

21.117718.000.00.HP

Issue Date: 05/28/21

**LAMPONE INVESTMENT INC**

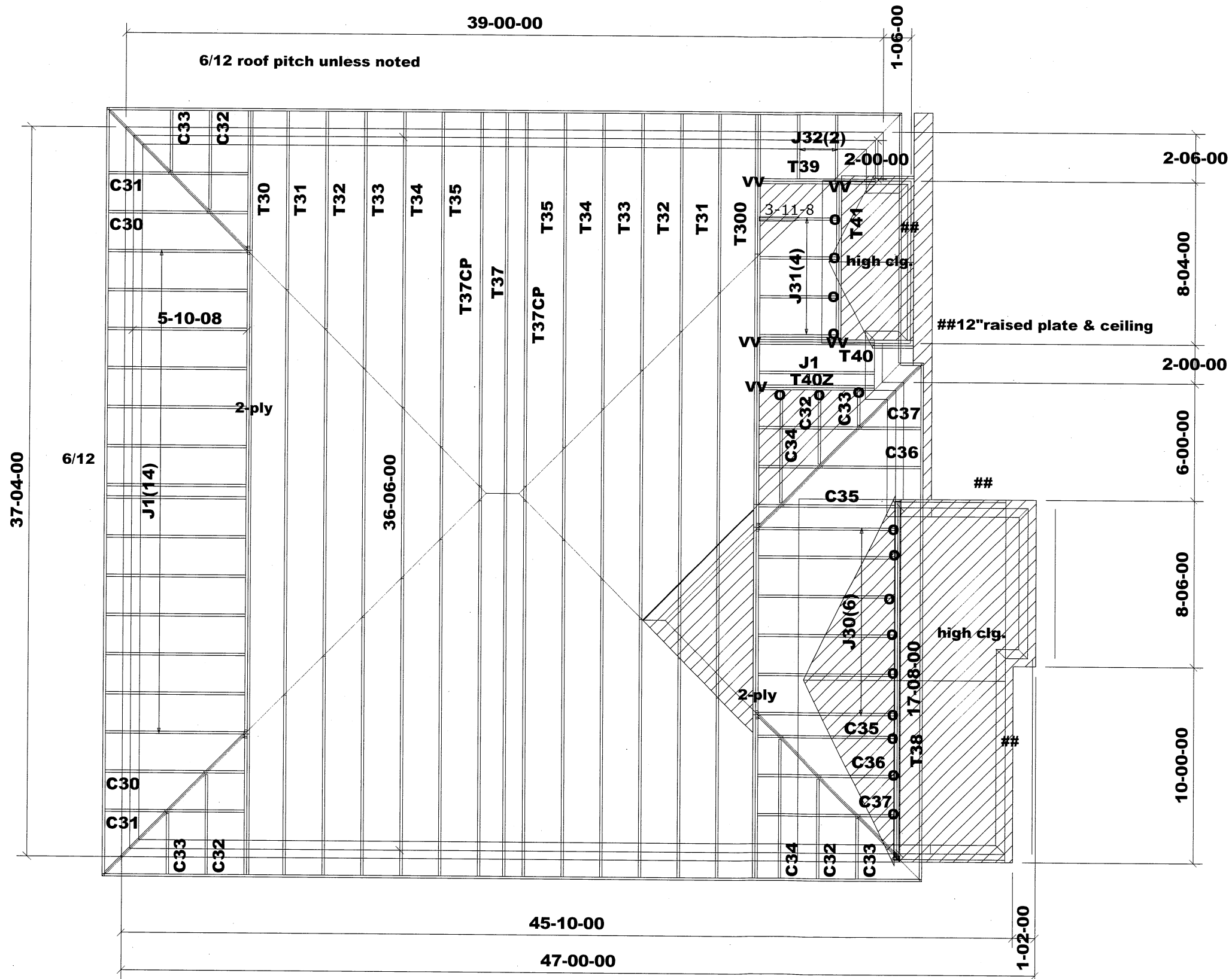
ALL CONSTRUCTION SHALL COMPLY WITH THE  
ONTARIO BUILDING CODE.

**CITY OF MARKHAM**

**ROOF TRUSS SHOP DRAWINGS**

**MODEL NAME : KIMBERLY 2**

**LOT 119 – ELEV 3**



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

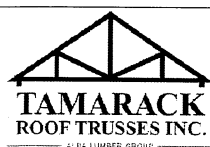
All conventional framing to conform with Part 9 of O.B.C. 2012 (2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post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

DESIGN CONFORMS WITH OBC 2012  
(2019 amendment) OCCUPANCY:  
RESIDENTIAL | PART: 9  
Ss = 31.35 psf | Sr = 8.4 psf

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

HARDWARE:  
LUS24 - (O)  
LJS26DS - (V)  
LUS26-2 - (VV)

 DENOTES:  
CONVENTIONAL  
FRAMING

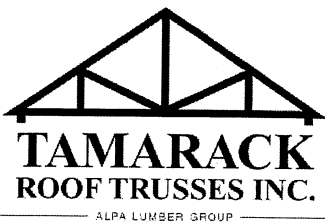


Job Track: **51453**  
Layout ID: **410005**  
Plan Log: **202861**

Builder / Location:  
**GREEN PARK HOMES / MARKHAM**  
Project:  
**LAMPONE INVESTMENTS INC**  
Date: 2020-08-06 Designer: **JG**

Model / Elevation: **KIMBERLY 2 / 3** Mitek ver 8.3.3.247  
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



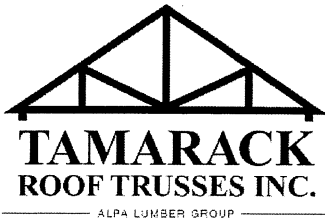
Lumber Yard: TAMARACK LUMBER  
 Builder: GREEN PARK HOMES  
 Project: LAMPONE INVESTMENTS INC  
 Location: MARKHAM  
 Model: KIMBERLY 2  
 Lot #:   
 Elevation: 3

Job Track: 51453  
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 Ref #  
 Page: 1 of 3  
 Date: 08-06-2020  
 Designer:  
 Sales Rep: Mario DiCano

## Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T30 Hip Girder	6 /12	36-06-00	4-01-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	376.22 236.00		
	1 2-ply	T300 Roof Special Girder	6 /12	36-06-00	4-08-04	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	391.55 243.00		
	2	T31 Hip	6 /12	36-06-00	5-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	342.94 213.67		
	2	T32 Hip	6 /12	36-06-00	6-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	345.25 213.33		
	2	T33 Hip	6 /12	36-06-00	7-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	342.76 210.33		
	2	T34 Hip	6 /12	36-06-00	8-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	355.98 218.00		
	2	T35 Hip	6 /12	36-06-00	9-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	362.17 224.00		
	1	T37 Common	6 /12	36-06-00	10-03-08	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	186.6 114.67		
	2	T37CP Hip	6 /12	36-06-00	10-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	372.82 229.33		
	1 2-ply	T38 Common Girder	3 /12	17-08-00	3-06-06	2 x 4 2 x 6		1-03-14 1-03-14	147.72 93.67		
	1 2-ply	T39 Half Hip Girder	6 /12	5-10-08	2-02-00	2 x 4 2 x 6		1-02-00 2-02-00	51.72 34.00		
	1 2-ply	T40 Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T40Z Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	58.39 37.67		
	1 2-ply	T41 Flat Girder	0 /12	8-00-00	2-00-00	2 x 6		2-00-00 2-00-00	76.31 47.33		

# DELIVERY SHIPLIST



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 Lot #:   
 Elevation: 3

Job Track: 51453  
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 Page: 2 of 3  
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## Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	15	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	251.92 160.00		
	6	J30 Jack-Partial	6 /12	7-00-08	4-08-04	2 x 4		1-02-00 4-08-04	148.13 102.00		
	4	J31 Jack-Open	6 /12	3-11-08	4-01-04	2 x 4		2-01-08 4-01-04	54.54 35.33		
	2	J32 Jack-Open	6 /12	2-00-00	2-02-00	2 x 4	1-03-08	1-02-00 2-02-00	14.87 9.33		
	2	C30 Jack-Open	6 /12	3-09-07	3-00-12	2 x 4	1-03-08 2-01-01	1-02-00 3-00-12	28.26 17.33		
	2	C31 Jack-Open	6 /12	1-09-07	2-00-12	2 x 4	1-03-08 4-01-01	1-02-00 2-00-12	23.16 14.67		
	4	C32 Jack-Open	6 /12	1-10-08	3-00-12	2 x 4	1-10-15	1-02-00 2-01-04	31.7 21.33		
	4	C33 Jack-Open	6 /12	1-09-07	2-00-12	2 x 4	1-03-08 1-01	1-02-00 2-00-12	28.08 18.67		
	2	C34 Jack-Open	6 /12	1-10-08	4-00-12	2 x 4	3-10-15	1-02-00 2-01-04	20.95 13.33		
	2	C35 Jack-Open	6 /12	7-00-08	4-00-12	2 x 4		1-02-00 4-08-04	32.73 21.33		
	2	C36 Jack-Open	6 /12	3-09-07	3-00-12	2 x 4	1-03-08 3-03-01	1-02-00 3-00-12	30.92 20.00		
	2	C37 Jack-Open	6 /12	7-00-08	2-00-12	2 x 4	1-03-08	1-02-00 4-08-04	25.82 17.33		

TOTAL # TRUSS= 74

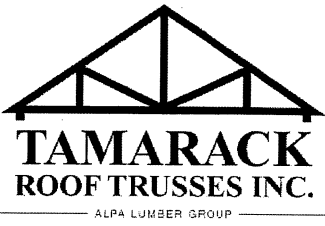
TOTAL BFT OF ALL TRUSSES= 2603.32 BFT.

TOTAL WEIGHT OF ALL TRSSES 4159.91 LBS

## HARDWARE

QTY	TYPE	MODEL	LENGTH
16	Hardware	LUS24	
5	Hardware	LUS26-2	

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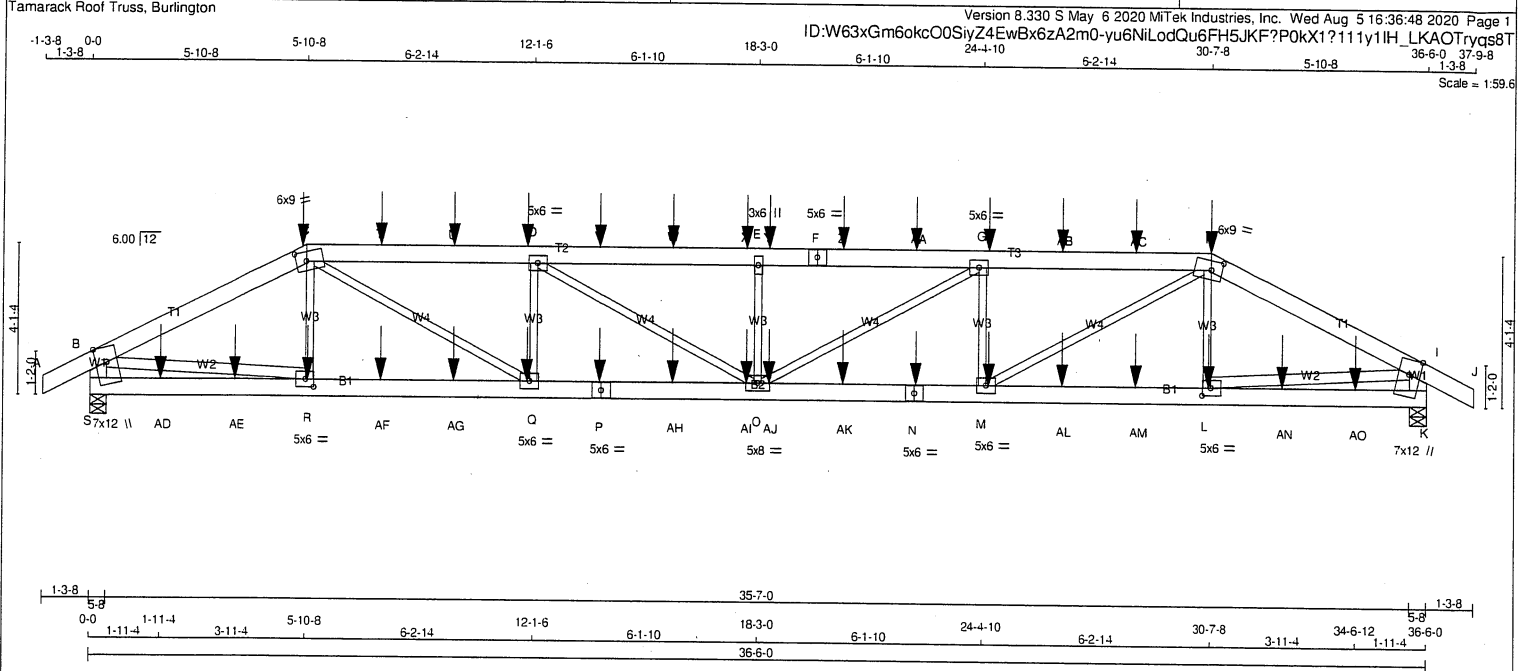
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## HARDWARE

QTY	TYPE	MODEL	LENGTH
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TOTAL NUMBER OF ITEMS= 21

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
410005	T30	1	2	TRUSS DESC.		



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.				
A - C	2x6	DRY	No.2				
C - F	2x6	DRY	No.2				
F - H	2x6	DRY	No.2				
H - J	2x6	DRY	No.2				
S - B	2x6	DRY	No.2				
K - I	2x6	DRY	No.2				
S - P	2x6	DRY	No.2				
P - N	2x6	DRY	No.2				
N - K	2x6	DRY	No.2				
ALL WEBS	2x3	DRY	No.2				
EXCEPT							
B - R	2x4	DRY	No.2				
L - I	2x4	DRY	No.2				
DRY: SEASONED LUMBER.							
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:							
CHORDS #ROWS	SURFACE SPACING (IN)		LOAD(PLF)				
TOP CHORDS : (0.122"x3") SPIRAL NAILS							
A - C	2	12	SIDE(122.0)				
C - F	2	12	SIDE(183.1)				
F - H	2	12	SIDE(183.1)				
H - J	2	12	SIDE(122.0)				
S - B	2	12	TOP				
K - I	2	12	TOP				
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS							
S - P	2	12	SIDE(183.1)				
P - N	2	12	SIDE(183.1)				
N - K	2	12	SIDE(183.1)				
WEBS : (0.122"x3") SPIRAL NAILS							
2x3	1	6					
2x4	1	6					
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.							
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.							
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.							

Structural component only  
DWG# T-2017443

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		IN-SX	IN-SX				
S	3496	0	3496	0	0	5-8	5-8				
K	3496	0	3496	0	0	5-8	5-8				
UNFACTORED REACTIONS											
JT	1ST LCASE COMBINED		MAX. MIN. COMPONENT REACTIONS								
	SNOW	LIVE	PERM.LIVE	WIND		DEAD	SOIL				
S	2472	1622 / 0	0 / 0	0 / 0	0 / 0	851 / 0	0 / 0				
K	2472	1622 / 0	0 / 0	0 / 0	0 / 0	851 / 0	0 / 0				
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K											
BRACING											
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 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 LC1 (PLF)		MAX. CSI (LC)	WEBS MAX. FACTORED FORCE (LBS)		MAX. CSI (LC)			
	FR-TO	FROM TO	FR-TO	FROM TO		FR-TO	FROM TO	FR-TO	FROM TO		
A-B	0 29	-91.8 -91.8	0.03 (1)	10.00	R-C	-322 53	0.04 (1)				
B-C	-5478 0	-91.8 -91.8	0.20 (1)	4.85	C-Q	0 3446	0.43 (1)				
C-T	-7864 0	-91.8 -91.8	0.31 (1)	4.08	Q-D	-1560 0	0.19 (1)				
T-U	-7864 0	-91.8 -91.8	0.31 (1)	4.08	D-O	0 1112	0.14 (1)				
U-D	-7864 0	-91.8 -91.8	0.31 (1)	4.08	O-E	-922 0	0.11 (1)				
D-V	-8820 0	-91.8 -91.8	0.32 (1)	3.88	E-G	0 1112	0.14 (1)				
V-W	-8820 0	-91.8 -91.8	0.32 (1)	3.88	M-G	-1560 0	0.19 (1)				
W-X	-8820 0	-91.8 -91.8	0.32 (1)	3.88	M-H	0 3446	0.43 (1)				
X-E	-8820 0	-91.8 -91.8	0.32 (1)	3.88	L-H	-322 53	0.04 (1)				
E-Y	-8820 0	-91.8 -91.8	0.32 (1)	3.88	B-R	0 4927	0.44 (1)				
Y-F	-8820 0	-91.8 -91.8	0.32 (1)	3.88	L-I	0 4927	0.44 (1)				
F-Z	-8820 0	-91.8 -91.8	0.32 (1)	3.88							
Z-AA	-8820 0	-91.8 -91.8	0.32 (1)	3.88							
AA-G	-8820 0	-91.8 -91.8	0.32 (1)	3.88							
G-AB	-7864 0	-91.8 -91.8	0.31 (1)	4.08							
AB-AC	-7864 0	-91.8 -91.8	0.31 (1)	4.08							
AC-H	-7864 0	-91.8 -91.8	0.31 (1)	4.08							
H-I	-5478 0	-91.8 -91.8	0.20 (1)	4.85							
I-J	0 29	-91.8 -91.8	0.03 (1)	10.00							
S-B	-3414 0	0.0 0.0	0.12 (1)	7.55							
K-I	-3414 0	0.0 0.0	0.12 (1)	7.55							
S-AD	0 0	-18.5 -18.5	0.07 (4)	10.00							
AD-AE	0 0	-18.5 -18.5	0.07 (4)	10.00							
AE-R	0 0	-18.5 -18.5	0.07 (4)	10.00							
R-AF	0 4886	-18.5 -18.5	0.36 (1)	10.00							
AF-AG	0 4886	-18.5 -18.5	0.36 (1)	10.00							
AG-Q	0 4886	-18.5 -18.5	0.36 (1)	10.00							
Q-P	0 7864	-18.5 -18.5	0.58 (1)	10.00							
P-AH	0 7864	-18.5 -18.5	0.58 (1)	10.00							
AH-AI	0 7864	-18.5 -18.5	0.58 (1)	10.00							
AI-O	0 7864	-18.5 -18.5	0.58 (1)	10.00							
O-AJ	0 7864	-18.5 -18.5	0.58 (1)	10.00							
AJ-AK	0 7864	-18.5 -18.5	0.58 (1)	10.00							
AK-N	0 7864	-18.5 -18.5	0.58 (1)	10.00							
N-M	0 7864	-18.5 -18.5	0.58 (1)	10.00							
M-AL	0 4886	-18.5 -18.5	0.36 (1)	10.00							
AL-AM	0 4886	-18.5 -18.5	0.36 (1)	10.00							
AM-L	0 4886	-18.5 -18.5	0.36 (1)	10.00							
L-AN	0 0	-18.5 -18.5	0.07 (4)	10.00							
AN-AO	0 0	-18.5 -18.5	0.07 (4)	10.00							
AO-K	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/C					
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12					
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015					
THIS DESIGN COMPLIES WITH:					
- PART 9 OF BCBC 2018 , ABC 2019					
- PART 9 OF OBC 2012 (2019 AMENDMENT)					
- CSA 086-14					
- TPIC 2014					
(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD					
ALLOWABLE DEFL.(LL)= L/360 (1.22")					
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")					
ALLOWABLE DEFL.(TL)= L/360 (1.22")					
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.43")					
CSI: TC=0.32/1.00 (E-G:1) , BC=0.58/1.00 (O-Q:1) .					
WB=0.44/1.00 (B-R:1) , SSI=0.15/1.00 (G-H:1)					
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00					
COMP=1.00 SHEAR=1.00 TENS=1.00					
COMPANION LIVE LOAD FACTOR = 1.00					
AUTOSOLVE HEELS OFF					
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .					
NAIL VALUES					
PLATE GRIP(DRY)	SHEAR	SECTION			
(PSI)	(PLI)	(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= 0.89 (R) (INPUT = 0.90 )					
JSI METAL= 0.74 (P) (INPUT = 1.00 )					



