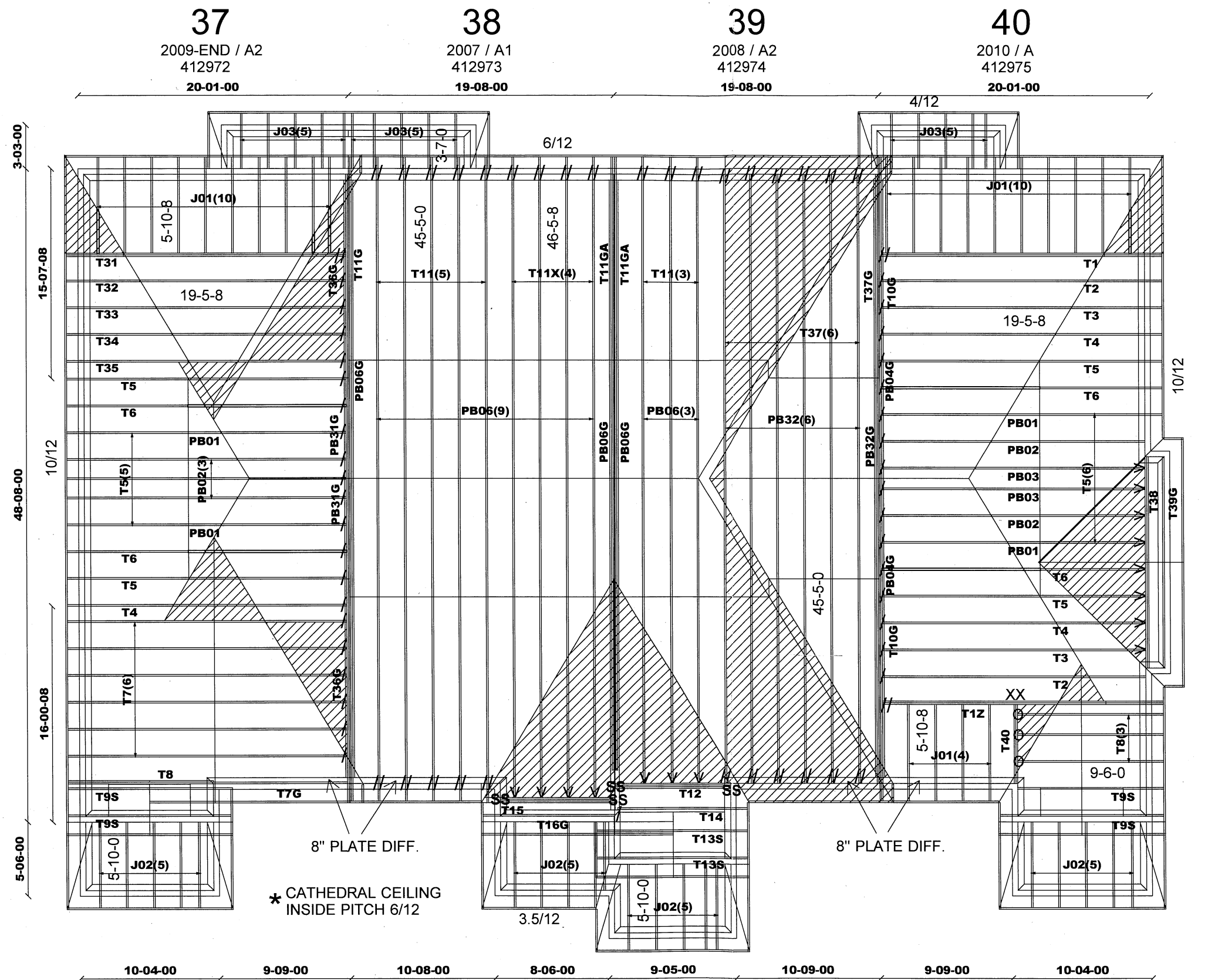




ASPHALT SHINGLES
 FINISHED OVERHANG: 12"
 2x6 EXTERIOR WALLS
 2x6 FASCIA BOARD
 HEEL: R.T.M.C.

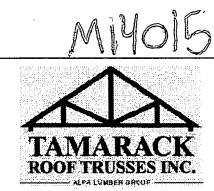
DESIGN CONFORMS WITH OBC 2012
 OCCUPANCY: RESIDENTIAL | PART: 9
 Ss = 31.4 psf | Sr = 8.4 psf

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

 DENOTES:
 CONVENTIONAL
 FRAMING

HARDWARE:
 LUS24 - (O)
 LJS26DS - (V)
 H2.5T - (I)
 HTS16 - (S)

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



Job Track: **51012**
 Plan Log: **203528**
 Layout ID: **412961**

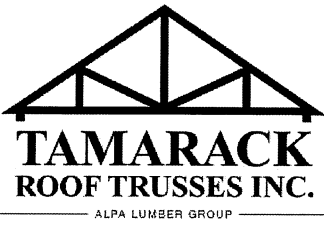
Builder / Location:
ROYAL PINE HOMES / RICHMOND HILL
 Project: **CENTREFIELD**
 Date: 2021-05-31 Sales: **Mario DiCano** Designer: AC

Model / Elevation:
BLOCK 54 / UNITS 37 - 40

Mitek ver 8.4.2.286

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.

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 54
 Lot #:
 Elevation: A2 / UNIT37BLK288

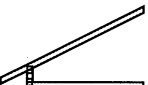
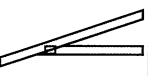
Job Track: 51012
 PlanLog: 203528
 Layout ID: 412972
 Ref #
 Page: 1 of 2
 Date: 05-31-2021
 Designer: Andrew Conway
 Sales Rep: Mario DiCano

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	T4 Half Hip	10 / 12	19-05-08	7-01-04	2 x 4	1-03-08	1-07-11 7-01-04	90.73 56.33		
	7	T5 Half Hip	10 / 12	19-05-08	8-01-04	2 x 4	1-03-08	1-07-11 8-01-04	670.62 424.67		
	2	T6 Half Hip	10 / 12	19-05-08	9-01-04	2 x 4	1-03-08	1-07-11 9-01-04	206.88 129.67		
	6	T7 Common	10 / 12	19-05-08	9-07-15	2 x 4	1-03-08	1-07-11 1-05-09	572.95 364.00		
	1	T7G GABLE	10 / 12	19-05-08	9-07-15	2 x 4	1-03-08	1-07-11 1-05-09	98.27 63.83		
	1	T8 Common	10 / 12	9-06-00	5-07-03	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	43.46 28.83		
	2	T9S Roof Special	10 / 12 6 / 12	9-06-00	5-07-03	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	95.47 67.33		
	1 2-ply	T31 Hip Girder	10 / 12	19-05-08	4-01-04	2 x 4	1-03-08	1-07-11 1-05-09	162.39 106.33		
	1	T32 Hip	10 / 12	19-05-08	5-01-04	2 x 4	1-03-08	1-07-11 1-05-09	81.28 52.17		
	1	T33 Hip	10 / 12	19-05-08	6-01-04	2 x 4	1-03-08	1-07-11 1-05-09	86.34 55.33		
	1	T34 Hip	10 / 12	19-05-08	7-01-04	2 x 4	1-03-08	1-07-11 1-05-09	87.43 56.17		
	1	T35 Hip	10 / 12	19-05-08	8-01-04	2 x 4	1-03-08	1-07-11 1-05-09	92.03 59.17		
	2	T36G GABLE	6 / 12	22-08-08	8-01-04	2 x 4		6-00 8-01-04	226.67 143.00		
	2	PB01 Piggyback	10 / 12	11-08-07	2-00-00	2 x 4		2-00-00	75.36 51.33		

DELIVERY SHIPLIST				
	Lumber Yard:	TAMARACK LUMBER	Job Track:	51012
	Builder:	ROYAL PINE HOMES	PlanLog:	203528
	Project:	CENTREFIELD	Layout ID:	412972
	Location:	RICHMOND HILL	Ref #	
	Model:	BLOCK 54	Page:	2 of 2
	Lot #:		Date:	05-31-2021
	Elevation:	A2 / UNIT37BLK288	Designer:	Andrew Conway
			Sales Rep:	Mario DiCano

Roof Trusses

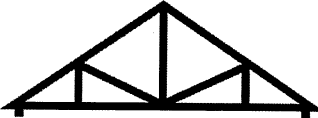
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	3	PB02 Piggyback	10 /12	11-08-07	3-00-00	2 x 4		3-00-00	121.93 82.00		
	2	PB31G GABLE	6 /12	7-06-00	3-09-00	2 x 4		3-09-00	46.01 31.67		
	10	J01 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	167.94 106.67		
	5	J02 Jack-Open	3.5 /12	5-10-00	2-04-09	2 x 4	1-03-08	3-14 1-09-11	76.06 46.67		
	5	J03 Jack-Open	4 /12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		

TOTAL # TRUSS= 55 TOTAL BFT OF ALL TRUSSES= 1958.5 BFT. TOTAL WEIGHT OF ALL TRSSES 3052.11 LBS

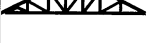
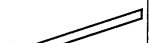
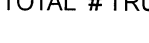
HARDWARE

QTY	TYPE	MODEL	LENGTH
22	Hardware	H2.5T	

TOTAL NUMBER OF ITEMS= 22

 TAMARACK ROOF TRUSSES INC. ALPA LUMBER GROUP	DELIVERY SHIPLIST			
	Lumber Yard:	TAMARACK LUMBER	Job Track:	51012
	Builder:	ROYAL PINE HOMES	PlanLog:	203528
	Project:	CENTREFIELD	Layout ID:	412973
	Location:	RICHMOND HILL	Ref #	
	Model:	BLOCK 54	Page:	1 of 1
Lot #:		Date:	05-31-2021	
Elevation:	A1 / UNIT38BLK288	Designer:	Andrew Conway	
		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
	5	T11 Piggyback Base	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1279.34 775.00		
	1	T11G GABLE	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	272.06 169.67		
	1	T11GA GABLE	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	265.46 167.00		
	4	T11X Piggyback Base	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1120.46 672.00		
	1 3-ply	T15 Monopitch Girder	10 /12	8-06-08	8-09-02	2 x 4 2 x 8	1-03-08	1-07-11 8-09-02	184.99 116.00		
	1	T16G GABLE	10 /12	8-05-00	8-07-14	2 x 4	1-03-08	1-07-11 8-07-14	48.26 30.83		
	9	PB06 Piggyback	6 /12	17-08-00	4-05-00	2 x 4			462.27 288.00		
	2	PB06G GABLE	6 /12	17-08-00	4-05-00	2 x 4			101.52 62.00		
	5	J02 Jack-Open	3.5 /12	5-10-00	2-04-09	2 x 4	1-03-08	3-14 1-09-11	76.06 46.67		
	5	J03 Jack-Open	4 /12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		

TOTAL # TRUSS= 36

TOTAL BFT OF ALL TRUSSES= 2360.5

BFT.

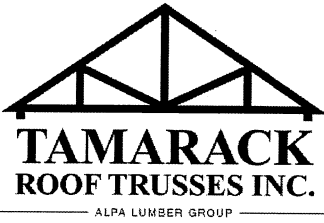
TOTAL WEIGHT OF ALL TRSSES 3860.71 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
4	Hardware	LJS26DS	
28	Hardware	H2.5T	
4		HTS16	

TOTAL NUMBER OF ITEMS= 36

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 54
 Lot #:
 Elevation: A2 / UNIT39BLK288

Job Track: 51012
 PlanLog: 203528
 Layout ID: 412974
 Ref #
 Page: 1 of 2
 Date: 05-31-2021
 Designer: Andrew Conway
 Sales Rep: Mario DiCano

Roof Trusses

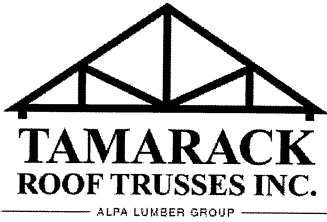
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	3	T11 Piggyback Base	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	767.61 465.00		
	1	T11GA GABLE	6 /12	45-05-00	8-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	265.46 167.00		
	1 3-ply	T12 Monopitch Girder	10 /12	8-05-08	8-08-04	2 x 4 2 x 8		1-07-11 8-08-04	177.6 112.00		
	2	T13S Scissor	10 /12 6 /12	8-07-00	5-02-10	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	81.56 52.00		
	1	T14 Monopitch	10 /12	8-03-08	8-06-10	2 x 4	1-03-08	1-07-11 8-06-10	45.99 28.83		
	6	T37 Piggyback Base	6 /12	45-05-00	8-01-04	2 x 6		6-00 6-00	1459.45 876.00		
	1	T37G GABLE	6 /12	45-05-00	8-01-04	2 x 6		6-00 6-00	258.48 161.00		
	3	PB06 Piggyback	6 /12	17-08-00	4-05-00	2 x 4			154.09 96.00		
	1	PB06G GABLE	6 /12	17-08-00	4-05-00	2 x 4			50.76 31.00		
	6	PB32 Piggyback	6 /12	15-00-00	3-09-00	2 x 4			219.15 140.00		
	1	PB32G GABLE	6 /12	15-00-00	3-09-00	2 x 4			41.61 28.33		
	5	J02 Jack-Open	3.5 /12	5-10-00	2-04-09	2 x 4	1-03-08	3-14 1-09-11	76.06 46.67		

TOTAL # TRUSS= 33 TOTAL BFT OF ALL TRUSSES= 2203.83 BFT. TOTAL WEIGHT OF ALL TRSSES 3597.8 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
3	Hardware	LJS26DS	
31	Hardware	H2.5T	

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
Builder: ROYAL PINE HOMES
Project: CENTREFIELD
Location: RICHMOND HILL
Model: BLOCK 54
Lot #:
Elevation: A2 / UNIT39BLK288

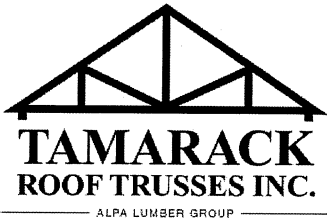
Job Track: 51012
PlanLog: 203528
Layout ID: 412974
Ref #
Page: 2 of 2
Date: 05-31-2021
Designer: Andrew Conway
Sales Rep: Mario DiCano

HARDWARE

QTY	TYPE	MODEL	LENGTH
4		HTS16	

TOTAL NUMBER OF ITEMS= 38

DELIVERY SHIPLIST



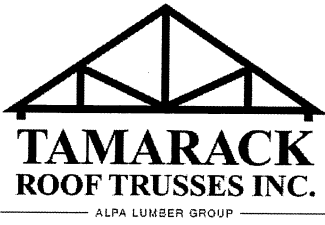
Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 54
 Lot #:
 Elevation: A / UNIT40BLK288

Job Track: 51012
 PlanLog: 203528
 Layout ID: 412975
 Ref #
 Page: 1 of 2
 Date: 05-31-2021
 Designer: Andrew Conway
 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 Half Hip Girder	10 / 12	19-05-08	4-01-04	2 x 4 2 x 6	1-03-08	1-07-11 4-01-04	193.91 122.67		
	1 2-ply	T1Z Half Hip Girder	10 / 12	19-05-08	4-01-04	2 x 4 2 x 6	1-03-08	1-07-11 4-01-04	193.91 122.67		
	2	T2 Half Hip	10 / 12	19-05-08	5-01-04	2 x 4	1-03-08	1-07-11 5-01-04	169.97 109.00		
	2	T3 Half Hip	10 / 12	19-05-08	6-01-04	2 x 4	1-03-08	1-07-11 6-01-04	182.13 117.33		
	2	T4 Half Hip	10 / 12	19-05-08	7-01-04	2 x 4	1-03-08	1-07-11 7-01-04	181.47 112.67		
	8	T5 Half Hip	10 / 12	19-05-08	8-01-04	2 x 4	1-03-08	1-07-11 8-01-04	766.42 485.33		
	2	T6 Half Hip	10 / 12	19-05-08	9-01-04	2 x 4	1-03-08	1-07-11 9-01-04	206.88 129.67		
	3	T8 Common	10 / 12	9-06-00	5-07-03	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	130.39 86.50		
	2	T9S Roof Special	10 / 12 6 / 12	9-06-00	5-07-03	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	95.47 67.33		
	2	T10G GABLE	6 / 12	22-08-08	8-01-04	2 x 4	1-05-00	1-02-00 8-01-04	243.75 153.67		
	1 2-ply	T38 Common Girder	10 / 12	15-09-00	8-02-07	2 x 4 2 x 6		1-07-11 1-07-11	173.65 110.00		
	1	T39G GABLE	10 / 12	15-09-00	8-02-07	2 x 4		1-07-11 1-07-11	74.85 48.00		
	1 2-ply	T40 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		
	2	PB01 Piggyback	10 / 12	11-08-07	2-00-00	2 x 4		2-00-00	75.36 51.33		

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: ROYAL PINE HOMES
 Project: CENTREFIELD
 Location: RICHMOND HILL
 Model: BLOCK 54
 Lot #:
 Elevation: A / UNIT40BLK288

Job Track: 51012
 PlanLog: 203528
 Layout ID: 412975
 Ref #
 Page: 2 of 2
 Date: 05-31-2021
 Designer: Andrew Conway
 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	PB02 Piggyback	10 / 12	11-08-07	3-00-00	2 x 4		3-00-00	81.28 54.67		
	2	PB03 Piggyback	10 / 12	11-08-07	4-00-00	2 x 4		4-00-00	83.07 54.00		
	2	PB04G GABLE	6 / 12	8-10-00	4-05-00	2 x 4		4-05-00	56.15 34.33		
	14	J01 Jack-Open	6 / 12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	235.12 149.33		
	5	J02 Jack-Open	3.5 / 12	5-10-00	2-04-09	2 x 4	1-03-08	3-14 1-09-11	76.06 46.67		
	5	J03 Jack-Open	4 / 12	3-07-00	1-11-03	2 x 4	1-03-08	3-15 1-03-04	50.28 33.33		

TOTAL # TRUSS= 64

TOTAL BFT OF ALL TRUSSES= 2126.17

BFT.

TOTAL WEIGHT OF ALL TRSSES 3328.54 LBS

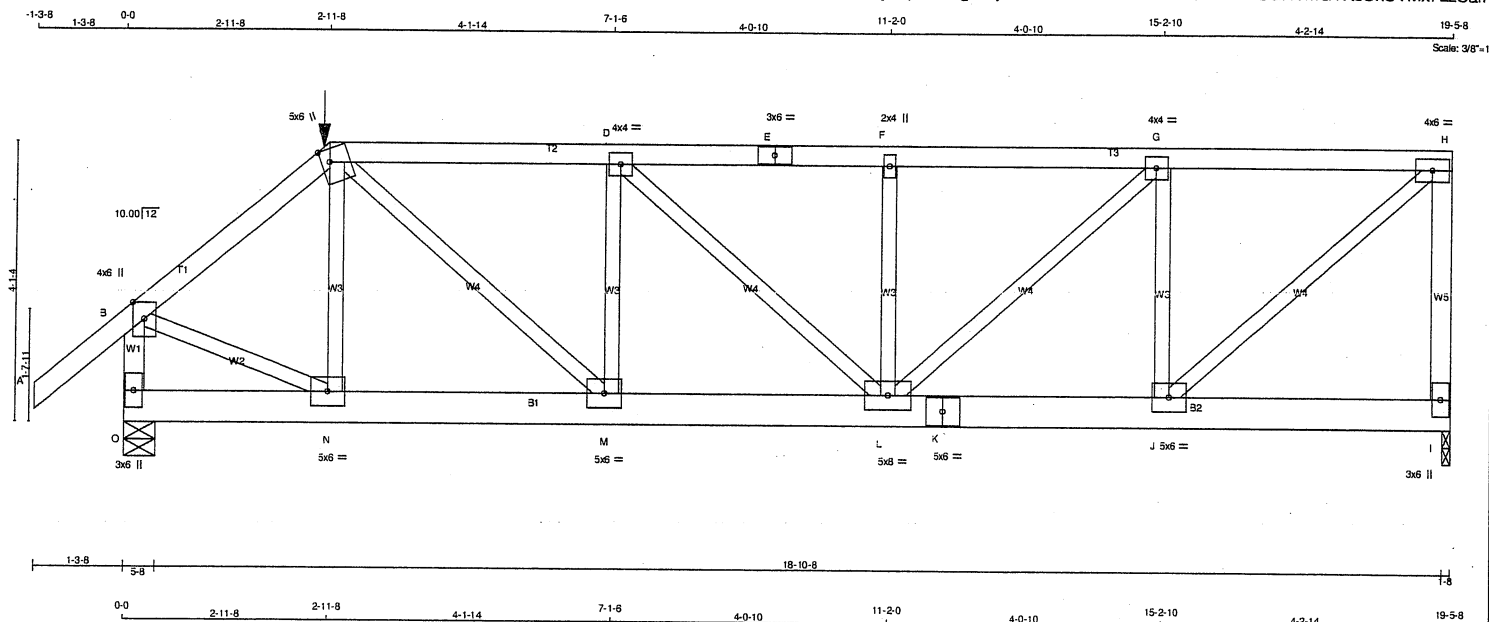
HARDWARE

QTY	TYPE	MODEL	LENGTH
3	Hardware	LUS24	
8	Hardware	LJS26DS	
1	Hardware	HGUS26-2	
20	Hardware	H2.5T	

TOTAL NUMBER OF ITEMS= 32

JOB NAME 412982	TRUSS NAME T1	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. Wed May 26 16:46:26 2021 Page 1
ID:wTM7iolSBYniqocTeDgf3Pyb9F8-vK3rTdcRSH1I0Q4EWwFSGHVmGYXcOkUVMx7LzCaIR



TOTAL WEIGHT = 2 X 95 = 190 lb

LUMBER				DESCR.	
CHORDS	SIZE	DRY	LUMBER		
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
O - B	2x4	DRY	No.2	SPF	
O - K	2x6	DRY	No.2	SPF	
K - I	2x6	DRY	No.2	SPF	
ALL WEBS EXCEPT I - H	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	SIDE(61.0)
C - E	12	SIDE(43.0)
E - H	12	SIDE(43.0)
O - B	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
O - K	12	SIDE(9.7)
K - I	12	SIDE(9.7)
WEBS : (0.122"x3") SPIRAL NAILS		
N - C	6	SIDE(8.7)
2x3	6	
2x4	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.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
I	2100	0	2100	0	0	1-8	1-8		
O	2123	0	2123	0	0	5-8	5-8		

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	1484	978 / 0	0 / 0	0 / 0	0 / 0	506 / 0	0 / 0
O	1500	991 / 0	0 / 0	0 / 0	0 / 0	509 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.26 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 LC1 (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM TO		FR-TO			
A - B	0 / 41	-91.8 -91.8	0.07 (1)	I - H	-2029 / 0	0.18 (1)	
B - C	-1919 / 0	-91.8 -91.8	0.09 (1)	N - C	-427 / 0	0.05 (1)	
C - D	-2600 / 0	-177.8 -177.8	0.26 (1)	B - N	0 / 1582	0.20 (1)	
D - E	-2664 / 0	-177.8 -177.8	0.27 (1)	J - H	0 / 2612	0.32 (1)	
E - F	-2664 / 0	-177.8 -177.8	0.27 (1)	C - M	0 / 1531	0.19 (1)	
F - G	-2664 / 0	-177.8 -177.8	0.27 (1)	J - G	-1564 / 0	0.20 (1)	
G - H	-1882 / 0	-177.8 -177.8	0.26 (1)	M - D	-880 / 0	0.11 (1)	
O - B	-2084 / 0	0.0 0.0	0.12 (1)	L - G	0 / 1062	0.13 (1)	
				D - L	0 / 87	0.01 (1)	
				L - F	-656 / 0	0.08 (1)	
O - N	0 / 0	-35.8 -35.8	0.03 (4)				
N - M	0 / 1457	-35.8 -35.8	0.12 (1)				
M - L	0 / 2600	-35.8 -35.8	0.21 (1)				
L - K	0 / 1882	-35.8 -35.8	0.16 (1)				
K - J	0 / 1882	-35.8 -35.8	0.16 (1)				
J - I	-79 / 0	-35.8 -35.8	0.03 (4)				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-11-8	-136	-136	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-11-8
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 1-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

(55 % OF 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 (0.04")
ALLOWABLE DEFL (TL) = L/360 (0.64")
CALCULATED VERT. DEFL (TL) = L/999 (0.07")

CSI: TC=0.27/1.00 (F-G:1), BC=0.21/1.00 (L-M:1), WB=0.32/1.00 (H-J:1), SSI=0.19/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.80 (H) (INPUT = 0.90)
JSI METAL = 0.43 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2



Structural component only
DWG# T-2115901 1/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412982	T1	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:26 2021 Page 2
ID:wTM7ioISByniqocTeDgf3Pvb9F8-vK3rTdcRShH1I0Q4EWwFSGHVmGYXcOKUVMx7LzCaIR

PLATES (table is in inches)

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

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

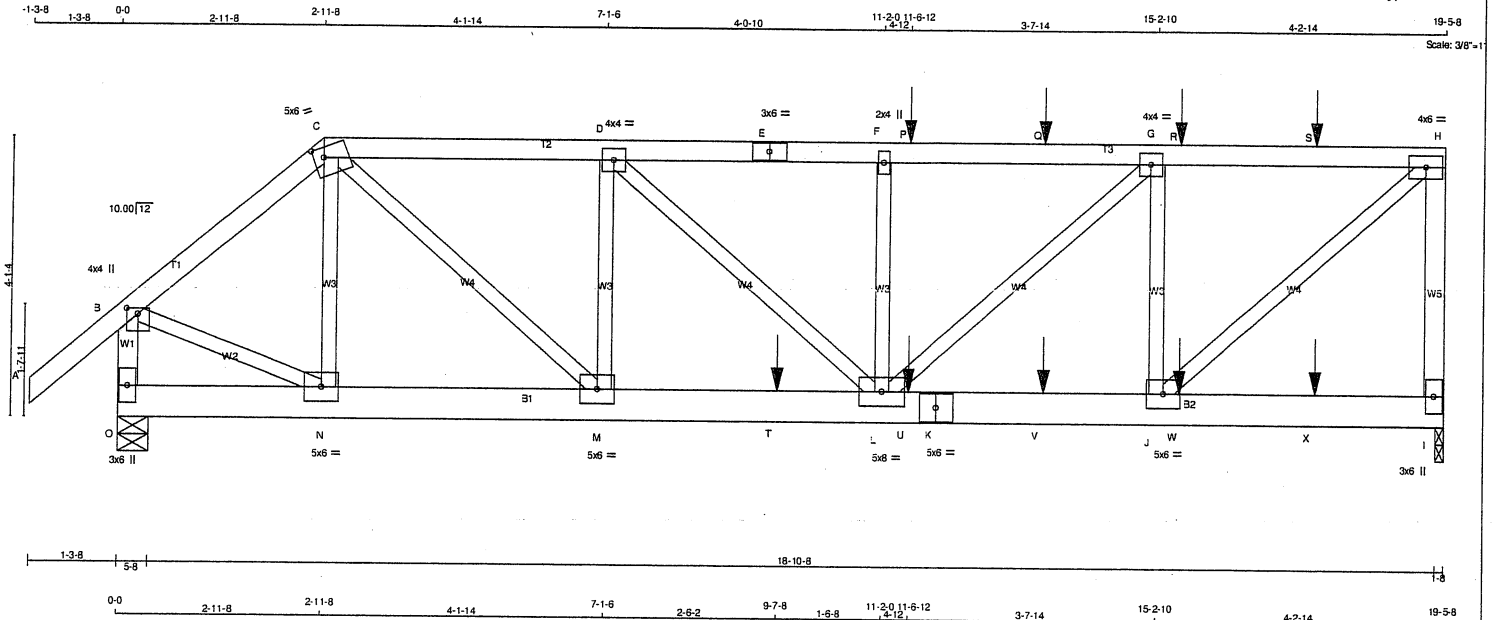


Structural component only
DWG# T-2115901 *21*

JOB NAME 412982	TRUSS NAME T1Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Wed May 26 16:46:28 2021 Page 1
ID:wTM7iolSBYniqocTeDgf3Pyb9F8-rjAbuJd_z4x?GcSpCfYOLtLeLZr8?WJ1ypr2CEzCaIP



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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	TOP
C - E	12	TOP
E - H	12	TOP
O - B	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
O - K	12	SIDE(0.0)
K - I	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	
2x4	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
I	2204	0	2204	0	0	1-8	1-8	
O	2044	0	2044	0	0	5-8	5-8	

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1555	1040 / 0	0 / 0	0 / 0	0 / 0	515 / 0	0 / 0
O	1439	981 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.79 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)

FR-TO	CHORDS MAX. FACTORED MEMB. FORCE (LBS)		FACTORED VERT. LOAD LC1 (PLF)		MAX. UNBRACED LENGTH (FT)		WEBS MAX. FACTORED MEMB. FORCE (LBS)		MAX. UNBRACED LENGTH (FT)	
	MEMB.	FORCE (LBS)	VERT.	LOAD LC1 (PLF)	MAX.	UNBRACED LENGTH (FT)	MEMB.	FORCE (LBS)	MAX.	UNBRACED LENGTH (FT)
A-B	0 / 41		-91.8	-91.8	0.07 (1)	10.00	I-H	-2127 / 0	0.19 (1)	
B-C	-1832 / 0		-91.8	-91.8	0.09 (1)	6.25	N-C	-599 / 0	0.08 (1)	
C-D	-3033 / 0		-91.8	-91.8	0.15 (1)	5.17	B-N	0 / 1510	0.19 (1)	
D-E	-3433 / 0		-91.8	-91.8	0.15 (1)	4.91	J-H	0 / 2911	0.36 (1)	
E-F	-3433 / 0		-91.8	-91.8	0.15 (1)	4.91	C-M	0 / 2208	0.27 (1)	
F-P	-3433 / 0		-91.8	-91.8	0.25 (1)	4.79	J-G	-1931 / 0	0.24 (1)	
P-Q	-3433 / 0		-91.8	-91.8	0.25 (1)	4.79	M-D	-770 / 0	0.10 (1)	
Q-G	-3433 / 0		-91.8	-91.8	0.25 (1)	4.79	L-G	0 / 1807	0.22 (1)	
G-R	-2103 / 0		-91.8	-91.8	0.22 (1)	5.83	D-L	0 / 542	0.07 (1)	
R-S	-2103 / 0		-91.8	-91.8	0.22 (1)	5.83	L-F	-469 / 0	0.06 (1)	
S-H	-2103 / 0		-91.8	-91.8	0.22 (1)	5.83				
O-B	-2002 / 0		0.0	0.0	0.11 (1)	7.78				
O-N	0 / 0		-18.5	-18.5	0.02 (1)	10.00				
N-M	0 / 1386		-18.5	-18.5	0.21 (1)	10.00				
M-T	0 / 3034		-18.5	-18.5	0.58 (1)	10.00				
T-L	0 / 3034		-18.5	-18.5	0.58 (1)	10.00				
L-U	0 / 2103		-18.5	-18.5	0.27 (1)	10.00				
U-K	0 / 2103		-18.5	-18.5	0.27 (1)	10.00				
K-V	0 / 2103		-18.5	-18.5	0.27 (1)	10.00				
V-J	0 / 2103		-18.5	-18.5	0.27 (1)	10.00				
J-W	-83 / 0		-18.5	-18.5	0.04 (1)	6.25				
W-X	-83 / 0		-18.5	-18.5	0.04 (1)	6.25				
X-I	-83 / 0		-18.5	-18.5	0.04 (1)	6.25				

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
P	11-6-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
Q	13-6-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
R	15-6-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
S	17-6-12	-76	-76	---	FRONT	VERT	TOTAL	---	C1
T	9-7-8	-1003	-1003	---	FRONT	VERT	TOTAL	---	C1
U	11-6-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
V	13-6-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
W	15-6-12	-21	-21	---	FRONT	VERT	TOTAL	---	C1
X	17-6-12	-21	-21	---	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

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 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=0.25/1.00 (F-G:1), BC=0.58/1.00 (L-M:1),
WB=0.36/1.00 (H-J:1), SS=0.31/1.00 (L-M:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



Structural component only
DWG# T-2115902

CONTINUED ON PAGE 2

JOB NAME 412982	TRUSS NAME T1Z	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:28 2021 Page 2
ID:wTM7iolSBYniqocTeDgf3Pyb9F8-rjAbuJd z4x?Gc9pCfYOLtLeLZr8?WJ1ypr2CEzCaIP

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TTWW-m	MT20	5.0	6.0	1.75	1.75
D	TMWW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	4.0	4.0		
H	TMWW-t	MT20	4.0	6.0		
I	BMW1+w	MT20	3.0	6.0		
J, M, N						
J	BMWW-t	MT20	5.0	6.0		
K	BS-t	MT20	5.0	6.0		
L	BMWWW-t	MT20	5.0	8.0		
O	BMV1+p	MT20	3.0	6.0		

