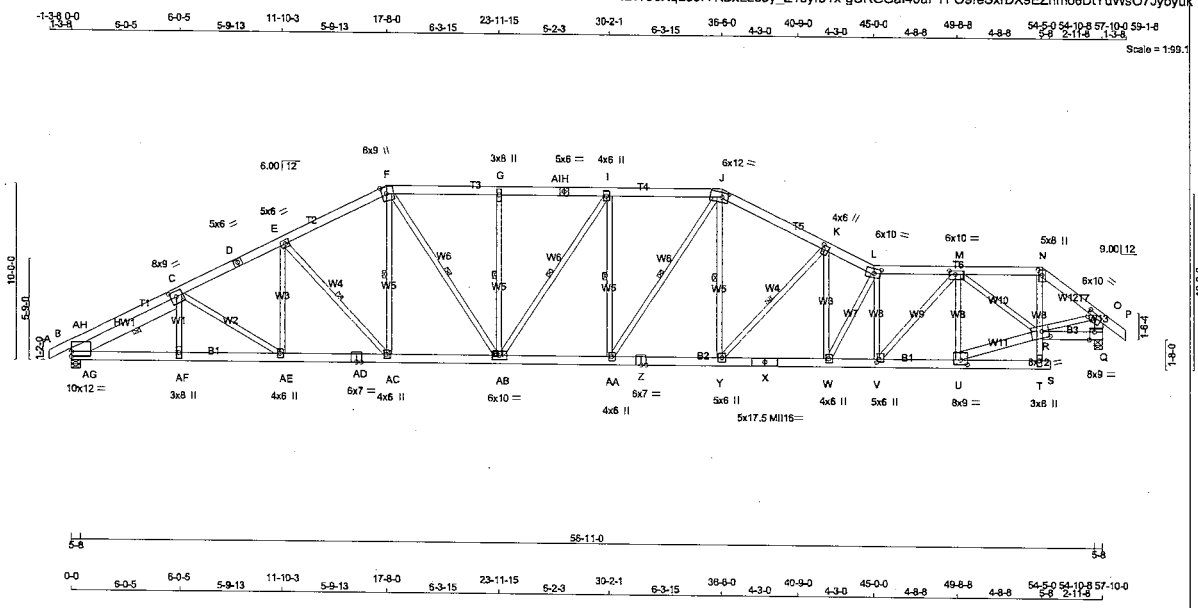


TOTAL WEIGHT = 4 X 410 = 1640 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x6	DRY	No.2	SPF
N - P	2x6	DRY	No.2	SPF
Q - O	2x6	DRY	No.2	SPF
B - AD	2x6	DRY	2100F 1.8E	SPF
AD- Z	2x6	DRY	2100F 1.8E	SPF
Z - X	2x6	DRY	2100F 1.8E	SPF
X - S	2x6	DRY	2100F 1.8E	SPF
R - Q	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF

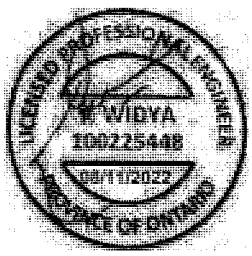
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-i	MT20	10.0	12.0	3.50	
C	TMWWW-t	MT20	8.0	9.0	3.75	4.00
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW+m	MT20	8.0	9.0	Edge	3.25
G	TMW+w	MT20	3.0	8.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0		
J	TTWW-m	MT20	6.0	12.0	2.75	4.25
K	TMWW+t	MT20	4.0	6.0	3.00	1.00
L	TTWW-m	MT20	6.0	10.0	3.50	4.50
M	TMWWW-t	MT20	6.0	10.0	2.50	4.00
N	TTW+p	MT20	5.0	8.0	3.50	2.50
O	TMWW-t	MT20	6.0	10.0	2.50	5.00
Q	BMV1-t	MT20	8.0	9.0	Edge	3.50
R	BWMWWW*+w	MT20	8.0	12.0	4.50	4.50
T	BMW+w	MT20	3.0	8.0		
U	BMWW-t	MT20	8.0	9.0	3.25	4.50
V	BMWW+t	MT20	5.0	6.0	2.00	1.75
W, AA, AC, AE						
W	BMWW+t	MT20	4.0	6.0		
X	BS-t	MII16	5.0	17.5		
Y	BMWW+t	MT20	5.0	6.0		
Z	BS-t	MT20	6.0	7.0		
AB	BMWWW-t	MT20	6.0	10.0		
AD	BS-t	MT20	6.0	7.0		
AF	BMW+w	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4914	0	4914	194	-214	5-8	5-5
Q	4928	0	4928	0	-244	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 214 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 244 LBS FACTORED UPLIFT.

PROVIDE FOR 194 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3628	2127 / 0	608 / 0	0 / 0	89 / -727	892 / 0	0 / 0
Q	3640	2130 / 0	621 / 0	0 / 0	144 / -747	890 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	138 / -77	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q

BRACING
FOR SECTION F-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.81 FT

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-AC, F-AC, J-Y, K-Y, J-AA, F-AB, I-AA, G-AB, I-AB, C-AG.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B-AH	-5719 / 182	-120.3	-120.3	0.33 (1)	3.44
AH- C	-3823 / 239	-120.3	-120.3	0.27 (2)	4.21
C- D	-7677 / 299	-120.3	-120.3	0.65 (1)	2.74
D- E	-7677 / 299	-120.3	-120.3	0.65 (1)	2.74
E- F	-6951 / 274	-120.3	-120.3	0.59 (1)	2.95
F- G	-7144 / 248	-132.8	-132.8	0.65 (1)	2.00
G-AI	-7144 / 248	-132.8	-132.8	0.67 (1)	2.00
AI- H	-7144 / 248	-132.8	-132.8	0.67 (1)	2.00
H- I	-7144 / 248	-132.8	-132.8	0.67 (1)	2.00
I- J	-7347 / 289	-132.8	-132.8	0.69 (1)	2.00
J- K	-7601 / 327	-120.3	-120.3	0.60 (1)	2.78
K- L	-9147 / 406	-120.3	-120.3	0.57 (1)	2.42
L- M	-8905 / 417	-120.3	-120.3	0.55 (1)	2.49
M- N	-4501 / 267	-120.3	-120.3	0.33 (3)	3.85
N- O	-5437 / 267	-120.3	-120.3	0.25 (1)	3.59
O- P	0 / 53	-120.3	-120.3	0.09 (3)	10.00
Q- O	-4856 / 269	0.0	0.0	0.32 (1)	4.91
B-AG	-290 / 3415	-39.5	-39.5	0.19 (1)	6.25
AG-AF	-344 / 7021	-39.5	-39.5	0.40 (1)	6.25
AF-AE	-345 / 7017	-39.5	-39.5	0.39 (1)	6.25
AE-AD	-238 / 6880	-39.5	-39.5	0.38 (1)	6.25
AD-AC	-238 / 6880	-39.5	-39.5	0.38 (1)	6.25
AC-AB	-94 / 6201	-39.5	-39.5	0.35 (1)	6.25
AB-AA	0 / 7347	-39.5	-39.5	0.39 (1)	10.00
AA- Z	-26 / 6800	-39.5	-39.5	0.38 (1)	6.25
Z- Y	-26 / 6800	-39.5	-39.5	0.38 (1)	6.25
Y- X	-202 / 8245	-39.5	-39.5	0.45 (1)	6.25
X- W	-202 / 8245	-39.5	-39.5	0.45 (1)	6.25
W- V	-266 / 8986	-39.5	-39.5	0.50 (1)	6.25
V- U	-208 / 6374	-39.5	-39.5	0.37 (1)	6.25
U- T	-3 / 31	-39.5	-39.5	0.07 (4)	10.00
T- S	0 / 0	-39.5	-39.5	0.00 (17)	10.00
R- Q	-5 / 11	-39.5	-39.5	0.03 (17)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AF- C	0 / 291	0.05 (17)
C-AE	-391 / 177	0.24 (2)
AE- E	0 / 442	0.07 (5)
E-AC	-1273 / 217	0.48 (2)
AC- F	-81 / 1208	0.19 (2)
Y- J	-115 / 2030	0.33 (3)
Y- K	-2351 / 266	0.88 (3)
W- K	-64 / 1675	0.27 (3)
W- L	-1683 / 142	0.67 (3)
V- L	-2908 / 107	0.91 (1)
V- M	-84 / 3877	0.62 (1)
U- M	-2065 / 145	0.65 (1)
T- R	0 / 111	0.09 (1)
R- N	-64 / 2841	0.54 (1)
R- O	-125 / 4493	0.72 (1)
U- R	-219 / 6769	0.80 (1)
M- R	-2411 / 123	0.32 (1)
AA- J	-67 / 1322	0.21 (2)
F-AB	-81 / 1851	0.30 (3)
AA- I	-885 / 137	0.38 (9)
AB- G	-997 / 122	0.44 (2)
AB- I	-1322 / 787	0.91 (3)
AG-AH	0 / 2507	0.00 (1)
AG- C	-4388 / 65	0.49 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.42")
ALLOWABLE DEFL.(TL)= L/180 (3.86")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.60")

CSI: TC=0.69/1.00 (I-J:1) , BC=0.50/1.00 (V-W:1) , WB=0.92/1.00 (M-R:1) , SSI=0.34/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.99 (AD) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T90		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085301

Alpa Roof Truss, Maple

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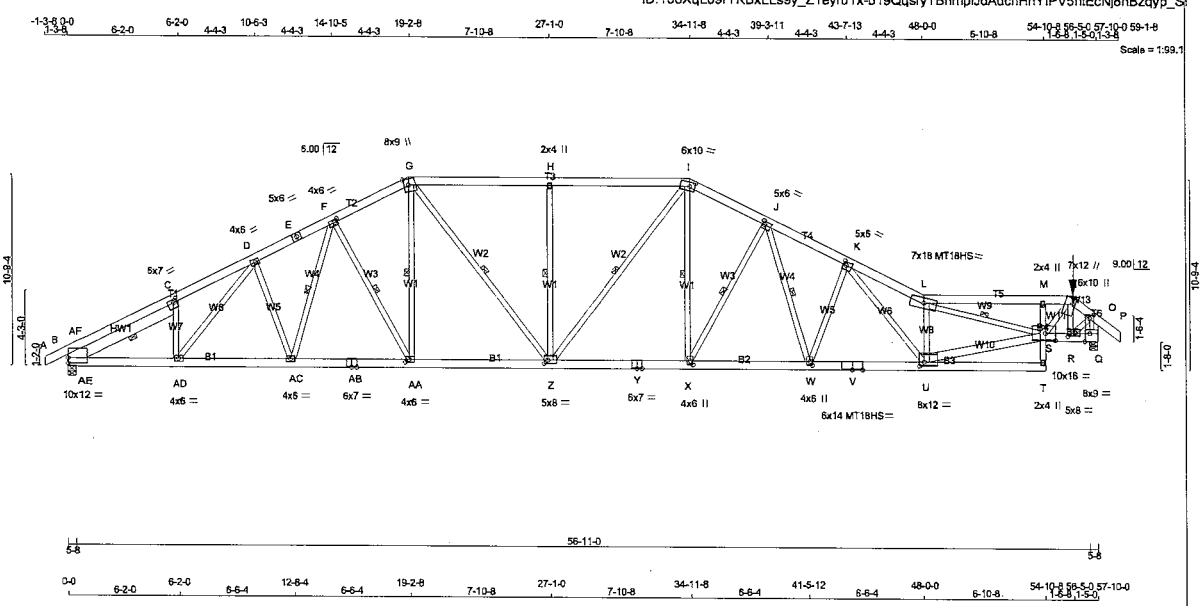

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	2100F 1.8E	SPF
I - L	2x6	DRY	No.2	SPF
L - N	2x6	DRY	No.2	SPF
N - P	2x6	DRY	No.2	SPF
Q - O	2x6	DRY	No.2	SPF
B - AB	2x6	DRY	2100F 1.8E	SPF
AB- Y	2x6	DRY	2100F 1.8E	SPF
Y - V	2x6	DRY	2100F 1.8E	SPF
V - T	2x6	DRY	2100F 1.8E	SPF
T - M	2x4	DRY	No.2	SPF
S - Q	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
U - S	2x6	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	10.0	12.0	3.50	
C	TMWW-t	MT20	6.0	7.0	2.25	2.75
D	TMWW-t	MT20	4.0	6.0		
E	TS-t	MT20	5.0	6.0		
F	TMWW-t	MT20	4.0	6.0	2.00	2.50
G	TTWW+m	MT20	8.0	9.0	Edge	3.25
H	TMW+w	MT20	2.0	4.0		
I	TTWW-m	MT20	6.0	10.0	3.00	3.50
J	TMWW-t	MT20	5.0	6.0	2.50	1.75
K	TMWW-t	MT20	5.0	6.0	2.50	2.00
L	TTWW-m	MT18HS	7.0	18.0		
M	TMV+p	MT20	2.0	4.0		
N	TTWW+m	MT20	7.0	12.0	3.75	1.75
O	TMVW+p	MT20	6.0	10.0	2.75	2.75
Q	BMV1-t	MT20	8.0	9.0	Edge	3.50
R	BMWW-t	MT20	5.0	8.0	2.00	3.50
S	BVMWWW-I	MT20	10.0	16.0	5.00	6.75
T	BMV+p	MT20	2.0	4.0		
U	BMWWW-t	MT20	8.0	12.0	2.75	3.00
V	BS-t	MT18HS	6.0	14.0		
W	BMWW+t	MT20	4.0	6.0	2.75	1.25
X	BMWW+t	MT20	4.0	6.0	2.75	1.75
Y	BS-t	MT20	6.0	7.0		
Z	BMWWW-t	MT20	5.0	8.0	2.25	2.50
AA	BMWW-t	MT20	4.0	6.0	2.00	2.50
AB	BS-t	MT20	6.0	7.0		
AC	BMWW-t	MT20	4.0	6.0		
AD	BMWW-t	MT20	4.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4786	0	4786	183	-356	5-8	5-3
Q	4808	0	4808	0	-380	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 356 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT Q FOR 380 LBS FACTORED UPLIFT

PROVIDE FOR 183 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3525	2126 / 0	607 / 0	0 / 0	193 / -763	792 / 0	0 / 0
Q	3540	2139 / 0	607 / 0	0 / 0	173 / -762	794 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	131 / -85	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, Q

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 1.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-AC, F-AA, G-AA, G-Z, H-Z, I-Z, I-X, J-X, J-W, L-S, C-AE.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.10 (2)	10.00	
B-AF	-5568 / 359	-120.3	-120.3	0.40 (2)	3.38	
AF- C	-3744 / 356	-120.3	-120.3	0.33 (2)	4.16	
C- D	-7578 / 658	-120.3	-120.3	0.52 (1)	2.84	
D- E	-7277 / 623	-120.3	-120.3	0.50 (1)	2.91	
E- F	-7277 / 623	-120.3	-120.3	0.50 (1)	2.91	
F- G	-6458 / 578	-120.3	-120.3	0.43 (1)	3.15	
G- H	-6547 / 601	-120.3	-120.3	0.50 (1)	3.80	
H- I	-6547 / 601	-120.3	-120.3	0.50 (1)	3.80	
I- J	-6940 / 636	-120.3	-120.3	0.45 (1)	3.00	
J- K	-8638 / 748	-120.3	-120.3	0.63 (1)	2.49	
K- L	-11093 / 904	-120.3	-120.3	0.92 (1)	1.77	
L- M	-6465 / 562	-120.3	-120.3	0.70 (1)	2.82	
M- N	-6525 / 566	-120.3	-120.3	0.50 (3)	2.92	
N- O	-4139 / 347	-120.3	-120.3	0.17 (1)	4.09	
O- P	0 / 53	-120.3	-120.3	0.10 (3)	10.00	
Q- O	-4920 / 402	0.0	0.0	0.35 (1)	4.81	
B-AE	-405 / 3338	-39.5	-39.5	0.20 (1)	6.25	
AE-AD	-580 / 6781	-39.5	-39.5	0.43 (1)	6.25	
AD-AC	-526 / 6695	-39.5	-39.5	0.42 (1)	6.25	
AC-AB	-441 / 6288	-39.5	-39.5	0.40 (1)	6.25	
AB-AA	-441 / 6288	-39.5	-39.5	0.40 (1)	6.25	
AA- Z	-395 / 5770	-39.5	-39.5	0.38 (1)	6.25	
Z- Y	-260 / 6214	-39.5	-39.5	0.40 (1)	6.25	
Y- X	-260 / 6214	-39.5	-39.5	0.40 (1)	6.25	
X- W	-397 / 7153	-39.5	-39.5	0.44 (1)	6.25	
W- V	-538 / 8326	-39.5	-39.5	0.53 (1)	6.25	
V- U	-538 / 8326	-39.5	-39.5	0.53 (1)	6.25	
U- T	-7 / 80	-39.5	-39.5	0.12 (4)	10.00	
T- S	0 / 171	0.0	0.0	0.23 (1)	10.00	
S- M	-744 / 185	0.0	0.0	0.21 (1)	7.81	
S- R	-179 / 3116	-39.5	-39.5	0.25 (1)	6.25	
R- O	-5 / 11	-39.5	-39.5	0.09 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AD- C	-118 / 461	0.08 (3)
AD- D	-318 / 332	0.23 (10)
D-AC	-711 / 182	0.34 (2)
AC- F	-86 / 972	0.17 (2)
F-AA	-1329 / 227	0.56 (2)
AA- G	-106 / 1466	0.26 (2)
G- Z	-207 / 1816	0.32 (3)
Z- H	-1234 / 266	0.65 (10)
Z- I	-168 / 1240	0.22 (2)
X- I	-162 / 2216	0.39 (3)
X- J	-2169 / 293	0.92 (3)
J- W	-183 / 2166	0.38 (3)
W- K	-1903 / 272	0.92 (3)
K- U	-236 / 2756	0.49 (3)
U- L	-4442 / 462	0.80 (1)
U- S	-685 / 10114	0.53 (1)
L- S	-3592 / 216	0.85 (1)
S- N	-466 / 5441	0.95 (1)
R- N	-1739 / 127	0.21 (1)
R- O	-237 / 3849	0.68 (1)
AE-AF	-22 / 2402	0.00 (1)
AE- C	-4196 / 213	0.47 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
N	56-5-0	-15	-16	3	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF {7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 9.00/12

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 19-2-8
RIGHT SETBACK = 1-5-0
END SETBACK = 2-0-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 83 % OF GSL. LOADS APPLIED TO FIRST 1-5-0 OF SPAN MEASURED FROM THE RIGHT.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.45")
ALLOWABLE DEFL.(TL)= L/180 (3.86")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.62")

CSI: TC=0.92/1.00 (K-L:1) , BC=0.53/1.00 (U-W:1) , WB=0.96/1.00 (N-S:1) , SSI=0.40/1.00 (G-H:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (N) (INPUT = 0.90)
JSI METAL= 1.00 (U) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T91		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085302

Alpa Roof Truss, Maple

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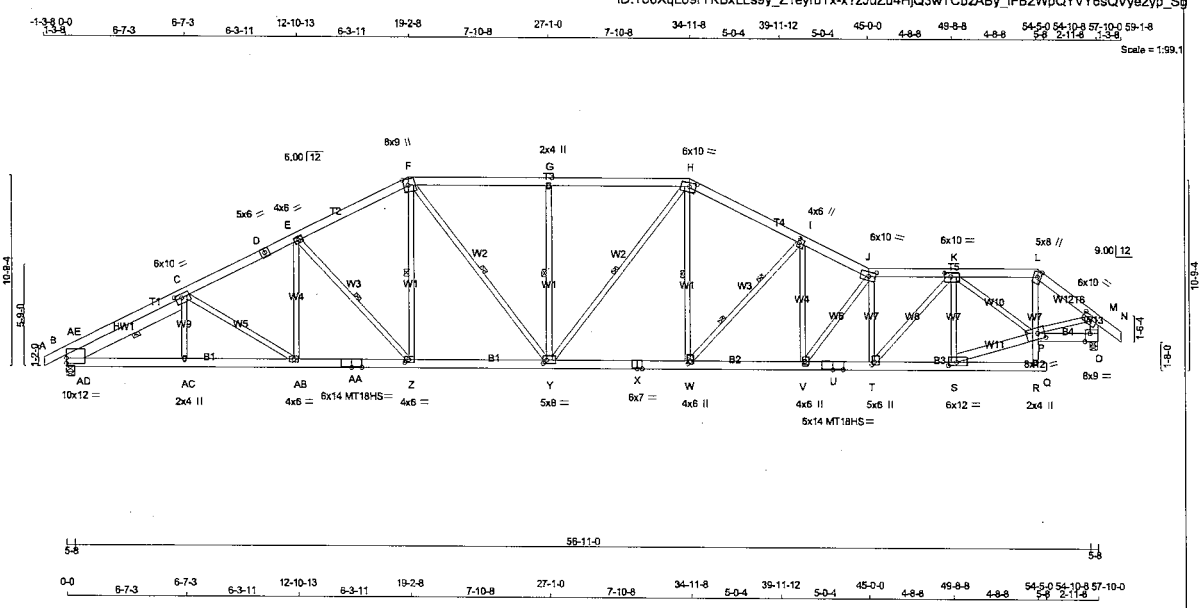

TOTAL WEIGHT = 4 X 400 = 1600 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	2100F 1.8E	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
L - N	2x6	DRY	No.2	SPF
O - M	2x6	DRY	No.2	SPF
B - AA	2x6	DRY	2100F 1.8E	SPF
AA- X	2x6	DRY	2100F 1.8E	SPF
X - U	2x6	DRY	2100F 1.8E	SPF
U - Q	2x6	DRY	2100F 1.8E	SPF
P - O	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
S - P	2x6	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-t	MT20	10.0	12.0	3.50	
C	TMWWW-t	MT20	6.0	10.0	2.25	4.25
D	TS-t	MT20	5.0	6.0		
E	TMWW-t	MT20	4.0	6.0		
F	TTWW+m	MT20	8.0	9.0	Edge	3.25
G	TMW+w	MT20	2.0	4.0		
H	TTWW-m	MT20	6.0	10.0	2.75	4.50
I	TMWW+t	MT20	4.0	6.0	3.00	1.00
J	TTWW-m	MT20	6.0	10.0	3.50	4.50
K	TMWWW-t	MT20	6.0	10.0	2.50	4.00
L	TTW+m	MT20	5.0	8.0	3.75	2.25
M	TMVW-t	MT20	6.0	10.0	2.50	5.00
O	BMV1-t	MT20	8.0	9.0	Edge	3.50
P	BWWWWW*+	MT20	8.0	12.0	4.50	4.25
R	BMW+w	MT20	2.0	4.0		
S	BMWW-t	MT20	6.0	12.0	2.25	5.25
T	BMWW+t	MT20	5.0	6.0	2.00	1.75
U	BS-t	MT18HS	6.0	14.0		
V	BMWW+t	MT20	4.0	6.0		
W	BMWW+t	MT20	4.0	6.0	2.00	1.75
X	BS-t	MT20	6.0	7.0		
Y	BMWWW-t	MT20	5.0	8.0	2.25	2.50
Z	BMWW-t	MT20	4.0	6.0	2.00	2.75
AA	BS-t	MT18HS	6.0	14.0		
AB	BMWW-t	MT20	4.0	6.0		
AC	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4894	0	4894	202	-227	5-8	5-5
O	4910	0	4910	0	-255	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 227 LBS FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT O FOR 255 LBS FACTORED UPLIFT

PROVIDE FOR 202 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3611	2127 / 0	608 / 0	0 / 0	88 / -725	876 / 0	0 / 0
O	3626	2130 / 0	621 / 0	0 / 0	143 / -745	875 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	144 / -83	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, O

BRACING

FOR SECTION F-H, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.81 FT

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Z, F-Z, F-Y, G-Y, H-Y, H-W, C-AD.
2 LATERAL BRACE(S) AT 1/ 3 LENGTH OF I-W.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00
B-AE	-5754 / 192	-120.3	-120.3	0.37 (1)	3.39
AE- C	-3880 / 264	-120.3	-120.3	0.32 (2)	4.13
C- D	-7540 / 320	-120.3	-120.3	0.73 (1)	2.70
D- E	-7540 / 320	-120.3	-120.3	0.73 (1)	2.70
E- F	-6697 / 290	-120.3	-120.3	0.65 (1)	2.95
F- G	-6801 / 280	-132.8	-132.8	0.50 (1)	2.00
G- H	-6801 / 280	-132.8	-132.8	0.50 (1)	2.00
H- I	-7195 / 337	-120.3	-120.3	0.64 (1)	2.84
I- J	-8808 / 418	-120.3	-120.3	0.63 (1)	2.44
J- K	-8864 / 443	-120.3	-120.3	0.59 (1)	2.49
K- L	-4486 / 278	-120.3	-120.3	0.34 (3)	3.85
L- M	-5415 / 281	-120.3	-120.3	0.25 (1)	3.60
M- N	0 / 53	-120.3	-120.3	0.09 (3)	10.00
Q- M	-4837 / 280	0.0	0.0	0.31 (1)	4.93
B-AD	-318 / 3468	-39.5	-39.5	0.18 (1)	6.25
AD-AC	-370 / 7042	-39.5	-39.5	0.40 (1)	6.25
AC-AB	-371 / 7037	-39.5	-39.5	0.39 (1)	6.25
AB-AA	-252 / 6757	-39.5	-39.5	0.39 (1)	6.25
AA- Z	-252 / 6757	-39.5	-39.5	0.39 (1)	6.25
Z- Y	-93 / 5972	-39.5	-39.5	0.35 (1)	6.25
Y- X	-9 / 6434	-39.5	-39.5	0.38 (1)	10.00
X- W	-9 / 6434	-39.5	-39.5	0.38 (1)	10.00
W- V	-199 / 7931	-39.5	-39.5	0.45 (1)	6.25
V- U	-293 / 8943	-39.5	-39.5	0.50 (1)	6.25
U- T	-293 / 8943	-39.5	-39.5	0.50 (1)	6.25
T- S	-226 / 6349	-39.5	-39.5	0.37 (1)	6.25
S- R	-3 / 24	-39.5	-39.5	0.07 (4)	10.00
R- Q	0 / 0	-39.5	-39.5	0.00 (17)	10.00
P- O	-5 / 11	-39.5	-39.5	0.03 (17)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AC- C	0 / 320	0.05 (17)
C-AB	-567 / 142	0.42 (2)
AB- E	0 / 546	0.09 (2)
E- Z	-1444 / 238	0.65 (2)
Z- F	-83 / 1364	0.22 (2)
F- Y	-125 / 1842	0.30 (3)
Y- G	-1274 / 108	0.68 (1)
Y- H	-407 / 1282	0.39 (10)
W- H	-117 / 2121	0.34 (3)
W- I	-2443 / 287	0.53 (3)
V- I	-63 / 1591	0.27 (3)
V- J	-1815 / 162	0.91 (3)
T- J	-2869 / 126	0.90 (1)
T- K	-98 / 3851	0.62 (1)
S- K	-2057 / 150	0.64 (1)
S- P	-238 / 6750	0.32 (1)
K- P	-2398 / 130	0.92 (1)
R- P	0 / 111	0.07 (1)
P- L	-72 / 2830	0.52 (1)
P- M	-136 / 4475	0.72 (1)
AD-AE	0 / 2456	0.00 (1)
AD- C	-4312 / 62	0.55 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.5.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1,000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH:	LL =	35.1	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

{80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD} TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.40")
ALLOWABLE DEFL.(TL)= L/180 (3.86")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.57")

CSI: TC=0.73/1.00 (C-E:1) , BC=0.50/1.00 (T-V:1) , WB=0.92/1.00 (K-P:1) , SSI=0.41/1.00 (F-G:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (W) (INPUT = 0.90)
JSI METAL= 0.97 (X) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T93		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085303

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MiTek Industries, Inc. Thu Aug 11 08:47:20 2022 Page 1
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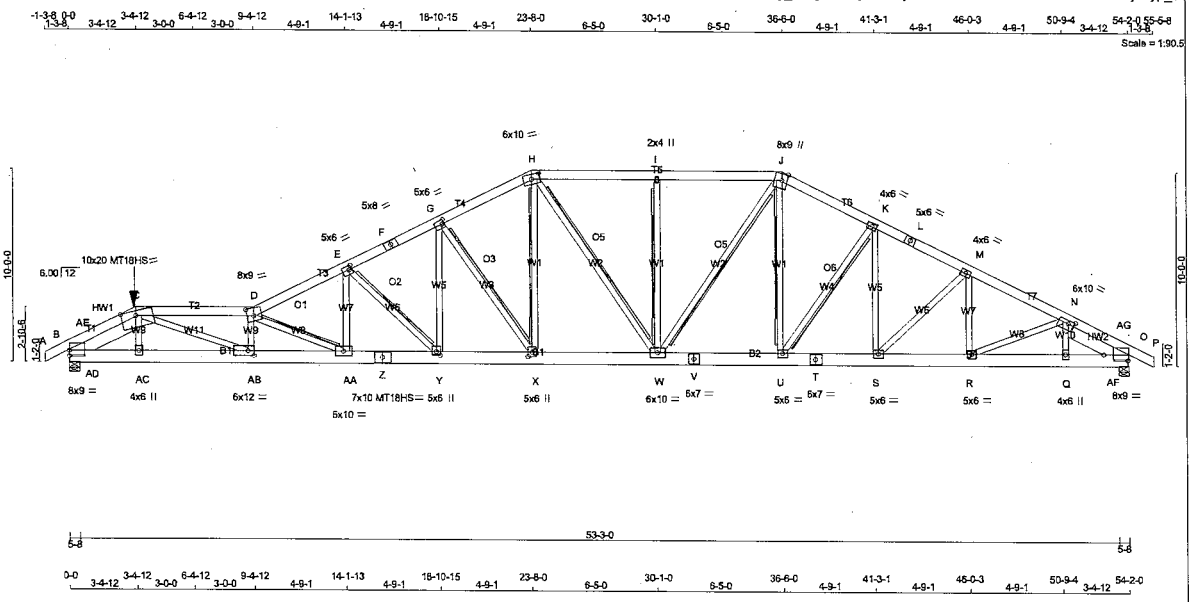

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - D	2x6	DRY	2100F 1.8E	SPF
D - F	2x6	DRY	1650F 1.5E	SPF
F - H	2x6	DRY	1650F 1.5E	SPF
H - J	2x6	DRY	2100F 1.8E	SPF
J - L	2x6	DRY	No.2	SPF
L - P	2x6	DRY	No.2	SPF
B - Z	2x8	DRY	1950F 1.7E	SPF
Z - V	2x8	DRY	1950F 1.7E	SPF
V - T	2x8	DRY	1950F 1.7E	SPF
T - O	2x8	DRY	1950F 1.7E	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
C - AB	2x4	DRY	2100F 1.8E	SPF
G - X	2x4	DRY	2100F 1.8E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	8.0	9.0	3.50	
C	TTWWW-m	MT18HS	10.0	20.0	2.75	9.25
D	TTWW-m	MT20	8.0	9.0	4.75	4.00
E	TMWW-t	MT20	5.0	6.0	2.25	1.75
F	TS-t	MT20	5.0	8.0		
G	TMWW-t	MT20	5.0	6.0	2.50	1.75
H	TTWW-m	MT20	6.0	10.0	2.75	5.00
I	TMW+w	MT20	2.0	4.0		
J	TTWW+m	MT20	8.0	9.0	Edge	3.25
K	TMWW-t	MT20	4.0	6.0		
L	TS-t	MT20	5.0	6.0		
M	TMWW-t	MT20	4.0	6.0		
N	TMWWW-t	MT20	6.0	10.0	2.25	4.00
O	TMBMW1-I	MT20	8.0	9.0	3.50	Edge
Q	BMW+w	MT20	4.0	6.0		
R, S, U						
R	BMWW-t	MT20	5.0	6.0		
T	BS-t	MT20	6.0	7.0		
V	BS-t	MT20	6.0	7.0		
W	BMWWW-t	MT20	6.0	10.0		
X	BMWW+t	MT20	5.0	6.0	2.75	2.50
Y	BMWW+t	MT20	5.0	6.0	2.25	2.25
Z	BS-t	MT18HS	7.0	10.0		
AA	BMWW-t	MT20	6.0	10.0		
AB	BMWW-t	MT20	6.0	12.0	3.00	3.75
AC	BMW+w	MT20	4.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4656	0	4656	141	-275	5-8	5-1
O	4593	0	4593	0	-212	5-8	5-0

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 275 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT O FOR 212 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3427	2056 / 0	569 / 0	0 / 0	102 / -713	803 / 0	0 / 0
O	3387	2005 / 0	569 / 0	0 / 0	77 / -674	814 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, O

BRACING
FOR SECTION H-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x4 DRY SPF No.2 T-BRACE AT D-AA, E-Y, G-X, H-X, H-W, I-W, J-W, J-U, K-U

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 6	-120.3	-120.3	0.10 (2)	10.00
B-AE	-4970 / 261	-120.3	-120.3	0.16 (1)	3.79
AE- C	-3693 / 252	-120.3	-120.3	0.12 (2)	4.36
C- D	-14168 / 705	-130.3	-130.3	0.69 (1)	2.42
D- E	-11150 / 536	-120.3	-120.3	0.47 (1)	2.78
E- F	-8707 / 432	-120.3	-120.3	0.32 (1)	3.28
F- G	-8707 / 432	-120.3	-120.3	0.32 (1)	3.28
G- H	-7055 / 360	-120.3	-120.3	0.26 (1)	3.66
H- I	-6409 / 293	-132.8	-132.8	0.35 (1)	2.00
I- J	-6409 / 293	-132.8	-132.8	0.35 (1)	2.00
J- K	-6325 / 278	-120.3	-120.3	0.45 (1)	3.16
K- L	-5953 / 298	-120.3	-120.3	0.51 (1)	2.96
L- M	-5953 / 298	-120.3	-120.3	0.51 (1)	2.96
M- N	-7360 / 304	-120.3	-120.3	0.54 (1)	2.85
N-AG	-3728 / 184	-120.3	-120.3	0.16 (3)	4.33
AG- O	-5109 / 199	-120.3	-120.3	0.17 (1)	3.76
O- P	0 / 6	-120.3	-120.3	0.10 (3)	10.00
B-AD	-296 / 3288	-39.5	-39.5	0.31 (1)	6.25
AD-AC	-425 / 6482	-39.5	-39.5	0.50 (1)	6.25
AC-AB	-424 / 5551	-39.5	-39.5	0.64 (1)	6.25
AB-AA	-769 / 14386	-39.5	-39.5	0.99 (1)	6.25
AA- Z	-491 / 9999	-39.5	-39.5	0.50 (1)	6.25
Z- Y	-491 / 9999	-39.5	-39.5	0.50 (1)	6.25
Y- X	-300 / 7793	-39.5	-39.5	0.40 (1)	6.25
X- W	-139 / 6322	-39.5	-39.5	0.32 (1)	6.25
W- V	0 / 5649	-39.5	-39.5	0.29 (1)	10.00
V- U	0 / 5649	-39.5	-39.5	0.29 (1)	10.00
U- T	-41 / 6223	-39.5	-39.5	0.32 (1)	6.25
T- S	-41 / 6223	-39.5	-39.5	0.32 (1)	6.25
S- R	-137 / 5591	-39.5	-39.5	0.35 (1)	6.25
R- Q	-202 / 6067	-39.5	-39.5	0.33 (1)	6.25
Q-AF	-200 / 6077	-39.5	-39.5	0.39 (1)	6.25
AF- O	-107 / 3350	-39.5	-39.5	0.27 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
AC- C	0 / 1101	0.19 (1)
C-AB	-355 / 8193	0.68 (1)
AB- D	-3480 / 238	0.42 (1)
D-AA	-4882 / 310	0.91 (1)
AA- E	-90 / 2651	0.47 (1)
E- Y	-3147 / 258	0.81 (2)
Y- G	-122 / 2329	0.41 (2)
G- X	-2783 / 287	0.86 (2)
X- H	-162 / 2540	0.45 (2)
H- W	-674 / 904	0.61 (2)
W- I	-1022 / 87	0.57 (1)
W- J	-124 / 1796	0.32 (2)
U- J	-98 / 1298	0.23 (3)
U- K	-1268 / 207	0.56 (3)
S- K	-31 / 653	0.12 (3)
S- M	-716 / 135	0.39 (3)
R- M	-117 / 146	0.03 (17)
R- N	0 / 580	0.10 (1)
Q- N	0 / 294	0.05 (4)
C-AD	-4392 / 178	0.39 (1)
AD-AE	-25 / 1842	0.00 (1)
N-AF	-3760 / 128	0.32 (1)
AF-AG	-40 / 2020	0.00 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-4-12	-40	-41	7	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-4-12
RIGHT SETBACK = 17-8-0
END SETBACK = 2-0-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 100 % OF GSL.
LOADS APPLIED TO FIRST 9-4-12 OF SPAN MEASURED FROM THE LEFT.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 %-OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.81")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.57")
ALLOWABLE DEFL.(TL)= L/180 (3.61")
CALCULATED VERT. DEFL.(TL) = L/ 818 (0.79")

CSI: TC=0.69/1.00 (C-D:1) , BC=0.99/1.00 (AA-AB:1) , WB=0.91/1.00 (D-AA:1) , SSI=0.41/1.00 (B-AD:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT18HS	586	403	2455	1382	3163	3004
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (AB) (INPUT = 0.90)
JSI METAL= 0.98 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T94		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085304

Alpa Roof Truss, Maple

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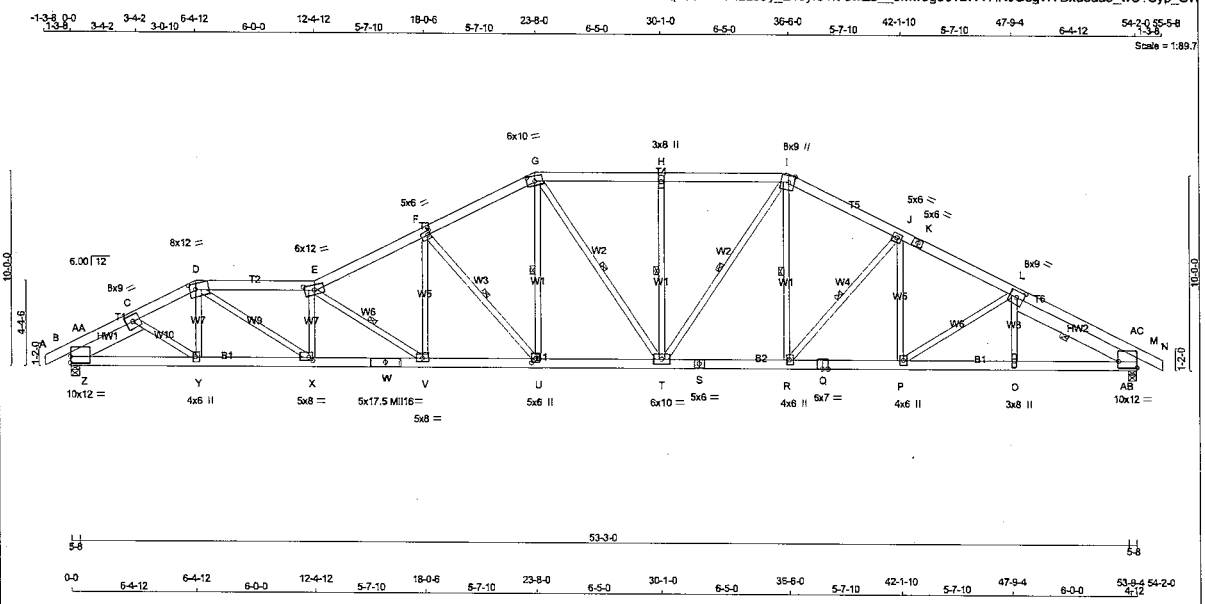


TOTAL WEIGHT = 5 X 361 = 1805 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	1650F 1.5E	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
K - N	2x6	DRY	No.2	SPF
B - W	2x6	DRY	2100F 1.8E	SPF
W - S	2x6	DRY	2100F 1.8E	SPF
S - Q	2x6	DRY	2100F 1.8E	SPF
Q - M	2x6	DRY	2100F 1.8E	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
HW2	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
F - U	2x4	DRY	2100F 1.8E	SPF

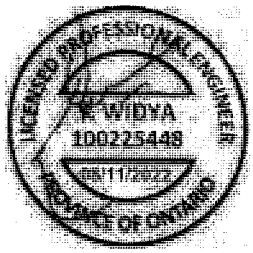
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1-I	MT20	10.0	12.0	4.00	
C	TMWW-t	MT20	8.0	9.0		
D	TTWW-m	MT20	8.0	12.0	3.25	3.75
E	TTWW-m	MT20	6.0	12.0	3.25	6.00
F	TMWW-t	MT20	5.0	6.0	2.50	2.00
G	TTWW-m	MT20	6.0	10.0	3.00	4.75
H	TMW+w	MT20	3.0	8.0		
I	TTWW+m	MT20	8.0	9.0	Edge	3.25
J	TMWW-t	MT20	5.0	6.0		
K	TS-t	MT20	5.0	6.0		
L	TMWWW-t	MT20	8.0	9.0	4.00	4.00
M	TMBMW1-I	MT20	10.0	12.0	3.75	Edge
O	BMW+w	MT20	3.0	8.0		
P, R, Y						
P	BMWW+t	MT20	4.0	6.0		
Q	BS-t	MT20	6.0	7.0		
S	BS-t	MT20	5.0	6.0		
T	BMWWW-t	MT20	6.0	10.0		
U	BMWW+t	MT20	5.0	6.0	2.50	2.50
V	BMWW-t	MT20	5.0	8.0		
W	BS-t	MII16	5.0	17.5		
X	BMWW-t	MT20	5.0	8.0	2.00	2.25

