

CERTIFIED MODEL
PRE-APPROVED
FOR PERMIT APPLICATION AS PER THE
ONTARIO BUILDING CODE
TOWN OF CALEDON BUILDING DIVISION

REVIEWED BY *J. SNELL*
DATE *JULY 23/19*
FILE # *BARTON 2 - ELEV. 1,2,3*

APPLICANT COPY

9/12 ROOF PITCH
UNLESS OTHERWISE SPECIFIED

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

12 " FINISH O.H
R.T.M.C
2X6 EXTERIOR WALLS
ASPHALT SHINGLES
2X6 FASCIA BOARD

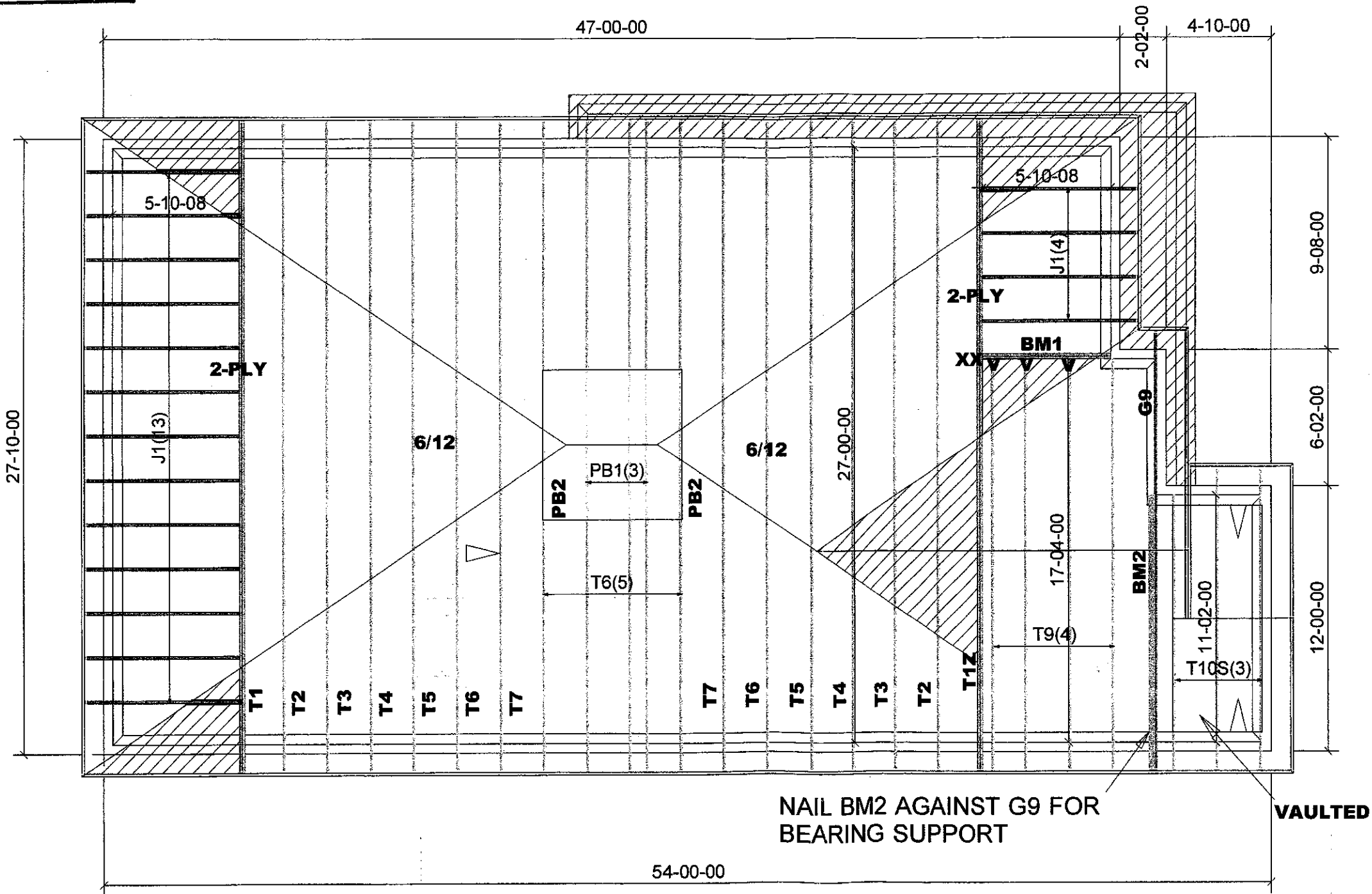
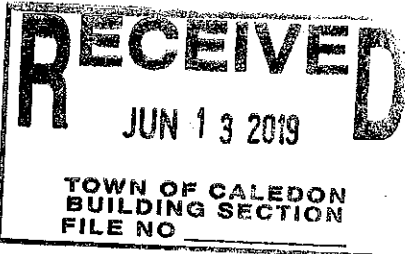
DESIGN LOADS:
GS LOAD 1.8 KPA
TC DEAD 6 PSF
BC LIVE 10.5 PSF
BC DEAD 7 PSF

ALL CONVENTIONAL ROOF
FRAMING TO CONFORM TO
PART 9 OF THE OBC LATEST
EDITION ROOF RAFTERS
THAT MEET OR CROSS
OVER TRUSSES ARE TO BE
2"X4" SPF @24"o.c. WITH A
2"X4"SPF VERTICAL POST
TO THE TRUSS UNDER AT
EACH CROSS POINT. POSTS
LONGER THAN 6' TO BE
LATERALLY BRACED SO
THAT THE DISTANCE
BETWEEN END POINTS AND
BETWEEN ROWS OF
BRACING DOES NOT
EXCEED 6'.

TRUSSES DESIGNED
CONFORM TO THE
RELEVANT SECTION OF THE
LATEST EDITION OF THE
ONTARIO BUILDING CODE
(RESIDENTIAL PART 9)

HARDWARE
HGUS26-2(XX)
...
LJS26DS(V)
...
BM1,2: 2-2X10
...

DENOTES
CONVENTIONAL
FRAMING



M12246
TAMARACK
LUMBER INC.
ALFA LUMBER GROUP

Job Track: **50033**
Plan Log: **201008**
Layout ID: **402946**

Builder / Location:
GREEN PARK HOMES / CALEDON

Project: **LAMBERT LANE PH.2**
Date: 5/3/2019
Sales: **Mario DiCano**

Model / Elevation:
BARTON 2/1

Designer: JG

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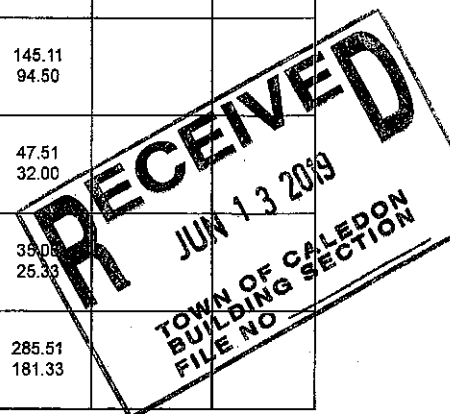
DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: LAMBERT LANE PH.2
 Location: CALEDON
 Model: BARTON 2
 Lot #:
 Elevation: 1

Job Track: 50033
 PlanLog: 201008
 Layout ID: 402946
 Ref #
 Page: 1 of 2
 Date: 05/03/2019
 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	T1 Hip Girder	9/12	27-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-06-04 1-06-04	248.69 160.67		
	1 2-ply	T1Z Hip Girder	9/12	27-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-06-04 1-06-04	248.69 160.67		
	2	T2 Hip	9/12	27-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	221.33 142.00		
	2	T3 Hip	9/12	27-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	242.71 157.33		
	2	T4 Hip	9/12	27-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	245.08 159.00		
	2	T5 Hip	9/12	27-00-00	8-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	259.05 166.67		
	7	T6 Hip	9/12	27-00-00	9-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	907.29 574.00		
	2	T7 Hip	9/12	27-00-00	10-01-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	264.11 169.33		
	4	T9 Common	9/12	17-04-00	8-00-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	322.63 204.00		
	1	G9 GABLE	9/12	17-04-00	8-00-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	82.93 53.00		
	3	T10S Scissor	9/12 7/12	11-02-00	5-08-08	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	145.11 94.50		
	3	PB1 Piggyback	9/12	6-09-05	2-06-08	2 x 4			47.51 32.00		
	2	PB2 Piggyback	9/12	6-09-05	2-00-00	2 x 4			39.00 25.39		
	17	J1 Jack-Open	6/12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	285.51 181.33		



DELIVERY SHIPLIST		
	Lumber Yard: TAMARACK LUMBER	Job Track: 50033
	Builder: GREEN PARK HOMES	PlanLog: 201008
	Project: LAMBERT LANE PH.2	Layout ID: 402946
	Location: CALEDON	Ref #
	Model: BARTON 2	Page: 2 of 2
	Lot #:	Date: 05/03/2019
Elevation: 1	Designer:	Sales Rep: Mario DiCano

Roof Trusses

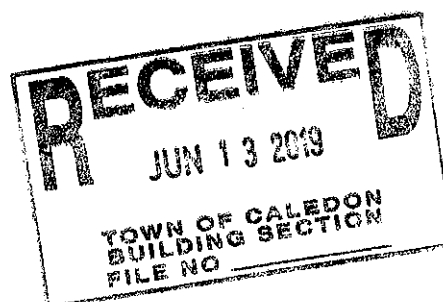
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
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TOTAL # TRUSS= 51 TOTAL BFT OF ALL TRUSSES= 2279.83 BFT. TOTAL WEIGHT OF ALL TRSSES 3555.68 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
1	Hardware	HGUS26-2	
3	Hardware	LJS26DS	

TOTAL NUMBER OF ITEMS= 4



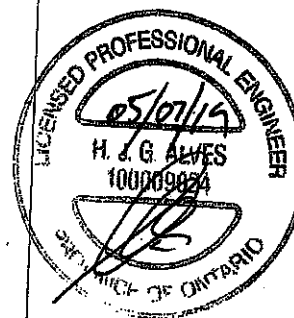
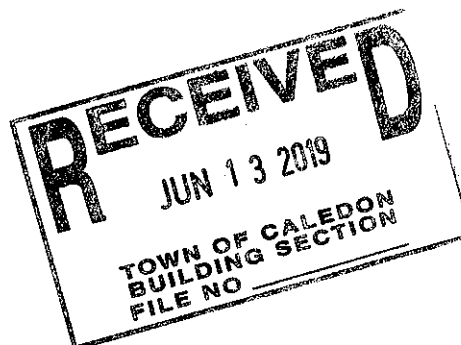
JOB NAME 402958 Tamarack Roof Truss, Burlington	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. GREEN PARK HOMES	TRUSS DESC.	DRWG NO.
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Version 8.230 S Nov 17 2018 Mittek Industries, Inc. Tue May 7 17:21:51 2019 Page 2
ID:7F57AUds_nGadQ0J40R5xzKA_Y-89wivvU68bo79amLi7TmTZqdMQkAHNSMo6XZQlzh0E

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. UNBRAC (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
AN-K	0/0	-38.5 -38.5	0.07 (2)	10.00			

