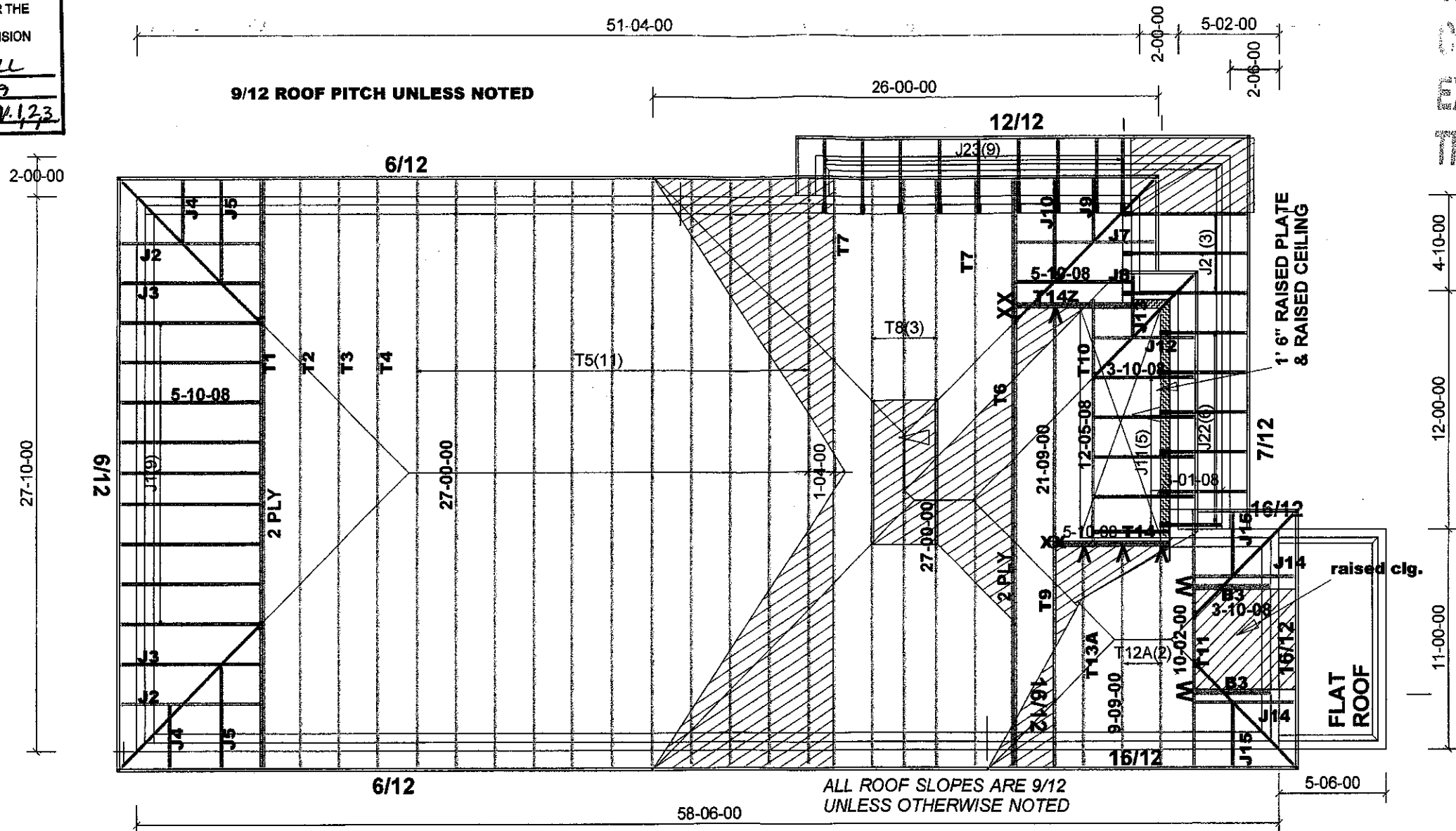


CERTIFIED MODEL
PRE-APPROVED
FOR PERMIT APPLICATION AS PER THE
ONTARIO BUILDING CODE
TOWN OF CALEDON BUILDING DIVISION
REVIEWED BY JS SNELL
DATE JULY 23/19
FILE # BRENTWOOD 3A - ELEV. 1, 2, 3



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

RECEIVED
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TOWN OF CALEDON
BUILDING DIVISION
FILE NO. 19-0000

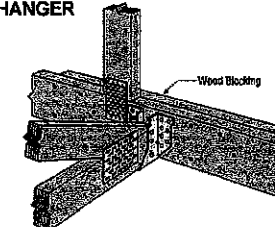
ASPHALT SHINGLES
12" FINISHED O.H.
5" CLADDING ALLOWANCE
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

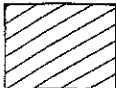
ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. 2012 ROOF
RAFTERS THAT CROSS OVER OR
MEET TRUSSES TO BE 2X4 SPF #2 24"
O.C. WITH A VERT. POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'

DESIGN CONFORMS WITH OBC 2012
OCCUPANCY: RESIDENTIAL | PART: 9
GROUND SNOW LOAD $S_s=37.6$ psf $S_r=8.4$ psf
DESIGN LOADS
TCDL (6 psf)
BCLL (10.5 psf)
BCDL (7 psf)

HARDWARE:
LJS26DS - (V)
LUS26-2 - (W)
HGUS26-2 - (XX)

HANGERS APPLIED TO A 1-PLY
GIRDERS REQUIRE A BLOCK SCABED
BEHIND, APPROX. 2' O.C. WITH
HANGER



 **DENOTES:**
CONVENTIONAL
FRAMING

BEAMS:
B3: 2 - 2x10 SPF #2

APPLICANT COPY

M12267



Job Track: **50120**
Plan Log: **200142**
Layout ID: **400307**

Builder / Location:
Greenpark / CALEDON

Project: **Lamberts Lane Home Corp.**

Date: 4/30/2019 Sales: **Mario DiCano**

Designer: **Brian Jane**

Model / Elevation:
Brentwood 3A / 1

Milek ver 8.2.3.229

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: Greenpark Project: Lamberts Lane Home Corp. Location: CALEDON Model: Brentwood 3A Lot #: Elevation: 1 STD	Job Track: 50120 PlanLog: 200142 Layout ID: 400307 Ref # Page: 1 of 3 Date: 04/30/2019 Designer: Brian Faneca Sales Rep: Mario DiCano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. 8FT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Hip Girder	6 /12	27-00-00	4-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	213.21 136.67		
	1	T2 Hip	6 /12	27-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	109.31 66.83		
	1	T3 Hip	6 /12	27-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	110.98 70.67		
	1	T4 Hip	6 /12	27-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	112.6 70.67		
	11	T5 Common	6 /12	27-00-00	7-11-00	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	1251.35 788.33		
	1 2-ply	T6 Hip Girder	9 /12	27-00-00	5-11-02	2 x 4 2 x 6	1-03-08 1-03-08	1-06-04 1-06-04	271.8 174.00		
	2	T7 Hip	9 /12	27-00-00	7-05-02	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	249.14 157.67		
	3	T8 Hip	9 /12	27-00-00	8-11-02	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	385.47 248.00		
	1	T9 Hip Girder	9 /12	21-09-00	7-05-02	2 x 4 2 x 6	1-03-08	1-06-04 3-04-00	118.06 74.33		
	1	T10 Half Hip Girder	9 /12	12-05-08	4-05-02	2 x 4 2 x 6		1-06-04 4-05-02	58.03 37.33		
	1	T11 Hip Girder	16 /12	10-02-00	7-06-03	2 x 4 2 x 6	1-03-08 1-03-08	2-04-03 2-04-03	67.77 44.00		
	2	T12A Common	16 /12	9-09-00	9-01-08	2 x 4	1-03-08	2-04-03 2-10-13	125.88 81.00		
	1	T13A Hip	16 /12	9-09-00	6-10-13	2 x 4	1-03-08	2-04-03 2-10-13	57.54 37.17		
	1 2-ply	T14 Flat Girder	0 /12	5-10-08	1-06-00	2 x 6		1-06-00 1-06-00	54.19 33.67		

TOWN OF CALEDON
BUILDING SECTION
FILE NO.

JUN 14 2019

RECEIVED



DELIVERY SHIPLIST

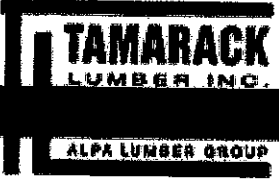
Lumber Yard: TAMARACK LUMBER
 Builder: Greenpark
 Project: Lamberts Lane Home Corp.
 Location: CALEDON
 Model: Brentwood 3A
 Lot #:
 Elevation: 1 STD

Job Track: 50120
 PlanLog: 200142
 Layout ID: 400307
 Ref #
 Page: 2 of 3
 Date: 04/30/2019
 Designer: Brian Faneca
 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	T14Z Flat Girder	0/12	5-10-08	1-06-00	2 x 6		1-06-00 1-06-00	54.19 33.67		
	9	J1 Jack-Open	6/12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	151.15 96.00		
	2	J2 Jack-Open Girder	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		
	2	J3 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	J4 Jack-Open	6/12	1-09-07	2-00-12	2 x 4	1-03-08 1-01	1-02-00 2-00-12	14.04 9.33		
	2	J5 Jack-Open	6/12	1-10-08	3-00-12	2 x 4	1-03-08 1-10-15	1-02-00 2-01-04	19.14 12.00		
	1	J7 Jack-Open Girder	9/12	1-09-07	2-10-05	2 x 4	1-03-08 4-01-01	1-06-04 2-10-05	14.22 10.17		
	1	J8 Jack-Open	9/12	5-10-08	4-04-05	2 x 4	1-03-08	1-06-04 5-11-02	17.07 11.50		
	1	J9 Jack-Open	9/12	1-09-07	2-10-05	2 x 4	1-03-08 1-01	1-06-04 2-10-05	9.31 7.00		
	1	J10 Jack-Open	9/12	1-10-08	4-04-05	2 x 4	1-03-08 1-10-15	1-06-04 2-11-02	12.22 8.33		
	5	J11 Jack-Open	9/12	3-10-08	4-05-02	2 x 4	1-03-08	1-06-04 4-05-02	74.57 50.83		
	1	J12 Jack-Open Girder	9/12	1-09-07	2-10-05	2 x 4	1-03-08 2-01-01	1-06-04 2-10-05	11.59 8.33		
	1	J13 Jack-Open	9/12	1-09-07	2-10-05	2 x 4	1-03-08 1-01	1-06-04 2-10-05	9.31 7.00		
	2	J14 Jack-Open Girder	16/12	1-09-07	4-08-12	2 x 4	1-03-08 2-01-01	2-04-03 4-08-12	29.67 19.00		

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 TOWN OF CALEDON
 BUILDING SECTION

		DELIVERY SHIPLIST	
		Lumber Yard: TAMARACK LUMBER Builder: Greenpark Project: Lamberts Lane Home Corp. Location: CALEDON Model: Brentwood 3A Lot #: Elevation: 1 STD	Job Track: 50120 PlanLog: 200142 Layout ID: 400307 Ref # Page: 3 of 3 Date: 04/30/2019 Designer: Brian Faneca Sales Rep: Mario DiCano

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	2	J15 Jack-Open	16 /12	1-09-07	4-08-12	2 x 4	1-03-08 1-01	2-04-03 4-08-12	25.11 16.33		
	3	J21 Jack-Open	7 /12	5-00-08	4-00-06	2 x 4	1-03-08	4-05 3-03-10	42.91 28.00		
	6	J22 Jack-Open	7 /12	3-01-08	2-11-00	2 x 4	1-03-08	4-05 2-02-03	57.53 40.00		
	9	J23 Jack-Open	12 /12	2-05-08	4-01-15	2 x 4	1-03-08	11-06 3-04-06	88.15 60.00		

TOTAL # TRUSS= 83

TOTAL BFT OF ALL TRUSSES= 2471.83

BFT.

TOTAL WEIGHT OF ALL TRSSES 3866.95 LBS

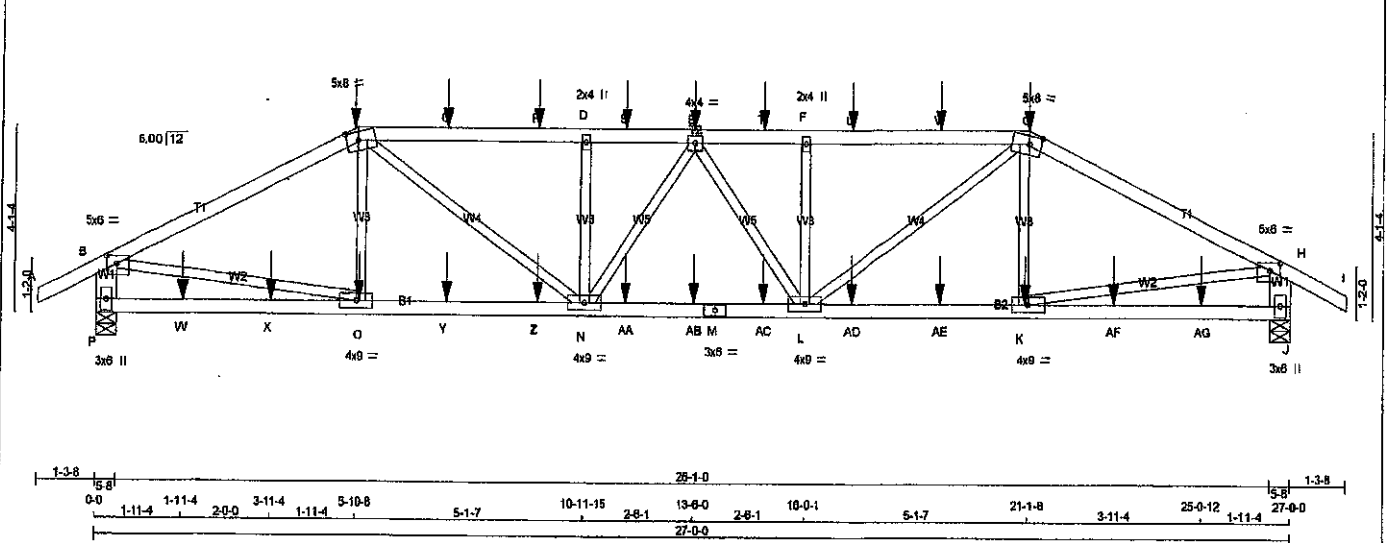
HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	HGUS26-2	
4	Hardware	LJS26DS	
2	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 8

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TOWN OF CALEDON
BUILDING SECTION
FILE NO.

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	T1	1	2	Brentwood 3A	
Tamarack Roof Truss, Burlington					
Version 8.230 S Nov 17 2018 MTek Industries, Inc. Wed May 8 14:08:59 2018 Page 1					
ID: Vfg7WpQQXfxf6eSfxbzZP9i-j3RU9bqjeDoyb1dn0n3Kzsg2gRZUR3JICfnY6zIYmw					
Scale = 1/4" = 1'-0"					



LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - C	2x4	DRY	No.2	SPF
C - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
P - B	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

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 (81.0)
C-G 1	12	SIDE (81.0)
G-I 1	12	SIDE (81.0)
P-B 2	12	TOP
J-H 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
P-M 1	12	SIDE (81.0)
M-J 1	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 to 1/4 inch)	JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	5.0	8.0	2.00	2.75	
C TTWW-m	MT20	5.0	8.0	2.25	3.25	
D TMVW-w	MT20	2.0	4.0			
E TMVW-l	MT20	4.0	4.0			
F TMVW-w	MT20	2.0	4.0			
G TTWW-m	MT20	5.0	8.0	2.25	3.25	
H TMVW-p	MT20	5.0	8.0	2.00	2.75	
J BMV1+p	MT20	3.0	6.0			
K BMVW-l	MT20	4.0	9.0			
L BMVW-l	MT20	4.0	9.0			
M BS-l	MT20	3.0	6.0			
N BMVW-l	MT20	4.0	9.0			
O BMVW-l	MT20	4.0	9.0			
P 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	REQD
JT	VERT	DOWN	BRG	BRG
P	3235 0	3235 0	5-8	5-8
J	3235 0	3235 0	5-8	5-8

UNFACTORED REACTIONS	1ST CASE	MAX/MIN COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE
P	2420 1328 / 0	489 / 0
J	2420 1328 / 0	489 / 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 = 3.63 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LBS)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LBS)
FR-TO		FROM TO			FR-TO		
A-B	0 / 31	-102.1 -102.1	0.07 (1)	10.00	O-C	-177 / 254	0.03 (3)
B-C	-4807 / 0	-102.1 -102.1	0.53 (1)	4.00	C-N	0 / 2086	0.28 (1)
C-Q	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63	N-D	-844 / 0	0.11 (1)
Q-R	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63	L-F	-844 / 0	0.11 (1)
R-D	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63	L-G	0 / 2086	0.26 (1)
D-S	-5772 / 0	-102.1 -102.1	0.39 (1)	3.66	K-G	-177 / 254	0.03 (3)
S-E	-5772 / 0	-102.1 -102.1	0.39 (1)	3.66	B-O	0 / 4160	0.51 (1)
E-T	-5772 / 0	-102.1 -102.1	0.39 (1)	3.66	K-H	0 / 4160	0.51 (1)
T-F	-5772 / 0	-102.1 -102.1	0.39 (1)	3.66	N-E	-78 / 0	0.01 (1)
F-U	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63	E-L	-78 / 0	0.01 (1)
U-V	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63			
V-G	-5772 / 0	-102.1 -102.1	0.47 (1)	3.63			
G-H	-4807 / 0	-102.1 -102.1	0.53 (1)	4.00			
H-I	0 / 31	-102.1 -102.1	0.07 (1)	10.00			
P-B	-3095 / 0	0.0	0.0	11 (1)	7.81		
J-H	-3095 / 0	0.0	0.0	11 (1)	7.81		

FACTORED CONCENTRATED LOADS (LBS)	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-408	-409			FRONT	VERT	TOTAL		
E	13-6-0	-123	-123			FRONT	VERT	TOTAL		
G	21-1-8	-409	-409			FRONT	VERT	TOTAL		

TOTAL WEIGHT = 2 X 107 = 213 lb

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

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 8 OF BCBC 2018, OBC 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

ALLOWABLE DEFL. (LL) = L/380 (0.90")
CALCULATED VERT. DEFL. (LL) = L/999 (0.15")
ALLOWABLE DEFL. (TL) = L/360 (0.90")
CALCULATED VERT. DEFL. (TL) = L/999 (0.25")

CSI: TC=0.53/1.00 (B-C-1), BC=0.82/1.00 (L-N-1),
WB=0.51/1.00 (B-O-1), SS=0.21/1.00 (F-G-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 818 354 1667 788 1987 1656
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JBI GRIP= 0.90 (H) (INPUT = 0.90)
SI METAL= 0.98 (M) (INPUT = 1.00)

DRWG NO. TAM 7140A20
STRUCTURAL
COMPONENT ONLY 1/2

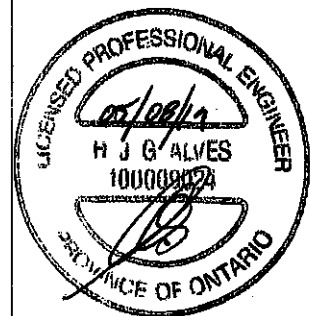
CONTINUED ON PAGE 2

JOB NAME 200142-400307	TRUSS NAME T1	QUANTITY 1	PLY 2	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:08:59 2019 Page 2	
ID:Vf8g7WpQQXf6eSbxbzMzP9Hj3RU9bqJeDoyb1dnDn3Kzsg2gRZUR3lICfnY8zIYmw					

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
K	21-0-12	-55	-70	-	FRONT	VERT	TOTAL	-	-
O	5-11-4	-55	-70	-	FRONT	VERT	TOTAL	-	-
Q	7-11-4	-123	-123	-	FRONT	VERT	TOTAL	-	-
R	9-11-4	-123	-123	-	FRONT	VERT	TOTAL	-	-
S	11-11-4	-123	-123	-	FRONT	VERT	TOTAL	-	-
T	15-0-12	-123	-123	-	FRONT	VERT	TOTAL	-	-
U	17-0-12	-123	-123	-	FRONT	VERT	TOTAL	-	-
V	19-0-12	-123	-123	-	FRONT	VERT	TOTAL	-	-
W	1-11-4	-55	-74	-	FRONT	VERT	TOTAL	-	-
X	3-11-4	-55	-70	-	FRONT	VERT	TOTAL	-	-
Y	7-11-4	-55	-70	-	FRONT	VERT	TOTAL	-	-
Z	9-11-4	-55	-70	-	FRONT	VERT	TOTAL	-	-
AA	11-11-4	-55	-70	-	FRONT	VERT	TOTAL	-	-
AB	13-0-0	-55	-70	-	FRONT	VERT	TOTAL	-	-
AC	15-0-12	-55	-70	-	FRONT	VERT	TOTAL	-	-
AD	17-0-12	-55	-70	-	FRONT	VERT	TOTAL	-	-
AE	19-0-12	-55	-70	-	FRONT	VERT	TOTAL	-	-
AF	23-0-12	-55	-70	-	FRONT	VERT	TOTAL	-	-
AG	25-0-12	-55	-74	-	FRONT	VERT	TOTAL	-	-

RECEIVED
JUN 10 2019

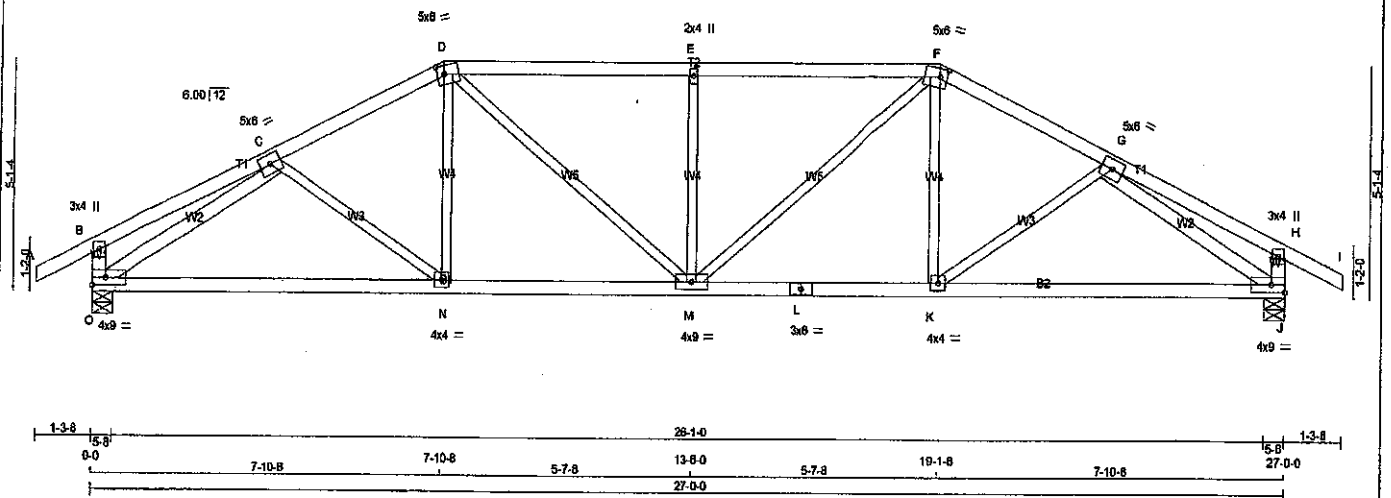
TOWN OF GALETON
BUILDING DEPARTMENT
FILE NO.



