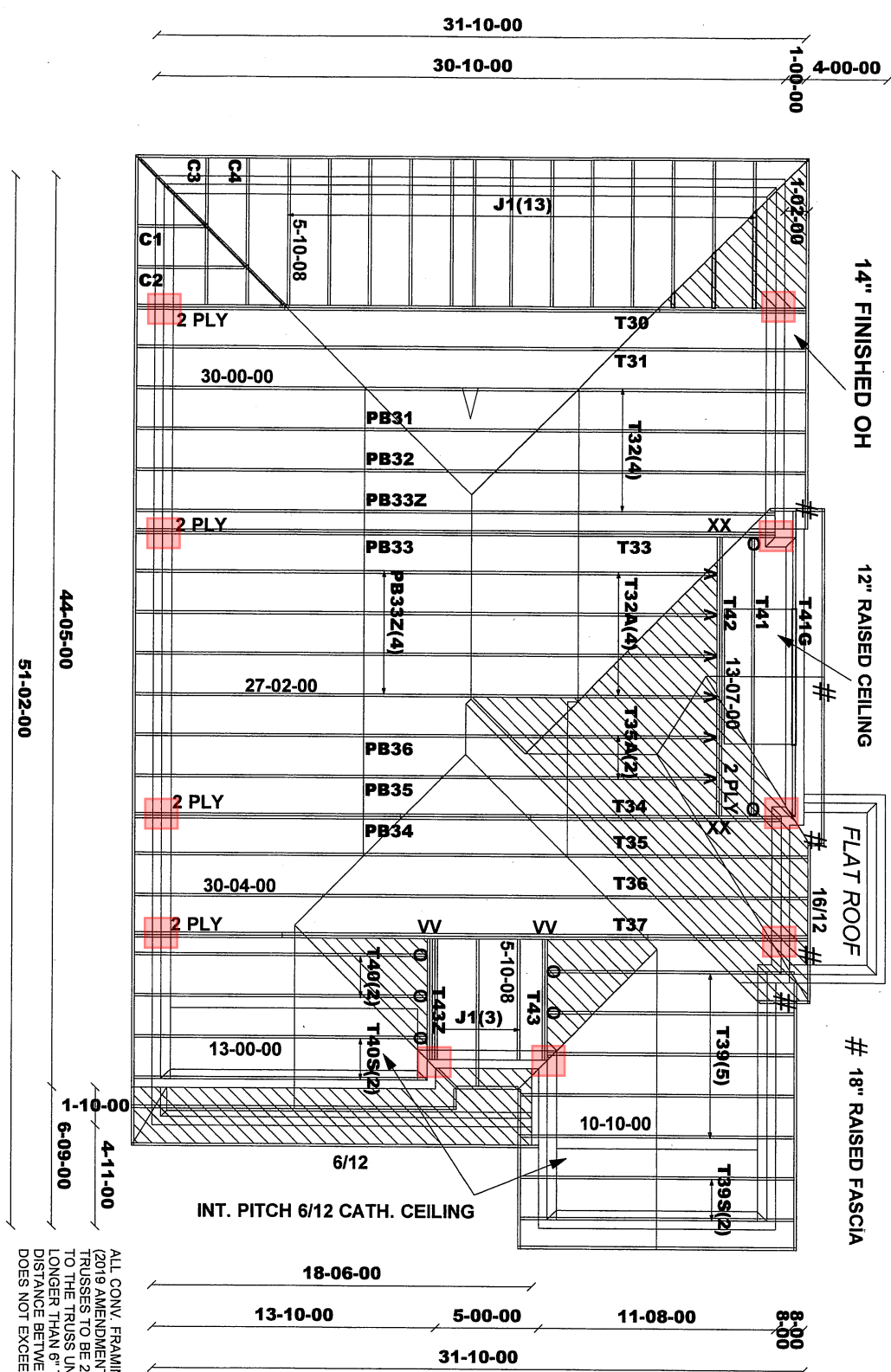


ALL ROOF PITCHES ARE 10/12
UNLESS OTHERWISE NOTED

CITY OF RICHMOND HILL
BUILDING DIVISION
03/06/2022
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ASPHALT SHINGLES
12" FINISHED OH.
R.T.M.C.
2X6 EXTERIOR WALLS
2X6 FASCIA BOARD

HARDWARE:
LUS24 - (O)
LUS26DS - (V)
HGUS26-2 - (XX)
LUS26-2 - (VV)

DENOTES
CONV.
FRAMING

DESIGN CONFORMS WITH
OBC 2012
(2019 AMENDMENT)
OCCUPANCY: RESIDENTIAL
PART: 9
Ss = 31.3 psf Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C.2012
(2019 AMENDMENT) ROOF RAFTERS THAT CROSS MEET OVER
TRUSSES TO BE 2X4 SPF @ 24"O.C. WITH A 2X4 VERT. POST
TO THE TRUSS UNDER NEATH AT EACH CROSS PT. VERT. POST
LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE
DISTANCE BETWEEN END PT. & BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6"

Job Track: 51012
Plan Log: 202057
Layout ID: 406782

Builder / Location: ROYAL PINE HOMES / RICHMOND HILL
Model / Elevation: 38-12 / A

Project: CENTREFIELD
Date: 2020-10-14
Sales: Mario DiCano
Designer: LC

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 UTILIZED FOR ANY OTHER
PURPOSE.

M13461

Milek ver 8.3.3.247

51-02-00
14-04-00
17-02-00
6-04-00
9-02-00
13-04-00

ALL ROOF PITCHES ARE 10/12
UNLESS OTHERWISE NOTED

BEAMS:
BM1, BM2 = 3-2X10 SPF #2

ASPHALT SHINGLES
12" FINISHED OH.
R.T.M.C.
2X6 EXTERIOR WALLS
2X6 FASCIA BOARD

HARDWARE:
LUS24 - (O)
LUS26DS - (V)
HGUS26-2 - (XX)
HGUS28-2 - (SS)
HGUS26-3 - (XXX)

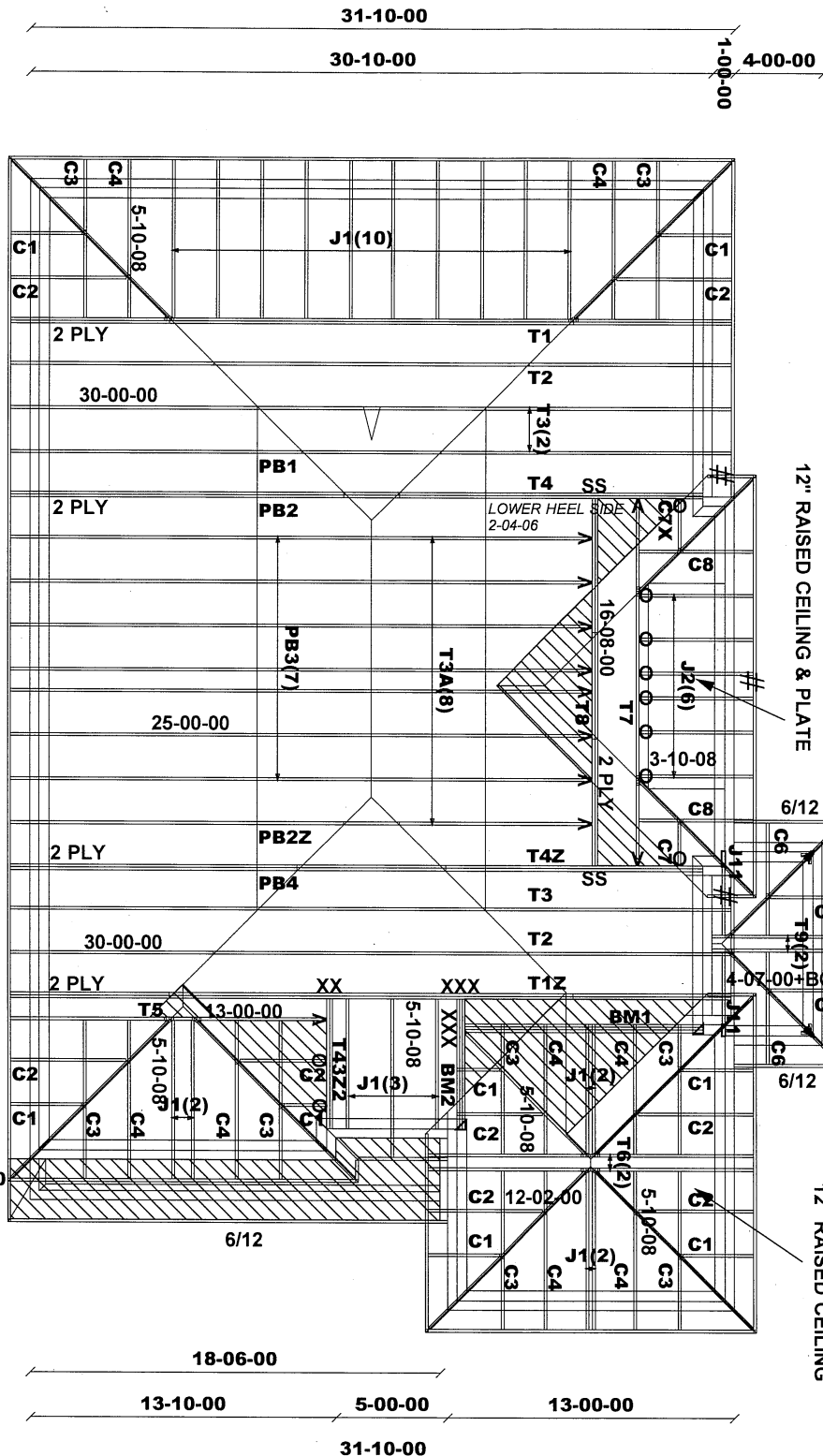
NOTES
CONV.
FRAMING



DESIGN CONFORMS WITH
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OCCUPANCY: RESIDENTIAL
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DOES NOT EXCEED 6'

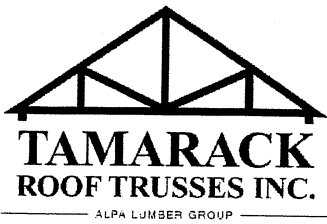


M13461

		Job Track: 51012 Plan Log: 202057 Layout ID: 406781		Builder / Location: ROYAL PINE HOMES / RICHMOND HILL Project: CENTREFIELD Date: 2021-06-05 Sales: Mario DiCiano Designer: LC		Model / Elevation: 38-12 / B 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 UTILIZED FOR ANY OTHER PURPOSE. Miter ver 8.4.2.286	
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CITY OF RICHMOND HILL
BUILDINGS DIVISION
03/08/2022
RECEIVED
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DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-12
 Lot #:
 Elevation: A

Job Track: 51012
 PlanLog: 202057
 Layout ID: 406782
 Ref #: 11780
 Page: 1 of 3
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

Roof Trusses

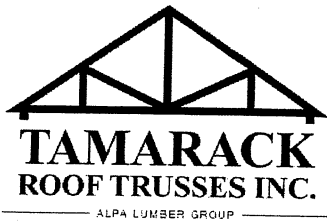
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T30 Hip Girder	10 /12	30-00-00	6-06-07	2 x 4 2 x 6	1-03-08 1-05-08	1-07-11 1-09-05	305.67 192.00		
	1	T31 Hip	10 /12	30-00-00	8-02-07	2 x 4	1-03-08 1-05-08	1-07-11 1-09-05	145.54 91.33		
	4	T32 Piggyback Base	10 /12	30-00-00	9-10-07	2 x 4	1-03-08 1-05-08	1-07-11 1-09-05	628.6 397.33		
	4	T32A Piggyback Base	10 /12	27-02-00	9-10-07	2 x 4	1-03-08	1-07-11 4-01-10	593.61 375.33		
	1 2-ply	T33 Piggyback Base Girder	10 /12	30-00-00	9-10-07	2 x 4 2 x 6	1-03-08	1-07-11 1-09-05	353.19 221.33		
	1 2-ply	T34 Piggyback Base Girder	10 /12	30-04-00	9-10-07	2 x 4 2 x 6	1-03-08	1-07-11 1-01-00	354.19 218.33		
	1	T35 Hip	10 /12	30-04-00	10-02-14	2 x 4	1-03-08 1-03-08	1-07-11 1-01-00	157.45 99.17		
	2	T35A Piggyback Base	10 /12	27-02-00	9-10-07	2 x 4	1-03-08	1-07-11 3-08-11	299.4 189.00		
	1	T36 Hip	10 /12	30-04-00	8-06-14	2 x 4	1-03-08 1-03-08	1-07-11 1-01-00	144.48 90.00		
	1 2-ply	T37 Hip Girder	10 /12	30-04-00	6-10-14	2 x 4 2 x 6	1-03-08 1-03-08	1-07-11 1-01-00	322.05 201.67		
	5	T39 Common	10 /12	10-10-00	6-01-14	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	242.33 155.00		
	2	T39S Scissor	10 /12 6 /12	10-10-00	6-01-14	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	102.96 68.00		
	2	T40 Common	10 /12	13-00-00	7-00-11	2 x 4	1-03-08	1-07-11 1-07-11	120.36 76.33		
	2	T40S Scissor	10 /12 6 /12	13-00-00	7-00-11	2 x 4	1-03-08	1-07-11 1-07-11	121.2 79.33		

CITY OF RICHMOND HILL
 BUILDING DIVISION

03/08/2022

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DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-12
 Lot #:
 Elevation: A

Job Track: 51012
 PlanLog: 202057
 Layout ID: 406782
 Ref #: 11780
 Page: 2 of 3
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

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	T41 Roof Special	10 / 12	13-07-00	8-09-10	2 x 4		3-01-11 3-01-11	79.98 52.67		
	1	T41G GABLE	10 / 12	13-07-00	8-09-10	2 x 4	1-03-08 1-03-08	3-01-11 3-01-11	89.4 58.67		
	1 2-ply	T42 Common Girder	10 / 12	13-07-00	8-09-10	2 x 4 2 x 6		3-01-11 3-01-11	174.95 108.00		
	1 2-ply	T43 Monopitch Girder	10 / 12	5-10-08	6-06-07	2 x 4 2 x 6		1-07-11 6-06-07	72.89 46.67		
	1 2-ply	T43Z Monopitch Girder	10 / 12	5-10-08	6-06-07	2 x 4 2 x 6		1-07-11 6-06-07	72.89 46.67		
	1	PB31 Piggyback	10 / 12	10-04-15	1-08-00	2 x 4			30.19 19.83		
	1	PB32 Piggyback	10 / 12	10-04-15	3-04-00	2 x 4			32.02 21.67		
	1 2-ply	PB33 Piggyback	10 / 12	10-04-15	4-04-01	2 x 4			57.55 36.00		
	5	PB33Z Piggyback	10 / 12	10-04-15	4-04-01	2 x 4			143.88 90.00		
	1 2-ply	PB34 Piggyback	10 / 12	9-11-00	1-05-15	2 x 4			57.09 37.33		
	1	PB35 Piggyback	10 / 12	9-11-00	3-01-15	2 x 4			30.31 19.67		
	1	PB36 Piggyback	10 / 12	9-11-00	4-01-09	2 x 4			27.31 17.33		
	16	J1 Jack-Open	10 / 12	5-10-08	6-06-07	2 x 4	1-03-08	1-07-11 6-06-07	327.6 208.00		
	1	C1 Jack-Open	10 / 12	1-10-15	3-02-13	2 x 4	1-03-08 1-01	1-07-11 3-02-13	10.17 7.00		

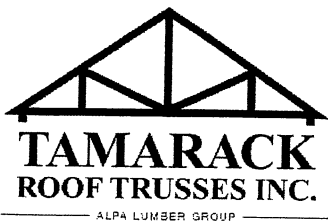
CITY OF RICHMOND HILL
 BUILDING DIVISION

03/08/2022

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Per: joshua.nabua

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-12
 Lot #:
 Elevation: A

Job Track: 51012
 PlanLog: 202057
 Layout ID: 406782
 Ref #: 11780
 Page: 3 of 3
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

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	C2 Jack-Open	10 /12	2-00-00	4-10-13	2 x 4	1-03-08 1-10-15	1-07-11 3-03-11	13.14 9.00		
	1	C3 Jack-Open	10 /12	1-10-15	3-02-13	2 x 4	1-03-08 3-11-09	1-07-11 3-02-13	14.59 9.67		
	1	C4 Jack-Open	10 /12	3-10-15	4-10-13	2 x 4	1-03-08 1-11-09	1-07-11 4-10-13	17.56 11.67		

TOTAL # TRUSS= 73

TOTAL BFT OF ALL TRUSSES= 3254

BFT.

TOTAL WEIGHT OF ALL TRSSES 5142.57 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	HGUS26-2	
6	Hardware	LJS26DS	
7	Hardware	LUS24	
2	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 17

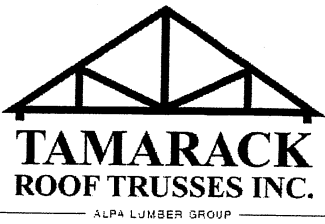
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DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-12
 Lot #:
 Elevation: B

Job Track: 51012
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Roof Trusses

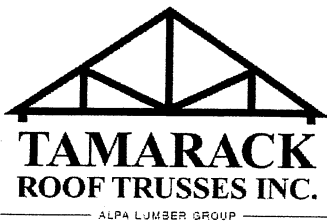
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	10 / 12	30-00-00	6-06-07	2 x 4 2 x 6	1-03-08 1-03-08	1-07-11 1-07-11	304.85 192.00		
	1 2-ply	T1Z Hip Girder	10 / 12	30-00-00	6-06-07	2 x 4 2 x 6	1-03-08 1-03-08	1-07-11 1-07-11	304.85 192.00		
	2	T2 Hip	10 / 12	30-00-00	8-02-07	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	290.38 182.67		
	3	T3 Hip	10 / 12	30-00-00	9-10-07	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	470.44 298.00		
	8	T3A Piggyback Base	10 / 12	25-00-00	9-10-07	2 x 4	1-03-08	1-07-11 5-09-11	1136.69 718.67		
	1 2-ply	T4 Piggyback Base Girder	10 / 12	30-00-00	9-10-07	2 x 4 2 x 8	1-03-08 1-03-08	1-07-11 1-07-11	403.64 249.67		
	1 2-ply	T4Z Piggyback Base Girder	10 / 12	30-00-00	9-10-07	2 x 4 2 x 8	1-03-08 1-03-08	1-07-11 1-07-11	403.64 249.67		
	1	T5 Hip Girder	10 / 12	13-00-00	6-06-07	2 x 4	1-03-08	1-07-11 1-07-11	64.96 41.67		
	2	T6 Hip Girder	10 / 12	12-02-00	6-06-07	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	120.41 79.00		
	1	T7 Hip Girder	10 / 12	16-08-00	6-04-07	2 x 4		2-04-06 2-07-11	80.21 51.33		
	1 2-ply	T8 Hip Girder	10 / 12	16-08-00	7-11-03	2 x 4 2 x 6		2-04-06 2-07-11	207.28 130.33		
	2	T9 Half Hip Girder	6 / 12	4-07-00	2-10-07	2 x 4 2 x 6	1-03-08	4-03 2-02-15	40.44 26.00		
	1 2-ply	T43Z2 Monopitch Girder	10 / 12	5-10-08	6-06-07	2 x 4 2 x 6		1-07-11 6-06-07	72.89 46.67		
	1	PB1 Piggyback	10 / 12	10-03-00	1-08-00	2 x 4			29.69 18.67		

CITY OF RICHMOND HILL
 BUILDING DIVISION

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DELIVERY SHIPLIST

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 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
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 Model: 38-12
 Lot #:
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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	PB2 Piggyback	10 /12	10-03-00	3-02-12	2 x 4			62.75 42.00		
	1	PB2Z Piggyback	10 /12	10-03-00	3-02-12	2 x 4			31.37 21.00		
	7	PB3 Piggyback	10 /12	10-03-00	4-03-04	2 x 4			198.06 121.33		
	1 2-ply	PB4 Piggyback	10 /12	10-03-00	1-05-15	2 x 4			59.15 38.33		
	19	J1 Jack-Open	10 /12	5-10-08	6-06-07	2 x 4	1-03-08	1-07-11 6-06-07	389.03 247.00		
	6	J2 Jack-Closed	10 /12	3-10-08	6-04-07	2 x 4	1-03-08	1-07-11 5-04-07	143.03 88.00		
	2	J11 Jack-Open	6 /12	3-09-08	2-02-15	2 x 4		4-03 2-02-15	19.98 13.33		
	8	C1 Jack-Open	10 /12	1-10-15	3-02-13	2 x 4	1-03-08 1-01	1-07-11 3-02-13	81.39 56.00		
	8	C2 Jack-Open	10 /12	2-00-00	4-10-13	2 x 4	1-03-08 1-10-15	1-07-11 3-03-11	105.14 72.00		
	8	C3 Jack-Open	10 /12	1-10-15	3-02-13	2 x 4	1-03-08 3-11-09	1-07-11 3-02-13	116.74 77.33		
	8	C4 Jack-Open	10 /12	3-10-15	4-10-13	2 x 4	1-03-08 1-11-09	1-07-11 4-10-13	140.49 93.33		
	2	C5 Jack-Open	6 /12	1-10-15	1-11-02	2 x 4	1-03-08 1-01	4-03 1-03-10	13.06 8.00		
	2	C6 Jack-Open	6 /12	1-10-15	1-11-02	2 x 4	1-03-08 1-10-09	4-03 1-03-10	17.15 10.67		
	1	C7 Jack-Open	10 /12	2-00-00	4-08-13	2 x 4		2-07-11 4-09-11	10.97 7.33		

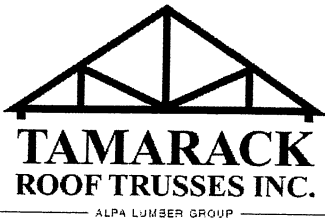
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 BUILDING DIVISION

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DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-12
 Lot #:
 Elevation: B

Job Track: 51012
 PlanLog: 202057
 Layout ID: 406781
 Ref #: 11780
 Page: 3 of 3
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

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	C7X Jack-Open	10 /12	2-04-00	4-08-13	2 x 4		2-04-06 4-09-11	11.32 8.17		
	2	C8 Jack-Open	10 /12	1-10-15	4-08-13	2 x 4	1-03-08 1-11-09	2-07-11 4-08-13	30.05 20.00		

TOTAL # TRUSS= 111

TOTAL BFT OF ALL TRUSSES= 3400.17

BFT.

TOTAL WEIGHT OF ALL TRSSES 5360.04 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
1	Hardware	HGUS26-2	
2	Hardware	HGUS26-3	
2	Hardware	HGUS28-2	
11	Hardware	LJS26DS	
10	Hardware	LUS24	

TOTAL NUMBER OF ITEMS= 26

CITY OF RICHMOND HILL
 BUILDING DIVISION

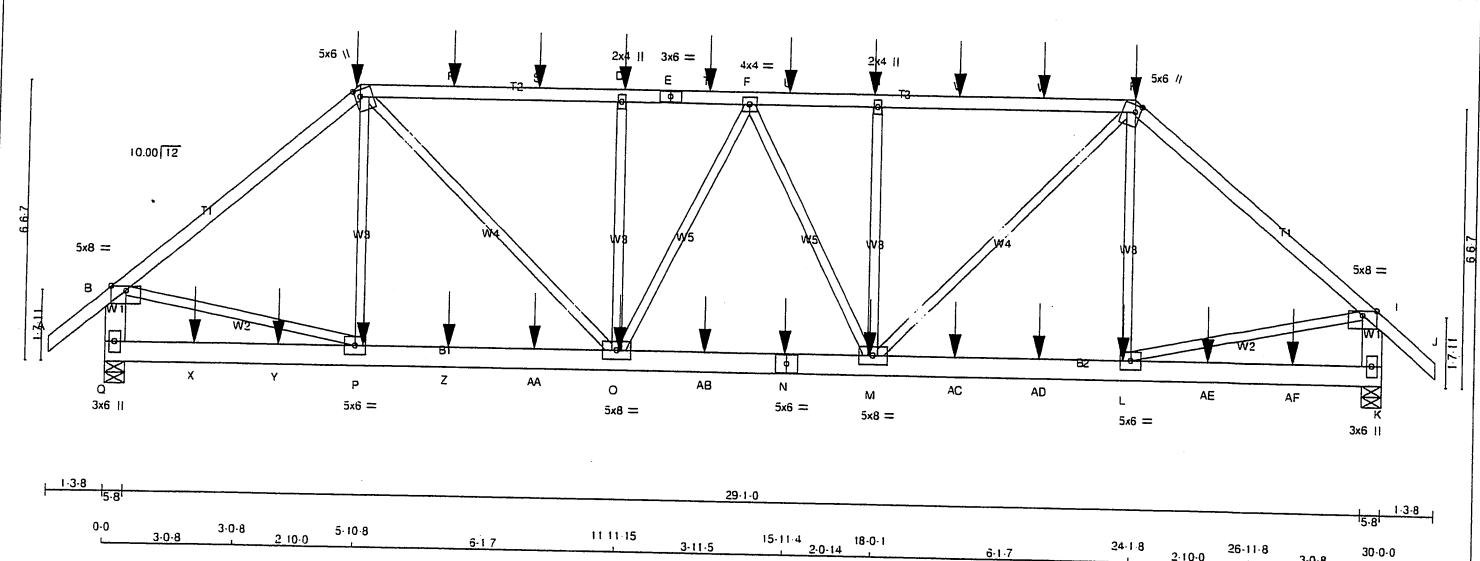
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JOB NAME 406781	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:36 2020 Page 1
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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 - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
Q - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
N - K	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-E 1	12	SIDE(61.0)
E-H 1	12	SIDE(61.0)
H-J 1	12	SIDE(61.0)
Q-B 2	12	TOP
K-I 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q-N 2	12	SIDE(183.1)
N-K 2	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
P-C 1	6	SIDE(17.7)
L-H 1	6	SIDE(17.7)
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.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	UPLIFT		
Q	3278	0	3278	0	5-8	5-8
K	3279	0	3279	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
Q	2317	1530	0	0	0	786	0
K	2317	1530	0	0	0	787	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08 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)

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE	VERT. LOAD	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 41	-91.8 -91.8	0.07 (1)	10.00	P-C	-301 88	0.10 (1)
B-C	-3519.0	-91.8 -91.8	0.46 (1)	4.59	L-H	-301 88	0.10 (1)
C-R	-4070.0	-91.8 -91.8	0.58 (1)	4.08	B-P	0 2754	0.34 (1)
R-S	-4070.0	-91.8 -91.8	0.58 (1)	4.08	L-I	0 2754	0.34 (1)
S-D	-4070.0	-91.8 -91.8	0.58 (1)	4.08	M-H	0 1951	0.24 (1)
D-E	-4070.0	-91.8 -91.8	0.50 (1)	4.08	C-O	0 1951	0.24 (1)
E-T	-4070.0	-91.8 -91.8	0.50 (1)	4.08	M-G	-1127.0	0.38 (1)
T-F	-4070.0	-91.8 -91.8	0.50 (1)	4.08	O-D	-1127.0	0.38 (1)
F-U	-4070.0	-91.8 -91.8	0.50 (1)	4.08	O-F	-54.0	0.02 (1)
U-G	-4070.0	-91.8 -91.8	0.50 (1)	4.08	F-M	-53.0	0.02 (1)
G-V	-4070.0	-91.8 -91.8	0.58 (1)	4.08			
V-W	-4070.0	-91.8 -91.8	0.58 (1)	4.08			
W-H	-4070.0	-91.8 -91.8	0.58 (1)	4.08			
H-I	-3519.0	-91.8 -91.8	0.46 (1)	4.59			
I-J	0 41	-91.8 -91.8	0.07 (1)	10.00			
Q-B	-3207.0	0.0 0.0	0.12 (1)	7.73			
K-L	-3207.0						

Q-X	0 0	-18.5	-18.5	0.08 (4)	10.00
X-Y	0 0	-18.5	-18.5	0.08 (4)	10.00
Y-P	0 0	-18.5	-18.5	0.08 (4)	10.00
P-Z	0 2693	-18.5	-18.5	0.22 (1)	10.00
Z-AA	0 2693	-18.5	-18.5	0.22 (1)	10.00
AA-O	0 2693	-18.5	-18.5	0.22 (1)	10.00
O-AB	0 4094	-18.5	-18.5	0.31 (1)	10.00
AB-N	0 4094	-18.5	-18.5	0.31 (1)	10.00
N-M	0 4094	-18.5	-18.5	0.31 (1)	10.00
M-AC	0 2693	-18.5	-18.5	0.22 (1)	10.00
AC-AD	0 2693	-18.5	-18.5	0.22 (1)	10.00
AD-L	0 2693	-18.5	-18.5	0.22 (1)	10.00
L-AE	0 0	-18.5	-18.5	0.08 (4)	10.00
AE-AF	0 0	-18.5	-18.5	0.08 (4)	10.00
AF-K	0 0	-18.5	-18.5	0.08 (4)	10.00

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-369	-369	---	BACK	VERT	TOTAL	---	C1
D	12-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
G	17-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
H	24-1-8	-369	-369	---	BACK	VERT	TOTAL	---	C1
L	23-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
M	17-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.00")

CALCULATED VERT. DEFL.(LL)= L/999 (0.08")

ALLOWABLE DEFL.(TL)= L/360 (1.00")

CALCULATED VERT. DEFL.(TL)= L/999 (0.15")

CSI: TC=0.58/1.00 (C-D:1), BC=0.31/1.00 (M-O:1), WB=0.38/1.00 (D-O:1), SS=0.24/1.00 (C-D: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) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP= 0.86 (H) INPUT= 0.90

SI METAL= 0.40 (N) INPUT= 1.00

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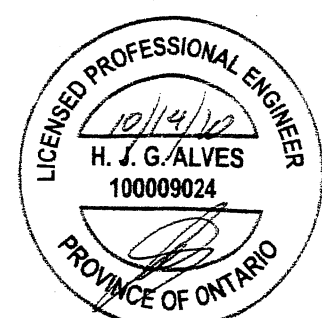
Per: **joshua.nabua**

03/08/2022

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Per: **joshua.nabua**

CONTINUED ON PAGE 2



Structural component only
 DWG# T-2022237 1/2

JOB NAME 406781	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:3novAUyvi2y?Et7nDiZ3g9yHzID-IV0GChnMuX74PYGnio870zi?8jGD5wXuVJGDu?yTWN5

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0		
G	TMVW+w	MT20	2.0	4.0		
H	TTWW+m	MT20	5.0	6.0	2.00	1.50
I	TMVW-p	MT20	5.0	8.0	Edge	
K	BMV1-p	MT20	3.0	6.0		
L	BMVW-t	MT20	5.0	6.0		
M	BMVWW-t	MT20	5.0	8.0		
N	BS-t	MT20	5.0	6.0		
O	BMVWW-t	MT20	5.0	8.0		
P	BMVW-t	MT20	5.0	6.0		
Q	BMV1-p	MT20	3.0	6.0		

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

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
N	15-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
O	12-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
P	6-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
R	8-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
S	10-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
T	14-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
U	15-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
V	19-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
W	21-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
X	2-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
Y	4-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
Z	8-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
AA	10-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
AB	14-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
AC	19-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
AD	21-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
AE	25-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
AF	27-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022237 *3/2*

CITY OF RICHMOND HILL
BUILDING DIVISION

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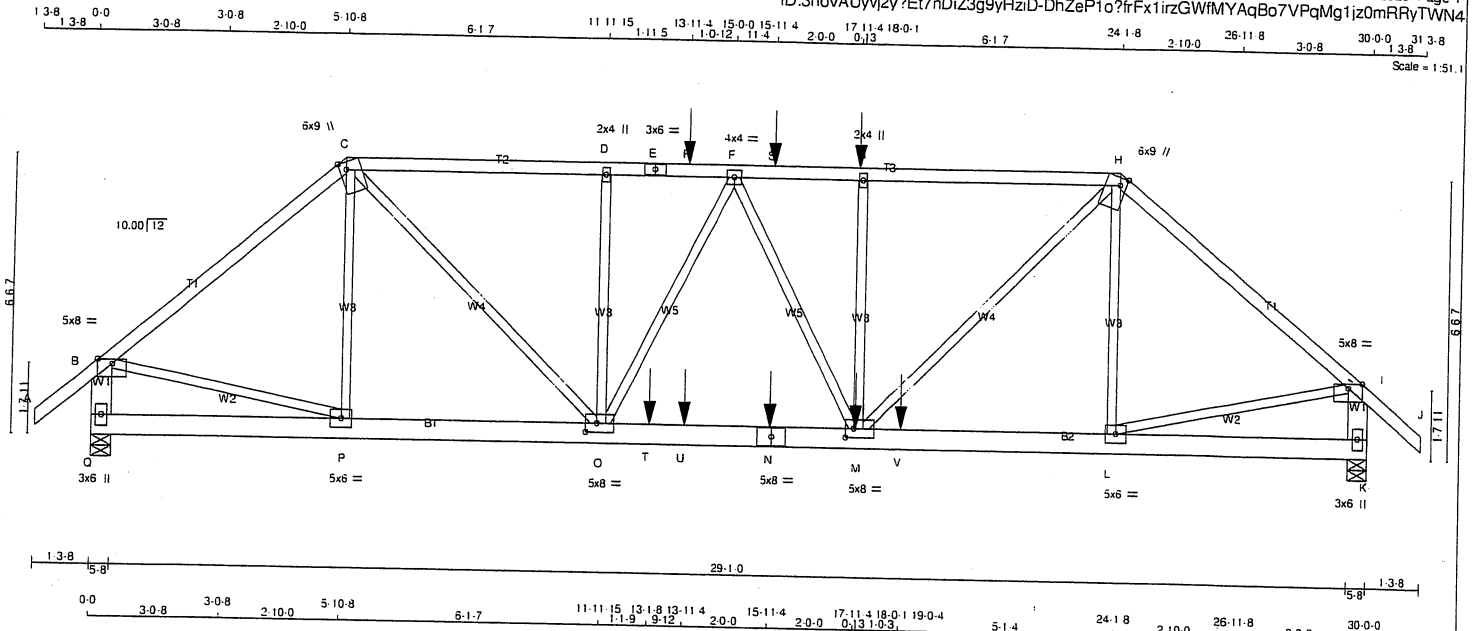
Per: joshua.nabua

JOB NAME 406781	TRUSS NAME T1Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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Scale = 1:51.1



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - C	2x4	DRY No.2
C - E	2x4	DRY No.2
E - H	2x4	DRY No.2
H - J	2x4	DRY No.2
Q - B	2x6	DRY No.2
K - I	2x6	DRY No.2
Q - N	2x6	DRY No.2
N - K	2x6	DRY No.2