Structural component only  
DWG# T-2017443 1/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
410005	T30	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:48 2020 Page 2  
ID:W63xGm6okc00SiyZ4EwBx6zA2m0-yu6NiLodQu6FH5JKF?P0kX1?111y1IH LKAOTrvgs8T

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B, I, K, S						
C	TTWW-m	MT20	6.0	9.0	3.00	3.50
D	TMWW-t	MT20	5.0	6.0		
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW-t	MT20	5.0	6.0		
H	TTWW-m	MT20	6.0	9.0	3.00	3.50
K	TMBMW1*+m	MT20	7.0	12.0	Edge	
L	BMWW-t	MT20	5.0	6.0	2.50	2.75
M	BMWW-t	MT20	5.0	6.0		
N	BS-t	MT20	5.0	6.0		
O	BMWW-t	MT20	5.0	8.0		
P	BS-t	MT20	5.0	6.0		
Q	BMWW-t	MT20	5.0	6.0		
R	BMWW-t	MT20	5.0	6.0	2.50	2.75
S	TMBMW1*+m	MT20	7.0	12.0	Edge	

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

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-433	-433	---	FRONT	VERT	TOTAL	---	C1
D	11-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
G	24-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
H	30-7-8	-433	-433	---	FRONT	VERT	TOTAL	---	C1
L	30-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
M	24-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
N	22-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
P	13-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
Q	11-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
R	5-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
T	7-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
U	9-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
V	13-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
W	15-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
X	17-11-4	-110	-110	---	FRONT	VERT	TOTAL	---	C1
Y	18-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
Z	20-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
AA	22-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
AB	26-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
AC	28-6-12	-110	-110	---	FRONT	VERT	TOTAL	---	C1
AD	1-11-4	-49	-49	---	FRONT	VERT	TOTAL	---	C1
AE	3-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AF	7-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AG	9-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AH	15-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AI	17-11-4	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AJ	18-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AK	20-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AL	26-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AM	28-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AN	32-6-12	-26	-26	---	FRONT	VERT	TOTAL	---	C1
AO	34-6-12	-49	-49	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

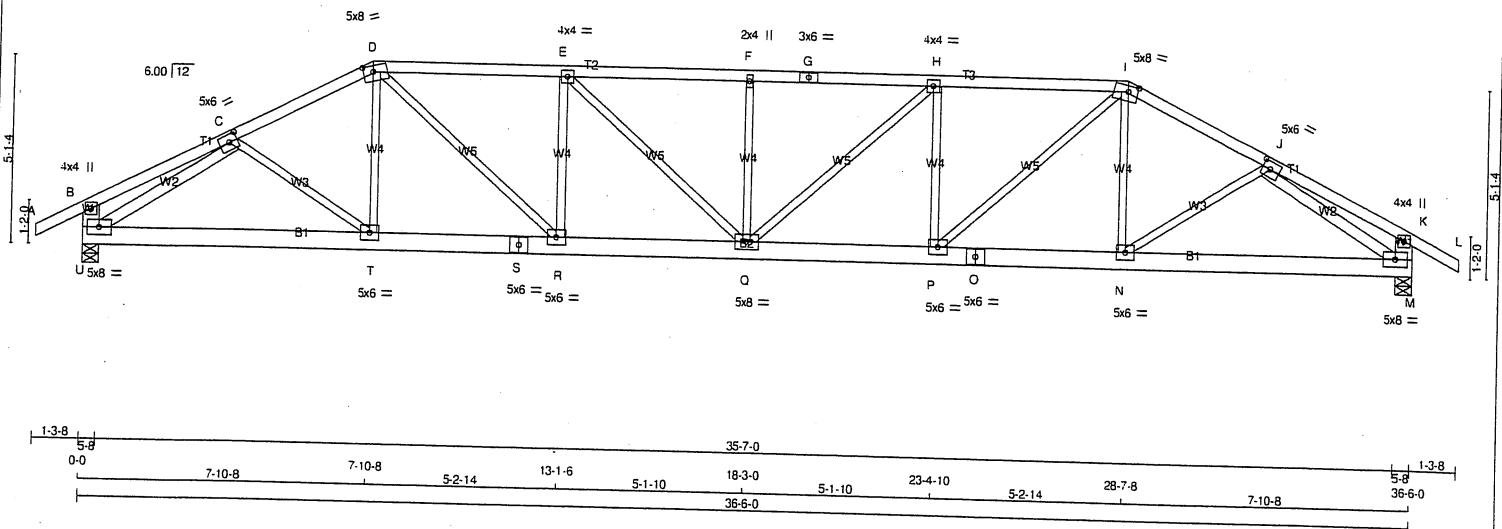
- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.



Structural component only  
DWG# T-2017443 2/2

JOB NAME <b>409989</b>	TRUSS NAME <b>T31</b>	QUANTITY <b>2</b>	PLY <b>1</b>	JOB DESC. <b>GREENPARK HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 10:41:00 2020 Page 1  
 ID:nmPe4yMblTuNMWU5OprM1EzA\_nL-0uByDkRnviUH8MIQfXQrWgtg8X?xAAfIN?iIBCyqxM1  
 Scale = 1:59.6



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

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMW/W-t	MT20	5.0	6.0	2.50	2.75
D	TTWW-m	MT20	5.0	8.0	2.00	3.25
E	TMW/W-t	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMW/W-t	MT20	4.0	4.0		
I	TTWW-m	MT20	5.0	8.0	2.00	3.25
J	TMW/W-t	MT20	5.0	6.0	2.50	2.75
K	TMV+p	MT20	4.0	4.0		
M	BMVW1-t	MT20	5.0	8.0		
N, P, R, T						
N	BMW/W-t	MT20	5.0	6.0		
O	BS-t	MT20	5.0	6.0		
Q	BMW/W-t	MT20	5.0	8.0		
S	BS-t	MT20	5.0	6.0		
U	BMVW1-t	MT20	5.0	8.0		

#### 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
U	2137	0	2137	0	5-8
M	2137	0	2137	0	5-8

#### UNFACTORED REACTIONS

1ST LOASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
U	1509	1003 / 0	0 / 0	0 / 0	0 / 0	505 / 0
M	1509	1003 / 0	0 / 0	0 / 0	0 / 0	505 / 0

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

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.03 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.  
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	MEMB.	FORCE (LBS)	MAX (CSI (LC))	UNBRAC LENGTH
FR-TO		FROM	TO	FR-TO			
A-B	0 / 28	-91.8	-91.8 0.12 (1)	10.00	C-T	0 / 87	0.03 (4)
B-C	0 / 17	-91.8	-91.8 0.20 (1)	10.00	T-D	0 / 118	0.04 (4)
C-D	-2978 / 0	-91.8	-91.8 0.34 (1)	3.76	D-R	0 / 1314	0.30 (1)
D-E	-3625 / 0	-91.8	-91.8 0.83 (1)	3.17	R-E	-797 / 0	0.29 (1)
E-F	-3907 / 0	-91.8	-91.8 0.86 (1)	3.03	E-Q	0 / 383	0.09 (1)
F-G	-3907 / 0	-91.8	-91.8 0.86 (1)	3.03	Q-F	-433 / 0	0.16 (1)
G-H	-3907 / 0	-91.8	-91.8 0.86 (1)	3.03	Q-H	0 / 383	0.09 (1)
H-I	-3625 / 0	-91.8	-91.8 0.83 (1)	3.17	P-H	-797 / 0	0.29 (1)
I-J	-2978 / 0	-91.8	-91.8 0.34 (1)	3.76	P-I	0 / 1314	0.30 (1)
J-K	0 / 17	-91.8	-91.8 0.20 (1)	10.00	N-I	0 / 118	0.04 (4)
K-L	0 / 28	-91.8	-91.8 0.12 (1)	10.00	N-J	0 / 87	0.03 (4)
U-B	-269 / 0	0.0	0.0 0.02 (1)	7.81	U-C	-3157 / 0	0.80 (1)
M-K	-269 / 0	0.0	0.0 0.02 (1)	7.81	J-M	-3157 / 0	0.80 (1)
U-T	0 / 2592	-18.5	-18.5 0.38 (1)	10.00			
T-S	0 / 2649	-18.5	-18.5 0.36 (1)	10.00			
S-R	0 / 2649	-18.5	-18.5 0.36 (1)	10.00			
R-Q	0 / 3626	-18.5	-18.5 0.48 (1)	10.00			
Q-P	0 / 3626	-18.5	-18.5 0.48 (1)	10.00			
P-O	0 / 2649	-18.5	-18.5 0.36 (1)	10.00			
O-N	0 / 2649	-18.5	-18.5 0.36 (1)	10.00			
N-M	0 / 2592	-18.5	-18.5 0.38 (1)	10.00			

TOTAL WEIGHT = 2 X 171 = 343 lb

#### DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (1.22")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.21")  
 ALLOWABLE DEFL.(TL) = L/360 (1.22")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.40")

CSI: TC=0.66/1.00 (E-F:1), BC=0.48/1.00 (Q-R:1), WB=0.80/1.00 (J-M:1), SS=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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= 0.86 (D) (INPUT = 0.90)  
 JSI METAL= 0.72 (C) (INPUT = 1.00)



Structural component only  
 DWG# T-2017369





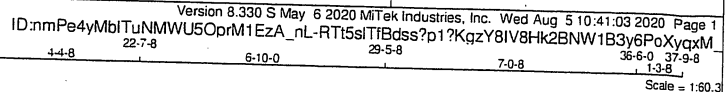
The drawing shows a roof truss system with the following details:

- Members:**
  - Top chord: 5x6 (D-E), 5x6 (E-F), 5x6 (F-G)
  - Bottom chord: 3x6 (P-Q), 5x6 (Q-R), 5x6 (R-S), 5x6 (S-T), 5x6 (T-U), 5x6 (U-V), 5x6 (V-W), 5x6 (W-X), 5x6 (X-Y), 5x6 (Y-Z), 5x6 (Z-A)
  - Verticals: W5 (D-P), W5 (E-R), W5 (F-S), W5 (G-U), W3 (C-Q), W3 (H-V)
  - Diagonals: W4 (C-P), W6 (E-R), W5 (F-S), W5 (G-U), W2 (B-Q), W2 (H-V)
  - Ends: 5x8 (B), 5x8 (H)
- Joints:** C, D, E, F, G, H, P, Q, R, S, T, U, V, W, X, Y, Z, A
- Dimensions:**
  - Overall length: 35-7-0
  - Overall height: 7-1-4
  - Horizontal segments: 1-3-8, 5-9, 6-0-8, 6-0-8, 5-10-0, 11-10-8, 6-4-8, 18-3-0, 6-4-8, 24-7-8, 5-10-0, 30-5-8, 6-0-8, 36-6-0, 1-3-8
  - Vertical segments: 1-2-0, 7-1-4

JSI GRIP= 0.85 (B) (INPUT = 0.90 )  
JSI METAL= 0.63 (K) (INPUT = 1.00 )



Tamarack Roof Truss, Burlington



DRY: SEASONED LUMBER.

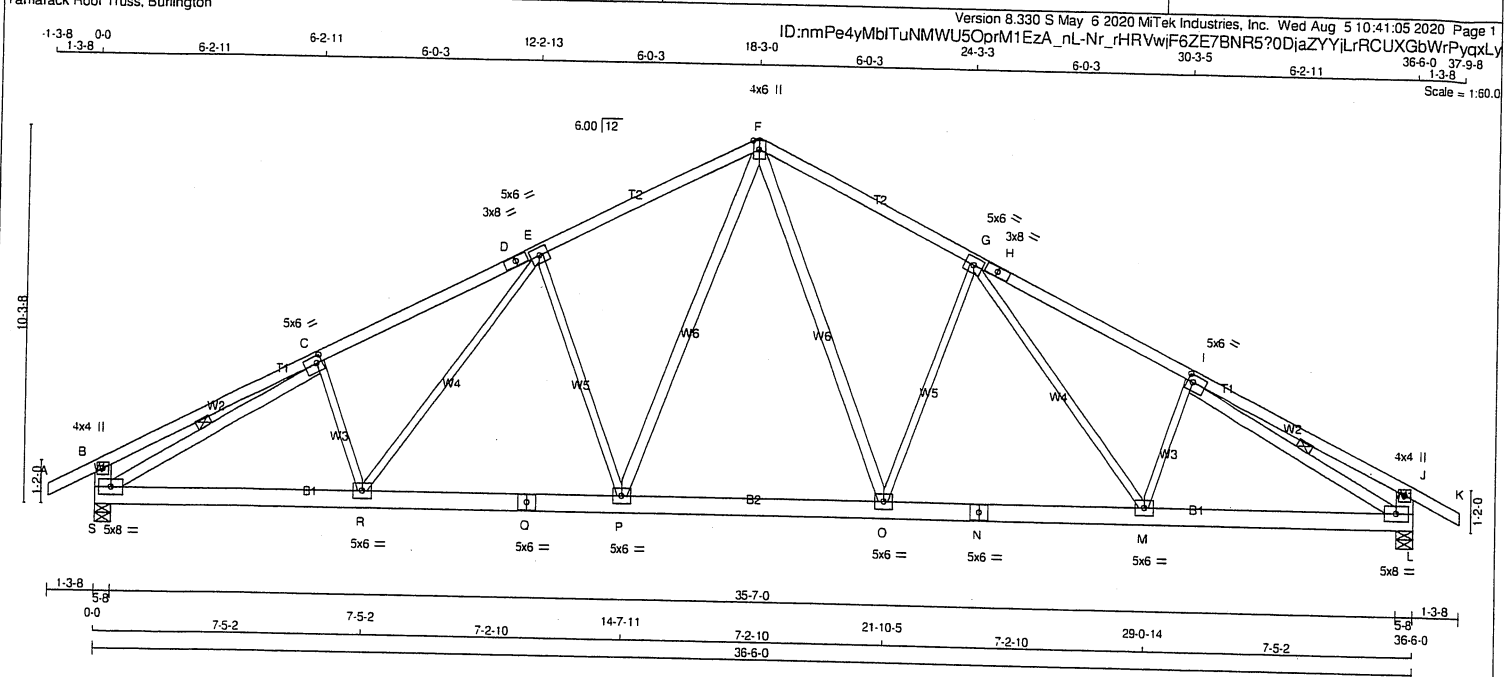
Edge - INDICATES REFERENCE CORNER OF PLATE  
TOUCHES EDGE OF CHORD.