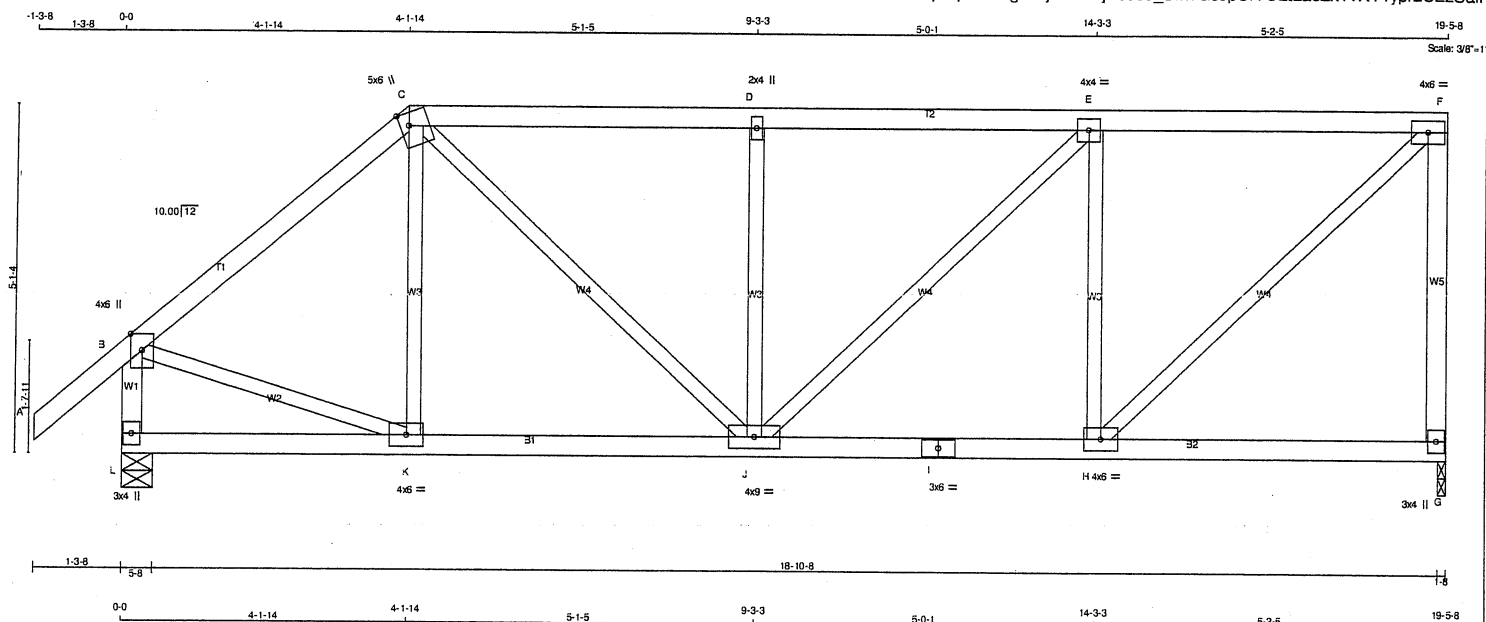


Structural component only
DWG# T-2115902 *HP*

JOB NAME 412982	TRUSS NAME T2	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
---------------------------	-------------------------	----------------------	-----------------	-------------------------------	-------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:28 2021 Page 1
ID:wTM7ioISByniqocTeDgf3Pyb9F8-rjAbuJd_z4x?Gc9pCfYOLtLa8Zx1?XY1ypr2CEzCaIf



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
L - B	2x4	DRY	No.2
L - I	2x4	DRY	No.2
I - G	2x4	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+p	MT20	4.0	6.0	Edge	
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVW-t	MT20	4.0	6.0		
I	BS-t	MT20	3.0	6.0		
J	BMVWW-t	MT20	4.0	9.0		
K	BMVW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	IN-SX
G	1073	0	0	1073	0	0	1-8	1-8	
L	1200	0	0	1200	0	0	5-8	5-8	

UNFACTORED REACTIONS

1ST LCASE	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0
L	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) G, L

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.50 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 41	-91.8 -91.8	0.13 (1)	10.00	K-C	-130 / 29	0.05 (1)
B-C	-971 / 0	-91.8 -91.8	0.30 (1)	5.92	B-K	0 / 778	0.18 (1)
C-D	-1133 / 0	-91.8 -91.8	0.34 (1)	5.52	H-F	0 / 1236	0.28 (1)
D-E	-1133 / 0	-91.8 -91.8	0.35 (1)	5.50	C-J	0 / 537	0.12 (1)
E-F	-906 / 0	-91.8 -91.8	0.35 (1)	5.99	H-E	-733 / 0	0.28 (1)
G-F	-1033 / 0	0.0 0.0	0.46 (1)	7.72	J-D	-500 / 0	0.19 (1)
L-B	-1170 / 0	0.0 0.0	0.12 (1)	7.37	J-E	0 / 315	0.07 (1)
L-K	0 / 0	-18.5 -18.5	0.09 (4)	10.00			
K-J	0 / 741	-18.5 -18.5	0.17 (1)	10.00			
J-I	0 / 906	-18.5 -18.5	0.21 (1)	10.00			
I-H	0 / 906	-18.5 -18.5	0.21 (1)	10.00			
H-G	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 2.00/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.48/1.00 (F-G:1), BC=0.21/1.00 (H-J:1),
WB=0.28/1.00 (E-H:1), SSI=0.22/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

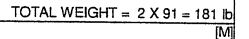
PLATE ROTATION TOL. = 5.0 Deg.

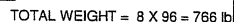
JSI GRIP= 0.79 (H) (INPUT = 0.90)
JSI METAL= 0.49 (B) (INPUT = 1.00)



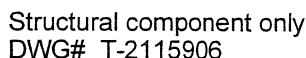
Structural component only
DWG# T-2115903

Structural component only
DWG# T-2115904





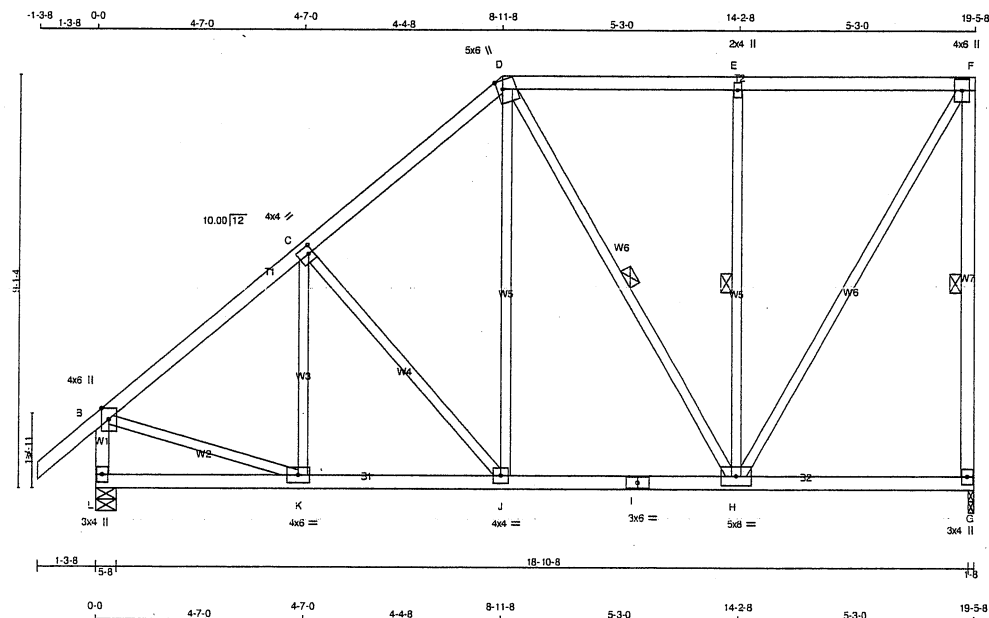
JSI GRIP= 0.88 (K) (INPUT = 0.90)
JSI METAL= 0.26 (C) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412982	T6	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:30 2021 Page 1
ID:wTM7ioISByniqocTeDgf3Pyb9F8-n5ILJ_fEVhBjVwJB4asQIRx3Ne_TQQKP7K9G6zCaIN



TOTAL WEIGHT = 2 X 103 = 207 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
G - F	2x4	DRY	No.2
L - B	2x4	DRY	No.2
L - I	2x4	DRY	No.2
I - G	2x4	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+p	MT20	4.0	6.0	Edge	
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TMVW+p	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMWW-t	MT20	5.0	8.0		
I	BS-t	MT20	3.0	6.0		
J	BMWW-t	MT20	4.0	4.0		
K	BMWW-t	MT20	4.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	HORZ	DOWN	UPLIFT
G	1073	0	1073	0
L	1200	0	1200	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0
L	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) G, L

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 41	-91.8	-91.8	0.13 (1)	10.00	K-C	-132 / 29
B-C	-988 / 0	-91.8	-91.8	0.34 (1)	5.83	C-J	-293 / 0
C-D	-803 / 0	-91.8	-91.8	0.33 (1)	6.25	J-D	0 / 305
D-E	-509 / 0	-91.8	-91.8	0.43 (1)	6.25	D-H	-166 / 0
E-F	-509 / 0	-91.8	-91.8	0.43 (1)	6.25	H-E	-596 / 0
G-F	-1033 / 0	0.0	0.0	0.40 (1)	6.18	H-F	0 / 988
L-B	-1164 / 0	0.0	0.0	0.12 (1)	7.39	B-K	0 / 814
L-K	0 / 0	-18.5	-18.5	0.09 (4)	10.00		
K-J	0 / 783	-18.5	-18.5	0.17 (1)	10.00		
J-I	0 / 594	-18.5	-18.5	0.18 (4)	10.00		
I-H	0 / 594	-18.5	-18.5	0.18 (4)	10.00		
H-G	0 / 0	-18.5	-18.5	0.12 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 25.6	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 2.00/12 MINIMUM

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

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

(55% OF 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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.43/1.00 (E-F:1), BC=0.18/1.00 (H-J:4), WB=0.32/1.00 (E-H:1), SSI=0.23/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES	PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	650	371	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.77 (B) (INPUT = 0.90)
JSI METAL = 0.50 (B) (INPUT = 1.00)

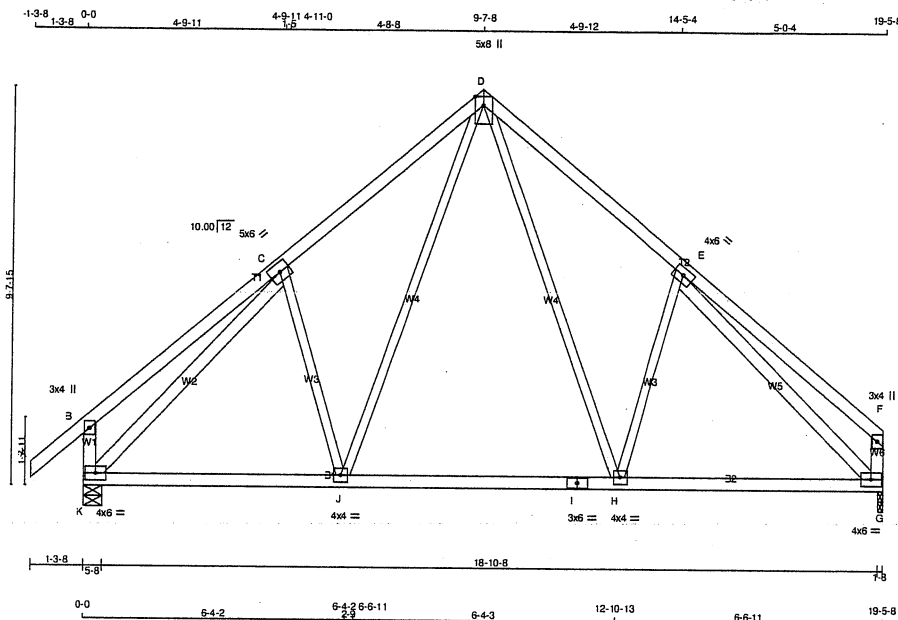


Structural component only
DWG# T-2115907

JOB NAME 412961	TRUSS NAME T7	QUANTITY 6	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	-------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MITek Industries, Inc. Wed May 26 11:58:13 2021 Page 1
ID:AsmHx6G_2ZhVLsQsbMcljUyapb7-kReN2YKRzByytkVrXvmftiY0BrB8FQtMzZrMgAzCeze



Scale = 1:53.3

TOTAL WEIGHT = 6 X 95 = 573 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+p	MT20	5.0	8.0	Edge	
E	TMWW-t	MT20	4.0	6.0		
F	TMV+p	MT20	3.0	4.0		
G	BMVW1-t	MT20	4.0	6.0		
H	BMVW-t	MT20	4.0	4.0		
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	4.0	4.0		
K	BMVW1-t	MT20	4.0	6.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
K	1200	0	1200	0	5-8	5-8
G	1073	0	1073	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	846	569 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 41	-91.8 -91.8	0.13 (1)	10.00	C-J	-272 / 0	0.14 (1)
B-C	0 / 35	-91.8 -91.8	0.35 (1)	10.00	J-D	0 / 413	0.09 (1)
C-D	-938 / 0	-91.8 -91.8	0.29 (1)	6.04	D-H	0 / 454	0.10 (1)
D-E	-957 / 0	-91.8 -91.8	0.30 (1)	5.99	H-E	-308 / 0	0.16 (1)
E-F	0 / 35	-91.8 -91.8	0.37 (1)	10.00	K-C	-1166 / 0	0.75 (1)
K-B	-285 / 0	0.0 0.0	0.03 (1)	7.81	E-G	-1174 / 0	0.80 (1)
G-F	-168 / 0	0.0 0.0	0.02 (1)	7.81			
K-J	0 / 779	-18.5 -18.5	0.24 (4)	10.00			
J-I	0 / 556	-18.5 -18.5	0.23 (4)	10.00			
I-H	0 / 556	-18.5 -18.5	0.23 (4)	10.00			
H-G	0 / 803	-18.5 -18.5	0.25 (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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 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) = $L/360$ (0.65")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.03")
ALLOWABLE DEFL.(TL) = $L/360$ (0.65")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.07")

CSI: TC=0.37/1.00 (E-F:1), BC=0.25/1.00 (G-H:4), WB=0.80/1.00 (E-G:1), SS=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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

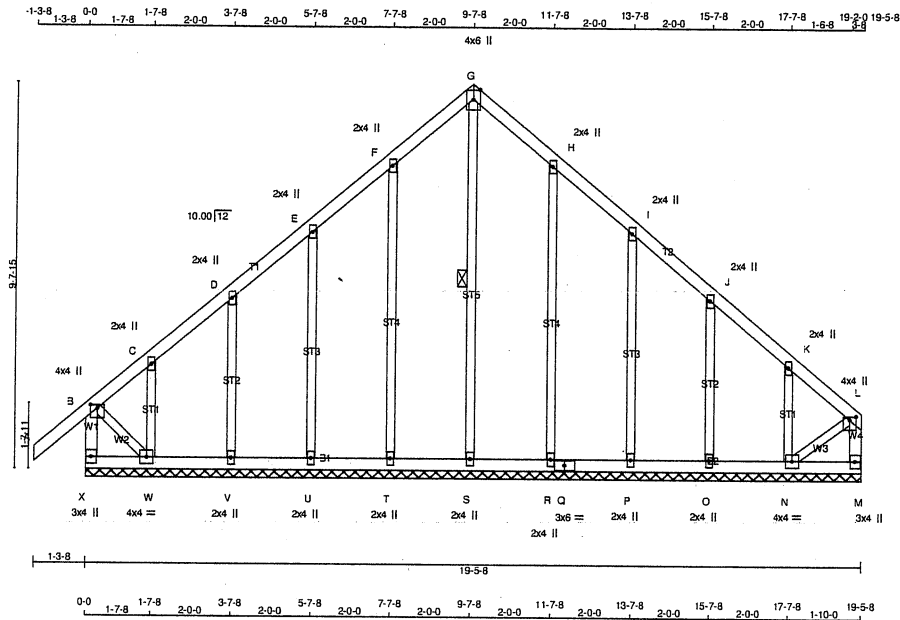
JSI GRIP= 0.85 (E) (INPUT = 0.90)
JSI METAL= 0.29 (E) (INPUT = 1.00)



Structural component only
DWG# T-2115812

JOB NAME 412961	TRUSS NAME T7G	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. Wed May 26 11:58:14 2021 Page 1
ID:AsmHx6G_2ZhVLSQsbMcjUyapb7-CeCiGuL3kU4pVu425cHuQw4FfFa?_OfVCDawCczCezd



TOTAL WEIGHT = 98 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - G	2x4	DRY	No.2
G - L	2x4	DRY	No.2
X - B	2x4	DRY	No.2
M - L	2x4	DRY	No.2
X - Q	2x4	DRY	No.2
Q - M	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C, D, E, F, H, I, J, K						
C	TMW+w	MT20	2.0	4.0		
G	TTW+p	MT20	4.0	6.0	Edge	
L	TMVW+p	MT20	4.0	4.0	1.00	2.00
M	BMV1+p	MT20	3.0	4.0		
N	BMW1-t	MT20	4.0	4.0		
O, P, R, S, T, U, V						
O	BMW1+w	MT20	2.0	4.0		
Q	BS-t	MT20	3.0	6.0		
W	BMW1-t	MT20	4.0	4.0		
X	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
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 LATERAL BRACE(S) AT 1/2 LENGTH OF G-S.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 41	-91.8	-91.8 0.13 (1)	10.00	S-G	-123 / 0	0.08 (1)
B-C	-74 / 0	-91.8	-91.8 0.12 (1)	6.25	T-F	-209 / 0	0.25 (1)
C-D	-30 / 0	-91.8	-91.8 0.05 (1)	6.25	U-E	-173 / 0	0.11 (1)
D-E	-34 / 0	-91.8	-91.8 0.05 (1)	6.25	V-D	-195 / 0	0.06 (1)
E-F	-25 / 0	-91.8	-91.8 0.05 (1)	6.25	W-C	-97 / 0	0.02 (1)
F-G	-37 / 0	-91.8	-91.8 0.05 (1)	6.25	R-H	-208 / 0	0.25 (1)
G-H	-37 / 0	-91.8	-91.8 0.05 (1)	6.25	P-I	-176 / 0	0.11 (1)
H-I	-26 / 0	-91.8	-91.8 0.05 (1)	6.25	O-J	-180 / 0	0.06 (1)
I-J	-32 / 0	-91.8	-91.8 0.04 (1)	6.25	N-K	-185 / 0	0.03 (1)
J-K	-38 / 0	-91.8	-91.8 0.04 (1)	6.25	B-W	0 / 41	0.01 (1)
K-L	-34 / 0	-91.8	-91.8 0.04 (1)	6.25	N-L	0 / 41	0.01 (1)
X-B	-301 / 0	0.0	0.0 0.03 (1)	7.81			
M-L	-113 / 0	0.0	0.0 0.01 (1)	7.81			
X-W	0 / 0	-18.5	-18.5 0.01 (4)	10.00			
W-V	0 / 29	-18.5	-18.5 0.02 (4)	10.00			
V-U	0 / 25	-18.5	-18.5 0.02 (4)	10.00			
U-T	0 / 22	-18.5	-18.5 0.02 (4)	10.00			
T-S	0 / 19	-18.5	-18.5 0.02 (4)	10.00			
S-R	0 / 19	-18.5	-18.5 0.02 (4)	10.00			
R-Q	0 / 22	-18.5	-18.5 0.02 (4)	10.00			
Q-P	0 / 22	-18.5	-18.5 0.02 (4)	10.00			
P-O	0 / 25	-18.5	-18.5 0.02 (4)	10.00			
O-N	0 / 29	-18.5	-18.5 0.02 (4)	10.00			
N-M	0 / 0	-18.5	-18.5 0.02 (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

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

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

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

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

CSI: TC=0.13/1.00 (A-B:1), BC=0.02/1.00 (N-O:4), WB=0.25/1.00 (F-T: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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.51 (N) (INPUT = 0.90)
JSI METAL= 0.11 (F) (INPUT = 1.00)

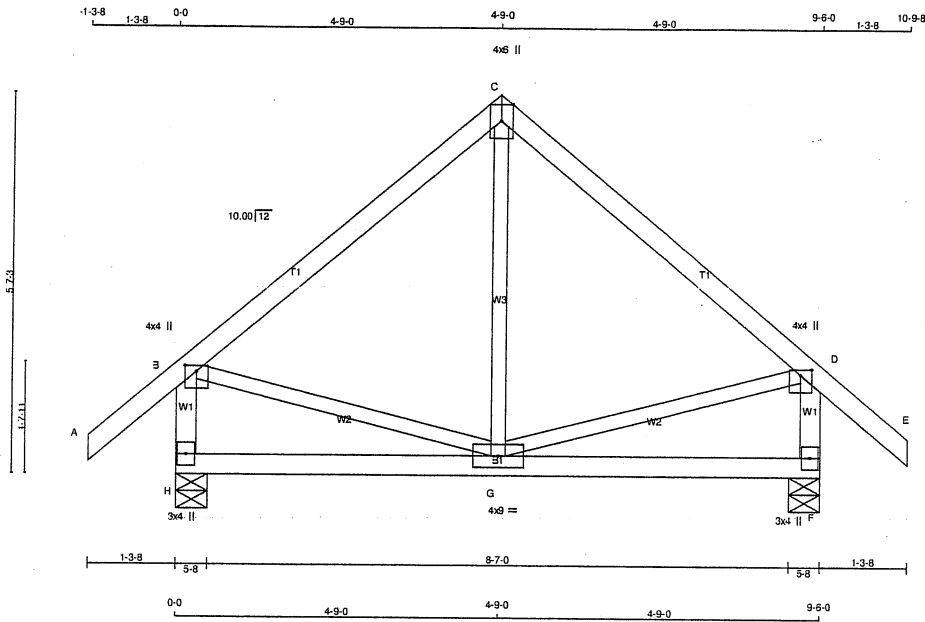


Structural component only
DWG# T-2115813

JOB NAME 412982	TRUSS NAME T8	QUANTITY 3	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	-------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:30 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-n5lJ_fEVhBjWvJB4asQIRzcNtTVYKP7K9G6zCaIn



TOTAL WEIGHT = 3 X 43 = 130 lb
[M/F]

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
H - B	2x4	DRY	No.2	SPF	
F - D	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	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	1.00	2.00
C	TTW+p	MT20	4.0	6.0	Edge	
D	TMVW+p	MT20	4.0	4.0	1.00	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
H	651 0	651 0	5-8	5-8
F	651 0	651 0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	458	314 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0
F	458	314 / 0	0 / 0	0 / 0	0 / 0	144 / 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	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
MEMB.	FORCE (LBS)	VERT. (PLF)	CS1 (LC)	UNBRAC	LENGTH	FR-TO	MEMB.	FORCE (LBS)	CS1 (LC)
FR-TO									
A-B	0 / 41	-91.8	-91.8	0.13 (1)	10.00	G-C	-27 / 72	0.02 (4)	
B-C	-319 / 0	-91.8	-91.8	0.27 (1)	6.25	B-G	0 / 254	0.06 (1)	
C-D	-319 / 0	-91.8	-91.8	0.27 (1)	6.25	G-D	0 / 254	0.06 (1)	
D-E	0 / 41	-91.8	-91.8	0.13 (1)	10.00				
H-B	-617 / 0	0.0	0.0	0.07 (1)	7.81				
F-D	-617 / 0	0.0	0.0	0.07 (1)	7.81				
H-G	0 / 0	-18.5	-18.5	0.12 (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

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 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 (0.32")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CS1: TC=0.27/1.00 (C-D:1), BC=0.12/1.00 (G-H:4), WB=0.06/1.00 (B-G:1), SSI=0.13/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (B) (INPUT = 0.90)
JSI METAL= 0.14 (D) (INPUT = 1.00)

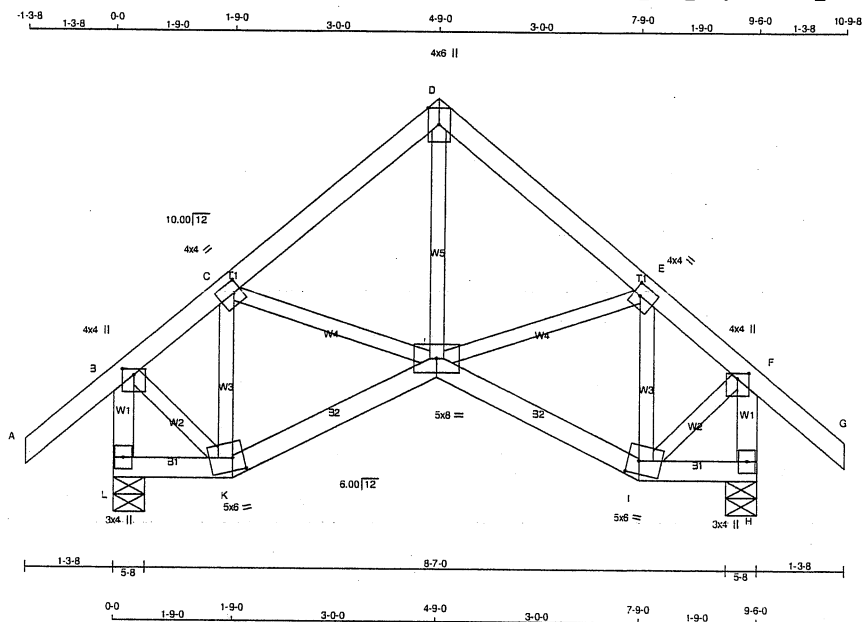


Structural component only
DWG# T-2115908

JOB NAME 412982	TRUSS NAME T9S	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:30 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-n5lJ_fEVhBjWvJB4asQIR0nNfaTUIKP7K9G6zCaIn



TOTAL WEIGHT = 2 X 48 = 95 lb

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

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTW+p	MT20	4.0	6.0	Edge	
E	TMWW-t	MT20	4.0	4.0	2.00	1.25
F	TMVW+p	MT20	4.0	4.0	1.00	2.00
H	BMV1+p	MT20	3.0	4.0		
I	BBWW-m	MT20	5.0	6.0	2.25	2.00
J	BBWWW-p	MT20	5.0	8.0		
K	BBWW-m	MT20	5.0	6.0	2.25	2.00
L	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP/LIFT
L	651	0	651	0
H	651	0	651	0

UNFACTORED REACTIONS

1ST CASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	458	314 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0
H	458	314 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, 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. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 41	-91.8 -91.8	0.13 (1)	J-D	0 / 268	0.06 (1)	
B-C	-354 / 0	-91.8 -91.8	0.09 (1)	J-E	0 / 59	0.01 (1)	
C-D	-414 / 0	-91.8 -91.8	0.11 (1)	I-E	-279 / 0	0.05 (1)	
D-E	-414 / 0	-91.8 -91.8	0.11 (1)	C-J	0 / 59	0.01 (1)	
E-F	-354 / 0	-91.8 -91.8	0.09 (1)	K-C	-279 / 0	0.05 (1)	
F-G	0 / 41	-91.8 -91.8	0.13 (1)	B-K	0 / 328	0.07 (1)	
L-B	-635 / 0	0.0 0.0	0.07 (1)	I-F	0 / 328	0.07 (1)	
H-F	-635 / 0	0.0 0.0	0.07 (1)				
L-K	0 / 0	-18.5 -18.5	0.02 (4)				
K-J	0 / 283	-18.5 -18.5	0.07 (1)				
J-I	0 / 283	-18.5 -18.5	0.07 (1)				
I-H	0 / 0	-18.5 -18.5	0.02 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 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) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.13/1.00 (A-B:1), BC=0.07/1.00 (I-J:1), WB=0.07/1.00 (F-I:1), SS=0.10/1.00 (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 (PSI)	SECTION (PL)
MAX	MIN	MAX
MT20	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

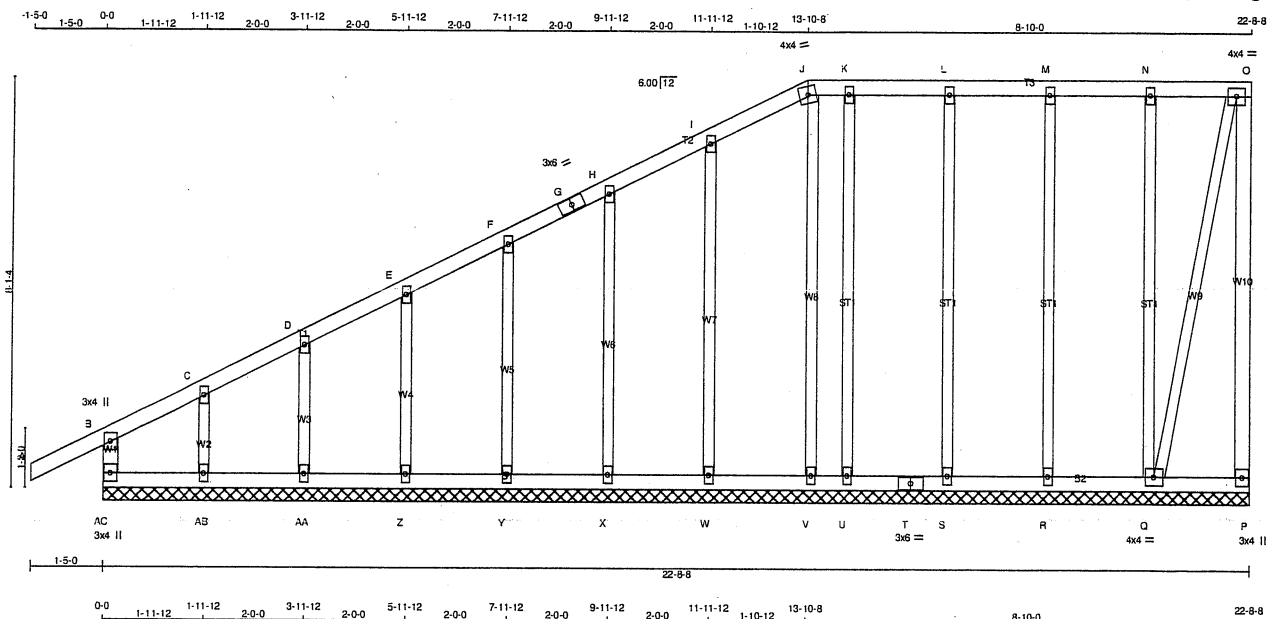
JSI GRIP= 0.44 (F) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115909

JOB NAME 412982	TRUSS NAME T10G	QUANTITY 4	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. Wed May 26 16:46:31 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-FlskWKgsG?Ja73uOto55yWzAln0gCvjTen4ioZzCaIm



TOTAL WEIGHT = 4 X 122 = 488 lb

LUMBER				DESCR.	
N. L. G. A. RULES	SIZE	LUMBER		SPF	
CHORDS					
AC - B	2x4 DRY	No.2		SPF	
A - G	2x4 DRY	No.2		SPF	
G - J	2x4 DRY	No.2		SPF	
J - O	2x4 DRY	No.2		SPF	
P - U	2x4 DRY	No.2		SPF	
AC - T	2x4 DRY	No.2		SPF	
T - P	2x4 DRY	No.2		SPF	
ALL WEBS	2x3 DRY	No.2		SPF	
ALL GABLE WEBS	2x3 DRY	No.2		SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	3.0	4.0		
C, D, E, F, H, I, K, L, M, N					
C TMV+w	MT20	2.0	4.0		
G TS-t	MT20	3.0	6.0		
J TTW-m	MT20	4.0	4.0		
O TMVW-t	MT20	4.0	4.0		
P BMV1+p	MT20	3.0	4.0		
Q BMVW1-t	MT20	4.0	4.0		
R, S, U, V, W, X, Y, Z, AA, AB					
R BMV1+w	MT20	2.0	4.0		
T BS-t	MT20	3.0	6.0		
AC BMV1+p	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 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. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
AC-B	-271 / 0	0.0 0.0 0.03 (1)	7.81	Q-N	-200 / 0	0.25 (1)	
A-B	0 / 30	-91.8 -91.8 0.14 (1)	10.00	R-M	-182 / 0	0.23 (1)	
B-C	-21 / 0	-91.8 -91.8 0.14 (1)	6.25	S-L	-190 / 0	0.24 (1)	
C-D	0 / 10	-91.8 -91.8 0.05 (1)	10.00	U-K	-149 / 0	0.19 (1)	
D-E	0 / 9	-91.8 -91.8 0.05 (1)	10.00	V-J	-95 / 0	0.12 (1)	
E-F	0 / 14	-91.8 -91.8 0.04 (1)	10.00	AB-C	-118 / 0	0.02 (1)	
F-G	0 / 16	-91.8 -91.8 0.04 (1)	10.00	AA-D	-196 / 0	0.04 (1)	
G-H	0 / 16	-91.8 -91.8 0.04 (1)	10.00	Z-E	-179 / 0	0.05 (1)	
H-I	0 / 19	-91.8 -91.8 0.05 (1)	10.00	Y-F	-183 / 0	0.07 (1)	
I-J	0 / 13	-91.8 -91.8 0.05 (1)	10.00	X-H	-180 / 0	0.11 (1)	
J-K	0 / 20	-91.8 -91.8 0.03 (1)	10.00	W-I	-200 / 0	0.18 (1)	
K-L	0 / 20	-91.8 -91.8 0.05 (1)	10.00	Q-O	-79 / 0	0.11 (1)	
L-M	0 / 20	-91.8 -91.8 0.05 (1)	10.00				
M-N	0 / 20	-91.8 -91.8 0.05 (1)	10.00				
N-O	0 / 20	-91.8 -91.8 0.05 (1)	10.00				
P-O	0 / 0	0.0 0.0 0.00 (1)	10.00				
AC-AB	0 / 0	-18.5 -18.5 0.02 (4)	10.00				
AB-AA	-4 / 0	-18.5 -18.5 0.02 (4)	10.00				
AA-Z	-9 / 0	-18.5 -18.5 0.01 (4)	10.00				
Z-Y	-12 / 0	-18.5 -18.5 0.01 (4)	6.25				
Y-X	-14 / 0	-18.5 -18.5 0.01 (4)	6.25				
X-W	-16 / 0	-18.5 -18.5 0.02 (4)	6.25				
W-V	-18 / 0	-18.5 -18.5 0.02 (4)	6.25				
V-U	-20 / 0	-18.5 -18.5 0.01 (4)	6.25				
U-T	-20 / 0	-18.5 -18.5 0.02 (4)	6.25				
T-S	-20 / 0	-18.5 -18.5 0.02 (4)	6.25				
S-R	-20 / 0	-18.5 -18.5 0.02 (4)	6.25				
R-Q	-20 / 0	-18.5 -18.5 0.02 (4)	6.25				
Q-P	0 / 0	-18.5 -18.5 0.02 (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 2.00/12 MINIMUM