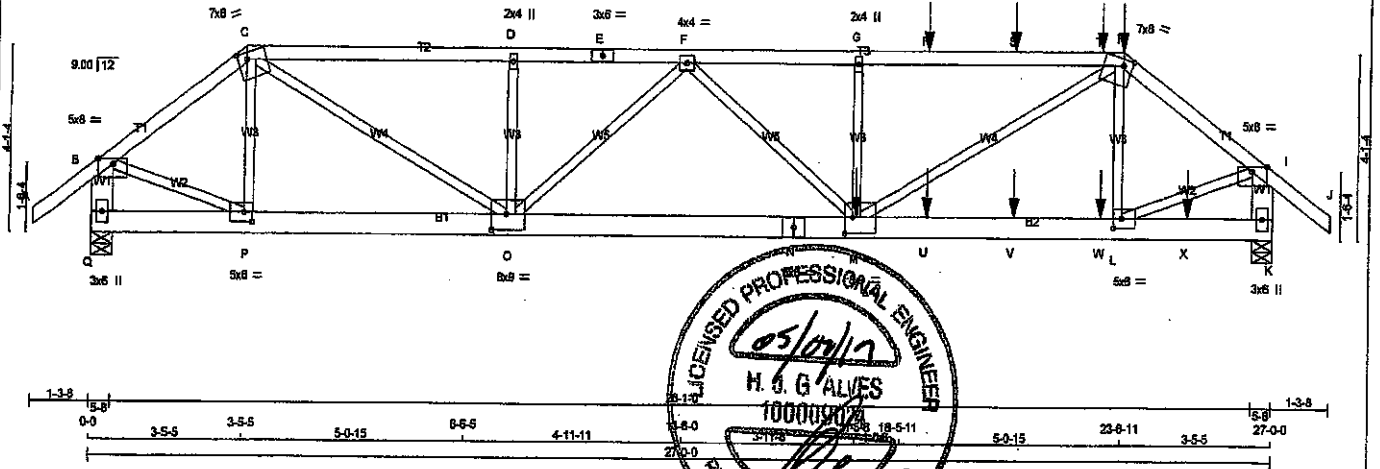
FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-5-5	-44	-49		FRONT	VERT	DEAD
C	3-5-5	-248	-248		FRONT	VERT	SNOW
H	23-6-11	-44	-49		FRONT	VERT	DEAD
H	23-6-11	-248	-248		FRONT	VERT	SNOW
N	15-11-4	-55	-70		BACK	VERT	TOTAL
R	3-11-4	-149	-149		BACK	VERT	TOTAL
S	5-11-4	-123	-123		BACK	VERT	TOTAL
T	7-11-4	-123	-123		BACK	VERT	TOTAL
U	9-11-4	-123	-123		BACK	VERT	TOTAL
V	11-11-4	-123	-123		BACK	VERT	TOTAL
W	13-11-4	-123	-123		BACK	VERT	TOTAL
X	15-11-4	-123	-123		BACK	VERT	TOTAL
Y	17-11-4	-123	-123		BACK	VERT	TOTAL
Z	19-11-4	-123	-123		BACK	VERT	TOTAL
AA	21-11-4	-123	-123		BACK	VERT	TOTAL
AB	23-11-4	-155	-155		BACK	VERT	TOTAL
AC	1-11-4	-55	-70		BACK	VERT	TOTAL
AD	3-11-4	-55	-70		BACK	VERT	TOTAL
AE	5-11-4	-55	-70		BACK	VERT	TOTAL
AF	7-11-4	-55	-70		BACK	VERT	TOTAL
AG	9-11-4	-55	-70		BACK	VERT	TOTAL
AH	11-11-4	-55	-70		BACK	VERT	TOTAL
AI	13-11-4	-55	-70		BACK	VERT	TOTAL
AJ	15-11-4	-55	-70		BACK	VERT	TOTAL
AK	17-11-4	-55	-70		BACK	VERT	TOTAL
AL	19-11-4	-55	-70		BACK	VERT	TOTAL
AM	21-11-4	-55	-70		BACK	VERT	TOTAL
AN	23-11-4	-55	-70		BACK	VERT	TOTAL



DWG NO. TAM 1910743
STRUCTURAL
CONSULTANT ONLY 7/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402958	T1Z	1	2	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington					

Version 8.230 S Nov 17 2018 MitTek Industries, Inc. Tue May 7 17:21:52 2019 Page 1
ID:7F57AJds_nGodQ040R5xzKA_Y-JLT86FuIvYwskLYaI?nDIAq2J0mpV0mH6zIzI0D
18-5-11 19-0-12 21-0-12 23-0-12 23-6-11 3-5-5 27-0-0 28-3-8
1-3-8 0-0 3-5-5 5-0-15 6-6-5 4-11-11 13-0-0 4-11-11 7-1 2-0-0 2-0-0 5-15 3-5-5 27-0-0 1-3-8
Scale = 1:48.0



TOTAL WEIGHT = 2 X 124 = 249 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	1650F 1.5E	SPF	
E - H	2x4	DRY	1650F 1.5E	SPF	
H - J	2x4	DRY	No.2	SPF	
Q - B	2x6	DRY	No.2	SPF	
K - I	2x6	DRY	No.2	SPF	
Q - N	2x6	DRY	No.2	SPF	
N - K	2x6	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)

TOP CHORDS: (0.122"x3") SPIRAL NAILS

A - C	1	12	TOP
C - E	1	12	TOP
E - H	1	12	SIDE(81.0)
H - J	1	12	SIDE(81.0)
Q - B	2	12	TOP
K - I	2	12	TOP

BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS

Q - N	2	12	TOP
N - K	2	12	SIDE(183.1)

WEBS: (0.122"x3") SPIRAL NAILS

2x3	1	5	SIDE(573.4)
G - M	1	3	
D - O	1	3	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLYS 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 in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	
C	TTWW-m	MT20	7.0	8.0	1.75	2.50
D	TMVW-w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-w	MT20	4.0	4.0		
G	TMVW-w	MT20	2.0	4.0		
H	TTWW-m	MT20	7.0	8.0	1.75	2.50
I	TMVW-p	MT20	5.0	8.0	Edge	
K	BMVW-p	MT20	3.0	6.0		
L	BMVW-w	MT20	5.0	6.0	2.50	2.25
M	BMVW-w	MT20	8.0	9.0	4.25	2.50
N	BS-t	MT20	5.0	6.0		
O	BMVW-w	MT20	8.0	9.0	4.25	4.00
P	BMVW-w	MT20	5.0	6.0	2.50	2.25
Q	BMVW-p	MT20	3.0	6.0		

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

BEARINGS	FACTORED		MAXIMUM FACTORED		INPUT		REQD	
	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	BRG	IN-SX	IN-SX
JT	3228	0	3228	0	5-8	5-8		
K	4658	0	4658	0	5-8	5-8		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	- LIVE	PERM. LIVE	WIND	DEAD	SOIL
Q	2390	1387 / 0	430 / 0	0 / 0	0 / 0	573 / 0	0 / 0
K	3445	2013 / 0	609 / 0	0 / 0	0 / 0	823 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.34 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LOCI MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0 / 42	-102.1	-102.1	0.08 (1)	10.00	P-C	-810 / 0	0.08 (1)
B-C	-3378 / 0	-102.1	-102.1	0.16 (1)	4.84	C-O	0 / 4214	0.52 (1)
C-D	-8278 / 0	-102.1	-102.1	0.35 (1)	4.19	Q-D	-829 / 0	0.08 (1)
D-E	-8278 / 0	-102.1	-102.1	0.27 (1)	4.21	Q-F	-1880 / 0	0.48 (1)
E-F	-8278 / 0	-102.1	-102.1	0.27 (1)	4.21	F-M	0 / 1580	0.20 (1)
F-G	-8797 / 0	-102.1	-102.1	0.43 (1)	3.48	M-G	-828 / 0	0.10 (1)
G-R	-8797 / 0	-102.1	-102.1	0.87 (1)	3.34	M-H	0 / 5590	0.69 (1)
R-S	-8797 / 0	-102.1	-102.1	0.87 (1)	3.34	L-H	-828 / 0	0.10 (1)
S-T	-8797 / 0	-102.1	-102.1	0.87 (1)	3.34	B-P	0 / 2824	0.35 (1)
T-H	-8797 / 0	-102.1	-102.1	0.87 (1)	3.34	L-I	0 / 4238	0.52 (1)
H-I	-5089 / 0	-102.1	-102.1	0.22 (1)	4.13			
I-J	0 / 42	-102.1	-102.1	0.08 (1)	10.00			
Q-B	-3195 / 0	0.0	0.0	0.12 (1)	7.74			
K-I	-4638 / 0	0.0	0.0	0.17 (1)	5.71			
Q-P	0 / 0	-38.5	-38.5	0.05 (2)	10.00			
P-O	0 / 2878	-38.5	-38.5	0.22 (1)	10.00			
O-N	0 / 17647	-38.5	-38.5	0.61 (1)	10.00			
N-M	0 / 17647	-38.5	-38.5	0.61 (1)	10.00			
M-U	0 / 4022	-38.5	-38.5	0.35 (1)	10.00			
U-V	0 / 4022	-38.5	-38.5	0.35 (1)	10.00			
V-W	0 / 4022	-38.5	-38.5	0.35 (1)	10.00			
W-L	0 / 4022	-38.5	-38.5	0.35 (1)	10.00			
L-X	0 / 0	-38.5	-38.5	0.10 (2)	10.00			
X-K	0 / 0	-38.5	-38.5	0.10 (2)	10.00			

DING KO. TAM
STRUCTURAL
ENGINEER

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	23-6-11	-44	-48		FRONT	VERT	DEAD		
H	23-6-11	-248	-248		FRONT	VERT	SNOW		
M	17-5-8	-2900	-2800		FRONT	VERT	TOTAL		
R	19-0-12	-123	-123		FRONT	VERT	TOTAL		
S	21-0-12	-123	-123		FRONT	VERT	TOTAL		
T	23-0-12	-149	-149		FRONT	VERT	TOTAL		
U	19-0-12	-55	-70		FRONT	VERT	TOTAL		
V	21-0-12	-55	-70		FRONT	VERT	TOTAL		
W	23-0-12	-55	-70		FRONT	VERT	TOTAL		
X	25-0-12	-55	-70		FRONT	VERT	TOTAL		

DRWG NO. TAM 1910744
STRUCTURAL
COMMENTS ONLY

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	=	29.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	52.5	PSF

SPACING = 24.0 IN./C

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

*** 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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, CBC 2012
- CSA 088-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
ALLOWABLE DEFL.(TL) = L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CSI: TC=0.67/1.00 (G-H:1), BC=0.61/1.00 (M-O:1)
WB=0.69/1.00 (H-M:1), SSI=0.23/1.00 (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

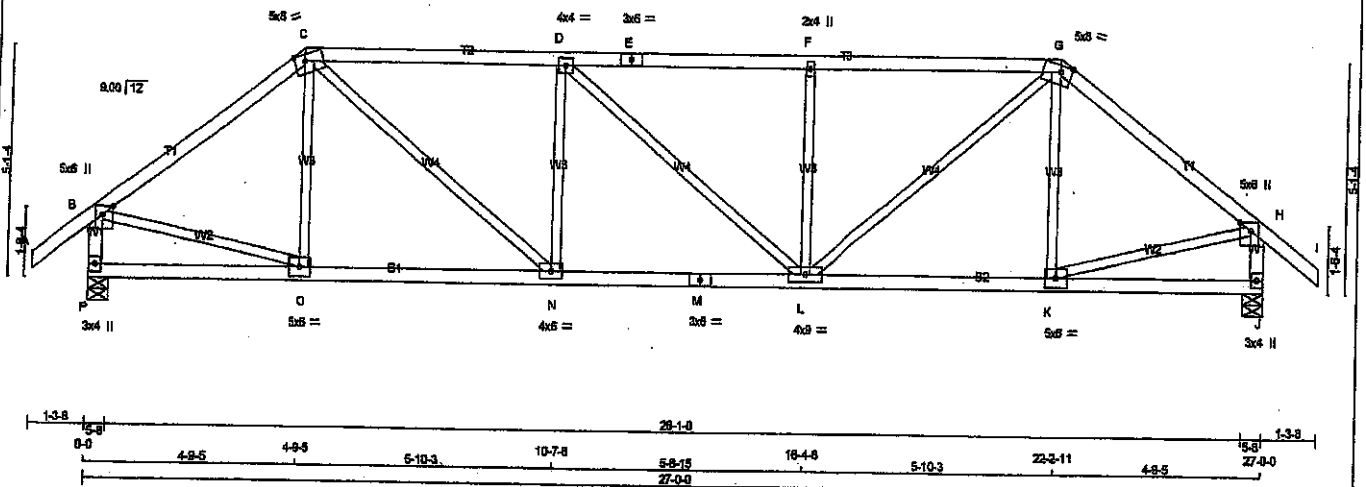
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PL)	(PL)
MT20	618	354	1657
	788	1987	1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (H) (INPUT = 0.90)
JSI METAL= 0.76 (N) (INPUT = 1.00)

JOB NAME 402938	TRUSS NAME T2	QUANTITY 2	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 5 Nov 17 2018 MTEK Industries, Inc. Tue May 7 17:41:40 2019 Page 1 ID:VdmZNIanRCr_yT1p7OGfzKFiU-qvGDStax8wblU9ISCJb9JQmVjWdM8zNCb3_fuzlqj	
1-3-8 0-0 4-9-5 4-9-5 5-10-3 10-7-8 5-9-15 16-4-8 5-10-3 22-3-11 4-9-5 27-0-0 1-3-8 Scale = 1:48.0					



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

PLATES (table in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW+p	MT20	5.0	6.0 Edge 3.00
C	TTWW-m	MT20	5.0	8.0 1.75 3.00
D	TMVW-t	MT20	4.0	4.0
E	TS-t	MT20	3.0	6.0
F	TMVW-w	MT20	2.0	4.0
G	TTWW-m	MT20	5.0	8.0 1.75 3.00
H	TMVW+p	MT20	5.0	6.0 Edge 3.00
J	BMV1+p	MT20	3.0	4.0
K	BMVW-t	MT20	5.0	6.0
L	BMVW-w	MT20	4.0	9.0
M	BS-t	MT20	3.0	6.0
N	BMVW-t	MT20	4.0	6.0
O	BMVW-t	MT20	5.0	6.0
P	BMV1+p	MT20	3.0	4.0