JSI GRIP= 0.86 (B) (INPUT = 0.90 )  
JSI METAL= 0.63 (S) (INPUT = 1.00 )





JOB NAME <b>409989</b>	TRUSS NAME <b>T37</b>	QUANTITY <b>1</b>	PLY <b>1</b>	JOB DESC. <b>GREENPARK HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington					



<b>LUMBER</b>		<b>N. L. G. A. RULES</b>		<b>CHORDS</b>		<b>SIZE</b>		<b>LUMBER</b>		<b>DESCR.</b>	
A - D	2x4	DRY	No.2	SPF							
D - F	2x4	DRY	No.2	SPF							
F - H	2x4	DRY	No.2	SPF							
H - K	2x4	DRY	No.2	SPF							
S - B	2x6	DRY	No.2	SPF							
L - J	2x6	DRY	No.2	SPF							
S - Q	2x6	DRY	No.2	SPF							
Q - N	2x6	DRY	No.2	SPF							
N - L	2x6	DRY	No.2	SPF							
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF							
F - O	2x4	DRY	No.2	SPF							
P - F	2x4	DRY	No.2	SPF							
S - C	2x4	DRY	No.2	SPF							
I - L	2x4	DRY	No.2	SPF							

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	5.0	6.0	2.25	1.75
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	5.0	6.0		
F	TTWW+p	MT20	4.0	6.0	Edge	
G	TMWW-t	MT20	5.0	6.0		
H	TS-t	MT20	3.0	8.0		
I	TMWW-t	MT20	5.0	6.0	2.25	1.75
J	TMV+p	MT20	4.0	4.0		
L	BMVW-t	MT20	5.0	8.0		
M, O, P, R						
M	BMVW-t	MT20	5.0	6.0		
N	BS-t	MT20	5.0	6.0		
Q	BS-t	MT20	5.0	6.0		
S	BMVW-t	MT20	5.0	8.0		

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

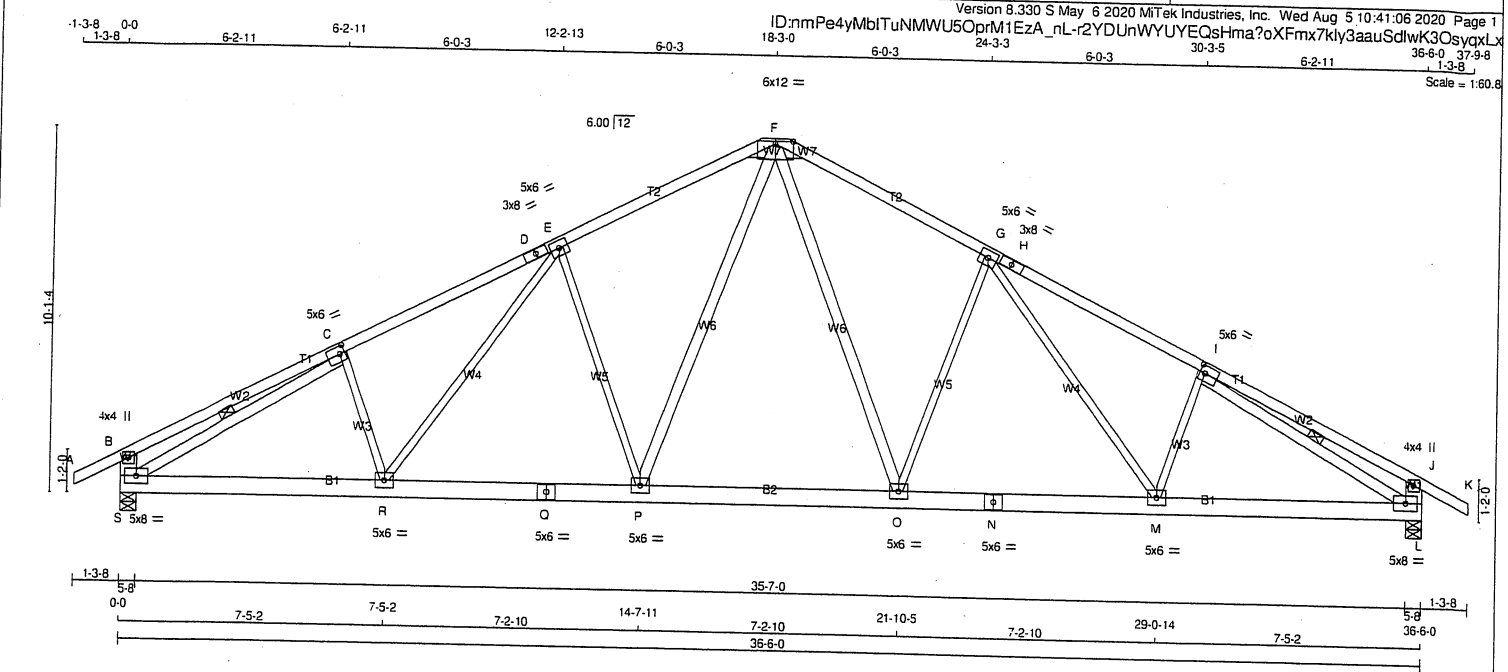
**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 28	F-O	0 917
B-C	0 23	O-G	-761 0
C-D	-2974 0	G-M	0 428
D-E	-2974 0	M-I	-238 6
E-F	-2445 0	I-P	0 917
F-G	-2445 0	P-F	0 917
G-H	-2974 0	H-E	-761 0
H-I	-2974 0	E-R	0 428
I-J	0 23	R-C	-238 6
J-K	0 28	C-S	-3232 0
S-B	-352 0	I-L	-3232 0
L-J	-352 0		

MEMB.	VERT. LOAD	LC1	MAX	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
S-R	0 2738	-18.5	-18.5	0.41 (1)	10.00
R-Q	0 2416	-18.5	-18.5	0.34 (1)	10.00
Q-P	0 2416	-18.5	-18.5	0.34 (1)	10.00
P-O	0 1851	-18.5	-18.5	0.27 (1)	10.00
O-N	0 2416	-18.5	-18.5	0.34 (1)	10.00
N-M	0 2416	-18.5	-18.5	0.34 (1)	10.00
M-L	0 2738	-18.5	-18.5	0.41 (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, 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 (1.22")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")  
ALLOWABLE DEFL.(TL) = L/360 (1.22")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.25")  
CSI: TC=0.56/1.00 (G-I:1), BC=0.41/1.00 (R-S:1), WB=0.78/1.00 (E-P:1), SS=0.23/1.00 (I-J: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= 0.82 (S) (INPUT = 0.90)  
JSI METAL= 0.74 (C) (INPUT = 1.00)

JOB NAME <b>409989</b>	TRUSS NAME <b>T37CP</b>	QUANTITY <b>2</b>	PLY <b>1</b>	JOB DESC. <b>GREENPARK HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington					



<b>LUMBER</b>				<b>DESIGN CRITERIA</b>			
N. L. G. A. RULES				TOTAL WEIGHT = 2 X 188 = 375 lb			
CHORDS	SIZE	LUMBER	DESCR.	[M/F]			
A - D	2x4	DRY	No.2	SPECIFIED LOADS:			
D - F	2x4	DRY	No.2	TOP CH. LL = 25.6 PSF			
F - H	2x4	DRY	No.2	DL = 6.0 PSF			
H - K	2x4	DRY	No.2	BOT CH. LL = 0.0 PSF			
S - B	2x6	DRY	No.2	DL = 7.4 PSF			
L - J	2x6	DRY	No.2	TOTAL LOAD = 39.0 PSF			
S - Q	2x6	DRY	No.2	SPACING = 24.0 IN. C/C			
Q - N	2x6	DRY	No.2	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR			
N - L	2x6	DRY	No.2	SMALL BUILDING REQUIREMENTS OF PART 9,			
ALL WEBS	2x3	DRY	No.2	NBC 2015			
EXCEPT				THIS DESIGN COMPLIES WITH:			
F - O	2x4	DRY	No.2	- PART 9 OF BCBC 2018, ABC 2019			
P - F	2x4	DRY	No.2	- PART 9 OF OBC 2012 (2019 AMENDMENT)			
S - C	2x4	DRY	No.2	- CSA 086-14			
I - L	2x4	DRY	No.2	- TPIC 2014			

<b>BEARINGS</b>				<b>UNFACTORED REACTIONS</b>			
FACTORED				1ST CASE			
GROSS REACTION				MAX./MIN. COMPONENT REACTIONS			
JT	VERT	HORZ	DOWN	COMBINED	SNOW	LIVE	PERM. LIVE
S	2137	0	2137	1509	1003	0	0
L	2137	0	2137	1509	1003	0	0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.61 FT.

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

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

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

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

<b>LOADING</b>			
TOTAL LOAD CASES: (4)			

<b>CHORDS</b>				<b>WEBS</b>			
MAX. FACTORED				MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CS1 (LC)		(LBS)	CS1 (LC)	
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
A-B	0	28	-91.8	-91.8	0.12	(1)	10.00
B-C	0	23	-91.8	-91.8	0.44	(1)	10.00
C-D	-2974	0	-91.8	-91.8	0.56	(1)	3.61
D-E	-2974	0	-91.8	-91.8	0.56	(1)	3.61
E-F	-2445	0	-91.8	-91.8	0.52	(1)	3.93
F-G	-2445	0	-91.8	-91.8	0.52	(1)	3.93
G-H	-2974	0	-91.8	-91.8	0.56	(1)	3.61
H-I	-2974	0	-91.8	-91.8	0.56	(1)	3.61
I-J	0	23	-91.8	-91.8	0.44	(1)	10.00
J-K	0	28	-91.8	-91.8	0.12	(1)	10.00
S-B	-352	0	0.0	0.0	0.02	(1)	7.81
L-J	-352	0	0.0	0.0	0.02	(1)	7.81
S-R	0	2738	-18.5	-18.5	0.41	(1)	10.00
R-O	0	2416	-18.5	-18.5	0.34	(1)	10.00
Q-P	0	2416	-18.5	-18.5	0.34	(1)	10.00
P-O	0	1851	-18.5	-18.5	0.27	(1)	10.00
O-N	0	2416	-18.5	-18.5	0.34	(1)	10.00
N-M	0	2416	-18.5	-18.5	0.34	(1)	10.00
M-L	0	2738	-18.5	-18.5	0.41	(1)	10.00

<b>PLATE GRIP (DRY)</b>				<b>SECTION</b>			
(PSI)				(PLI)			
MAX MIN				MAX MIN			
MT20				650 371 1747 788 1987 1873			

PLATE PLACEMENT TOL. = 0.250 inches

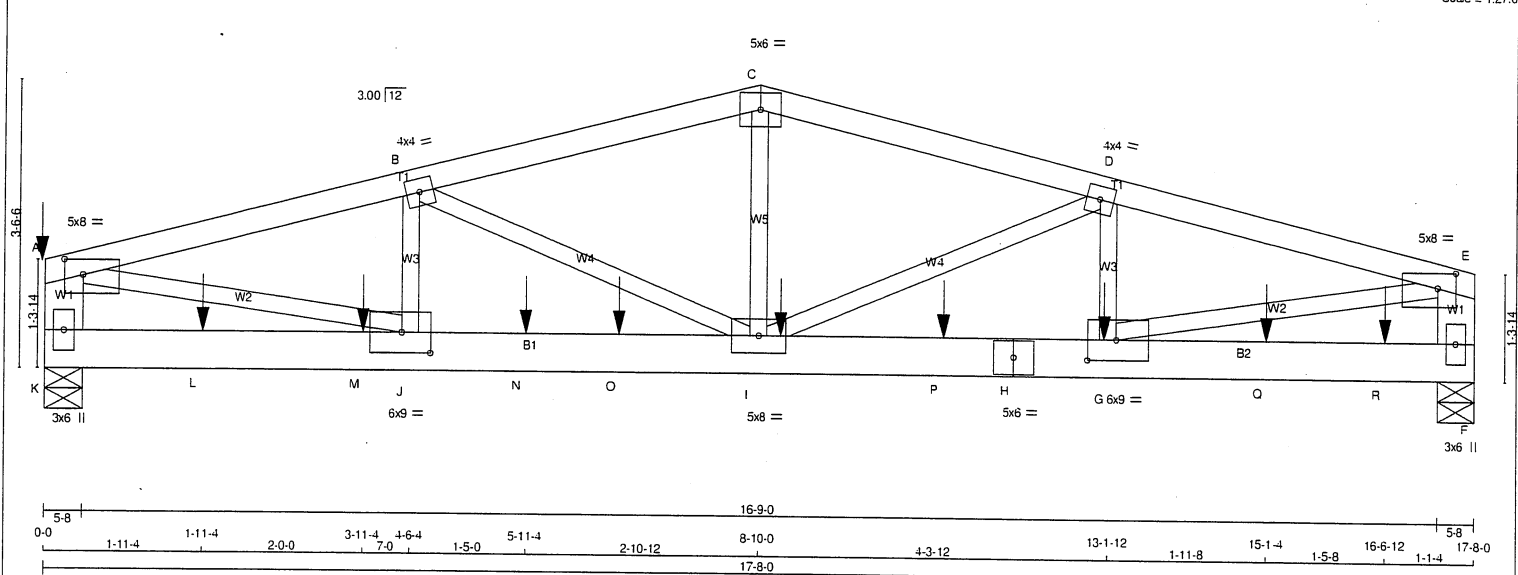
PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL = 0.74 (C) (INPUT = 1.00)



JOB NAME <b>410005</b>	TRUSS NAME <b>T38</b>	QUANTITY <b>1</b>	PLY <b>2</b>	JOB DESC. <b>GREEN PARK HOMES</b>	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:51 2020 Page 1	
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Scale = 1:27.0					



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
K - A	2x6	DRY	No.2
F - E	2x6	DRY	No.2
K - H	2x6	DRY	No.2
H - F	2x6	DRY	No.2

ALL WEBS EXCEPT 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C 1 12		SIDE(55.2)
C - E 1 12		SIDE(55.2)
K - A 2 12		TOP
F - E 2 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
K - H 2 12		SIDE(183.1)
H - F 2 12		SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	UPLIFT	BRG IN-SX	BRG IN-SX	
K	4882	0	0	4882	0	0	5-8	5-8	
F	4596	0	0	4596	0	0	5-8	5-8	

#### UNFACTORED REACTIONS

JT	1ST LCASE	MAX.	MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
K	3438	2339	0	0	0	1099	0	0	0
F	3242	2173	0	0	0	1069	0	0	0

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

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.03 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED	MEMB.	MAX. FACTORED
FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)
A-B	-7871	I-C	0 2585
B-C	-6831	I-D	-1172 0
C-D	-6831	G-D	-300 0
D-E	-7880	B-I	-1182 0
K-A	-4424	J-B	-306 0
F-E	-3897	A-J	0 7819
		G-E	0 7828
K-L	0		
L-M	0		
M-J	0		
J-N	0 7655		
N-O	0 7655		
O-I	0 7655		
I-P	0 7663		
P-H	0 7663		
H-G	0 7663		
G-Q	0		
Q-R	0		
R-F	0		

#### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
A	0-0	-531	-531	---	TOP	VERT	TOTAL	---	C1
G	13-1-4	-366	-366	---	BACK	VERT	TOTAL	---	C1
I	9-1-4	-366	-366	---	BACK	VERT	TOTAL	---	C1
L	1-11-4	-272	-272	---	BACK	VERT	TOTAL	---	C1
M	3-11-4	-400	-400	---	TOP	VERT	TOTAL	---	C1
N	5-11-4	-315	-315	---	BACK	VERT	TOTAL	---	C1
O	7-1-4	-366	-366	---	BACK	VERT	TOTAL	---	C1
P	11-1-4	-366	-366	---	BACK	VERT	TOTAL	---	C1
Q	15-1-4	-366	-366	---	BACK	VERT	TOTAL	---	C1
R	16-6-12	-366	-366	---	BACK	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSStdGirder

START DISTANCE = 0-0  
START SPAN CARRIED = 6-7-0  
END DISTANCE = 17-8-0  
END SPAN CARRIED = 6-7-0  
END WALL WIDTH = 5-8  
APPLIED TO FRONT SIDE OF TOP CHORD.  
- ADDT'L LOADS BASED ON 55% OF GSL.

GIRDER TYPE: CSStdGirder

START DISTANCE = 0-0  
START SPAN CARRIED = 6-2-0  
END DISTANCE = 17-8-0  
END SPAN CARRIED = 6-2-0  
END WALL WIDTH = 5-8  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADDT'L LOADS BASED ON 55% OF GSL.  
(DEFINED BY USER)

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 (0.59")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")  
ALLOWABLE DEFL.(TL) = L/360 (0.59")  
CALCULATED VERT. DEFL.(TL) = L/847 (0.25")

CSI: TC=0.56/1.00 (D-E:1), BC=0.70/1.00 (I-J:1), WB=0.97/1.00 (E-G:1), SSI=0.25/1.00 (J-K:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

TOTAL WEIGHT = 2 X 74 = 148 lb



Structural component only  
DWG# T-2017445 1/2

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	T38	1	2	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	
Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:51 2020 Page 2					
ID:W63xGm6okcO0SivZ4EwBx6zA2m0-NTtoWKNqWipUq8Y2vw7ziM9fRTF0nEWhQ1HP23Avqs8Q					

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	5.0	8.0	2.25	2.75
B	TMWW-t	MT20	4.0	4.0		
C	TTW-p	MT20	5.0	6.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMVW-p	MT20	5.0	8.0	2.25	2.75
F	BMV1+p	MT20	3.0	6.0		
G	BMWW-t	MT20	6.0	9.0	3.00	4.25
H	BS-t	MT20	5.0	6.0		
I	BMWWWW-t	MT20	5.0	8.0		
J	BMWW-t	MT20	6.0	9.0	3.00	4.25
K	BMV1+p	MT20	3.0	6.0		

JSI GRIP= 0.89 (E) (INPUT = 0.90 )  
JSI METAL= 0.85 (H) (INPUT = 1.00 )

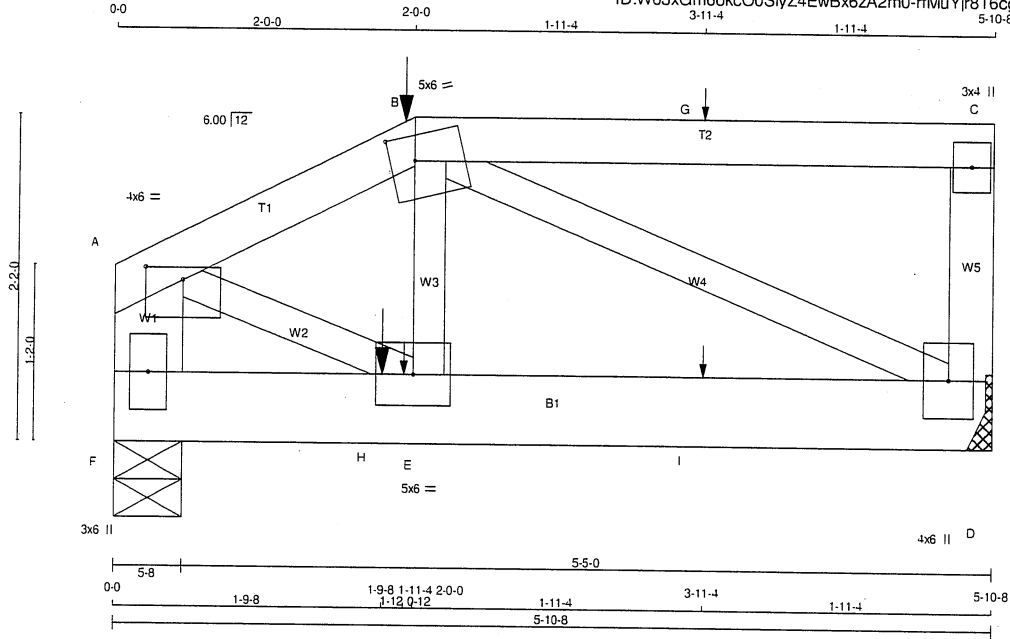


Structural component only  
DWG# T-2017445 *72*



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	T39	1	2	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:52 2020 Page 1  
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CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
B - C	2x4	DRY	No.2
D - C	2x4	DRY	No.2
F - A	2x6	DRY	No.2
F - D	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - B 1	12	SIDE(72.3)
B - C 1	12	SIDE(81.0)
C - D 1	12	TOP
F - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
E - B 1	2	SIDE(230.2)
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	MTWV-p	MT20	4.0	6.0	1.00 3.00

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REORD BRG
JT	VERT	HORZ	DOWN	HORZ
D	1070	0	1070	0
F	1415	0	1415	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

#### UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
D	755 503 0 0 0 0 253 0 0 0
F	998 671 0 0 0 0 327 0 0 0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. LC2	UNBRAC LENGTH	WEBS	MEMB.	FORCE (LBS)	MAX. LC1	MAX. LC2
FR-TO							FR-TO				
A-B	-1266	0	-253.7	-253.7	0.10 (1)	6.25	E-B	0	352	0.04 (1)	
B-G	0	0	-253.7	-253.7	0.36 (1)	10.00	B-D	-1267	0	0.18 (1)	
G-C	0	0	-253.7	-253.7	0.36 (1)	10.00	A-E	0	1205	0.15 (1)	
D-C	-492	0	0.0	0.0	0.03 (1)	7.81					
F-A	-1240	0	0.0	0.0	0.04 (1)	7.81					
F-H	0	0	-18.5	-18.5	0.10 (1)	10.00					
H-E	0	0	-18.5	-18.5	0.10 (1)	10.00					
E-I	0	1151	-18.5	-18.5	0.10 (1)	10.00					
I-D	0	1151	-18.5	-18.5	0.10 (1)	10.00					

#### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	2-0-0	-3	-3	---	FRONT	VERT	TOTAL	---	C1
G	3-11-4	1	1	---	FRONT	VERT	TOTAL	---	C1
H	1-9-8	-883	-883	---	BACK	VERT	TOTAL	---	C1
H	1-11-4	1	1	---	FRONT	VERT	TOTAL	---	C1
I	3-11-4	1	1	---	FRONT	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

#### DESIGN CRITERIA

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

SPACING = 24.0 IN/C

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

GIRDER TYPE: CS1dGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 8-0-0  
END DISTANCE = 5-10-8  
END SPAN CARRIED = 8-0-0  
END WALL WIDTH = 1-8  
APPLIED TO FRONT SIDE OF TOP CHORD.  
- 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 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 (0.20")  
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=0.36/1.00 (B-C:1), BC=0.10/1.00 (E-F:1), WB=0.18/1.00 (B-D:1), SSI=0.25/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (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= 0.75 (D) (INPUT = 0.90)  
JSI METAL= 0.26 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	T39	1	2	GREEN PARK HOMES	

Tamarack Roof Truss, Burlington

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**PLATES** (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TTWW-m	MT20	5.0	6.0	2.00	2.00
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		



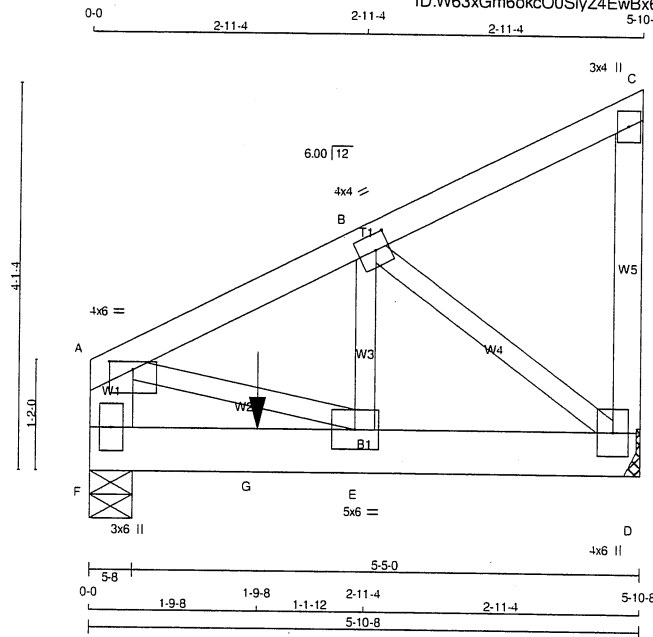
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DWG# T-2017446 7/2

JOB NAME <b>410005</b>	TRUSS NAME <b>T40</b>	QUANTITY <b>1</b>	PLY <b>2</b>	JOB DESC. <b>GREEN PARK HOMES</b>	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F - A 2	12	TOP
A - C 1	12	TOP
C - D 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 2	12	SIDE(81.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	6.0	1.00 3.00
B	TMVW-t	MT20	4.0	4.0	2.00 1.75
C	TMV-p	MT20	3.0	4.0	
D	BMVW1+p	MT20	4.0	6.0	
E	BMVW-t	MT20	5.0	6.0	
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
F	1544	0	1544	0	0
D	1126	0	1126	0	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

#### UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1088	735.0	0.0	0.0	0.0	354.0	0.0
D	795	531.0	0.0	0.0	0.0	264.0	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	
F-A	-975.0	A-E	0 1171
A-B	-1255.0	E-B	0 1112
B-C	-11.0	B-D	-1425.0
D-C	-110.0		
F-G	0.0		
G-E	0.0		
E-D	0 1132		

#### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-9-8	-1072	-1072	---	FRONT	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 29 = 58 lb

#### DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSldGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 8-0-0  
END DISTANCE = 5-10-8  
END SPAN CARRIED = 8-0-0  
END WALL WIDTH = 1-8  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADD'L LOADS BASED ON 55 % OF G.S.L.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC0 2015

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.06/1.00 (A-B:1), BC=0.27/1.00 (E-F:1),  
WB=0.17/1.00 (B-D:1), SSI=0.34/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

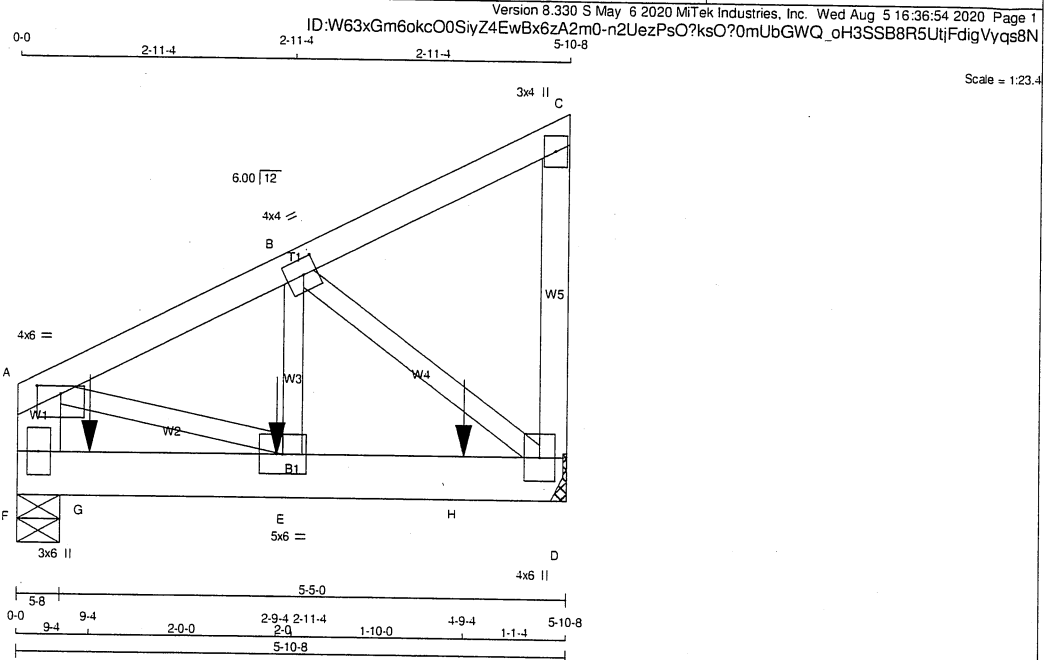
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (B) (INPUT = 0.90)  
JSI METAL= 0.26 (D) (INPUT = 1.00)



Structural component only  
DWG# T-2017447

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	T40Z	1	2	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	



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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F - A	2 12	TOP
A - C	1 12	TOP
C - D	1 12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D	2 12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1 6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

#### PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	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	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	DOWN	BRG	BRG
F	658 0	658 0	0 0	5-8	5-8
D	584 0	584 0	0 0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

#### UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
F	460	335.0	0.0	0.0	0.0	125.0	0.0	
D	408	294.0	0.0	0.0	0.0	114.0	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)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
F-A	-458 0	0.0 0.0 0.02 (1)	7.81	A-E	0 478	0.06 (1)	
A-B	-503 0	-91.8 -91.8 0.07 (1)	6.25	E-B	0 254	0.03 (1)	
B-C	-13 0	-91.8 -91.8 0.07 (1)	6.25	B-D	-581 0	0.07 (1)	
D-C	-105 0	0.0 0.0 0.01 (1)	7.81				
F-G	0 0	-18.5 -18.5 0.05 (1)	10.00				
G-E	0 0	-18.5 -18.5 0.05 (1)	10.00				
E-H	0 462	-18.5 -18.5 0.08 (1)	10.00				
H-D	0 462	-18.5 -18.5 0.08 (1)	10.00				

#### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	2-9-4	-151	-151	---	BACK	VERT	TOTAL	---	C1
G	9-4	-258	-258	---	TOP	VERT	TOTAL	---	C1
H	4-9-4	-185	-185	---	BACK	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

#### DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.07/1.00 (A-B:1), BC=0.08/1.00 (D-E:1),  
WB=0.07/1.00 (B-D:1), SSI=0.07/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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= 0.22 (D) (INPUT = 0.90)  
JSI METAL= 0.10 (D) (INPUT = 1.00)

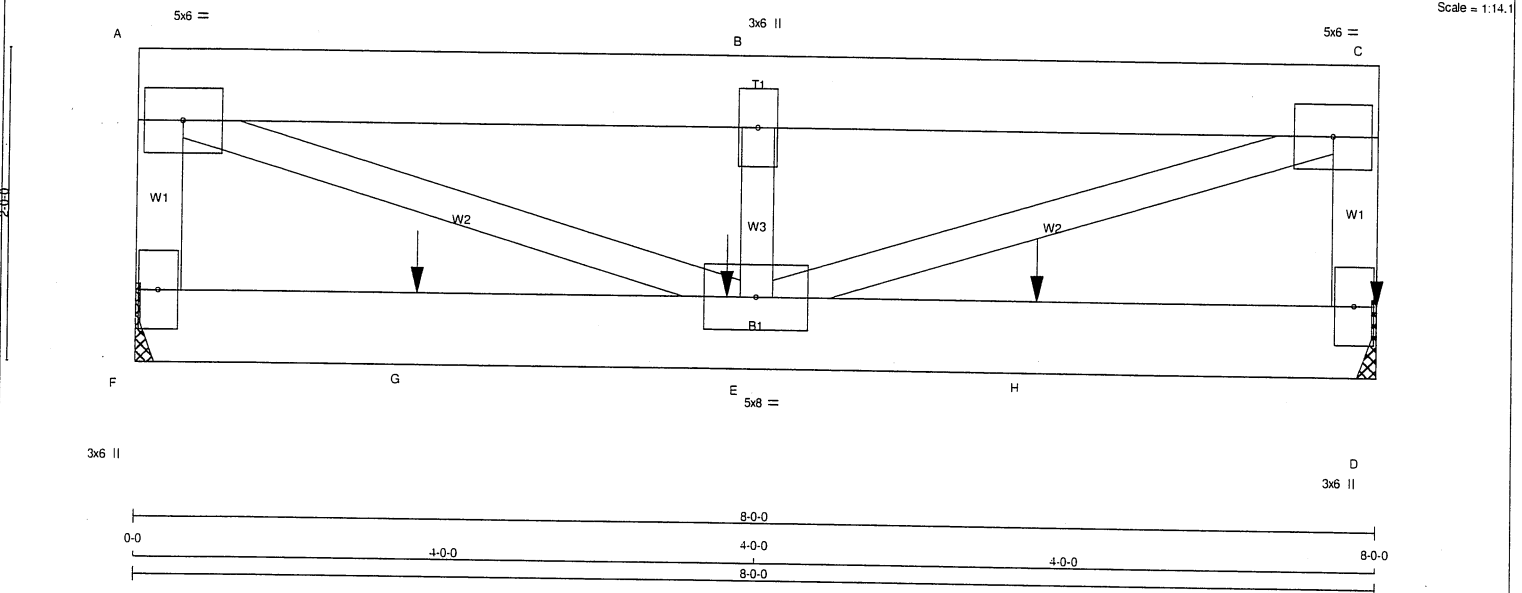


Structural component only  
DWG# T-2017448

JOB NAME 410005	TRUSS NAME T41	QUANTITY 1	PLY 2	JOB DESC. GREEN PARK HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F-A 1 12		TOP
C-D 1 12		TOP
A-C 2 12		TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F-D 2 12		SIDE(154.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMWV-t	MT20	5.0	6.0	
B	TMWV-w	MT20	3.0	6.0	
C	TMWV-t	MT20	5.0	6.0	
D	BMV1+p	MT20	3.0	6.0	
E	BMWVW-t	MT20	5.0	8.0	
F	BMV1+p	MT20	3.0	6.0	

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	GROSS REACTION	BRG	BRG
F	VERT	HORZ	DOWN	HORZ	UPLIFT
F	902	0	902	0	0
D	1090	0	1090	0	0

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

#### UNFACTORED REACTIONS

1ST LCASE	MAX. MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	635	432	0	0	0	203	0
D	767	523	0	0	0	244	0

#### 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)
FR-TO					FR-TO		
F-A	-701	0	0.0	0.04 (1)	A-E	0	1445
A-B	-1348	0	-91.8	0.07 (1)	E-B	-372	0
B-C	-1348	0	-91.8	0.07 (1)	E-C	0	1445
D-C	-701	0	0.0	0.04 (1)			
F-G	0	0	-56.4	-56.4	0.10 (1)		
G-E	0	0	-56.4	-56.4	0.10 (1)		
E-H	0	0	-56.4	-56.4	0.10 (1)		
H-D	0	0	-56.4	-56.4	0.10 (1)		

#### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
D	8-0-0	-207	-207	---	FRONT	VERT	TOTAL	---	C1
E	3-9-12	-200	-200	---	FRONT	VERT	TOTAL	---	C1
G	1-9-12	-200	-200	---	FRONT	VERT	TOTAL	---	C1
H	5-9-12	-200	-200	---	FRONT	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

TOTAL WEIGHT = 2 X 38 = 76 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 3-6-0

END DISTANCE = 8-0-0

END SPAN CARRIED = 3-6-0

END WALL WIDTH = 1-8

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

ADDT'L LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 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 (0.27")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")  
ALLOWABLE DEFL.(TL)= L/360 (0.27")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.02")

CSI: TC=0.07:1.00 (B-C:1), BC=0.10/1.00 (E-F:1), WB=0.18:1.00 (A-E:1), SSI=0.08/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

#### NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (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= 0.51 (E) (INPUT = 0.90 )  
JSI METAL= 0.15 (C) (INPUT = 1.00 )



Structural component only  
DWG# T-2017449

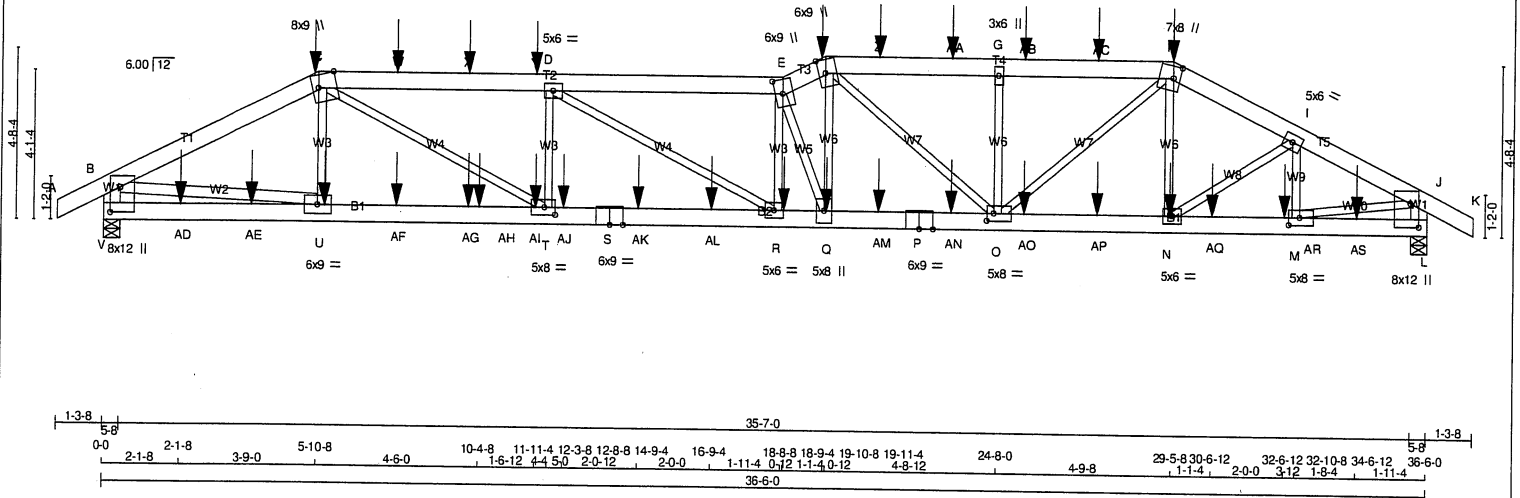
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
410005	T300	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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18-8 19-10-8 1-2-0 4-9-8 24-8-0 4-9-8 29-5-8 32-10-8 36-6-0 37-9-8 1-3-8

Scale = 1:60.3



TOTAL WEIGHT = 2 X 196 = 392 lb

LUMBER			
N.L.G.A. RULES	CHORDS	SIZE	DESCR.
A - C	2x6	DRY	No.2
C - E	2x6	DRY	No.2
E - F	2x6	DRY	No.2
F - H	2x6	DRY	No.2
H - K	2x6	DRY	No.2
V - B	2x6	DRY	No.2
L - J	2x6	DRY	No.2
V - S	2x6	DRY	1650F 1.5E
S - P	2x6	DRY	1650F 1.5E
P - L	2x6	DRY	1650F 1.5E
ALL WEBS EXCEPT	2x3	DRY	No.2
B - U	2x4	DRY	No.2

DRY: SEASONED LUMBER.