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	4566	0	4566	141	-268	5-8	4-15
M	4584	0	4584	0	-211	5-8	4-15

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 268 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 211 LBS FACTORED UPLIFT

PROVIDE FOR 141 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	3367	1998 / 0	569 / 0	0 / 0	100 / -705	800 / 0	0 / 0
M	3381	1998 / 0	569 / 0	0 / 0	77 / -674	814 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	101 / -101	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M

BRACING
FOR SECTION G-I, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-V, F-U, G-U, G-T, H-T, I-T, I-R, J-R, L-AB.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 1	-120.3	-120.3	0.09 (2)	10.00	
B-AA	-5031 / 215	-120.3	-120.3	0.16 (1)	3.81	
AA- C	-3279 / 196	-120.3	-120.3	0.10 (1)	4.63	
C- D	-7229 / 406	-120.3	-120.3	0.33 (1)	3.06	
D- E	-10690 / 545	-120.3	-120.3	0.54 (2)	2.81	
E- F	-8940 / 432	-120.3	-120.3	0.75 (1)	2.38	
F- G	-6977 / 352	-120.3	-120.3	0.57 (1)	2.92	
G- H	-6338 / 292	-132.8	-132.8	0.68 (1)	2.00	
H- I	-6338 / 292	-132.8	-132.8	0.68 (1)	2.00	
I- J	-6262 / 270	-120.3	-120.3	0.50 (1)	3.17	
J- K	-6995 / 293	-120.3	-120.3	0.57 (1)	2.95	
K- L	-6995 / 293	-120.3	-120.3	0.57 (1)	2.95	
L-AC	-3598 / 243	-120.3	-120.3	0.27 (3)	4.31	
AC- M	-5348 / 176	-120.3	-120.3	0.32 (1)	3.55	
M- N	0 / 1	-120.3	-120.3	0.09 (3)	10.00	
B- Z	-252 / 2914	-39.5	-39.5	0.20 (1)	6.25	
Z- Y	-421 / 5789	-39.5	-39.5	0.36 (1)	6.25	
Y- X	-379 / 6455	-39.5	-39.5	0.39 (1)	6.25	
X- W	-544 / 10792	-39.5	-39.5	0.62 (1)	6.25	
W- V	-544 / 10792	-39.5	-39.5	0.62 (1)	6.25	
V- U	-334 / 8032	-39.5	-39.5	0.42 (1)	6.25	
U- T	-136 / 6241	-39.5	-39.5	0.34 (1)	6.25	
T- S	0 / 5596	-39.5	-39.5	0.31 (1)	10.00	
S- R	0 / 5596	-39.5	-39.5	0.31 (1)	10.00	
R- Q	-62 / 6266	-39.5	-39.5	0.34 (1)	6.25	
Q- P	-62 / 6266	-39.5	-39.5	0.34 (1)	6.25	
P- O	-173 / 6497	-39.5	-39.5	0.36 (1)	6.25	
O-AB	-171 / 6501	-39.5	-39.5	0.37 (1)	6.25	
AB- M	-125 / 3215	-39.5	-39.5	0.17 (1)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- Y	0 / 832	0.13 (1)
Y- D	-175 / 104	0.03 (8)
D- X	-190 / 5086	0.82 (1)
X- E	-2720 / 187	0.48 (1)
E- V	-3379 / 255	0.76 (2)
V- F	-71 / 2189	0.35 (2)
F- U	-2937 / 306	0.67 (2)
U- G	-152 / 2462	0.40 (2)
G- T	-660 / 921	0.46 (2)
T- H	-1026 / 87	0.45 (1)
T- I	-126 / 1786	0.29 (2)
R- I	-84 / 1237	0.20 (3)
R- J	-1305 / 215	0.48 (3)
P- J	0 / 507	0.08 (3)
P- L	-516 / 142	0.31 (3)
O- L	0 / 298	0.05 (17)
Z-AA	-40 / 2397	0.00 (1)
Z- C	-3861 / 228	0.34 (1)
L-AB	-3985 / 56	0.47 (1)
AB-AC	0 / 2283	0.00 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF {7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.81")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.47")
ALLOWABLE DEFL.(TL)= L/180 (3.61")
CALCULATED VERT. DEFL.(TL) = L/ 978 (0.66")

CSI: TC=0.75/1.00 (E-F:1) , BC=0.62/1.00 (V-X:1) , WB=0.82/1.00 (D-X:1) , SSI=0.33/1.00 (H-I:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.99 (S) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T95		2	TRUSS DESC.	JT 53080	E22085305

Alpa Roof Truss, Maple

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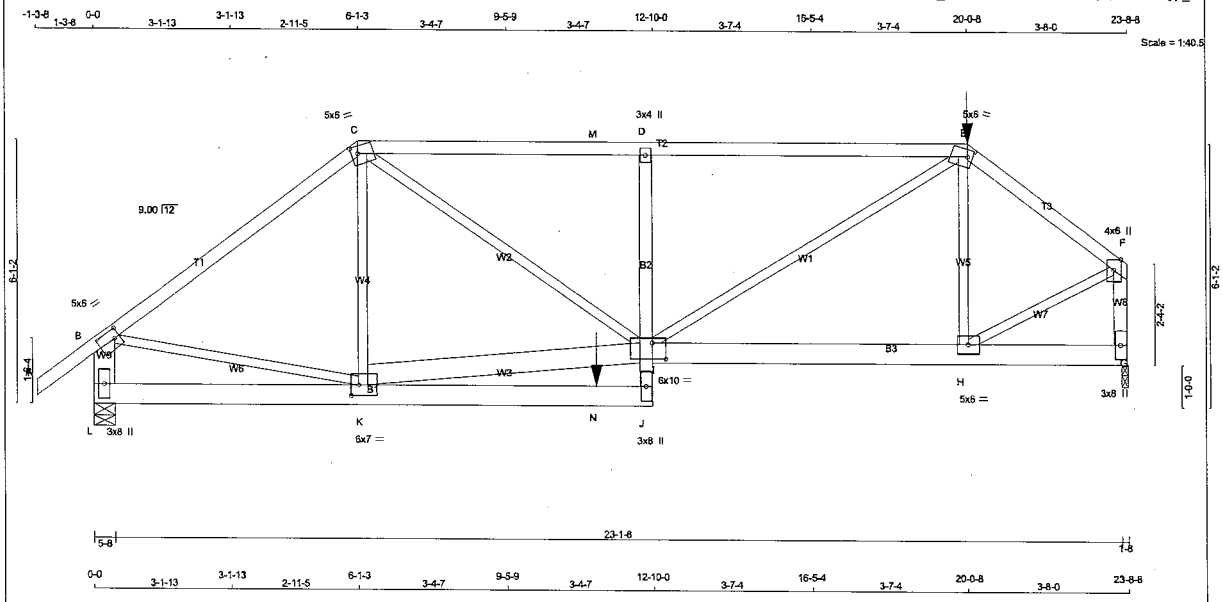


TOTAL WEIGHT = 2 X 124 = 249 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
J - D	2x4	DRY	No.2	SPF
I - G	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	TOP
C- E	1	12	SIDE(45.0)
E- F	1	12	SIDE(59.4)
G- F	1	12	TOP
L- B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
L- J	2	12	SIDE(4.9)
I- G	2	12	SIDE(4.9)
J- D	1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	
2x6	2	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

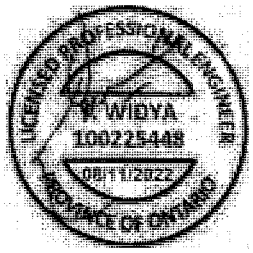
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	5.0	6.0	2.50	1.50
C	TTWW-m	MT20	5.0	6.0	2.00	1.75
D	TMV+p	MT20	3.0	4.0		
E	TTWW-m	MT20	5.0	6.0	2.00	1.50
F	TMVW+p	MT20	4.0	6.0	- Edge	
G	BMV1+p	MT20	3.0	8.0		
H	BMWW-t	MT20	5.0	6.0		
I	BVMWWW-t	MT20	6.0	10.0	4.50	3.75
J	BMV+p	MT20	3.0	8.0		
K	BMWWW-t	MT20	6.0	7.0	3.00	2.00
L	BMV1+p	MT20	3.0	8.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	2034	0	2034	0	0	5-8	1-8
G	2156	0	2156	0	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX/MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1433	969 / 0	0 / 0	0 / 0	0 / 0	464 / 0	0 / 0
G	1522	1011 / 0	0 / 0	0 / 0	0 / 0	512 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, G

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.07 (1)	10.00	
B- C	-2150 / 0	-95.2	-95.2	0.41 (1)	5.56	
C- M	-3128 / 0	-95.2	-95.2	0.67 (1)	4.35	
M- D	-3128 / 0	-139.8	-139.8	0.67 (1)	4.35	
D- E	-3141 / 0	-139.8	-139.8	0.71 (1)	4.33	
E- F	-1943 / 0	-95.2	-95.2	0.14 (1)	6.13	
L- B	-2022 / 0	0.0	0.0	0.07 (1)	7.81	
G- F	-2139 / 0	0.0	0.0	0.14 (1)	7.59	
L- K	0 / 0	-18.5	-18.5	0.11 (1)	10.00	
K- N	0 / 62	-18.5	-18.5	0.26 (1)	10.00	
N- J	0 / 62	-27.2	-27.2	0.26 (1)	10.00	
J- I	0 / 534	0.0	0.0	0.10 (1)	10.00	
I- D	-1066 / 0	0.0	0.0	0.12 (1)	7.81	
I- H	0 / 1537	-27.2	-27.2	0.15 (1)	10.00	
H- G	0 / 0	-27.2	-27.2	0.08 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-223 / 39	0.06 (1)
K- I	0 / 1671	0.11 (1)
C- I	0 / 1738	0.22 (1)
I- E	0 / 1904	0.24 (1)
H- E	-592 / 0	0.11 (1)
B- K	0 / 1745	0.22 (1)
H- F	0 / 1742	0.22 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	20-0-8	-138	-138	—	FRONT	VERT	TOTAL	--	C1
N	11-6-8	-739	-739	—	FRONT	VERT	TOTAL	--	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	5.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 6-1-3
RIGHT SETBACK = 3-8-0
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 12-2-0 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.71/1.00 (D-E:1) , BC=0.26/1.00 (J-K:1) , WB=0.24/1.00 (E-I:1) , SSI=0.26/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PL) MAX	MIN	SECTION (PL) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (B) (INPUT = 0.90)
JSI METAL= 0.45 (F) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T96		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085306

Alpa Roof Truss, Maple

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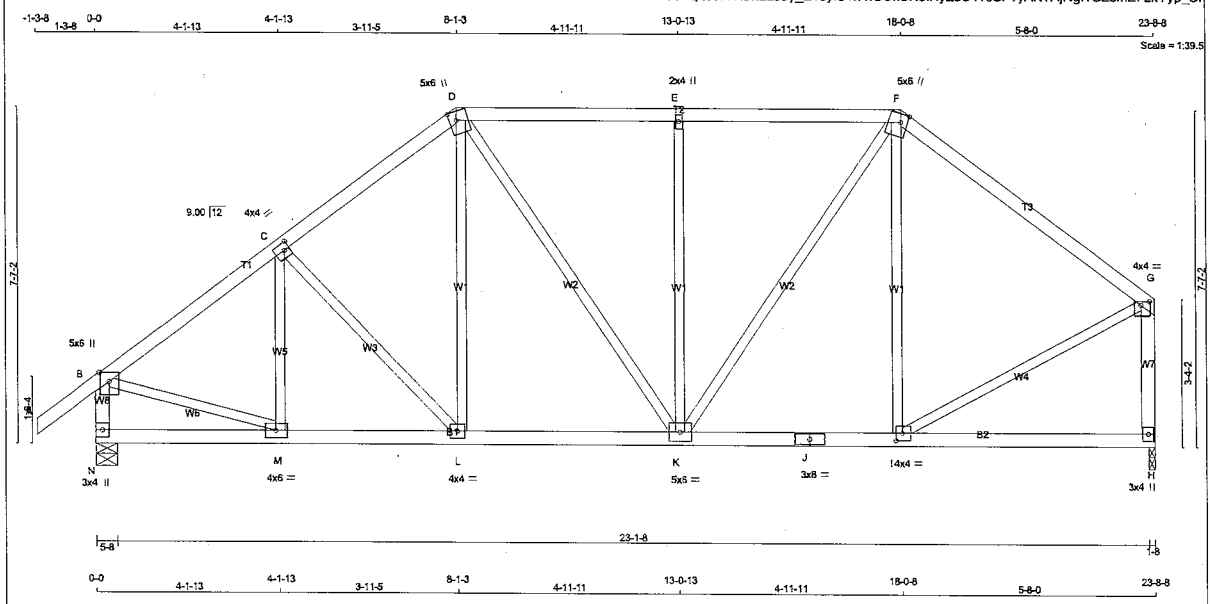

TOTAL WEIGHT = 112 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTWW+m	MT20	5.0	6.0	2.25	1.75
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.75
G	TMVW-p	MT20	4.0	4.0	1.00	2.25
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	4.0	2.00	1.75
J	BS-t	MT20	3.0	8.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	4.0		
M	BMWW-t	MT20	4.0	6.0		
N	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1479	0	1479	0	0	5-8	1-10
H	1348	0	1348	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0
H	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, H

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-1372 / 0	-95.2	-95.2	0.22 (1)	5.33	
C- D	-1266 / 0	-95.2	-95.2	0.21 (1)	5.49	
D- E	-1124 / 0	-95.2	-95.2	0.31 (1)	5.61	
E- F	-1124 / 0	-95.2	-95.2	0.31 (1)	5.61	
F- G	-1016 / 0	-95.2	-95.2	0.41 (1)	5.67	
N- B	-1445 / 0	0.0	0.0	0.15 (1)	6.80	
H- G	-1305 / 0	0.0	0.0	0.25 (1)	7.07	
N- M	0 / 0	-18.5	-18.5	0.06 (4)	10.00	
M- L	0 / 1118	-18.5	-18.5	0.22 (1)	10.00	
L- K	0 / 992	-18.5	-18.5	0.20 (1)	10.00	
K- J	0 / 807	-18.5	-18.5	0.21 (1)	10.00	
J- I	0 / 807	-18.5	-18.5	0.21 (1)	10.00	
I- H	0 / 0	-18.5	-18.5	0.14 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-245 / 0	0.08 (1)
C- L	-190 / 0	0.11 (1)
L- D	0 / 226	0.05 (1)
D- K	0 / 235	0.05 (1)
K- E	-578 / 0	0.61 (1)
K- F	0 / 563	0.13 (1)
I- F	-308 / 0	0.32 (1)
B- M	0 / 1164	0.26 (1)
I- G	0 / 915	0.21 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.41/1.00 (F-G:1) , BC=0.22/1.00 (L-M:1) , WB=0.61/1.00 (E-K:1) , SSI=0.23/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (G) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T97		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085307

Alpa Roof Truss, Maple

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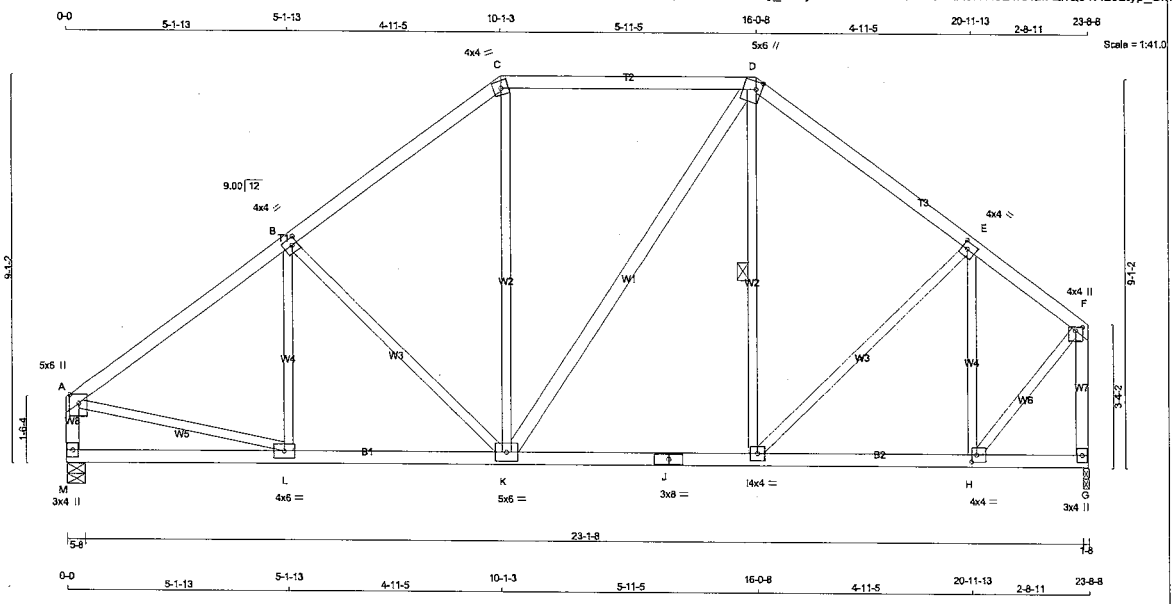


TOTAL WEIGHT = 116 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
M - A	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - D	2x4	DRY	No.2	SPF

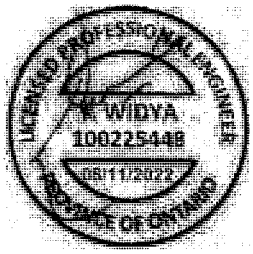
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TMVW+p	MT20	4.0	4.0	1.00	2.00
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	4.0	4.0	2.00	1.50
I	BMWW-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	8.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	6.0		
M	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1348	0	1348	0	0	5-8	1-8
G	1348	0	1348	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
G	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF D-I.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX MAX. UNBRAC LENGTH
A- B	-1391 / 0	-95.2	-95.2	0.34 (1)	5.14
B- C	-1151 / 0	-95.2	-95.2	0.33 (1)	5.54
C- D	-893 / 0	-95.2	-95.2	0.44 (1)	5.88
D- E	-1030 / 0	-95.2	-95.2	0.28 (1)	5.85
E- F	-814 / 0	-95.2	-95.2	0.23 (1)	6.25
M- A	-1307 / 0	0.0	0.0	0.14 (1)	7.06
G- F	-1331 / 0	0.0	0.0	0.25 (1)	7.02
M- L	0 / 0	-18.5	-18.5	0.11 (4)	10.00
L- K	0 / 1140	-18.5	-18.5	0.24 (1)	10.00
K- J	0 / 802	-18.5	-18.5	0.19 (1)	10.00
J- I	0 / 802	-18.5	-18.5	0.19 (1)	10.00
I- H	0 / 688	-18.5	-18.5	0.17 (1)	10.00
H- G	0 / 0	-18.5	-18.5	0.06 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- B	-164 / 29	0.07 (1)
B- K	-353 / 0	0.35 (1)
K- C	0 / 212	0.05 (4)
K- D	0 / 165	0.03 (1)
I- D	-9 / 74	0.03 (4)
I- E	0 / 161	0.04 (1)
H- E	-687 / 0	0.30 (1)
A- L	0 / 1170	0.26 (1)
H- F	0 / 1027	0.23 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.44/1.00 (C-D:1) , BC=0.24/1.00 (K-L:1) , WB=0.35/1.00 (B-K:1) , SSI=0.22/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (F) (INPUT = 0.90)
JSI METAL= 0.54 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T98A		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085308

Alpa Roof Truss, Maple

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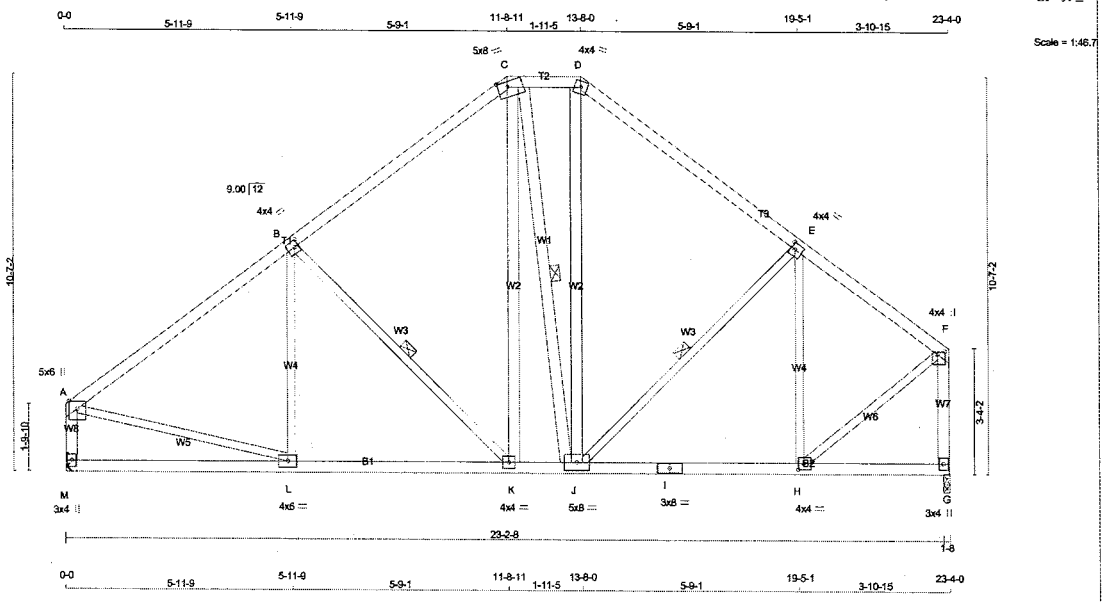

TOTAL WEIGHT = 130 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
M - A	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
M - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - C	2x4	DRY	No.2	SPF
C - J	2x4	DRY	No.2	SPF
J - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTWW-m	MT20	5.0	8.0	1.75	3.00
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TMVW+p	MT20	4.0	4.0	1.00	2.25
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	4.0	4.0	2.00	1.75
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	5.0	8.0		
K	BMWW-t	MT20	4.0	4.0		
L	BMWW-t	MT20	4.0	6.0		
M	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1327	0	1327	0	0	MECHANICAL	
G	1327	0	1327	0	0	1-8	1-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT M. MINIMUM BEARING LENGTH AT JOINT M = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
G	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-K, C-J, E-J.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1295 / 0	-95.2	-95.2	0.47 (1)	5.09
B- C	-980 / 0	-95.2	-95.2	0.44 (1)	5.69
C- D	-737 / 0	-95.2	-95.2	0.05 (1)	6.25
D- E	-950 / 0	-95.2	-95.2	0.39 (1)	5.67
E- F	-933 / 0	-95.2	-95.2	0.33 (1)	5.98
M- A	-1282 / 0	0.0	0.0	0.14 (1)	7.12
G- F	-1301 / 0	0.0	0.0	0.25 (1)	7.08
M- L	0 / 0	-18.5	-18.5	0.17 (4)	10.00
L- K	0 / 1068	-18.5	-18.5	0.26 (1)	10.00
K- J	0 / 755	-18.5	-18.5	0.19 (1)	10.00
J- I	0 / 783	-18.5	-18.5	0.19 (1)	10.00
I- H	0 / 783	-18.5	-18.5	0.19 (1)	10.00
H- G	0 / 0	-18.5	-18.5	0.11 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- B	-136 / 57	0.09 (1)
B- K	-453 / 0	0.21 (1)
K- C	0 / 368	0.06 (1)
C- J	-103 / 0	0.06 (1)
J- D	0 / 238	0.04 (1)
J- E	-71 / 0	0.03 (1)
H- E	-504 / 0	0.32 (1)
A- L	0 / 1101	0.25 (1)
H- F	0 / 989	0.22 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.47/1.00 (A-B:1) , BC=0.26/1.00 (K-L:1) , WB=0.32/1.00 (E-H:1) , SSI=0.22/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (F) (INPUT = 0.90)
JSI METAL= 0.52 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T99A		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085309

Alpa Roof Truss, Maple

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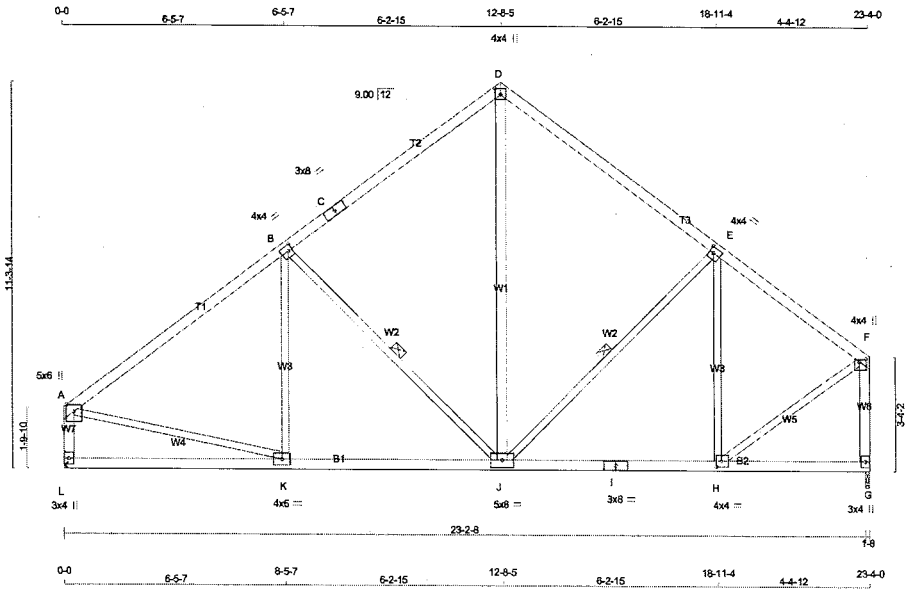

TOTAL WEIGHT = 110 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
L - A	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
J - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TS-t	MT20	3.0	8.0		
D	TTW+p	MT20	4.0	4.0	2.25	2.00
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TMVW+p	MT20	4.0	4.0	1.00	2.25
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	4.0	4.0	2.00	1.75
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	6.0	6.0		
K	BMWW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GRDSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1327	0	1327	0	0	MECHANICAL	
G	1327	0	1327	0	0	1-8	1-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT L. MINIMUM BEARING LENGTH AT JOINT L = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
G	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.95 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF B-J, E-J.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1289 / 0	-95.2	-95.2	0.56 (1)	4.95
B- C	-925 / 0	-95.2	-95.2	0.52 (1)	5.67
C- D	-925 / 0	-95.2	-95.2	0.52 (1)	5.67
D- E	-914 / 0	-95.2	-95.2	0.46 (1)	5.82
E- F	-969 / 0	-95.2	-95.2	0.39 (1)	5.80
L- A	-1277 / 0	0.0	0.0	0.14 (1)	7.13
G- F	-1297 / 0	0.0	0.0	0.25 (1)	7.09
L- K	0 / 0	-18.5	-18.5	0.18 (4)	10.00
K- J	0 / 1066	-18.5	-18.5	0.26 (1)	10.00
J- I	0 / 814	-18.5	-18.5	0.21 (1)	10.00
I- H	0 / 814	-18.5	-18.5	0.21 (1)	10.00
H- G	0 / 0	-18.5	-18.5	0.12 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- B	-114 / 68	0.08 (1)
B- J	-516 / 0	0.28 (1)
J- D	0 / 594	0.10 (1)
J- E	-157 / 0	0.08 (1)
H- E	-451 / 0	0.33 (1)
A- K	0 / 1094	0.25 (1)
H- F	0 / 967	0.22 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.56/1.00 (A-B:1) , BC=0.26/1.00 (J-K:1) , WB=0.33/1.00 (E-H:1) , SSI=0.24/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (F) (INPUT = 0.90)
JSI METAL= 0.52 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T100		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085310

Alpa Roof Truss, Maple

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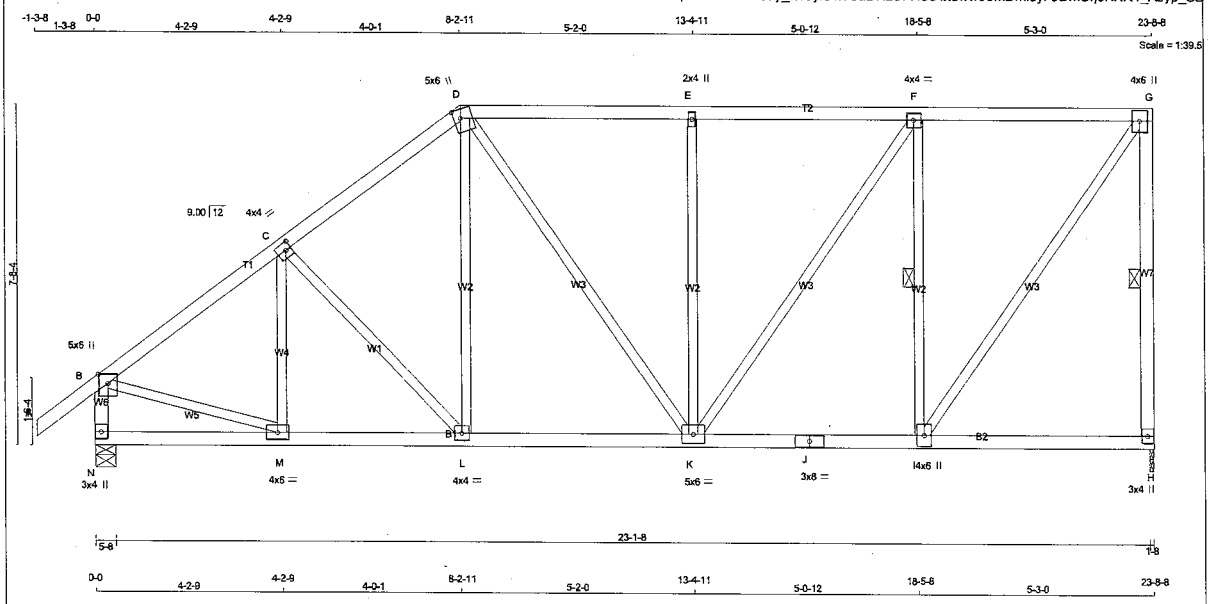

TOTAL WEIGHT = 117 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
N - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTWW+m	MT20	5.0	6.0	2.25	1.75
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW+p	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	4.0		
I	BMWW+t	MT20	4.0	5.0		
J	BS-t	MT20	3.0	8.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	4.0		
M	BMWW-t	MT20	4.0	6.0		
N	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
H	1348	0	1348	0	0	1-8	1-8
N	1479	0	1479	0	0	5-8	IN-SX
						IN-SX	IN-SX

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
N	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, N

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF G-H, F-I.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-1374 / 0	-95.2	-95.2	0.30 (1)	5.19	
C- D	-1260 / 0	-95.2	-95.2	0.30 (1)	5.37	
D- E	-1098 / 0	-95.2	-95.2	0.36 (1)	5.55	
E- F	-1098 / 0	-95.2	-95.2	0.38 (1)	5.52	
F- G	-785 / 0	-95.2	-95.2	0.36 (1)	6.25	
H- G	-1308 / 0	0.0	0.0	0.35 (1)	5.65	
N- B	-1444 / 0	0.0	0.0	0.15 (1)	6.80	
N- M	0 / 0	-18.5	-18.5	0.07 (4)	10.00	
M- L	0 / 1120	-18.5	-18.5	0.23 (1)	10.00	
L- K	0 / 986	-18.5	-18.5	0.20 (1)	10.00	
K- J	0 / 785	-18.5	-18.5	0.19 (1)	10.00	
J- I	0 / 785	-18.5	-18.5	0.19 (1)	10.00	
I- H	0 / 0	-18.5	-18.5	0.12 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-239 / 0	0.08 (1)
C- L	-200 / 0	0.12 (1)
L- D	0 / 235	0.05 (1)
B- M	0 / 1164	0.26 (1)
I- G	0 / 1356	0.31 (1)
D- K	0 / 194	0.04 (1)
I- F	-997 / 0	0.37 (1)
K- E	-527 / 0	0.57 (1)
K- F	0 / 553	0.12 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.38/1.00 (E-F:1) , BC=0.23/1.00 (L-M:1) , WB=0.57/1.00 (E-K:1) , SSI=0.23/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (M) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T100A		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085311

Alpa Roof Truss, Maple

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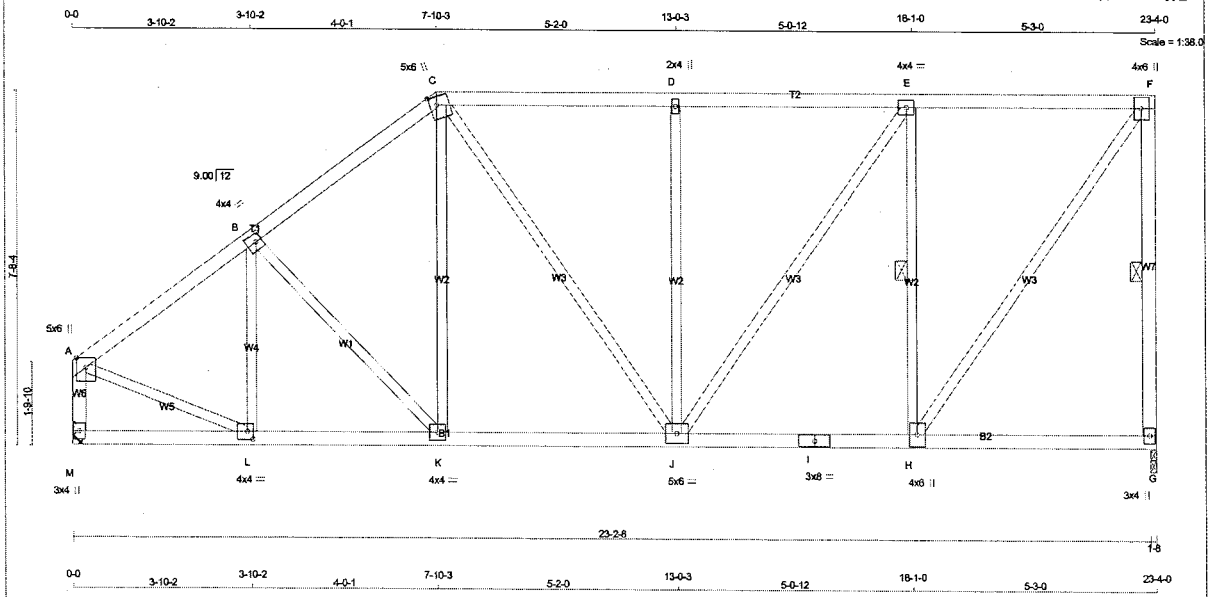


TOTAL WEIGHT = 115 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
M - A	2x4	DRY	No.2	SPF
M - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

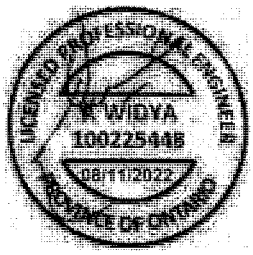
ORY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTWW+m	MT20	5.0	6.0	2.25	1.75
D	TMW+w	MT20	2.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW+p	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW+t	MT20	4.0	6.0		
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	5.0	6.0		
K	BMWW-t	MT20	4.0	4.0		
L	BMWW-t	MT20	4.0	4.0	2.00	1.50
M	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1327	0	1327	0	0	1-8	1-8
M	1327	0	1327	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT M. MINIMUM BEARING LENGTH AT JOINT M = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
M	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.43 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G, E-H.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1249 / 0	-95.2	-95.2	0.27 (1)	5.43
B- C	-1203 / 0	-95.2	-95.2	0.27 (1)	5.51
C- D	-1068 / 0	-95.2	-95.2	0.36 (1)	5.62
D- E	-1068 / 0	-95.2	-95.2	0.37 (1)	5.58
E- F	-770 / 0	-95.2	-95.2	0.36 (1)	6.25
G- F	-1287 / 0	0.0	0.0	0.34 (1)	5.69
M- A	-1295 / 0	0.0	0.0	0.14 (1)	7.10
M- L	0 / 0	-18.5	-18.5	0.06 (4)	10.00
L- K	0 / 1021	-18.5	-18.5	0.21 (1)	10.00
K- J	0 / 942	-18.5	-18.5	0.20 (1)	10.00
J- I	0 / 770	-18.5	-18.5	0.19 (1)	10.00
I- H	0 / 770	-18.5	-18.5	0.19 (1)	10.00
H- G	0 / 0	-18.5	-18.5	0.12 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	0 / 177	0.04 (4)
L- B	-318 / 0	0.10 (1)
B- K	-119 / 0	0.07 (1)
A- L	0 / 1093	0.25 (1)
H- F	0 / 1330	0.30 (1)
C- J	0 / 220	0.05 (1)
H- E	-976 / 0	0.36 (1)
J- D	-527 / 0	0.57 (1)
J- E	0 / 527	0.12 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.37/1.00 (D-E:1) , BC=0.21/1.00 (K-L:1) , WB=0.57/1.00 (D-J:1) , SSI=0.23/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (L) (INPUT = 0.90)
JSI METAL= 0.48 (A) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T101		1	TRUSS DESC.	JT 53080	E22085312

Alpa Roof Truss, Maple

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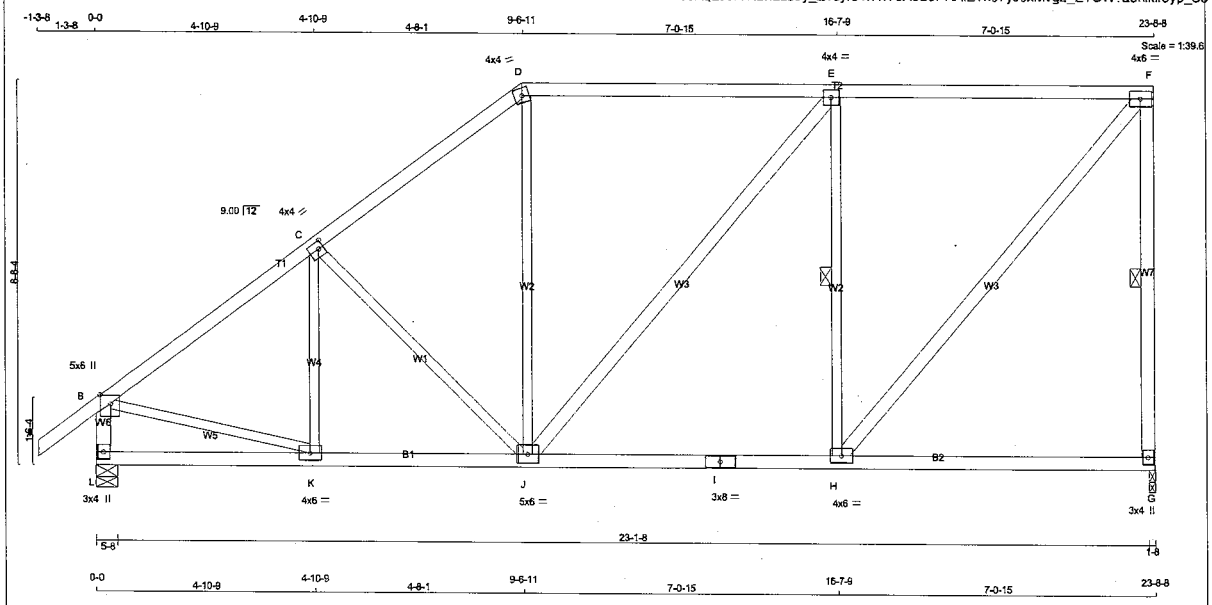

TOTAL WEIGHT = 119 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
J - E	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	4.0	6.0		
I	BS-t	MT20	3.0	8.0		
J	BMWWW-t	MT20	5.0	6.0		
K	BMWW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GRDSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	1348	0	1348	0	0	1-8	1-8
L	1479	0	1479	0	0	5-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
L	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, L

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-G, E-H.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1388 / 0	-95.2	-95.2	0.43 (1)	5.01
C- D	-1186 / 0	-95.2	-95.2	0.41 (1)	5.33
D- E	-923 / 0	-95.2	-95.2	0.89 (1)	4.49
E- F	-881 / 0	-95.2	-95.2	0.89 (1)	4.59
G- F	-1296 / 0	0.0	0.0	0.45 (1)	5.68
L- B	-1440 / 0	0.0	0.0	0.15 (1)	6.81
L- K	0 / 0	-18.5	-18.5	0.09 (4)	10.00
K- J	0 / 1136	-18.5	-18.5	0.25 (1)	10.00
J- I	0 / 881	-18.5	-18.5	0.31 (4)	10.00
I- H	0 / 881	-18.5	-18.5	0.31 (4)	10.00
H- G	0 / 0	-18.5	-18.5	0.23 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-186 / 15	0.07 (1)
C- J	-308 / 0	0.27 (1)
J- D	0 / 273	0.06 (1)
J- E	0 / 66	0.01 (1)
H- E	-888 / 0	0.43 (1)
H- F	0 / 1362	0.22 (1)
B- K	0 / 1170	0.26 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.89/1.00 (D-E:1) , BC=0.31/1.00 (H-J:4) , WB=0.43/1.00 (E-H:1) , SSI=0.33/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (F) (INPUT = 0.90)
JSI METAL= 0.57 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225449
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T101A		1	TRUSS DESC.	JT 53080	E22085313