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

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

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=0.14/1.00 (A-B:1), BC=0.02/1.00 (Q-R:4), WB=0.25/1.00 (N-Q:1), SS=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.59 (J) (INPUT = 0.90)
JSI METAL = 0.08 (I) (INPUT = 1.00)

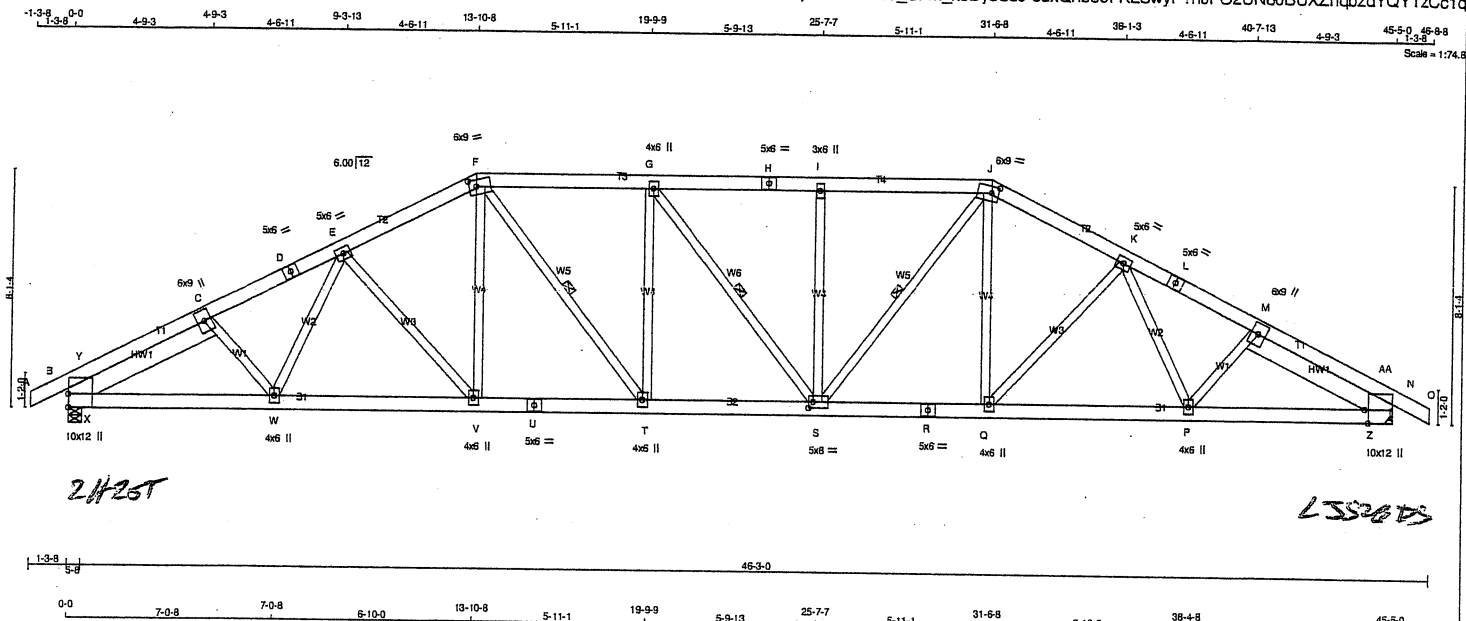


Structural component only
DWG# T-2115910

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
413226	T11	10	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mittek Industries, Inc. Wed May 26 15:18:33 2021 Page 1
ID:U6yi?rbeFFwlof_UFm_koDybSsJ-ouxQnbo9FKLSwyP?hJPO2UN80BUXZhqbdYQYTzCc1c



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x6 DRY	No.2	SPF		
D - F	2x6 DRY	No.2	SPF		
F - H	2x6 DRY	No.2	SPF		
H - J	2x6 DRY	No.2	SPF		
J - L	2x6 DRY	No.2	SPF		
L - O	2x6 DRY	No.2	SPF		
O - R	2x6 DRY	No.2	SPF		
R - N	2x6 DRY	No.2	SPF		

REINFORCING MEMBERS	SIZE	LUMBER	DESCR.
HW1	2x8 DRY	No.2	SPF
HW2	2x8 DRY	No.2	SPF

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMBMW+H	MT20	10.0	12.0	5.50	
C TMBW+H	MT20	6.0	9.0		
D, H, L					
D TS-t	MT20	5.0	6.0		
E TMBW-t	MT20	5.0	6.0		
F TTWW-m	MT20	6.0	9.0	2.75	3.00
G TMBW-t	MT20	4.0	6.0		
I TMBW-w	MT20	3.0	6.0		
J TTWW-m	MT20	6.0	9.0	2.75	3.00
K TMBW-t	MT20	5.0	6.0		
M TMBW-t	MT20	6.0	9.0		
N TMBMW+H	MT20	10.0	12.0	Edge	1.50
P, Q, T, V, W					
P BMBW-t	MT20	4.0	6.0		
R BS-t	MT20	5.0	6.0		
S BMBW-t	MT20	5.0	8.0	2.50	2.00
U BS-t	MT20	5.0	6.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
B	3675	0	3709	195
N	3675	0	3709	0

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

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 1082 LBS. FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1082 LBS. FACTORED UPLIFT

PROVIDE FOR 195 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
B	2713	1634 / 0	477 / 0	0 / 0	0 / -1073
N	2713	1634 / 0	477 / 0	0 / 0	59 / -1073

HORIZONTAL REACTIONS

B	0 / 0	0 / 0	0 / 0	139 / -139	0 / 0
---	-------	-------	-------	------------	-------

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

LOADING

TOTAL LOAD CASES: (18)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC1)	MAX. FACTORED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LENGTH (LC)
FR-TO	A-B	0 / 1	-115.2	-115.2	0.09 (2)	10.00	C-W	-30 / 380	0.06 (3)
	B-Y	-4270 / 1161	-115.2	-115.2	0.18 (2)	4.08	W-E	-108 / 274	0.04 (5)
	Y-C	-2819 / 902	-115.2	-115.2	0.15 (2)	4.88	E-V	-825 / 384	0.54 (2)
	C-D	-5532 / 1713	-115.2	-115.2	0.33 (2)	3.53	V-F	-234 / 885	0.18 (13)
	D-E	-5532 / 1713	-115.2	-115.2	0.33 (2)	3.53	F-T	-482 / 1515	0.24 (3)
	E-F	-4993 / 1604	-115.2	-115.2	0.29 (2)	3.73	T-G	-977 / 432	0.78 (3)
	F-G	-5190 / 1688	-115.2	-115.2	0.41 (1)	3.53	G-S	-325 / 310	0.14 (2)
	G-H	-5185 / 1686	-115.2	-115.2	0.41 (1)	3.53	S-I	-721 / 361	0.58 (2)
	H-I	-5185 / 1686	-115.2	-115.2	0.41 (1)	3.53	I-J	-477 / 1506	0.24 (2)
	I-J	-5185 / 1685	-115.2	-115.2	0.41 (1)	3.55	J-Q	-237 / 890	0.19 (14)
	J-K	-4994 / 1605	-115.2	-115.2	0.29 (3)	3.73	Q-K	-824 / 384	0.54 (3)
	K-L	-5532 / 1713	-115.2	-115.2	0.33 (3)	3.53	K-P	-120 / 274	0.05 (9)
	L-M	-5532 / 1713	-115.2	-115.2	0.33 (3)	3.53	P-M	-24 / 380	0.06 (2)
	M-AA	-2820 / 904	-115.2	-115.2	0.15 (3)	4.88	X-Y	-385 / 1912	0.00 (1)
	AA-N	-4270 / 1164	-115.2	-115.2	0.18 (3)	4.08	X-C	-2971 / 828	0.50 (1)
	N-O	0 / 1	-115.2	-115.2	0.09 (3)	10.00	M-Z	-2970 / 827	0.50 (1)
	B-X	-866 / 2518	-39.5	-39.5	0.30 (2)	6.25	Z-AA	-387 / 1912	0.00 (1)
	X-W	-1526 / 4875	-39.5	-39.5	0.68 (1)	6.25			
	W-V	-1438 / 4893	-39.5	-39.5	0.67 (1)	6.25			
	V-U	-1189 / 4457	-39.5	-39.5	0.62 (1)	6.25			
	U-T	-1189 / 4457	-39.5	-39.5	0.62 (1)	6.25			
	T-S	-1376 / 5190	-39.5	-39.5	0.68 (1)	6.25			
	S-R	-1028 / 4458	-39.5	-39.5	0.62 (1)	6.25			
	R-Q	-1028 / 4458	-39.5	-39.5	0.62 (1)	6.25			
	Q-P	-1244 / 4893	-39.5	-39.5	0.67 (1)	6.25			
	P-Z	-1333 / 4874	-39.5	-39.5	0.68 (1)	6.25			
	Z-N	-673 / 2518	-39.5	-39.5	0.30 (3)	6.25			

TOTAL WEIGHT = 10 X 299 = 2993 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 33.4 PSF
DL	= 6.0 PSF
BOT CH. LL	= 10.5 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 57.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR. EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.51")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL) = L/180 (3.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.32")

CSI: TC=0.41/1.00 (F-G-1), BC=0.88/1.00 (P-Z-1), WB=0.78/1.00 (G-T-3), SS=0.24/1.00 (F-G-2)

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

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

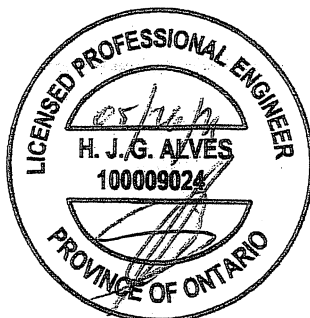
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.88 (F) (INPUT=0.90)
JSI METAL=0.86 (C) (INPUT=1.00)



Structural component only
DWG# T-2115850

CONTINUED ON PAGE 2

JOB NAME 413226	TRUSS NAME T11	QUANTITY 10	PLY 1	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	--------------------------	-----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 15:18:39 2021 Page 2
ID:U6yi?rbeFFwxf Ufm koDybSsJ-ouxQnbo9FKLSwyP?hJPO2UN80BUXZhqbzdYQYTzCctc

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

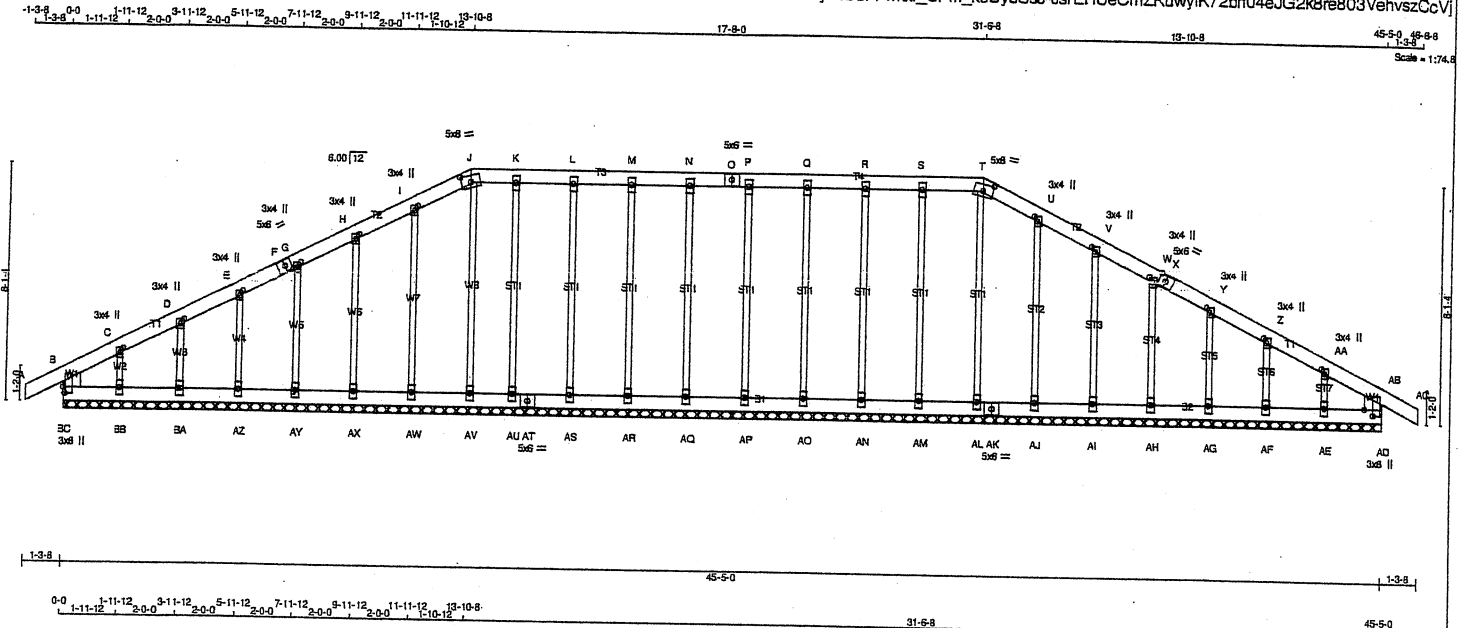
WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (31-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.



Structural component only
DWG# T-2115850 *2/2*

JOB NAME 413226	TRUSS NAME T11G	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 Mittek Industries, Inc. Wad May 26 14:46:40 2021 Page 1
ID:U6yi?rbeFFwkoF_UFm_koDybSsJ-JsrEHUeCmZKuwyfK72bn04eJG2k8re803VehvszGcVj



TOTAL WEIGHT = 2 X 272 = 544 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
BC- B	2x8 DRY	No.2	SPF
A- F	2x6 DRY	No.2	SPF
F- J	2x6 DRY	No.2	SPF
J- O	2x6 DRY	No.2	SPF
O- T	2x6 DRY	No.2	SPF
T- X	2x6 DRY	No.2	SPF
X- AC	2x6 DRY	No.2	SPF
AD- AB	2x8 DRY	No.2	SPF
BC- AT	2x6 DRY	No.2	SPF
AT- AK	2x6 DRY	No.2	SPF
AK- AD	2x6 DRY	No.2	SPF
ALL WEBS	2x3 DRY	No.2	SPF
ALL GABLE WEBS	2x3 DRY	No.2	SPF
DRY: SEASONED LUMBER.			

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B, AB, AD, BC				
B				
C, D, E, G, H, I, U, V, W, Y, Z, AA				
C TMW+w	MT20	3.0	4.0	2.00 1.25
F TS+	MT20	5.0	6.0	2.50 2.75
J TTW-m	MT20	5.0	8.0	2.75 4.00
K, L, M, N, P, Q, R, S				
K TMW+w	MT20	3.0	6.0	
O TS+	MT20	5.0	6.0	
T TTW-m	MT20	5.0	8.0	2.75 4.00
X TS+	MT20	5.0	6.0	2.50 2.75
AD TMBMV1+p	MT20	3.0	8.0	2.50 3.75
AE, AF, AG, AH, AI, AJ, AL, AM, AN, AO, AP, AQ, AR, AS, AU, AV, AW, AX, AY, AZ, BA, BB				
AE Bmw1+w	MT20	3.0	6.0	
AK BS+	MT20	5.0	6.0	
AT BS+	MT20	5.0	6.0	
BC TMBMV1+p	MT20	3.0	8.0	2.50 0.50

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	UNBRACED LENGTH FR-TO
FR-TO		FROM	TO	FR-TO			
BC-B	-260 / 0	0.0	0.0 0.02 (1)	AL-T	-186 / 0	0.21 (1)	
A-B	0 / 29	-91.8	-91.8 0.06 (1)	AM-S	-190 / 0	0.21 (1)	
B-C	-50 / 0	-91.8	-91.8 0.05 (1)	AN-R	-183 / 0	0.21 (1)	
C-D	-24 / 0	-91.8	-91.8 0.02 (1)	AO-Q	-183 / 0	0.21 (1)	
D-E	-19 / 0	-91.8	-91.8 0.02 (1)	AP-P	-183 / 0	0.21 (1)	
E-F	-13 / 0	-91.8	-91.8 0.02 (1)	AQ-N	-183 / 0	0.21 (1)	
F-G	-13 / 0	-91.8	-91.8 0.02 (1)	AR-M	-184 / 0	0.21 (1)	
G-H	-9 / 0	-91.8	-91.8 0.02 (1)	AS-L	-184 / 0	0.21 (1)	
H-I	-5 / 0	-91.8	-91.8 0.02 (1)	AU-K	-163 / 0	0.18 (1)	
I-J	-3 / 0	-91.8	-91.8 0.02 (1)	AJ-U	-183 / 0	0.14 (1)	
J-K	0 / 0	-91.8	-91.8 0.02 (1)	AI-V	-182 / 0	0.09 (1)	
K-L	0 / 0	-91.8	-91.8 0.02 (1)	AH-W	-182 / 0	0.06 (1)	
L-M	0 / 0	-91.8	-91.8 0.02 (1)	AG-Y	-180 / 0	0.04 (1)	
M-N	0 / 0	-91.8	-91.8 0.02 (1)	AF-Z	-188 / 0	0.03 (1)	
N-O	0 / 0	-91.8	-91.8 0.02 (1)	AE-AA	-137 / 0	0.02 (1)	
O-P	0 / 0	-91.8	-91.8 0.02 (1)	AV-J	-159 / 0	0.18 (1)	
P-Q	0 / 0	-91.8	-91.8 0.02 (1)	BB-C	-137 / 0	0.02 (1)	
Q-R	0 / 0	-91.8	-91.8 0.02 (1)	BA-D	-188 / 0	0.03 (1)	
R-S	0 / 0	-91.8	-91.8 0.02 (1)	AZ-E	-180 / 0	0.04 (1)	
S-T	0 / 0	-91.8	-91.8 0.02 (1)	AY-G	-181 / 0	0.06 (1)	
T-U	-2 / 0	-91.8	-91.8 0.02 (1)	AX-H	-183 / 0	0.10 (1)	
U-V	-5 / 0	-91.8	-91.8 0.02 (1)	AW-I	-184 / 0	0.14 (1)	
V-W	-9 / 0	-91.8	-91.8 0.02 (1)				
W-X	-14 / 0	-91.8	-91.8 0.02 (1)				
X-Y	-14 / 0	-91.8	-91.8 0.02 (1)				
Y-Z	-20 / 0	-91.8	-91.8 0.02 (1)				
Z-AA	-24 / 0	-91.8	-91.8 0.02 (1)				
AA-AB	-51 / 0	-91.8	-91.8 0.05 (1)				
AB-AC	0 / 29	-91.8	-91.8 0.06 (1)				
AD-AB	-260 / 0	0.0	0.0 0.02 (1)				
BC-BB	0 / 33	-18.5	-18.5 0.03 (1)				
BB-BA	0 / 24	-18.5	-18.5 0.01 (1)				
BA-AZ	0 / 17	-18.5	-18.5 0.01 (4)				
AZ-AY	0 / 12	-18.5	-18.5 0.01 (4)				
AY-AX	0 / 8	-18.5	-18.5 0.01 (4)				
AX-AW	0 / 5	-18.5	-18.5 0.01 (4)				
AW-AV	0 / 2	-18.5	-18.5 0.01 (4)				
AV-AU	0 / 0	-18.5	-18.5 0.01 (4)				
AU-AT	0 / 0	-18.5	-18.5 0.01 (4)				
AT-AS	0 / 0	-18.5	-18.5 0.01 (4)				
AS-AR	0 / 0	-18.5	-18.5 0.01 (4)				
AR-AQ	0 / 0	-18.5	-18.5 0.01 (4)				
AQ-AP	0 / 0	-18.5	-18.5 0.01 (4)				
AP-AO	0 / 0	-18.5	-18.5 0.01 (4)				
AO-AN	0 / 0	-18.5	-18.5 0.01 (4)				
AN-AM	0 / 0	-18.5	-18.5 0.01 (4)				
AM-AL	0 / 0	-18.5	-18.5 0.01 (4)				
AL-AK	0 / 2	-18.5	-18.5 0.01 (4)				
AK-AJ	0 / 2	-18.5	-18.5 0.01 (4)				
AJ-AI	0 / 5	-18.5	-18.5 0.01 (4)				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

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

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

CSI: TC=0.06/1.00 (AB-AC:1), BC=0.03/1.00 (AD-AE:1), WB=0.21/1.00 (S-AM:1), SS=0.07/1.00 (AB-AC:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.25 (J) (INPUT = 0.90)
JSI METAL = 0.09 (AD) (INPUT = 1.00)



Structural component only
DWG# T-2115853

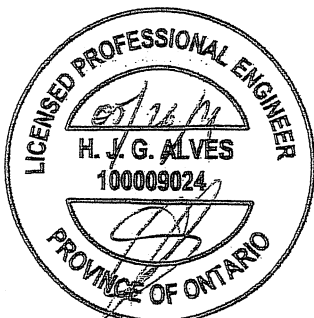
CONTINUED ON PAGE 2

JOB NAME 413226	TRUSS NAME T11G	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 14:46:40 2021 Page 2 ID:U6vi?rbeFFwxf Ufm koDybSsJ-JsrEHUeCmZKuwyfK72bn04eJG2k8re803VehvszCcVi		

LOADING

TOTAL LOAD CASES: (4)

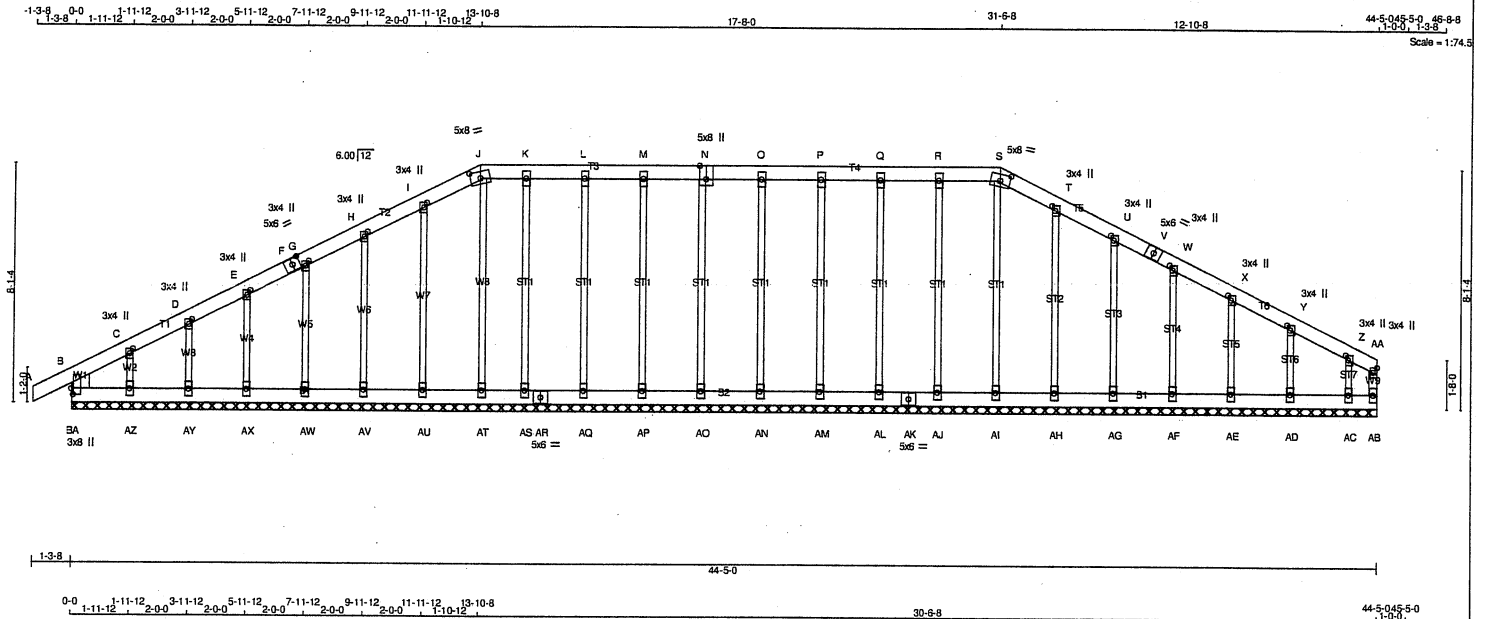
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO						
AI-AH	0 / 8	-18.5	-18.5	0.01 (4)	10.00				
AH-AG	0 / 12	-18.5	-18.5	0.01 (4)	10.00				
AG-AF	0 / 17	-18.5	-18.5	0.01 (4)	10.00				
AF-AE	0 / 25	-18.5	-18.5	0.01 (1)	10.00				
AE-AD	0 / 33	-18.5	-18.5	0.03 (1)	10.00				



JOB NAME 412961	TRUSS NAME T11GA	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	----------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon May 31 14:35:23 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-pKZ7XnW_aZTBg3r925JdINEKrzfy2X8_eMxv6DzAzCf



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
BA- B	2x8	DRY	No.2	SPF
A - F	2x6	DRY	No.2	SPF
F - J	2x6	DRY	No.2	SPF
J - N	2x6	DRY	No.2	SPF
N - S	2x6	DRY	No.2	SPF
S - V	2x6	DRY	No.2	SPF
V - AA	2x6	DRY	No.2	SPF
BA- AR	2x6	DRY	No.2	SPF
AR- AK	2x6	DRY	No.2	SPF
AK- AB	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
AB- AA	2x4	DRY	No.2	SPF
ALL GABLE WEBS				
	2x3	DRY	No.2	SPF
GABLE STUDS SPACED AT 2'-0.0" OC.				

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B				
C, D, E, G, H, I, T, U, W, X, Y, Z				
C TMW+w	MT20	3.0	4.0	2.00 1.25
F TS-t	MT20	5.0	6.0	2.50 2.75
J TTW-m	MT20	5.0	8.0	2.75 4.00
K, L, M, O, P, Q, R				
K TMW+w	MT20	3.0	6.0	
N TSW+H	MT20	5.0	8.0	Edge 2.50
S TTW-m	MT20	5.0	8.0	2.75 4.00
V TS-t	MT20	5.0	6.0	
AA TMW+w	MT20	3.0	4.0	2.00 Edge
AB, AC, AD, AE, AF, AG, AH, AI, AJ, AL, AM, AN, AO, AP, AQ, AS, AT, AU, AV, AW, AX, AY, AZ				
AB BMW1+w	MT20	3.0	6.0	
AK BS-t	MT20	5.0	6.0	
AR BS-t	MT20	5.0	6.0	
BA				
BA TMBMV1+p	MT20	3.0	8.0	2.50 0.50

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.