DWG NO. TAM 177/0920
STRUCTURAL
COMPONENT ONLY 3/2

JOB NAME 200142-400307	TRUSS NAME T2	QUANTITY 1	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:07:00 2019 Page 1 ID:Vftg?WpQQXf6eSf6bzMzZP9-BxdphVcS3xLZlcqLJtIBOrv4INDqKt5eOK4ZziYmv	

1-3-8 0-0 4-0-8 3-10-0 7-10-8 5-7-8 13-8-0 5-7-8 19-1-8 3-10-0 22-11-8 4-0-8 27-0-0 1-3-8
Scale = 1/4"=1'-0"



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - J	2x4	DRY	No.2
ALL WEBS	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-1	MT20	5.0	6.0		
D	TTVW-m	MT20	5.0	6.0	2.25	2.00
E	TMVW-w	MT20	2.0	4.0		
F	TTVW-m	MT20	5.0	6.0	2.25	2.00
G	TMVW-1	MT20	5.0	6.0		
H	TMV+p	MT20	3.0	4.0		
J	BMVW-1	MT20	4.0	9.0		Edge
K	BMVW-1	MT20	4.0	4.0		
L	BS-1	MT20	3.0	6.0		
M	BMVW-w	MT20	4.0	9.0		
N	BMVW-1	MT20	4.0	4.0		
O	BMVW-1	MT20	4.0	9.0		Edge

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

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

BEARINGS			
JT	VERT	HORZ	MAXIMUM FACTORED GROSS REACTION
O	2037	0	2037
J	2037	0	2037

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1514	863 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0
J	1514	863 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING

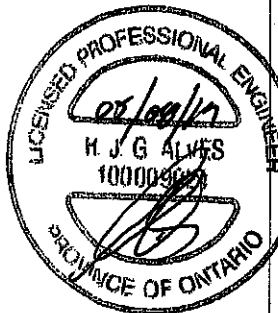
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.68 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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 (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO			
A-B	0 / 31	-102.1	-102.1
B-C	0 / 19	-102.1	-102.1
C-D	-2533 / 0	-102.1	-102.1
D-E	-2746 / 0	-102.1	-102.1
E-F	-2746 / 0	-102.1	-102.1
F-G	-2533 / 0	-102.1	-102.1
G-H	0 / 19	-102.1	-102.1
H-I	0 / 31	-102.1	-102.1
O-B	-299 / 0	0.0	0.0
J-H	-299 / 0	0.0	0.0
O-N	0 / 2250	-38.5	-38.5
N-M	0 / 2254	-38.5	-38.5
M-L	0 / 2254	-38.5	-38.5
L-K	0 / 2254	-38.5	-38.5
K-J	0 / 2250	-38.5	-38.5



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

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 CBC 2018, OBC 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 (0.90")
CALCULATED VERT. DEFL. (LL) = L/999 (0.18")
ALLOWABLE DEFL. (TL) = L/360 (0.90")
CALCULATED VERT. DEFL. (TL) = L/999 (0.30")

CSI: TC=0.52/1.00 (D-E-1), BC=0.71/1.00 (K-M-2),

WB=0.77/1.00 (G-J-1), SS=0.28/1.00 (E-F-1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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
#20 618 354 1667 798 1987 1656

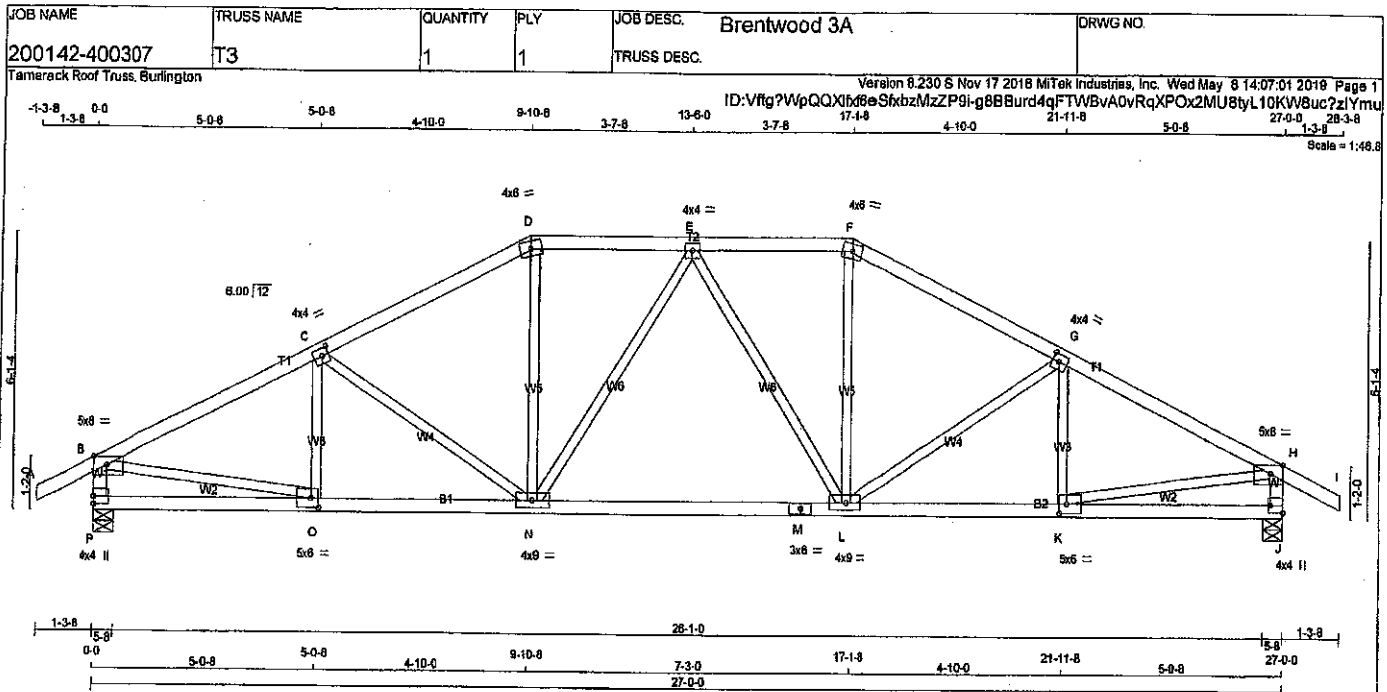
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JS GRIP = 0.88 (G) (INPUT = 0.90)
JS METAL = 0.73 (L) (INPUT = 1.00)

DWG NO. TAM 1410921
STRUCTURAL
COMPONENT ONLY

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TOWN OF CALEDON
BUILDING SECTION
FILE NO.



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

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVV-p	MT20	5.0	8.0	Edge	3.50
C	TMVV-w	MT20	4.0	4.0	2.00	1.75
D	TTW-m	MT20	4.0	4.0		
E	TMVV-w	MT20	4.0	4.0		
F	TTW-m	MT20	4.0	4.0		
G	TMVV-w	MT20	4.0	4.0	2.00	1.75
H	TMVV-p	MT20	5.0	8.0	Edge	3.50
J	BMV1-p	MT20	4.0	4.0	2.00	Edge
K	BMVV-w	MT20	5.0	6.0	2.50	2.00
L	BMVV-w	MT20	4.0	9.0		
M	BS-t	MT20	3.0	6.0		
N	BMVV-w	MT20	4.0	9.0		
O	BMVV-w	MT20	5.0	6.0	2.50	2.00
P	BMV1-p	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	UPLIFT		
P	2037	0	2037	0	5-8	5-8
J	2037	0	2037	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
P	1514	883 / 0	284 / 0	0 / 0	0 / 0	387 / 0	0 / 0
J	1514	883 / 0	284 / 0	0 / 0	0 / 0	387 / 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 = 3.88 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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 31	-102.1 -102.1	0.13 (1)	O-C	-221 / 84	0.05 (1)	
B-C	-2863 / 0	-102.1 -102.1	0.41 (1)	C-N	-410 / 0	0.26 (1)	
C-D	-2337 / 0	-102.1 -102.1	0.38 (1)	N-D	0 / 898	0.16 (1)	
D-E	-2078 / 0	-102.1 -102.1	0.20 (1)	E-N	-258 / 0	0.22 (1)	
E-F	-2078 / 0	-102.1 -102.1	0.20 (1)	F-L	-258 / 0	0.22 (1)	
F-G	-2337 / 0	-102.1 -102.1	0.38 (1)	L-F	0 / 898	0.16 (1)	
G-H	-2863 / 0	-102.1 -102.1	0.41 (1)	H-G	-410 / 0	0.26 (1)	
H-I	0 / 31	-102.1 -102.1	0.13 (1)	I-K	-221 / 84	0.05 (1)	
I-B	-1951 / 0	0.0 0.0	0.20 (1)	B-O	0 / 2438	0.55 (1)	
J-H	-1951 / 0	0.0 0.0	0.20 (1)	K-H	0 / 2438	0.55 (1)	
P-O	0 / 0	-38.5 -38.5	0.18 (3)				
O-N	0 / 2404	-38.5 -38.5	0.58 (1)				
N-M	0 / 2211	-38.5 -38.5	0.53 (2)				
M-L	0 / 2211	-38.5 -38.5	0.53 (2)				
L-K	0 / 2404	-38.5 -38.5	0.58 (1)				
K-J	0 / 0	-38.5 -38.5	0.16 (3)				

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, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2016, OBC 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 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.90")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.13")
ALLOWABLE DEFL. (TL) = $L/360$ (0.90")
CALCULATED VERT. DEFL. (TL) = $L/998$ (0.23")

CSI: TC=0.41/1.00 (G-H-1), BC=0.58/1.00 (N-O-1)
WB=0.55/1.00 (B-C-1), SS=0.22/1.00 (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 (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1887	788	1887

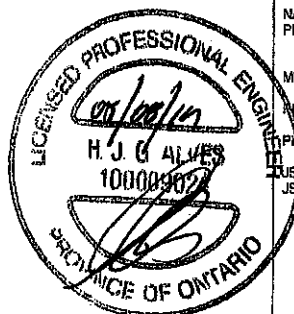
PLATE PLACEMENT TOL = 0.250 inches

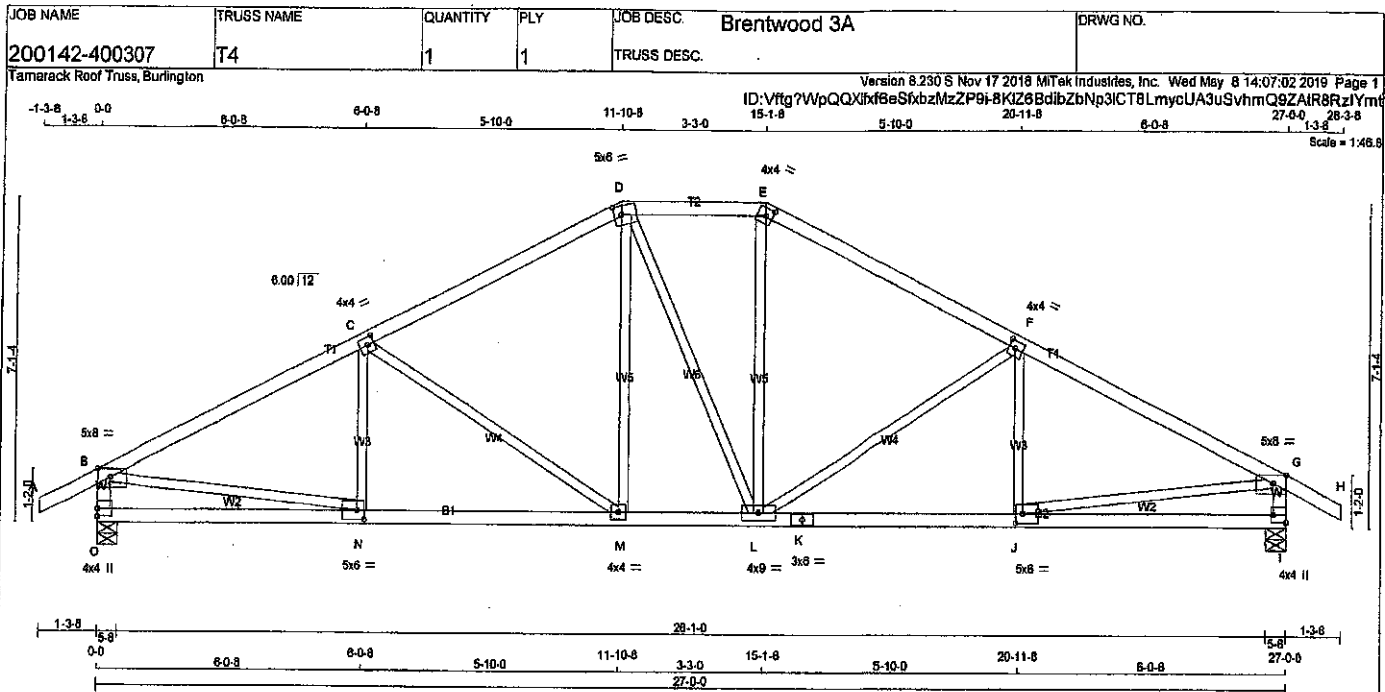
PLATE ROTATION TOL = 5.0 Deg.

US GRIP= 0.78 (K) (INPUT = 0.90)
US METAL= 0.85 (M) (INPUT = 1.00)

DWG NO. TAM 77910922
STRUCTURAL
COMPONENT ONLY

RECEIVED
JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.





LUMBER

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	3.50
C	TMVW-l	MT20	4.0	4.0	2.00	1.75
D	TTVW-m	MT20	5.0	6.0	2.25	2.00
E	TTVW-h	MT20	4.0	4.0	2.00	1.75
F	TMVW-l	MT20	4.0	4.0	2.00	1.75
G	TMVW-p	MT20	5.0	8.0	Edge	3.50
I	BMV1-p	MT20	4.0	4.0	2.00	Edge
J	BMVW-l	MT20	5.0	6.0	2.50	2.00
K	BS-l	MT20	3.0	6.0		
L	BMVW-l	MT20	4.0	9.0		
M	BMVW-l	MT20	4.0	4.0		
N	BMVW-l	MT20	5.0	6.0	2.50	2.00
O	BMV1-p	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

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	2037	0	2037	0	0	5-8	5-8
I	2037	0	2037	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1514	863 / 0	284 / 0	0 / 0	0 / 0	387 / 0	0 / 0
I	1514	863 / 0	284 / 0	0 / 0	0 / 0	387 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO				FR-TO			
A-B	0 / 31	-102.1	-102.1 0.13 (1)	N-C	-84 / 185	0.04 (3)	
B-C	-2894 / 0	-102.1	-102.1 0.61 (1)	C-M	-892 / 0	0.87 (1)	
C-D	-2111 / 0	-102.1	-102.1 0.53 (1)	M-D	0 / 537	0.12 (1)	
D-E	-1868 / 0	-102.1	-102.1 0.18 (1)	D-L	0 / 4	0.00 (1)	
E-F	-2113 / 0	-102.1	-102.1 0.53 (1)	L-E	0 / 541	0.12 (1)	
F-G	-2893 / 0	-102.1	-102.1 0.61 (1)	L-F	-889 / 0	0.88 (1)	
G-H	0 / 31	-102.1	-102.1 0.13 (1)	J-F	-88 / 183	0.04 (3)	
O-B	-1942 / 0	0.0	0.0 0.20 (1)	B-N	0 / 2462	0.55 (1)	
I-G	-1942 / 0	0.0	0.0 0.20 (1)	J-G	0 / 2461	0.55 (1)	
O-N	0 / 0	-38.5	-38.5 0.27 (3)				
N-M	0 / 2438	-38.5	-38.5 0.58 (2)				
M-L	0 / 1866	-38.5	-38.5 0.40 (1)				
L-K	0 / 2437	-38.5	-38.5 0.57 (2)				
K-J	0 / 2437	-38.5	-38.5 0.57 (2)				
J-I	0 / 0	-38.5	-38.5 0.27 (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

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 CBC 2018, OBC 2012
- CSA 088-09, 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 28.1 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")

CS: TC=0.61/1.00 (B-C:1), BC=0.58/1.00 (M-N:2),
WB=0.67/1.00 (C-M:1), SS=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 788 1987 1656

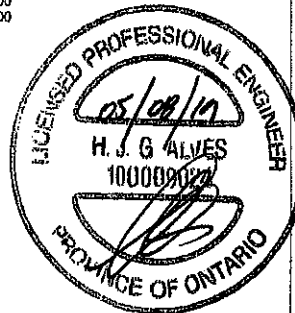
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

SI GRIP= 0.84 (E) (INPUT = 0.80)
SI METAL= 0.71 (K) (INPUT = 1.00)

RECEIVED
JUN 14 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.

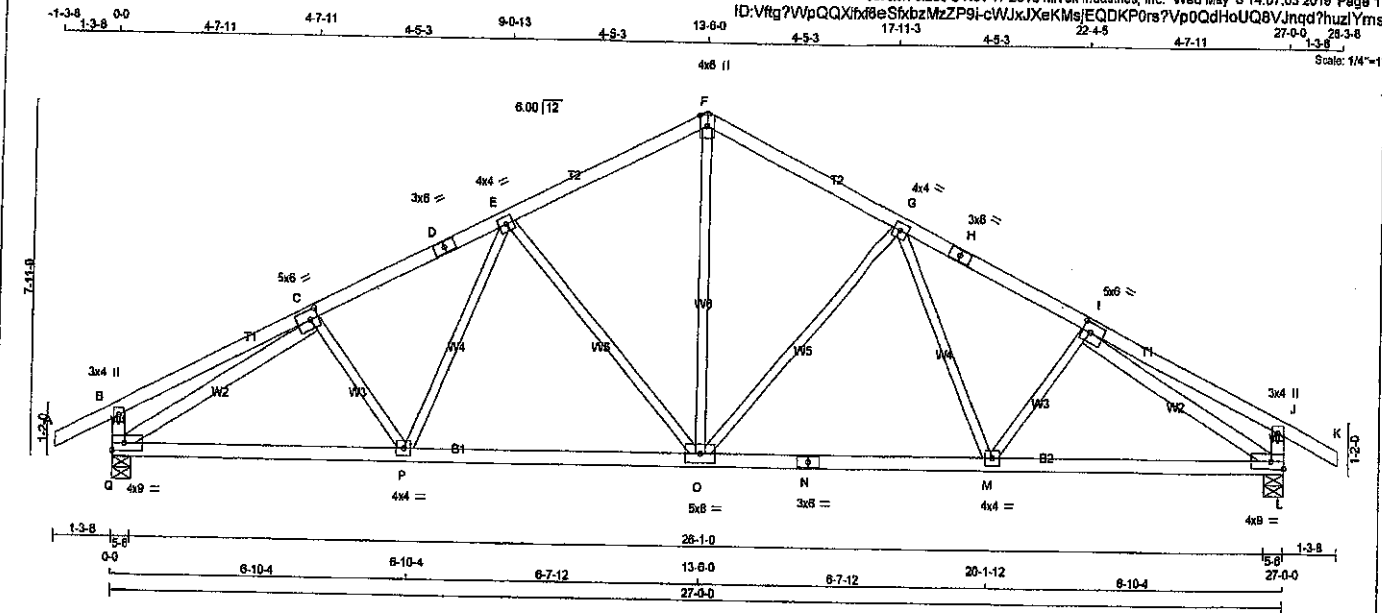


DWG NO. TAM 17910923
STRUCTURAL
COMPONENT ONLY

JOB NAME 200142-400307	TRUSS NAME T5	QUANTITY 11	PLY 1	JOB DESC. Brentwood 3A	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:07:03 2019 Page 1



TOTAL WEIGHT = 11 X 114 = 1251 lb

LUMBER

N. L. G. A. RULES

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

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT Q - 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	3.0	4.0		
C	TMVWW-i	MT20	5.0	8.0	2.50	2.25
D	TS-i	MT20	3.0	8.0		
E	TMVWW-i	MT20	4.0	4.0		
F	TTW+p	MT20	4.0	6.0	Edge	
G	TMVWW-i	MT20	4.0	4.0		
H	TS-i	MT20	3.0	8.0		
I	TMVWW-i	MT20	5.0	6.0	2.50	2.25
J	TMV+p	MT20	3.0	4.0		
L	BMVWW-i	MT20	4.0	4.0	Edge	
M	BS-i	MT20	3.0	6.0		
O	BMVWW-i	MT20	5.0	8.0		
P	BMVWW-i	MT20	4.0	4.0		
Q	BMVWW-i	MT20	4.0	9.0	Edge	