ALL WEBS 2x3 DRY No.2
EXCEPT

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	12	TOP
C-E	12	TOP
E-H	12	TOP
H-J	12	TOP
Q-B	12	TOP
K-I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q-N	12	SIDE(0.0)
N-K	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	UPLIFT	IN-SX
Q	3552	0	0	5-8
K	3790	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	2505	1683.0	0.0	0.0	0.0	822.0	0.0
K	2673	1793.0	0.0	0.0	0.0	881.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.72 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)	UNBRAC	MEMB.	MAX. FACTORED	MAX	CS1 (LC)
MEMB.	FORCE (LBS)	FORCE (LBS)	FROM	TO	LENGTH	FR-TO	FR-TO	FORCE (LBS)	FORCE (LBS)	FORCE (LBS)	FORCE (LBS)
A-B	0.41	-91.8	-91.8	0.07 (1)	10.00	P-C	-589.0	0.20 (1)	0.20 (1)	0.20 (1)	0.20 (1)
B-C	-3874.0	-91.8	-91.8	0.49 (1)	4.40	L-H	-359.0	0.12 (1)	0.12 (1)	0.12 (1)	0.12 (1)
C-D	-5505.0	-91.8	-91.8	0.44 (1)	3.82	B-P	0.3032	0.38 (1)	0.38 (1)	0.38 (1)	0.38 (1)
D-E	-5505.0	-91.8	-91.8	0.34 (1)	3.82	L-I	0.3309	0.41 (1)	0.41 (1)	0.41 (1)	0.41 (1)
E-F	-5505.0	-91.8	-91.8	0.34 (1)	3.82	M-H	0.3597	0.45 (1)	0.45 (1)	0.45 (1)	0.45 (1)
F-G	-5505.0	-91.8	-91.8	0.34 (1)	3.74	C-O	0.3605	0.45 (1)	0.45 (1)	0.45 (1)	0.45 (1)
G-H	-5505.0	-91.8	-91.8	0.34 (1)	3.74	M-G	-756.0	0.25 (1)	0.25 (1)	0.25 (1)	0.25 (1)
H-I	-4228.0	-91.8	-91.8	0.46 (1)	3.72	O-D	-591.0	0.20 (1)	0.20 (1)	0.20 (1)	0.20 (1)
I-J	0.41	-91.8	-91.8	0.53 (1)	4.22	O-F	-505.0	0.22 (1)	0.22 (1)	0.22 (1)	0.22 (1)
Q-B	-3490.0	0.0	0.0	0.07 (1)	10.00	F-M	0.111	0.01 (1)	0.01 (1)	0.01 (1)	0.01 (1)
K-I	-3773.0	0.0	0.0	0.13 (1)	7.48						
		0.0	0.0	0.14 (1)	7.26						
Q-P	0.0	-18.5	-18.5	0.04 (4)	10.00						
P-O	0.2960	-18.5	-18.5	0.37 (1)	10.00						
O-T	0.5726	-18.5	-18.5	0.76 (1)	10.00						
T-U	0.5726	-18.5	-18.5	0.76 (1)	10.00						
U-N	0.5726	-18.5	-18.5	0.76 (1)	10.00						
N-M	0.5726	-18.5	-18.5	0.76 (1)	10.00						
M-V	0.3236	-18.5	-18.5	0.76 (1)	10.00						
V-L	0.3236	-18.5	-18.5	0.51 (1)	10.00						
L-K	0.0	-18.5	-18.5	0.51 (1)	10.00						

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	17-11.4	-122	-122	---	FRONT	VERT	TOTAL	---	C1
M	17-11.4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
N	15-11.4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
R	13-11.4	-122	-122	---	FRONT	VERT	TOTAL	---	C1
S	15-11.4	-122	-122	---	FRONT	VERT	TOTAL	---	C1
T	13-1.8	-1155	-1155	---	FRONT	VERT	TOTAL	---	C1
U	13-11.4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
V	19-0.4	-1056	-1056	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 25.6 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.53/1.00 (H-I:1), BC=0.76/1.00 (M-O:1), WB=0.45/1.00 (C-O:1), SSI=0.46/1.00 (L-M: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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (Q) INPUT = 0.90
JSI METAL = 0.86 (M) INPUT = 1.00

ROYAL PINE HOMES
BUILDING DIVISION

03/08/2022

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Per: joshua.nabua

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Structural component only
DWG# T-2022238

JOB NAME 406781	TRUSS NAME T1Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:37 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	
C	TTWW+m	MT20	6.0	9.0	Edge	1.75
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW+m	MT20	6.0	9.0	Edge	1.75
I	TMVW-p	MT20	5.0	8.0	Edge	
K	BMV1+p	MT20	3.0	6.0		
L	BMWW-i	MT20	5.0	6.0		
M	BMWWW-i	MT20	5.0	8.0	2.50	2.25
N	BS-t	MT20	5.0	8.0		
O	BMWWW-i	MT20	5.0	8.0	2.50	3.25
P	BMWW-i	MT20	5.0	6.0		
Q	BMV1+p	MT20	3.0	6.0		

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



Structural component only
DWG# T-2022238 *mn*

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

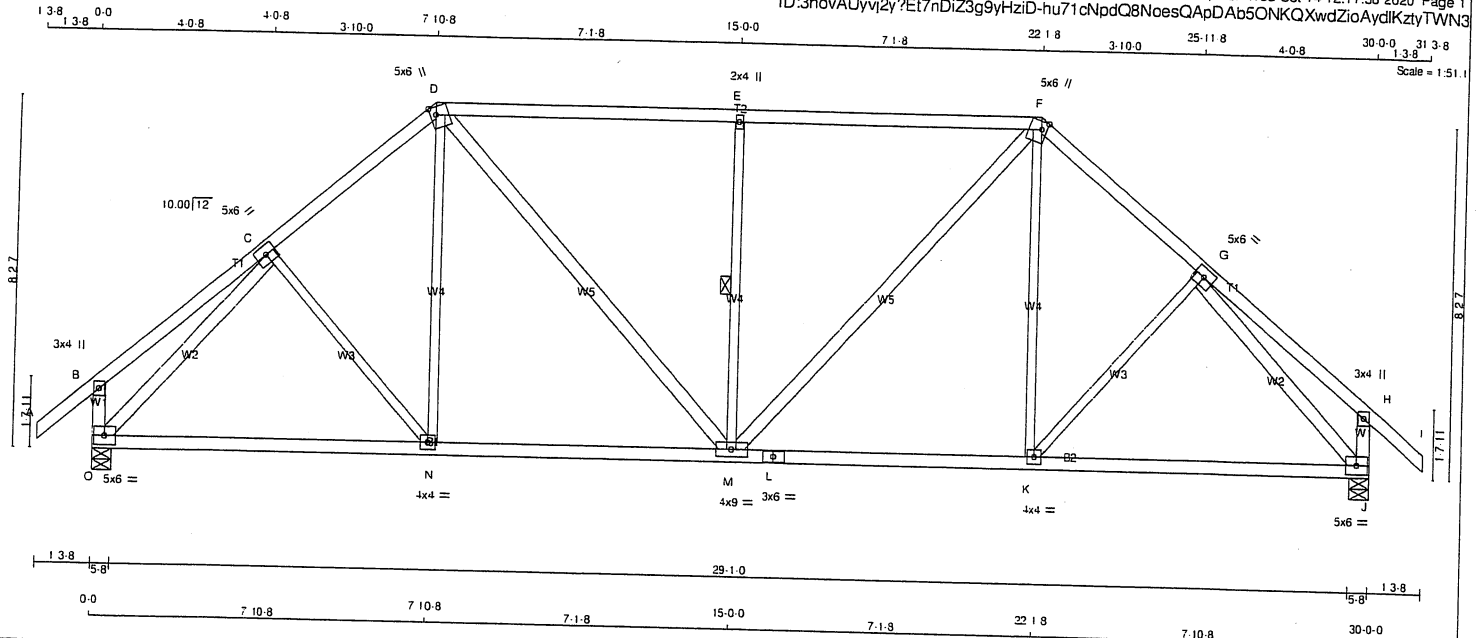
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Per: joshua.nabua

JOB NAME 406781	TRUSS NAME T2	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

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LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	SPF	SPF
A - D	2x4	DRY	No.2	SPF	SPF
D - F	2x4	DRY	No.2	SPF	SPF
F - I	2x4	DRY	No.2	SPF	SPF
O - B	2x4	DRY	No.2	SPF	SPF
J - H	2x4	DRY	No.2	SPF	SPF
O - L	2x4	DRY	No.2	SPF	SPF
L - J	2x4	DRY	No.2	SPF	SPF

ALL WEBS EXCEPT				DESCR.	
C - N	2x3	DRY	No.2	SPF	SPF
N - D	2x3	DRY	No.2	SPF	SPF
M - E	2x3	DRY	No.2	SPF	SPF
K - F	2x3	DRY	No.2	SPF	SPF
K - G	2x3	DRY	No.2	SPF	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	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	TTWW+m	MT20	5.0	6.0	2.25 1.50
G	TMWW-t	MT20	5.0	6.0	
H	TMV+p	MT20	3.0	4.0	
J	BMVW-t	MT20	5.0	6.0	
K	BMWW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMWW-t	MT20	4.0	9.0	
N	BMWW-t	MT20	4.0	4.0	
O	BMVW-t	MT20	5.0	6.0	

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	JT	VERT	HORZ	IN-SX	IN-SX
O	1781	0	1781	0	0	5-8	5-8
J	1781	0	1781	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX. MIN. COMPONENT REACTIONS		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	COMBINED	SNOW	LIVE	PERM. LIVE
O	1257	838 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0	1257	838 / 0	0 / 0	0 / 0
J	1257	838 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0	1257	838 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.27 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-M.

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		FACTORED		MAX. FACTORED		WEBS		FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. CSI (LC)	MAX. UNBRAC LENGTH
FR-TO						FR-TO					
A-B	0 / 41	-91.8	-91.8	0.13 (1)	10.00	C-N	-26	40	0.02 (1)		
B-C	0 / 26	-91.8	-91.8	0.22 (1)	10.00	N-D	0	181	0.05 (4)		
C-D	-1632 / 0	-91.8	-91.8	0.21 (1)	5.00	D-M	0	617	0.10 (1)		
D-E	-1646 / 0	-91.8	-91.8	0.66 (1)	4.27	M-E	-804	0	0.34 (1)		
E-F	-1646 / 0	-91.8	-91.8	0.66 (1)	4.27	M-F	0	617	0.10 (1)		
F-G	-1632 / 0	-91.8	-91.8	0.21 (1)	5.00	K-F	0	181	0.05 (4)		
G-H	0 / 26	-91.8	-91.8	0.22 (1)	10.00	K-G	-26	40	0.02 (1)		
H-I	0 / 41	-91.8	-91.8	0.13 (1)	10.00	O-C	-1918	0	0.84 (1)		
O-B	-265 / 0	0.0	0.0	0.03 (1)	7.81	G-J	-1918	0	0.84 (1)		
J-H	-265 / 0	0.0	0.0	0.03 (1)	7.81						
O-N	0 / 1247	-18.5	-18.5	0.37 (4)	10.00						
N-M	0 / 1233	-18.5	-18.5	0.38 (4)	10.00						
M-L	0 / 1233	-18.5	-18.5	0.38 (4)	10.00						
L-K	0 / 1233	-18.5	-18.5	0.38 (4)	10.00						
K-J	0 / 1247	-18.5	-18.5	0.37 (4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.00")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.00")
CALCULATED VERT. DEFL.(TL)= L/999 (0.14")

CSI: TC=0.66/1.00 (D-E:1), BC=0.38/1.00 (M-N:4), WB=0.84/1.00 (G-J:1), SS=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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.86 (G) INPUT=0.90
JSI METAL=0.47 (C) INPUT=1.00

ROYAL PINE HOMES BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

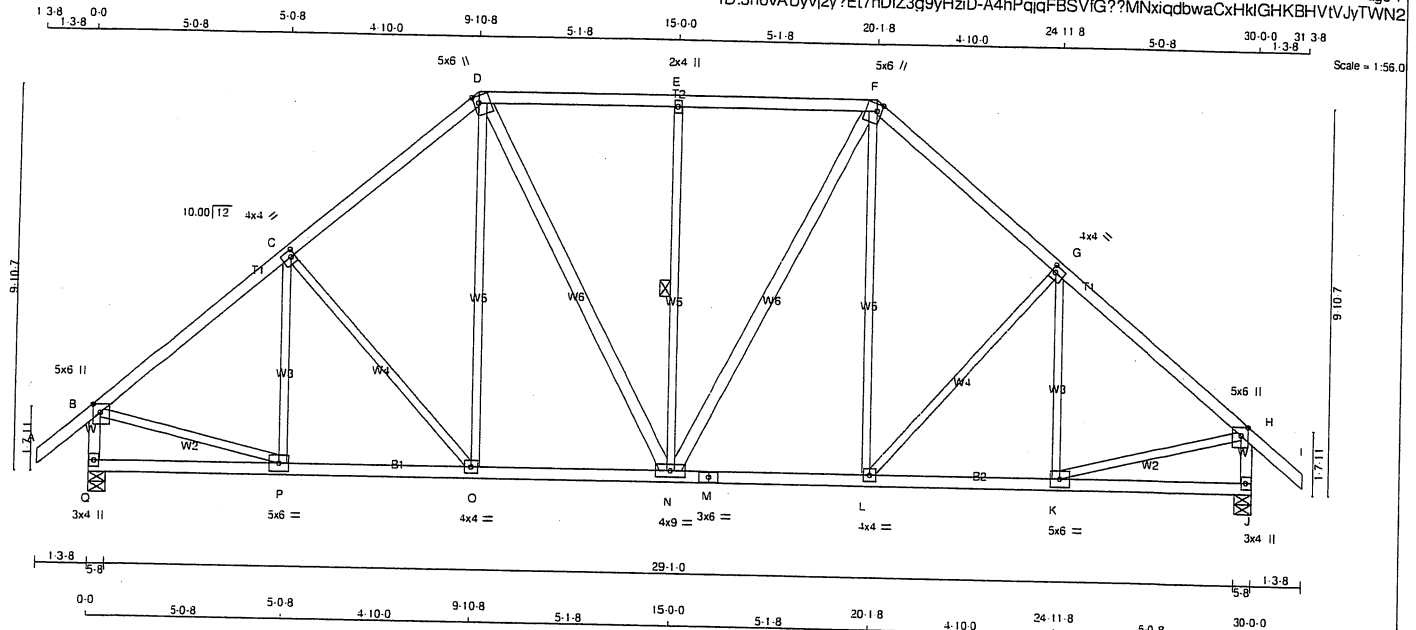


Structural component only
DWG# T-2022239

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406781	T3	3	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:39 2020 Page 1
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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 - I	2x4	DRY	No.2	SPF	
Q - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
Q - M	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
D - N	2x4	DRY	No.2	SPF	
N - F	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	RECORD BRG
	VERT	HORZ	DOWN	HORZ		
Q	1781	0	1781	0	5-8	5-8
J	1781	0	1781	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
Q	1257	838 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0
J	1257	838 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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-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: (4)

MEMB.	C H O R D S		W E B S	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	0 / 41	-91.8	-91.8 0.13 (1)	10.00
B-C	-1678 / 0	-91.8	-91.8 0.34 (1)	4.80
C-D	-1533 / 0	-91.8	-91.8 0.32 (1)	4.98
D-E	-1329 / 0	-91.8	-91.8 0.33 (1)	5.24
E-F	-1329 / 0	-91.8	-91.8 0.33 (1)	5.24
F-G	-1533 / 0	-91.8	-91.8 0.32 (1)	4.98
G-H	-1678 / 0	-91.8	-91.8 0.34 (1)	4.80
H-I	0 / 41	-91.8	-91.8 0.13 (1)	10.00
O-B	-1741 / 0	0.0	0.0 0.19 (1)	6.32
J-H	-1741 / 0	0.0	0.0 0.19 (1)	6.32
Q-P	0 / 0	-18.5	-18.5 0.10 (4)	10.00
P-O	0 / 1315	-18.5	-18.5 0.26 (1)	10.00
O-N	0 / 1151	-18.5	-18.5 0.24 (1)	10.00
N-M	0 / 1151	-18.5	-18.5 0.24 (1)	10.00
M-L	0 / 1151	-18.5	-18.5 0.24 (1)	10.00
L-K	0 / 1315	-18.5	-18.5 0.26 (1)	10.00
K-J	0 / 0	-18.5	-18.5 0.10 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.34/1.00 (B-C:1), BC=0.26/1.00 (O-P:1), WB=0.38/1.00 (E-N: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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.82 (B) (INPUT=0.90)
JSI METAL=0.33 (P) (INPUT=1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

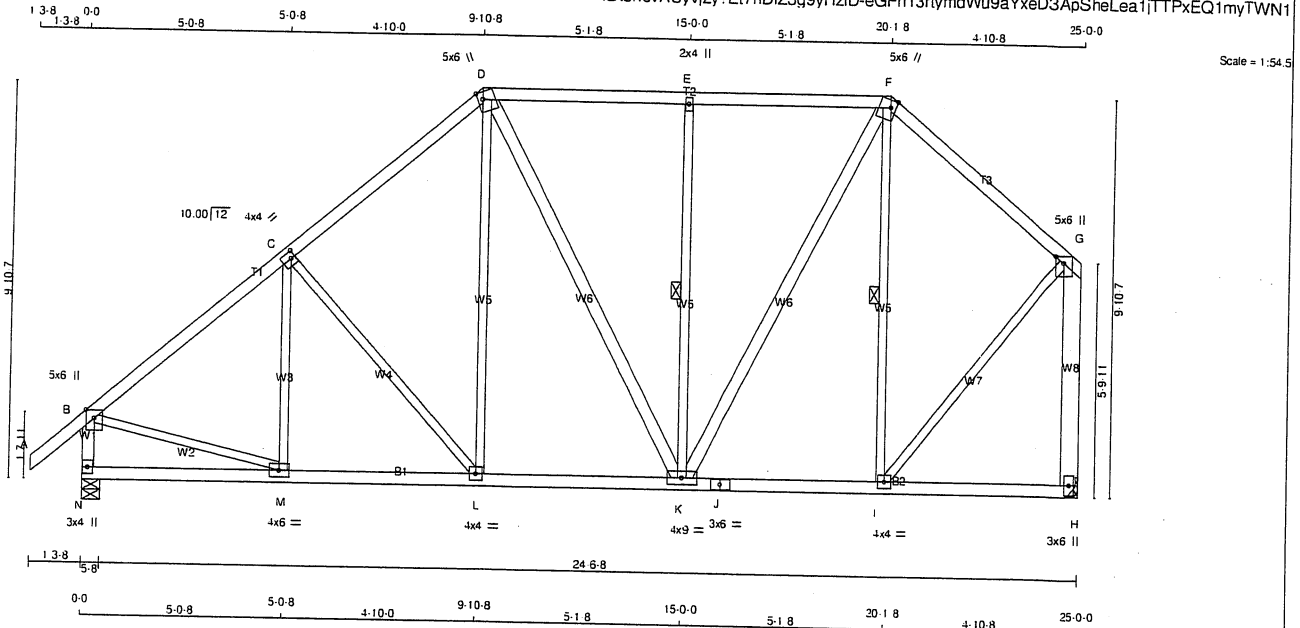


Structural component only
DWG# T-2022240

JOB NAME 406781	TRUSS NAME T3A	QUANTITY 8	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 8 X 142 = 1137 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - G	2x4	DRY	No.2
N - B	2x4	DRY	No.2
H - G	2x6	DRY	No.2
N - J	2x4	DRY	No.2
J - H	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
D - K	2x4	DRY	No.2
K - F	2x4	DRY	No.2

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	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTVW+m	MT20	5.0	6.0	2.25	1.50
E	TMVW+m	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	6.0	2.25	1.50
G	TMVW+p	MT20	5.0	6.0	2.00	2.25
H	BMV1+p	MT20	3.0	6.0		
I	BMVW-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	6.0		
K	BMVW-t	MT20	4.0	9.0		
L	BMVW-t	MT20	4.0	4.0		
M	BMVW-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
N	1505	0	1505	0	5-8	5-8
H	1378	0	1378	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	1062	710 / 0	0 / 0	0 / 0	0 0	352 / 0	0 0
H	975	640 / 0	0 / 0	0 / 0	0 0	335 / 0	0 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.24 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-K, 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0.41	-91.8	-91.8 0.13 (1)	M-C	-175.22	0.09 (1)	
B-C	-1350.0	-91.8	-91.8 0.32 (1)	C-L	-301.0	0.32 (1)	
C-D	-1161.0	-91.8	-91.8 0.31 (1)	L-D	0.317	0.07 (1)	
D-E	-896.0	-91.8	-91.8 0.31 (1)	D-K	0.65	0.01 (1)	
E-F	-896.0	-91.8	-91.8 0.31 (1)	K-E	-575.0	0.38 (1)	
F-G	-754.0	-91.8	-91.8 0.29 (1)	K-F	0.687	0.11 (1)	
N-B	-1466.0	0.0	0.0 0.16 (1)	I-F	-528.0	0.35 (1)	
H-G	-1342.0	0.0	0.0 0.62 (1)	B-M	0.1098	0.25 (1)	
				I-G	0.858	0.19 (1)	
N-M	0.0	-18.5	-18.5 0.11 (4)				
M-L	0.1063	-18.5	-18.5 0.22 (1)				
L-K	0.866	-18.5	-18.5 0.19 (1)				
K-J	0.572	-18.5	-18.5 0.16 (4)				
J-I	0.572	-18.5	-18.5 0.16 (4)				
I-H	0.0	-18.5	-18.5 0.11 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	39.0	PSF	

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.62/1.00 (G-H:1), BC=0.22/1.00 (L-M:1), WB=0.38/1.00 (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

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PL)
MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.90 (I) INPUT=0.90
JSI METAL=0.53 (B) INPUT=1.00

DIAMOND HILL
BUILDING DIVISION

03/08/2022

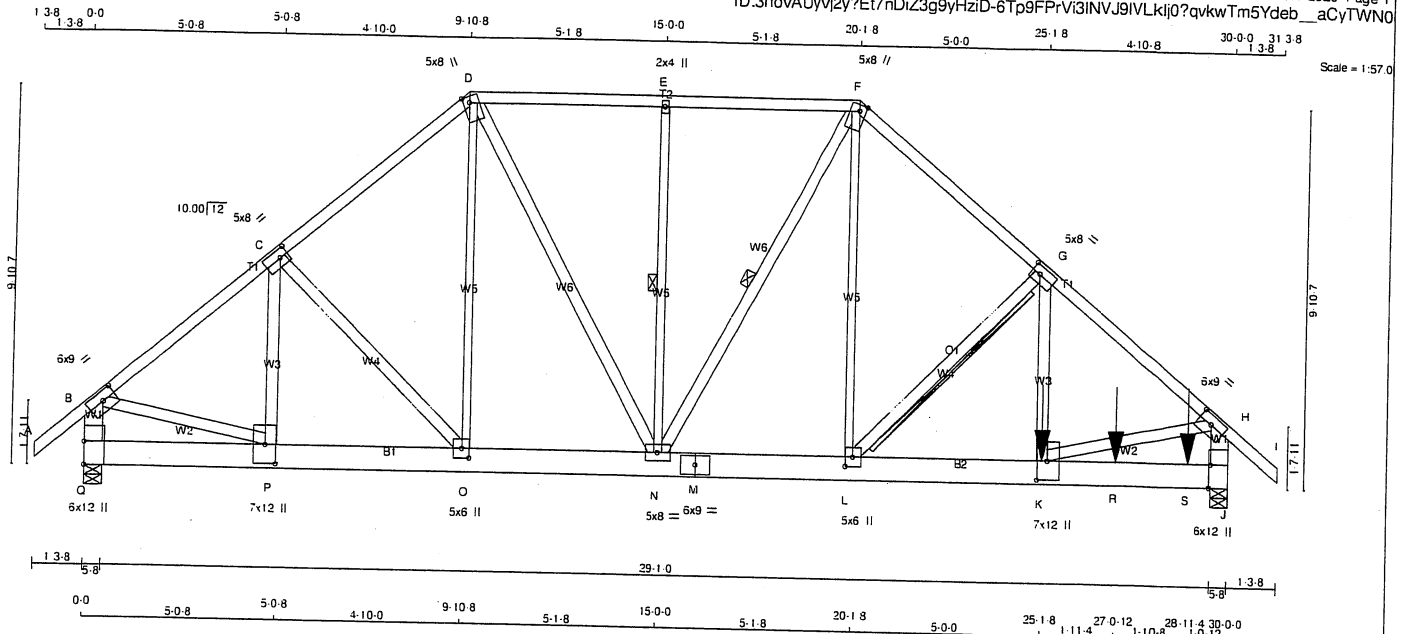
RECEIVED

Per: joshua.nabua



Structural component only
DWG# T-2022241

JOB NAME 406781	TRUSS NAME T4	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER	N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS				
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
Q - B	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
Q - M	2x8	DRY	No.2	SPF
M - J	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
O - D	2x3	DRY	No.2	SPF
N - E	2x3	DRY	No.2	SPF
L - F	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 - D	1	12
D - F	1	12
F - I	1	12
Q - B	2	12
J - H	2	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q - M	2	12
M - J	2	12
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6
G - K	2	3
2x4	2	3
O - C	1	6
N - D	1	6
N - F	1	6
L - G	1	6
P - B	1	6
K - H	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD BRG
JT	VERT	HORZ	DOWN	UP
Q	2979	0	2979	0
J	8691	0	8691	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	2102	1406.0	0.0	0.0	0.0	697.0	0.0
J	6128	4124.0	0.0	0.0	0.0	2003.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.87 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-N, F-N.
2x6 DRY SPF No.2 T-BRACE AT G-L

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)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-TO		FROM TO		FR-TO		
A-B	0.41	-91.8 -91.8 0.07 (1)	10.00	P-C	-536.0	0.09 (1)
B-C	-3150.0	-91.8 -91.8 0.28 (1)	4.96	C-O	-27.0	0.01 (1)
C-D	-3201.0	-91.8 -91.8 0.29 (1)	4.93	O-D	0.119	0.02 (4)
D-E	-3271.0	-91.8 -91.8 0.28 (1)	4.86	D-N	0.1759	0.16 (1)
E-F	-3271.0	-91.8 -91.8 0.28 (1)	4.86	N-E	-553.0	0.17 (1)
F-G	-4822.0	-91.8 -91.8 0.33 (1)	4.16	N-F	-926.0	0.28 (1)
G-H	-9228.0	-91.8 -91.8 0.71 (1)	2.87	L-F	0.3512	0.43 (1)
H-I	0.41	-91.8 -91.8 0.07 (1)	10.00	L-G	-4909.0	0.45 (1)
Q-B	-2912.0	0.0 0.0 0.11 (1)	7.81	K-G	0.5813	0.51 (1)
J-H	-7908.0	0.0 0.0 0.29 (1)	5.34	B-P	0.2514	0.22 (1)
				K-H	0.7305	0.65 (1)
Q-P	0.0	-18.5 -18.5 0.03 (1)	10.00			
P-O	0.2447	-18.5 -18.5 0.16 (1)	10.00			
O-N	0.2429	-18.5 -18.5 0.17 (1)	10.00			
N-M	0.3714	-18.5 -18.5 0.24 (1)	10.00			
M-L	0.3714	-18.5 -18.5 0.24 (1)	10.00			
L-K	0.7111	-18.5 -18.5 0.42 (1)	10.00			
K-R	0.0	-18.5 -18.5 0.50 (1)	10.00			
R-S	0.0	-18.5 -18.5 0.50 (1)	10.00			
S-J	0.0	-18.5 -18.5 0.50 (1)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	25-1.8	-4491	-4491	---	FRONT	VERT	TOTAL	---	C1
R	27-0.12	-1151	-1151	---	FRONT	VERT	TOTAL	---	C1
S	28-11.4	-73	-73	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD = 39.0 PSF				

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.71/1.00 (G-H:1), BC=0.50/1.00 (J-K:1), WB=0.65/1.00 (H-K:1), SSI=0.31/1.00 (J-K: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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
618	354	1667	788
1987	1656		

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP = 0.90 (C) (INPUT = 0.90)
SI METAL = 0.92 (K) (INPUT = 1.00)

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CONTINUED ON PAGE 2



Structural component only
DWG# T-2022242

JOB NAME 406781 Tamarack Roof Truss, Burlington	TRUSS NAME T4	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:41 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.75	4.25
C	TMVW-t	MT20	5.0	8.0	2.50	2.75
D	TTWW+m	MT20	5.0	8.0	2.00	2.00
E	TMVW+m	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	8.0	2.00	2.00
G	TMVW-t	MT20	5.0	8.0	2.50	2.75
H	TMVW-t	MT20	6.0	9.0	2.75	4.25
J	BMV1-t	MT20	6.0	12.0	Edge	0.50
K	BMVW-t	MT20	7.0	12.0	6.00	3.25
L	BMVW-t	MT20	5.0	6.0	3.00	2.25
M	BS-t	MT20	6.0	9.0		
N	BMVW-t	MT20	5.0	8.0		
O	BMVW-t	MT20	5.0	6.0	3.00	2.25
P	BMVW-t	MT20	7.0	12.0	6.00	3.25
Q	BMV1-t	MT20	6.0	12.0	7.25	

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

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022242 2/2

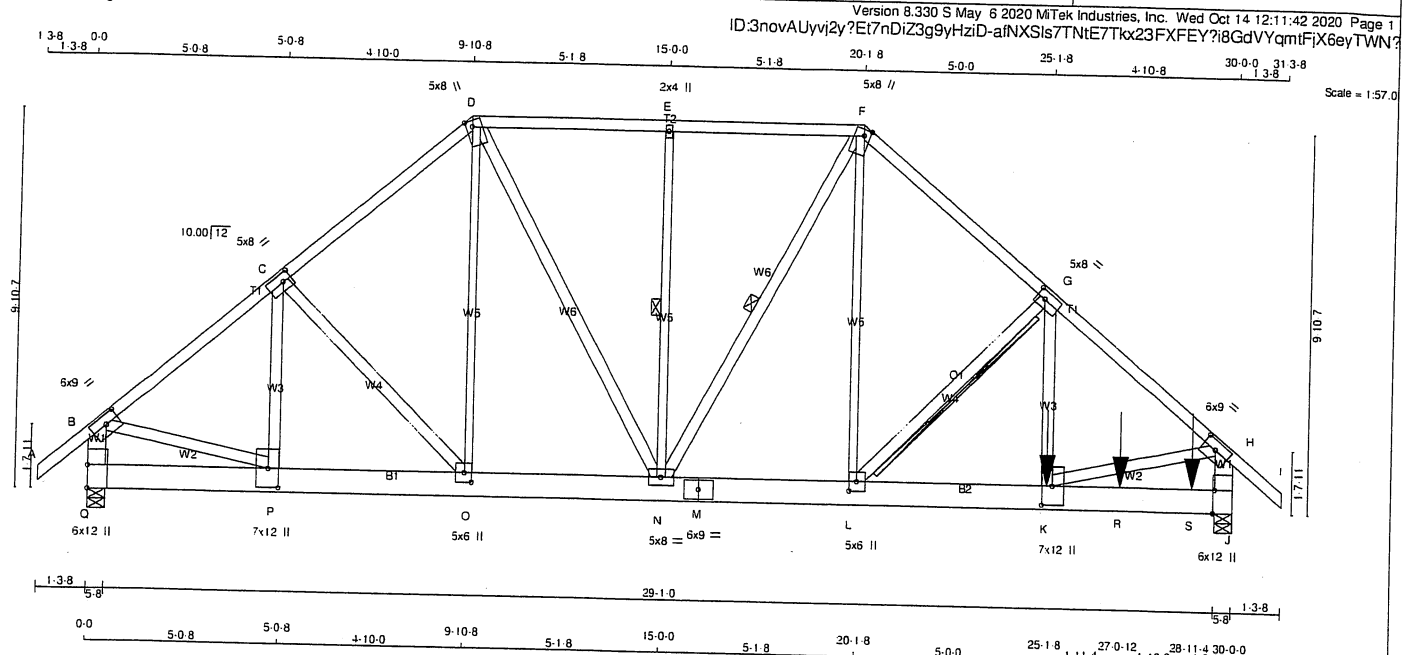
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BUILDING DIVISION

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JOB NAME 406781	TRUSS NAME T4Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
Q - B	2x6	DRY	No.2
J - H	2x6	DRY	No.2
Q - M	2x8	DRY	No.2
M - J	2x8	DRY	No.2
ALL WEBS EXCEPT	2x4	DRY	No.2
O - D	2x3	DRY	No.2
N - E	2x3	DRY	No.2
L - F	2x3	DRY	No.2

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	12	TOP
D-F	12	TOP
F-I	12	TOP
Q-B	2	TOP
J-H	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q-M	2	TOP
M-J	2	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	SIDE(183.1)
G-K	2	SIDE(146.3)
2x4	2	
O-C	6	
N-D	6	
N-F	6	
L-G	6	
P-B	6	
K-H	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
Q	2974	0	2974	0	5-8	5-8	5-8
J	8661	0	8661	0	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
Q	2098	1403 / 0	0 / 0	695	0 / 0
J	6106	4111 / 0	0 / 0	1996	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.87 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-N, F-N.
2x6 DRY SPF No.2 T-BRACE AT G-L

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		WEBS	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 41	P-C	-534 / 0
B-C	-3144 / 0	C-O	-28 / 0
C-D	-3193 / 0	O-D	0 / 120
D-E	-3262 / 0	D-N	0 / 1753
E-F	-3262 / 0	N-E	-553 / 0
F-G	-4807 / 0	N-F	-919 / 0
G-H	-9196 / 0	L-F	0 / 3496
H-I	0 / 41	L-G	-4892 / 0
Q-B	-2907 / 0	K-G	0 / 5791
J-H	-7882 / 0	B-P	0 / 2509
		K-H	0 / 7280
Q-P	0 / 0		
P-O	0 / 2442		
O-N	0 / 2423		
N-M	0 / 3702		
M-L	0 / 3702		
L-K	0 / 7086		
K-R	0 / 0		
R-S	0 / 0		
S-J	0 / 0		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
K	25-1-8	-4457	-4457	---	BACK	VERT	TOTAL	C1
R	27-0-12	-1172	-1172	---	BACK	VERT	TOTAL	C1
S	28-11-4	-61	-61	---	BACK	VERT	TOTAL	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.71/1.00 (G-H:1), BC=0.50/1.00 (J-K:1), WB=0.64/1.00 (H-K:1), SSI=0.31/1.00 (J-K: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)	SHEAR	SECTION (PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (C) (INPUT = 0.90)

JSI METAL = 0.91 (K) (INPUT = 1.00)

DIAMOND HILL BUILDING DIVISION
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CONTINUED ON PAGE 2



Structural component only
DWG# T-2022243

JOB NAME 406781	TRUSS NAME T4Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 MTek Industries, Inc. Wed Oct 14 12:11:42 2020 Page 2 ID:3novAUyvi2y?Et7nDiZ3q9yHzID-afNXSIs7TNtE7Tkx23FXFEY?i8GdVYqmIFIX6eyTWN?	