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	JT	HORZ	JT	UP-LIFT	JT	IN-SX
P	2039	0	2039	0	0	5-8	5-8
J	2039	0	2039	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1515	884 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0
J	1515	884 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.59 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PL)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 42	-102.1 -102.1	0.14 (1)	10.00	O-C	-159 / 110	0.06 (1)
B-C	-1985 / 0	-102.1 -102.1	0.52 (1)	4.22	O-N	0 / 1355	0.30 (1)
C-D	-2630 / 0	-102.1 -102.1	0.66 (1)	3.59	N-D	-640 / 0	0.25 (1)
D-E	-2628 / 0	-102.1 -102.1	0.65 (1)	3.59	D-L	-2 / 0	0.00 (1)
E-F	-2628 / 0	-102.1 -102.1	0.65 (1)	3.59	L-F	-639 / 0	0.25 (1)
F-G	-2628 / 0	-102.1 -102.1	0.65 (1)	3.59	L-G	0 / 1353	0.30 (1)
G-H	-1986 / 0	-102.1 -102.1	0.52 (1)	4.22	K-G	-157 / 110	0.06 (1)
H-I	0 / 42	-102.1 -102.1	0.14 (1)	10.00	B-O	0 / 1632	0.37 (1)
P-B	-1967 / 0	0.0 0.0	0.21 (1)	8.00	K-H	0 / 1632	0.37 (1)
J-H	-1967 / 0	0.0 0.0	0.21 (1)	8.00			
P-O	0 / 0	-38.5 -38.5	0.20 (3)	10.00			
O-N	0 / 1682	-38.5 -38.5	0.41 (2)	10.00			
N-M	0 / 2630	-38.5 -38.5	0.55 (1)	10.00			
M-L	0 / 2630	-38.5 -38.5	0.55 (1)	10.00			
L-K	0 / 1682	-38.5 -38.5	0.41 (2)	10.00			
K-J	0 / 0	-38.5 -38.5	0.20 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. CG

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.90")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.12")
ALLOWABLE DEFL.(TL) = $L/360$ (0.90")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.20")

CS1: TO=0.68/1.00 (C-D:1), BO=0.55/1.00 (L-N:1),
WB=0.37/1.00 (H-K:1), SSI=0.28/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

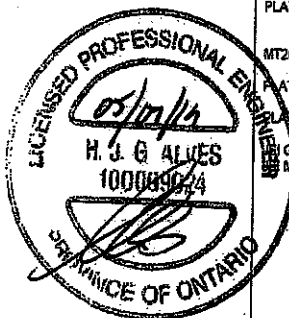
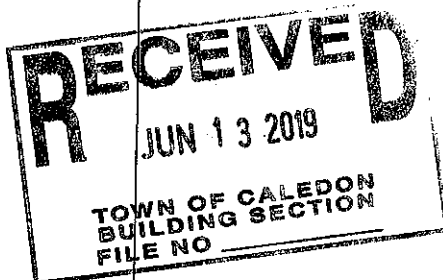
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1659

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

GRIP= 0.88 (G) (INPUT = 0.90)
METAL= 0.91 (M) (INPUT = 1.00)



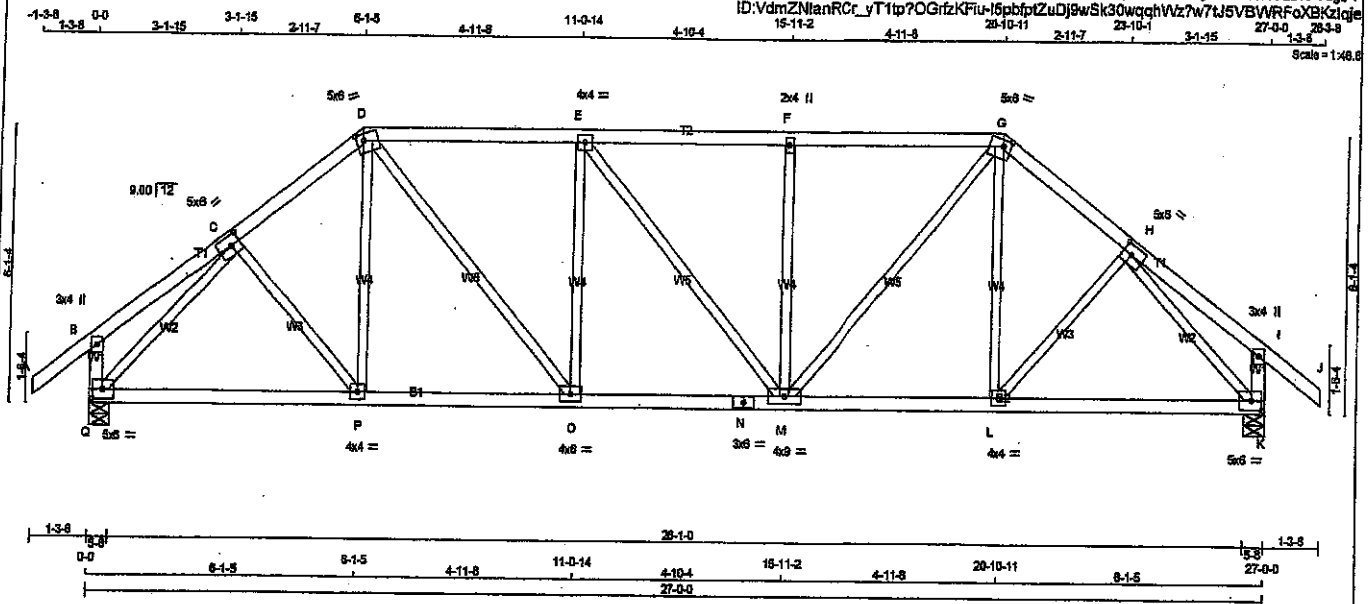
DRWG NO. TAM 179/0761
STRUCTURAL
COMPONENT ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	TRUSS DESC.	DRWG NO.
402938	T3	2	1	GREEN PARK HOMES		

Tamarack Roof Truss, Burlington

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ID:VdmZNIanRCr_yT1tp?OGfzKFiU-15pbtpZuDJ9wSk30wqghVWz7w7tJ5VBVRFoX8KzIcJe



TOTAL WEIGHT = 2 X 121 = 243 lb

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

DRY: SEASONED LUMBER.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	DOWN	JT	IN-SX	JT	IN-SX
Q	2039	0	2039	0	5-8	5-8	5-8
K	2039	0	2039	0	5-8	5-8	5-8

UNFACTORED REACTIONS		1ST CASE		MAX. MIN. COMPONENT REACTIONS	
JT	COMBINED	JT	SNOW	JT	LIVE
Q	1515	864 / 0	284 / 0	0 / 0	0 / 0
K	1515	864 / 0	284 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MEMB.		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LOC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO						FR-TO			
A-B	0 / 42	-102.1	-102.1	0.14 (1)	10.00	C-P	0 / 178	0.04 (2)	
B-C	0 / 18	-102.1	-102.1	0.13 (1)	10.00	P-D	0 / 205	0.05 (3)	
C-D	-1988 / 0	-102.1	-102.1	0.18 (1)	4.84	D-O	0 / 938	0.21 (1)	
D-E	-2184 / 0	-102.1	-102.1	0.42 (1)	4.17	O-E	-540 / 0	0.32 (1)	
E-F	-2182 / 0	-102.1	-102.1	0.42 (1)	4.17	E-M	-3 / 0	0.00 (1)	
F-G	-1988 / 0	-102.1	-102.1	0.18 (1)	4.83	M-G	-539 / 0	0.32 (1)	
G-H	0 / 18	-102.1	-102.1	0.18 (1)	10.00	L-G	0 / 938	0.21 (1)	
H-I	0 / 42	-102.1	-102.1	0.13 (1)	10.00	L-H	0 / 205	0.05 (3)	
I-J	-268 / 0	-102.1	-102.1	0.14 (1)	10.00	L-K	0 / 178	0.04 (2)	
J-K	-268 / 0	0.0	0.0	0.03 (1)	7.81	Q-C	-2228 / 0	0.75 (1)	
		0.0	0.0	0.03 (1)	7.81	H-K	-2228 / 0	0.75 (1)	
Q-P	0 / 1466	-38.5	-38.5	0.43 (2)	10.00				
P-O	0 / 1574	-38.5	-38.5	0.45 (2)	10.00				
O-N	0 / 2184	-38.5	-38.5	0.43 (1)	10.00				
N-M	0 / 2184	-38.5	-38.5	0.43 (1)	10.00				
M-L	0 / 1574	-38.5	-38.5	0.48 (2)	10.00				
L-K	0 / 1466	-38.5	-38.5	0.44 (2)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 088-08, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 9.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.90")
CALCULATED VERT. DEFL. (LL) = L/989 (0.09")
ALLOWABLE DEFL. (TL) = L/360 (0.90")
CALCULATED VERT. DEFL. (TL) = L/989 (0.15")

CSI: TC=0.42/1.00 (D-E-1), BC=0.46/1.00 (L-M-2), WB=0.75/1.00 (H-K-1), SS=0.23/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

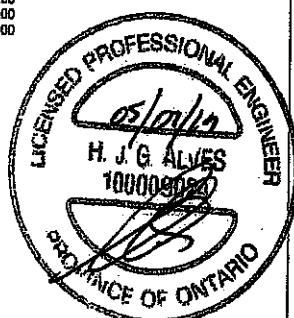
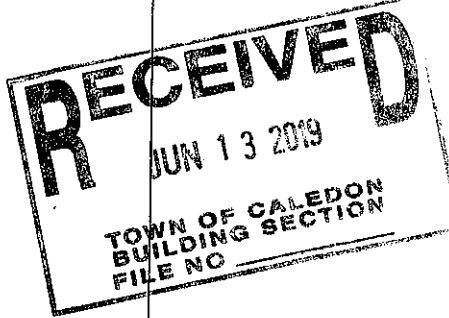
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1887 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

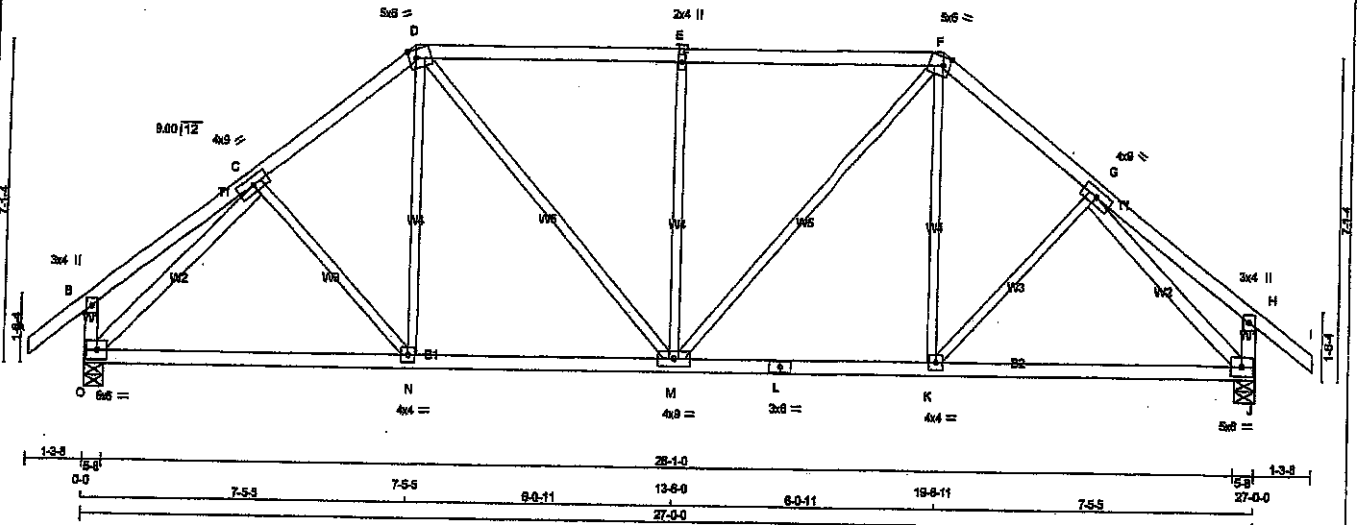
JSI GRIP=0.87 (K) (INPUT = 0.90)
JSI METAL=0.67 (N) (INPUT = 1.00)



DRWG NO. TAM T1910762
STRUCTURAL COMPONENT ONLY

THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE

JOB NAME 402938	TRUSS NAME T4	QUANTITY 2	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 5 Nov 17 2018 MITek Industries, Inc. Tue May 7 17:41:42 2019 Page 1 ID:VdmZNlanRCr_yT1tp?OGrtzKFiu-nHNz9u8Xr?YcJFadL3EkV8sXBdqyfvY9jnzjqljd	
-1-3-8 0-0 3-8-15 3-8-15 3-7-7 7-5-5 6-0-11 13-6-0 6-0-11 18-6-11 3-7-7 23-2-1 3-8-15 27-0-0 1-3-8 Scale = 1/4" = 1'-0"					



TOTAL WEIGHT = 2 X 123 = 246 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	3.0	4.0
C	TMVW+t	MT20	4.0	9.0
D	TTVW+m	MT20	5.0	8.0
E	TMVW+w	MT20	2.0	4.0
F	TTVW+m	MT20	6.0	8.0
G	TMVW+t	MT20	4.0	9.0
H	TMV+p	MT20	3.0	4.0
J	BMVW+t	MT20	5.0	6.0
K	BMVW+t	MT20	4.0	4.0
L	BS-t	MT20	3.0	6.0
M	BMVW+t	MT20	4.0	9.0
N	BMVW+t	MT20	4.0	4.0
O	BMVW+t	MT20	5.0	6.0

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

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	JT	GROSS REACTION	JT	BRG	JT	BRG
O	2089 0	O	2039 0	O	5-8	O	5-8
J	2089 0	J	2039 0	J	5-8	J	5-8