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

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

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

BEARINGS			
FACTORED	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	UPLIFT	IN-SX
V 6025	0	0	5-8
L 5069	0	0	5-8

UNFACTORED REACTIONS			
1ST LCASE	MAX./MIN. COMPONENT REACTIONS		
JT COMBINED	SNOW	LIVE	PERM.LIVE
V 4251	2846 / 0	0 / 0	0 / 0
L 3579	2382 / 0	0 / 0	0 / 0

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

### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.02 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 LC1 FROM TO (PLF)	MAX. UNBRACED LENGTH FR-TO (CSI (LC))
A-B	0 / 29	-91.8 -91.8	0.03 (1)
B-C	-9134 / 0	-91.8 -91.8	0.30 (1)
C-W	-13252 / 0	-91.8 -91.8	0.51 (1)
W-X	-13252 / 0	-91.8 -91.8	0.51 (1)
X-Y	-13252 / 0	-91.8 -91.8	0.51 (1)
Y-D	-13252 / 0	-91.8 -91.8	0.45 (1)
D-E	-13948 / 0	-91.8 -91.8	0.23 (1)
E-F	-13405 / 0	-91.8 -91.8	0.24 (1)
F-Z	-10473 / 0	-91.8 -91.8	0.24 (1)
Z-AA	-10473 / 0	-91.8 -91.8	0.24 (1)
AA-G	-10473 / 0	-91.8 -91.8	0.25 (1)
G-AB	-10473 / 0	-91.8 -91.8	0.25 (1)
AB-AC	-10473 / 0	-91.8 -91.8	0.25 (1)
AC-H	-10473 / 0	-91.8 -91.8	0.17 (1)
H-I	-8318 / 0	-91.8 -91.8	0.16 (1)
I-J	-7439 / 0	-91.8 -91.8	0.03 (1)
J-K	0 / 29	-91.8 -91.8	0.03 (1)
V-B	-5427 / 0	0.0 0.0	0.19 (1)
L-J	-4898 / 0	0.0 0.0	0.17 (1)

WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO (CSI (LC))	MAX. FACTORED FORCE (LBS)
U-C	0 / 172	0.03 (4)	0 / 172
C-T	0 / 5845	0.72 (1)	0 / 5845
T-D	-1219 / 0	0.15 (1)	-1219 / 0
D-R	0 / 803	0.10 (1)	0 / 803
R-E	-675 / 0	0.08 (1)	-675 / 0
E-Q	-5988 / 0	0.76 (1)	-5988 / 0
Q-F	0 / 6550	0.81 (1)	0 / 6550
F-O	-2236 / 0	0.77 (1)	-2236 / 0
O-G	-505 / 0	0.07 (1)	-505 / 0
G-H	0 / 4032	0.50 (1)	0 / 4032
H-N	0 / 148	0.03 (4)	0 / 148
N-I	0 / 985	0.12 (1)	0 / 985
I-M	-1250 / 0	0.11 (1)	-1250 / 0
B-U	0 / 8215	0.73 (1)	0 / 8215
M-J	0 / 6756	0.84 (1)	0 / 6756

### 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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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

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

### THIS DESIGN COMPLIES WITH:

- PART 9 OF 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 (1.22")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.37")  
ALLOWABLE DEFL.(TL)= L/360 (1.22")  
CALCULATED VERT. DEFL.(TL)= L/642 (0.68")

CSI: TC=0.51/1.00 (C-D:1), BC=0.68/1.00 (R-T:1), WB=0.84/1.00 (J-M:1), SS=0.28/1.00 (R-T:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)  
JSI METAL= 0.97 (S) (INPUT = 1.00)

CONTINUED ON PAGE 2



Structural component only  
DWG# T-2018265

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
410005	T300	1	2	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B, J, L, V						
C	TTWW+m	MT20	8.0	9.0	Edge	6.00
D	TMWW-l	MT20	5.0	6.0		
E	TTWW+m	MT20	6.0	9.0	4.75	2.50
F	TTWW+m	MT20	6.0	9.0	Edge	2.25
G	TMW-w	MT20	3.0	6.0		
H	TTWW+m	MT20	7.0	8.0	4.00	2.25
I	TMWW-l	MT20	5.0	6.0		
L	TMBMW1*+pMT20	MT20	8.0	12.0	7.75	2.75
M	BMWW-l	MT20	5.0	8.0	2.50	3.50
N	BMWW-l	MT20	5.0	6.0		
O	BMWW-l	MT20	5.0	8.0	2.50	2.25
P	BS-l	MT20	6.0	9.0		
Q	BMWW-l	MT20	5.0	8.0		
R	BMWW-l	MT20	5.0	6.0		
S	BS-l	MT20	6.0	9.0		
T	BMWW-l	MT20	5.0	8.0	2.50	3.50
U	BMWW-l	MT20	6.0	9.0		
V	TMBMW1*+pMT20	MT20	8.0	12.0	8.25	3.25

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. UNBRAC. LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC. LENGTH FR-TO	
AR-M	0 / 6639	-18.5	-18.5 0.33 (1)			10.00	
M-AS	0 / 0	-18.5	-18.5 0.08 (1)			10.00	
AS-L	0 / 0	-18.5	-18.5 0.08 (1)			10.00	

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-348	-348	---	FRONT	VERT	TOTAL	---	C1
C	5-10-8	-96	-96	---	BACK	VERT	TOTAL	---	C1
F	19-10-8	-618	-618	---	BACK	VERT	TOTAL	---	C1
H	29-5-8	-534	-534	---	BACK	VERT	TOTAL	---	C1
N	29-4-12	-249	-249	---	BACK	VERT	TOTAL	---	C1
Q	19-11-4	-249	-249	---	BACK	VERT	TOTAL	---	C1
R	18-9-4	-61	-61	---	BACK	VERT	TOTAL	---	C1
U	6-0-12	-18	-18	---	BACK	VERT	TOTAL	---	C1
W	8-0-12	-90	-90	---	BACK	VERT	TOTAL	---	C1
X	10-0-12	-90	-90	---	BACK	VERT	TOTAL	---	C1
Y	11-11-4	-110	-110	---	BACK	VERT	TOTAL	---	C1
Z	21-4-12	-31	-31	---	BACK	VERT	TOTAL	---	C1
AA	23-4-12	-31	-31	---	BACK	VERT	TOTAL	---	C1
AB	25-4-12	-31	-31	---	BACK	VERT	TOTAL	---	C1
AC	27-4-12	-31	-31	---	BACK	VERT	TOTAL	---	C1
AD	2-1-8	-1052	-1052	---	BACK	VERT	TOTAL	---	C1
AE	4-0-12	-18	-18	---	BACK	VERT	TOTAL	---	C1
AF	8-0-12	-18	-18	---	BACK	VERT	TOTAL	---	C1
AG	10-0-12	-18	-18	---	BACK	VERT	TOTAL	---	C1
AH	10-4-8	-1108	-1108	---	BACK	VERT	TOTAL	---	C1
AI	11-11-4	-26	-26	---	BACK	VERT	TOTAL	---	C1
AJ	12-8-8	-565	-565	---	BACK	VERT	TOTAL	---	C1
AK	14-9-4	-148	-148	---	BACK	VERT	TOTAL	---	C1
AL	16-9-4	-35	-35	---	BACK	VERT	TOTAL	---	C1
AM	21-4-12	-249	-249	---	BACK	VERT	TOTAL	---	C1
AN	23-4-12	-249	-249	---	BACK	VERT	TOTAL	---	C1
AO	25-4-12	-249	-249	---	BACK	VERT	TOTAL	---	C1
AP	27-4-12	-249	-249	---	BACK	VERT	TOTAL	---	C1
AQ	30-6-12	-61	-61	---	BACK	VERT	TOTAL	---	C1
AR	32-6-12	-35	-35	---	BACK	VERT	TOTAL	---	C1
AS	34-6-12	-148	-148	---	BACK	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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



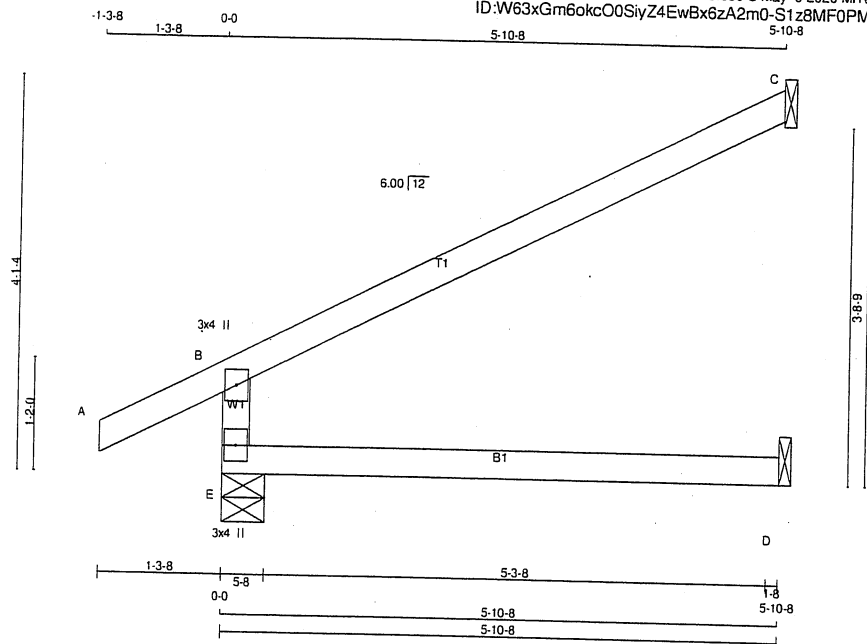
Structural component only  
DWG# T-2018265 2/2

JOB NAME 409707	TRUSS NAME J1	QUANTITY 25	PLY 1	JOB DESC. GREENPARK HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

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Scale = 1:22.5



#### LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	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		
E	BMV1+p	MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	525	0	525	0	5-8	5-8
C	202	0	202	0	1-8	1-8
D	45	0	50	0	1-8	1-8

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

#### UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	369	257.0	0.0	0.0	0.0	111.0	0.0
C	139	113.0	0.0	0.0	0.0	26.0	0.0
D	36	0.0	0.0	0.0	0.0	36.0	0.0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	LC1 MAX (LC)	MEMB. MAX. FACTORED FORCE (LBS)	LC1 MAX (LC)
FR-TO						
E-B	-461.0	0.0	0.0	0.13 (4)	7.81	
A-B	0.28	-91.8	-91.8	0.12 (1)	10.00	
B-C	-30.0	-91.8	-91.8	0.54 (1)	6.25	
E-D	0.0	-18.5	-18.5	0.13 (4)	10.00	

TOTAL WEIGHT = 25 X 17 = 420 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

#### DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

#### NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(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 = 0.18 (E) (INPUT = 0.90)  
JSI METAL = 0.13 (B) (INPUT = 1.00)



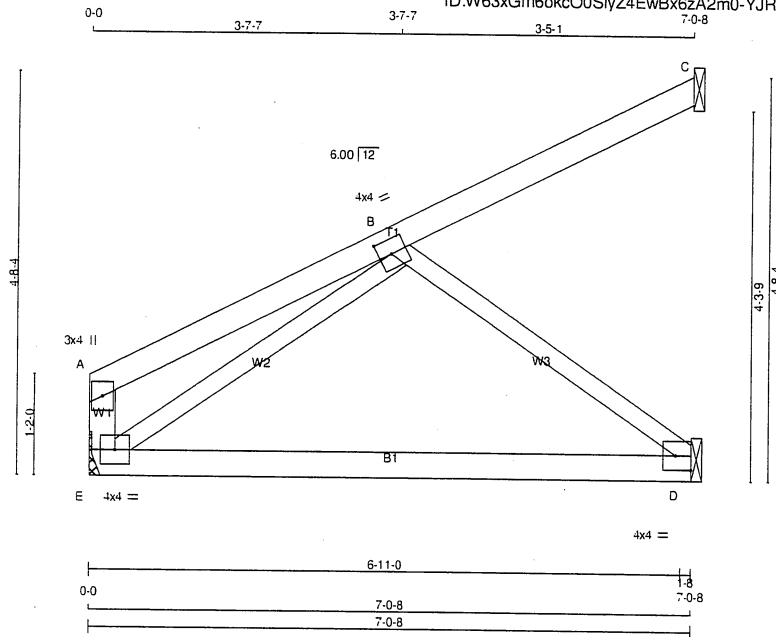
Structural component only  
DWG# T-2017328



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	J30	6	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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Scale = 1:25.6



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMV+p	MT20	3.0	4.0	
B	TMWW-t	MT20	4.0	4.0	2.00 1.75
D	BMW1-t	MT20	4.0	4.0	2.00 Edge
E	BMVW1-t	MT20	4.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		RECORD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG
E	385	0	385	0	0	0	0	MECHANICAL	
C	123	0	123	0	0	1-8	1-8		
D	267	0	267	0	0	1-8	1-8		

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

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

#### UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	272	179 0	0 0	0 0	0 0	93 0	0 0
C	85	68 0	0 0	0 0	0 0	16 0	0 0
D	191	113 0	0 0	0 0	0 0	78 0	0 0

#### 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	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
E-A	-123 0	0.0 0.0 0.01 (1)	7.81	B-D	-334 0	0.11 (1)	
A-B	0 17	-91.8 -91.8 0.19 (1)	10.00	E-B	-330 0	0.10 (1)	
B-C	-17 0	-91.8 -91.8 0.14 (1)	6.25				
E-D	0 265	-18.5 -18.5 0.27 (4)	10.00				

TOTAL WEIGHT = 6 X 25 = 148 lb [M][F]

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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.(TL)= L/360 (0.23")  
CALCULATED VERT. DEFL.(TL) = L/793 (0.11")

CSI: TC=0.19/1.00 (A-B:1), BC=0.27/1.00 (D-E:4),  
WB=0.11/1.00 (B-D:1), SSI=0.14/1.00 (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= 0.30 (B) (INPUT = 0.90)  
JSI METAL= 0.09 (D) (INPUT = 1.00)



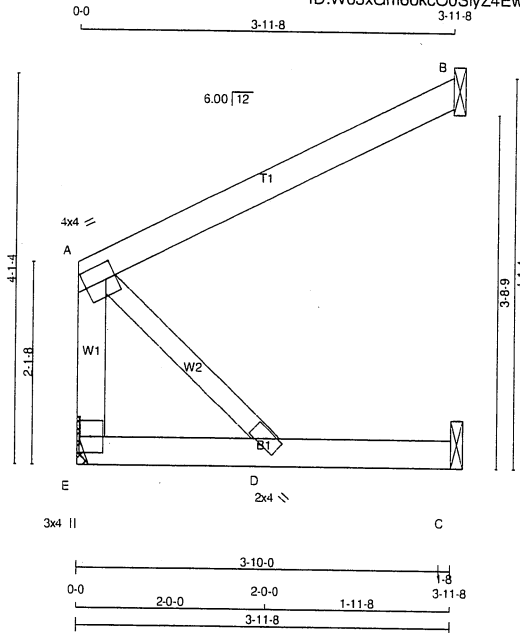
Structural component only  
DWG# T-2017440

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	J31	4	1	GREEN PARK HOMES	
				TRUSS DESC.	

Tamarack Roof Truss, Burlington

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Scale = 1:23.2



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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
E	218	0	218	0	MECHANICAL	
B	182	0	182	0	1-8	1-8
C	37	0	41	0	1-8	1-8

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

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

#### UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
E	154	101.0	0.0	0.0	0.0	53.0	0.0
B	125	101.0	0.0	0.0	0.0	24.0	0.0
C	29	0.0	0.0	0.0	0.0	29.0	0.0

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO					FR-TO		
E-A	-182.0	0.0	0.0 0.02 (1)	7.81	A-D	0.0	0.00 (1)
A-B	0.0	-91.8	-91.8 0.24 (1)	10.00			
E-D	0.0	-18.5	-18.5 0.08 (4)	10.00			
D-C	0.0	-18.5	-18.5 0.08 (4)	10.00			

TOTAL WEIGHT = 4 X 14 = 55 lb  
(M)(F)

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.24/1.00 (A-B:1), BC=0.08/1.00 (D-E:4),  
WB=0.00/1.00 (A-D:1), SSI=0.13/1.00 (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 (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

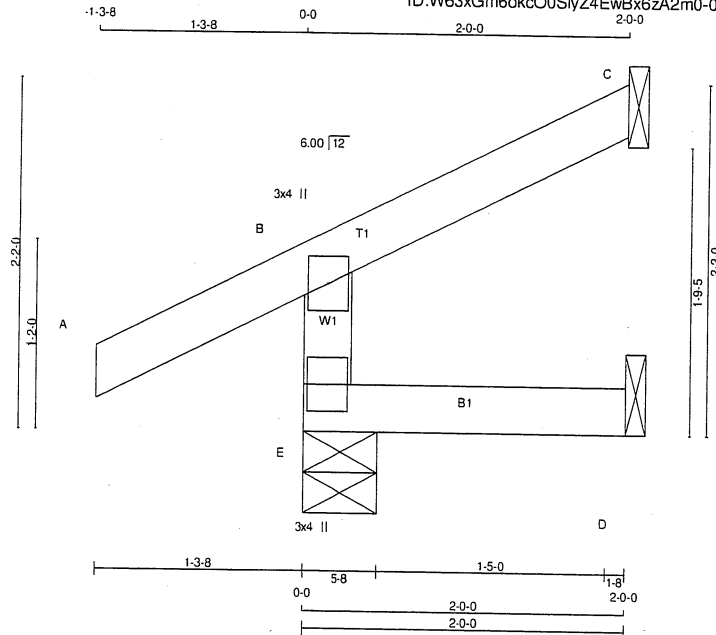
JSI GRIP = 0.11 (A) (INPUT = 0.90)  
JSI METAL = 0.03 (A) (INPUT = 1.00)



Structural component only  
DWG# T-2017441

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	J32	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	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	
E	BMV1+p	MT20	3.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
E	259	0	259	0	5-8	5-8	5-8	5-8
C	69	0	69	0	1-8	1-8	1-8	1-8
D	16	0	16	0	1-8	1-8	1-8	1-8

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

#### UNFACTORED REACTIONS

JT	1ST LC CASE COMBINED		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
E	181	133.0	0.0	0.0	0.0	48.0	0.0
C	48	39.0	0.0	0.0	0.0	9.0	0.0
D	13	0.0	0.0	0.0	0.0	13.0	0.0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED
	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX			FORCE (LBS)	MAX	
FR-TO									
E-B	-239	0	0.0	0.0	0.01 (4)	7.81			
A-B	0	28	-91.8	-91.8	0.12 (1)	10.00			
B-C	-10	0	-91.8	-91.8	0.06 (1)	6.25			
E-D	0	0	-18.5	-18.5	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

ALLOWABLE DEFL. (LL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.00")  
ALLOWABLE DEFL. (TL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.00")

CSI: TC=0.12/1.00 (A-B:1), BC=0.02/1.00 (D-E:4),  
WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