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.75	4.25
C	TMVW-t	MT20	5.0	8.0	2.50	2.75
D	TTWW+m	MT20	5.0	8.0	2.00	2.00
E	TMVW-t	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	8.0	2.00	2.00
G	TMVW-t	MT20	5.0	8.0	2.50	2.75
H	TMVW-t	MT20	6.0	9.0	2.75	4.25
J	BMV1-t	MT20	6.0	12.0	Edge	0.50
K	BMVW+t	MT20	7.0	12.0	6.00	3.25
L	BMVW+t	MT20	5.0	6.0	3.00	2.25
M	BS-t	MT20	6.0	9.0		
N	BMVW+t	MT20	5.0	8.0		
O	BMVW+t	MT20	5.0	6.0	3.00	2.25
P	BMVW+t	MT20	7.0	12.0	6.00	3.25
Q	BMV1-t	MT20	6.0	12.0	7.25	

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

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022243 1/2

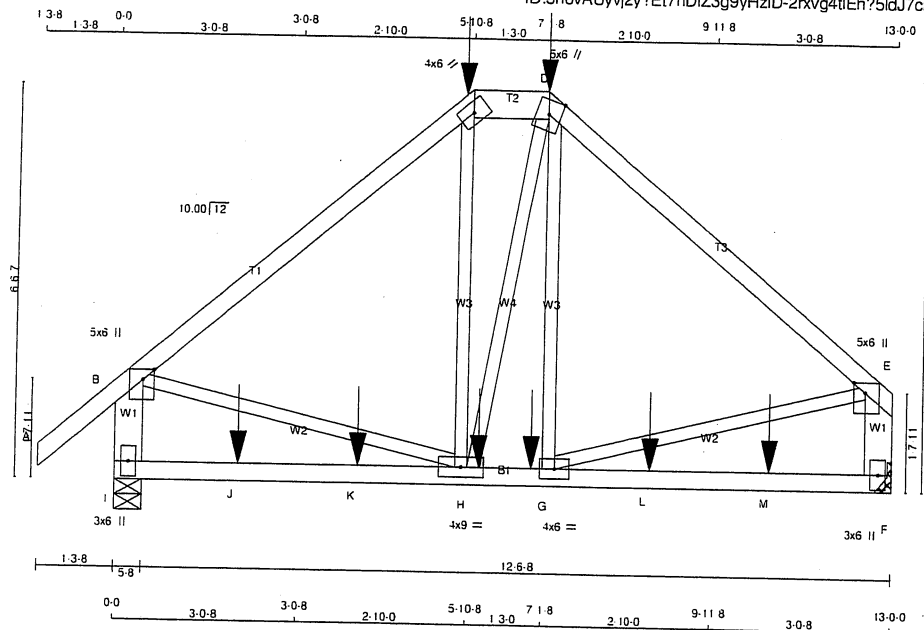
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BUILDING DIVISION

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JOB NAME 406781	TRUSS NAME T5	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2		SPF
C - D	2x6	DRY	No.2		SPF
D - E	2x4	DRY	No.2		SPF
E - F	2x6	DRY	No.2		SPF
F - G	2x4	DRY	No.2		SPF

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.25	
C	TTW-h	MT20	4.0	6.0			
D	TTWW+m	MT20	5.0	6.0	Edge		
E	TMVW+p	MT20	5.0	6.0	2.00	2.25	
F	BMV1+p	MT20	3.0	6.0			
G	BMVW-t	MT20	4.0	6.0			
H	BMVW-t	MT20	4.0	9.0			
I	BMV1+p	MT20	3.0	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

FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	UP/LIFT	IN-SX
I 1494	0	1494	0
F 1368	0	1368	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	1055	703.0	0.0	0.0	0.0	352.0	0.0
F	968	632.0	0.0	0.0	0.0	336.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.63 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				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX (LC)
FR-TO		FROM TO			FR-TO		
A-B	0.41	-91.8	-91.8 0.14 (1)	10.00	H-C	-61 105	0.04 (1)
B-C	-1267.0	-91.8	-91.8 0.74 (1)	4.63	H-D	0 8	0.00 (4)
C-D	-975.0	-91.8	-91.8 0.02 (1)	6.25	G-D	-65.97	0.04 (1)
D-E	-1265.0	-91.8	-91.8 0.74 (1)	4.63	B-H	0 999	0.25 (1)
E-F	-1423.0	0.0	0.0 0.11 (1)	7.81	G-E	0 998	0.25 (1)
F-E	-1298.0	0.0	0.0 0.10 (1)	7.81			
I-J	0.0	-18.5	-18.5 0.29 (4)	10.00			
J-K	0.0	-18.5	-18.5 0.29 (4)	10.00			
K-H	0.0	-18.5	-18.5 0.29 (4)	10.00			
H-G	0.975	-18.5	-18.5 0.37 (4)	10.00			
G-L	0.0	-18.5	-18.5 0.27 (4)	10.00			
L-M	0.0	-18.5	-18.5 0.27 (4)	10.00			
M-F	0.0	-18.5	-18.5 0.27 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-375	-375	---	FRONT	VERT	TOTAL	---	C1
D	7-1-8	-375	-375	---	FRONT	VERT	TOTAL	---	C1
G	6-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
H	6-0-12	-29	-29	---	FRONT	VERT	TOTAL	---	C1
J	2-0-12	-29	-29	---	FRONT	VERT	TOTAL	---	C1
K	4-0-12	-29	-29	---	FRONT	VERT	TOTAL	---	C1
L	8-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
M	10-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 65 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 25.6	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.43")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.74/1.00 (B-C:1), BC=0.37/1.00 (G-H:4), WB=0.25/1.00 (B-H:1), SS=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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR	SECTION
(PSI)	(PLI)
MAX MIN	MAX MIN
MT20 618 354	1667 1586

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.82 (B) INPUT = 0.90
JSI METAL = 0.26 (B) INPUT = 1.00

DIAMOND HILL
BUILDING DIVISION

03/08/2022

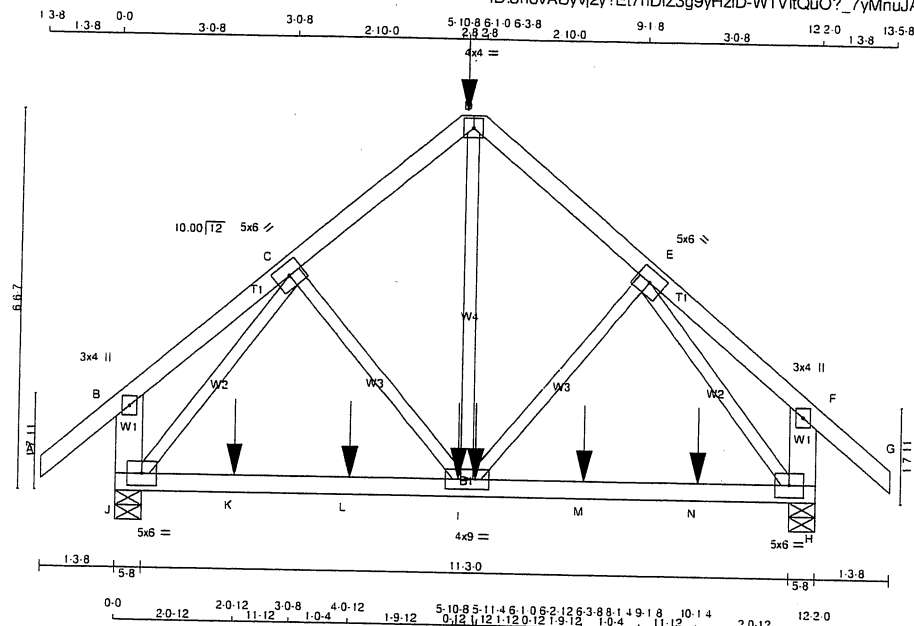
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Per: joshua.nabua



Structural component only
DWG# T-2022244

JOB NAME 406781	TRUSS NAME T6	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



Scale = 1:37.7

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - D	2x4 DRY	No.2
D - G	2x4 DRY	No.2
J - B	2x6 DRY	No.2
H - F	2x6 DRY	No.2
J - H	2x4 DRY	No.2

ALL WEBS 2x3 DRY SEASONED LUMBER.

DESCR.
SPF
SPF
SPF
SPF
SPF

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UP/LIFT
J	1450	0	1450	0
H	1450	0	1450	0

UNFACTORED REACTIONS

1ST CASE	MAX. MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
J	1025	677	0	0	0	347	0	0
H	1025	677	0	0	0	347	0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.58 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0.41	-91.8	-91.8 0.14 (1)	I-D	0.262	0.10 (4)	
B-C	0.19	-91.8	-91.8 0.13 (1)	C-I	0.54	0.02 (4)	
C-D	-1230.0	-91.8	-91.8 0.16 (1)	J-C	-1461.0	0.52 (1)	
D-E	-1230.0	-91.8	-91.8 0.16 (1)	I-E	0.54	0.02 (4)	
E-F	0.19	-91.8	-91.8 0.13 (1)	E-H	-1461.0	0.52 (1)	
F-G	0.41	-91.8	-91.8 0.14 (1)				
J-B	-230.0	0.0	0.0 0.02 (1)				
H-F	-230.0	0.0	0.0 0.02 (1)				
J-K	0.898	-18.5	-18.5 0.47 (4)				
K-L	0.898	-18.5	-18.5 0.47 (4)				
L-I	0.898	-18.5	-18.5 0.47 (4)				
I-M	0.898	-18.5	-18.5 0.47 (4)				
M-N	0.898	-18.5	-18.5 0.47 (4)				
N-H	0.898	-18.5	-18.5 0.47 (4)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
D	6-10	-754	-754	---	BACK	VERT	TOTAL	---	C1
I	5-11.4	-29	-29	---	BACK	VERT	TOTAL	---	C1
I	6-2-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
K	2-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
L	4-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
M	8-1-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
N	10-1-4	-29	-29	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 60 = 120 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 25.6 PSF
	DL	= 6.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.4 PSF
TOTAL LOAD		= 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.16:1.00 (D-E:1), BC=0.47:1.00 (I-J:4), WB=0.52:1.00 (C-J:1), SSI=0.17:1.00 (I-J:4)

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) SHEAR SECTION	(PSI)	(PLI)	(PLI)
MAX MIN MAX MIN MAX MIN			
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (E) (INPUT = 0.90)
JSI METAL= 0.36 (E) (INPUT = 1.00)



Structural component only
DWG# T-2022245

CITY OF RICHMOND HILL
BUILDING DIVISION

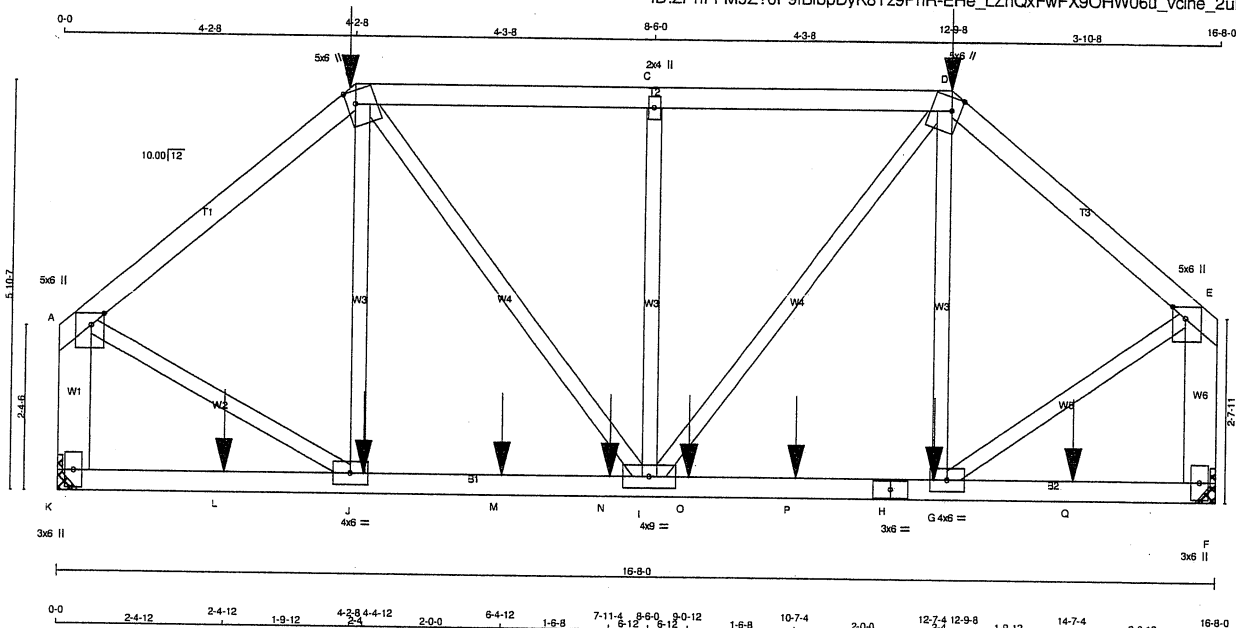
03/08/2022

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Per: joshua.nabua

JOB NAME 406781	TRUSS NAME T7	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon Jun 7 08:44:02 2021 Page 1
ID:ZPnFFM9Z?6P9fBbpDyK8Tz9PnR-EHe_LZhQxwFwX9OHw06_u_vcihe_2uM0Jd0LF7Uz8khh



Scale = 1:31.5

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	SPF
A - B	2x4	DRY	No.2	SPF	
B - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
K - A	2x6	DRY	No.2	SPF	
F - E	2x6	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	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - B	MT20	5.0	6.0	2.00	2.25
B - C	MT20	5.0	6.0	2.25	1.50
C - D	MT20	2.0	4.0		
D - E	MT20	5.0	6.0	2.25	1.50
E - F	MT20	5.0	6.0	2.00	2.25
F - G	MT20	3.0	6.0		
G - H	MT20	4.0	6.0		
H - I	MT20	3.0	6.0		
I - J	MT20	4.0	9.0		
J - K	MT20	4.0	6.0		
K - L	MT20	3.0	6.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT	IN-SX
K	1645	0	1645	0	MECHANICAL
F	1683	0	1683	0	MECHANICAL

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

UNFACTORED REACTIONS

1ST LCASE	COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
JT							
K	1157	793 / 0	0 / 0	0 / 0	0 / 0	365 / 0	0 / 0
F	1184	812 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.93 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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)
FR-TO		FROM TO	FR-TO
A-B	-1421 / 0	-91.8 -91.8	0.37 (1)
B-C	-1503 / 0	-91.8 -91.8	0.33 (1)
C-D	-1503 / 0	-91.8 -91.8	0.33 (1)
D-E	-1364 / 0	-91.8 -91.8	0.31 (1)
K-A	-1618 / 0	0.0 0.0	0.15 (1)
F-E	-1660 / 0	0.0 0.0	0.17 (1)
K-L	0 / 0	-18.5 -18.5	0.14 (4)
L-J	0 / 0	-18.5 -18.5	0.14 (4)
J-M	0 / 1087	-18.5 -18.5	0.52 (1)
M-N	0 / 1087	-18.5 -18.5	0.52 (1)
N-I	0 / 1087	-18.5 -18.5	0.52 (1)
I-O	0 / 1041	-18.5 -18.5	0.51 (1)
O-P	0 / 1041	-18.5 -18.5	0.51 (1)
P-H	0 / 1041	-18.5 -18.5	0.51 (1)
H-G	0 / 1041	-18.5 -18.5	0.51 (1)
G-Q	0 / 0	-18.5 -18.5	0.14 (1)
Q-F	0 / 0	-18.5 -18.5	0.14 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	4-2-8	-92	-92	---	BACK	VERT	TOTAL	---	C1
D	12-9-8	-102	-102	---	BACK	VERT	TOTAL	---	C1
G	12-7-4	-136	-136	---	BACK	VERT	TOTAL	---	C1
J	4-4-12	-136	-136	---	BACK	VERT	TOTAL	---	C1
L	2-4-12	-15	-15	---	BACK	VERT	TOTAL	---	C1
M	6-4-12	-136	-136	---	BACK	VERT	TOTAL	---	C1
N	7-11-4	-136	-136	---	BACK	VERT	TOTAL	---	C1
O	9-0-12	-136	-136	---	BACK	VERT	TOTAL	---	C1
P	10-7-4	-136	-136	---	BACK	VERT	TOTAL	---	C1
Q	14-7-4	-15	-15	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.37/1.00 (A-B:1), BC=0.52/1.00 (H-J:1), WB=0.30/1.00 (E-G:1), SS=0.29/1.00 (G-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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.77 (A) (INPUT = 0.90)

JSI METAL= 0.30 (H) (INPUT = 1.00)

**CITY OF RICHMOND HILL
BUILDING DIVISION**

03/08/2022

RECEIVED

Per: joshua.nabua

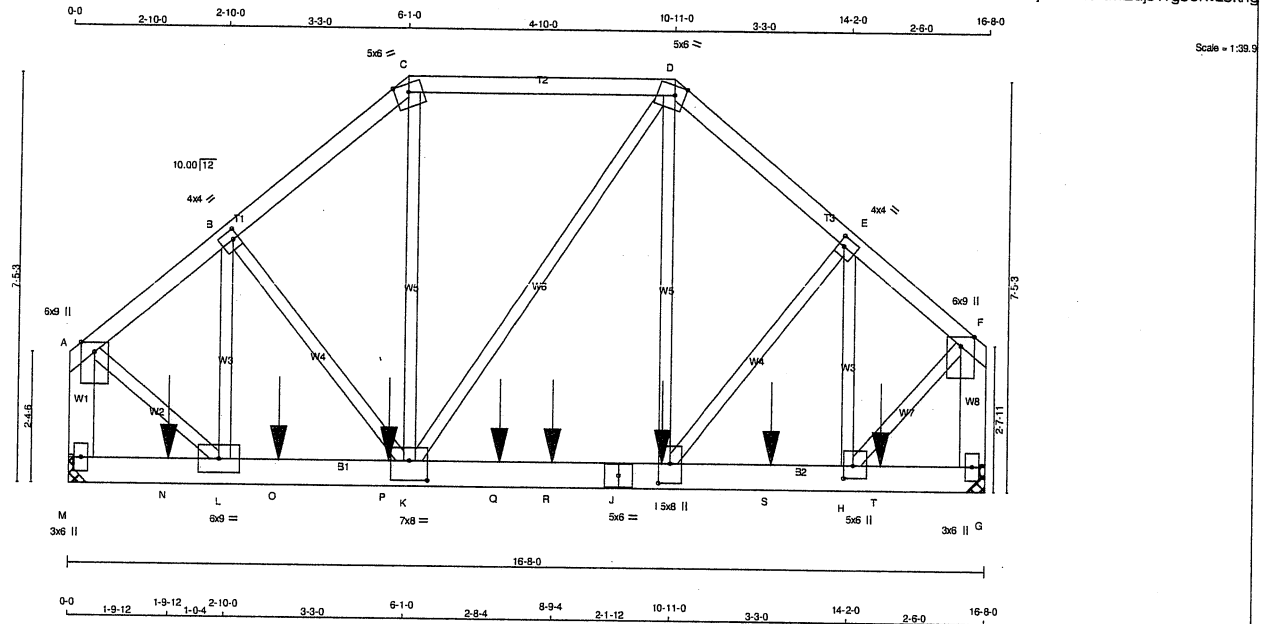


Structural component only
DWG# T-2117980

JOB NAME 406781	TRUSS NAME T8	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	DRY	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	2x6	DRY	No.2	SPF		
G - F	2x6	DRY	No.2	SPF		
M - J	2x6	DRY	2100F 1.8E	SPF		
J - G	2x6	DRY	2100F 1.8E	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	12	TOP
C - D	12	TOP
D - F	12	TOP
M - A	12	TOP
G - F	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
M - J	12	SIDE(0.1)
J - G	12	SIDE(197.8)
WEBS : (0.122"x3") SPIRAL NAILS		
I - D	6	SIDE(157.0)
2x3	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 TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

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	UPLIFT
M	6381	0	6381	0
G	6334	0	6334	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT M, G. MINIMUM BEARING LENGTH AT JOINT M = 4'-0, JOINT G = 4'-0.

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL
M	4506 2996 / 0 0 / 0 0 / 0 1510 / 0 0 / 0
G	4472 2974 / 0 0 / 0 0 / 0 1499 / 0 0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.07 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	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. CS1 (LC)	MAX. UNBRACED LENGTH FR-TO	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. CS1 (LC)
FR-TO							
A-B	-5020 / 0	-91.8	-91.8	0.14 (1)	4.22	K-C	0 / 3072
B-C	-5338 / 0	-91.8	-91.8	0.19 (1)	4.07	K-D	0 / 251
C-D	-4126 / 0	-91.8	-91.8	0.29 (1)	4.42	I-D	0 / 2748
D-E	-5160 / 0	-91.8	-91.8	0.18 (1)	4.14	B-K	0 / 351
E-F	-4529 / 0	-91.8	-91.8	0.11 (1)	4.44	L-B	-795 / 0
M-A	-5985 / 0	0.0	0.0	0.26 (1)	6.04	A-L	0 / 4686
G-F	-6103 / 0	0.0	0.0	0.29 (1)	5.99	I-E	0 / 744
						H-E	-1288 / 0
						H-F	0 / 4665
M-N	0 / 0	-18.5	-18.5	0.14 (1)	10.00		
N-L	0 / 0	-18.5	-18.5	0.14 (1)	10.00		
L-O	0 / 3864	-18.5	-18.5	0.37 (1)	10.00		
O-P	0 / 3864	-18.5	-18.5	0.37 (1)	10.00		
P-K	0 / 3864	-18.5	-18.5	0.37 (1)	10.00		
K-Q	0 / 3985	-18.5	-18.5	0.39 (1)	10.00		
Q-R	0 / 3985	-18.5	-18.5	0.39 (1)	10.00		
R-J	0 / 3985	-18.5	-18.5	0.39 (1)	10.00		
J-I	0 / 3985	-18.5	-18.5	0.39 (1)	10.00		
I-S	0 / 3487	-18.5	-18.5	0.28 (1)	10.00		
S-H	0 / 3487	-18.5	-18.5	0.28 (1)	10.00		
H-T	0 / 0	-18.5	-18.5	0.08 (1)	10.00		
T-G	0 / 0	-18.5	-18.5	0.08 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
I	10-9-4	-960	-960	---	FRONT	VERT	TOTAL	---	C1
N	1-9-12	-960	-960	---	FRONT	VERT	TOTAL	---	C1
O	3-9-12	-960	-960	---	FRONT	VERT	TOTAL	---	C1
P	5-9-12	-960	-960	---	FRONT	VERT	TOTAL	---	C1
Q	7-9-12	-960	-960	---	FRONT	VERT	TOTAL	---	C1
R	8-9-4	-960	-960	---	FRONT	VERT	TOTAL	---	C1
S	12-9-4	-960	-960	---	FRONT	VERT	TOTAL	---	C1
T	14-9-4	-960	-960	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 98 = 196 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.29/1.00 (C-D:1), BC=0.39/1.00 (I-K:1), WB=0.58/1.00 (A-L:1), SSI=0.64/1.00 (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 HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.85 (H) (INPUT = 0.90)
JSI METAL = 0.61 (H) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: Joshua Nabua

CONTINUED ON PAGE 2



Structural component only
DWG# T-2117981 1/2

JOB NAME 406781	TRUSS NAME T8	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	6.0	9.0	Edge	
B	TMWW-t	MT20	4.0	4.0	2.00	1.25
C	TTW-m	MT20	5.0	6.0	Edge	
D	TTWW-m	MT20	5.0	6.0	2.00	2.25
E	TMWW-t	MT20	4.0	4.0	2.00	1.25
F	TMVW+p	MT20	6.0	9.0	Edge	
G	BMV1+p	MT20	3.0	6.0		
H	BMWW-t	MT20	5.0	6.0	2.75	2.00
I	BMWW-t	MT20	5.0	8.0	4.25	2.50
J	BS-t	MT20	5.0	6.0		
K	BMWWW-t	MT20	7.0	8.0	4.25	4.00
L	BMWW-t	MT20	6.0	9.0		
M	BMV1+p	MT20	3.0	6.0		

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



Structural component only
DWG# T-2117981 *20*

CITY OF RICHMOND HILL
BUILDING DIVISION

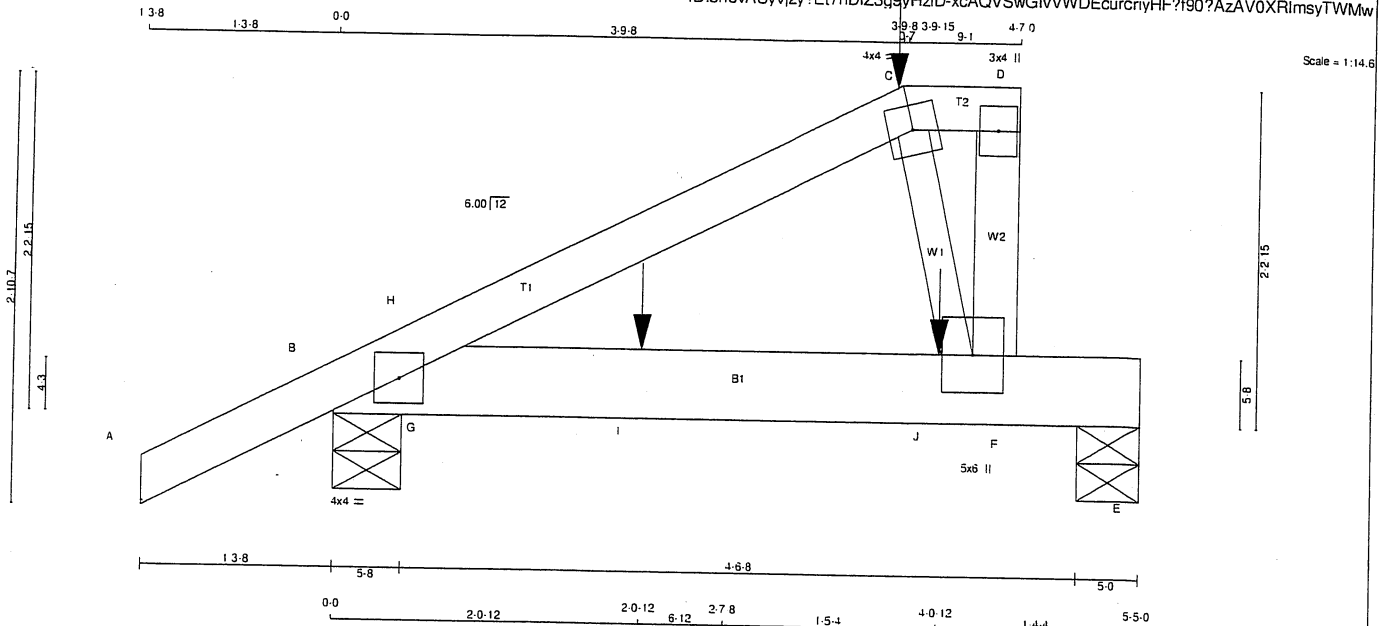
03/08/2022

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Per: joshua.nabua

JOB NAME 406781	TRUSS NAME T9	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington		TRUSS DESC.			

Version 8.330 S May 6 2020 MTEK Industries, Inc. Wed Oct 14 12:11:47 2020 Page 1
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TOTAL WEIGHT = 2 X 20 = 40 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
F - D	2x4	DRY	No.2
B - E	2x6	DRY	No.2
ALL WEBS 2x3 DRY No.2			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	4.0	4.0	
C	TTW-m	MT20	4.0	4.0	
D	TMV+p	MT20	3.0	4.0	
F	BMVW+p	MT20	5.0	6.0	

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

JT	VERT	HORZ	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
			DOWN	UP	DOWN	UP		
B	505	0	505	0	505	0	5-8	5-8
E	491	0	491	0	491	0	5-0	5-0

UNFACTORED REACTIONS

JT	COMBINED	1ST LCASE		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE	PERM. LIVE	WIND			
B	354	249.0	0.0	0.0	0.0	105.0	0.0	0.0
E	346	234.0	0.0	0.0	0.0	112.0	0.0	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.		W E B S	
MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOC1	MAX. MAX. (LC)	MEMB.	MAX. FORCE (LBS)
FR-TO	FROM TO	LENGTH	FR-TO		
A-B	0.28	-91.8 -91.8 0.13 (1)	10.00	C-F	-367.0
B-H	-161.0	-91.8 -91.8 0.04 (4)	6.25	G-H	-157.3
H-C	-153.0	-91.8 -91.8 0.18 (1)	6.25		
C-D	0.0	-91.8 -91.8 0.01 (1)	10.00		
F-D	-35.0	0.0 0.0 0.00 (1)	7.81		
B-G	0.120	-18.5 -18.5 0.15 (1)	10.00		
G-I	0.138	-18.5 -18.5 0.30 (1)	10.00		
I-J	0.138	-18.5 -18.5 0.30 (1)	10.00		
J-F	0.138	-18.5 -18.5 0.30 (1)	10.00		
F-E	0.0	-110.3 -110.3 0.27 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX- MAX+	FACE	DIR.	TYPE	HEEL
C	3-9-15	-158	-158	---	FRONT	VERT	TOTAL
I	2-0-12	-6	-6	---	FRONT	VERT	TOTAL
J	4-0-12	-28	-28	---	FRONT	VERT	TOTAL

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010. NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.18/1.00 (C-H:1) , BC=0.30/1.00 (F-G:1) , WB=0.06/1.00 (C-F:1) , SS=0.33/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

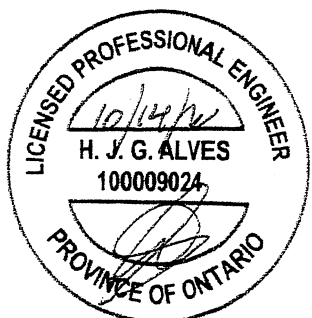
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.21 (B) (INPUT=0.50)
JSI METAL=0.10 (B) (INPUT=1.00)

BUILDING DIVISION

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Per: joshua.nabua

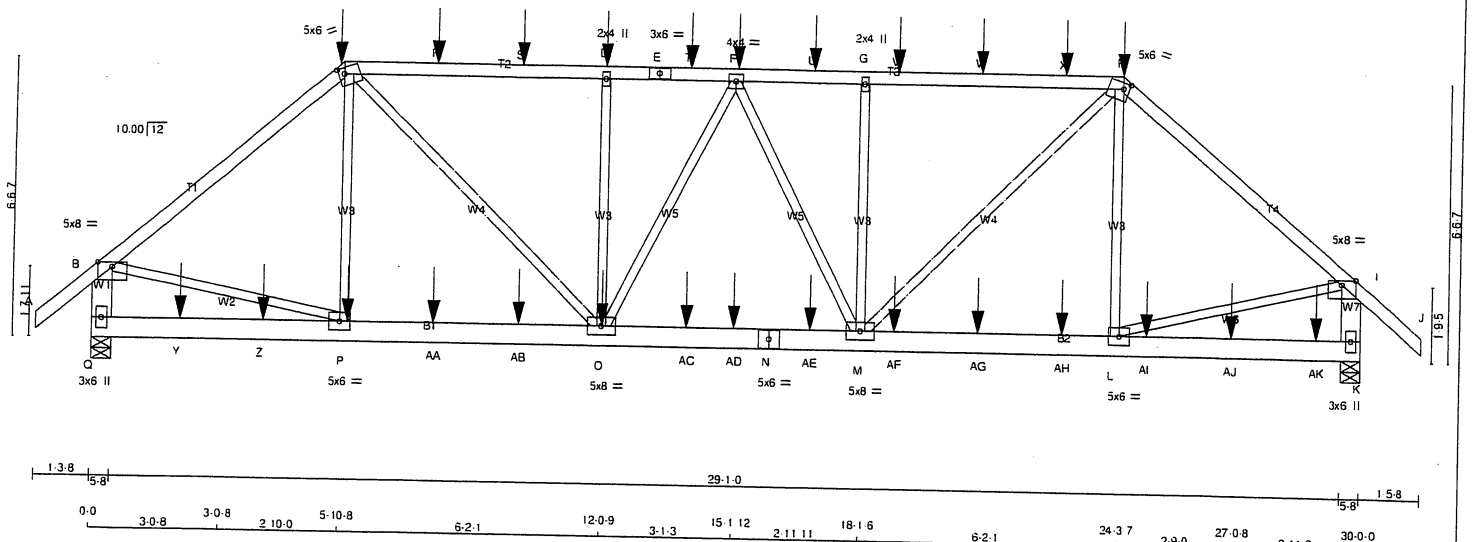


Structural component only
DWG# T-2022248

JOB NAME 406782	TRUSS NAME T30	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MITek Industries, Inc. Wed Oct 14 11:58:02 2020 Page 1
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1:3.8 0-0 3-0.8 3-0.8 2-10-0 5-10-8 8-0-12 3-11-13 12-0-9 3-0-7 15-1-0 15-1-2 12-16-11-4 18-1-6 6-2-1 24-3-7 2-9-0 27-0-8 2-11-8 30-0-0 1-5-8 31-5-8
Scale = 1:51.4



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
Q - B	2x6	DRY	No.2
K - I	2x6	DRY	No.2
Q - N	2x6	DRY	No.2
N - K	2x6	DRY	No.2

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
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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	12	SIDE(61.0)
C - E	12	SIDE(61.0)
E - H	12	SIDE(61.0)
H - J	12	SIDE(61.0)
Q - B	2	TOP
K - I	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q - N	2	SIDE(183.1)
N - K	2	SIDE(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	SIDE(13.8)
P - C	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.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
Q	3320	0	3320	0	5-8	5-8
K	3356	0	3356	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
Q	2346	1548	0	0	0	797	0
K	2372	1561	0	0	0	811	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.93 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)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO				
A-B	0.41	-91.8	-91.8	0.07 (1)
B-C	-3570	-91.8	-91.8	0.47 (1)
C-R	-4176	-91.8	-91.8	0.61 (1)
R-S	-4176	-91.8	-91.8	0.61 (1)
S-D	-4176	-91.8	-91.8	0.61 (1)
D-E	-4176	-91.8	-91.8	0.51 (1)
E-T	-4176	-91.8	-91.8	0.51 (1)
T-F	-4176	-91.8	-91.8	0.51 (1)
F-U	-4157	-91.8	-91.8	0.55 (1)
U-G	-4157	-91.8	-91.8	0.55 (1)
G-V	-4156	-91.8	-91.8	0.65 (1)
V-W	-4156	-91.8	-91.8	0.65 (1)
W-X	-4156	-91.8	-91.8	0.65 (1)
X-H	-4156	-91.8	-91.8	0.65 (1)
H-I	-3493	-91.8	-91.8	0.43 (1)
I-J	0.46	-91.8	-91.8	0.09 (1)
Q-B	-3248	0.0	0.0	0.12 (1)
K-I	-3272	0.0	0.0	0.12 (1)
Q-Y	0.0	-18.5	-18.5	0.08 (4)
Y-Z	0.0	-18.5	-18.5	0.08 (4)
Z-P	0.0	-18.5	-18.5	0.08 (4)
P-AA	0.2733	-18.5	-18.5	0.22 (1)
AA-AB	0.2733	-18.5	-18.5	0.22 (1)
AB-O	0.2733	-18.5	-18.5	0.22 (1)
O-AC	0.4211	-18.5	-18.5	0.33 (1)
AC-AD	0.4211	-18.5	-18.5	0.33 (1)
AD-N	0.4211	-18.5	-18.5	0.33 (1)
N-AE	0.4211	-18.5	-18.5	0.33 (1)
AE-M	0.4211	-18.5	-18.5	0.33 (1)
M-AF	0.2672	-18.5	-18.5	0.22 (1)
AF-AG	0.2672	-18.5	-18.5	0.22 (1)
AG-AH	0.2672	-18.5	-18.5	0.22 (1)
AH-L	0.2672	-18.5	-18.5	0.22 (1)
L-AI	0.0	-18.5	-18.5	0.08 (4)
AI-AJ	0.0	-18.5	-18.5	0.08 (4)
AJ-AK	0.0	-18.5	-18.5	0.08 (4)
AK-K	0.0	-18.5	-18.5	0.08 (4)

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	= 25.6	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN./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 RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.65/1.00 (G-H:1), BC=0.33/1.00 (M-O:1), WB=0.38/1.00 (G-M:1), SSI=0.29/1.00 (G-H: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) SHEAR SECTION (PSI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (H) (INPUT = 0.90)

JSI METAL = 0.42 (N) (INPUT = 1.00)

Per: joshua.nabua

CONTINUED ON PAGE 2



Structural component only
DWG# T-2022205 1/2

JOB NAME 406782	TRUSS NAME T30	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:02 2020 Page 2 ID:3novAUyvi2y?E(t7nDiZ3g9vHzID-bvqYMMxmaRZaiS2L0rXE0JauUbRVNmu4Jg58JAyTWZp	