UNFACTORED REACTIONS		MAX. MIN. COMPONENT REACTIONS	
JT	1ST CASE	JT	1ST CASE
O	1515 864/0	O	1515 864/0
J	1515 864/0	J	1515 864/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. FURLIN SPACING = 4.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

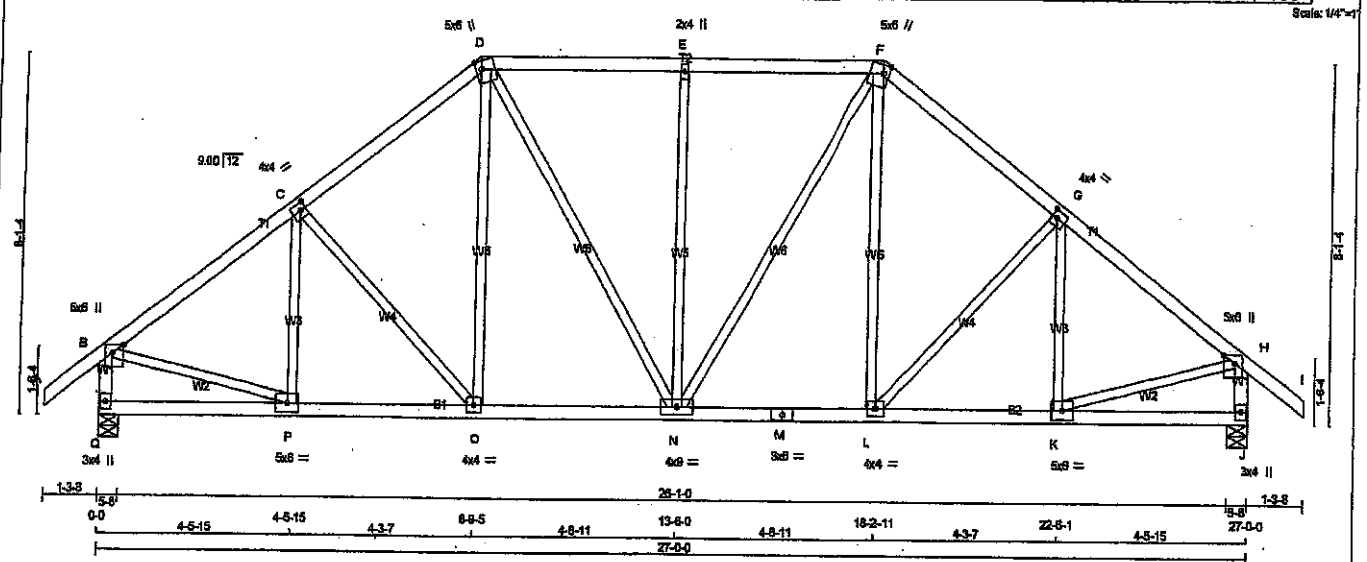
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CS1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0/42	-102.1	-102.1 0.14 (1)	10.00	C-N	0/113	0.03 (3)
B-C	0/25	-102.3	-102.1 0.22 (1)	10.00	N-D	0/251	0.08 (2)
C-D	-1948/0	-102.1	-102.1 0.21 (1)	4.65	D-M	0/625	0.14 (1)
D-E	-1955/0	-102.1	-102.1 0.54 (1)	4.20	M-F	-758/0	0.14 (1)
E-F	-1955/0	-102.1	-102.1 0.54 (1)	4.20	F-G	0/625	0.06 (1)
F-G	-1948/0	-102.1	-102.1 0.21 (1)	4.65	K-F	0/351	0.06 (2)
G-H	0/25	-102.1	-102.1 0.22 (1)	10.00	K-G	0/113	0.03 (3)
H-I	0/42	-102.1	-102.1 0.14 (1)	10.00	C-C	-2234/0	0.78 (1)
I-J	-288/0	0.0	0.0 0.03 (1)	7.81	G-J	-2234/0	0.78 (1)
J-K	-288/0	0.0	0.0 0.03 (1)	7.81			
K-L							
L-M							
M-N	0/1524	-38.5	-38.5 0.57 (2)	10.00			
N-O	0/1539	-38.5	-38.5 0.58 (2)	10.00			
O-P	0/1539	-38.5	-38.5 0.58 (2)	10.00			
P-Q	0/1539	-38.5	-38.5 0.58 (2)	10.00			
Q-R	0/1524	-38.5	-38.5 0.57 (2)	10.00			

JOB NAME 402938	TRUSS NAME T5	QUANTITY 2	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue May 7 17:41:42 2019 Page 1
 ID:VdmZnlanRCr_vYt1tpOGrtzKFlu-nHNz9uB0G?YcJFadL3EKVCKXPHqyhtVY5jmtz1qj



TOTAL WEIGHT = 2 X 130 = 259 lb
 [MIP]

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

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	IN-SX				
Q	2039	0	0	5-8	5-8				
J	2039	0	0	5-8	5-8				
UNFACTORED REACTIONS									
	1ST CASE	SNOW	LIVE	PERM/LIVE	WIND	DEAD	SOIL		
Q	1515	884 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0		
J	1515	884 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 28.1 PSF
 DL = 8.0 PSF
 BOT CH. LL = 10.5 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
 - PART 9 OF CBC 2018, OBC 2012
 - CSA 088-08, CSA 088-14
 - TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.90")
 CALCULATED VERT. DEFL. (LL) = 1/899 (0.06")
 ALLOWABLE DEFL. (TL) = L/360 (0.90")
 CALCULATED VERT. DEFL. (TL) = 1/899 (0.11")

CSI: TC=0.32/1.00 (D-E-1), SC=0.34/1.00 (K-L-1), WB=0.74/1.00 (S-T-1), SS=0.23/1.00 (D-E-1)

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

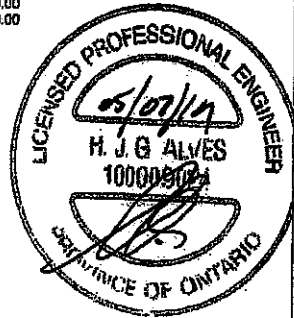
COMPANION LIVE LOAD FACTOR = 1.00

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW+p	MT20	5.0	6.0 Edge 3.00
C	TMVW+q	MT20	4.0	4.0 2.00 1.50
D	TTVW+m	MT20	5.0	6.0 2.25 1.50
E	TMVW+m	MT20	2.0	4.0
F	TTVW+m	MT20	5.0	6.0 2.25 1.50
G	TMVW+q	MT20	4.0	4.0 2.00 1.50
H	TMVW+p	MT20	5.0	6.0 Edge 3.00
J	BMV1+p	MT20	3.0	4.0
K	BMVW+q	MT20	5.0	6.0
L	BMVW+q	MT20	4.0	4.0
M	SS+q	MT20	3.0	6.0
N	BMVW+q	MT20	4.0	4.0
O	BMVW+q	MT20	4.0	4.0
P	BMVW+q	MT20	5.0	6.0
Q	BMV1+p	MT20	3.0	4.0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.51 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL FITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS									
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)		
FR-TO					FR-TO				
A-B	0 / 42	-102.1	-102.1 0.14 (1)	10.00	P-C	-245 / 47	0.09 (1)		
B-C	-1987 / 0	-102.1	-102.1 0.30 (1)	4.51	C-O	-252 / 0	0.18 (1)		
C-D	-1945 / 0	-102.1	-102.1 0.29 (1)	4.88	O-D	0 / 370	0.08 (2)		
D-E	-1683 / 0	-102.1	-102.1 0.32 (1)	4.79	D-N	0 / 448	0.10 (1)		
E-F	-1683 / 0	-102.1	-102.1 0.32 (1)	4.79	N-E	-583 / 0	0.74 (1)		
F-G	-1845 / 0	-102.1	-102.1 0.28 (1)	4.88	N-F	0 / 448	0.10 (1)		
G-H	-1987 / 0	-102.1	-102.1 0.30 (1)	4.51	L-F	0 / 370	0.08 (2)		
H-I	0 / 42	-102.1	-102.1 0.14 (1)	10.00	L-G	-252 / 0	0.18 (1)		
Q-B	-1987 / 0	0.0	0.0 0.21 (1)	6.01	K-G	-248 / 47	0.09 (1)		
J-H	-1987 / 0	0.0	0.0 0.21 (1)	6.01	K-P	0 / 1678	0.38 (1)		
					B-P	0 / 1678	0.38 (1)		
					K-H	0 / 1678	0.38 (1)		
Q-P	0 / 0	-38.5	-38.5 0.13 (3)	10.00					
P-O	0 / 1622	-38.5	-38.5 0.34 (1)	10.00					
O-N	0 / 1452	-38.5	-38.5 0.32 (1)	10.00					
N-M	0 / 1452	-38.5	-38.5 0.32 (1)	10.00					
M-L	0 / 1452	-38.5	-38.5 0.32 (1)	10.00					
L-K	0 / 1622	-38.5	-38.5 0.34 (1)	10.00					
K-J	0 / 0	-38.5	-38.5 0.13 (3)	10.00					

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

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 BUILDING DEPARTMENT
 FILE NO.



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 818 354 1957 788 1987 1656

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

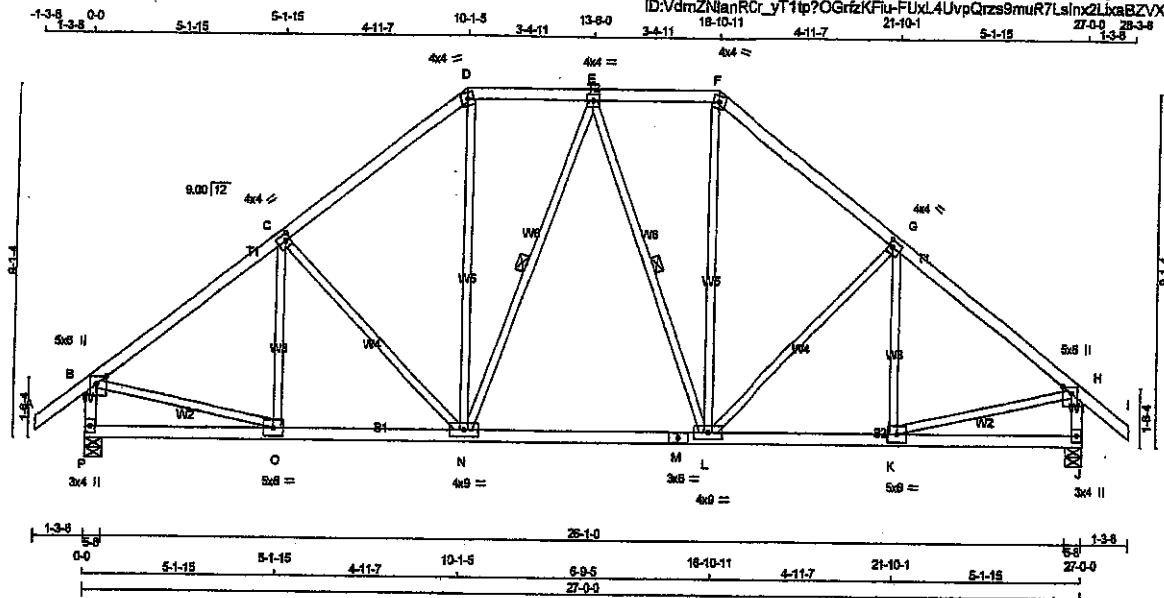
JSI GRIP= 0.88 (H) (INPUT = 0.80)
 JSI METAL= 0.51 (M) (INPUT = 1.00)

DRWG NO. TAM 1910764
 STRUCTURAL
 CONSULTANT ONLY

JOB NAME 402938	TRUSS NAME T6	QUANTITY 6	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
TRUSS DESC.					