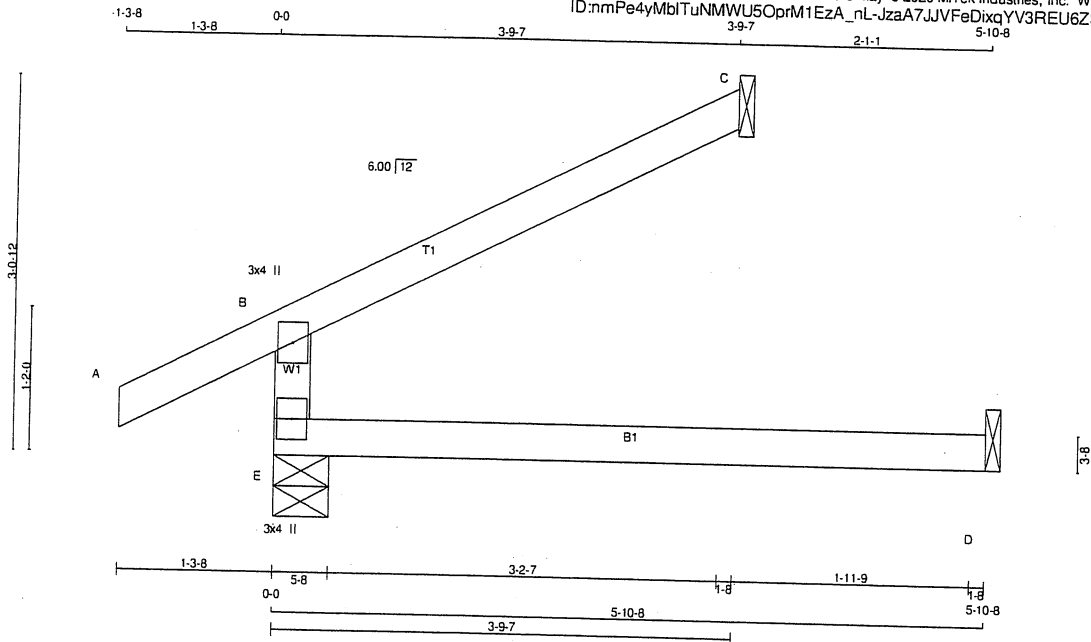
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90 )  
JSI METAL= 0.07 (B) (INPUT = 1.00 )



Structural component only  
DWG# T-2017442

JOB NAME 409989	TRUSS NAME C30	QUANTITY 4	PLY 1	JOB DESC. GREENPARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					
Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 10:40:50 2020 Page 1 ID:nmPe4yMblTuNMWU5OprM1EzA_nL-JzaA7JVFEDixqYV3REU6ZS4WVq8qrgH4RSDmyqxMB					



LUMBER				TOTAL WEIGHT = 4 X 14 = 57 lb			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	SPF	SPF	SPF
E - B	2x4	DRY	No.2				
A - C	2x4	DRY	No.2				
E - D	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	
E	BMV1+p	MT20	3.0	4.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	405	0	405	0	0	5-8	5-8
C	130	0	130	0	0	1-8	1-8
D	45	0	50	0	0	1-8	1-8

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

#### UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	286	190.0	0.0	0.0	0.0	96.0	0.0
C	90	73.0	0.0	0.0	0.0	17.0	0.0
D	36	0.0	0.0	0.0	0.0	36.0	0.0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED	VERT. LOAD	LC1 MAX	MEMB.	MAX. FACTORED
	(LBS)	(PLF)	CSI (LC)		(LBS)
FR-TO		FROM TO		FR-TO	
E-B	-342.0	0.0	0.0 0.13 (4)	7.81	
A-B	0.28	-91.8	-91.8 0.12 (1)	10.00	
B-C	-19.0	-91.8	-91.8 0.22 (1)	6.25	
E-D	0.0	-18.5	-18.5 0.13 (4)	10.00	

#### DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

#### DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.22/1.00 (B-C:1), BC=0.13/1.00 (D-E:4),  
WB=0.00/1.00 (n/a:0), SSI=0.15/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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.

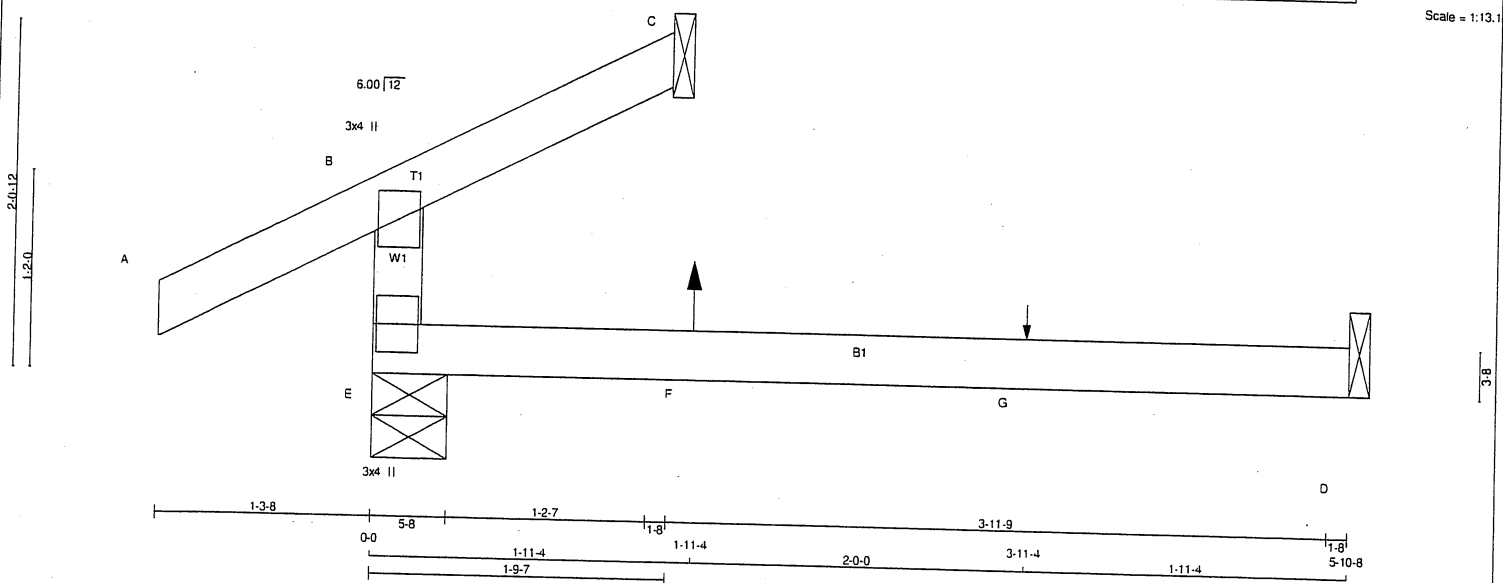
JSI GRIP= 0.14 (E) (INPUT = 0.90)  
JSI METAL= 0.09 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2017359

JOB NAME 409989	TRUSS NAME C31	QUANTITY 4	PLY 1	JOB DESC. GREENPARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.330 S May 6 2020 MITek Industries, Inc. Wed Aug 5 10:40:51 2020 Page 1  
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5-10-8



LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	
E - B	2x4	DRY	No.2	
A - C	2x4	DRY	No.2	
E - D	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		
E	BMV1+p	MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	284	0	284	0	5-8	5-8
C	63	0	63	0	1-8	1-8
D	44	0	52	0	1-8	1-8

SEE MITEK STANDARD DETAIL 897791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	COMBINED	1ST LOASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE	PERM. LIVE				
E	200	137	0	0	0	0	62	0
C	46	21	0	0	0	0	25	0
D	35	0	3	0	0	0	37	0

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

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

**LOADING**  
TOTAL LOAD CASES: (7)

MEMB.	CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
	FORCE (LBS)	VERT.	LC1	MAX	FORCE (PLF)	LC1	MAX	MEMB. FORCE (LBS)	MAX	CS1 (LC)
FR-TO										
E-B	-227	0	0.0	0.0	0.11	(4)	7.81			
A-B	0	28	-91.8	-91.8	0.12	(1)	10.00			
B-C	-9	9	-91.8	-91.8	0.08	(4)	10.00			
E-F	0	0	-18.5	-18.5	0.14	(4)	10.00			
F-G	0	0	-18.5	-18.5	0.14	(4)	10.00			
G-D	0	0	-18.5	-18.5	0.14	(4)	10.00			

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-11-4	7	1	12	FRONT	VERT	TOTAL	---	C1
G	3-11-4	1	1	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

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

TOTAL WEIGHT = 4 X 12 = 46 lb [M]

**DESIGN CRITERIA**

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

**SPACING = 24.0 IN. C/C**

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

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 (0.04")

CSI: TC=0.12/1.00 (A-B:1), BC=0.14/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (A-B:1)

DOL LUMBER=0.99 NAIL=0.99 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

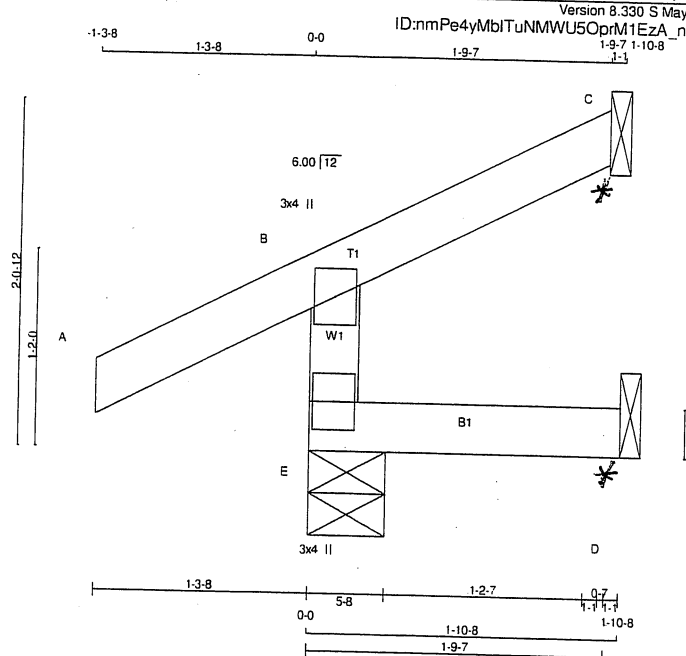
JSI GRIP = 0.09 (E) (INPUT = 0.90)  
JSI METAL = 0.06 (B) (INPUT = 1.00)



Structural component only  
DWG# T-2017360



JOB NAME 409989	TRUSS NAME C33	QUANTITY 6	PLY 1	JOB DESC. GREENPARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	
CHORDS			
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	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	
E	BMV1+p	MT20	3.0	4.0	

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	271	0	271	0	0	5-8	5-8
C	45	0	45	0	-23	1-8	1-8
D	8	0	17	0	-2	1-8	1-8

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

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

#### 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
E	188	141 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
C	31	24 / -18	0 / 0	0 / 0	0 / 0	7 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
D	7	0 / -8	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (5)

CHORDS		FACTORED		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM TO		FR-TO	
E-B	-244 / 0	0.0	0.0	0.04 (5)	7.81
A-B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B-C	-17 / 0	-91.8	-91.8	0.09 (1)	6.25
E-D	0 / 0	-18.5	-18.5	0.04 (5)	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 6 X 7 = 42 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

#### DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.12/1.00 (A-B:1), BC=0.04/1.00 (D-E:1)  
WB=0.00/1.00 (in/a:0), 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

AUTOSOLVE RIGHT HEEL ONLY

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

#### NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)  
JSI METAL= 0.07 (B) (INPUT = 1.00)

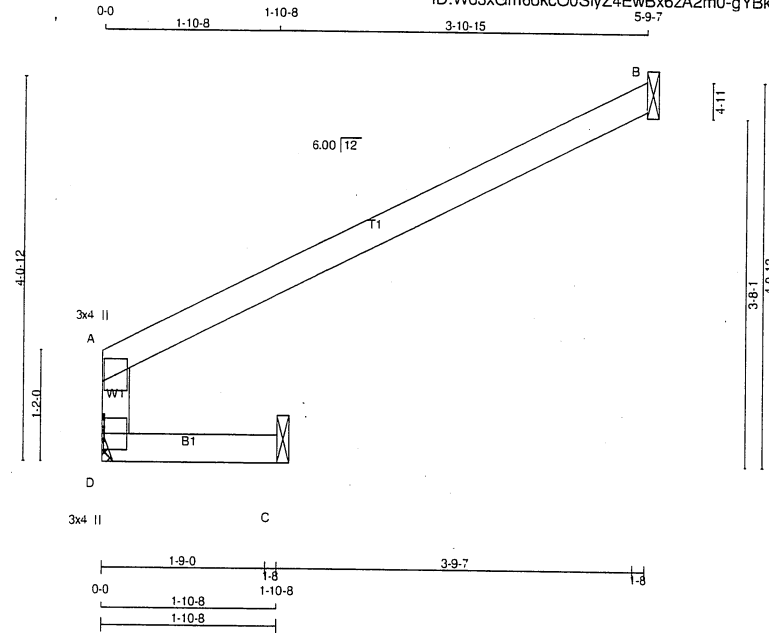


Structural component only  
DWG# T-2017362

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	C34	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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Scale = 1:23.3



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMV+p	MT20	3.0	4.0	
D	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	REORD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
D	201	0	201	0	MECHANICAL	
B	226	0	226	0	1-8	1-8
C	138	0	138	0	1-8	1-8

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

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

#### UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	141	102	0	0	0	38	0
B	156	126	0	0	0	30	0
C	97	68	0	0	0	29	0

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
D-A	-305	0	0.0	0.0	0.26	(1)	7.81
A-B	-17	0	-91.8	-91.8	0.38	(1)	6.25
D-C	0	0	-18.5	-18.5	0.31	(1)	10.00

TOTAL WEIGHT = 2 X 10 = 21 lb  
(M/F)

#### DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.38/1.00 (A-B:1), BC=0.31/1.00 (C-D:1), WB=0.00/1.00 (n/a:0), SSI=0.21/1.00 (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= 0.12 (D) (INPUT = 0.90)  
JSI METAL= 0.08 (A) (INPUT = 1.00)

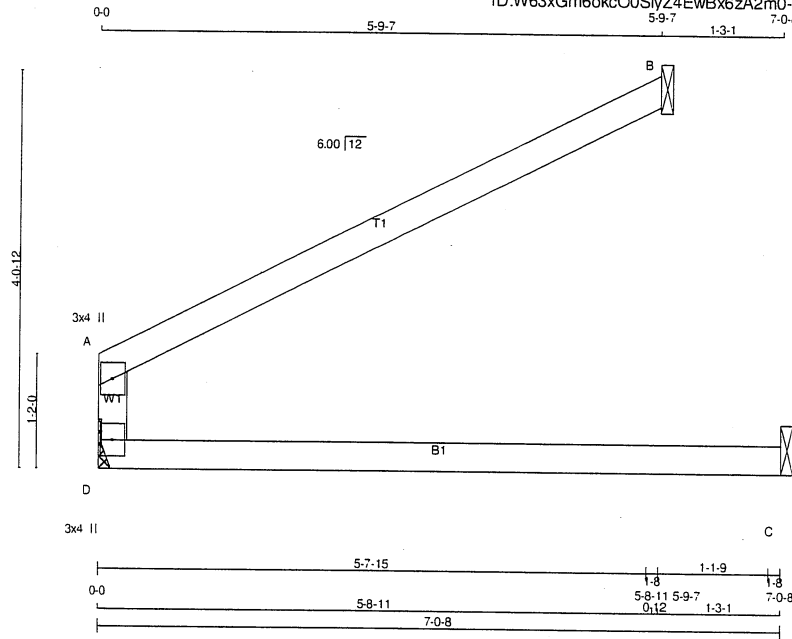


Structural component only  
DWG# T-2017436



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	C35	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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Scale = 1:22.5

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

DRY: SEASONED LUMBER.

<b>PLATES (table is in inches)</b>				
JT	TYPE	PLATES	W	LEN Y X
A	TMV+p	MT20	3.0	4.0
D	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 REORD	
	VERT	HORZ	DOWN	HORZ	BRG	BRG
D	334	0	334	0	MECHANICAL	
B	247	0	247	0	1-8	1-8
C	80	0	80	0	1-8	1-8

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

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

#### UNFACTORED REACTIONS

JT	1ST LCASE		MAX / MIN. COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
D	237	151 / 0	0 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0
B	171	133 / 0	0 / 0	0 / 0	0 / 0	0 / 0	38 / 0	0 / 0
C	62	12 / 0	0 / 0	0 / 0	0 / 0	0 / 0	49 / 0	0 / 0

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		MAX. FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	LC1 (LC)	MEMB.	FORCE (LBS)	MAX	LC1 (LC)
FR-TO					FR-TO			
D-A	-283	0	0.0	0.0	0.12 (1)	7.81		
A-B	-8	2	-91.8	-91.8	0.46 (1)	10.00		
D-C	0	0	-18.5	-18.5	0.24 (4)	10.00		

TOTAL WEIGHT = 2 X 16 = 33 lb

(M/F)

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.23")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
ALLOWABLE DEFL.(TL)= L/360 (0.23")  
CALCULATED VERT. DEFL.(TL) = L/469 (0.18")

CSI: TC=0.46/1.00 (A-B:1), BC=0.24/1.00 (C-D:4),  
WB=0.00/1.00 (n/a:0), SSI=0.20/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

#### NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.11 (D) (INPUT = 0.90)  
JSI METAL = 0.08 (A) (INPUT = 1.00)



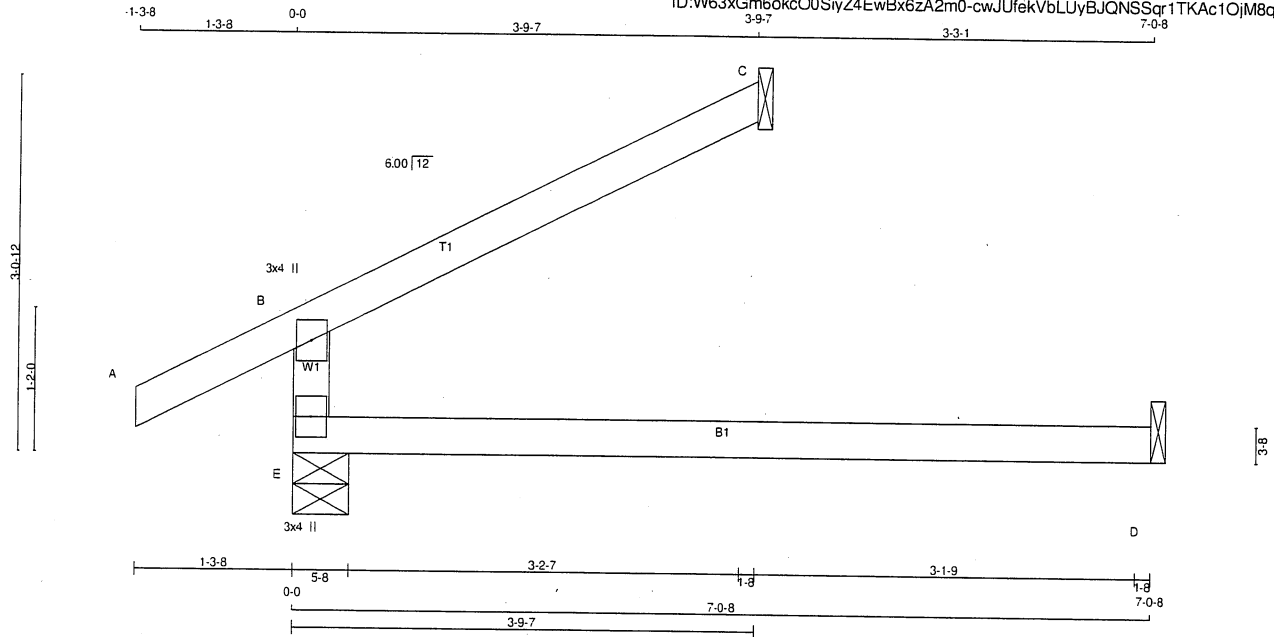
Structural component only  
DWG# T-2017437