PLATES (table is in inches)							SPECIFIED CONCENTRATED LOADS (LBS)									
JT	TYPE	PLATES	W	LEN	Y	X	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	TMVW-p	MT20	5.0	8.0	Edge		C	5-10-8	-359	-359	---	BACK	VERT	TOTAL	---	C1
C	TTWW-m	MT20	5.0	6.0	1.75	1.75	D	12-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
D	TMW-w	MT20	2.0	4.0			E	15-1-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
E	TS-t	MT20	3.0	6.0			F	24-3-7	-58	-58	---	FRONT	VERT	DEAD	---	C1
F	TMWW-t	MT20	4.0	4.0			H	24-3-7	-245	-245	---	FRONT	VERT	SNOW	---	C1
G	TMW-w	MT20	2.0	4.0			O	12-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
H	TTWW-m	MT20	5.0	6.0	1.75	1.75	P	6-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
I	TMVW-p	MT20	5.0	8.0	Edge		R	8-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
K	BMV1+p	MT20	3.0	6.0			S	10-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
L	BMWW-t	MT20	5.0	6.0			T	14-0-12	-122	-122	---	BACK	VERT	TOTAL	---	C1
M	BMWW-t	MT20	5.0	8.0			U	16-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
N	BS-t	MT20	5.0	6.0			V	18-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
O	BMWW-t	MT20	5.0	8.0			W	20-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
P	BMWW-t	MT20	5.0	6.0			X	22-11-4	-122	-122	---	BACK	VERT	TOTAL	---	C1
Q	BMV1+p	MT20	3.0	6.0			Y	2-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							Z	4-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AA	8-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AB	10-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AC	14-0-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AD	15-1-12	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AE	16-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AF	18-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AG	20-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AH	22-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AI	24-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AJ	26-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1
							AK	28-11-4	-29	-29	---	BACK	VERT	TOTAL	---	C1

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

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

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



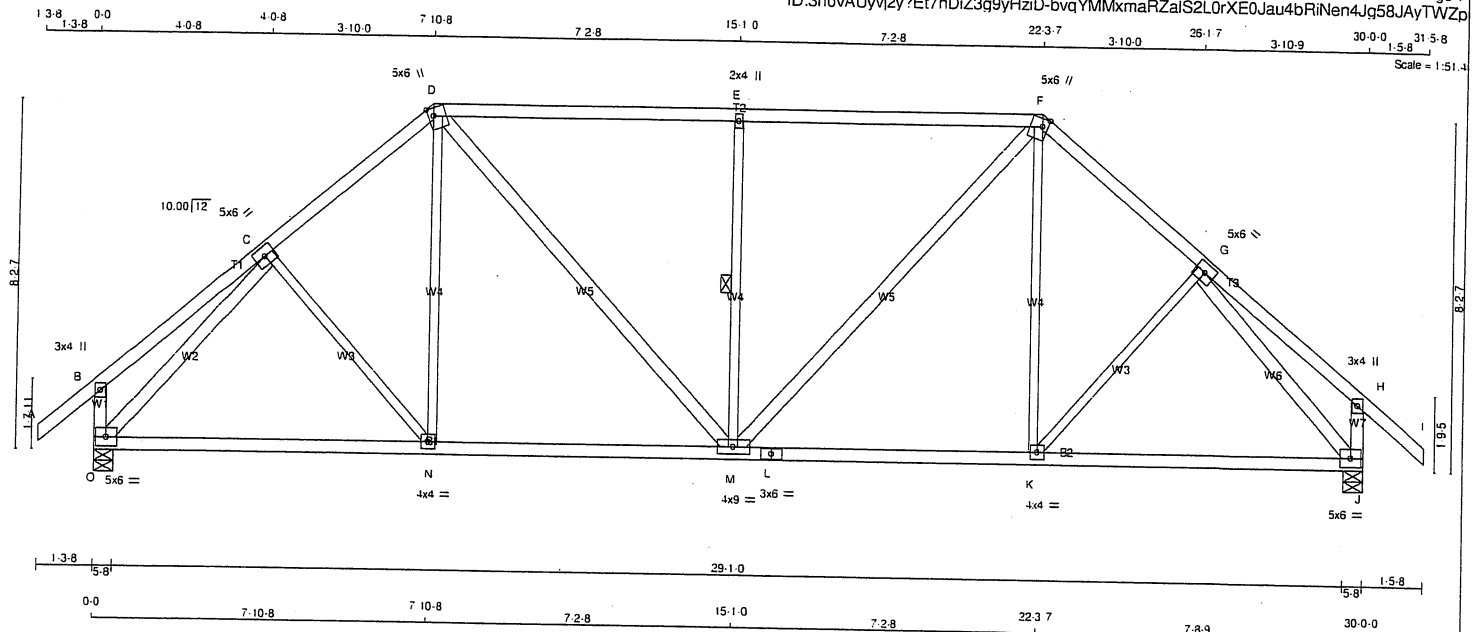
Structural component only
DWG# T-2022205

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED
Per: joshua.nabua

JOB NAME 406782	TRUSS NAME T31	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington		Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:02 2020 Page 1 ID:3novAUyvi2y?Et7nDiZ3g9yHzID-bvqYMMxmaRZaiS2L0rXE0Jau4bRiNen4Jg58JAYTWZp			
		Scale = 1:51.4			



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - J	2x4	DRY	No.2
ALL WEBS EXCEPT	2x4	DRY	No.2
C - N	2x3	DRY	No.2
N - D	2x3	DRY	No.2
M - E	2x3	DRY	No.2
K - F	2x3	DRY	No.2
K - G	2x3	DRY	No.2

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+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	TTWW+m	MT20	5.0	6.0	2.25 1.50
G	TMWW-t	MT20	5.0	6.0	
H	TMV+p	MT20	3.0	4.0	
J	BMVW1-t	MT20	5.0	6.0	
K	BMWW-t	MT20	4.0	9.0	
L	BS-t	MT20	3.0	6.0	
M	BMWWW-t	MT20	4.0	9.0	
N	BMWW-t	MT20	4.0	4.0	
O	BMVW1-t	MT20	5.0	6.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1781	0	1781	0	5-8	5-8
J	1796	0	1796	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE			
O	1257	838 / 0	0 / 0	0 / 0	0 / 0	419 / 0	0 / 0
J	1268	847 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.24 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-M.

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		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	0 / 41	-91.8	-91.8 0.13 (1)	C-N	-26 / 40
B-C	0 / 26	-91.8	-91.8 0.22 (1)	N-D	0 / 181
C-D	-1632 / 0	-91.8	-91.8 0.21 (1)	D-M	0 / 616
D-E	-1648 / 0	-91.8	-91.8 0.68 (1)	M-E	-813 / 0
E-F	-1648 / 0	-91.8	-91.8 0.68 (1)	M-F	0 / 641
F-G	-1610 / 0	-91.8	-91.8 0.20 (1)	K-F	0 / 148
G-H	0 / 27	-91.8	-91.8 0.22 (1)	K-G	0 / 53
H-I	0 / 46	-91.8	-91.8 0.16 (1)	O-C	-1918 / 0
O-B	-265 / 0	0.0	0.0 0.03 (1)	G-J	-1896 / 0
J-H	-273 / 0	0.0	0.0 0.03 (1)		
O-N	0 / 1247	-18.5	-18.5 0.37 (4)		
N-M	0 / 1233	-18.5	-18.5 0.38 (4)		
M-L	0 / 1216	-18.5	-18.5 0.37 (4)		
L-K	0 / 1216	-18.5	-18.5 0.37 (4)		
K-J	0 / 1203	-18.5	-18.5 0.36 (4)		

DESIGN CRITERIA

SPECIFIED LOADS:	
TOP CH.	LL = 25.6 PSF
	DL = 6.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF	

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.68/1.00 (D-E:1), BC=0.38/1.00 (M-N:4), WB=0.84/1.00 (O-C:1), SSI=0.32/1.00 (D-E:1)

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

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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (G) (INPUT = 0.90)
JSI METAL = 0.47 (C) (INPUT = 1.00)

DIAMOND HILL BUILDING DIVISION

03/08/2022

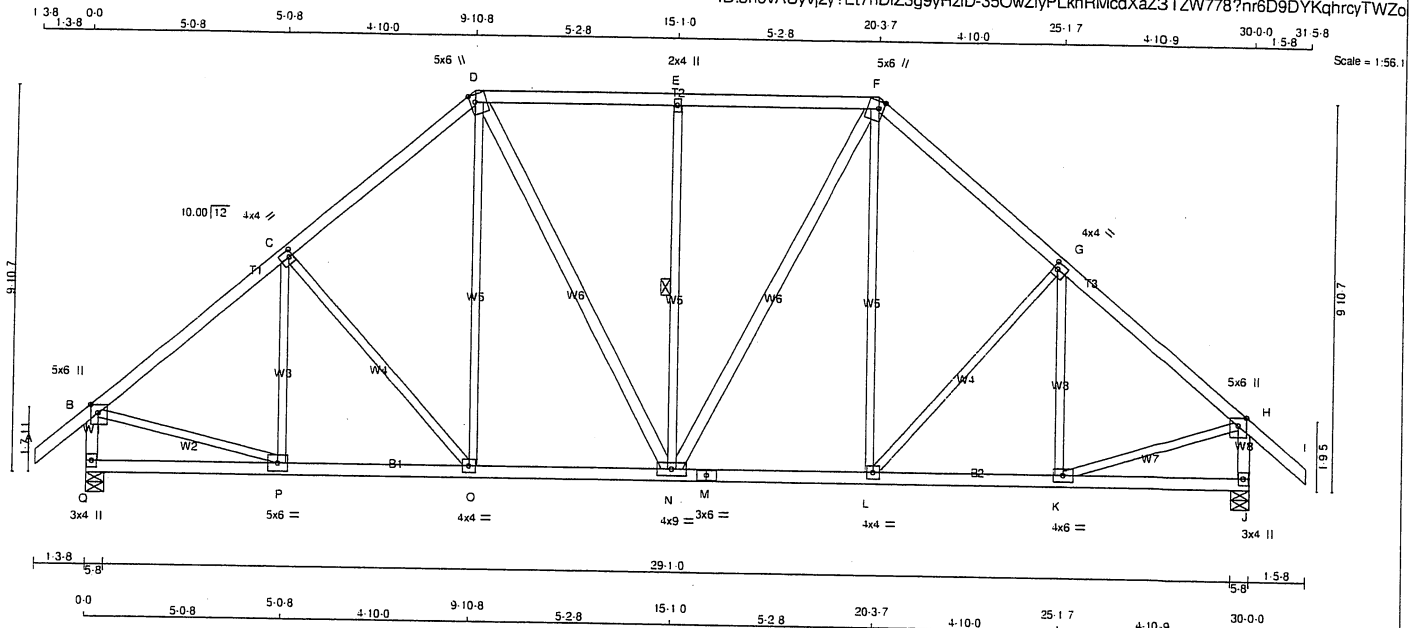
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Per: joshua.nabua



Structural component only
DWG# T-2022206

JOB NAME 406782	TRUSS NAME T32	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
D - N	2x4	DRY	No.2
N - F	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.50	2.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.25
H	TMVW-p	MT20	5.0	6.0	2.25	1.50
J	BMV1+p	MT20	3.0	4.0	Edge	
K	BMVW-t	MT20	4.0	6.0		
L	BMVW-t	MT20	4.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	9.0		
O	BMVW-t	MT20	4.0	4.0		
P	BMVW-t	MT20	5.0	6.0		
Q	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		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	HORIZ	GROSS REACTION	DOWN	UPLIFT	IN-SX	IN-SX	IN-SX
Q	1781	0	1781	0	0	5-8	5-8	5-8	5-8
J	1796	0	1796	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	SNOW	LIVE
Q	1257	838	0	0	0	0	0	0	0	0	0	419	0	0	0
J	1268	847	0	0	0	0	0	0	0	0	0	421	0	0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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-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: (4)

CHORDS				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0.41	-91.8	-91.8	0.13 (1)	10.00	P-C	-241.0 0.13 (1)
B-C	-1678.0	-91.8	-91.8	0.34 (1)	4.80	C-O	-251.0 0.27 (1)
C-D	-1533.0	-91.8	-91.8	0.32 (1)	4.98	O-D	0.279 0.06 (1)
D-E	-1330.0	-91.8	-91.8	0.34 (1)	5.22	D-N	0.375 0.06 (1)
E-F	-1330.0	-91.8	-91.8	0.34 (1)	5.22	N-E	-581.0 0.38 (1)
F-G	-1519.0	-91.8	-91.8	0.31 (1)	5.01	N-F	0.395 0.06 (1)
G-H	-1633.0	-91.8	-91.8	0.32 (1)	4.86	L-F	0.251 0.06 (1)
H-I	0.46	-91.8	-91.8	0.16 (1)	10.00	L-G	-213.0 0.23 (1)
Q-B	-1741.0	0.0	0.0	0.19 (1)	6.32	K-G	-281.0 0.15 (1)
J-H	-1758.0	0.0	0.0	0.19 (1)	6.29	B-P	0.1358 0.31 (1)
					K-H	0.1335 0.30 (1)	
Q-P	0.0	-18.5	-18.5	0.10 (4)	10.00		
P-O	0.1315	-18.5	-18.5	0.26 (1)	10.00		
O-N	0.1151	-18.5	-18.5	0.24 (1)	10.00		
N-M	0.1141	-18.5	-18.5	0.24 (1)	10.00		
M-L	0.1141	-18.5	-18.5	0.24 (1)	10.00		
L-K	0.1280	-18.5	-18.5	0.25 (1)	10.00		
K-J	0.0	-18.5	-18.5	0.10 (4)	10.00		

TOTAL WEIGHT = 4 X 157 = 629 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 25.6	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD		= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.00")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.00")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.34/1.00 (B-C:1), BC=0.26/1.00 (O-P:1), WB=0.38/1.00 (E-N: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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT= 0.90)

JSI METAL= 0.62 (H) (INPUT= 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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Per: joshua.nabua



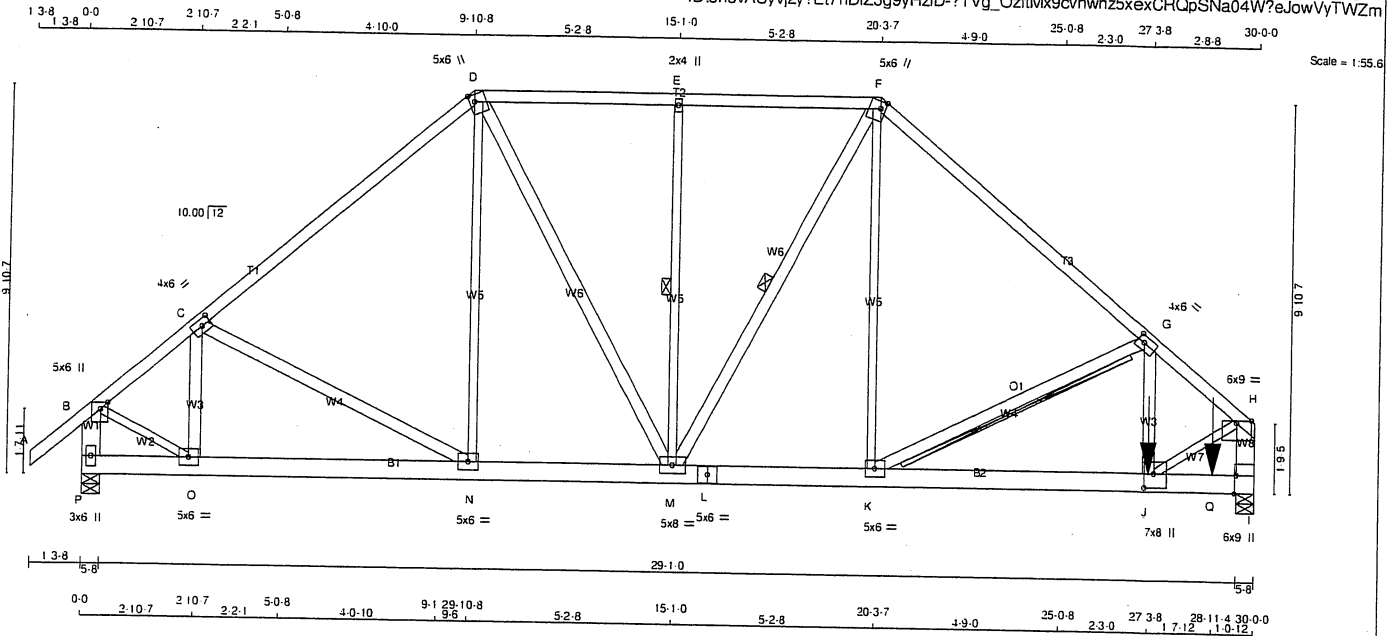
Structural component only
DWG# T-2022207

JOB NAME 406782	TRUSS NAME T33	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:05 2020 Page 1

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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
P - B	2x6	DRY No.2	SPF
I - H	2x6	DRY No.2	SPF
P - L	2x6	DRY No.2	SPF
L - I	2x6	DRY No.2	SPF
ALL WEBS EXCEPT	2x4	DRY No.2	SPF
N - D	2x3	DRY No.2	SPF
M - E	2x3	DRY No.2	SPF
K - F	2x3	DRY No.2	SPF
B - O	2x3	DRY No.2	SPF
J - H	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-D	1	12	TOP
D-F	1	12	TOP
F-H	1	12	TOP
P-B	2	12	TOP
I-H	2	12	TOP
BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS			
P-L	2	12	TOP
L-I	2	12	TOP
WEBS: (0.122"x3") SPIRAL NAILS			
2x3	1	6	SIDE(183.1)
G-J	2	3	SIDE(1163.7)
2x4	1	6	SIDE(1163.7)

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.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	2273	0	2273	0	5-8	5-8
I	7055	0	7055	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND		
P	1604	1070	0	0	0	0
I	4981	3314	0	0	0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.46 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-M, F-M.
2x4 DRY SPF No.2 T-BRACE AT G-K

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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRAC LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. (LC)
FR-TO					FR-TO		
A-B	0.41	-91.8	-91.8	0.07 (1)	10.00	N-D	0.142
B-C	-2113	-91.8	-91.8	0.33 (1)	5.64	D-M	0.921
C-D	-2223	-91.8	-91.8	0.44 (1)	5.52	M-E	-574
D-E	-2121	-91.8	-91.8	0.25 (1)	5.77	K-F	-185
E-F	-2121	-91.8	-91.8	0.25 (1)	5.77	M-F	0.1540
F-G	-2895	-91.8	-91.8	0.48 (1)	5.00	B-O	0.1841
G-H	-6298	-91.8	-91.8	0.44 (1)	3.46	J-H	0.5490
P-B	-2247	0.0	0.0	0.08 (1)	7.81	J-G	0.2994
I-H	-6532	0.0	0.0	0.25 (1)	5.82	O-C	-638
P-O	0.0	-18.5	-18.5	0.03 (4)	10.00	C-N	-20
O-N	0.1694	-18.5	-18.5	0.14 (1)	10.00	K-G	-3045
N-M	0.1678	-18.5	-18.5	0.14 (1)	10.00		
M-L	0.2210	-18.5	-18.5	0.18 (1)	10.00		
L-K	0.2210	-18.5	-18.5	0.18 (1)	10.00		
K-J	0.4908	-18.5	-18.5	0.38 (1)	10.00		
J-Q	0.0	-18.5	-18.5	0.20 (1)	10.00		
Q-I	0.0	-18.5	-18.5	0.20 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC	LC1 MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
J	27-3.8	-3644	-3644	---	FRONT	VERT	TOTAL	C1
Q	28-11.4	-515	-515	---	FRONT	VERT	TOTAL	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.00")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.00")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.48/1.00 (F-G:1), BC=0.38/1.00 (J-K:1), WB=0.80/1.00 (G-K:1), SSI=0.17/1.00 (I-J: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)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.37 (G) INPUT=0.90
JSI METAL=0.63 (J) INPUT=1.00

ROYAL PINE HILL BUILDING DIVISION

03/08/2022

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Per: joshua.nabua

CONTINUED ON PAGE 2



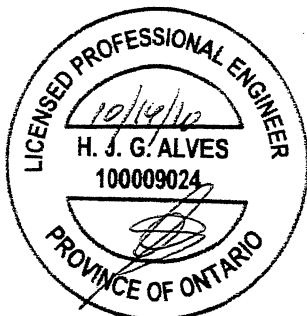
Structural component only
DWG# T-2022209

JOB NAME 406782	TRUSS NAME T33	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:05 2020 Page 2 ID:3novAUyvi2y?Et7nDiZ3q9yHziD-?TVg OzftMx9cvnwhz5xexCRQpSNa04W?eJowVvTWZm	

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.25
C	TMWW-t	MT20	4.0	6.0	2.00	2.75
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMWW-t	MT20	4.0	6.0	2.00	2.00
H	TMVW-p	MT20	6.0	9.0	Edge	
I	BMV1+t	MT20	6.0	9.0	Edge	0.50
J	BMWW-t	MT20	7.0	8.0	4.25	3.00
K, N, O						
K	BMWW-t	MT20	5.0	6.0		
L	BS-t	MT20	5.0	6.0		
M	BMWW-t	MT20	5.0	8.0		
P	BMV1+p	MT20	3.0	6.0		

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



Structural component only
DWG# T-2022209 *2/21*

CITY OF RICHMOND HILL
BUILDING DIVISION

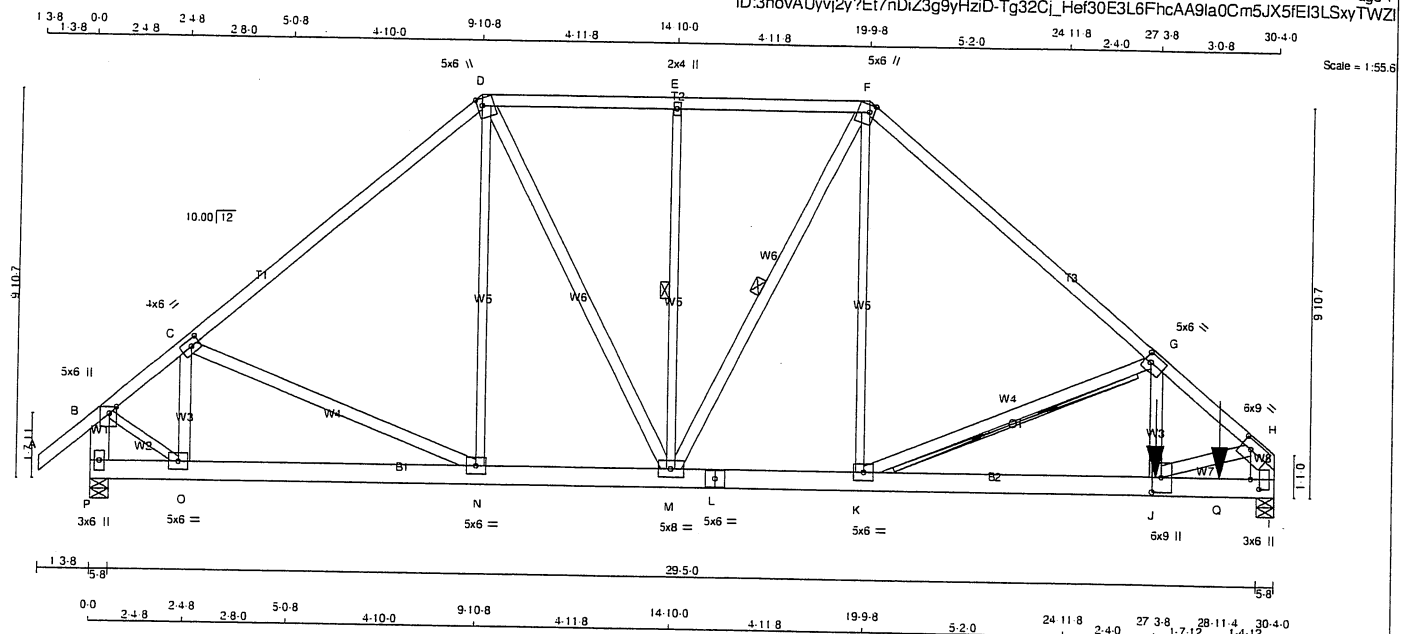
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Per: joshua.nabua

JOB NAME 406782	TRUSS NAME T34	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MTek Industries, Inc. Wed Oct 14 11:58:06 2020 Page 1
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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
P - B	2x6	DRY	No.2
I - H	2x8	DRY	No.2
P - L	2x6	DRY	No.2
L - I	2x6	DRY	No.2
ALL WEBS	2x4	DRY	No.2
EXCEPT			
N - D	2x3	DRY	No.2
M - E	2x3	DRY	No.2
K - F	2x3	DRY	No.2
B - O	2x3	DRY	No.2

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 1	12	TOP
D-F 1	12	TOP
F-H 1	12	TOP
P-B 2	12	TOP
I-H 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
P-L 2	12	TOP
L-I 2	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	SIDE(1166.2)
G-J 2	6	
2x4 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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
P	2352	0	2352	0	0	5-8	5-8	
I	7023	0	7023	0	0	5-8	5-8	

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
P	1660	1107	0	0	0	0	553
I	4958	3298	0	0	0	0	1660

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.92 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-M, F-M.
2x6 DRY SPF No.2 T-BRACE AT G-K

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.		WEBS	
MAX. FACTORED	FORCE (LBS)	MAX. FACTORED	FORCE (LBS)	MAX. FACTORED	FORCE (LBS)
FR-TO		FR-TO		FR-TO	
A-B	0.41	FROM TO		C-N	0.52
B-C	-2095.0			D-M	0.133
C-D	-2336.0			E-M	0.1007
D-E	-2227.0			F-M	0.543
E-F	-2227.0			G-M	0.329
F-G	-3114.0			H-M	0.1795
G-H	-8002.0			I-M	0.1924
P-B	-2335.0			J-G	0.6364
I-H	-6540.0			K-G	0.4148
				O-C	-4184.0
P-O	0.0				
O-N	0.1711				
N-M	0.1761				
M-L	0.2380				
L-K	0.2380				
K-J	0.6217				
J-Q	0.0				
Q-I	0.0				

SPECIFIED CONCENTRATED LOADS (LBS)		LOC.		MAX.		FACE		DIR.		TYPE		HEEL		CONN.	
JT	LOC.	LC1	MAX.	MAX+	MAX-	BACK	FACE	VERT	HEEL	TOTAL	TYPE	TOTAL	TYPE	C1	C1
Q	27-3-8	-3651	-3651			BACK	FACE	VERT		TOTAL				C1	C1
J	28-11-4	-515	-515			BACK	FACE	VERT		TOTAL				C1	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.01")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.62/1.00 (F-G:1), BC=0.48/1.00 (J-K:1), WB=0.56/1.00 (H-J:1), SSI=0.16/1.00 (I-J: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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.89 (J) INPUT=0.90
JSI METAL=0.93 (J) INPUT=1.00

ROYAL PINE MOND HILL BUILDING DIVISION

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Structural component only
DWG# T-2022210

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	T34	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTek Industries, Inc. Wed Oct 14 11:58:06 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.25
C	TMWW-t	MT20	4.0	6.0	2.00	2.75
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMWW-t	MT20	5.0	6.0	2.50	1.75
H	TMVW-t	MT20	6.0	9.0	2.75	3.25
I	BMV1+p	MT20	3.0	6.0	3.00	2.75
J	BMWW-t	MT20	6.0	9.0	4.50	2.75
K, N, O						
K	BMWW-t	MT20	5.0	6.0		
L	BS-t	MT20	5.0	6.0		
M	BMWWWW-t	MT20	5.0	8.0		
P	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022210

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

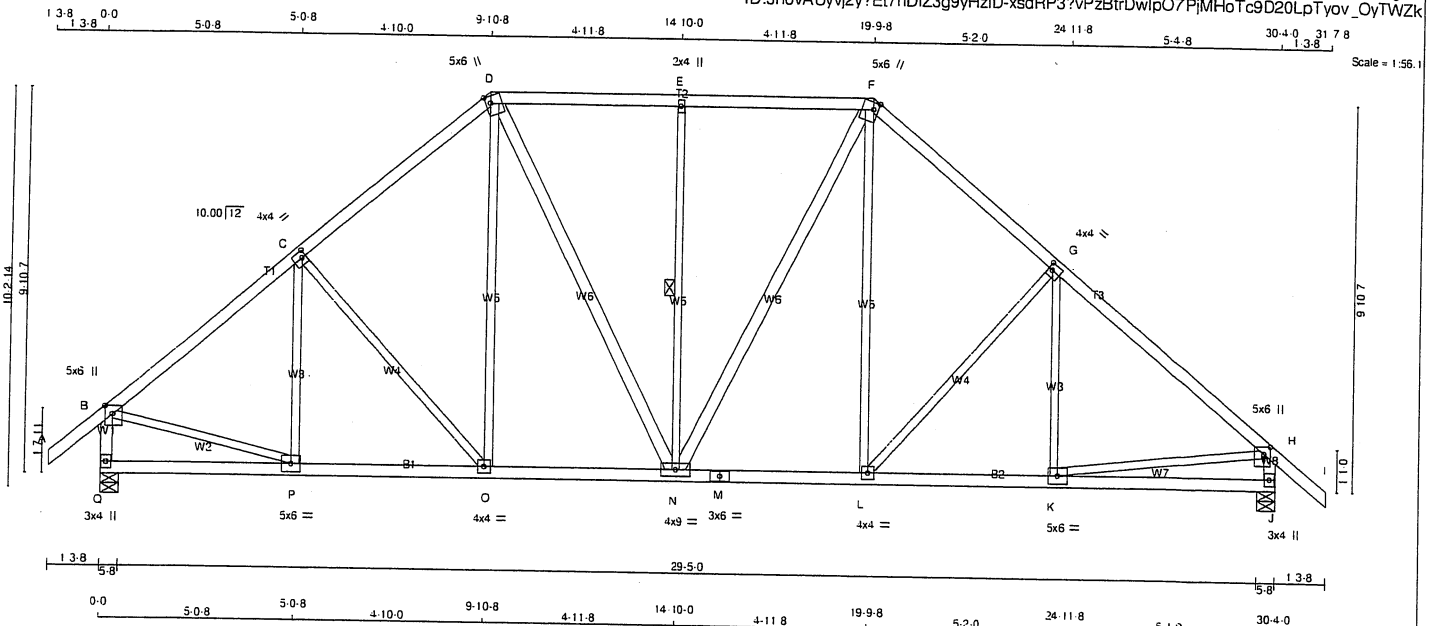
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Per: joshua.nabua

JOB NAME 406782	TRUSS NAME T35	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:07 2020 Page 1

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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 - I	2x4	DRY	No.2	SPF
Q - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
Q - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
D - N	2x4	DRY	No.2	SPF
N - 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	2.50	2.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTVW+m	MT20	5.0	6.0	2.25	1.50
E	TMVW+w	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	6.0	2.25	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.25
H	TMVW+p	MT20	5.0	6.0	2.25	2.00
J	BMV1+p	MT20	3.0	4.0		
K	BMVW-t	MT20	5.0	6.0		
L	BMVW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVWVW-t	MT20	4.0	9.0		
O	BMVW-t	MT20	4.0	4.0		
P	BMVW-t	MT20	5.0	6.0		
Q	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	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
Q	VERT 1799	DOWN 0	5-8	5-8
J	HORIZ 1799	UP/LIFT 0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1270	847.0	0.0	0.0	0.0	423.0	0.0
J	1270	847.0	0.0	0.0	0.0	423.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.47 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-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: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	CS1 (LC)	UNBRAC LENGTH FR-TO	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)
FR-TO												
A-B	0.41	-91.8	-91.8	0.13	(1)	10.00	P-C	-245.0	0.13	(1)		
B-C	-1700.0	-91.8	-91.8	0.34	(1)	4.77	C-O	-248.0	0.27	(1)		
C-D	-1557.0	-91.8	-91.8	0.33	(1)	4.95	O-D	0.274	0.06	(1)		
D-E	-1355.0	-91.8	-91.8	0.31	(1)	5.23	D-N	0.403	0.06	(1)		
E-F	-1355.0	-91.8	-91.8	0.31	(1)	5.23	N-E	-551.0	0.36	(1)		
F-G	-1611.0	-91.8	-91.8	0.37	(1)	4.82	N-F	0.321	0.05	(1)		
G-H	-1881.0	-91.8	-91.8	0.45	(1)	4.47	L-F	0.387	0.09	(1)		
H-I	0.41	-91.8	-91.8	0.13	(1)	10.00	L-G	-402.0	0.43	(1)		
Q-B	-1760.0	0.0	0.0	0.19	(1)	6.29	K-G	-85.61	0.04	(1)		
J-H	-1754.0	0.0	0.0	0.18	(1)	6.29	B-P	0.1376	0.31	(1)		
Q-P	0.0	-18.5	-18.5	0.11	(4)	10.00	K-H	0.1484	0.33	(1)		
P-O	0.1332	-18.5	-18.5	0.26	(1)	10.00						
O-N	0.1169	-18.5	-18.5	0.24	(1)	10.00						
N-M	0.1207	-18.5	-18.5	0.24	(1)	10.00						
M-L	0.1207	-18.5	-18.5	0.24	(1)	10.00						
L-K	0.1472	-18.5	-18.5	0.30	(1)	10.00						
K-J	0.0	-18.5	-18.5	0.13	(4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 5.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.45/1.00 (G-H:1), BC=0.30/1.00 (K-L:1), WB=0.43/1.00 (G-L:1), SSI=0.22/1.00 (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

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.83 (B) INPUT = 0.30
JSI METAL = 0.39 (H) INPUT = 1.00

MOND HILL BUILDING DIVISION

03/08/2022

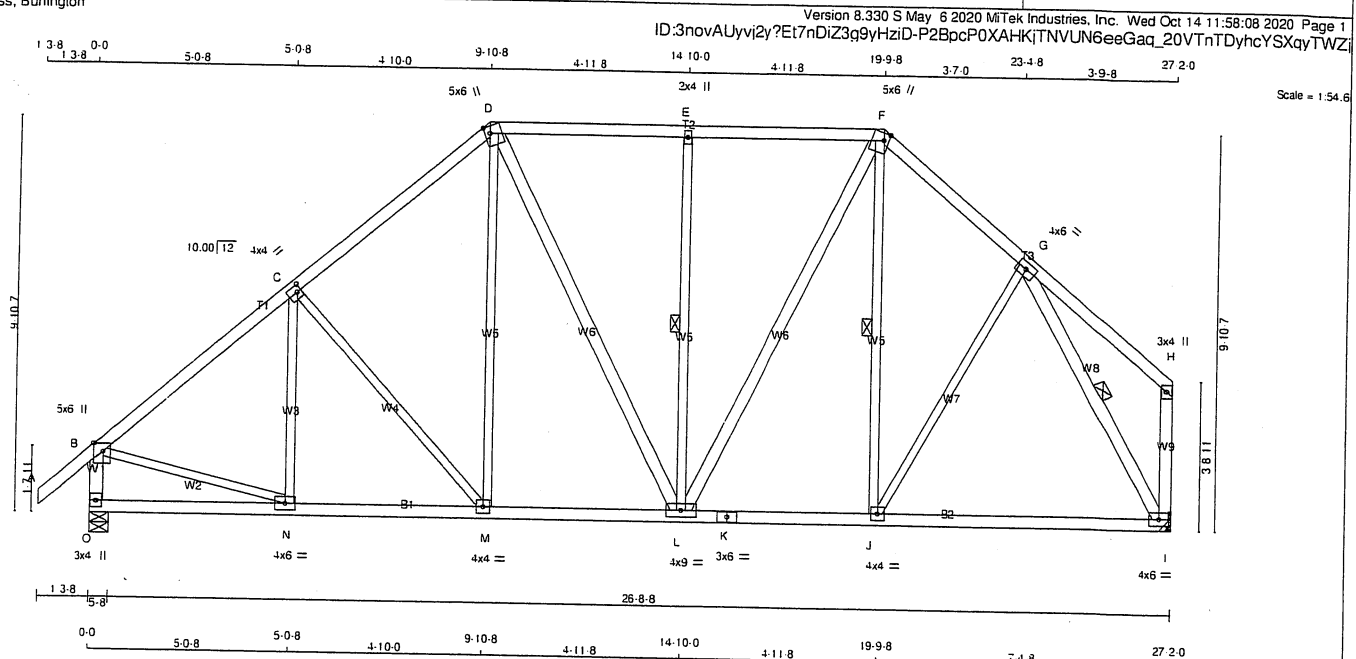
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Structural component only
DWG# T-2022211