Tamarack Roof Truss, Burlington

Version 6.230 S Nov 17 2018 MITek Industries, Inc. Tue May 7 17:41:43 2019 Page 1
ID:VdmZMnRRC_yT1tp?OGrfzKFlu-FUXL4UvpQrzs9muR7Lslnx2LbaBZVXpuZHaGDzJqic



TOTAL WEIGHT = 6 X 130 = 778 lb

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

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	Edge 3.00	
C	TMVW+q	MT20	4.0	4.0	2.00 1.50	
D	TTVW-m	MT20	4.0	4.0		
E	TMVW+q	MT20	4.0	4.0		
F	TTVW-m	MT20	4.0	4.0		
G	TMVW+q	MT20	4.0	4.0	2.00 1.50	
H	TMVW+p	MT20	5.0	6.0	Edge 3.00	
J	BMV1+p	MT20	3.0	4.0		
K	BMVW+q	MT20	5.0	6.0		
L	BMVW+q	MT20	4.0	4.0		
M	BS+q	MT20	3.0	6.0		
N	BMVW+q	MT20	4.0	4.0		
O	BMVW+q	MT20	5.0	6.0		
P	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	GROSS REACTION	GROSS REACTION	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX
P	2039	0	2039	0	0	5-8	5-8	5-8	5-8
J	2039	0	2039	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1515	864 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0
J	1515	864 / 0	284 / 0	0 / 0	0 / 0	368 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N, E-L

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
A-B	0 / 42	-102.1	-102.1 0.14 (1)	10.00	C-C	-175 / 94	0.08 (1)
B-C	-2017 / 0	-102.1	-102.1 0.41 (1)	4.37	C-N	-379 / 0	0.37 (1)
C-D	-1758 / 0	-102.1	-102.1 0.38 (1)	4.84	N-D	0 / 701	0.16 (1)
D-E	-1382 / 0	-102.1	-102.1 0.15 (1)	5.39	N-E	-215 / 0	0.13 (1)
E-F	-1382 / 0	-102.1	-102.1 0.15 (1)	5.39	E-L	-215 / 0	0.13 (1)
F-G	-1758 / 0	-102.1	-102.1 0.38 (1)	4.84	L-F	0 / 701	0.16 (1)
G-H	-2017 / 0	-102.1	-102.1 0.41 (1)	4.37	L-G	-379 / 0	0.37 (1)
H-I	0 / 42	-102.1	-102.1 0.14 (1)	10.00	K-G	-175 / 94	0.08 (1)
P-B	-1955 / 0	0.0	0.0 0.20 (1)	6.02	B-O	0 / 1685	0.38 (1)
J-H	-1955 / 0	0.0	0.0 0.20 (1)	6.02	K-H	0 / 1685	0.38 (1)
P-O	0 / 0	-38.5	-38.5 0.17 (3)	10.00			
O-N	0 / 1642	-38.5	-38.5 0.43 (2)	10.00			
N-M	0 / 1458	-38.5	-38.5 0.40 (2)	10.00			
M-L	0 / 1458	-38.5	-38.5 0.40 (2)	10.00			
L-K	0 / 1642	-38.5	-38.5 0.43 (2)	10.00			
K-J	0 / 0	-38.5	-38.5 0.17 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = 1/360 (0.80")
CALCULATED VERT. DEFL.(LL) = 1/989 (0.08")
ALLOWABLE DEFL.(TL) = 1/360 (0.80")
CALCULATED VERT. DEFL.(TL) = 1/989 (0.16")

CSI: TC=0.41/1.00 (G+H:1), BC=0.43/1.00 (K-L:2), WB=0.38/1.00 (H-K:1), SI=0.20/1.00 (G+H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

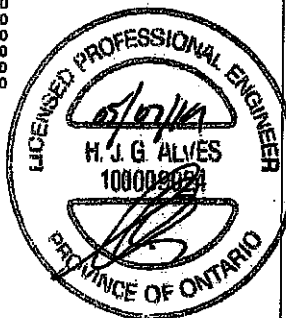
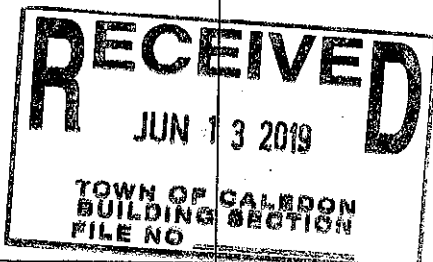
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MT20 818 354 1657 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

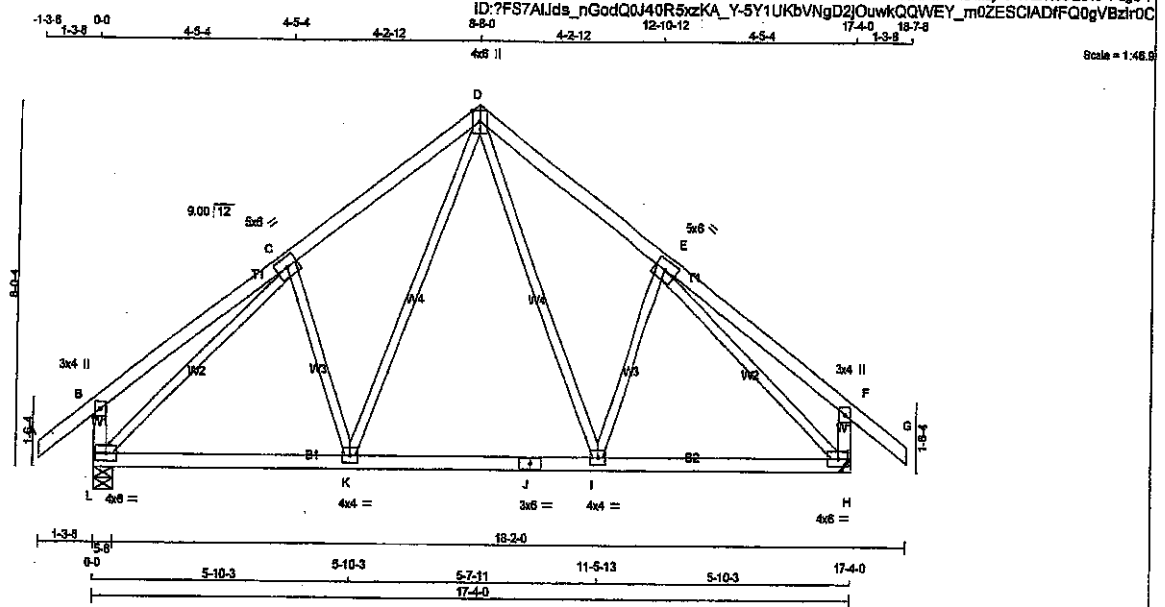
PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP=0.90 (B) (INPUT = 0.90)
SI METAL=0.48 (M) (INPUT = 1.00)



DRWG NO. TAM 1910165
STRUCTURAL
COMMENT ONLY

JOB NAME 402958	TRUSS NAME T9	QUANTITY 4	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



TOTAL WEIGHT = 4 X 81 = 323 lb
[M/F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	3.0	4.0		
C TMVWV-i	MT20	5.0	6.0		
D TTWWV+p	MT20	4.0	6.0	Edge	
E TMVWV-i	MT20	5.0	6.0		
F TMV+p	MT20	3.0	4.0		
H BMVWV-i	MT20	4.0	6.0		
I BMVWV-i	MT20	4.0	4.0		
J BS-i	MT20	3.0	6.0		
K BMVWV-i	MT20	4.0	4.0		
L BMVWV-i	MT20	4.0	6.0		

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
L	1360	0	1360	0
H	1360	0	1360	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
L	1007	584/0	182/0	0/0	0/0	242/0
H	1007	584/0	182/0	0/0	0/0	242/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)
FR-TO					FR-TO			
A-B	0/42	-102.1	-102.1	0.14 (1)	D-I	0/498	0.11 (1)	
B-C	0/31	-102.1	-102.1	0.31 (1)	I-E	-240/28	0.09 (1)	
C-D	-1087/0	-102.1	-102.1	0.25 (1)	K-D	0/498	0.11 (1)	
D-E	-1087/0	-102.1	-102.1	0.25 (1)	C-K	-240/28	0.09 (1)	
E-F	0/31	-102.1	-102.1	0.31 (1)	L-C	-1338/0	0.87 (1)	
F-G	0/42	-102.1	-102.1	0.14 (1)	E-H	-1338/0	0.87 (1)	
L-B	-309/0	0.0	0.0	0.03 (1)				
H-F	-309/0	0.0	0.0	0.03 (1)				
L-K	0/933	-38.5	-38.5	0.34 (2)				
K-J	0/882	-38.5	-38.5	0.31 (2)				
J-I	0/882	-38.5	-38.5	0.31 (2)				
I-H	0/933	-38.5	-38.5	0.34 (2)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBCG 2010, NBCC 2015
- CSA D86-08, CSA D86-14
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = 1/380 (0.58")
CALCULATED VERT. DEFL. (LL) = 1/999 (0.05")
ALLOWABLE DEFL. (TL) = 1/380 (0.58")
CALCULATED VERT. DEFL. (TL) = 1/999 (0.09")

CSI: TC=0.31/1.00 (B-C:1), EC=0.34/1.00 (H-1:2), WB=0.87/1.00 (C-L:1), SS=0.17/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

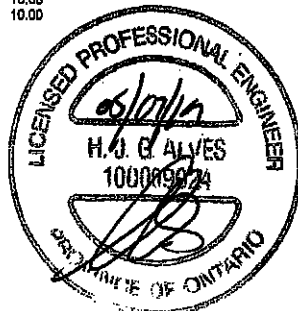
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

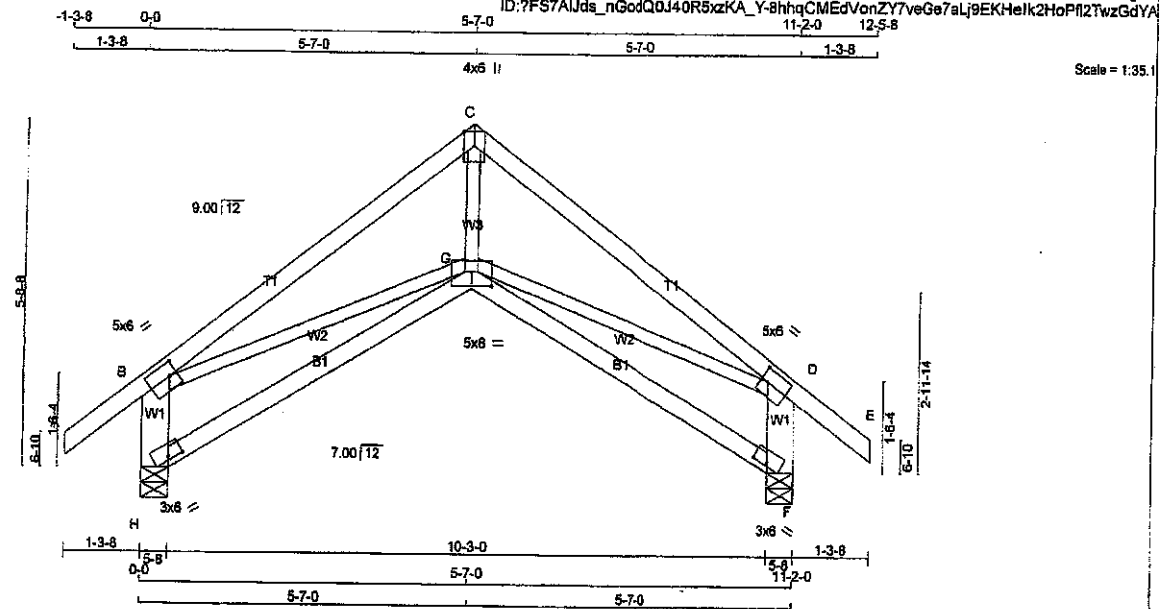
JSI GRIP= 0.76 (E) (INPUT = 0.90)
JSI METAL= 0.36 (E) (INPUT = 1.00)



DWG NO. TAM 1910745
STRUCTURAL
CHECKED ONLY

DWG NO. TABI 17910746
STRUCTURAL
CONCRETE CIVIL

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402946	T10S	3	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	



TOTAL WEIGHT = 3 X 50 = 150 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVV-1	MT20	5.0	6.0	2.50	1.50
C	TTVV-p	MT20	4.0	6.0	Edge	
D	TMVV-t	MT20	5.0	6.0	2.50	1.50
F	BVM-1	MT20	3.0	6.0	0.50	3.00
G	BBVVV-p	MT20	5.0	6.0	2.75	4.00
H	BVM-1	MT20	3.0	6.0	0.50	3.00

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	926	0	926	0	0
F	926	0	926	0	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	PERM LIVE	WIND	DEAD	SOIL
H	683	404 / 0	117 / 0	0 / 0	0 / 0	162 / 0	0 / 0
F	683	404 / 0	117 / 0	0 / 0	0 / 0	162 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 42	-102.1 -102.1	0.14 (1)	G-C	0 / 819	0.18 (1)	
B-C	-1157 / 0	-102.1 -102.1	0.44 (1)	B-G	0 / 974	0.22 (1)	
C-D	-1157 / 0	-102.1 -102.1	0.44 (1)	G-D	0 / 974	0.22 (1)	
D-E	0 / 42	-102.1 -102.1	0.14 (1)				
H-B	-819 / 0	0.0 0.0	0.06 (1)				
F-D	-819 / 0	0.0 0.0	0.06 (1)				
H-G	0 / 0	-38.5 -38.5	0.28 (3)				
G-F	0 / 0	-38.5 -38.5	0.28 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 28.1	PSF
	DL = 8.0	PSF
BOT CH.	LL = 10.5	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 52.5	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012
- CSA 088-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = 1/360 (0.37")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.09")
ALLOWABLE DEFL.(TL) = 1/360 (0.37")
CALCULATED VERT. DEFL.(TL) = 1/916 (0.15")

CSI: TC=0.44/1.00 (B-C:1), BC=0.28/1.00 (G-H:3),
WB=0.22/1.00 (D-G:1), SS=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

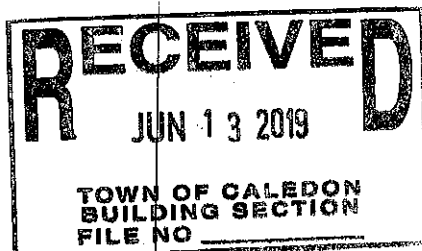
NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSD)	(PLI)	(PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1697 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