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
410005	C36	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:43 2020 Page 1  
ID:W63xGm6okcO0SiyZ4EwBx6zA2m0-cwJufekVbLUyBJQNSSqr1TKAc1OjM8qFB2Tndyqs8Y

Scale = 1:17.9



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	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
E	BMV1+p	MT20	3.0	4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	419	0	419	0	5-8	5-8
C	130	0	130	0	1-8	1-8
D	53	0	60	0	1-8	1-8

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

#### UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
E	297	190	0	0	0	106	0
C	90	73	0	0	0	17	0
D	43	0	0	0	0	43	0

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

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO	MAX. LC1 CSI (LC)
FR-TO				FR-TO			
E-B	-342	0	0.0	0.0	0.16	(4)	7.81
A-B	0	28	-91.8	-91.8	0.12	(1)	10.00
B-C	-19	0	-91.8	-91.8	0.17	(1)	6.25
E-D	0	0	-18.5	-18.5	0.20	(4)	10.00

#### DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

ALLOWABLE DEFL.(LL)= L/360 (0.23")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.23")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.17 1.00 (B-C:1), BC=0.20/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.15/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

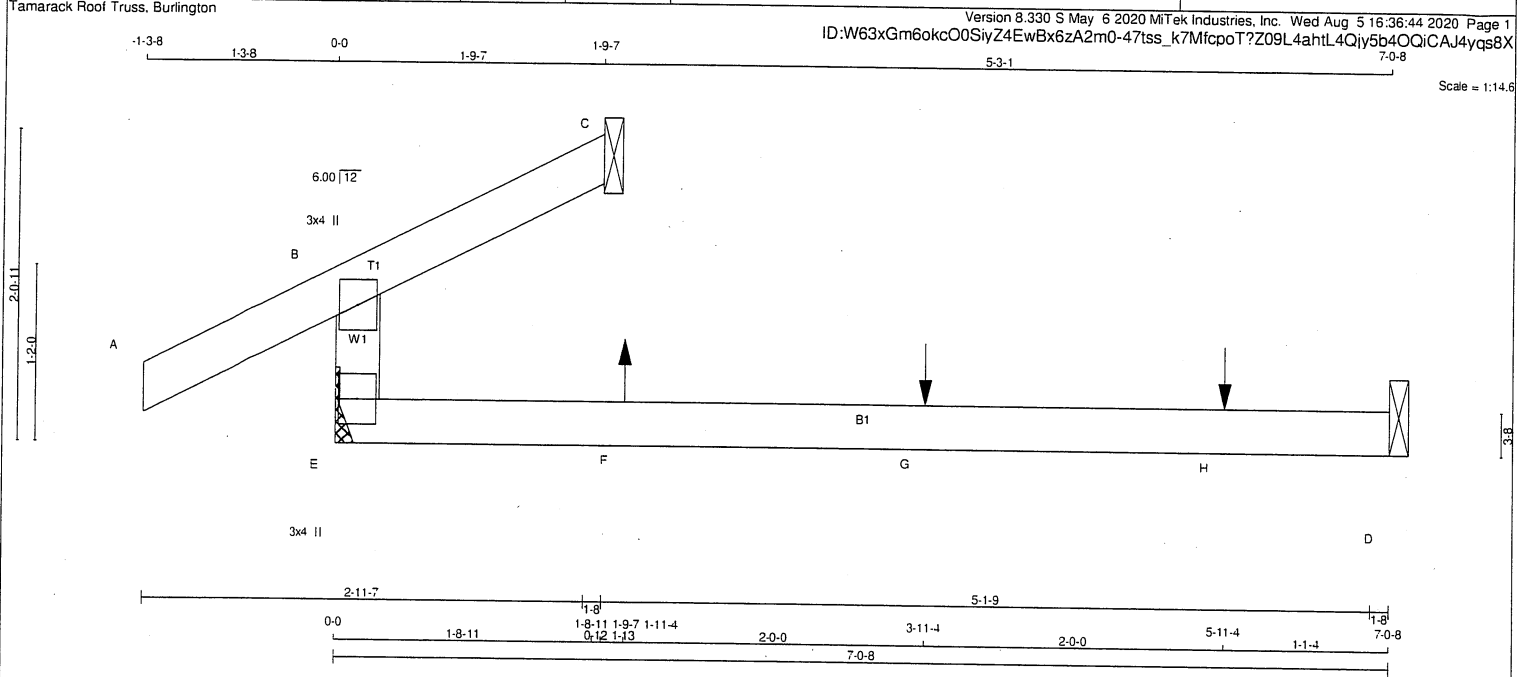
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90 )  
JSI METAL= 0.09 (B) (INPUT = 1.00 )



Structural component only  
DWG# T-2017438

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
410005	C37	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington					
Version 8.330 S May 6 2020 MiTek Industries, Inc. Wed Aug 5 16:36:44 2020 Page 1					
ID:W63xGm6okcO0SiyZ4EwBx6zA2m0-47tss_k7MfcpoT?Z09L4ahtL4Qiy5b4OQiCAJ4yqs8X					
7-0-8					



<b>LUMBER</b>				TOTAL WEIGHT = 2 X 13 = 26 lb			
N. L. G. A. RULES				(M/F)			
CHORDS	SIZE	LUMBER	DESCR.	SPF	SPF	SPF	SPF
E - B	2x4	DRY	No.2	SPF	SPF	SPF	SPF
A - C	2x4	DRY	No.2	SPF	SPF	SPF	SPF
E - D	2x4	DRY	No.2	SPF	SPF	SPF	SPF
DRY: SEASONED LUMBER.							

<b>PLATES (table is in inches)</b>					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	3.0	4.0	
E	BMV1+p	MT20	3.0	4.0	

<b>DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER</b>									
<b>BEARINGS</b>									
JT	FACTORED	MAXIMUM FACTORED	INPUT	REQD					
	GROSS REACTION	GROSS REACTION	BRG	BRG					
E	291	0	291	0	0	0	0	0	0
C	115	0	115	0	0	0	0	0	0
D	166	0	166	0	0	0	0	0	0

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

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

<b>UNFACTORED REACTIONS</b>							
JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	204	142 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
C	83	43 / 0	0 / 0	0 / 0	0 / 0	41 / 0	0 / 0
D	120	63 / -2	0 / 0	0 / 0	0 / 0	57 / 0	0 / 0

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

**LOADING**  
TOTAL LOAD CASES: (7)

<b>CHORDS</b>				<b>WEBS</b>			
MEMB.	MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED	MAX. FACTORED	
	FORCE	VERT. LOAD LC1	MAX.		FORCE	MAX.	
	(LBS)	(PLF)	CSI (LC)		(LBS)	CSI (LC)	
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
E-B	-210.4	0.0	0.0	0.19 (4)	7.81		
A-B	0.28	-91.8	-91.8	0.12 (1)	10.00		
B-C	-1.19	-91.8	-91.8	0.16 (4)	10.00		
E-F	0.0	-18.5	-18.5	0.26 (1)	10.00		
F-G	0.0	-18.5	-18.5	0.26 (1)	10.00		
G-H	0.0	-18.5	-18.5	0.26 (1)	10.00		
H-D	0.0	-18.5	-18.5	0.26 (1)	10.00		

<b>FACTORED CONCENTRATED LOADS (LBS)</b>									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-11-4	7	1	12	BACK	VERT	TOTAL	---	C1
G	3-11-4	-41	-41	---	BACK	VERT	TOTAL	---	C1
H	5-11-4	-119	-119	---	BACK	VERT	TOTAL	---	C1

#### CONNECTION REQUIREMENTS

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

#### DESIGN CRITERIA

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

**SPACING = 24.0 IN. C/C**

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

ALLOWABLE DEFL.(LL) = L/360 (0.23")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")  
ALLOWABLE DEFL.(TL) = L/360 (0.23")  
CALCULATED VERT. DEFL.(TL) = L/524 (0.16")

CSI: TC=0.19/1.00 (B-E:4), BC=0.26/1.00 (D-E:1), WB=0.00/1.00 (n/a:0), SSI=0.13/1.00 (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 RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.08 (E) (INPUT = 0.90 )  
JSI METAL= 0.06 (B) (INPUT = 1.00 )



Structural component only  
DWG# T-2017439

# 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. 258–259.

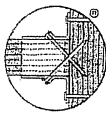
**Finish:** Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 20–24.

### Installation:

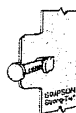
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for 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:

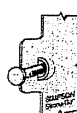
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on p. 126.



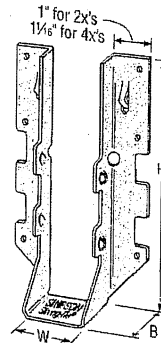
Double-Shear Nailing Top View



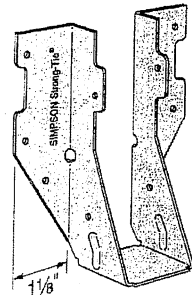
Double-Shear Nailing Side View; Do not bend tab



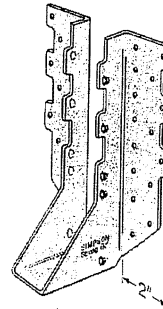
Dome Double-Shear Nailing Side View (available on some models)  
U.S. Patent 5,603,580



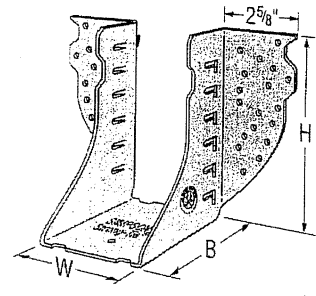
**LUS28**



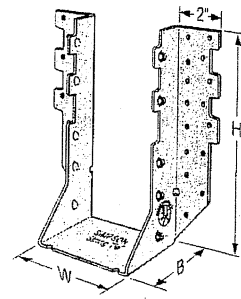
**LU26L**



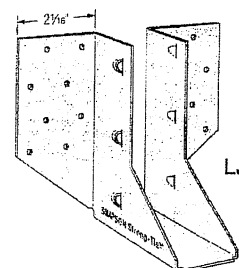
**HUS210**  
(HUS26, HUS28, and HHUS similar)



**HGUS28-2**

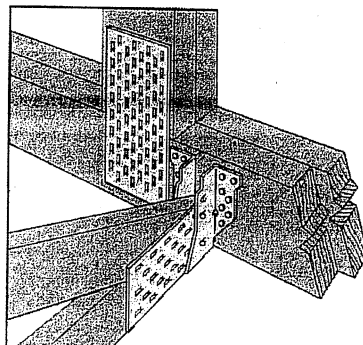


**HHUS210-2**



**LJS26DS**

**Typical HUS26 Installation with Reduced Heel Height**  
(Truss Designer to provide fastener quantity for connecting multiple members together)



**LUL/LUS/LJS/HUS/HHUS/HGUS****HHUS/HGUS**

See Hanger Options information on pp. 125–127.

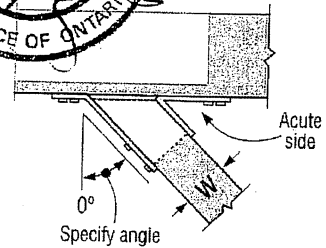
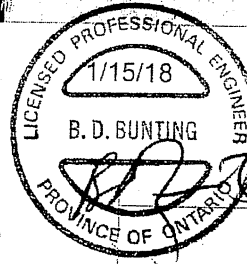
**HHUS — Sloped and/or Skewed Seat**

- HHUS hangers can be skewed to a maximum of 45° and/or sloped to a maximum of 45°
- For skew only, maximum factored down resistance is 0.85 of the table value
- For sloped only or sloped and skewed hangers, the maximum factored down resistance is 0.72 of the table value
- Uplift resistances for sloped/skewed conditions are 0.62 of the table value
- The joist must be bevel-cut to allow for double-shear nailing

**HGUS — Skewed Seat**

- HGUS hangers can be skewed only to a maximum of 45°. Factored resistances are:

HGUS Seat Width	Joist	Down Resistance	Uplift
$W < 2"$	Bevel or square cut	0.62 of table value	0.46 of table value
$2" < W < 6"$	Bevel cut	0.67 of table value	0.41 of table value
$2" < W < 6"$	Square cut	0.46 of table value	0.41 of table value
$W > 6"$	Bevel cut	0.75 of table value	0.41 of table value



**Top View HHUS Hanger Skewed Right**  
(joist must be bevel cut)  
All joist nails installed on the outside angle (non-acute side).

**Standard and Double-Shear Joist Hangers (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.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance			
		W	H	B	$d_e^3$	Header	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								( $K_D = 1.15$ )	( $K_D = 1.00$ )	( $K_D = 1.15$ )	( $K_D = 1.00$ )
								lb.	lb.	lb.	lb.
								kN	kN	kN	kN
<b>Single 2x Sizes</b>											
LUS24	18	1 1/16	3 1/4	1 3/4	2 1/4	(4) 10d	(2) 10d	710	1625	645	1155
LU24L	22	1 1/16	3	1 1/8	2 1/16	(4) 10d	(2) 10d x 1 1/2"	316	723	287	514
LU26L	22	1 1/16	5	1 1/8	4 5/8	(6) 10d	(4) 10d x 1 1/2"	360	1020	320	725
SS LUS26	18	1 1/16	4 3/4	1 3/4	3 3/4	(4) 10d	(4) 10d	1.60	4.54	1.42	3.22
								720	1605	645	1140
								3.20	7.14	2.87	5.07
HUS26	16	1 1/8	5 3/8	3	3 1/16	(14) 16d	(6) 16d	1420	2170	1290	1630
								6.32	9.65	5.74	7.25
								2705	4940	2065	3875
								11.30	21.97	9.20	17.24
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2055	4265	1460	4115
								9.14	18.97	6.49	18.31
HGUS26	12	1 1/8	5 3/8	5	4 1/8	(20) 16d	(8) 16d	2685	6625	2685	5700
								11.96	29.51	11.96	25.35
LU28L	20	1 1/16	6 3/4	1 1/8	5 1/8	(8) 10d	(6) 10d x 1 1/2"	1140	2185	1020	1550
								5.07	9.72	4.54	6.89
SS LUS28	18	1 1/16	6 3/4	1 3/4	3 3/4	(6) 10d	(4) 10d	1420	2520	1290	1790
								6.32	11.21	5.74	7.96
HUS28	16	1 1/8	7 1/8	3	6 1/16	(22) 16d	(8) 16d	3605	5365	2675	4345
								16.04	23.86	11.90	19.33
HGUS28	12	1 1/8	7 1/8	5	6 1/8	(36) 16d	(12) 16d	3310	7675	3310	6900
								14.74	34.19	14.74	30.73
LU210L	20	1 1/16	8	1 1/8	7 3/8	(10) 10d	(6) 10d x 1 1/2"	1140	2495	1020	1770
								5.07	11.10	4.54	7.87
SS LUS210	18	1 1/16	7 1/16	1 3/4	3 3/4	(8) 10d	(4) 10d	1420	2785	1290	2210
								6.32	12.39	5.74	9.83

1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Designer must ensure that hanger is compatible with truss when reduced heel height is used.
3.  $d_e$  is the distance from the bearing seat to the top joist nail.
4. Resistances shown require a minimum 2-ply girder truss. For fastening to single-ply truss request technical bulletin T-C-N10TRSSCN and/or see installation notes.
5. Nails: 16d = 0.162" dia. x 3 1/2" long. See pp. 27–28 for other nail sizes and information.