JOB NAME 406782	TRUSS NAME T35A	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - D	2x4	DRY
D - F	2x4	DRY
F - H	2x4	DRY
O - B	2x4	DRY
I - H	2x4	DRY
O - K	2x4	DRY
K - I	2x4	DRY

ALL WEBS	EXCEPT	SIZE	LUMBER
D - L	2x4	DRY	No.2
L - F	2x4	DRY	No.2
G - I	2x4	DRY	No.2

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	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMVW-t	MT20	4.0	6.0		
H	TMVW+p	MT20	3.0	4.0		
I	BMVW1-t	MT20	4.0	6.0		
J	BMVW1-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVWW-t	MT20	4.0	9.0		
M	BMVW-t	MT20	4.0	4.0		
N	BMVW-t	MT20	4.0	6.0		
O	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	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
O	1625 0	1625 0	5-8	5-8
I	1498 0	1498 0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
O	1147	766 0	0 0	0 0	0 0	0 0	381 0	0 0
I	1059	695 0	0 0	0 0	0 0	0 0	364 0	0 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.03 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-L, F-J, G-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)

FR-TO	CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	W E B S	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
A-B	0 41			-91.8 -91.8	0.13 (1)	10.00	N-C	-204 12	0.11 (1)
B-C	-1492 0			-91.8 -91.8	0.33 (1)	5.03	C-M	-279 0	0.30 (1)
C-D	-1322 0			-91.8 -91.8	0.31 (1)	5.28	M-D	0 302	0.07 (1)
D-E	-1083 0			-91.8 -91.8	0.30 (1)	5.71	D-L	0 203	0.03 (1)
E-F	-1083 0			-91.8 -91.8	0.30 (1)	5.71	L-E	-554 0	0.36 (1)
F-G	-1139 0			-91.8 -91.8	0.17 (1)	5.77	F-F	0 500	0.08 (1)
G-H	0 25			-91.8 -91.8	0.20 (1)	10.00	J-F	-34 62	0.02 (1)
O-B	-1585 0			0 0	0.17 (1)	6.55	J-G	0 204	0.05 (1)
I-H	-131 0			0 0	0.03 (1)	7.81	B-N	0 1211	0.27 (1)
							G-I	-1509 0	0.39 (1)
O-N	0 0			-18.5 -18.5	0.10 (4)	10.00			
N-M	0 1172			-18.5 -18.5	0.24 (1)	10.00			
M-L	0 989			-18.5 -18.5	0.21 (1)	10.00			
L-K	0 852			-18.5 -18.5	0.29 (4)	10.00			
K-J	0 852			-18.5 -18.5	0.29 (4)	10.00			
J-I	0 751			-18.5 -18.5	0.28 (4)	10.00			

TOTAL WEIGHT = 2 X 150 = 299 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 25.6	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD		= 39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.91")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.91")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.33/1.00 (B-C:1), BC=0.29/1.00 (J-L:4), WB=0.39/1.00 (G-I:1), SSI=0.22/1.00 (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

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

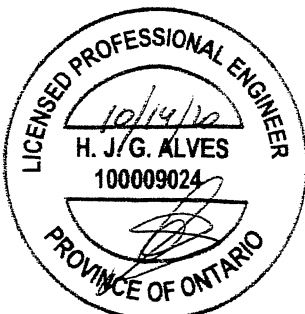
JSI GRIP = 0.89 (NO INPUT) JSI METAL = 0.57 (B) (INPUT = 1.00)

ROYAL PINE HILL BUILDING DIVISION

03/08/2022

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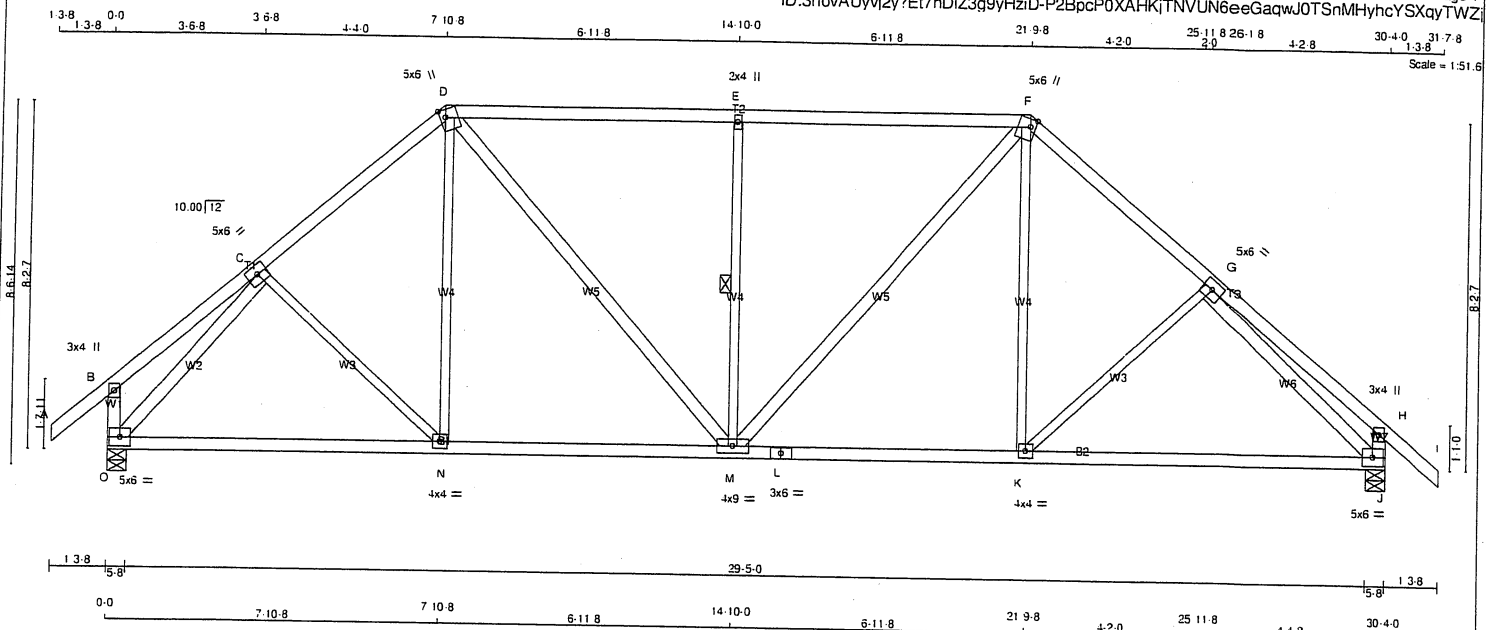
Per: joshua.nabua



Structural component only
DWG# T-2022212

JOB NAME 406782	TRUSS NAME T36	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:08 2020 Page 1
ID:3novAUyvj2y?Et7nDiZ3g9yHzID-P2BpcP0XAHKjTNVUN6eeGaQwJ0TSnMHycYsXqyTWZ



LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR. TOTAL WEIGHT = 144 lb

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
O - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x4	DRY No.2	SPF
C - N	2x3	DRY No.2	SPF
N - D	2x3	DRY No.2	SPF
M - E	2x3	DRY No.2	SPF
K - F	2x3	DRY No.2	SPF
K - G	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	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	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMWW-t	MT20	5.0	6.0		
H	TMV+p	MT20	3.0	4.0		
J	BMVW1-t	MT20	5.0	6.0		
K	BMVW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVWW-t	MT20	4.0	9.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMVW1-t	MT20	5.0	6.0		

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		RECORD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	1799	0	1799	0	0	5-8	5-8
J	1799	0	1799	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN.	COMPONENT REACTIONS	DEAD	SOIL
O	1270	847.0	0.0	0.0	423.0
J	1270	847.0	0.0	0.0	423.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.31 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-M.

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		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM TO				FR-TO			
A-B	0.41	-91.8	-91.8	0.13 (1)	10.00	C-N	0.53	0.02 (4)	
B-C	0.32	-91.8	-91.8	0.24 (1)	10.00	N-D	0.153	0.05 (4)	
C-D	-1655.0	-91.8	-91.8	0.25 (1)	4.93	D-M	0.642	0.10 (1)	
D-E	-1676.0	-91.8	-91.8	0.63 (1)	4.31	M-E	-784.0	0.33 (1)	
E-F	-1676.0	-91.8	-91.8	0.63 (1)	4.31	M-F	0.542	0.09 (1)	
F-G	-1742.0	-91.8	-91.8	0.26 (1)	4.82	K-F	0.287	0.07 (4)	
G-H	0.30	-91.8	-91.8	0.27 (1)	10.00	O-C	-1950.0	0.65 (1)	
H-I	0.41	-91.8	-91.8	0.13 (1)	10.00	K-G	-173.0	0.12 (1)	
O-B	-234.0	0.0	0.0	0.02 (1)	7.81	G-J	-2057.0	0.84 (1)	
J-H	-267.0	0.0	0.0	0.03 (1)	7.81				
O-N	0.1239	-18.5	-18.5	0.37 (4)	10.00				
N-M	0.1251	-18.5	-18.5	0.38 (4)	10.00				
M-L	0.1318	-18.5	-18.5	0.42 (4)	10.00				
L-K	0.1318	-18.5	-18.5	0.42 (4)	10.00				
K-J	0.1442	-18.5	-18.5	0.42 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.01")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.63/1.00 (D-E:1), BC=0.42/1.00 (K-M:4), WB=0.84/1.00 (G-J:1), SS=0.31/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.82 (G) (INPUT=0.90)
JSI METAL=0.51 (G) (INPUT=1.00)

03/08/2022

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Per: joshua.nabua



Structural component only
DWG# T-2022213

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	T37	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:09 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	
C	TTWW+m	MT20	5.0	8.0	2.25	1.50
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW+m	MT20	6.0	9.0	Edge	1.75
I	TMWW-t	MT20	4.0	6.0	2.00	2.00
J	TMV+p	MT20	3.0	4.0		
L	BMVW1-t	MT20	5.0	6.0		
M, N, Q, R						
M	BMWW-t	MT20	5.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0		
S	BMV1+p	MT20	3.0	6.0		

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

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022214 *3/2*

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BUILDING DIVISION

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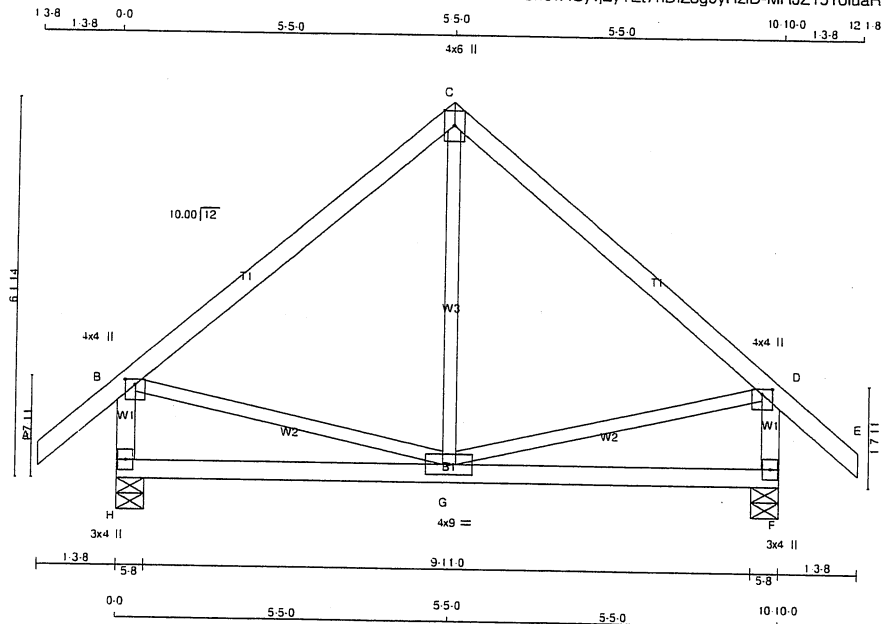
Per: joshua.nabua

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	T39	5	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTek Industries, Inc. Wed Oct 14 11:58:10 2020 Page 1
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Scale = 1:35.5



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 2x3 DRY No.2 EXCEPT

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	6.0	Edge	
D	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
H	724	0	724	0	0	5-8	5-8	5-8	5-8
F	724	0	724	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	510	348	0	0	0	162	0
F	510	348	0	0	0	162	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 41	-91.8 -91.8 0.13 (1)	10.00	G-C	-16 88	0.03 (4)	
B-C	-376 0	-91.8 -91.8 0.35 (1)	6.25	B-G	0 297	0.07 (1)	
C-D	-376 0	-91.8 -91.8 0.35 (1)	6.25	G-D	0 297	0.07 (1)	
D-E	0 41	-91.8 -91.8 0.13 (1)	10.00				
H-B	-686 0	0.0 0.0 0.07 (1)	7.81				
F-D	-686 0	0.0 0.0 0.07 (1)	7.81				
H-G	0 0	-18.5 -18.5 0.15 (4)	10.00				
G-F	0 0	-18.5 -18.5 0.15 (4)	10.00				

TOTAL WEIGHT = 5 X 48 = 242 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.35/1.00 (B-C:1), BC=0.15/1.00 (F-G:4)
WB=0.07/1.00 (D-G:1), SS=0.15/1.00 (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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.60 (B) (INPUT = 0.90)
JSI METAL = 0.16 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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Per: joshua.nabua

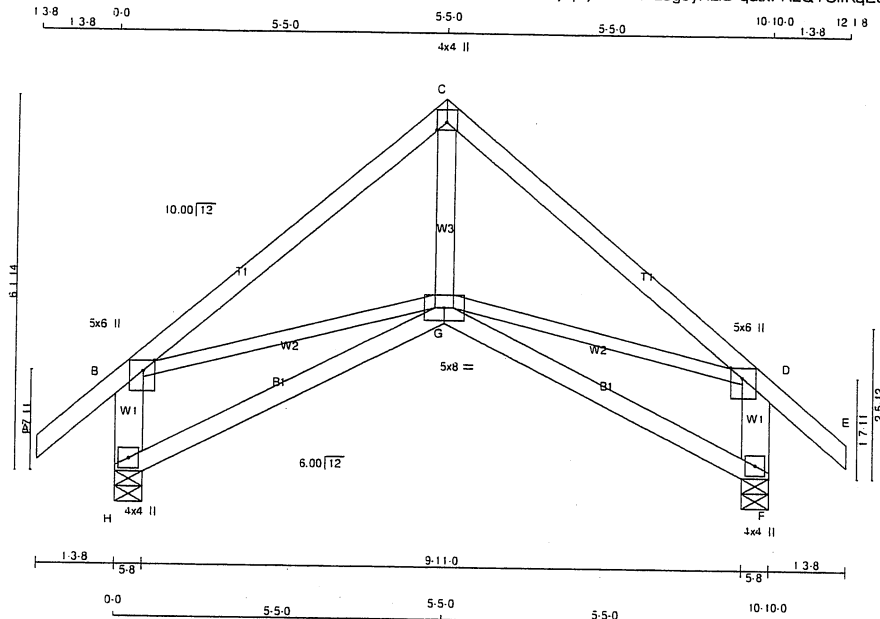


Structural component only
DWG# T-2022215

JOB NAME 406782	TRUSS NAME T39S	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale = 1:36.0

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - C	2x4 DRY	No.2
C - E	2x4 DRY	No.2
H - B	2x6 DRY	No.2
F - D	2x6 DRY	No.2
H - G	2x4 DRY	No.2
G - F	2x4 DRY	No.2

ALL WEBS	2x3 DRY	No.2
EXCEPT		
G - C	2x4 DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.25
C	TTW+p	MT20	4.0	4.0	1.50	2.00
D	TMVW+p	MT20	5.0	6.0	2.00	2.25
F	BMV1+p	MT20	4.0	4.0		
G	BBWW+p	MT20	5.0	8.0		
H	BMV1+p	MT20	4.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
JT	VERT	HORZ	DOWN	HORZ
H	724	0	724	0
F	724	0	724	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
H	510	348 0	0 0	162 0
F	510	348 0	0 0	162 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 41	-91.8 -91.8 0.13 (1)	10.00	G-C	0 314	0.05 (1)	
B-C	-634 0	-91.8 -91.8 0.35 (1)	6.25	B-G	0 498	0.11 (1)	
C-D	-634 0	-91.8 -91.8 0.35 (1)	6.25	G-D	0 498	0.11 (1)	
D-E	0 41	-91.8 -91.8 0.13 (1)	10.00				
H-B	-674 0	0.0 0.0 0.05 (1)	7.81				
F-D	-674 0	0.0 0.0 0.05 (1)	7.81				
H-G	0 0	-18.5 -18.5 0.16 (4)	10.00				
G-F	0 0	-18.5 -18.5 0.16 (4)	10.00				

TOTAL WEIGHT = 2 X 51 = 103 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6 PSF
DL = 6.0 PSF	
BOT CH.	LL = 0.0 PSF
DL = 7.4 PSF	
TOTAL LOAD = 39.0 PSF	

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.35/1.00 (B-C:1), BC=0.16/1.00 (G-H:4), WB=0.11/1.00 (D-G:1), SSI=0.15/1.00 (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 HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618 354 1667 788 1987 1656	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (C) (INPUT= 0.90)
JSI METAL= 0.15 (B) (INPUT= 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

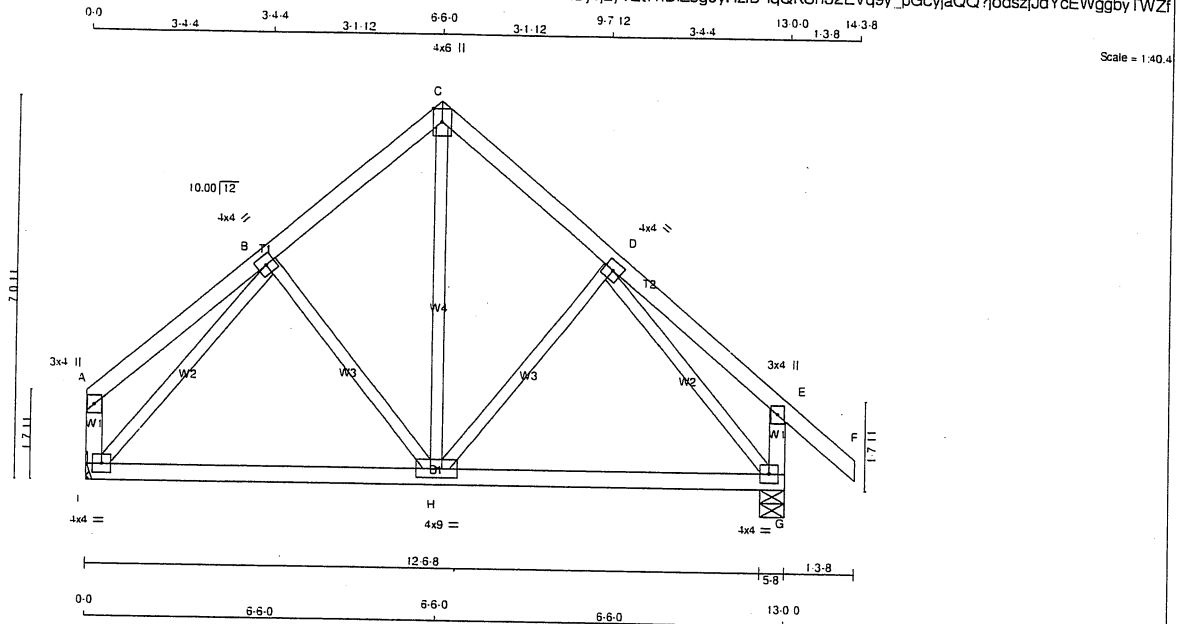


Structural component only
DWG# T-2022216

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	T40	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
I - A	2x4	DRY	No.2
G - E	2x4	DRY	No.2
I - G	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	3.0	4.0		
B	TMWW-1	MT20	4.0	4.0		
C	TTW+p	MT20	4.0	6.0	Edge	
D	TMWW-1	MT20	4.0	4.0		
E	TMV+p	MT20	3.0	4.0		
G	BMWW-1	MT20	4.0	4.0		
H	BMWW-1	MT20	4.0	9.0		
I	BMWW-1	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	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
I	717	0	717	0
G	844	0	844	0

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

UNFACTORED REACTIONS

JT	1ST LOASE	MAX..MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
I	507	333.0	0.0	0.0	174.0	0.0
G	594	403.0	0.0	0.0	191.0	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 = 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	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 MAX (PLF)	MEMB.	FORCE (LBS)
FR-TO			FR-TO	
A-B	0.22	-91.8 -91.8 0.15 (1)	H-C	0.366
B-C	-490.0	-91.8 -91.8 0.12 (1)	H-D	-141.0
C-D	-490.0	-91.8 -91.8 0.12 (1)	B-H	-141.0
D-E	0.22	-91.8 -91.8 0.15 (1)	I-B	-716.0
E-F	0.41	-91.8 -91.8 0.13 (1)	D-G	-716.0
I-A	-114.0	0.0 0.0 0.01 (1)		
G-E	-241.0	0.0 0.0 0.03 (1)		
I-H	0.450	-18.5 -18.5 0.26 (4)		
H-G	0.450	-18.5 -18.5 0.26 (4)		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.43")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.15/1.00 (D-E:1), BC=0.26/1.00 (G-H:4), WB=0.30/1.00 (D-G: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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.82 (D) (INPUT = 0.90)
JSI METAL = 0.26 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022217

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

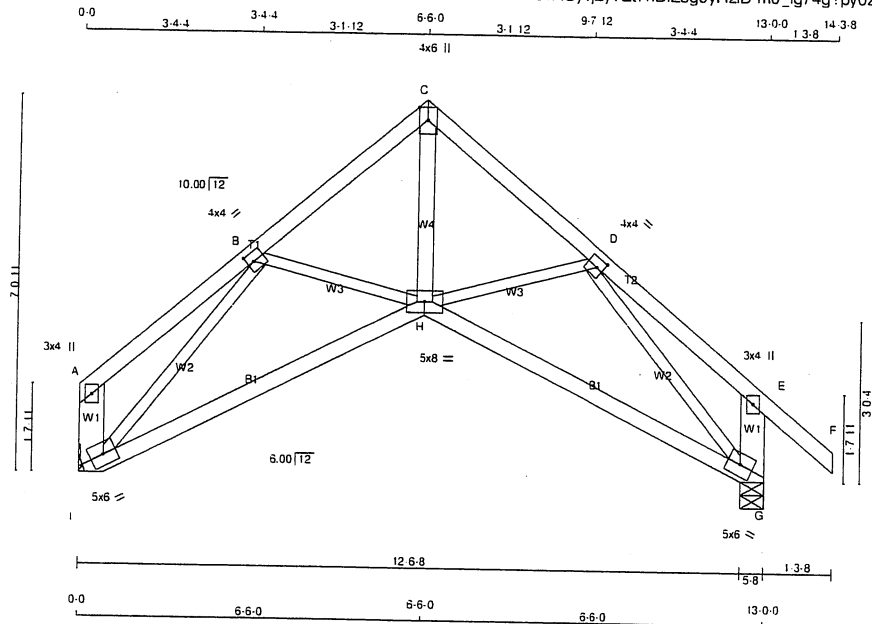
RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME T40S	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:13 2020 Page 1
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Scale = 1:41.2

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
I - A	2x6	DRY	No.2
G - E	2x6	DRY	No.2
I - H	2x4	DRY	No.2
H - G	2x4	DRY	No.2

ALL WEBS	2x3	DRY	No.2
EXCEPT			
H - C	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV-p	MT20	3.0	4.0		
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-p	MT20	4.0	6.0	Edge	
D	TMWW-t	MT20	4.0	4.0	2.00	1.50
E	TMV-p	MT20	3.0	4.0		
G	BMWW-t	MT20	5.0	6.0		
H	BMWW-p	MT20	5.0	8.0		
I	BMWW-t	MT20	5.0	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	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
I	717	0	717	0
G	844	0	844	0

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	507	333.0	0.0	0.0	0.0	174.0	0.0
G	594	403.0	0.0	0.0	0.0	191.0	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 = 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
A-B	0.19	-91.8	-91.8	0.14 (1)	10.00	H-C	0.816	0.13 (1)
B-C	-842.0	-91.8	-91.8	0.11 (1)	6.25	H-D	-42.24	0.01 (1)
C-D	-842.0	-91.8	-91.8	0.11 (1)	6.25	B-H	-42.24	0.01 (1)
D-E	0.19	-91.8	-91.8	0.14 (1)	10.00	I-B	-1102.0	0.45 (1)
E-F	0.41	-91.8	-91.8	0.13 (1)	10.00	D-G	-1102.0	0.46 (1)
I-A	-119.0	0.0	0.0	0.01 (1)	7.81			
G-E	-246.0	0.0	0.0	0.02 (1)	7.81			
I-H	0.751	-18.5	-18.5	0.28 (4)	10.00			
H-G	0.751	-18.5	-18.5	0.28 (4)	10.00			

TOTAL WEIGHT = 2 X 61 = 121 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.43")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.14/1.00 (D-E:1), BC=0.28/1.00 (G-H:4), WB=0.46/1.00 (D-G:1), SSI=0.11/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.39 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

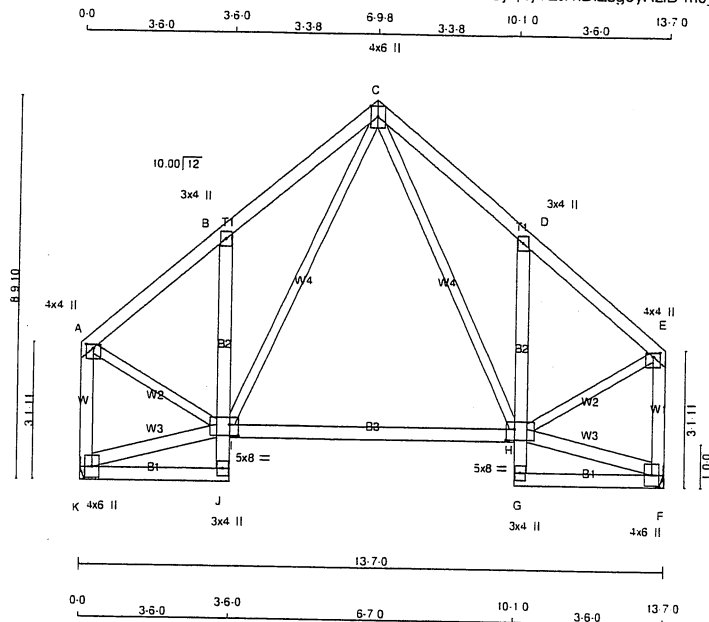


Structural component only
DWG# T-2022218

JOB NAME 406782	TRUSS NAME T41	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MITek Industries, Inc. Wed Oct 14 11:58:13 2020 Page 1
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Scale = 1:50.4

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - D	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - I	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
A	TMVW+p	MT20	4.0	4.0	1.00	2.00
B	TMV+p	MT20	3.0	4.0		
C	TTWW+p	MT20	4.0	6.0	Edge	
D	TMV+p	MT20	3.0	4.0		
E	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	BMVW1+p	MT20	4.0	6.0		
G	BMV+p	MT20	3.0	4.0		
H	BVMWWV-I	MT20	5.0	8.0	3.00	2.50
I	BVMWWV-I	MT20	5.0	8.0	3.00	2.50
J	BMV+p	MT20	3.0	4.0		
K	BMVW1+p	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

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	749	0	749	0	0		
F	749	0	749	0	0	MECHANICAL	
						MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	530	348 0	0 0	0 0	0 0	182 0	0 0
F	530	348 0	0 0	0 0	0 0	182 0	0 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 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			W E B S				
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. UNBRACED	MEMB.	FORCE (LBS)	MAX
FR-TO		(PLF)	CSI (LC)	LENGTH	FR-TO		CSI (LC)
		FROM	TO				
A-B	-549.0	-91.8	-91.8 0.13 (1)	6.25	C-H	0 258	0.06 (1)
B-C	-587.0	-91.8	-91.8 0.13 (1)	6.25	I-C	0 258	0.06 (1)
C-D	-587.0	-91.8	-91.8 0.13 (1)	6.25	K-I	-6 0	0.00 (1)
D-E	-549.0	-91.8	-91.8 0.13 (1)	6.25	A-I	0 500	0.11 (1)
K-A	-716.0	0.0	0.0 0.12 (1)	7.81	H-F	-6 0	0.00 (1)
F-E	-716.0	0.0	0.0 0.12 (1)	7.81	H-E	0 500	0.11 (1)
K-J	0 6	-18.5	-18.5 0.06 (4)	10.00			
J-I	0 35	0.0	0.0 0.01 (1)	10.00			
I-B	-378.0	0.0	0.0 0.04 (1)	7.81			
I-H	0 326	-18.5	-18.5 0.28 (4)	10.00			
G-H	0 35	0.0	0.0 0.01 (1)	10.00			
H-D	-378.0	0.0	0.0 0.04 (1)	7.81			
G-F	0 6	-18.5	-18.5 0.06 (4)	10.00			

TOTAL WEIGHT = 80 lb [M][F]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.13/1.00 (C-D:1), BC=0.28/1.00 (H-I:4), WB=0.11/1.00 (E-H:1), SSI=0.12/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.61 (A) (INPUT = 0.90)
JSI METAL = 0.17 (E) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua



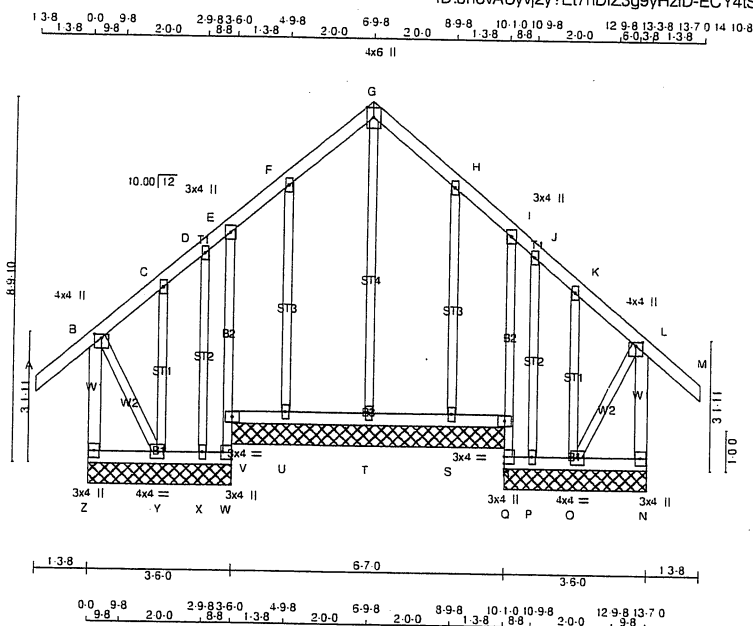
Structural component only
DWG# T-2022219

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	T41G	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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Scale = 1:52.9



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - G	2x4	DRY	No.2
G - M	2x4	DRY	No.2
Z - B	2x4	DRY	No.2
N - L	2x4	DRY	No.2
Z - W	2x4	DRY	No.2
W - E	2x4	DRY	No.2
V - R	2x4	DRY	No.2
Q - I	2x3	DRY	No.2
Q - N	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
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, H, J, K					
E TMVW+w	MT20	2.0	4.0		
F TMV+p	MT20	3.0	4.0		
G TTV+p	MT20	4.0	6.0		Edge
I TMV+p	MT20	3.0	4.0		
L TMVW+p	MT20	4.0	4.0	1.00	2.00
N, Q, Z					
N BMV1+p	MT20	3.0	4.0		
O BMVW1-l	MT20	4.0	4.0		
P, S, T, U, X					
P BMV1+w	MT20	2.0	4.0		
R BVW-l	MT20	3.0	4.0		
V BVW-l	MT20	3.0	4.0		
W BMV1+p	MT20	3.0	4.0	2.00	Edge
Y BMVW1-l	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

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 = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	VERT. LOAD LC1 MAX (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0.41	-91.8 -91.8	0.13 (1)	10.00	T-G	-167.0	0.18 (1)
B-C	-37.0	-91.8 -91.8	0.12 (1)	6.25	U-F	-193.0	0.11 (1)
C-D	0.4	-91.8 -91.8	0.01 (1)	10.00	X-D	-77.0	0.03 (1)
D-E	0.3	-91.8 -91.8	0.01 (1)	10.00	Y-C	-62.0	0.02 (1)
E-F	0.14	-91.8 -91.8	0.05 (1)	10.00	S-H	-193.0	0.11 (1)
F-G	-4.0	-91.8 -91.8	0.05 (1)	10.00	P-J	-77.0	0.03 (1)
G-H	-4.0	-91.8 -91.8	0.05 (1)	10.00	O-K	-62.0	0.02 (1)
H-I	0.14	-91.8 -91.8	0.05 (1)	10.00	B-Y	0.5	0.00 (1)
I-J	0.3	-91.8 -91.8	0.01 (1)	10.00	O-L	0.5	0.00 (1)
J-K	0.4	-91.8 -91.8	0.01 (1)	10.00			
K-L	-37.0	-91.8 -91.8	0.12 (1)	6.25			
L-M	0.41	-91.8 -91.8	0.13 (1)	10.00			
Z-B	-264.0	0.0 0.0	0.05 (1)	7.81			
N-L	-264.0	0.0 0.0	0.05 (1)	7.81			
Z-Y	0.0	-18.5 -18.5	0.01 (4)	10.00			
Y-X	0.1	-18.5 -18.5	0.01 (4)	10.00			
X-W	0.0	-18.5 -18.5	0.00 (4)	10.00			
W-V	-84.0	0.0 0.0	0.00 (1)	7.81			
V-E	-75.0	0.0 0.0	0.00 (1)	7.81			
V-U	-2.0	-18.5 -18.5	0.01 (4)	10.00			
U-T	-5.0	-18.5 -18.5	0.02 (4)	10.00			
T-S	-5.0	-18.5 -18.5	0.02 (4)	10.00			
S-R	-2.0	-18.5 -18.5	0.01 (4)	10.00			
Q-R	-84.0	0.0 0.0	0.00 (1)	7.81			
R-I	-75.0	0.0 0.0	0.00 (1)	7.81			
Q-P	0.0	-18.5 -18.5	0.00 (4)	10.00			
P-O	0.1	-18.5 -18.5	0.01 (4)	10.00			
O-N	0.0	-18.5 -18.5	0.01 (4)	10.00			

TOTAL WEIGHT = 89 lb

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
DL = 6.0	PSF	
BOT CH.	LL = 0.0	PSF
DL = 7.4	PSF	
TOTAL LOAD = 39.0	PSF	

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (T-U:4), WB=0.18/1.00 (G-T: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

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.20 (L) (INPUT=0.90)

JSI METAL=0.10 (F) (INPUT=1.00)

CHY OF RICHMOND HILL BUILDING DIVISION

03/08/2022

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Per: joshua.nabua



Structural component only
DWG# T-2022220

JOB NAME 406782	TRUSS NAME T42	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:15 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	3.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	1.75
C	TTWW+p	MT20	5.0	6.0	Edge	
D	TMWW-t	MT20	4.0	6.0	2.00	1.75
E	TMV+p	MT20	3.0	4.0		
F	BMVW1-t	MT20	5.0	6.0		
G	BMWW+t	MT20	5.0	8.0	4.25	2.50
H	BMWW+t	MT20	5.0	8.0	4.25	2.50
I	BMVW1-t	MT20	5.0	6.0		