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
GROSS REACTION	DOWN	BRG	BRG
JT VERT	2037	0	5-8
Q	2037	0	5-8
L	2037	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED	1514	883 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0
Q	1514	883 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0
L	1514	883 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00
B-C	0 / 17	-102.1	-102.1	0.25 (1)	10.00
C-D	-2581 / 0	-102.1	-102.1	0.30 (1)	4.08
D-E	-2581 / 0	-102.1	-102.1	0.30 (1)	4.08
E-F	-1921 / 0	-102.1	-102.1	0.28 (1)	4.80
F-G	-1921 / 0	-102.1	-102.1	0.28 (1)	4.80
G-H	-2581 / 0	-102.1	-102.1	0.30 (1)	4.08
H-I	-2581 / 0	-102.1	-102.1	0.30 (1)	4.08
I-J	0 / 17	-102.1	-102.1	0.25 (1)	10.00
J-K	0 / 31	-102.1	-102.1	0.13 (1)	10.00
Q-B	-331 / 0	0.0	0.0	0.03 (1)	7.81
L-J	-331 / 0	0.0	0.0	0.03 (1)	7.81
Q-P	0 / 2320	-38.5	-38.5	0.82 (2)	10.00
P-O	0 / 2158	-38.5	-38.5	0.80 (2)	10.00
O-N	0 / 2158	-38.5	-38.5	0.80 (2)	10.00
N-M	0 / 2158	-38.5	-38.5	0.80 (2)	10.00
M-L	0 / 2320	-38.5	-38.5	0.82 (2)	10.00

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. GC

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 37.6 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/999 (0.11")

ALLOWABLE DEFL.(TL) = L/360 (0.90")

CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.30/1.00 (G-I:1), BC=0.62/1.00 (L-M:2), WB=1.00/1.00 (L:1), SG=0.19/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

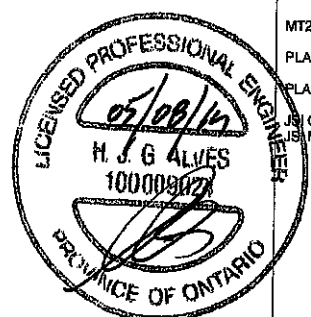
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	818	354	1587

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JS GRIP= 0.85 (C) (INPUT = 0.90)

JS METAL= 0.77 (N) (INPUT = 1.00)



DRWG NO. TAM 12910924

STRUCTURAL COMPONENT ONLY

RECEIVED

JUN 10 2019

TOWN OF CALEDON BUILDING SECTION

JOB NAME 200142-400307	TRUSS NAME T6	QUANTITY 1	PLY 2	Brentwood 3A TRUSS DESC.	ORWNG NO. 0R
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Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:07:04 2018 Page 1
ID:VfHg?WpQQXfxfBeShbzMzP9l-4lsKtly7ArS2NvbaZNE11ZW1hDq9IKS0UMYDKZlYm
28-8-8 27-0-0 28-3-8 1-3-8
Scale = 1/4"=1'-0"

LUMBER

N.L.G.A. RULES	CHORDS	SIZE	DY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - G	2x4	DRY	No.2	SPF	
G - I	2x4	DRY	No.2	SPF	
P - B	2x8	DRY	No.2	SPF	
J - H	2x6	DRY	No.2	SPF	
P - M	2x6	DRY	No.2	SPF	
M - J	2x6	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

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

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

TOP CHORDS : (0.122"x3") SPIRAL NAILS

CHORDS	SIZE	SPACING	LOAD(PLF)
A-C	1	12	SIDE(81.0)
C-G	1	12	SIDE(81.0)
G-I	1	12	TOP
P-B	2	12	TOP
J-H	2	12	TOP

BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS

CHORDS	SIZE	SPACING	LOAD(PLF)
P-M	2	12	SIDE(183.1)
M-J	2	12	TOP

WEBS : (0.122"x3") SPIRAL NAILS

CHORDS	SIZE	SPACING	LOAD(PLF)
O-C	1	6	SIDE(441.9)
C-K	1	6	SIDE(441.9)

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 in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVV+p	MT20	5.0	8.0	Edge
C	TMVV+m	MT20	5.0	8.0	Edge
D	TMVV+a	MT20	2.0	4.0	
E	TMVV+a	MT20	2.0	4.0	
F	TMVV+a	MT20	2.0	4.0	
G	TMVV+m	MT20	5.0	8.0	Edge
H	TMVV+p	MT20	5.0	8.0	Edge
I	BMV1+p	MT20	3.0	6.0	
K	BMVV+1	MT20	5.0	8.0	4.00 2.00
L	BMVV+1	MT20	5.0	8.0	
M	BS-1	MT20	5.0	8.0	
N	BMVV+1	MT20	5.0	8.0	
O	BMVV+1	MT20	5.0	8.0	4.00 2.00
P	BMV1+p	MT20	3.0	6.0	

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQ'D BRG
	VERT	HORIZ	DOWN	HORIZ		
P	4521	0	4521	0	5-8	5-8
J	2825	0	2825	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
P	3358	1825 / 0	618 / 0	0 / 0	0 / 0	811 / 0	0 / 0
J	1946	1124 / 0	354 / 0	0 / 0	0 / 0	488 / 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 = 3.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

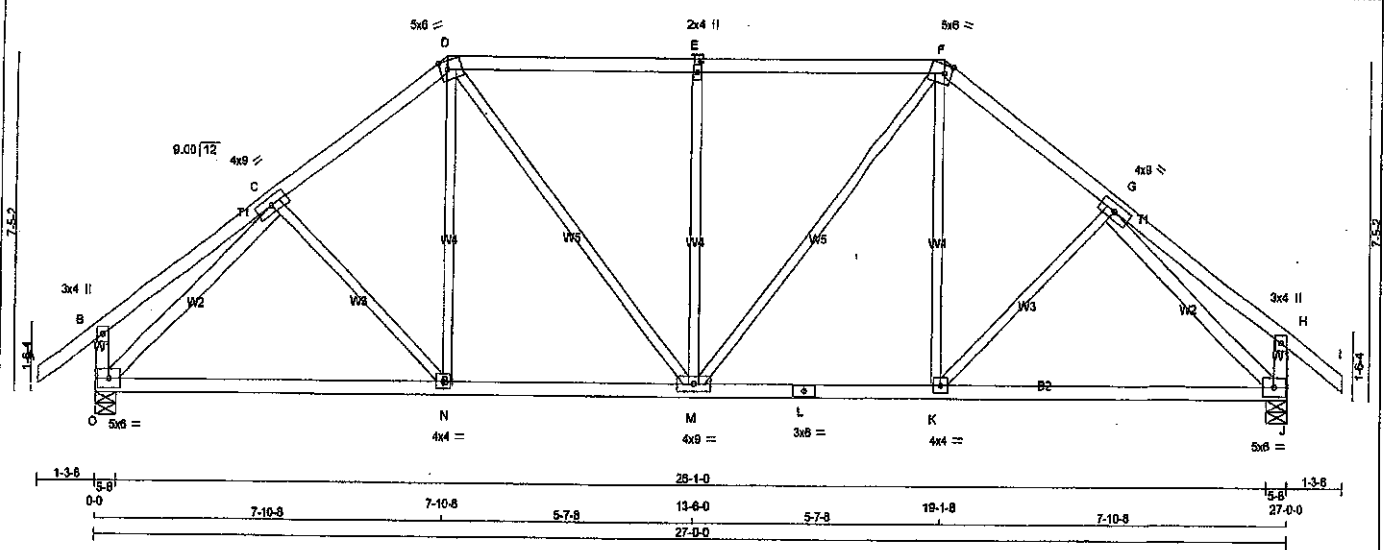
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

MEMB.	FORCE (LBS)	CHORDS		MAX. FACTORED VERT. LOAD (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MAX. FACTORED TORSION (LBS)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED TORQUE (LBS)
		FR-TO	TO-TO							
A-B	0 / 42	-102.1	-102.1	0.08 (1)	10.00	C-N	0 / 261	0.03 (1)		
B-C	-5088 / 0	-102.1	-102.1	0.84 (1)	3.81	N-D	-529 / 0	0.14 (1)		
C-D	-3970 / 0	-102.1	-102.1	0.25 (1)	4.53	L-F	-531 / 0	0.14 (1)		
D-E	-3970 / 0	-102.1	-102.1	0.22 (1)	4.54	L-G	0 / 1619	0.23 (1)		
E-F	-3435 / 0	-102.1	-102.1	0.21 (1)	4.83	N-E	0 / 618	0.08 (1)		
F-G	-3435 / 0	-102.1	-102.1	0.23 (1)	4.83	E-L	-682 / 0	0.22 (1)		

JOB NAME 200142-400307	TRUSS NAME T7	QUANTITY 2	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 S Nov 17 2018 MITek Industries, Inc. Wed May 8 14:07:04 2019 Page 1 ID: V/Rg?WpQQXfX6eShbzMzZP9i4IsKXfy7Ar52NvbaZNE11ZYqh8r9d2S0UMYDKzIYm	



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 - J	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
O - C	2x4	DRY	No.2	SPF
G - J	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMVW-t	MT20	4.0	9.0		
D	TTVW-m	MT20	5.0	6.0	Edge 2.00	
E	TMVW-w	MT20	2.0	4.0		
F	TTVW-m	MT20	5.0	6.0	Edge 2.00	
G	TMVW-t	MT20	4.0	9.0		
H	TMV+p	MT20	3.0	4.0		
J	BMVW-t	MT20	5.0	8.0		
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

BEARINGS

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1515	884 / 0	284 / 0	0 / 0	0 / 0	389 / 0	0 / 0
J	1515	884 / 0	284 / 0	0 / 0	0 / 0	389 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO				FR-TO			
A-B	0 / 42	-102.1	-102.1 0.14 (1)	C-N	-25 / 100	0.02 (3)	
B-C	0 / 27	-102.1	-102.1 0.25 (1)	N-D	0 / 380	0.09 (2)	
C-D	-1927 / 0	-102.1	-102.1 0.24 (1)	D-M	0 / 535	0.12 (1)	
D-E	-1854 / 0	-102.1	-102.1 0.46 (1)	M-E	-700 / 0	0.89 (1)	
E-F	-1854 / 0	-102.1	-102.1 0.46 (1)	M-F	0 / 535	0.12 (1)	
F-G	-1927 / 0	-102.1	-102.1 0.24 (1)	K-F	0 / 380	0.09 (2)	
G-H	0 / 27	-102.1	-102.1 0.25 (1)	K-G	-25 / 100	0.02 (3)	
H-I	0 / 42	-102.1	-102.1 0.14 (1)	O-C	-2231 / 0	0.85 (1)	
O-B	-298 / 0	0.0	0.0 0.03 (1)	G-J	-2231 / 0	0.85 (1)	
J-H	-298 / 0	0.0	0.0 0.03 (1)				
O-N	0 / 1535	-38.5	-38.5 0.61 (2)				
N-M	0 / 1522	-38.5	-38.5 0.61 (2)				
M-L	0 / 1522	-38.5	-38.5 0.61 (2)				
L-K	0 / 1522	-38.5	-38.5 0.61 (2)				
K-J	0 / 1535	-38.5	-38.5 0.61 (2)				

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 8, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2010, OBC 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) = $L/360$ (0.90")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.16")
ALLOWABLE DEFL. (TL) = $L/360$ (0.90")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.27")

CSI: TC=0.48/1.00 (D-E:1), BC=0.61/1.00 (K-M:2), WB=0.85/1.00 (G-J:1), SSI=0.28/1.00 (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

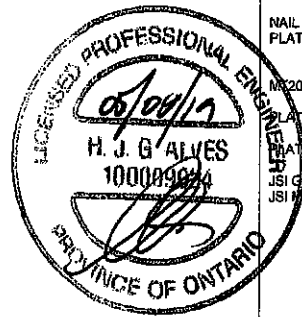
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1867

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.87 (C) (INPUT = 0.90)
JSI METAL= 0.51 (L) (INPUT = 1.00)

DWG NO. TAM **17A10926**
STRUCTURAL
COMPONENT ONLY

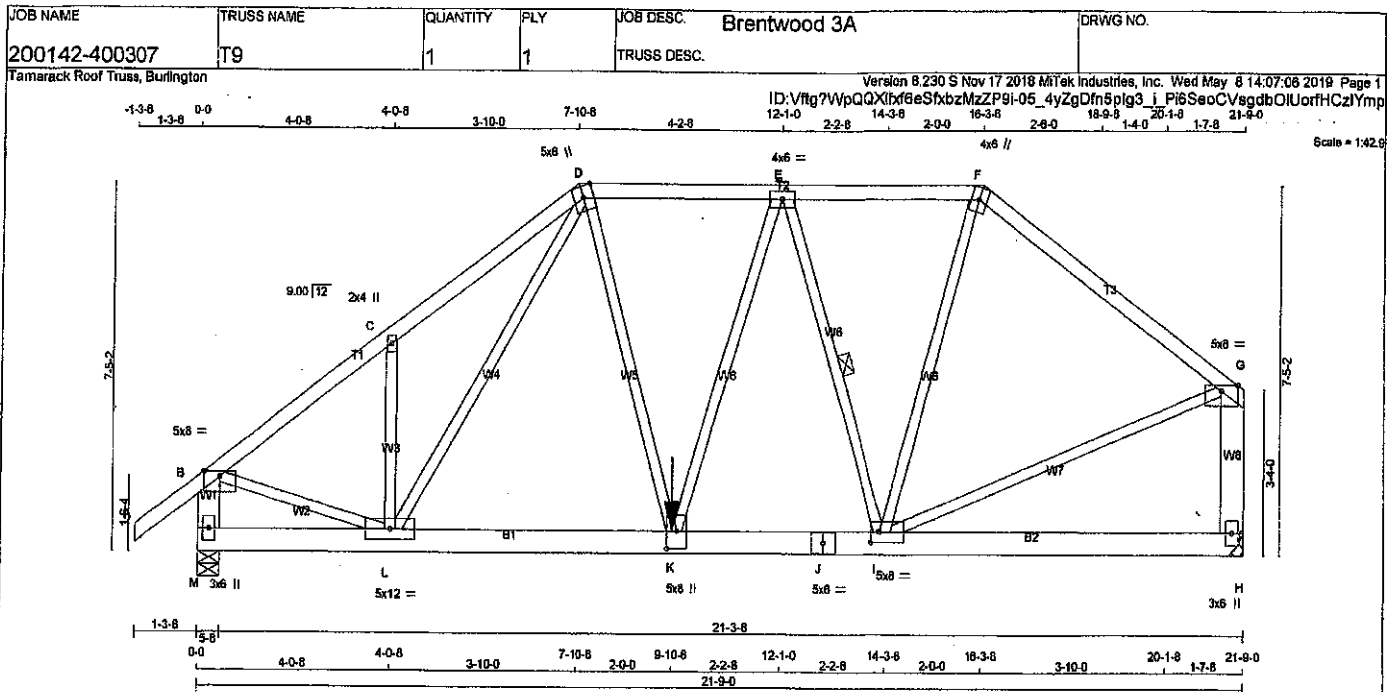


THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE

RECEIVED

JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



LUMBER

N. L. G. A. RULES

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

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
M	2779	0	0	5-8
H	2462	0	0	MECHANICAL

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
M	2082	1186 / 0	378 / 0	0 / 0	0 / 0	498 / 0	0 / 0
H	1835	1031 / 0	354 / 0	0 / 0	0 / 0	450 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)
FR-TO		FROM TO	FR-TO	FROM TO
A-B	0 / 42	-102.1 -102.1 0.15 (1)	I-G	0 / 1942 0.46 (1)
B-C	-2918 / 0	-102.1 -102.1 0.43 (1)	D-K	0 / 1442 0.36 (1)
C-D	-2956 / 0	-102.1 -102.1 0.44 (1)	K-E	0 / 834 0.21 (1)
D-E	-2715 / 0	-102.1 -102.1 0.43 (1)	E-I	-1377 / 0 0.52 (1)
E-F	-2071 / 0	-102.1 -102.1 0.38 (1)	I-F	0 / 948 0.23 (1)
F-G	-2263 / 0	-102.1 -102.1 0.85 (1)	L-C	-483 / 0 0.14 (1)
M-B	-2712 / 0	0.0 0.0 0.20 (1)	L-D	0 / 69 0.09 (1)
H-G	-2343 / 0	0.0 0.0 0.29 (1)	B-L	0 / 242 0.80 (1)
M-L	0 / 0	-38.5 -38.5 0.09 (3)		
L-K	0 / 2319	-38.5 -38.5 0.41 (1)		
K-J	0 / 2472	-38.5 -38.5 0.46 (1)		
J-I	0 / 2472	-38.5 -38.5 0.46 (1)		
I-H	0 / 0	-38.5 -38.5 0.19 (3)		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.
JT	9-10-8	-2042	-2042		FRONT	VERT

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

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 CBC 2010, OBC 2012
- CSA 086-09, 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

ALLOWABLE DEFL.(LL) = L/360 (0.73")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.85/1.00 (F-G:1), BC=0.46/1.00 (I-K:1), WB=0.60/1.00 (B-L:1), SSI=0.22/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN
MT20	618	354	1657	788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

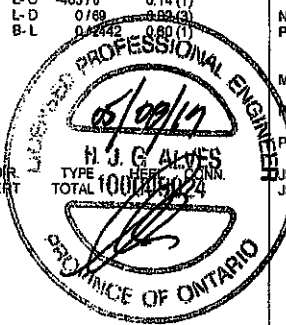
PLATE ROTATION TOL. = 5.0 Deg.

GRIP= 0.88 (I) (INPUT = 0.90)
JS METAL= 0.52 (B) (INPUT = 1.00)

DRWG NO. TAM 17910928
STRUCTURAL
CONNECTION ONLY

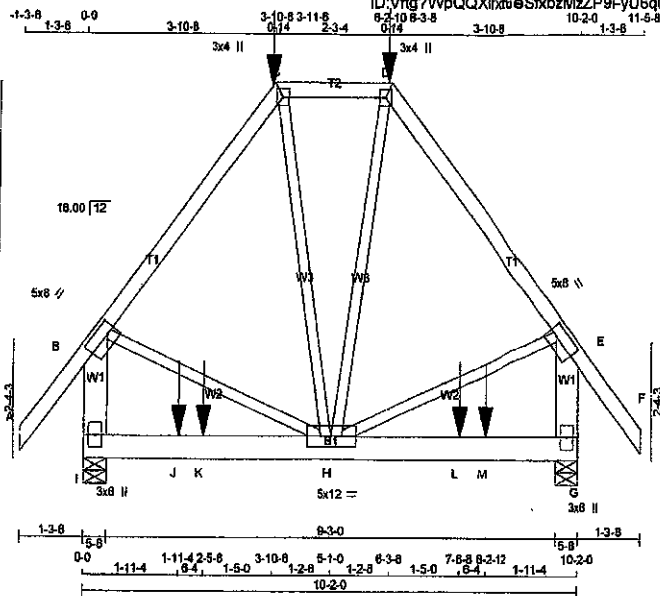
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JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



JOB NAME 200142-400307	TRUSS NAME T11	QUANTITY 1	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
TRUSS DESC.				Version 8.230 6 Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:07:08 2019 Page 1	

Tamarack Roof Truss, Burlington



Scale = 1:42.5

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	
I - B	2x6	DRY	No.2	SPF	
G - E	2x6	DRY	No.2	SPF	
I - G	2x6	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-I	MT20	5.0	8.0	2.50	2.25
C TTW+p	MT20	3.0	4.0		
D TTW+p	MT20	3.0	4.0		
E TMVW-I	MT20	5.0	8.0	2.50	2.25
G BMV1+p	MT20	3.0	6.0		
H BMVWWW-I	MT20	5.0	12.0		
I 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
	GROSS REACTION	GROSS REACTION	BRG	BRG
	VERT	HORIZ	DOWN	HORIZ
JT	1832	0	1832	0
G	1832	0	1832	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
I	1349	803 / 0 223 / 0 0 / 0 0 / 0 323 / 0 0 / 0
G	1349	803 / 0 223 / 0 0 / 0 0 / 0 323 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.29 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 58	-102.1 -102.1	0.16 (1)	10.00	B-H	0 / 704	0.17 (1)
B-C	-1100 / 0	-151.9 -151.9	0.51 (1)	5.29	H-E	0 / 704	0.17 (1)
C-D	-898 / 0	-151.9 -151.9	0.15 (1)	6.25	C-H	0 / 249	0.08 (2)
D-E	-1100 / 0	-151.9 -151.9	0.51 (1)	5.29	H-D	0 / 249	0.08 (2)
E-F	0 / 58	-102.1 -102.1	0.16 (1)	10.00			
I-B	-1588 / 0	0.0 0.0	0.14 (1)	7.80			
G-E	-1588 / 0	0.0 0.0	0.14 (1)	7.80			
I-J	0 / 0	-38.5 -38.5	0.42 (1)	10.00			
J-K	0 / 0	-38.5 -38.5	0.42 (1)	10.00			
K-H	0 / 0	-38.5 -38.5	0.42 (1)	10.00			
H-L	0 / 0	-38.5 -38.5	0.42 (1)	10.00			
L-M	0 / 0	-38.5 -38.5	0.42 (1)	10.00			
M-G	0 / 0	-38.5 -38.5	0.42 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-11-8	-188	-188	---	FRONT	VERT	TOTAL	---	---
D	6-2-10	-188	-188	---	FRONT	VERT	TOTAL	---	---
J	1-11-4	-38	-48	---	FRONT	VERT	TOTAL	---	---
K	2-5-8	-498	-498	---	FRONT	VERT	TOTAL	---	---
L	7-8-8	-498	-498	---	FRONT	VERT	TOTAL	---	---
M	8-2-12	-38	-48	---	FRONT	VERT	TOTAL	---	---

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

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

*** NON STANDARD GIRDER ***
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, OBC 2012
- CSA 088-09, 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 (0.34")
CALCULATED VERT. DEFL.(LL) = 1/989 (0.03")
ALLOWABLE DEFL.(TL) = 1/360 (0.34")
CALCULATED VERT. DEFL.(TL) = 1/989 (0.05")

CSI: TC=0.51/1.00 (D-E:1), BC=0.42/1.00 (H-I:1), WB=0.17/1.00 (B-H:1), SS=0.31/1.00 (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)
MT20	618 354 1687 788 1987 1658	

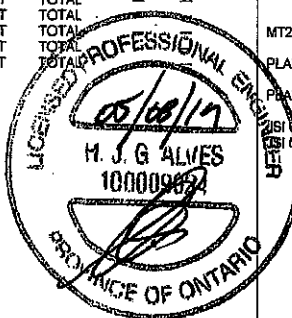
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

CSI GRIP = 0.76 (C) (INPUT = 0.90)
CSI METAL = 0.27 (E) (INPUT = 1.00)

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JUN 11 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



DRWG NO. TAM 17110930
STRUCTURAL
COMPONENT ONLY

JOB NAME

TRUSS NAME

QUANTITY

PLY

JOB DESC.