Alpa Roof Truss, Maple

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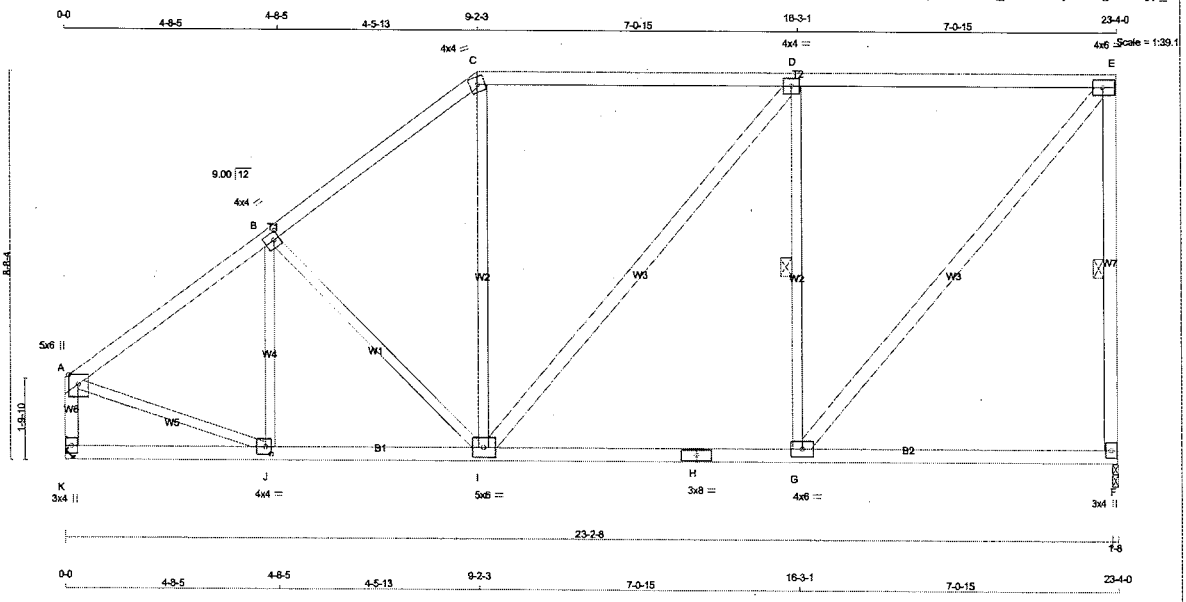


TOTAL WEIGHT = 117 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - D	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWW-t	MT20	4.0	6.0		
H	BS-t	MT20	3.0	8.0		
I	BMWWW-t	MT20	5.0	6.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.50
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1327	0	1327	0	0	1-8	1-8
K	1327	0	1327	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX /MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
K	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.59 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-F, D-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1279 / 0	-95.2	-95.2	0.38 (1)	5.22
B- C	-1139 / 0	-95.2	-95.2	0.37 (1)	5.47
C- D	-887 / 0	-95.2	-95.2	0.69 (1)	4.59
D- E	-863 / 0	-95.2	-95.2	0.69 (1)	4.64
F- E	-1274 / 0	0.0	0.0	0.44 (1)	5.71
K- A	-1291 / 0	0.0	0.0	0.14 (1)	7.10
K- J	0 / 0	-18.5	-18.5	0.08 (4)	10.00
J- I	0 / 1049	-18.5	-18.5	0.23 (1)	10.00
I- H	0 / 863	-18.5	-18.5	0.30 (4)	10.00
H- G	0 / 863	-18.5	-18.5	0.30 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.23 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- B	-255 / 0	0.10 (1)
B- I	-234 / 0	0.20 (1)
I- C	0 / 242	0.05 (1)
I- D	0 / 39	0.01 (1)
G- D	-867 / 0	0.42 (1)
G- E	0 / 1334	0.21 (1)
A- J	0 / 1103	0.25 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.89/1.00 (C-D:1) , BC=0.30/1.00 (G-I:4) , WB=0.42/1.00 (D-G:1) , SSI=0.33/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

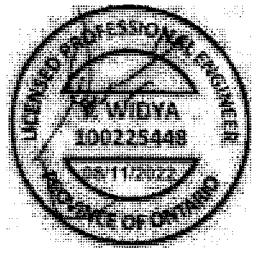
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90)
JSI METAL= 0.50 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	T102A		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085314

Alpa Roof Truss, Maple

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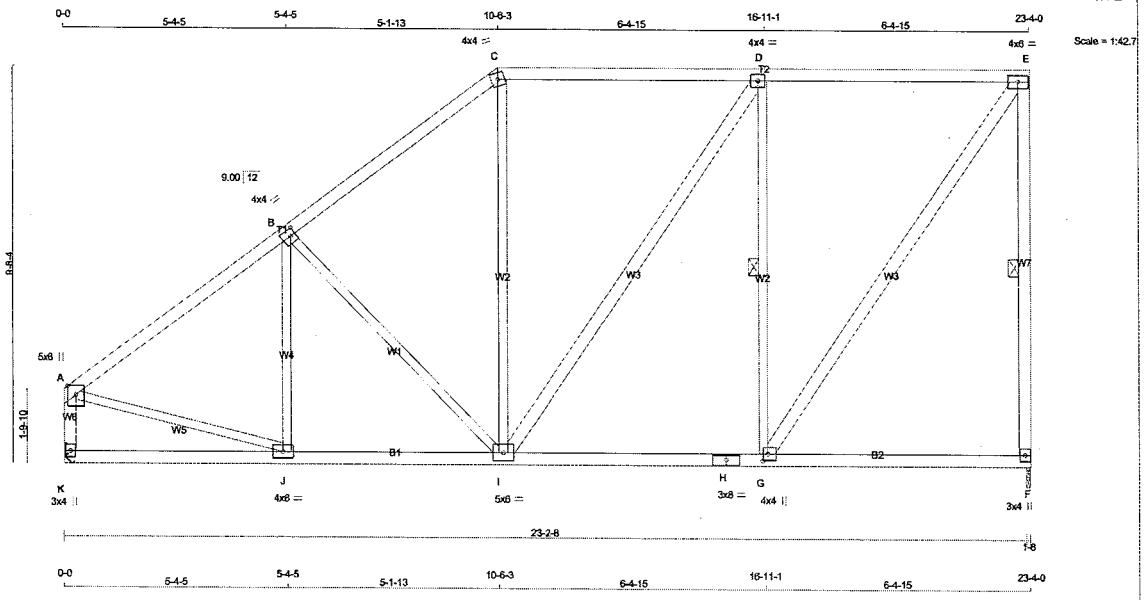

TOTAL WEIGHT = 123 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - D	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMVW+t	MT20	4.0	4.0	2.00	1.50
H	BS-t	MT20	3.0	8.0		
I	BMWWW-t	MT20	5.0	6.0		
J	BMWW-t	MT20	4.0	6.0		
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1327	0	1327	0	0	1-8	1-8
K	1327	0	1327	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
K	936	624 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-F, D-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1293 / 0	-95.2	-95.2	0.52 (1)	5.00
B- C	-1062 / 0	-95.2	-95.2	0.50 (1)	5.41
C- D	-820 / 0	-95.2	-95.2	0.71 (1)	5.38
D- E	-718 / 0	-95.2	-95.2	0.70 (1)	5.66
F- E	-1279 / 0	0.0	0.0	0.57 (1)	5.70
K- A	-1285 / 0	0.0	0.0	0.14 (1)	7.11
K- J	0 / 0	-18.5	-18.5	0.12 (4)	10.00
J- I	0 / 1063	-18.5	-18.5	0.23 (1)	10.00
I- H	0 / 718	-18.5	-18.5	0.25 (4)	10.00
H- G	0 / 718	-18.5	-18.5	0.25 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.19 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- B	-185 / 26	0.10 (1)
B- I	-354 / 0	0.41 (1)
I- C	0 / 203	0.05 (4)
I- D	0 / 184	0.03 (1)
G- D	-910 / 0	0.57 (1)
G- E	0 / 1269	0.20 (1)
A- J	0 / 1103	0.25 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.71/1.00 (C-D:1) , BC=0.25/1.00 (G-I:4) , WB=0.57/1.00 (D-G:1) , SSI=0.30/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.51 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
K WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T102B		1	TRUSS DESC.	JT 53080	E22085315

Alpa Roof Truss, Maple

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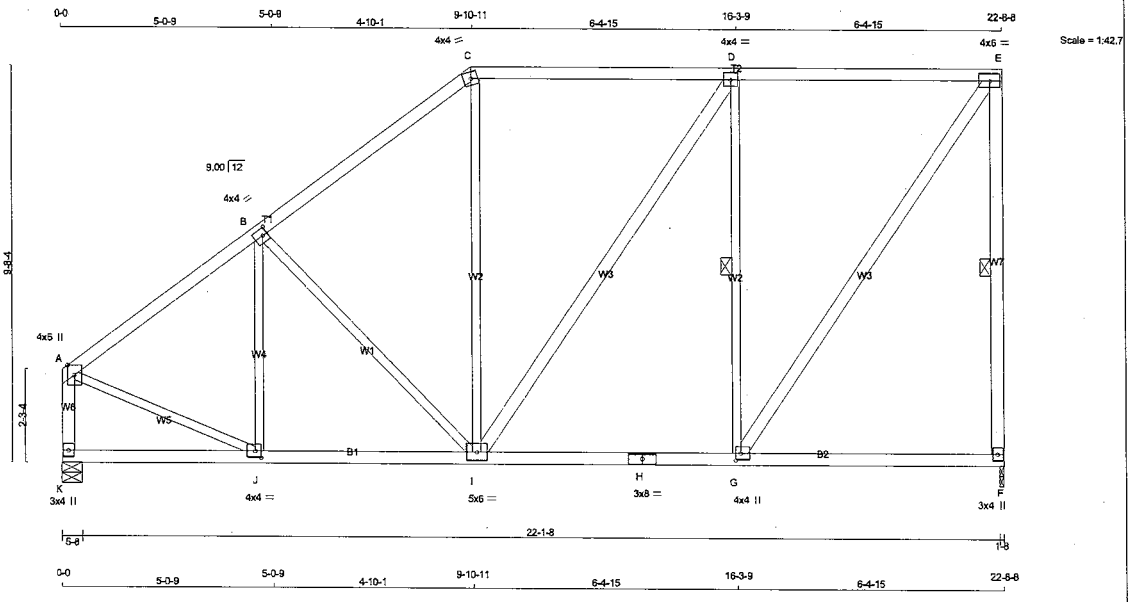


TOTAL WEIGHT = 121 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - D	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMVW-l	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWW+t	MT20	4.0	4.0	2.00	1.50
H	BS-t	MT20	3.0	8.0		
I	BMWWW-t	MT20	5.0	6.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1291	0	1291	0	0	1-8	1-8
K	1291	0	1291	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	911	607 / 0	0 / 0	0 / 0	0 / 0	304 / 0	0 / 0
K	911	607 / 0	0 / 0	0 / 0	0 / 0	304 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, K

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-F, D-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	-1138 / 0	-95.2	-95.2	0.44 (1)	5.36
B- C	-998 / 0	-95.2	-95.2	0.44 (1)	5.65
C- D	-772 / 0	-95.2	-95.2	0.70 (1)	5.51
D- E	-694 / 0	-95.2	-95.2	0.70 (1)	5.74
F- E	-1243 / 0	0.0	0.0	0.56 (1)	5.76
K- A	-1255 / 0	0.0	0.0	0.15 (1)	7.17
K- J	0 / 0	-18.5	-18.5	0.10 (4)	10.00
J- I	0 / 939	-18.5	-18.5	0.21 (1)	10.00
I- H	0 / 694	-18.5	-18.5	0.25 (4)	10.00
H- G	0 / 594	-18.5	-18.5	0.25 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.19 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- B	-285 / 0	0.15 (1)
B- I	-244 / 0	0.28 (1)
I- C	0 / 161	0.04 (4)
I- D	0 / 141	0.02 (1)
G- D	-875 / 0	0.55 (1)
G- E	0 / 1226	0.20 (1)
A- J	0 / 1015	0.23 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.70/1.00 (C-D:1) , BC=0.25/1.00 (G-I:4) , WB=0.55/1.00 (D-G:1) , SSI=0.30/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

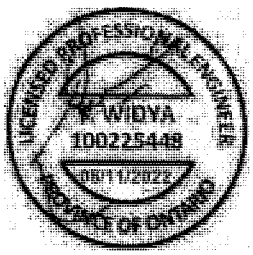
NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.56 (A) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T102C		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085316

Alpa Roof Truss, Maple

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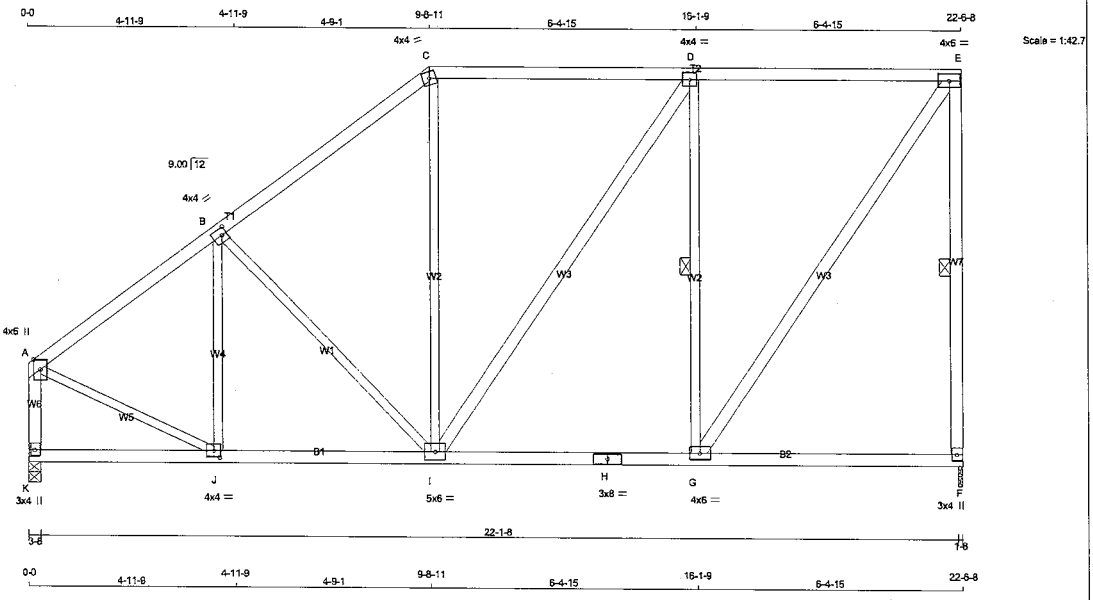


TOTAL WEIGHT = 4 X 121 = 483 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
I - D	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWW-t	MT20	4.0	6.0		
H	BS-t	MT20	3.0	8.0		
I	BMWWW-t	MT20	5.0	6.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1350	0	1350	0	0	1-8	1-8
K	1309	0	1309	0	0	3-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	960	603 / 0	0 / 0	0 / 0	0 / 0	357 / 0	0 / 0
K	927	603 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, K

BRACING
FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.41 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-F, D-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-1125 / 0	-95.2	-95.2	0.42 (1)	5.41	
B- C	-1017 / 0	-95.2	-95.2	0.43 (1)	5.63	
C- D	-788 / 0	-102.7	-102.7	0.76 (1)	2.00	
D- E	-722 / 0	-102.7	-102.7	0.76 (1)	2.00	
F- E	-1303 / 0	0.0	0.0	0.58 (1)	5.66	
K- A	-1275 / 0	0.0	0.0	0.16 (1)	7.13	
K- J	0 / 0	-18.5	-18.5	0.10 (4)	10.00	
J- I	0 / 929	-18.5	-18.5	0.21 (1)	10.00	
I- H	0 / 722	-18.5	-18.5	0.25 (4)	10.00	
H- G	0 / 722	-18.5	-18.5	0.25 (4)	10.00	
G- F	0 / 0	-18.5	-18.5	0.19 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- B	-322 / 0	0.17 (1)
B- I	-207 / 0	0.24 (1)
I- C	0 / 153	0.04 (4)
I- D	0 / 119	0.02 (1)
G- D	-916 / 0	0.58 (1)
G- E	0 / 1276	0.21 (1)
A- J	0 / 1020	0.23 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.75")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.76/1.00 (C-D:1) , BC=0.25/1.00 (G-I:4) , WB=0.58/1.00 (D-G:1) , SSI=0.32/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

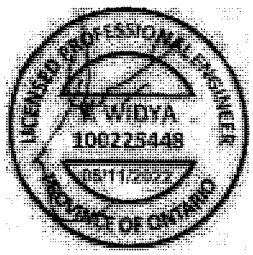
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)
JSI METAL= 0.55 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T103		2	TRUSS DESC.	JT 53080	E22085317

Alpa Roof Truss, Maple

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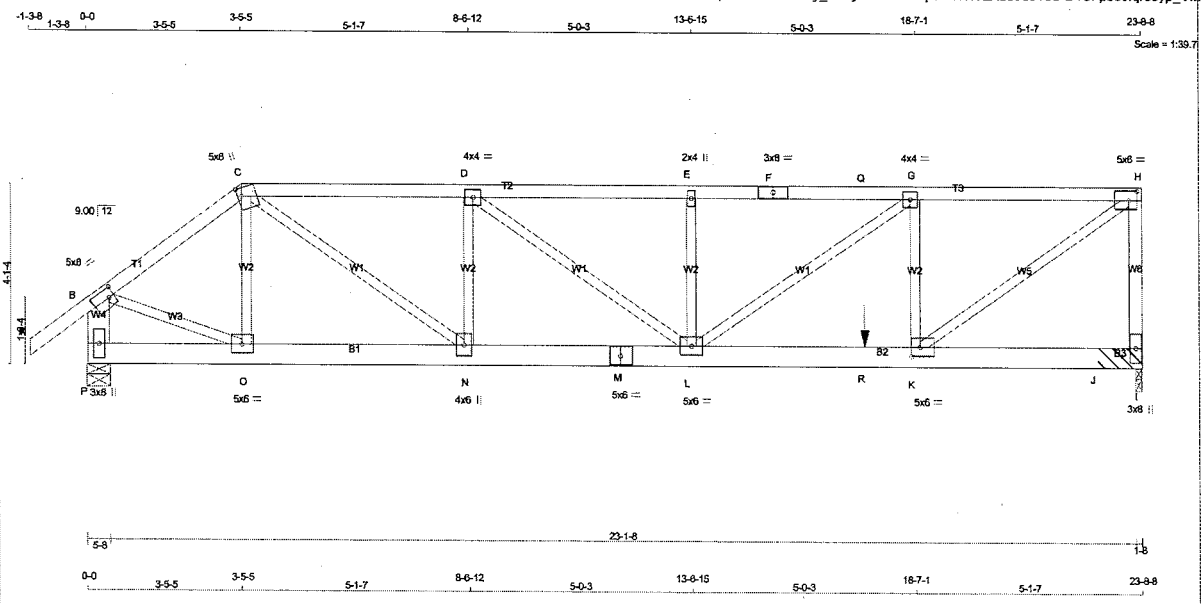


TOTAL WEIGHT = 2 X 113 = 225 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
P - B	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
M - I	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	TOP
C- F	1	12	TOP
F- H	1	12	SIDE(46.1)
H- I	1	12	TOP
P- B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
P- M	2	12	TOP
M- I	2	12	SIDE(10.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

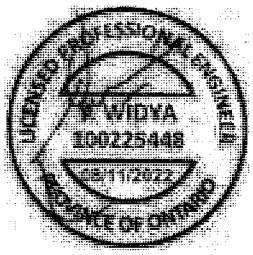
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	2.50	1.50
C	TTWW+m	MT20	5.0	6.0	2.25	1.00
D	TMWW-t	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	8.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMVW-t	MT20	5.0	6.0	2.50	2.25
I	BMV1+p	MT20	3.0	8.0		
K	BMWW-t	MT20	5.0	6.0	2.50	2.25
L	BMWWW-t	MT20	5.0	6.0		
M	BS-t	MT20	5.0	6.0		
N	BMWW+t	MT20	4.0	6.0		
O	BMWW-t	MT20	5.0	6.0		
P	BMV1+p	MT20	3.0	8.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	3135	0	3135	0	0	1-8	1-8 & BLOCK
P	1996	0	1996	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	2213	1474 / 0	0 / 0	0 / 0	0 / 0	739 / 0	0 / 0
P	1406	950 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, P

2x6 DRY SPF No.2 BEARING BLOCK 12" LONG AT JT. I ATTACHED TO FRONT SIDE WITH 3 ROWS OF (0.122"X3") SPIRAL NAILS SPACED 4" C.C. 6 NAILS TOTAL.

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.07 (1)	10.00	
B- C	-1981 / 0	-95.2	-95.2	0.12 (1)	6.11	
C- D	-3205 / 0	-95.2	-95.2	0.25 (1)	4.94	
D- E	-4076 / 0	-95.2	-95.2	0.29 (1)	4.46	
E- F	-4076 / 0	-95.2	-95.2	0.41 (1)	4.28	
F- Q	-4076 / 0	-95.2	-95.2	0.41 (1)	4.28	
Q- G	-4076 / 0	-187.4	-187.4	0.41 (1)	4.28	
G- H	-3752 / 0	-187.4	-187.4	0.42 (1)	4.43	
I- H	-3134 / 0	0.0	0.0	0.39 (1)	6.55	
P- B	-1983 / 0	0.0	0.0	0.07 (1)	7.81	
P- O	0 / 0	-18.5	-18.5	0.03 (4)	10.00	
O- N	0 / 1571	-18.5	-18.5	0.14 (1)	10.00	
N- M	0 / 3205	-18.5	-18.5	0.30 (1)	10.00	
M- L	0 / 3205	-18.5	-18.5	0.30 (1)	10.00	
L- R	0 / 3752	-18.5	-18.5	0.63 (1)	10.00	
R- K	0 / 3752	-36.4	-36.4	0.63 (1)	10.00	
K- J	0 / 0	-36.4	-36.4	0.17 (1)	10.00	
J- I	0 / 0	-36.4	-36.4	0.17 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- C	-360 / 0	0.05 (1)
C- N	0 / 2018	0.25 (1)
N- D	-1197 / 0	0.15 (1)
D- L	0 / 1086	0.13 (1)
L- E	-402 / 0	0.05 (1)
L- G	0 / 404	0.05 (1)
K- G	-1190 / 0	0.15 (1)
K- H	0 / 4643	0.57 (1)
B- O	0 / 1656	0.20 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
R	17-5-8	-1615	-1615	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-5-5
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-3-0 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.42/1.00 (G-H:1) , BC=0.63/1.00 (K-L:1) , WB=0.57/1.00 (H-K:1) , SSI=0.45/1.00 (K-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.43 (H) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	T104		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085318

Alpa Roof Truss, Maple

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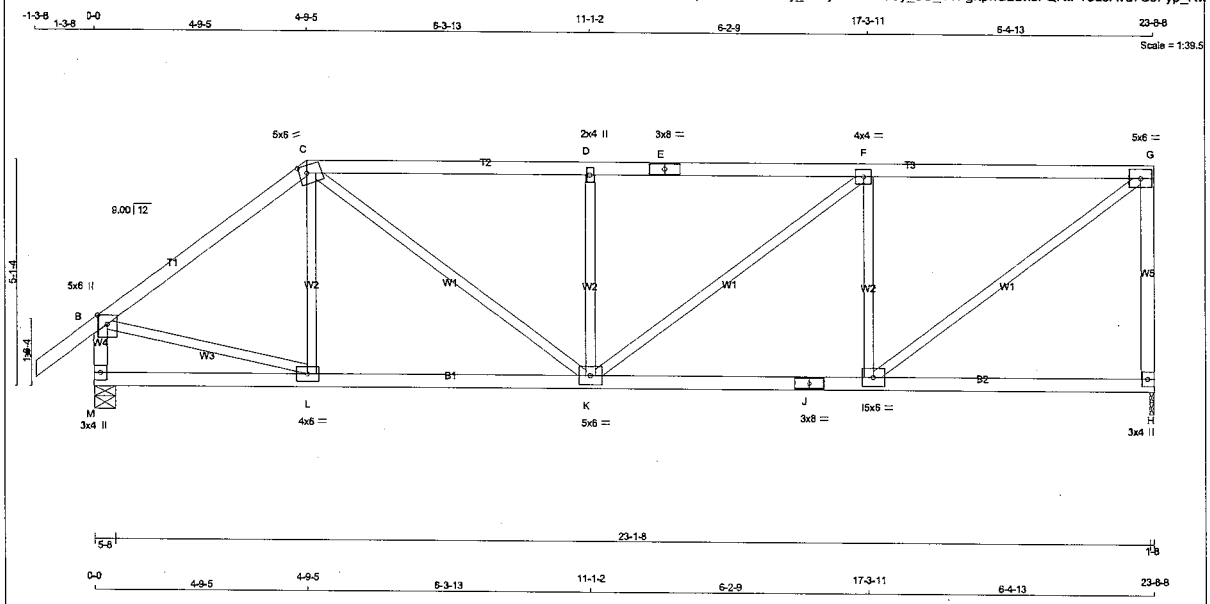

TOTAL WEIGHT = 97 lb

LUMBER
N. L. G. A. RULES

CHOROS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	5.0	6.0	Edge	
C	TTWW-m	MT20	5.0	6.0	2.00	2.00
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMVW-t	MT20	5.0	6.0		
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	5.0	6.0		
J	BS-t	MT20	3.0	8.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	6.0		
M	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	1348	0	1348	0	0	1-8	1-8
M	1479	0	1479	0	0	5-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
M	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, M

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-1364 / 0	-95.2	-95.2	0.44 (1)	5.02
C- D	-1736 / 0	-95.2	-95.2	0.62 (1)	4.30
D- E	-1736 / 0	-95.2	-95.2	0.64 (1)	4.26
E- F	-1736 / 0	-95.2	-95.2	0.64 (1)	4.26
F- G	-1400 / 0	-95.2	-95.2	0.61 (1)	4.69
H- G	-1299 / 0	0.0	0.0	0.57 (1)	7.08
M- B	-1446 / 0	0.0	0.0	0.15 (1)	6.80
M- L	0 / 0	-18.5	-18.5	0.14 (4)	10.00
L- K	0 / 1086	-18.5	-18.5	0.25 (1)	10.00
K- J	0 / 1400	-18.5	-18.5	0.32 (1)	10.00
J- I	0 / 1400	-18.5	-18.5	0.32 (1)	10.00
I- H	0 / 0	-18.5	-18.5	0.18 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- C	-149 / 39	0.06 (1)
B- L	0 / 1121	0.25 (1)
I- G	0 / 1752	0.39 (1)
C- K	0 / 817	0.18 (1)
I- F	-921 / 0	0.35 (1)
K- D	-646 / 0	0.25 (1)
K- F	0 / 425	0.10 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.64/1.00 (D-F:1) , BC=0.32/1.00 (I-K:1) , WB=0.39/1.00 (G-I:1) , SSI=0.28/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (C) (INPUT = 0.90)
JSI METAL= 0.56 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	T105		1	TRUSS DESC.	JT 53080	E22085319

Alpa Roof Truss, Maple

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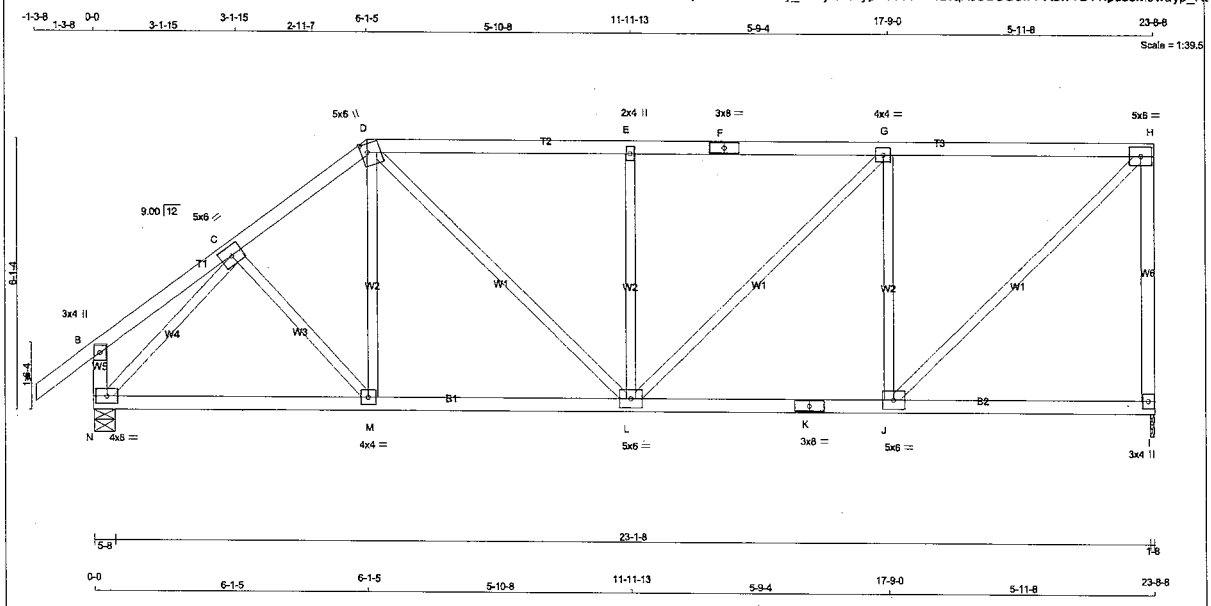

TOTAL WEIGHT = 105 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	3.0	4.0		
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	8.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMVW-t	MT20	5.0	6.0		
I	BMV1+p	MT20	3.0	4.0		
J	BMWW-t	MT20	5.0	6.0		
K	BS-t	MT20	3.0	8.0		
L	BMWWW-t	MT20	5.0	6.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMVW1-t	MT20	4.0	6.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	1348	0	1348	0	0	1-8	1-8
N	1479	0	1479	0	0	5-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
N	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, N

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.79 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	0 / 18	-95.2	-95.2	0.13 (1)	10.00
C- D	-1354 / 0	-95.2	-95.2	0.15 (1)	5.42
D- E	-1433 / 0	-95.2	-95.2	0.50 (1)	4.82
E- F	-1433 / 0	-95.2	-95.2	0.52 (1)	4.79
F- G	-1433 / 0	-95.2	-95.2	0.52 (1)	4.79
G- H	-1100 / 0	-95.2	-95.2	0.50 (1)	5.32
I- H	-1303 / 0	0.0	0.0	0.94 (1)	7.07
N- B	-246 / 0	0.0	0.0	0.03 (1)	7.81
N- M	0 / 1038	-18.5	-18.5	0.26 (1)	10.00
M- L	0 / 1068	-18.5	-18.5	0.26 (1)	10.00
L- K	0 / 1100	-18.5	-18.5	0.26 (1)	10.00
K- J	0 / 1100	-18.5	-18.5	0.26 (1)	10.00
J- I	0 / 0	-18.5	-18.5	0.16 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- M	0 / 53	0.02 (4)
M- D	0 / 104	0.04 (4)
N- C	-1577 / 0	0.53 (1)
J- H	0 / 1538	0.35 (1)
D- L	0 / 513	0.12 (1)
J- G	-950 / 0	0.56 (1)
L- E	-600 / 0	0.35 (1)
L- G	0 / 472	0.11 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.94/1.00 (H-I:1) , BC=0.26/1.00 (L-M:1) , WB=0.56/1.00 (G-J:1) , SSI=0.26/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (N) (INPUT = 0.90)
JSI METAL= 0.35 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T106		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085320

Alpa Roof Truss, Maple

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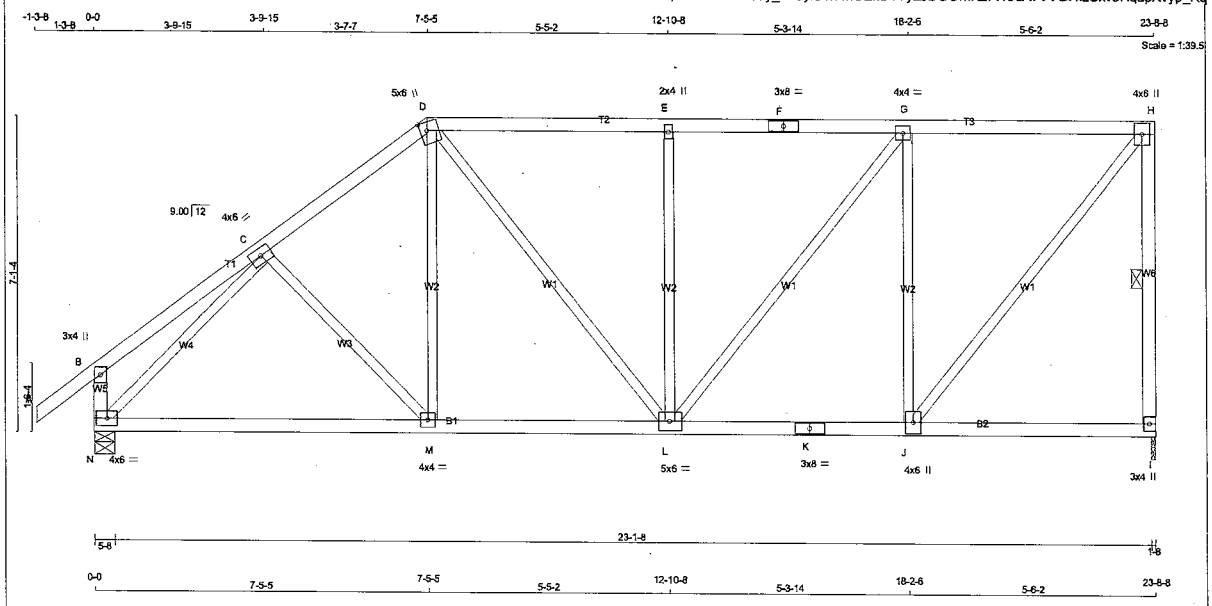


TOTAL WEIGHT = 111 lb

[M]

LUMBER

N. L. G. A. RULES

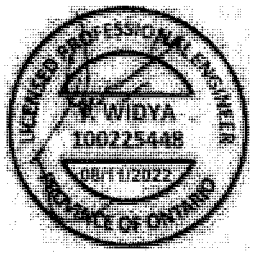
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.75
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	8.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMVW+p	MT20	4.0	6.0		
I	BMV1+p	MT20	3.0	4.0		
J	BMWW+t	MT20	4.0	6.0		
K	BS-t	MT20	3.0	8.0		
L	BMWWW-t	MT20	5.0	6.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMVW1-t	MT20	4.0	6.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
I	1348	0	1348	0	0	1-8	1-8
N	1479	0	1479	0	0	5-8	1-10

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	951	634 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
N	1042	708 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, N

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-I.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI	MAX (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13	(1)	10.00
B- C	0 / 24	-95.2	-95.2	0.20	(1)	10.00
C- D	-1307 / 0	-95.2	-95.2	0.23	(1)	5.38
D- E	-1205 / 0	-95.2	-95.2	0.41	(1)	5.29
E- F	-1205 / 0	-95.2	-95.2	0.42	(1)	5.26
F- G	-1205 / 0	-95.2	-95.2	0.42	(1)	5.26
G- H	-886 / 0	-95.2	-95.2	0.41	(1)	5.93
I- H	-1307 / 0	0.0	0.0	0.30	(1)	5.65
N- B	-268 / 0	0.0	0.0	0.03	(1)	7.81
N- M	0 / 1076	-18.5	-18.5	0.31	(4)	10.00
M- L	0 / 1028	-18.5	-18.5	0.31	(4)	10.00
L- K	0 / 886	-18.5	-18.5	0.22	(1)	10.00
K- J	0 / 886	-18.5	-18.5	0.22	(1)	10.00
J- I	0 / 0	-18.5	-18.5	0.14	(4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- M	-74 / 24	0.04 (1)
M- D	0 / 199	0.06 (4)
N- C	-1578 / 0	0.75 (1)
J- H	0 / 1406	0.32 (1)
D- L	0 / 284	0.06 (1)
J- G	-977 / 0	0.85 (1)
L- E	-554 / 0	0.48 (1)
L- G	0 / 519	0.12 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.42/1.00 (E-G:1) , BC=0.31/1.00 (L-M:4) , WB=0.85/1.00 (G-J:1) , SSI=0.24/1.00 (G-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.40 (H) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	T107		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085321

Alpa Roof Truss, Maple

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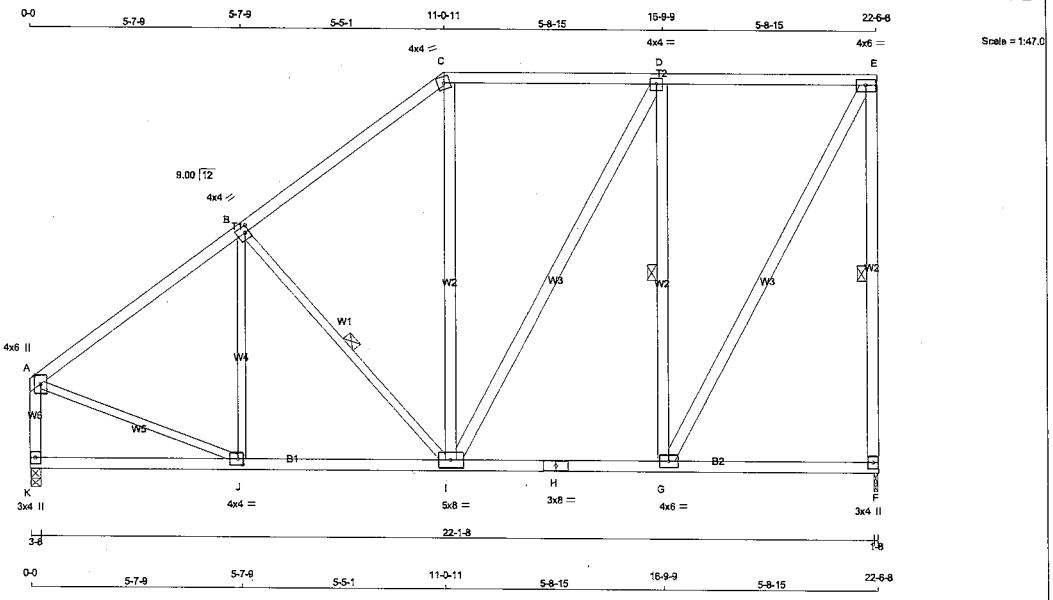

TOTAL WEIGHT = 2 X 134 = 267 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS	2x4	ORY	No.2	SPF
EXCEPT				
J - B	2x3	DRY	No.2	SPF
B - I	2x3	DRY	No.2	SPF
A - J	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	6.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWW-t	MT20	4.0	6.0		
H	BS-t	MT20	3.0	8.0		
I	BMWWW-t	MT20	5.0	8.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.50
K	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1281	0	1281	0	0	1-8	1-8
K	1281	0	1281	0	0	3-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	905	603 / 0	0 / 0	0 / 0	0 / 0	302 / 0	0 / 0
K	905	603 / 0	0 / 0	0 / 0	0 / 0	302 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, K

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED..