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



Structural component only
DWG# T-2022221 3/2

CITY OF RICHMOND HILL
BUILDING DIVISION

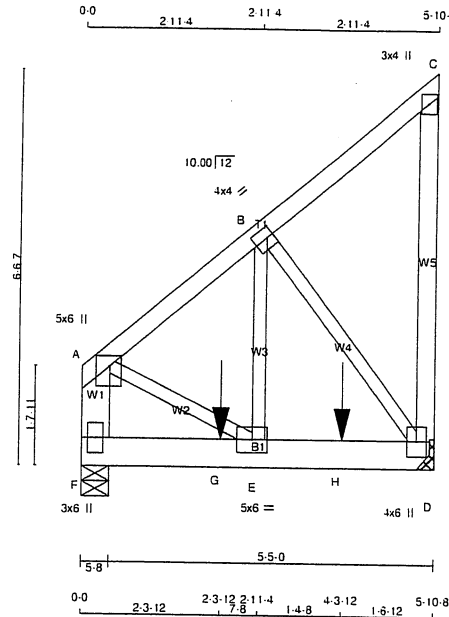
03/08/2022

RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME T43	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:58:16 2020 Page 1
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Scale = 1:36.2

LUMBER				DESCR.
CHORDS	SIZE	LUMBER		
A - C	2x4 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 2x3 DRY No.2 SPF
EXCEPT

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 - D 1	12	TOP
F - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2	12	TOP
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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	2.00	2.25
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMVW-t	MT20	5.0	6.0		
F	BMV1+p	MT20	3.0	6.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
D	1120	0	1120	0	0	MECHANICAL
F	940	0	940	0	0	5-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
D	787	543	0	0	0	244	0
F	661	454	0	0	0	207	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)

FR-TO	CHORDS				WEBS			
	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MEMB.	FORCE (LBS)	MAX. FACTORED	LC1 MAX
A-B	-759	0	-91.8	-91.8	0.07 (1)	6.25	E-B	0 915
B-C	-19	0	-91.8	-91.8	0.07 (1)	6.25	B-D	-957 0
D-C	-104	0	0.0	0.0	0.04 (1)	7.81	A-E	0 648
F-A	-852	0	0.0	0.0	0.03 (1)	7.81		0.08 (1)
F-G	0	0	-18.5	-18.5	0.10 (1)	10.00		
G-E	0	0	-18.5	-18.5	0.10 (1)	10.00		
E-H	0	598	-18.5	-18.5	0.18 (1)	10.00		
H-D	0	598	-18.5	-18.5	0.18 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-3-12	-495	-495	---	TOP	VERT	TOTAL	---	C1
H	4-3-12	-495	-495	---	TOP	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

- C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
PART 9 OF BCBC 2018, OBC 2012, ABC 2019
PART 9 OF OBC 2012 (2019 AMENDMENT)
CSA 086-09, CSA 086-14
TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.07/1.00 (A-B:1), BC=0.18/1.00 (D-E:1), WB=0.17/1.00 (B-D:1), SSI=0.22/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

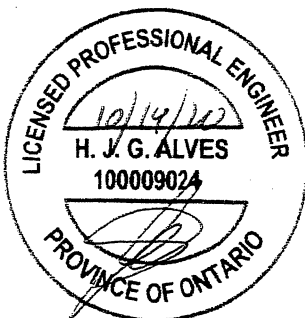
JSI GRIP = 0.53 (B) (INPUT = 0.90)
JSI METAL = 0.13 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

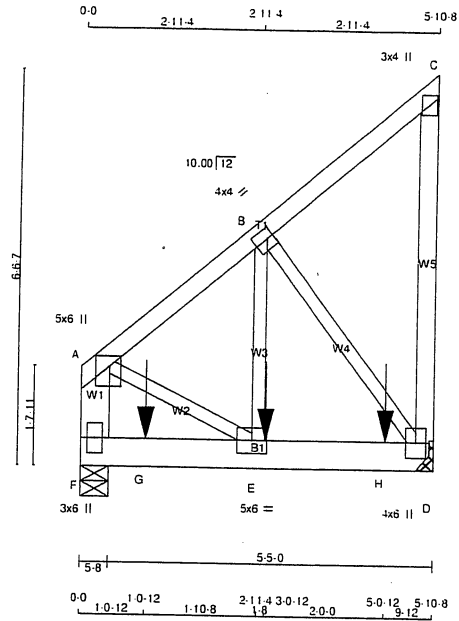


Structural component only
DWG# T-2022222

JOB NAME 406782	TRUSS NAME T43Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale = 1:36.2

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
D - C	2x4	DRY	No.2
F - A	2x6	DRY	No.2
F - D	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

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 - D 1 12		TOP
F - A 2 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2 12		SIDE(183.1)
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	TMVW+p	MT20	5.0	6.0	2.00	2.25
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+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	UPLIFT	IN-SX
D	1402	0	1402	0	MECHANICAL
F	1342	0	1342	0	5-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	989	663	0	0	0	0	326	0
F	946	635	0	0	0	0	311	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LBS)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LBS)
FR-TO		FROM PLF			FR-TO		
A-B	-844	0	-91.8	-91.8 0.07 (1)	6.25	E-B	0 1051
B-C	-19	0	-91.8	-91.8 0.07 (1)	6.25	B-D	-1061 0
D-C	-105	0	0.0	0.0 0.04 (1)	7.81	A-E	0 718
F-A	-933	0	0.0	0.0 0.03 (1)	7.81		
F-G	0	0	-18.5	-18.5 0.16 (1)	10.00		
G-E	0	0	-18.5	-18.5 0.16 (1)	10.00		
E-H	0	663	-18.5	-18.5 0.18 (1)	10.00		
H-D	0	663	-18.5	-18.5 0.18 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
E	3-0-12	-492	-492	---	BACK	VERT	TOTAL	C1
G	1-0-12	-492	-492	---	BACK	VERT	TOTAL	C1
H	5-0-12	-493	-493	---	BACK	VERT	TOTAL	C1

CONNECTION REQUIREMENTS

- C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.07:1.00 (A-B:1), BC=0.18:1.00 (D-E:1), WB=0.19:1.00 (B-D:1), SS=0.16:1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.60 (B) (INPUT = 0.90)
JSI METAL= 0.15 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua



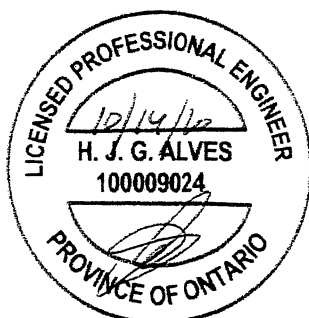
Structural component only
DWG# T-2022223

JOB NAME 406782	TRUSS NAME T43Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0		
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022223 *ML*

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

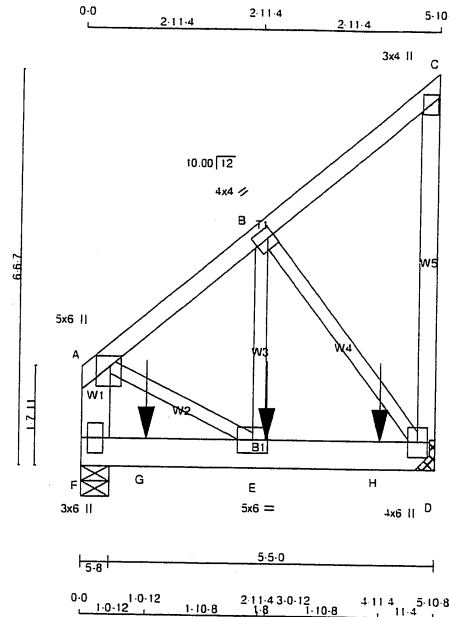
RECEIVED

Per: joshua.nabua

JOB NAME 406781	TRUSS NAME T43Z2	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale = 1/32"

<u>LUMBER</u>					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR
A - C	2x4	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		2x3	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

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 - D 1	12	TOP
F - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2	12	SIDE(0.0)
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 TRANSFERRING. 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	2.00	2.25
B TMWW-t	MT20	4.0	4.0	2.00	1.25
C TMV+p	MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT		
D	1660	0	1660	0	MECHANICAL	
F	910	0	910	0	5-8	5-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	1170	793	0	0	0	376	0
F	637	456	0	0	0	181	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)

C H O R D S							W E B S						
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CS1 (LC)	MAX. UNBRAC LENGTH	FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)				
FR-TO		FROM TO					FR-TO						
A-B	-710 0	-91.8 -91.8	0.07 (1)	6.25	E-B	0 836	0.10 (1)						
B-C	-20 0	-91.8 -91.8	0.07 (1)	6.25	B-D	-896 0	0.16 (1)						
D-C	-104 0	0.0 0.0	0.04 (1)	7.81	A-E	0 607	0.08 (1)						
F-A	-804 0	0.0 0.0	0.03 (1)	7.81									
F-G	0 0	-18.5 -18.5	0.10 (1)	10.00									
G-E	0 0	-18.5 -18.5	0.10 (1)	10.00									
E-H	0 560	-18.5 -18.5	0.33 (1)	10.00									
H-D	0 560	-18.5 -18.5	0.33 (1)	10.00									

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC	LC1	MAX-	MAX+	FACE	DIRL	TYPE	HEEL	CONN.
E	3-0-12	-213	-213		TOP	VERT	TOTAL		C1
G	1-0-12	-182	-182		TOP	VERT	TOTAL		C1
H	4-11-4	-953	-953		BACK	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 36 = 73 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.02")

CSI: TC=0.07/1.00 (A-B:1), BC=0.33/1.00 (D-E:1), WB=0.16/1.00 (B-D:1), SSI=0.28/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.48 (B) (INPUT = 0.90)

JSI METAL = 0.13 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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Per: joshua.nabua



Structural component only
DWG# T-2022249 1/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406781	T43Z2	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:48 2020 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0		
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022249 *MR*

CITY OF RICHMOND HILL
BUILDING DIVISION

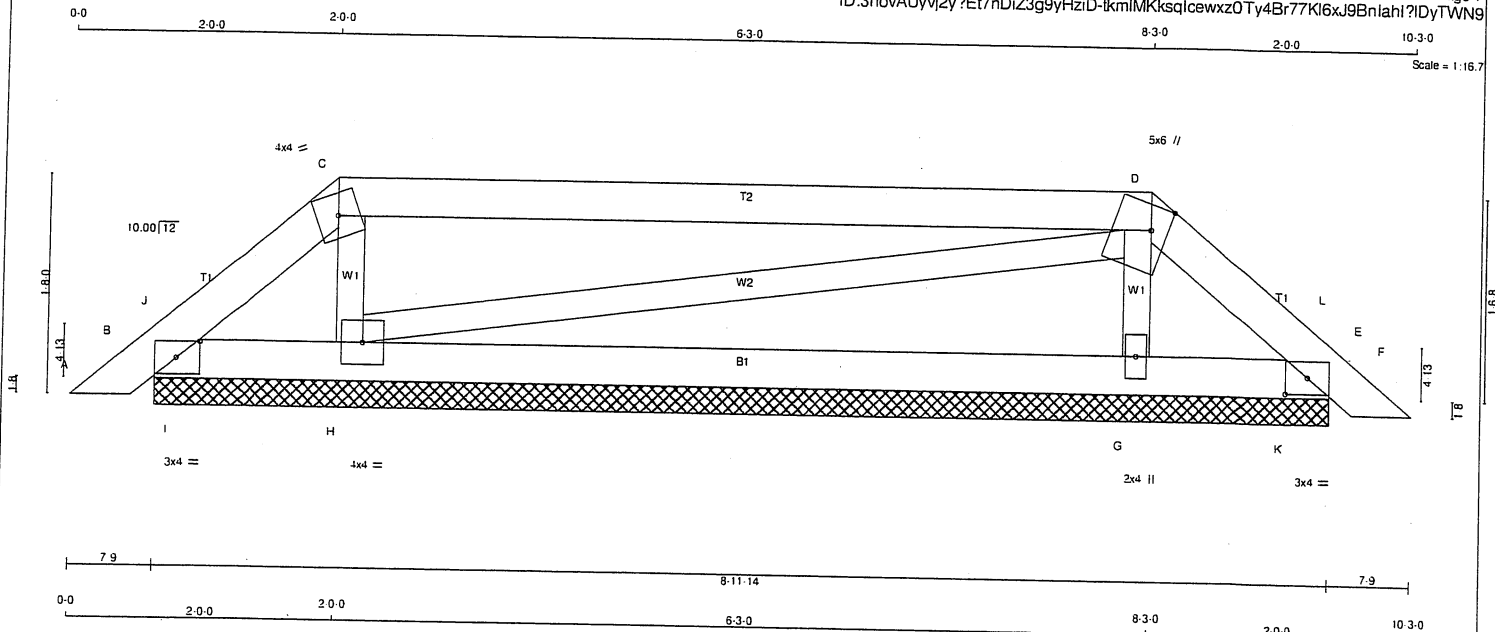
03/08/2022

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Per: joshua.nabua

JOB NAME 406781	TRUSS NAME PB1	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:32 2020 Page 1
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TOTAL WEIGHT = 30 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
B - E	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	1.50 2.00
C	TTW-m	MT20	4.0	4.0	
D	TTWW+m	MT20	5.0	6.0	2.25 1.50
E	TMB1-I	MT20	3.0	4.0	1.50 2.00
G	BMW1+w	MT20	2.0	4.0	
H	BMW1-I	MT20	4.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
B	136	0	136	0	8-11-14	8-11-14
E	142	0	142	0	8-11-14	8-11-14
H	410	0	410	0	8-11-14	8-11-14
G	402	0	402	0	8-11-14	8-11-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS				SOIL
	SNOW	LIVE	PERM. LIVE	WIND	DEAD		
B	91	89.0	0.0	0.0	2.0	0.0	
E	95	92.0	0.0	0.0	3.0	0.0	
H	294	169.0	0.0	0.0	125.0	0.0	
G	289	165.0	0.0	0.0	124.0	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0.14	-91.8 -91.8	0.02 (1)	10.00	H-C	-285.0	0.04 (1)
B-J	-30.28	-91.8 -91.8	0.03 (4)	6.25	H-D	-7.0	0.00 (1)
J-C	-72.0	-91.8 -91.8	0.02 (4)	6.25	G-D	-279.0	0.04 (1)
C-D	-25.0	-91.8 -91.8	0.61 (1)	6.25	I-J	-121.0	0.00 (1)
D-L	-80.0	-91.8 -91.8	0.02 (4)	6.25	K-L	-120.0	0.00 (1)
L-E	-38.26	-91.8 -91.8	0.03 (4)	6.25			
E-F	0.14	-91.8 -91.8	0.02 (1)	10.00			
B-I	0.49	-18.5 -18.5	0.03 (1)	10.00			
I-H	0.49	-18.5 -18.5	0.12 (4)	10.00			
H-G	0.31	-18.5 -18.5	0.12 (4)	10.00			
G-K	0.55	-18.5 -18.5	0.12 (4)	10.00			
K-E	0.55	-18.5 -18.5	0.03 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.61/1.00 (C-D:1), BC=0.12/1.00 (G-K:4), WB=0.04/1.00 (C-H:1), SSI=0.22/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (C) (INPUT = 0.90)
JSI METAL= 0.06 (D) (INPUT = 1.00)



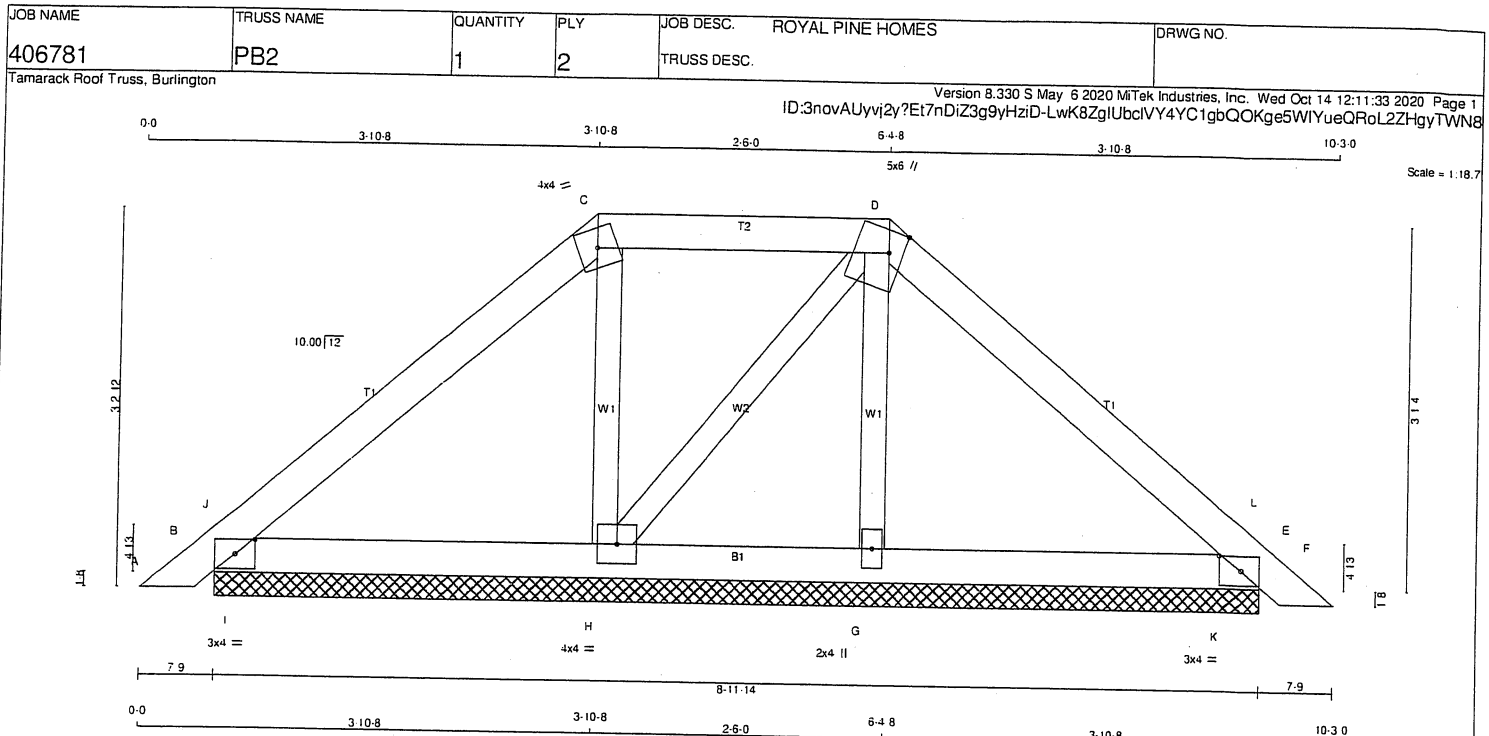
Structural component only
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BUILDING DIVISION

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Per: joshua.nabua



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.			

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	12	TOP
C-D	12	TOP
D-F	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
B-E	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-i	MT20	3.0	4.0	1.50	2.00
C	TTW-m	MT20	4.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMB1-i	MT20	3.0	4.0	1.50	2.00
G	BMW1+w	MT20	2.0	4.0		
H	BMW1-i	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REORD BRG
BT	289	289	0	0
ET	310	310	0	0
HT	287	287	0	0
GT	204	204	0	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	202	143.0	0.0	0.0	0.0	0.0	59.0	0.0
E	217	155.0	0.0	0.0	0.0	0.0	62.0	0.0
H	203	132.0	0.0	0.0	0.0	0.0	71.0	0.0
G	146	85.0	0.0	0.0	0.0	0.0	61.0	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 14	-91.8 -91.8	0.01 (1)	10.00	H-C	-174 0	0.02 (1)
B-J	-35 0	-91.8 -91.8	0.02 (1)	6.25	H-D	-40 0	0.00 (1)
J-C	-112 0	-91.8 -91.8	0.06 (1)	6.25	G-D	-122 0	0.01 (1)
C-D	-74 0	-91.8 -91.8	0.05 (1)	6.25	I-J	-282 0	0.00 (1)
D-L	-144 0	-91.8 -91.8	0.06 (1)	6.25	K-L	-277 0	0.00 (1)
L-E	-49 0	-91.8 -91.8	0.02 (1)	6.25			
E-F	0 14	-91.8 -91.8	0.01 (1)	10.00			
B-I	0 80	-18.5 -18.5	0.05 (1)	10.00			
I-H	0 80	-18.5 -18.5	0.05 (1)	10.00			
H-G	0 100	-18.5 -18.5	0.03 (1)	10.00			
G-K	0 105	-18.5 -18.5	0.05 (1)	10.00			
K-E	0 105	-18.5 -18.5	0.05 (1)	10.00			

TOTAL WEIGHT = 2 X 31 = 63 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.06/1.00 (C-J:1), BC=0.05/1.00 (G-K:1).
WB=0.02/1.00 (C-H:1), SSI=0.11/1.00 (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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.13 (E) (INPUT = 0.90)
JSI METAL = 0.03 (E) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

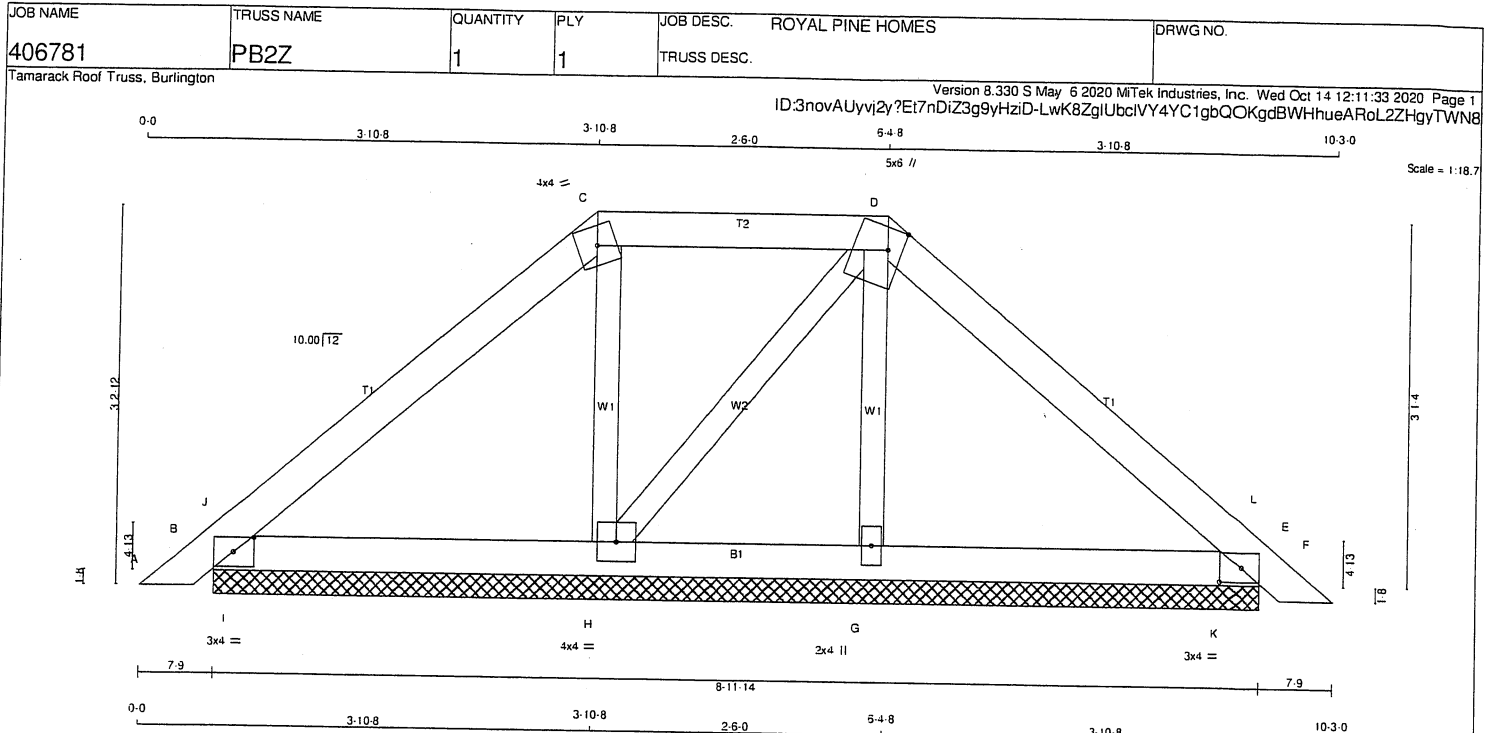
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Per: joshua.nabua



Structural component only
DWG# T-2022233



LUMBER

N. L. G. A. RULES
CHORDS SIZE

A - C 2x4 DRY No.2
C - D 2x4 DRY No.2
D - F 2x4 DRY No.2
B - E 2x4 DRY No.2
ALL WEBS 2x3 DRY No.2
DRY: SEASONED LUMBER.

LUMBER

DESCR. SPF
SPF
SPF
SPF

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT HORZ	DOWN HORZ UPLIFT	IN-SX	IN-SX
B 288 0	288 0 0	8-11-14	8-11-14
E 309 0	309 0 0	8-11-14	8-11-14
H 288 0	288 0 0	8-11-14	8-11-14
G 205 0	205 0 0	8-11-14	8-11-14

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS	DEAD	SOIL
JT COMBINED	SNOW LIVE PERM. LIVE WIND		
B 202	142.0 0.0 0.0 0.0	59.0	0.0
E 216	155.0 0.0 0.0 0.0	62.0	0.0
H 204	133.0 0.0 0.0 0.0	71.0	0.0
G 147	85.0 0.0 0.0 0.0	61.0	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	FACTORED	FACTORED	FACTORED	FACTORED	FACTORED	FACTORED	FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. FACTORED (LBS)
FR-TO					FR-TO		
A-B	0.14	-91.8	-91.8 0.02 (1)	10.00	H-C	-174.0	0.03 (1)
B-J	-35.0	-91.8	-91.8 0.05 (1)	6.25	H-D	-41.0	0.01 (1)
J-C	-111.0	-91.8	-91.8 0.12 (1)	6.25	G-D	-122.0	0.02 (1)
C-D	-73.0	-91.8	-91.8 0.10 (1)	6.25	I-J	-286.0	0.00 (1)
D-L	-143.0	-91.8	-91.8 0.12 (1)	6.25	K-L	-281.0	0.00 (1)
L-E	-45.0	-91.8	-91.8 0.05 (1)	6.25			
E-F	0.14	-91.8	-91.8 0.02 (1)	10.00			
B-I	0.79	-18.5	-18.5 0.11 (1)	10.00			
I-H	0.79	-18.5	-18.5 0.11 (1)	10.00			
H-G	0.99	-18.5	-18.5 0.06 (1)	10.00			
G-K	0.104	-18.5	-18.5 0.11 (1)	10.00			
K-E	0.104	-18.5	-18.5 0.11 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.12/1.00 (C-J:1), BC=0.11/1.00 (G-K:1), WB=0.03/1.00 (C-H: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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.26 (E) (INPUT = 0.90)
JSI METAL = 0.07 (E) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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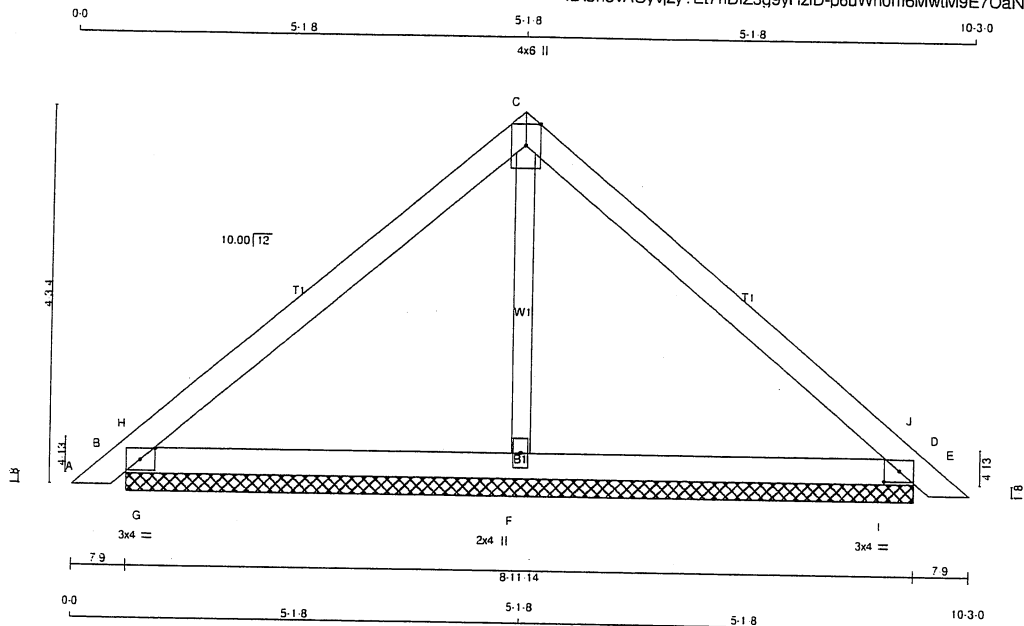
Per: joshua.nabua



Structural component only
DWG# T-2022234

JOB NAME 406781	TRUSS NAME PB3	QUANTITY 7	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MTEK Industries, Inc. Wed Oct 14 12:11:34 2020 Page 1
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Scale = 1/24.8

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - E 2x4 DRY No.2

B - D 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

LUMBER

No.2

No.2

No.2

No.2

No.2

DESCR.

SPF

SPF

SPF

SPF

SPF

PLATES (table is in inches)

JT TYPE PLATES

B TMB1-I MT20

C TTW+p MT20

D TMB1-I MT20

F BMW1+w MT20

W LEN Y X

3.0 4.0 1.50 2.00

4.0 6.0 Edge

3.0 4.0 1.50 2.00

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	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
VERT	HORZ	DOWN	HORZ	UPLIFT
B	394	0	394	0
D	394	0	394	0
F	301	0	301	0

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
COMBINED	MAX. MIN.	COMPONENT REACTIONS					
B	276	197	0	0	0	79	0
D	276	197	0	0	0	79	0
F	217	121	0	0	0	96	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 LOADED CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 14	-91.8 -91.8	0.02 (1)	F-C	-101 0	0.03 (1)	
B-H	-32 / 80	-91.8 -91.8	0.15 (1)	G-H	-592 0	0.00 (1)	
H-C	-204 / 0	-91.8 -91.8	0.22 (1)	I-J	-592 0	0.00 (1)	
C-J	-204 / 0	-91.8 -91.8	0.22 (1)				
J-D	-32 / 80	-91.8 -91.8	0.15 (1)				
D-E	0 / 14	-91.8 -91.8	0.02 (1)				
B-G	0 / 146	-18.5 -18.5	0.21 (1)				
G-F	0 / 146	-18.5 -18.5	0.21 (1)				
F-I	0 / 146	-18.5 -18.5	0.21 (1)				
I-D	0 / 146	-18.5 -18.5	0.21 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.22/1.00 (C-H:1), BC=0.21/1.00 (B-G:1), WB=0.03/1.00 (C-F:1), SSI=0.45/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1667 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (B) (INPUT = 0.90)
JSI METAL= 0.09 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022235

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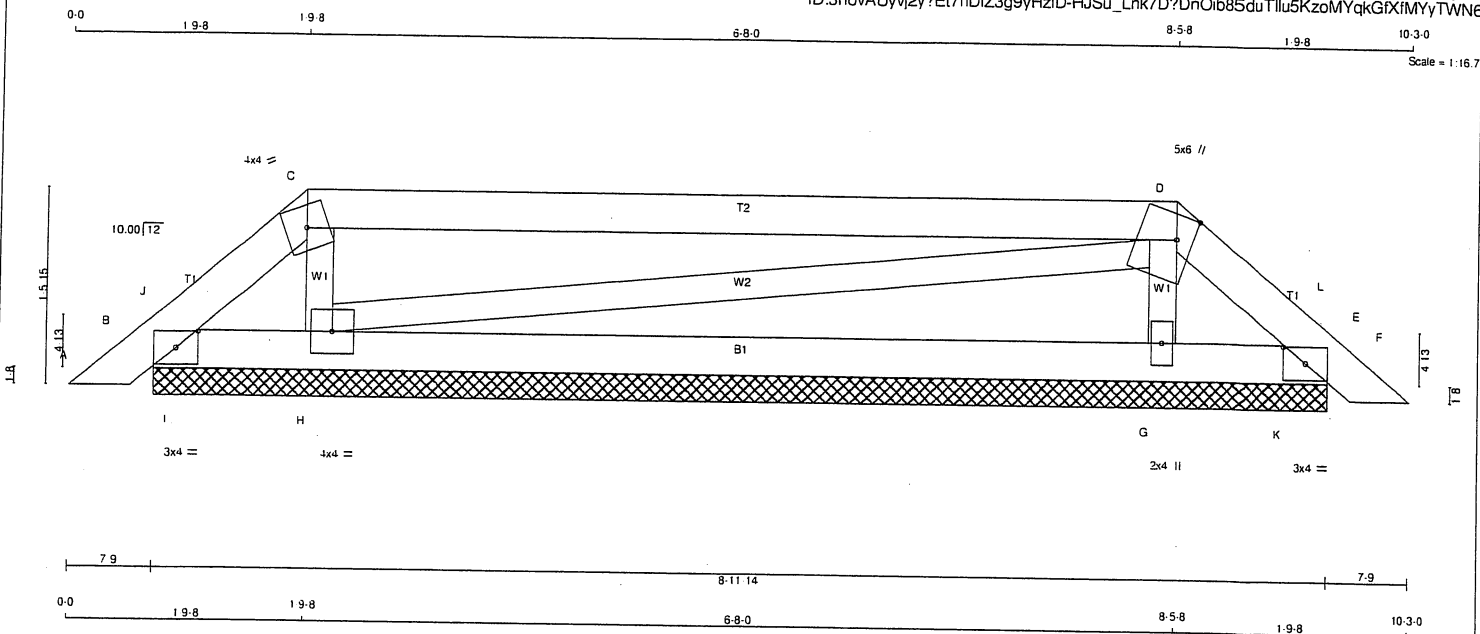
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Per: joshua.nabua

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406781	PB4	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:35 2020 Page 1
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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.					