DRWG NO.

200142-400307

T12A

2

1

Brentwood 3A

Tamarack Roof Truss, Burlington

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ID-Vftg7WpQQXlM8eSxbzZp9i-yU8qNEITBPLXX_DMPPSABikilics5YG2x6Kmm5ziYmn

Scale = 1:50.0

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF
D - F	2x4 DRY	No.2	SPF
I - B	2x4 DRY	No.2	SPF
G - F	2x4 DRY	No.2	SPF
I - G	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	TMVW-1	MT20	4.0	6.0	2.00	2.75
D	TTV+p	MT20	4.0	6.0		
E	TMVW-1	MT20	4.0	4.0	2.00	1.50
F	TMV+p	MT20	3.0	4.0		
G	BMVW-1	MT20	4.0	4.0		
H	BMVW-1	MT20	4.0	9.0		
I	BMVW-1	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
I	829 0	829 0	5-8	5-8
G	886 0	886 0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS
I	COMBINED	SNOW 365 / 0 LIVE 102 / 0 PERM. LIVE 0 / 0 WIND 0 / 0 DEAD 144 / 0 SOIL 0 / 0
G	COMBINED	SNOW 283 / 0 LIVE 102 / 0 PERM. LIVE 0 / 0 WIND 0 / 0 DEAD 127 / 0 SOIL 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO				FR-TO			
A-B	0 / 58	-102.1	-102.1 0.15 (1)	C-H	-90 / 20	0.06 (1)	
B-C	0 / 22	-102.1	-102.1 0.10 (1)	H-D	0 / 337	0.08 (1)	
C-D	-381 / 0	-102.1	-102.1 0.08 (1)	H-E	-26 / 42	0.02 (1)	
D-E	-357 / 0	-102.1	-102.1 0.07 (1)	I-C	-559 / 0	0.32 (1)	
E-F	0 / 21	-102.1	-102.1 0.08 (1)	E-G	-576 / 0	0.31 (1)	
I-B	-248 / 0	0.0	0.0 0.03 (1)				
G-F	-84 / 0	0.0	0.0 0.01 (1)				
I-H	0 / 241	-38.5	-38.5 0.22 (3)				
H-G	0 / 214	-38.5	-38.5 0.22 (3)				

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. GC

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012

- 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 (0.32")

CALCULATED VERT. DEFL.(LL) = L/909 (0.02")

ALLOWABLE DEFL.(TL) = L/360 (0.32")

CALCULATED VERT. DEFL.(TL) = L/909 (0.04")

CSI: TC=0.15/1.00 (A-B:1), BC=0.22/1.00 (H-G:3), WB=0.32/1.00 (C-I:1), SI=0.13/1.00 (H-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)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	
MT20	818 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.59 (E) (INPUT = 0.90)

JSI METAL= 0.21 (E) (INPUT = 1.00)

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JUN 10 2019

TOWN OF CALEDON BUILDING SECTION

PROFESSIONAL ENGINEER

H. J. G. ALVES

100009822

PROVINCE OF ONTARIO

DRWG NO. TAM 02910931

STRUCTURAL

GOVERNMENT ONLY

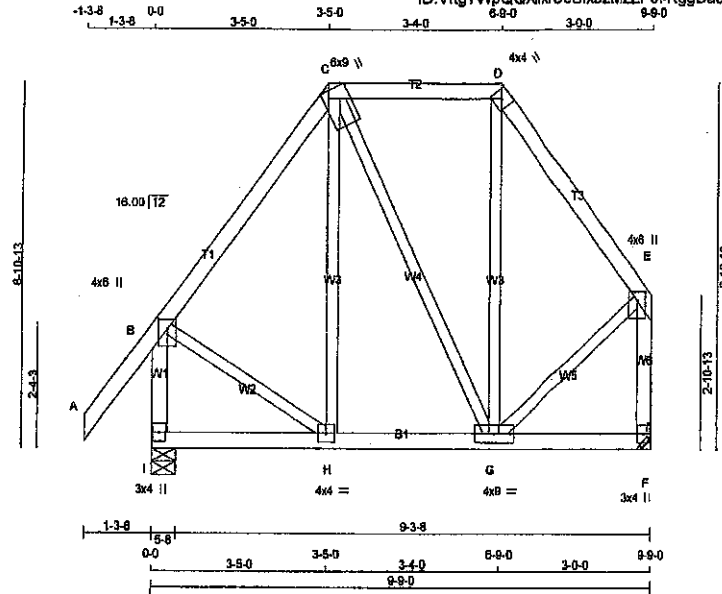
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	Brentwood 3A	DRWG NO.
200142-400307	T13A	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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Scale = 1:40.3



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
F - G	2x4	DRY	No.2
G - H	2x4	DRY	No.2
H - I	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	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	6.0	9.0	Edge	1.50
D	TTWW-h	MT20	4.0	4.0		
E	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-l	MT20	4.0	8.0		
H	BMVWW-l	MT20	4.0	4.0		
I	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	IN-SX	IN-SX
I	829	0	829	0
F	886	0	886	0

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

UNFACTORED REACTIONS

1ST LOASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	811	365 / 0	102 / 0	0 / 0	0 / 0	144 / 0	0 / 0
F	512	283 / 0	102 / 0	0 / 0	0 / 0	127 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC2)	MAX. FACTORED VERT. LOAD (LC3)	MAX. FACTORED VERT. LOAD (LC4)	MAX. FACTORED VERT. LOAD (LC5)	MAX. FACTORED VERT. LOAD (LC6)	MAX. FACTORED VERT. LOAD (LC7)	MAX. FACTORED VERT. LOAD (LC8)	MAX. FACTORED VERT. LOAD (LC9)	MAX. FACTORED VERT. LOAD (LC10)
FR-TO												
A-B	0 / 58	-102.1	-102.1	0.15 (1)	10.00	H-C	0 / 118	0.03 (3)				
B-C	-401 / 0	-102.1	-102.1	0.15 (1)	6.25	C-G	-38 / 0	0.04 (1)				
C-D	-223 / 0	-102.1	-102.1	0.15 (1)	6.25	G-D	-22 / 95	0.02 (3)				
D-E	-378 / 0	-102.1	-102.1	0.12 (1)	6.25	B-H	0 / 273	0.08 (1)				
E-F	-773 / 0	0.0	0.0	0.10 (1)	7.81	G-E	0 / 288	0.06 (1)				
F-G	-836 / 0	0.0	0.0	0.10 (1)	7.81							
H-I	0 / 0	-38.5	-38.5	0.08 (3)	10.00							
H-G	0 / 239	-38.5	-38.5	0.11 (2)	10.00							
G-F	0 / 0	-38.5	-38.5	0.08 (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. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.15/1.00 (B-C-1), BC=0.11/1.00 (G-H-2), WB=0.08/1.00 (E-G-1), SS=0.13/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

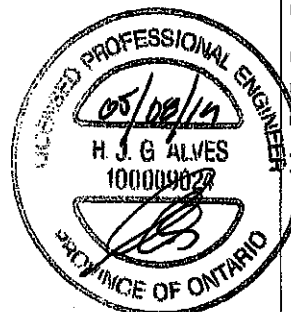
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1687 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

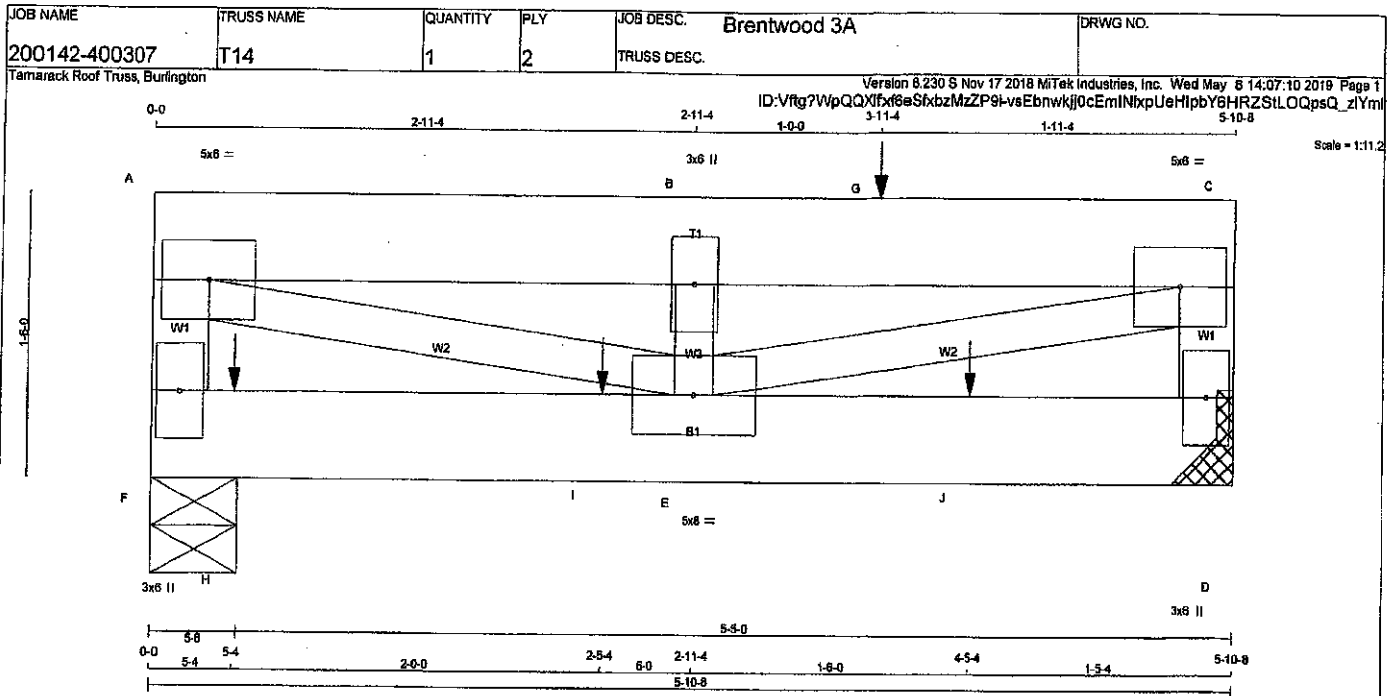
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (B) (INPUT = 0.80)
JSI METAL= 0.20 (B) (INPUT = 1.00)

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JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.



DRWG NO. TAM 171/0932
STRUCTURAL
COMPONENT ONLY



LUMBER

N. L. G. A. RULES					
CHORDS	SIZE		LUMBER		DESCR
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	11	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.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TMVW-I	MT20	5.0	6.0		
B TMVW+V	MT20	3.0	6.0		
C TMVW-I	MT20	5.0	6.0		
D BMV1+P	MT20	3.0	6.0		
E BMVWW-I	MT20	5.0	6.0		
F BMV1+P	MT20	3.0	6.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
F	1982	0	1982	0	5-8	5-8
D	2081	0	2081	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN	COMPONENT REACTIONS
F	1473	840 / 0	275 / 0
D	1549	873 / 0	297 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.88 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)

CHORDS					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOC1 MAX (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX. CSI (LC)		
FR-TO		FROM	TO		FR-TO				
F-A	-1210 / 0	0.0	0.0	0.07 (1)	7.81	A-E	0 / 3085	0.38 (1)	
A-B	-2908 / 0	-102.1	-102.1	0.07 (1)	6.25	E-B	-1089 / 0	0.08 (1)	
B-G	-2908 / 0	-102.1	-102.1	0.38 (1)	5.88	E-C	0 / 3085	0.38 (1)	
G-C	-2908 / 0	-102.1	-102.1	0.38 (1)	5.88				
D-C	-1648 / 0	0.0	0.0	0.09 (1)	7.81				
F-H	0 / 0	-38.5	-38.5	0.17 (1)	10.00				
H-I	0 / 0	-38.5	-38.5	0.17 (1)	10.00				
I-E	0 / 0	-38.5	-38.5	0.17 (1)	10.00				
E-J	0 / 0	-38.5	-38.5	0.21 (1)	10.00				
J-D	0 / 0	-38.5	-38.5	0.21 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	3-11-4	-1285	-1285		TOP	VERT	TOTAL		
H	5-4	-658	-658		BACK	VERT	TOTAL		
I	2-5-4	-647	-647		BACK	VERT	TOTAL		
J	4-5-4	-647	-647		BACK	VERT	TOTAL		

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

LOADING IN PLAT 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, OBC 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) = L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.38/1.00 (B-C:1), BC=0.21/1.00 (D-E:1), WB=0.38/1.00 (A-E:1), SI=0.32/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 768 1987 1656

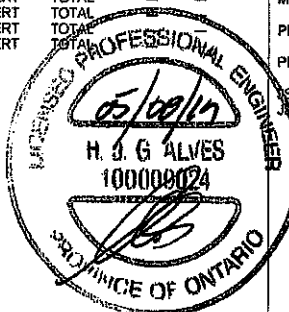
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

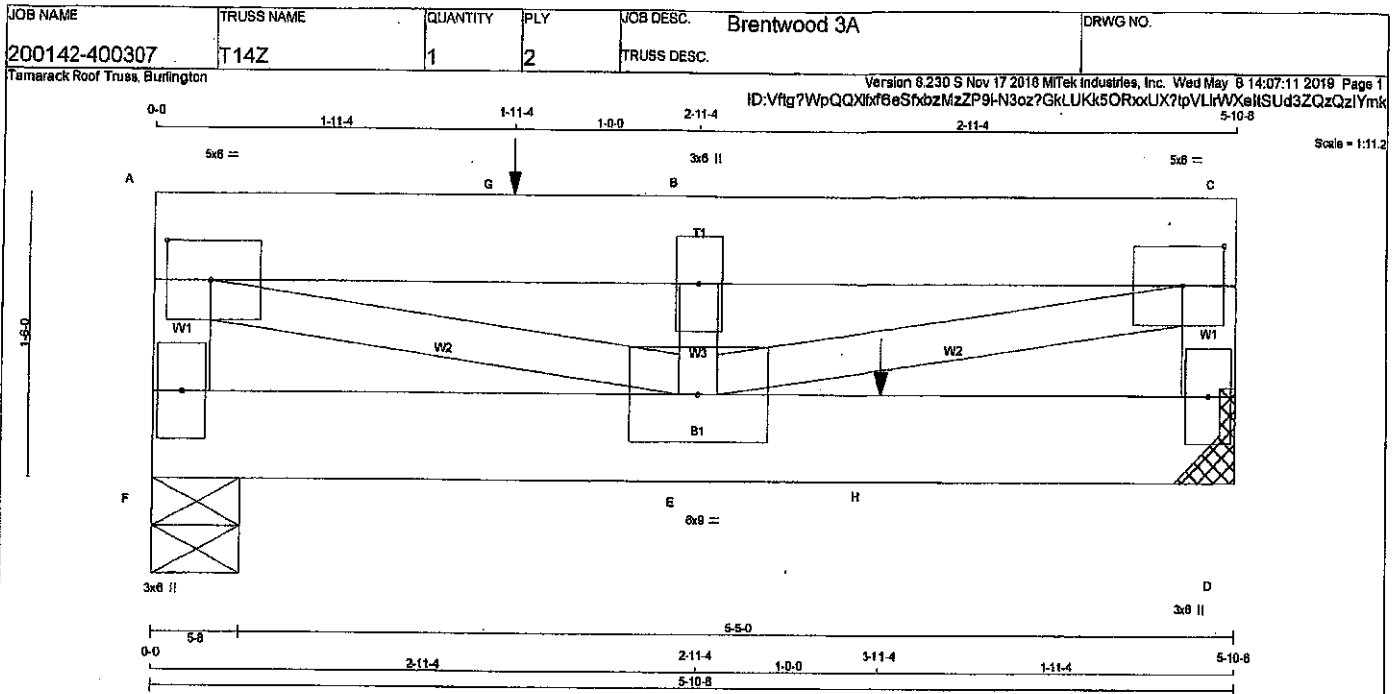
SI GRIP= 0.79 (E) (INPUT = 0.80)
SI METAL= 0.38 (A) (INPUT = 1.00)

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JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



BYNG NIA TAM 77910933
STRUCTURAL
CHECKED ONLY



LUMBER

CHORDS	SIZE	LUMBER	DESCR
F - A	2x4	DRY	No.2
A - C	2x6	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 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(0.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW	MT20	5.0	6.0	2.50	2.75
B	TMVW	MT20	3.0	6.0		
C	TMVW	MT20	5.0	6.0	2.50	2.75
D	BMV1	MT20	3.0	6.0		
E	BMVW	MT20	3.0	6.0		
F	BMV1	MT20	3.0	6.0		

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

JT	FACTORED		MAXIMUM FACTORED		INPUT	REORD
	GROSS REACTION	DOWN	GROSS REACTION	DOWN		
F	2020	0	2020	0	5-8	5-8
D	2434	0	2434	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
F	1507	840 / 0	295 / 0	0 / 0	0 / 0	373 / 0	0 / 0
D	1812	1023 / 0	348 / 0	0 / 0	0 / 0	443 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. FURLIN SPACING = 5.29 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	LC2 MAX (PLF)			FORCE (LBS)	MAX. FACTORED (LBS)	
FR-TO						FR-TO			
F-A	-1965 / 0	0.0	0.0	0.11 (1)	7.81	A-E	0 / 3947	0.49 (1)	
A-G	-3720 / 0	-102.1	-102.1	0.41 (1)	5.29	E-B	-921 / 0	0.07 (1)	
G-B	-3720 / 0	-102.1	-102.1	0.41 (1)	5.29	E-C	0 / 3947	0.49 (1)	
B-C	-3720 / 0	-102.1	-102.1	0.12 (1)	5.73				
D-C	-1565 / 0	0.0	0.0	0.09 (1)	7.81				
F-E	0 / 0	-38.5	-38.5	0.02 (2)	10.00				
E-H	0 / 0	-38.5	-38.5	0.60 (1)	10.00				
H-D	0 / 0	-38.5	-38.5	0.60 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR	TYPE	HEEL	CONN.
G	1-11-4	-1204	-1204		TOP	VERT	TOTAL		
H	3-11-4	-2424	-2424		BACK	VERT	TOTAL		

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. G/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, OBC 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) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.04")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.06")

CSI: TC=0.41/1.00 (A-B:1), BC=0.60/1.00 (D-E:1), WB=0.49/1.00 (C-E:1), SS=0.55/1.00 (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

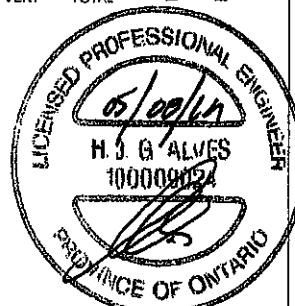
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1987 788 1987 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.83 (A) (INPUT = 0.90)
JSI METAL = 0.48 (C) (INPUT = 1.00)



DRG. K. TAM 17/09/2019
STRUCTURAL
CHECKED ONLY

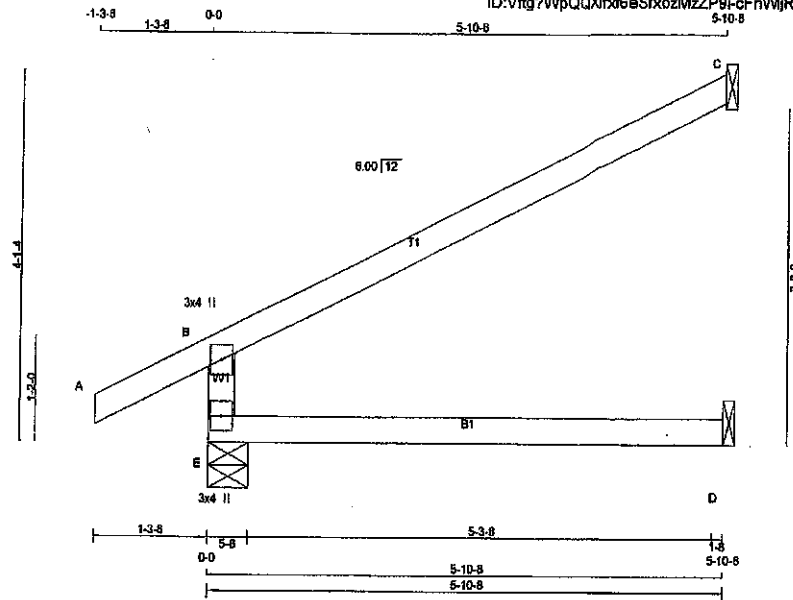
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JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.

