

Job Track: 51012

Plan Log: 201953

Layout ID: 406506

Builder / Location:

ROYAL PINE HOMES / RICHMOND HILL

Model / Elevation:

38-10 / A

Project: CENTREFIELD

Date: 2021-06-04

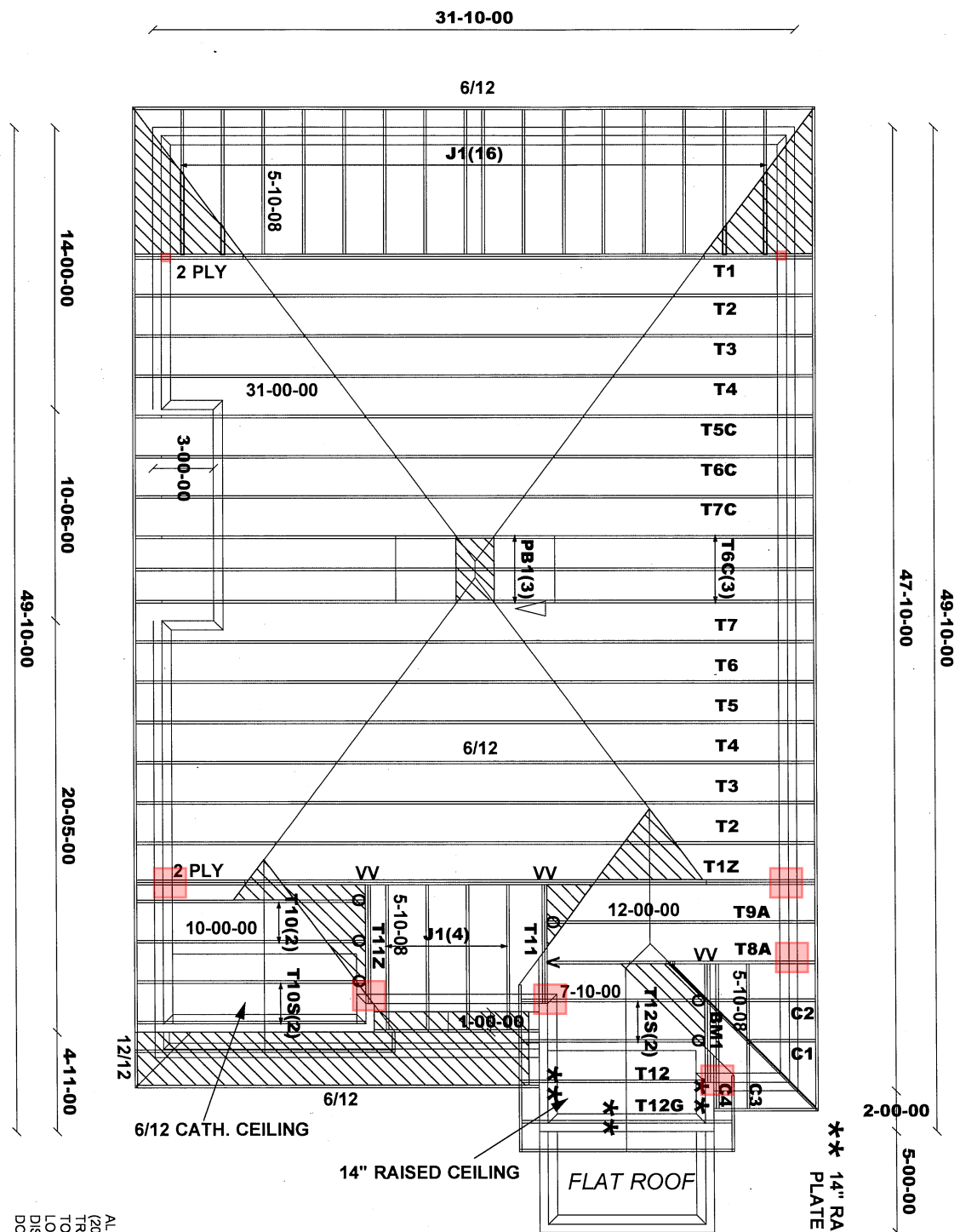
Sales: Mario DiCiano

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.

Milek ver 8.4.2.286

M13459



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\"/>

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

DENOTES
 CONV.
 FRAMING



CITY OF RICHMOND HILL
BUILDING DIVISION

11-00-2021

RECEIVED


Per: [Signature]

ALL ROOF PITCHES ARE 8/12 UNLESS OTHERWISE NOTED

BEAMS: BM1: 2-2X10 SPF#2

ASPHALT SHINGLES

12\"/>



TAMARACK
ROOF TRUSSES INC.

Job Track: **51012**

Plan Log: **201953**

Layout ID: **406445**

Builder / Location: **ROYAL PINE HOMES / RICHMOND HILL**

Project: **CENTREFIELD**

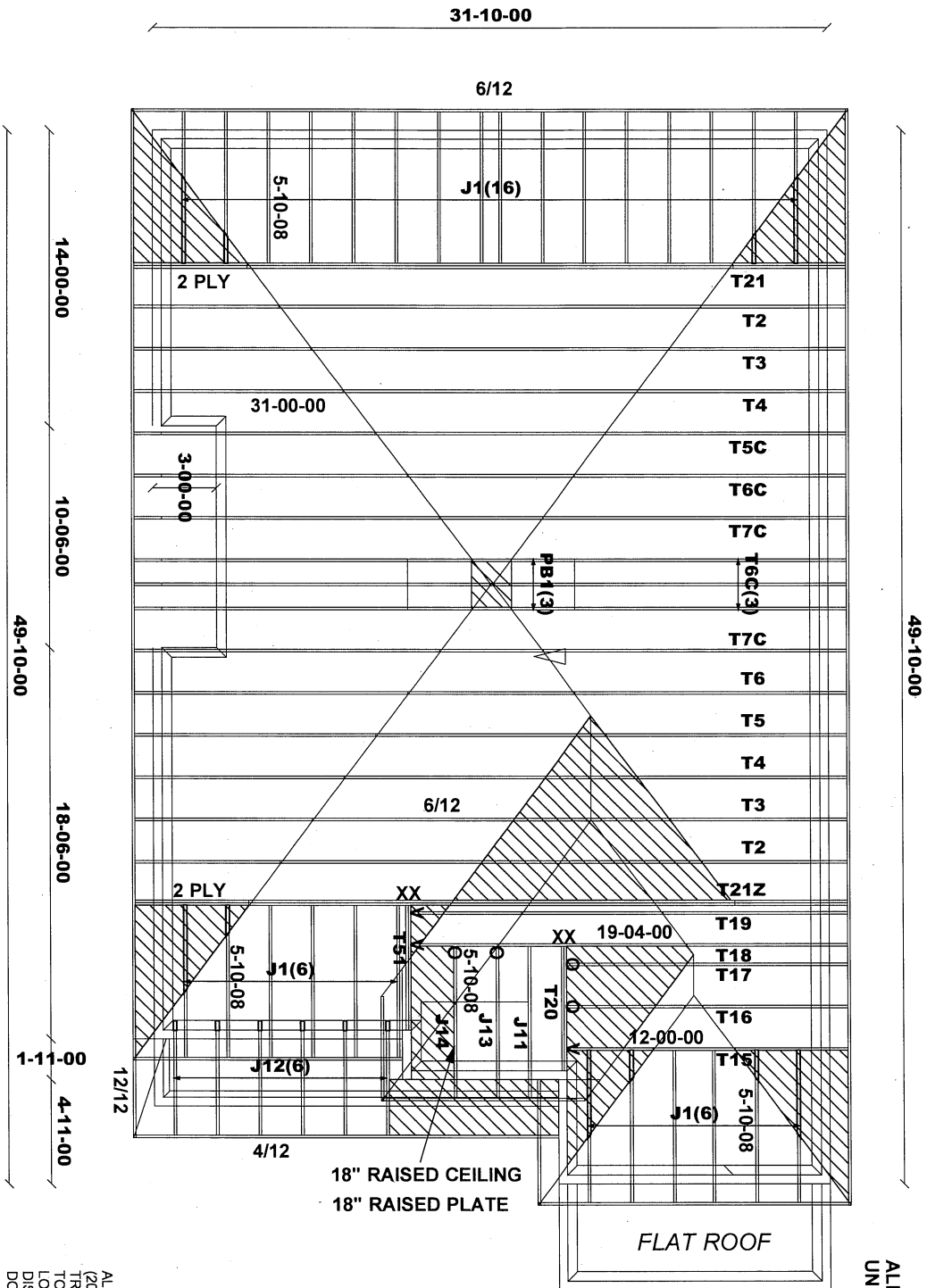
Date: **2021-06-04** Sales: **Mario DiCarno** Designer: **LC**

Model / Elevation: **38-10 / 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.

Milek ver 6.4.2.266

M13459



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\"/>

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

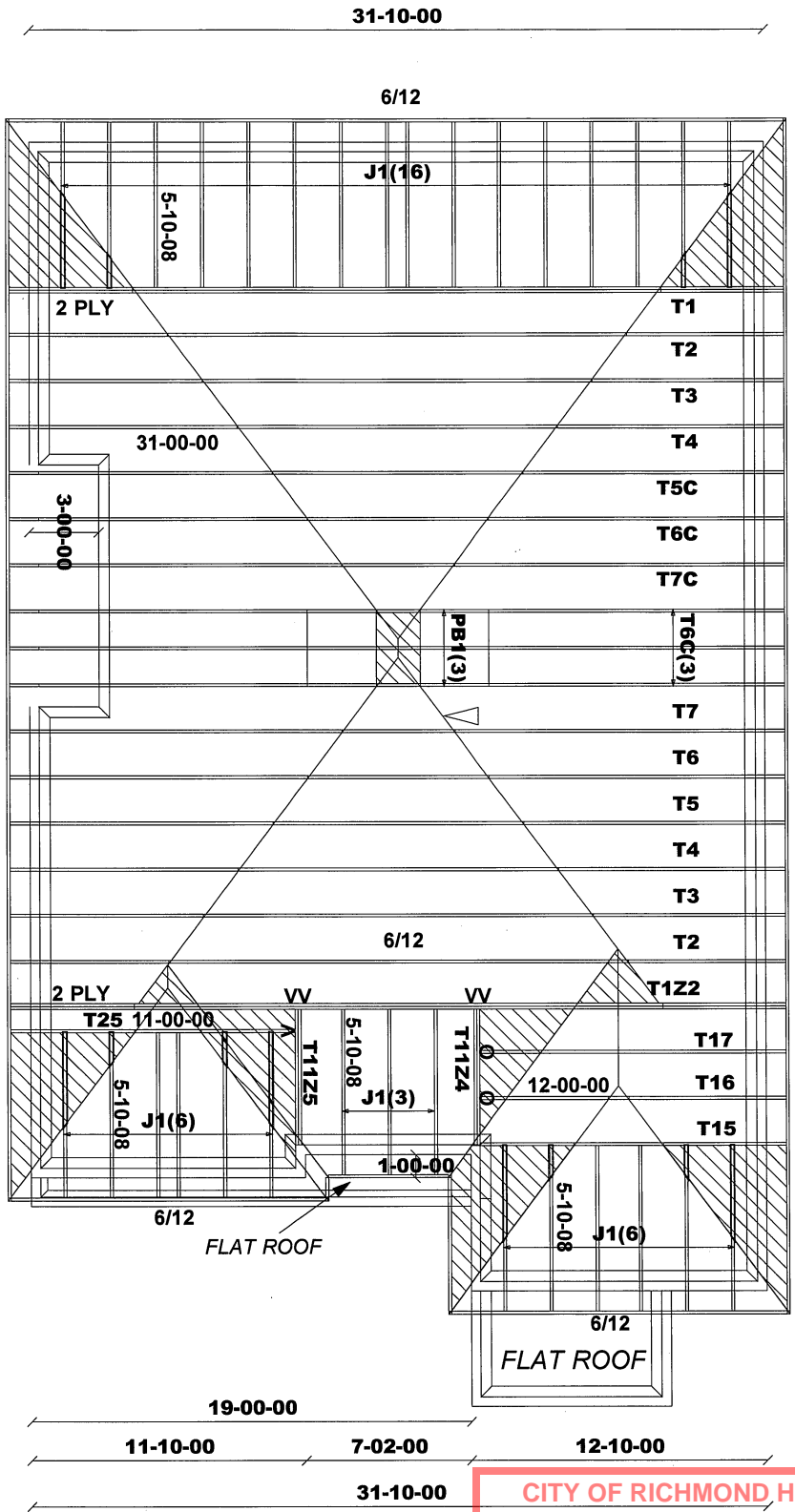
DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

DENOTES
CONV.
FRAMING



CITY OF RICHMOND HILL
BUILDING DIVISION
11/11/2021
RECEIVED
Per: [Signature] Date: [Signature]
HARDWARE:
LUS24 - (O)
LUS26DS - (W)
HGUS26-2 - (XX)

ALL ROOF PITCHES ARE 8/12
UNLESS OTHERWISE NOTED



49-10-00

5-00-00

ALL ROOF PITCHES ARE 8/12
UNLESS OTHERWISE NOTED

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/21

RECEIVED

ASPHALT SHINGLES
12" FINISHED O.H.
RTM.C.
2X6 EXTERIOR WALLS
2X6 FASCIA BOARD

HARDWARE:
LUS24 - (O)
LUS26DS - (V)
LUS26-2 - (W)

Per: [signature] date: [blank]

DENOTES
CONV.
FRAMING



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

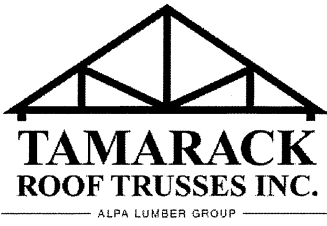
DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

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'

M13459

		Builder / Location: ROYAL PINE HOMES / RICHMOND HILL		Model / Elevation: 38-10 / C	
Job Track: 51012	Plan Log: 201953	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.					
Miek ver 8.3.3.247					

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-10
 Lot #:
 Elevation: A

Job Track: 51012
 PlanLog: 201953
 Layout ID: 406506
 Ref #: 12606
 Page: 1 of 3
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

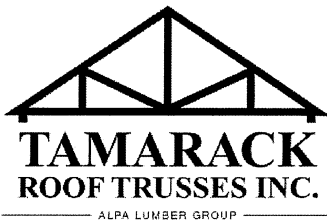
Roof Trusses

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	T1 Hip Girder	8 /12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	293.47 181.33		
	1 2-ply	T1Z Hip Girder	8 /12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	293.47 181.33		
	2	T2 Hip	8 /12	31-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.62 161.00		
	2	T3 Hip	8 /12	31-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.73 168.67		
	2	T4 Hip	8 /12	31-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	267.35 169.67		
	1	T5 Hip	8 /12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T5C Hip	8 /12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T6 Hip	8 /12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	149.53 93.33		
	4	T6C Hip	8 /12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	598.12 373.33		
	1	T7 Hip	8 /12	31-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	156.28 97.33		
	1	T7C Hip	8 /12	31-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	156.28 97.33		
	1	T8A Hip Girder	8 /12	12-00-00	5-03-13	2 x 4 2 x 6	1-03-08	1-04-13 2-06-13	64.29 40.33		
	1	T9A Common	8 /12	12-00-00	5-11-13	2 x 4	1-03-08	1-04-13 2-06-13	51.89 33.67		
	2	T10 Common	8 /12	10-00-00	4-08-13	2 x 4	1-03-08	1-04-13 1-04-13	80.97 51.00		

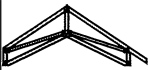
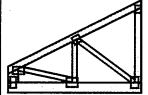
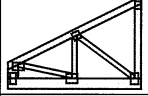


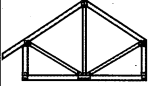

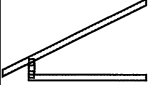
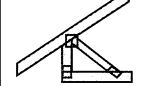
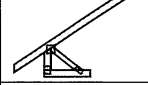
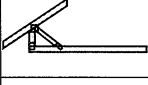
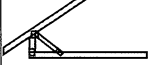
CHIT OF RICHMOND HILL
 BUILDING DIVISION

11/16/2021

RECEIVED
 Per: danielle.devitt

 <p>TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	DELIVERY SHIPLIST				Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-10 Lot #: Elevation: A		Job Track: 51012 PlanLog: 201953 Layout ID: 406506 Ref #: 12606 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
	2	T10S Scissor	8 / 12 6 / 12	10-00-00	4-08-13	2 x 4	1-03-08	1-04-13 1-04-13	82.73 54.00		
	1 2-ply	T11 Monopitch Girder	6 / 12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T11Z Monopitch Girder	6 / 12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1	T12 Common	8 / 12	7-10-00	4-00-02	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	34.51 22.00		
	1	T12G GABLE	8 / 12	7-10-00	4-00-02	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	32 21.00		
	2	T12S Common	8 / 12	7-10-00	5-02-02	2 x 4	1-03-08	2-06-13 2-06-13	74.21 49.67		
	3	PB1 Piggyback	8 / 12	7-10-11	2-00-00	2 x 4			64.14 43.00		
	20	J1 Jack-Open	6 / 12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	335.89 213.33		
	1	C1 Jack-Open	8 / 12	1-10-15	2-08-02	2 x 4	1-03-08 1-01	1-04-13 2-08-02	9.34 6.33		
	1	C2 Jack-Open	8 / 12	2-00-00	4-00-02	2 x 4	1-03-08 1-10-15	1-04-13 2-08-13	12.08 7.67		
	1	C3 Jack-Open	8 / 12	1-10-15	2-08-02	2 x 4	1-03-08 3-11-09	1-04-13 2-08-02	13.76 9.00		
	1	C4 Jack-Open	8 / 12	3-04-15	3-08-02	2 x 4	1-03-08 2-05-09	1-04-13 3-08-02	15.81 9.67		

TOTAL # TRUSS= 60

TOTAL BFT OF ALL TRUSSES= 2334.67 BFT.

TOTAL WEIGHT OF ALL TRSSES 3710.08 LBS


HARDWARE

QTY	TYPE	MODEL	LENGTH
1	Hardware	LJS26DS	
6	Hardware	LUS24	

RECEIVED
CITY OF RICHMOND HILL
BUILDING DIVISION

10/16/2021

Per: danielle.devitt

		DELIVERY SHIPLIST	
 TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small>	Lumber Yard:	TAMARACK LUMBER	Job Track: 51012
	Builder:	ROYAL PINE HOMES	PlanLog: 201953
	Project:	CENTREFIELD	Layout ID: 406506
	Location:	RICHMOND HILL	Ref #: 12606
	Model:	38-10	Page: 3 of 3
	Lot #:		Date: 10-14-2020
Elevation:	A	Designer: Leo Chen	Sales Rep: Mario DiCano

HARDWARE

QTY	TYPE	MODEL	LENGTH
3	Hardware	LUS26-2	

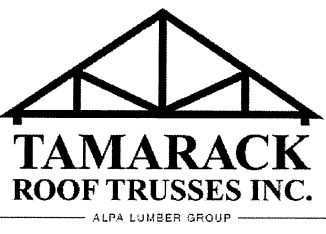
TOTAL NUMBER OF ITEMS= **10**

CITY OF RICHMOND HILL
BUILDING DIVISION






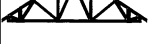
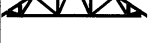

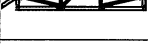
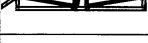

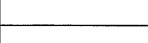

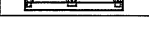
11/16/2021

RECEIVED

Per: danielle.devitt

 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-10 Lot #: Elevation: B	Job Track: 51012 PlanLog: 201953 Layout ID: 406445 Ref #: 12629 Page: 1 of 2 Date: 06-04-2021 Designer: Leo Chen Sales Rep: Mario DiCano

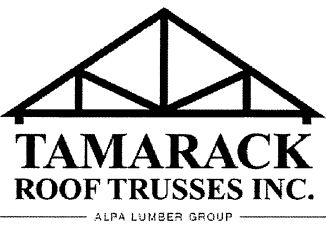
Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	T2 Hip	8 / 12	31-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.62 161.00		
	2	T3 Hip	8 / 12	31-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.73 168.67		
	2	T4 Hip	8 / 12	31-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	267.35 169.67		
	1	T5 Hip	8 / 12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T5C Hip	8 / 12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T6 Hip	8 / 12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	149.53 93.33		
	4	T6C Hip	8 / 12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	598.12 373.33		
	2	T7C Hip	8 / 12	31-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	312.55 194.67		
	1	T15 Hip Girder	8 / 12	12-00-00	4-01-04	2 x 4	1-03-08	1-04-13 1-04-13	49.71 31.17		
	1	T16 Hip	8 / 12	12-00-00	5-01-04	2 x 4	1-03-08	1-04-13 1-04-13	54.15 34.50		
	1	T17 Common	8 / 12	12-00-00	5-04-13	2 x 4	1-03-08	1-04-13 1-04-13	47.65 29.17		
	1	T18 Hip Girder	8 / 12	19-04-00	5-07-04	2 x 4 2 x 6	1-03-08	1-04-13 2-10-13	100.9 62.63		
	1	T19 Hip	8 / 12	19-04-00	6-04-04	2 x 4	1-03-08	1-04-13 2-10-13	86.53 53.67		
	1 2-ply	T20 Monopitch Girder	6 / 12	5-10-08	5-07-04	2 x 4 2 x 6		2-08-00 5-07-04	72.57 47.00		



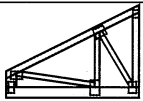

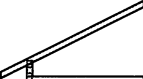


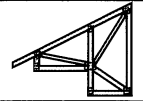
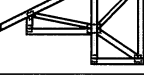
CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED
Per: daniele devitt

 <p>TAMARACK ROOF TRUSSES INC. <small>ALPHA LUMBER GROUP</small></p>	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: ROYAL PINE HOMES Project: CENTREFIELD Location: RICHMOND HILL Model: 38-10 Lot #: Elevation: B	Job Track: 51012 PlanLog: 201953 Layout ID: 406445 Ref #: 12629 Page: 2 of 2 Date: 06-04-2021 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	T21 Hip Girder	8 / 12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	298.15 185.33		
	1 2-ply	T21Z Hip Girder	8 / 12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	298.15 185.33		
	1 2-ply	T51 Monopitch Girder	6 / 12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	60.47 38.67		
	3	PB1 Piggyback	8 / 12	7-10-11	2-00-00	2 x 4			64.14 43.00		
	28	J1 Jack-Open	6 / 12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	470.25 298.67		
	1	J11 Jack-Open	6 / 12	5-10-08	5-07-04	2 x 4	1-03-08	2-08-00 5-07-04	20.59 13.50		
	6	J12 Jack-Open	4 / 12	3-07-00	2-01-03	2 x 4	1-09-08	3-15 1-06-04	63.95 40.00		
	1	J13 Jack-Closed	6 / 12	5-10-08	5-07-04	2 x 4	1-03-08	1-02-00 5-07-04	35.39 23.33		
	1	J14 Jack-Closed	6 / 12	5-10-08	4-02-13	2 x 4	1-03-08	1-02-00 4-02-13	32.52 22.17		

TOTAL # TRUSSES= 68 TOTAL BFT OF ALL TRUSSES= 2444.35 BFT. TOTAL WEIGHT OF ALL TRUSSES 3889.03 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	HGUS26-2	
3	Hardware	LJS26DS	
4	Hardware	LUS24	

TOTAL NUMBER OF ITEMS= 9

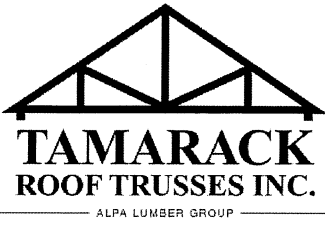
CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: 38-10
 Lot #:
 Elevation: C

Job Track: 51012
 PlanLog: 201953
 Layout ID: 413423
 Ref #: 12606
 Page: 1 of 2
 Date: 10-14-2020
 Designer: Leo Chen
 Sales Rep: Mario DiCano

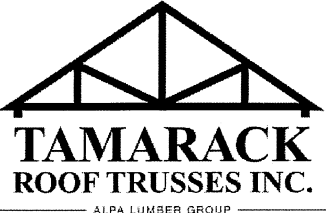
Roof Trusses

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	T1 Hip Girder	8 /12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	293.47 181.33		
	1 2-ply	T1Z2 Hip Girder	8 /12	31-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	293.47 181.33		
	2	T2 Hip	8 /12	31-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	255.62 161.00		
	2	T3 Hip	8 /12	31-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	269.73 168.67		
	2	T4 Hip	8 /12	31-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	267.35 169.67		
	1	T5 Hip	8 /12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T5C Hip	8 /12	31-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	141.02 87.67		
	1	T6 Hip	8 /12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	149.53 93.33		
	4	T6C Hip	8 /12	31-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	598.12 373.33		
	1	T7 Hip	8 /12	31-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	156.28 97.33		
	1	T7C Hip	8 /12	31-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-04-13 1-04-13	156.28 97.33		
	1 2-ply	T11Z4 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T11Z5 Monopitch Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1	T15 Hip Girder	8 /12	12-00-00	4-01-04	2 x 4	1-03-08	1-04-13 1-04-13	49.71 31.17		


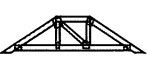
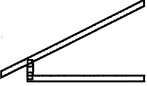
CITY OF RICHMOND HILL
 BUILDING DIVISION

11/16/2021

RECEIVED
 Per: danielle.devitt

 <p>TAMARACK ROOF TRUSSES INC. <small>ALPA LUMBER GROUP</small></p>	DELIVERY SHIPLIST					
	Lumber Yard:	TAMARACK LUMBER			Job Track:	51012
	Builder:	ROYAL PINE HOMES			PlanLog:	201953
	Project:	CENTREFIELD			Layout ID:	413423
	Location:	RICHMOND HILL			Ref #	12606
	Model:	38-10			Page:	2 of 2
Lot #:				Date:	10-14-2020	
Elevation:	C			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	T16 Hip	8 /12	12-00-00	5-01-04	2 x 4	1-03-08	1-04-13 1-04-13	54.15 34.50		
	1	T17 Common	8 /12	12-00-00	5-04-13	2 x 4	1-03-08	1-04-13 1-04-13	47.65 29.17		
	1	T25 Hip Girder	8 /12	11-00-00	4-01-04	2 x 4	1-03-08	1-04-13 1-04-13	46.9 29.83		
	3	PB1 Piggyback	8 /12	7-10-11	2-00-00	2 x 4			64.14 43.00		
	31	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	520.63 330.67		

TOTAL # TRUSS= 61 TOTAL BFT OF ALL TRUSSES= 2272.34 BFT. TOTAL WEIGHT OF ALL TRSSES 3621.84 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
1	Hardware	LJS26DS	
2	Hardware	LUS24	
2	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 5

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

amarac Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:06 2020 Page 1

ID:pXBePeIFV7RX?2FLkZMhgeyOWXj-cR?Pd0?SVa5Fw_lplimNeUG1svTGfYqzL2lqzByTZ1F

1-3.8 0-0 4-0-11 4-0-11 5-0-12 3-7-9 8-8-5 13-2-12 15-6-0 2-3-4 2-3-4 17-9-3 4-6-7 22-3-10 4-7-11 26-11-5 4-0-11 31-0-0 1-3-8

Scale = 1:52.7



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

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***

GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.

LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE

UNFACTORED REACTIONS

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

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)
H-C	1	12	SIDE(61.0)
H-J	1	12	SIDE(61.0)
J-L	1	12	SIDE(61.0)
U-B	2	12	TOP
M-K	2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
Q-U	2	12	SIDE(183.1)
Q-M	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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 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 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 35	-91.8	-91.8	0.07 (1)	10.00	T-C	-529 / 0
B-C	-3502 / 0	-91.8	-91.8	0.20 (1)	4.83	N-J	-529 / 0
C-V	-5022 / 0	-91.8	-91.8	0.38 (1)	3.97	B-T	0 2991
V-W	-5022 / 0	-91.8	-91.8	0.38 (1)	3.97	N-K	0 2992
W-D	-5022 / 0	-91.8	-91.8	0.38 (1)	3.97	O-J	0 2727
D-X	-5998 / 0	-91.8	-91.8	0.42 (1)	3.63	C-S	0 2726
X-Y	-5998 / 0	-91.8	-91.8	0.42 (1)	3.63	O-I	-1575 / 0
Y-E	-5998 / 0	-91.8	-91.8	0.42 (1)	3.63	S-D	-1574 / 0
E-Z	-5998 / 0	-91.8	-91.8	0.21 (1)	3.85	P-I	0 1261
Z-F	-5998 / 0	-91.8	-91.8	0.21 (1)	3.85	D-R	0 1264
F-AA	-5998 / 0	-91.8	-91.8	0.20 (1)	3.85	P-G	-492 / 0
AA-G	-5998 / 0	-91.8	-91.8	0.20 (1)	3.85	R-E	-496 / 0
G-H	-5998 / 0	-91.8	-91.8	0.43 (1)	3.63	R-F	-187 / 0
H-AB	-5998 / 0	-91.8	-91.8	0.43 (1)	3.63	F-P	-188 / 0
AB-I	-5998 / 0	-91.8	-91.8	0.43 (1)	3.63		
I-AC	-5024 / 0	-91.8	-91.8	0.38 (1)	3.97		
AC-AD	-5024 / 0	-91.8	-91.8	0.38 (1)	3.97		
AD-J	-5024 / 0	-91.8	-91.8	0.38 (1)	3.97		
J-K	-3503 / 0	-91.8	-91.8	0.20 (1)	4.83		
K-L	0 35	-91.8	-91.8	0.07 (1)	10.00		
U-B	-2959 / 0	0.0	0.0	0.11 (1)	7.81		
M-K	-2959 / 0	0.0	0.0	0.11 (1)	7.81		

AE	0	0	-18.5	-18.5	0.04 (4)	10.00
AE-AF	0	0	-18.5	-18.5	0.04 (4)	10.00
AF-T	0	0	-18.5	-18.5	0.04 (4)	10.00
T-AG	0	2894	-18.5	-18.5	0.22 (1)	10.00
AG-AH	0	2894	-18.5	-18.5	0.22 (1)	10.00
AH-S	0	2894	-18.5	-18.5	0.22 (1)	10.00
S-AI	0	5022	-18.5	-18.5	0.37 (1)	10.00
AI-AJ	0	5022	-18.5	-18.5	0.37 (1)	10.00
AJ-R	0	5022	-18.5	-18.5	0.37 (1)	10.00
R-AK	0	6095	-18.5	-18.5	0.45 (1)	10.00
AK-Q	0	6095	-18.5	-18.5	0.45 (1)	10.00
Q-P	0	6095	-18.5	-18.5	0.45 (1)	10.00
P-L	0	5024	-18.5	-18.5	0.37 (1)	10.00
AL-AM	0	5024	-18.5	-18.5	0.37 (1)	10.00
AM-O	0	5024	-18.5	-18.5	0.37 (1)	10.00
O-AN	0	2895	-18.5	-18.5	0.22 (1)	10.00
AN-AO	0	2895	-18.5	-18.5	0.22 (1)	10.00
AO-N	0	2895	-18.5	-18.5	0.22 (1)	10.00
N-AP	0	0	-18.5	-18.5	0.04 (4)	10.00

SEALING 31.2 IN 3/2

LOADING IN FLAT SECTION BASED ON A SLOPE OF 0.02:1.0

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

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
- TRIC 2011, TRIC 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 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.43/1.00 (G-I:1) , BC=0.45/1.00 (P-R:1) ,
WB=0.37/1.00 (K-N:1) , SSI=0.18/1.00 (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

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

JSI GRIP= 0.75 (T) (INPUT = 0.90)
JSI METAL = 0.50 (Q) (INPUT = 1.00)



Structural component only
DWG# T-2022113 //

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SE		
(FSL)	(PSI)	(MLN)	(#)		
MAX MIN	MAX MIN	MAX MIN	MAX MIN		
M2700	618	3541	1667	788	199

PLATE PLACEMENT TOL = 0.250

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T1	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:07 2020 Page 2
ID:pXBePelFV7RX?2FLKzMhgeyOWXJ-4eYnqM04GuD6Y8K?JQHcBhpCclpVH9w7ai1WCeyTZ1E

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	6.0	9.0	1.75	3.75
D	TMWW-t	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	6.0		
J	TTWW-m	MT20	6.0	9.0	1.75	3.75
K	TMVW-p	MT20	5.0	6.0	1.50	3.00
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.25
P	BMWWWW-t	MT20	5.0	8.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWWWW-t	MT20	5.0	8.0		
S	BMWW-t	MT20	5.0	6.0	2.50	2.25
T	BMWW-t	MT20	5.0	6.0		
U	BMV1+p	MT20	3.0	6.0		

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LBS)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
AP-AQ	0 / 0	-18.5	-18.5	0.04 (4)	10.00		
AQ-M	0 / 0	-18.5	-18.5	0.04 (4)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-11	-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11	-169	-169	---	FRONT	VERT	SNOW	---	C1
E	13-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
G	17-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
H	19-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
J	26-11-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
J	26-11-5	-169	-169	---	FRONT	VERT	SNOW	---	C1
P	17-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
O	15-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
R	13-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
V	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
W	7-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
X	9-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Y	11-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Z	15-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AA	15-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AB	21-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AC	23-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AD	25-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AE	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AF	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AG	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AH	7-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AI	9-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AJ	11-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AK	15-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AL	19-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AM	21-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AN	23-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AO	25-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AP	27-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AQ	29-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022113 3/1

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME 406506	TRUSS NAME T1Z	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 09:10:08 2020 Page 2
ID:pXBePeIFV7RX?2FLKzMngevOWXJ-Yq692i0i1BLy9IvCt7onvLM?i510ZuGoMn4I4yTZ1D

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	6.0	9.0	1.75	4.00
D	TMWW-t	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	6.0		
J	TTWW-m	MT20	6.0	9.0	1.75	4.00
K	TMVW-p	MT20	5.0	6.0	1.50	3.00
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.50
P	BMWWWW-t	MT20	5.0	8.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWWWW-t	MT20	5.0	8.0		
S	BMWW-t	MT20	5.0	6.0	2.50	2.50
T	BMWW-t	MT20	5.0	6.0		
U	BMV1+p	MT20	3.0	6.0		

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022114 *W*

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413423	T1Z2	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:48:43 2020 Page 2
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-GBVJvH1qrU0UO3O7 pri25i GuBfwaO08133VOyTYT2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW+m	MT20	7.0	8.0	Edge	2.50
D	TMWW-t	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	6.0		
J	TTWW+m	MT20	7.0	8.0	Edge	2.50
K	TMVW-p	MT20	5.0	6.0	1.50	3.00
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.75
P	BMWWW-t	MT20	5.0	8.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	5.0	8.0		
S	BMWW-t	MT20	5.0	6.0	2.50	2.75
T	BMWW-t	MT20	5.0	6.0		
U	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-2022146 2/2

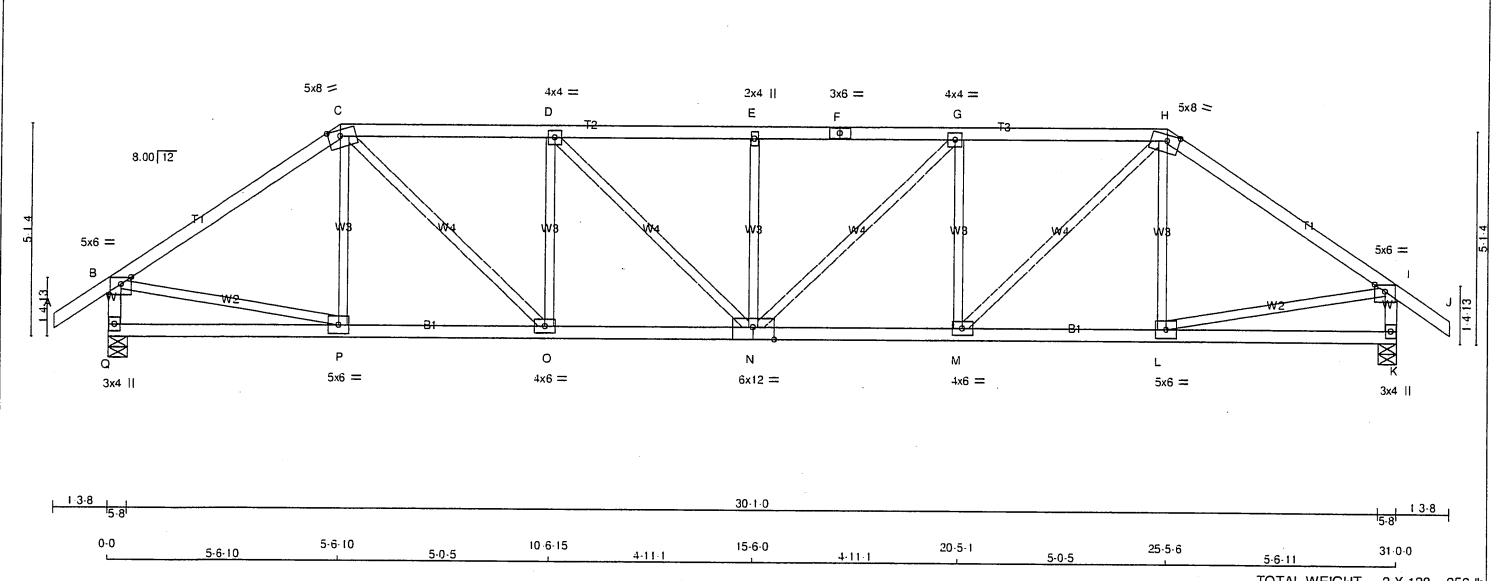
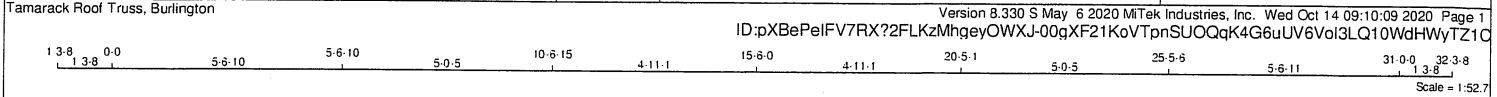
CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T2	2	1	TRUSS DESC.		



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED				TOP CH. LL = 25.6 PSF			
A - C	2x4	DRY	No.2	GROSS REACTION				DL = 6.0 PSF			
C - F	2x4	DRY	No.2	MAXIMUM FACTORED				BOT CH. LL = 0.0 PSF			
F - H	2x4	DRY	No.2	DOWN				DL = 7.4 PSF			
H - J	2x4	DRY	No.2	UP				TOTAL LOAD = 39.0 PSF			
Q - B	2x4	DRY	No.2	UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
K - I	2x4	DRY	No.2	1ST LCASE				LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
Q - N	2x4	DRY	No.2	COMBINED				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015			
N - K	2x4	DRY	No.2	SNOW				THIS DESIGN COMPLIES WITH:			
ALL WEBS EXCEPT	2x3	DRY	No.2	LIVE				- PART 9 OF BCBC 2018, OBC 2012, ABC 2019			
DRY: SEASONED LUMBER.				PERM. LIVE				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
				WIND				- CSA 086-09, CSA 086-14			
				DEAD				- TPIC 2011, TPIC 2014			
				SOIL				(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			
				TOTAL LOAD				ALLOWABLE DEFL.(LL)= L/360 (1.03")			
								CALCULATED VERT. DEFL.(LL)= L/999 (0.13")			
								ALLOWABLE DEFL.(TL)= L/360 (1.03")			
								CALCULATED VERT. DEFL.(TL)= L/999 (0.25")			
								CSI: TC=0.66/1.00 (H-I:1), BC=0.46/1.00 (N-O:1), WB=0.38/1.00 (I-L:1), SS=0.22/1.00 (C-D:1)			
								DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10			
								COMPANION LIVE LOAD FACTOR = 1.00			
								TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT			
								NAIL VALUES			
								PLATE GRIP (DRY) SHEAR SECTION (PL)			
								MAX MIN MAX MIN MAX MIN			
								WT20 618 354 667 788 1937 1656			
								PLATE PLACEMENT TOL. = 0.250 inches			
								PLATE ROTATION TOL. = 5.0 Deg			
								JSI GRIP= 0.88 (I) (INPUT = 0.90)			
								JSI METAL= 0.47 (N) (INPUT = 1.00)			

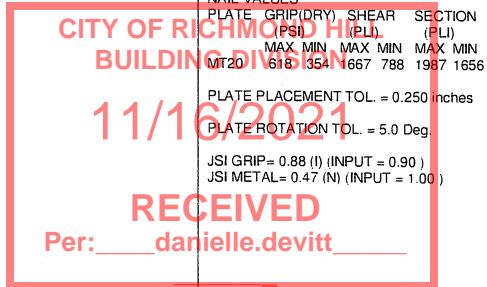
PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-p	MT20	5.0	6.0 Edge
C	TTWW-m	MT20	5.0	8.0 1.75 3.50
D	TMVW-t	MT20	4.0	4.0
E	TMVW-w	MT20	2.0	4.0
F	TS-t	MT20	3.0	6.0
G	TMVW-t	MT20	4.0	4.0
H	TTWW-m	MT20	5.0	8.0 1.75 3.50
I	TMVW-p	MT20	5.0	6.0 Edge
K	BMV1+p	MT20	3.0	4.0
L	BMVW-t	MT20	5.0	6.0
M	BMVW-t	MT20	4.0	6.0
N	BSVWW-t	MT20	6.0	12.0 Edge 6.00
O	BMVW-t	MT20	4.0	6.0
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.

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 : 35	-91.8 -91.8 0.12 (1)	10.00	P-C	-202 16	0.08 (1)	
B-C	-1974 : 0	-91.8 -91.8 0.66 (1)	4.07	L-H	-202 16	0.08 (1)	
C-D	-2528 : 0	-91.8 -91.8 0.45 (1)	3.91	B-P	0 1670	0.38 (1)	
D-E	-2782 : 0	-91.8 -91.8 0.47 (1)	3.72	L-I	0 1670	0.38 (1)	
E-F	-2782 : 0	-91.8 -91.8 0.47 (1)	3.72	M-H	0 1234	0.28 (1)	
F-G	-2782 : 0	-91.8 -91.8 0.47 (1)	3.72	C-O	0 1234	0.28 (1)	
G-H	-2528 : 0	-91.8 -91.8 0.45 (1)	3.91	M-G	-760 0	0.29 (1)	
H-I	-1974 : 0	-91.8 -91.8 0.66 (1)	4.07	O-D	-760 0	0.29 (1)	
I-J	0 : 35	-91.8 -91.8 0.12 (1)	10.00	N-G	0 : 354	0.08 (1)	
Q-B	-1791 : 0	0.0 0.0 0.18 (1)	6.24	D-N	0 : 354	0.08 (1)	
K-I	-1791 : 0	0.0 0.0 0.18 (1)	6.24	N-E	-416 0	0.16 (1)	
Q-P	0 : 0	-18.5 -18.5 0.13 (4)	10.00				
P-O	0 : 1636	-18.5 -18.5 0.33 (1)	10.00				
O-N	0 : 2529	-18.5 -18.5 0.46 (1)	10.00				
N-M	0 : 2529	-18.5 -18.5 0.46 (1)	10.00				
M-L	0 : 1636	-18.5 -18.5 0.33 (1)	10.00				
L-K	0 : 0	-18.5 -18.5 0.13 (4)	10.00				



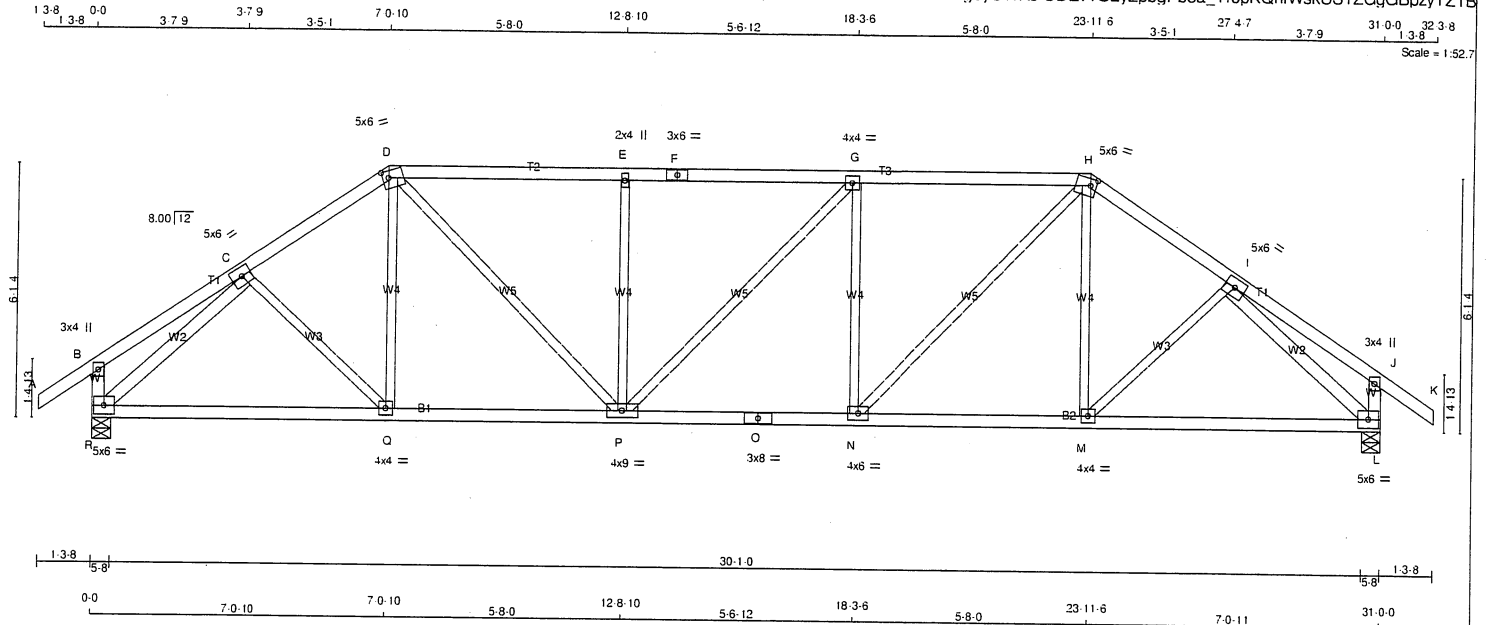
Structural component only
DWG# T-2022115



JOB NAME 406506	TRUSS NAME T3	QUANTITY 2	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 09:10:10 2020 Page 1
ID:pXBpElFV7RX?2FLKzMhgeyOWXJ-UDevTO2yZpbqPb3a_YrJpKQhWskUS1ZGqGBpzyTZ1B



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
H - K	2x4 DRY	No.2	SPF
R - B	2x4 DRY	No.2	SPF
L - J	2x4 DRY	No.2	SPF
R - O	2x4 DRY	No.2	SPF
O - L	2x4 DRY	No.2	SPF

ALL WEBS EXCEPT	2x3 DRY	No.2	SPF
R - C	2x4 DRY	No.2	SPF
I - L	2x4 DRY	No.2	SPF

DRY: SEASONED LUMBER.

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

BUILDING DESIGNER

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	UPLIFT	IN-SX
R	1835	0	0	5-8
L	1835	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1295	863.0	0.0	0.0	0.0	432.0	0.0
L	1295	863.0	0.0	0.0	0.0	432.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.01 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CS1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0.35	-91.8	-91.8 0.12 (1)	10.00	C-Q	0.72	0.02 (4)
B-C	0.19	-91.8	-91.8 0.17 (1)	10.00	Q-D	0.106	0.04 (4)
C-D	-1970.0	-91.8	-91.8 0.22 (1)	4.60	D-P	0.910	0.20 (1)
D-E	-2257.0	-91.8	-91.8 0.52 (1)	4.02	P-E	-557.0	0.33 (1)
E-F	-2258.0	-91.8	-91.8 0.52 (1)	4.01	P-G	-2.0	0.00 (1)
F-G	-2258.0	-91.8	-91.8 0.52 (1)	4.01	N-G	-558.0	0.33 (1)
G-H	-2259.0	-91.8	-91.8 0.53 (1)	4.01	N-H	0.912	0.21 (1)
H-I	-1970.0	-91.8	-91.8 0.22 (1)	4.60	M-H	0.106	0.04 (4)
I-J	0.19	-91.8	-91.8 0.17 (1)	10.00	M-I	0.72	0.02 (4)
J-K	0.35	-91.8	-91.8 0.12 (1)	10.00	R-C	-2189.0	0.60 (1)
R-B	-253.0	0.0	0.0 0.03 (1)	7.81	I-L	-2189.0	0.60 (1)
L-J	-253.0	0.0	0.0 0.03 (1)	7.81			
R-Q	0.1569	-18.5	-18.5 0.37 (1)	10.00			
Q-P	0.1622	-18.5	-18.5 0.37 (1)	10.00			
P-O	0.2259	-18.5	-18.5 0.42 (1)	10.00			
O-N	0.2259	-18.5	-18.5 0.42 (1)	10.00			
N-M	0.1622	-18.5	-18.5 0.37 (1)	10.00			
M-L	0.1568	-18.5	-18.5 0.37 (1)	10.00			

TOTAL WEIGHT = 2 X 135 = 270 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

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 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CSI: TC=0.53/1.00 (G-H:1), BC=0.42/1.00 (N-P:1), WB=0.60/1.00 (C-R:1), SSI=0.24/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

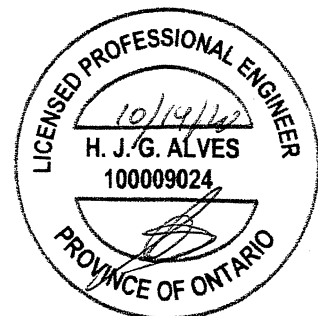
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP (PSI) SHEAR (PLI) 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= 0.85 (C) (INPUT = 0.90)
JSI METAL = 0.74 (O) (INPUT = 1.00)



Structural component only
DWG# T-2022116

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

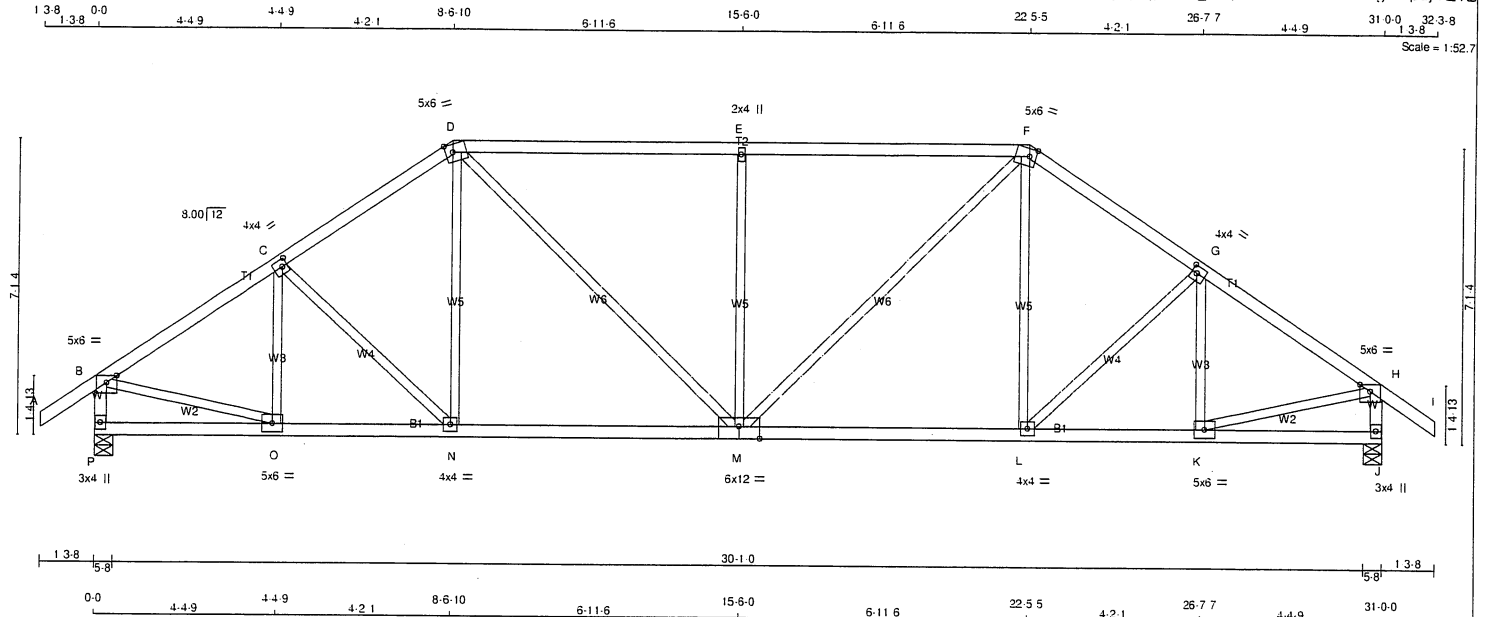
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T4	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:10 2020 Page 1
ID: pXBepelFV7RX?2FLKzMhgeyQWXJ-UDEvTO2yZpbqPb3a_YrJpKQfGWtUURmZGgGBpyTZ1B



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								TOTAL WEIGHT = 2 X 134 = 267 lb		
N. L. G. A. RULES				BEARINGS								[M][F]		
CHORDS SIZE LUMBER DESCR.														
A - D	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQD	SPECIFIED LOADS:					
D - F	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH.	LL	= 25.6 PSF			
F - I	2x4	DRY	No.2	SPF	JT VERT	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	DL	= 6.0 PSF		
P - B	2x4	DRY	No.2	SPF	P	1835	0	1835	0	5-8	5-8	BOT CH.	LL	= 0.0 PSF
J - H	2x4	DRY	No.2	SPF	J	1835	0	1835	0	0	5-8	5-8	DL	= 7.4 PSF
P - M	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS								TOTAL LOAD = 39.0 PSF	
M - J	2x4	DRY	No.2	SPF										

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMWV-p	MT20	5.0	6.0	Edge	
C TMWW-i	MT20	4.0	4.0	2.00	1.50
D TTWW-m	MT20	5.0	6.0	2.25	2.00
E TMW-w	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	6.0	2.25	2.00
G TMWW-i	MT20	4.0	4.0	2.00	1.50
H TMWV-p	MT20	5.0	6.0	Edge	
J BMV1-p	MT20	3.0	4.0		
K BMWW-i	MT20	5.0	6.0		
L BMWW-i	MT20	4.0	4.0		
M BSWWW-i	MT20	6.0	12.0	Edge	6.00
N BMWW-i	MT20	4.0	4.0		
O BMWW-i	MT20	5.0	6.0		
P BMV1-p	MT20	3.0	4.0		

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRAC. (LC) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC. (LC) (LC)	
FR-TO				FR-TO			
A-B	0 / 35	-91.8	-91.8 0.12 (1)	10.00	C-N	-344 0	0.10 (1)
B-C	-1966 / 0	-91.8	-91.8 0.26 (1)	4.58	C-N	-123 0	0.07 (1)
C-D	-1911 / 0	-91.8	-91.8 0.25 (1)	4.64	N-D	0 215	0.06 (4)
D-E	-2023 / 0	-91.8	-91.8 0.66 (1)	3.96	D-M	0 634	0.14 (1)
E-F	-2023 / 0	-91.8	-91.8 0.66 (1)	3.96	M-E	-784 0	0.68 (1)
F-G	-1911 / 0	-91.8	-91.8 0.25 (1)	4.64	M-F	0 634	0.14 (1)
G-H	-1966 / 0	-91.8	-91.8 0.26 (1)	4.58	L-F	0 215	0.06 (4)
H-I	0 / 35	-91.8	-91.8 0.12 (1)	10.00	L-G	-123 0	0.07 (1)
P-B	-1796 / 0	0.0	0.0 0.18 (1)	6.24	K-G	-344 0	0.10 (1)
J-H	-1796 / 0	0.0	0.0 0.18 (1)	6.24	B-O	0 1706	0.38 (1)
					K-H	0 1706	0.38 (1)
P-O	0 / 0	-18.5	-18.5 0.08 (4)	10.00			
O-N	0 / 1656	-18.5	-18.5 0.37 (1)	10.00			
N-M	0 / 1570	-18.5	-18.5 0.36 (1)	10.00			
M-L	0 / 1570	-18.5	-18.5 0.36 (1)	10.00			
L-K	0 / 1656	-18.5	-18.5 0.37 (1)	10.00			
K-J	0 / 0	-18.5	-18.5 0.08 (4)	10.00			



Structural component only
DWG# T-2022117

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

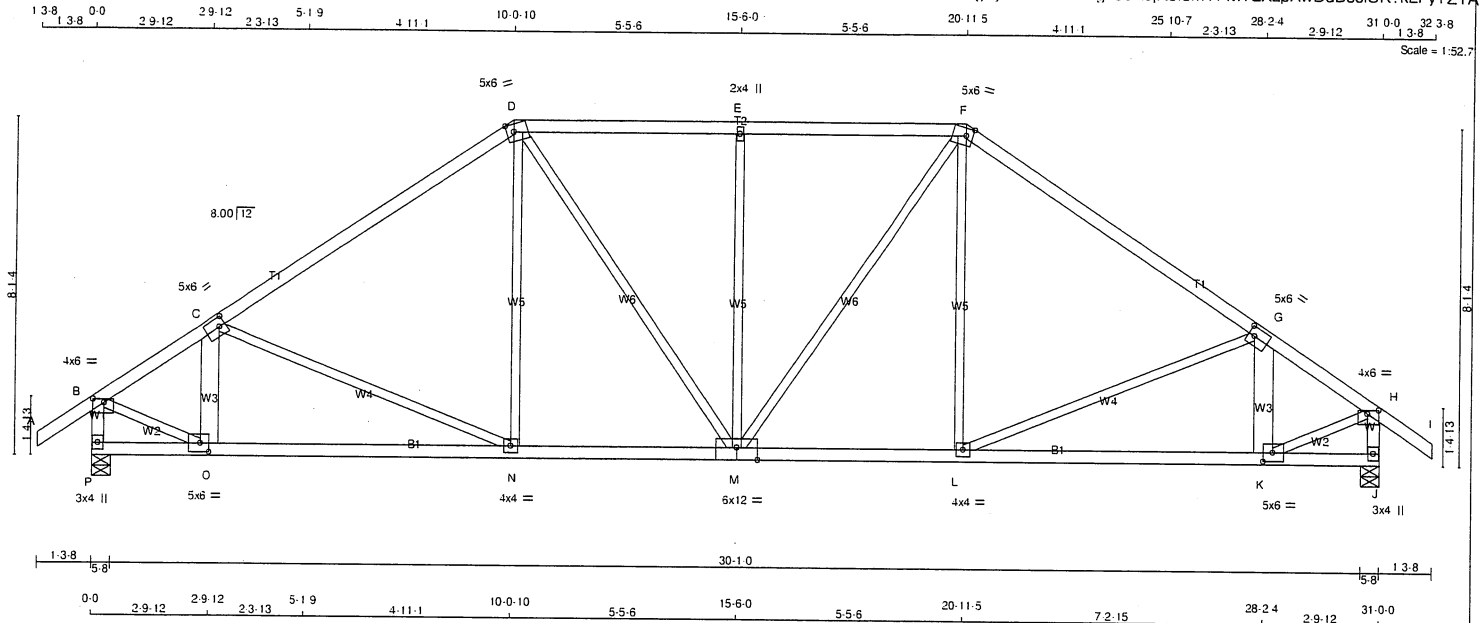
RECEIVED

Per: danielle.devitt

JOB NAME 406506	TRUSS NAME T5	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	-------------------------	----------------------	-----------------	--------------------------------------	----------