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

CHORDS #ROWS	SURFACE	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS	SPACING (IN)	
A-C	12	TOP
C-D	12	TOP
D-F	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
B-E	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.00
C	TTW-m	MT20	4.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMB1-I	MT20	3.0	4.0	1.50	2.00
G	BMW1+w	MT20	2.0	4.0		
H	BMW1-I	MT20	4.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	114	0	114	0	8-11-14	8-11-14
E	118	0	118	0	8-11-14	8-11-14
H	431	0	431	0	8-11-14	8-11-14
G	426	0	426	0	8-11-14	8-11-14

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	74	85.0	0.0	0.0	0.0	0. -10	0.0
E	77	87.0	0.0	0.0	0.0	0. -10	0.0
H	311	173.0	0.0	0.0	0.0	137.0	0.0
G	307	170.0	0.0	0.0	0.0	137.0	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				WEBS						
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)			
FR-TO		FROM	TO		FR-TO					
A-B	0 14	-91.8	-91.8	0.01 (1)	10.00	H-C	-291 0	0.02 (1)		
B-J	-27 35	-91.8	-91.8	0.02 (4)	6.25	H-D	-5 0	0.00 (1)		
J-C	-75 0	-91.8	-91.8	0.01 (4)	6.25	G-D	-287 0	0.02 (1)		
C-D	-20 0	-91.8	-91.8	0.35 (1)	6.25	I-J	-119 0	0.00 (1)		
D-L	-80 0	-91.8	-91.8	0.01 (4)	6.25	K-L	-118 0	0.00 (1)		
L-E	-33 34	-91.8	-91.8	0.02 (4)	6.25					
E-F	0 14	-91.8	-91.8	0.01 (1)	10.00					
B-I	0 49	-18.5	-18.5	0.01 (1)	10.00					
I-H	0 49	-18.5	-18.5	0.07 (4)	10.00					
H-G	0 25	-18.5	-18.5	0.07 (4)	10.00					
G-K	0 53	-18.5	-18.5	0.07 (4)	10.00					
K-E	0 53	-18.5	-18.5	0.01 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.35/1.00 (C-D:1), BC=0.07/1.00 (G-K:4), WB=0.02/1.00 (C-H:1), SSI=0.12/1.00 (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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.13 (C) (INPUT = 0.90)
JSI METAL = 0.03 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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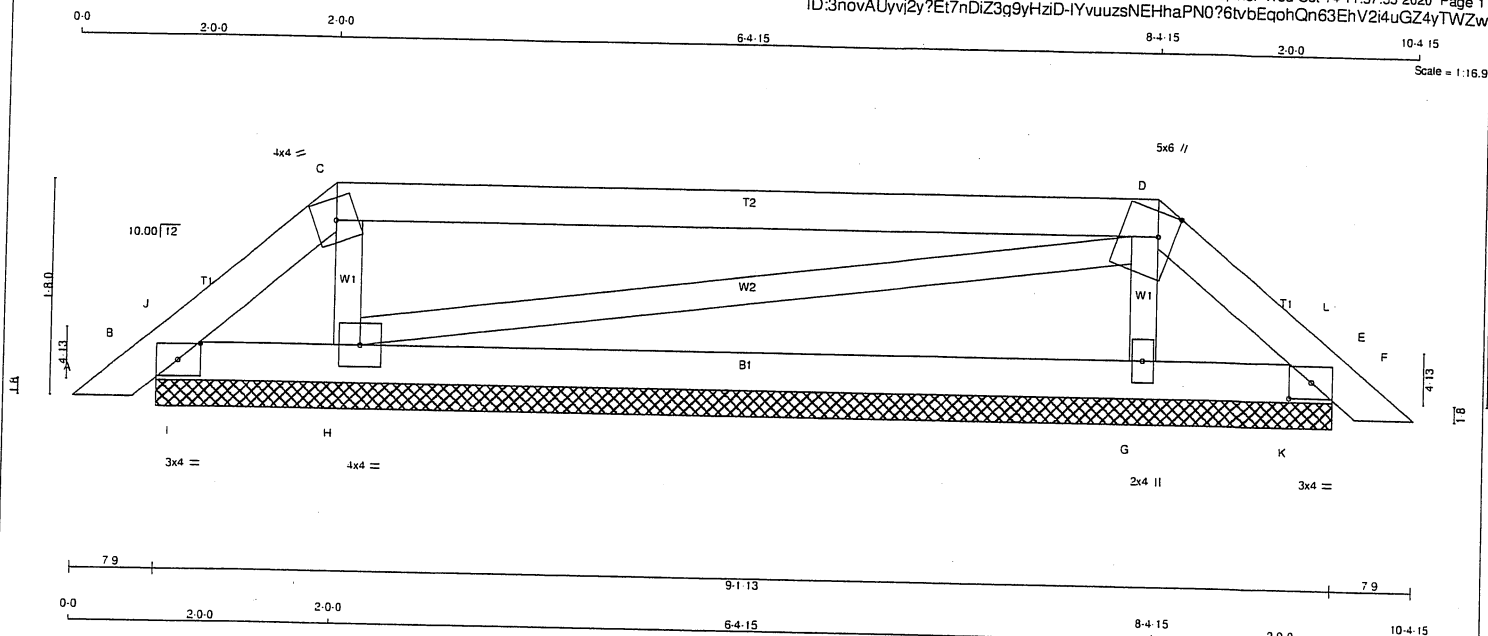
Per: joshua.nabua



Structural component only
DWG# T-2022236

JOB NAME 406782	TRUSS NAME PB31	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - D 2x4 DRY No.2

D - F 2x4 DRY No.2

B - E 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
VERT	HORZ	DOWN	HORZ
JT	135	0	0
B	140	0	0
E	420	0	0
H	412	0	0
G	412	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED						
B	90	89.0	0.0	0.0	0.0	1.0	0.0
E	94	92.0	0.0	0.0	0.0	1.0	0.0
H	301	173.0	0.0	0.0	0.0	129.0	0.0
G	296	168.0	0.0	0.0	0.0	128.0	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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO					FR-TO			
A-B	0.14	-91.8	-91.8	0.02 (1)	10.00	H-C	-292.0	0.04 (1)
B-J	-28.30	-91.8	-91.8	0.03 (4)	6.25	H-D	-6.0	0.00 (1)
J-C	-73.0	-91.8	-91.8	0.03 (4)	6.25	G-D	-285.0	0.04 (1)
C-D	-25.0	-91.8	-91.8	0.64 (1)	6.25	I-J	-125.0	0.00 (1)
D-L	-81.0	-91.8	-91.8	0.03 (4)	6.25	K-L	-124.0	0.00 (1)
L-E	-37.29	-91.8	-91.8	0.03 (4)	6.25			
E-F	0.14	-91.8	-91.8	0.02 (1)	10.00			
B-I	0.49	-18.5	-18.5	0.03 (1)	10.00			
I-H	0.49	-18.5	-18.5	0.13 (4)	10.00			
H-G	0.31	-18.5	-18.5	0.12 (4)	10.00			
G-K	0.55	-18.5	-18.5	0.13 (4)	10.00			
K-E	0.55	-18.5	-18.5	0.03 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.64/1.00 (C-D:1), BC=0.13/1.00 (G-K:4), WB=0.04/1.00 (C-H: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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (C) (INPUT = 0.90)
JSI METAL= 0.06 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

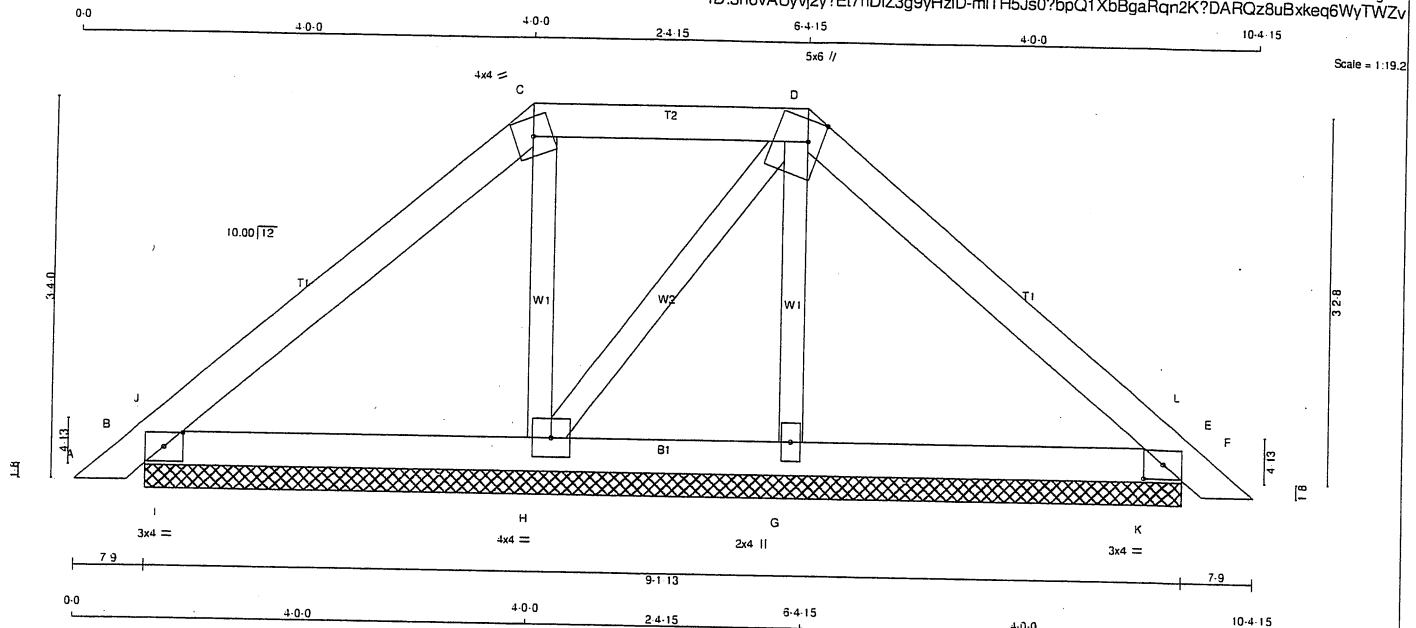


Structural component only
DWG# T-2022198

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	PB32	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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Scale = 1:19.2

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
DRY: SEASONED LUMBER.

DESCR.	SPF
SPF	
SPF	
SPF	
SPF	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD IN-SX
	VERT	HORZ	DOWN	HORZ		
B	298	0	298	0	9-1-13	9-1-13
E	319	0	319	0	9-1-13	9-1-13
H	289	0	289	0	9-1-13	9-1-13
G	202	0	202	0	9-1-13	9-1-13

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	209	147.0	0.0	0.0	0.0	62.0	0.0
E	223	159.0	0.0	0.0	0.0	64.0	0.0
H	205	133.0	0.0	0.0	0.0	71.0	0.0
G	144	84.0	0.0	0.0	0.0	61.0	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				WEBS				
MEMB.	MAX. FACTORED	FACTORED		MAX. UNBRAC	MEMB.	MAX. FACTORED	MAX	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)			FORCE (LBS)		CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0.14	-91.8	-91.8	0.02 (1)	10.00	H-C	-171.0	0.03 (1)
B-J	-37.0	-91.8	-91.8	0.05 (1)	6.25	H-D	-42.0	0.01 (1)
J-C	-118.0	-91.8	-91.8	0.13 (1)	6.25	G-D	-117.0	0.02 (1)
C-D	-78.0	-91.8	-91.8	0.09 (1)	6.25	I-J	-308.0	0.00 (1)
D-L	-150.0	-91.8	-91.8	0.13 (1)	6.25	K-L	-303.0	0.00 (1)
L-E	-43.0	-91.8	-91.8	0.05 (1)	6.25			
E-F	0.14	-91.8	-91.8	0.02 (1)	10.00			
B-I	0.84	-18.5	-18.5	0.11 (1)	10.00			
I-H	0.84	-18.5	-18.5	0.11 (1)	10.00			
H-G	0.104	-18.5	-18.5	0.07 (1)	10.00			
G-K	0.108	-18.5	-18.5	0.12 (1)	10.00			
K-E	0.108	-18.5	-18.5	0.12 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 25.6 PSF
	DL	= 6.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.4 PSF
TOTAL LOAD	=	39.0 PSF

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13/1.00 (C-J:1), BC=0.12/1.00 (G-K:1), WB=0.03/1.00 (C-H:1), SS=0.24/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

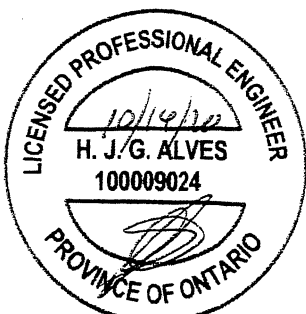
JSI GRIP = 0.26 (E) (INPUT = 0.90)
JSI METAL = 0.07 (E) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

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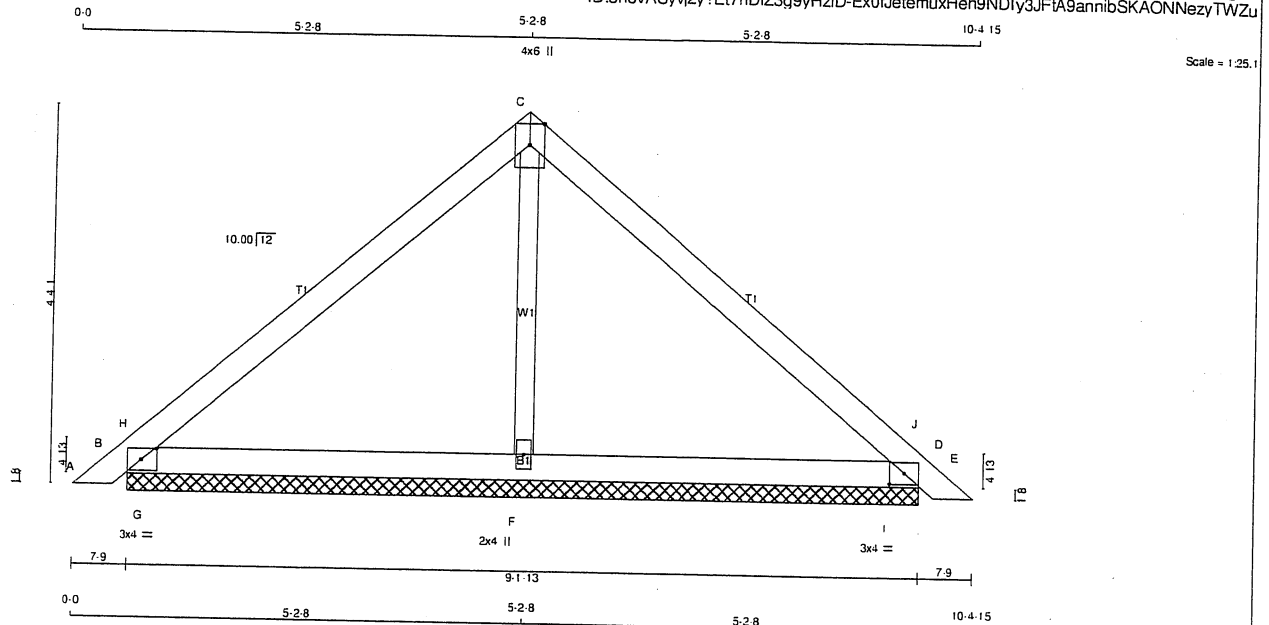
Per: joshua.nabua



Structural component only
DWG# T-2022199

JOB NAME 406782	TRUSS NAME PB33	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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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
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		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
B-D 1 12		TOP
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.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0	1.50	2.00
C TTW+p	MT20	4.0	6.0	Edge	
D TMB1-I	MT20	3.0	4.0	1.50	2.00
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	403	0	403	0	9-1-13	9-1-13
D	403	0	403	0	9-1-13	9-1-13
F	302	0	302	0	9-1-13	9-1-13

UNFACTORED REACTIONS

1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	282	201.0	0.0	0.0	0.0	81.0	0.0
B	282	201.0	0.0	0.0	0.0	81.0	0.0
TD	217	120.0	0.0	0.0	0.0	97.0	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)

MEMB.	CHORDS		W EBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	0.14	-91.8	-91.8	0.01 (1)
B-H	-33.80	-91.8	-91.8	0.07 (1)
H-C	-212.0	-91.8	-91.8	0.12 (1)
C-J	-212.0	-91.8	-91.8	0.12 (1)
J-D	-33.80	-91.8	-91.8	0.07 (1)
D-E	0.14	-91.8	-91.8	0.01 (1)
B-G	0.151	-18.5	-18.5	0.11 (1)
G-F	0.151	-18.5	-18.5	0.11 (1)
F-I	0.151	-18.5	-18.5	0.11 (1)
I-D	0.151	-18.5	-18.5	0.11 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD =	39.0	PSF

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.12/1.00 (C-J:1), BC=0.11/1.00 (F-I:1), WB=0.01/1.00 (C-F:1), SS=0.23/1.00 (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)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (D) (INPUT = 0.90)
JSI METAL = 0.05 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022200

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

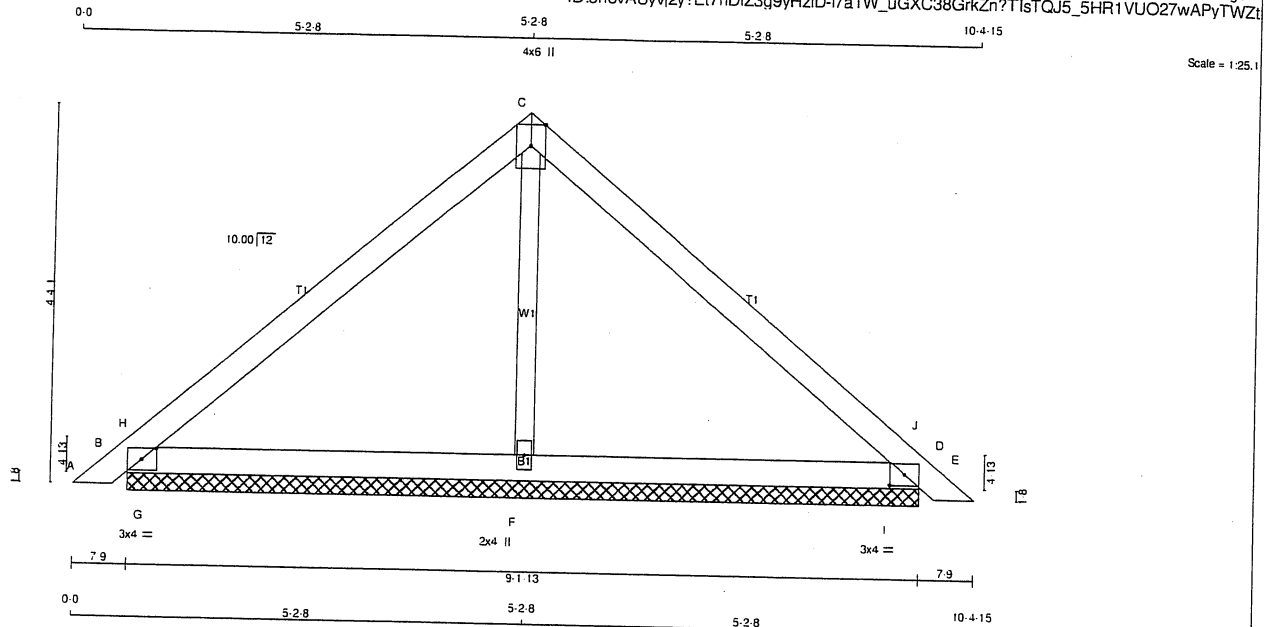
RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME PB33Z	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:57:58 2020 Page 1
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Scale = 1/25.1

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	1.50	2.00
C	TTW+p	MT20	4.0	6.0	Edge	
D	TMB1-I	MT20	3.0	4.0	1.50	2.00
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
B	402	0	402	0	9-1-13	9-1-13
D	402	0	402	0	9-1-13	9-1-13
F	304	0	304	0	9-1-13	9-1-13

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	281	201.0	0.0	0.0	0.0	81.0	0.0
D	281	201.0	0.0	0.0	0.0	81.0	0.0
F	219	122.0	0.0	0.0	0.0	97.0	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)

MEMB.	CHORDS		FACTORED		MAX. UNBRACED LENGTH	MEMB.	WEBS		MAX. UNBRACED LENGTH
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CSI (LC)			MAX. FORCE (LBS)	FACTORED MAX. CSI (LC)	
FR-TO									
A-B	0.14	-91.8	-91.8	0.02 (1)	10.00	F-C	-101.0	0.03 (1)	
B-H	-32.87	-91.8	-91.8	0.15 (1)	6.25	G-H	-612.0	0.00 (1)	
H-C	-210.0	-91.8	-91.8	0.23 (1)	6.25	I-J	-612.0	0.00 (1)	
C-J	-210.0	-91.8	-91.8	0.23 (1)	6.25				
J-D	-32.87	-91.8	-91.8	0.15 (1)	6.25				
D-E	0.14	-91.8	-91.8	0.02 (1)	10.00				
B-G	0.150	-18.5	-18.5	0.22 (1)	10.00				
G-F	0.150	-18.5	-18.5	0.22 (1)	10.00				
F-I	0.150	-18.5	-18.5	0.22 (1)	10.00				
I-D	0.150	-18.5	-18.5	0.22 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.23/1.00 (C-J:1), BC=0.22/1.00 (F-I:1), WB=0.03/1.00 (C-F:1), SSI=0.46/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



Structural component only
DWG# T-2022201

CITY OF RICHMOND HILL
BUILDING DIVISION

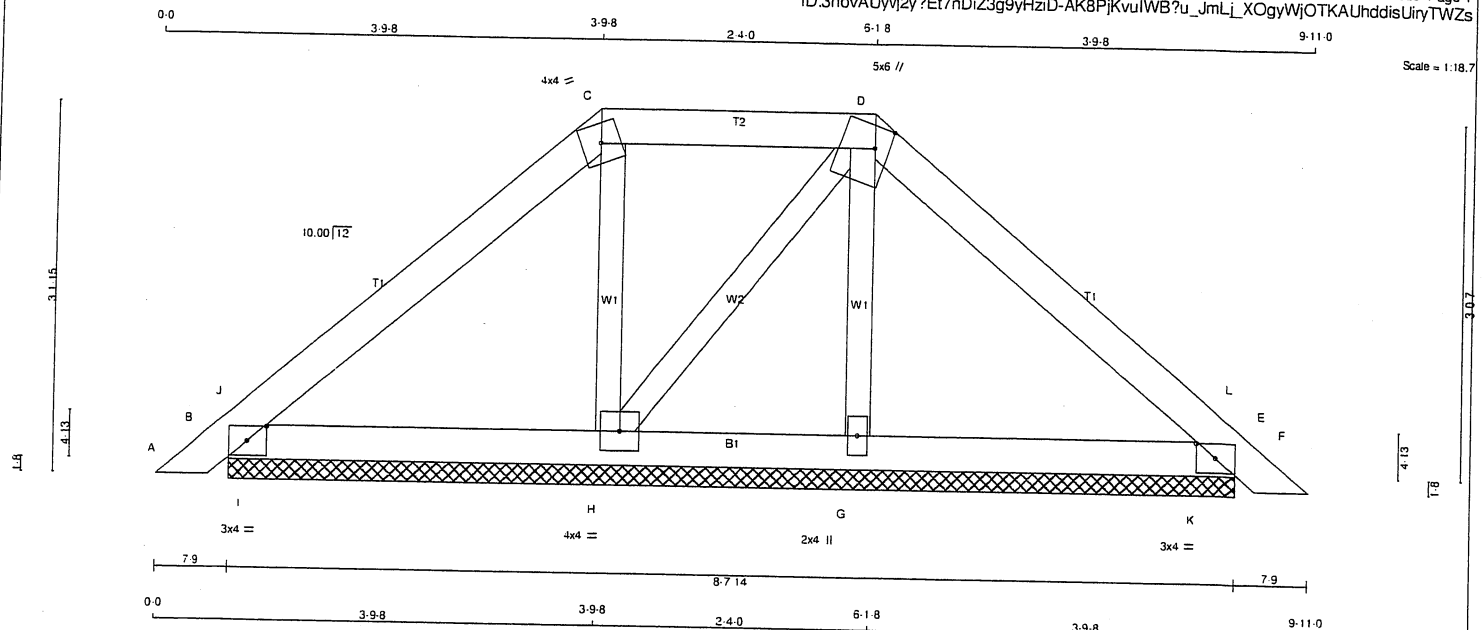
03/08/2022

RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME PB35	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:57:59 2020 Page 1
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LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - C	2x4 DRY	No.2
C - D	2x4 DRY	No.2
D - F	2x4 DRY	No.2
B - E	2x4 DRY	No.2

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.00
C	TTW-m	MT20	4.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMB1-I	MT20	3.0	4.0	1.50	2.00
G	BMW1+w	MT20	2.0	4.0		
H	BMW1-I	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD IN-SX
B	280	280	0	8-7-14
E	301	301	0	8-7-14
H	277	277	0	8-7-14
G	194	194	0	8-7-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	197	139	0	0	0	58	0
E	211	150	0	0	0	60	0
H	196	128	0	0	0	68	0
G	139	81	0	0	0	58	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 14	-91.8 -91.8	0.02 (1)	H-C	-166 0	0.03 (1)	
B-J	-34 0	-91.8 -91.8	0.05 (1)	H-D	-40 0	0.01 (1)	
J-C	-106 0	-91.8 -91.8	0.11 (1)	G-D	-115 0	0.02 (1)	
C-D	-69 0	-91.8 -91.8	0.09 (1)	I-J	-273 0	0.00 (1)	
D-L	-137 0	-91.8 -91.8	0.11 (1)	K-L	-268 0	0.00 (1)	
L-E	-46 0	-91.8 -91.8	0.05 (1)				
E-F	0 14	-91.8 -91.8	0.02 (1)				
B-I	0 76	-18.5 -18.5	0.10 (1)				
I-H	0 76	-18.5 -18.5	0.10 (1)				
H-G	0 95	-18.5 -18.5	0.06 (1)				
G-K	0 99	-18.5 -18.5	0.10 (1)				
K-E	0 99	-18.5 -18.5	0.10 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6 PSF
DL = 6.0 PSF	
BOT CH.	LL = 0.0 PSF
DL = 7.4 PSF	
TOTAL LOAD	= 39.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (C-J:1), BC=0.10/1.00 (G-K:1), WB=0.03/1.00 (C-H:1), SSI=0.21/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.25 (E) (INPUT = 0.90)
JSI METAL = 0.06 (E) (INPUT = 1.00)



Structural component only
DWG# T-2022203

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

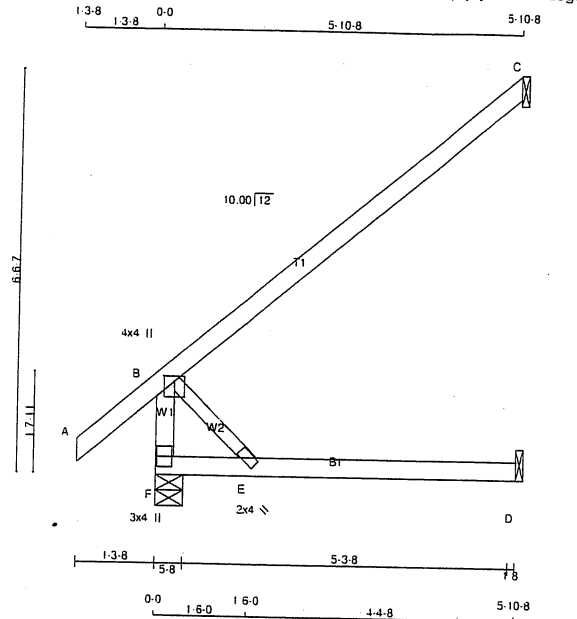
RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME J1	QUANTITY 16	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:57:55 2020 Page 1
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Scale = 1:35.5

TOTAL WEIGHT = 16 X 20 = 328 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	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		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
F	451	0	451	0	5-8	5-8
C	270	0	270	0	1-8	1-8
D	54	0	61	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	317	221	0	0	0	95	0
C	186	150	0	0	0	35	0
D	43	0	0	0	0	43	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: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	FR-TO	WEBS	
	MAX. FORCE (LBS)	VERT. LOAD (LBS)	LC1	MAX			MEMB. MAX. FORCE (LBS)	FACTORED
F-B	-397	0	0.0	0.0	0.04 (1)	7.81	B-E	0
A-B	0	41	-91.8	-91.8	0.13 (1)	10.00		
B-C	0	0	-91.8	-91.8	0.54 (1)	10.00		
F-E	0	0	-18.5	-18.5	0.14 (4)	10.00		
E-D	0	0	-18.5	-18.5	0.19 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6 PSF
	DL = 6.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.4 PSF
TOTAL LOAD	= 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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) = $L/999$ (0.05")

CSI: TC=0.54/1.00 (B-C:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E: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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.31 (B) (INPUT = 0.90)
JSI METAL = 0.08 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022197

CITY OF RICHMOND HILL
BUILDING DIVISION

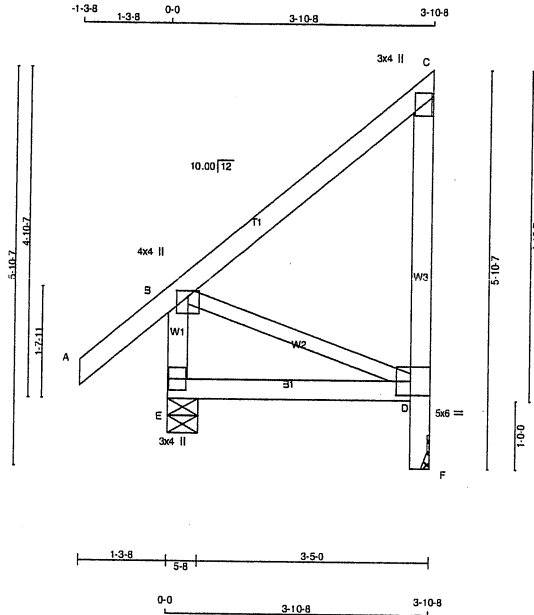
03/08/2022

RECEIVED

Per: joshua.nabua

JOB NAME 406781	TRUSS NAME J2	QUANTITY 6	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon Jun 7 08:44:01 2021 Page 1
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TOTAL WEIGHT = 6 X 23 = 135 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
F - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

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

BEARINGS		FACTORED		GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
E	341	0	341	0	0	5-8	5-8	5-8	5-8
F	214	0	214	0	0	MECHANICAL			

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

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	239	170 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0
F	151	99 / 0	0 / 0	0 / 0	0 / 0	52 / 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: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
E - B	-305 / 0	0.0	0.0 0.03 (1)	7.81	B - D	0 / 0	0.00 (1)
A - B	0 / 41	-91.8	-91.8 0.14 (5)	10.00			
B - C	0 / 0	-91.8	-91.8 0.23 (1)	10.00			
F - D	-214 / 0	0.0	0.0 0.02 (1)	7.81			
D - C	-178 / 0	0.0	0.0 0.08 (1)	7.81			
E - D	0 / 0	-18.5	-18.5 0.08 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	39.0	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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.23/1.00 (B-C:1), BC=0.08/1.00 (D-E:4), WB=0.00/1.00 (B-D:1), SSI=0.11/1.00 (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)	SHEAR	SECTION
(PSI)	(PL)	(PL)
MAX	MIN	MAX
MT20	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.90)

JSI METAL= 0.06 (C) (INPUT = 1.00)



Structural component only
DWG# T-2117979

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

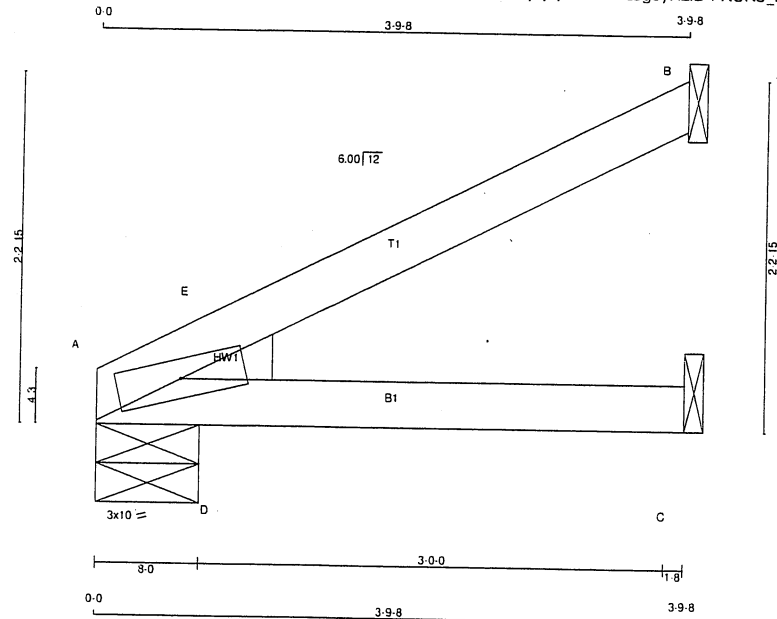
RECEIVED

Per: joshua.nabua

JOB NAME 406781	TRUSS NAME J11	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:31 2020 Page 1
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LUMBER

N. L. G. A. RULES
CHORDS SIZE
A - B 2x4 DRY No.2
A - C 2x4 DRY No.2

LUMBER
No.2
No.2

DESCR.
SPF
SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBH1-m	MT20	3.0	10.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REGRD BRG	HEEL WEDGE
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	
B	146	0	146	0	0	1-8	1-8
C	63	0	63	0	0	1-8	1-8
A	209	0	209	0	0	8-0	8-0

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) B, C

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						DEAD	SOIL
		COMBINED	SNOW	LIVE	PERM. LIVE	WIND			
B	101	78.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0
C	47	19.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0
A	148	97.0	0.0	0.0	0.0	0.0	51.0	0.0	0.0

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

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)

MEMB.	CHORDS		FACTORED				WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. (PLF)	VERT. LOAD	LC1	MAX	MAX. UNBRAC	MEMB. FORCE (LBS)	MAX	MAX	MAX
FR-TO			FROM	TO		LENGTH	FR-TO			
A-E	-17.0	-91.8	-91.8	0.04 (4)	6.25	D-E	-127.3	0.00 (1)		
E-B	0.5	-91.8	-91.8	0.16 (1)	10.00					
A-D	0.0	-18.5	-18.5	0.15 (1)	10.00					
D-C	0.0	-18.5	-18.5	0.15 (1)	10.00					

TOTAL WEIGHT = 2 X 10 = 20 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.03")

CSI: TC=0.16/1.00 (B-E:1), BC=0.15/1.00 (A-D:1), WB=0.00/1.00 (D-E:1), SSI=0.10/1.00 (A-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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.04 (A) (INPUT = 0.90)
JSI METAL = 0.01 (A) (INPUT = 1.00)



Structural component only
DWG# T-2022231

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

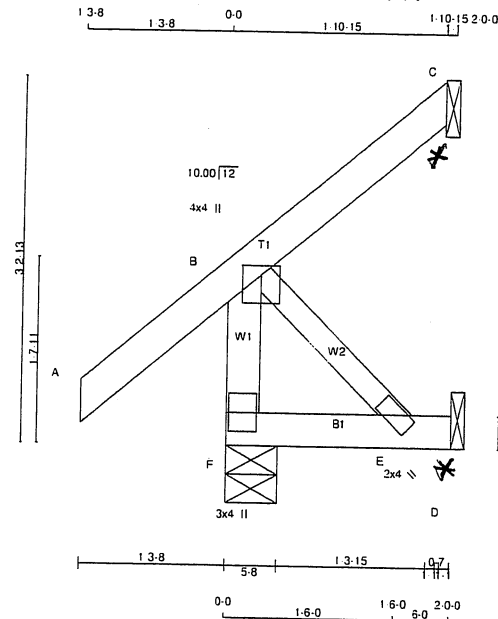
RECEIVED

Per: joshua.nabua

JOB NAME 406782	TRUSS NAME C1	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MITek Industries, Inc. Wed Oct 14 11:57:52 2020 Page 1
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Scale = 1:19.3



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER
F - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
F - D	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
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	BMV+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

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	279	0	279	0	0	5-8	5-8
C	42	0	42	0	-36	1-8	1-8
D	19	0	21	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	194	145.0	0.0	0.0	0.0	49.0	0.0
C	29	23.26	0.0	0.0	0.0	5.0	0.0
D	15	0.0	0.0	0.0	0.0	15.0	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: (5)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED MAX. LC1 (LC)	MAX. UNBRACED LENGTH FR-TO	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO	F-B	-261.0	0.0	0.0	0.03 (1)	7.81	B-E	0.0	0.00 (1)
	A-B	0.41	-91.8	-91.8	0.13 (1)	10.00			
	B-C	-29.0	-91.8	-91.8	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			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 10 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	39.0	PSF	

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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), SS=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)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	788	1987	1656