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-F, B-I, D-G.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI	MAX (LC)	MAX. UNBRAC LENGTH
A- B	-1119 / 0	-95.2	-95.2	0.57	(1)	5.19
B- C	-910 / 0	-95.2	-95.2	0.54	(1)	5.63
C- D	-696 / 0	-95.2	-95.2	0.55	(1)	6.14
D- E	-570 / 0	-95.2	-95.2	0.55	(1)	6.25
F- E	-1239 / 0	0.0	0.0	0.71	(1)	5.77
K- A	-1239 / 0	0.0	0.0	0.16	(1)	7.22
K- J	0 / 0	-18.5	-18.5	0.14	(4)	10.00
J- I	0 / 926	-18.5	-18.5	0.22	(1)	10.00
I- H	0 / 570	-18.5	-18.5	0.19	(4)	10.00
H- G	0 / 570	-18.5	-18.5	0.19	(4)	10.00
G- F	0 / 0	-18.5	-18.5	0.15	(4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- B	-224 / 20	0.16 (1)
B- I	-348 / 0	0.17 (1)
I- C	0 / 122	0.03 (4)
I- D	0 / 267	0.04 (1)
G- D	-913 / 0	0.53 (1)
G- E	0 / 1179	0.19 (1)
A- J	0 / 986	0.22 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.75")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.71/1.00 (E-F:1) , BC=0.22/1.00 (I-J:1) , WB=0.53/1.00 (D-G:1) , SSI=0.27/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.57 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T108		1	GREEN PARK HOMES JT 53080	E22085322

Alpa Roof Truss, Maple

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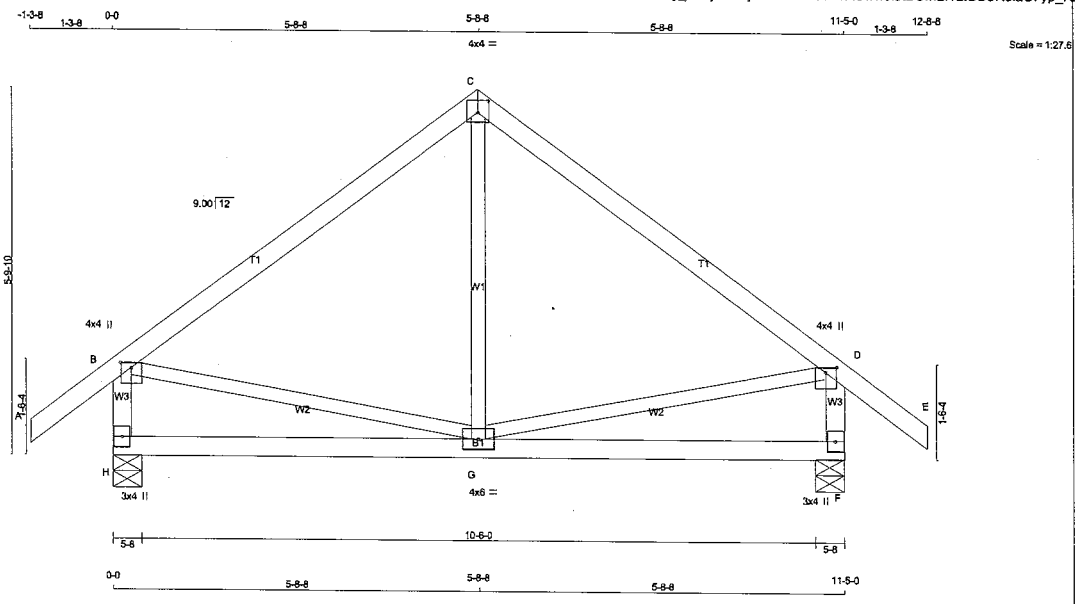

TOTAL WEIGHT = 5 X 49 = 245 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	3.0	4.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REORD BRG IN-SX
H	780	0	780	0	0	5-8	1-8
F	780	0	780	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	548	379 / 0	0 / 0	0 / 0	0 / 0	170 / 0	0 / 0
F	548	379 / 0	0 / 0	0 / 0	0 / 0	170 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-439 / 0	-95.2	-95.2	0.40 (1)	6.25
C- D	-439 / 0	-95.2	-95.2	0.40 (1)	6.25
D- E	0 / 39	-95.2	-95.2	0.13 (1)	10.00
H- B	-740 / 0	0.0	0.0	0.08 (1)	7.81
F- D	-740 / 0	0.0	0.0	0.08 (1)	7.81
H- G	0 / 0	-18.5	-18.5	0.17 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.17 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
G- C	-17 / 94	0.03 (4)
B- G	0 / 359	0.08 (1)
G- D	0 / 359	0.08 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.40/1.00 (B-C:1) , BC=0.17/1.00 (G-H:4) , WB=0.08/1.00 (D-G:1) , SSI=0.17/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (D) (INPUT = 0.90)
JSI METAL= 0.17 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T108G		1	GREEN PARK HOMES JT 53080	E22085323

Alpa Roof Truss, Maple

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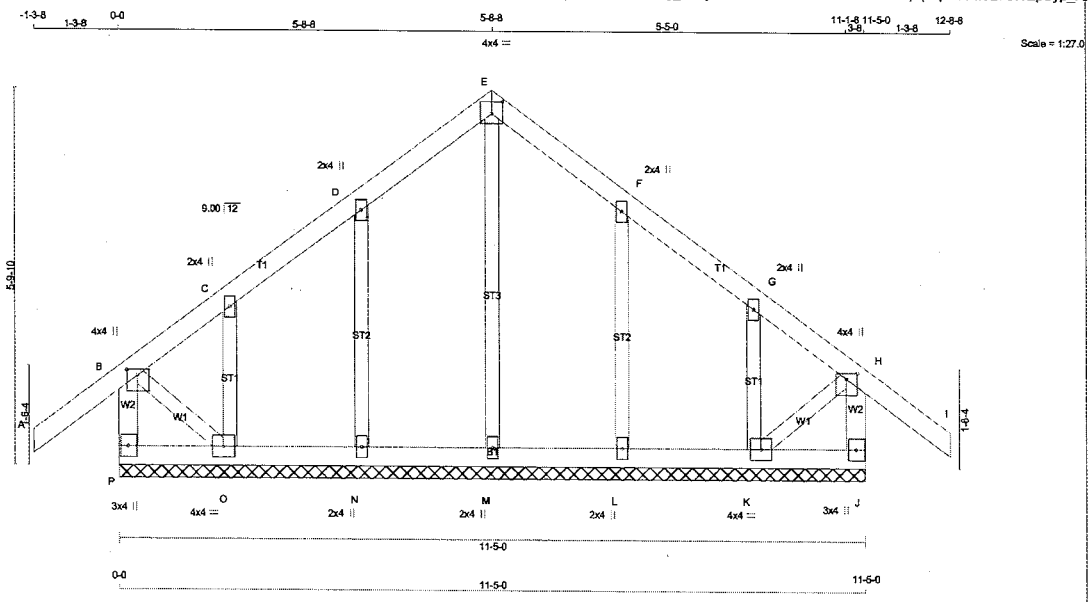


TOTAL WEIGHT = 53 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW-p	MT20	4.0	4.0	2.25	2.00
H	TMVW+p	MT20	4.0	4.0	1.00	2.00
J	BMV1+p	MT20	3.0	4.0		
K	BMWW1-t	MT20	4.0	4.0		
L, M, N						
L	BMW1+w	MT20	2.0	4.0		
O	BMWW1-t	MT20	4.0	4.0		
P	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
P- B	-283 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-51 / 0	-95.2	-95.2	0.12 (1)	6.25	
C- D	-6 / 0	-95.2	-95.2	0.06 (1)	10.00	
D- E	-23 / 0	-95.2	-95.2	0.06 (1)	6.25	
E- F	-23 / 0	-95.2	-95.2	0.06 (1)	6.25	
F- G	-6 / 0	-95.2	-95.2	0.06 (1)	10.00	
G- H	-51 / 0	-95.2	-95.2	0.12 (1)	6.25	
H- I	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
J- H	-283 / 0	0.0	0.0	0.03 (1)	7.81	
P- O	0 / 0	-18.5	-18.5	0.02 (4)	10.00	
O- N	0 / 13	-18.5	-18.5	0.02 (4)	10.00	
N- M	0 / 8	-18.5	-18.5	0.01 (4)	10.00	
M- L	0 / 8	-18.5	-18.5	0.01 (4)	10.00	
L- K	0 / 13	-18.5	-18.5	0.02 (4)	10.00	
K- J	0 / 0	-18.5	-18.5	0.02 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- E	-144 / 0	0.07 (1)
N- D	-230 / 0	0.06 (1)
O- C	-102 / 0	0.02 (1)
L- F	-230 / 0	0.06 (1)
K- G	-102 / 0	0.02 (1)
B- O	0 / 21	0.00 (1)
K- H	0 / 21	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (A-B:1) , BC=0.02/1.00 (N-O:4) , WB=0.07/1.00 (E-M:1) , SSI=0.08/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

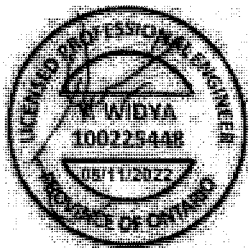
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	660	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (H) (INPUT = 0.90)
JSI METAL= 0.12 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T109		2	GREEN PARK HOMES JT 53080 (TRUSS DESC.)	E22085324

Alpa Roof Truss, Maple

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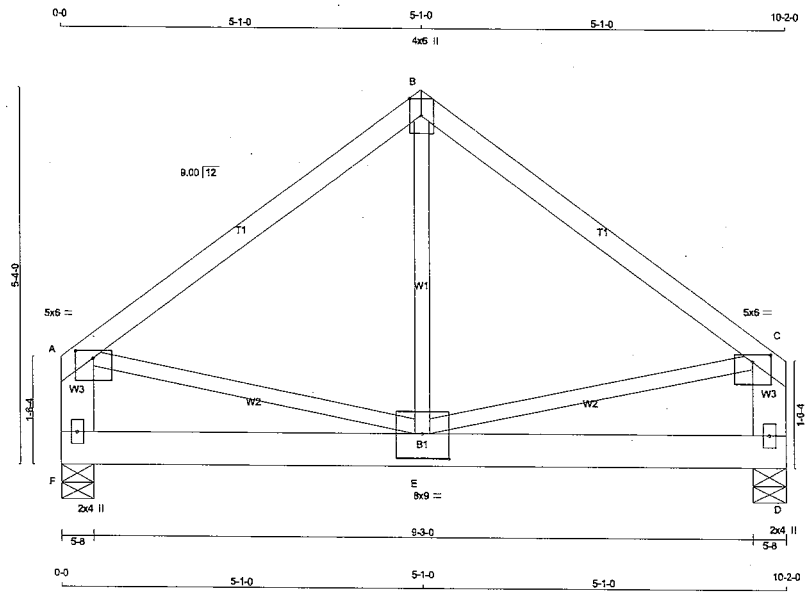


TOTAL WEIGHT = 2 X 48 = 96 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x6	DRY	No.2	SPF
D - C	2x6	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS		SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- B	1	12	TOP
B- C	1	12	TOP
F- A	2	12	TOP
D- C	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	8	SIDE(303.2)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

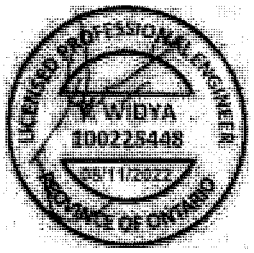
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	5.0	6.0	1.25	3.00
B	TTW+p	MT20	4.0	6.0	Edge	
C	TMVW-p	MT20	5.0	6.0	1.25	3.00
D	BMV1+p	MT20	2.0	4.0		
E	BMWWW-t	MT20	8.0	9.0	4.25	4.50
F	BMV1+p	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	3661	0	3661	0	0	5-8	2-0
D	3661	0	3661	0	0	5-8	2-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	2584	1721 / 0	0 / 0	0 / 0	0 / 0	863 / 0	0 / 0
D	2584	1721 / 0	0 / 0	0 / 0	0 / 0	863 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	-2828 / 0	-95.2	-95.2	0.30 (1)	5.14
B- C	-2828 / 0	-95.2	-95.2	0.30 (1)	5.14
F- A	-2433 / 0	0.0	0.0	0.09 (1)	7.81
D- C	-2433 / 0	0.0	0.0	0.09 (1)	7.81
F- E	0 / 0	-624.9	-624.9	0.67 (1)	10.00
E- D	0 / 0	-624.9	-624.9	0.67 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	0 / 2910	0.36 (1)
A- E	0 / 2316	0.29 (1)
E- C	0 / 2316	0.29 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 23-4-0
END DISTANCE = 10-2-0
END SPAN CARRIED = 23-4-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.30/1.00 (B-C:1) , BC=0.67/1.00 (E-F:1) , WB=0.36/1.00 (B-E:1) , SSI=0.65/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.62 (B) (INPUT = 0.80)
JSI METAL= 0.35 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T110G		1	GREEN PARK HOMES JT 53080	E22085325

Alpa Roof Truss, Maple

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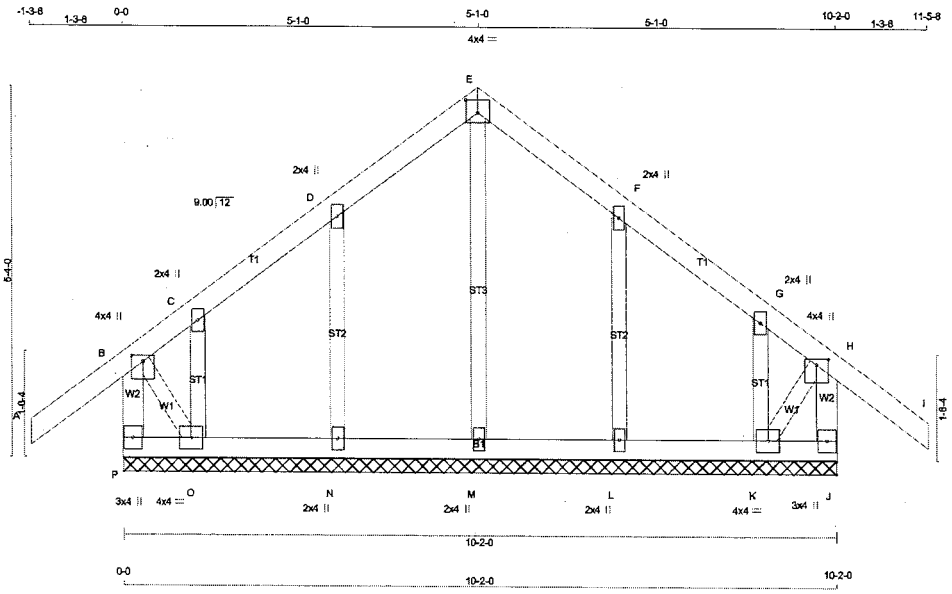

TOTAL WEIGHT = 47 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW-p	MT20	4.0	4.0	2.25	2.00
H	TMVW+p	MT20	4.0	4.0	1.00	2.00
J	BMV1+p	MT20	3.0	4.0		
K	BMWW1-t	MT20	4.0	4.0		
L, M, N						
L	BMW1+w	MT20	2.0	4.0		
O	BMWW1-t	MT20	4.0	4.0		
P	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
P- B	-277 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-60 / 0	-95.2	-95.2	0.12 (1)	6.25	
C- D	0 / 2	-95.2	-95.2	0.06 (1)	10.00	
D- E	-15 / 0	-95.2	-95.2	0.06 (1)	6.25	
E- F	-15 / 0	-95.2	-95.2	0.06 (1)	6.25	
F- G	0 / 2	-95.2	-95.2	0.06 (1)	10.00	
G- H	-60 / 0	-95.2	-95.2	0.12 (1)	6.25	
H- I	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
J- H	-277 / 0	0.0	0.0	0.03 (1)	7.81	
P- O	0 / 0	-18.5	-18.5	0.01 (4)	10.00	
O- N	0 / 7	-18.5	-16.5	0.02 (4)	10.00	
N- M	0 / 1	-18.5	-18.5	0.02 (4)	10.00	
M- L	0 / 1	-18.5	-18.5	0.02 (4)	10.00	
L- K	0 / 7	-18.5	-18.5	0.02 (4)	10.00	
K- J	0 / 0	-18.5	-18.5	0.01 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- E	-153 / 0	0.06 (1)
N- D	-230 / 0	0.05 (1)
O- C	-42 / 0	0.01 (1)
L- F	-230 / 0	0.05 (1)
K- G	-42 / 0	0.01 (1)
B- O	0 / 13	0.00 (1)
K- H	0 / 13	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (H-I:1) , BC=0.02/1.00 (K-L:4) , WB=0.06/1.00 (E-M:1) , SSI=0.08/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.12 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T111G		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085326

Alpa Roof Truss, Maple

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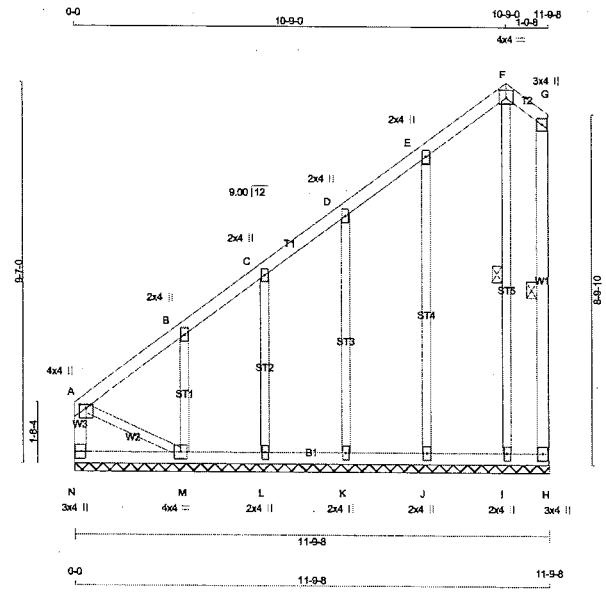

TOTAL WEIGHT = 68 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
N - A	2x4	DRY	No.2	SPF
A - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.00	2.00
B, C, D, E						
B	TMW+w	MT20	2.0	4.0		
F	TTW-p	MT20	4.0	4.0	2.25	2.00
G	TMV+p	MT20	3.0	4.0		
H	BMV1+p	MT20	3.0	4.0		
I, J, K, L						
I	BMW1+w	MT20	2.0	4.0		
M	BMWW1-t	MT20	4.0	4.0		
N	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF G-H, F-I.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX	MAX. UNBRAC LENGTH
N- A	-122 / 0	0.0	0.0	0.01 (1)		7.81
A- B	-5 / 0	-95.2	-95.2	0.08 (1)		10.00
B- C	-21 / 0	-95.2	-95.2	0.08 (1)		6.25
C- D	-5 / 0	-95.2	-95.2	0.04 (1)		10.00
D- E	0 / 0	-95.2	-95.2	0.05 (1)		10.00
E- F	-11 / 0	-95.2	-95.2	0.05 (1)		6.25
F- G	0 / 0	-95.2	-95.2	0.02 (1)		10.00
H- G	-50 / 0	0.0	0.0	0.02 (1)		6.25
N- M	0 / 0	-18.5	-18.5	0.03 (4)		10.00
M- L	0 / 8	-18.5	-18.5	0.03 (4)		10.00
L- K	0 / 5	-18.5	-18.5	0.02 (4)		10.00
K- J	0 / 2	-18.5	-18.5	0.02 (4)		10.00
J- I	0 / 0	-18.5	-18.5	0.02 (4)		10.00
I- H	0 / 0	-18.5	-18.5	0.01 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- F	-130 / 0	0.08 (1)
J- E	-215 / 0	0.27 (1)
K- D	-188 / 0	0.13 (1)
L- C	-167 / 0	0.06 (1)
M- B	-258 / 0	0.05 (1)
A- M	0 / 17	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.08/1.00 (B-C:1) , BC=0.03/1.00 (L-M:4) , WB=0.27/1.00 (E-J:1) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
2/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	T112		2	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085327

Alpa Roof Truss, Maple

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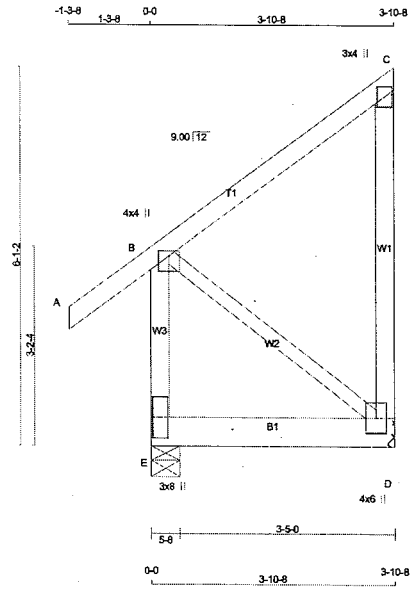


TOTAL WEIGHT = 2 X 27 = 54 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS		
E- B 1	12	TOP
A- C 1	12	TOP
C- D 1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS		
E- D 2	12	SIDE(133.8)
WEBS : (0.122"X3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

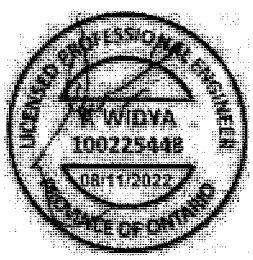
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMV1+p	MT20	3.0	8.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	870	0	870	0	0	5-8	1-8
D	739	0	739	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	612	421 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0
D	522	347 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (7)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
E- B	-316 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 39	-95.2	-95.2	0.11 (7)	10.00
B- C	0 / 0	-95.2	-95.2	0.13 (1)	10.00
D- C	-184 / 0	0.0	0.0	0.06 (1)	7.81
E- D	0 / 0	-286.2	-286.2	0.20 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- D	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-5-0
END DISTANCE = 3-10-8
END SPAN CARRIED = 11-5-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.13/1.00 (B-C:1) , BC=0.20/1.00 (D-E:1) , WB=0.00/1.00 (B-D:1) , SSI=0.18/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (B) (INPUT = 0.90)
JSI METAL= 0.03 (C) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T113		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085328

Alpa Roof Truss, Maple

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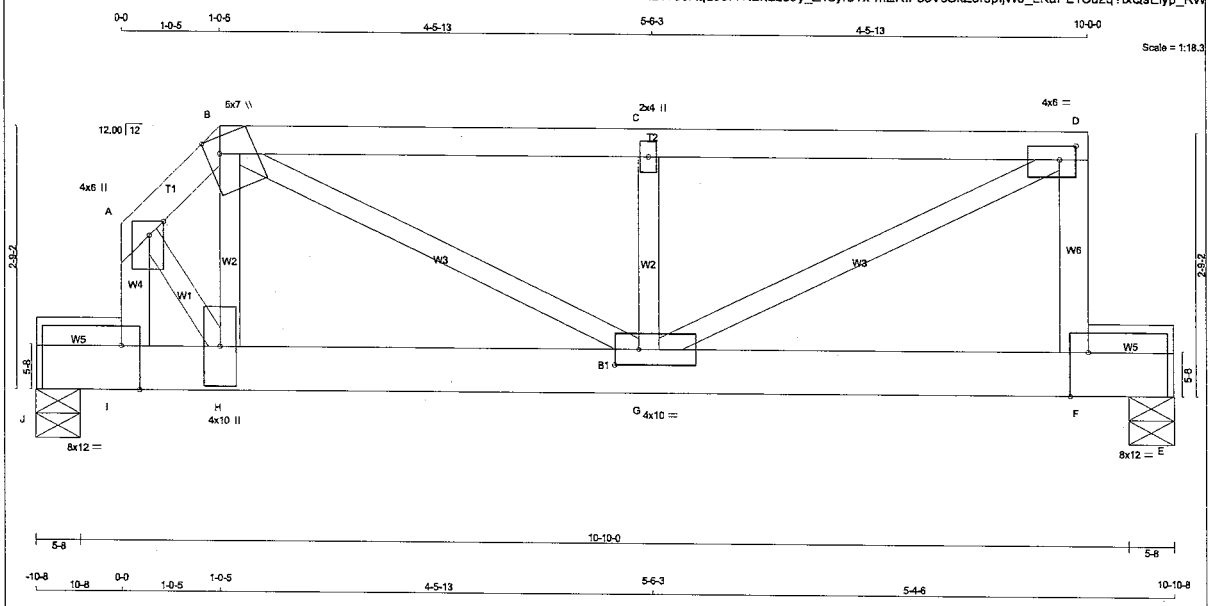

TOTAL WEIGHT = 2 X 51 = 102 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
I - A	2x4	DRY	No.2	SPF
J - E	2x6	DRY	1650F 1.5E	SPF
J - I	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASDNED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	Edge	1.75
B	TTWW+m	MT20	6.0	7.0	Edge	1.75
C	TMW+w	MT20	2.0	4.0		
D	TMVW-t	MT20	4.0	6.0	1.75	2.00
F	BMVW-t	MT20	8.0	12.0	Edge	2.25
G	BMWWW-t	MT20	4.0	10.0	2.00	3.00
H	BMWW+t	MT20	4.0	10.0		
I	BMVW-t	MT20	8.0	12.0	Edge	2.25

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
J	1358	0	1358	0	0	5-8	1-8
E	1358	0	1358	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	963	621 / 0	0 / 0	0 / 0	0 / 0	341 / 0	0 / 0
E	962	621 / 0	0 / 0	0 / 0	0 / 0	341 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX	MAX. UNBRAC LENGTH
A- B	-1551 / 0	-134.4	-134.4	0.06 (1)		5.22
B- C	-2141 / 0	-134.4	-134.4	0.54 (1)		3.97
C- D	-2141 / 0	-134.4	-134.4	0.54 (1)		3.97
F- D	-1368 / 0	0.0	0.0	0.19 (1)		6.90
I- A	-2418 / 0	0.0	0.0	0.28 (1)		5.45
J- I	0 / 0	-43.0	-43.0	0.44 (1)		10.00
I- H	0 / 0	-129.7	-129.7	0.60 (1)		10.00
H- G	0 / 1091	-129.7	-129.7	0.28 (1)		10.00
G- F	0 / 0	-129.7	-129.7	0.60 (1)		10.00
F- E	0 / 0	-43.0	-43.0	0.44 (1)		10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
H- B	0 / 239	0.06 (1)
B- G	0 / 1189	0.29 (1)
G- C	-716 / 0	0.13 (1)
G- D	0 / 2420	0.60 (1)
A- H	0 / 1642	0.41 (1)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 7-3-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: PARTIAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 675 (0.21")

CSI: TC=0.54/1.00 (C-D:1) , BC=0.60/1.00 (F-G:1) , WB=0.60/1.00 (D-G:1) , SSI=0.83/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (G) (INPUT = 0.90)
JSI METAL= 0.59 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
K. VIDYA
100225448
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	T114		2	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085350

Alpa Roof Truss, Maple

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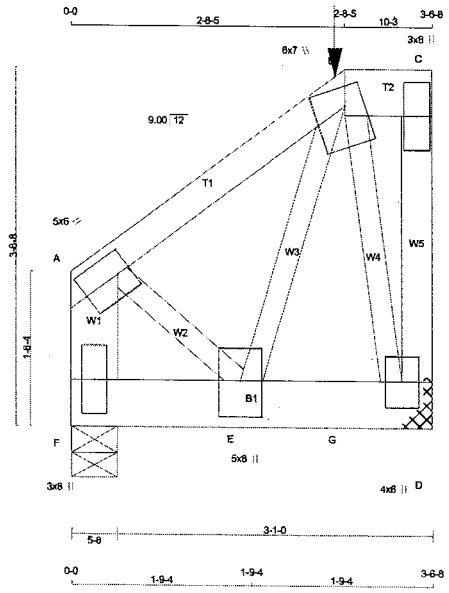


Scale = 1:17.3

TOTAL WEIGHT = 2 X 23 = 45 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x6	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - A	2x6	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS		
A- B 1	12	SIDE(70.1)
C- D 1	12	TOP
B- C 2	12	SIDE(61.2)
F- A 2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS		
F- D 2	2	SIDE(1166.9)
WEBS : (0.122"X3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

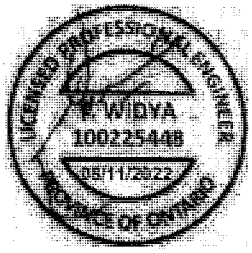
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-t	MT20	5.0	6.0	2.50	1.50
B	TTWW+m	MT20	6.0	7.0	2.25	2.25
C	TMV+p	MT20	3.0	8.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW+t	MT20	5.0	8.0	4.25	2.50
F	BMV1+p	MT20	3.0	8.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	4699	0	4699	0	-207	MECHANICAL	
F	4524	0	4524	95	-128	5-8	2-7

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-9.

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 207 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT F FOR 150 LBS FACTORED UPLIFT

PROVIDE FOR 95 LBS FACTORED HORIZONTAL REACTION AT JOINT F

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	3431	2185 / 0	545 / 0	0 / 0	630 / -599	701 / 0	0 / 0
F	3312	2080 / 0	545 / 0	0 / 0	576 / -533	686 / 0	0 / 0
HORIZONTAL REACTIONS							
F	---	0 / 0	0 / 0	0 / 0	69 / -52	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 5.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	-2208 / 78	-120.3	-120.3	0.10 (2)	5.90
B- C	-13 / 35	-226.8	-226.8	0.01 (3)	6.25
D- C	-110 / 23	0.0	0.0	0.02 (13)	7.81
F- A	-2633 / 87	0.0	0.0	0.10 (1)	7.81
F- E	-63 / 67	-2400.5	-2400.5	0.27 (1)	6.25
E- G	-52 / 692	-2400.5	-2400.5	0.37 (1)	6.25
G- D	-52 / 692	-2400.5	-2400.5	0.37 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	-89 / 3580	0.44 (3)
B- D	-2629 / 151	0.27 (1)
A- E	-77 / 2117	0.26 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	2-8-5	-205	-228	51	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	35.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	59.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 53-11-0
END DISTANCE = 3-6-8
END SPAN CARRIED = 53-11-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 100 % OF GSL. (DEFINED BY USER)

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-8-5
RIGHT SETBACK = 0-0
END SETBACK = 4-9-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO BACK SIDE
- ADDT'L LOADS BASED ON 100 % OF GSL.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/180 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10/1.00 (A-B:2) , BC=0.37/1.00 (D-E:1) , WB=0.44/1.00 (B-E:3) , SSI=0.78/1.00 (D-E:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (B) (INPUT = 0.90)
JSI METAL= 0.38 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T115		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085329

Alpa Roof Truss, Maple

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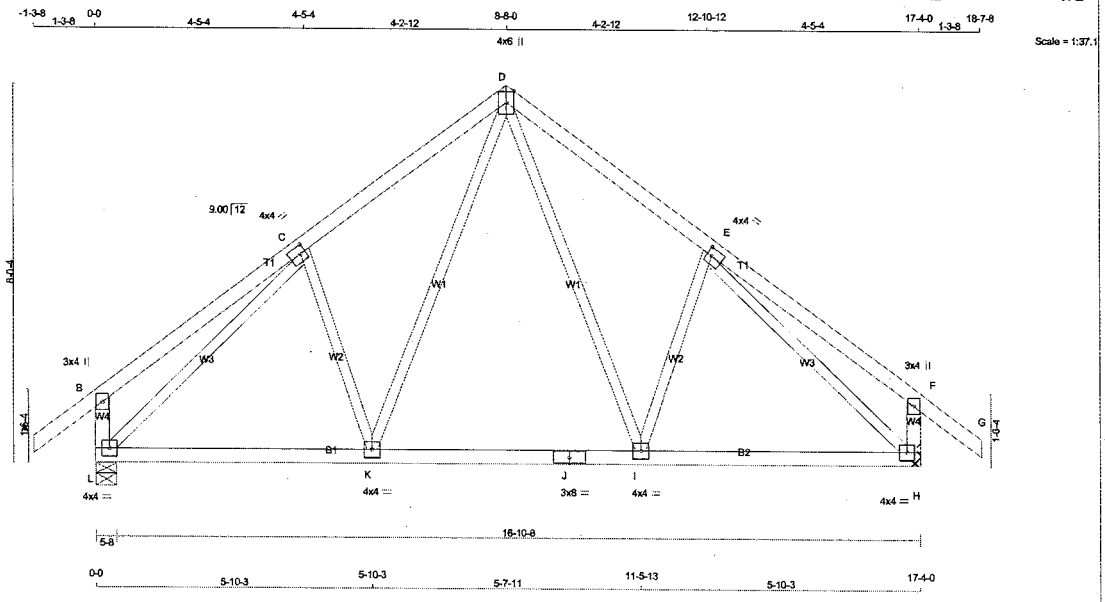


TOTAL WEIGHT = 2 X 81 = 161 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+p	MT20	4.0	6.0	Edge	
E	TMWW-t	MT20	4.0	4.0	2.00	1.25
F	TMV+p	MT20	3.0	4.0		
H	BMVW1-t	MT20	4.0	4.0		
I	BMWW-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	8.0		
K	BMWW-t	MT20	4.0	4.0		
L	BMVW1-t	MT20	4.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1117	0	1117	0	0	5-8	1-8
H	1117	0	1117	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 1-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	786	537 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0
H	786	537 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	0 / 29	-95.2	-95.2	0.29 (1)	10.00
C- D	-880 / 0	-95.2	-95.2	0.23 (1)	6.25
D- E	-880 / 0	-95.2	-95.2	0.23 (1)	6.25
E- F	0 / 29	-95.2	-95.2	0.29 (1)	10.00
F- G	0 / 39	-95.2	-95.2	0.13 (1)	10.00
L- B	-287 / 0	0.0	0.0	0.03 (1)	7.81
H- F	-287 / 0	0.0	0.0	0.03 (1)	7.81
L- K	0 / 764	-18.5	-18.5	0.20 (4)	10.00
K- J	0 / 553	-18.5	-18.5	0.18 (4)	10.00
J- I	0 / 553	-18.5	-18.5	0.18 (4)	10.00
I- H	0 / 764	-18.5	-18.5	0.20 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- I	0 / 373	0.08 (1)
I- E	-249 / 0	0.09 (1)
K- D	0 / 373	0.08 (1)
C- K	-249 / 0	0.09 (1)
L- C	-1095 / 0	0.71 (1)
E- H	-1095 / 0	0.71 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.58")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.58")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.29/1.00 (B-C:1) , BC=0.20/1.00 (K-L:4) , WB=0.71/1.00 (C-L:1) , SSI=0.16/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

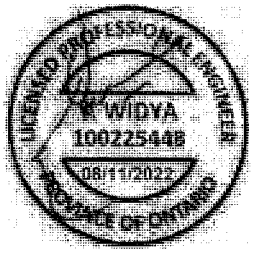
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.39 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	T115G		1	GREEN PARK HOMES JT 53080	E22085330

Alpa Roof Truss, Maple

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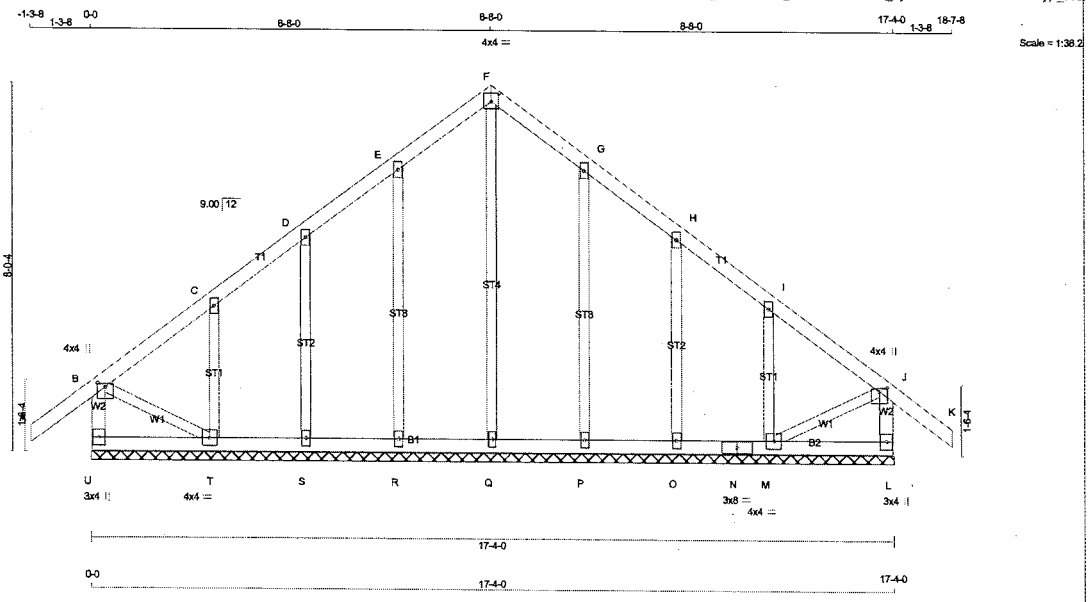


TOTAL WEIGHT = 83 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
U - B	2x4	DRY	No.2	SPF
A - F	2x4	DRY	No.2	SPF
F - K	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
U - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

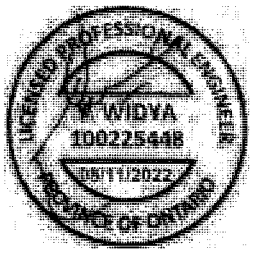
DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW+p	MT20	4.0	4.0	1.00	2.00
C, D, E, G, H, I						
C	TMW+w	MT20	2.0	4.0		
F	TTW-p	MT20	4.0	4.0	2.25	2.00
J	TMWW+p	MT20	4.0	4.0	1.00	2.00
L	BMV1+p	MT20	3.0	4.0		
M	BMWW1-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	8.0		
O, P, Q, R, S						
O	BMW1+w	MT20	2.0	4.0		
T	BMWW1-t	MT20	4.0	4.0		
U	BMV1+p	MT20	3.0	4.0		

LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
U- B	-269 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
B- C	-25 / 0	-95.2	-95.2	0.08 (1)	6.25	
C- D	-40 / 0	-95.2	-95.2	0.08 (1)	6.25	
D- E	-21 / 0	-95.2	-95.2	0.06 (1)	6.25	
E- F	-34 / 0	-95.2	-95.2	0.06 (1)	6.25	
F- G	-34 / 0	-95.2	-95.2	0.06 (1)	6.25	
G- H	-21 / 0	-95.2	-95.2	0.06 (1)	6.25	
H- I	-40 / 0	-95.2	-95.2	0.08 (1)	6.25	
I- J	-25 / 0	-95.2	-95.2	0.08 (1)	6.25	
J- K	0 / 39	-95.2	-95.2	0.13 (1)	10.00	
L- J	-269 / 0	0.0	0.0	0.03 (1)	7.81	
U- T	0 / 0	-18.5	-18.5	0.03 (4)	10.00	
T- S	0 / 24	-18.5	-18.5	0.03 (4)	10.00	
S- R	0 / 21	-18.5	-18.5	0.02 (4)	10.00	
R- Q	0 / 18	-18.5	-18.5	0.02 (4)	10.00	
Q- P	0 / 18	-18.5	-18.5	0.02 (4)	10.00	
P- O	0 / 21	-18.5	-18.5	0.02 (4)	10.00	
O- N	0 / 24	-18.5	-18.5	0.03 (4)	10.00	
N- M	0 / 24	-18.5	-18.5	0.03 (4)	10.00	
M- L	0 / 0	-18.5	-18.5	0.03 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
Q- F	-132 / 0	0.16 (1)
R- E	-220 / 0	0.15 (1)
S- D	-163 / 0	0.08 (1)
T- C	-253 / 0	0.05 (1)
P- G	-220 / 0	0.15 (1)
O- H	-163 / 0	0.08 (1)
M- I	-253 / 0	0.05 (1)
B- T	0 / 34	0.01 (1)
M- J	0 / 34	0.01 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (J-K:1) , BC=0.03/1.00 (S-T:4) , WB=0.16/1.00 (F-Q:1) , SSI=0.09/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (T) (INPUT = 0.90)
JSI METAL= 0.13 (I) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	PB16		1	TRUSS DESC.	JT 53080	E22085254

Alpa Roof Truss, Maple

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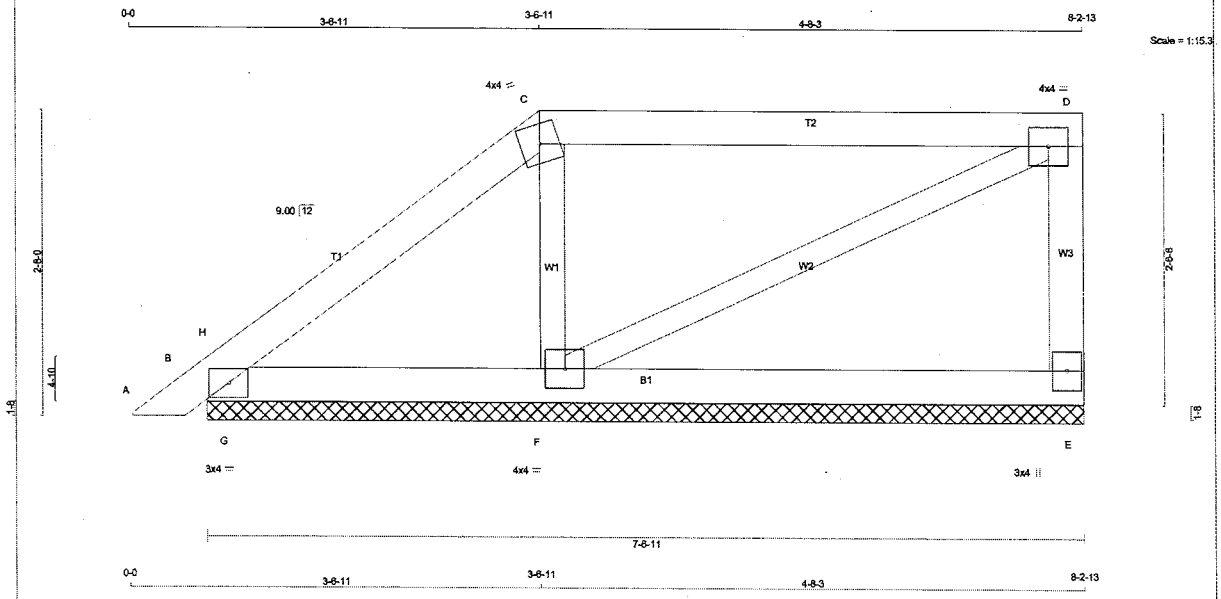


TOTAL WEIGHT = 2 X 27 = 53 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMB1-t	MT20	3.0	4.0	
C	TTW-m	MT20	4.0	4.0	
D	TMVW-t	MT20	4.0	4.0	
E	BMV1+p	MT20	3.0	4.0	
F	BMWW1-t	MT20	4.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	270	0	270	0	0	7-6-11	1-8
B	239	0	239	0	0	7-6-11	1-8
F	406	0	406	0	0	7-6-11	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX /MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	189	132 / 0	0 / 0	0 / 0	0 / 0	57 / 0	0 / 0
B	166	125 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0
F	289	177 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-95.2	-95.2	0.02 (1)	10.00
B- H	0 / 8	-95.2	-95.2	0.04 (1)	10.00
H- C	-64 / 0	-95.2	-95.2	0.09 (1)	6.25
C- D	-32 / 0	-95.2	-95.2	0.36 (1)	6.25
E- D	-238 / 0	0.0	0.0	0.03 (1)	7.81
B- G	0 / 46	-18.5	-18.5	0.09 (1)	10.00
G- F	0 / 46	-18.5	-18.5	0.09 (4)	10.00
F- E	0 / 0	-18.5	-18.5	0.09 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
F- C	-302 / 0	0.05 (1)
F- D	0 / 35	0.01 (1)
G- H	-242 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.36/1.00 (C-D:1) , BC=0.09/1.00 (F-G:4) , WB=0.05/1.00 (C-F:1) , SSI=0.18/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