PROVIDE ANCHORAGE AT BEARING JOINT AB FOR 150 LBS. FACTORED UPLIFT 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 LC1 (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
BA-B	-205 / 0	0.0	0.0 0.01 (1)	AI-S	-166 / 0	0.19 (1)	
A-B	0 / 29	-91.8	-91.8 0.06 (1)	AJ-R	-217 / 0	0.24 (1)	
B-C	0 / 4	-91.8	-91.8 0.07 (1)	AL-Q	-177 / 0	0.20 (1)	
C-D	-8 / 0	-91.8	-91.8 0.07 (1)	AM-P	-177 / 0	0.20 (1)	
D-E	0 / 27	-91.8	-91.8 0.02 (1)	AN-O	-207 / 0	0.23 (1)	
E-F	0 / 27	-91.8	-91.8 0.02 (1)	AO-N	-138 / 0	0.16 (1)	
F-G	0 / 27	-91.8	-91.8 0.02 (1)	AP-M	-218 / 0	0.25 (1)	
G-H	0 / 32	-91.8	-91.8 0.02 (1)	AQ-L	-187 / 0	0.21 (1)	
H-I	0 / 36	-91.8	-91.8 0.03 (1)	AS-K	-160 / 0	0.18 (1)	
I-J	0 / 32	-91.8	-91.8 0.03 (1)	AH-T	-200 / 0	0.16 (1)	
J-K	0 / 37	-91.8	-91.8 0.02 (1)	AG-U	-181 / 0	0.09 (1)	
K-L	0 / 37	-91.8	-91.8 0.03 (1)	AF-W	-181 / 0	0.06 (1)	
L-M	0 / 37	-91.8	-91.8 0.04 (1)	AE-X	-179 / 0	0.04 (1)	
M-N	0 / 37	-91.8	-91.8 0.04 (1)	AD-Y	-179 / 0	0.03 (1)	
N-O	0 / 35	-91.8	-91.8 0.03 (1)	AC-Z	-186 / 0	0.03 (1)	
O-P	0 / 35	-91.8	-91.8 0.03 (1)	AT-J	-158 / 0	0.18 (1)	
P-Q	0 / 35	-91.8	-91.8 0.03 (1)	AZ-C	-229 / 0	0.03 (1)	
Q-R	0 / 35	-91.8	-91.8 0.03 (1)	AY-D	-119 / 0	0.02 (1)	
R-S	0 / 35	-91.8	-91.8 0.03 (1)	AX-E	-193 / 0	0.04 (1)	
S-T	0 / 29	-91.8	-91.8 0.03 (1)	AW-G	-181 / 0	0.06 (1)	
T-U	0 / 33	-91.8	-91.8 0.03 (1)	AV-H	-182 / 0	0.09 (1)	
U-V	0 / 29	-91.8	-91.8 0.03 (1)	AU-I	-198 / 0	0.16 (1)	
V-W	0 / 29	-91.8	-91.8 0.03 (1)	AB-AA	0 / 18	0.00 (1)	
W-X	0 / 25	-91.8	-91.8 0.02 (1)				
X-Y	0 / 18	-91.8	-91.8 0.03 (1)				
Y-Z	0 / 9	-91.8	-91.8 0.03 (1)				
Z-AA	0 / 24	-91.8	-91.8 0.03 (1)				

BA-AZ	0 / 0	-18.5	-18.5 0.01 (4)	10.00
AZ-AY	-14 / 0	-18.5	-18.5 0.01 (4)	6.25
AY-AX	-19 / 0	-18.5	-18.5 0.01 (4)	6.25
AX-AW	-25 / 0	-18.5	-18.5 0.01 (4)	6.25
AW-AV	-29 / 0	-18.5	-18.5 0.01 (4)	6.25
AV-AU	-32 / 0	-18.5	-18.5 0.01 (4)	6.25
AU-AT	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AT-AS	-37 / 0	-18.5	-18.5 0.01 (4)	6.25
AS-AR	-37 / 0	-18.5	-18.5 0.01 (4)	6.25
AR-AQ	-37 / 0	-18.5	-18.5 0.01 (4)	6.25
AQ-AP	-37 / 0	-18.5	-18.5 0.01 (4)	6.25
AP-AO	-37 / 0	-18.5	-18.5 0.01 (4)	6.25
AO-AN	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AN-AM	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AM-AL	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AL-AK	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AK-AJ	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AJ-AI	-35 / 0	-18.5	-18.5 0.01 (4)	6.25
AI-AH	-33 / 0	-18.5	-18.5 0.01 (4)	6.25
AH-AG	-30 / 0	-18.5	-18.5 0.01 (4)	6.25
AG-AF	-26 / 0	-18.5	-18.5 0.01 (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

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

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

THIS DESIGN COMPLIES WITH:

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

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=0.07/1.00 (B-C:1), BC=0.01/1.00 (AY-AZ:4), WB=0.25/1.00 (M-AP:1), SSL=0.08/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.29 (AA) (INPUT = 0.90)
JSI METAL = 0.06 (C) (INPUT = 1.00)



Structural component only
DWG# T-2116501 1/2

CONTINUED ON PAGE 2

JOB NAME 412961	TRUSS NAME T11GA	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	----------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Mon May 31 14:35:23 2021 Page 2
ID:U6yi?rbeFFwxf Ufm koDybSsJ-pKZ7XnW azTBg3r925JdINEKrzfy2X8 eMxv6DzAzC

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 CSI (LC)	MAX. MEMB. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
AF-AE	-22 / 0	-18.5 -18.5	0.01 (4)	6.25			
AE-AD	-17 / 0	-18.5 -18.5	0.01 (4)	6.25			
AD-AC	-10 / 0	-18.5 -18.5	0.01 (4)	6.25			
AC-AB	0 / 2	-18.5 -18.5	0.01 (4)	10.00			

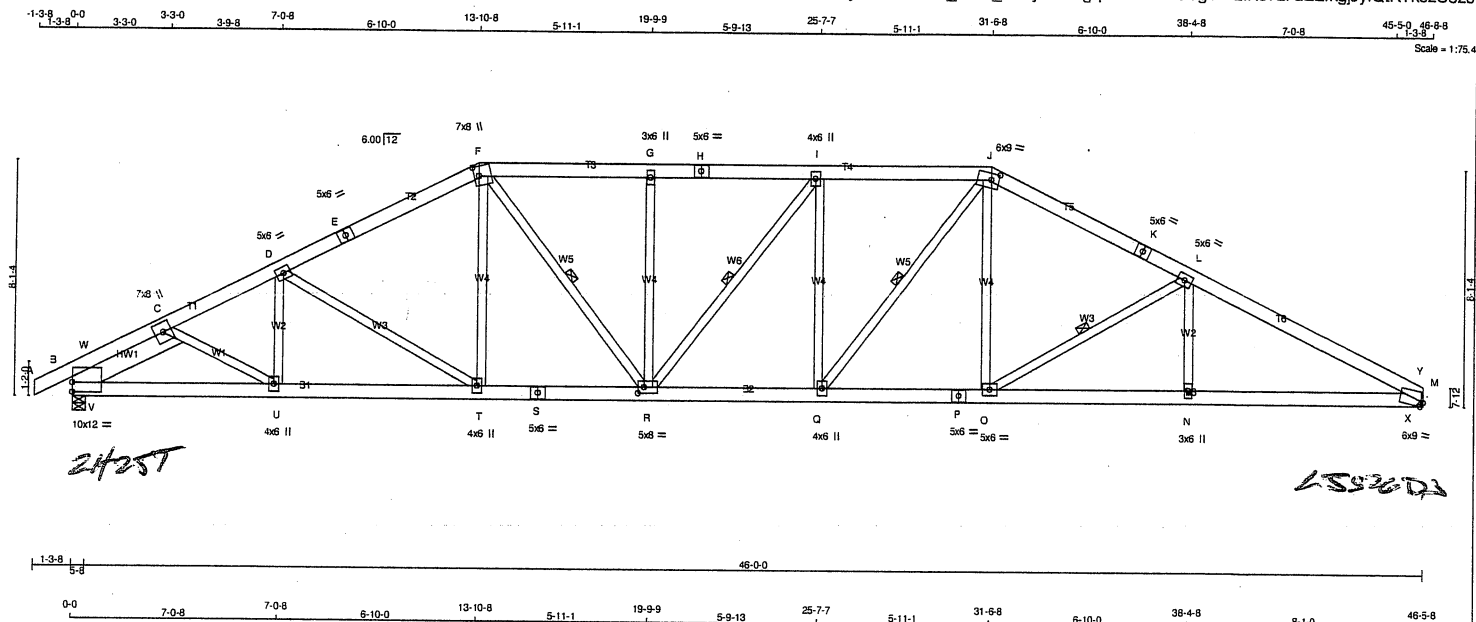


Structural component only
DWG# T-2116501

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T11X	4	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:15 2021 Page 1
ID:U6yi7rbeFFwxf_UFm_koDybSsJ-gqm7TELhVoCg61fEfKo7z7dELfkgJyfQtKtK3zCezc



LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR
A - E	2x6	DRY	No.2	SPF
E - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - K	2x6	DRY	No.2	SPF
K - M	2x6	DRY	No.2	SPF
B - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF
ALL WEBS 2x4 DRY				
DRY: SEASONED LUMBER			No.2	SPF

JOB NAME 412961	TRUSS NAME T11X	QUANTITY 4	PLY 1	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	---------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:15 2021 Page 2
ID:U6yi?rbeFFwxf UFrn koDybSsJ-qgm7TELhVoCg61fEfKo7z7dELfkgljyQtKtK3zCezc

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (31'-0") FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0'-0") FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

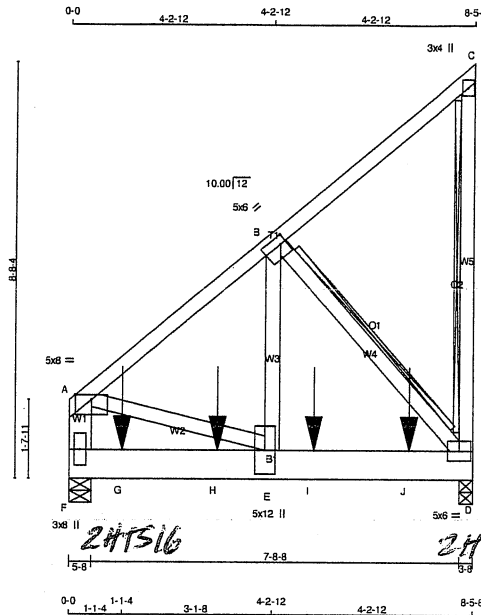


Structural component only
DWG# T-2115814 *7/2*

JOB NAME 412961	TRUSS NAME T12	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:15 2021 Page 1
ID:6ZMXwLBWm_sGlyG7JmrkJzyb8gQ-gqm7TELhVoCg61fEfKo7z7dOJfrUjQufQtKtK3zCezc



Scale = 1/4" = 1'-0"

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	2x8 DRY	1950F 1.7E	SPF		
ALL WEBS EXCEPT	2x4 DRY	No.2	SPF		
B - D	2x4 DRY	2100F 1.8E	SPF		

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C 1 12	TOP	
C - D 1 12	TOP	
F - A 2 12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2 4	SIDE (957.4)	
WEBS : (0.122"x3") SPIRAL NAILS		
2x4 1 6		

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	5.0	8.0	Edge

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT DOWN	REQD BRG
JT	VERT	HORZ	UP/LIFT	IN-SX
D	7777	0	7857	0
F	8212	0	8291	338

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 2326 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT F FOR 2290 LBS. FACTORED UPLIFT

PROVIDE FOR 338 LBS. FACTORED HORIZONTAL REACTION AT JOINT F

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	5726	3507 / 0	974 / 0	0 / 0	263 / -2288	1298 / 0	0 / 0
F	6045	3700 / 0	1028 / 0	0 / 0	234 / -2297	1371 / 0	0 / 0

HORIZONTAL REACTIONS

F	0 / 0	0 / 0	0 / 0	241 / -159	0 / 0	0 / 0
---	-------	-------	-------	------------	-------	-------

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.64 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x6 DRY SPF No.2 T-BRACE AT C-D, B-D

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

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

LOADING

TOTAL LOAD CASES: (18)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-5976 / 1705	-115.2	-115.2 0.20 (2)	4.64	E-B	-2434 / 8360	0.45 (3)
B-C	-121 / 136	-115.2	-115.2 0.12 (2)	6.25	B-D	-6888 / 2128	0.24 (2)
D-C	-221 / 108	0.0	0.0 0.09 (13)	7.81	A-E	-1359 / 4789	0.26 (2)
F-A	-5328 / 1445	0.0	0.0 0.12 (2)	7.47			
F-G	-322 / 216	-39.5	-39.5 0.26 (3)	6.25			
G-H	-322 / 216	-39.5	-39.5 0.26 (3)	6.25			
H-E	-322 / 216	-39.5	-39.5 0.26 (3)	6.25			
E-I	-1414 / 4622	-39.5	-39.5 0.32 (2)	6.25			
I-J	-1414 / 4622	-39.5	-39.5 0.32 (2)	6.25			
J-D	-1414 / 4622	-39.5	-39.5 0.32 (2)	6.25			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-1-4	-2700	-2700	615	BACK	VERT	TOTAL	---	C1
H	3-1-4	-2700	-2700	615	BACK	VERT	TOTAL	---	C1
I	5-1-4	-2700	-2700	615	BACK	VERT	TOTAL	---	C1
J	7-1-4	-2700	-2700	615	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 33.4	PSF
DL = 6.0	PSF	
BOT CH.	LL = 10.5	PSF
DL = 7.4	PSF	
TOTAL LOAD = 57.3	PSF	

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 4 OF BCBC 2018, ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/180 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.20/1.00 (A-B-2), BC=0.32/1.00 (D-E-2), WB=0.45/1.00 (B-E-3), SS=0.89/1.00 (D-E-3)

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

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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (B) (INPUT = 0.90)
JSI METAL= 0.56 (E) (INPUT = 1.00)



Structural component only
DWG# T-2115815

CONTINUED ON PAGE 2

JOB NAME 412961	TRUSS NAME T12	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:15 2021 Page 2
ID:6ZMXwLBWm sGivG7JmrkJzyb8gQ-gqm7TElhVoCg61fEtKo7z7dOJfrUjQufQtKtK3zCezc

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	5.0	6.0	2.00	1.50
C	TMV+p	MT20	3.0	4.0		
D	BMVW1-t	MT20	5.0	6.0		
E	BMVW+t	MT20	5.0	12.0		
F	BMV1+p	MT20	3.0	8.0		

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

CONNECTION REQUIREMENTS

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.2} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpG, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

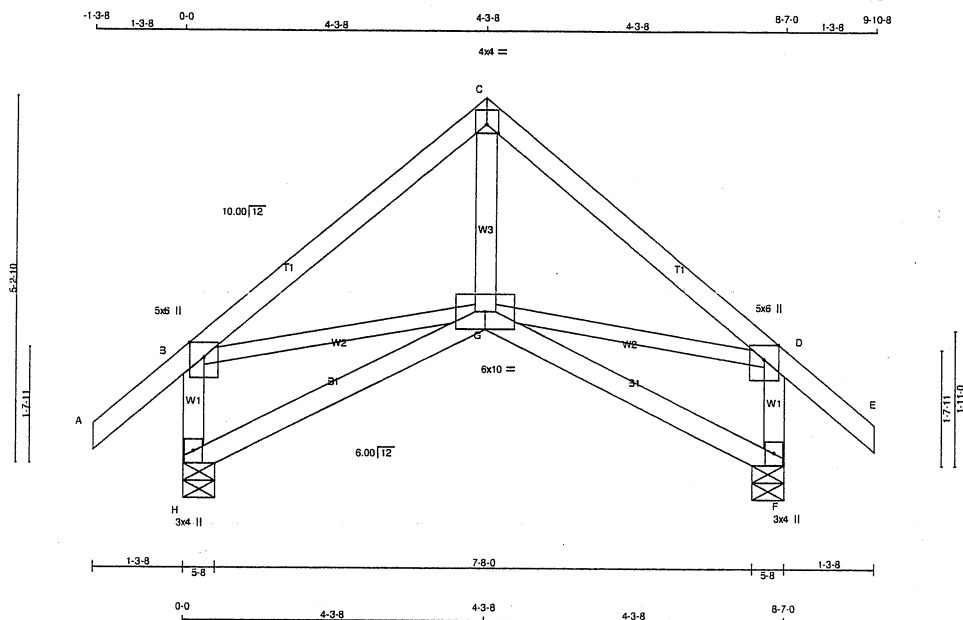


Structural component only
DWG# T-2115815 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412982	T13S	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:32 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-kUQ6kggV1IRRIDTaRVdKVjWkRAlexOicsRpFL?zCaIL



Scale = 1:31.3

TOTAL WEIGHT = 2 X 41 = 82 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge	
C	TTW-p	MT20	4.0	4.0	1.50	2.00
D	TMVW+p	MT20	5.0	6.0	Edge	
F	BMV1+p	MT20	3.0	4.0		
G	BBWWW-p	MT20	6.0	10.0		
H	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
H	600	0	600	0
F	600	0	600	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE	
H	422	290 / 0	0 / 0	0 / 0	132 / 0
F	422	290 / 0	0 / 0	0 / 0	132 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (CSI (LC))	UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX (CSI (LC))
FR-TO			FROM	TO		FR-TO			
A-B	0 / 41	-91.8	-91.8	0.13 (1)	10.00	G-C	0 / 180	0.03 (4)	
B-C	-448 / 0	-91.8	-91.8	0.22 (1)	6.25	B-G	0 / 348	0.08 (1)	
C-D	-448 / 0	-91.8	-91.8	0.22 (1)	6.25	G-D	0 / 348	0.08 (1)	
D-E	0 / 41	-91.8	-91.8	0.13 (1)	10.00				
H-B	-561 / 0	0.0	0.0	0.06 (1)	7.81				
F-D	-561 / 0	0.0	0.0	0.06 (1)	7.81				
H-G	0 / 0	-18.5	-18.5	0.10 (4)	10.00				
G-F	0 / 0	-18.5	-18.5	0.10 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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) = $L/360$ (0.29")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.29")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CSI: TC=0.22/1.00 (B-C:1), BC=0.10/1.00 (G-H:4), WB=0.08/1.00 (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 MIN	MAX MIN
MT20	650 371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.60 (C) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)

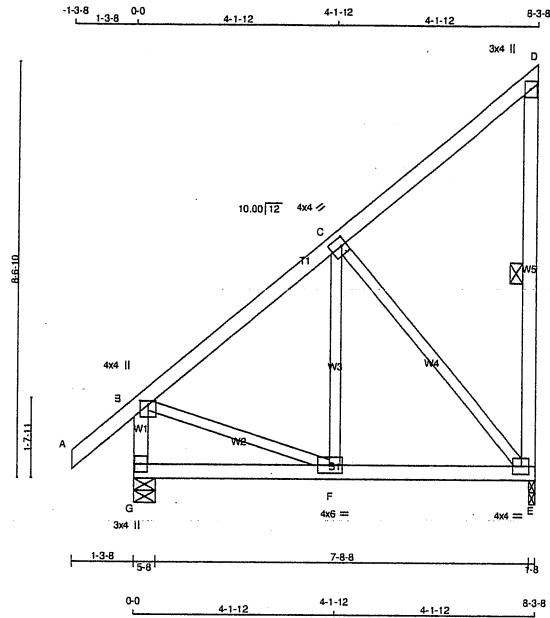


Structural component only
DWG# T-2115912

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T14	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:16 2021 Page 1
ID:6ZMXwLBWm_sGlyG7JmrkJzyb8gQ-90KVgaMJG6KXkBEQD1JMVLAZx3E2SwAofX31HVzCezb



Scale = 1/4" = 1'-0"

TOTAL WEIGHT = 46 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - B	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF
ALL WEBS	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	1.00	2.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TMV+p	MT20	3.0	4.0		
E	BMVW1-t	MT20	4.0	4.0		
F	BMVW1-t	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	457	0	457	0	1-8	1-8
G	584	0	584	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	323	212 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
G	411	283 / 0	0 / 0	0 / 0	0 / 0	128 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED	FACTORED			MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED	MAX. CSI (LC)	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	FORCE (LBS)					
FR-TO		FROM	TO			FR-TO			
A-B	0 / 41	-91.8	-91.8	0.13 (1)	10.00	F-C	0 / 80	0.03 (4)	
B-C	-292 / 0	-91.8	-91.8	0.20 (1)	6.25	C-E	-376 / 0	0.25 (1)	
C-D	-30 / 0	-91.8	-91.8	0.20 (1)	6.25	B-F	0 / 259	0.06 (1)	
E-D	-143 / 0	0.0	0.0	0.05 (1)	6.25				
G-B	-554 / 0	0.0	0.0	0.06 (1)	7.81				
G-F	0 / 0	-18.5	-18.5	0.09 (4)	10.00				
F-E	0 / 247	-18.5	-18.5	0.11 (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, NBC 2015

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

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

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

CSI: TC=0.20/1.00 (B-C:1), BC=0.11/1.00 (E-F:4), WB=0.25/1.00 (C-E:1), SSI=0.14/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115816

JOB NAME 412961	TRUSS NAME T15	QUANTITY 1	PLY 3	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:18 2021 Page 2
ID:6ZMXwLBWm sGlyG7JmrkJzvb8gQ-5PSG5FOaojaFzVNpKSLqamFwistGwiN57qY7LOzCezZ

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
C	TMWW-t	MT20	5.0	8.0	2.50	2.75
D	TMV+p	MT20	3.0	4.0		
E	BMVW1+p	MT20	6.0	12.0	6.75	3.00
F	BMWW-t	MT20	7.0	12.0		
G	BMV1+p	MT20	3.0	8.0		

CONNECTION REQUIREMENTS

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.2} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM OPEN TERRAIN., AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

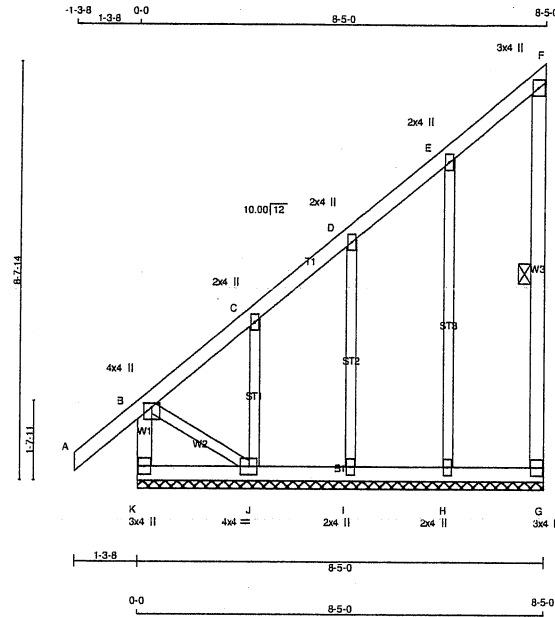


Structural component only
DWG# T-2115817 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T16G	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:18 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-5PSG5FOaojaFzVnPKSLqamFxfsxqwrU57qY7LOzCezZ



TOTAL WEIGHT = 48 lb

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

ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C, D, E						
C	TMW+w	MT20	2.0	4.0		
F	TMV+p	MT20	3.0	4.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BMWW1-t	MT20	4.0	4.0		
K	BMV1+p	MT20	3.0	4.0		

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-G.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
K-B	-230 / 0	0.0	0.0 0.02 (1)	H-E	-209 / 0	0.17 (1)	
A-B	0 / 41	-91.8	-91.8 0.13 (1)	I-D	-164 / 0	0.07 (1)	
B-C	-3 / 0	-91.8	-91.8 0.06 (1)	J-C	-224 / 0	0.05 (1)	
C-D	-15 / 0	-91.8	-91.8 0.06 (1)	B-J	0 / 14	0.00 (1)	
D-E	0 / 0	-91.8	-91.8 0.05 (1)				
E-F	-12 / 0	-91.8	-91.8 0.05 (1)				
G-F	-78 / 0	0.0	0.0 0.03 (1)				
K-J	0 / 0	-18.5	-18.5 0.02 (4)				
J-I	0 / 6	-18.5	-18.5 0.02 (4)				
I-H	0 / 3	-18.5	-18.5 0.02 (4)				
H-G	0 / 0	-18.5	-18.5 0.02 (4)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 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

CSI: TC=0.13/1.00 (A-B:1), BC=0.02/1.00 (I-J:4), WB=0.17/1.00 (E-H:1), SSI=0.08/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

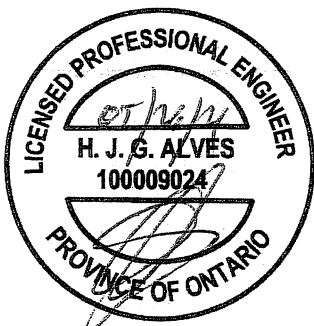
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

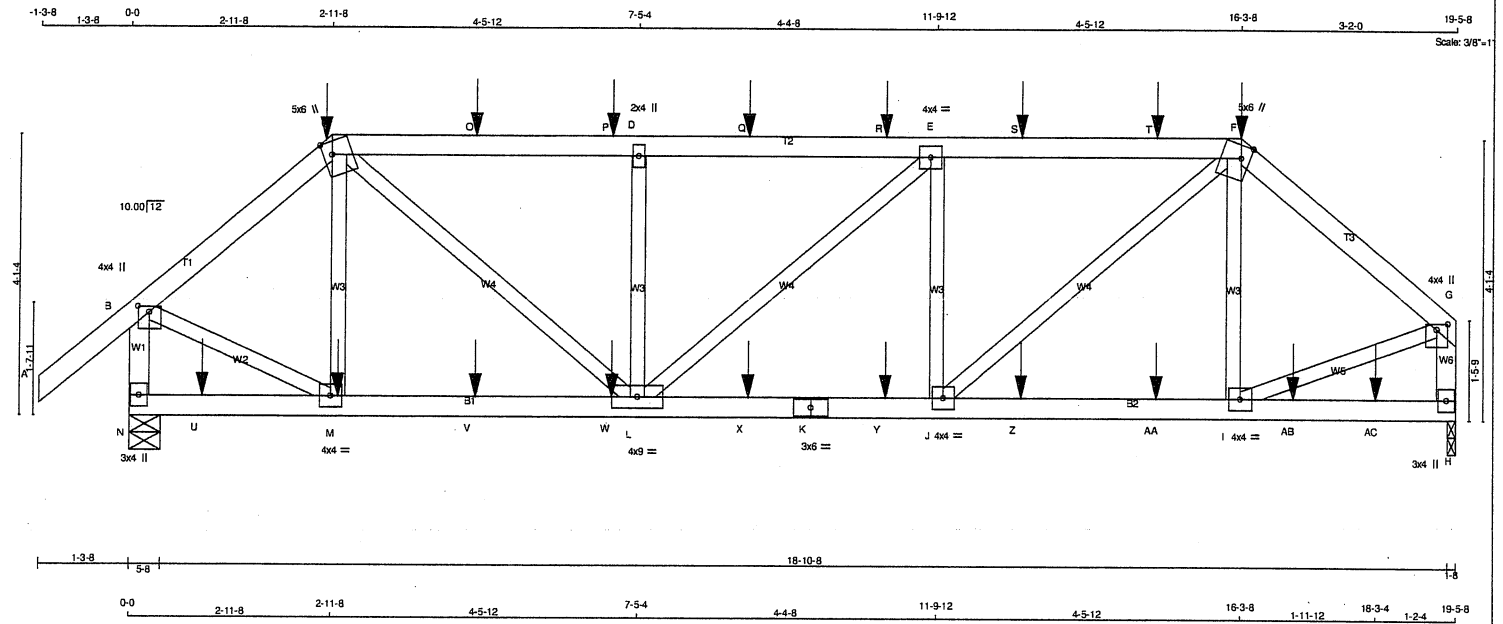
JSI GRIP = 0.17 (B) (INPUT = 0.90)
JSI METAL = 0.12 (C) (INPUT = 1.00)



Structural component only
DWG# T-2115818

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 12:15:40 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-atPAoY?BPtsP_e14Ni2ApVP_tvXF36ITjzGw_zCeJH



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - H	2x4	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	12	SIDE(61.0)
C-F	12	SIDE(61.0)
F-G	12	SIDE(61.0)
N-B	12	TOP
H-G	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
N-K	12	SIDE(61.0)
K-H	12	SIDE(0.0)
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.

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT REQRD BRG
JT VERT	DOWN	IN-SX
N 2002	0	5-8
H 1794	0	1-8

UNFACTORED REACTIONS

1ST CASE	MAX./MIN. COMPONENT REACTIONS
JT COMBINED	SNOW
N 1412	945 / 0
H 1270	825 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MAX. FACTORED		FACTORED		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 / 41	-91.8	-91.8	0.07 (1)	10.00	M-C	-437 / 0	0.06 (1)
B-C	-1760 / 0	-91.8	-91.8	0.09 (1)	6.25	C-L	0 / 1290	0.16 (1)
C-O	-2319 / 0	-91.8	-91.8	0.22 (1)	5.62	L-D	-688 / 0	0.09 (1)
O-P	-2319 / 0	-91.8	-91.8	0.22 (1)	5.62	E-F	-16 / 0	0.00 (1)
P-D	-2319 / 0	-91.8	-91.8	0.22 (1)	5.62	J-E	-695 / 0	0.09 (1)
D-Q	-2320 / 0	-91.8	-91.8	0.24 (1)	5.59	J-F	0 / 1288	0.16 (1)
Q-R	-2320 / 0	-91.8	-91.8	0.24 (1)	5.59	I-F	-323 / 0	0.04 (1)
R-E	-2320 / 0	-91.8	-91.8	0.24 (1)	5.59	B-M	0 / 1464	0.18 (1)
E-S	-2332 / 0	-91.8	-91.8	0.24 (1)	5.58	I-G	0 / 1437	0.18 (1)
S-T	-2332 / 0	-91.8	-91.8	0.24 (1)	5.58			
T-F	-2332 / 0	-91.8	-91.8	0.24 (1)	5.58			
F-G	-1774 / 0	-91.8	-91.8	0.10 (1)	6.25			
N-B	-1970 / 0	0.0	0.0	0.11 (1)	7.81			
H-G	-1755 / 0	0.0	0.0	0.10 (1)	7.81			

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)
N-U	0 / 0	-18.5	10.00
U-M	0 / 0	-18.5	10.00
M-V	0 / 1335	-18.5	10.00
V-W	0 / 1335	-18.5	10.00
W-L	0 / 1335	-18.5	10.00
L-X	0 / 2332	-18.5	10.00
X-K	0 / 2332	-18.5	10.00
K-Y	0 / 2332	-18.5	10.00
Y-J	0 / 2332	-18.5	10.00
J-Z	0 / 1349	-18.5	10.00
Z-AA	0 / 1349	-18.5	10.00
AA-I	0 / 1349	-18.5	10.00
I-AB	0 / 0	-18.5	10.00
AB-AC	0 / 0	-18.5	10.00
AC-H	0 / 0	-18.5	10.00

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-11-8	-28	-28	---	FRONT	VERT	DEAD	---	C1
C	2-11-8	-104	-104	---	BACK	VERT	TOTAL	---	C1
C	2-11-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
F	16-3-8	-28	-28	---	FRONT	VERT	DEAD	---	C1
F	16-3-8	-125	-125	---	FRONT	VERT	SNOW	---	C1
M	3-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
O	5-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
P	7-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
Q	9-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
R	11-0-12	-76	-76	---	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 2.00/12 MINIMUM

*** 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, NBC 2015.

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.24/1.00 (E-F:1), BC=0.24/1.00 (J-L:1), WB=0.18/1.00 (B-M:1), SS=0.18/1.00 (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 (PSI)	SECTION (PLI)	MAX MIN	MAX MIN
MT20	650	371	1747	788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (B) (INPUT = 0.90)
JSI METAL= 0.38 (K) (INPUT = 1.00)



Structural component only
DWG# T-2115828

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T31	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 12:15:40 2021 Page 2
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-atPAoY?BPtsP e14NI2ApVP tvXF36ITjyzGw zCeitH

PLATES (table is in inches)

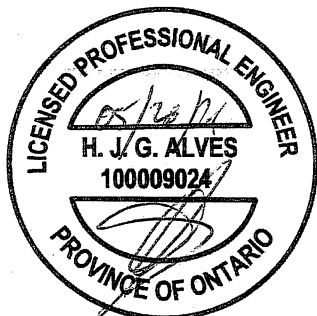
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TMW-t	MT20	4.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMVW+p	MT20	4.0	4.0	1.00	2.00
H	BMV1+p	MT20	3.0	4.0		
I, J, M						
I	BMWV-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWVW-t	MT20	4.0	9.0		
N	BMV1+p	MT20	3.0	4.0		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
S	13-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
T	15-0-12	-76	-76	---	BACK	VERT	TOTAL	---	C1
U	1-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
V	5-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
W	7-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
X	9-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
Y	11-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
Z	13-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
AA	15-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
AB	17-0-12	-21	-21	---	BACK	VERT	TOTAL	---	C1
AC	18-3-4	-21	-21	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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



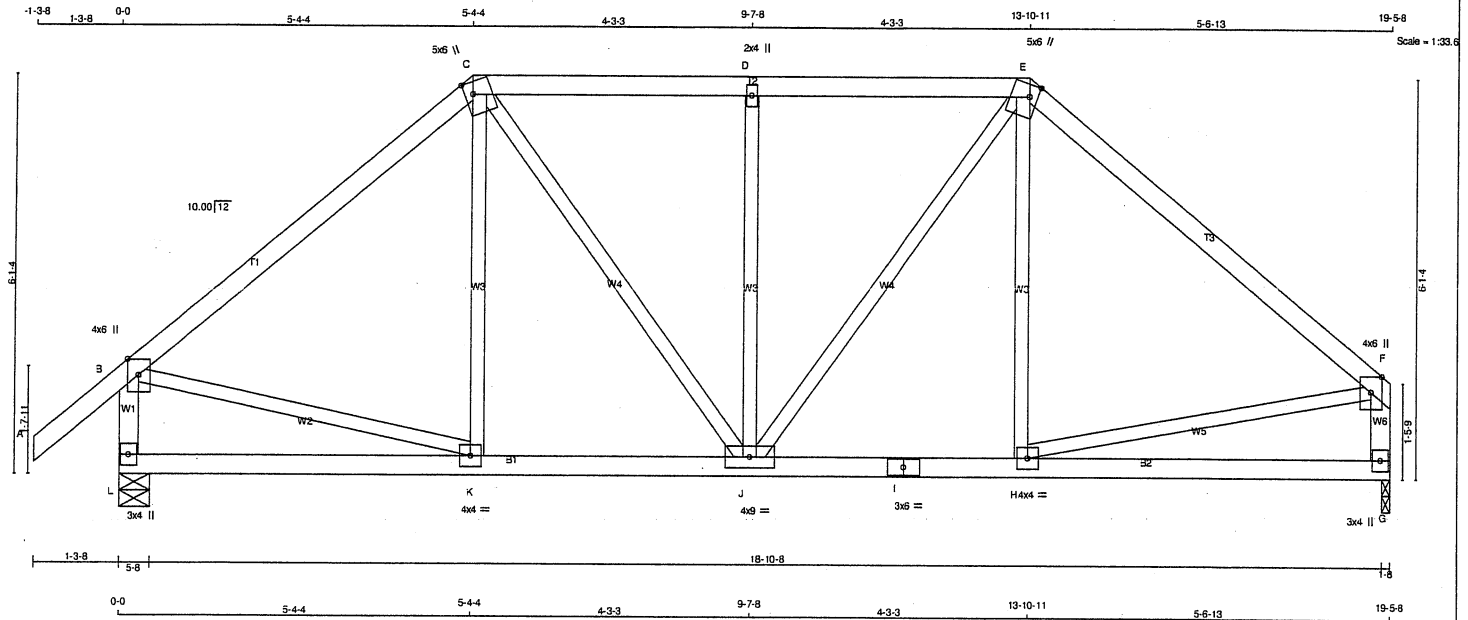
Structural component only
DWG# T-2115828 22

Structural component only
DWG# T-2115819

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T33	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:20 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-1nZ0WxPqKqzDpXBStOlgBKC4gaeOjnOa81EQGzCezX



TOTAL WEIGHT = 86 lb
(M/F)

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
L - B	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
L - I	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
ALL WEBS	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	6.0	Edge
C	TTWW+m	MT20	5.0	6.0	2.25 1.50
D	TMW+w	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	6.0	2.25 1.50
F	TMVW+p	MT20	4.0	6.0	Edge
G	BMV1+p	MT20	3.0	4.0	
H	BMVW-t	MT20	4.0	4.0	
I	BS-t	MT20	3.0	6.0	
J	BMVW-t	MT20	4.0	9.0	
K	BMVW-t	MT20	4.0	4.0	
L	BMV1+p	MT20	3.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
L	1200	0	1200	0	0	5-8	5-8		
G	1073	0	1073	0	0	1-8	1-8		