JOB NAME 200142-400307	TRUSS NAME J1	QUANTITY 9	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 9 Nov 17 2018 Mitek Industries, Inc. Wed May 6 14:08:48 2019 Page 1

ID:Vftg?WpQQXf6eSfxbzMzZP9l-cFnVWjRgNeaX8Xn20IEpRAR5oxhtp7bbNzIYn7

Scale = 1:23.6



TOTAL WEIGHT = 9 X 17 = 151 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	646	0	646	0	5-8	5-8
C	225	0	225	0	1-8	1-8
D	93	0	119	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	473	282 / 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

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

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.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. FACTORED (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)		MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)
FR-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		

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, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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/380 (0.20")
CALCULATED VERT. DEFL. (LL) = L/998 (0.04")
ALLOWABLE DEFL. (TL) = L/380 (0.20")
CALCULATED VERT. DEFL. (TL) = L/942 (0.07")

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), SS=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.

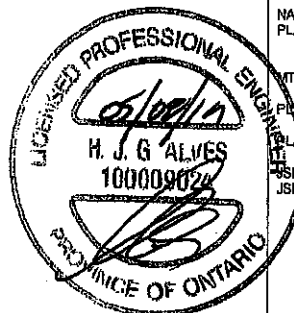
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

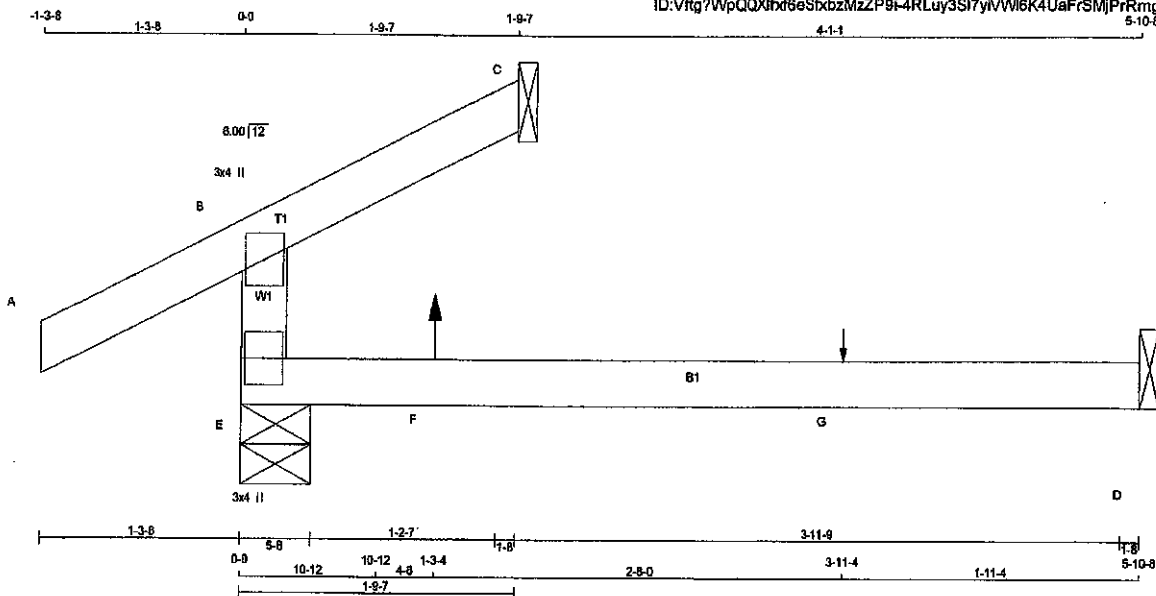
SSI GRIP= 0.21 (E) (INPUT = 0.90)
SSI METAL= 0.14 (B) (INPUT = 1.00)



RECEIVED
JUN 10 2019
TOWN OF CALEDON
BUILDING DEPARTMENT

DRWG NO. TAM 12910937
STRUCTURAL
CHECK ONLY

JOB NAME 200142-400307	TRUSS NAME J2	QUANTITY 2	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	Version 6.230 6 Nov 17 2016 Mitek Industries, Inc. Wed May 8 14:06:47 2019 Page 1 ID: Vftg?WpQQXbf6eSbxbzMzP9i-4RLuy3Si7yVW6K4UaFrSMjPrRmg87y8KIB7pziYn6



TOTAL WEIGHT = 2 X 12 = 23 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	351	0	351	0	0	5-8	5-8
C	95	0	97	0	0	1-8	1-8
D	84	0	123	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H 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	258	155 / 0	42 / 0	0 / 0	0 / 0	61 / 0	0 / 0
C	77	24 / 0	28 / 0	0 / 0	0 / 0	24 / 0	0 / 0
D	88	0 / -2	53 / 0	0 / 0	0 / 0	35 / 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 = 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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED VERT. LOAD LC1 MAX. (PLF)	MAX. FACTORED VERT. LOAD LC1 MAX. (PLF)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 MAX. (PLF)
FR-TO						LENGTH FR-TO		
E-B	-228 / 28	0.0	0.0	0.19 (2)	7.81			
A-B	0 / 31	-102.1	-102.1	0.15 (1)	10.00			
B-C	0 / 27	-102.1	-102.1	0.16 (3)	10.00			
E-F	0 / 0	-38.5	-38.5	0.23 (3)	10.00			
F-G	0 / 0	-38.5	-38.5	0.23 (3)	10.00			
G-D	0 / 0	-38.5	-38.5	0.23 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-3.4	8	1	13	FRONT	VERT	TOTAL		
G	3-11.4	1	1		FRONT	VERT	TOTAL		

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, 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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.05")
ALLOWABLE DEFL.(TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(TL) = $L/839$ (0.08")

CSI: TC=0.18/1.00 (B-E-2), BC=0.23/1.00 (D-E-3),
WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (D-E-3)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

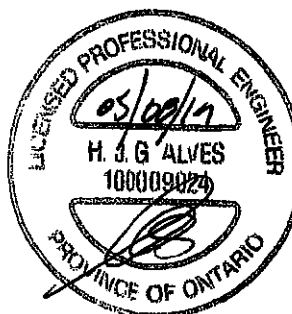
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	818	354	1687 768 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

RECEIVED
JUN 14 2019
TOWN OF SALEDON
BUILDING DEPARTMENT
FILE NO.



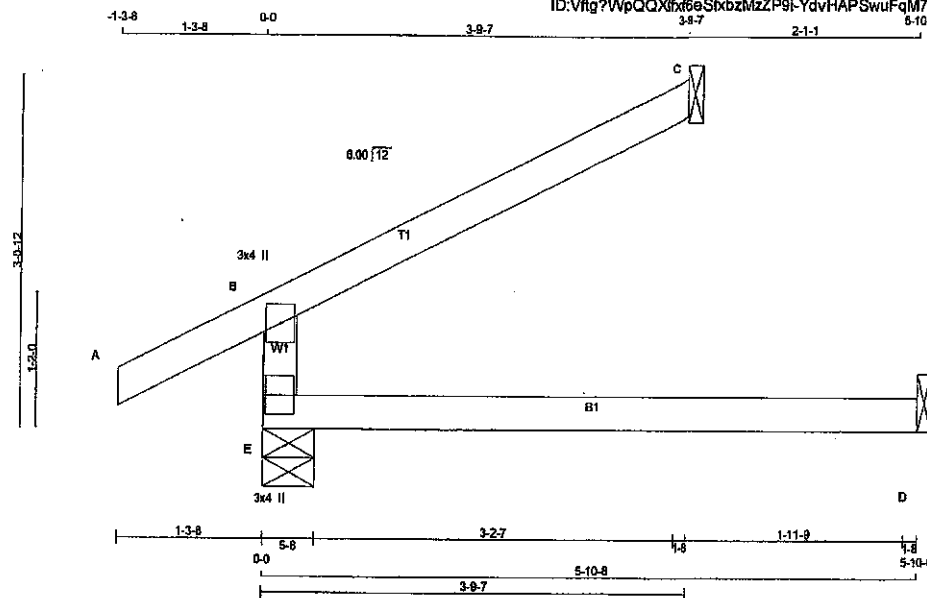
ENGINEER TAM 0191 2938
STRUCTURAL
CALCULATIONS ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	J3	2	1	Brentwood 3A	
Tamarack Roof Truss, Burlington					

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:08:48 2019 Page 1

ID:Vf9g?WpQQXm6eStkbzMzP9l-YdvHAPSwuFqM7vhWeC5UOfvTAEnPPaNB_LUgFzYn5

Scale = 1:16.5



TOTAL WEIGHT = 2 X 14 = 28 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
E	513	513	5-8	5-8
C	145	145	1-8	1-8
D	93	119	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
E	382	218 / 0	72 / 0	0 / 0	93 / 0	0 / 0
C	100	83 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	85	0 / 0	51 / 0	0 / 0	34 / 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 = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC1)	MAX. HORIZ. LOAD (LC2)	MAX. UNBRACED LENGTH (FR-TO)	MEMB. MAX. FACTORED FORCE (LBS)	MAX. HORIZ. LOAD (LC2)
FR-TO							
E-B	-380 / 0	0.0	0.0	0.21 (3)	7.81		
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00		
B-C	-22 / 0	-102.1	-102.1	0.25 (1)	6.25		
E-D	0 / 0	-38.5	-38.5	0.21 (3)	10.00		

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, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.04")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/942$ (0.07")

CSI: TC=0.25/1.00 (B-C:1), BC=0.21/1.00 (D-E:3),
WB=0.00/1.00 (n/a:0), SS=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE GRIP (DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	788 1987 1658

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.80)
JSI METAL= 0.11 (B) (INPUT = 1.00)

DESIGNED BY: TAM 17910939
STRUCTURAL
CHECKED BY: ONLY

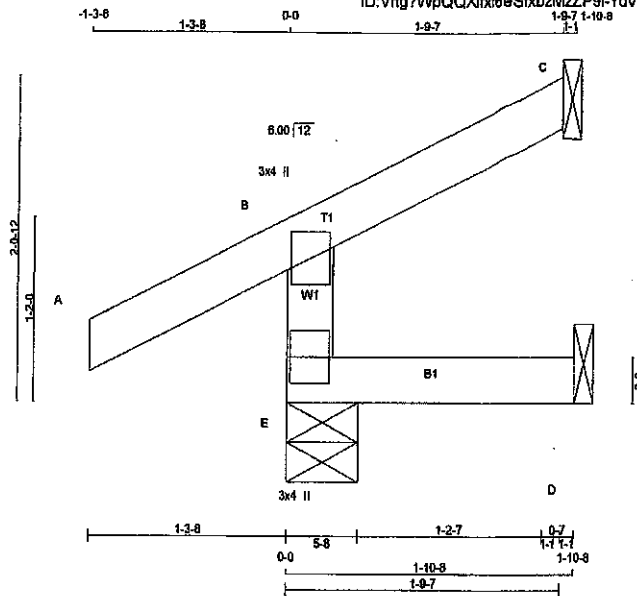
RECEIVED
JUN 10 2019

TOWN OF CALEDON
BUILDING DEPARTMENT
FILE NO.



JOB NAME 200142-400307	TRUSS NAME J4	QUANTITY 2	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:08:48 2019 Page 1
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TOTAL WEIGHT = 2 X 7 = 14 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS							
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	318	0	318	0	5-8	5-8	
C	51	0	51	0	1-8	1-8	
D	24	0	41	0	-4	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H 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				
JT	COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
E	226	160/0	20/0	0/0	0/0	48/0	0/0
C	38	27/-21	2/0	0/0	0/0	7/0	0/0
D	24	0/-8	18/0	0/0	0/0	11/0	0/0

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

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

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

LOADING
TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
E-B	-270/0	0.0	0.0 (5)	7.81			
A-B	0/31	-102.1	-102.1 (1)	10.00			
B-C	-18/0	-102.1	-102.1 (1)	6.25			
E-D	0/0	-38.5	-38.5 (5)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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. 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 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

CSI: TC=0.13/1.00 (A-B-1), BC=0.04/1.00 (D-E-5), WB=0.00/1.00 (n/a-0), SSI=0.10/1.00 (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 (PSI)	SECTION (PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1687 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.11 (E) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

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JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.

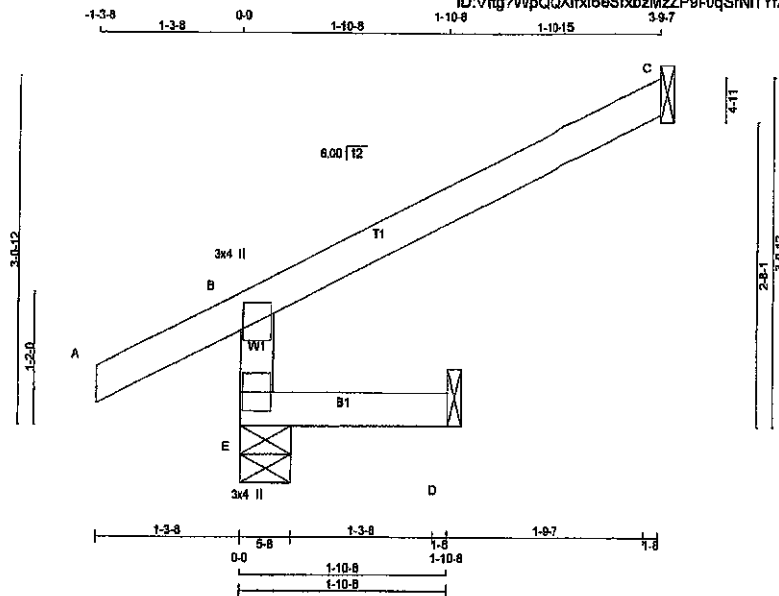


DWG NO. TAM 12910940
STRUCTURAL
CITY OF CALEDON ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	J5	2	1	Brentwood 3A	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:49 2019 Page 1
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Scale = 1:18.7



TOTAL WEIGHT = 2 X 10 = 19 lb

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	420	0	420	0	5-8	5-8
C	145	0	145	0	1-8	1-8
D	32	0	41	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H 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	297	218 / 0	22 / 0	0 / 0	0 / 0	59 / 0	0 / 0
C	100	83 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	29	0 / 0	18 / 0	0 / 0	0 / 0	12 / 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 = 8.25 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		MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. FACTORED VERT. LOAD LC1 (PLF)	MAX. FACTORED UNBRACED LENGTH FR-TO		MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO							
E-B	-380 / 0	0.0	0.0	0.01 (3)	7.81		
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00		
B-C	-22 / 0	-102.1	-102.1	0.25 (1)	8.25		
E-D	0 / 0	-38.5	-38.5	0.03 (3)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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./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 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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 (0.19")
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=0.25/1.00 (B-C:1), BC=0.03/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SSI=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618 354 1667 786 1987 1658	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.80)
JSI METAL= 0.11 (B) (INPUT = 1.00)

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JUN 10 2019

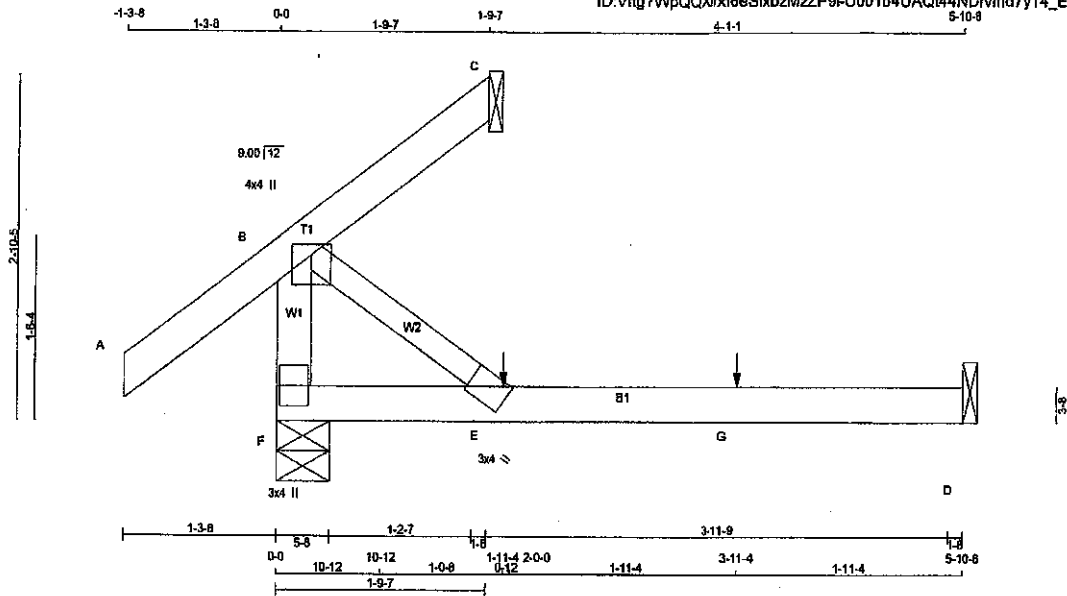
TOWN OF CALEDON
BUILDING SECTION
FILE NO.



ENG. NO. TAM 71910941
STRUCTURAL
COMPANION ONLY

JOB NAME 200142-400307	TRUSS NAME J7	QUANTITY 1	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 5 Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:50 2019 Page 1
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5-10-8



Scale = 1:17.7

TOTAL WEIGHT = 14 lb

LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWw+p	MT20	4.0	4.0	1.00	2.00
E	BMWw+p	MT20	3.0	4.0	2.00	1.25
F	BMVt+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
F	400	400	5-8	5-8
C	37	37	1-8	1-8
D	113	144	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) F, C, D

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	289	163 / 0	62 / 0	0 / 0	0 / 0	75 / 0	0 / 0	0 / 0
C	25	21 / 0	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0	0 / 0
D	103	0 / 0	62 / 0	0 / 0	0 / 0	41 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. LC2	MAX. UNBRACED LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. LC1
F-B	-285 / 0	0.0	0.0	0.03 (1)	7.81		B-E	0 / 0	0.00 (1)	
A-B	0 / 42	-102.1	-102.1	0.15 (1)	10.00					
B-C	-33 / 0	-102.1	-102.1	0.15 (1)	6.25					
F-E	0 / 0	-38.5	-38.5	0.27 (2)	10.00					
E-G	0 / 0	-38.5	-38.5	0.32 (2)	10.00					
G-D	0 / 0	-38.5	-38.5	0.32 (2)	10.00					

FACTORED CONCENTRATED LOADS (LBS)

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

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, NBC 2010, NBC 2015

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

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

(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

ALLOWABLE DEFL. (LL) = L/360 (0.20")
CALCULATED VERT. DEFL. (LL) = L/925 (0.08")
ALLOWABLE DEFL. (TL) = L/360 (0.20")
CALCULATED VERT. DEFL. (TL) = L/555 (0.13")

CSI: TC=0.15/1.00 (A-B:1), BC=0.32/1.00 (D-E:2),
WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (E-F:2)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE GRIP (DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1687 788

PLATE PLACEMENT TOL. = 0.250 inches

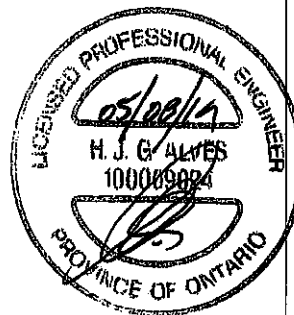
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

DWG NO. TAM 17910942
STRUCTURAL
CHECKED BY ONLY

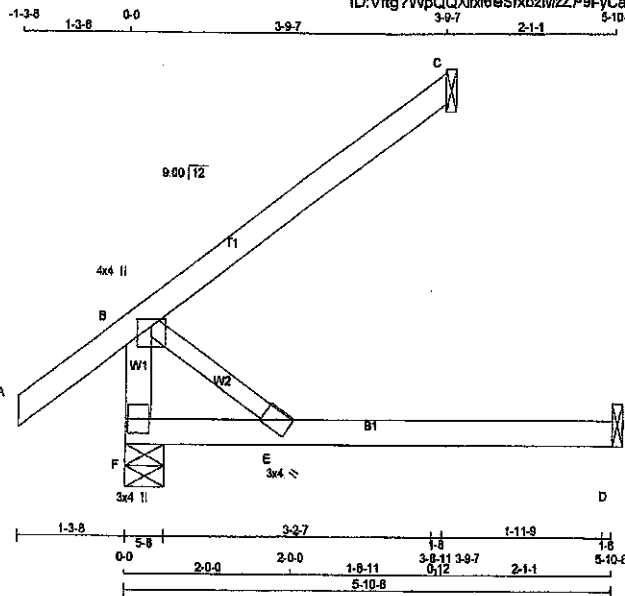
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JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



JOB NAME 200142-400307	TRUSS NAME J8	QUANTITY 1	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:51 2018 Page 1
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Scale = 1/24.0

LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMV+w	MT20	3.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

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

BEARINGS							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	447	0	447	0	0	5-8	5-8
C	193	0	193	0	0	1-8	1-8
D	113	0	144	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LOASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	332	190/0	62/0	0/0	0/0	80/0	0/0
C	133	110/0	0/0	0/0	0/0	23/0	0/0
D	103	0/0	62/0	0/0	0/0	41/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
F-B	-334/0	0.0 0.0 0.03 (1)	B-E	0/0 0.00 (1)
A-B	0/42	-102.1 -102.1 0.14 (1)		
B-C	0/0	-102.1 -102.1 0.25 (1)		
F-E	0/0	-38.5 -38.5 0.25 (3)		
E-D	0/0	-38.5 -38.5 0.30 (3)		

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, NBC 2010, NBC 2015

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

(55 % OF 37.6 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 (0.20")
CALCULATED VERT. DEFL. (LL) = L/925 (0.08")
ALLOWABLE DEFL. (TL) = L/360 (0.20")
CALCULATED VERT. DEFL. (TL) = L/885 (0.13")

CSI: TC=0.25/1.00 (B-C:1), BC=0.30/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.27 (B) (INPUT = 0.90)
JSI METAL = 0.07 (B) (INPUT = 1.00)



DATE: MAY 11 2019
FILE NO: 11910943
STRUCTURAL
CHECK ONLY

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

RECEIVED
JUN 10 2019

TOWN OF SAULT STEPHEN
BUILDING DEPARTMENT
FILE NO.