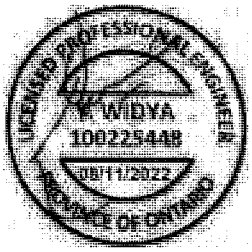
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 0.5 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.04 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	PB17		1	TRUSS DESC.	JT 53080	E22085255

Alpa Roof Truss, Maple

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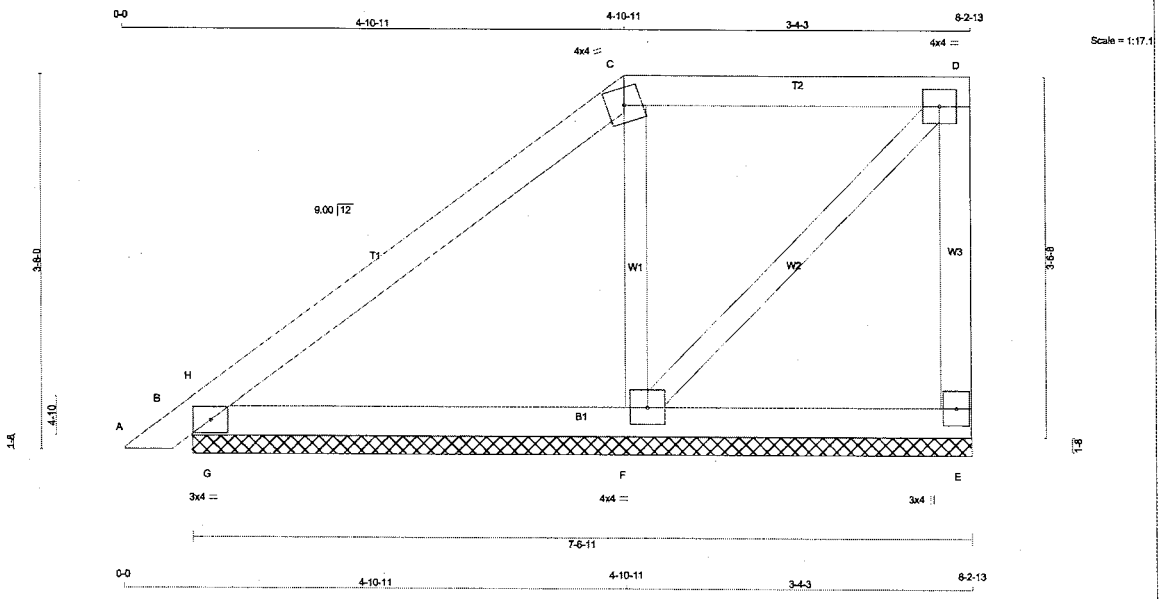

TOTAL WEIGHT = 2 X 29 = 57 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMB1-t	MT20	3.0	4.0	
C	TTW-m	MT20	4.0	4.0	
D	TMWW-t	MT20	4.0	4.0	
E	BMV1+p	MT20	3.0	4.0	
F	BMWW1-t	MT20	4.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	219	0	219	0	0	7-6-11	1-8
B	326	0	326	0	0	7-6-11	1-8
F	368	0	368	0	0	7-6-11	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	154	109 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
B	228	163 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0
F	262	163 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-95.2	-95.2	0.02 (1)	10.00
B- H	-21 / 91	-95.2	-95.2	0.11 (1)	6.25
H- C	-87 / 0	-95.2	-95.2	0.21 (1)	6.25
C- D	-52 / 0	-95.2	-95.2	0.18 (1)	6.25
E- D	-211 / 0	0.0	0.0	0.04 (1)	7.81
B- G	0 / 61	-18.5	-18.5	0.18 (1)	10.00
G- F	0 / 61	-18.5	-18.5	0.18 (1)	10.00
F- E	0 / 0	-18.5	-18.5	0.10 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-284 / 0	0.06 (1)
F- D	0 / 73	0.02 (1)
G- H	-459 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.21/1.00 (C-H:1) , BC=0.16/1.00 (B-G:1) , WB=0.06/1.00 (C-F:1) , SSI=0.35/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.07 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB18		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085256

Alpa Roof Truss, Maple

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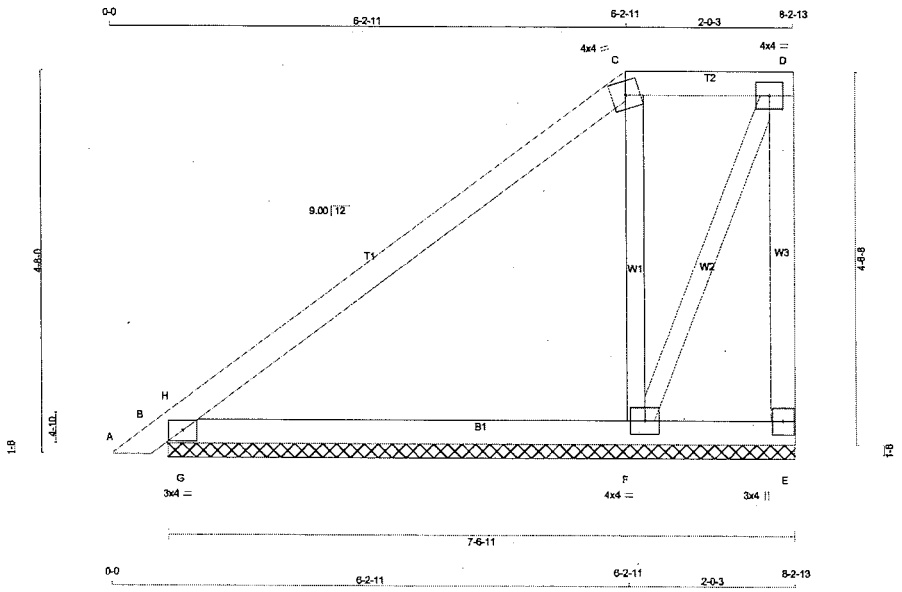

TOTAL WEIGHT = 2 X 31 = 62 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-t	MT20	3.0	4.0		
C	TTW-m	MT20	4.0	4.0		
D	TMVW-t	MT20	4.0	4.0		
E	BMV1+p	MT20	3.0	4.0		
F	BMWW1-t	MT20	4.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	134	0	134	0	0	7-6-11	1-8
B	384	0	384	0	0	7-6-11	1-8
F	396	0	396	0	0	7-6-11	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	92	73 / 0	0 / 0	0 / 0	0 / 0	19 / 0	0 / 0
B	270	169 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
F	282	172 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI	MAX (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-95.2	-95.2	0.02	(1)	10.00
B- H	-10 / 290	-95.2	-95.2	0.24	(1)	6.25
H- C	-77 / 0	-95.2	-95.2	0.36	(1)	6.25
C- D	-42 / 0	-95.2	-95.2	0.07	(1)	6.25
E- D	-188 / 0	0.0	0.0	0.06	(1)	7.81
B- G	0 / 49	-18.5	-18.5	0.30	(1)	10.00
G- F	0 / 49	-18.5	-18.5	0.30	(1)	10.00
F- E	0 / 0	-18.5	-18.5	0.19	(1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-284 / 0	0.09 (1)
F- D	0 / 102	0.02 (1)
G- H	-797 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.36/1.00 (C-H:1) , BC=0.30/1.00 (F-G:1) , WB=0.09/1.00 (C-F:1) , SSI=0.61/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.12 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB19		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085257

Alpa Roof Truss, Maple

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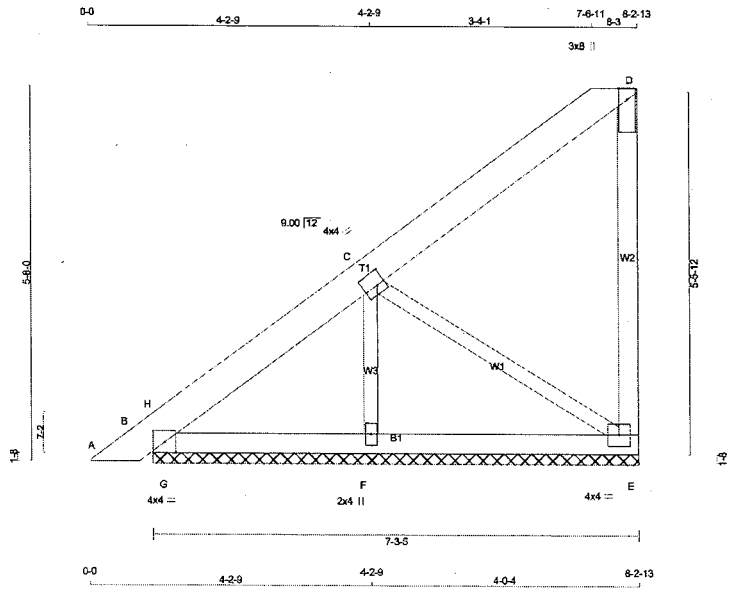

TOTAL WEIGHT = 2 X 37 = 75 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-i	MT20	4.0	4.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.50	1.50
D	TMV+p	MT20	3.0	8.0	Edge	
E	BMVW1-t	MT20	4.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	240	0	240	0	0	7-3-5	1-8
B	276	0	276	0	0	7-3-5	1-8
F	387	0	387	0	0	7-3-5	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX /MIN COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	169	118 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0
B	192	143 / 0	0 / 0	0 / 0	0 / 0	50 / 0	0 / 0
F	275	172 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 18	-95.2	-95.2	0.02 (1)	10.00	
B- H	-173 / 0	-95.2	-95.2	0.01 (4)	6.25	
H- C	-81 / 0	-95.2	-95.2	0.10 (1)	6.25	
C- D	-23 / 0	-95.2	-95.2	0.10 (1)	6.25	
E- D	-153 / 0	0.0	0.0	0.09 (1)	7.81	
B- G	0 / 91	-18.5	-18.5	0.03 (1)	10.00	
G- F	0 / 91	-18.5	-18.5	0.08 (4)	10.00	
F- E	0 / 91	-18.5	-18.5	0.08 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-300 / 0	0.05 (1)
C- E	-108 / 0	0.04 (1)
G- H	-21 / 26	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10/1.00 (C-H:1) , BC=0.08/1.00 (F-G:4) , WB=0.05/1.00 (C-F:1) , SSI=0.11/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (C) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	PB75		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085258

Alpa Roof Truss, Maple

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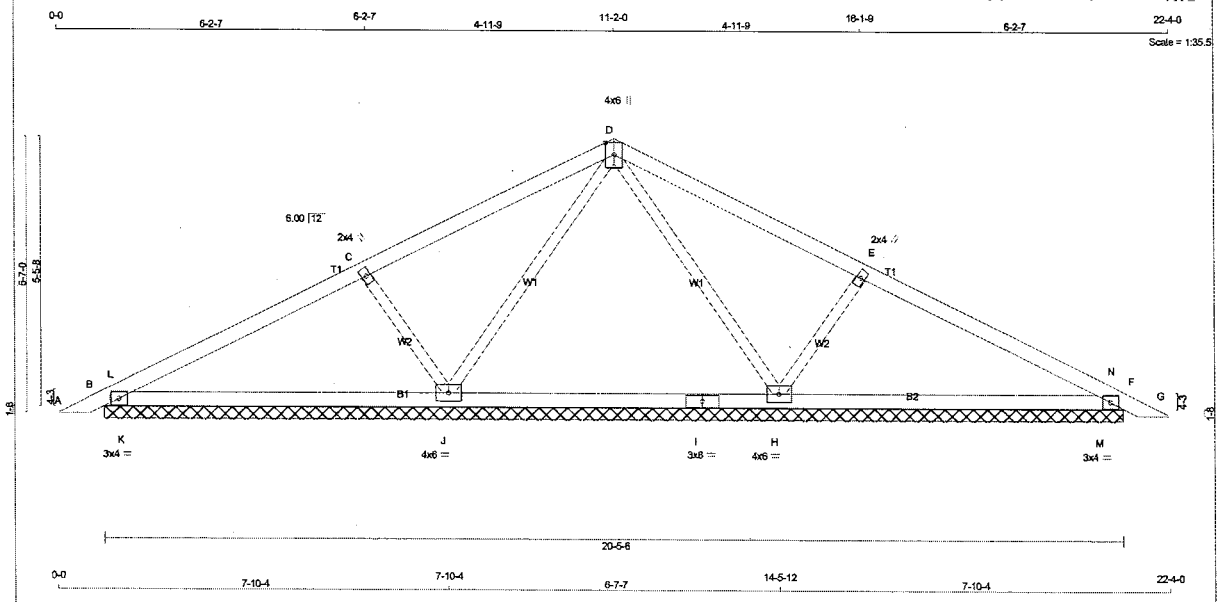

TOTAL WEIGHT = 5 X 66 = 330 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASDNED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	6.0	Edge	
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-t	MT20	4.0	6.0		
I	BS-t	MT20	3.0	8.0		
J	BMWW1-t	MT20	4.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	431	0	431	0	0	20-5-6 (11-11½)	
H	812	0	812	0	0	20-5-6 (11-11½)	
J	812	0	812	0	0	20-5-6 (11-11½)	
F	431	0	431	0	0	20-5-6 (11-11½)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	303	210 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
H	573	382 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
J	573	382 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
F	303	210 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, H, J, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- L	-270 / 0	-95.2	-95.2	0.09 (4)	6.25
L- C	-209 / 0	-95.2	-95.2	0.41 (1)	6.25
C- D	0 / 61	-95.2	-95.2	0.41 (1)	10.00
D- E	0 / 61	-95.2	-95.2	0.41 (1)	10.00
E- N	-209 / 0	-95.2	-95.2	0.41 (1)	6.25
N- F	-270 / 0	-95.2	-95.2	0.09 (4)	6.25
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- K	0 / 213	-18.5	-18.5	0.12 (1)	10.00
K- J	0 / 213	-18.5	-18.5	0.20 (4)	10.00
J- I	0 / 63	-18.5	-18.5	0.19 (4)	10.00
I- H	0 / 63	-18.5	-18.5	0.19 (4)	10.00
H- M	0 / 213	-18.5	-18.5	0.20 (4)	10.00
M- F	0 / 213	-18.5	-18.5	0.12 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	-261 / 0	0.18 (1)
H- E	-533 / 0	0.11 (1)
J- D	-261 / 0	0.18 (1)
C- J	-533 / 0	0.11 (1)
K- L	-117 / 92	0.00 (1)
M- N	-117 / 92	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.41/1.00 (C-D:1) , BC=0.20/1.00 (H-M:4) , WB=0.18/1.00 (D-J:1) , SSI=0.21/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (J) (INPUT = 0.90)
JSI METAL= 0.11 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	PB76		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085259

Alpa Roof Truss, Maple

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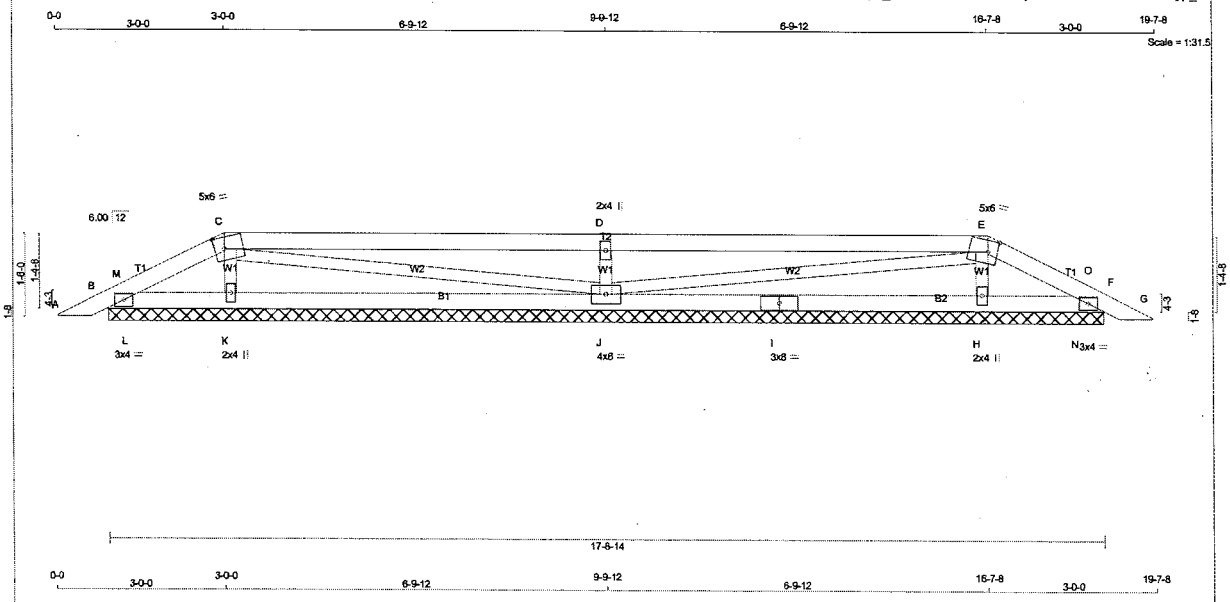

TOTAL WEIGHT = 2 X 56 = 112 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0	2.50	2.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	6.0	2.50	2.00
F	TMB1-I	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BS-t	MT20	3.0	8.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	193	0	193	0	0	17-8-14 (5-9-2)/8	
K	425	0	425	0	0	17-8-14 (5-9-2)/8	
J	942	0	942	0	0	17-8-14 (5-9-2)/8	
H	425	0	425	0	0	17-8-14 (5-9-2)/8	
F	193	0	193	0	0	17-8-14 (5-9-2)/8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	132	111 / 0	0 / 0	0 / 0	0 / 0	20 / 0	0 / 0
K	304	180 / 0	0 / 0	0 / 0	0 / 0	124 / 0	0 / 0
J	662	455 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0
H	304	180 / 0	0 / 0	0 / 0	0 / 0	124 / 0	0 / 0
F	132	111 / 0	0 / 0	0 / 0	0 / 0	20 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, K, J, H, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- M	-33 / 7	-95.2	-95.2	0.02 (4)	6.25
M- C	-46 / 0	-95.2	-95.2	0.04 (1)	6.25
C- D	-2 / 0	-95.2	-95.2	0.75 (1)	10.00
D- E	-2 / 0	-95.2	-95.2	0.75 (1)	10.00
E- O	-46 / 0	-95.2	-95.2	0.04 (1)	6.25
O- F	-33 / 7	-95.2	-95.2	0.02 (4)	6.25
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- L	0 / 39	-18.5	-18.5	0.06 (1)	10.00
L- K	0 / 39	-18.5	-18.5	0.13 (4)	10.00
K- J	0 / 10	-18.5	-18.5	0.18 (4)	10.00
J- I	0 / 10	-18.5	-18.5	0.18 (4)	10.00
I- H	0 / 10	-18.5	-18.5	0.18 (4)	10.00
H- N	0 / 39	-18.5	-18.5	0.13 (4)	10.00
N- F	0 / 39	-18.5	-18.5	0.06 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-296 / 0	0.04 (1)
C- J	-8 / 0	0.01 (1)
J- D	-811 / 0	0.11 (1)
J- E	-8 / 0	0.01 (1)
H- E	-296 / 0	0.04 (1)
L- M	-126 / 0	0.00 (1)
N- O	-126 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.75/1.00 (C-D:1) , BC=0.18/1.00 (J-K:4) , WB=0.11/1.00 (D-J:1) , SSI=0.32/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	786	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (E) (INPUT = 0.90)
JSI METAL= 0.17 (I) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB77		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085260

Alpa Roof Truss, Maple

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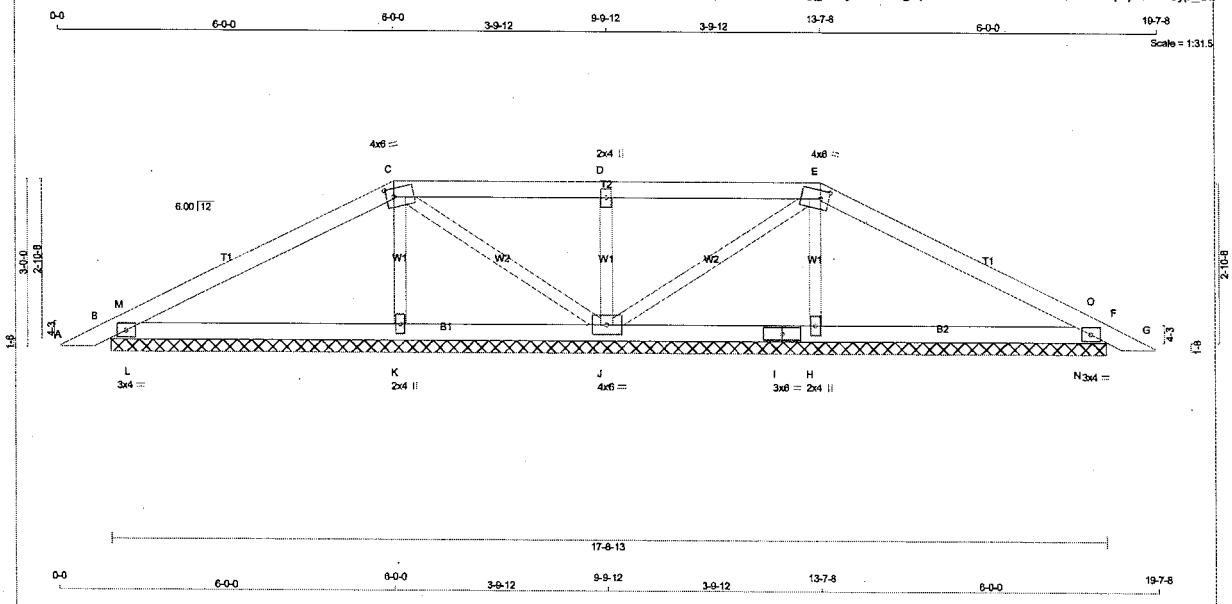


TOTAL WEIGHT = 2 X 57 = 113 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-l	MT20	3.0	4.0		
C	TTWW-m	MT20	4.0	6.0	1.75	1.75
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	1.75
F	TMB1-l	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BS-t	MT20	3.0	8.0		
J	BMWWW1-t	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	407	0	407	0	0	17-8-13 (5-9-11)8	
K	407	0	407	0	0	17-8-13 (5-9-11)8	
J	551	0	551	0	0	17-8-13 (5-9-11)8	
H	407	0	407	0	0	17-8-13 (5-9-11)8	
F	407	0	407	0	0	17-8-13 (5-9-11)8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX /MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	285	203 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
K	290	177 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
J	385	278 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0
H	290	177 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
F	285	203 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, K, J, H, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- M	-41 / 0	-95.2	-95.2	0.11 (1)	6.25
M- C	-133 / 0	-95.2	-95.2	0.30 (1)	6.25
C- D	-31 / 0	-95.2	-95.2	0.23 (1)	6.25
D- E	-31 / 0	-95.2	-95.2	0.23 (1)	6.25
E- O	-133 / 0	-95.2	-95.2	0.30 (1)	6.25
O- F	-41 / 0	-95.2	-95.2	0.11 (1)	8.25
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- L	0 / 113	-18.5	-18.5	0.25 (1)	10.00
L- K	0 / 113	-18.5	-18.5	0.25 (1)	10.00
K- J	0 / 103	-18.5	-18.5	0.16 (1)	10.00
J- I	0 / 103	-18.5	-18.5	0.16 (1)	10.00
I- H	0 / 103	-18.5	-18.5	0.16 (1)	10.00
H- N	0 / 113	-18.5	-18.5	0.25 (1)	10.00
N- F	0 / 113	-18.5	-18.5	0.25 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-236 / 0	0.04 (1)
C- J	-87 / 0	0.03 (1)
J- D	-453 / 0	0.08 (1)
J- E	-87 / 0	0.03 (1)
H- E	-236 / 0	0.04 (1)
L- M	-438 / 0	0.00 (1)
N- O	-438 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.30/1.00 (C-M:1) , BC=0.25/1.00 (B-L:1) , WB=0.08/1.00 (D-J:1) , SSI=0.34/1.00 (B-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

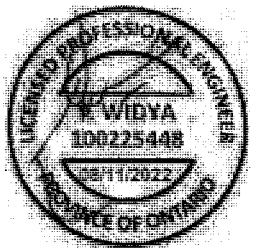
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	786	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (E) (INPUT = 0.90)
JSI METAL= 0.21 (I) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB78		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085261

Alpa Roof Truss, Maple

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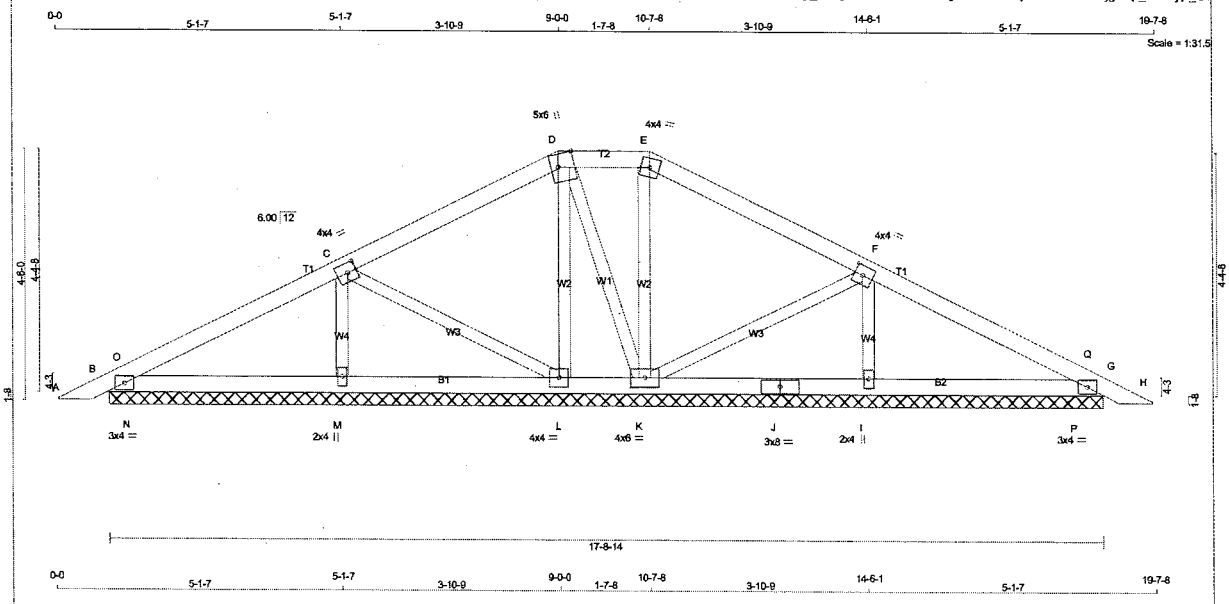


TOTAL WEIGHT = 64 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

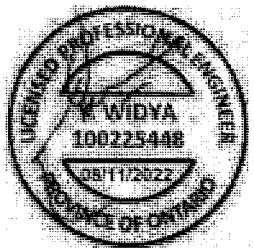
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-l	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTWW+m	MT20	5.0	6.0	Edge	3.50
E	TTW-m	MT20	4.0	4.0		
F	TMWW-t	MT20	4.0	4.0	2.00	1.75
G	TMB1-l	MT20	3.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BS-t	MT20	3.0	8.0		
K	BMWWW1-t	MT20	4.0	6.0		
L	BMWW1-t	MT20	4.0	4.0		
M	BMW1+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	305	0	305	0	0	17-8-14 (5-9-2)8	
M	493	0	493	0	0	17-8-14 (5-9-2)8	
L	204	0	204	0	0	17-8-14 (5-9-2)8	
K	401	0	401	0	0	17-8-14 (5-9-2)8	
I	476	0	476	0	0	17-8-14 (5-9-2)8	
G	298	0	298	0	0	17-8-14 (5-9-2)8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	213	153 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
M	349	229 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
L	146	89 / 0	0 / 0	0 / 0	0 / 0	57 / 0	0 / 0
K	281	200 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
I	337	219 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
G	209	149 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M, L, K, I, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- O	-87 / 0	-95.2	-95.2	0.02 (4)	6.25
O- C	-72 / 0	-95.2	-95.2	0.24 (1)	6.25
C- D	-29 / 0	-95.2	-95.2	0.24 (1)	6.25
D- E	0 / 27	-95.2	-95.2	0.05 (1)	10.00
E- F	-2 / 4	-95.2	-95.2	0.24 (1)	10.00
F- Q	-58 / 0	-95.2	-95.2	0.24 (1)	6.25
Q- G	-72 / 0	-95.2	-95.2	0.02 (4)	6.25
G- H	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- N	0 / 83	-18.5	-18.5	0.11 (1)	10.00
N- M	0 / 83	-18.5	-18.5	0.11 (1)	10.00
M- L	0 / 83	-18.5	-18.5	0.09 (1)	10.00
L- K	0 / 5	-18.5	-18.5	0.03 (4)	10.00
K- J	0 / 69	-18.5	-18.5	0.09 (4)	10.00
J- I	0 / 69	-18.5	-18.5	0.09 (4)	10.00
I- P	0 / 69	-18.5	-18.5	0.11 (1)	10.00
P- G	0 / 69	-18.5	-18.5	0.11 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-377 / 0	0.06 (1)
C- L	-84 / 0	0.03 (1)
L- D	-126 / 0	0.04 (1)
D- K	-93 / 0	0.03 (1)
K- E	-228 / 0	0.06 (1)
K- F	-103 / 0	0.03 (1)
I- F	-360 / 0	0.08 (1)
N- O	-165 / 6	0.00 (1)
P- Q	-165 / 6	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.24/1.00 (E-F:1) , BC=0.11/1.00 (M-N:1) , WB=0.06/1.00 (E-K:1) , SSI=0.16/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (K) (INPUT = 0.90)
JSI METAL= 0.09 (E) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB79		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085262

Alpa Roof Truss, Maple

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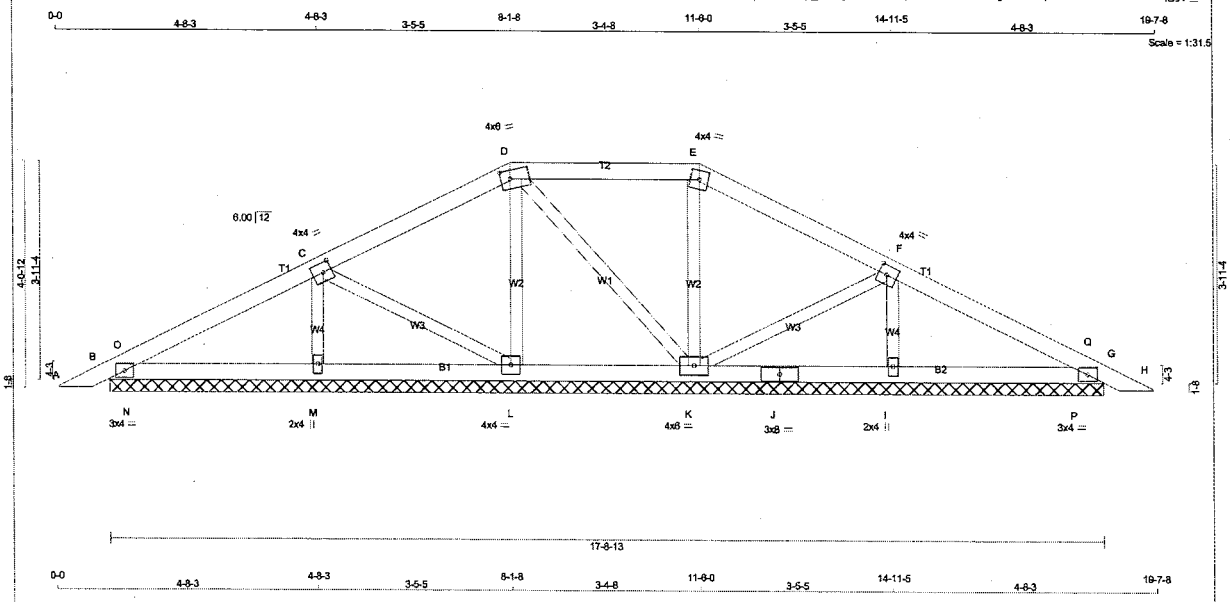

TOTAL WEIGHT = 63 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTWW-m	MT20	4.0	6.0	1.75	2.00
E	TTW-m	MT20	4.0	4.0		
F	TMWW-t	MT20	4.0	4.0	2.00	1.75
G	TMB1-I	MT20	3.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BS-t	MT20	3.0	8.0		
K	BMWWW1-t	MT20	4.0	6.0		
L	BMWW1-t	MT20	4.0	4.0		
M	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GRDSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	268	0	268	0	0	17-8-13 (5-9-11)8	
M	455	0	455	0	0	17-8-13 (5-9-11)8	
L	290	0	290	0	0	17-8-13 (5-9-11)8	
K	441	0	441	0	0	17-8-13 (5-9-11)8	
I	427	0	427	0	0	17-8-13 (5-9-11)8	
G	277	0	277	0	0	17-8-13 (5-9-11)8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	201	145 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0
M	321	213 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
L	206	129 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
K	310	214 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0
I	302	198 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
G	194	139 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M, L, K, I, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- O	-96 / 0	-95.2	-95.2	0.02 (4)	6.25
Q- C	-77 / 0	-95.2	-95.2	0.19 (1)	6.25
C- D	-59 / 0	-95.2	-95.2	0.19 (1)	6.25
D- E	0 / 20	-95.2	-95.2	0.19 (1)	10.00
E- F	-5 / 0	-95.2	-95.2	0.19 (1)	10.00
F- Q	-53 / 0	-95.2	-95.2	0.19 (1)	6.25
Q- G	-72 / 0	-95.2	-95.2	0.02 (4)	6.25
G- H	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- N	0 / 85	-18.5	-18.5	0.09 (1)	10.00
N- M	0 / 85	-18.5	-18.5	0.09 (1)	10.00
M- L	0 / 85	-18.5	-18.5	0.07 (1)	10.00
L- K	0 / 30	-18.5	-18.5	0.04 (4)	10.00
K- J	0 / 64	-18.5	-18.5	0.07 (1)	10.00
J- I	0 / 64	-18.5	-18.5	0.07 (1)	10.00
I- P	0 / 64	-18.5	-18.5	0.09 (1)	10.00
P- G	0 / 64	-18.5	-18.5	0.09 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-353 / 0	0.05 (1)
C- L	-55 / 0	0.02 (1)
L- D	-210 / 0	0.05 (1)
D- K	-75 / 0	0.03 (1)
K- E	-290 / 0	0.07 (1)
K- F	-86 / 0	0.02 (1)
I- F	-326 / 0	0.05 (1)
N- O	-135 / 6	0.00 (1)
P- Q	-135 / 6	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TDP	CH.	LL =	26.7	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.19/1.00 (F-Q:1) , BC=0.09/1.00 (M-N:1) , WB=0.07/1.00 (E-K:1) , SSI=0.14/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (D) (INPUT = 0.90)
JSI METAL= 0.09 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
N. WIDYA
1002254445
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB80		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085263

Alpa Roof Truss, Maple

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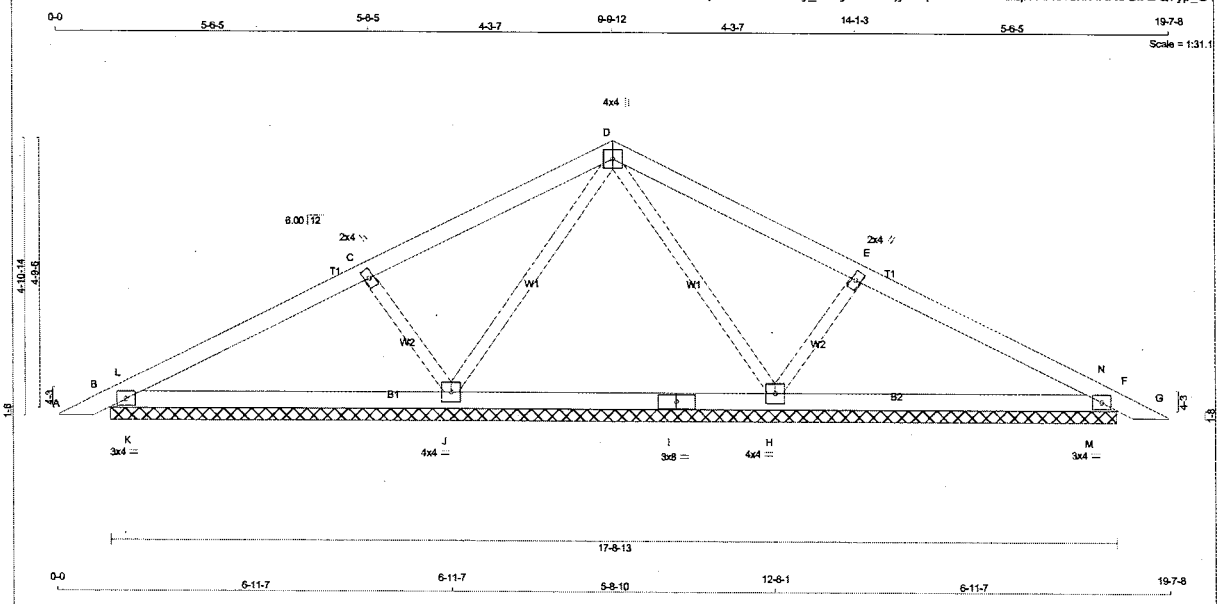

TOTAL WEIGHT = 57 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-t	MT20	4.0	4.0		
I	BS-t	MT20	3.0	8.0		
J	BMWW1-t	MT20	4.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	383	0	383	0	0	17-8-13 (9-11-8)	
H	706	0	706	0	0	17-8-13 (9-11-8)	
J	706	0	706	0	0	17-8-13 (9-11-8)	
F	383	0	383	0	0	17-8-13 (9-11-8)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
H	499	332 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0
J	499	332 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0
F	269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, H, J, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- L	-232 / 0	-95.2	-95.2	0.07 (4)	6.25
L- C	-173 / 0	-95.2	-95.2	0.30 (1)	6.25
C- D	0 / 59	-95.2	-95.2	0.31 (1)	10.00
D- E	0 / 59	-95.2	-95.2	0.31 (1)	10.00
E- N	-173 / 0	-95.2	-95.2	0.30 (1)	6.25
N- F	-232 / 0	-95.2	-95.2	0.07 (4)	6.25
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- K	0 / 178	-18.5	-18.5	0.10 (1)	10.00
K- J	0 / 178	-18.5	-18.5	0.15 (4)	10.00
J- I	0 / 50	-18.5	-18.5	0.14 (4)	10.00
I- H	0 / 50	-18.5	-18.5	0.14 (4)	10.00
H- M	0 / 178	-18.5	-18.5	0.15 (4)	10.00
M- F	0 / 178	-18.5	-18.5	0.10 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	-229 / 0	0.11 (1)
H- E	-462 / 0	0.08 (1)
J- D	-229 / 0	0.11 (1)
C- J	-462 / 0	0.08 (1)
K- L	-91 / 71	0.00 (1)
M- N	-91 / 71	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.31/1.00 (C-D:1) , BC=0.15/1.00 (H-M:4) , WB=0.11/1.00 (D-H:1) , SSI=0.18/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (J) (INPUT = 0.90)
JSI METAL= 0.10 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	PB81		1	GREEN PARK HOMES JT 53080	E22085343

Alpa Roof Truss, Maple

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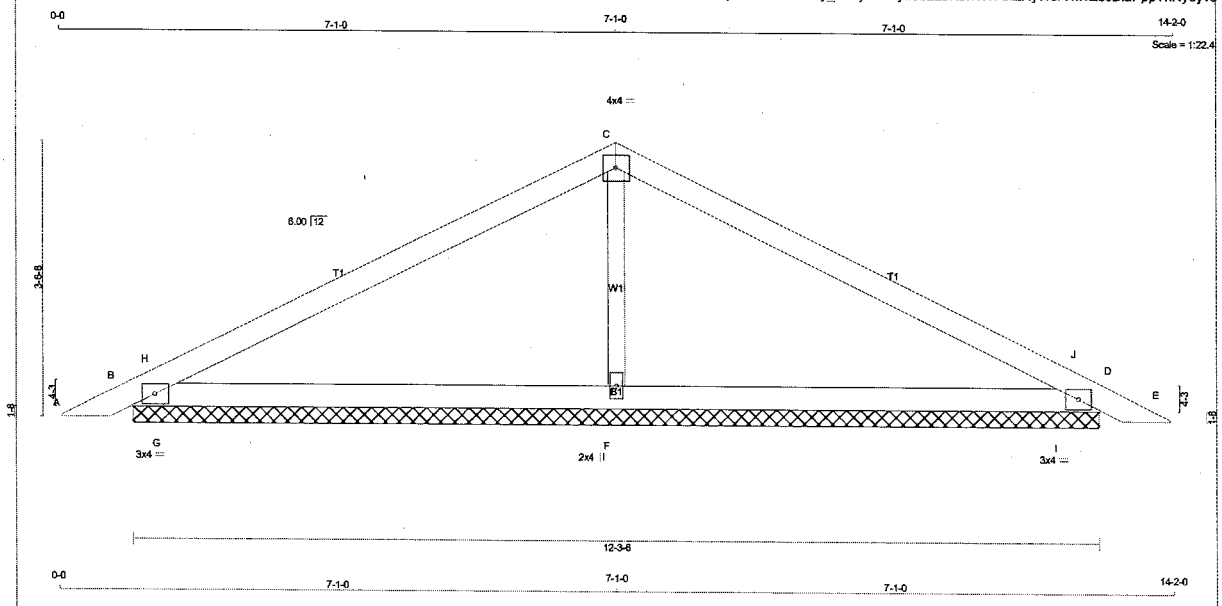