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	846	569 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
G	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 41	-91.8 -91.8	0.13 (1)	10.00	K-C	-65 / 60	0.04 (1)
B-C	-952 / 0	-91.8 -91.8	0.36 (1)	5.90	C-J	0 / 343	0.08 (1)
C-D	-932 / 0	-91.8 -91.8	0.22 (1)	6.15	J-D	-474 / 0	0.28 (1)
D-E	-932 / 0	-91.8 -91.8	0.22 (1)	6.15	J-E	0 / 313	0.07 (1)
E-F	-974 / 0	-91.8 -91.8	0.39 (1)	5.81	H-E	-37 / 73	0.03 (4)
L-B	-1159 / 0	0.0 0.0	0.12 (1)	7.40	B-K	0 / 751	0.17 (1)
G-F	-1030 / 0	0.0 0.0	0.11 (1)	7.74	H-F	0 / 762	0.17 (1)
L-K	0 / 0	-18.5 -18.5	0.12 (4)	10.00			
K-J	0 / 729	-18.5 -18.5	0.19 (1)	10.00			
J-I	0 / 746	-18.5 -18.5	0.19 (4)	10.00			
I-H	0 / 746	-18.5 -18.5	0.19 (4)	10.00			
H-G	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

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

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

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

(55% OF 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 (0.65")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL)= L/999 (0.04")

CSI: TC=0.39/1.00 (E-F:1), BC=0.19/1.00 (H-J:4), WB=0.28/1.00 (D-J:1), SSI=0.19/1.00 (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

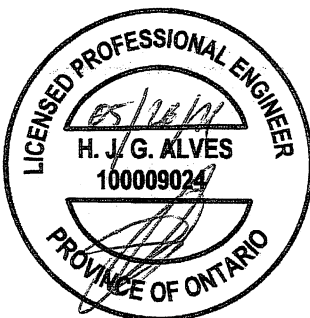
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

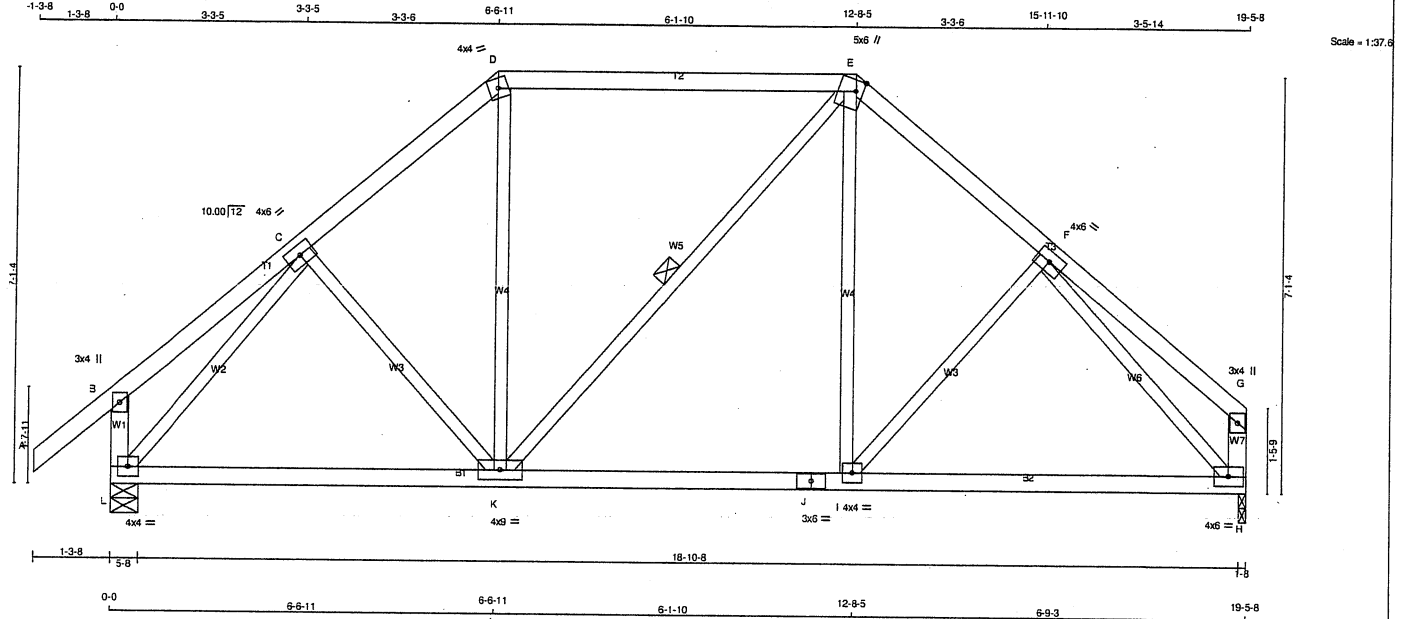
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.84 (K) (INPUT = 0.90)
JSI METAL= 0.50 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115820



LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TTWW-t	MT20	4.0	6.0		
D	TTW-m	MT20	4.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMWW-t	MT20	4.0	6.0		
G	TMV+p	MT20	3.0	4.0		
H	BMVW-t	MT20	4.0	6.0		
I	BMVW-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	6.0		
K	BMVW-t	MT20	4.0	9.0		
L	BMVW-t	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT		
L	1200	0	1200	0	5-8	5-8
H	1073	0	1073	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
L	846	569 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
H	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.24 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-K.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 41	-91.8	-91.8 0.13 (1)	C-K	-53 / 22	0.02 (1)	10.00
B-C	0 / 22	-91.8	-91.8 0.15 (1)	K-D	0 / 178	0.05 (4)	10.00
C-D	-928 / 0	-91.8	-91.8 0.13 (1)	D-E	-16 / 0	0.01 (1)	6.25
D-E	-698 / 0	-91.8	-91.8 0.45 (1)	E-F	0 / 201	0.05 (4)	6.25
E-F	-943 / 0	-91.8	-91.8 0.13 (1)	F-G	-96 / 9	0.04 (1)	6.24
F-G	0 / 22	-91.8	-91.8 0.16 (1)	G-H	-1168 / 0	0.47 (1)	10.00
L-B	-237 / 0	0.0	0.0 0.03 (1)	H-I	-1185 / 0	0.51 (1)	7.81
L-H	-119 / 0	0.0	0.0 0.01 (1)				
L-K	0 / 731	-18.5	-18.5 0.23 (4)				10.00
K-J	0 / 709	-18.5	-18.5 0.24 (4)				10.00
J-I	0 / 709	-18.5	-18.5 0.24 (4)				10.00
I-H	0 / 770	-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 2.00/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(55 % OF 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 (0.65")

CALCULATED VERT. DEFL.(LL)= L/999 (0.02")

ALLOWABLE DEFL.(TL)= L/360 (0.65")

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

CSI: TC=0.45/1.00 (D-E:1), BC=0.24/1.00 (I-K:4), WB=0.51/1.00 (F-H:1), SS=0.22/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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
MT20	650 371	1747 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (L) (INPUT = 0.90)

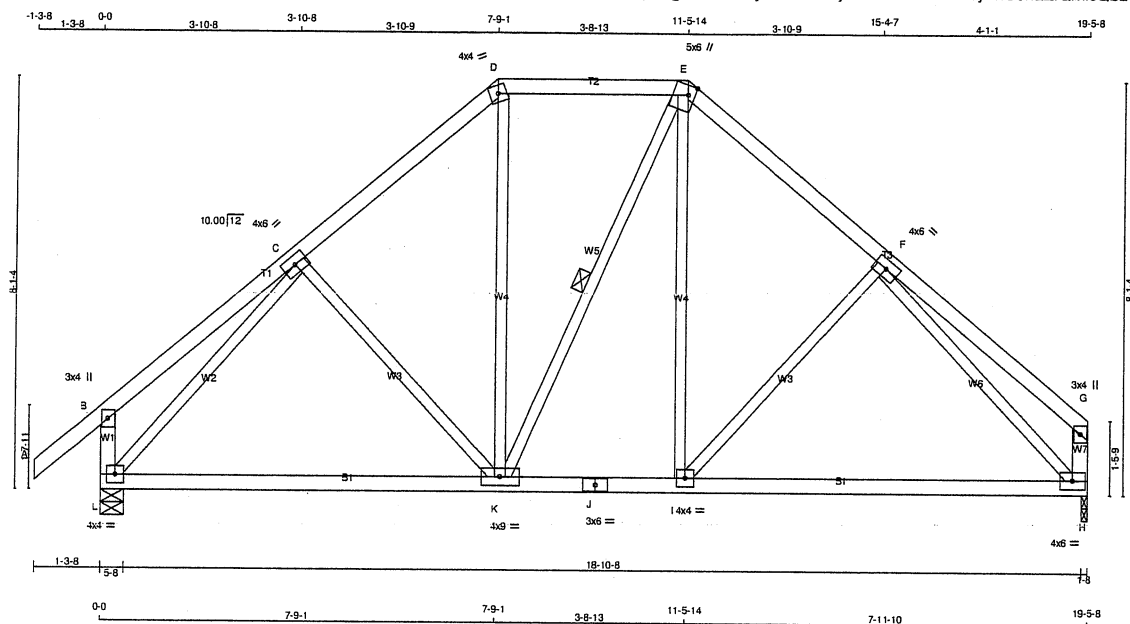
JSI METAL= 0.32 (J) (INPUT = 1.00)



JOB NAME 412961	TRUSS NAME T35	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. Wed May 26 11:58:22 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-zAhmxdR4sy4hS6haZlCmIcQbzTEJsXng1SWLU9zCezV



TOTAL WEIGHT = 92 lb
[M/F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TTWW-t	MT20	4.0	6.0		
D	TTW-m	MT20	4.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMVW-t	MT20	4.0	6.0		
G	TMV+p	MT20	3.0	4.0		
H	BMVW-t	MT20	4.0	6.0		
I	BMVW-t	MT20	4.0	4.0		
J	BS-t	MT20	3.0	6.0		
K	BMVW-t	MT20	4.0	9.0		
L	BMVW-t	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
L	1200	0	1200	0	5-8	5-8
H	1073	0	1073	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	LIVE			
L	846	569 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
H	759	498 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-K.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO				FR-TO			
A-B	0 / 41	-91.8	-91.8 0.13 (1)	10.00	C-K	-140 / 0	0.09 (1)
B-C	0 / 27	-91.8	-91.8 0.22 (1)	10.00	K-D	0 / 231	0.05 (1)
C-D	-875 / 0	-91.8	-91.8 0.18 (1)	6.25	K-E	-14 / 0	0.01 (1)
D-E	-654 / 0	-91.8	-91.8 0.17 (1)	6.25	I-F	0 / 250	0.06 (1)
E-F	-884 / 0	-91.8	-91.8 0.19 (1)	6.25	F-G	-178 / 0	0.11 (1)
F-G	0 / 27	-91.8	-91.8 0.23 (1)	10.00	L-C	-1155 / 0	0.65 (1)
L-B	-256 / 0	0.0	0.0 0.03 (1)	7.81	F-H	-1168 / 0	0.69 (1)
H-G	-139 / 0	0.0	0.0 0.01 (1)	7.81			
L-K	0 / 746	-18.5	-18.5 0.29 (4)	10.00			
K-J	0 / 660	-18.5	-18.5 0.29 (4)	10.00			
J-I	0 / 660	-18.5	-18.5 0.29 (4)	10.00			
I-H	0 / 778	-18.5	-18.5 0.31 (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 2.00/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 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) = $L/360$ (0.65")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
ALLOWABLE DEFL.(TL) = $L/360$ (0.65")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.14")

CSI: TC=0.23/1.00 (F-G:1), BC=0.31/1.00 (H-I:4), WB=0.69/1.00 (F-H:1), SSI=0.14/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (L) (INPUT = 0.90)
JSI METAL= 0.40 (J) (INPUT = 1.00)

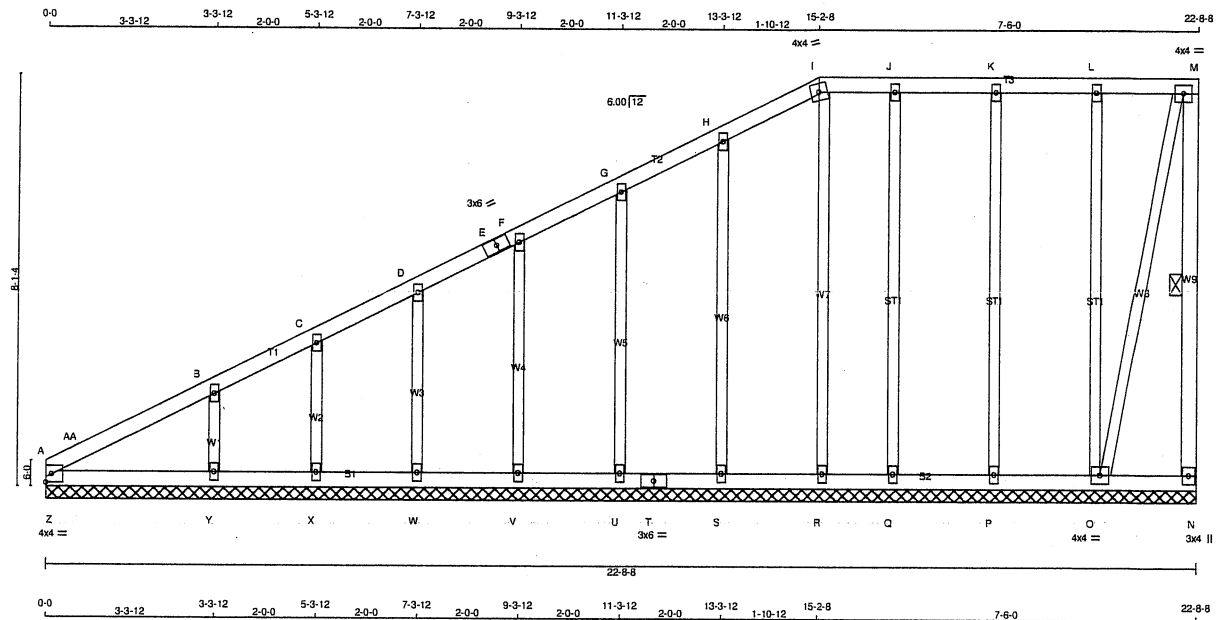


Structural component only
DWG# T-2115822

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T36G	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:23 2021 Page 1
IDZk4pT?gQQ4nYrHy9Mo5wA1yaos6-RMF98zSicFCX4GGM7?x7HpyootePb5uqG6Gu1bzCezU



TOTAL WEIGHT = 2 X 113 = 227 lb

LUMBER	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES				
CHORDS				
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
I - M	2x4	DRY	No.2	SPF
N - O	2x4	DRY	No.2	SPF
A - T	2x4	DRY	No.2	SPF
T - N	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT	2-0-0	OC.		

PLATES (table is in inches)	TYPE	PLATES	W	LEN	Y	X
JT	TMB1-I	MT20	4.0	4.0		Edge
B, C, D, F, G, H, J, K, L						
B	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
I	TTW-m	MT20	4.0	4.0		
M	TMVW-t	MT20	4.0	4.0		
N	BMV1+p	MT20	3.0	4.0		
O	BMVW1-t	MT20	4.0	4.0		
P, Q, R, S, U, V, W, X, Y						
P	BMV1+w	MT20	2.0	4.0		
T	BS-t	MT20	3.0	6.0		

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

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF M-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	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH	FR-TO	FROM
A-AA	-30 / 59	-91.8	-91.8	0.04 (1)	6.25	O-L	-201 / 0	0.25 (1)	
AA-B	-18 / 0	-91.8	-91.8	0.10 (1)	6.25	P-K	-185 / 0	0.23 (1)	
B-C	-27 / 0	-91.8	-91.8	0.10 (1)	6.25	Q-J	-176 / 0	0.22 (1)	
C-D	-8 / 0	-91.8	-91.8	0.04 (1)	10.00	R-I	-123 / 0	0.16 (1)	
D-E	-8 / 0	-91.8	-91.8	0.04 (1)	10.00	Y-B	-272 / 0	0.04 (1)	
E-F	-8 / 0	-91.8	-91.8	0.04 (1)	10.00	X-C	-149 / 0	0.03 (1)	
F-G	-4 / 0	-91.8	-91.8	0.04 (1)	10.00	W-D	-189 / 0	0.05 (1)	
G-H	-1 / 0	-91.8	-91.8	0.05 (1)	10.00	V-F	-181 / 0	0.07 (1)	
H-I	-8 / 0	-91.8	-91.8	0.05 (1)	10.00	U-G	-180 / 0	0.11 (1)	
I-J	0 / 2	-91.8	-91.8	0.04 (1)	10.00	S-H	-201 / 0	0.18 (1)	
J-K	0 / 2	-91.8	-91.8	0.04 (1)	10.00	O-M	-7 / 1	0.01 (1)	
K-L	0 / 2	-91.8	-91.8	0.05 (1)	10.00	Z-AA	-228 / 9	0.00 (1)	
L-M	0 / 2	-91.8	-91.8	0.05 (1)	10.00				
N-M	-69 / 0	0.0	0.0	0.02 (1)	6.25				
A-Z	0 / 23	-18.5	-18.5	0.06 (1)	10.00				
Z-Y	0 / 23	-18.5	-18.5	0.06 (1)	10.00				
Y-X	0 / 13	-18.5	-18.5	0.05 (1)	10.00				
X-W	0 / 10	-18.5	-18.5	0.02 (4)	10.00				
W-V	0 / 6	-18.5	-18.5	0.02 (4)	10.00				
V-U	0 / 4	-18.5	-18.5	0.01 (4)	10.00				
U-T	0 / 2	-18.5	-18.5	0.02 (4)	10.00				
T-S	0 / 2	-18.5	-18.5	0.02 (4)	10.00				
S-R	0 / 0	-18.5	-18.5	0.02 (4)	10.00				
R-Q	-2 / 0	-18.5	-18.5	0.01 (4)	10.00				
Q-P	-2 / 0	-18.5	-18.5	0.01 (4)	10.00				
P-O	-2 / 0	-18.5	-18.5	0.02 (4)	10.00				
O-N	0 / 0	-18.5	-18.5	0.02 (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 2.00/12 MINIMUM

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

CSI: TC=0.10/1.00 (B-AA:1), BC=0.06/1.00 (Y-Z:1), WB=0.25/1.00 (L-O:1), SS=0.18/1.00 (A-Z: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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.59 (I) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

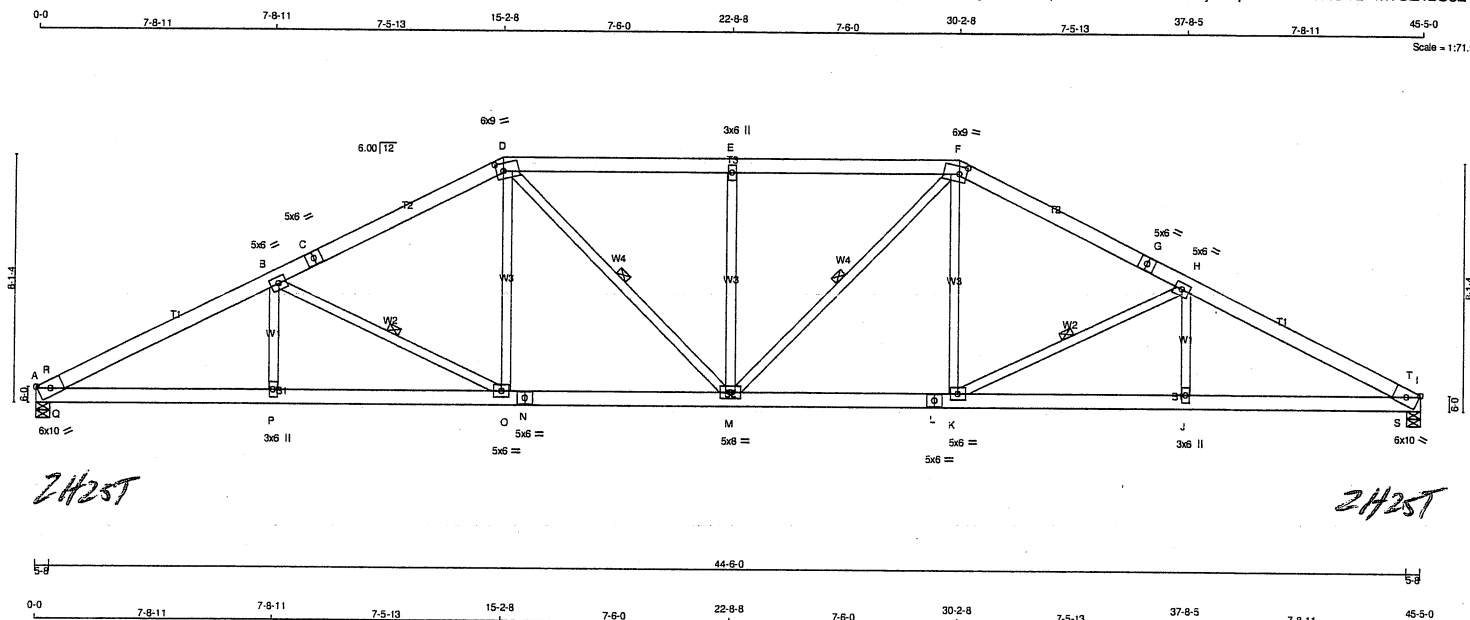


Structural component only
DWG# T-2115823

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T37	6	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 Mitek Industries, Inc. Wed May 26 11:58:24 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-wZpXMSLNZKOhQrzhjSeq1Vm1Hm0KO?zVm?SZ1zCezT



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

ALL WEBS 2x4 DRY: SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
A TBM1-h	MT20	6.0	10.0	Edge
B TMMW-t	MT20	5.0	6.0	
C TS-t	MT20	5.0	6.0	
D TTTWW-m	MT20	6.0	9.0	3.00 2.75
E TMW-w	MT20	3.0	6.0	
F TTTWW-m	MT20	6.0	9.0	3.00 2.75
G TS-t	MT20	5.0	6.0	
H TMMW-t	MT20	5.0	6.0	
I TBM1-h	MT20	6.0	10.0	Edge 4.75
J BMW-w	MT20	3.0	6.0	
K BMWW-t	MT20	5.0	6.0	
L BS-t	MT20	5.0	6.0	
M BMWW-t	MT20	5.0	6.0	
N BS-t	MT20	5.0	6.0	
O BMWW-t	MT20	5.0	6.0	
P BMW-w	MT20	3.0	6.0	

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
A	3514	0	3514	193
I	3514	0	3514	0

PROVIDE ANCHORAGE AT BEARING JOINT A FOR 1003 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT I FOR 1003 LBS. FACTORED UPLIFT

PROVIDE FOR 193 LBS. FACTORED HORIZONTAL REACTION AT JOINT A

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL
A	2603 1518 / 0 477 / 0 0 / 0 0 / -1008 609 / 0 0 / 0
I	2603 1518 / 0 477 / 0 0 / 0 80 / -1008 609 / 0 0 / 0

HORIZONTAL REACTIONS

A	0 / 0	0 / 0	138 / -138	0 / 0	0 / 0
---	-------	-------	------------	-------	-------

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.65 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.86 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-O, D-M, F-M, H-K.

LOADING

TOTAL LOAD CASES: (18)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED MOMENT (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED MOMENT (LC)
FR-TO						FR-TO			
A-R	-6772 / 1768	-115.2	-115.2	0.23 (13)	3.30	P-B	0 / 415	0.07 (5)	
R-B	-6675 / 1923	-115.2	-115.2	0.90 (2)	2.65	B-O	-1703 / 658	0.59 (2)	
B-C	-5258 / 1583	-115.2	-115.2	0.77 (2)	3.22	O-D	-234 / 1081	0.18 (13)	
C-D	-5258 / 1583	-115.2	-115.2	0.77 (2)	3.22	D-M	-427 / 1348	0.24 (14)	
D-E	-5332 / 1662	-115.2	-115.2	0.75 (1)	3.07	M-E	-1046 / 521	0.84 (2)	
E-F	-5332 / 1662	-115.2	-115.2	0.75 (1)	3.07	F-F	-427 / 1348	0.24 (13)	
F-G	-5258 / 1583	-115.2	-115.2	0.77 (3)	3.22	K-F	-234 / 1081	0.18 (14)	
G-H	-5258 / 1583	-115.2	-115.2	0.77 (3)	3.22	K-H	-1703 / 658	0.59 (3)	
H-T	-6675 / 1925	-115.2	-115.2	0.90 (3)	2.65	J-H	0 / 415	0.07 (6)	
T-I	-6772 / 1769	-115.2	-115.2	0.23 (14)	3.30	Q-R	-395 / 309	0.00 (1)	
						S-T	-396 / 309	0.00 (1)	
A-Q	-1794 / 6006	-39.5	-39.5	0.88 (2)	5.86				
Q-P	-1794 / 6006	-39.5	-39.5	0.93 (2)	5.86				
P-O	-1794 / 6006	-39.5	-39.5	0.84 (1)	5.95				
O-N	-1212 / 4685	-39.5	-39.5	0.68 (1)	6.25				
N-M	-1212 / 4685	-39.5	-39.5	0.68 (1)	6.25				
M-L	-1054 / 4685	-39.5	-39.5	0.68 (1)	6.25				
L-K	-1054 / 4685	-39.5	-39.5	0.68 (1)	6.25				
K-J	-1602 / 6006	-39.5	-39.5	0.84 (1)	6.21				
J-S	-1602 / 6006	-39.5	-39.5	0.93 (3)	6.11				
S-I	-1602 / 6006	-39.5	-39.5	0.88 (3)	6.11				

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

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.2) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE. TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 33.4 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 57.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.51")
CALCULATED VERT. DEFL.(LL)= L/999 (0.30")
ALLOWABLE DEFL.(TL)= L/180 (3.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.42")

CSI: TC=0.90/1.00 (H-T:3), BC=0.93/1.00 (J-S:3), WB=0.84/1.00 (E-M:2), SS=0.33/1.00 (B-D:2)

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

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

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (D) (INPUT = 0.90)
JSI METAL= 1.00 (A) (INPUT = 1.00)

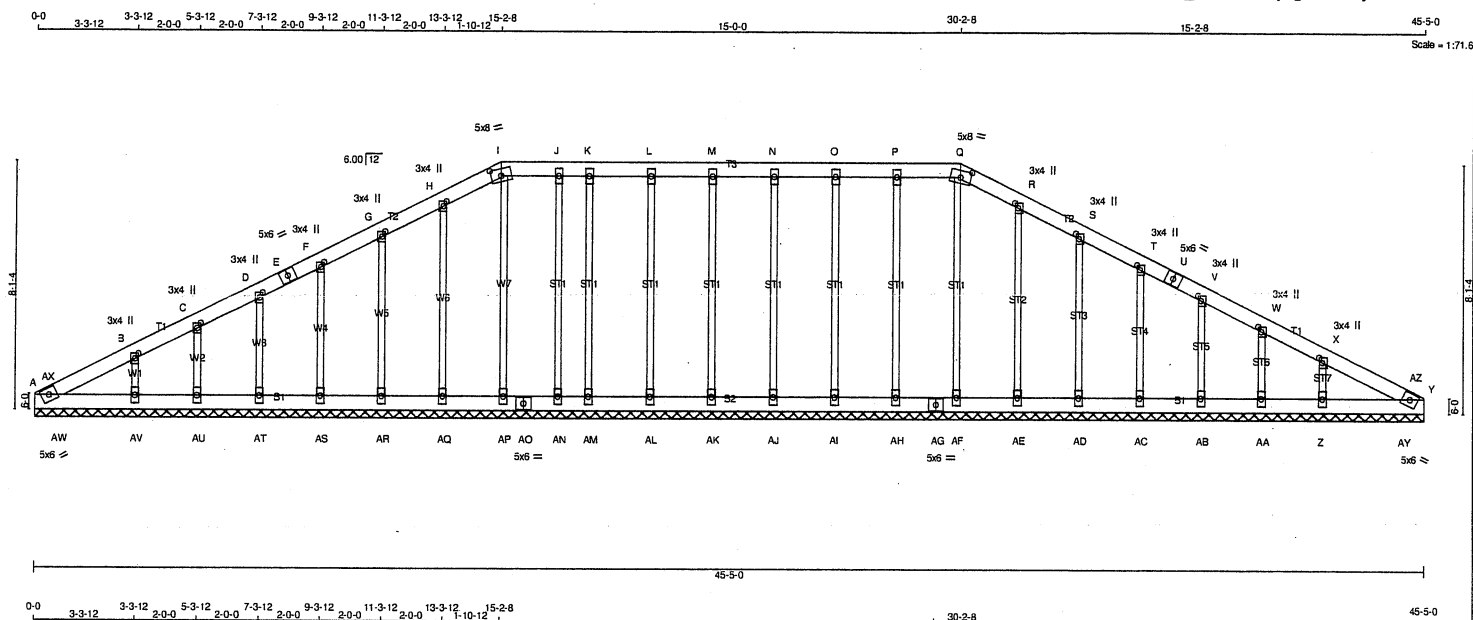


Structural component only
DWG# T-2115824

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T37G	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:26 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-sxxHn_UbvAa6xk_Lo7VivSaKy5gMoR0Gy4UYdwzCezR



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - E	2x6	DRY	No.2	SPF
E - I	2x6	DRY	No.2	SPF
I - Q	2x6	DRY	No.2	SPF
Q - U	2x6	DRY	No.2	SPF
U - Y	2x6	DRY	No.2	SPF
A - AO	2x6	DRY	No.2	SPF
AO - AG	2x6	DRY	No.2	SPF
AG - Y	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
A TBM1-h	MT20	5.0	6.0	
B, C, D, F, G, H, R, S, T, V, W, X	MT20	3.0	4.0	2.00 1.25
E TS-t	MT20	5.0	6.0	
I TTW-m	MT20	5.0	8.0	2.75 4.00
J, K, L, M, N, O, P	MT20	3.0	6.0	
Q TTW-m	MT20	5.0	8.0	2.75 4.00
U TS-t	MT20	5.0	6.0	
Y TBM1-h	MT20	5.0	6.0	
Z, AA, AB, AC, AD, AE, AF, AH, AI, AJ, AK, AL, AM, AN, AP, AQ, AR, AS, AT, AU, AV	MT20	3.0	6.0	
Z BMW1-w	MT20	5.0	6.0	
AG BS-t	MT20	5.0	6.0	
AO BS-t	MT20	5.0	6.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.									
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.									
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.
FR-TO					FR-TO				
A-AX	-69 / 0	-91.8	-91.8	0.01 (4)	6.25	AF-Q	-150 / 0	0.17 (1)	
AX-B	-43 / 0	-91.8	-91.8	0.04 (1)	6.25	AH-P	-204 / 0	0.23 (1)	
B-C	-49 / 0	-91.8	-91.8	0.04 (1)	6.25	AI-O	-184 / 0	0.21 (1)	
C-D	-32 / 0	-91.8	-91.8	0.02 (1)	6.25	AJ-N	-183 / 0	0.21 (1)	
D-E	-27 / 0	-91.8	-91.8	0.02 (1)	6.25	AK-M	-185 / 0	0.21 (1)	
E-F	-27 / 0	-91.8	-91.8	0.02 (1)	6.25	AL-L	-181 / 0	0.20 (1)	
F-G	-23 / 0	-91.8	-91.8	0.02 (1)	6.25	AM-K	-141 / 0	0.16 (1)	
G-H	-19 / 0	-91.8	-91.8	0.02 (1)	6.25	AN-J	-143 / 0	0.16 (1)	
H-I	-23 / 0	-91.8	-91.8	0.02 (1)	6.25	AO-R	-198 / 0	0.16 (1)	
I-J	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AD-S	-182 / 0	0.09 (1)	
J-K	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AC-T	-181 / 0	0.06 (1)	
K-L	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AB-V	-184 / 0	0.04 (1)	
L-M	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AA-W	-158 / 0	0.03 (1)	
M-N	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	Z-X	-251 / 0	0.04 (1)	
N-O	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AP-I	-143 / 0	0.16 (1)	
O-P	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AV-B	-251 / 0	0.04 (1)	
P-Q	-12 / 0	-91.8	-91.8	0.02 (1)	6.25	AU-C	-158 / 0	0.03 (1)	
Q-R	-23 / 0	-91.8	-91.8	0.02 (1)	6.25	AT-D	-184 / 0	0.04 (1)	
R-S	-19 / 0	-91.8	-91.8	0.02 (1)	6.25	AS-F	-181 / 0	0.06 (1)	
S-T	-23 / 0	-91.8	-91.8	0.02 (1)	6.25	AR-G	-182 / 0	0.09 (1)	
T-U	-28 / 0	-91.8	-91.8	0.02 (1)	6.25	AQ-H	-198 / 0	0.15 (1)	
U-V	-28 / 0	-91.8	-91.8	0.02 (1)	6.25	AW-AX	-91 / 2	0.00 (1)	
V-W	-32 / 0	-91.8	-91.8	0.02 (1)	6.25	AY-AZ	-91 / 2	0.00 (1)	
W-X	-49 / 0	-91.8	-91.8	0.04 (1)	6.25				
X-AZ	-44 / 0	-91.8	-91.8	0.04 (1)	6.25				
AZ-Y	-69 / 0	-91.8	-91.8	0.01 (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