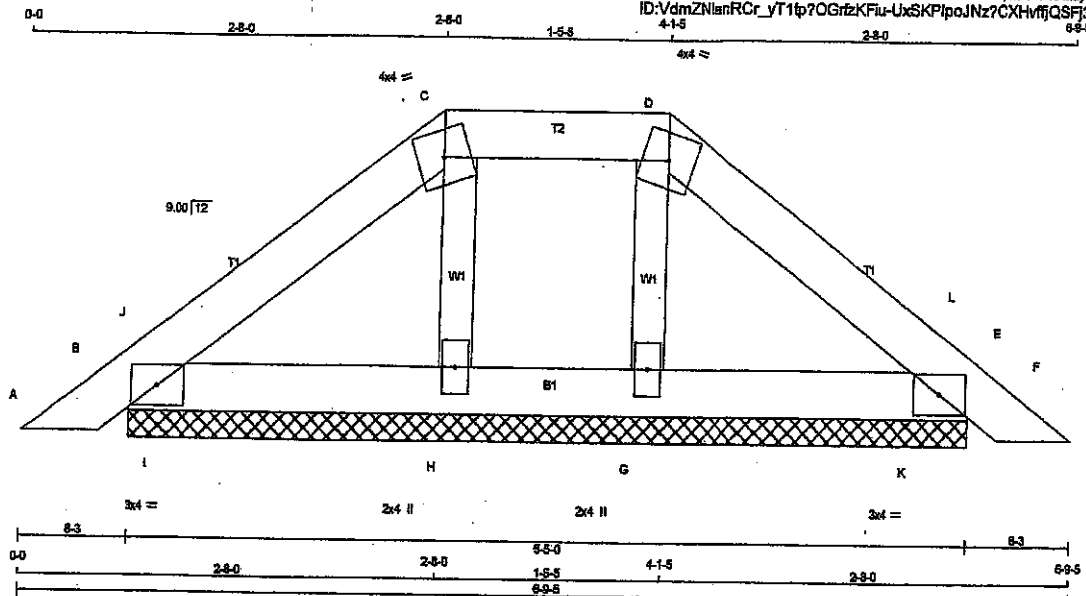
JSI GRIP= 0.62 (B) (INPUT = 0.90)
JSI METAL = 0.35 (B) (INPUT = 1.00)



DRWG NO. TAM 17911524
STRUCTURAL
COMPONENT ONLY

JOB NAME 402938	TRUSS NAME PB1	QUANTITY 2	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.230 8 Nov 17 2018 MTEK Industries, Inc. Tue May 7 17:41:35 2019 Page 1
ID:VdmZNlanRCr_YT1p?QGrfzKFiu-UxSKPipoJNz?CXHvrfQSF3lfxDhyCd2JLD_gziqjk



Scale = 1:12.1

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

PLATES (table in inches)	W	LEN	Y	X
JT TYPE PLATES				
B TMB1-I	MT20	3.0	4.0	
C TTW-m	MT20	4.0	4.0	
D TTW-m	MT20	4.0	4.0	
E TMB1-I	MT20	3.0	4.0	
G BMW1-w	MT20	2.0	4.0	
H BMW1-w	MT20	2.0	4.0	

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
B	233	0	0	5-5-0
E	233	0	0	5-5-0
H	208	0	0	5-5-0
G	208	0	0	5-5-0

UNFACTORED REACTIONS

1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED						
B	169	111/0	21/0	0/0	37/0	0/0
E	169	111/0	21/0	0/0	37/0	0/0
H	158	81/0	36/0	0/0	41/0	0/0
G	158	81/0	36/0	0/0	41/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO					FR-TO		
A-B	0/17	-102.1	-102.1 0.03 (1)	10.00	H-C	-121/0	0.02 (1)
B-J	-64/0	-102.1	-102.1 0.01 (3)	6.25	G-D	-121/0	0.02 (1)
J-C	-65/0	-102.1	-102.1 0.05 (1)	6.25	I-J	-103/22	0.00 (1)
C-D	-43/0	-102.1	-102.1 0.04 (1)	6.25	K-L	-103/22	0.00 (1)
D-L	-65/0	-102.1	-102.1 0.05 (1)	6.25			
L-E	-64/0	-102.1	-102.1 0.01 (3)	6.25			
E-F	0/17	-102.1	-102.1 0.03 (1)	10.00			
B-I	0/51	-38.5	-38.5 0.05 (1)	10.00			
I-H	0/51	-38.5	-38.5 0.05 (1)	10.00			
H-G	0/43	-38.5	-38.5 0.04 (1)	10.00			
G-K	0/51	-38.5	-38.5 0.05 (1)	10.00			
K-E	0/51	-38.5	-38.5 0.05 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, CBC 2012
- CSA 088-09, CSA 088-14
- TPIC 2011, TPIC 2014

(65% OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.05/1.00 (D-L-1), BC=0.05/1.00 (G-K-1), WB=0.02/1.00 (D-G-1), SS=0.09/1.00 (E-K-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

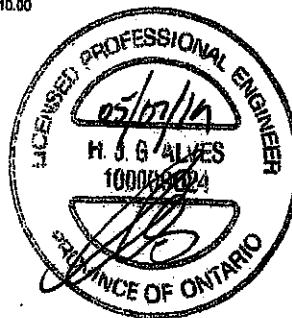
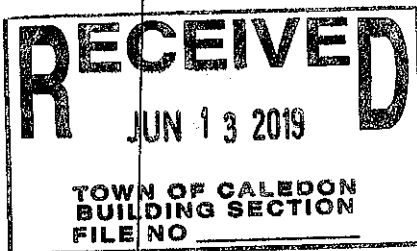
NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PS) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 818 354 1657 788 1957 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

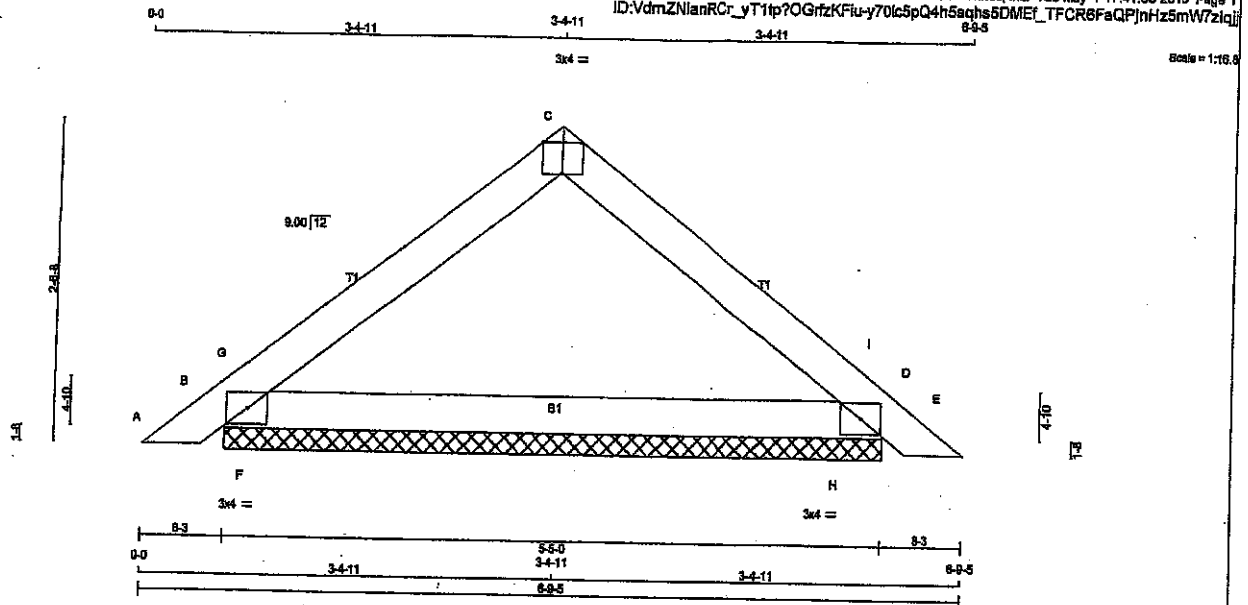
JSI GRIP= 0.17 (B) (INPUT = 0.80)
JSI METAL = 0.04 (B) (INPUT = 1.00)



DRWG NO. TAM 17910757
STRUCTURAL
COMPONENT ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402938	PB2	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington					

Version 8.230 S Nov 17 2018 M&T Industries, Inc. Tue May 7 17:41:38 2019 Page 1
ID:VdmZNianRCr_yT1p?OGfzKFlu-y70ic5pQ4h5sqhs5DMET_TFCR6FaQPjHHz5mW7z1qj



LUMBER

N.L.G.A. RULES
CHORDS SIZE

A - C 2x4 DRY
C - E 2x4 DRY
B - D 2x4 DRY

LUMBER
No.2
No.2
No.2

DESCR.
SPF
SPF
SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0		
C TT-p	MT20	3.0	4.0	Edge	2.00
D TMB1-I	MT20	3.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
B	441	0	441	0	5-5-0	5-5-0
D	441	0	441	0	5-5-0	5-5-0

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	326	192 / 0	57 / 0	0 / 0	0 / 0	78 / 0	0 / 0
D	326	192 / 0	57 / 0	0 / 0	0 / 0	78 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO	
A-B	0 / 17	-102.1	-102.1 0.03 (1)	F-G	0 / 330
B-G	-442 / 0	-102.1	-102.1 0.12 (3)	H-I	0 / 330
G-C	-235 / 0	-102.1	-102.1 0.16 (1)		
C-I	-235 / 0	-102.1	-102.1 0.16 (1)		
I-D	-442 / 0	-102.1	-102.1 0.12 (3)		
D-E	0 / 17	-102.1	-102.1 0.03 (1)		
B-F	0 / 201	-38.5	-38.5 0.09 (3)		
F-H	0 / 201	-38.5	-38.5 0.17 (2)		
H-D	0 / 201	-38.5	-38.5 0.09 (3)		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 62.5 PSF

SPACING = 24.0 IN. OC

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, CBC 2012
- CSA 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.15/1.00 (C-G-1), BC=0.17/1.00 (F-H-2), WB=0.00/1.00 (F-G-1), SG=0.18/1.00 (D-I-3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

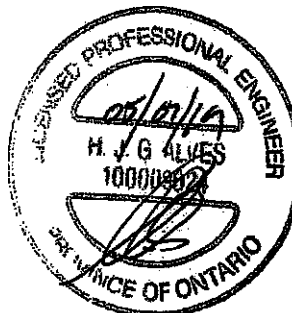
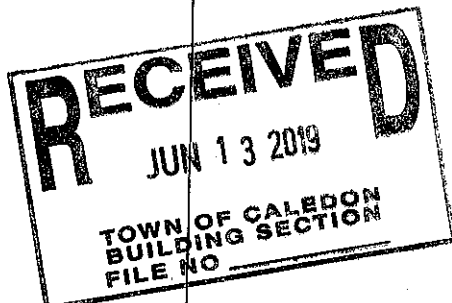
NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)	(PL)
MT20	518	354	1887
	518	354	1887

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)



DRWG NO. TAM 1910750
STRUCTURAL
COMPONENT ONLY

138 33



DRY: SEASONED LUMBER.