TOTAL WEIGHT = 5 X 34 = 171 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTW-p	MT20	4.0	4.0		
D	TMB1-I	MT20	3.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	497	0	497	0	0	12-3-6	1-8
D	497	0	497	0	0	12-3-6	1-8
F	564	0	564	0	0	12-3-6	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	348	249 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0
D	348	249 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0
F	401	249 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- H	-56 / 0	-95.2	-95.2	0.21 (1)	6.25
H- C	-242 / 0	-95.2	-95.2	0.44 (1)	6.25
C- J	-242 / 0	-95.2	-95.2	0.44 (1)	6.25
J- D	-56 / 0	-95.2	-95.2	0.21 (1)	6.25
D- E	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- G	0 / 205	-18.5	-18.5	0.40 (1)	10.00
G- F	0 / 205	-18.5	-18.5	0.40 (1)	10.00
F- I	0 / 205	-18.5	-18.5	0.40 (1)	10.00
I- D	0 / 205	-18.5	-18.5	0.40 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-266 / 0	0.06 (1)
G- H	-685 / 0	0.00 (1)
I- J	-685 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.44/1.00 (C-J:1) , BC=0.40/1.00 (F-I:1) , WB=0.08/1.00 (C-F:1) , SSI=0.51/1.00 (D-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.43 (D) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	PB82		1	GREEN PARK HOMES / TRUSS DESC. JT 53080	E22085344

Alpa Roof Truss, Maple

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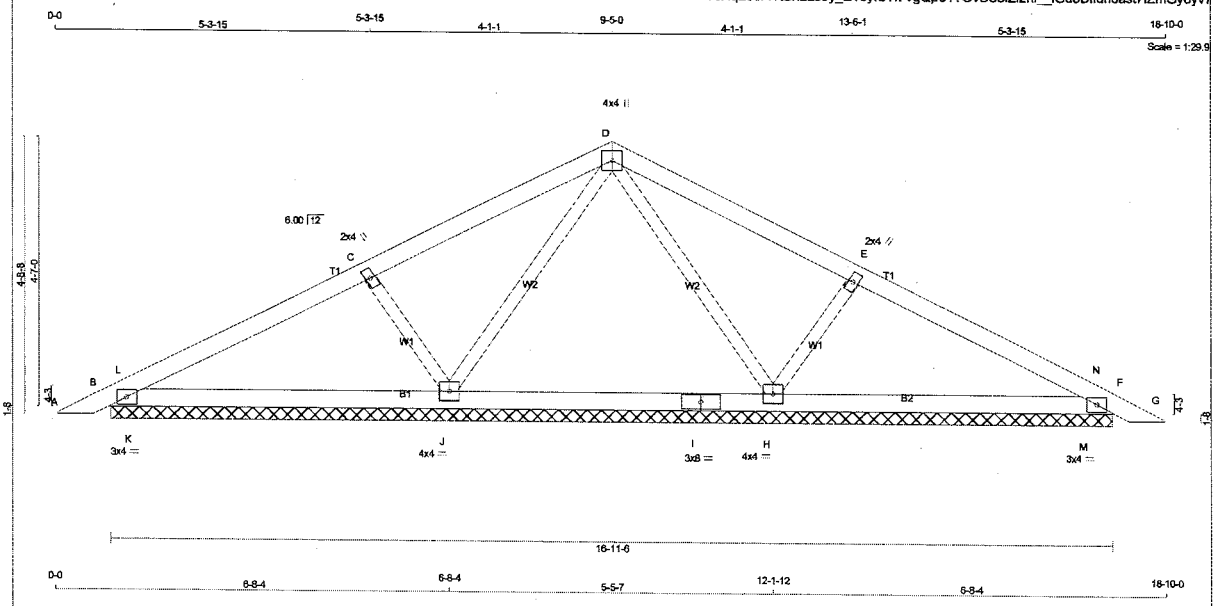

TOTAL WEIGHT = 11 X 55 = 604 lb

[M]

LUMBER:
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0		
H	BMWW1-t	MT20	4.0	4.0		
I	BS-t	MT20	3.0	8.0		
J	BMWW1-t	MT20	4.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	369	0	369	0	0	16-11-6 (9-11-8)	
H	675	0	675	0	0	16-11-6 (9-11-8)	
J	675	0	675	0	0	16-11-6 (9-11-8)	
F	369	0	369	0	0	16-11-6 (9-11-8)	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	259	181 / 0	0 / 0	0 / 0	0 / 0	78 / 0	0 / 0
H	477	317 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
J	477	317 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
F	259	181 / 0	0 / 0	0 / 0	0 / 0	78 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, H, J, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- L	-221 / 0	-95.2	-95.2	0.07 (4)	6.25	
L- C	-163 / 0	-95.2	-95.2	0.28 (1)	6.25	
C- D	0 / 58	-95.2	-95.2	0.29 (1)	10.00	
D- E	0 / 58	-95.2	-95.2	0.29 (1)	10.00	
E- N	-163 / 0	-95.2	-95.2	0.28 (1)	6.25	
N- F	-221 / 0	-95.2	-95.2	0.07 (4)	6.25	
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- K	0 / 169	-18.5	-18.5	0.09 (1)	10.00	
K- J	0 / 169	-18.5	-18.5	0.14 (4)	10.00	
J- I	0 / 46	-18.5	-18.5	0.13 (4)	10.00	
I- H	0 / 46	-18.5	-18.5	0.13 (4)	10.00	
H- M	0 / 169	-18.5	-18.5	0.14 (4)	10.00	
M- F	0 / 169	-18.5	-18.5	0.09 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	-219 / 0	0.10 (1)
H- E	-441 / 0	0.08 (1)
J- D	-219 / 0	0.10 (1)
C- J	-441 / 0	0.08 (1)
K- L	-84 / 65	0.00 (1)
M- N	-84 / 65	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.29/1.00 (C-D:1) , BC=0.14/1.00 (J-K:4) , WB=0.10/1.00 (D-J:1) , SSI=0.17/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (J) (INPUT = 0.90)
JSI METAL= 0.09 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
K. WIDYA
100225448
11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB83		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085264

Alpa Roof Truss, Maple

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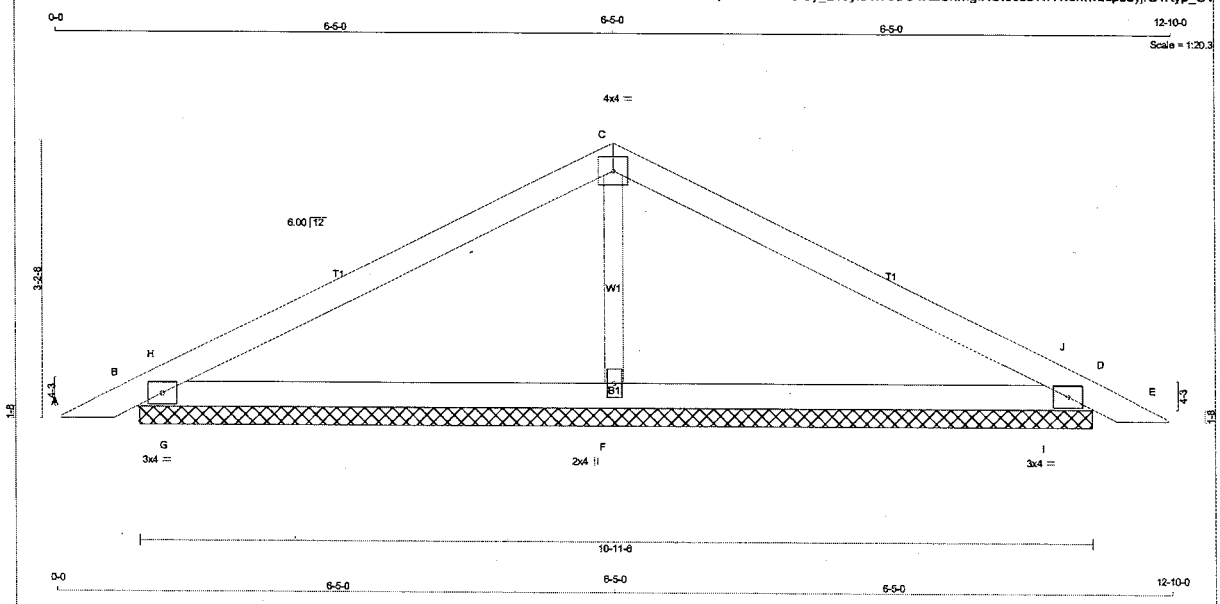

TOTAL WEIGHT = 6 X 31 = 185 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMB1-i	MT20	3.0	4.0	
C	TTW-p	MT20	4.0	4.0	
D	TMB1-i	MT20	3.0	4.0	
F	BMW1+w	MT20	2.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	444	0	444	0	0	10-11-6	1-8
D	444	0	444	0	0	10-11-6	1-8
F	517	0	517	0	0	10-11-6	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
B	311	223 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
D	311	223 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
F	368	230 / 0	0 / 0	0 / 0	0 / 0	138 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- H	-50 / 0	-95.2	-95.2	0.16 (1)	6.25
H- C	-199 / 0	-95.2	-95.2	0.34 (1)	6.25
C- J	-199 / 0	-95.2	-95.2	0.34 (1)	6.25
J- D	-50 / 0	-95.2	-95.2	0.16 (1)	6.25
D- E	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- G	0 / 169	-18.5	-18.5	0.32 (1)	10.00
G- F	0 / 169	-18.5	-18.5	0.32 (1)	10.00
F- I	0 / 169	-18.5	-18.5	0.32 (1)	10.00
I- D	0 / 169	-18.5	-18.5	0.32 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-268 / 0	0.05 (1)
G- H	-554 / 0	0.00 (1)
I- J	-554 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.34/1.00 (C-J:1) , BC=0.32/1.00 (F-I:1) , WB=0.05/1.00 (C-F:1) , SSI=0.41/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (D) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB84		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085265

Alpa Roof Truss, Maple

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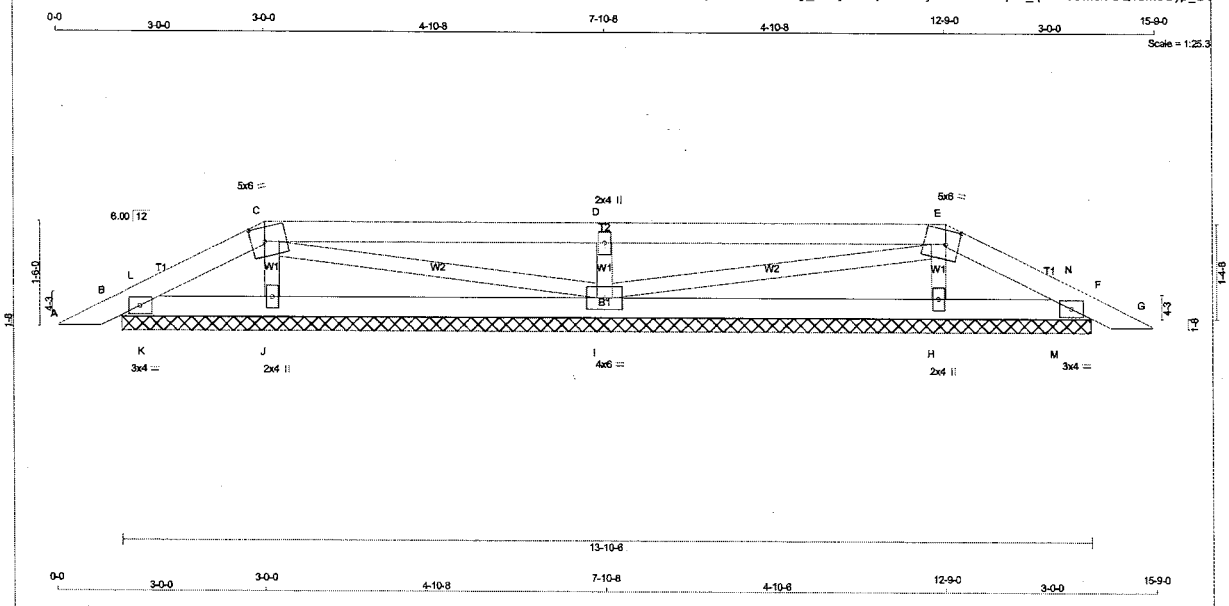


TOTAL WEIGHT = 44 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0	2.50	2.25
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	6.0	2.50	2.25
F	TMB1-i	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMWWW1-t	MT20	4.0	6.0		
J	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	202	0	202	0	0	13-10-6	1-8
F	202	0	202	0	0	13-10-6	1-8
J	329	0	329	0	0	13-10-6	1-8
I	674	0	674	0	0	13-10-6	1-8
H	329	0	329	0	0	13-10-6	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	140	109 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
F	140	109 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
J	234	143 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0
I	474	326 / 0	0 / 0	0 / 0	0 / 0	148 / 0	0 / 0
H	234	143 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, J, I, H

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- L	-38 / 0	-95.2	-95.2	0.00 (4)	6.25	
L- C	-41 / 0	-95.2	-95.2	0.04 (1)	6.25	
C- D	-2 / 0	-95.2	-95.2	0.38 (1)	10.00	
D- E	-2 / 0	-95.2	-95.2	0.38 (1)	10.00	
E- N	-41 / 0	-95.2	-95.2	0.04 (1)	6.25	
N- F	-38 / 0	-95.2	-95.2	0.00 (4)	6.25	
F- G	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- K	0 / 36	-18.5	-18.5	0.05 (1)	10.00	
K- J	0 / 36	-18.5	-18.5	0.07 (4)	10.00	
J- I	0 / 13	-18.5	-18.5	0.09 (4)	10.00	
I- H	0 / 13	-18.5	-18.5	0.09 (4)	10.00	
H- M	0 / 36	-18.5	-18.5	0.07 (4)	10.00	
M- F	0 / 36	-18.5	-18.5	0.05 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- C	-232 / 0	0.03 (1)
C- I	-12 / 0	0.00 (1)
I- D	-580 / 0	0.08 (1)
I- E	-12 / 0	0.00 (1)
H- E	-232 / 0	0.03 (1)
K- L	-103 / 0	0.00 (1)
M- N	-103 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.36/1.00 (C-D:1) , BC=0.09/1.00 (I-J:4) , WB=0.08/1.00 (D-I:1) , SSI=0.23/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

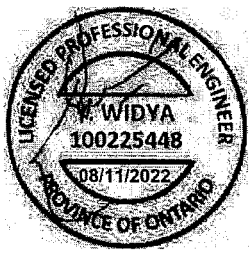
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (D) (INPUT = 0.90)
JSI METAL= 0.12 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	PB85		1	TRUSS DESC.	JT 53080	E22085266

Alpa Roof Truss, Maple

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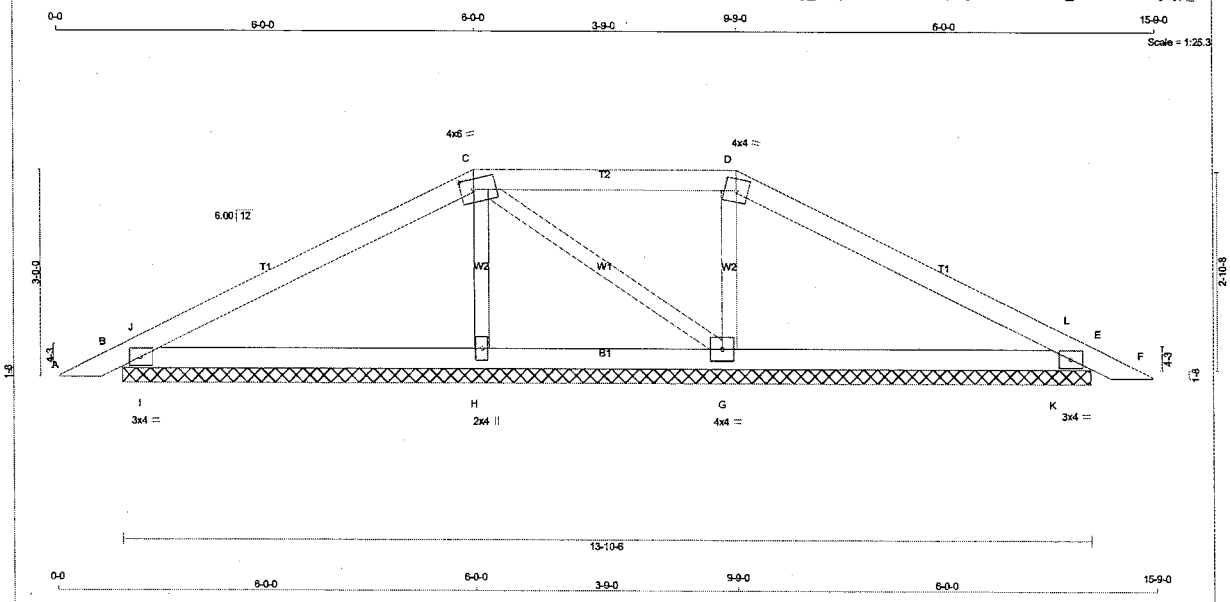

TOTAL WEIGHT = 42 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	4.0	6.0	1.75	2.25
D	TTW-m	MT20	4.0	4.0		
E	TMB1-I	MT20	3.0	4.0		
G	BMWW1-t	MT20	4.0	4.0		
H	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	431	0	431	0	0	13-10-6	1-8
E	411	0	411	0	0	13-10-6	1-8
H	410	0	410	0	0	13-10-6	1-8
G	466	0	466	0	0	13-10-6	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	301	215 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0
E	288	204 / 0	0 / 0	0 / 0	0 / 0	84 / 0	0 / 0
H	291	185 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
G	343	228 / 0	0 / 0	0 / 0	0 / 0	116 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- J	-85 / 0	-95.2	-95.2	0.10 (1)	6.25
J- C	-176 / 0	-95.2	-95.2	0.31 (1)	6.25
C- D	-100 / 0	-95.2	-95.2	0.23 (1)	6.25
D- L	-133 / 0	-95.2	-95.2	0.31 (1)	6.25
L- E	-48 / 0	-95.2	-95.2	0.10 (1)	6.25
E- F	0 / 17	-95.2	-95.2	0.05 (1)	10.00
B- I	0 / 151	-18.5	-18.5	0.25 (1)	10.00
I- H	0 / 151	-18.5	-18.5	0.25 (1)	10.00
H- G	0 / 140	-18.5	-18.5	0.13 (1)	10.00
G- K	0 / 113	-18.5	-18.5	0.25 (1)	10.00
K- E	0 / 113	-18.5	-18.5	0.25 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-280 / 0	0.05 (1)
C- G	-49 / 0	0.02 (1)
G- D	-328 / 0	0.06 (1)
I- J	-421 / 0	0.00 (1)
K- L	-423 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.31/1.00 (C-J:1) , BC=0.25/1.00 (B-I:1) , WB=0.06/1.00 (D-G:1) , SSI=0.33/1.00 (E-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB86		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085267

Alpa Roof Truss, Maple

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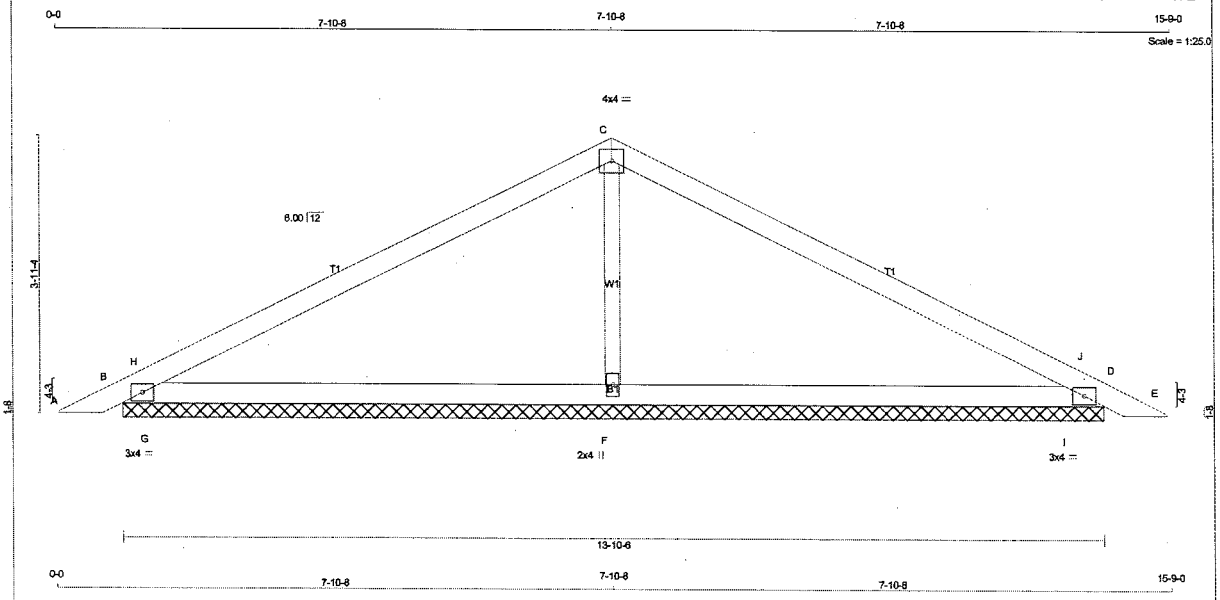


TOTAL WEIGHT = 2 X 38 = 77 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMB1-I	MT20	3.0	4.0	
C	TTW-p	MT20	4.0	4.0	
D	TMB1-I	MT20	3.0	4.0	
F	BMW1+w	MT20	2.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	562	0	562	0	0	13-10-6	1-8
D	562	0	562	0	0	13-10-6	1-8
F	614	0	614	0	0	13-10-6	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
B	393	281 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
D	393	281 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
F	437	270 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- H	-67 / 0	-95.2	-95.2	0.29 (1)	6.25	
H- C	-298 / 0	-95.2	-95.2	0.57 (1)	6.25	
C- J	-298 / 0	-95.2	-95.2	0.57 (1)	6.25	
J- D	-67 / 0	-95.2	-95.2	0.29 (1)	6.25	
D- E	0 / 17	-95.2	-95.2	0.05 (1)	10.00	
B- G	0 / 254	-18.5	-18.5	0.50 (1)	10.00	
G- F	0 / 254	-18.5	-18.5	0.50 (1)	10.00	
F- I	0 / 254	-18.5	-18.5	0.50 (1)	10.00	
I- D	0 / 254	-18.5	-18.5	0.50 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (I.C)
F- C	-303 / 0	0.07 (1)
G- H	-859 / 0	0.00 (1)
I- J	-859 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.57/1.00 (C-J:1) , BC=0.50/1.00 (F-I:1) , WB=0.07/1.00 (C-F:1) , SSI=0.65/1.00 (D-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

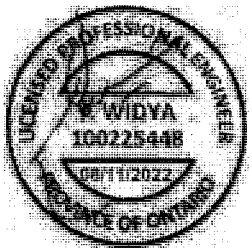
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	768	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (D) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB87		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085268

Alpa Roof Truss, Maple

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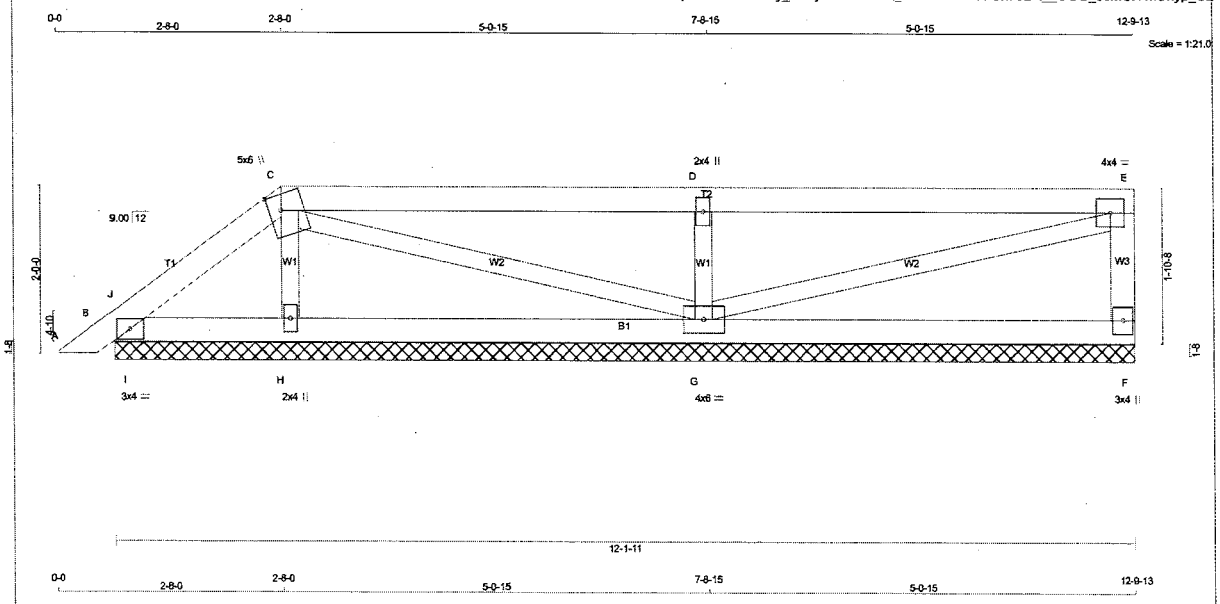

TOTAL WEIGHT = 2 X 41 = 81 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW+m	MT20	5.0	6.0	2.25	1.75
D	TMW+w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW1-t	MT20	4.0	6.0		
H	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	221	0	221	0	0	12-1-11	1-8
B	188	0	188	0	0	12-1-11	1-8
H	306	0	306	0	0	12-1-11	1-8
G	720	0	720	0	0	12-1-11	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	156	103 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
B	130	101 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0
H	218	132 / 0	0 / 0	0 / 0	0 / 0	87 / 0	0 / 0
G	507	343 / 0	0 / 0	0 / 0	0 / 0	164 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, B, H, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-95.2	-95.2	0.02 (1)	10.00	
B- J	-32 / 0	-95.2	-95.2	0.01 (1)	6.25	
J- C	-56 / 0	-95.2	-95.2	0.04 (1)	6.25	
C- D	0 / 0	-95.2	-95.2	0.42 (1)	10.00	
D- E	0 / 0	-95.2	-95.2	0.42 (1)	10.00	
F- E	-164 / 0	0.0	0.0	0.02 (1)	7.81	
B- I	0 / 42	-18.5	-18.5	0.05 (1)	10.00	
I- H	0 / 42	-18.5	-18.5	0.06 (4)	10.00	
H- G	0 / 27	-18.5	-18.5	0.12 (4)	10.00	
G- F	0 / 0	-18.5	-18.5	0.12 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-215 / 0	0.03 (1)
C- G	-29 / 0	0.01 (1)
G- D	-604 / 0	0.09 (1)
G- E	0 / 0	0.00 (1)
I- J	-129 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.42/1.00 (D-E:1) , BC=0.12/1.00 (G-H:4) , WB=0.09/1.00 (D-G:1) , SSI=0.24/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (D) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
WIDYA
100225448
AUG 11 2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	PB88		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085269

Alpa Roof Truss, Maple

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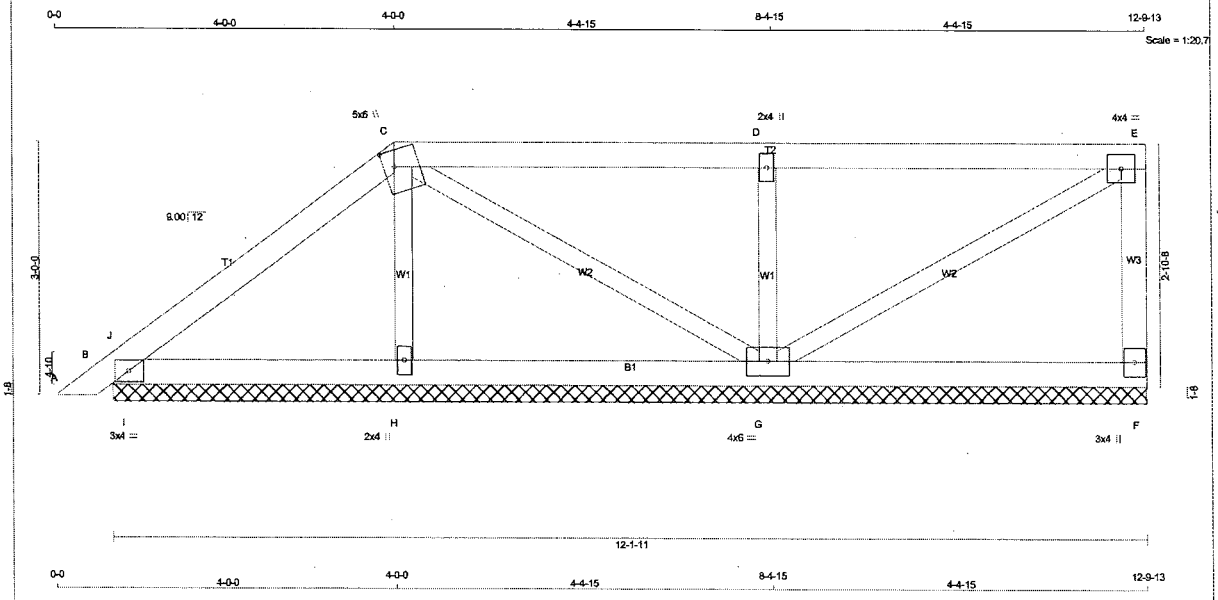

TOTAL WEIGHT = 2 X 44 = 87 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW1-t	MT20	4.0	6.0		
H	BMW1+w	MT20	2.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	193	0	193	0	0	12-1-11	1-8
B	287	0	287	0	0	12-1-11	1-8
H	306	0	306	0	0	12-1-11	1-8
G	648	0	648	0	0	12-1-11	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	137	90 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
B	201	146 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
H	219	132 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0
G	456	312 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, B, H, G

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-95.2	-95.2	0.02 (1)	10.00
B- J	-23 / 0	-95.2	-95.2	0.05 (1)	6.25
J- C	-96 / 0	-95.2	-95.2	0.13 (1)	6.25
C- D	0 / 2	-95.2	-95.2	0.31 (1)	10.00
D- E	0 / 1	-95.2	-95.2	0.31 (1)	10.00
F- E	-159 / 0	0.0	0.0	0.02 (1)	7.81
B- I	0 / 71	-18.5	-18.5	0.12 (1)	10.00
I- H	0 / 71	-18.5	-18.5	0.12 (1)	10.00
H- G	0 / 63	-18.5	-18.5	0.09 (4)	10.00
G- F	0 / 0	-18.5	-18.5	0.09 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-197 / 0	0.03 (1)
C- G	-74 / 0	0.03 (1)
G- D	-524 / 0	0.09 (1)
G- E	-2 / 0	0.00 (1)
I- J	-290 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.31/1.00 (C-D:1) , BC=0.12/1.00 (B-I:1) , WB=0.09/1.00 (D-G:1) , SSI=0.22/1.00 (B-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (D) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J1		1	GREEN PARK HOMES JT 53080 (TRUSS DESC.)	E22085242

Alpa Roof Truss, Maple

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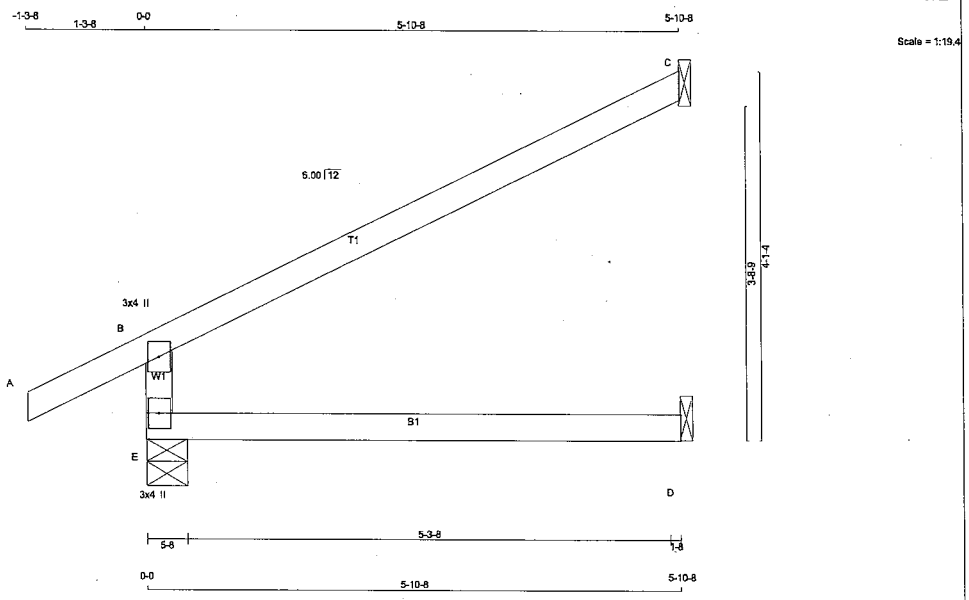


TOTAL WEIGHT = 19 X 17 = 319 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	542	0	542	0	0	5-8	1-8
C	210	0	210	0	0	1-8	1-8
D	45	0	50	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	380	269 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
C	144	118 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
E- B	-479 / 0	0.0	0.0	0.13 (4)	7.81
A- B	0 / 29	-95.2	-95.2	0.12 (1)	10.00
B- C	-31 / 0	-95.2	-95.2	0.56 (1)	6.25
E- D	0 / 0	-18.5	-18.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

DESIGN CRITERIA [M]

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.56/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

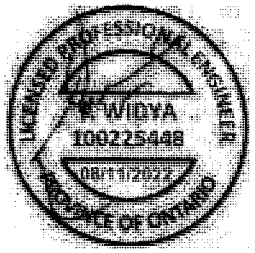
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (E) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	J13W		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085243

Alpa Roof Truss, Maple

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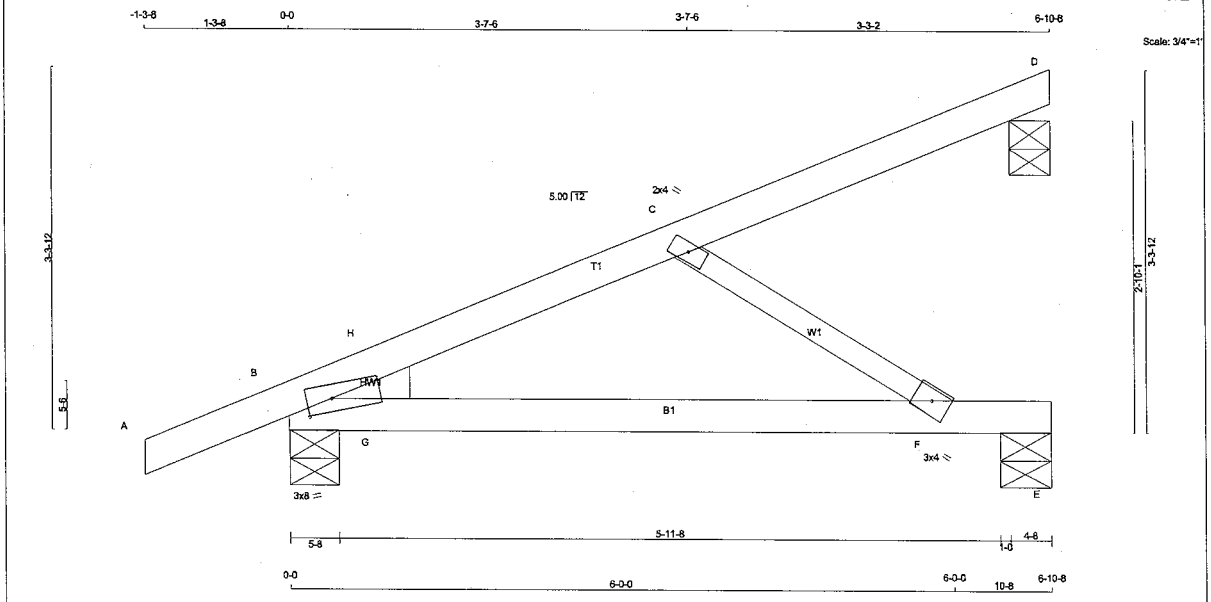

TOTAL WEIGHT = 6 X 21 = 127 lb

[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	8.0	1.50	2.75
C	TMW+w	MT20	2.0	4.0		
F	BMW+w	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
D	134	0	135	0	-67	4-8	4-8	
B	519	0	519	163	-183	5-8	1-8	2x4 L
E	257	0	257	0	-157	5-8	1-8	

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): D

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 183 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 157 LBS FACTORED UPLIFT

PROVIDE FOR 163 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	92	75 / 0	0 / 0	0 / 0	3 / -59	17 / 0	0 / 0
B	364	256 / 0	0 / 0	0 / 0	0 / -200	108 / 0	0 / 0
E	184	109 / 0	0 / 0	0 / 0	0 / -160	75 / 0	0 / 0
HORIZONTAL REACTIONS							
B	--	0 / 0	0 / 0	0 / 0	116 / -0	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D, B, E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (12)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 19	-95.2	-95.2	0.12 (1)	10.00
B- H	-502 / 131	-95.2	-95.2	0.17 (1)	6.25
H- C	-345 / 77	-95.2	-95.2	0.23 (1)	6.25
C- D	-33 / 0	-95.2	-95.2	0.12 (1)	6.25
B- G	-189 / 349	-18.5	-18.5	0.11 (1)	6.25
G- F	-189 / 349	-18.5	-18.5	0.42 (1)	6.25
F- E	0 / 0	-18.5	-18.5	0.36 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- F	-430 / 233	0.09 (1)
G- H	-121 / 167	0.00 (1)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF {7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 3}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1,000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 711 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 438 (0.19")

CSI: TC=0.23/1.00 (C-H:1) , BC=0.42/1.00 (F-G:1) , WB=0.09/1.00 (C-F:1) , SSI=0.20/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (C) (INPUT = 0.90)
JSI METAL= 0.20 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
AUG 11 2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	J14W		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085244

Alpa Roof Truss, Maple

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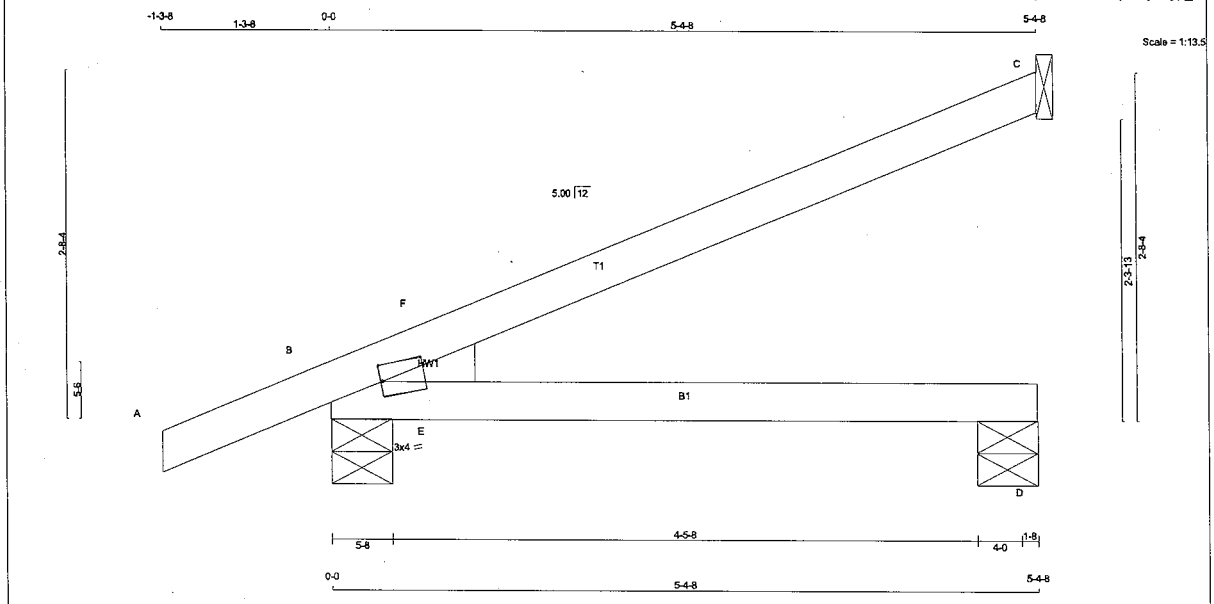


TOTAL WEIGHT = 8 X 15 = 92 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	4.0	1.50	0.25

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REORD BRG IN-SX	HEEL WEDGE
C	220	0	220	0	-115	1-8	1-8	
B	434	0	434	132	-148	5-8	1-8	2x4 L
D	86	0	86	0	-60	5-8	1-8	