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 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

CSI: TC=0.04/1.00 (B-C:1), BC=0.05/1.00 (Z-AY:1), WB=0.23/1.00 (P-AH:1), SSI=0.08/1.00 (B-AX: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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (I) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115825

CONTINUED ON PAGE 2

JOB NAME 412961	TRUSS NAME T37G	QUANTITY 1	PLY 1	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	---------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:26 2021 Page 2
ID:Zk4pT?gQQ4nYrHy9M65wA1yaos6-sxxHn UbvAa6xk Lo7VivSaKy5gMoR0Gy4UYdwzCezR

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH FR-TO	MAX CSI (LC)
FR-TO		FROM TO					
Z-AY	0 / 52	-18.5 -18.5	0.05 (1)			10.00	
AY-Y	0 / 52	-18.5 -18.5	0.05 (1)			10.00	



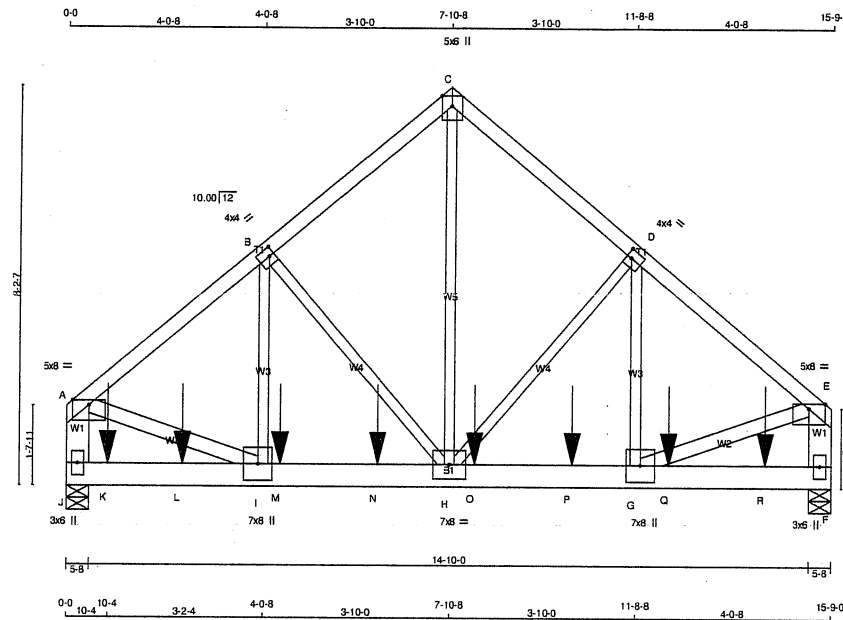
Structural component only

DWG# T-2115825 *TH*

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412961	T38	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:27 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-K8Vf_KVDgUizYuZyMr0xSf7SpUtDXp1QBKE6AMzCezQ



LUMBER				DESIGN	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	SPF	
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
J - A	2x6	DRY	No.2	SPF	
F - E	2x6	DRY	No.2	SPF	
J - F	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
A - I	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-C	1 12	TOP
C-E	1 12	TOP
J-A	2 12	TOP
F-E	2 12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J-F	2 12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1 6	
2x4	1 6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-p	MT20	5.0	8.0	Edge
B	TMVW-t	MT20	4.0	4.0	2.00 1.25
C	TTW+p	MT20	5.0	6.0	Edge
D	TMVW-t	MT20	4.0	4.0	2.00 1.25
E	TMVW-p	MT20	5.0	8.0	Edge
F	BMV1+p	MT20	3.0	6.0	
G	BMVW-t	MT20	7.0	8.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	UP	IN-SX	BRG	IN-SX
J	5848	0	0	5848	0	0	5-8	5-8	5-8
F	5340	0	0	5340	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	4118	2800 / 0	0 / 0	0 / 0	0 / 0	1319 / 0	0 / 0
F	3761	2556 / 0	0 / 0	0 / 0	0 / 0	1205 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.13 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO		FR-TO			
A-B	-5093 / 0	-91.8 -91.8	0.23 (1)	4.13	H-C	0 / 4559	0.56 (1)
B-C	-3807 / 0	-91.8 -91.8	0.16 (1)	4.73	H-D	-1475 / 0	0.45 (1)
C-D	-3807 / 0	-91.8 -91.8	0.16 (1)	4.72	G-D	0 / 1499	0.19 (1)
D-E	-4999 / 0	-91.8 -91.8	0.22 (1)	4.17	B-H	-1587 / 0	0.49 (1)
J-A	-4616 / 0	0.0 0.0	0.17 (1)	6.71	I-B	0 / 1645	0.20 (1)
F-E	-4534 / 0	0.0 0.0	0.17 (1)	6.76	A-I	0 / 4102	0.36 (1)
J-K	0 / 0	-18.5 -18.5	0.40 (1)	10.00	G-E	0 / 4027	0.36 (1)
K-L	0 / 0	-18.5 -18.5	0.40 (1)	10.00			
L-I	0 / 0	-18.5 -18.5	0.40 (1)	10.00			
I-M	0 / 3927	-18.5 -18.5	0.58 (1)	10.00			
M-N	0 / 3927	-18.5 -18.5	0.58 (1)	10.00			
N-H	0 / 3927	-18.5 -18.5	0.58 (1)	10.00			
H-O	0 / 3855	-18.5 -18.5	0.57 (1)	10.00			
O-P	0 / 3855	-18.5 -18.5	0.57 (1)	10.00			
P-G	0 / 3855	-18.5 -18.5	0.57 (1)	10.00			
Q-Q	0 / 0	-18.5 -18.5	0.40 (1)	10.00			
Q-R	0 / 0	-18.5 -18.5	0.40 (1)	10.00			
R-F	0 / 0	-18.5 -18.5	0.40 (1)	10.00			

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	10-4	-832	-832		TOP	VERT	TOTAL		C1
L	2-4-12	-831	-831		TOP	VERT	TOTAL		C1
M	4-4-12	-831	-831		TOP	VERT	TOTAL		C1
N	6-4-12	-831	-831		TOP	VERT	TOTAL		C1
O	8-4-12	-831	-831		TOP	VERT	TOTAL		C1
P	10-4-12	-831	-831		TOP	VERT	TOTAL		C1
Q	12-4-12	-831	-831		TOP	VERT	TOTAL		C1
R	14-4-12	-831	-831		TOP	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, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 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 (0.52")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.23/1.00 (A-B:1), BC=0.58/1.00 (H-I:1), WB=0.56/1.00 (C-H:1), SS=0.54/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.51 (G) (INPUT = 1.00)



Structural component only
DWG# T-2115826

CONTINUED ON PAGE 2

JOB NAME 412961	TRUSS NAME T38	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES TRUSS DESC.	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	---	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:27 2021 Page 2
ID:Zk4pT?gQQ4nYrHy9Mc5wA1yaos6-K8Vf KVDgUizYuZYM0xSf7SpUtDXp1QBkE6AMzCezQ

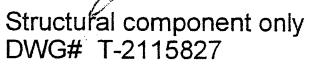
PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
H	BMW/W-t	MT20	7.0	8.0		
I	BMW/W-t	MT20	7.0	8.0		
J	BMV1+p	MT20	3.0	6.0		

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

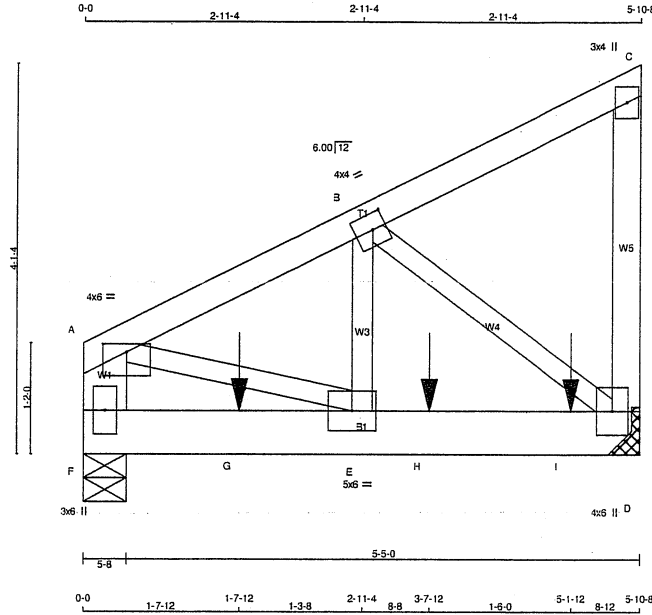


Structural component only
DWG# T-2115826 *2/1*



JOB NAME 412982	TRUSS NAME T40	QUANTITY 1	PLY 2	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:34 2021 Page 1
ID:PrpSyr_45RAIF3mJ8Agi49yajqE-gtYs9MilZwh8?XdzYwfoa8bjo_KPH0vKIIMPtZCalu



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

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
EXCEPT				

DRY: SEASONED LUMBER.

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

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

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	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		
F	BMV1-p	MT20	3.0	6.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
D	1449	0	1449	0	0
F	1098	0	1098	0	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	1018	708 / 0	0 / 0	0 / 0	0 / 0	310 / 0	0 / 0
F	771	534 / 0	0 / 0	0 / 0	0 / 0	237 / 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	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	-1143 / 0	E-B	0 / 984
B-C	-11 / 0	B-D	-1299 / 0
D-C	-109 / 0	A-E	0 / 1068
F-A	-898 / 0		
F-G	0 / 0		
G-E	0 / 0		
E-H	0 / 1032		
H-I	0 / 1032		
I-D	0 / 1032		

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-7-12	-443	-443	---	TOP	VERT	TOTAL	---	C1
H	3-7-12	-443	-443	---	TOP	VERT	TOTAL	---	C1
I	5-1-12	-445	-445	---	TOP	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 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OSC 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=0.06/1.00 (A-B:1), BC=0.21/1.00 (D-E:1), WB=0.15/1.00 (B-D:1), SSI=0.26/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.64 (B) (INPUT = 0.90)

JSI METAL = 0.23 (D) (INPUT = 1.00)

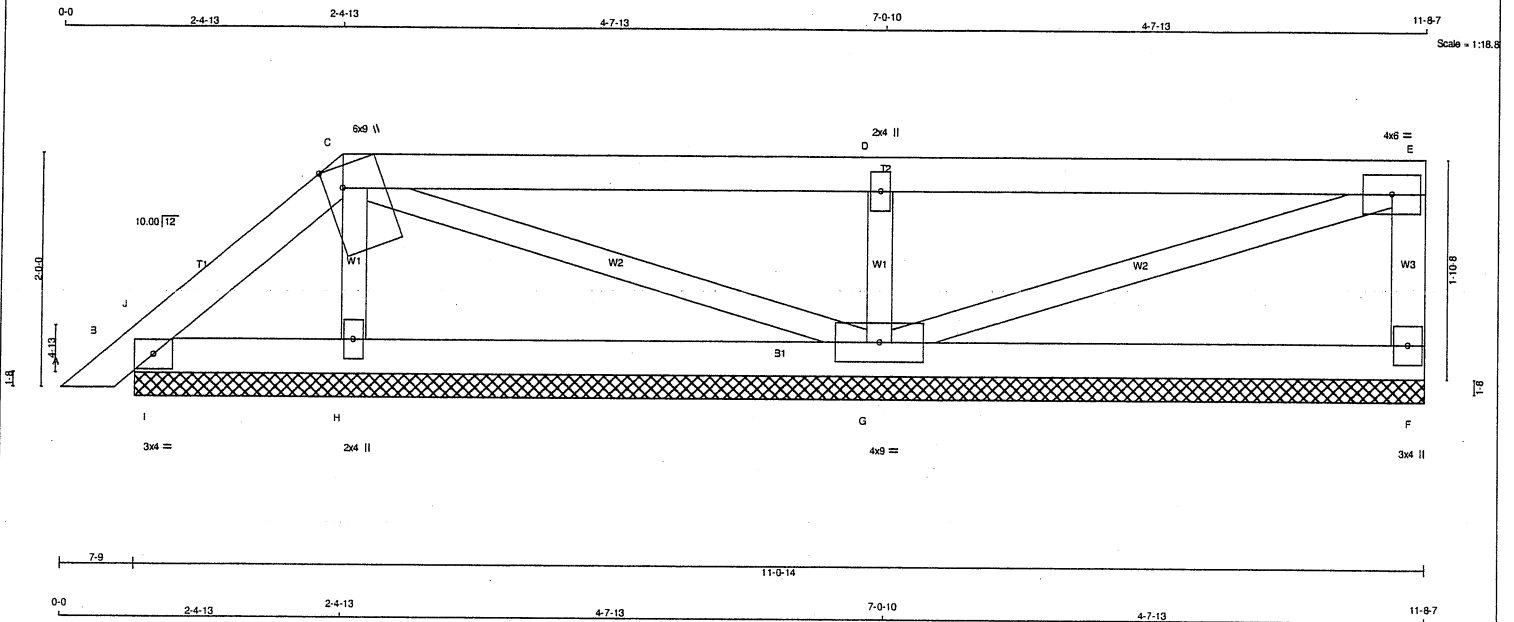


Structural component only
DWG# T-2115913

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ROYAL PINE HOMES	DRWG NO.
412982	PB01	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:21 2021 Page 1
ID:wTM7iolSBYniqocTeDgf3Pyb9F8-YNFYQvYbdw2_xX7TlhwYPZQmb?SQ??LEfAS8zCaIV



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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMB1-I	MT20	3.0	4.0
C	TTWW+m	MT20	6.0	9.0 Edge 1.75
D	TMW+w	MT20	2.0	4.0
E	TMVW-I	MT20	4.0	6.0
F	BMV1+p	MT20	3.0	4.0
G	BMWW1-I	MT20	4.0	9.0
H	BMW1+w	MT20	2.0	4.0

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	197	0	197	0	11-0-14	11-0-14
B	170	0	170	0	11-0-14	11-0-14
H	263	0	263	0	11-0-14	11-0-14
G	641	0	641	0	11-0-14	11-0-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	IN-SX			
F	139	91 / 0	0 / 0	0 / 0	48 / 0	0 / 0	0 / 0
B	117	91 / 0	0 / 0	0 / 0	26 / 0	0 / 0	0 / 0
H	188	110 / 0	0 / 0	0 / 0	78 / 0	0 / 0	0 / 0
G	452	302 / 0	0 / 0	0 / 0	151 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. CS (LC)	UNBRAC LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)		MAX. CS (LC)
	FR-TO	FROM TO	FR-TO	FROM TO				FR-TO	FROM TO	
A-B	0 / 14	-91.8	-91.8	0.02 (1)	10.00	H-C	-181 / 0	0.03 (1)		
B-J	-32 / 0	-91.8	-91.8	0.01 (1)	6.25	C-G	-28 / 0	0.01 (1)		
J-C	-54 / 0	-91.8	-91.8	0.03 (1)	6.25	G-D	-533 / 0	0.08 (1)		
C-D	0 / 0	-91.8	-91.8	0.34 (1)	10.00	G-E	0 / 0	0.00 (1)		
D-E	0 / 0	-91.8	-91.8	0.34 (1)	10.00	I-J	-112 / 0	0.00 (1)		
F-E	-162 / 0	0.0	0.0	0.02 (1)	7.81					
B-I	0 / 38	-18.5	-18.5	0.04 (1)	10.00					
I-H	0 / 38	-18.5	-18.5	0.05 (4)	10.00					
H-G	0 / 26	-18.5	-18.5	0.10 (4)	10.00					
G-F	0 / 0	-18.5	-18.5	0.10 (4)	10.00					

TOTAL WEIGHT = 2 X 38 = 75 lb [M]

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 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=0.34/1.00 (C-D:1), BC=0.10/1.00 (G-H:4), WB=0.08/1.00 (D-G:1), SSI=0.21/1.00 (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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

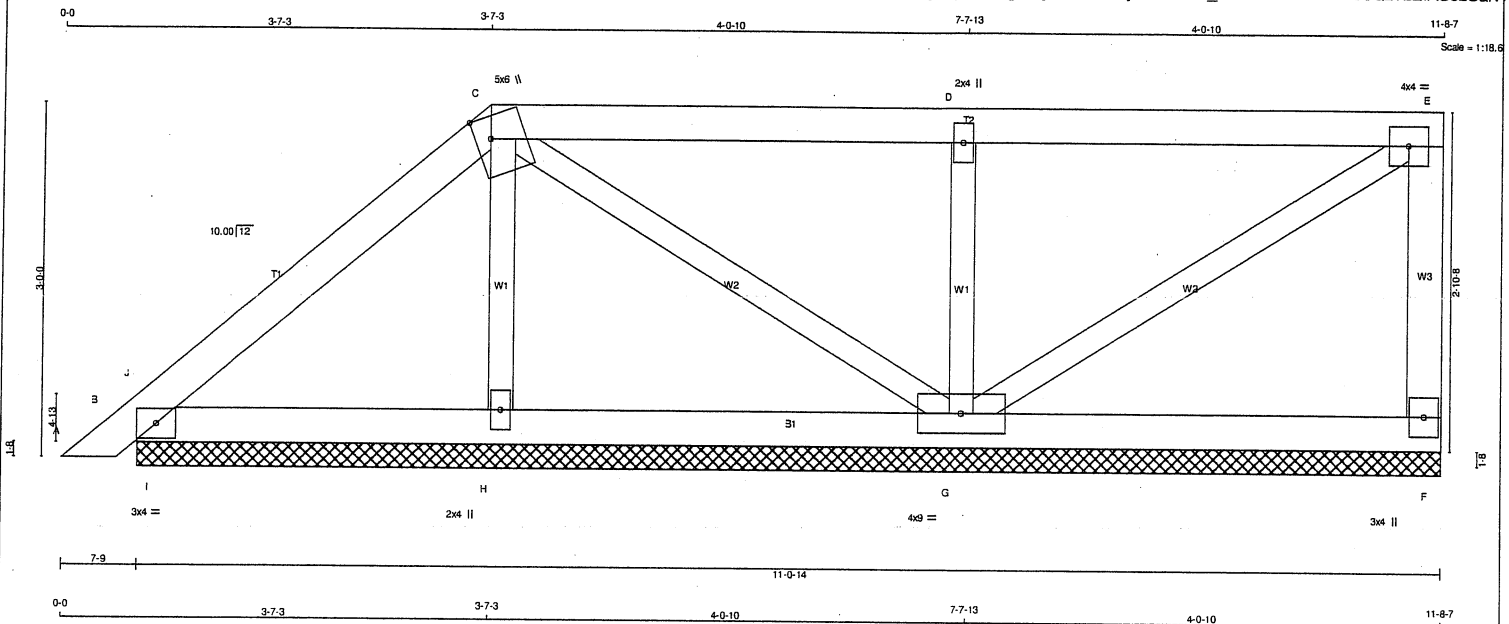
JSI GRIP= 0.27 (D) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)



Structural component only
DWG# T-2115894

JOB NAME 412982	TRUSS NAME PB02	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:21 2021 Page 1
ID:wTM7iolSByniqocTeDgf3Pyb9F8-YNFyQvYbdw2_xX7TlhwYPZS2lbBsQz?LEfAS8zCaIW



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TTWW+m	MT20	5.0	6.0	2.25 1.50
D	TMW+w	MT20	2.0	4.0	
E	TMVW-I	MT20	4.0	4.0	
F	BMV1+p	MT20	3.0	4.0	
G	BMVWW1-I	MT20	4.0	9.0	
H	BMV1+w	MT20	2.0	4.0	

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	
F	172	0	172	0	0	11-0-14	11-0-14
B	257	0	257	0	0	11-0-14	11-0-14
H	260	0	260	0	0	11-0-14	11-0-14
G	582	0	582	0	0	11-0-14	11-0-14

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	122	79 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0
B	180	130 / 0	0 / 0	0 / 0	0 / 0	50 / 0	0 / 0
H	186	109 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
G	410	277 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 14	-91.8 -91.8	0.02 (1)	10.00	H-C	-163 / 0	0.03 (1)
B-J	-20 / 0	-91.8 -91.8	0.04 (1)	6.25	C-G	-69 / 0	0.02 (1)
J-C	-88 / 0	-91.8 -91.8	0.10 (1)	6.25	G-D	-464 / 0	0.08 (1)
C-D	0 / 3	-91.8 -91.8	0.25 (1)	10.00	G-E	-3 / 0	0.00 (1)
D-E	0 / 2	-91.8 -91.8	0.25 (1)	10.00	I-J	-249 / 0	0.00 (1)
F-E	-141 / 0	0.0 0.0	0.02 (1)	7.81			
B-I	0 / 62	-18.5 -18.5	0.09 (1)	10.00			
I-H	0 / 62	-18.5 -18.5	0.09 (1)	10.00			
H-G	0 / 56	-18.5 -18.5	0.08 (4)	10.00			
G-F	0 / 0	-18.5 -18.5	0.07 (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

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

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

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

(55 % OF 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=0.25/1.00 (C-D:1), BC=0.09/1.00 (B-I:1), WB=0.08/1.00 (D-G:1), SSI=0.19/1.00 (B-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

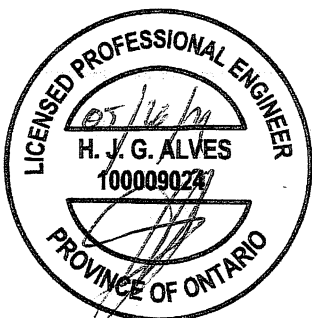
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

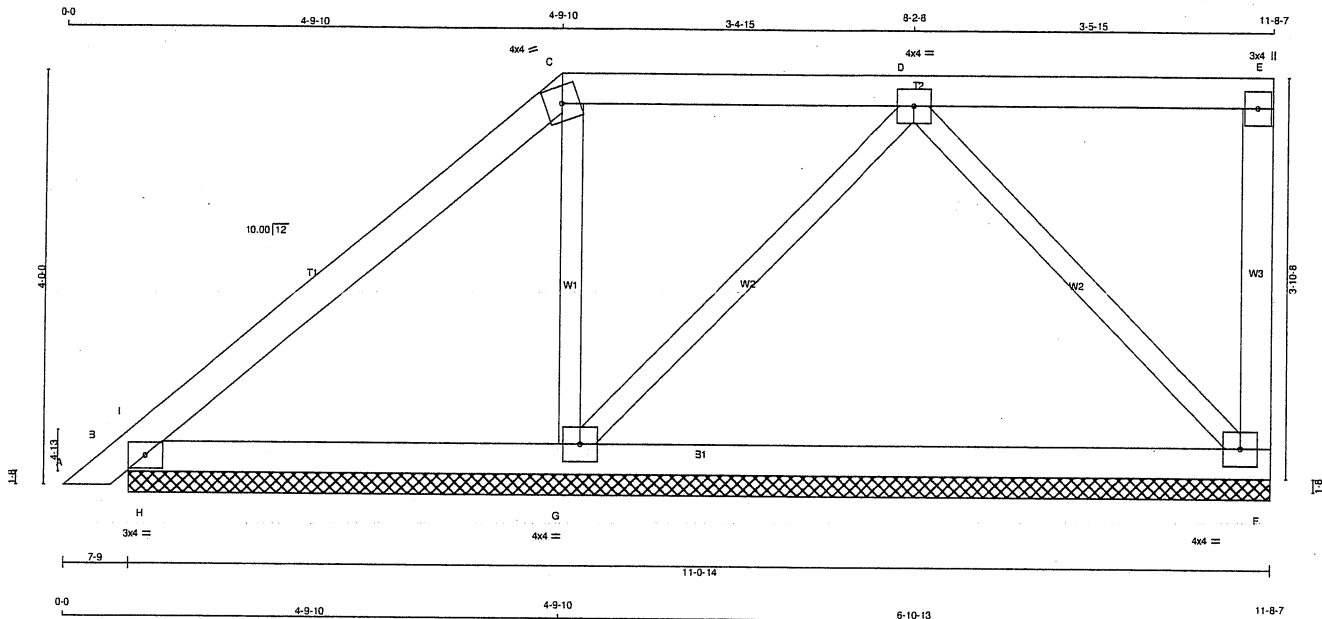
JSI GRIP= 0.23 (D) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)



Structural component only
DWG# T-2115895

JOB NAME 412982	TRUSS NAME PB03	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:22 2021 Page 1
ID:wTM7iolSBYniqocTeDgf3Pyb9F8-0ZpKdFZDOEARyhfrPR_5c6eo8uYbtY8ZuOk_azCaIV



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TTW-m	MT20	4.0	4.0	
D	TMW-w	MT20	4.0	4.0	
E	TMV-p	MT20	3.0	4.0	
F	BMW1-t	MT20	4.0	4.0	
G	BMW1-t	MT20	4.0	4.0	

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
F		391	0	391	0	11-0-14	11-0-14		
B		311	0	311	0	11-0-14	11-0-14		
G		568	0	568	0	11-0-14	11-0-14		

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	275	190 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
B	216	162 / 0	0 / 0	0 / 0	0 / 0	54 / 0	0 / 0
G	406	242 / 0	0 / 0	0 / 0	0 / 0	163 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 14	-91.8 -91.8	0.02 (1)	10.00	G-C	-224 / 0	0.05 (1)
B-I	0 / 144	-91.8 -91.8	0.13 (1)	10.00	G-D	-233 / 0	0.09 (1)
I-C	-97 / 0	-91.8 -91.8	0.19 (1)	6.25	D-F	-309 / 0	0.12 (1)
C-D	-57 / 0	-91.8 -91.8	0.18 (1)	6.25	H-I	-519 / 0	0.00 (1)
D-E	0 / 0	-91.8 -91.8	0.18 (1)	10.00			
F-E	-122 / 0	0.0 0.0	0.03 (1)	7.81			
B-H	0 / 64	-18.5 -18.5	0.18 (1)	10.00			
H-G	0 / 64	-18.5 -18.5	0.20 (4)	10.00			
G-F	0 / 216	-18.5 -18.5	0.21 (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 2.00/12 MINIMUM

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

CSI: TC=0.19/1.00 (C-I:1), BC=0.21/1.00 (F-G:4), WB=0.12/1.00 (D-F:1), SSI=0.39/1.00 (B-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

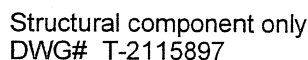
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (B) (INPUT = 0.90)
JSI METAL= 0.07 (F) (INPUT = 1.00)

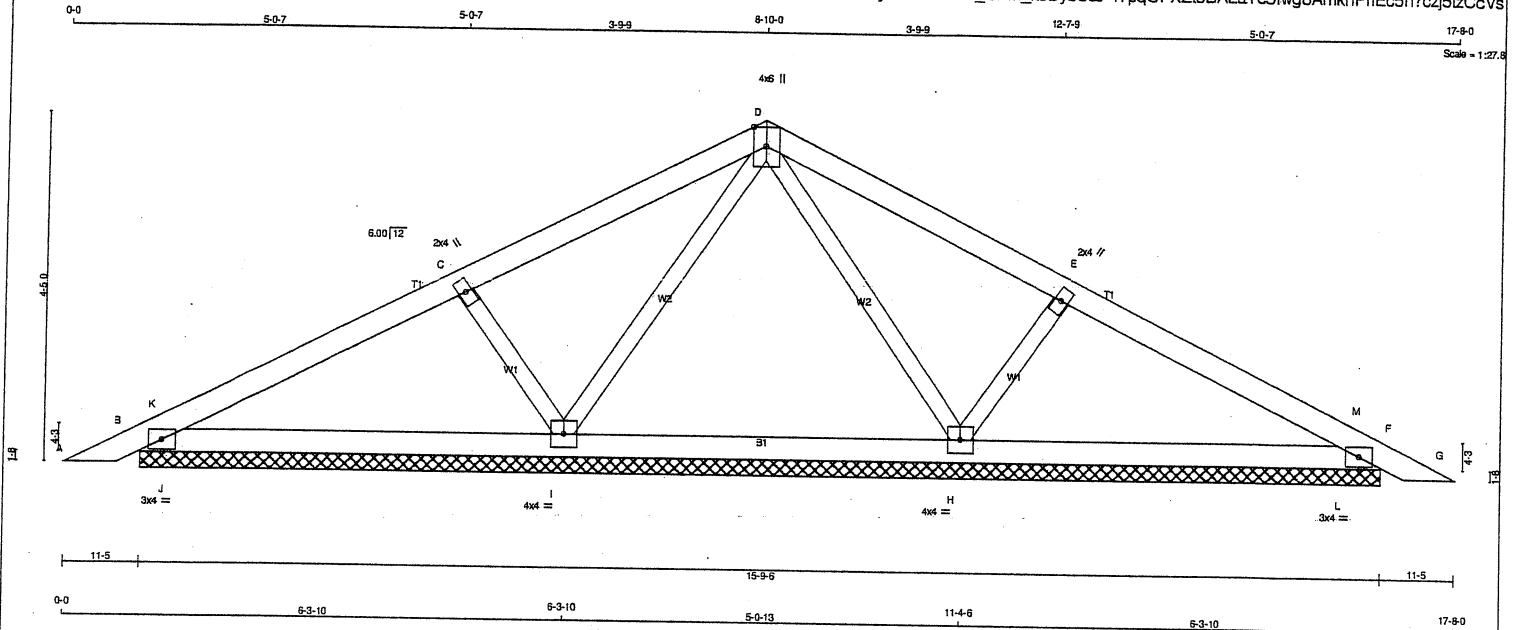


Structural component only
DWG# T-2115896



JOB NAME 413226	TRUSS NAME PB06	QUANTITY 17	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. Wed May 26 14:46:31 2021 Page 1
ID:U6yi?rbeFFwKxf_UFm_koDybSsJ-47pqOPXZtoBALaTc5fwg8AmknPffEc5h?czj5zCcVs



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TMW+w	MT20	2.0	4.0	
D	TTWW+p	MT20	4.0	6.0	Edge
E	TMW+w	MT20	2.0	4.0	
F	TMB1-I	MT20	3.0	4.0	
H	BMWW1-t	MT20	4.0	4.0	
I	BMWW1-t	MT20	4.0	4.0	

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	340	0	340	0	0	15-9-6	15-9-6
F	340	0	340	0	0	15-9-6	15-9-6
H	610	0	610	0	0	15-9-6	15-9-6
I	610	0	610	0	0	15-9-6	15-9-6

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	PERM. LIVE	WIND	DEAD	SOIL
B	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
F	239	166 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
H	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
I	432	283 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, H, 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 17	-91.8	-91.8 0.05 (1)	10.00	D-H	-197 / 0	0.07 (1)
B-K	-199 / 0	-91.8	-91.8 0.06 (4)	6.25	H-E	-396 / 0	0.07 (1)
K-C	-143 / 0	-91.8	-91.8 0.23 (1)	6.25	I-D	-197 / 0	0.07 (1)
C-D	0 / 54	-91.8	-91.8 0.24 (1)	10.00	C-I	-396 / 0	0.07 (1)
D-E	0 / 54	-91.8	-91.8 0.24 (1)	10.00	J-K	-69 / 58	0.00 (1)
E-M	-143 / 0	-91.8	-91.8 0.23 (1)	6.25	L-M	-69 / 58	0.00 (1)
M-F	-199 / 0	-91.8	-91.8 0.06 (4)	6.25			
F-G	0 / 17	-91.8	-91.8 0.05 (1)	10.00			
B-J	0 / 149	-18.5	-18.5 0.08 (1)	10.00			
J-I	0 / 149	-18.5	-18.5 0.12 (4)	10.00			
I-H	0 / 40	-18.5	-18.5 0.11 (4)	10.00			
H-L	0 / 149	-18.5	-18.5 0.12 (4)	10.00			
L-F	0 / 149	-18.5	-18.5 0.08 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

CSI: TC=0.24/1.00 (C-D:1), BC=0.12/1.00 (I-J:4), WB=0.07/1.00 (D-I:1), SS=0.15/1.00 (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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