Tamarack Roof Truss, Burlington

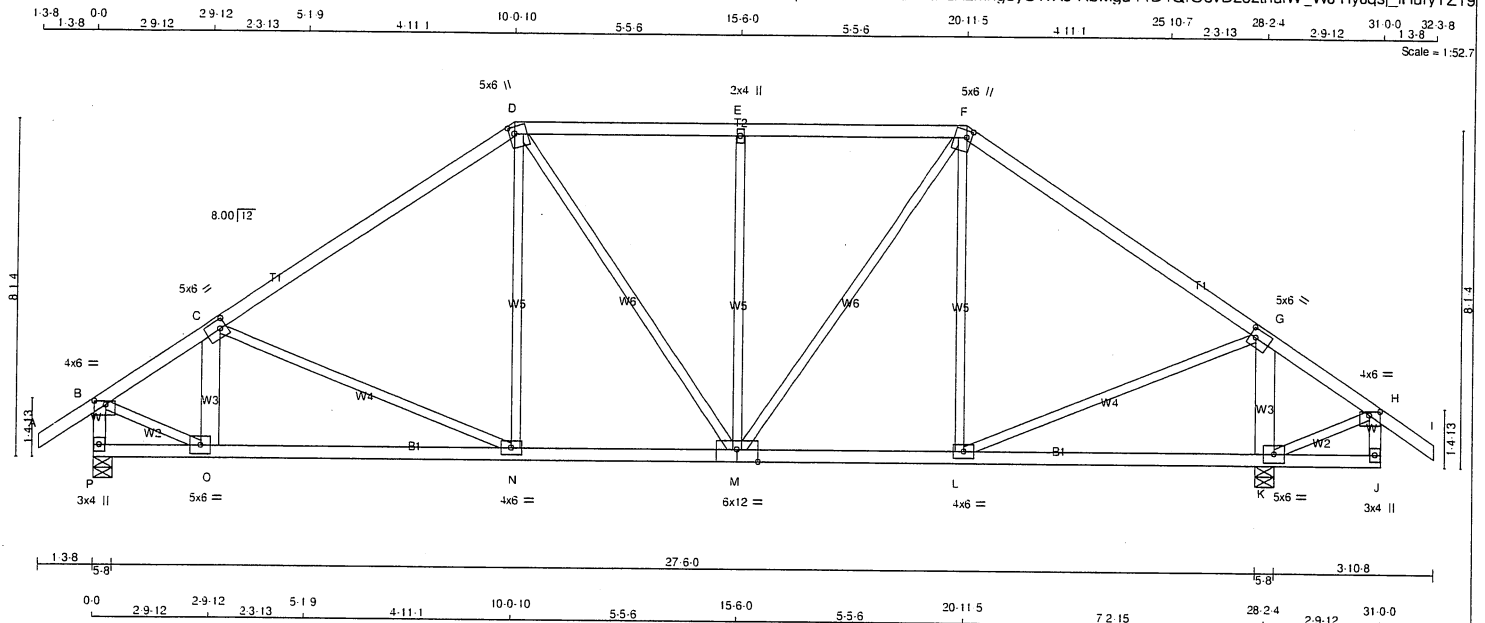
Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:11 2020 Page 1
ID:pXBePeIFV7RX?2FLKzMHqeyOWXJ-zPoHgk3bK6jX0lemYFMYLXzpAwDdDseilUK?kLPyTZ1A



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T5C	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:12 2020 Page 1
ID:pXBePeIFV7RX?2FLKzMhgeyOWXJ-RbMgu44D4QrOevDz6ztnuIW_WJYIyJsqi_IHuryTZ19



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. TOTAL WEIGHT = 141 lb [M/F]

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
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
O - C	2x6	DRY	No.2	SPF
K - G	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-p	MT20	4.0	6.0	1.00	3.25
C	TMWV-t	MT20	5.0	6.0	2.50	1.75
D	TTWV+m	MT20	5.0	6.0	2.00	1.50
E	TMW-w	MT20	2.0	4.0		
F	TTWV+m	MT20	5.0	6.0	2.00	1.50
G	TMWV-t	MT20	5.0	6.0	2.50	1.75
H	TMWV-p	MT20	4.0	6.0	1.00	3.25
J	BMV+p	MT20	3.0	4.0		
K	BMWV1-t	MT20	5.0	6.0		
L	BMWV-t	MT20	4.0	6.0		
M	BSWVWV-t	MT20	6.0	12.0	Edge 6.00	
N	BMWV-t	MT20	4.0	6.0		
O	BMWV-t	MT20	5.0	6.0		
P	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		RECORD	
JT	VERT	GROSS REACTION	GROSS REACTION	DOWN	UP	BRG	BRG	IN-SX	IN-SX
P	1652	0	1652	0	0	5-8	5-8		
K	2018	0	2018	0	0	5-8	5-8		

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1166	777	0	0	0	389	0
K	1424	949	0	0	0	475	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	MAX. UNBRACED LENGTH (LC1)
FR-TO				FR-TO			
A-B	0	-91.8	-91.8 0.12 (1)	10.00	N-D	0	0.222
B-C	-1679	-91.8	-91.8 0.49 (1)	4.52	D-M	0	0.192
C-D	-1551	-91.8	-91.8 0.67 (1)	4.44	M-E	-612	0.78 (1)
D-E	-1374	-91.8	-91.8 0.37 (1)	5.11	M-F	0	0.640
E-F	-1374	-91.8	-91.8 0.37 (1)	5.11	L-F	-310	0.39 (1)
F-G	-1253	-91.8	-91.8 0.64 (1)	4.87	B-O	0	0.1574
G-H	0	-91.8	-91.8 0.67 (1)	10.00	K-H	-87	0.02 (1)
H-I	0	-91.8	-91.8 0.12 (1)	10.00	O-C	-459	0.04 (1)
P-B	-1642	0	0.0 0.17 (1)	6.46	K-G	-1862	0.17 (1)
J-H	-3	0	0.0 0.00 (1)	7.81	C-N	-225	0.29 (1)
				L-G	0	0.1178	0.27 (1)
P-O	0	-18.5	-18.5 0.14 (4)	10.00			
O-N	0	-18.5	-18.5 0.35 (1)	10.00			
N-M	0	-18.5	-18.5 0.31 (1)	10.00			
M-L	0	-18.5	-18.5 0.27 (4)	10.00			
L-K	-82	-18.5	-18.5 0.14 (4)	6.25			
K-J	0	-18.5	-18.5 0.17 (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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL) = L/120 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.67/1.00 (C-D:1), BC=0.35/1.00 (N-O:1), WB=0.78/1.00 (E-M:1), SSI=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

Per: danielle devitt
JSI GRIP= 0.87 (G) (INPUT = 0.90)
JSI METAL= 0.42 (G) (INPUT = 1.00)



Structural component only
DWG# T-2022119

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

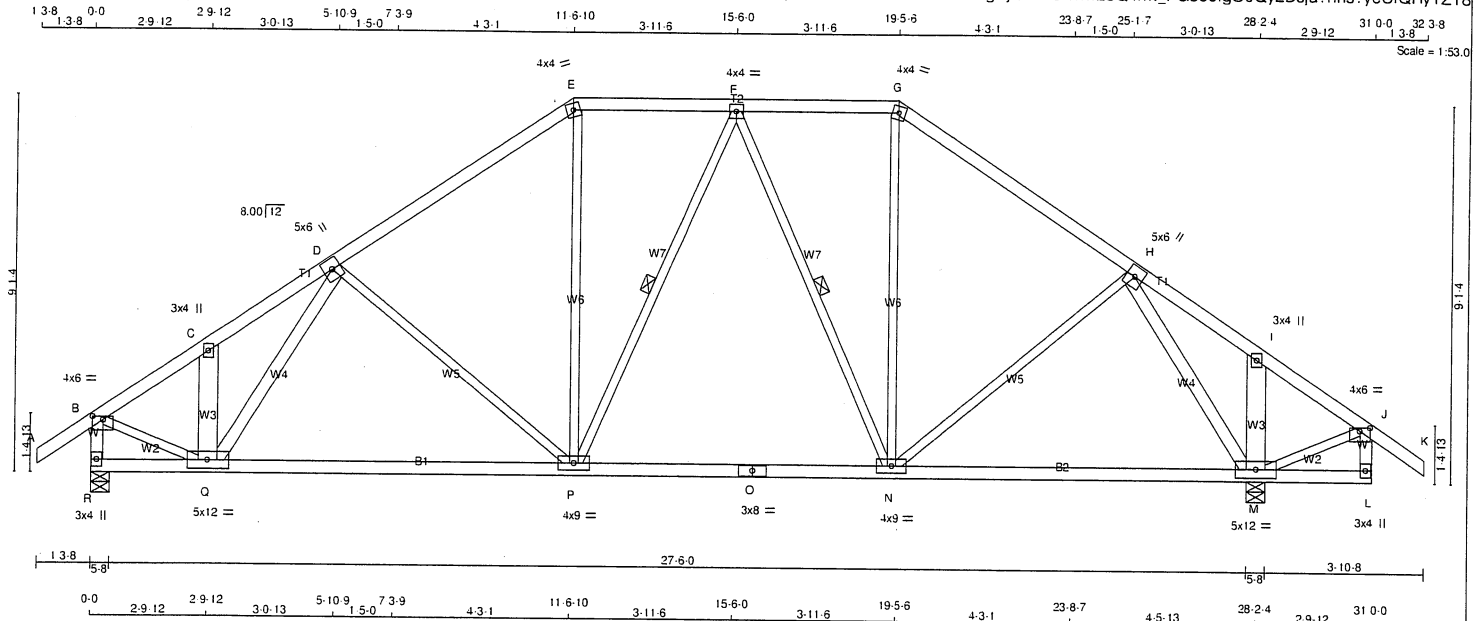
11/16/2021

RECEIVED
Per: danielle devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T6	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:13 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-vnw25Q4rrk_FG3o9fgO0Qy2Dju?hns?yeUrQHytZ18



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-p	MT20	4.0	6.0	1.00	3.00
C	TMWV-w	MT20	3.0	4.0		
D	TMWV-t	MT20	5.0	6.0		
E	TTW-m	MT20	4.0	4.0		
F	TMWV-t	MT20	4.0	4.0		
G	TTW-m	MT20	4.0	4.0		
H	TMWV-t	MT20	5.0	6.0		
I	TMWV-w	MT20	3.0	4.0		
J	TMWV-p	MT20	4.0	6.0	1.00	3.00
L	BMV1-p	MT20	3.0	4.0		
M	BMWVW1-t	MT20	5.0	12.0		
N	BMWVW1-t	MT20	4.0	9.0		
O	BS-t	MT20	3.0	8.0		
P	BMWVW1-t	MT20	4.0	9.0		
Q	BMWVW1-t	MT20	5.0	12.0		
R	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	VERT	GROSS REACTION	GROSS REACTION	DOWN	HORIZ	BRG	IN-SX	IN-SX	
R	1652	0	1652	0	0	5-8	5-8	5-8	
M	2018	0	2018	0	0	5-8	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	1166	777	0	0	0	389	0
M	1424	949	0	0	0	475	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P, F-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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0	-91.8	-91.8	0.12 (1)	10.00	P-E	0
B-C	-1607	-91.8	-91.8	0.13 (1)	5.11	N-G	0
C-D	-1553	-91.8	-91.8	0.32 (1)	4.94	B-Q	0
D-E	-1442	-91.8	-91.8	0.40 (1)	5.00	M-J	-223
E-F	-1181	-91.8	-91.8	0.19 (1)	5.67	Q-C	-174
F-G	-1020	-91.8	-91.8	0.18 (1)	5.99	M-I	-207
G-H	-1249	-91.8	-91.8	0.39 (1)	5.29	N-H	0
H-I	0	-91.8	-91.8	0.41 (1)	10.00	H-M	-1844
I-J	0	-91.8	-91.8	0.13 (1)	10.00	Q-D	-239
J-K	0	-91.8	-91.8	0.12 (1)	10.00	D-P	-366
R-B	-1656	0	0	0.17 (1)	6.44	P-F	-37
L-J	-14	0	0	0.00 (4)	7.81	F-N	-440
R-Q	0	-18.5	-18.5	0.22 (4)	10.00		
Q-P	0	-18.5	-18.5	0.38 (1)	10.00		
P-O	0	-18.5	-18.5	0.35 (4)	10.00		
O-N	0	-18.5	-18.5	0.35 (4)	10.00		
N-M	0	-18.5	-18.5	0.31 (4)	10.00		
M-L	0	-18.5	-18.5	0.24 (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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.41/1.00 (H-I:1), BC=0.38/1.00 (P-Q:1),
WB=0.73/1.00 (H-M:1), SSI=0.20/1.00 (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 = 0.88 (J) (INPUT = 0.90)
JSI METAL = 0.63 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022120

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

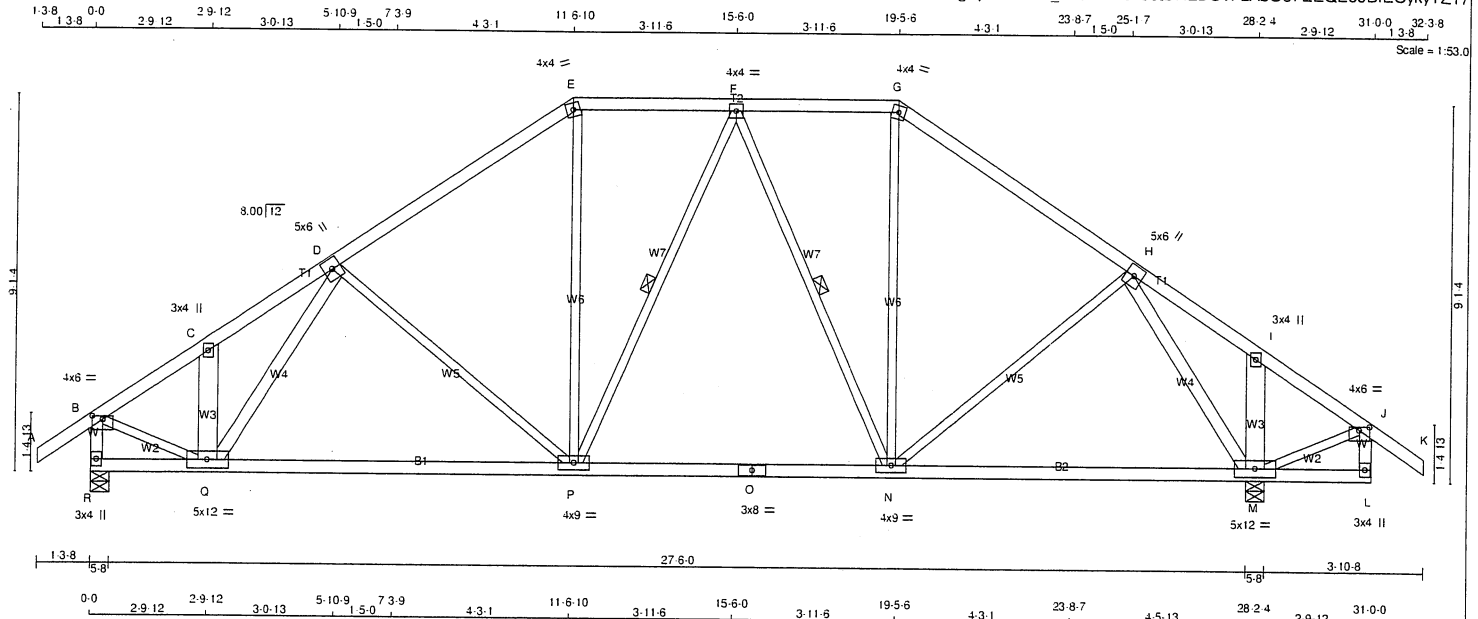
11/16/2021

RECEIVED
Per: danielle devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T6C	4	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:14 2020 Page 1
ID:pXBepIFV7RX?2FLKzMhgeyOWXJ-N_UQIm5Tc166tDNLDOvFzAbO37EEQE69BIEOykyTZ17



LUMBER				DESIGN CRITERIA			
N. L. G. A. RULES				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	TOP CH.	LL	25.6	PSF
A - E	2x4	DRY	No.2	DL		6.0	PSF
E - G	2x4	DRY	No.2	BOT CH.	LL	0.0	PSF
G - K	2x4	DRY	No.2	DL		7.4	PSF
R - B	2x4	DRY	No.2	TOTAL LOAD		39.0	PSF
L - J	2x4	DRY	No.2				
R - O	2x4	DRY	No.2				
O - L	2x4	DRY	No.2				
ALL WEBS 2x3 DRY No.2				SPACING = 24.0 IN. C/C			
EXCEPT				LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
Q - C	2x6	DRY	No.2	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015			
M - I	2x6	DRY	No.2	THIS DESIGN COMPLIES WITH:			
H - M	2x4	DRY	No.2	- PART 9 OF BCBC 2018, OBC 2012, ABC 2019			
Q - D	2x4	DRY	No.2	- PART 9 OF OBC 2012 (2019 AMENDMENT)			
DRY: SEASONED LUMBER.				- CSA 086-09, CSA 086-14			
				- TPIC 2011, TPIC 2014			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-p	MT20	4.0	6.0	1.00	3.00
C	TMWV-w	MT20	3.0	4.0		
D	TMWV-t	MT20	5.0	6.0		
E	TTW-m	MT20	4.0	4.0		
F	TMWV-t	MT20	4.0	4.0		
G	TTW-m	MT20	4.0	4.0		
H	TMWV-t	MT20	5.0	6.0		
I	TMWV-w	MT20	3.0	4.0		
J	TMWV-p	MT20	4.0	6.0	1.00	3.00
L	BMV-p	MT20	3.0	4.0		
M	BMWVWV-t	MT20	5.0	12.0		
N	BMWVWV-t	MT20	4.0	9.0		
O	BS-t	MT20	3.0	8.0		
P	BMWVWV-t	MT20	4.0	9.0		
Q	BMWVWV-t	MT20	5.0	12.0		
R	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	VERT	GROSS REACTION	DOWN	GROSS REACTION	HORIZ	BRG	IN-SX	BRG	IN-SX
R	1652	0	1652	0	0	5-8	5-8	5-8	5-8
M	2018	0	2018	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	1166	777	0	0	0	389	0
M	1424	949	0	0	0	475	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P, F-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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0	-91.8	-91.8	P-E	0	426	0.10 (1)
B-C	-1607	-91.8	-91.8	N-G	0	318	0.07 (1)
C-D	-1553	-91.8	-91.8	B-Q	0	1434	0.32 (1)
D-E	-1442	-91.8	-91.8	M-J	-223	0	0.04 (1)
E-F	-1181	-91.8	-91.8	Q-C	-174	0	0.02 (1)
F-G	-1020	-91.8	-91.8	M-I	-207	0	0.02 (1)
G-H	-1249	-91.8	-91.8	N-H	0	366	0.08 (1)
H-I	0	-91.8	-91.8	H-M	-1844	0	0.73 (1)
I-J	0	-91.8	-91.8	Q-D	-239	2	0.09 (1)
J-K	0	-91.8	-91.8	D-P	-366	0	0.44 (1)
R-B	-1656	0	0	P-F	-37	24	0.02 (1)
L-J	-14	0	0	F-N	-440	0	0.29 (1)
R-Q	0	-18.5	-18.5				
Q-P	0	-18.5	-18.5				
P-O	0	-18.5	-18.5				
O-N	0	-18.5	-18.5				
N-M	0	-18.5	-18.5				
M-L	0	-18.5	-18.5				



Structural component only
DWG# T-2022121

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

RECEIVED

Per: Danielle Devitt

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

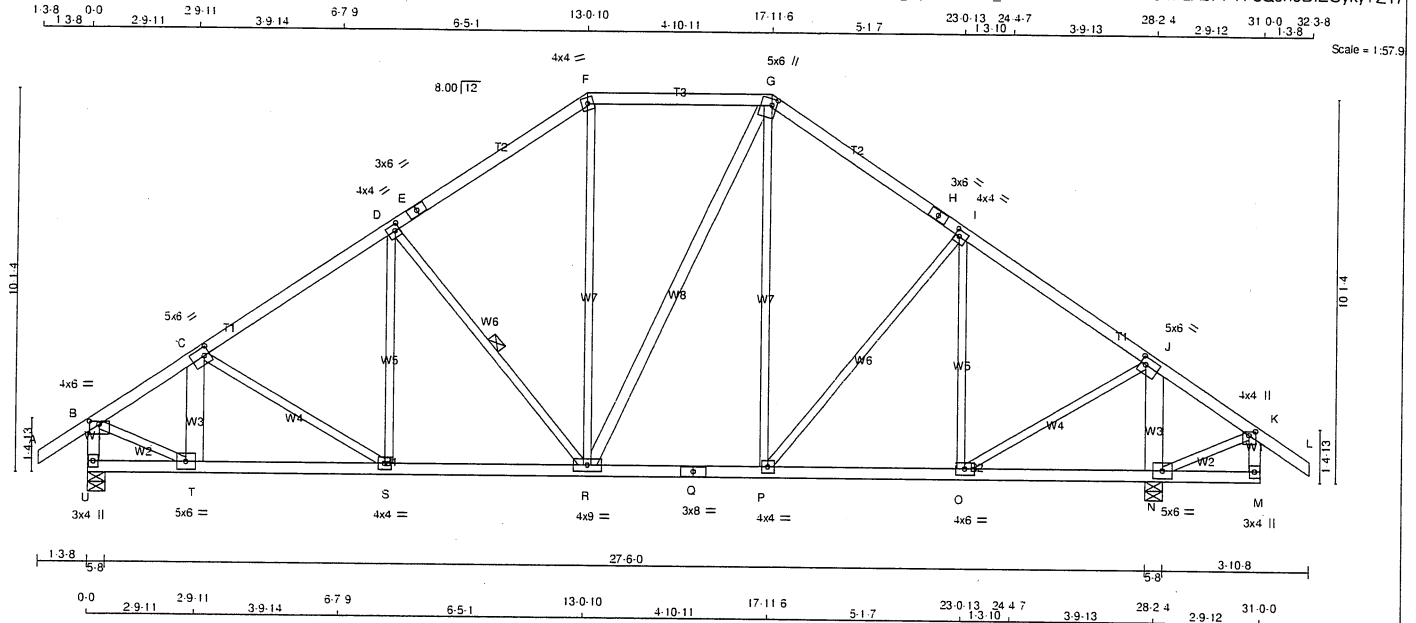
PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP = 0.88 (J) (INPUT = 0.90)
JSI METAL = 0.63 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T7	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:14 2020 Page 1
ID:PxBePeIFV7RX?2FLKzMhgeyOWXJ-N_UQIm5Tc166tDNLDovFzAbPP7FsQJh9BIEOykyTZ17



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF	
F - G	2x4	DRY	No.2	SPF	
H - L	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
U - B	2x4	DRY	No.2	SPF	
N - J	2x4	DRY	No.2	SPF	
Q - M	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
R - G	2x4	DRY	No.2	SPF	
N - J	2x6	DRY	No.2	SPF	
T - C	2x6	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	6.0	1.00	3.00
C	TMVW-t	MT20	5.0	6.0	2.50	1.75
D	TMVW-l	MT20	4.0	4.0	2.00	1.50
E	TS-l	MT20	3.0	6.0		
F	TTW-m	MT20	4.0	4.0		
G	TTWW+m	MT20	5.0	6.0	2.00	1.50
H	TS-l	MT20	3.0	6.0		
I	TMVW-t	MT20	4.0	4.0	2.00	1.50
J	TMVW-t	MT20	5.0	6.0	2.25	1.75
K	TMVW-p	MT20	4.0	4.0	1.25	2.00
M	BMV-p	MT20	3.0	4.0		
N	BMVW-t	MT20	5.0	6.0		
O	BMVW-t	MT20	4.0	6.0		
P	BMVW-t	MT20	4.0	4.0		
Q	BS-l	MT20	3.0	8.0		
R	BMVW-t	MT20	4.0	9.0		
S	BMVW-t	MT20	4.0	4.0		
T	BMVW-t	MT20	5.0	6.0		
U	BMV-t	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	VERT	HORZ	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG
U	1652	0	1652	0	0	0	5-8	5-8	5-8
N	2018	0	2018	0	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	1166	777	0	0	0	389	0
N	1424	949	0	0	0	475	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 35	-91.8	-91.8 0.12 (1)	10.00	S-D	0 / 103	0.04 (4)
B-C	-1600 / 0	-91.8	-91.8 0.16 (1)	5.08	D-R	-520 / 0	0.24 (1)
C-D	-1672 / 0	-91.8	-91.8 0.33 (1)	4.82	R-F	0 / 310	0.07 (1)
D-E	-1320 / 0	-91.8	-91.8 0.31 (1)	5.29	R-G	0 / 204	0.03 (1)
E-F	-1320 / 0	-91.8	-91.8 0.31 (1)	5.29	P-G	0 / 93	0.03 (4)
F-G	-1076 / 0	-91.8	-91.8 0.30 (1)	5.73	B-T	0 / 1449	0.33 (1)
G-H	-1214 / 0	-91.8	-91.8 0.30 (1)	5.47	N-K	-211 / 0	0.04 (1)
H-I	-1214 / 0	-91.8	-91.8 0.30 (1)	5.47	N-J	-1846 / 0	0.17 (1)
I-J	-1150 / 0	-91.8	-91.8 0.29 (1)	5.60	T-C	-446 / 0	0.04 (1)
J-K	0 / 267	-91.8	-91.8 0.25 (1)	10.00	C-S	0 / 58	0.01 (1)
K-L	0 / 35	-91.8	-91.8 0.12 (1)	10.00	P-I	0 / 32	0.01 (1)
U-B	-1631 / 0	0.0	0.0 0.17 (1)	6.48	O-I	-580 / 0	0.43 (1)
M-K	0 / 14	0.0	0.0 0.00 (4)	10.00	O-J	0 / 1343	0.30 (1)
U-T	0 / 0	-18.5	-18.5 0.06 (4)	10.00			
T-S	0 / 1352	-18.5	-18.5 0.27 (1)	10.00			
S-R	0 / 1403	-18.5	-18.5 0.28 (1)	10.00			
R-Q	0 / 987	-18.5	-18.5 0.21 (1)	10.00			
Q-P	0 / 987	-18.5	-18.5 0.21 (1)	10.00			
P-O	0 / 966	-18.5	-18.5 0.20 (1)	10.00			
O-N	-197 / 0	-18.5	-18.5 0.07 (4)	6.25			
N-M	0 / 0	-18.5	-18.5 0.09 (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 (0.94")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.28")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.28")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.33/1.00 (C-D:1), BC=0.28/1.00 (R-S:1), WB=0.43/1.00 (I-O:1), SSI=0.19/1.00 (D-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP (DRY) 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= 0.87 (B) (INPUT= 0.90)

JSI METAL= 0.40 (J) (INPUT= 1.00)



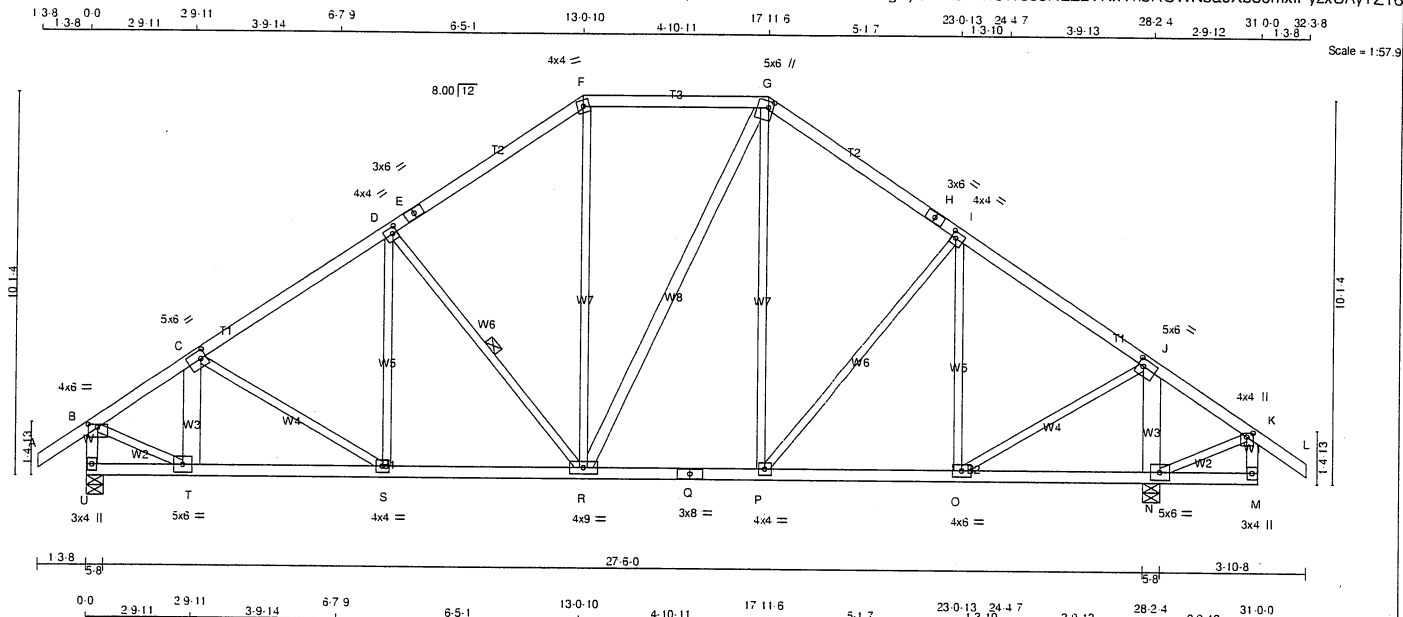
Structural component only
DWG# T-2022122

CITY OF RICHMOND
BUILDING DEPARTMENT
11/16/2021
RECEIVED
Per: danielle devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T7C	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:15 2020 Page 1
ID:pXBepIFV7RX?2FLKzMhgeyOWXJ-rA1oW565NLEzVNxYn5RUWN8a9XB59mxIPyzxUAYTZ16



TOTAL WEIGHT = 156 lb
[M/F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
F - G	2x4	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
H - L	2x4	DRY	No.2	SPF	
U - B	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
U - Q	2x4	DRY	No.2	SPF	
Q - M	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
R - G	2x4	DRY	No.2	SPF	
N - J	2x6	DRY	No.2	SPF	
T - C	2x6	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	6.0	1.00 3.00
C	TMVW-t	MT20	5.0	6.0	2.50 1.75
D	TMVW-t	MT20	4.0	4.0	2.00 1.50
E	TS-t	MT20	3.0	6.0	
F	TTW-m	MT20	4.0	4.0	
G	TTW+m	MT20	5.0	6.0	2.00 1.50
H	TS-t	MT20	3.0	6.0	
I	TMVW-t	MT20	4.0	4.0	2.00 1.50
J	TMVW-t	MT20	5.0	6.0	2.25 1.75
K	TMVW-p	MT20	4.0	4.0	1.25 2.00
M	BMV-p	MT20	3.0	4.0	
N	BMVW-t	MT20	5.0	6.0	
O	BMVW-t	MT20	4.0	6.0	
P	BMVW-t	MT20	4.0	4.0	
Q	BS-t	MT20	3.0	8.0	
R	BMVW-t	MT20	4.0	9.0	
S	BMVW-t	MT20	4.0	4.0	
T	BMVW-t	MT20	5.0	6.0	
U	BMV-t	MT20	3.0	4.0	

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG	
VERT	HORZ	DOWN	UPLIFT	IN-SX
JT	1652	0	1652	0
U	2018	0	2018	0
N				

UNFACTORED REACTIONS

1ST LCASE	SNOW	MAX./MIN. COMPONENT REACTIONS	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED	1166	777	0	0	0	389	0
N	1424	949	0	0	0	475	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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	MAX. FACTORED	FACTORED	MAX. FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	0 35	-91.8 -91.8 0.12 (1)	10.00	S-D	0 103
B-C	-1600 0	-91.8 -91.8 0.16 (1)	5.08	D-R	-520 0
C-D	-1672 0	-91.8 -91.8 0.33 (1)	4.82	R-F	0 310
D-E	-1320 0	-91.8 -91.8 0.31 (1)	5.29	R-G	0 204
E-F	-1320 0	-91.8 -91.8 0.31 (1)	5.29	P-G	0 93
F-G	-1076 0	-91.8 -91.8 0.30 (1)	5.73	B-T	0 1449
G-H	-1214 0	-91.8 -91.8 0.30 (1)	5.47	N-K	-211 0
H-I	-1214 0	-91.8 -91.8 0.30 (1)	5.47	N-J	-1846 0
I-J	-1150 0	-91.8 -91.8 0.29 (1)	5.60	T-C	-446 0
J-K	0 267	-91.8 -91.8 0.25 (1)	10.00	C-S	0 58
K-L	0 35	-91.8 -91.8 0.12 (1)	10.00	P-I	0 32
U-B	-1631 0	0 0 0.17 (1)	6.48	O-I	-580 0
M-K	0 14	0 0 0.00 (4)	10.00	O-J	0 1343
U-T	0 0	-18.5 -18.5 0.06 (4)	10.00		
T-S	0 1352	-18.5 -18.5 0.27 (1)	10.00		
S-R	0 1403	-18.5 -18.5 0.28 (1)	10.00		
R-Q	0 987	-18.5 -18.5 0.21 (1)	10.00		
Q-P	0 987	-18.5 -18.5 0.21 (1)	10.00		
P-O	0 966	-18.5 -18.5 0.20 (1)	10.00		
O-N	-197 0	-18.5 -18.5 0.07 (4)	6.25		
N-M	0 0	-18.5 -18.5 0.09 (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 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 (0.94")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.28")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.28")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.33/1.00 (C-D:1), BC=0.28/1.00 (R-S:1), WB=0.43/1.00 (I-O:1), SS=0.19/1.00 (D-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP (DRY) SHEAR 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= 0.87 (B) (INPUT = 0.90)

JSI METAL= 0.40 (J) (INPUT = 1.00)

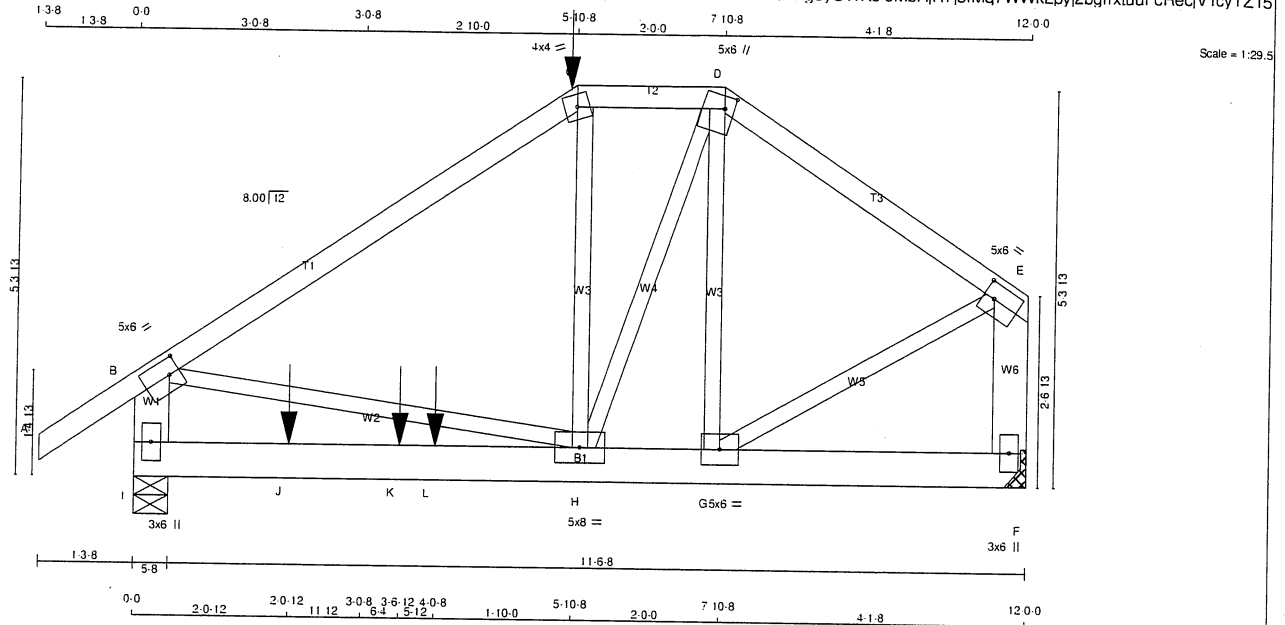


Structural component only
DWG# T-2022123

RECEIVED
Per: danielle devitt

JOB NAME 406506	TRUSS NAME T8A	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 09:10:16 2020 Page 1
ID: pXBePeIFV7RX?2FLKzMhgeyOWXJ-JMbAjr7j8fMq7WWWLpyi2bgfrxtuuFcReqV1cyTZ15



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

ALL WEBS 2x3 DRY No.2
EXCEPT SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	2.50	1.75
C	TTW-m	MT20	4.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TMVW-t	MT20	5.0	6.0	2.50	1.75
F	BMV1+p	MT20	3.0	6.0		
G	BMVW-t	MT20	5.0	6.0		
H	BMVWW-t	MT20	5.0	8.0		
I	BMV1+p	MT20	3.0	6.0		

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
JT	VERT	HORZ	DOWN	HORZ
I	1504	0	1504	0
F	1093	0	1093	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
I	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
I	1061	712	0	0	0	0
F	770	521	0	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			
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 35	-91.8 -91.8	0.14 (1)	10.00	H-C	0 100	0.04 (4)
B-C	-1265 0	-91.8 -91.8	0.71 (1)	4.63	H-D	0 953	0.24 (1)
C-D	-1052 0	-91.8 -91.8	0.08 (1)	6.02	G-D	-683 0	0.28 (1)
D-E	-882 0	-91.8 -91.8	0.32 (1)	6.07	G-E	0 823	0.20 (1)
E-B	-1273 0	0.0 0.0	0.09 (1)	7.81	B-H	0 1066	0.26 (1)
F-E	-1055 0	0.0 0.0	0.10 (1)	7.81			
I-J	0 0	-18.5 -18.5	0.51 (1)	10.00			
J-K	0 0	-18.5 -18.5	0.51 (1)	10.00			
K-L	0 0	-18.5 -18.5	0.51 (1)	10.00			
L-H	0 0	-18.5 -18.5	0.51 (1)	10.00			
H-G	0 718	-18.5 -18.5	0.56 (1)	10.00			
G-F	0 0	-18.5 -18.5	0.04 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	5-10-8	-234	-234	---	BACK	VERT	TOTAL
J	2-0-12	-29	-29	---	BACK	VERT	TOTAL
K	3-6-12	-29	-29	---	BACK	VERT	TOTAL
L	4-0-8	-517	-517	---	BACK	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 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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.71/1.00 (B-C:1), BC=0.56/1.00 (G-H:1), WB=0.28/1.00 (D-G:1), SSI=0.46/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES	PLATE GRIP (PSI)	DRY MIN. SHEAR (PLI)	SECTION (PLI)
---	---	---	---
---	---	---	---
---	---	---	---
---	---	---	---

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.37 (B) (INPUT = 1.00)



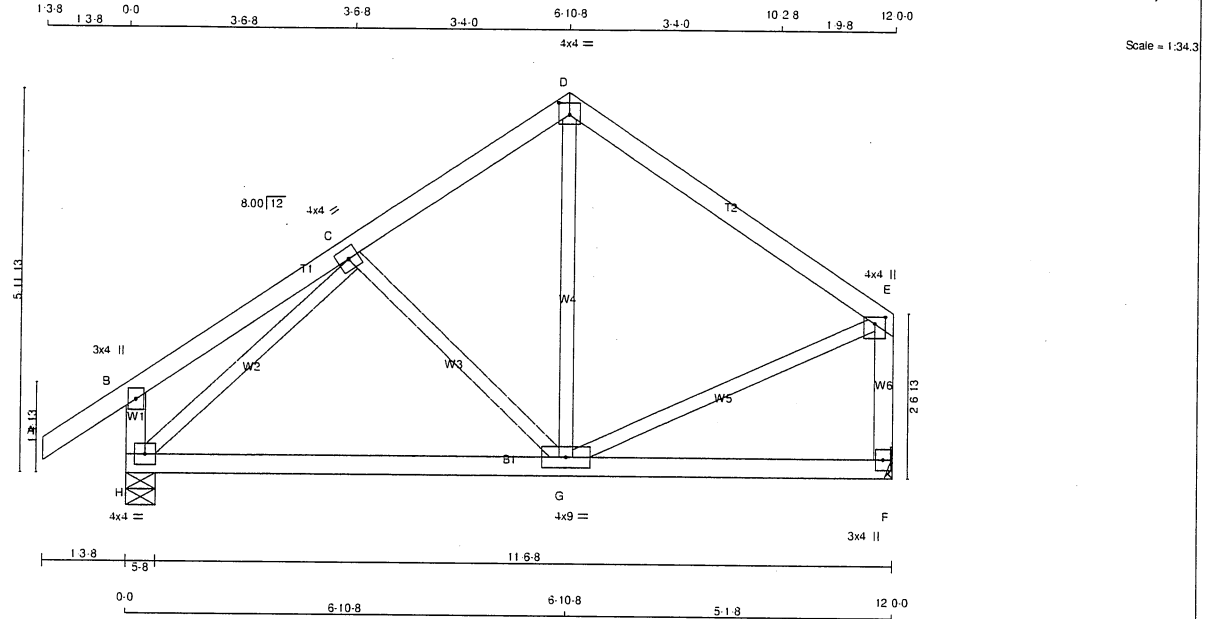
Structural component only
DWG# T-2022124

CITY OF RICHMOND HILL
BUILDING DIVISION
11/16/2021
RECEIVED
Per: danielle.devitt

JOB NAME 406506	TRUSS NAME T9A	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 09:10:17 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-nZ9Zxn7LvyUhg5wuWTyboDxuKIAdiBbtFT2Z3yTZ14



TOTAL WEIGHT = 52 lb [M/F]

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TTWV-t	MT20	4.0	4.0		
D	TTW-p	MT20	4.0	4.0	2.25	2.00
E	TMVW+p	MT20	4.0	4.0	1.25	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	BMVW1-t	MT20	4.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
F	662	0	662	0	0	MECHANICAL			
H	787	0	787	0	0	5-8	5-8		

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

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	468	307.0	0.0	0.0	0.0	161.0	0.0
H	555	377.0	0.0	0.0	0.0	177.0	0.0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				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	0.35	-91.8 -91.8 0.12 (1)	10.00	C-G	-197.0	0.08 (1)	
B-C	0.20	-91.8 -91.8 0.17 (1)	10.00	G-D	0.120	0.04 (4)	
C-D	-450.0	-91.8 -91.8 0.13 (1)	6.25	H-C	-698.0	0.26 (1)	
D-E	-430.0	-91.8 -91.8 0.31 (1)	6.25	G-E	0.390	0.09 (1)	
H-B	-247.0	0.0 0.0 0.03 (1)	7.81				
F-E	-630.0	0.0 0.0 0.09 (1)	7.81				
H-G	0.498	-18.5 -18.5 0.24 (4)	10.00				
G-F	0.0	-18.5 -18.5 0.20 (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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.31/1.00 (D-E:1), BC=0.24/1.00 (G-H:4), WB=0.26/1.00 (C-H:1), SSI=0.15/1.00 (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 MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.59 (C) (INPUT = 0.90)
JSI METAL = 0.24 (C) (INPUT = 1.00)



Structural component only
DWG# T-2022125

**CITY OF RICHMOND HILL
BUILDING DIVISION**

11/10/2021

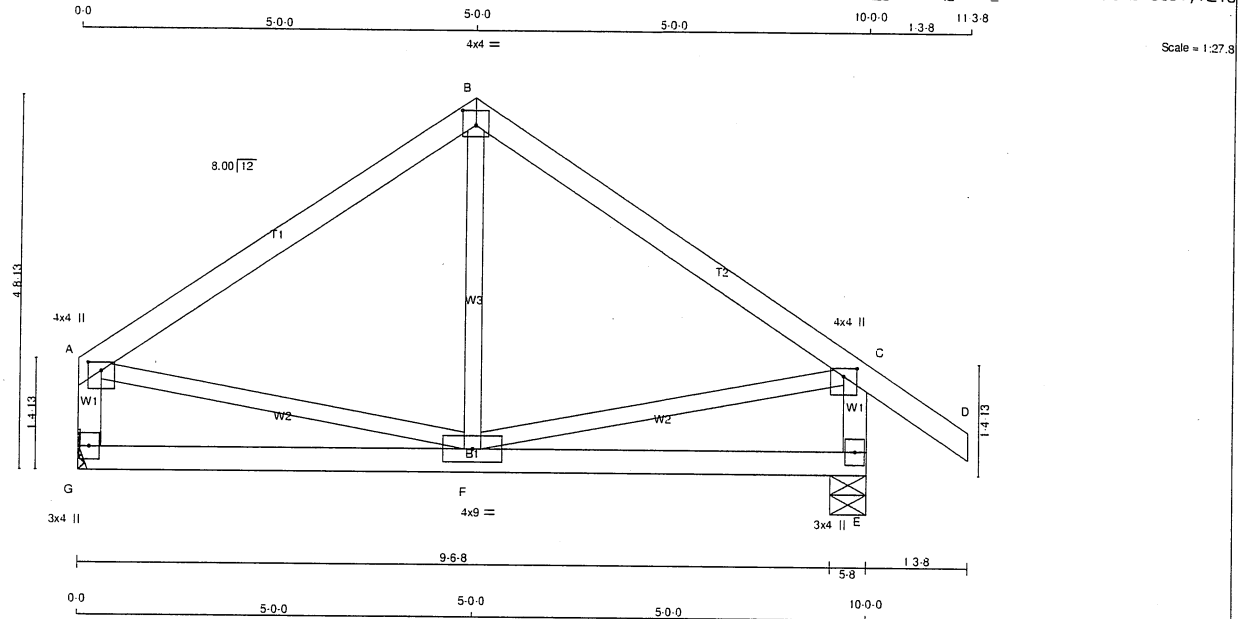
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T10	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:18 2020 Page 1
ID:pXBepelFV7RX?2FLKzHmgeyOWXJ-Fijx878_gGcYMqg7SD_B70m6ike6MCGk5vCc5VyTZ13



TOTAL WEIGHT = 2 X 40 = 81 lb
[M][F]

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TTW+p	MT20	4.0	4.0	2.25	2.00
C	TMVW+p	MT20	4.0	4.0	1.25	2.00
E	BMV1+p	MT20	3.0	4.0		
F	BMVWW-t	MT20	4.0	9.0		
G	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	REORD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ
G	551	0	551	0
E	677	0	677	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	390	256	0	0	0	134	0
E	477	326	0	0	0	150	0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	UNBRAC	MEMB.	WEBS	MAX. FACTORED	MAX
		FORCE	(PLF)			CS1	LENGTH			FORCE	CS1
FR-TO		(LBS)	FROM	TO			FR-TO			(LBS)	
A-B	-390	0	-91.8	-91.8	0.30	(1)	6.25	F-B	-27	77	0.03
B-C	-390	0	-91.8	-91.8	0.30	(1)	6.25	A-F	0	332	0.07
C-D	0	35	-91.8	-91.8	0.12	(1)	10.00	F-C	0	332	0.07
G-A	-515	0	0.0	0.0	0.05	(1)	7.81				
E-C	-641	0	0.0	0.0	0.07	(1)	7.81				
G-F	0	0	-18.5	-18.5	0.13	(4)	10.00				
F-E	0	0	-18.5	-18.5	0.13	(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 (0.33")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.30/1.00 (A-B:1), BC=0.13/1.00 (F-G:4),
WB=0.07/1.00 (A-F:1), SS=0.15/1.00 (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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667

PLATE PLACEMENT DOL = 0.250 inches

PLATE ROTATION DOL = 5.0 Deg

JSI GRIP = 0.47 (A) (INPUT = 0.90)
JSI METAL = 0.74 (A) (INPUT = 1.00)



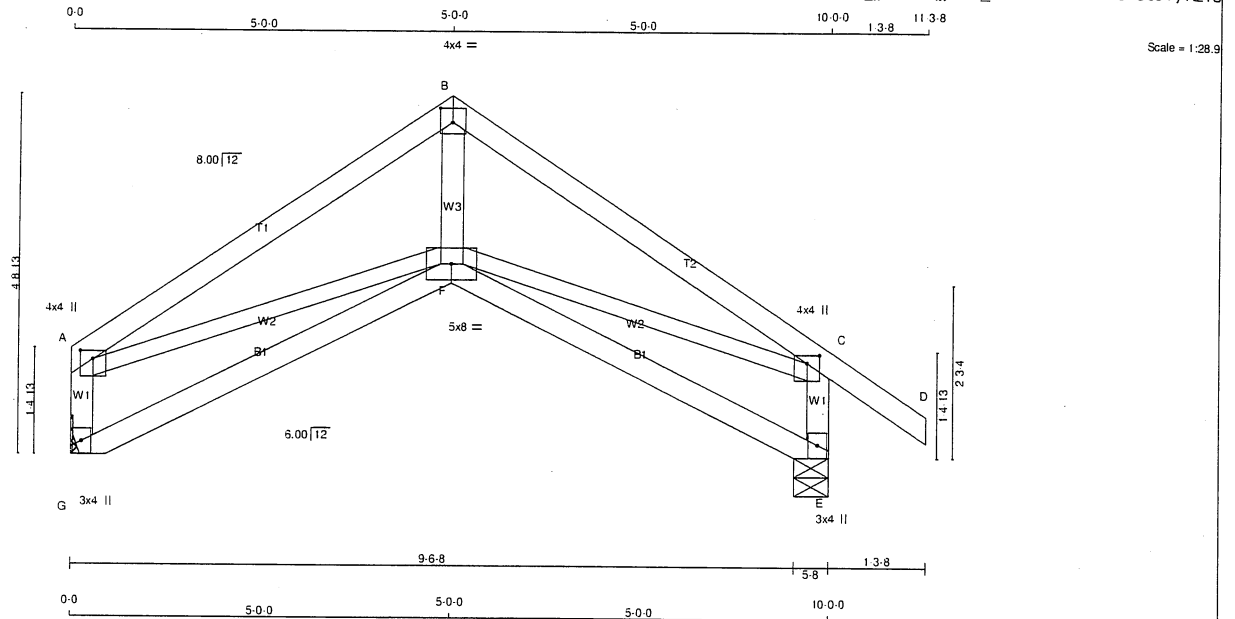
Structural component only
DWG# T-2022126

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

RECEIVED

Per: danielle.devitt



TOTAL WEIGHT = 2 X 41 = 83 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TTW-p	MT20	4.0	4.0	2.25	2.00
C	TMVW+p	MT20	4.0	4.0	1.25	2.00
E	BMV1+p	MT20	3.0	4.0		
F	BBWVW-p	MT20	5.0	8.0		
G	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	551	0	551	0	0	MECHANICAL	
E	677	0	677	0	0	5-8	5-8

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	390	256.0	0.0	0.0	0.0	134.0	0.0
E	477	326.0	0.0	0.0	0.0	150.0	0.0

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

BRACING

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

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MEMB.		MAX. FACTORED		
MEMB.	FORCE	VERT.	LOAD	LC1	MAX	MAX.	MEMB.	MAX.	FORCE
	(LBS)	(PLF)	CSI (LC)		UNBRAC				CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	-779 / 0	-91.8	-91.8	0.30 (1)	6.25	F-B	0	406	0.07 (1)
B-C	-779 / 0	-91.8	-91.8	0.30 (1)	6.25	A-F	0	667	0.15 (1)
C-D	0 / 35	-91.8	-91.8	0.12 (1)	10.00	F-C	0	667	0.15 (1)
G-A	-505 / 0	0.0	0.0	0.05 (1)	7.81				
E-C	-631 / 0	0.0	0.0	0.07 (1)	7.81				
G-F	0 / 0	-18.5	-18.5	0.14 (4)	10.00				
F-E	0 / 0	-18.5	-18.5	0.14 (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 (0.33")
CALCULATED VERT. DEFL.(LL) = L'/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L'/999 (0.05")

CSI: TC=0.30/1.00 (A-B:1), BC=0.14/1.00 (F-G:4), WB=0.15/1.00 (C-F:1), SSI=0.15/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES					
PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		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= 0.77 (A) (INPUT = 0.90)
JSI METAL= 0.23 (A) (INPUT = 1.00)



Structural component only
DWG# T-2022127

MT20 618 354 1667
PLATE PLACEMENT TOL. =

JSI GRIP = 0.77 (A) (IN)
JSI METAL = 0.23 (A) (I)

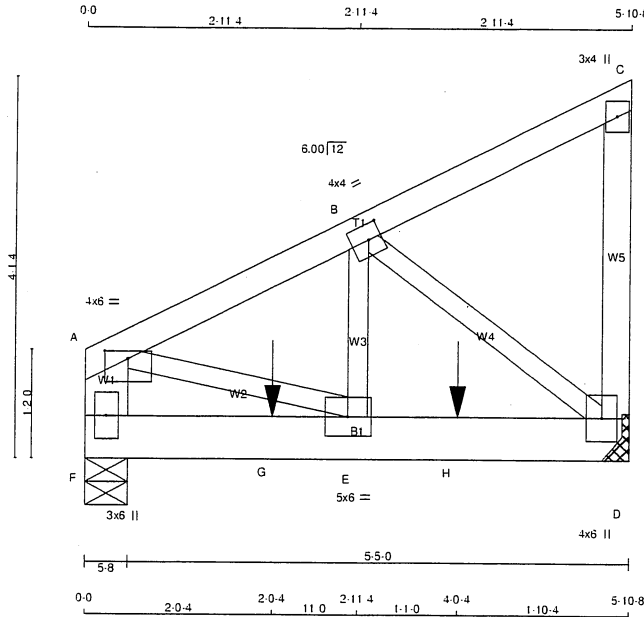
RECEIVED

Per: **danielle.devitt**

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T11	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:19 2020 Page 1
ID: pXBepelFV7RX?2FLKzMHgeyOWXJ-kxHJMT9cRakP__FJ0xVQgDIL18zN5e0uKZy9dxyTZ12



Scale = 1:23.7

TOTAL WEIGHT = 2 X 29 = 58 lb

LUMBER	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	
		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 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	4.0	6.0	1.00	3.00
B	TMVW-t	MT20	4.0	4.0	2.00	1.75
C	TMV-p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMVW-t	MT20	5.0	6.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	UPLIFT	IN-SX
D	1134	0	1134	0
F	1232	0	1232	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	799	540.0	0.0	0.0	0.0	259.0	0.0
F	867	589.0	0.0	0.0	0.0	279.0	0.0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)	UNBRAC	MEMB.	MAX. FACTORED	MAX	CS1 (LC)
MEMB.	FORCE (LBS)	VERT. (PLF)	FROM	TO	LENGTH	FR-TO			FORCE (LBS)	MAX	CS1 (LC)
A-B	-1261.0	-91.8	-91.8	0.06 (1)	6.25	A-E	0	1176	0.15 (1)		
B-C	-11.0	-91.8	-91.8	0.05 (1)	6.25	E-B	0	1119	0.14 (1)		
D-C	-110.0	0.0	0.0	0.01 (1)	7.81	B-D	-1431	0	0.17 (1)		
F-A	-979.0	0.0	0.0	0.03 (1)	7.81						
F-G	0.0	-18.5	-18.5	0.17 (1)	10.00						
G-E	0.0	-18.5	-18.5	0.17 (1)	10.00						
E-H	0.1137	-18.5	-18.5	0.19 (1)	10.00						
H-D	0.1137	-18.5	-18.5	0.19 (1)	10.00						

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-4	-755	-755	---	FRONT	VERT	TOTAL	---	C1
H	4-0-4	-453	-453	---	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	=	8.0	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=0.06/1.00 (A-B:1), BC=0.19/1.00 (D-E:1), WB=0.17/1.00 (B-D:1), SSI=0.29/1.00 (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	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 = 0.77 (B) (INPUT = 0.90)
JSI METAL = 0.26 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt



Structural component only
DWG# T-2022128 //L

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T11	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:19 2020 Page 2
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-kxHJMT9cRakP FJ0xVQgDILi8zN5e0uKzy9dxyTZ12

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022128 7/2

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T11Z	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTEK Industries, Inc. Wed Oct 14 09:10:20 2020 Page 2
ID:pXBePelFV7RX?2FLKzHqeyOWXJ-C8rhZpAECtsGb8qVae0fDRrW?YK1q5u1ZDhiANyTZ11

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022129 *2/11*

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

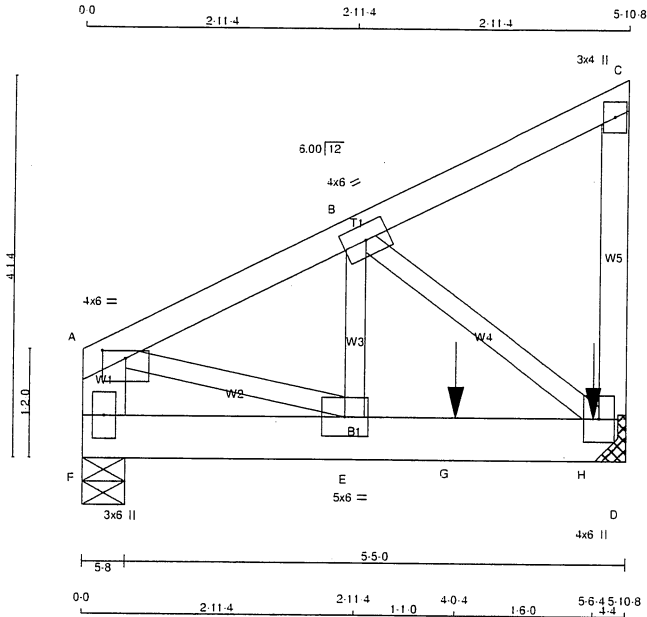
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406445	T11Z3	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:39:42 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-c6JoNIUTFFsF_wX8oidsd?pcFpZNgzyOkMWy?FyTYbV



Scale = 1:23.7

TOTAL WEIGHT = 2 X 29 = 58 lb

LUMBER	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	
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	10	SIDE(152.7)
F - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2	12	SIDE(122.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	6.0	1.00	3.00
B	TMVW-t	MT20	4.0	6.0		
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMVW-t	MT20	5.0	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
D	3248	0	3248	0
F	1279	0	1279	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	2288	1553	0	0	0	734	0
F	901	613	0	0	0	288	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LBS)	MAX. LC2 (LBS)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LBS)
FR-TO		FROM TO				FR-TO		
A-B	-1975	0	-91.8	-91.8	0.07 (1)	6.19	A-E	0
B-C	-9	0	-91.8	-91.8	0.05 (1)	10.00	E-B	0
D-C	-115	0	0.0	0.0	0.01 (1)	7.81	B-D	-2232
F-A	-1470	0	0.0	0.0	0.05 (1)	7.81		
F-E	0	0	-18.5	-18.5	0.24 (1)	10.00		
E-G	0	1774	-18.5	-18.5	0.73 (1)	10.00		
G-H	0	1774	-18.5	-18.5	0.73 (1)	10.00		
H-D	0	1774	-18.5	-18.5	0.73 (1)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	4-0-4	-1986	-1986	---	FRONT	VERT	TOTAL	---	C1
H	5-6-4	-744	-744	---	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

(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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL)= L/999 (0.04")

CSI: TC=0.07/1.00 (A-B:1), BC=0.73/1.00 (D-E:1), WB=0.27/1.00 (B-D:1), SSI=0.71/1.00 (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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (D) (INPUT = 0.90)
JSI METAL= 0.40 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt



Structural component only
DWG# T-2022137

CONTINUED ON PAGE 2

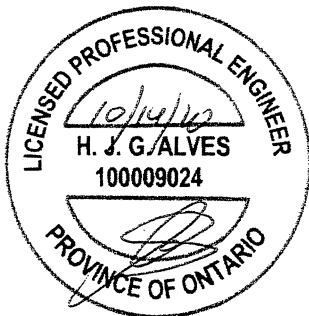
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406445	T11Z3.	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTak Industries, Inc. Wed Oct 14 09:39:42 2020 Page 2
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-c6JoNIUTFFsF wx8oidsd?pcFpZNqyzOkMWV?FvTYbV