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

PROVIDE FOR 132 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	152	119 / 0	0 / 0	0 / 0	0 / -103	33 / 0	0 / 0
B	304	216 / 0	0 / 0	0 / 0	0 / -162	88 / 0	0 / 0
D	64	25 / 0	0 / 0	0 / 0	0 / -68	39 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	94 / 0	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (12)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 19	-95.2	-95.2	0.12 (1)	10.00
B- F	-109 / 4	-95.2	-95.2	0.08 (12)	6.25
F- C	-54 / 3	-95.2	-95.2	0.34 (1)	6.25
B- E	0 / 0	-18.5	-18.5	0.27 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.27 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- F	-264 / 112	0.00 (1)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 7.5} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 3}. BUILDING MAY BE LOCATED ON {ROUGH TERRAIN} AT MINIMUM {1.000} MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 587 (0.11")

CSI: TC=0.34/1.00 (C-F:1) , BC=0.27/1.00 (B-E:1) , WB=0.00/1.00 (E-F:1) , SSI=0.20/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

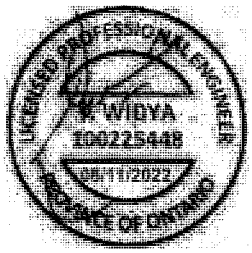
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J15		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085245

Alpa Roof Truss, Maple

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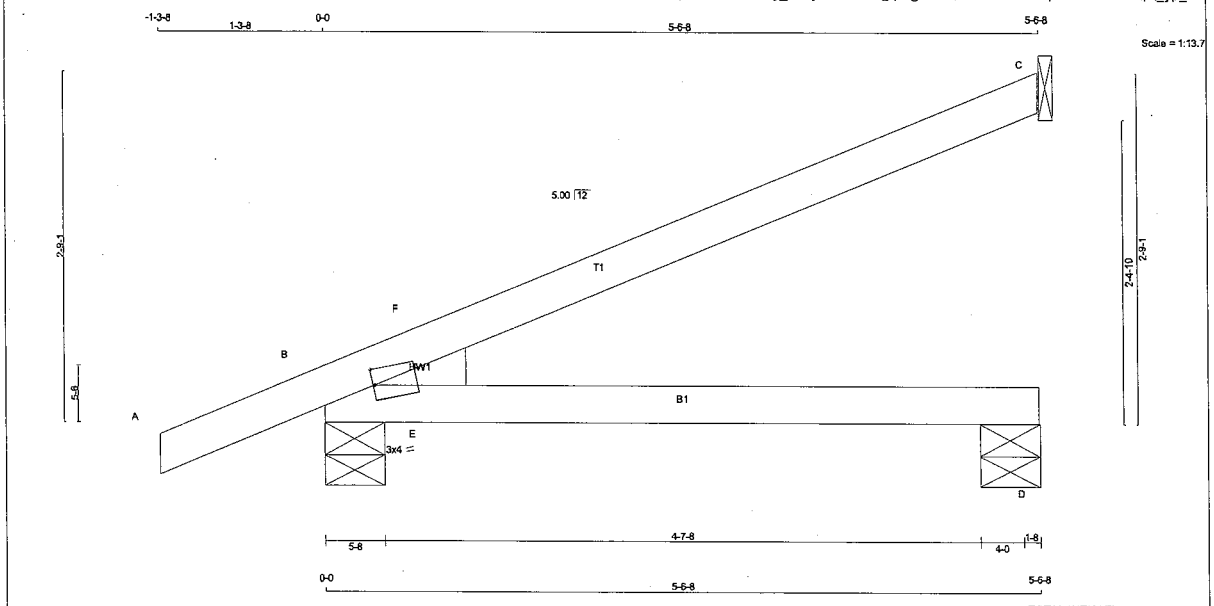

TOTAL WEIGHT = 7 X 16 = 110 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	4.0	1.50	0.25

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
C	227	0	227	0	0	1-8	1-8	
B	443	0	443	0	0	5-8	1-8	2x4 L
D	88	0	88	0	0	5-8	1-8	

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	157	123 / 0	0 / 0	0 / 0	0 / 0	34 / 0	0 / 0
B	311	220 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0
D	86	25 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 19	-95.2	-95.2	0.12 (1)	10.00
B- F	-23 / 0	-95.2	-95.2	0.08 (4)	6.25
F- C	0 / 3	-95.2	-95.2	0.37 (1)	10.00
B- E	0 / 0	-18.5	-18.5	0.29 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.29 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- F	-252 / 7	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 538 (0.12")

CSI: TC=0.37/1.00 (C-F:1) , BC=0.29/1.00 (B-E:1) , WB=0.00/1.00 (E-F:1) , SSI=0.21/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J18W		1	GREEN PARK HOMES JT 53080 (TRUSS DESC.)	E22085246

Alpa Roof Truss, Maple

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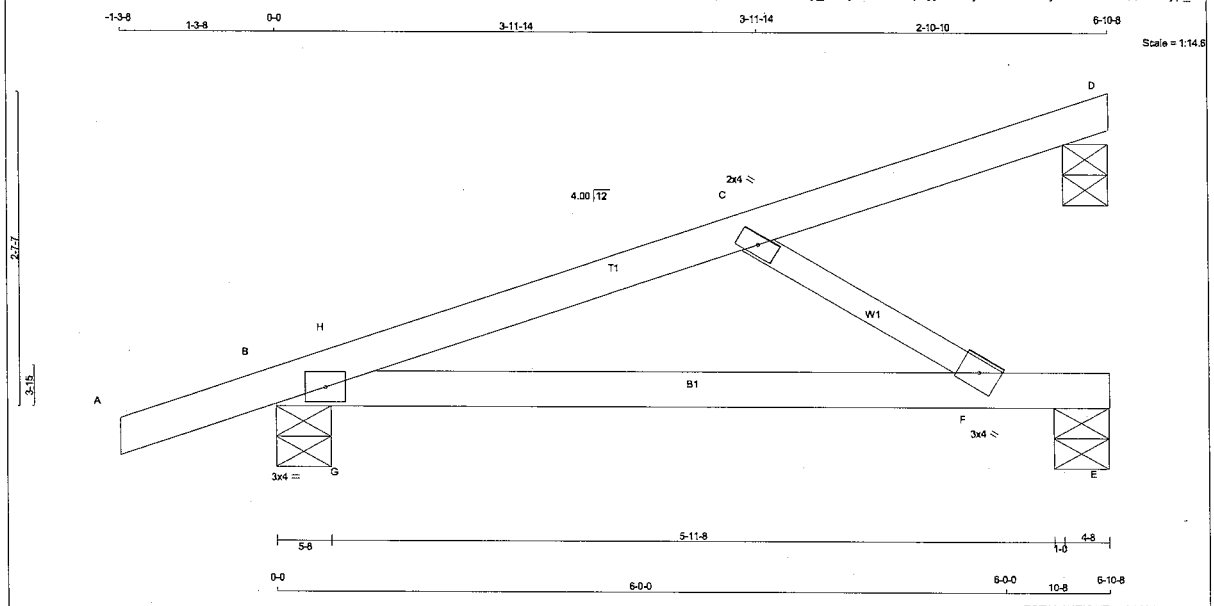

TOTAL WEIGHT = 24 X 20 = 473 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-i	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
F	BMW+w	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	121	0	121	0	-58	4-8	4-8
B	518	0	518	129	-196	5-8	1-8
E	270	0	270	0	-152	5-8	1-8

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): D

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 196 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 152 LBS FACTORED UPLIFT

PROVIDE FOR 129 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	84	66 / 0	0 / 0	0 / 0	0 / -53	18 / 0	0 / 0
B	363	255 / 0	0 / 0	0 / 0	0 / -210	108 / 0	0 / 0
E	192	118 / 0	0 / 0	0 / 0	0 / -157	75 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D, B, E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (12)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 19	-95.2	-95.2	0.12 (1)	10.00
B- H	-469 / 126	-95.2	-95.2	0.16 (1)	6.25
H- C	-357 / 91	-95.2	-95.2	0.28 (1)	6.25
C- D	-23 / 0	-95.2	-95.2	0.09 (1)	6.25
B- G	-175 / 357	-18.5	-18.5	0.09 (12)	6.25
G- F	-175 / 357	-18.5	-18.5	0.44 (1)	6.25
F- E	0 / 0	-18.5	-18.5	0.38 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- F	-441 / 216	0.08 (1)
G- H	-113 / 141	0.00 (1)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 3). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS DF 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 652 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 370 (0.22")

CSI: TC=0.28/1.00 (C-H:1) , BC=0.44/1.00 (F-G:1) , WB=0.08/1.00 (C-F:1) , SSI=0.21/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (C) (INPUT = 0.90)
JSI METAL= 0.21 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J19		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085247

Alpa Roof Truss, Maple

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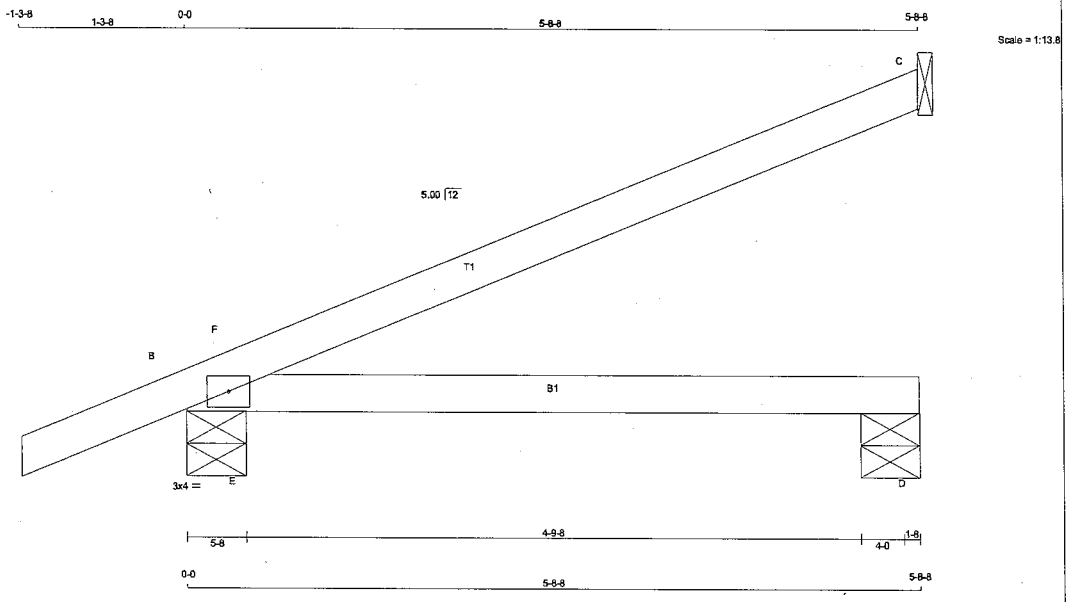

TOTAL WEIGHT = 5 X 15 = 76 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
C	238	0	238	0	0	1-8	1-8
B	453	0	453	0	0	5-8	1-8
D	87	0	87	0	0	5-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	164	129 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
B	317	225 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
D	65	23 / 0	0 / 0	0 / 0	0 / 0	42 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, B, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 23	-95.2	-95.2	0.12 (1)	10.00
B- F	-24 / 51	-95.2	-95.2	0.09 (1)	6.25
F- C	-4 / 2	-95.2	-95.2	0.40 (1)	10.00
B- E	0 / 0	-18.5	-18.5	0.27 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.28 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- F	-399 / 12	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 523 (0.13")

CSI: TC=0.40/1.00 (C-F:1) , BC=0.28/1.00 (D-E:1) , WB=0.00/1.00 (E-F:1) , SSI=0.33/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
K WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428375	J75		1	TRUSS DESC.	JT 53080	E22085248

Alpa Roof Truss, Maple

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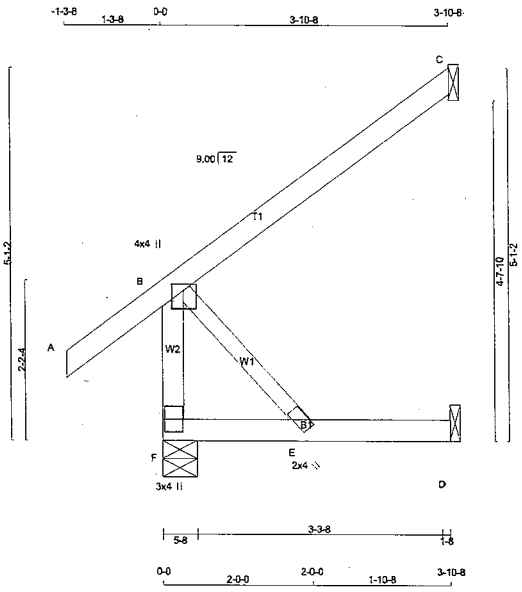

TOTAL WEIGHT = 5 X 16 = 80 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	352	0	352	0	0	5-8	1-8
C	184	0	184	0	0	1-8	1-8
D	36	0	40	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	246	177 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
C	127	104 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	29	0 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (7)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-316 / 0	0.0	0.0	0.04 (1)		7.81
A- B	0 / 39	-95.2	-95.2	0.15 (5)		10.00
B- C	0 / 0	-95.2	-95.2	0.24 (1)		10.00
F- E	0 / 0	-18.5	-18.5	0.08 (4)		10.00
E- D	0 / 0	-18.5	-18.5	0.08 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA O86-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
V. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J76		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085249

Alpa Roof Truss, Maple

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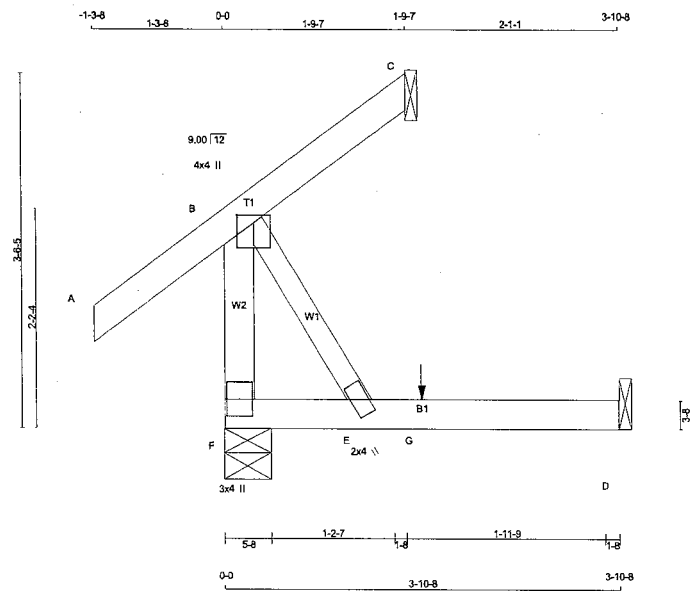


TOTAL WEIGHT = 13 lb

LUMBER
N. L. G. A. RULES

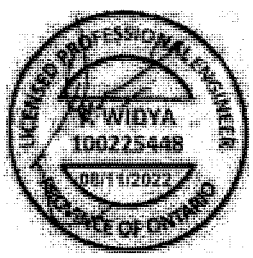
CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW+p	MT20	4.0	4.0	1.00	2.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	303	0	303	0	0	5-8	1-8
C	34	0	77	0	-41	1-8	1-8
D	36	0	40	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	212	150 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
C	24	48 / -28	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	29	0 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (11)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FROM	TO	VERT. LOAD (PLF)	LC1 CSI	MAX (LC)	MAX. UNBRAC LENGTH
F-B	-267 / 0	0.0	0.0	0.03	(1)		7.81
A-B	0 / 39	-95.2	-95.2	0.15	(5)		10.00
B-C	-30 / 0	-95.2	-95.2	0.14	(5)		6.25
F-E	0 / 0	-18.5	-18.5	0.07	(4)		10.00
E-G	0 / 0	-18.5	-18.5	0.08	(4)		10.00
G-D	0 / 0	-18.5	-18.5	0.08	(4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B-E	0 / 0	0.00 (1)

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	1	1	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014 .

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.15/1.00 (A-B:5) , BC=0.08/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J77		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085250

Alpa Roof Truss, Maple

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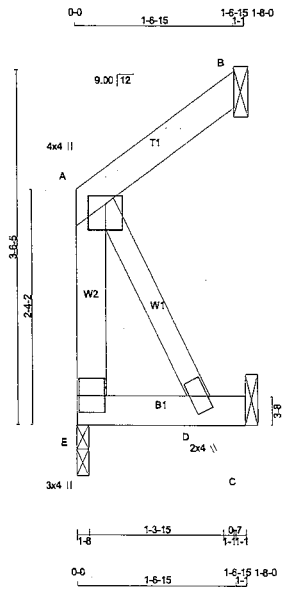

TOTAL WEIGHT = 8 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	4.0	1.00	2.00
D	BMW+w	MT20	2.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	91	0	91	0	0	1-8	1-8
B	75	0	75	0	0	1-8	1-8
C	15	0	17	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) B , C

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	64	42 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
B	52	42 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
C	12	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX. UNBRAC LENGTH
E- A	-75 / 0	0.0	0.0	0.01 (1)	7.81
A- B	0 / 0	-95.2	-95.2	0.04 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00
D- C	0 / 0	-18.5	-18.5	0.01 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- D	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA O86-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.04/1.00 (A-B:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (A-D:1) , SSI=0.05/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.06 (A) (INPUT = 0.90)
JSI METAL= 0.01 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
W. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.		DRWG NO.
428375	J78		1	TRUSS DESC.	GREEN PARK HOMES JT 53080	E22085251

Alpa Roof Truss, Maple

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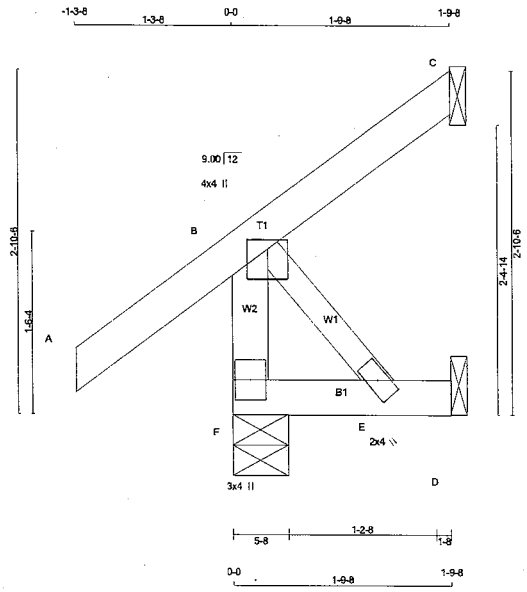


TOTAL WEIGHT = 3 X 9 = 27 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	4.0	4.0	1.00	2.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	284	0	284	0	0	5-8	1-8
C	35	0	35	0	-41	1-8	1-8
D	17	0	19	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	197	150 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	24	20 / -28	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-257 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B- C	-30 / 0	-95.2	-95.2	0.12 (1)	6.25
F- E	0 / 0	-18.5	-18.5	0.02 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.08/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

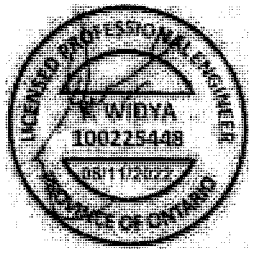
PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428375	J79		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085252

Alpa Roof Truss, Maple

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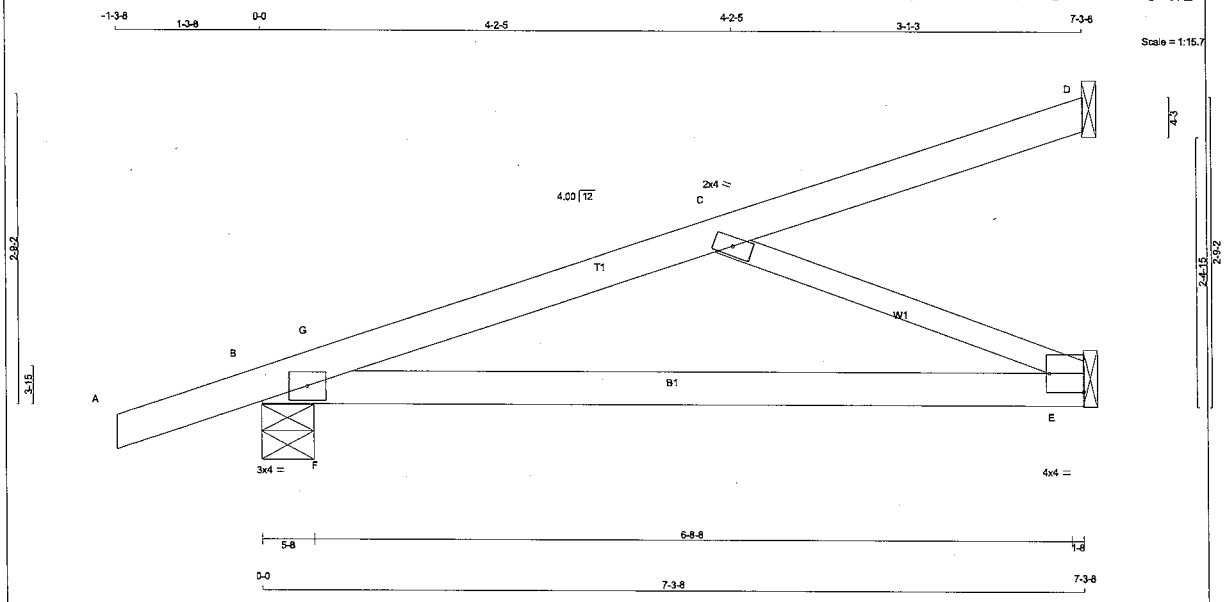

TOTAL WEIGHT = 12 X 22 = 258 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-t	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
E	BMW1-t	MT20	4.0	4.0	2.00	Edge

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	100	0	100	0	0	1-8	1-8
B	535	0	535	0	0	5-8	1-8
E	318	0	318	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) D , E

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	68	61 / 0	0 / 0	0 / 0	0 / 0	7 / 0	0 / 0
B	375	264 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
E	227	137 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 19	-95.2	-95.2	0.12 (1)	10.00
B- G	-638 / 0	-95.2	-95.2	0.15 (4)	6.25
G- C	-552 / 0	-95.2	-95.2	0.18 (1)	6.25
C- D	-16 / 0	-95.2	-95.2	0.16 (1)	6.25
B- F	0 / 545	-18.5	-18.5	0.13 (4)	10.00
F- E	0 / 545	-18.5	-18.5	0.23 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- E	-602 / 0	0.15 (1)
F- G	0 / 159	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	26.7	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF QBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 843 (0.10")

CSI: TC=0.18/1.00 (C-G:1) , BC=0.23/1.00 (E-F:1) , WB=0.15/1.00 (C-E:1) , SSI=0.18/1.00 (C-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (C) (INPUT = 0.90)
JSI METAL= 0.30 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
428334	J80		1	GREEN PARK HOMES TRUSS DESC. JT 53080	E22085342

Alpa Roof Truss, Maple

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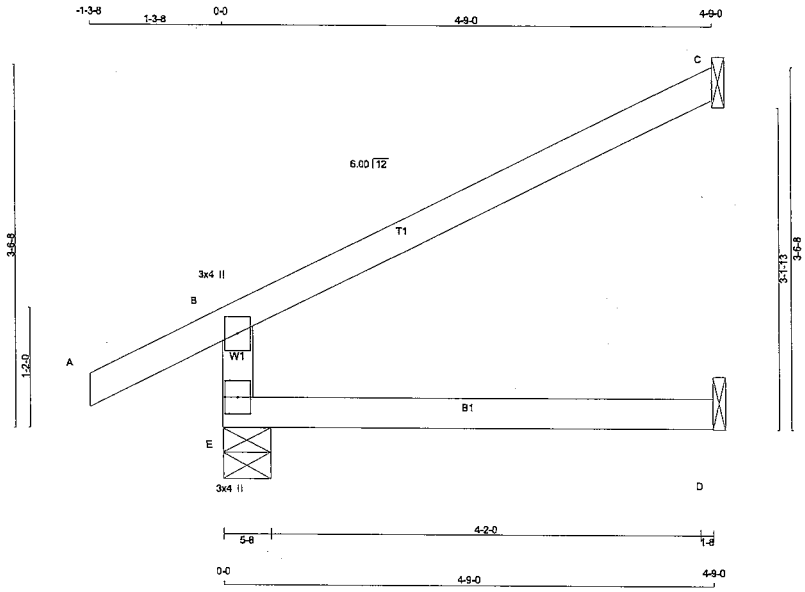

TOTAL WEIGHT = 14 lb

[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	463	0	463	0	0	5-8	1-8
C	170	0	170	0	0	1-8	1-8
D	37	0	41	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	324	231 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
C	117	95 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0
D	29	0 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
E- B	-412 / 0	0.0	0.0	0.08 (4)	7.81
A- B	0 / 29	-95.2	-95.2	0.12 (1)	10.00
B- C	-25 / 0	-95.2	-95.2	0.37 (1)	6.25
E- D	0 / 0	-18.5	-18.5	0.09 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.37/1.00 (B-C:1) , BC=0.09/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

LICENSED PROFESSIONAL ENGINEER
Y. WIDYA
100225448
08/11/2022
PROVINCE OF ONTARIO

EWP DESIGN INC.

(905) 832-2250 FAX (905) 832-0286

RESPONSIBILITIES AND SPECIFICATIONS

RESPONSIBILITIES

1. EWP DESIGN INC. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on each drawing meet or exceed the actual dead load imposed by the structure, the live load imposed by the intended use and the snow load imposed by local building code or authorities with jurisdictions.
3. All dimensions are to be verified by the owner, contractor, architect or other authorities with jurisdictions before truss fabrication.
4. EWP DESIGN INC. bears no responsibility for the erection of trusses. Persons erecting trusses are cautioned to seek professional advice regarding the temporary and permanent bracing for the system. Bracing shown on EWP DESIGN INC. drawing is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacturer's responsibility to ensure that trusses are manufactured in conformance with specifications of EWP DESIGN INC. as outlined below.

SPECIFICATIONS

1. Trusses designed by EWP DESIGN INC. conform to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type, as indicated on the EWP DESIGN INC. drawings, and conform to the design procedures established by the Truss Plate Institute of Canada. Unit stresses used for truss designs are as per the edition of CSA-O86 shown on EWP DESIGN INC. drawings.
2. Lumber is to be the size, species and grade as specified on EWP DESIGN INC. drawings.
3. Moisture content of lumber shall not exceed 19% in service unless specified otherwise.
4. Metal connector plates shall be applied to both faces of truss at each joint and shall be positioned as specified.
5. Top chords of trusses are assumed to be continuously braced laterally by roof sheathing or by purlins at intervals not exceeding 12.5 times the thickness of top chord member.
6. Bottom chords shall be laterally braced at intervals not exceeding 3M (10') o.c., where rigid ceiling is not applied directly to the underside of chords.

THESE DRAWINGS CONSTITUTE THE PROPERTY OF EWP DESIGN INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY THE ALPA LUMBER GROUP, AND WILL BE RETRACTED BY EWP DESIGN INC. IF UTILIZED FOR ANY OTHER PURPOSE.

February 1, 2019

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

			SPF	D. FIR	SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	**Common wire**	**Common spiral**	**Common wire**	**Common spiral**	**Gun Nail**
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
LUMBER	**MAXIMUM NUMBER OF TOE-NAILS**				
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

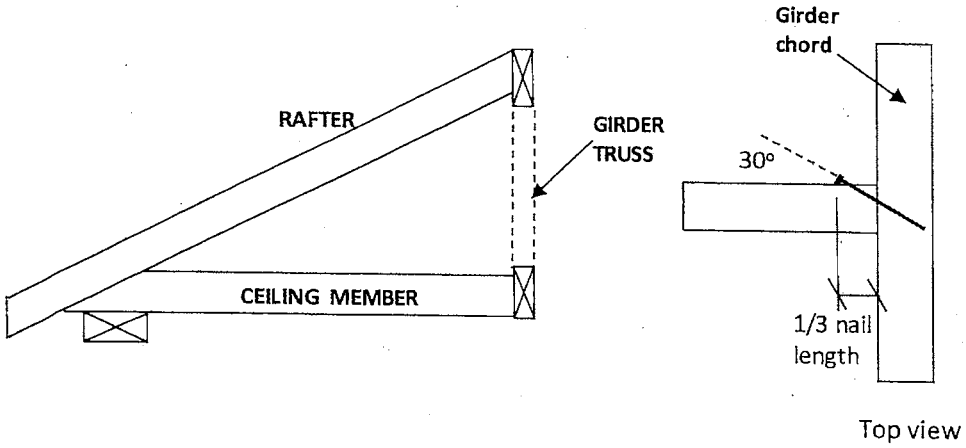

Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

December 21, 2020

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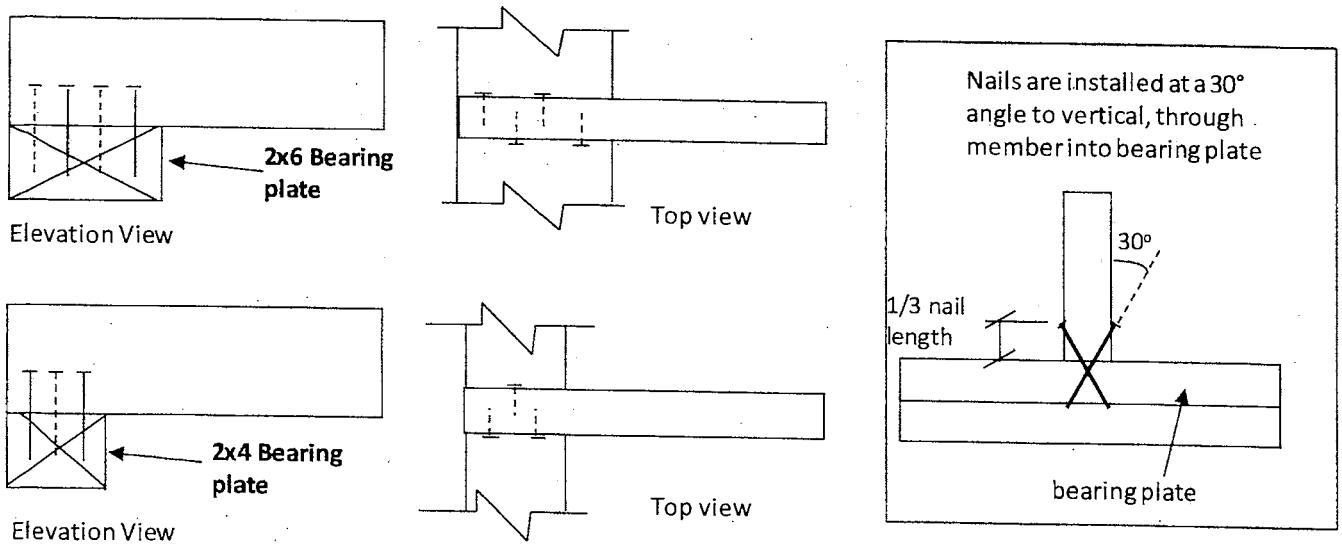
TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).

2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails.** Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).

3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.

4. Nail values are based on specific gravity of G = 0.42 (SPF) and G = 0.49 (D. Fir).

5. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.

6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.

7. Lumber must be dry (< 19% moisture content) at the time of nail installation.

8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

December 21, 2020

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LUL/LUS/LJS/HUS/HHUS/HGUS

SIMPSON Strong-Tie®

Standard and Double-Shear Joist Hangers

This product is preferable to similar connectors because of a) easier installation, b) higher capacities, c) lower installed cost, or a combination of these features.

Most hangers in this series have double-shear nailing — an innovation that distributes the load through two points on each joist nail for greater strength. This allows for fewer nails, faster installation, and the use of all common nails for the same connection. (Do not bend or remove tabs)

Double-shear hangers range from the light capacity LUS hangers to the highest capacity HGUS hangers. For medium load truss applications, the HUS offers a lower cost alternative and easier installation than the HGUS hangers, while providing greater load capacity and bearing than the LUS.

Material: See table on pp. 217–218.

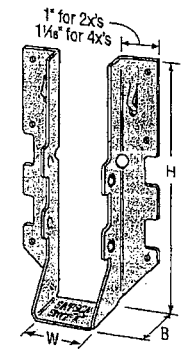
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

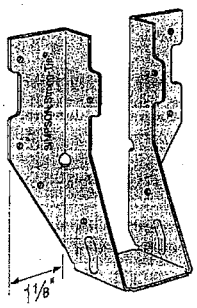
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1½" nails into the header and 10d commons into the joist, and reduce the resistance to 0.64 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

Options:

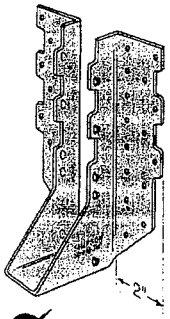
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



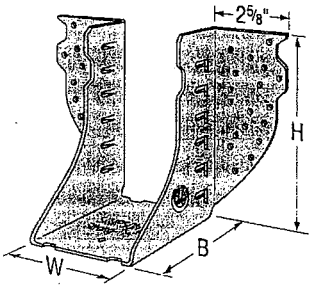
LUS28



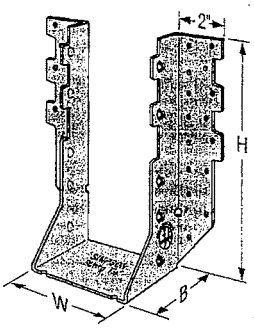
LU26L



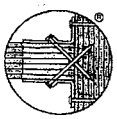
HUS210
(HUS26, HUS28, and HHUS similar)



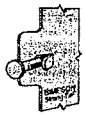
HGUS28-2



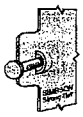
HHUS210-2



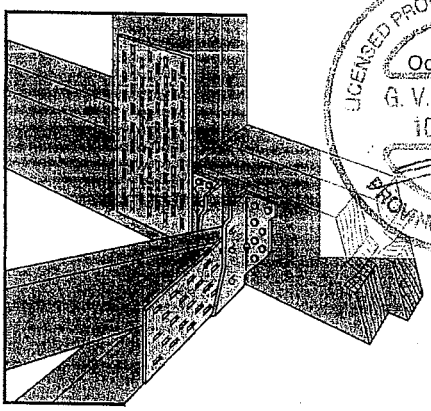
Double-Shear Nailing Top View



Double-Shear Nailing Side View; Do not bend tab

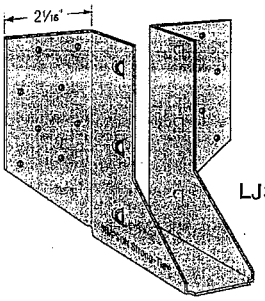


Dome Double-Shear Nailing Side View *(available on some models)*



Typical HUS26 Installation with Reduced Heel Height
(Truss Designer to provide fastener quantity for connecting multiple members together)

LICENSED PROFESSIONAL ENGINEER
Oct. 14, 2020
G. V. LUBARSKY
100044463
PROVINCE OF ONTARIO



LJS26DS

Plated Truss Connectors

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TECHNICAL BULLETIN

LUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

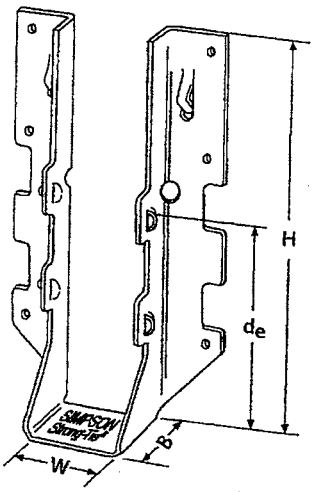
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

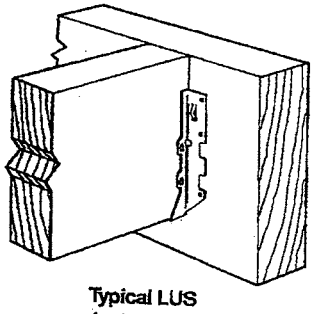
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



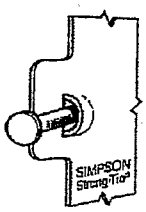
LUS28



Typical LUS Installation

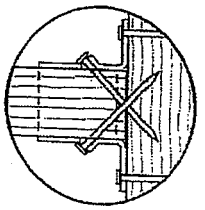
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
LUS24	18	1 9/16	3 1/8	1 3/4	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 9/16	4 3/4	1 3/4	3 5/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 5/8	4 3/16	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 9/16	6 5/8	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 5/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 9/16	7 13/16	1 3/4	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 5/8	8 3/16	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

1. d_e is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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TECHNICAL BULLETIN

HUS/LJS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: See table

Finish: G90 galvanized

Design:

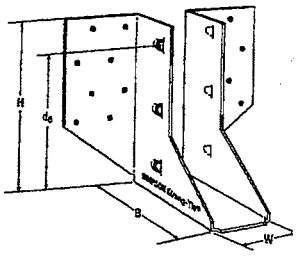
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

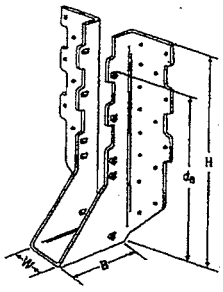
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

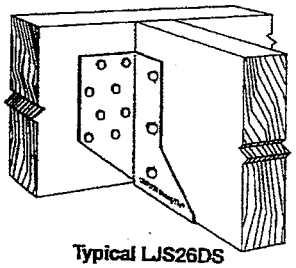
- See current catalogue for options



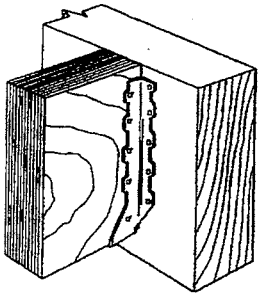
LJS26DS



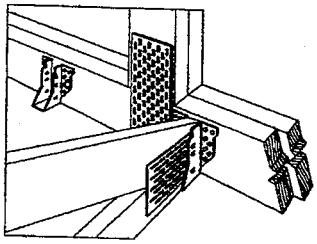
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



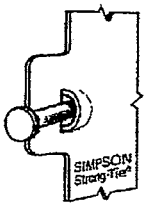
Typical HUS Installation



Typical HUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

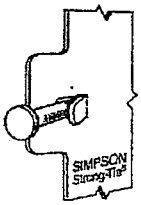
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
								lb.	lb.	lb.	lb.
LJS26DS	18	1 9/16	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅝	5⅜	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7 3/32	3	6 3/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9 3/32	3	7 31/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d_e is the distance from the seat of the hanger to the highest joist nail.

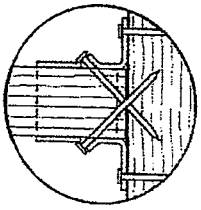


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

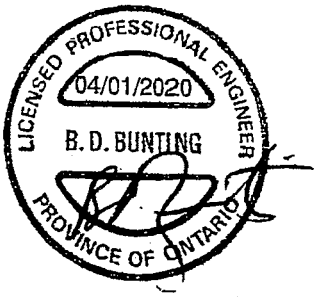
U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

HGUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 12 gauge

Finish: G90 galvanized

Design:

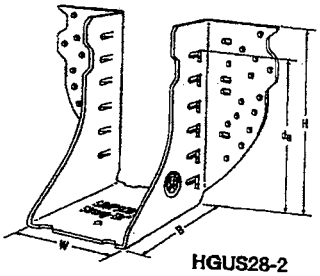
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

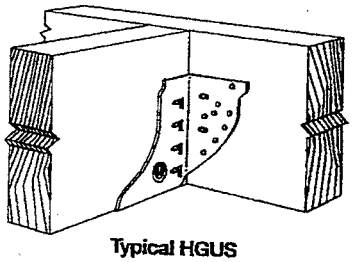
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

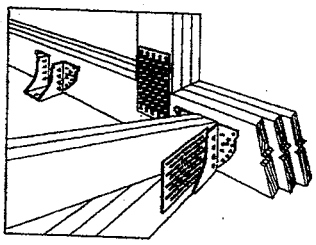
- See current catalogue for options



HGUS28-2



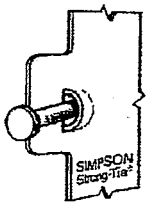
Typical HGUS Installation



Typical HGUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

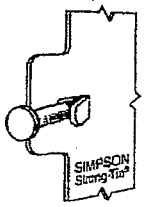
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HGUS26	12	1⅝	5⅜	5	4 5/32	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 5/16	5 7/16	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 15/16	5½	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 9/16	5 7/16	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1⅝	7⅛	5	6⅛	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 5/16	7 3/16	4	6⅛	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 15/16	7¼	4	6⅜	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 9/16	7 3/16	4	6⅛	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1⅝	9⅛	5	7⅞	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 5/16	9 3/16	4	8⅛	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 15/16	9¼	4	8⅜	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 9/16	9 3/16	4	8⅛	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 9/16	10⅝	4	10⅛	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 9/16	12⅝	4	11⅛	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d_e is the distance from the seat of the hanger to the highest joist nail.

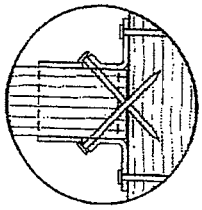


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHGUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HHUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

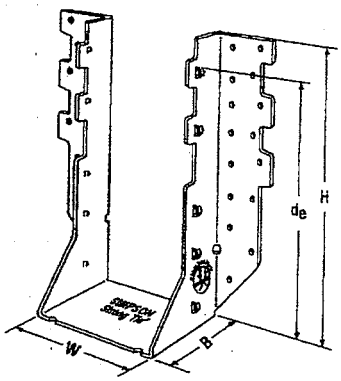
All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

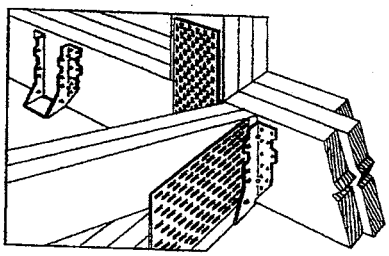
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.