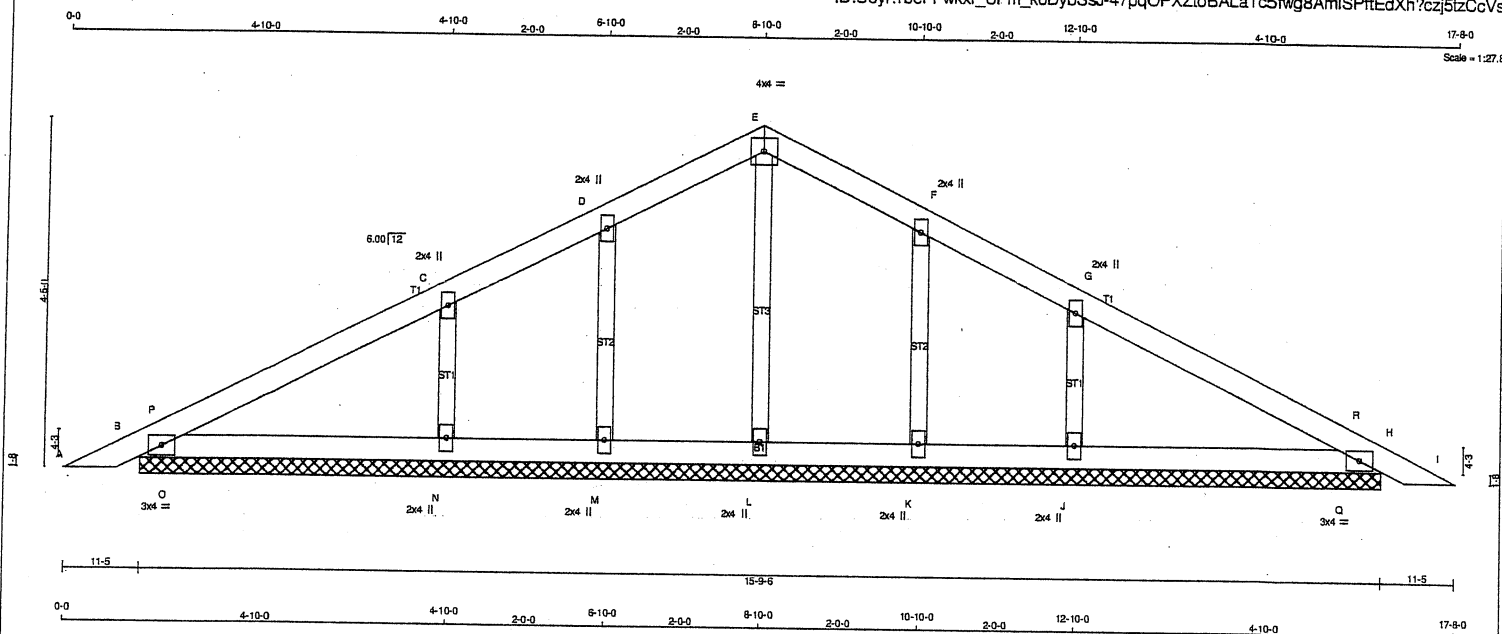
JSI GRIP= 0.24 (F) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)



Structural component only
DWG# T-2115839

JOB NAME 413226	TRUSS NAME PB06G	QUANTITY 2	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 14:46:31 2021 Page 1
 ID:U6yi?rbeFFwxf_UFm_koDybSsJ-47pqOPXZtoBALaTc5fwg8AmISpftEdXh?czj5tzCcVs



TOTAL WEIGHT = 2 X 51 = 102 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY No.2	SPF
E - I	2x4	DRY No.2	SPF
B - H	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

ALL GABLE WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0		
C, D, F, G					
C TMW+w	MT20	2.0	4.0		
E TTW-p	MT20	4.0	4.0		
H TMB1-I	MT20	3.0	4.0		
J, K, L, M, N					
J BMW1+w	MT20	2.0	4.0		

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 17	-91.8	-91.8	0.05 (1)	10.00	L-E	-131 / 0	0.04 (1)
B-P	-44 / 0	-91.8	-91.8	0.02 (4)	6.25	M-D	-160 / 0	0.03 (1)
P-C	-44 / 0	-91.8	-91.8	0.13 (1)	6.25	N-C	-306 / 0	0.05 (1)
C-D	-60 / 0	-91.8	-91.8	0.13 (1)	6.25	K-F	-160 / 0	0.03 (1)
D-E	-45 / 0	-91.8	-91.8	0.05 (1)	6.25	J-G	-306 / 0	0.05 (1)
E-F	-45 / 0	-91.8	-91.8	0.05 (1)	6.25	O-P	-171 / 5	0.00 (1)
F-G	-60 / 0	-91.8	-91.8	0.13 (1)	6.25	Q-R	-171 / 5	0.00 (1)
G-R	-44 / 0	-91.8	-91.8	0.13 (1)	6.25			
R-H	-44 / 0	-91.8	-91.8	0.02 (4)	6.25			
H-I	0 / 17	-91.8	-91.8	0.05 (1)	10.00			
B-O	0 / 49	-18.5	-18.5	0.10 (1)	10.00			
O-N	0 / 49	-18.5	-18.5	0.10 (1)	10.00			
N-M	0 / 39	-18.5	-18.5	0.07 (1)	10.00			
M-L	0 / 36	-18.5	-18.5	0.02 (4)	10.00			
L-K	0 / 36	-18.5	-18.5	0.02 (4)	10.00			
K-J	0 / 39	-18.5	-18.5	0.07 (1)	10.00			
J-Q	0 / 49	-18.5	-18.5	0.10 (1)	10.00			
Q-H	0 / 49	-18.5	-18.5	0.10 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN/C

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

CSI: TC=0.13/1.00 (C-P:1), BC=0.10/1.00 (B-C:1), WB=0.05/1.00 (C-N:1), SS=0.14/1.00 (H-Q:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (H) (INPUT = 0.90)

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



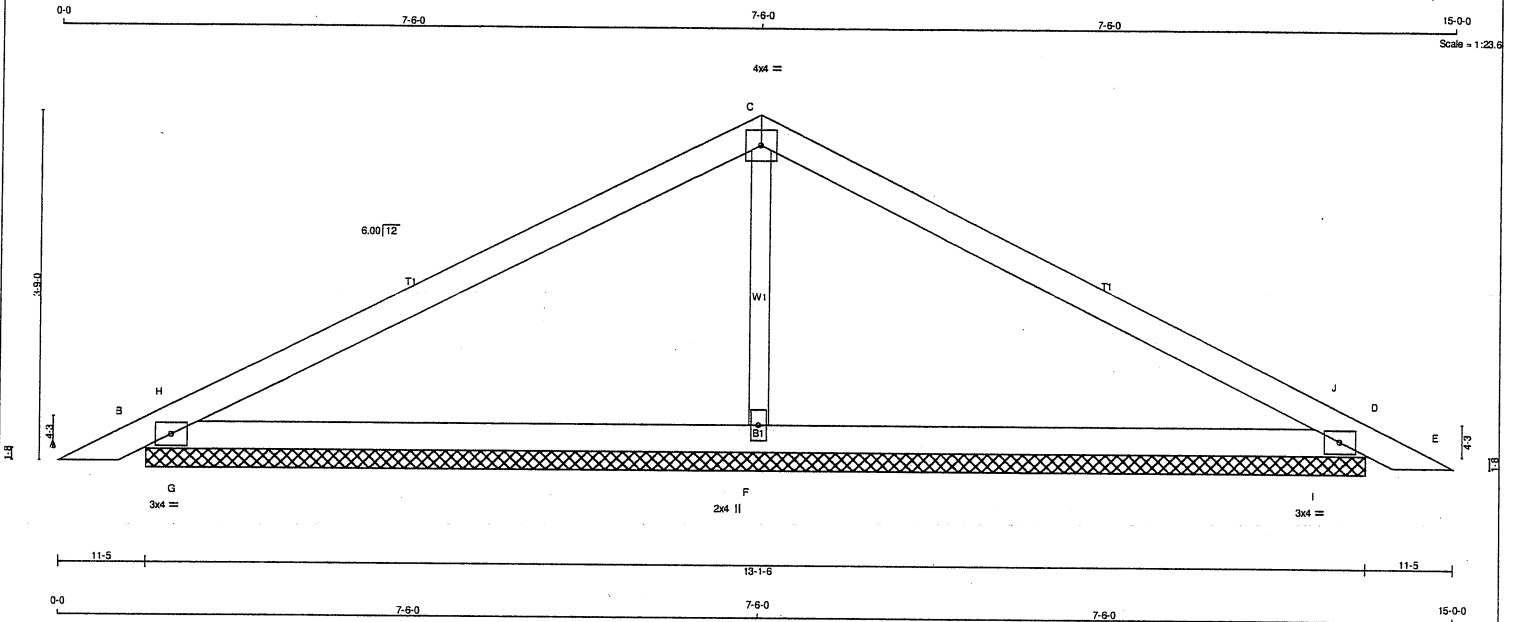
Structural component only
 DWG# T-2115840

Structural component only
DWG# T-2115809

JOB NAME 412961	TRUSS NAME PB32	QUANTITY 6	PLY 1	JOB DESC. ROYAL PINE HOMES	TRUSS DESC.	DRWG NO.
---------------------------	---------------------------	----------------------	-----------------	-------------------------------	-------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 11:58:12 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mo5wA1yaos6-GF5_rCjpCtp5Fawf_BFQLV?pWRo3W9BCKv5p8kzCezf



TOTAL WEIGHT = 6 X 37 = 219 lb

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

PLATES (table is in inches)	TYPE	PLATES	W	LEN	Y	X
JT	TMB1-I	MT20	3.0	4.0		
B	TMB1-I	MT20	3.0	4.0		
C	TTW-p	MT20	4.0	4.0		
D	TMB1-I	MT20	3.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	517	0	517	0	13-1-6	13-1-6
D	517	0	517	0	13-1-6	13-1-6
F	574	0	574	0	13-1-6	13-1-6

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM. LIVE	WIND	DEAD
B	362	256 / 0	0 / 0	0 / 0	0 / 0	106 / 0
D	362	256 / 0	0 / 0	0 / 0	0 / 0	106 / 0
F	409	249 / 0	0 / 0	0 / 0	0 / 0	160 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	0 / 17	-91.8	-91.8	0.05 (1)	10.00	F-C	-284 / 0	0.06 (1)	
B-H	-62 / 0	-91.8	-91.8	0.24 (1)	6.25	G-H	-744 / 0	0.00 (1)	
H-C	-262 / 0	-91.8	-91.8	0.49 (1)	6.25	I-J	-744 / 0	0.00 (1)	
C-J	-262 / 0	-91.8	-91.8	0.49 (1)	6.25				
J-D	-62 / 0	-91.8	-91.8	0.24 (1)	6.25				
D-E	0 / 17	-91.8	-91.8	0.05 (1)	10.00				
B-G	0 / 223	-18.5	-18.5	0.43 (1)	10.00				
G-F	0 / 223	-18.5	-18.5	0.43 (1)	10.00				
F-I	0 / 223	-18.5	-18.5	0.43 (1)	10.00				
I-D	0 / 223	-18.5	-18.5	0.43 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

CSI: TC=0.49/1.00 (C-H:1), BC=0.43/1.00 (B-G:1), WB=0.06/1.00 (C-F:1), SSI=0.56/1.00 (D-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

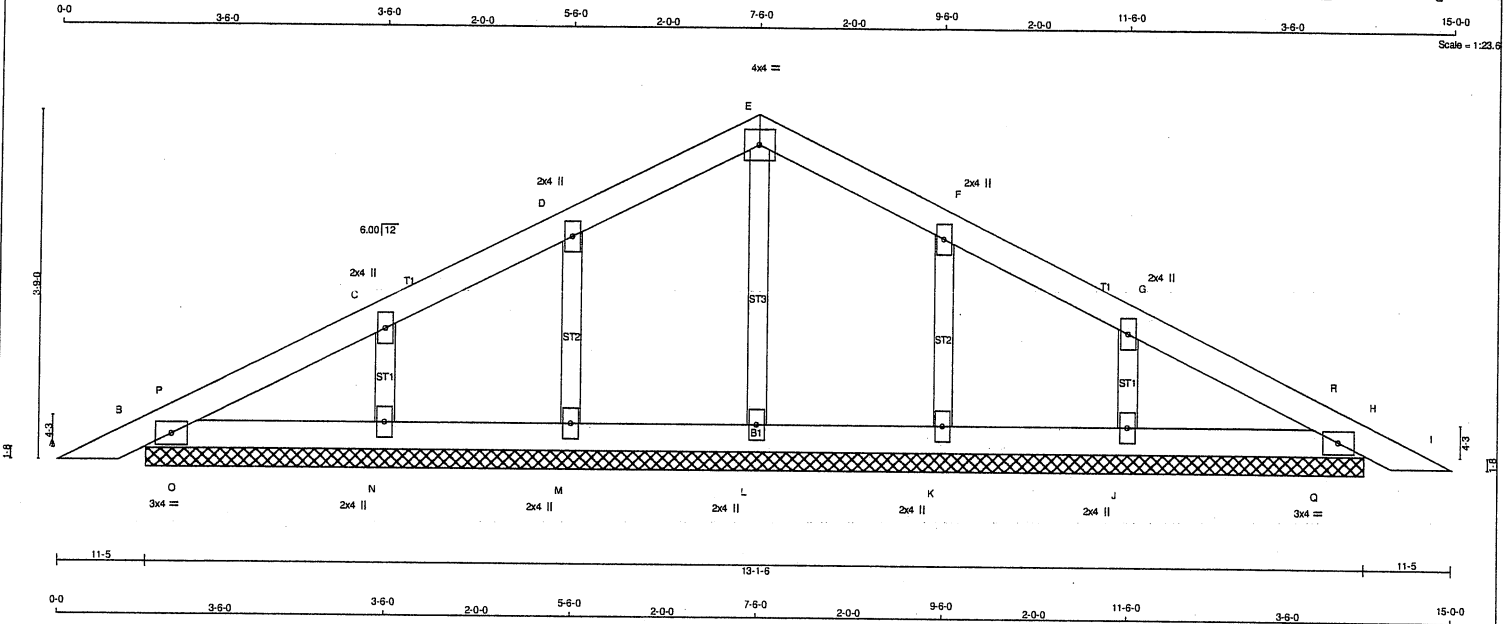
JSI GRIP= 0.45 (D) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115810

JOB NAME 412961	TRUSS NAME PB32G	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. Wed May 26 11:58:13 2021 Page 1
ID:Zk4pT?gQQ4nYrHy9Mc5wA1yaos6-kReN2YKRzByytkVrXvmftuY5_rEHFctMzZrMgAzCeze



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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMB1-I	MT20	3.0	4.0
C, D, F, G				
C	TMW+w	MT20	2.0	4.0
E	TTW-p	MT20	4.0	4.0
H	TMB1-I	MT20	3.0	4.0
J, K, L, M, N				
J	BMW1+w	MT20	2.0	4.0

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 (LC)	MAX. UNBRACED LENGTH	
FR-TO		FROM	TO		FR-TO				
A-B	0 / 17	-91.8	-91.8	0.05 (1)	10.00	L-E	-135 / 0	0.03 (1)	
B-P	-47 / 0	-91.8	-91.8	0.01 (4)	6.25	M-D	-198 / 0	0.03 (1)	
P-C	-30 / 0	-91.8	-91.8	0.06 (1)	6.25	N-C	-208 / 0	0.03 (1)	
C-D	-30 / 0	-91.8	-91.8	0.06 (1)	6.25	K-F	-198 / 0	0.03 (1)	
D-E	-30 / 0	-91.8	-91.8	0.05 (1)	6.25	J-G	-208 / 0	0.03 (1)	
E-F	-30 / 0	-91.8	-91.8	0.05 (1)	6.25	O-P	-78 / 3	0.00 (1)	
F-G	-30 / 0	-91.8	-91.8	0.06 (1)	6.25	Q-R	-78 / 3	0.00 (1)	
G-R	-30 / 0	-91.8	-91.8	0.06 (1)	6.25				
R-H	-47 / 0	-91.8	-91.8	0.01 (4)	6.25				
H-I	0 / 17	-91.8	-91.8	0.05 (1)	10.00				
B-O	0 / 36	-18.5	-18.5	0.05 (1)	10.00				
O-N	0 / 36	-18.5	-18.5	0.05 (1)	10.00				
N-M	0 / 25	-18.5	-18.5	0.03 (1)	10.00				
M-L	0 / 20	-18.5	-18.5	0.02 (4)	10.00				
L-K	0 / 20	-18.5	-18.5	0.02 (4)	10.00				
K-J	0 / 25	-18.5	-18.5	0.03 (1)	10.00				
J-Q	0 / 36	-18.5	-18.5	0.05 (1)	10.00				
Q-H	0 / 36	-18.5	-18.5	0.05 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 25.6 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 39.0 PSF

SPACING = 24.0 IN. C/C

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

CSI: TC=0.06/1.00 (G-R:1), BC=0.05/1.00 (N-O:1), WB=0.03/1.00 (D-M:1), SSI=0.08/1.00 (G-R: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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

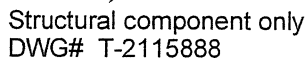
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (H) (INPUT = 0.90)

JSI METAL= 0.09 (C) (INPUT = 1.00)

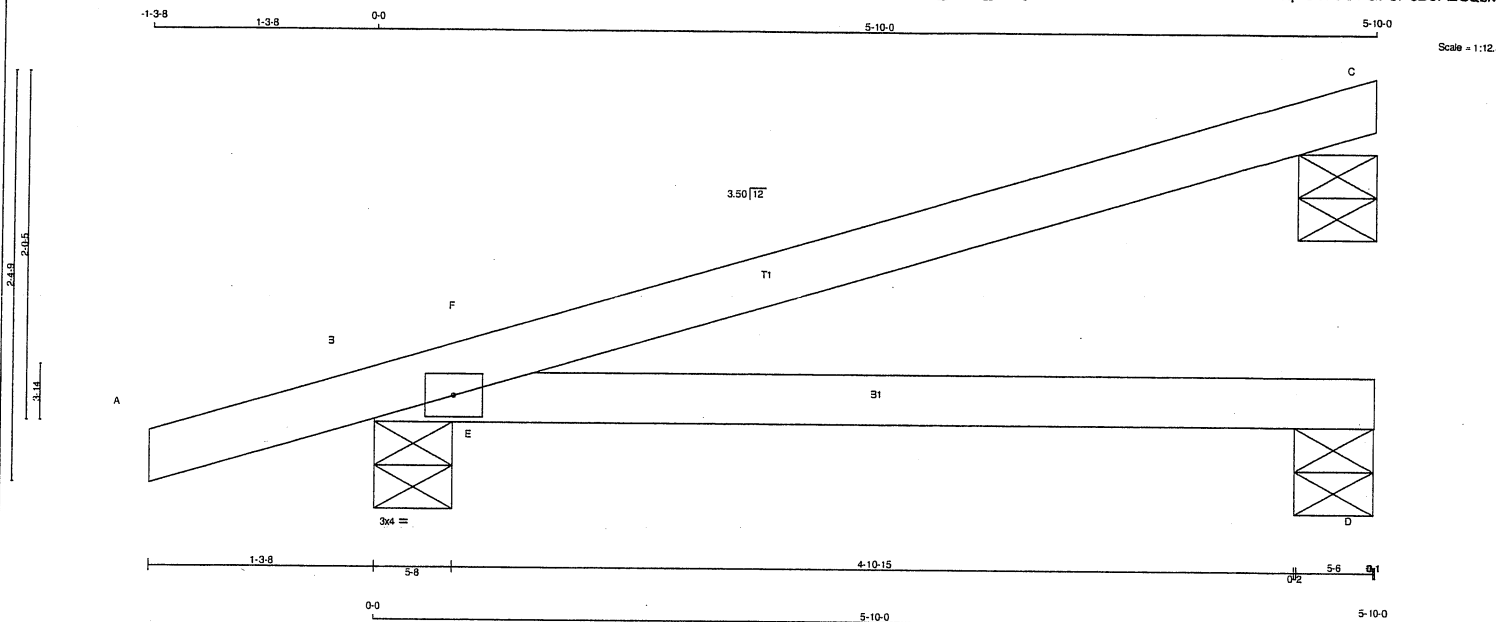


Structural component only
DWG# T-2115811



JOB NAME 412982	TRUSS NAME J02	QUANTITY 10	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. Wed May 26 16:56:07 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-O6fUPHeAdzrEaw5dmRAIzqYszYD9TGF5PcB0AzCacM



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
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-H	MT20	3.0	4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
C	233	0	233	0	0	5-8 (5-7)	5-8	
B	444	0	444	0	0	5-8	5-8	
D	88	0	88	0	0	5-8	5-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

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	161	125 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0
B	312	217 / 0	0 / 0	0 / 0	0 / 0	94 / 0	0 / 0
D	66	24 / 0	0 / 0	0 / 0	0 / 0	42 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED				WEBS		FACTORED	
	MAX.	FORCE	VERT.	LOAD	LC1	MAX	MEMB.	FORCE	MAX	
		(LBS)	(PLF)		CSI (LC)			(LBS)	CSI (LC)	
FR-TO			FROM	TO			FR-TO			
A-B	0 / 16		-91.8	-91.8	0.11 (1)	10.00	E-F	-289 / 12	0.00 (1)	
B-F	-17 / 6		-91.8	-91.8	0.08 (4)	6.25				
F-C	0 / 2		-91.8	-91.8	0.40 (1)	10.00				
B-E	0 / 0		-18.5	-18.5	0.29 (1)	10.00				
E-D	0 / 0		-18.5	-18.5	0.29 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/496$ (0.14")

CSI: TC=0.40/1.00 (C-F:1), BC=0.29/1.00 (D-E:1),
WB=0.00/1.00 (E-F:1), SS=0.24/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

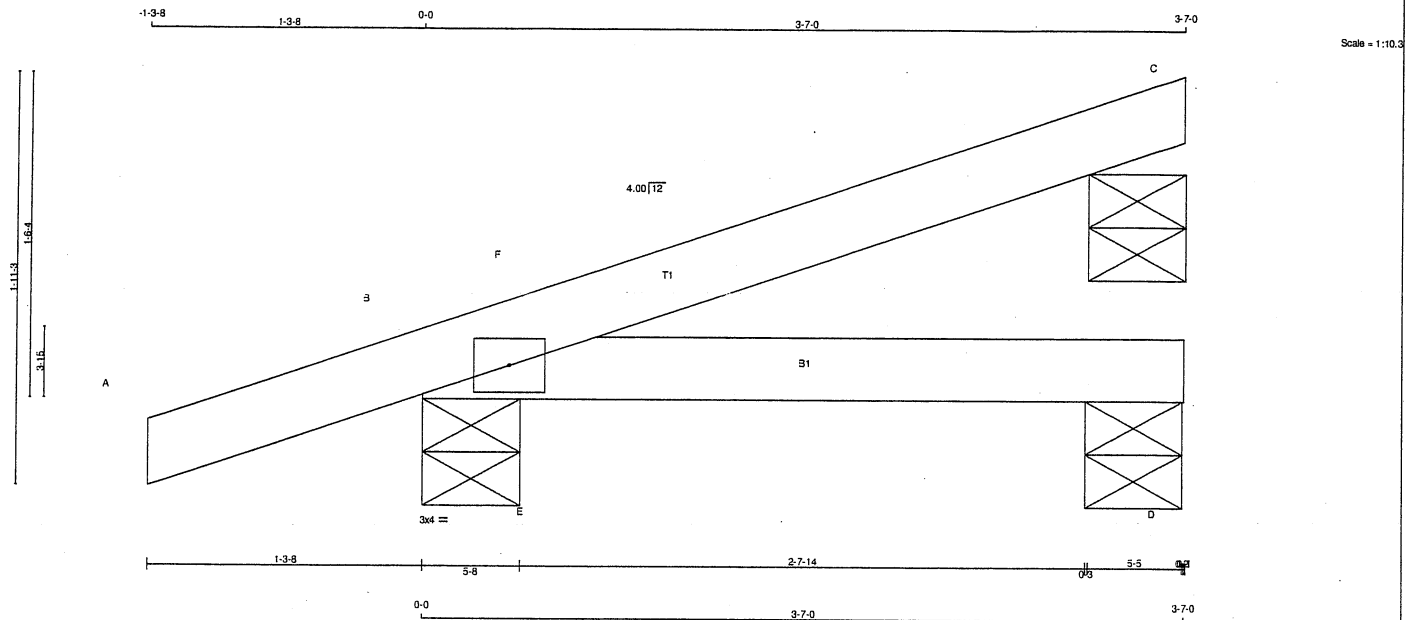


Structural component only
DWG# T-2115889

JOB NAME 412982	TRUSS NAME J03	QUANTITY 5	PLY 1	JOB DESC. ROYAL PINE HOMES	DRWG NO.
---------------------------	--------------------------	----------------------	-----------------	-------------------------------	----------

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Wed May 26 16:46:18 2021 Page 1
ID:U6yi?rbeFFwxf_UFm_koDybSsJ-8oapouWjk?gQ43OucZM2xmxyUXZ4f4SZeGQWrpzCaIZ



TOTAL WEIGHT = 5 X 10 = 50 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B	TMB1-1	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX (5-7)	IN-SX
C	141	0	141	0	0	5-8 (5-7)	5-8
B	320	0	320	0	0	5-8	5-8
D	57	0	57	0	0	5-8	5-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	98	76 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
B	224	160 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
D	42	16 / 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO			FR-TO			
A-B	0 / 18	-91.8	-91.8	0.13 (5)	10.00	E-F	-138 / 5	0.00 (1)	
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, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 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=0.15/1.00 (C-F:1), BC=0.12/1.00 (B-E:1), WB=0.00/1.00 (E-F:1), SS=0.11/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

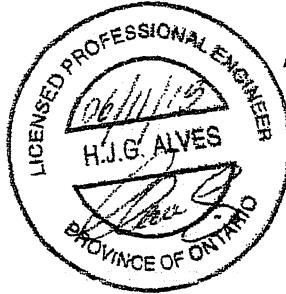
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



Structural component only
DWG# T-2115890



Alves Engineering Services Inc.

5208 Easton road
Burlington, Ontario L7L 6N6
(289) 259 5455

RESPONSABILITIES

- 1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components
- 2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.
- 3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.
- 4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.
- 5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

SPECIFICATIONS

- 1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.
- 2- Lumber is to be the sizes and grade specified on the truss drawing.
- 3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.
- 4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings
- 5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.
- 6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)
- 7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.
- 8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1800213

Feb 09, 2018

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

			SPF	D. FIR	SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	Common wire	Common spiral	Common wire	Common spiral	Gun Nail
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

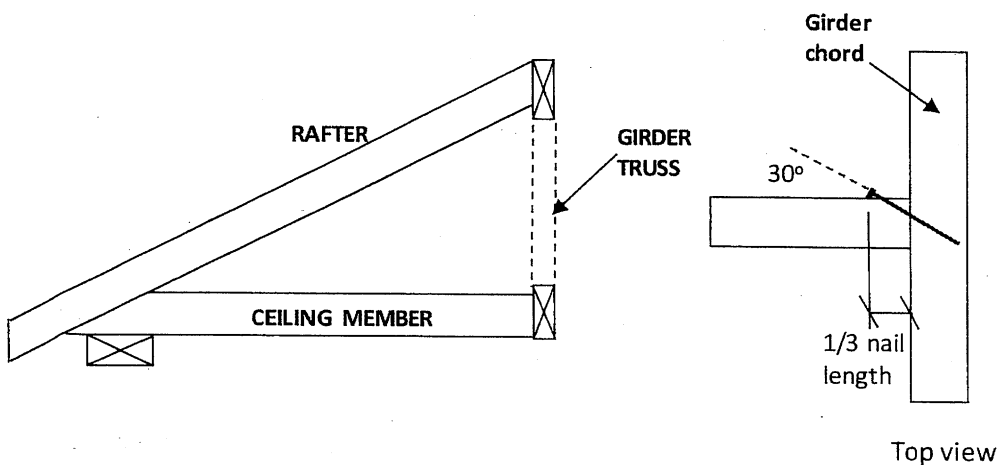


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

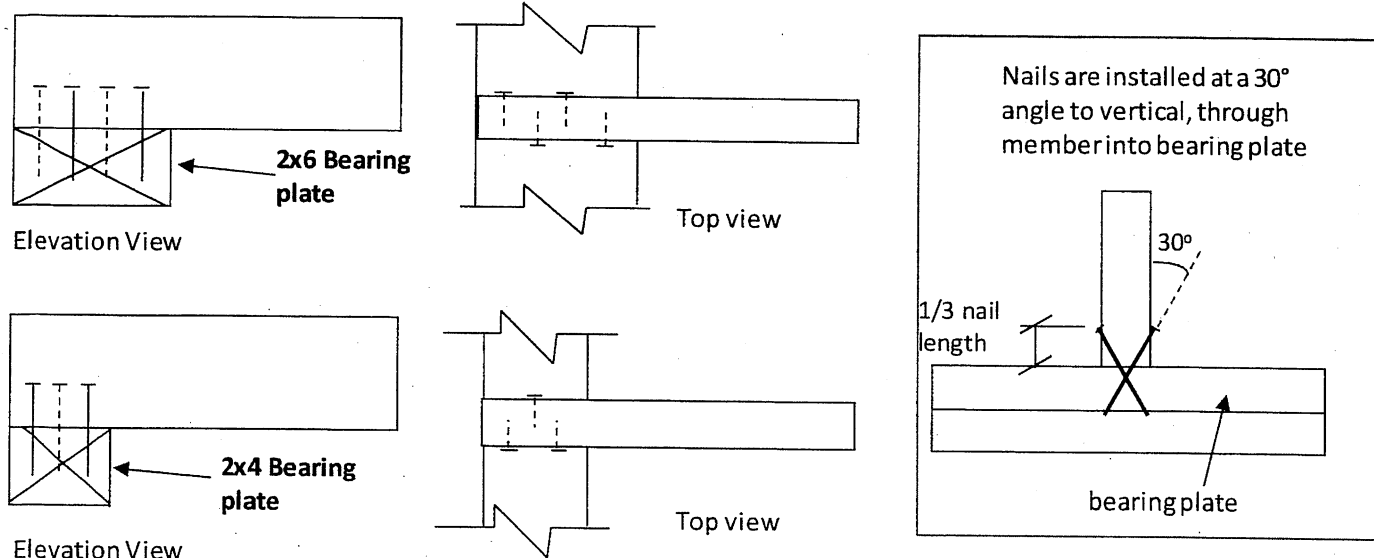
PEO
Certificate No. 10889485



December 21, 2020

TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails**. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
4. Nail values are based on specific gravity of $G = 0.42$ (SPF) and $G = 0.49$ (D. Fir).
5. Toe-nails shall be driven at approximately $1/3$ the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.
6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_0 factor). No increases are permitted for tabulated withdrawal resistances.
7. Lumber must be dry ($< 19\%$ moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485



LUL/LUS/LJS/HUS/HHUS/HGUS

Standard and Double-Shear Joist Hangers



This product is preferable to similar connectors because of a) easier installation, b) higher capacities, c) lower installed cost, or a combination of these features.

Most hangers in this series have double-shear nailing — an innovation that distributes the load through two points on each joist nail for greater strength. This allows for fewer nails, faster installation, and the use of all common nails for the same connection. (Do not bend or remove tabs)

Double-shear hangers range from the light capacity LUS hangers to the highest capacity HGUS hangers. For medium load truss applications, the HUS offers a lower cost alternative and easier installation than the HGUS hangers, while providing greater load capacity and bearing than the LUS.

Material: See table on pp. 217–218.