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022137 *ML*

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

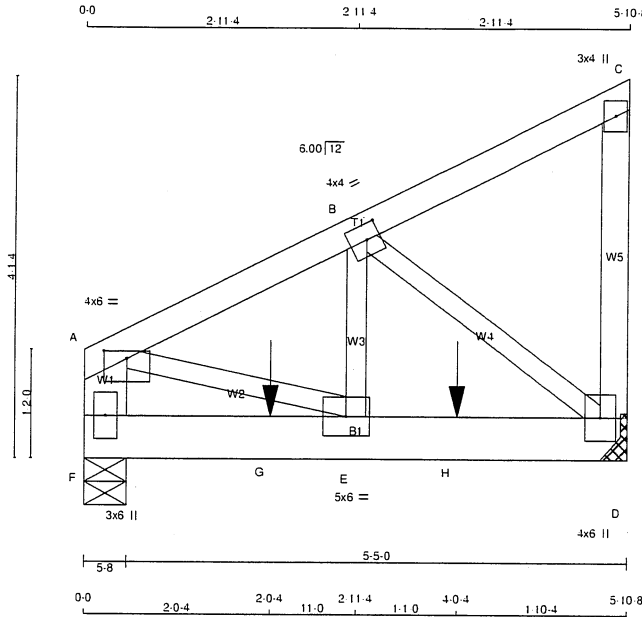
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413423	T11Z4	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MTek Industries, Inc. Wed Oct 14 09:48:44 2020 Page 1
ID:pXBpElFV7RX?2FLKzMHggyOWXJ-kO3i7d2Scn8L0DzJYXMyblGFahzf6A9Mhod1ryTYT



Scale = 1:23.7

LUMBER				
CHORDS	SIZE	DRY	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
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		TOP
A - C 1 12		TOP
C - D 1 12		TOP
F - A 2 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		SIDE(0.0)
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 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	4.0	6.0	1.00	3.00
B	TMVW-t	MT20	4.0	4.0	2.00	1.75
C	TMVW-p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMVW-t	MT20	5.0	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	HORZ	UPLIFT
D	985	0	985	0	0
F	949	0	949	0	0

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

UNFACTORED REACTIONS

1ST LCASE		MAX. MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	695	466 0	0 0	0 0	0 0	229 0	0 0
F	669	449 0	0 0	0 0	0 0	221 0	0 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS					
MAX. FACTORED		FORCE (LBS)	FACTORED			MAX. UNBRACED LENGTH	MAX. FACTORED		MAX. CSI (LC1)		
MEMB.	FR-TO		VERT. LOAD (PLF)	LC1 MAX	LC1 MAX		MEMB.	FORCE (LBS)			
FR-TO			FROM	TO	CSI (LC1)	FR-TO					
A-B	-1005	0	-91.8	-91.8	0.06 (1)	6.25	A-E	0	941	0.12 (1)	
B-C	-12	0	-91.8	-91.8	0.06 (1)	6.25	E-B	0	827	0.10 (1)	
D-C	-108	0	0.0	0.0	0.01 (1)	7.81	B-D	-1145	0	0.14 (1)	
F-A	-803	0	0.0	0.0	0.03 (1)	7.81					
F-G	0	0	-18.5	-18.5	0.09 (1)	10.00					
G-E	0	0	-18.5	-18.5	0.09 (1)	10.00					
E-H	0	910	-18.5	-18.5	0.17 (1)	10.00					
H-D	0	910	-18.5	-18.5	0.17 (1)	10.00					

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	2-0-4	-453	-453	---	FRONT	VERT	TOTAL	C1	
H	4-0-4	-453	-453	---	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

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

CSI: TC=0.06/1.00 (A-B:1), BC=0.17/1.00 (D-E:1), WB=0.14/1.00 (B-D:1), SSI=0.18/1.00 (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)
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 = 0.57 (B) (INPUT = 0.90)
JSI METAL = 0.20 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022147 1/2

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413423	T11Z4	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MITek Industries, Inc. Wed Oct 14 09:48:44 2020 Page 2
ID:pXBePeIFV7RX?2FLKzMhgeyOWXJ-kO3i7d2Scn8L0DzJYXMyblGFalhzf6A9Mhod1ryTYT

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2022147

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

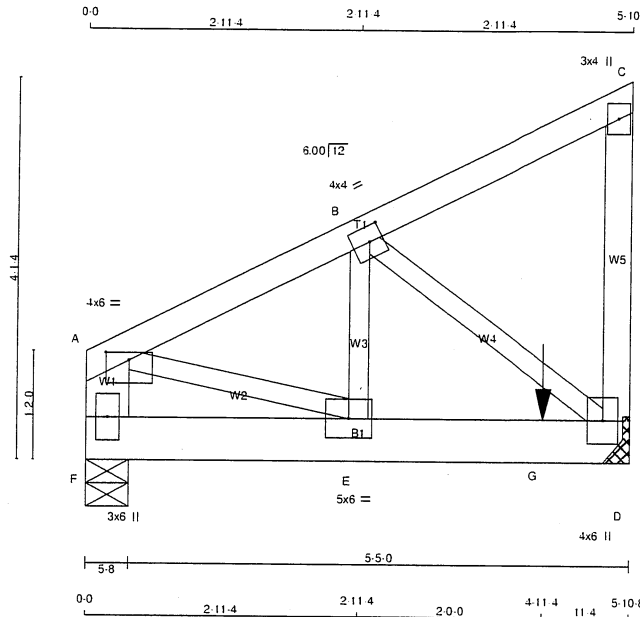
Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413423	T11Z5	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 09:48:45 2020 Page 1

ID:pXBepelFV7RX?2FLKzMHgeyOWXJ-Cac4Kz34N5GCdMYV6EtB7WpPGi?ZOaFJbLYAZHyTYTQ



Scale = 1:23.7

LUMBER	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	
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 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	4.0	6.0	1.00	3.00
B	TMVW-t	MT20	4.0	4.0	2.00	1.75
C	TMV-p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMVW-t	MT20	5.0	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	REQRD BRG
JT	VERT	HORZ	UPLIFT	IN-SX
D	1235	0	0	0
F	497	0	0	0

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	872	582 / 0	0 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0
F	351	232 / 0	0 / 0	0 / 0	0 / 0	0 / 0	119 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CS1 (LC)	UNBRAC LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO						FR-TO		
A-B	-606 / 0	-91.8	-91.8	0.07 (1)	6.25	A-E	0 573	0.07 (1)
B-C	-13 / 0	-91.8	-91.8	0.06 (1)	6.25	E-B	0 372	0.05 (1)
D-C	-106 / 0	0.0	0.0	0.01 (1)	7.81	B-D	-697 / 0	0.08 (1)
F-A	-529 / 0	0.0	0.0	0.02 (1)	7.81			
F-E	0 / 0	-18.5	-18.5	0.06 (1)	10.00			
E-G	0 / 554	-18.5	-18.5	0.28 (1)	10.00			
G-D	0 / 554	-18.5	-18.5	0.28 (1)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	4-11.4	-765	-765	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 29 = 58 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 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=0.28/1.00 (D-E:1), WB=0.08/1.00 (B-D:1), SSI=0.23/1.00 (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
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.28 (D) (INPUT = 0.90)

JSI METAL = 0.12 (D) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt



Structural component only
DWG# T-2022148 1/2

CONTINUED ON PAGE 2

JOB NAME 413423	TRUSS NAME T11Z5	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 09:48:45 2020 Page 2 ID:pXBepelFV7RX?2FLKzMhgevOWXJ-Cac4Kz34N5GCdMYV6EtB7WpPGI?ZOaFJbLYAZHyTYT0	

PLATES (table is in inches)

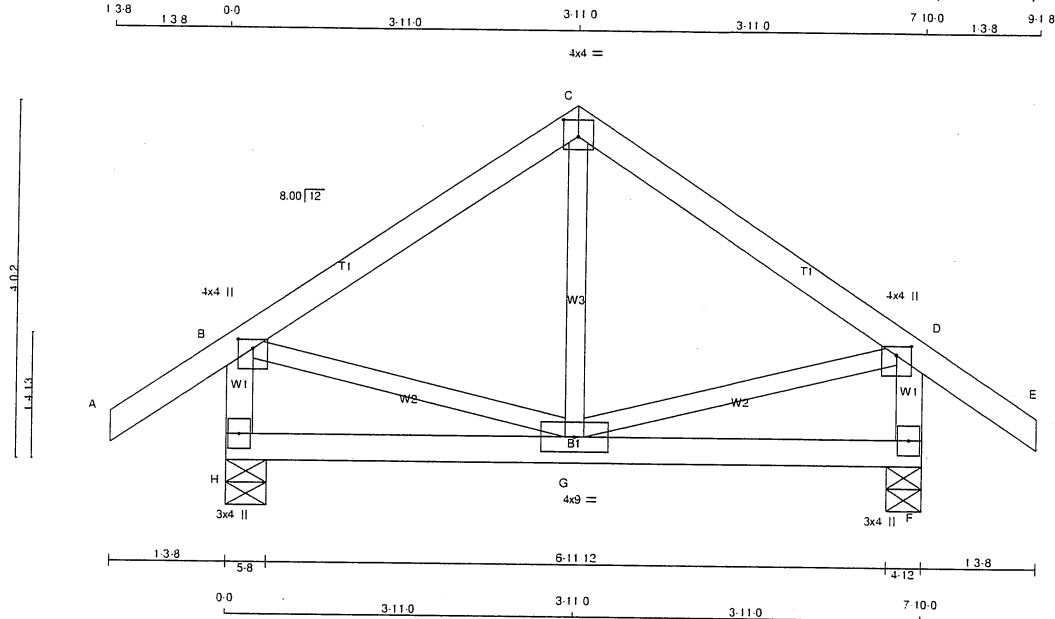
JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	T12	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:20 2020 Page 1
ID:pXBepIFV7RX?2FLKzMhgeyOWXJ-C8rhZpAEctG8qVae0fDRrU9YLOq731ZDhiAnYTZ11



Scale = 1:24.7

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	2.00
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMVW+p	MT20	4.0	4.0	1.25	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		

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

BUILDING DESIGNER								
BEARINGS								
	FACTORED		MAXIMUM FACTORED			INPUT	REQD	
	GROSS REACTION		GROSS REACTION			BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
H	558	0	558	0	0	5-8	5-8	
F	558	0	558	0	0	4-12	4-12	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	392	271.0	0.0	0.0	0.0	121.0	0.0
F	392	271.0	0.0	0.0	0.0	121.0	0.0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0.35	-91.8 -91.8	0.12 (1)	10.00	G-C	-43.52	0.02 (4)
B-C	-285.0	-91.8 -91.8	0.18 (1)	6.25	B-G	0.246	0.06 (1)
C-D	-285.0	-91.8 -91.8	0.18 (1)	6.25	G-D	0.246	0.06 (1)
D-E	0.35	-91.8 -91.8	0.12 (1)	10.00			
H-B	-529.0	0.0 0.0	0.05 (1)	7.81			
F-D	-529.0	0.0 0.0	0.05 (1)	7.81			
H-G	0.0	-18.5 -18.5	0.08 (4)	10.00			
G-F	0.0	-18.5 -18.5	0.08 (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 (0.26")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.18/1.00 (B-C:1), BC=0.08/1.00 (G-H:4),
WB=0.06/1.00 (D-G:1), SSI=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (D) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)



Structural component only
DWG# T-2022130

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

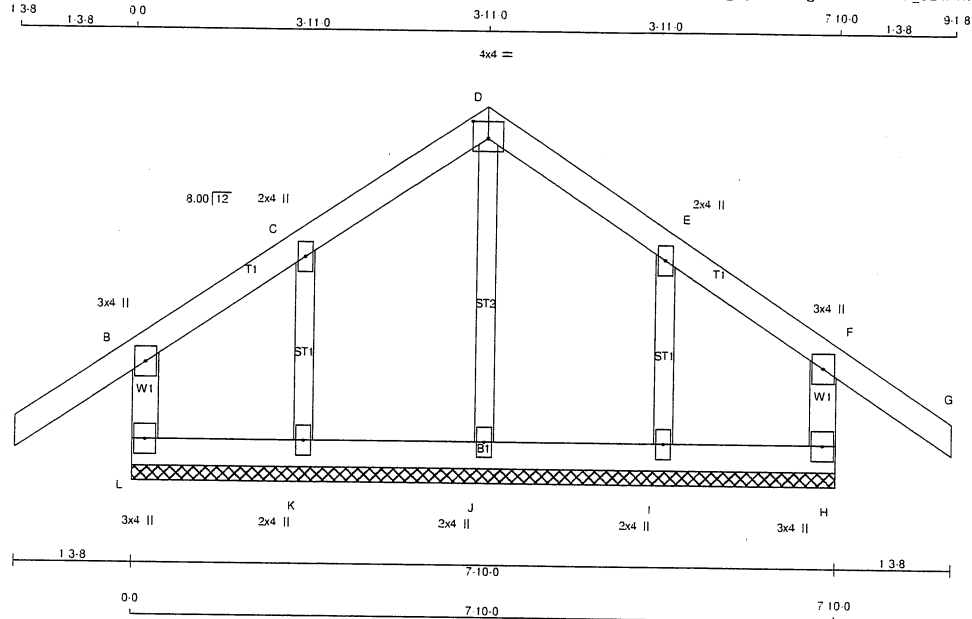
RECEIVED

Per: danielle.devitt

JOB NAME 406506	TRUSS NAME T12G	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 09:10:21 2020 Page 1
ID:pXBePelFV7RX?2FLKzMhgeyOWXJ-gKP3m9AszB_6DIPh7MXuleOgoyicZaGBotRGiqyTZ10



Scale = 1/24

LUMBER TOTAL WEIGHT = 32 lb

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
L - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2'-0" OC.

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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (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			
L-B	-209 / 0	0.0	0.0	0.04 (1)	7.81	J-D	-244 / 0	0.06 (1)
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	K-C	-154 / 0	0.03 (1)
B-C	0 / 22	-91.8	-91.8	0.08 (1)	10.00	I-E	-154 / 0	0.03 (1)
C-D	0 / 41	-91.8	-91.8	0.05 (1)	10.00			
D-E	0 / 41	-91.8	-91.8	0.05 (1)	10.00			
E-F	0 / 22	-91.8	-91.8	0.08 (1)	10.00			
F-G	0 / 35	-91.8	-91.8	0.12 (1)	10.00			
H-F	-209 / 0	0.0	0.0	0.04 (1)	7.81			
L-K	-26 / 0	-18.5	-18.5	0.02 (4)	6.25			
K-J	-32 / 0	-18.5	-18.5	0.02 (4)	6.25			
J-I	-32 / 0	-18.5	-18.5	0.02 (4)	6.25			
I-H	-26 / 0	-18.5	-18.5	0.02 (4)	6.25			

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

CSI: TC=0.12/1.00 (A-B:1), BC=0.02/1.00 (I-J:4), WB=0.06/1.00 (D-J:1), SS=0.08/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) 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 (D) (INPUT = 0.90)
JSI METAL = 0.08 (C) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TTW+p	MT20	4.0	4.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TMV+p	MT20	3.0	4.0		
H	BMV1+p	MT20	3.0	4.0		
I, J, K						
I	BMV1+w	MT20	2.0	4.0		
L	BMV1+p	MT20	3.0	4.0		



Structural component only
DWG# T-2022131

CITY OF RICHMOND HILL
BUILDING DIVISION

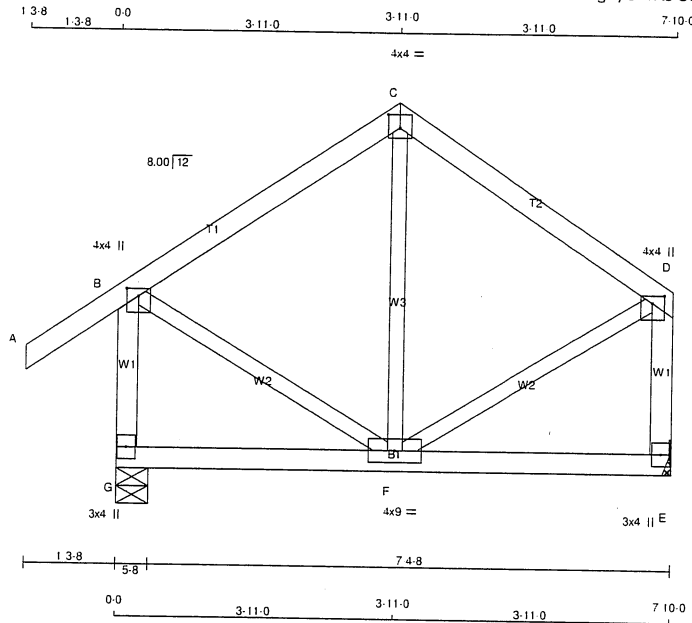
11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME 406506	TRUSS NAME T12S	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 09:10:22 2020 Page 1
ID:pXBepelFV7RX?2FLKzHmgeyOWXJ-8WyS_VBUkV6zR_uh337lswqfL1r1iK0XApEGyTZ1?



Scale = 1:30.9

LUMBER		CHORDS		SIZE		LUMBER		DESCR.	
N. L. G. A. RULES		A - C		2x4		No.2		SPF	
C - D		2x4		No.2		SPF		GROSS REACTION	
G - B		2x4		No.2		SPF		FACTORED	
E - D		2x4		No.2		SPF		MAXIMUM FACTORED	
G - E		2x4		No.2		SPF		INPUT	
ALL WEBS EXCEPT		2x3		No.2		SPF		REQD	
DRY: SEASONED LUMBER.									

ALL WEBS EXCEPT 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)		W		LEN		Y		X	
JT TYPE		PLATES		MT20		4.0		1.25	
B TMVW+p		MT20		4.0		4.0		2.25	
C TTW-p		MT20		4.0		4.0		1.25	
D TMVW+p		MT20		4.0		4.0		2.00	
E BMV1+p		MT20		3.0		4.0			
F BMVWW-t		MT20		4.0		9.0			
G 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		VERT		HORZ		UP/LIFT		IN-SX	
G		558		0		5-8		5-8	
E		432		0		0		MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX. MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT		COMBINED		SNOW		LIVE		PERM. LIVE	
G		392		271 / 0		0 / 0		0 / 0	
E		305		200 / 0		0 / 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		VERT. LOAD LC1		MEMB.		FORCE	
		(LBS)		(PLF)				(LBS)	
FR-TO				FROM TO		FR-TO			
A-B		0 / 35		-91.8 -91.8		10.00		F-C	
B-C		-217 / 0		-91.8 -91.8		6.25		B-F	
C-D		-217 / 0		-91.8 -91.8		6.25		F-D	
G-B		-530 / 0		0.0 0.0		7.81			
E-D		-404 / 0		0.0 0.0		7.81			
G-F		0 / 0		-18.5 -18.5		10.00			
F-E		0 / 0		-18.5 -18.5		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 (0.26")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.18/1.00 (C-D:1), BC=0.08/1.00 (E-F:4), WB=0.05/1.00 (D-F: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: L = 0.250 inches

PLATE ROTATION: L = 5.0 Deg.

JSI GRIP= 0.37 (B) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

RECEIVED

Per: danielle.devitt

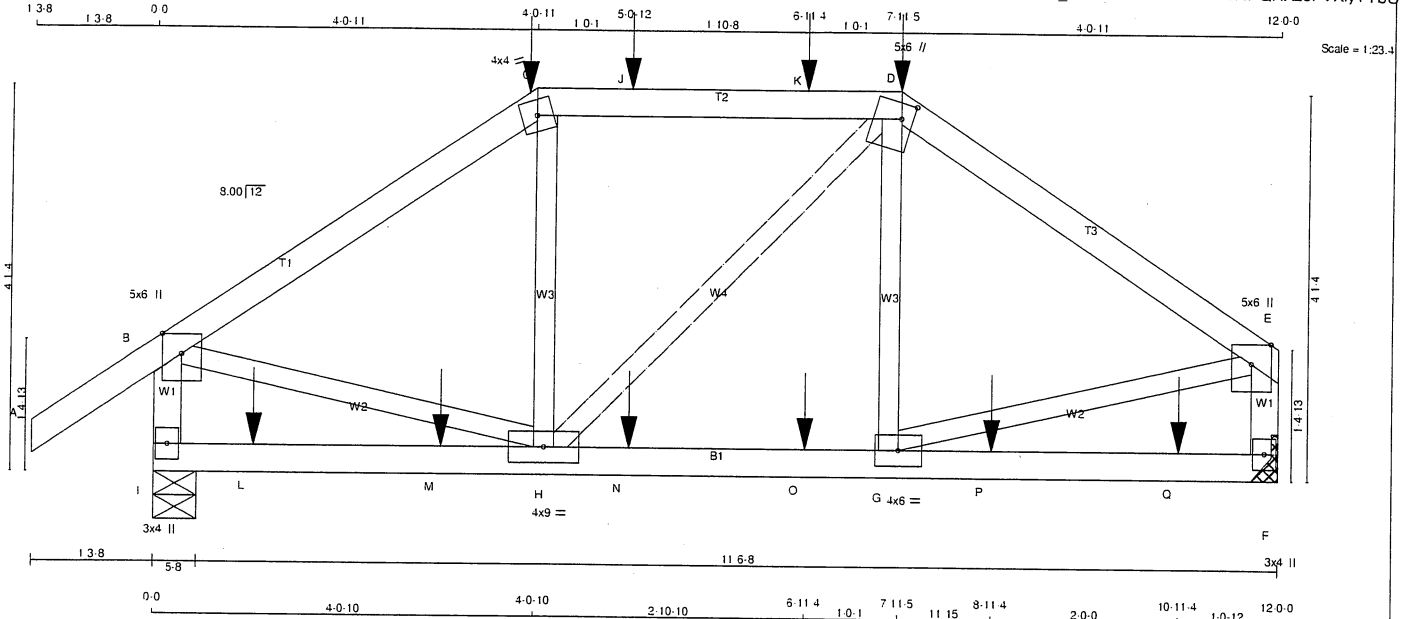


Structural component only
DWG# T-2022132

JOB NAME 406445	TRUSS NAME T15	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 09:39:43 2020 Page 1
ID:pXBePelfV7RX?2FLKzMhgeyOWXJ-4JsAaeV50Z_6c46LMP95ADMh?D1NPQRXz0FVXiyTYbU



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 - E	2x4 DRY	No.2	SPF		
I - B	2x4 DRY	No.2	SPF		
F - E	2x4 DRY	No.2	SPF		
I - F	2x4 DRY	No.2	SPF		

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TTW-m	MT20	4.0	4.0		
D	TTW+m	MT20	5.0	6.0	2.00	1.50
E	TMVW+p	MT20	5.0	6.0	Edge	
F	BMV1+p	MT20	3.0	4.0		
G	BMVW-t	MT20	4.0	6.0		
H	BMVW-t	MT20	4.0	9.0		
I	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
JT	VERT	HORZ	UP/LIFT	IN-SX
I	1284	0	1284	0
F	1158	0	1158	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	COMBINED	810	0	0	0	295	0
F	818	540	0	0	0	279	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.42 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. LC2 (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO						FR-TO			
A-B	0	35	-91.8	-91.8	0.14 (1)	10.00	H-C	-118	71
B-C	-1191	0	-91.8	-91.8	0.32 (1)	5.42	H-D	0	3
C-J	-984	0	-91.8	-91.8	0.45 (1)	5.57	G-D	-122	68
J-K	-984	0	-91.8	-91.8	0.45 (1)	5.57	B-H	0	1021
K-D	-984	0	-91.8	-91.8	0.45 (1)	5.57	G-E	0	1018
D-E	-1187	0	-91.8	-91.8	0.32 (1)	5.43			
I-B	-1228	0	0.0	0.0	0.14 (1)	7.20			
F-E	-1103	0	0.0	0.0	0.12 (1)	7.51			
I-L	0	0	-18.5	-18.5	0.13 (4)	10.00			
L-M	0	0	-18.5	-18.5	0.13 (4)	10.00			
M-H	0	0	-18.5	-18.5	0.13 (4)	10.00			
H-N	0	982	-18.5	-18.5	0.24 (1)	10.00			
N-O	0	982	-18.5	-18.5	0.24 (1)	10.00			
O-G	0	982	-18.5	-18.5	0.24 (1)	10.00			
G-P	0	0	-18.5	-18.5	0.13 (4)	10.00			
P-Q	0	0	-18.5	-18.5	0.13 (4)	10.00			
Q-F	0	0	-18.5	-18.5	0.13 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN
C	4-0-11	-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11	-171	-171	---	FRONT	VERT	SNOW	---	C1
D	7-11-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
D	7-11-5	-171	-171	---	FRONT	VERT	SNOW	---	C1
J	5-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
K	6-11-4	-76	-76	---	BACK	VERT	TOTAL	---	C1
L	1-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
M	3-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
N	5-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
O	6-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
P	8-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
Q	10-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH.	LL	=	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

*** 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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.45/1.00 (C-D:1), BC=0.24/1.00 (G-H:1), WB=0.25/1.00 (B-H:1), SSI=0.25/1.00 (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

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 = 0.74 (C) (INPUT = 0.90)
JSI METAL = 0.50 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022138

CITY OF RICHMOND HILL
BUILDING DIVISION

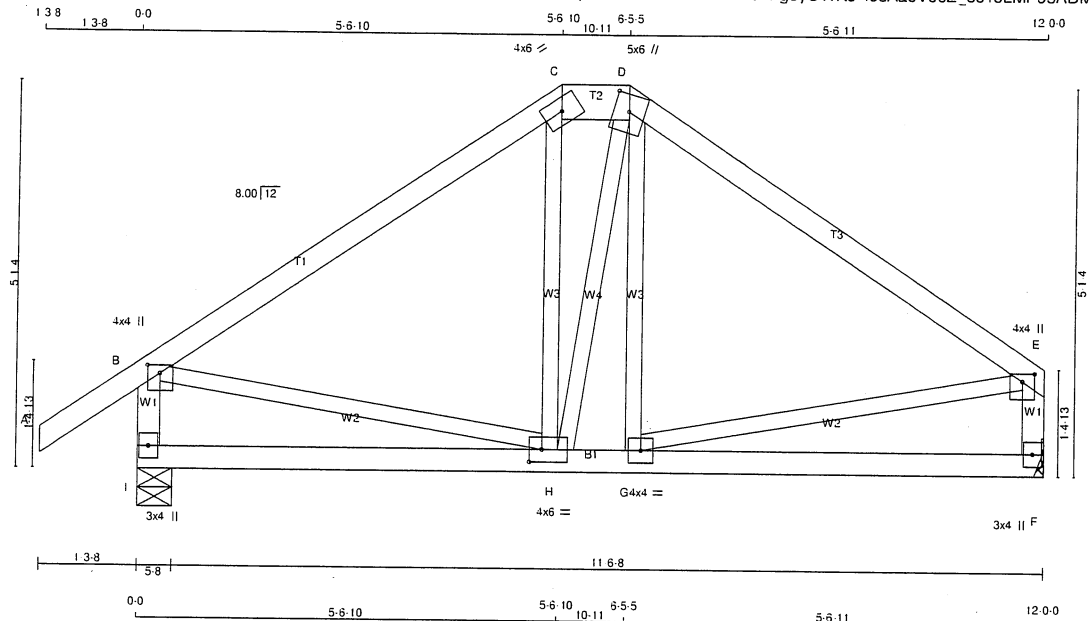
11/10/2020

RECEIVED
Per: danielle.devitt

JOB NAME 406445	TRUSS NAME T16	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 09:39:43 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-4JsAaeV50Z_6c46LMP95ADMjLD2SPSSxZ0FVXiyTYbU



Scale = 1:29.0

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	
I - B	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
I - F	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	2.00
C	TTW-h	MT20	4.0	6.0		
D	TTW+m	MT20	5.0	6.0	2.75	2.50
E	TMVW+p	MT20	4.0	4.0	1.25	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMVW-t	MT20	4.0	4.0		
H	BMVW-t	MT20	4.0	6.0	2.00	2.00
I	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
GROSS REACTION	GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	DOWN	HORZ	UPLIFT	IN-SX
I 787 0	787 0	0 0	5-8	5-8
F 662 0	662 0	0 0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX. MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	555	377 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
F	468	307 / 0	0 / 0	0 / 0	0 / 0	161 / 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 = 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	VERT. LOAD	LC1	MAX	MAX. FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. (PLF)	CS1 (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	H-C	-14 / 48	0.02 (4)
B-C	-510 / 0	-91.8	-91.8	0.37 (1)	6.25	H-D	0 / 6	0.00 (4)
C-D	-426 / 0	-91.8	-91.8	0.01 (1)	6.25	G-D	-17 / 42	0.01 (4)
D-E	-509 / 0	-91.8	-91.8	0.37 (1)	6.25	B-H	0 / 434	0.10 (1)
I-B	-745 / 0	0.0	0.0	0.08 (1)	7.81	G-E	0 / 433	0.10 (1)
F-E	-620 / 0	0.0	0.0	0.06 (1)	7.81			
I-H	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
H-G	0 / 425	-18.5	-18.5	0.17 (4)	10.00			
G-F	0 / 0	-18.5	-18.5	0.12 (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 (0.40")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL)= L/999 (0.03")

CS1: TC=0.37/1.00 (B-C-1), BC=0.17/1.00 (G-H-4), WB=0.10/1.00 (B-H-1), SS1=0.17/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

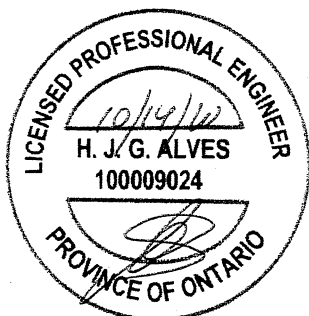
NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	618 / 554	667 / 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.58 (B) (INPUT = 0.90)
JSI METAL= 0.17 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022139

**CITY OF RICHMOND HILL
BUILDING DIVISION**

11/16/2021

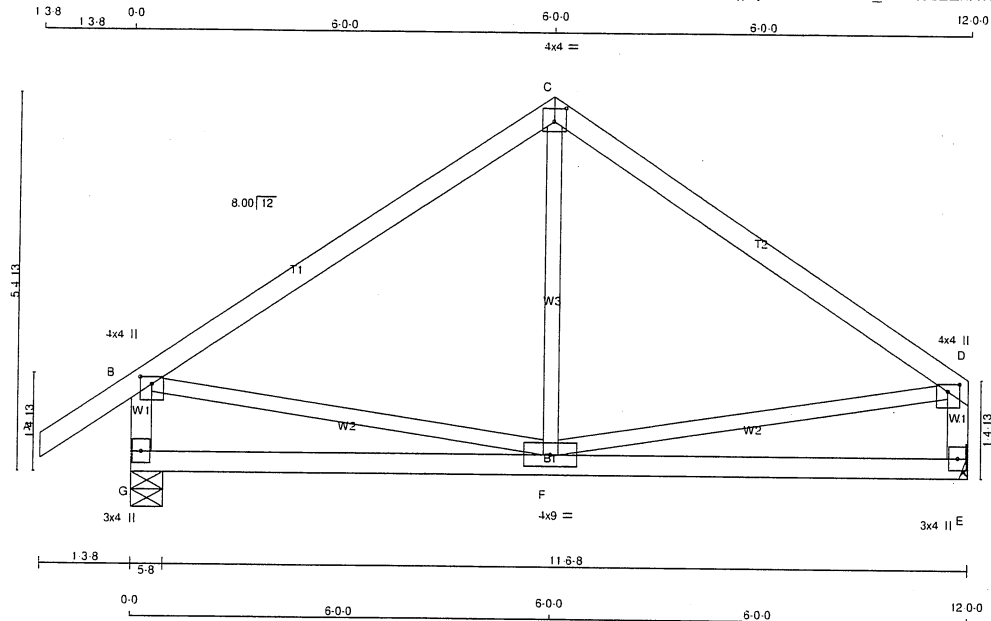
RECEIVED

Per: danielle.devitt

JOB NAME 406445	TRUSS NAME T17	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 09:39:44 2020 Page 1
ID:pXBePeIFV7RX?2FLKzMHgeyOWXJ-YVQZn_Wknt6zEEhXv6gKiQvt7dNM8vBgBg?348yTVbT



TOTAL WEIGHT = 48 lb
[M/F]

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	2.00
C	TTW-p	MT20	4.0	4.0	2.25	2.00
D	TMVW+p	MT20	4.0	4.0	1.25	2.00
E	BMV1+p	MT20	3.0	4.0		
F	BMVWW-t	MT20	4.0	9.0		
G	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	GROSS REACTION	DOWN	BRG	BRG
G	787	0	787	0	0
E	662	0	662	0	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	555	377	0	0	0	177	0
E	468	307	0	0	0	161	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 35	-91.8	-91.8 0.12 (1)	10.00	F-C	-9	100
B-C	-488 / 0	-91.8	-91.8 0.43 (1)	6.25	B-F	0	412
C-D	-488 / 0	-91.8	-91.8 0.43 (1)	6.25	F-D	0	412
G-B	-745 / 0	0	0 0.08 (1)	7.81			
E-D	-619 / 0	0	0 0.06 (1)	7.81			
G-F	0 / 0	-18.5	-18.5 0.19 (4)	10.00			
F-E	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 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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.43/1.00 (C-D:1) , BC=0.19/1.00 (F-G:4) , WB=0.09/1.00 (B-F:1) , SSI=0.18/1.00 (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
MT20	618	354	1667

PLATE PLACEMENT: LL = 0.250 inches

PLATE ROTATION: LL = 5.0 Deg.