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 = 0.00

OF 0.00 MOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

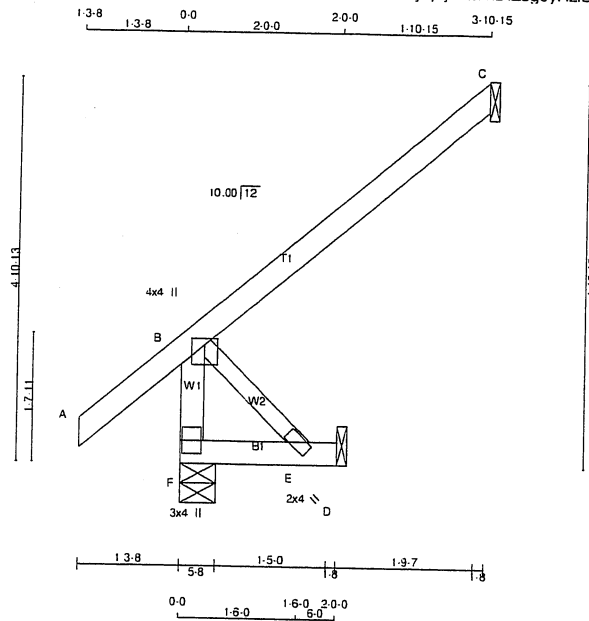


Structural component only
DWG# T-2022193

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	C2	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 11:57:52 2020 Page 1
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Scale = 1/8\"

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	325	0	325	0	5-8	5-8
C	179	0	179	0	1-8	1-8
D	19	0	21	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
F	226	171.0	0.0	0.0	0.0	55.0	0.0
C	124	100.0	0.0	0.0	0.0	23.0	0.0
D	15	0.0	0.0	0.0	0.0	15.0	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: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
F-B	-307.0	0.0	0.0	0.03 (1)	7.81	B-E	0.00 (1)
A-B	0.41	-91.8	-91.8	0.13 (5)	10.00		
B-C	0.0	-91.8	-91.8	0.24 (1)	10.00		
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		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 13 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6 PSF
	DL = 6.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.4 PSF
TOTAL LOAD	= 39.0 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.24/1.00 (B-C:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MT20	618 354 1667 788 1987 1656	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

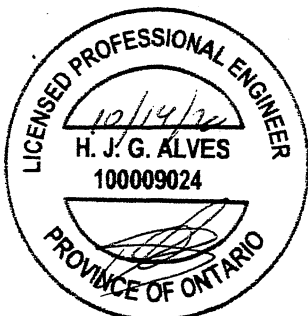
JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

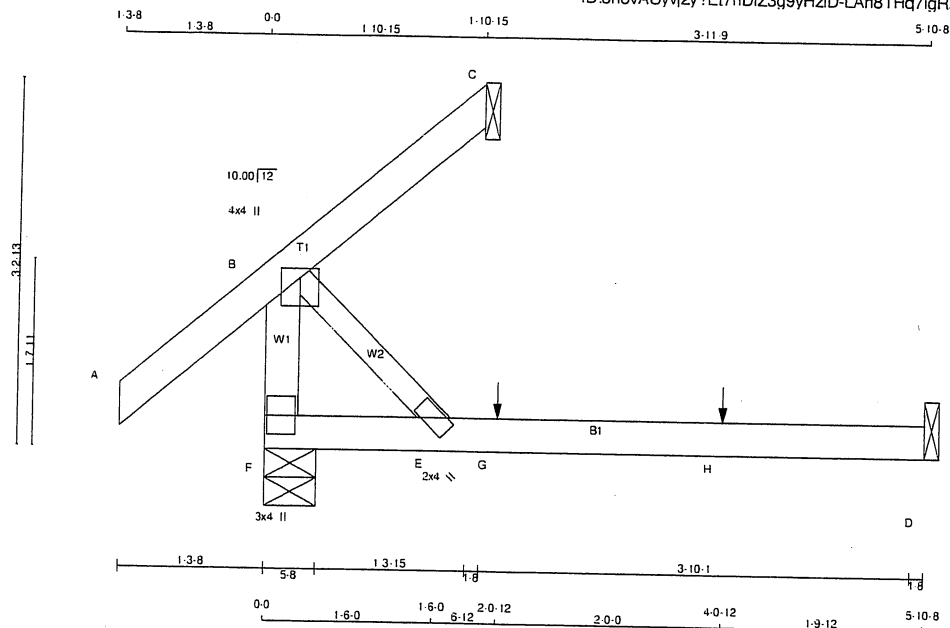


Structural component only
DWG# T-2022194

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406782	C3	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 11:57:53 2020 Page 1
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Scale = 1:19.3

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER
F - B	2x4 DRY	No.2		
A - C	2x4 DRY	No.2		
F - D	2x4 DRY	No.2		
ALL WEBS	2x3 DRY	No.2		
	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
F	BMV+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

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
VERT	HORZ	DOWN	HORZ
JT			
F	315	0	315
C	42	0	42
D	54	0	61

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	223	145	0	0	0	78	0
C	29	23	0	0	0	5	0
D	43	0	0	0	0	43	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: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD LC1 (LC)	MAX. UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. VERT. LOAD LC1 (LC)
FR-TO						FR-TO			
F-B	-261	0	0.0	0.0	0.03 (1)	7.81	B-E	0	0.00 (1)
A-B	0	41	-91.8	-91.8	0.13 (1)	10.00			
B-C	-29	0	-91.8	-91.8	0.12 (1)	6.25			
F-E	0	0	-18.5	-18.5	0.14 (4)	10.00			
E-G	0	0	-18.5	-18.5	0.19 (4)	10.00			
G-H	0	0	-18.5	-18.5	0.19 (4)	10.00			
H-D	0	0	-18.5	-18.5	0.19 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-12	1	1	---	FRONT	VERT	TOTAL	C1
H	4-0-12	1	1	---	FRONT	VERT	TOTAL	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.05")

CSI: TC=0.13/1.00 (A-B:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.08/1.00 (B-C:1)

DOL LUMBER=0.98 NAIL=0.98 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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.21 (B) INPUT=0.90
JSI METAL=0.05 (B) INPUT=1.00

DIAMOND HILL BUILDING DIVISION

03/08/2022

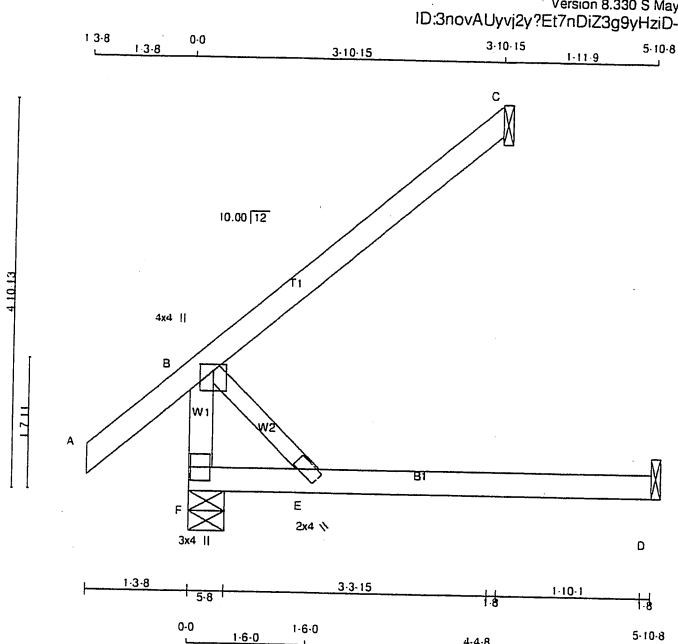
RECEIVED

Per: joshua.nabua



Structural component only
DWG# T-2022195

JOB NAME 406782	TRUSS NAME C4	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



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
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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD BRG
F	361	361	5-8	5-8
C	179	179	1-8	1-8
D	54	61	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	SOIL
F	255	171 0	0 0
C	124	100 0	0 0
D	43	0 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 = 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. FACTORED UNBRACED LENGTH (FR-TO)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)
FR-TO					FR-TO		
F-B	-307	0	0.0	0.03 (1)	B-E	0	0.00 (1)
A-B	0	41	-91.8	0.13 (1)			
B-C	0	0	-91.8	0.24 (1)			
F-E	0	0	-18.5	0.14 (4)			
E-D	0	0	-18.5	0.19 (4)			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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 (0.05")

CSI: TC=0.24/1.00 (B-C:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.11/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

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)



Structural component only
DWG# T-2022196

**CITY OF RICHMOND HILL
BUILDING DIVISION**

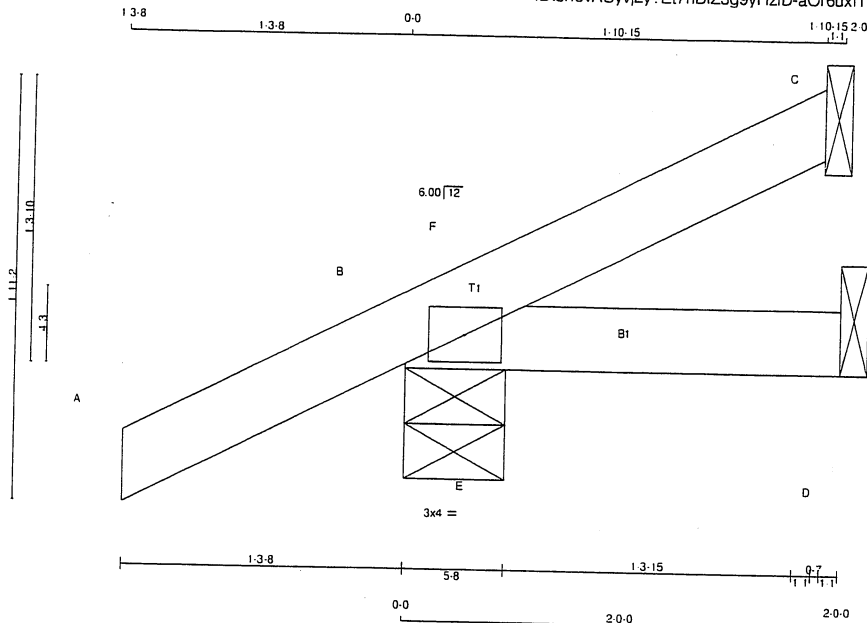
03/08/2022

RECEIVED
Per: joshua.nabua

JOB NAME 406781	TRUSS NAME C5	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:25 2020 Page 1
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER
A - C 2x4 DRY No.2
B - D 2x4 DRY No.2
DRY: SEASONED LUMBER.

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
B TMB1-1 MT20 3.0 4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
C	75	0	75	0	1-8	1-8
B	231	0	231	0	5-8	5-8
D	31	0	31	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	52	40.0	0.0	0.0	0.0	12.0	0.0
B	161	119.0	0.0	0.0	0.0	43.0	0.0
D	23	9.0	0.0	0.0	0.0	14.0	0.0

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

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)

MEMB.	CHORDS		FACTORED		W E B S		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)
FR-TO								
A-B	0.27	-91.8	-91.8	0.12 (1)	10.00			
B-F	-11.0	-91.8	-91.8	0.01 (4)	6.25			
F-C	0.3	-91.8	-91.8	0.04 (1)	10.00			
B-E	0.0	-18.5	-18.5	0.04 (1)	10.00			
E-D	0.0	-18.5	-18.5	0.04 (1)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 2 X 7 = 13 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.12/1.00 (A-B:1), BC=0.04/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SS=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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (B) (INPUT = 0.90)
JSI METAL = 0.04 (B) (INPUT = 1.00)

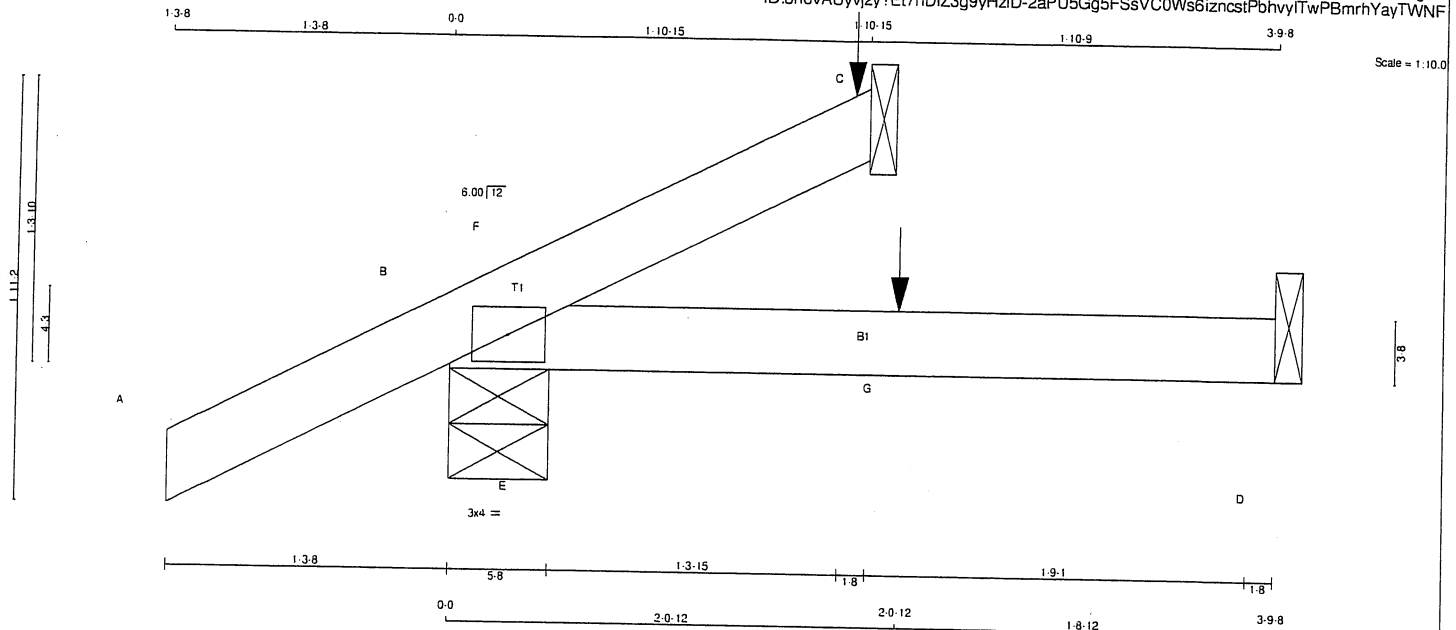


Structural component only
DWG# T-2022224

CITY OF RICHMOND HILL
BUILDING DIVISION
03/08/2022
RECEIVED
Per: joshua.nabua

JOB NAME 406781	TRUSS NAME C6	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 12:11:26 2020 Page 1
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LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			SPF
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ UPLIFT		
C	132	0	132	0	1-8	1-8
B	249	0	249	0	5-8	5-8
D	38	0	38	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST CASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
C	93	64	0	0	29	0	0
B	174	124	0	0	51	0	0
D	29	6	0	0	23	0	0

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

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)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FORCE (LBS)	MAX. CS1 (LC)	MAX. UNBRACED LENGTH
FR-TO					FR-TO			
A-B	0.27	-91.8	-91.8	0.14 (5)	10.00	0.69	0.00 (1)	10.00
B-F	-52	-91.8	-91.8	0.06 (4)	6.25			
F-C	0.12	-91.8	-91.8	0.07 (1)	10.00			
B-E	0.0	-18.5	-18.5	0.02 (4)	10.00			
E-G	0.0	-18.5	-18.5	0.05 (4)	10.00			
G-D	0.0	-18.5	-18.5	0.05 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIRL	TYPE	HEEL	CONN.
C	1-10-15	-25	-25	---	FRONT	VERT	TOTAL	---	C1
G	2-0-12	-9	-9	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.14/1.00 (A-B-5), BC=0.05/1.00 (D-E-4), WB=0.00/1.00 (E-F-1), SSI=0.10/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987
			1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.16 (B) (INPUT = 0.90)

JSI METAL = 0.03 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022225

CITY OF RICHMOND HILL
BUILDING DIVISION

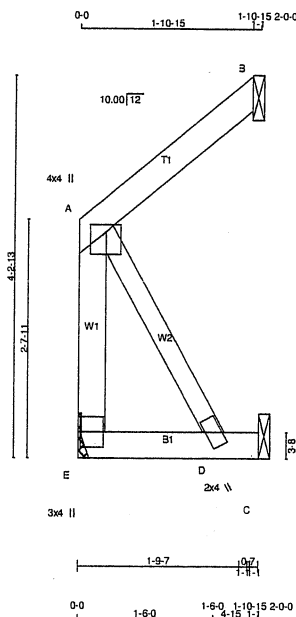
03/08/2022

RECEIVED

Per: joshua.nabua

JOB NAME 406781	TRUSS NAME C7	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Mon Jun 7 08:43:58 2021 Page 1
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Scale = 1/24"

LUMBER			
N.L.G.A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
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	TMVW+p	MT20	4.0	4.0	1.00 2.00
D	BMV+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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
E	106	0	106	0	MECHANICAL	
B	88	0	88	0	1-8	1-8
C	19	0	21	0	1-8	1-8

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

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) B, C

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE				
E	75	49 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
B	60	49 / 0	0 / 0	0 / 0	0 / 0	11 / 0	0 / 0
C	15	0 / 0	0 / 0	0 / 0	0 / 0	15 / 0	0 / 0

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX (PLF)
FR-TO					FR-TO		
E-A	-88 / 0	0.0	0.0 0.01 (1)	7.81	A-D	0 / 0	0.00 (1)
A-B	0 / 0	-91.8	-91.8 0.06 (1)	10.00			
E-D	0 / 0	-18.5	-18.5 0.02 (4)	10.00			
D-C	0 / 0	-18.5	-18.5 0.02 (4)	10.00			

TOTAL WEIGHT = 10 lb
(M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	=	25.6	PSF
DL	=	6.0	PSF
BOT CH. LL	=	0.0	PSF
DL	=	7.4	PSF
TOTAL LOAD	=	39.0	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 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.06/1.00 (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)	SHEAR	SECTION	
(PSI)	(PLI)	(PLI)	
MAX	MIN	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= 0.02 (A) (INPUT = 1.00)



Structural component only
DWG# T-2117976

CITY OF RICHMOND HILL
BUILDING DIVISION

03/08/2022

RECEIVED

Per: joshua.nabua

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon Jun 7 08:43:59 2021 Page 1
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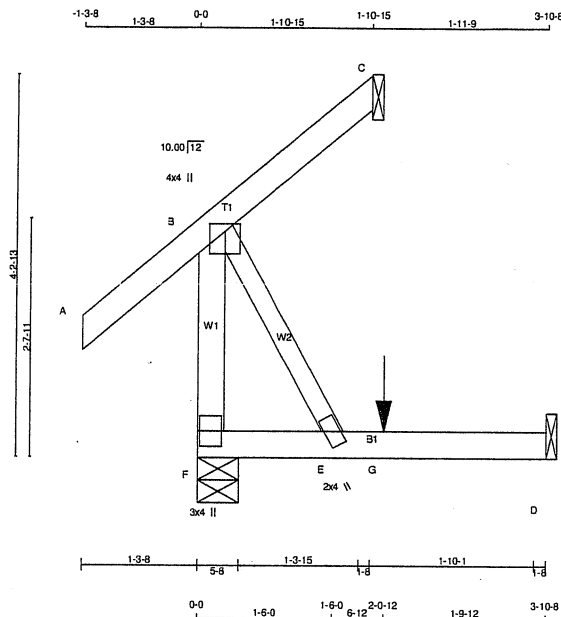


TOTAL WEIGHT = 10 lb

~~Per: ioshua.nabua~~

JOB NAME 406781	TRUSS NAME C8	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon Jun 7 08:44:00 2021 Page 1
ID:ZPnFFM9Z?6P9fBfpDyK8Tz9PnR-HuXExtg9PegYHsEvOb4QvLXPeqQIQWA19is82bz8khj



Scale = 1/24" = 1'

TOTAL WEIGHT = 2 X 14 = 28 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
F - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
F - D	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
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		FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	DOWN	UP	BRG	BRG
F	298	0	298	0	5-8
C	42	0	42	0	1-8
D	37	0	42	0	1-8

SEE MITTEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LOASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	209	145 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0	0 / 0
C	29	23 / -26	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	0 / 0
D	30	0 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 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: (5)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	FORCE (LBS)	MAX. CS (LC)	MAX. CS (LC)
FR-TO		FROM TO		FR-TO			
F-B	-261 / 0	0.0	0.0 0.04 (1)	B-E	0 / 0	0.00 (1)	
A-B	0 / 41	-91.8	-91.8 0.15 (5)				
B-C	-29 / 0	-91.8	-91.8 0.14 (5)				
F-E	0 / 0	-18.5	-18.5 0.08 (4)				
E-G	0 / 0	-18.5	-18.5 0.09 (4)				
G-D	0 / 0	-18.5	-18.5 0.09 (4)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-12	-2	-2	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 25.6 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 39.0 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 CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 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=0.09/1.00 (D-E-4),
WB=0.00/1.00 (B-E-1), SS=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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	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= 0.05 (B) (INPUT = 1.00)



Structural component only
DWG# T-2117978

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BUILDING DIVISION

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Alves Engineering Services Inc.

5208 Easton road
Burlington, Ontario L7L 6N6
(289) 259 5455

RESPONSABILITIES

- 1-Alves Engineering Services 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 this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.
- 3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.
- 4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.
- 5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

SPECIFICATIONS

- 1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.
- 2- Lumber is to be the sizes and grade specified on the truss drawing.
- 3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.
- 4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings
- 5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.
- 6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)
- 7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.
- 8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1900218

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BUILDING DIVISION
Feb 09, 2018

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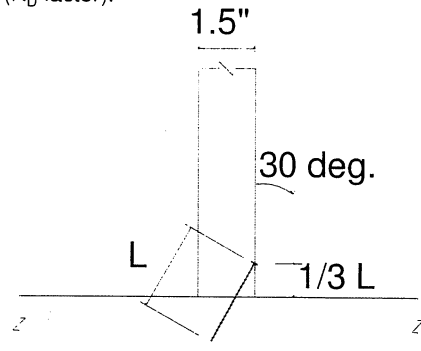
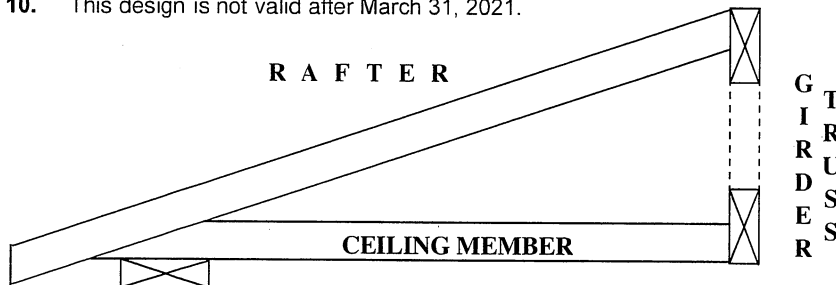
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. 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 (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-14, section 12.9.4
10. This design is not valid after March 31, 2021.



TOE-NAIL INSTALLATION

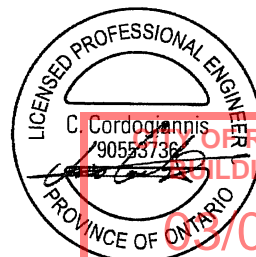
Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	(3.5" nail)		(3" and 3.25" nail)	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4

MiTek®

MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

December 2, 2019

PEO
Certificate No. 10889485



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BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

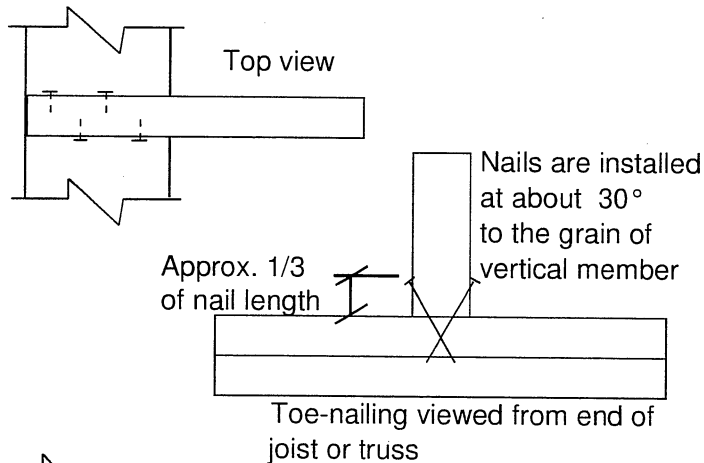
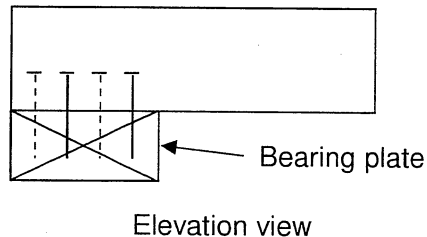
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

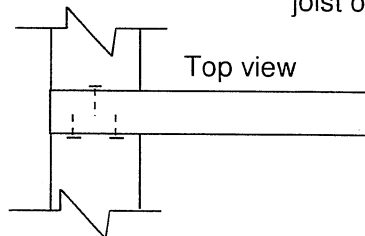
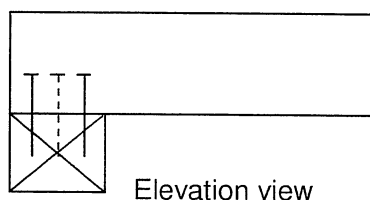
NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. 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 (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate

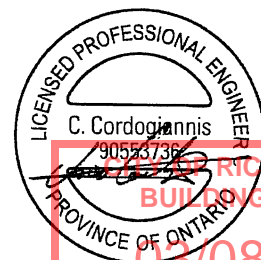


MiTek®

MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

December 2, 2019

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Certificate No. 10889485



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HUS/LJS – Double Shear Joist Hangers



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:

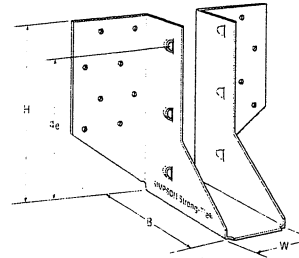
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

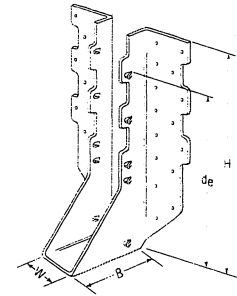
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

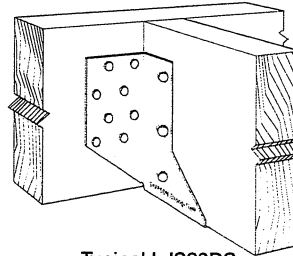
- See current catalogue for options



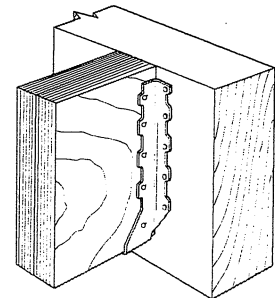
LJS26DS



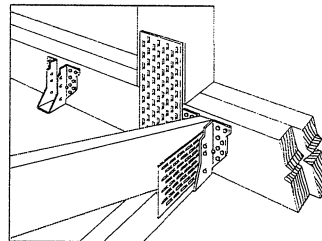
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



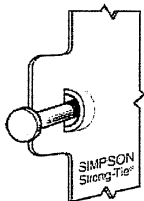
Typical HUS
Installation



Typical HUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

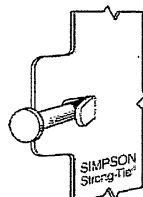
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.	Uplift (K ₀ =1.15) lb.	Normal (K ₀ =1.00) lb.
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 5/8	5 3/8	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 5/8	7 3/32	3	6 3/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 3/8	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.

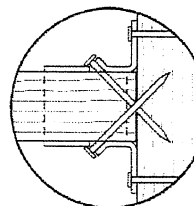


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



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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

LUS – Double Shear Joist Hangers



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

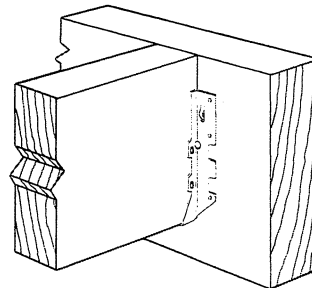
Finish: G90 galvanized

Design:

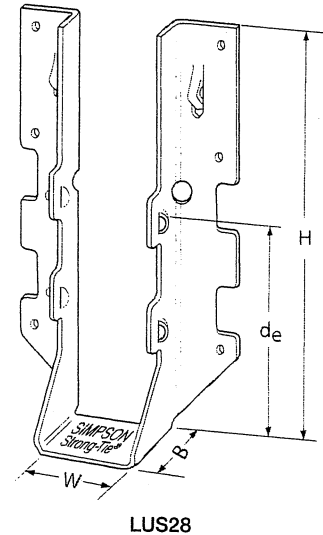
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these 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.

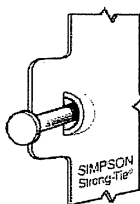


Typical LUS Installation

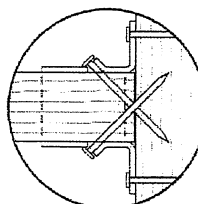


Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1⅞	3⅞	1¾	1⅞	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3⅞	3⅞	2	1⅞	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1⅞	4¾	1¾	3⅞	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3⅞	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4⅞	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1⅞	6⅞	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3⅞	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4⅞	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1⅞	7⅞	1¾	3⅞	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3⅞	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4⅞	8⅞	2	5¼	(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.



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-SPEC LUS20 3/20 exp. 6/22

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HGUS – Double Shear Joist Hangers



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:

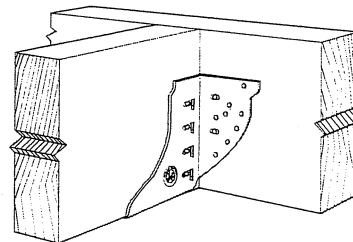
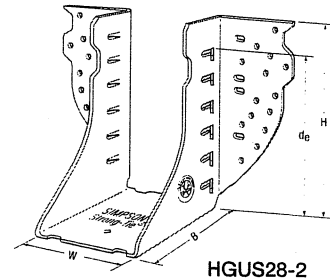
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

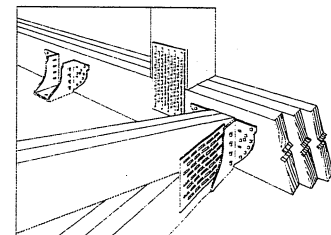
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



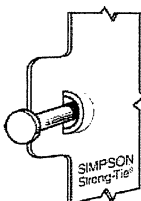
Typical HGUS Installation



Typical HGUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

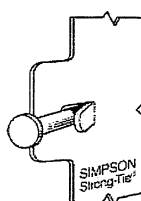
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HGUS26	12	1 5/8	5 3/8	5	4 3/32	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 9/16	5 7/16	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 15/16	5 1/2	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 3/16	5 7/16	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 5/8	7 1/8	5	6 1/8	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 9/16	7 3/16	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 15/16	7 1/4	4	6 3/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 3/16	7 3/16	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1 5/8	9 1/8	5	7 7/8	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 9/16	9 3/16	4	8 1/8	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 15/16	9 1/4	4	8 3/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 3/16	9 3/16	4	8 1/2	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 3/16	10 5/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 3/16	12 5/8	4	11 1/8	(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.

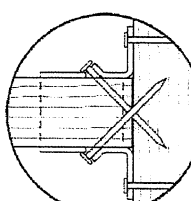


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



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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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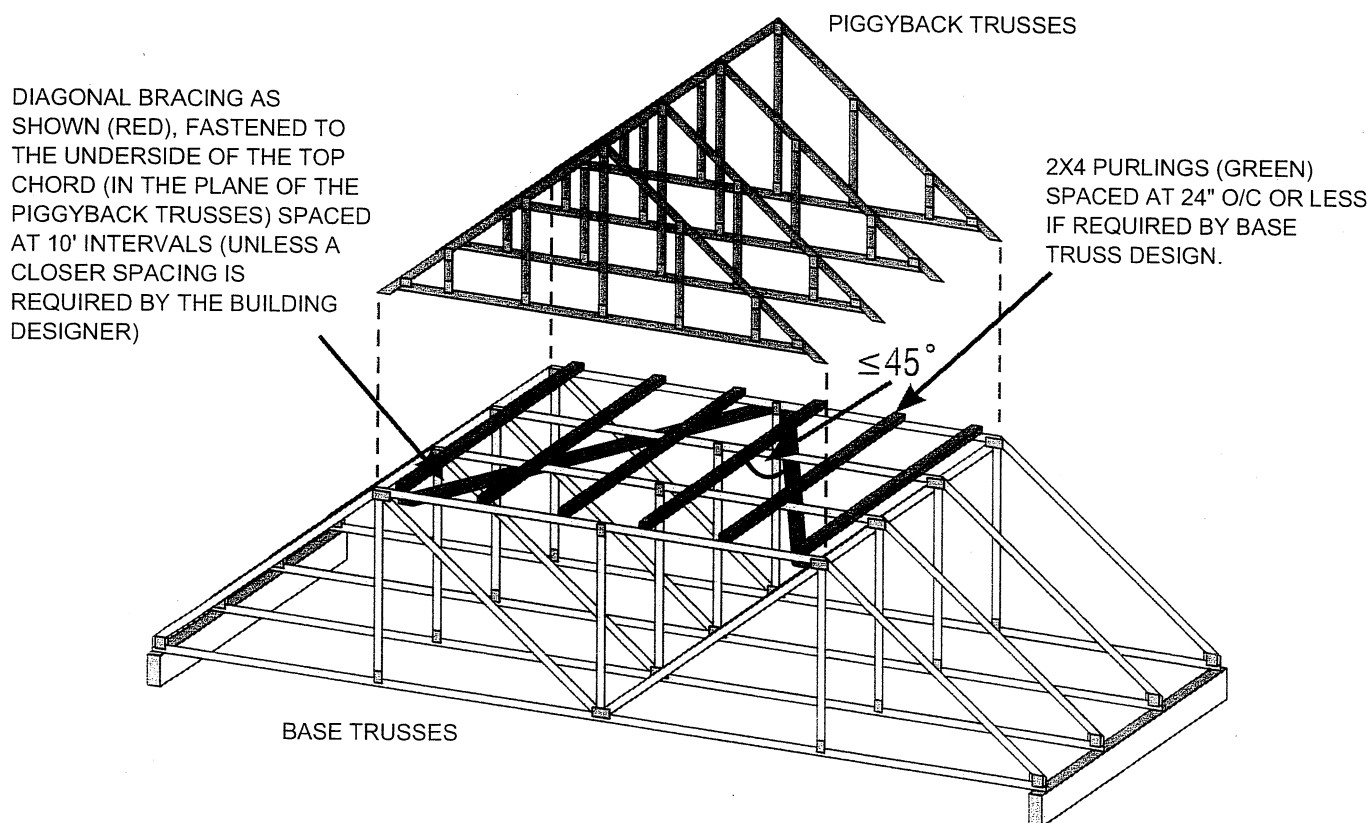
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Overview:

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.

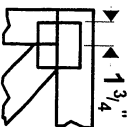
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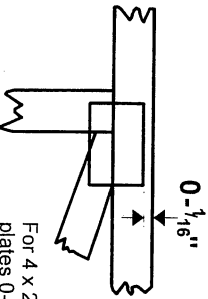
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Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. 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 20/20** software or upon request.

PLATE SIZE

4 X 4

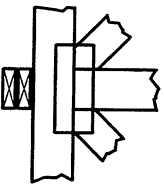
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or L bracing if indicated.

BEARING



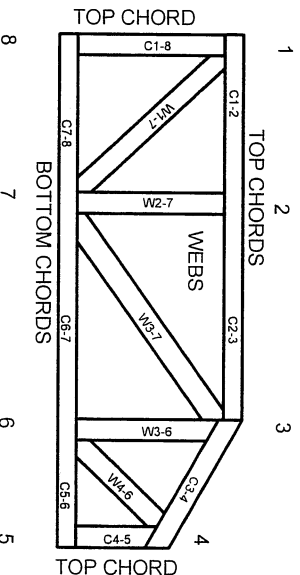
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
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

6-4-8 dimensions shown in ft-in-sixteenths (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

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MIL-7473 rev. 10/03/2015



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 or L 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 ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
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 ANSI/TP1 Quality Criteria.

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