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	Brentwood 3A	DRWG NO.
200142-400307	J9	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

ID: Vtfg?WpQQXfndBSeShxbzMzP9-yCaPoQVoBACx_NQ5JKeB?IWP8Srxcx7Y1yJMgzlYnZ
Version 8.230 S Nov 17 2018 M&T Industries, Inc. Wed May 8 14:06:51 2019 Page 1
Scale = 1:17.7

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

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

PLATES (Table is in inches)
JT TYPE PLATES W LEN Y X
B TMVWW+p MT20 4.0 4.0 1.00 2.00
E BMVW+w MT20 2.0 4.0
F BMVW+p MT20 3.0 4.0

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ UPLIFT		
JT	323	0	323	0	5-8	5-8
F	37	0	37	-45	1-8	1-8
C	36	0	48	0	1-8	1-8

SEE MITTEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

	COMBINED	MAX/MIN COMPONENT REACTIONS				
		SNOW	LIVE	PERM LIVE	WIND	DEAD SOIL
JT	229	163 / 0	20 / 0	0 / 0	0 / 0	47 / 0
F	25	21 / -31	0 / 0	0 / 0	0 / 0	4 / 0
C	33	0 / 0	20 / 0	0 / 0	0 / 0	13 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 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				WEBS			
	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	MAX. FORCE (LBS)	FACTORED CS1 (LC)	UNBRACED LENGTH FR-TO	
FR-TO								
F-B	-286 / 0	0.0	0.0	0.03 (1)	7.81			
A-B	0 / 42	-102.1	-102.1	0.14 (1)	10.00			
B-C	-33 / 0	-102.1	-102.1	0.13 (1)	6.25			
F-E	0 / 0	-38.5	-38.5	0.03 (3)	10.00			
E-D	0 / 0	-38.5	-38.5	0.03 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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. CIC

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

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

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 37.6 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 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=0.14/1.00 (A-B-1), BC=0.03/1.00 (E-F-3). WB=0.00/1.00 (B-E-1), SS=0.09/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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

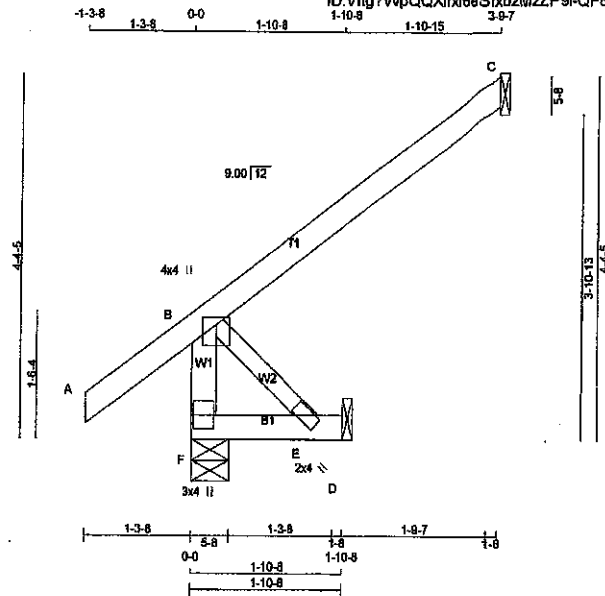
RECEIVED
JUN 10 2019
TOWN OF SALEM
BUILDING SECTION
FILE NO

LICENSED PROFESSIONAL ENGINEER
H.O.G. ALVES
100089023
PROVINCE OF ONTARIO

DATE: TAM 7/9/2019
STRUCTURAL
ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	J10	1	1	Brentwood 3A	
Tamarack Roof Truss, Burlington					

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ID: Vfig?WpQQXih8eSfbzP9i-QP8n0mVRyUKocX_Ht29QYV3Y8sB0LONhGcSvp0zIYn1



Scale = 1/25.8

TOTAL WEIGHT = 12 lb [M]

LUMBER

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

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMVW+p	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

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

JT	GROSS REACTION	FACTORED		INPUT	RECORD
		VERT	HORZ		
F	370	0	0	5-8	5-8
C	193	0	0	1-8	1-8
D	38	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LOASE	MAX. MIN.	COMPONENT REACTIONS	WIND	DEAD	SOIL
F	262	190/0	20/0	0/0	52/0	0/0
C	133	110/0	0/0	0/0	23/0	0/0
D	33	0/0	20/0	0/0	13/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS						WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CS1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)			
FR-TO		FROM	TO			FR-TO					
F-B	-334 / 0	0.0	0.0	0.03 (1)	7.81	B-E	0 / 0	0.00 (1)			
A-B	0 / 42	-102.1	-102.1	0.14 (1)	10.00						
B-C	0 / 0	-102.1	-102.1	0.25 (1)	10.00						
F-E	0 / 0	-38.5	-38.5	0.04 (3)	10.00						
E-D	0 / 0	-38.5	-38.5	0.03 (3)	10.00						

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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, CBC 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 28.1 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=0.25/1.00 (B-C:1), BC=0.04/1.00 (E-F:3), WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1887	788	1887	1858

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

RECEIVED
JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



UNL. ACC. TAM 71910945
STRUCTURAL
CALCULATIONS

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	Brentwood 3A	DRWG NO.
200142-400307	J11	5	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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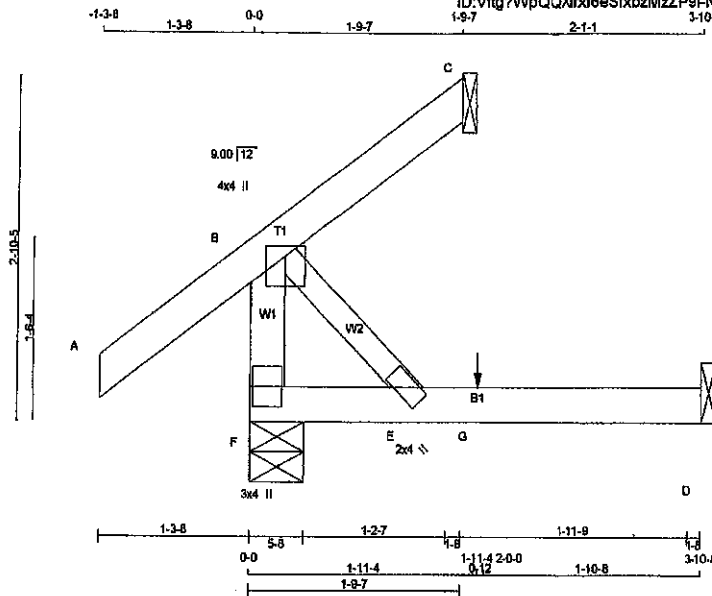
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	J12	1	1	Brentwood 3A	
Ternareck Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:08:54 2019 Page 1
ID: Vltg?WpQQXfkd6eSfxbzMzZP9i-NnGYQXShU5bWq8g?SCudw8v9frupls_jwx0tvzlYn?

Scale = 1:17.7



LUMBER

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMVW+p	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
F	361	0	381	0	5-8	5-8
C	37	0	37	0	1-8	1-8
D	75	0	95	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN. COMPONENT REACTIONS				
		SNOW	LIVE	PERM. LIVE	WIND	DEAD
F	284	183 / 0	41 / 0	0 / 0	0 / 0	61 / 0
C	25	21 / -31	0 / 0	0 / 0	0 / 0	4 / 0
D	68	0 / 0	41 / 0	0 / 0	0 / 0	27 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CS1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO		FROM	TO			FR-TO		
F-B	-206 / 0	0.0	0.0	0.03 (1)	7.81	B-E	0 / 0	0.00 (1)
A-B	0 / 42	-102.1	-102.1	0.15 (1)	10.00			
B-C	-33 / 0	-102.1	-102.1	0.15 (1)	6.25			
F-E	0 / 0	-38.5	-38.5	0.12 (2)	10.00			
E-G	0 / 0	-38.5	-38.5	0.14 (2)	10.00			
G-D	0 / 0	-38.5	-38.5	0.14 (2)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	1	1		FRONT	VERT	TOTAL		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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, NBCC 2010, NBCC 2015

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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) = L/360 (0.19')
CALCULATED VERT. DEFL. (LL) = L/999 (0.01')
ALLOWABLE DEFL. (TL) = L/360 (0.19')
CALCULATED VERT. DEFL. (TL) = L/999 (0.02')

CS1: TC=0.15/1.00 (A-B:1), BC=0.14/1.00 (D-E:2), WB=0.00/1.00 (B-E:1), SS1=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1657

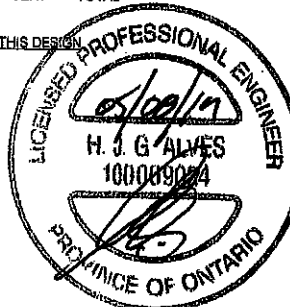
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

RECEIVED
JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.



17410947
NATURAL
GAS

JOB NAME

TRUSS NAME

QUANTITY

PLY

JOB DESC.

DRWG NO.

200142-400307

J13

1

1

Brentwood 3A

Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:08:54 2019 Page 1

ID: Vltg?WpQQXf8eSfxbzMzZP9i-NnGYQShU6bWrg8g?SCudw8vNfXpls_jwx0tvzYn7

Scale = 1:17.7

LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

SPF

SPF

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE

PLATES

W

LEN

Y

X

B TMVW+p

MT20

4.0

4.0

1.00

2.00

E BMW+w

MT20

2.0

4.0

F BMV1+p

MT20

3.0

4.0

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

F

323

0

323

0

0

5-8

5-8

C

37

0

37

0

-45

1-8

1-8

D

38

0

46

0

0

1-8

1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

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

OK w/100 P.M.L.W.H.

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

F

229

183 / 0

20 / 0

0 / 0

0 / 0

47 / 0

0 / 0

C

25

21 / -31

0 / 0

0 / 0

0 / 0

4 / 0

0 / 0

D

33

0 / 0

20 / 0

0 / 0

0 / 0

13 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS

MAX. FACTORED

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX.

MAX.

MEMB.

FORCE

MAX.

CS1 (LC)

UNBRAC

LENGTH

FR-TO

FR-TO

FR-TO

FR-TO

F-B

-288 / 0

0.0

0.0

0.03 (1)

7.81

B-E

0 / 0

0.0

0.00 (1)

A-B

0 / 42

-102.1

-102.1

0.14 (1)

10.02

B-C

-33 / 0

-102.1

-102.1

0.13 (1)

8.25

F-E

0 / 0

-38.5

-38.5

0.03 (3)

10.00

E-D

0 / 0

-38.5

-38.5

0.03 (3)

10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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

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 2010, CBC 2012

- CSA 088-09, CSA 088-14

- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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

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=0.14/1.00 (A-B-1), BC=0.03/1.00 (E-F-3), WB=0.00/1.00 (B-E-1), SB=0.09/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE GRIP (DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1867 788 1987 1858

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)

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

RECEIVED

JUN 10 2019

TOWN OF CALEDON BUILDING SECTION

FILE NO.

LICENSED PROFESSIONAL ENGINEER

05/02/19

H.O. G. ALVES

100009004

PROVINCE OF ONTARIO

ENGINEER

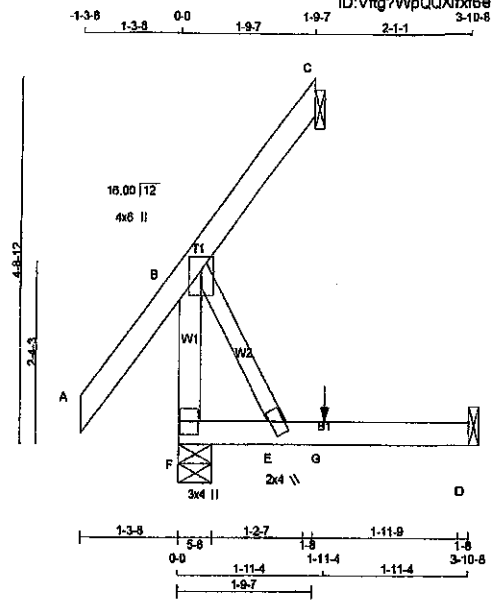
77110948

STRUCTURAL

ONLY

JOB NAME 200142-400307	TRUSS NAME J14	QUANTITY 2	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:55 2019 Page 1
ID:Vftg?WpQQXfnd6eSfxbzMzP9f-qweoYJFPJNT_JsYAJ7A7h4m3B5Y168yahaPLz/Yn



Scale = 1:27.5

TOTAL WEIGHT = 2 X 15 = 30 lb

LUMBER
N.L.G.A. RULES

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

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00
E	BMVW+w	MT20	2.0	4.0	
F	BMV1+p	MT20	3.0	4.0	

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	UP/LIFT
F	386	0	386	0
C	35	0	35	0
D	75	0	95	0

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D
PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
F	COMBINED	166 / 0	41 / 0	0 / 0	81 / 0	0 / 0
C	24	20 / -32	0 / 0	0 / 0	4 / 0	0 / 0
D	68	0 / 0	41 / 0	0 / 0	27 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO						
F-B	-292 / 0	0.0	0.0	0.04 (1)	7.81	0.00 (1)
A-B	0 / 58	-102.1	-102.1	0.16 (1)	10.00	
B-C	-45 / 0	-102.1	-102.1	0.15 (1)	6.25	
F-E	0 / 0	-38.5	-38.5	0.13 (3)	10.00	
E-G	0 / 0	-38.5	-38.5	0.14 (3)	10.00	
G-D	0 / 0	-38.5	-38.5	0.14 (3)	10.00	

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	1	1		FRONT	VERT	TOTAL		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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. G.C.

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

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

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

(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 (0.18")
CALCULATED VERT. DEFL. (LL) = L/999 (0.01")
ALLOWABLE DEFL. (TL) = L/360 (0.18")
CALCULATED VERT. DEFL. (TL) = L/999 (0.02")

CS: TC=0.18/1.00 (A-B-1), BC=0.14/1.00 (D-E-3), WB=0.09/1.00 (B-E-1), SS=0.08/1.00 (E-F-3)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

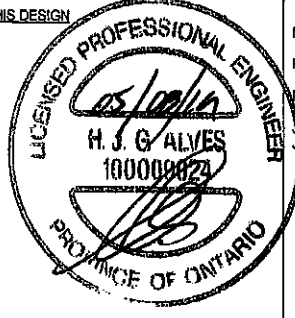
PLATE	GRIP (DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP = 0.17 (B) (INPUT = 0.80)
SI METAL = 0.07 (B) (INPUT = 1.00)

RECEIVED
JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO.



EWALD TAM 17910949
STRUCTURAL
CALCULATIONS ONLY

JOB NAME

TRUSS NAME

QUANTITY

PLY

JOB DESC.

DRWG NO.

200142-400307

J15

2

1

Brentwood 3A

Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:58 2019 Page 1

ID: Vltg?WpQQXf6aSt6zLmZZP9JANI8Zx0JrE58I36IEMILEFKTY?HCMHAEQ?xnziYmz

1-3-8

1-3-8

0-0

1-9-7

1-2-7

1-10-0

18.00

4x6 II

4-8-12

2-4-3

3-8

3x4 II

2x4 II

1-3-8

5-8

1-2-7

0-0

1-10-0

1-9-7

Scale = 1:27.5

LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

SPF

F - B

2x4

DRY

No.2

SPF

A - C

2x4

DRY

No.2

SPF

F - D

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE

PLATES

W

LEN

Y

X

B TMVW+p

MT20

4.0

6.0

2.00

2.00

E BMVW+p

MT20

2.0

4.0

F BMV1+p

MT20

3.0

4.0

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

RECORD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

F 328

0

328

0

0

5-8

5-8

C 35

0

35

0

-47

1-8

1-8

D 38

0

46

0

0

1-8

1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN COMPONENT REACTIONS

JT COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

F 233

168 / 0

20 / 0

0 / 0

0 / 0

47 / 0

0 / 0

C 24

20 / -32

0 / 0

0 / 0

0 / 0

4 / 0

0 / 0

D 33

0 / 0

20 / 0

0 / 0

0 / 0

13 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS

MAX. FACTORED

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

VERT. LOAD LC1

MAX.

MEMB.

FORCE

MAX.

CS1 (LC)

UNBRAC

LENGTH

FR-TO

FR-TO

F-B

-202 / 0

0.0

0.0

0.04 (1)

7.81

B-E

0 / 0

0.00 (1)

A-B

0 / 58

-102.1

-102.1

0.15 (1)

10.00

B-C

-45 / 0

-102.1

-102.1

0.14 (1)

8.25

F-E

0 / 0

-38.5

-38.5

0.03 (3)

10.00

E-D

0 / 0

-38.5

-38.5

0.03 (3)

10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012

- CSA 088-08, CSA 088-14

- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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 (0.19")

CALCULATED VERT. DEFL.(LL) = L/999 (0.00")

ALLOWABLE DEFL.(TL) = L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CS1: TC=0.15/1.00 (A-B:1), BC=0.03/1.00 (E-F:3), WB=0.00/1.00 (B-E:1), SS=0.07/1.00 (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 1687 768 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)

JSI METAL= 0.07 (B) (INPUT = 1.00)

TOTAL WEIGHT = 2 X 13 = 25 lb

RECEIVED

JUN 10 2019

TOWN OF CALEDON

BUILDING SECTION

LICENSED PROFESSIONAL ENGINEER

05/09/19

H. G. ALVES

100009024

PROVINCE OF ONTARIO

WTD 2019 TOWN 17109.50

17109.50

JOB NAME

TRUSS NAME

QUANTITY

PLY

JOB DESC.

DRWG NO.

200142-400307

J21

3

1

Brentwood 3A

Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:08:57 2019 Page 1

ID: Vftg?WpQQXlfx6eSfxbzZP0i-nMxg3UZZn0z4lItFgblbFymN2tqO0fcQPuAgTEzIYmy

1-3.8

1-3.8

0-0

5-1.8

5-1.8

3.4-3

4.5

7.00 (12)

2.9-3

3.4-3

1-4.8

3-8

4-4.8

1-3.8

5-1.8

5-1.8

Scale = 1/21.0

LUMBER

N.L.G.A. RULES

CHORDS SIZE

LUMBER

DESCR.

SPF

A - C

2x4

DRY

No.2

B - D

2x4

DRY

No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE

PLATES

W

LEN

Y

X

B

TMB1-1

MT20

3.0

4.0

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

C

235

0

235

0

0

4-8

4-8

D

126

0

126

0

0

3-8

3-8

B

500

0

500

0

0

3-8

3-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

C

164

128 / 0

7 / 0

0 / 0

0 / 0

31 / 0

0 / 0

D

105

23 / 0

47 / 0

0 / 0

0 / 0

36 / 0

0 / 0

B

365

228 / 0

54 / 0

0 / 0

0 / 0

83 / 0

0 / 0

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

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.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FR-TO

FORCE

VERT.

PLF

CSI (LC)

UNBRAC

LENGTH

FR-TO

FORCE

MAX

CSI (LC)

A - B

0 / 34

-102.1

-102.1

0.13 (1)

10.00

E - F

-395 / 158

0.00 (1)

B - F

-105 / 72

-102.1

-102.1

0.09 (3)

8.25

F - C

-5 / 7

-102.1

-102.1

0.37 (1)

10.00

B - E

0 / 0

-38.5

-38.5

0.22 (1)

10.00

E - D

0 / 0

-38.5

-38.5

0.28 (1)

10.00

WEBS

MAX. FACTORED

MEMB.

MAX. FACTORED

FR-TO

FORCE

MAX

CSI (LC)

A - B

0 / 34

-102.1

-102.1

0.13 (1)

10.00

B - F

-105 / 72

-102.1

-102.1

0.09 (3)

8.25

F - C

-5 / 7

-102.1

-102.1

0.37 (1)

10.00

B - E

0 / 0

-38.5

-38.5

0.22 (1)

10.00

E - D

0 / 0

-38.5

-38.5

0.28 (1)

10.00

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, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, CBC 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 (0.19")

CALCULATED VERT. DEFL.(LL) = L/969 (0.06")

ALLOWABLE DEFL.(TL) = L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/590 (0.10")

CSI: TC=0.37/1.00 (C-F:1), BC=0.28/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SS=0.38/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 818 354 1867 788 1867 1866

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.37 (B) (INPUT = 0.80)

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

TOTAL WEIGHT = 3 X 15 = 44 lb

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TOWN OF CALEDON

BUILDING SECTION

FILE NO.