PLATES (table is in inches)

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	648	0	648	0	0	5-8	5-8
C	225	0	225	0	0	1-8	1-8
D	93	0	119	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	473	292 / 0	72 / 0	0 / 0	0 / 0	109 / 0	0 / 0
C	154	128 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	85	0 / 0	51 / 0	0 / 0	0 / 0	34 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

LOADING

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO						
E-B	-514 / 0	0.0	0.0	0.22 (3)	7.81			
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00			
B-C	-34 / 0	-102.1	-102.1	0.60 (1)	6.25			
E-D	0 / 0	-38.5	-38.5	0.22 (3)	10.00			

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO							
E-B	-514 / 0	0.0	0.0	0.22 (3)	7.81				
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00				
B-C	-34 / 0	-102.1	-102.1	0.60 (1)	6.25				
E-D	0 / 0	-38.5	-38.5	0.22 (3)	10.00				

SPECIFIED LOADS:

TOP CH.	LL	=	29.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	52.5	PSF

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

DESIGN ASSUMPTIONS

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.60/1.00 (B-C:1), BC=0.22/1.00 (D-E:3),
WB=0.00/1.00 (n/a:0), SSI=0.26/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1667	788	1987 1659

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.21 (E) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

DWG NO. TAM 71910753
STRUCTURAL
COMPONENT ONLY





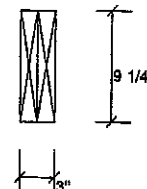
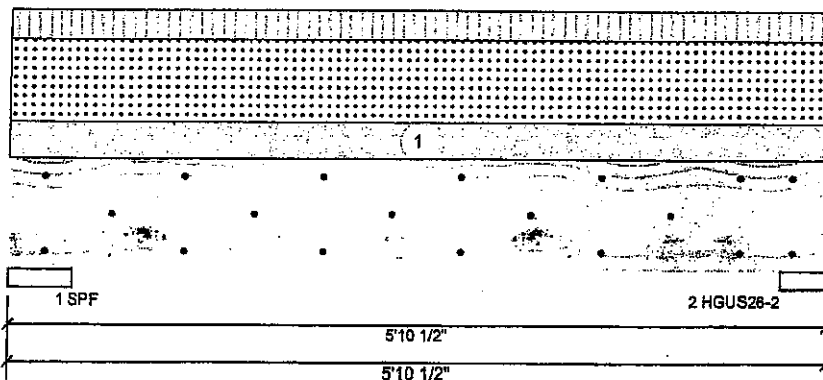
isDesign™

Client:
Project:
Address:Date: 5/7/2019
Designer:
Job Name: 201008
Project #:

Page 1 of 4

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level

**Member Information**

Type: Girder
Piles: 2
Moisture Condition: Dry
Deflection LL: 360
Deflection TL: 360
Importance: Normal

Application: Roof (Residential)
Slope: 0/12
Design Method: LSD
Building Code: NBCC 2015
Load Sharing: No
Deck: Not Checked
Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	305	377	856	0
2	292	361	820	0

Bearings and Factored Reactions

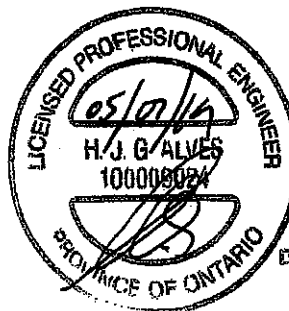
Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	20%	471 / 1588	2069	L	1.25D+1.5S +L
2 - HGUS...	4.000"	27%	452 / 1522	1973	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2327 ft-lb	3'	6039 ft-lb	0.385 (39%)	1.25D+1.5S +L	L
Unbraced	2327 ft-lb	3'	5236 ft-lb	0.445 (44%)	1.25D+1.5S +L	L
Shear	1787 lb	12"	3984 lb	0.449 (45%)	1.25D+1.5S +L	L
LL Defl inch	0.020 (L/3063)	3'	0.174 (L/360)	0.120 (12%)	S+0.5L	L
TL Defl inch	0.028 (L/2229)	3'	0.174 (L/360)	0.160 (16%)	D+S+0.5L	L

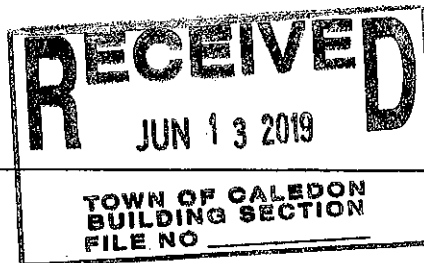
Design Notes

- 1 Fasten all piles using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on single ply width.



ENG NO. TAM 1910750
STRUCTURAL
GROUP OF RESIDENTIAL V 1/2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		9-8-0	Near Face	13 PSF	10.5 PSF	29.5 PSF	0 PSF	

**Manufacturer Info**

Tamarack Roof Trusses
3269 North Service Rd., ON
Canada
L7N3G2
(905) 335-1115



This design is valid until 12/11/2021





isDesign™

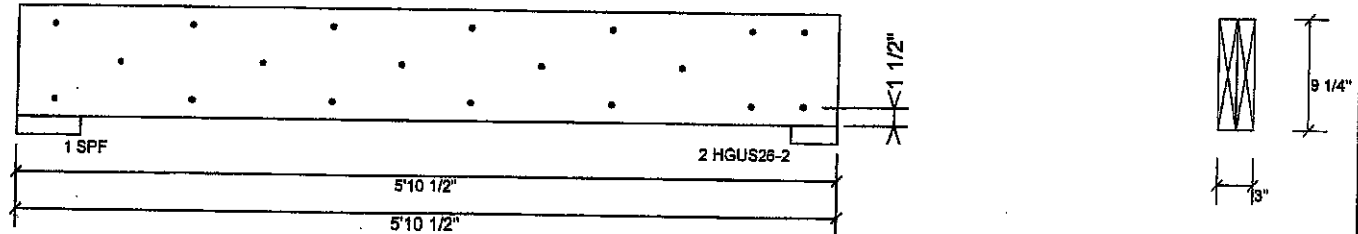
Client:
Project:
Address:

Date: 5/7/2019
Designer:
Job Name: 201008
Project#:

Page 2 of 4

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level

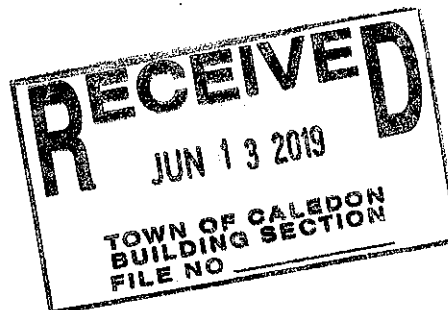


Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6"

Capacity	88.5 %
Load	343.2 PLF
Yield Limit per Foot	383.4 PLF
Yield Limit per Fastener	127.8 lb.
Yield Mode	g
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	1.25D+1.5S+L
Duration Factor	1.00

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE



DWG NO. TARI 19110750
STRUCTURAL
COMPONENT ONLY 7/2

Manufacturer Info	Tamarack Roof Trusses 3289 North Service Rd., ON Canada L7N3G2 (905) 335-1115
	TAMARACK LUMBER INC ALMA LUMBER GROUP

This design is valid until 12/11/2021

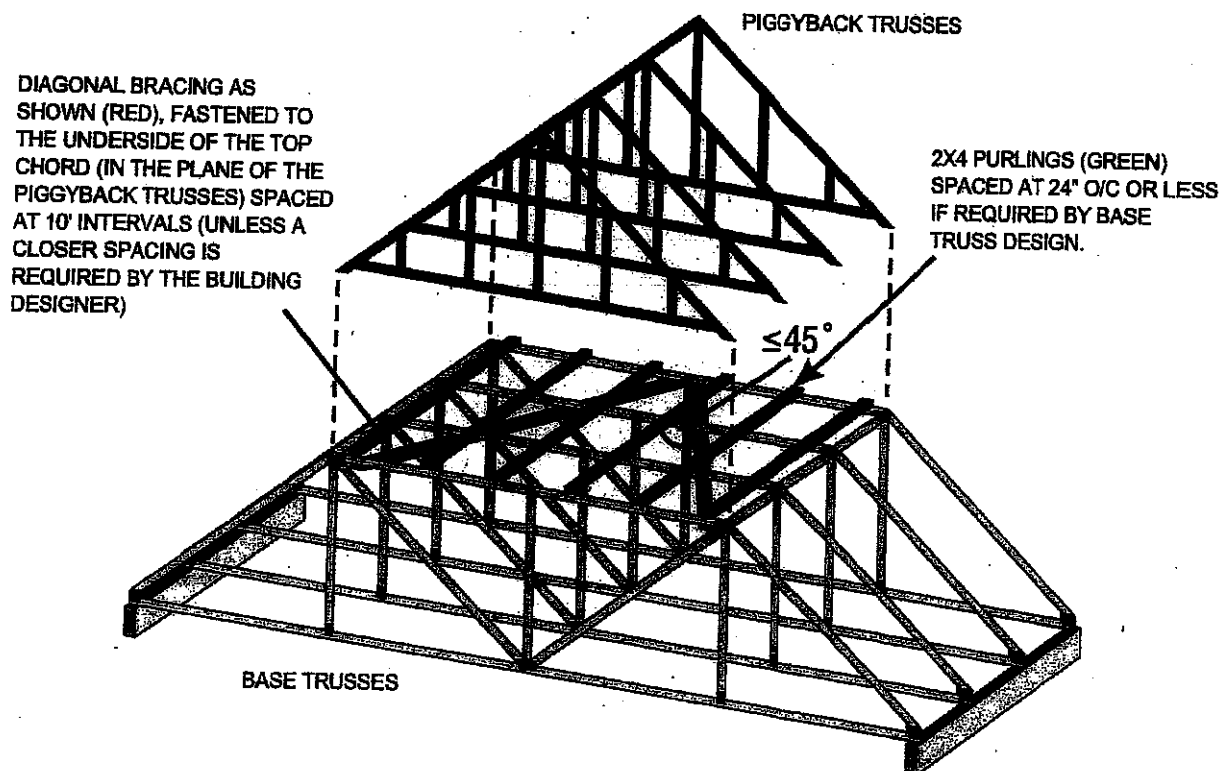


Overview:

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

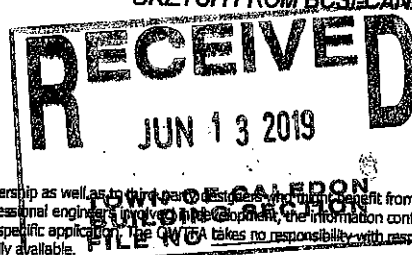
Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



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

SKETCH FROM BCSL-CANADA 2013



Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third parties. The details have been developed by the OWTFA technical committee and although there may be professional engineering input in the 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.

LUS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: 18 gauge

Finish: G90 galvanized

Design:

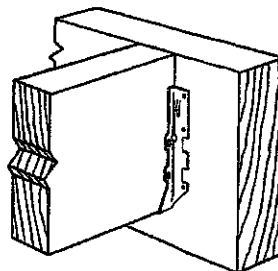
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

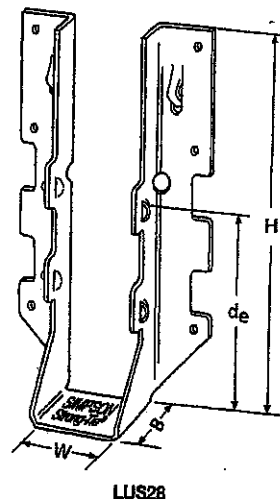
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



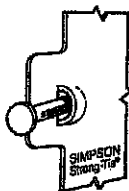
Typical LUS Installation



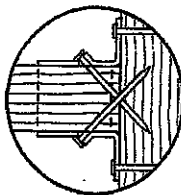
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
LUS24	18	1 1/8	3 1/8	1 1/4	1 1/8	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 1/8	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 1/8	4 1/8	1 1/4	3 1/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 1/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 1/8	4 1/8	2	3 1/8	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 1/8	6 1/8	1 1/4	3 1/8	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 1/8	6 1/8	2	3 1/8	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/8	1 1/4	3 1/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 1/8	8 1/8	2	5 1/8	(8) 16d	(6) 16d	2580	3345	2320	2375

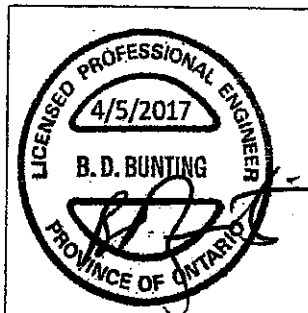
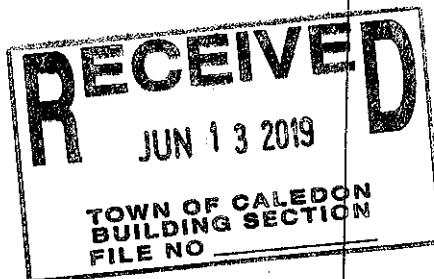
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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



Double Shear Nailing Top View.



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HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: See table

Finish: G90 galvanized

Design:

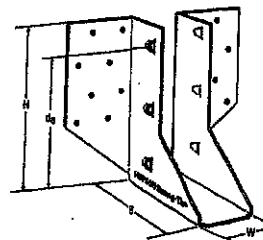
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

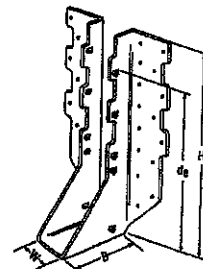
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

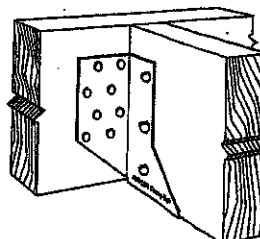
- See current catalogue for options



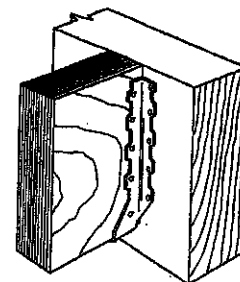
LJS26DS



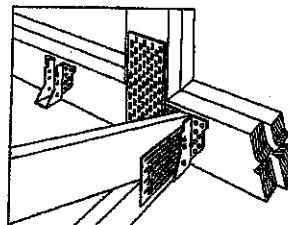
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



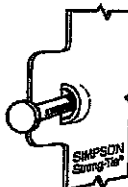
Typical HUS
Installation



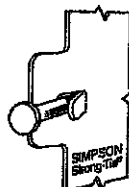
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _s ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LJS26DS	18	1 1/8	5	3 1/2	4 3/8	(16) 16d	(6) 16d		2055	4265	1460	4115
HUS26	18	1 1/8	5 1/2	3	3 1/8	(14) 16d	(6) 16d		2705	4940	2065	3875
HUS28	18	1 1/8	7 3/8	3	6 1/8	(22) 16d	(8) 16d		3605	5365	2675	4345
HUS210	16	1 1/8	9 3/8	3	7 1/8	(30) 16d	(10) 16d		4505	5795	4010	4740
HUS1.81/10	16	1 1/8	9	3	8	(30) 16d	(10) 16d		4505	6450	4010	5200

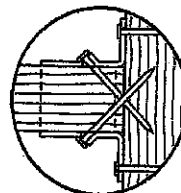
1. d_s is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,803,580



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



Double Shear Nailing Top View.