JSI GRIP = 0.57 (B) (INPUT = 0.90)
JSI METAL = 0.77 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

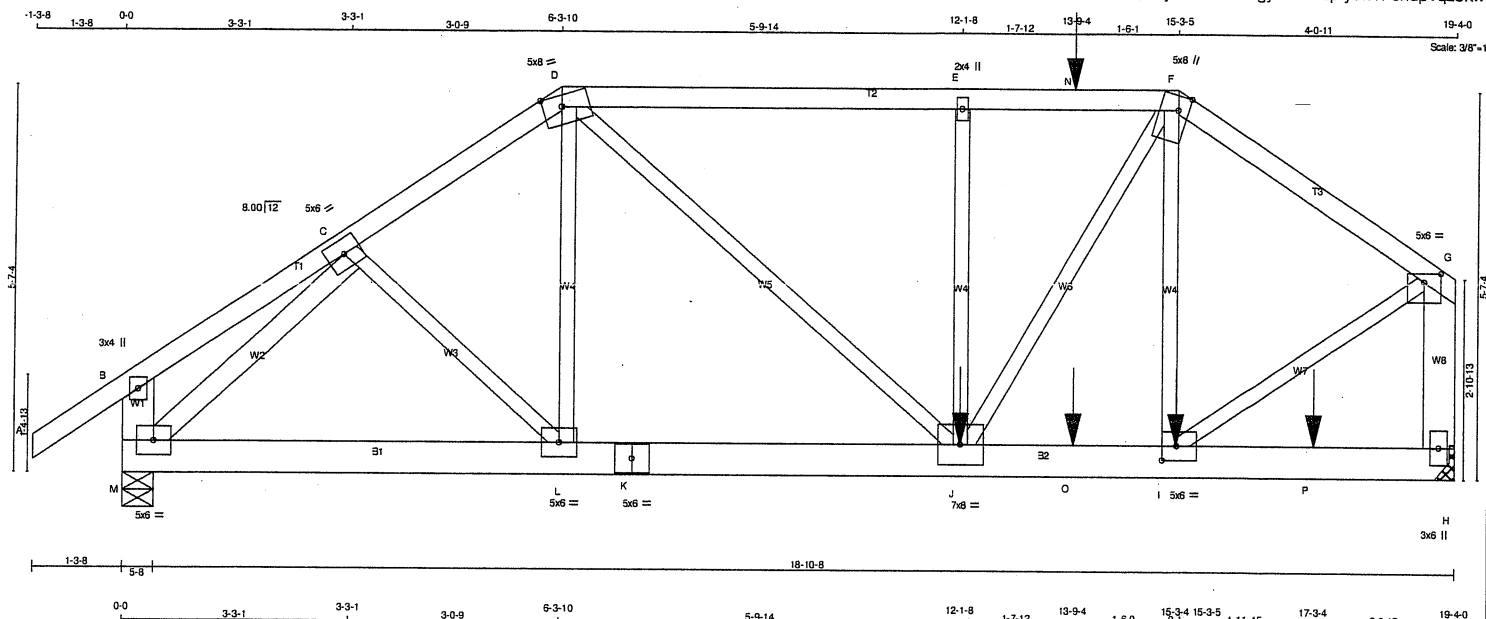
Per: danielle.devitt



Structural component only
DWG# T-2022140

JOB NAME 406445	TRUSS NAME T18	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 08:27:50 2021 Page 1
ID: aJLQU5bMioEiVDRZFnhbz9dRb-hHvXLCWjrcSAvn4TatgybXMMwCply9h1F6nup?qz8kwf



TOTAL WEIGHT = 101 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	5.0	4.0		
C	TTWW-t	MT20	5.0	6.0		
D	TTWW-m	MT20	5.0	8.0	2.00	3.25
E	TTWW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	8.0	Edge	1.75
G	TMVW-p	MT20	5.0	6.0	1.50	3.00
H	BMV1+p	MT20	3.0	6.0		
I	BMVW-t	MT20	5.0	6.0	2.50	2.50
J	BMVW-w	MT20	7.0	8.0		
K	BS-t	MT20	5.0	6.0		
L	BMVW-t	MT20	5.0	6.0		
M	BMVW-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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS	REACTION	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX	
JT	VERT	HORIZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX
H	2593	0	2593	0	0	MECHANICAL	
M	1864	0	1864	0	0	5-8	5-8

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

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	1828	1231 / 0	0 / 0	0 / 0	0 / 0	597 / 0	0 / 0
M	1314	888 / 0	0 / 0	0 / 0	0 / 0	426 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 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			
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 / 35	-91.8 -91.8 0.14 (1)	10.00	L-D	0 / 100	0.04 (4)	
B-C	0 / 16	-91.8 -91.8 0.14 (1)	10.00	D-J	0 / 1092	0.27 (1)	
C-D	-2063 / 0	-91.8 -91.8 0.21 (1)	4.50	J-E	-623 / 0	0.28 (1)	
D-E	-2514 / 0	-91.8 -91.8 0.65 (1)	3.63	J-F	0 / 1435	0.36 (1)	
E-N	-2514 / 0	-91.8 -91.8 0.55 (1)	3.63	I-F	-378 / 0	0.17 (1)	
N-F	-2514 / 0	-91.8 -91.8 0.55 (1)	3.63	I-G	0 / 2075	0.51 (1)	
F-G	-2142 / 0	-91.8 -91.8 0.39 (1)	4.22	C-L	0 / 131	0.03 (1)	
M-B	-241 / 0	0.0 0.0 0.02 (1)	7.81	M-C	-2251 / 0	0.49 (1)	
H-G	-2446 / 0	0.0 0.0 0.25 (1)	6.56				
M-L	0 / 1605	-18.5 -18.5 0.28 (1)	10.00				
L-K	0 / 1701	-18.5 -18.5 0.31 (1)	10.00				
K-J	0 / 1701	-18.5 -18.5 0.31 (1)	10.00				
J-O	0 / 1771	-18.5 -18.5 0.37 (1)	10.00				
O-I	0 / 1771	-18.5 -18.5 0.37 (1)	10.00				
I-P	0 / 0	-18.5 -18.5 0.19 (1)	10.00				
P-H	0 / 0	-18.5 -18.5 0.19 (1)	10.00				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
I	15-3-4	-214	-214	---	BACK	VERT	TOTAL
J	12-1-8	-968	-968	---	BACK	VERT	TOTAL
N	13-9-4	-122	-122	---	BACK	VERT	TOTAL
O	13-9-4	-29	-29	---	BACK	VERT	TOTAL
P	17-3-4	-214	-214	---	BACK	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 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) = $L/360$ (0.64")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.06")
ALLOWABLE DEFL. (TL) = $L/360$ (0.64")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.11")

CSI: TC=0.65/1.00 (D-E:1), BC=0.37/1.00 (I-J:1), WB=0.51/1.00 (G-I:1), SS=0.28/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP (DRY)	SHEAR (PL)	SECTION (PL)
MT20	650	371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (C) (INPUT = 0.90)
JSI METAL= 0.51 (C) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION
11/10/2021
RECEIVED
Per: danielle.devitt

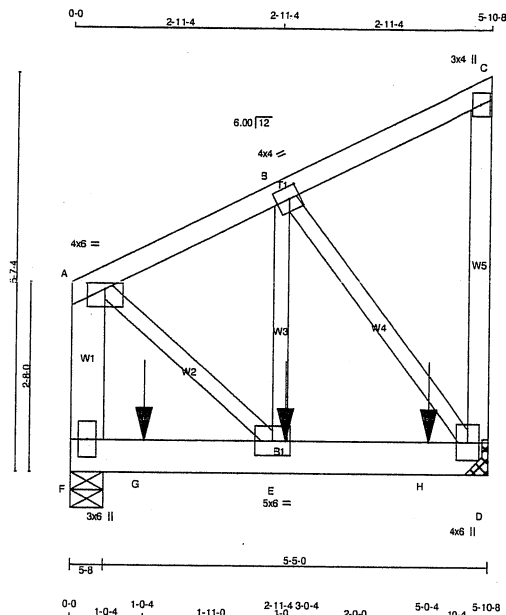


Structural component only
DWG# T-2117966

Structural component only
DWG# T-2117967

JOB NAME 406445	TRUSS NAME T20	QUANTITY 1	PLY 2	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 08:27:52 2021 Page 1
ID: aJLQU5bMioEIVDRZFnhbz9dRb-df1HmtyzNDiu95EshljQgMR_Bd0ldgMYZ5Nw4iz8kwr



Scale = 1/32" = 1'-0"

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

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	4.0	6.0	1.00	3.00
B TMWW-t	MT20	4.0	4.0	2.00	1.75
C TMV-p	MT20	3.0	4.0		

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

BEARINGS

JT	VERT	HORZ	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
			DOWN	HORZ	DOWN	HORZ		
D	1394	0	1394	0	0	0	MECHANICAL	
F	1680	0	1680	0	0	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	COMBINED	MAX./MIN. COMPONENT REACTIONS					
		1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD
D	983	660 / 0	0 / 0	0 / 0	0 / 0	0 / 0	323 / 0
F	1185	794 / 0	0 / 0	0 / 0	0 / 0	0 / 0	391 / 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 (PLF)	LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	LC1 MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	-776 / 0	-91.8 -91.8	0.07 (1)	E-B	0 / 924	6.25	0.11 (1)
B-C	-13 / 0	-91.8 -91.8	0.06 (1)	B-D	-1142 / 0	6.25	0.20 (1)
D-C	-106 / 0	0.0 0.0	0.03 (1)	A-E	0 / 892	7.81	0.11 (1)
F-A	-1005 / 0	0.0 0.0	0.05 (1)				
F-G	0 / 0	-18.5 -18.5	0.25 (1)				
G-E	0 / 0	-18.5 -18.5	0.25 (1)				
E-H	0 / 705	-18.5 -18.5	0.17 (1)				
H-D	0 / 705	-18.5 -18.5	0.17 (1)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
E	3-0-4	-453	-453	---	FRONT	VERT	TOTAL
G	1-0-4	-803	-803	---	FRONT	VERT	TOTAL
H	5-0-4	-454	-454	---	FRONT	VERT	TOTAL

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 36 = 73 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 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) = $L/360$ (0.20")
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=0.25/1.00 (E-F:1), WB=0.20/1.00 (B-D:1), SS=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	650	1747
MT20	650	1747
MT20	650	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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



Structural component only
DWG# T-2117968

RECEIVED
Per: danielle.devitt

JOB NAME 406445	TRUSS NAME T20	QUANTITY 1	PLY 2	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 08:27:52 2021 Page 2
ID:eJLQU5bMioEiViDRZFnhbz9dRb-df1HmtyzNDiu95EshIjQgMR Bd0ldgMYZ5Nw4iz8kwr

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-2117968 *2/6*

CITY OF RICHMOND HILL
BUILDING DIVISION

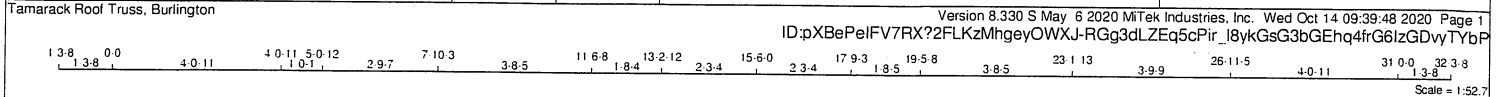
11/16/2021

RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406445	T21	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES								*** SPECIAL LOADS ANALYSIS ***			
CHORDS SIZE LUMBER DESCR.								GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.			
A - C 2x4 DRY No.2 SPF				BEARINGS				LOADS WERE DERIVED FROM USER INPUT			
C - H 2x4 DRY No.2 SPF				FACTORED MAXIMUM FACTORED INPUT REQD				NO FURTHER MODIFICATIONS WERE MADE			
H - J 2x4 DRY No.2 SPF				GROSS REACTION GROSS REACTION BRG BRG							
J - L 2x4 DRY No.2 SPF				JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX							
U - B 2x6 DRY No.2 SPF				M 3012 0 3012 0 0 5-8 5-8							
M - K 2x6 DRY No.2 SPF				U 3012 0 3012 0 0 5-8 5-8							
U - Q 2x6 DRY No.2 SPF								SPECIFIED LOADS:			
Q - M 2x6 DRY No.2 SPF								TOP CH. LL = 25.6 PSF			
								DL = 6.0 PSF			
ALL WEBS 2x3 DRY No.2 SPF				UNFACTORED REACTIONS				BOT CH. LL = 0.0 PSF			
EXCEPT				1ST LCASE MAX./MIN. COMPONENT REACTIONS				DL = 7.4 PSF			
				JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL				TOTAL LOAD = 39.0 PSF			
				M 2129 1402.0 0.0 0.0 0.0 728 0 0.0							
				U 2129 1402.0 0.0 0.0 0.0 727 0 0.0							
DRY: SEASONED LUMBER.				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, U							
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:				BRACING				LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.73 FT.				*** NON STANDARD GIRDER ***			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.				ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015			
CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)				LOADING				THIS DESIGN COMPLIES WITH:			
				TOTAL LOAD CASES: (4)				- PART 9 OF CBC 2018, OBC 2012, ABC 2019			
TOP CHORDS : (0.122"x3") SPIRAL NAILS								- PART 9 OF OBC 2012 (2019 AMENDMENT)			
A - C 1 12 SIDE(61.0)								- CSA 086-09, CSA 086-14			
H - C 1 12 SIDE(61.0)								- TPIC 2011, TPIC 2014			
H - J 1 12 SIDE(61.0)								(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			
J - L 1 12 SIDE(61.0)								ALLOWABLE DEFL.(LL)= L/360 (1.03")			
U - B 2 12 TOP								CALCULATED VERT. DEFL.(LL) = L/999 (0.15")			
M - K 2 12 TOP								ALLOWABLE DEFL.(TL)= L/360 (1.03")			
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS								CALCULATED VERT. DEFL.(TL) = L/999 (0.28")			
Q - U 2 12 SIDE(0.0)								CSI: TC=0.29/1.00 (F-G:1), BC=0.41/1.00 (Q-R:1), WB=0.37 1.00 (K-N:1), SSI=0.15/1.00 (I-J:1)			
Q - M 2 12 SIDE(0.0)								DOL LUMBER-1.00 NAIL-1.00 L.S BEND=1.00			
WEBS : (0.122"x3") SPIRAL NAILS								COMP-1.00 SHEAR-1.00 TENS= 1.00			
2x3 1 6								COMPARISON LIVE LOAD FACTOR = 1.00			
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.								AUTOSOLVE HEELS OFF			
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.								TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT			
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.								NAIL VALUES			
								PLATE GRIP(DRY) SHEAR SECTION			
								(P.S.I.) (P.L.I.) (P.L.I.)			
								MAX MIN MAX MIN MAX MIN			
								M20 618 354 1667 788 1987 1666			
								PLATE PLACEMENT TOL. = 0.250 inches			
								PLATE ROTATION TOL. = 5.0 Deg.			
								JSI GRIP= 0.55 (T) (INPUT = 0.90)			
								JSI METAL= 0.40 (Q) (INPUT = 1.00)			

LICENSED PROFESSIONAL ENGINEER

H. J. G. ALVES

100009024

PROVINCE OF ONTARIO

10/19/2022

Structural component only

DWG# T-2022144

CITY OF RICHMOND HILL

BUILDING DIVISION

11/16/2024

RECEIVED

Per: daniel

8

11

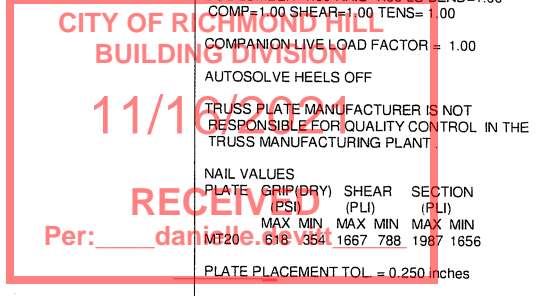
16

2024

Continued on Page 2



Structural component only
DWG# T-2022144



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406445	T21	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:39:48 2020 Page 2
ID:pXBepelFV7RX?2FLKzMhgevOWXJ-RGg3dLZEg5cPir I8ykGsG3bGEh4frG6lzGDwTYbP

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	7.0	8.0	Edge	2.50
D	TMVW-t	MT20	5.0	6.0		
E	TMVW-t	MT20	4.0	6.0		
F	TMVW-w	MT20	2.0	4.0		
G	TMVW-t	MT20	4.0	6.0		
H	TS-t	MT20	3.0	8.0		
I	TMVW-t	MT20	5.0	6.0		
J	TTWW+m	MT20	7.0	8.0	Edge	2.50
K	TMVW-p	MT20	5.0	8.0	Edge	
M	BMV1+p	MT20	3.0	6.0		
N	BMVW-t	MT20	5.0	6.0	2.50	2.00
O	BMVW-t	MT20	5.0	6.0	2.50	2.00
P	BMVW-t	MT20	5.0	8.0	4.25	2.50
Q	BSVWVW-t	MT20	8.0	12.0	5.00	6.00
R	BMVW-t	MT20	5.0	8.0	4.25	2.50
S	BMVW-t	MT20	5.0	6.0	2.50	2.00
T	BMVW-t	MT20	5.0	6.0	2.50	2.00
U	BMV1+p	MT20	3.0	6.0		

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH FR-TO			
AR-O	0 / 4688	-18.5	-18.5	0.34 (1)	10.00		
O-AS	0 / 2889	-18.5	-18.5	0.21 (1)	10.00		
AS-AT	0 / 2889	-18.5	-18.5	0.21 (1)	10.00		
AT-N	0 / 2889	-18.5	-18.5	0.21 (1)	10.00		
N-AU	0 / 0	-18.5	-18.5	0.03 (4)	10.00		
AU-AV	0 / 0	-18.5	-18.5	0.03 (4)	10.00		
AV-M	0 / 0	-18.5	-18.5	0.03 (4)	10.00		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-11	-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11	-169	-169	---	FRONT	VERT	SNOW	---	C1
H	19-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
J	26-11-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
J	26-11-5	-169	-169	---	FRONT	VERT	SNOW	---	C1
V	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
W	7-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
X	9-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Y	11-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Z	13-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AA	15-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AB	15-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AC	17-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AD	21-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AE	23-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AF	25-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
AG	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AH	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AI	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AJ	7-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AK	9-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AL	11-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AM	13-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AN	15-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AO	15-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AP	17-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AQ	19-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AR	21-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AS	23-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AT	25-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AU	27-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
AV	29-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022144 7/2

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

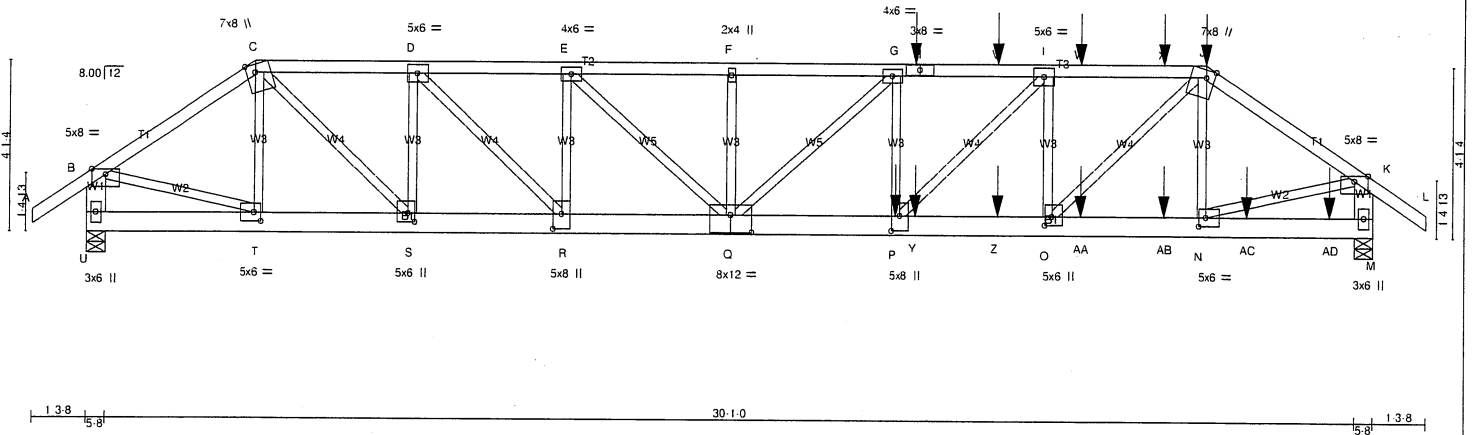
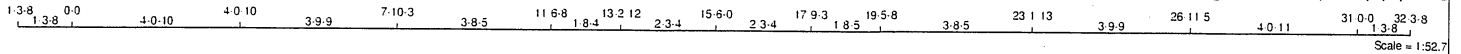
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406445	T21Z	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 09:39:49 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-vTESmshbPkFK?ZUigFVPuchHexrp2iQLyqLlyTYbC



TOTAL WEIGHT = 2 X 149 = 298 lb

LUMBER						
N. L. G. A. RULES						
CHORDS		SIZE		LUMBER		DESCR
A - C	2x4	DRY	No.2			SPF
C - H	2x4	DRY	No.2			SPF
H - J	2x4	DRY	No.2			SPF
J - L	2x4	DRY	No.2			SPF
U - B	2x6	DRY	No.2			SPF
M - K	2x6	DRY	No.2			SPF
U - Q	2x6	DRY	No.2			SPF
Q - M	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
H-C 1	12	SIDE(0.0)
H-J 1	12	SIDE(61.0)
J-L 1	12	SIDE(61.0)
U-B 2	12	TOP
M-K 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
Q-U 2	12	TOP
Q-M 2	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	SIDE(659.3)
G-P 1	3	
E-R 1	3	

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		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
M	4583	0	4583	0	0	5-8	5-8	5-8	5-8
U	3223	0	3223	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
M	3232	2170.0	0.0	0.0	0.0	1063.0	0.0	0.0	0.0
U	2273	1528.0	0.0	0.0	0.0	745.0	0.0	0.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.61 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.		MAX. FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 (PLF)	CS1 (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX CS1 (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0.35	-91.8	-91.8	0.07 (1)	10.00	T-C	-661.0	0.08 (1)	
B-C	-3808 / 0	-91.8	-91.8	0.21 (1)	4.66	N-J	-968 / 0	0.12 (1)	
C-D	-5625 / 0	-91.8	-91.8	0.22 (1)	3.96	B-T	0 / 3252	0.40 (1)	
D-E	-7606 / 0	-91.8	-91.8	0.32 (1)	3.37	N-K	0 / 4760	0.59 (1)	
E-F	-9342 / 0	-91.8	-91.8	0.44 (1)	2.96	P-G	0 / 634	0.08 (1)	
F-G	-9342 / 0	-91.8	-91.8	0.44 (1)	2.95	R-E	-1976 / 0	0.25 (1)	
G-H	-10486 / 0	-91.8	-91.8	0.59 (1)	2.61	D-R	0 / 2815	0.35 (1)	
H-V	-10486 / 0	-91.8	-91.8	0.59 (1)	2.61	C-S	0 / 3471	0.43 (1)	
V-I	-10486 / 0	-91.8	-91.8	0.59 (1)	2.61	S-D	-2360 / 0	0.30 (1)	
I-W	-7993 / 0	-91.8	-91.8	0.41 (1)	3.19	O-J	0 / 4746	0.59 (1)	
W-X	-7993 / 0	-91.8	-91.8	0.41 (1)	3.19	P-I	0 / 3543	0.44 (1)	
X-J	-7993 / 0	-91.8	-91.8	0.41 (1)	3.19	O-I	-3123 / 0	0.40 (1)	
J-K	-5572 / 0	-91.8	-91.8	0.29 (1)	3.91	Q-F	-368 / 0	0.05 (1)	
K-L	0.35	-91.8	-91.8	0.07 (1)	10.00	E-Q	0 / 2386	0.30 (1)	
U-B	-3190 / 0	0.0	0.0	0.11 (1)	7.74	Q-G	-1572 / 0	0.39 (1)	
M-K	-4524 / 0	0.0	0.0	0.16 (1)	6.77				

U-T	0 0	-18.5	-18.5	0.02 (4)	10.00
T-S	0 0.3144	-18.5	-18.5	0.22 (1)	10.00
S-R	0 0.5625	-18.5	-18.5	0.41 (1)	10.00
R-Q	0 0.7606	-18.5	-18.5	0.54 (1)	10.00
Q-P	0 0.10486	-18.5	-18.5	0.81 (1)	10.00
P-Y	0 0.7993	-18.5	-18.5	0.65 (1)	10.00
Y-Z	0 0.7993	-18.5	-18.5	0.65 (1)	10.00
Z-O	0 0.7993	-18.5	-18.5	0.65 (1)	10.00
O-AA	0 0.4602	-18.5	-18.5	0.32 (1)	10.00
AA-AB	0 0.4602	-18.5	-18.5	0.32 (1)	10.00
AB-N	0 0.4602	-18.5	-18.5	0.32 (1)	10.00
N-AC	0 0	-18.5	-18.5	0.03 (4)	10.00
AC-AD	0 0	-18.5	-18.5	0.03 (4)	10.00
AD-M	0 0	-18.5	-18.5	0.03 (4)	10.00

SPECIFIED CONCENTRATED LOADS (LBS)

LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
H	19-11.4	-76	-76	---	BACK VERT	TOTAL	C1
J	26-11.5	-40	-40	---	FRONT VERT	DEAD	C1
J	26-11.5	-171	-171	---	FRONT VERT	SNOW	C1
P	19-5.8	-2273	-2273	---	BACK VERT	TOTAL	C1
V	21-11.4	-76	-76	---	BACK VERT	TOTAL	C1
W	23-11.4	-76	-76	---	BACK VERT	TOTAL	C1
X	25-11.4	-76	-76	---	BACK VERT	TOTAL	C1
Y	19-11.4	-21	-21	---	BACK VERT	TOTAL	C1

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/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 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/873 (0.43")

CSI: TC=0.59/1.00 (G-I:1), BC=0.81/1.00 (P-Q:1), WB=0.59/1.00 (K-N:1), SS=0.15/1.00 (I-J:1)

DOL LUMBER-1.00 NAIL-1.00 L.S 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
N120 618 354 1667 788 1987 1666

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.89 (O) (INPUT = 0.90)
JSI METAL = 0.73 (Q) (INPUT = 1.00)

CONTINUED ON PAGE 2



Structural component only
DWG# T-2022145 1/2

CITY OF RICHMOND HILL
BUILDING DIVISION
11/10/2021
RECEIVED
Per: daniel

JOB NAME 406445	TRUSS NAME T21Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
--------------------	--------------------	---------------	----------	-------------------------------	-------------	----------

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 09:39:50 2020 Page 2
ID:pXBepelFV7RX??FLKzMhgevOWXJ-Nfoq21bUMjs6y98hGnNkyh9s02G3YVvZabSNHoyTYbN