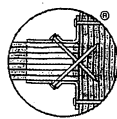
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1 1/2" nails into the header and 10d commons into the joist, and reduce the resistance to 0.64 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

Options:

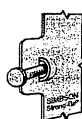
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



Double-Shear Nailing Top View



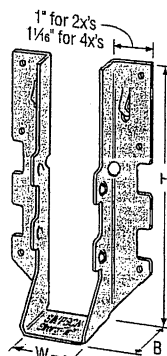
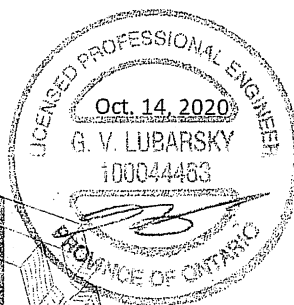
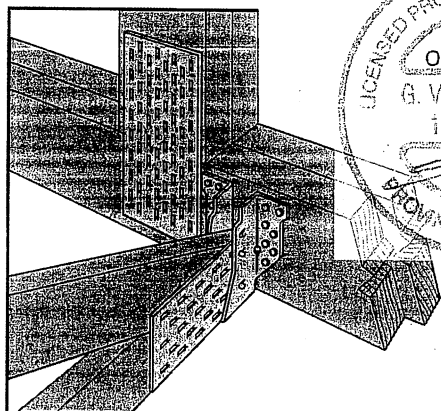
Double-Shear Nailing Side View; Do not bend tab



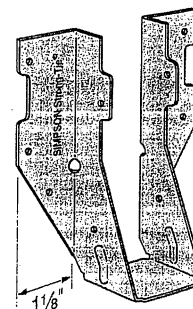
Dome Double-Shear Nailing Side View (available on some models)

Typical HUS26 Installation with Reduced Heel Height

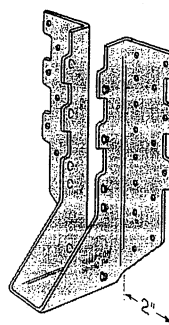
(Truss Designer to provide fastener quantity for connecting multiple members together)



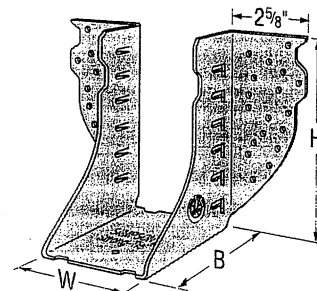
LUS28



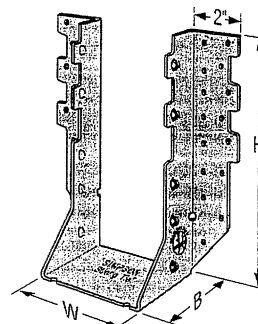
LU26L



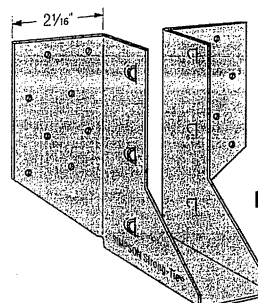
HUS210
(HUS26, HUS28, and HHUS similar)



HGUS28-2



HHUS210-2



LJS26DS

LUS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

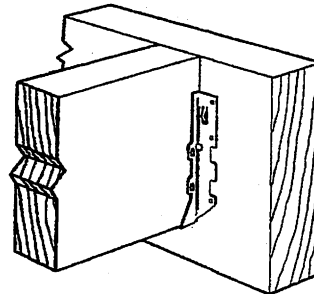
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

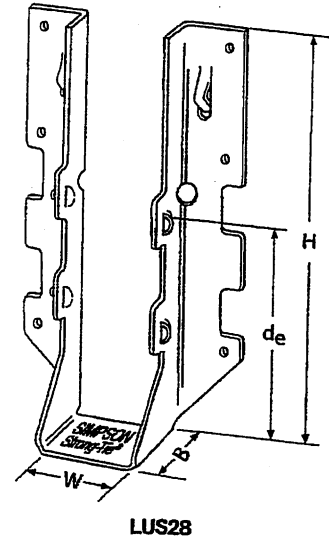
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

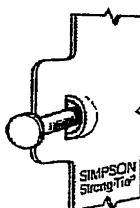


Typical LUS Installation

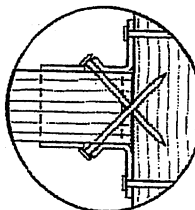


Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _p =1.00)	Uplift (K _u =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1½	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3¾	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¾	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¼	2	3¾	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 11/16	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4¾	8 11/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

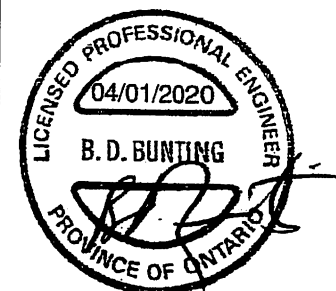
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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-SPEC LUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: See table

Finish: G90 galvanized

Design:

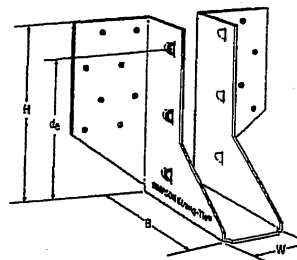
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

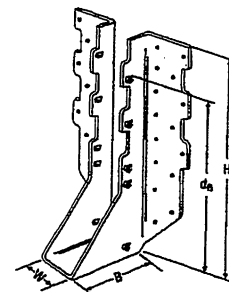
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

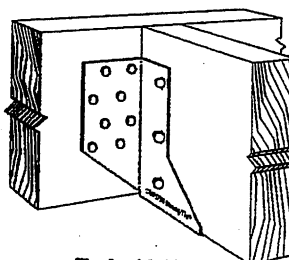
- See current catalogue for options



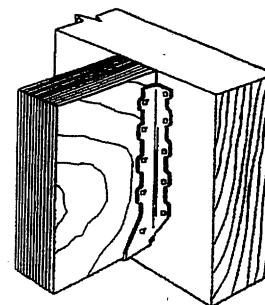
LJS26DS



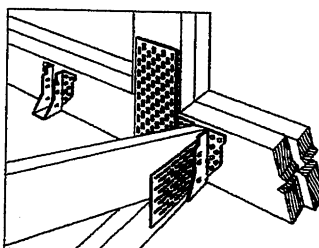
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



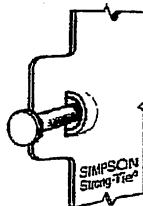
Typical HUS
Installation



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

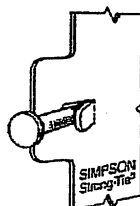
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _s ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15) lb.	Normal (K _u =1.00) lb.	Uplift (K _u =1.15) lb.	Normal (K _u =1.00) lb.
LJS26DS	18	1½	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1½	5⅝	3	3⅝	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1½	7⅝	3	6⅝	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1½	9⅝	3	7⅝	(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. d_s is the distance from the seat of the hanger to the highest joist nail.

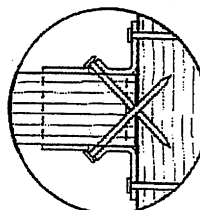


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

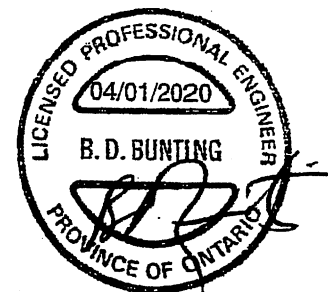
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

© 2020 Simpson Strong-Tie Company Inc.

T-SPECHUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

HGUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 12 gauge

Finish: G90 galvanized

Design:

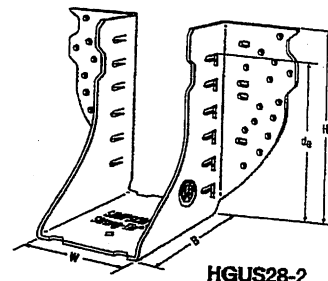
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

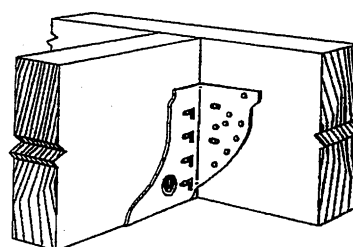
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

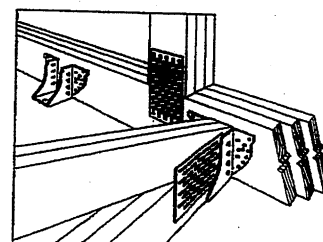
- See current catalogue for options



HGUS28-2



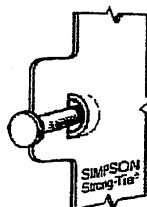
Typical HGUS Installation



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

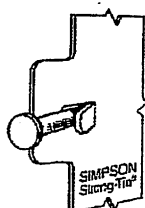
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
HGUS26	12	1½	5½	5	4½	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3½	5½	4	4½	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4½	5½	4	4½	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6½	5½	4	4½	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1½	7½	5	6½	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3½	7½	4	6½	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4½	7½	4	6½	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6½	7½	4	6½	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1½	9½	5	7½	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3½	9½	4	8½	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4½	9½	4	8½	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6½	9½	4	8½	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6½	10½	4	10½	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6½	12½	4	11½	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d₁ is the distance from the seat of the hanger to the highest joist nail.

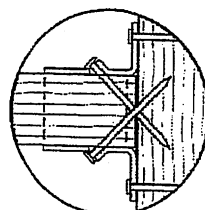


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

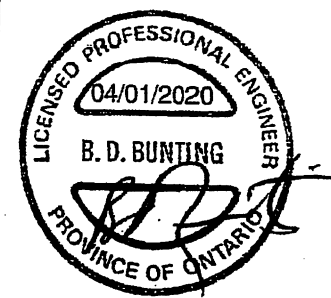
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

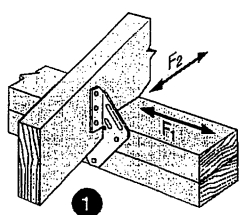
© 2020 Simpson Strong-Tie Company Inc.

T-SPECHGUS20 3/20 exp. 6/22

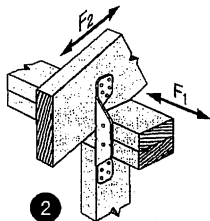
(800) 999-5099
strongtie.com

H/TSP

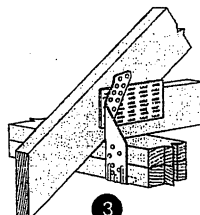
Seismic and Hurricane Ties (cont.)



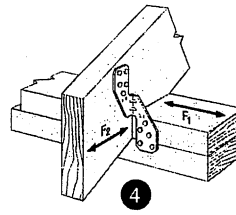
1 H1 Installation



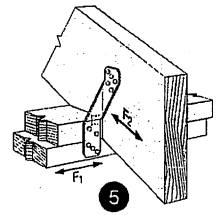
2 H2A Installation



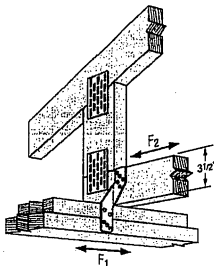
3 TSP Installation



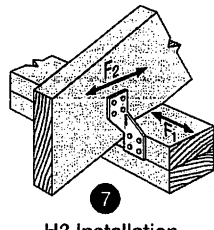
4 H2.5A Installation
(Nails into both top plates)



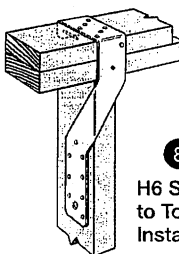
5 H2.5T Installation
(Nails into both top plates)



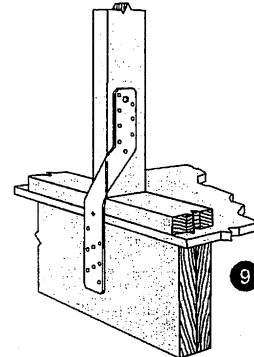
6 H2.5T Installation



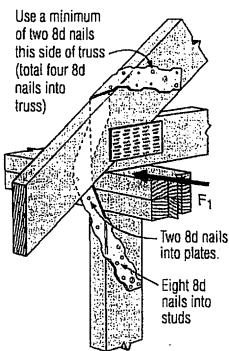
7 H3 Installation
(Nails into upper top plate)



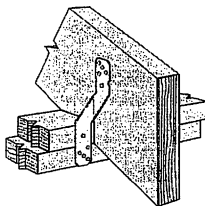
8 H6 Stud to Top Plate Installation



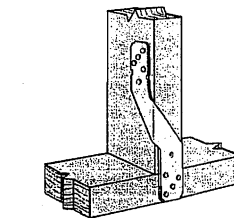
9 H6 Stud to Band Joist Installation



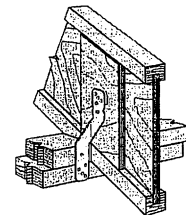
10 H7Z Installation



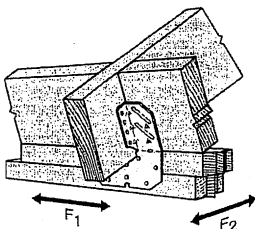
11 H8 Attaching Rafter to Double Top Plates



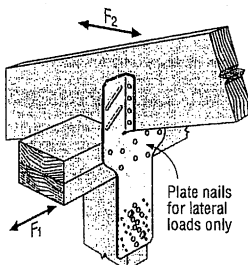
12 H8 attaching Stud to Sill
((4) 8d into plate, (5) 8d into stud)



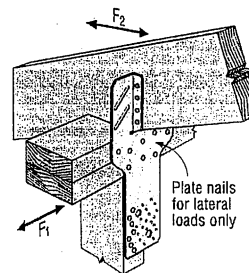
13 H8 attaching I-Joist to Double Top Plates



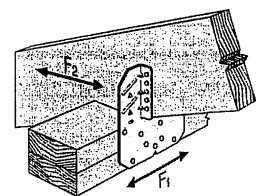
14 H10A Field-Bent Installation



15 H10S Installation

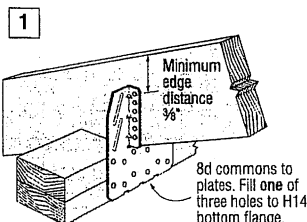


16 H10S Installation with Stud Offset

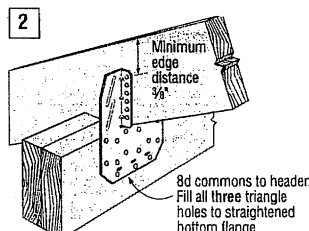


17 H10A Installation

H10A optional positive angle nailing connects shear blocking to rafter. Use 8d common nails. Slot allows maximum field-bending up to a pitch of 6/12, use 75% of the table uplift value; bend one time only.

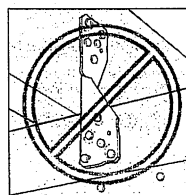


18 H14 Installation to Double Top Plates



19 H14 Installation to Double 2x Header

Avoid a Misinstallation



Do not make new holes or overdrive nails.

H/TSP

Seismic and Hurricane Ties

Simpson Strong-Tie® hurricane ties provide a positive connection between truss/rafter and the wall of the structure to resist wind and seismic forces. New additions to the line provide even more options.

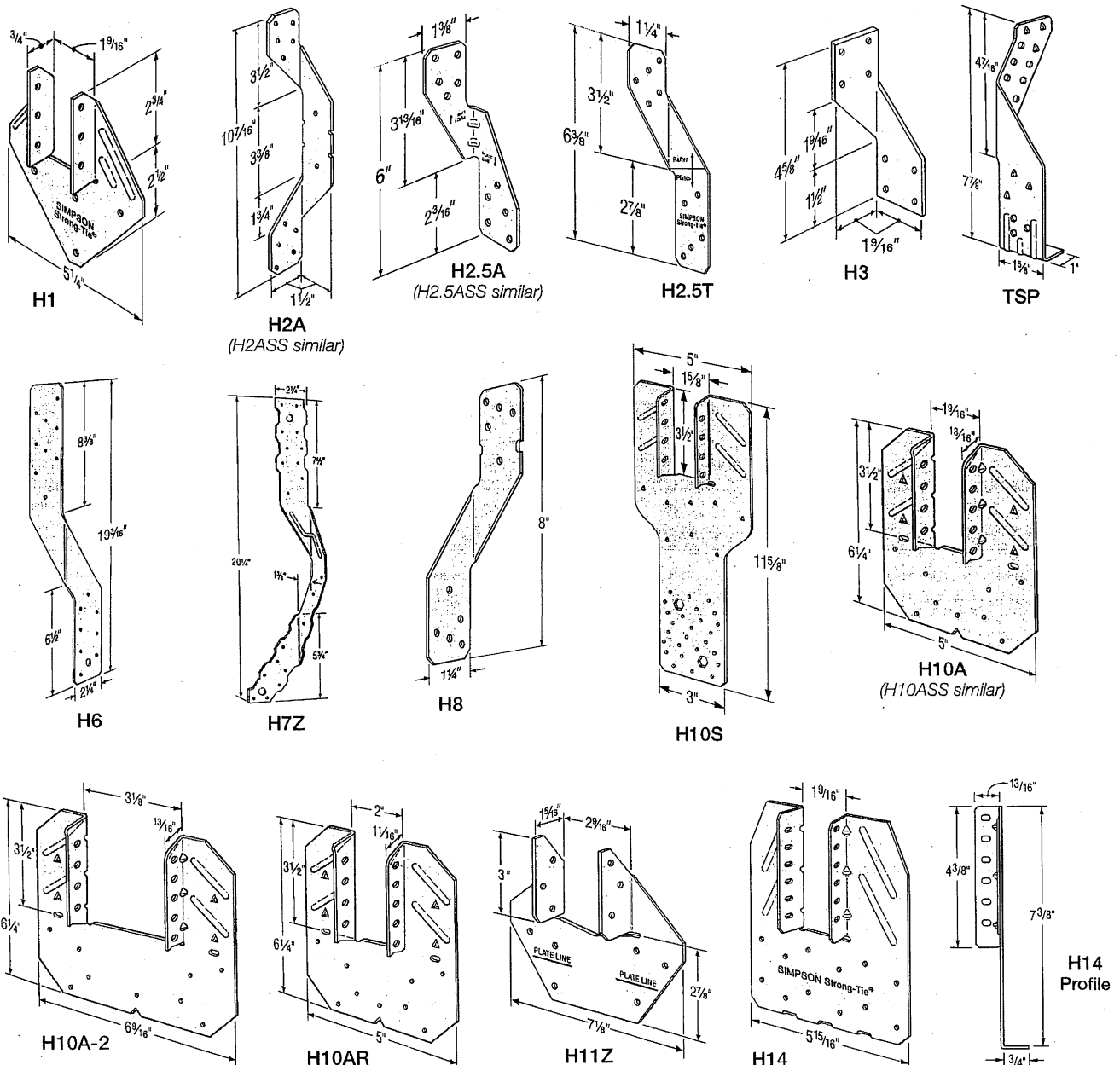
- H10AR — The heavy-duty design of the H10A available with a 2" wide throat to accommodate rough lumber
- H10A-2 — The H10A design with a 3" throat for double 2x members
- H2ASS, H2.5ASS and H10ASS — Popular ties now available in stainless steel

Material: See table

Finish: Galvanized. H7Z and H11Z — ZMAX® coating. Some models available in stainless steel or ZMAX; see Corrosion Information, pp.20–24 or visit strongtie.com.

Installation:

- Use all specified fasteners; see General Notes.
- H1 can be installed with flanges facing inward (reverse of H1 installation drawing; number 1).
- H2.5T, H3 and H6 ties are shipped in equal quantities of right and left versions (right versions shown).
- Hurricane ties do not replace solid blocking.
- When installing ties on plated trusses (on the side opposite the truss plate) do not fasten through the truss plate from behind. This can force the truss plate off of the truss and compromise truss performance.
- H10A optional nailing to connect shear blocking, use 8d nails. Slots allow maximum field bending up to a pitch of 6:12, use H10A sloped loads for field bent installation.



TECHNICAL BULLETIN

H – Seismic and Hurricane Ties

SIMPSON
Strong-Tie

The H connector series provides wind and seismic ties for trusses and rafters.

Material: 18 gauge **Finish:** G90 galvanized

Design: • Factored resistances are in accordance with CSA O86-14

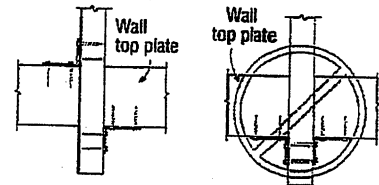
- Factored resistances have been increased 15%. No further increase is permitted.

Installation: • Use all specified fasteners

- Nails: $8d = 0.131"$ dia. x $2\frac{1}{2}"$ long common wire, $8d \times 1\frac{1}{2}" = 0.131" \times 1\frac{1}{2}"$ long, $10d \times 1\frac{1}{2}" = 0.146" \times 1\frac{1}{2}"$ long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

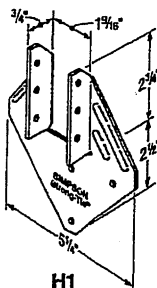
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0 .

Hurricane Tie Installations to Achieve Twice the Load (Top View)

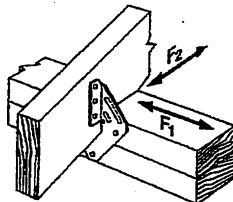


Install diagonally across from each other for minimum 2x truss.

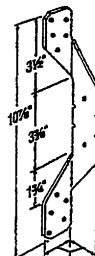
Nailing into both sides of a single ply 2x truss may cause the wood to split.



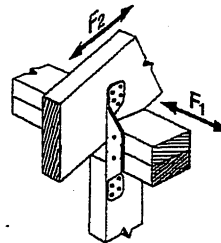
H1



H1 Installation



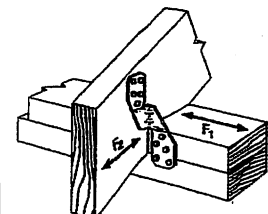
H2A



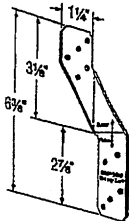
H2A Installation



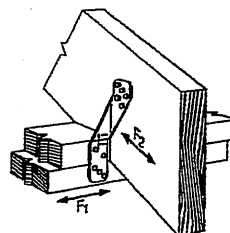
H2.5A



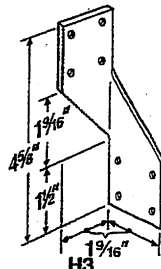
H2.5A Installation



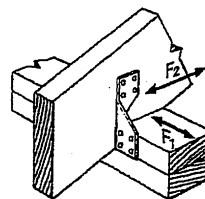
H2.5T



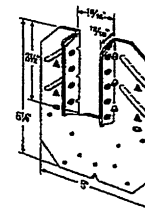
H2.5T Installation
(Nails into both top plates)



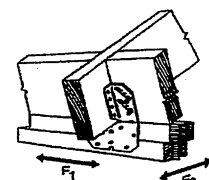
H3



H3 Installation



H10A



H10A Installation

Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
					D.Fir-L			S-P-F		
		To Rafter	To Plates	To Studs	Uplift	Normal		Uplift	Normal	
						F ₁	F ₂		F ₁	F ₂
										(K _g =1.15)
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H2.5T	18	(5) 8d	(5) 8d	—	835	175	240	740	160	210
H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.

2. Factored resistances are for one anchor. A minimum rafter thickness of 2 1/2" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.

3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.

4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.



**LIMIT
STATES
DESIGN**

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

© 2020 Simpson Strong-Tie Company Inc.

T-SPECH20 3/20 exp. 6/22

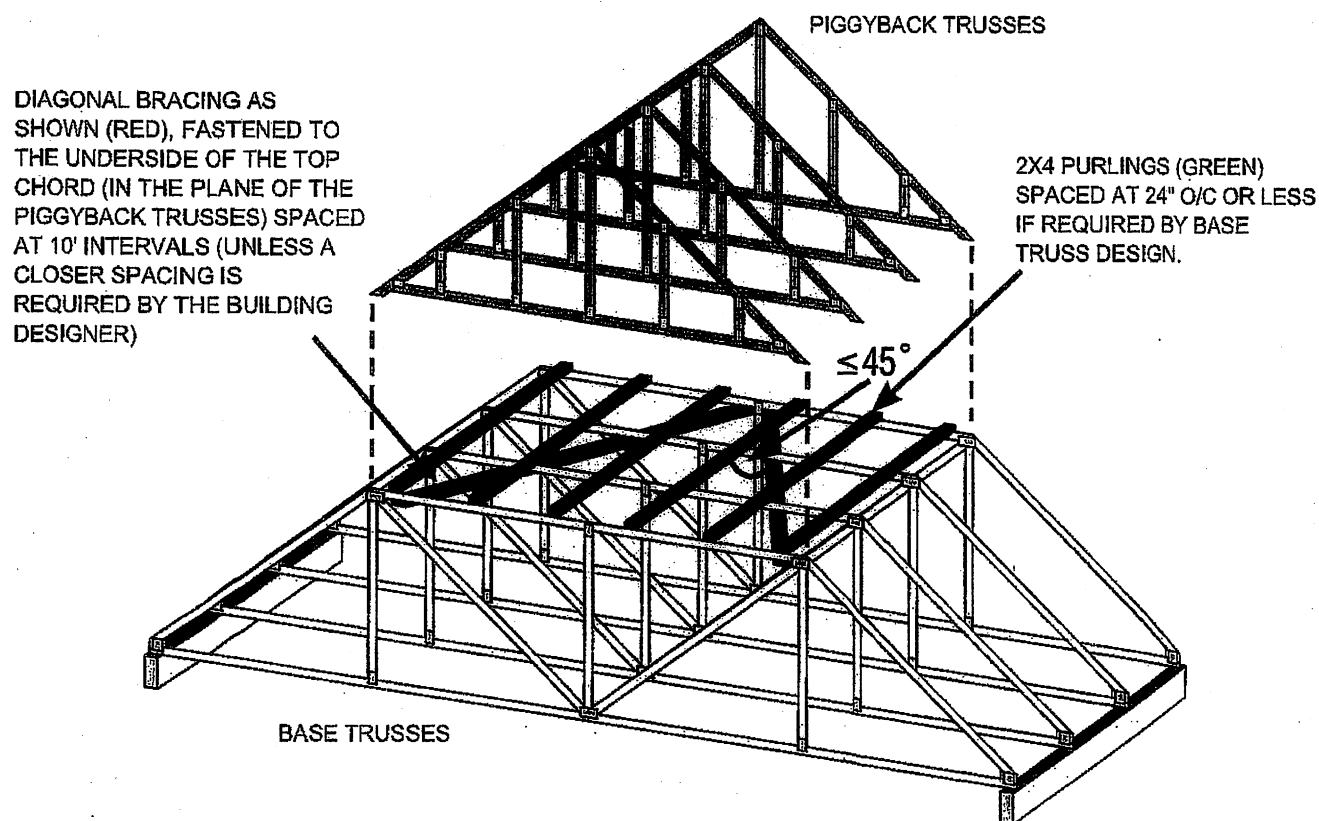
(800) 999-5099
strongtie.com

Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

TS/LTS/MTS/HTS

Twist Straps

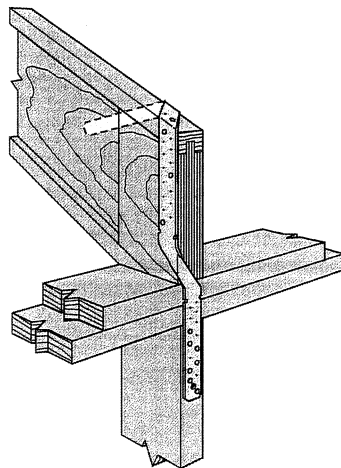
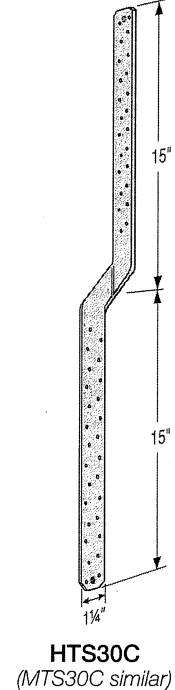
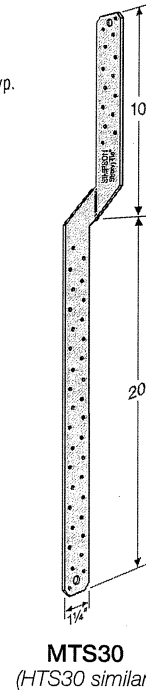
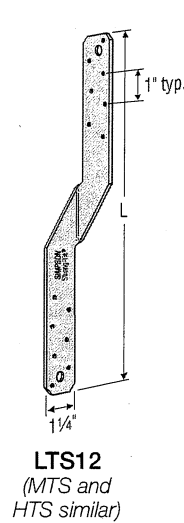
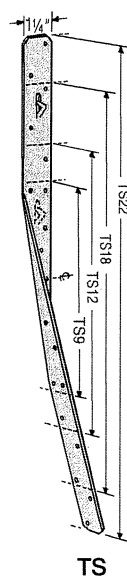
Twist straps provide a tension connection between two wood members. They resist uplift at the heel of a truss economically. The 3"-bend section eliminates interference at the transition points between wood members. TS twist straps come with an equal number of left and right hand units in each carton.

Material: LTS — 18 gauge; MTS/TS — 16 gauge; HTS — 14 gauge

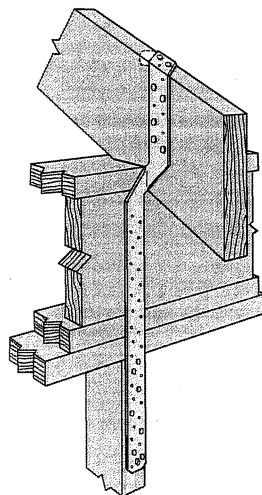
Finish: Galvanized. Some products available in stainless steel and ZMAX® coating; see Corrosion Information, pp. 20–24.

Installation:

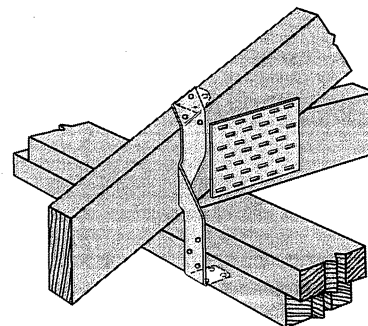
- Use all specified fasteners; see General Notes
- TS should be installed in pairs to reduce eccentricity
- When LTS/MTS is installed as truss-to-top plate tie, install (3) 10d x 1½" nails to the underside of the plate and (3) 10d x 1½" nails into the edge of the double top plate
- LTS, MTS and HTS are available with the bend reversed. Specify "-REV" after model number, such as MTS16-REV



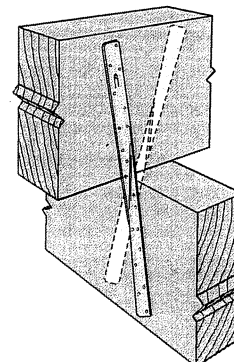
MTS30 Installation
with I-Joist Rafter



Typical MTS30
Installation



MTS Installation as a
Truss-to-Top Plate Tie



Typical TS
Installation

TS/LTS/MTS/HTS

Twist Straps (cont.)

These products are available with additional corrosion protection. For more information, see p. 24.

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32–34 for more information.

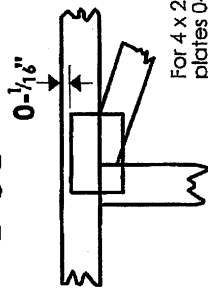
Model No.	L (in.)	Fasteners (Total)	Factored Resistance ($K_D = 1.15$)	
			D.Fir-L	S-P-F
			lb.	lb.
			kN	kN
TS9	9	(8) 16d	1125	1040
			5.00	4.63
TS12	11½	(10) 16d	1410	1300
			6.27	5.78
TS18	17¾	(14) 16d	1970	1820
			8.76	8.10
TS22	21¾	(18) 16d	2125	2125
			9.45	9.45
SS LTS12	12	(12) 10d x 1½"	1015	720
			4.52	3.20
LTS16	16	(12) 10d x 1½"	1015	720
			4.52	3.20
SS LTS18	18	(12) 10d x 1½"	1015	720
			4.52	3.20
LTS20	20	(12) 10d x 1½"	1015	720
			4.52	3.20
MTS12	12	(14) 10d x 1½"	1570	1180
			6.98	5.25
MTS16	16	(14) 10d x 1½"	1570	1180
			6.98	5.25
MTS18	18	(14) 10d x 1½"	1570	1180
			6.98	5.25
SS MTS20	20	(14) 10d x 1½"	1570	1180
			6.98	5.25
MTS30	30	(14) 10d x 1½"	1570	1180
			6.98	5.25
MTS24C	24	(14) 10d x 1½"	1570	1180
			6.98	5.25
MTS30C	30	(14) 10d x 1½"	1570	1180
			6.98	5.25
HTS16	16	(16) 10d x 1½"	2050	1455
			9.12	6.47
HTS20	20	(24) 10d x 1½"	2050	1455
			9.12	6.47
HTS24	24	(24) 10d x 1½"	2050	1455
			9.12	6.47
HTS28	28	(24) 10d x 1½"	2050	1455
			9.12	6.47
HTS30	30	(24) 10d x 1½"	2050	1455
			9.12	6.47
HTS30C	30	(24) 10d x 1½"	2050	1455
			9.12	6.47

1. LTS12 through LTS20, MTS16 through MTS30, HTS24 through HTS30C (except HTS30) have additional nail holes.
2. Install half of the fasteners on each end of strap to achieve maximum factored resistance.
3. Factored resistances have been increased 15% for earthquake or wind loading. No further increase allowed; reduce where other loads govern.
4. All straps except the MTS30 and HTS30 have the twist in the centre of the strap.
5. Twist straps do not have to be wrapped over the truss to achieve the load.
6. Optional nail holes are provided on some straps.
7. When used as a truss-to-top plate tie multiply the tabulated values by 0.95 for LTS and 0.74 for MTS. HTS cannot be used in this application.
8. **Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long. See pp. 27–28 for other nail sizes and information.

Symbols

PLATE LOCATION AND ORIENTATION

Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



This symbol indicates the required direction of slots in connector plates.

* Plate location details available in Mitek software or upon request.

PLATE SIZE

4 X 4

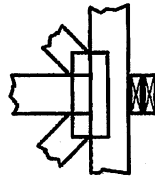
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



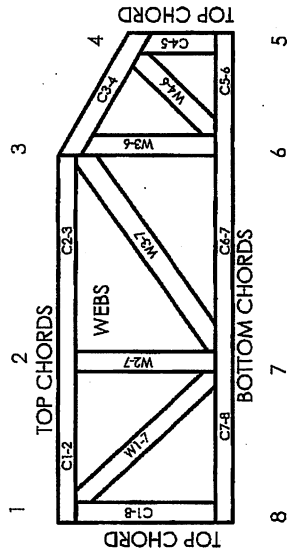
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

© 2007 Mitek® All Rights Reserved

Mitek
POWER TO PERFORM.™

Mitek Engineering Reference Sheet: MII-7473C rev. 10-'08

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.