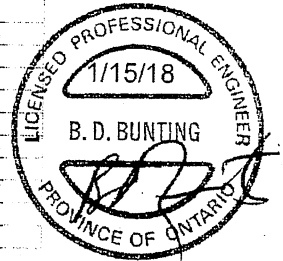
## Face-Mount Hangers

**SIMPSON**  
**Strong-Tie**

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.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance			
		W	H	B	d <sub>e</sub> <sup>3</sup>	Header	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K <sub>D</sub> = 1.15)	(K <sub>D</sub> = 1.00)	(K <sub>D</sub> = 1.15)	(K <sub>D</sub> = 1.00)
								lb.	lb.	lb.	lb.
								kN	kN	kN	kN
Double 2x Sizes											
LUS24-2	18	3 1/8	3 1/8	2	1 1/2	(4) 16d	(2) 16d	835	2020	590	1435
SS LUS26-2	18	3 1/8	4 1/8	2	4	(4) 16d	(4) 16d	3.71	8.99	2.62	6.38
HHUS26-2	14	3 1/8	5 1/8	3	3 1/8	(14) 16d	(6) 16d	1720	2595	1545	1920
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	7.65	11.54	6.87	8.54
SS LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	2850	7335	2065	5205
HHUS28-2	14	3 1/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	12.68	32.63	9.20	23.15
HGUS28-2	12	3 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	4385	8950	3110	6355
SS LUS210-2	18	3 1/8	9	2	6	(8) 16d	(8) 16d	19.51	39.81	13.83	28.27
HHUS210-2	14	3 1/8	9 1/8	3	8	(30) 16d	(10) 16d	1720	3325	1545	2575
HGUS210-2	12	3 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	7.65	14.79	6.87	11.45
								3765	8940	2675	6345
								16.75	39.77	11.90	28.22
								6070	12980	4310	9215
								27.00	57.74	19.17	40.99
								2580	4500	2320	3195
								11.48	20.02	10.32	14.21
								4670	9660	4235	7000
								20.77	42.97	18.84	31.14
								6840	14015	4855	10270
								30.43	62.34	21.60	45.69
Triple 2x Sizes											
HGUS26-3	12	4 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3110	6355
HGUS28-3	12	4 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	19.51	39.81	13.83	28.27
HHUS210-3	14	4 1/8	9	3	7 1/8	(30) 16d	(10) 16d	6070	12980	4310	9215
HGUS210-3	12	4 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	27.00	57.74	19.17	40.99
								4670	9670	4235	6865
								20.77	43.02	18.84	30.54
								6840	14645	4855	10400
								30.43	65.14	21.60	46.26
Quadruple 2x Sizes											
HGUS26-4	12	6 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3110	6355
HGUS28-4	12	6 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	19.51	39.81	13.83	28.27
HHUS210-4	14	6 1/8	8 1/8	3	7 1/8	(30) 16d	(10) 16d	6070	12980	4310	9215
HGUS210-4	12	6 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	27.00	57.74	19.17	40.99
								4670	10155	4235	7210
								20.77	45.17	18.84	32.07
								6840	14645	4855	10400
								30.43	65.14	21.60	46.26
								7640	14995	5425	10645
								33.98	66.70	24.13	47.35
								10130	16400	7195	11645
								45.06	72.95	32.00	51.80
4x Sizes											
LUS46	18	3 1/8	4 1/8	2	3 1/8	(4) 16d	(4) 16d	1720	2595	1545	1920
HHUS46	14	3 1/8	5 1/8	3	3 1/8	(14) 16d	(6) 16d	7.65	11.54	6.87	8.54
HGUS46	12	3 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	2540	7335	2065	5205
LUS48	18	3 1/8	6 1/8	2	3 1/8	(6) 16d	(4) 16d	11.30	32.63	9.20	23.15
HHUS48	14	3 1/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	4385	8950	3110	6355
HGUS48	12	3 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	19.51	39.81	13.83	28.27
LUS410	18	3 1/8	8 1/8	2	5 1/8	(8) 16d	(6) 16d	1720	3325	1545	2575
HHUS410	14	3 1/8	9 1/8	3	8 1/8	(30) 16d	(10) 16d	7.65	14.79	6.87	11.45
HGUS410	12	3 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	3765	8940	2675	6345
								16.75	39.77	11.90	28.22
								6070	12980	4310	9215
								27.00	57.74	19.17	40.99
								2580	4500	2320	3195
								11.48	20.02	10.32	14.21
								6840	14015	4855	10270
								30.43	62.34	21.60	45.69
								7640	14995	5425	10645
								33.98	66.70	24.13	47.35
								10130	16400	7195	11645
								45.06	72.95	32.00	51.80



Plated Truss Connectors

# TC – Truss Connectors

**SIMPSON**  
**Strong-Tie**

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

**Material:** 16 gauge

**Finish:** G90 galvanized

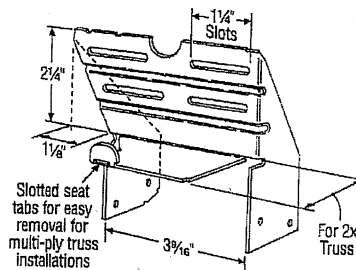
**Design:** Factored resistances are in accordance with CSA 086-14

## Installation:

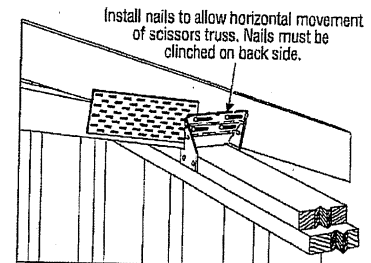
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

## Optional TC Installation:

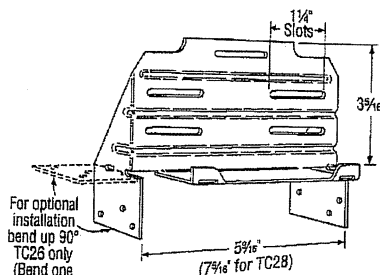
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



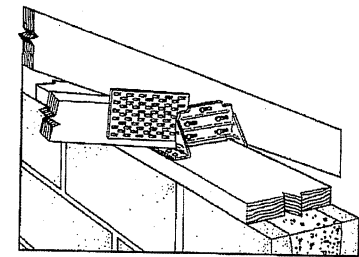
**TC24**  
U.S. Patent 4,932,173



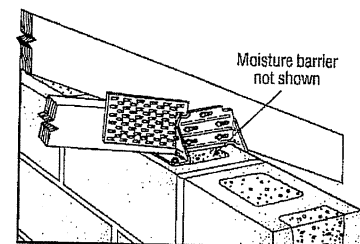
Typical TC24 Installation



**TC26**  
(TC28 Similar)



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer (8", 10", 12" Wall Installation Similar)



Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K <sub>0</sub> =1.15)	Uplift (K <sub>0</sub> =1.15)
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

## Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K <sub>0</sub> =1.15)	Uplift (K <sub>0</sub> =1.15)
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT  
STATES  
DESIGN

This technical bulletin is effective until June 30, 2019, and reflects information available as of March 1, 2017. This information is updated periodically and should not be relied upon after June 30, 2019. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECTC17-3/17 exp. 6/19

(800) 999-5099  
strongtie.com

## H/TSP

**SIMPSON**  
**Strong-Tie**

## Seismic and Hurricane Ties (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.	Ga.	Fasteners			Factored Resistance ( $K_D = 1.15$ )					
					D.Fir-L			S-P-F		
		To Rafters/ Truss	To Plates	To Studs	Uplift	Lateral		Uplift	Lateral	
						F <sub>1</sub>	F <sub>2</sub>		F <sub>1</sub>	F <sub>2</sub>
					lb.	lb.	lb.	lb.	lb.	lb.
					kN	kN	kN	kN	kN	kN
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
					3.29	3.05	1.33	3.02	2.16	0.96
SS H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
					3.69	0.98	0.33	2.62	0.69	0.24
SS H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
					3.58	0.71	0.71	3.36	0.71	0.71
H2.5T	18	(5) 8d	(5) 8d	—	835	175	210	740	160	210
					3.71	0.78	0.93	3.29	0.71	0.93
SS H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
					3.29	0.80	1.18	2.74	0.56	0.85
H6	16	—	(8) 8d	(8) 8d	1585	1085	—	1125	770	—
					7.05	4.83	—	5.00	3.43	—
H7Z	16	(4) 8d	(2) 8d	(8) 8d	1390	670	—	990	475	—
					6.18	2.98	—	4.40	2.11	—
SS H8 <sup>3</sup>	18	(5) 10d x 1½"	(5) 10d x 1½"	—	1120	—	—	1025	—	—
					4.98	—	—	4.56	—	—
SS H10A <sup>3</sup>	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290
					7.72	3.54	1.82	6.69	2.51	1.29
H10AR	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1485	690	430	1220	570	305
					6.61	3.07	1.91	5.43	2.54	1.36
H10A-2	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1835	1275	430	1645	880	305
					8.16	5.67	1.91	7.32	3.91	1.36
H10S <sup>7,3</sup>	18	(8) 8d x 1½"	(8) 8d x 1½"	(8) 8d	1465	795	315	1040	565	225
					6.52	3.54	1.40	4.63	2.51	1.00
H11Z	18	(6) 16d x 2½"	(6) 16d x 2½"	—	1095	920	545	780	655	390
					4.87	4.09	2.42	3.47	2.91	1.73
H14	18	① (12) 8d x 1½"	(13) 8d	—	2390	855	320	1805	610	230
					10.63	3.80	1.42	8.03	2.71	1.02
		② (12) 8d x 1½"	(15) 8d	—	2390	855	320	1805	610	230
					10.63	3.80	1.42	8.03	2.71	1.02
TSP	16	(9) 10d x 1½"	(6) 10d x 1½"	—	1295	440	—	920	310	—
					5.76	1.96	—	4.09	1.38	—
		(9) 10d x 1½"	(6) 10d	—	1560	440	—	1105	310	—
					6.94	1.96	—	4.92	1.38	—

- Factored resistances have been increased 15% for short term loading; no further increase is allowed.
- Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on the same side of the plate (exception: H2.5A).
- H8 factored uplift resistances for stud-to-bottom plate installations are 595 lb. (2.65 kN) for D.Fir-L and 390 lb. (1.74 kN) for S-P-F.
- When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
- 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 at the top and bottom of the wall must be on the same side of the wall (see technical bulletin T-HTIECONPATH).
- Factored resistances in the F<sub>1</sub> direction are not intended to replace diaphragm boundary members or prevent cross grain bending of the truss or rafter members. Additional shear transfer elements shall be considered where there may be effects of cross grain bending or tension.

- H10S can have the stud offset a maximum of 1" from the rafter (centre to centre) for a reduced uplift of 1435 lb. (6.38 kN) D.Fir-L and 1015 lb. (4.51 kN) S-P-F.
- H10S nails to plates are optional for uplift but required for lateral loads.
- H10A may be field-bent up to a slope of 6/12. Multiply the tabulated uplift value x 0.75. Full tabulated lateral resistances apply.
- The factored resistances of stainless-steel connectors match carbon-steel connectors when installed with Simpson Strong-Tie® stainless-steel, SCNR ring-shank nails. For more information, refer to engineering letter L-F-SSNAILS at [strongtie.com](http://strongtie.com).
- D.Fir-L/S-P-F factored uplift resistances for the H2.5A fastened to a 2x4 truss bottom chord and double top plates using (5) 8d x 1½" nails into the top plates and (3) 8d x 1½" nails into the lowest three flange holes into the truss bottom chord is 495 lb. (2.20 kN).
- Nails: 16d x 2½" = 0.162" dia. x 2½" long, 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long, 8d x 1½" = 0.131" dia. x 1½" long. See pp. 27–28 for other nail sizes and information.



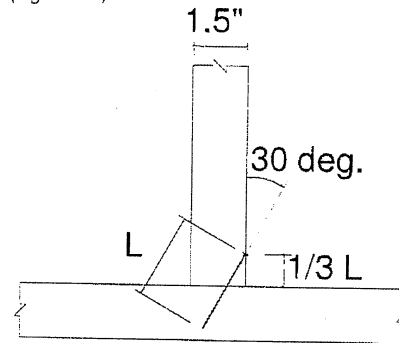
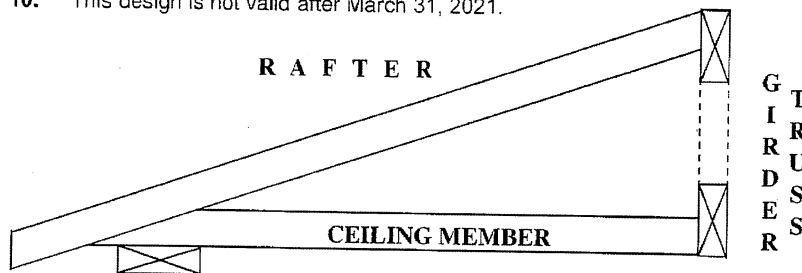
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

## NOTES:

- Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
- Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-14, section 12.9.4.1.
- For 9-3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
- Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
- Nail values in table are based on the following relative lumber densities:  $G = 0.42$  (SPF),  $G = 0.49$  (D. Fir).
- Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
- For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 ( $K_D$  factor).
- Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
- Nail values in this table comply with CSA O86-14, section 12.9.4
- This design is not valid after March 31, 2021.

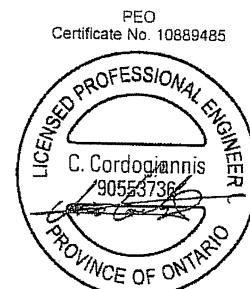


TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	( 3.5" nail )		( 3" and 3.25" nail )	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4

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

December 2, 2019



# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

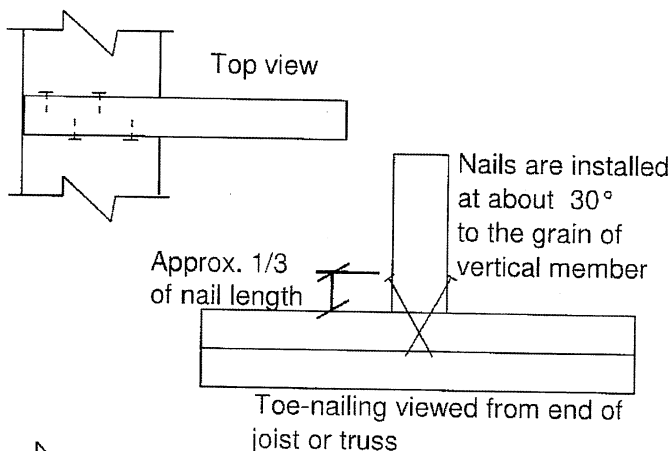
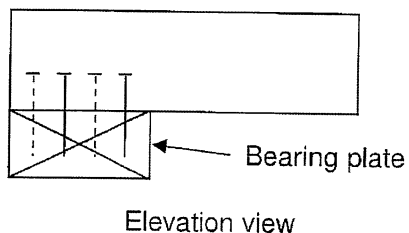
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

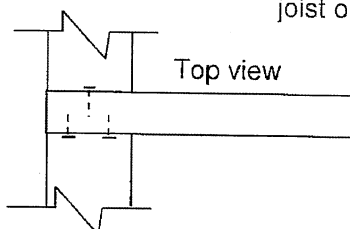
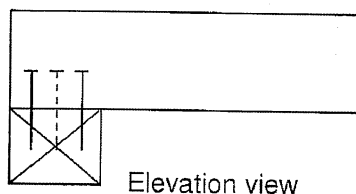
## NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: G = 0.42(SPF), G = 0.49(D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

## Toe-nailing on 2x6 Bearing Plate



## Toe-nailing on 2x4 Bearing Plate



**MiTek**®

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

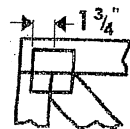
December 2, 2019

PEO  
Certificate No. 10889485

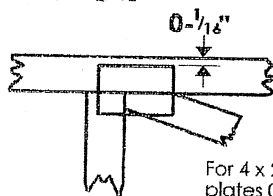


## Symbols

### PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-1/8\" from outside edge of truss.



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

\*Plate location details available in MiTek software or upon request.

### PLATE SIZE

4 x 4

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

### LATERAL BRACING LOCATION



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

### BEARING

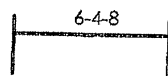


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

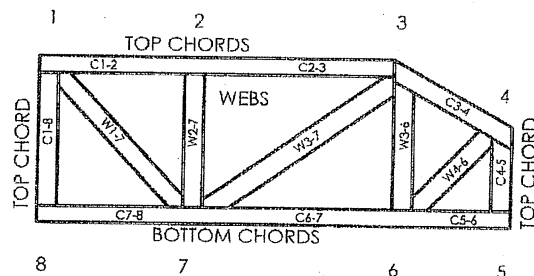
### Industry Standards:

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

## Numbering System



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



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

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

### PRODUCT CODE APPROVALS

CCMC Reports:

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

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



## General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

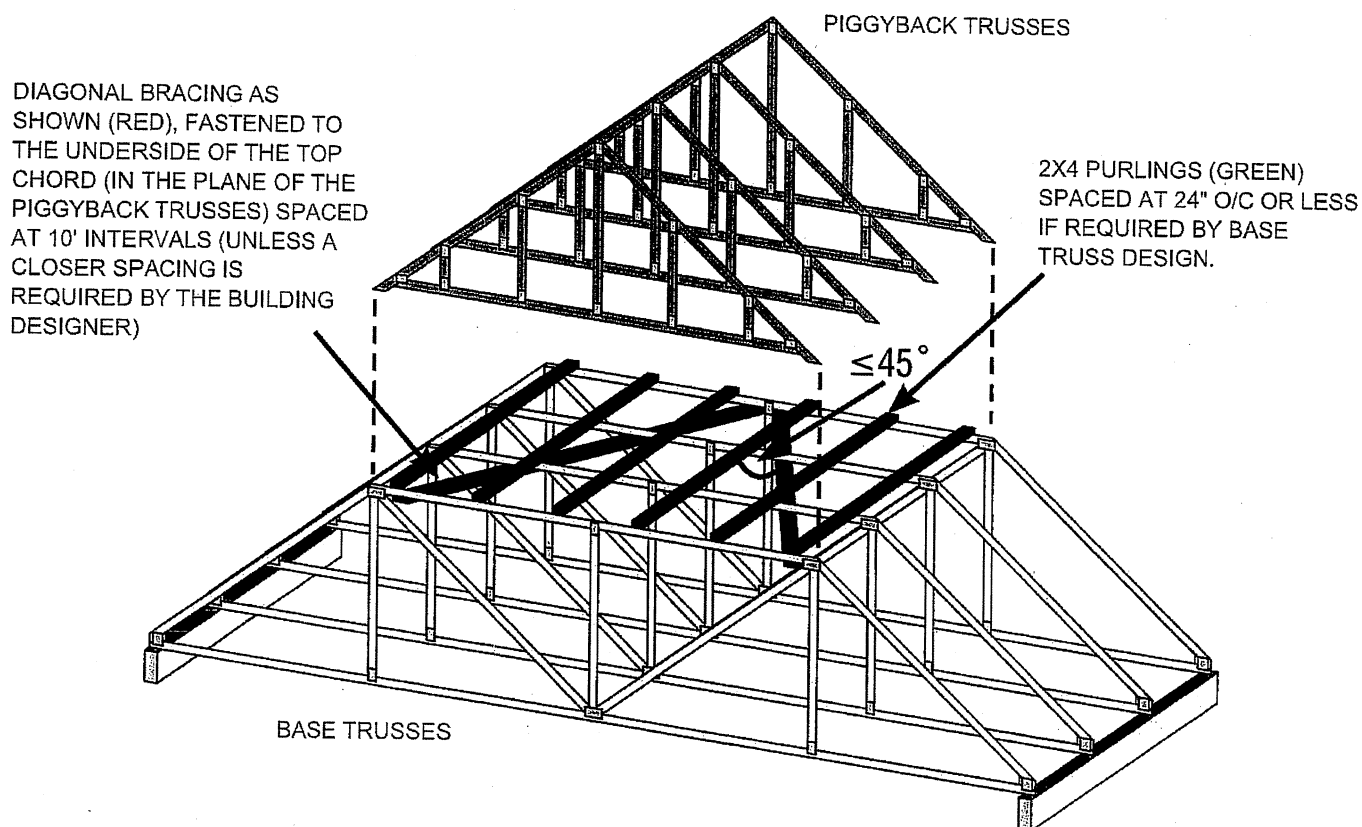
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
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.

### Overview:

Where piggybacks are connected ovetop 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.



## Alves Engineering Services Inc.

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

### RESPONSABILITIES

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

### SPECIFICATIONS

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

T-1900218

Feb 09, 2018