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	7.0	8.0	Edge	2.50
D	TMWW-t	MT20	5.0	6.0		
E	TMWW-t	MT20	4.0	6.0		
F	TMW-w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	6.0		
H	TS-t	MT20	3.0	8.0		
I	TMWW-t	MT20	5.0	6.0		
J	TTWW-m	MT20	7.0	8.0	Edge	2.50
K	TMVW-p	MT20	5.0	8.0	Edge	
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	6.0	2.50	2.00
O	BMWW-t	MT20	5.0	6.0	2.50	2.00
P	BMWW-t	MT20	5.0	8.0	4.25	2.50
Q	BSWWW-l	MT20	8.0	12.0	5.00	6.00
R	BMWW-t	MT20	5.0	8.0	4.25	2.50
S	BMWW-t	MT20	5.0	6.0	2.50	2.00
T	BMWW-t	MT20	5.0	6.0	2.50	2.00
U	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.
Z	21-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
AA	23-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
AB	25-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
AC	27-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1
AD	29-11-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



Structural component only
DWG# T-2022145 312

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

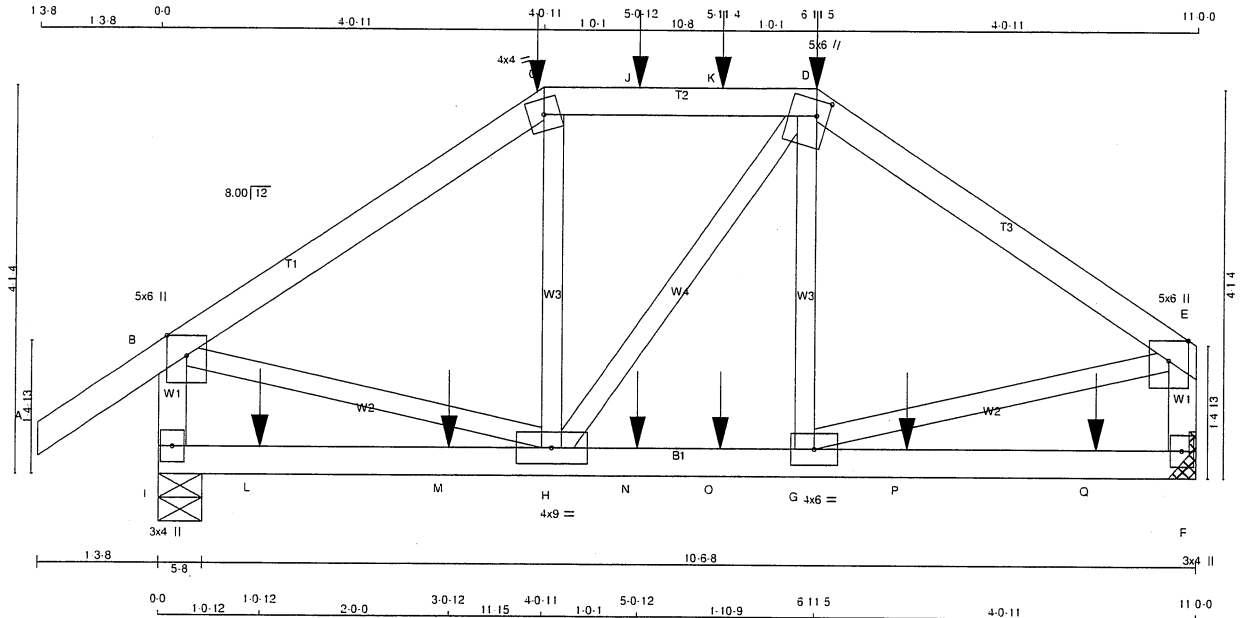
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413423	T25	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:48:45 2020 Page 1
ID:pXBepelFV7RX?2FLKzMHgeyOWXJ-Cac4Kz34N5GCdMYV6EtB7WpLCiOQOYrJbLYAZHyTYTQ



TOTAL WEIGHT = 47 lb

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 - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - 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	5.0	6.0	Edge	
C	TTW-m	MT20	4.0	4.0		
D	TTWV+m	MT20	5.0	6.0	2.00	1.50
E	TMVW+p	MT20	5.0	6.0	Edge	
F	BMV1+p	MT20	3.0	4.0		
G	BMVW-t	MT20	4.0	6.0		
H	BMVWW-t	MT20	4.0	9.0		
I	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 BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
I	1228	0	1228	0
F	1103	0	1103	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	866	584 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0
F	779	514 / 0	0 / 0	0 / 0	0 / 0	265 / 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 = 5.56 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 FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC1)	MAX. VERT. LOAD (LC)	MAX. VERT. LOAD (LC)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. VERT. LOAD (LC)
FR-TO						FR-TO		
A-B	0 / 35	-91.8	-91.8	0.14 (1)	10.00	H-C	-113	65
B-C	-1118.0	-91.8	-91.8	0.32 (1)	5.56	H-D	0	3
C-J	-923.0	-91.8	-91.8	0.33 (1)	5.94	G-D	-116	62
J-K	-923.0	-91.8	-91.8	0.33 (1)	5.94	B-H	0	958
K-D	-923.0	-91.8	-91.8	0.33 (1)	5.94	G-E	0	956
D-E	-1114.0	-91.8	-91.8	0.32 (1)	5.57			
I-B	-1172.0	0.0	0.0	0.13 (1)	7.33			
F-E	-1047.0	0.0	0.0	0.12 (1)	7.65			
I-L	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
L-M	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
M-H	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
H-N	0 / 923	-18.5	-18.5	0.22 (1)	10.00			
N-O	0 / 923	-18.5	-18.5	0.22 (1)	10.00			
O-G	0 / 923	-18.5	-18.5	0.22 (1)	10.00			
G-P	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
P-Q	0 / 0	-18.5	-18.5	0.13 (4)	10.00			
Q-F	0 / 0	-18.5	-18.5	0.13 (4)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-11	-40	-40	---	FRONT	VERT	DEAD	---	C1
C	4-0-11	-171	-171	---	FRONT	VERT	SNOW	---	C1
D	6-11-5	-40	-40	---	FRONT	VERT	DEAD	---	C1
D	6-11-5	-171	-171	---	FRONT	VERT	SNOW	---	C1
J	5-0-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
K	5-11-4	-76	-76	---	FRONT	VERT	TOTAL	---	C1
L	1-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
M	3-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
N	5-0-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
O	5-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
P	7-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1
Q	9-11-4	-21	-21	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH. LL	= 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

*** 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 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 (0.37")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.33/1.00 (C-D:1), BC=0.22/1.00 (G-H:1), WB=0.24/1.00 (B-H:1), SSI=0.21/1.00 (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

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 = 0.69 (G) (INPUT = 0.90)
JSI METAL = 0.47 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022149

CITY OF RICHMOND HILL
BUILDING DIVISION

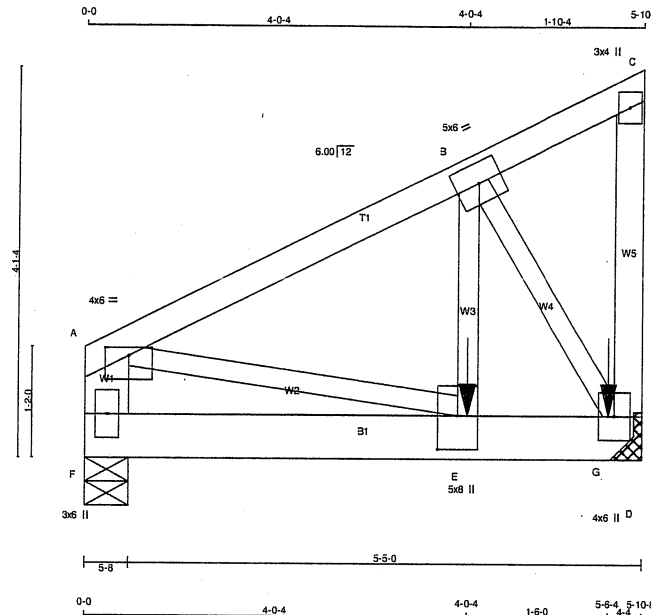
11/16

RECEIVED
Per: danielle.devitt

JOB NAME 406445	TRUSS NAME T51	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon Jun 7 08:27:53 2021 Page 1
ID:pXBePelFV7RX?2FLKzHmgeyOWXJ-5sbf_Dzb8XqlmFp2F?EfDZ_991L3M68ho17Tc8z8kw



Scale = 1:23.1

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	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 10	SIDE(152.7)	
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		
E - B 1 2	SIDE(488.6)	
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF 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	4.0	6.0	1.00	3.00
B	TMVW-t	MT20	5.0	6.0		
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
D	3076	0	3076	0	0
F	1200	0	1200	0	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	2169	1458 / 0	0 / 0	0 / 0	0 / 0	711 / 0	0 / 0
F	846	569 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH	CS1 (LC)
FR-TO		FROM	TO	FR-TO			
A-B	-1525 / 0	-91.8	-91.8 0.12 (1)	A-E	0 / 1400	0.17 (1)	
B-C	-24 / 0	-91.8	-91.8 0.07 (1)	E-B	0 / 2403	0.30 (1)	
D-C	-31 / 0	0.0	0.0 0.00 (1)	B-D	-2480 / 0	0.27 (1)	
F-A	-1112 / 0	0.0	0.0 0.04 (1)				
F-E	0 / 0	-18.5	-18.5 0.08 (1)				
E-G	0 / 1374	-18.5	-18.5 0.22 (1)				
G-D	0 / 1374	-18.5	-18.5 0.22 (1)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	4-0-4	-1813	-1813	---	FRONT	VERT	TOTAL	---	C1
G	5-6-4	-744	-744	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 30 = 60 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 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF CBC 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 (0.20")
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=0.12/1.00 (A-B:1), BC=0.22/1.00 (D-E:1), WB=0.30/1.00 (B-E:1), SSI=0.33/1.00 (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)	
MT20	650	371	1788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.74 (B) (INPUT = 0.90)
JSI METAL = 0.38 (E) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/15/2021

RECEIVED

Per: danielle.devitt



Structural component only
DWG# T-2117969

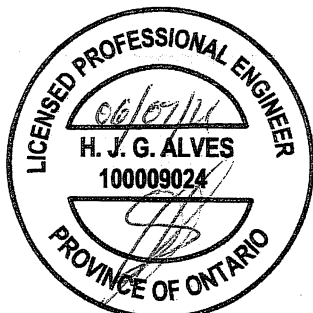
CONTINUED ON PAGE 2

JOB NAME 406445	TRUSS NAME T51	QUANTITY 1	PLY 2	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 08:27:53 2021 Page 2
ID:pXBePelFV7RX?2FLKzMhgeyOWXJ-5sbf Dzb8XqlmFp2F?EfDZ 991L3M68hoI7Tc8z8kwo

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
E	BMW+1	MT20	5.0	8.0	4.25	2.50
F	BMV1+p	MT20	3.0	6.0		



Structural component only
DWG# T-2117969

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

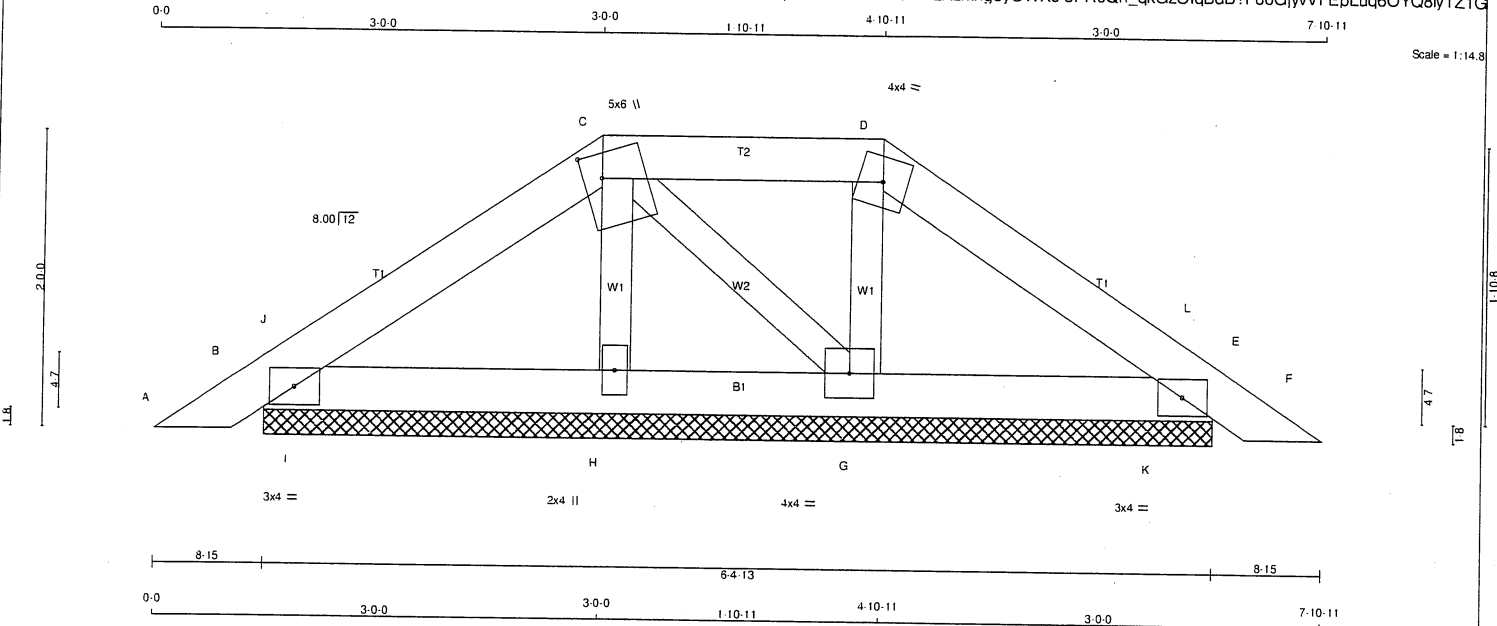
RECEIVED

Per: danielle.devitt

JOB NAME 406506	TRUSS NAME PB1	QUANTITY 3	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 09:10:05 2020 Page 1
ID: pXBepelFV7RX?2FLKzMhgeyOWXJ-8FR0Qh_qkGzOlqBdB?F86GiyvVFEpLuq6OYQ8lyTZ1G



LUMBER				DESIGN CRITERIA			
N. L. G. A. RULES				TOTAL WEIGHT = 3 X 21 = 64 lb			
CHORDS	SIZE	LUMBER	DESCR.	SPECIFIED LOADS:			
A - C	2x4	DRY	No.2	TOP CH. LL = 25.6 PSF			
C - D	2x4	DRY	No.2	DL = 6.0 PSF			
D - F	2x4	DRY	No.2	BOT CH. LL = 0.0 PSF			
B - E	2x4	DRY	No.2	DL = 7.4 PSF			
ALL WEBS	2x3	DRY	No.2	TOTAL LOAD = 39.0 PSF			
DRY: SEASONED LUMBER.				SPACING = 24.0 IN. C/C			

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	UP	IN-SX	BRG	IN-SX
B	219	0	219	0	0	6-4-13	6-4-13		
E	205	0	205	0	0	6-4-13	6-4-13		
H	176	0	176	0	0	6-4-13	6-4-13		
G	227	0	227	0	0	6-4-13	6-4-13		

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	153	111.0	0.0	0.0	0.0	43.0	0.0
E	144	103.0	0.0	0.0	0.0	41.0	0.0
H	125	77.0	0.0	0.0	0.0	49.0	0.0
G	161	105.0	0.0	0.0	0.0	56.0	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		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0.15	-91.8	-91.8 0.03 (1)	10.00	H-C	-116.0	0.02 (1)
B-J	-60.0	-91.8	-91.8 0.01 (1)	6.25	C-G	-29.0	0.00 (1)
J-C	-70.0	-91.8	-91.8 0.06 (1)	6.25	G-D	-148.0	0.02 (1)
C-D	-27.0	-91.8	-91.8 0.06 (1)	6.25	I-J	-119.0	0.00 (1)
D-L	-47.0	-91.8	-91.8 0.06 (1)	6.25	K-L	-121.0	0.00 (1)
L-E	-35.0	-91.8	-91.8 0.01 (1)	6.25			
E-F	0.15	-91.8	-91.8 0.03 (1)	10.00			
B-I	0.57	-18.5	-18.5 0.06 (1)	10.00			
I-H	0.57	-18.5	-18.5 0.06 (1)	10.00			
H-G	0.49	-18.5	-18.5 0.03 (1)	10.00			
G-K	0.37	-18.5	-18.5 0.05 (1)	10.00			
K-E	0.37	-18.5	-18.5 0.05 (1)	10.00			

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-D:1), BC=0.06/1.00 (B-I:1), WB=0.02/1.00 (D-G:1), SSI=0.09/1.00 (E-K:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 518 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.17 (B) (INPUT = 0.90)
JSI METAL = 0.04 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt

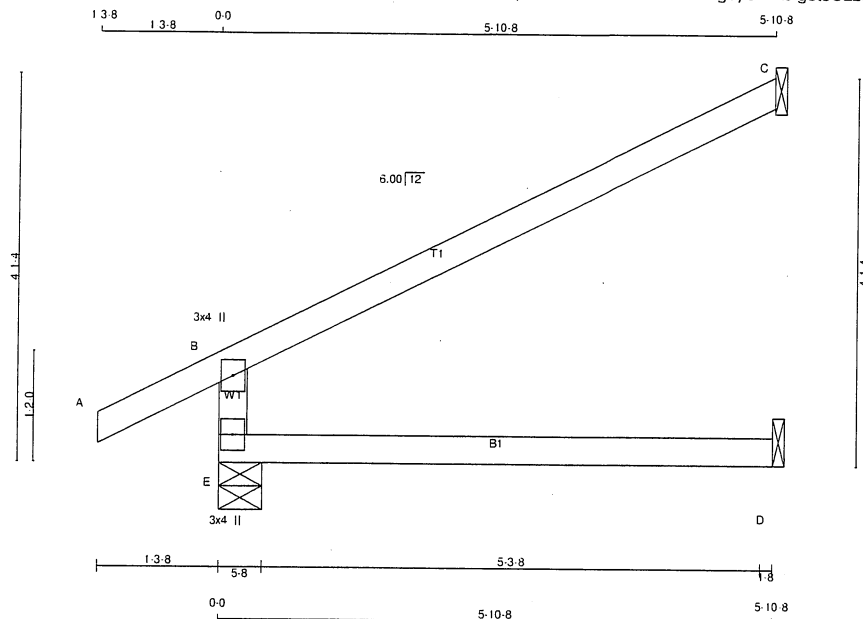


Structural component only
DWG# T-2022112

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	J1	20	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:04 2020 Page 1
ID:pXBePelFV7RX?2FLKzMhgeyOWXJ-g3teCLzCzzrXggcQeHkvZ3Bfb5tr4uzgikpscJyTZ1H



Scale = 1:23.3

TOTAL WEIGHT = 20 X 17 = 336 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
E	525	0	525	0
C	202	0	202	0
D	45	0	50	0

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	SOIL
E	369	257	0	0	0	111	0
C	139	113	0	0	0	26	0
D	36	0	0	0	0	36	0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORIZ. LOAD (LC1)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)
FR-TO			FROM	TO		FR-TO			
E-B	-461	0	0.0	0.0	0.13 (4)	7.81			
A-B	0	28	-91.8	-91.8	0.12 (1)	10.00			
B-C	-30	0	-91.8	-91.8	0.54 (1)	6.25			
E-D	0	0	-18.5	-18.5	0.13 (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 CBC 2018, CBC 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 (0.03")

CSI: TC=0.54/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP (DRY)	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= 0.19 (E) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

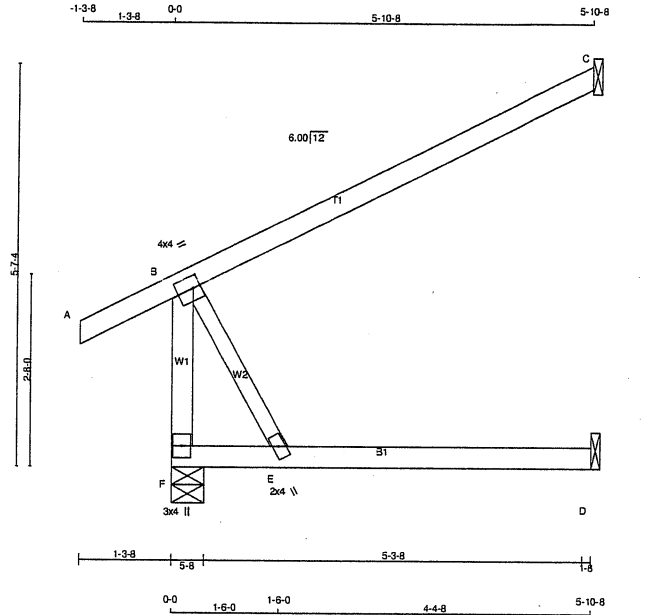
Per: danielle.devitt



Structural component only
DWG# T-2022111

JOB NAME 406445	TRUSS NAME J11	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 08:27:47 2021 Page 1
ID:aJLQU5bMioEIVDRZFnhbz9dRb-HiEOjAuqYh4b2KLvuk7Fzlk13cJ6ySlpQgg9PVz8kww



TOTAL WEIGHT = 21 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
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-t	MT20	4.0	4.0	2.00 1.25
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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
F	448	0	448	0	5-8
C	270	0	270	0	1-8
D	54	0	61	0	1-8

SEE MITK 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	315	220 / 0	0 / 0	0 / 0	0 / 0	95 / 0	95 / 0	0 / 0
C	186	150 / 0	0 / 0	0 / 0	0 / 0	35 / 0	35 / 0	0 / 0
D	43	0 / 0	0 / 0	0 / 0	0 / 0	43 / 0	43 / 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: (4)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
F-B	-394 / 0	0.0	0.0 0.05 (1)	7.81	0 / 0
A-B	0 / 28	-91.8	-91.8 0.12 (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 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) = $L/360$ (0.20")
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=0.19/1.00 (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 (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788

PLATE PLACEMENT TOL ±0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.23 (B) (INPUT = 0.90)
JSI METAL = 0.06 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DEPARTMENT

11/16/2021

RECEIVED

Per: danielle.devitt

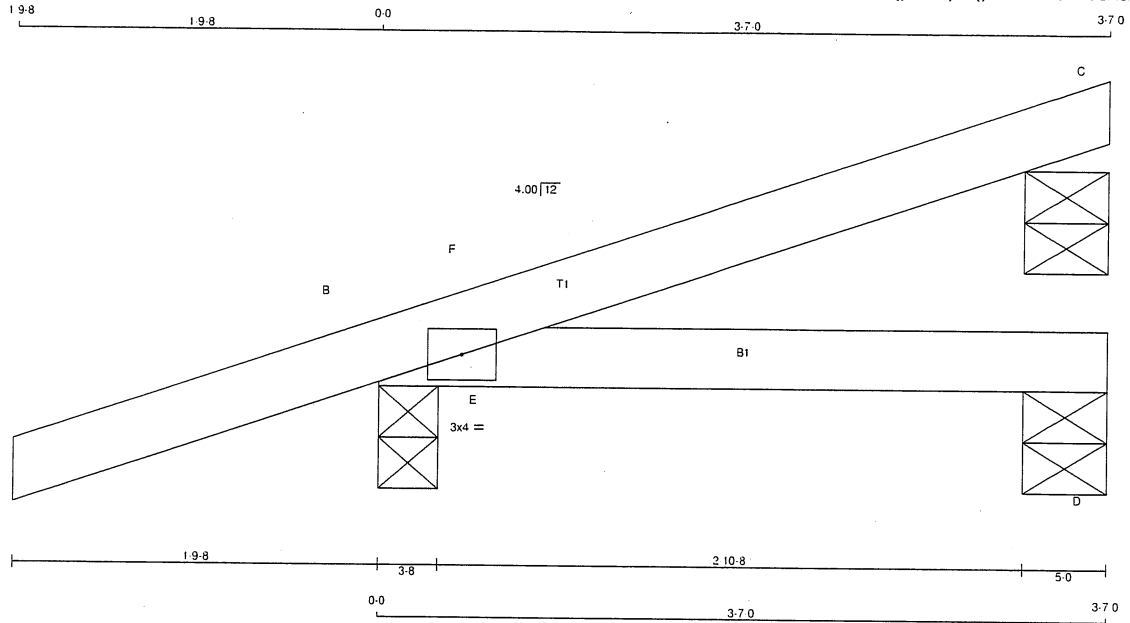


Structural component only
DWG# T-2117963

JOB NAME 406445	TRUSS NAME J12	QUANTITY 6	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 09:39:39 2020 Page 1
ID:pXBePeIFV7RX?2FLKzMHqeyOWXJ-CXdkgGSbyKTg7SoZ749?NC3XchJTfOx2OHIOwyTYbY



TOTAL WEIGHT = 6 X 11 = 64 lb [M]

LUMBER

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT
C	141	0	141	0
B	366	0	366	0
D	57	0	57	0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	98	76.0	0.0	0.0	0.0	0.0	22.0	0.0
B	256	186.0	0.0	0.0	0.0	0.0	70.0	0.0
D	42	16.0	0.0	0.0	0.0	0.0	26.0	0.0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH FR-TO	MEMB. FORCE (LBS)
A-B	0.26	-91.8	-91.8 0.23 (5)	10.00
B-F	-10.0	-91.8	-91.8 0.04 (4)	6.25
F-C	0.2	-91.8	-91.8 0.15 (1)	10.00
B-E	0.0	-18.5	-18.5 0.12 (1)	10.00
E-D	0.0	-18.5	-18.5 0.12 (1)	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 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 (0.02")

CSI: TC=0.23/1.00 (A-B-5), BC=0.12/1.00 (B-E-1), WB=0.00/1.00 (E-F-1), SS=0.13/1.00 (A-B-5)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.24 (B) (INPUT = 0.90)
JSI METAL = 0.07 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

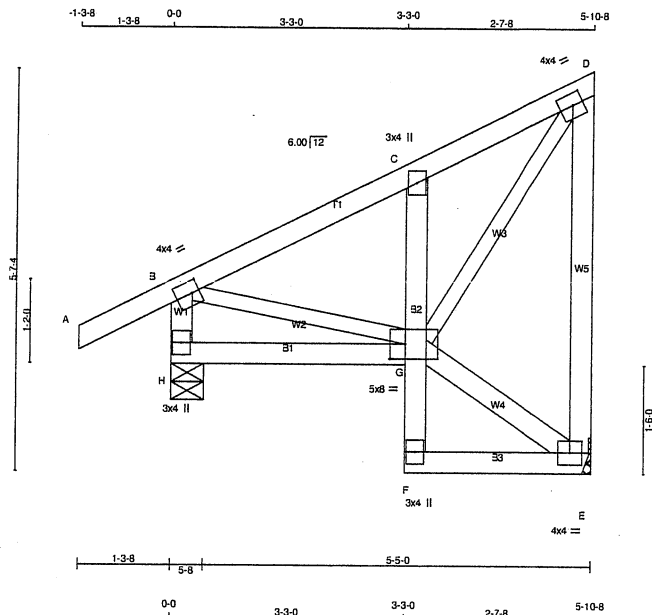
Per: danielle.devitt



Structural component only
DWG# T-2022134

JOB NAME 406445	TRUSS NAME J13	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 08:27:48 2021 Page 1
ID: aJLQU5bMioEIViDRZFnhbz9dRb-luomwVwTJ_CSGtW5SSeUWWGle0hIhuDyeUPixx28kwv



TOTAL WEIGHT = 35 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	TMVW-t	MT20	4.0	4.0	2.00	1.75
E	BMVW1-t	MT20	4.0	4.0		
F	BMV+p	MT20	3.0	4.0		
G	BVMVWW-t	MT20	5.0	8.0	2.50	2.50
H	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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
H	448	0	448	0	0	5-8	5-8		
E	324	0	324	0	0	MECHANICAL			

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	315	220 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0
E	229	150 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 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		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
H-B	-417 / 0	0.0	0.0 0.04 (1)	B-G	0 / 230
A-B	0 / 28	-91.8	-91.8 0.12 (1)	G-E	-11 / 0
B-C	-237 / 0	-91.8	-91.8 0.13 (1)	G-D	0 / 381
C-D	-249 / 0	-91.8	-91.8 0.13 (1)		
E-D	-295 / 0	0.0	0.0 0.16 (1)		
H-G	0 / 0	-18.5	-18.5 0.06 (4)		
F-G	0 / 26	0.0	0.0 0.02 (1)		
G-C	-327 / 0	0.0	0.0 0.02 (1)		
F-E	0 / 10	-18.5	-18.5 0.03 (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

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

(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 (0.01")

CSI: TC=0.16/1.00 (D-E:1) , BC=0.06/1.00 (G-H:4) , WB=0.09/1.00 (D-G:1) , SS=0.13/1.00 (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 (PSI)	SECTION (PL)
MT20	650	371	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.40 (G) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

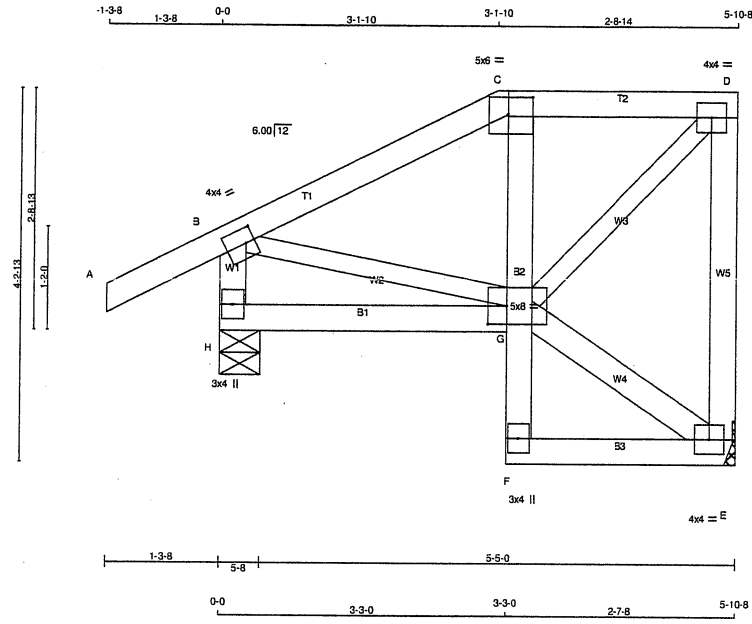
Per: danielle.devitt



Structural component only
DWG# T-2117964

JOB NAME 406445	TRUSS NAME J14	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 08:27:49 2021 Page 1
ID: aJLQU5bMioEIVDRZFnhbz9dRb-D4M98sv54IKJdVH099j3pTMQ1XQMw5t89GTNz8kwu



TOTAL WEIGHT = 33 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	4.0	2.00 1.25
C	TTV-m	MT20	5.0	6.0	2.25 3.50
D	TMVW-t	MT20	4.0	4.0	
E	BMVW-t	MT20	4.0	4.0	
F	BMV-p	MT20	3.0	4.0	
G	BVMVW-t	MT20	5.0	8.0	2.50 2.50
H	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	REQRD
JT	GROSS REACTION	GROSS REACTION	DOWN	UP	BRG
H	VERT	0	448	0	5-8
E	HORZ	0	324	0	MECHANICAL

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

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
H	315	220 / 0	0 / 0
E	229	150 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
H-B	-417 / 0	B-G	0 / 198
A-B	0 / 28	G-E	-6 / 0
B-C	-214 / 0	G-D	0 / 251
C-D	-179 / 0		
E-D	-298 / 0		
H-G	0 / 0		
F-G	0 / 26		
G-C	-174 / 0		
F-E	0 / 5		

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

CSI: TC=0.17/1.00 (B-C:1), BC=0.06/1.00 (G-H:4), WB=0.06/1.00 (D-G:1), SS=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PL)
MAX MIN MAX MIN
MT20 650 371 747 788 1987 1873

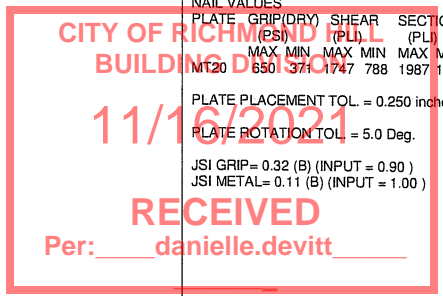
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (B) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)



Structural component only
DWG# T-2117965



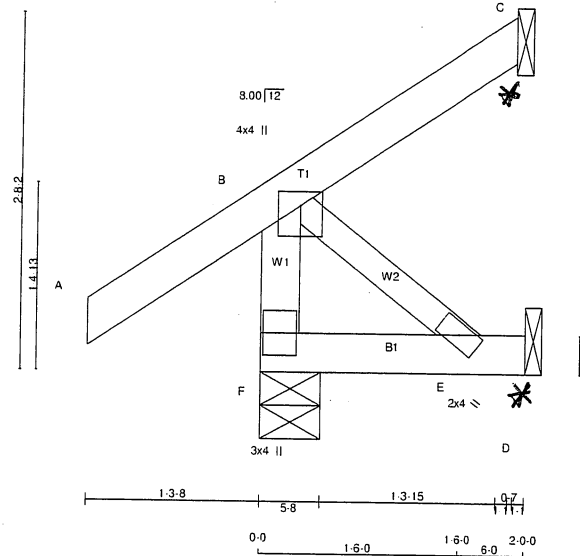
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	C1	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 09:10:01 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-FUBWajJg2TypDtry9ACxQZFrutXDEBmaC?_yTZ1K

1-3-8 1-3-8 0-0 1-10-15 1-10-15 2-0-0

Scale = 1:16.5



LUMBER

N. L. G. A. RULES

CHORDS SIZE

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.