LICENSED PROFESSIONAL ENGINEER

H. J. G. ALVES

100008024

PROVINCE OF ONTARIO

7910951

JOB NAME 200142-400307	TRUSS NAME J22	QUANTITY 6	PLY 1	JOB DESC. Brentwood 3A	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:08:57 2019 Page 1 ID:Vfig?WpQQXlxf6eSfxbzMzZP9l-nMxg3UZZn0z4iltFgblbFYmQht30fcQPuAgTEzIymy	

Scale = 1:15.2

LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - C 2x4 DRY No.2 SPF B - D 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">JT</th> <th colspan="2">FACTORED GROSS REACTION</th> <th colspan="2">MAXIMUM FACTORED GROSS REACTION</th> <th rowspan="2">INPUT BRG IN-SX</th> <th rowspan="2">REQD BRG IN-SX</th> </tr> <tr> <th>VERT</th> <th>HORZ</th> <th>DOWN</th> <th>UP/LIFT</th> </tr> <tr> <td>C</td> <td>142</td> <td>0</td> <td>142</td> <td>0</td> <td>1-8</td> <td>1-8</td> </tr> <tr> <td>B</td> <td>359</td> <td>0</td> <td>359</td> <td>0</td> <td>3-8</td> <td>3-8</td> </tr> <tr> <td>D</td> <td>78</td> <td>0</td> <td>85</td> <td>0</td> <td>5-8</td> <td>5-8</td> </tr> </table>		JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX	VERT	HORZ	DOWN	UP/LIFT	C	142	0	142	0	1-8	1-8	B	359	0	359	0	3-8	3-8	D	78	0	85	0	5-8	5-8	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, 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 (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 (0.19") 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=0.13/1.00 (A-B:1), BC=0.11/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), 8SI=0.18/1.00 (8-E:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1887 788 1887 1658 PLATE PLACEMENT TOL = 0.250 inches PLATE ROTATION TOL = 5.0 Deg. JSI GRIP = 0.27 (B) (INPUT = 0.80) JSI METAL = 0.08 (B) (INPUT = 1.00)																																																																																			
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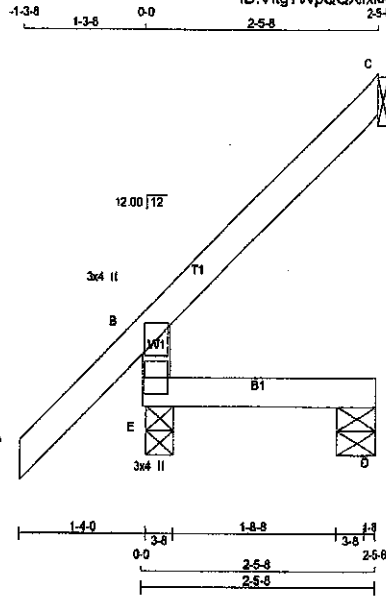
TOWN OF CALEDON
BUILDING SECTION
FILE NO.

17910952

STRUCTURAL
ENGINEER

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
200142-400307	J23	9	1	Brentwood 3A	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:06:58 2019 Page 1
ID:Vftg?WpQXhM6eSfxbzMzP9t-FZV2GqaBYK5xKSSREIGqomJbHGELi6saeYvE?gzYmx



Scale = 1/2\"/>

TOTAL WEIGHT = 9 X 10 = 88 lb
[M]

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG
E	353	0	353	0	0	0	3.8	3-8	IN-SX
C	94	0	94	0	0	0	1.8	1-8	
D	40	0	52	0	0	0	5-0	5-0	

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD	SOIL
		SNOW	LIVE				
E	255	170 / 0	30 / 0	0 / 0	0 / 0	55 / 0	0 / 0
C	65	54 / 0	0 / 0	0 / 0	0 / 0	11 / 0	0 / 0
D	37	0 / 0	22 / 0	0 / 0	0 / 0	15 / 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)

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		
E-B	-289 / 0	0.0	0.0	0.03 (3)	7.81		
A-B	0 / 50	-102.1	-102.1	0.14 (1)	10.00		
B-C	-22 / 0	-102.1	-102.1	0.10 (1)	8.25		
E-D	0 / 0	-38.5	-38.5	0.04 (3)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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, NBC 2010, NBC 2015

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

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

(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) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/989$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/989$ (0.00")

CSI: TC=0.14/1.00 (A-B:1), BC=0.04/1.00 (D-E:3),
WB=0.00/1.00 (n/a:0), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX	MIN	MAX
618	354	1987
788	1987	1655

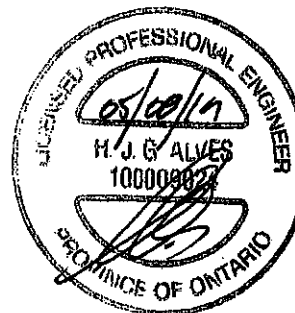
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

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ENGINEER 17910753
TOWN OF CALEDON
BUILDING SECTION



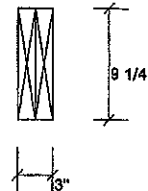
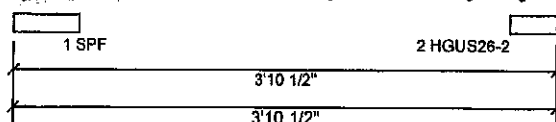
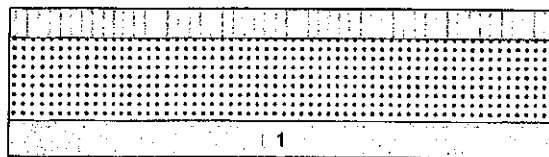
isDesign™

Client:
Project:
Address:Date: 5/8/2019
Designer:
Job Name: 200142
Project #:

Page 1 of 4

B3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level

**Member Information**Type: Girder
Plies: 2
Moisture Condition: Dry
Deflection LL: 360
Deflection TL: 360
Importance: NormalApplication: 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	84	104	236	0
2	79	98	221	0

Bearings and Factored Reactions

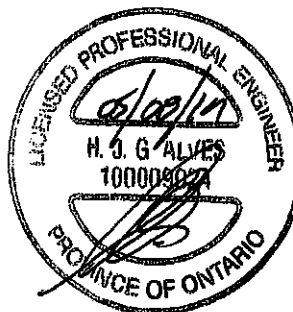
Bearing	Length	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	6%	130 / 438	568 L	1.25D+1.5S +L
2 - HGUS...	4.000"	7%	122 / 411	533 L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	365 ft-lb	2'	6039 ft-lb	0.061 (6%)	1.25D+1.5S +L	L
Unbraced	365 ft-lb	2'	5734 ft-lb	0.064 (6%)	1.25D+1.5S +L	L
Shear	456 lb	12"	3984 lb	0.114 (11%)	1.25D+1.5S +L	L
LL Defl inch	0.001 (L/31667)	2'	0.107 (L/360)	0.010 (1%)	S+0.5L	L
TL Defl inch	0.002 (L/23045)	2'	0.107 (L/360)	0.020 (2%)	D+S+0.5L	L

Design Notes

- 1 Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") 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.

EXPIRATION DATE 11/1/2019
RENEWAL
FEE \$100.00 ONLY
4/2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		4-0-0	Near Face	13 PSF	10.5 PSF	28.5 PSF	0 PSF	

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BUILDING SECTION
FILE NO

This design is valid until 12/11/2021

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



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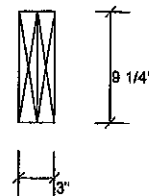
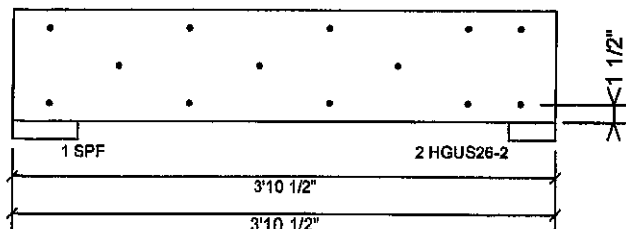
Client:
Project:
Address:

Date: 5/8/2019
Designer:
Job Name: 200142
Project #:

Page 2 of 4

B3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	41.8 %
Load	142.0 PLF
Yield Limit per Foot	340.0 PLF
Yield Limit per Fastener	113.3 lb.
Yield Mode	g
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	1.25D+1.5S+L
Duration Factor	1.00

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TOWN OF CALEDON
BUILDING SECTION
FILE NO.



W1012111111 12/10/2019
TAMARACK
LUMBER GROUP

Manufacturer Info

Tamarack Roof Trusses
3289 North Service Rd., ON
Canada
L7N3G2
(905) 335-1115



This design is valid until 12/11/2021



TECH-NOTES

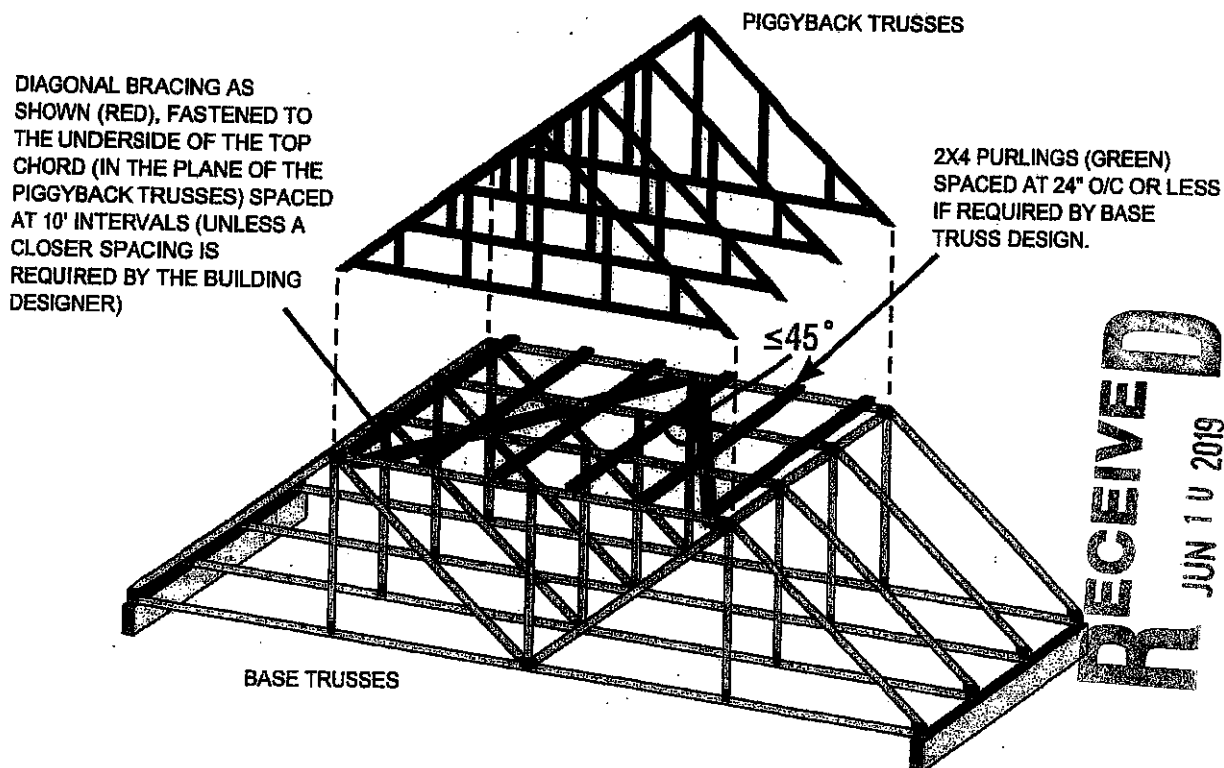
TN 15-001 Piggyback Bracing

Overview:

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

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

Detail:



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

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

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

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BUILDING SECTION
FILE NO.

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:

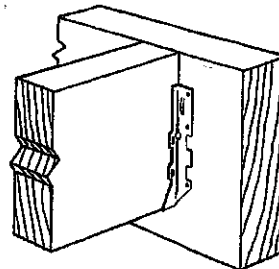
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

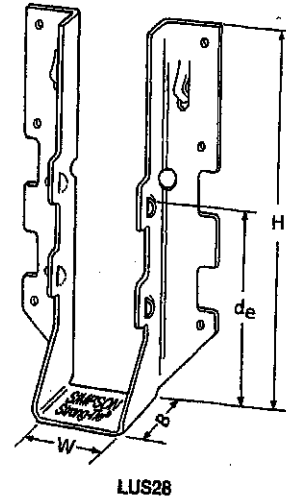
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

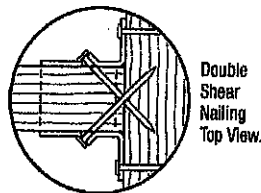
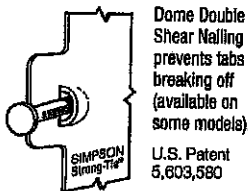


Typical LUS Installation



Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _s ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _u =1.15)	(K _n =1.00)	(K _u =1.15)	(K _n =1.00)
LUS24	18	1 1/8	3 1/8	1 1/4	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 15/16	(4) 16d	(2) 16d	835	2020	580	1435
LUS26	18	1 1/8	4 1/8	1 1/4	3 3/8	(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 3/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 1/8	6 1/8	1 1/4	3 3/8	(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 1/4	2	3 3/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/8	1 1/4	3 3/8	(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 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

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



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For more information, visit strongtie.com or call 1-800-999-5099. Simpson Strong-Tie is a leader in providing innovative, high-strength fastening solutions for a wide range of construction applications. Our products are designed to meet the most demanding requirements for safety and performance. Simpson Strong-Tie is committed to providing the highest quality products and service to our customers.

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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:

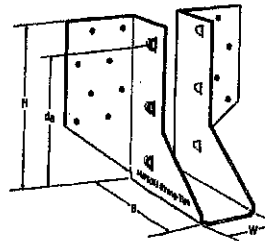
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

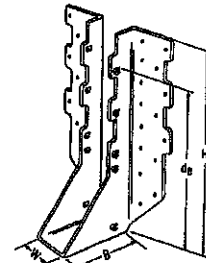
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

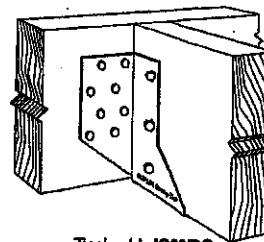
- See current catalogue for options



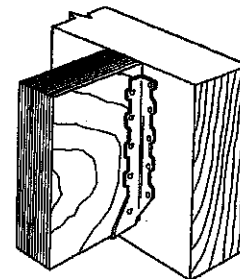
LJS26DS



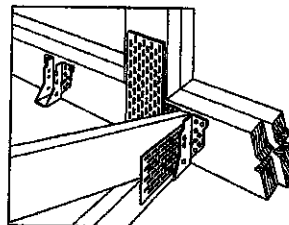
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



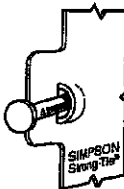
Typical HUS
Installation



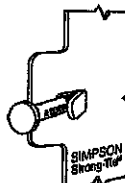
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d 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)
LJS26DS	18	1 1/16	5	3 1/2	4 3/4	(16) 16d	(8) 16d		2055	4285	1460	4115
HUS26	16	1 1/8	5 3/8	3	3 1/4	(14) 16d	(8) 16d		2705	4940	2065	3875
HUS28	16	1 1/8	7 1/2	3	6 1/2	(22) 16d	(8) 16d		3605	5365	2675	4345
HUS210	16	1 1/8	9 1/2	3	7 3/4	(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

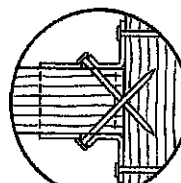
1. d₁ is the distance from the seat of the hanger to the highest joist nail.



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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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.

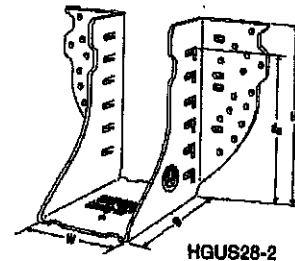
Material: 12 gauge

Finish: G90 galvanized

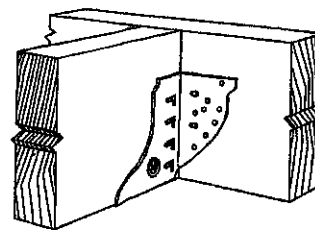
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

- 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

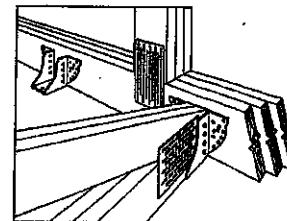
- See current catalogue for options



HGUS26-2



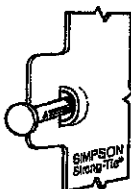
Typical HGUS
Installation



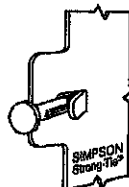
Typical HGUS
Installation
(Truss Designer to
provide fastener
quantity for
connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _g =1.15)	Normal (K _g =1.00)	Uplift (K _g =1.15)	Normal (K _g =1.00)
HGUS26	12	1 1/8	5 1/8	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/8	4	4 1/2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/2	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/8	7 1/8	5	6 1/8	(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

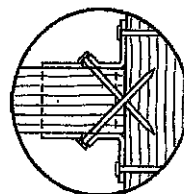
1. d_g is the distance from the seat of the hanger to the highest joist nail.



Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,803,680



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



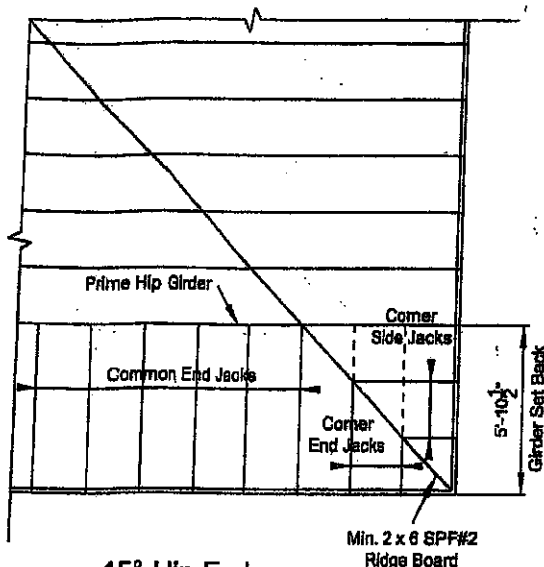
Double Shear Nailing Top View.



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TOWN OF CALLETON



45° Hip End

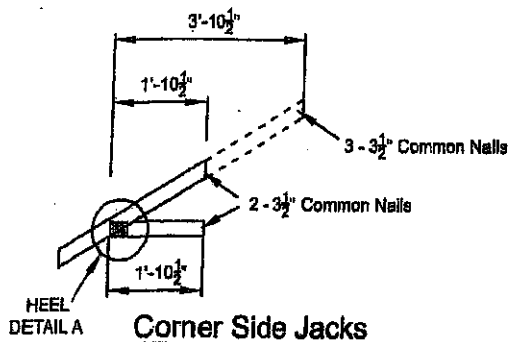
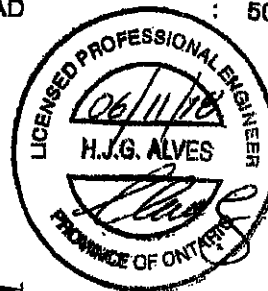
LUMBER SPECIFICATION

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

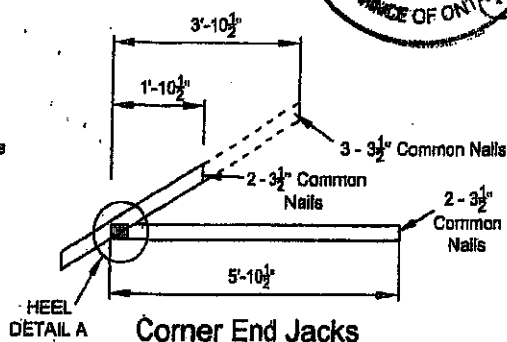
DESIGN LOAD

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.

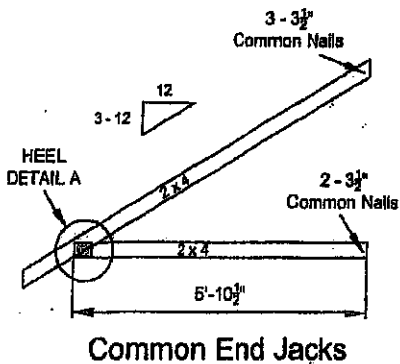
TOTAL LOAD : 50.5 P.S.F.



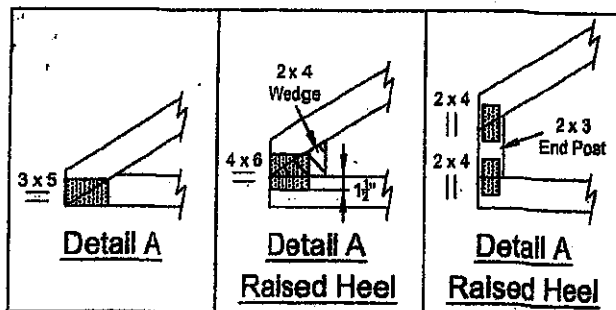
Corner Side Jacks



Corner End Jacks



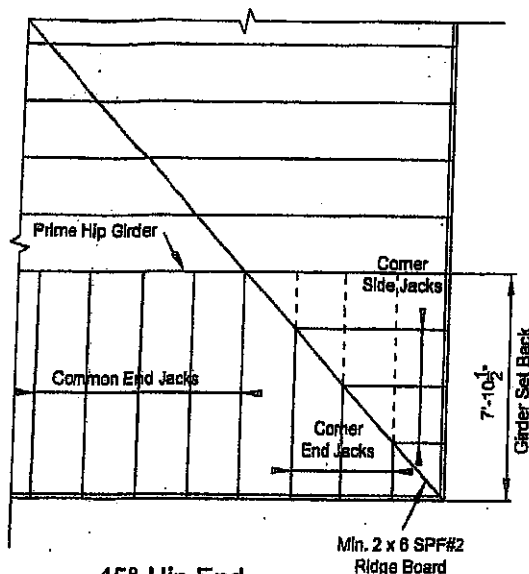
Common End Jacks



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

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45° Hip End

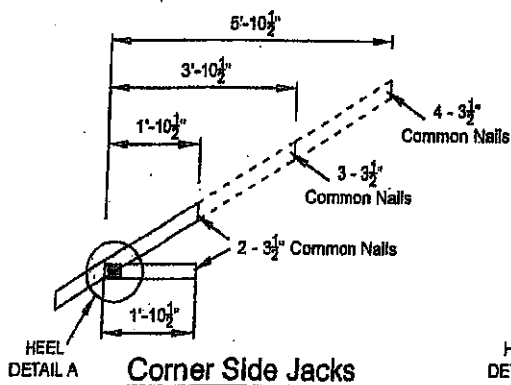
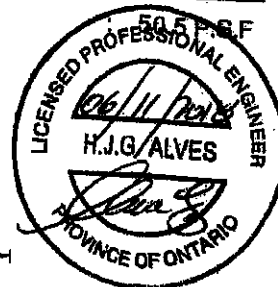
LUMBER SPECIFICATION

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

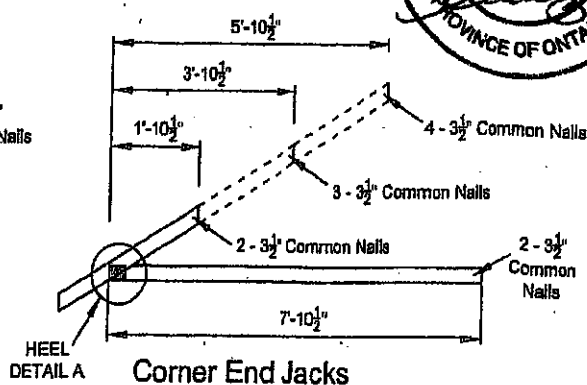
DESIGN LOAD

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.