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HGUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: 12 gauge

Finish: G90 galvanized

Design:

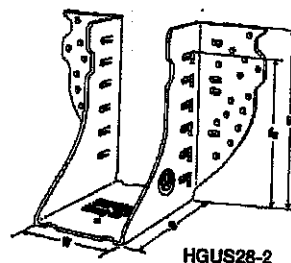
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

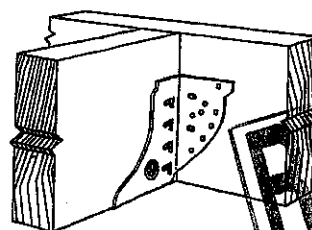
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

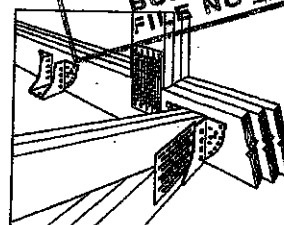
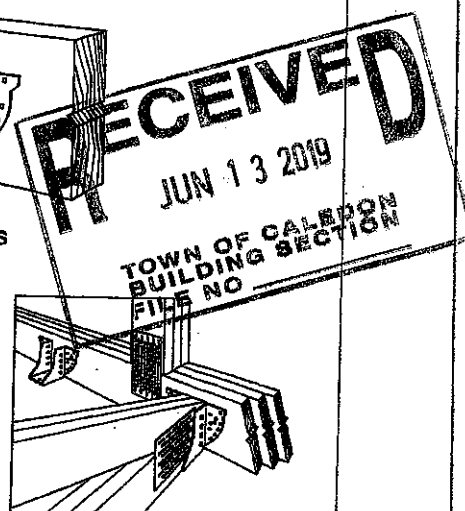
- See current catalogue for options



HGUS28-2



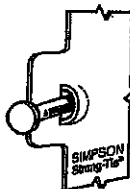
Typical HGUS
Installation



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

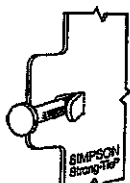
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₁ =1.15)	Normal (K ₂ =1.00)	Uplift (K ₁ =1.15)	Normal (K ₂ =1.00)
HGUS26	12	1 1/2	5 1/2	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/2	7 1/2	5	6 1/2	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210-2	12	3 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-3	12	4 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 1/8	10 1/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 1/8	12 1/8	4	11 1/8	(66) 16d	(22) 16d	10130	16400	7195	11645

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

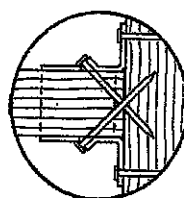


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



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

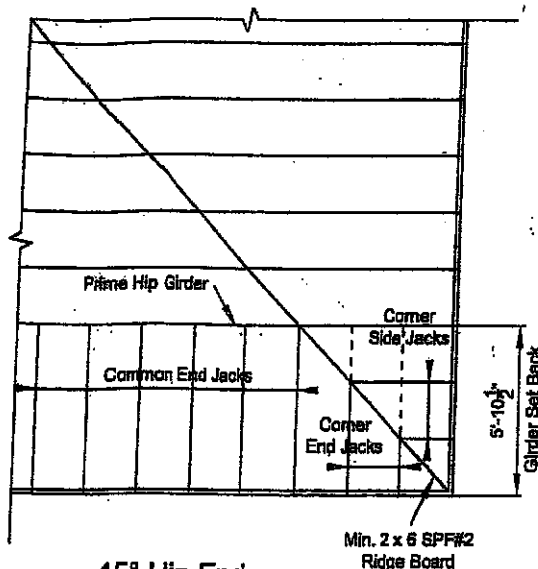


Double
Shear
Nailing
Top View.



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THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE



45° Hip End

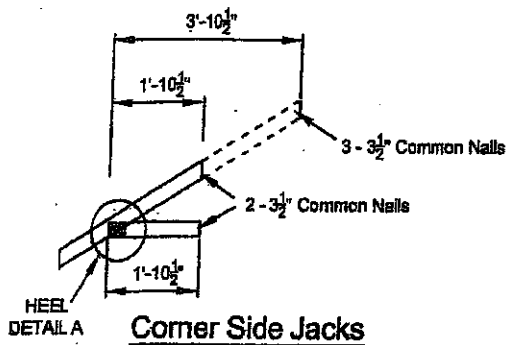
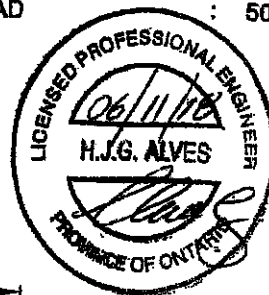
LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2
BOTTOM CHORD : 2 x 4 SPF#2
WEBS : 2 x 3 SPF#2
UNLESS OTHERWISE SHOWN

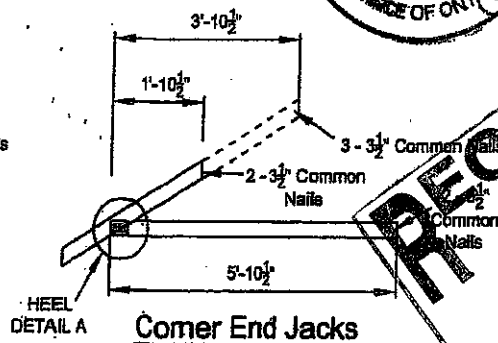
DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.
TOP CHORD DEAD LOAD : 3.0 P.S.F.
BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

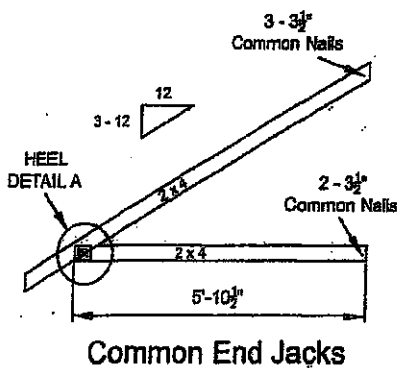
TOTAL LOAD : 50.5 P.S.F



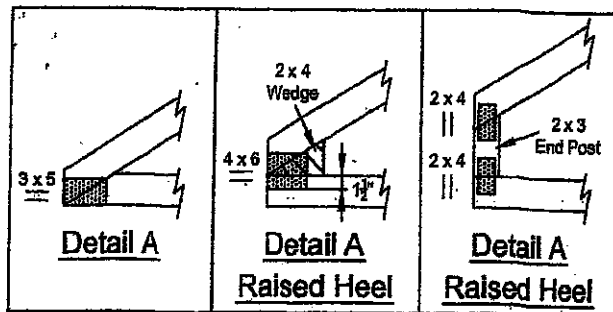
Corner Side Jacks



Corner End Jacks



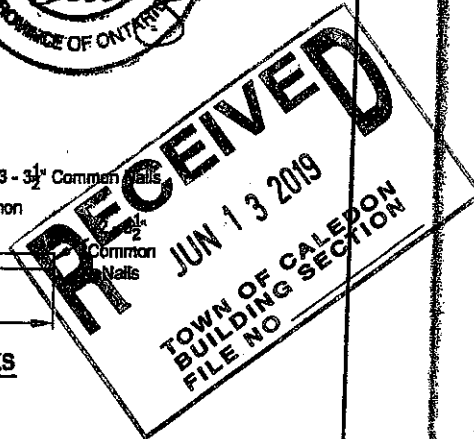
Common End Jacks



Detail A

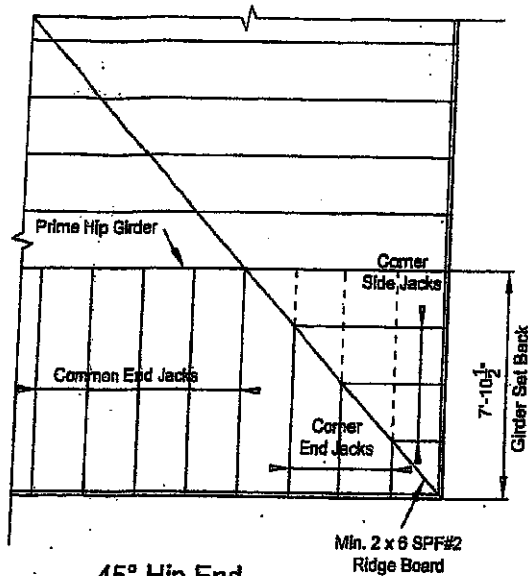
**Detail A
Raised Heel**

**Detail A
Raised Heel**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

F-1800216



45° Hip End

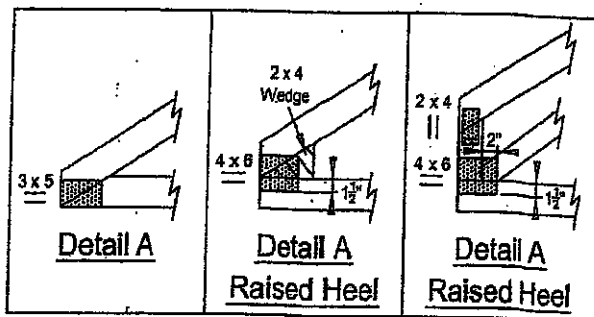
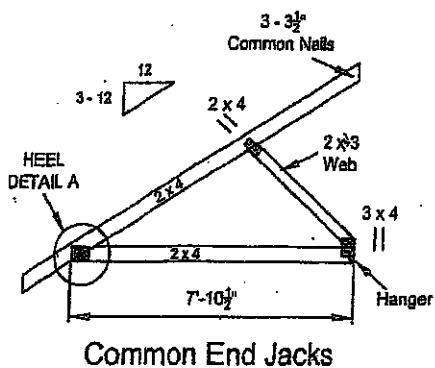
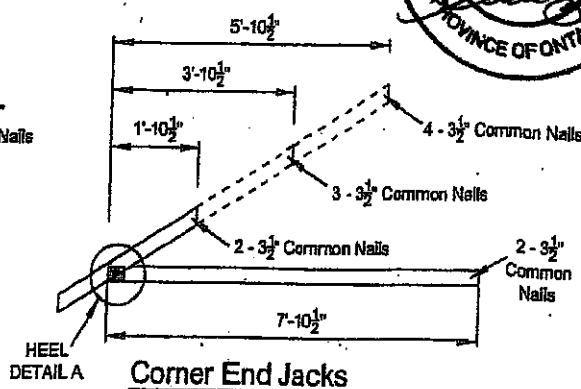
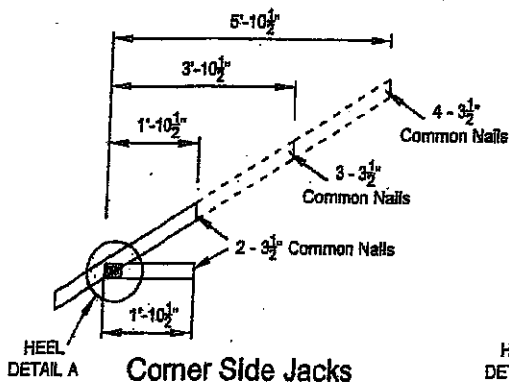
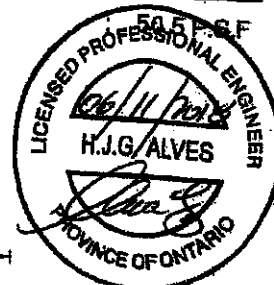
LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

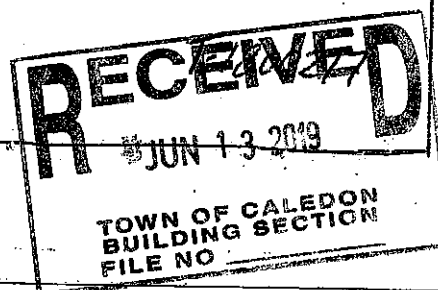
DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

TOTAL LOAD

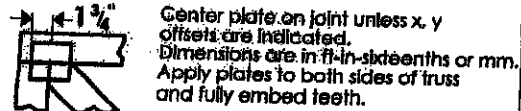


NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

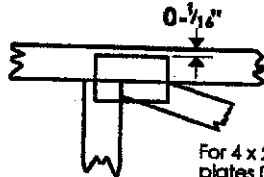


Symbols

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 0-1/4\" 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



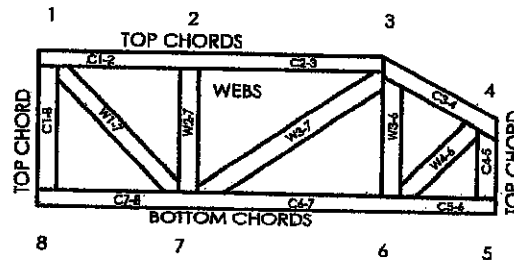
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

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

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



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

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

PRODUCT CODE APPROVALS

CCMC Reports:

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

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MiTek
POWER TO PERFORM.™

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

RECEIVED
 JUN 13 2009
 TOWN OF CALEDON
 BUILDING SECTION
 FILE NO



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