LUMBER

DESCR.

SPF

SPF

SPF

SPF

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
F	VERT	HORZ	UP/LIFT	IN-SX
F	277	0	0	5-8
C	42	0	0	1-8
D	18	0	0	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 CASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
F	COMBINED	SNOW	LIVE	PERM. LIVE	
F	193	144.0	0.0	0.0	0.0
C	29	24.25	0.0	0.0	0.0
D	15	0.0	0.0	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	MAX. FACTORED	FACTORED	W E B S	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	CS (LC)	MEMB. FORCE (LBS)
FR-TO		FROM TO	UNBRAC LENGTH	FR-TO
F-B	-259.0	0.0	0.03 (1)	7.81
A-B	0.35	-91.8	-91.8 0.12 (1)	10.00
B-C	-25.0	-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 = 9 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 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=0.12/1.00 (A-B:1), BC=0.02/1.00 (E-F:4), WB=0.00/1.00 (B-E:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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)
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 = 0.05 (B) (INPUT = 1.00)

CITY OF RICHMOND HILL
BUILDING DIVISION

11/16/2021

RECEIVED

Per: danielle.devitt

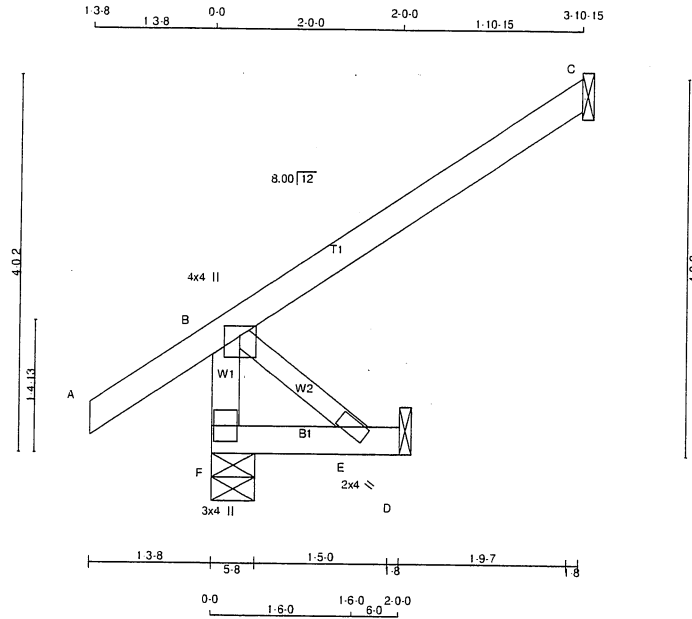


Structural component only
DWG# T-2022107

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	C2	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 Mitek Industries, Inc. Wed Oct 14 09:10:02 2020 Page 1
ID:pXBepelFV7RX?2FLKzMHgeyOWXJ-igIunfyxRLbpRNS2WsiRUe5OoHD4c_TOQQKIXQyTZ1J



Scale = 1:23.3

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				TOTAL WEIGHT = 12 lb			
N. L. G. A. RULES				BEARINGS				(M)			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT	REQD	DESIGN CRITERIA			
F - B	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	SPECIFIED LOADS:			
A - C	2x4	DRY	No.2	VERT	DOWN	UP	IN-SX	TOP CH. LL = 25.6 PSF			
F - D	2x4	DRY	No.2	HORZ	HORZ	UPLIFT	IN-SX	DL = 6.0 PSF			
ALL WEBS 2x3 DRY				F	324	0	5-8	BOT CH. LL = 0.0 PSF			
DRY: SEASONED LUMBER.				C	179	0	1-8	DL = 7.4 PSF			
				D	18	0	1-8	TOTAL LOAD = 39.0 PSF			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	4.0	1.25 2.00
E	BMW+w	MT20	2.0	4.0	
F	BMV1+p	MT20	3.0	4.0	

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	225	170 / 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 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
F-B	-305 / 0	0.0	0.0 0.03 (1)	7.81	B-E	0 / 0	0.00 (1)
A-B	0 / 35	-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

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=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 518 354 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 = 0.06 (B) (INPUT = 1.00)



Structural component only
DWG# T-2022108

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

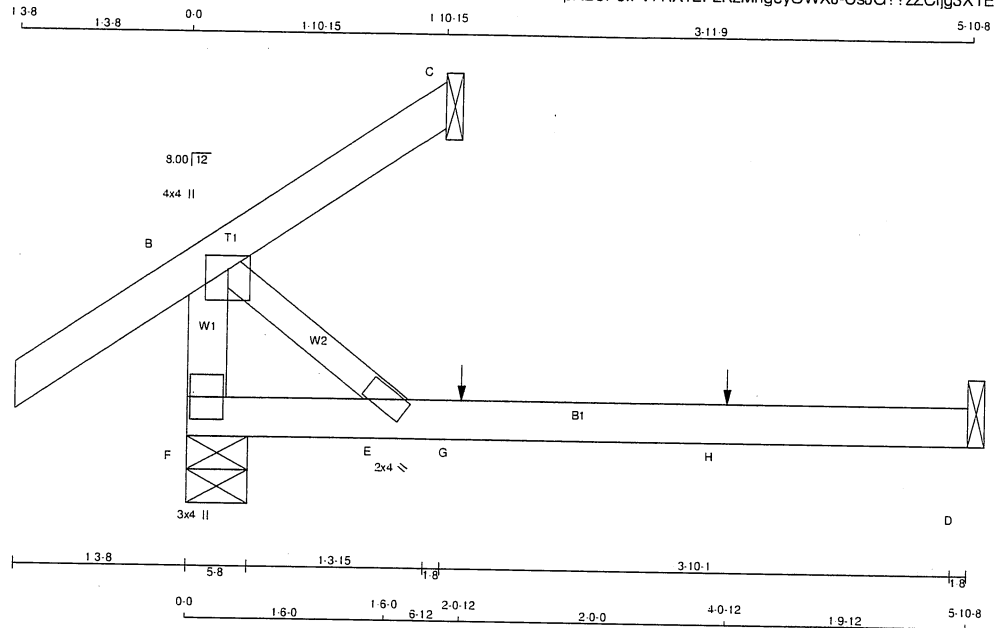
RECEIVED

Per: danielle.devitt

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
406506	C3	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Oct 14 09:10:03 2020 Page 1
ID:pXBePeIFV7RX?2FLKzMhgeyOWXJ-CsJG??zZCfig3X1E4aDg0rebJhXjLRjXf43J3tyTZ1



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	1.25	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
F	313	0	313	0	5-8	5-8
C	42	0	42	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 COMBINED	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	222	144.0	0.0	0.0	0.0	77.0	0.0
C	29	24.0	0.0	0.0	0.0	6.0	0.0
D	43	0.0	0.0	0.0	0.0	43.0	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: (4)

CHORDS					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED		MAX	MAX.	MEMB.	MAX. FORCE (LBS)	FACTORED	MAX
		VERT. (PLF)	LOAD LC1	CSI (LC)	UNBRAC				CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO			
F-B	-259 / 0	0.0	0.0	0.03 (1)	7.81	B-E	0 / 0		0.00 (1)
A-B	0 / 35	-91.8	-91.8	0.13 (1)	10.00				
B-C	-25 / 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-	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

- 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

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=0.09/1.00 (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 (PSI)	SECTION (PLI)
MT20	618	354
	1667	788
	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (B) (INPUT = 0.90)

JSI METAL = 0.05 (B) (INPUT = 1.00)



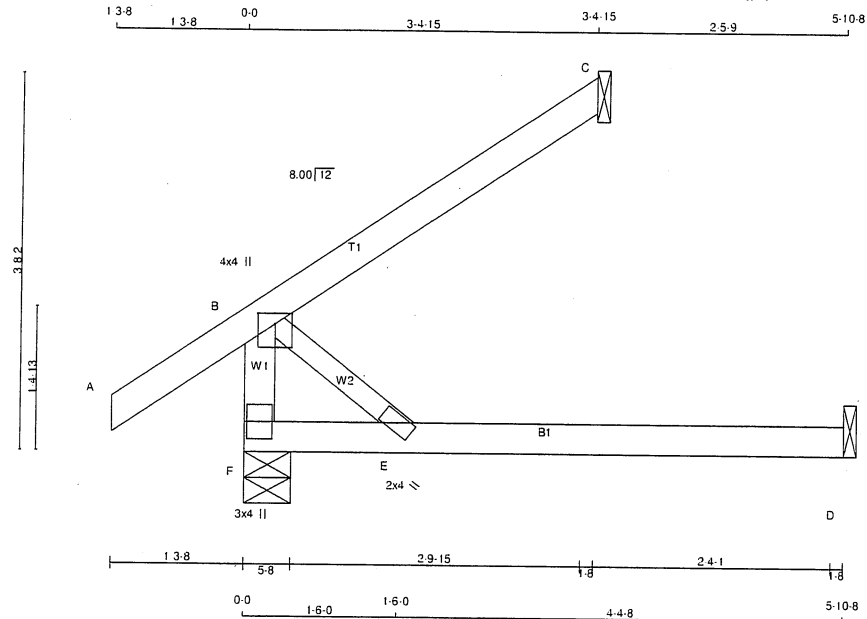
Structural component only
DWG# T-2022109

CITY OF RICHMOND HILL
BUILDING DIVISION
11/16/2021
RECEIVED
Per: danielle.devitt

JOB NAME 406506	TRUSS NAME C4	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 09:10:03 2020 Page 1
ID:pXBepelFV7RX?2FLKzMhgeyOWXJ-CsJG??zZCfig3X1E4aDg0reaRhXjLRjXf43J3tyTZ1



TOTAL WEIGHT = 16 lb [M]

LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	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
F	337	337	5-8	5-8
C	157	157	1-8	1-8
D	54	61	1-8	1-8

SEE MITTEK 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	238	158	0	0	0	0	80	0
C	108	87	0	0	0	0	20	0
D	43	0	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 = 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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO								
F-B		-282	0	0.0	0.03 (1)	7.81	0	0.00 (1)
A-B		0	35	-91.8	0.12 (1)	10.00		
B-C		0	0	-91.8	0.18 (1)	10.00		
F-E		0	0	-18.5	0.14 (4)	10.00		
E-D		0	0	-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=0.18/1.00 (B-C:1), BC=0.19/1.00 (D-E:4), WB=0.00/1.00 (B-E:1), SSI=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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
MT20	618	354	1867
	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 = 0.06 (B) (INPUT = 1.00)



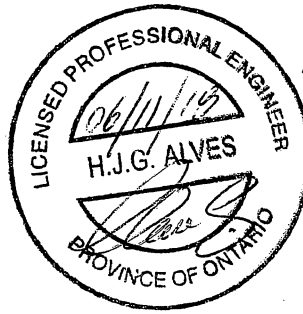
Structural component only
DWG# T-2022110

CITY OF RICHMOND HILL
BUILDING DIVISION

11/10/2021

RECEIVED

Per: danielle.devitt



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.

CITY OF RICHMOND HILL
BUILDING DIVISION
11/16/2021

RECEIVED

T-1300213
Per. danielle.dewitt
Feb 09, 2018

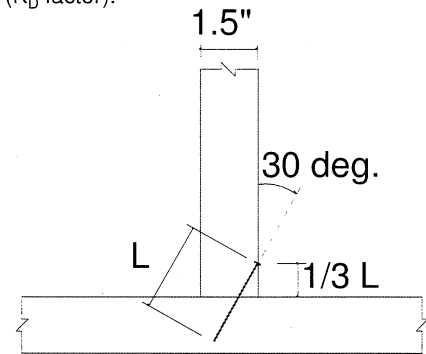
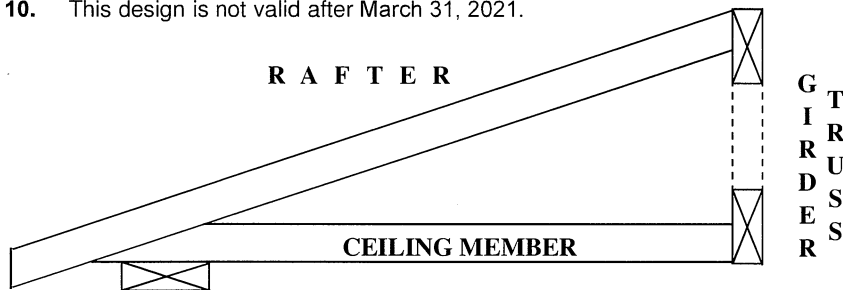
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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:

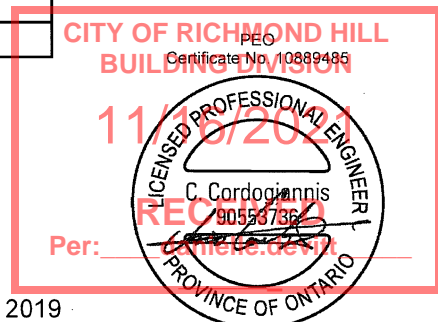
1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum 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

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

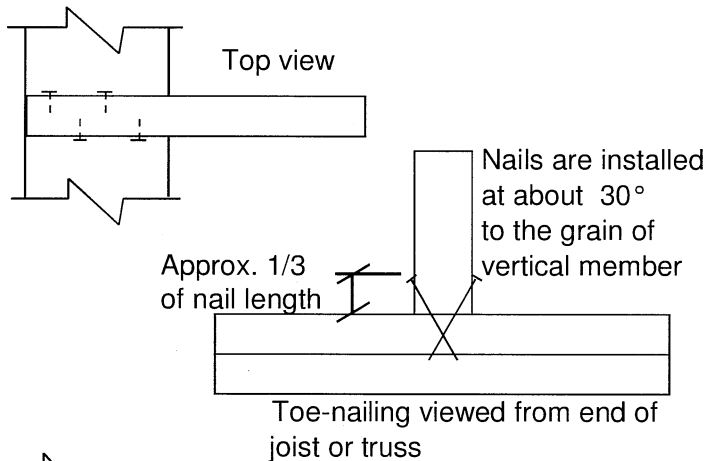
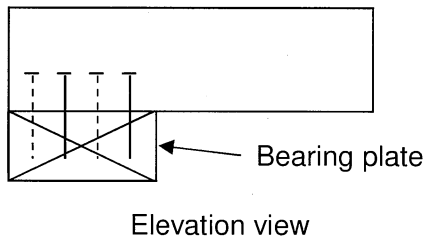
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

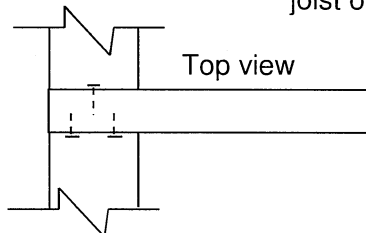
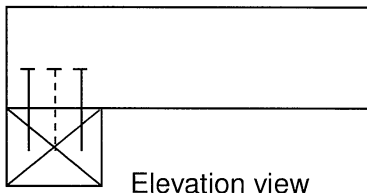
NOTES:

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

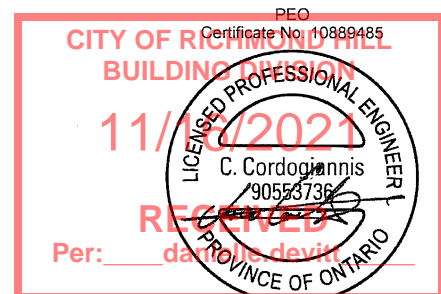


Toe-nailing on 2x4 Bearing Plate



MiTek®

MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7



December 2, 2019

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:

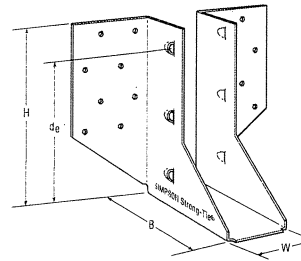
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

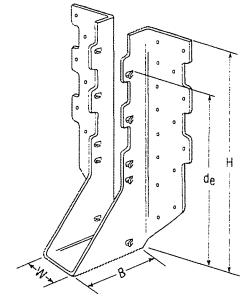
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

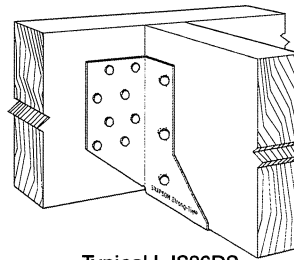
- See current catalogue for options



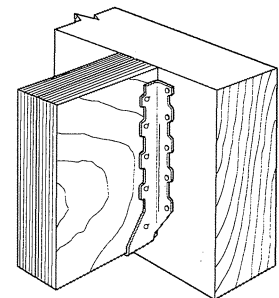
LJS26DS



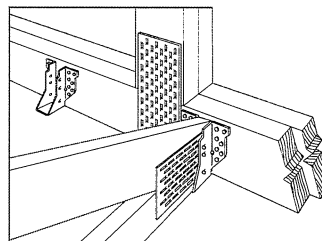
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



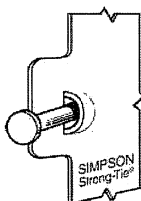
Typical HUS
Installation



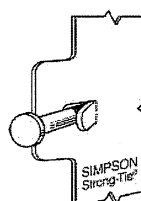
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	dg 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	1½	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1½	5⅝	3	3⅝	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1½	7⅞	3	6⅞	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1½	9⅞	3	7⅞	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅜	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

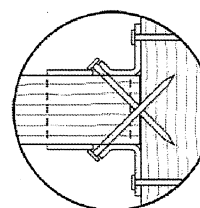
1. dg is the distance from the seat of the hanger to the highest joist nail.



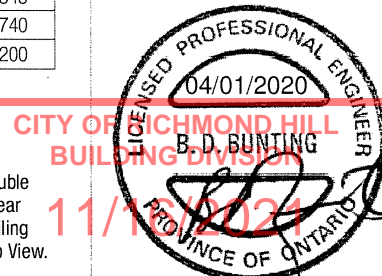
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



Double
Shear
Nailing
Side View.
Do not
bend tab
back.



Double
Shear
Nailing
Top View.



RECEIVED

Per: danielle.devitt



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.

© 2020 Simpson Strong-Tie Company Inc.

T-SPECHUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

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:

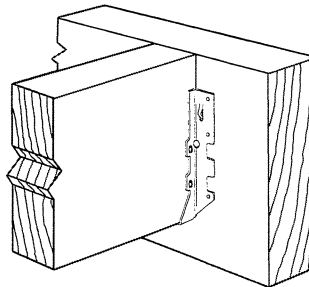
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

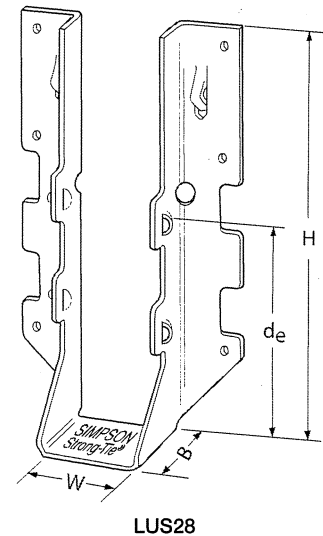
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

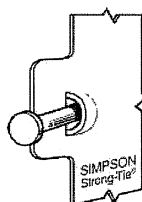


Typical LUS Installation



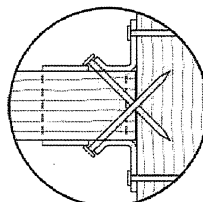
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _p =1.15)	(K _p =1.00)	(K _p =1.15)	(K _p =1.00)
LUS24	18	1⅞	3⅞	1¾	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3⅞	3⅞	2	1 13/16	(4) 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	4⅞	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	7 13/16	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.



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.

© 2020 Simpson Strong-Tie Company Inc.

T-SPECLUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

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:

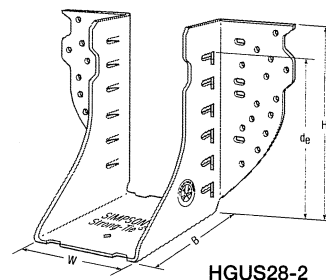
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

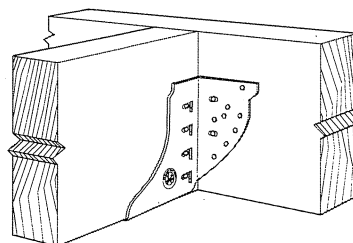
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

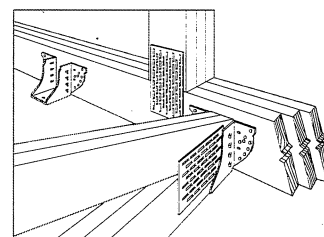
- See current catalogue for options



HGUS28-2



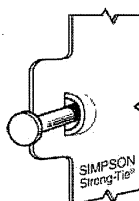
Typical HGUS Installation



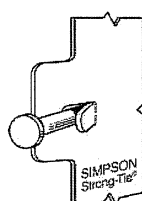
Typical HGUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		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 5/16	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 5/16	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 5/16	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 1/8	(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

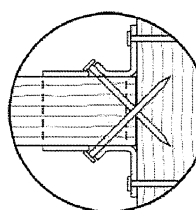
1. d_e is the distance from the seat of the hanger to the highest joist nail.



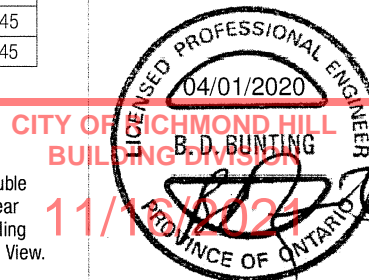
Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



RECEIVED

Per: danielle.devitt



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.

© 2020 Simpson Strong-Tie Company Inc.

T-SPECHGUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com



ONTARIO WOOD TRUSS
FABRICATORS ASSOCIATION

TECH-NOTES

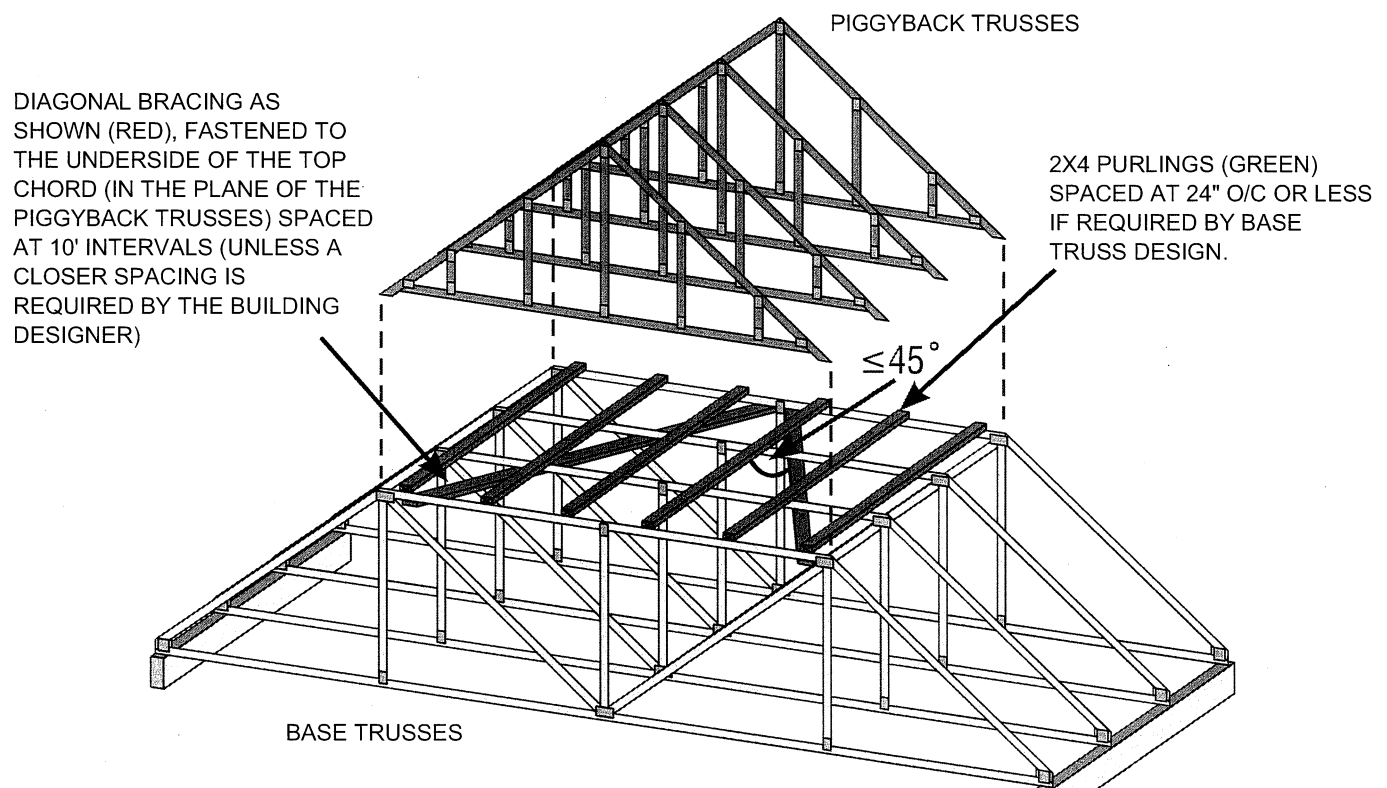
TN 15-001 Piggyback Bracing

Overview:

Where piggybacks are connected otopop 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.

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.

CITY OF RICHMOND HILL
BUILDING DIVISION

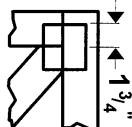
SKETCH FROM BCSI-CANADA 2013
11/16/2021

RECEIVED

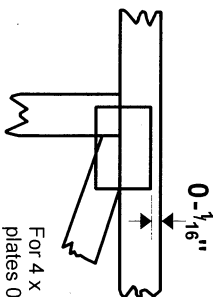
Per: danielle.devitt

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

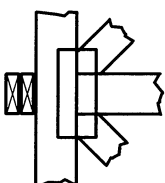
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



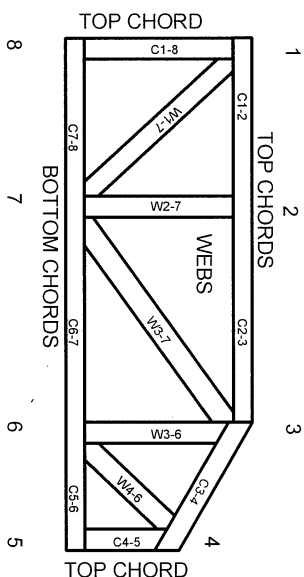
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: 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/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.

© 2012 MITek® All Rights Reserved



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 I 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.

RECEIVED
Per: danielle.devitt