HHUS410

Installation:

- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications



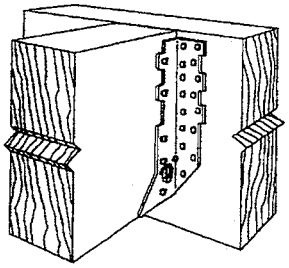
Typical HHUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

Options:

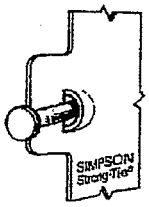
- See current catalogue for options

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HHUS26-2	14	3 5/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 7/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 3/32	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4 11/16	9	3	7 15/16	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3 5/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 5/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3 5/8	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7 1/4	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4670	10155	3370	7210

1. d_e is the distance from the seat of the hanger to the highest joist nail.

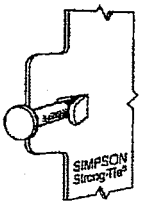


Typical HHUS Installation

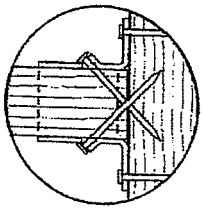


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

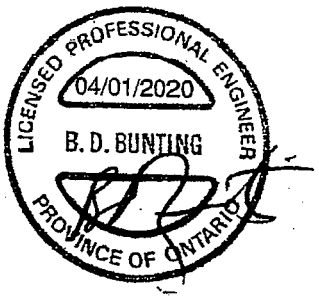
U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHHUS20 3/20 exp. 6/22

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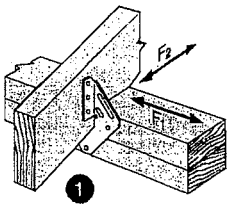
strongtie.com

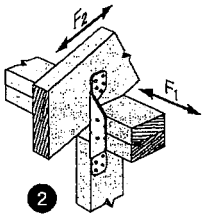
SIMPSON Strong-Tie

H/TSP

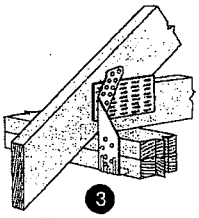
Seismic and Hurricane Ties (cont.)



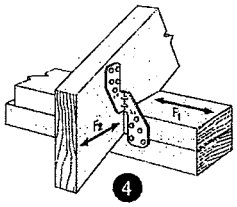
1 H1 Installation



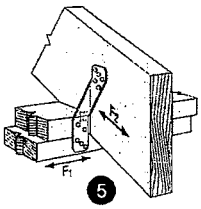
2 H2A Installation



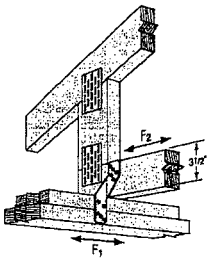
3 TSP Installation



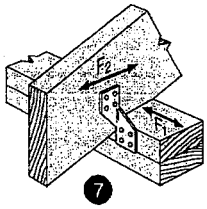
4 H2.5A Installation
(Nails into both top plates)



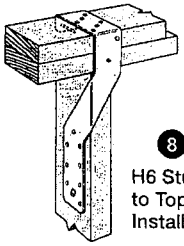
5 H2.5T Installation
(Nails into both top plates)



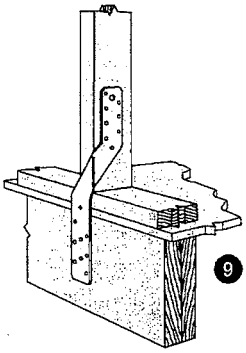
6 H2.5T Installation



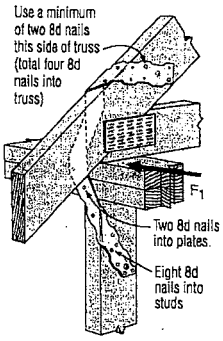
7 H3 Installation
(Nails into upper top plate)



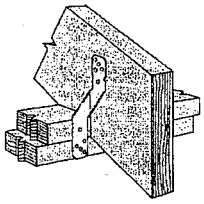
8 H6 Stud to Top Plate Installation



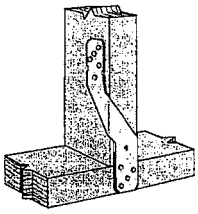
9 H6 Stud to Band Joist Installation



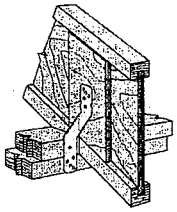
10 H7Z Installation



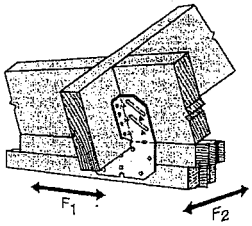
11 H8 Attaching Rafter to Double Top Plates



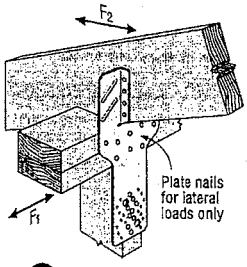
12 H8 attaching Stud to Sill
((4) 8d into plate, (5) 8d into stud)



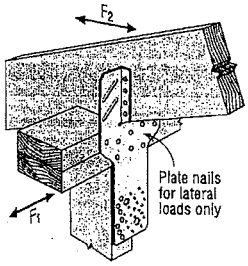
13 H8 attaching I-Joist to Double Top Plates



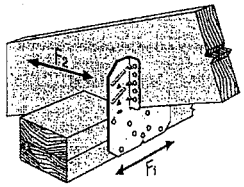
14 H10A Field-Bent Installation



15 H10S Installation



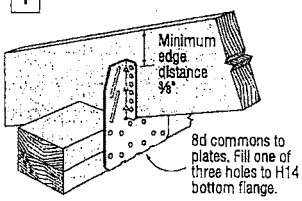
16 H10S Installation with Stud Offset



17 H10A Installation

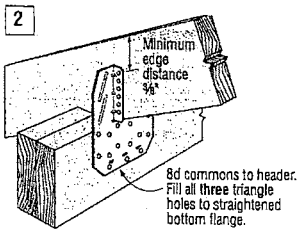
H10A optional positive angle nailing connects shear blocking to rafter. Use 8d common nails. Slot allows maximum field-bending up to a pitch of 6/12, use 75% of the table uplift value; bend one time only.

1



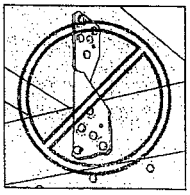
18 H14 Installation to Double Top Plates

2



19 H14 Installation to Double 2x Header

Avoid a Misinstallation



Do not make new holes or overdrive nails.

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H/TSP

Seismic and Hurricane Ties

Simpson Strong-Tie® hurricane ties provide a positive connection between truss/rafter and the wall of the structure to resist wind and seismic forces. New additions to the line provide even more options.

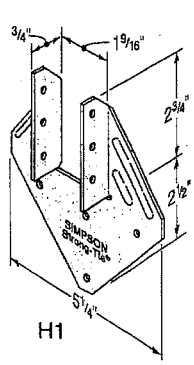
- H10AR — The heavy-duty design of the H10A available with a 2" wide throat to accommodate rough lumber
- H10A-2 — The H10A design with a 3" throat for double 2x members
- H2ASS, H2.5ASS and H10ASS — Popular ties now available in stainless steel

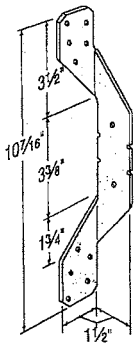
Material: See table

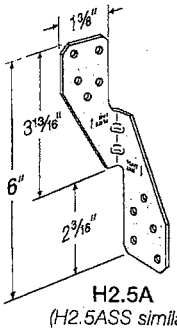
Finish: Galvanized. H7Z and H11Z — ZMAX® coating. Some models available in stainless steel or ZMAX; see Corrosion Information, pp. 20–24 or visit **strongtie.com**.

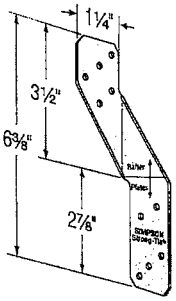
Installation:

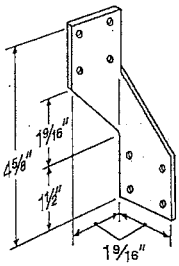
- Use all specified fasteners; see General Notes.
- H1 can be installed with flanges facing inward (reverse of H1 installation drawing; number 1).
- H2.5T, H3 and H6 ties are shipped in equal quantities of right and left versions (right versions shown).
- Hurricane ties do not replace solid blocking.
- When installing ties on plated trusses (on the side opposite the truss plate) do not fasten through the truss plate from behind. This can force the truss plate off of the truss and compromise truss performance.
- H10A optional nailing to connect shear blocking, use 8d nails. Slots allow maximum field bending up to a pitch of 6:12, use H10A sloped loads for field bent installation.

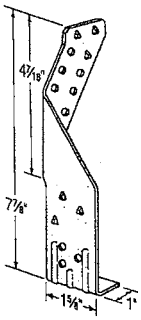

H1

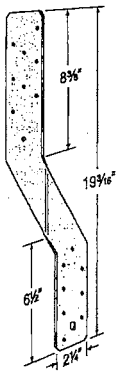

H2A
(H2ASS similar)

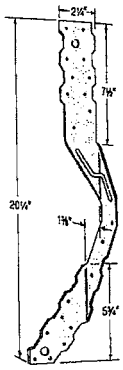

H2.5A
(H2.5ASS similar)

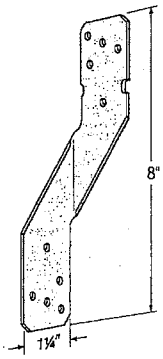

H2.5T

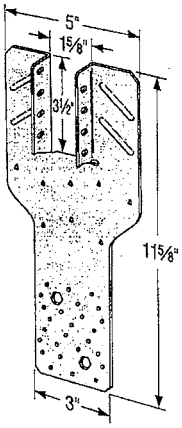

H3

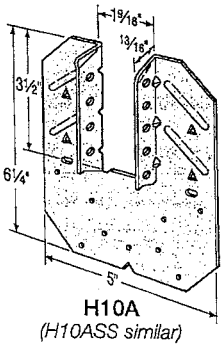

TSP

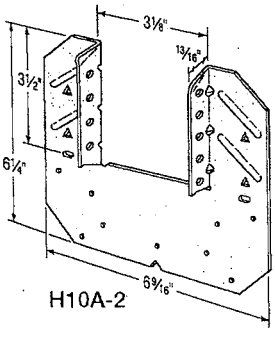

H6

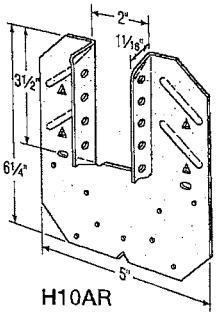

H7Z

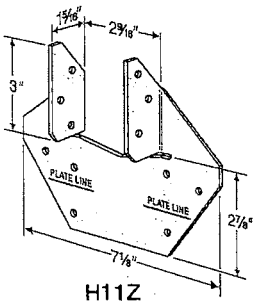

H8

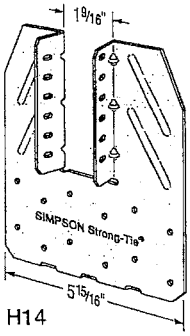

H10S

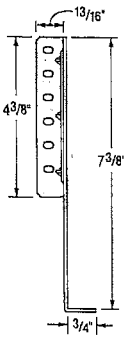

H10A
(H10ASS similar)


H10A-2


H10AR


H11Z


H14


H14
Profile

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TECHNICAL BULLETIN

H – Seismic and Hurricane Ties

SIMPSON Strong-Tie®

The H connector series provides wind and seismic ties for trusses and rafters.

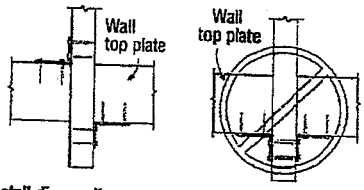
Material: 18 gauge **Finish:** G90 galvanized

Design:
- Factored resistances are in accordance with CSA O86-14
- Factored resistances have been increased 15%. No further increase is permitted.

Installation:
- Use all specified fasteners
- Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½ long, 10d x 1½" = 0.146" x 1½" long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

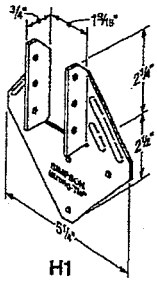
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

Hurricane Tie Installations to Achieve Twice the Load (Top View)

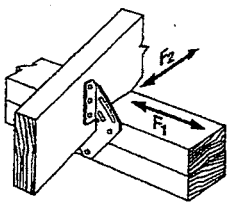


Install diagonally across from each other for minimum 2x truss.

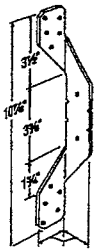
Nailing into both sides of a single ply 2x truss may cause the wood to split.



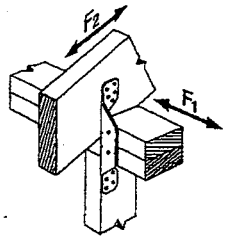
H1



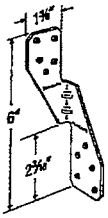
H1 Installation



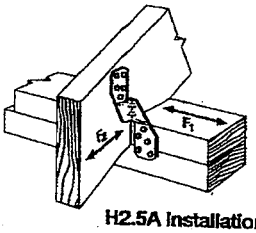
H2A



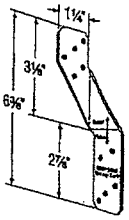
H2A Installation



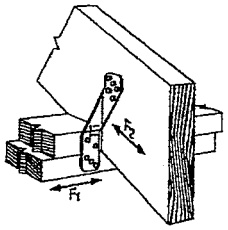
H2.5A



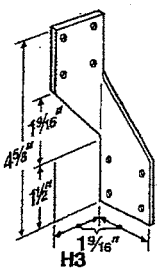
H2.5A Installation



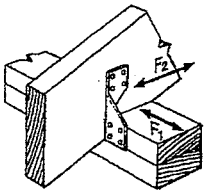
H2.5T



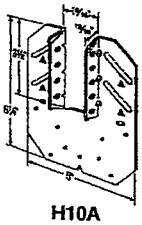
H2.5T Installation (Nails into both top plates)



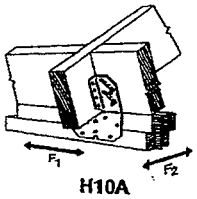
H3



H3 Installation



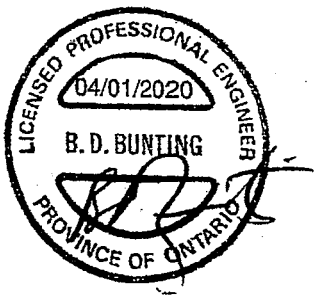
H10A



H10A Installation

Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
					D.Fir-L			S-P-F		
		To Rafter	To Plates	To Studs	Uplift	Normal F_1	Normal F_2	Uplift	Normal F_1	Normal F_2
					(K_D=1.15)			(K_D=1.15)		
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H2.5T	18	(5) 8d	(5) 8d	—	835	175	240	740	160	210
H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.
3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECH20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

TC – Truss Connectors

SIMPSON Strong-Tie®

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

Material: 16 gauge

Finish: G90 galvanized

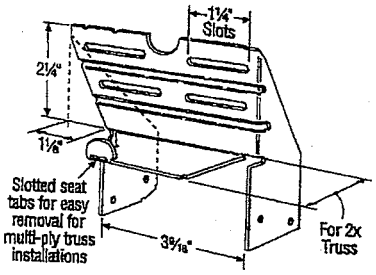
Design: Factored resistances are in accordance with CSA 086-14

Installation:

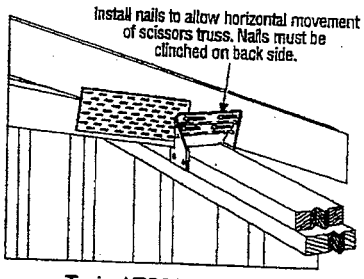
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½ = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss–allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

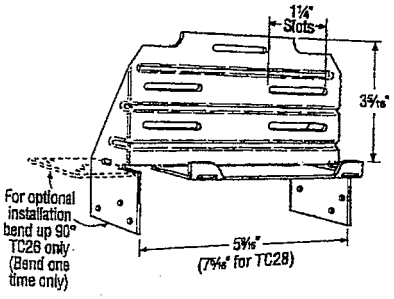
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



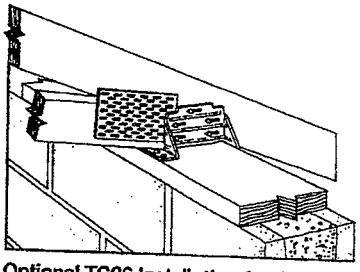
TC24
U.S. Patent 4,932,173



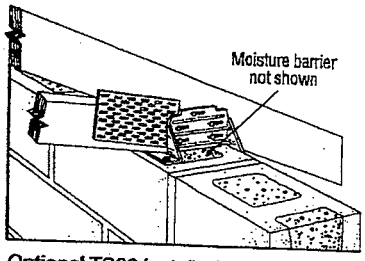
Typical TC24 Installation



TC26
(TC28 Similiar)



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer
(8", 10", 12" Wall Installation Similar)



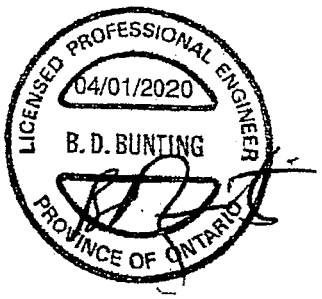
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K_D=1.15)	Uplift (K_D=1.15)
			lb.	lb.
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K_D=1.15)	Uplift (K_D=1.15)
			lb.	lb.
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ⅜" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT STATES DESIGN

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(800) 999-5099
strongtie.com

HTU

SIMPSON Strong-Tie®

Face-Mount Truss Hanger (cont.)

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32-34 for more information.

Alternate Installation for (2) 2x4 and (2) 2x6 Headers

Model No.	Min. Heel Height (in.)	Minimum Header Size	Fasteners		Factored Resistance			
					D.Fir-L		S-P-F	
			Header	Joist	Uplift (K_D = 1.15) lb. / kN	Normal (K_D = 1.00) lb. / kN	Uplift (K_D = 1.15) lb. / kN	Normal (K_D = 1.00) lb. / kN
HTU26 (Min.)	3⅞	(2) 2x4	(10) 16d	(14) 10d x 1½"	1740 / 7.74	3340 / 14.86	1235 / 5.49	2370 / 10.54
HTU26 (Max.)	5½	(2) 2x4	(10) 16d	(20) 10d x 1½"	2470 / 10.99	4015 / 17.86	1755 / 7.81	2850 / 12.68
HTU28 (Max.)	3⅞	(2) 2x6	(20) 16d	(26) 10d x 1½"	4150 / 18.46	6395 / 28.45	2945 / 13.10	4540 / 20.19
HTU210 (Max.)	7¼	(2) 2x6	(20) 16d	(32) 10d x 1½"	4150 / 18.46	6395 / 28.45	2945 / 13.10	4540 / 20.19

See table footnotes on p. 260.

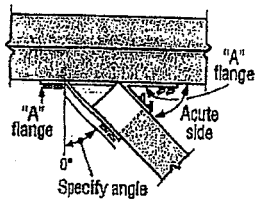
LICENSED PROFESSIONAL ENGINEER
5/29/19
B. D. BUNTING
PROVINCE OF ONTARIO

Hanger Options

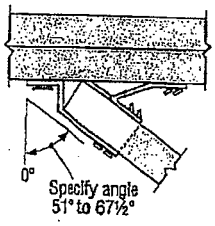
See Hanger Options information on pp. 125–127.

Skewed Seat

- Skewable up to 67½°
- Available in single and 2-ply size
- No bevel cut required



Top View HTU Hanger Skewed Right < 51°



Top View HTU Hanger Skewed Right ≥ 51°

Factored Resistances for Skewed HTU Hangers

Model No.	Skew Angle (Degrees)	Fasteners		Factored Resistance			
				D.Fir-L		S-P-F	
		Header	Joist	Uplift (KD=1.15) lbs / kN	Normal (KD=1.00) lbs / kN	Uplift (KD=1.15) lbs / kN	Normal (KD=1.00) lbs / kN
HTU26	< 51	(20) 16d	(14) 10d x 1½"	1835 / 8.16	4110 / 18.28	1300 / 5.78	2905 / 12.92
	51–67½	(20) 16d	(12) 10d x 1½"	1350 / 6.01	3620 / 16.10	955 / 4.25	2560 / 11.39
HTU28	< 51	(26) 16d	(20) 10d x 1½"	2810 / 12.50	4270 / 18.99	1985 / 8.83	3030 / 13.48
	51–67½	(26) 16d	(17) 10d x 1½"	2075 / 9.23	3930 / 17.48	1465 / 6.52	2780 / 12.37
HTU210	< 51	(32) 16d	(26) 10d x 1½"	3785 / 16.84	4430 / 19.71	2675 / 11.90	3135 / 13.95
	51–67½	(32) 16d	(22) 10d x 1½"	2795 / 12.43	4240 / 18.86	1980 / 8.81	3000 / 13.35
HTU26-2	< 51	(20) 16d	(14) 10d	2140 / 9.52	3715 / 16.53	1515 / 6.74	2625 / 11.68
	51–67½	(20) 16d	(12) 10d	1610 / 7.16	3920 / 17.44	1140 / 5.07	2785 / 12.39
HTU28-2	< 51	(26) 16d	(20) 10d	3960 / 17.62	5425 / 24.13	2815 / 12.52	3855 / 17.15
	51–67½	(26) 16d	(17) 10d	2385 / 10.61	5425 / 24.13	1695 / 7.54	3855 / 17.15
HTU210-2	< 51	(32) 16d	(26) 10d	5025 / 22.35	6890 / 30.65	3570 / 15.88	4890 / 21.75
	51–67½	(36) 16d	(22) 10d	3145 / 13.99	6680 / 29.72	2225 / 9.90	4745 / 21.10

1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Reduced heel heights are not permitted for skewed HTU's.
3. Nails: 16d = 0.162" dia. x 3½" long, 10d x 1½" = 0.148" dia. x 1½" long, 10d = 0.148" dia. x 3" long. See pp. 27–28 for other nail sizes and information.

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ONTARIO WOOD TRUSS
FABRICATORS ASSOCIATION

TECH-NOTES

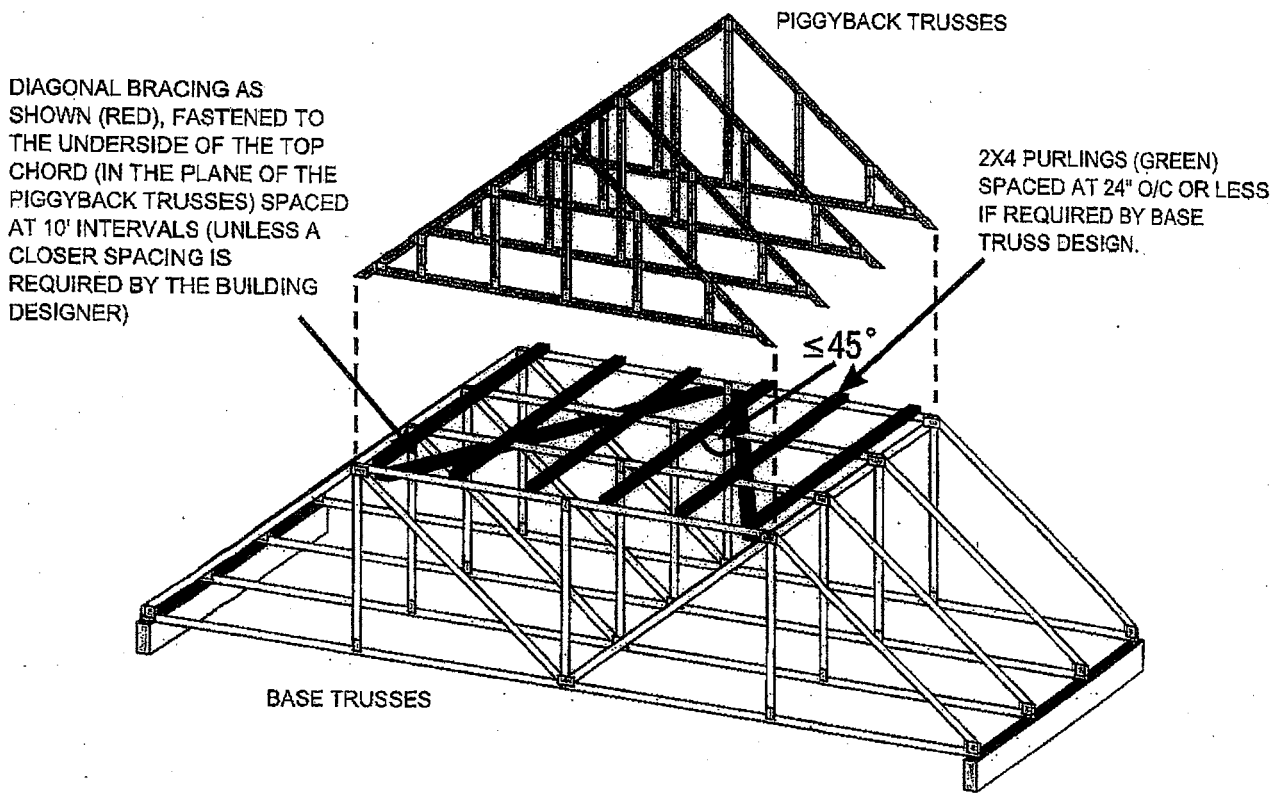
TN 15-001
Piggyback Bracing

Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

SIMPSON Strong-Tie®

Strap Ties

Straps are designed to transfer tension loads in a wide variety of applications.

HRS — Heavy strap designed for installation on the edge of 2x members. The HRS416Z installs with Strong-Drive® SDS Heavy-Duty Connector screws.

LSTA and MSTA — Designed for use on the edge of 2x members, with a nailing pattern that reduces the potential for splitting.

LSTI and MSTI — Light and medium straps that are suitable where pneumatic-nailing is necessary through diaphragm decking and wood chord open-web trusses.

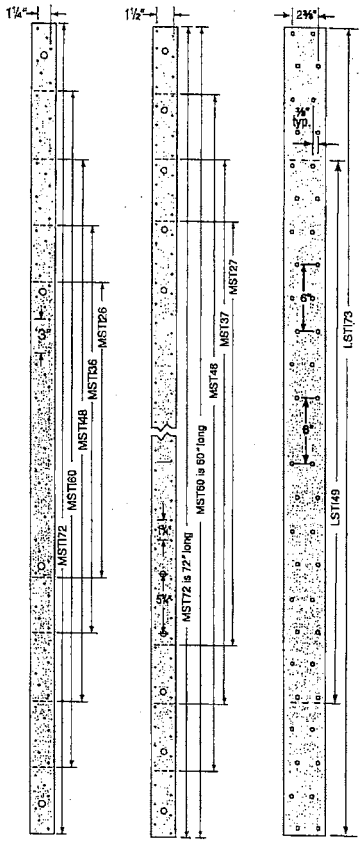
MST — High-capacity strap that can be installed with either nails or bolts. Suitable for double 2x member connections or greater.

MSTC — High-capacity strap that utilizes a staggered nail pattern to help minimize wood splitting. Nail slots have been countersunk to provide a lower nail head profile.

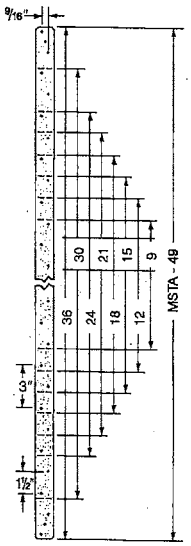
Finish: Galvanized. Some products are available in stainless steel, ZMAX® coating or black powder coat (add PC to sku); contact Simpson Strong-Tie. See Corrosion Information, pp. 18–20.

Installation: Use all specified fasteners; see General Notes

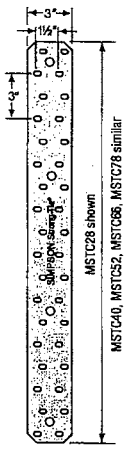
Options: Special sizes can be made to order; contact Simpson Strong-Tie for longer lengths



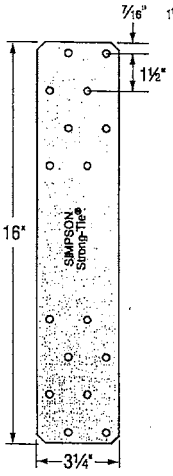
MSTI MST LSTI



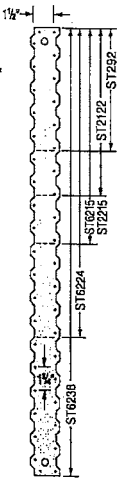
LSTA and MSTA
(Pilot holes not shown)



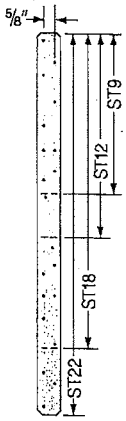
MSTC



HRS416Z

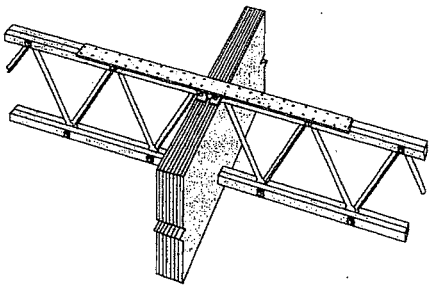


ST

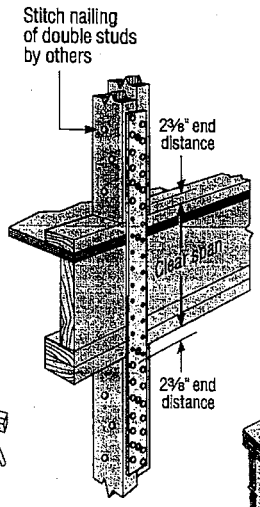


ST9, ST12, ST18, ST22

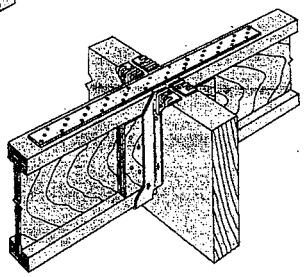
ST2115



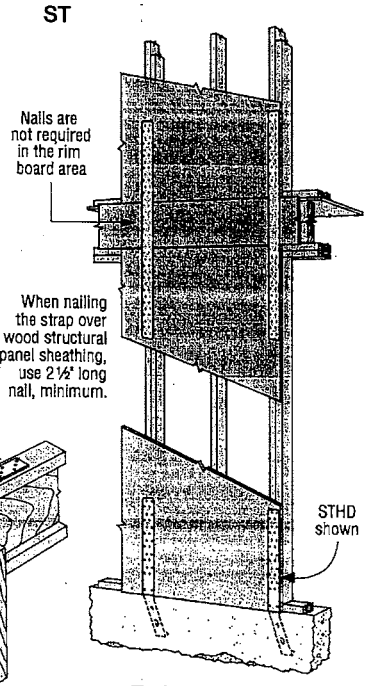
Typical LSTI Installation



Floor-to-Floor Tie Installation Showing a Clear Span



Typical MSTI Installation
(MIT hanger shown)
LSTI similar



Typical Detail with Strap Installed over Wood Structural Panel Sheathing

Straps and Ties

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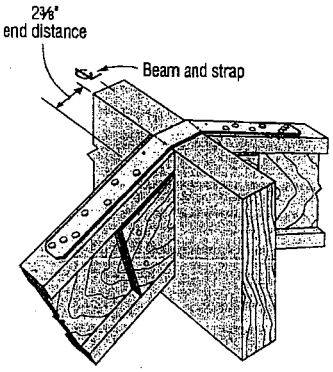
HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

Strap Ties (cont.)

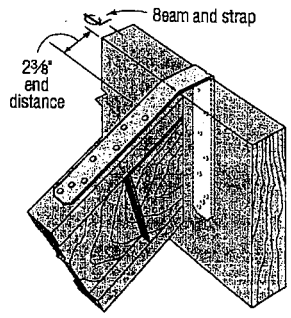
These products are available with additional corrosion protection. For more information, see p. 20.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.) W	Dimensions (in.) L	Fasteners (Total)	Factored Tensile Resistance D.Fir-L (K_D = 1.00) lb. / kN	D.Fir-L (K_D = 1.15) lb. / kN	S-P-F (K_D = 1.00) lb. / kN	S-P-F (K_D = 1.15) lb. / kN
LSTA9	20	1¼	9	(6) 10d	600 / 2.67	690 / 3.07	555 / 2.47	635 / 2.82
LSTA12	20	1¼	12	(8) 10d	800 / 3.56	920 / 4.09	735 / 3.27	845 / 3.76
LSTA15	20	1¼	15	(10) 10d	1000 / 4.45	1150 / 5.12	920 / 4.09	1060 / 4.72
LSTA18	20	1¼	18	(12) 10d	1200 / 5.34	1380 / 6.14	1105 / 4.92	1270 / 5.65
LSTA21	20	1¼	21	(14) 10d	1400 / 6.23	1610 / 7.16	1290 / 5.74	1485 / 6.61
LSTA24	20	1¼	24	(16) 10d	1600 / 7.12	1840 / 8.19	1475 / 6.56	1695 / 7.54
ST292	20	2 1/16	9 5/16	(8) 8d	585 / 2.60	675 / 3.00	535 / 2.38	615 / 2.74
ST2122	20	2 1/16	12 13/16	(12) 8d	940 / 4.18	1085 / 4.83	865 / 3.85	995 / 4.43
ST2115	20	¾	16 5/16	(8) 8d	670 / 2.98	770 / 3.43	615 / 2.74	710 / 3.16
ST2215	20	2 1/16	16 5/16	(16) 8d	1335 / 5.94	1540 / 6.85	1235 / 5.49	1420 / 6.32
LSTA30	18	1¼	30	(20) 10d	2235 / 9.94	2465 / 10.97	2075 / 9.23	2385 / 10.61
LSTA36	18	1¼	36	(24) 10d	2465 / 10.97	2465 / 10.97	2465 / 10.97	2465 / 10.97
LSTI49	18	3¾	49	(32) 10d x 1½"	3115 / 13.86	3580 / 15.93	2852 / 12.69	3280 / 14.59
LSTI73	18	3¾	73	(48) 10d x 1½"	4670 / 20.77	5370 / 23.89	4280 / 19.04	4920 / 21.89
MSTA9	18	1¼	9	(6) 10d	670 / 2.98	770 / 3.43	625 / 2.78	715 / 3.18
SS MSTA12	18	1¼	12	(8) 10d	895 / 3.98	1030 / 4.58	830 / 3.69	955 / 4.25
MSTA15	18	1¼	15	(10) 10d	1120 / 4.98	1285 / 5.72	1040 / 4.63	1195 / 5.32
SS MSTA18	18	1¼	18	(12) 10d	1340 / 5.96	1545 / 6.87	1245 / 5.54	1430 / 6.36
MSTA21	18	1¼	21	(14) 10d	1565 / 6.96	1800 / 8.01	1455 / 6.47	1670 / 7.43
SS MSTA24	18	1¼	24	(16) 10d	1790 / 7.96	2060 / 9.16	1660 / 7.38	1910 / 8.50
MSTA30	16	1¼	30	(20) 10d	2470 / 10.99	2840 / 12.63	2260 / 10.05	2595 / 11.54
SS MSTA36	16	1¼	36	(24) 10d	2965 / 13.19	3070 / 13.66	2710 / 12.06	3070 / 13.66
MSTA49	16	1¼	49	(28) 8d	2725 / 12.12	2725 / 12.12	2545 / 11.32	2725 / 12.12
ST6215	16	2 1/16	16 5/16	(16) 8d	1405 / 6.25	1615 / 7.18	1300 / 5.78	1500 / 6.67
ST6224	16	2 1/16	23 9/16	(24) 8d	2305 / 10.25	2650 / 11.79	2155 / 9.59	2475 / 11.01
ST9	16	1¼	9	(6) 8d	525 / 2.34	605 / 2.69	490 / 2.18	560 / 2.49
ST12	16	1¼	11⅝	(8) 8d	700 / 3.11	805 / 3.58	650 / 2.89	750 / 3.34
ST18	16	1¼	17¾	(12) 8d	1050 / 4.67	1210 / 5.38	975 / 4.34	1125 / 5.00
ST22	16	1¼	21⅝	(18) 8d	1580 / 7.03	1790 / 7.96	1465 / 6.52	1685 / 7.50



Typical LSTA Installation
(hanger not shown)
Bend strap one time only



Typical LSTA Installation
(hanger not shown)
Bend strap one time only

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Use half of the nails in each member being connected to achieve the listed resistances.
3. **Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.

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HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

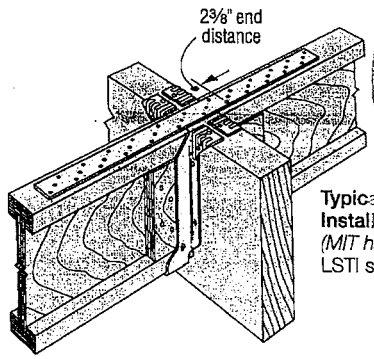
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.) W	Dimensions (in.) L	Fasteners (Total)	Factored Tensile Resistance D.Fir–L (K_D = 1.00) lb. / kN	D.Fir–L (K_D = 1.15) lb. / kN	S-P-F (K_D = 1.00) lb. / kN	S-P-F (K_D = 1.15) lb. / kN
MSTC28	16	3	28¼	(32) 10d	3955	4545	3615	4155
					17.59	20.22	16.08	18.48
MSTC40		3	40¼	(48) 10d	5930	6820	5420	6235
					26.38	30.34	24.11	27.74
MSTC52		3	52¼	(54) 10d	6670	6940	6100	6940
					29.67	30.87	27.14	30.87
MSTC66	14	3	65¾	(66) 10d	8515	8565	7455	8565
					37.88	38.10	33.16	38.10
MSTC78		3	77¾	(66) 10d	8515	8565	7455	8565
					37.88	38.10	33.16	38.10
ST6236		2 1/16	33 13/16	(36) 8d	3735	4295	3270	3760
					16.61	19.11	14.55	16.73
MSTI26	12	2 1/16	26	(22) 10d x 1½"	2825	3250	2475	2850
					12.57	14.46	11.01	12.68
MSTI36		2 1/16	36	(32) 10d x 1½"	4110	4725	3600	4140
					18.28	21.02	16.01	18.42
MSTI48		2 1/16	48	(44) 10d x 1½"	5650	6500	4955	5695
					25.13	28.91	22.04	25.33
MSTI60		2 1/16	60	(56) 10d x 1½"	7195	7360	6305	7250
					32.01	32.74	28.05	32.25
MSTI72		2 1/16	72	(68) 10d x 1½"	7360	7360	7240	7360
					32.74	32.74	32.21	32.74
MST27		2 1/16	27	(26) 8d	2685	3090	2355	2710
					11.94	13.75	10.48	12.06
MST37		2 1/16	37½	(38) 8d	3930	4515	3440	3960
					17.48	20.08	15.30	17.62
MST48		2 1/16	48	(50) 8d	5170	5945	4530	5210
					23.00	26.45	20.15	23.18
HRS416Z		3¼	16	(16) ¼" x 1½" SDS	2400	2760	2120	2440
					10.68	12.28	9.43	10.85
MST60	10	2 1/16	60	(64) 8d	6620	7610	5800	6670
					29.45	33.85	25.80	29.67
MST72		2 1/16	72	(78) 8d	8065	9135	7065	8125
					35.88	40.64	31.43	36.14

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Use half of the nails in each member being connected to achieve the listed resistances.
3. **Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.



Typical MSTI Installation
(MIT hanger shown)
LSTI similar

LICENSED PROFESSIONAL ENGINEER
Jan. 5, 2021
G. V. LUBARSKY
100044463
PROVINCE OF ONTARIO

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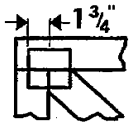
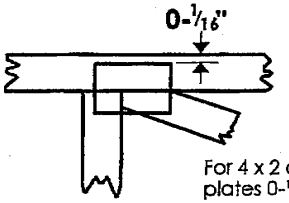
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*Plate location details available in MiTek software or upon request.

PLATE SIZE

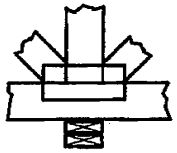
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING

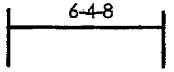


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

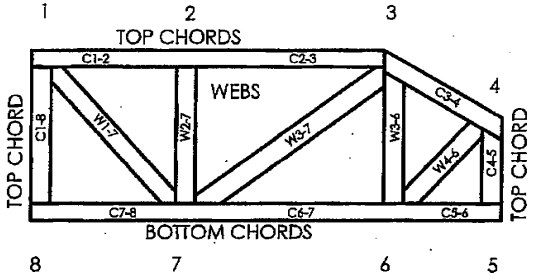
Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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MiTek®

POWER TO PERFORM.™

MiTek Engineering Reference Sheet: MII-7473C rev. 10-'08

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.