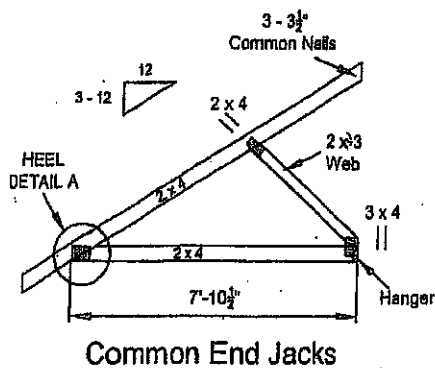
TOTAL LOAD



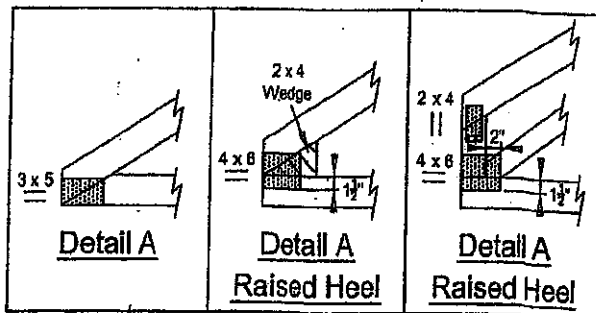
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

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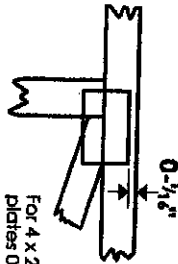
T-1800217

TOWN OF CALEDON
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Symbols

PLATE LOCATION AND ORIENTATION

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



For 4 x 2 orientation, locate plates 0-1/2" 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

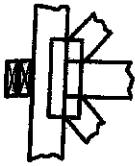
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

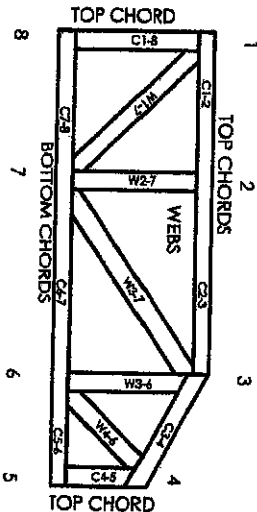


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:
TFC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses DSB-89: 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-steeleths or mm (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED COUNTERCLOCKWISE 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: MUK-7470C rev. 10-08

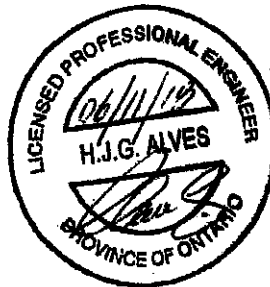
General Safety Notes

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 BCSL.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, L or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stock 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 warps at joint locations are regulated by TFC.
7. Design assumes trusses will be suitably protected from the environment in accord with TFC.
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 the 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 of 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 TFC Quality Criteria.

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TOWN OF CALEDON
BUILDING SECTION



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 M117473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1800218

Feb 09, 2018

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

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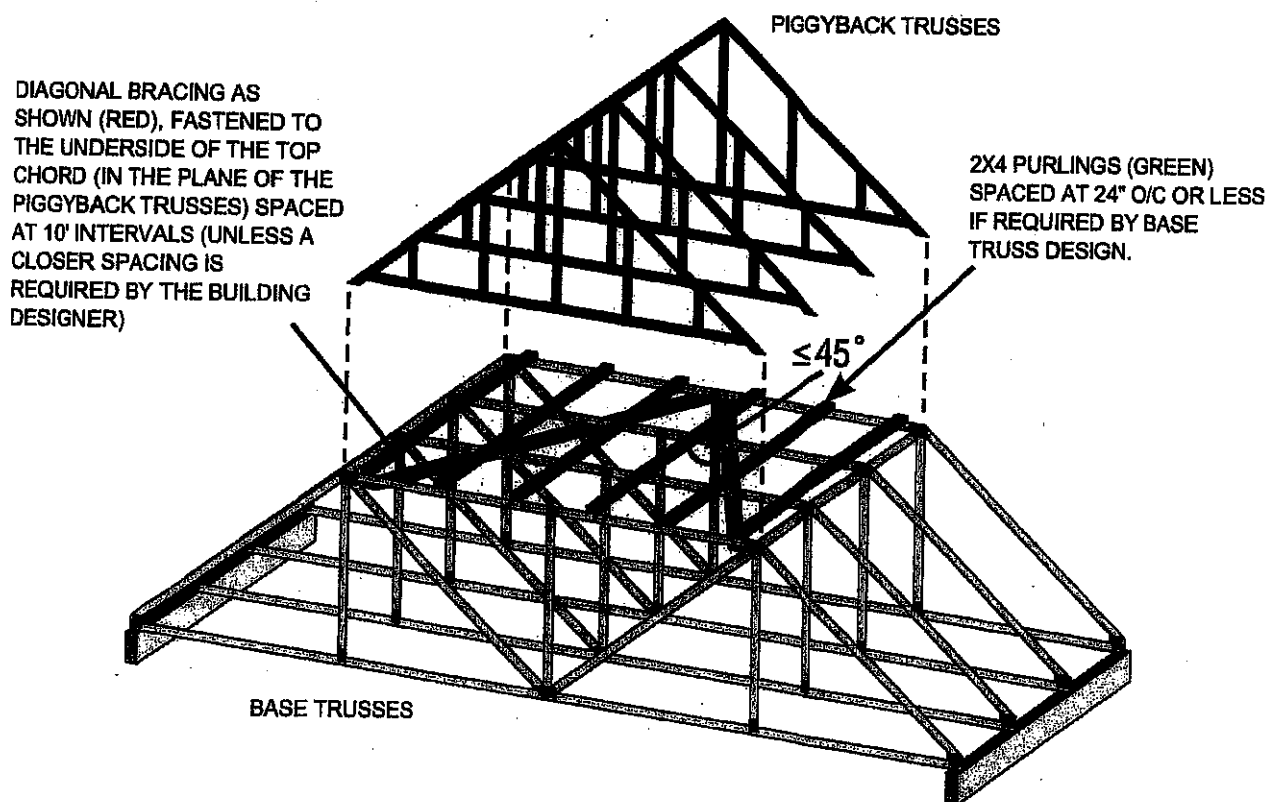
TOWN OF CALEDON
BUILDING SECTION
FILE NO.

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.

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SKETCH FROM BCSI-CANADA 2013

Disclaimer:

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

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FILE NO

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:

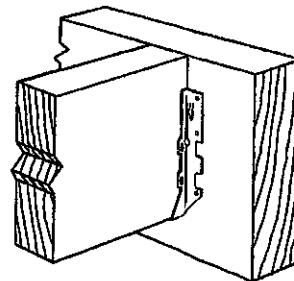
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

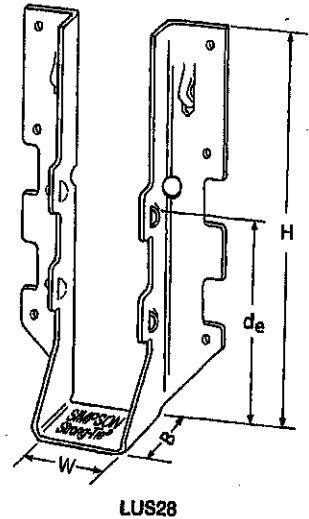
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



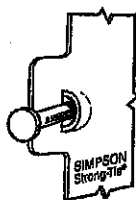
Typical LUS
Installation



LUS28

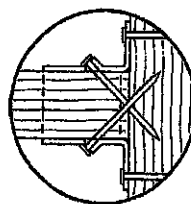
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.F.T-L		S-P-F	
								Uplift	Normal	Uplift	Normal
LUS24	18	1 1/8	3 1/2	1 1/4	1 1/8	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/2	3 1/2	2	1 1/8	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 1/8	4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



DESIGN

For more information, visit us online at www.simpsonstrongtie.com or call 1-800-999-5099. We are committed to providing you with the highest quality products and service. Our products are designed to meet or exceed all applicable codes and standards. We are a leader in the industry and we are proud to be a part of your team.

(800) 999-5099
strongtie.com

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

Material: See table

Finish: G90 galvanized

Design:

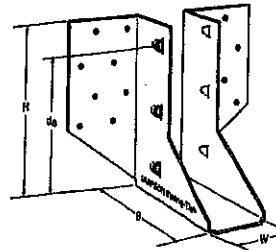
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

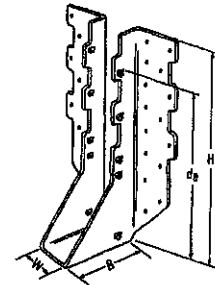
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

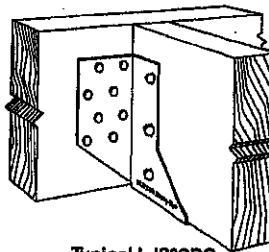
- See current catalogue for options



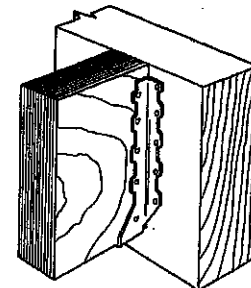
LJS26DS



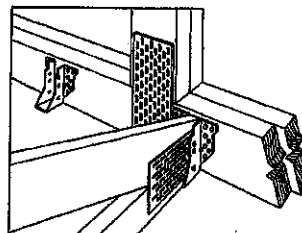
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



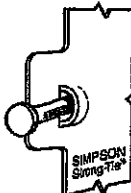
Typical HUS
Installation



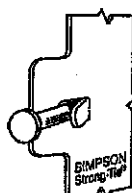
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15) lb.	Normal (K _o =1.00) lb.	Uplift (K _o =1.15) lb.	Normal (K _o =1.00) lb.
LJS26DS	18	1 1/8	5	3 1/2	4 9/16	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 1/8	5 1/2	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 1/8	7 1/2	3	6 1/2	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 1/8	9 1/2	3	7 3/4	(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

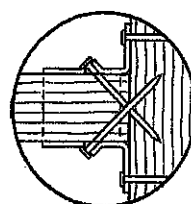
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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:

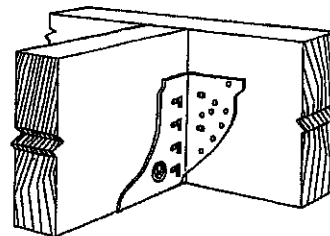
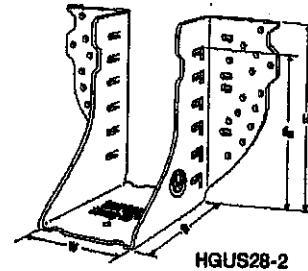
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

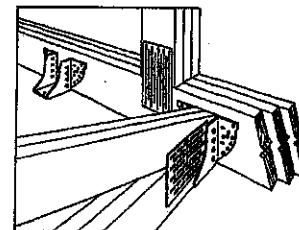
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



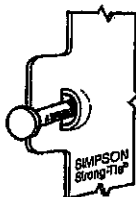
Typical HGUS
Installation



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

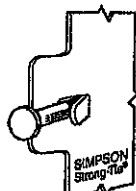
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
HGUS26	12	1 1/8	5 1/8	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	(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 1/8	7 1/8	5	6 1/8	(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. d_o is the distance from the seat of the hanger to the highest joist nail.

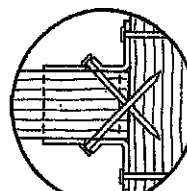


Double Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



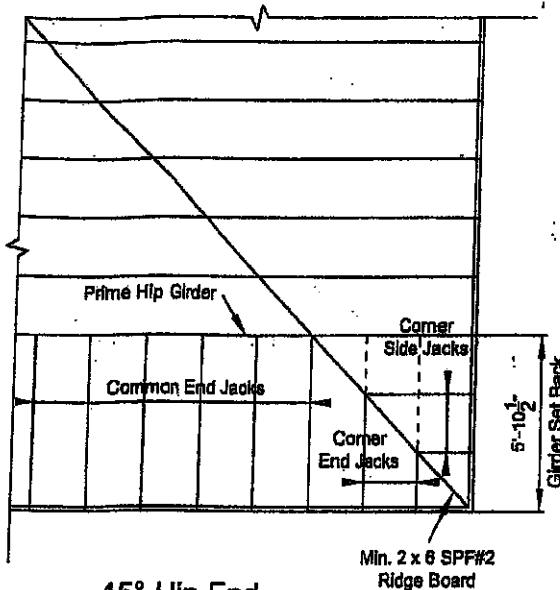
Double
Shear Nailing
Side View.
Do not
bend tab
back.



Double
Shear Nailing
Top View.



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45° Hip End

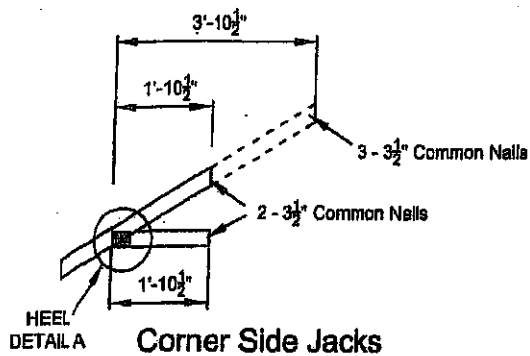
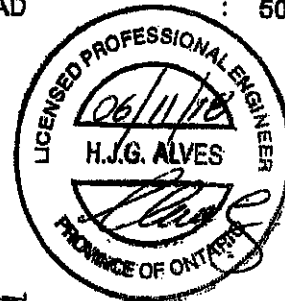
LUMBER SPECIFICATION

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

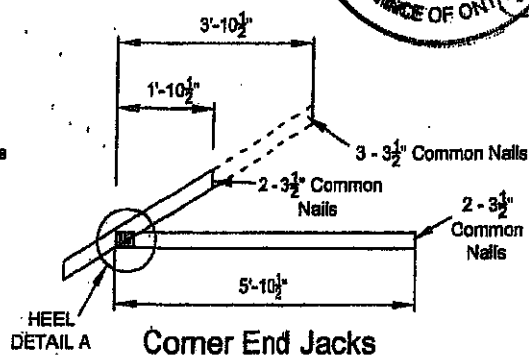
DESIGN LOAD

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.

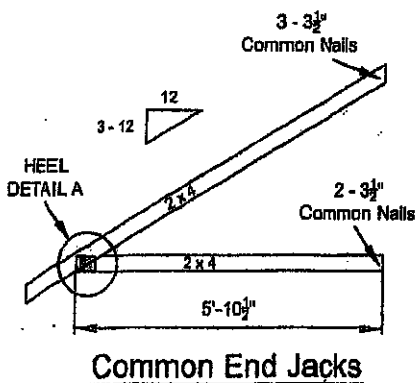
TOTAL LOAD : 50.5 P.S.F



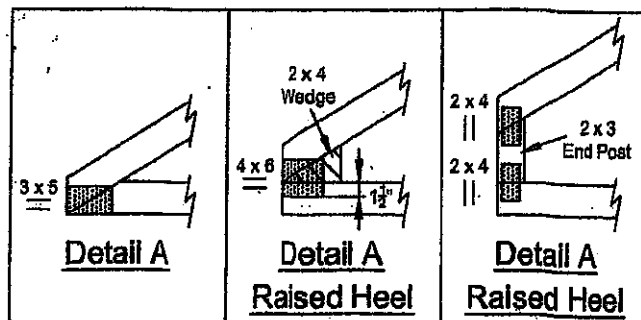
Corner Side Jacks



Corner End Jacks



Common End Jacks



Detail A

Detail A
Raised Heel

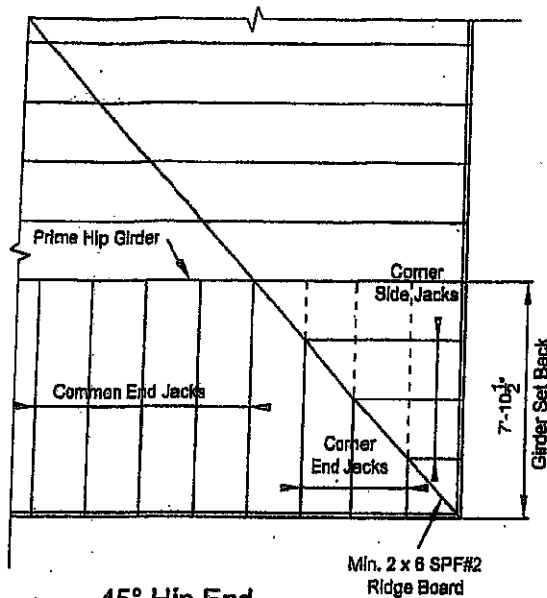
Detail A
Raised Heel

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

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45° Hip End

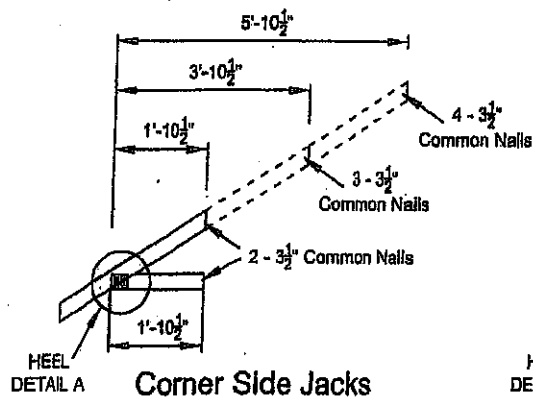
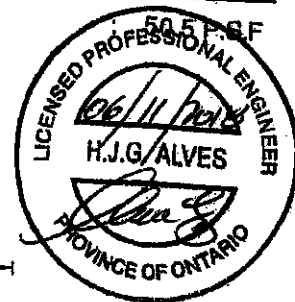
LUMBER SPECIFICATION

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

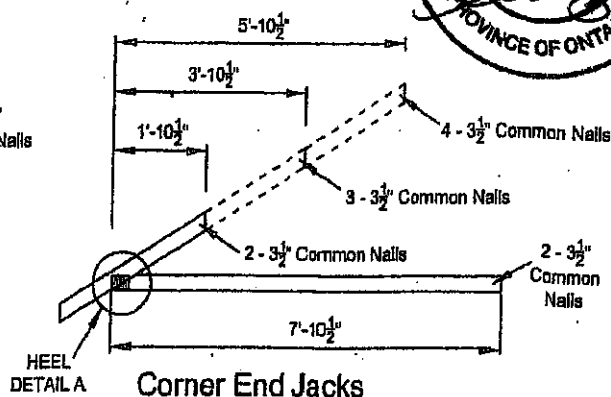
DESIGN LOAD

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.

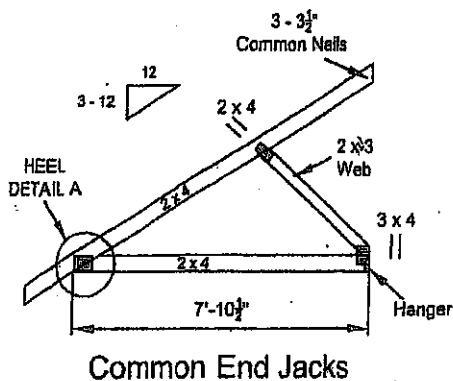
TOTAL LOAD



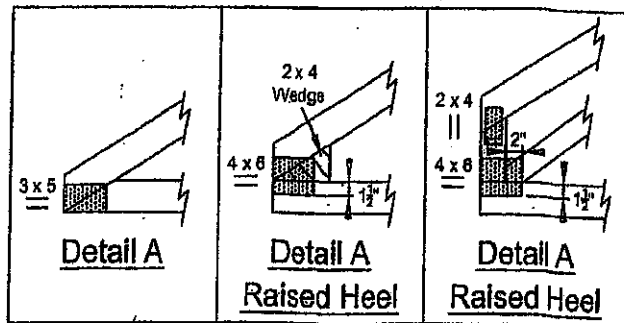
Corner Side Jacks



Corner End Jacks



Common End Jacks



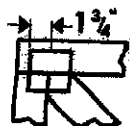
NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

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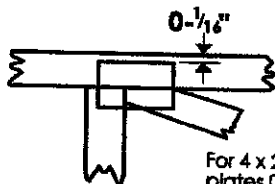
TOWN OF CALEDON
 BUILDING SECTION
 FILE NO.

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



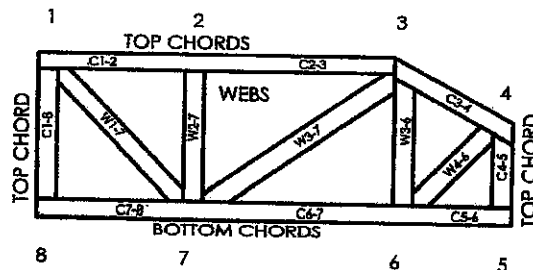
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

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

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 Engineering Reference Sheet: MI-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.

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TOWN OF CALEBON
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.

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JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO.

F-1800218 Feb 09, 2018
**THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE**