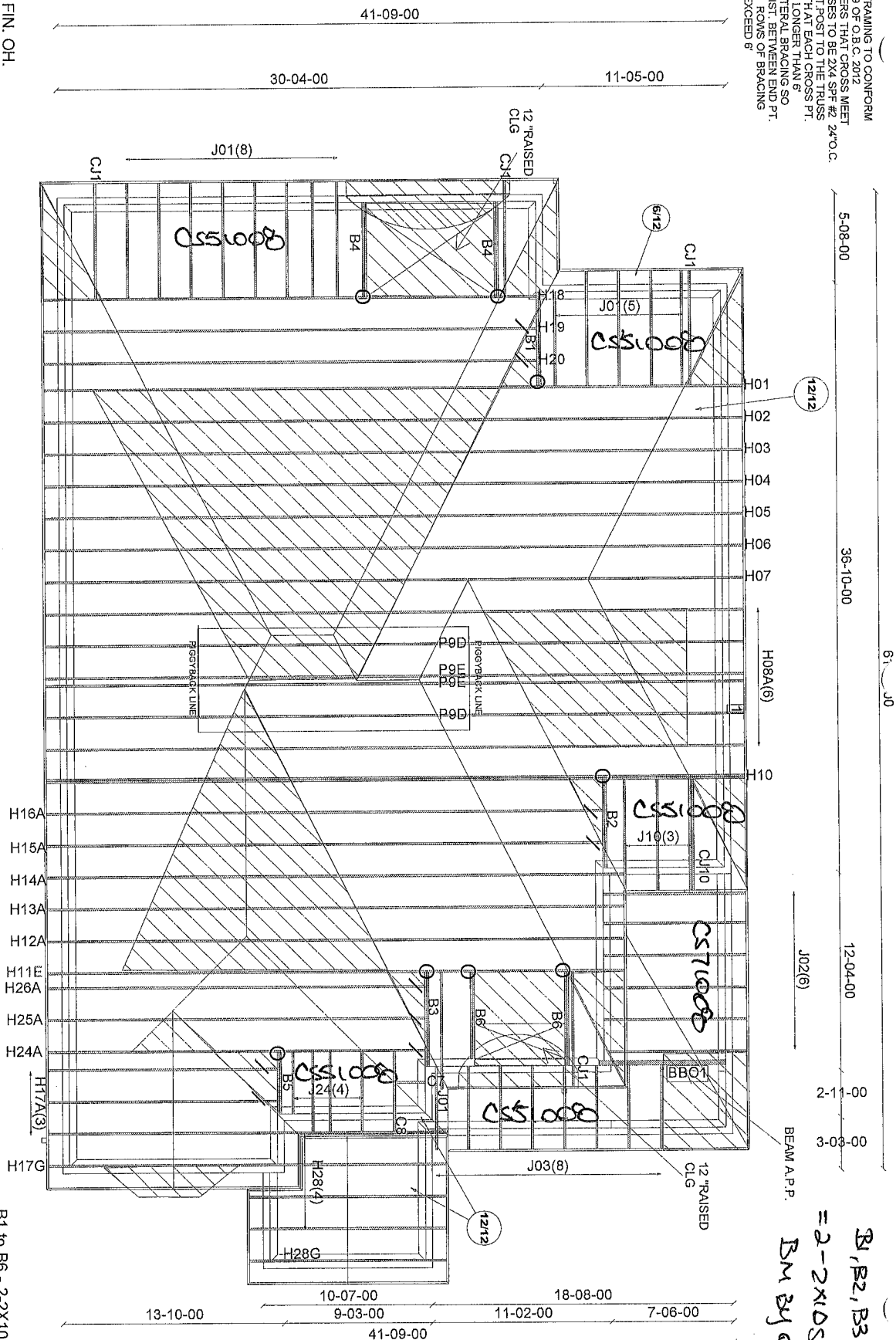


ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF PARTS THAT CROSS MEET WITHIN TRUSSES SHALL BE 2x4 SPF #2. 2x6 C. UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B30, B31, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49, B50, B51, B52, B53, B54, B55, B56, B57, B58, B59, B60, B61, B62, B63, B64, B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83, B84, B85, B86, B87, B88, B89, B90, B91, B92, B93, B94, B95, B96, B97, B98, B99, B100

SITE COPY

12" FIN. OH.
RSD HEEL-0" DROP
(2"x6" FASCIA)-FM
ASPHALT SHINGLES
2"x6" BRG./BRK.

1/4/16 227

A.18012513-A.18012514
A.18012437-A.18012443
A.18012455-A.18012472

61-00-00

B1 to B6 - 2-2X10SPF#2
/ LJS26DS
O HHUS26-2
// LUS24

CONVENTIONAL
FRAMING BY
OTHERS

Mill Creek Ver. 7.5.0



Job Track: 38514
Layout ID: 264491
Plan Log: 84728

Builder / Location:
BAYVIEW WELLINGTON HOMES / BRADFORD

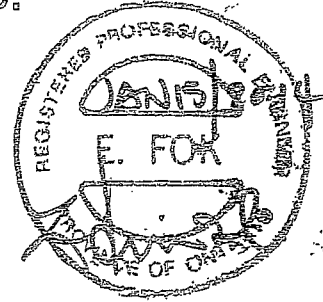
Model / Elevation:
S50-2 / B

Project: **GREEN VALLEY ESTATES**
Date: 2/10/2016 Designer: JERZY

THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA 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 ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

Stracon Engineering Inc.

69 Graydon Crescent
Richmond Hill, Ontario
L4B 3W7
(905) 832-2250 Fax (905) 832-0286



RESPONSIBILITIES

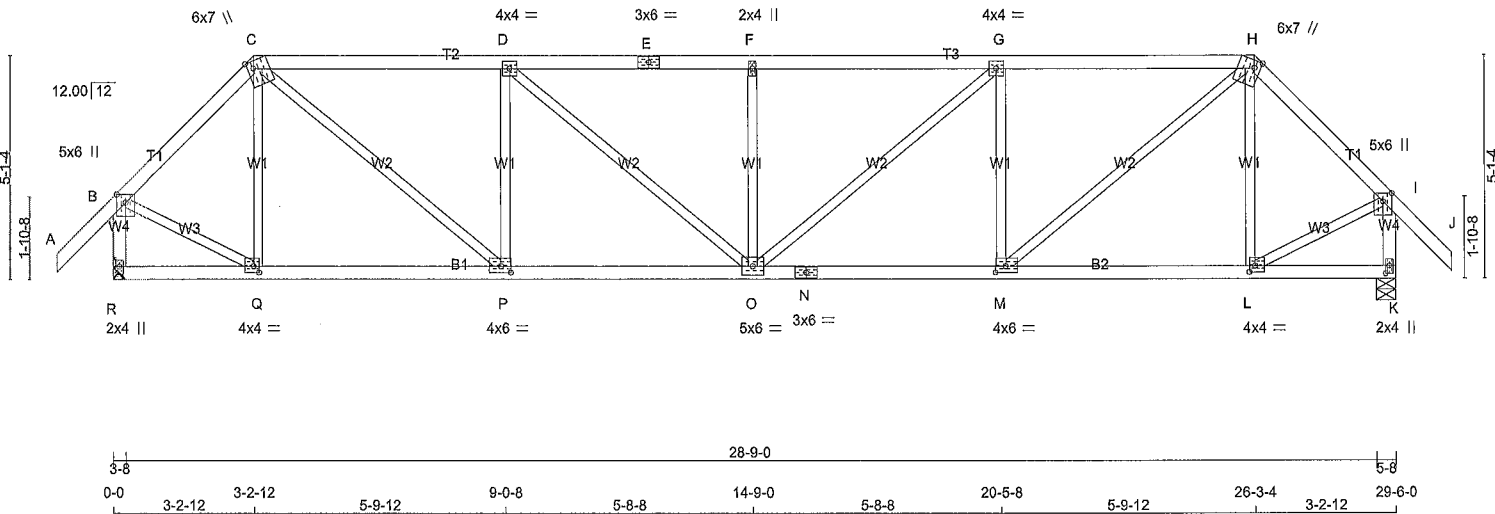
1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities with jurisdictions.
3. All dimensions are to be verified by owner contractor, architect or other authority before manufacture.
4. Stracon Engineering 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 Stracon Engineering Inc. drawings is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacture's responsibility to ensure that trusses are manufactured in conformance with Stracon Engineering Inc. specifications outlined below.

SPECIFICATIONS

1. Trusses designed by Stracon Engineering Inc. conforms to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type indicated on the drawings as well as to the procedures established by the truss plate institute of Canada. Unit stresses used are as per CSA-086-09.
2. Lumber is to be the sizes and grade specified.
3. Moisture content of lumber is not to exceed 19% in service unless otherwise specified.
4. Lumber not to be treated with chemicals unless otherwise specified.
5. Plates shall be applied to both faces of the truss at each joint and shall be positioned as specified.
6. The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals not exceeding 12.5 times in thickness.
7. Where not rigid ceiling is attached directly to the bottom chord, laterally brace the chords at intervals not exceeding 3M (10') o.c.

January 15, 2014

SITE COPY



TOTAL WEIGHT = 125 lb [M]

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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW+p	MT20	5.0	6.0 2.25 2.50
C	TTWW+m	MT20	6.0	7.0 Edge 1.75
D	TMWW-t	MT20	4.0	4.0
E	TS-t	MT20	3.0	6.0
F	TMW+w	MT20	2.0	4.0
G	TMWW-t	MT20	4.0	4.0
H	TTWW+m	MT20	6.0	7.0 Edge 1.75
I	TMVW+p	MT20	5.0	6.0 2.25 2.50
K	BMV1+p	MT20	2.0	4.0 2.25 1.00
L	BMWW-t	MT20	4.0	4.0 1.75 1.50
M	BMWW-t	MT20	4.0	6.0 1.75 2.75
N	BS-t	MT20	3.0	6.0
O	BMWWW-t	MT20	5.0	6.0
P	BMWW-t	MT20	4.0	6.0 1.75 2.75
Q	BMWW-t	MT20	4.0	4.0 1.75 1.50
R	BMV1+p	MT20	2.0	4.0 2.25 1.00
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
R	1967	0	1967	0	0	0/0	0/0	315/0	0/0
K	1967	0	1967	0	0	0/0	0/0	315/0	0/0

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
R	1364	1049/0	0/0	0/0	315/0
K	1364	1049/0	0/0	0/0	315/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.36 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.	FACTORED FORCE (LBS)	MEMB.	FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0/52	A-B	-1583/0
B-C	-1583/0	B-C	-2455/0
C-D	-2455/0	C-D	-2844/0
D-E	-2844/0	D-E	-2844/0
E-F	-2844/0	E-F	-2844/0
F-G	-2844/0	F-G	-2844/0
G-H	-2844/0	G-H	-2844/0
H-I	-2844/0	H-I	-2844/0
I-J	-2844/0	I-J	-2844/0
J-K	-2844/0	J-K	-2844/0
K-L	-2844/0	K-L	-2844/0
L-M	-2844/0	L-M	-2844/0
M-N	-2844/0	M-N	-2844/0
N-O	-2844/0	N-O	-2844/0
O-P	-2844/0	O-P	-2844/0
P-Q	-2844/0	P-Q	-2844/0
Q-R	-2844/0	Q-R	-2844/0
R-S	-2844/0	R-S	-2844/0
S-T	-2844/0	S-T	-2844/0
T-U	-2844/0	T-U	-2844/0
U-V	-2844/0	U-V	-2844/0
V-W	-2844/0	V-W	-2844/0
W-X	-2844/0	W-X	-2844/0
X-Y	-2844/0	X-Y	-2844/0
Y-Z	-2844/0	Y-Z	-2844/0
Z-A	-2844/0	Z-A	-2844/0

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL	= 32.5 PSF
DL	= 3.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 42.9 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

THIS DESIGN COMPLIES WITH:

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.98")

CALCULATED VERT. DEFL.(LL) = L/999 (0.15")

ALLOWABLE DEFL.(TL)= L/360 (0.98")

CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.74/1.00 (F-G:1), BC=0.45/1.00 (M-O:1), WB=0.39/1.00 (C-P:1), SS=0.29/1.00 (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 = 0.50

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

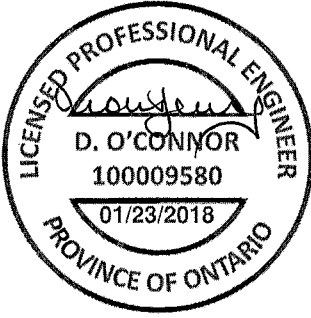
MT20 618 354 1687 822 2284 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)

JSI METAL= 0.64 (N) (INPUT = 1.00)

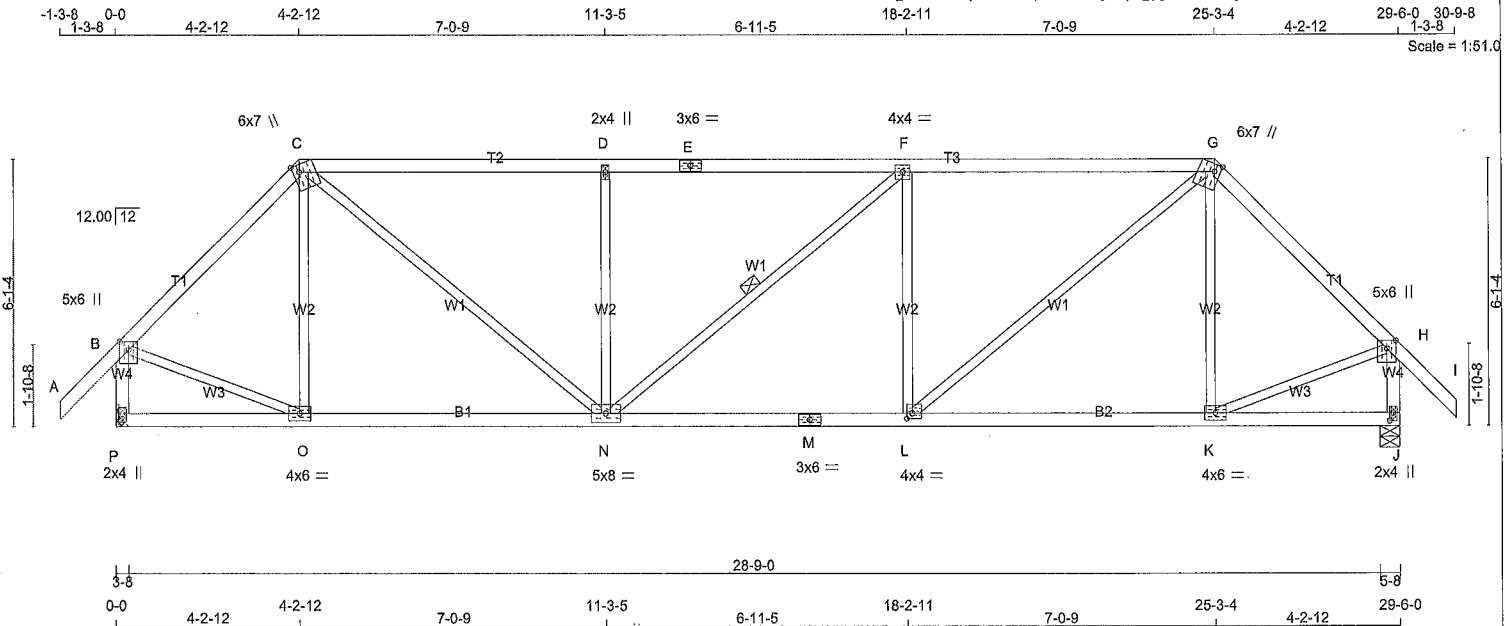


JOB NAME 264490	TRUSS NAME H20	QUANTITY 1	PLY 1	JOB DESC. TRUSS DESC.	DRWG NO. JT 38514
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Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Tue Jan 23 11:51:44 2018 Page 1
ID:6Y8KH0VgPKPWwprlbEOlqznGVz-yVqVgpxdU4PWyTITC0zu8s6Ht87YmlqsZ2LzlsV3T

Scale = 1:51.0



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	5.0	6.0	2.25 2.50
C	TTWW+m	MT20	6.0	7.0	Edge 1.75
D	TMW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	6.0	
F	TMWW-t	MT20	4.0	4.0	
G	TTWW+m	MT20	6.0	7.0	Edge 1.75
H	TMVW+p	MT20	5.0	6.0	2.25 2.50
J	BMV1+p	MT20	2.0	4.0	2.25 1.00
K	BMWW-t	MT20	4.0	6.0	
L	BMWW-t	MT20	4.0	4.0	1.50 1.50
M	BS-t	MT20	3.0	6.0	
N	BMWW-t	MT20	5.0	8.0	
O	BMWW-t	MT20	4.0	6.0	
P	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
P	1967	0	1967	0	0	5-8	2-15		
J	1967	0	1967	0	0	5-8	2-15		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
P	1364	1049 / 0	0 / 0	0 / 0	0 / 0
J	1364	1049 / 0	0 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-N.

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

LOADING		TOTAL LOAD CASES: (4)	
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 52	A-B	-288 / 32
B-C	-1644 / 0	C-N	0 / 1456
C-D	-2278 / 0	N-D	-795 / 0
D-E	-2279 / 0	N-F	-2 / 0
E-F	-2279 / 0	L-F	-795 / 0
F-G	-2280 / 0	L-G	0 / 1458
G-H	-1643 / 0	K-G	-289 / 32
H-I	0 / 52	B-O	0 / 1228
P-B	-1942 / 0	K-H	0 / 1227
J-H	-1941 / 0		
P-O	0 / 0		
O-N	0 / 1153		
N-M	0 / 2280		
M-L	0 / 2280		
L-K	0 / 1153		
K-J	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 32.5 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 42.9 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

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.98")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.98")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=1.00/1.00 (F-G:1), BC=0.46/1.00 (L-N:1), WB=0.47/1.00 (F-L:1), SSI=0.34/1.00 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (B) (INPUT = 0.90)
JSI METAL= 0.64 (M) (INPUT = 1.00)

A18010114

SITE COPY

Alpa Roof Truss, Maple

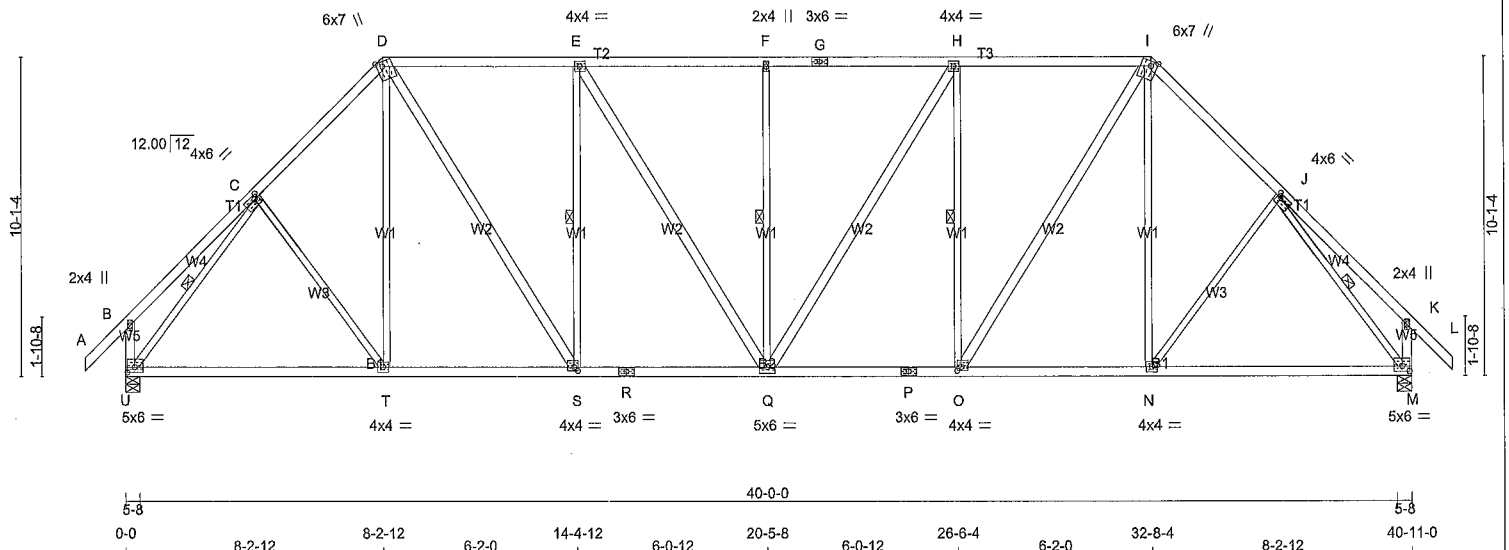
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Tue Jan 23 11:51:28 2018 Page 1

ID:6Y8KH0VgPKPWwprlE0lqlznGVz-QQsJLWvOa3gbVedXrKdEmCQvQgMoQIUAAUPdzsV5

1-3-8 0-0 4-2-10 8-2-12 14-4-12 20-5-8 6-0-12 26-6-4 6-2-0 32-8-4 4-0-2 36-8-6 4-2-10 1-3-8

1-3-8 4-2-10 4-0-2 6-2-0 6-0-12 20-5-8 6-0-12 26-6-4 6-2-0 32-8-4 4-0-2 36-8-6 4-2-10 1-3-8

Scale = 1/80.5



TOTAL WEIGHT = 221 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMWW-t	MT20	4.0	6.0	1.50 1.50
D	TTWW+m	MT20	6.0	7.0	Edge 2.25
E	TMWW-t	MT20	4.0	4.0	
F	TMV+w	MT20	2.0	4.0	
G	TS-t	MT20	3.0	6.0	
H	TMWW-t	MT20	4.0	4.0	
I	TTWW+m	MT20	6.0	7.0	Edge 2.25
J	TMWW-t	MT20	4.0	6.0	1.50 1.50
K	TMV+p	MT20	2.0	4.0	
M	BMVW1-t	MT20	5.0	6.0	2.00 2.75
N	BMVW-t	MT20	4.0	4.0	
O	BMVW-t	MT20	4.0	4.0	1.50 1.50
P	BMVW-t	MT20	3.0	6.0	
Q	BMVWW-t	MT20	5.0	6.0	
R	BS-t	MT20	3.0	6.0	
S	BMVW-t	MT20	4.0	4.0	1.50 1.50
T	BMVW-t	MT20	4.0	4.0	
U	BMVW1-t	MT20	5.0	6.0	2.00 2.75

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
U	2672	0	2672	0	0	5-8	3-10
M	2672	0	2672	0	0	5-8	3-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0
M	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.31 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-S, F-Q, H-O, C-U, J-M.

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

LOADING

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM (PLT)	CSI (LC)	LENGTH	FR-TO			
A-B	0 / 52	-104.9	-104.9	0.15 (1)	10.00	C-T	0 / 68	0.02 (4)
B-B	0 / 34	-104.9	-104.9	0.27 (1)	10.00	T-D	0 / 125	0.04 (4)
C-D	-2458 / 0	-104.9	-104.9	0.42 (1)	4.03	D-S	0 / 1385	0.22 (1)
D-E	-2447 / 0	-104.9	-104.9	0.80 (1)	3.48	S-E	-1072 / 0	0.75 (1)
E-F	-2664 / 0	-104.9	-104.9	0.83 (1)	3.31	E-Q	0 / 411	0.07 (1)
F-G	-2664 / 0	-104.9	-104.9	0.83 (1)	3.31	Q-F	-585 / 0	0.41 (1)
G-H	-2664 / 0	-104.9	-104.9	0.83 (1)	3.31	Q-H	0 / 411	0.07 (1)
H-I	-2447 / 0	-104.9	-104.9	0.80 (1)	3.48	O-H	-1072 / 0	0.75 (1)
I-J	-2458 / 0	-104.9	-104.9	0.42 (1)	4.03	O-I	0 / 1385	0.22 (1)
J-K	0 / 34	-104.9	-104.9	0.27 (1)	10.00	N-I	0 / 125	0.04 (4)
K-L	0 / 52	-104.9	-104.9	0.15 (1)	10.00	N-J	0 / 68	0.02 (4)
U-B	-311 / 0	0.0	0.0	0.03 (1)	7.81	U-C	-2840 / 0	0.92 (1)
M-K	-311 / 0	0.0	0.0	0.03 (1)	7.81	J-M	-2840 / 0	0.92 (1)
U-T	0 / 1671	-18.5	-18.5	0.42 (1)	10.00			
T-S	0 / 1709	-18.5	-18.5	0.43 (1)	10.00			
S-R	0 / 2448	-18.5	-18.5	0.46 (1)	10.00			
R-Q	0 / 2448	-18.5	-18.5	0.46 (1)	10.00			
Q-P	0 / 2448	-18.5	-18.5	0.46 (1)	10.00			
P-O	0 / 2448	-18.5	-18.5	0.46 (1)	10.00			
O-N	0 / 1709	-18.5	-18.5	0.43 (1)	10.00			
N-M	0 / 1671	-18.5	-18.5	0.42 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	32.5	PSF
		DL =	3.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	42.9	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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.36")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.83/1.00 (F-H:1), BC=0.46/1.00 (O-Q:1),
WB=0.92/1.00 (J-M:1), SSI=0.30/1.00 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90)
JSI METAL= 0.70 (J) (INPUT = 1.00)

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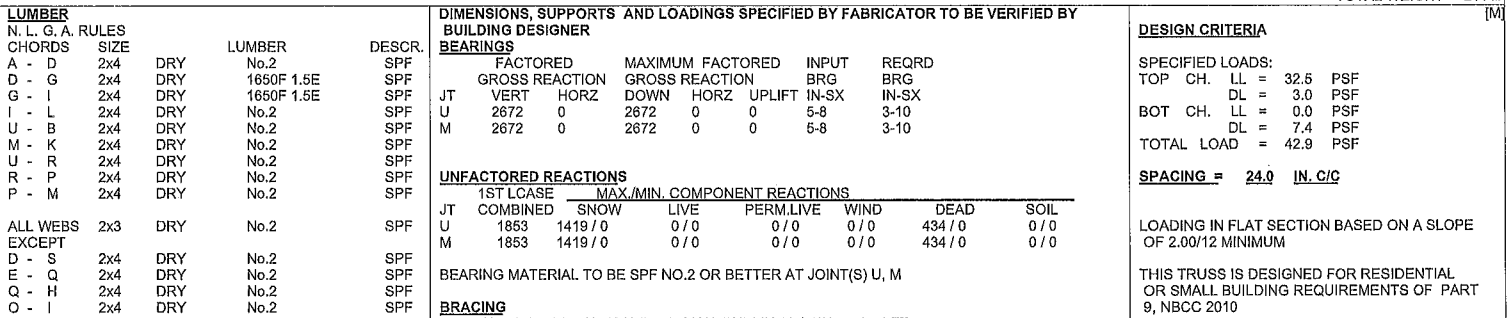
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Tue Jan 23 11:51:27 2018 Page 1

ID:6Y8KH0VgPKPWwpribEOlqznGVz_yE45?V/GdGxp_LfRz7D_hZF60LJ30OKxQQxtbzsV5

-1-3-8 0-0 3-8-10 7-2-12 13-10-12 20-5-8 20-5-8 6-6-12 27-0-4 6-8-0 33-8-4 3-6-2 37-2-6 3-8-10 40-11-0 42-2-8 1-3-8

Scale = 1/64.8



DRY: SEASONED LUMBER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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

BEARINGS							
FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
U	2672	0	2672	0	0	5-8	3-10
M	2672	0	2672	0	0	5-8	3-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0
M	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 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-S, F-Q, H-O, C-U, J-M

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO		CSI (LC)		
A-B	0 / 52	-104.9	-104.9	0.15 (1)	10.00	C-T	0 / 158	0.04 (1)	
B-C	0 / 29	-104.9	-104.9	0.20 (1)	10.00	T-D	0 / 98	0.03 (4)	
C-D	-2474 / 0	-104.9	-104.9	0.31 (1)	4.11	D-S	0 / 1602	0.26 (1)	
D-E	-2691 / 0	-104.9	-104.9	0.74 (1)	3.92	S-E	-1159 / 0	0.63 (1)	
E-F	-2972 / 0	-104.9	-104.9	0.77 (1)	3.74	E-Q	0 / 471	0.08 (1)	
F-G	-2972 / 0	-104.9	-104.9	0.77 (1)	3.74	Q-F	-634 / 0	0.34 (1)	
G-H	-2972 / 0	-104.9	-104.9	0.77 (1)	3.74	Q-H	0 / 471	0.08 (1)	
H-I	-2691 / 0	-104.9	-104.9	0.74 (1)	3.92	O-H	-1159 / 0	0.63 (1)	
I-J	-2474 / 0	-104.9	-104.9	0.31 (1)	4.11	O-I	0 / 1602	0.26 (1)	
J-K	0 / 29	-104.9	-104.9	0.20 (1)	10.00	N-I	0 / 98	0.03 (4)	
K-L	0 / 52	-104.9	-104.9	0.15 (1)	10.00	N-J	0 / 158	0.04 (1)	
U-B	-293 / 0	0.0	0.0	0.03 (1)	7.81	U-C	-2837 / 0	0.77 (1)	
M-K	-293 / 0	0.0	0.0	0.03 (1)	7.81	J-M	-2837 / 0	0.77 (1)	
U-T	0 / 1629	-18.5	-18.5	0.39 (1)	10.00				
T-S	0 / 1723	-18.5	-18.5	0.40 (1)	10.00				
S-R	0 / 2691	-18.5	-18.5	0.51 (1)	10.00				
R-Q	0 / 2691	-18.5	-18.5	0.51 (1)	10.00				
Q-P	0 / 2691	-18.5	-18.5	0.51 (1)	10.00				
P-O	0 / 2691	-18.5	-18.5	0.51 (1)	10.00				
O-N	0 / 1723	-18.5	-18.5	0.40 (1)	10.00				
N-M	0 / 1629	-18.5	-18.5	0.39 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	32.5	PSF
		DL =	3.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD		=	42.9	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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 43.9 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.36")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.30")

CSI: TC=0.77/1.00 (E-F:1), BC=0.51/1.00 (O-Q:1),
WB=0.77/1.00 (J-M:1), SS=0.33/1.00 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP (DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

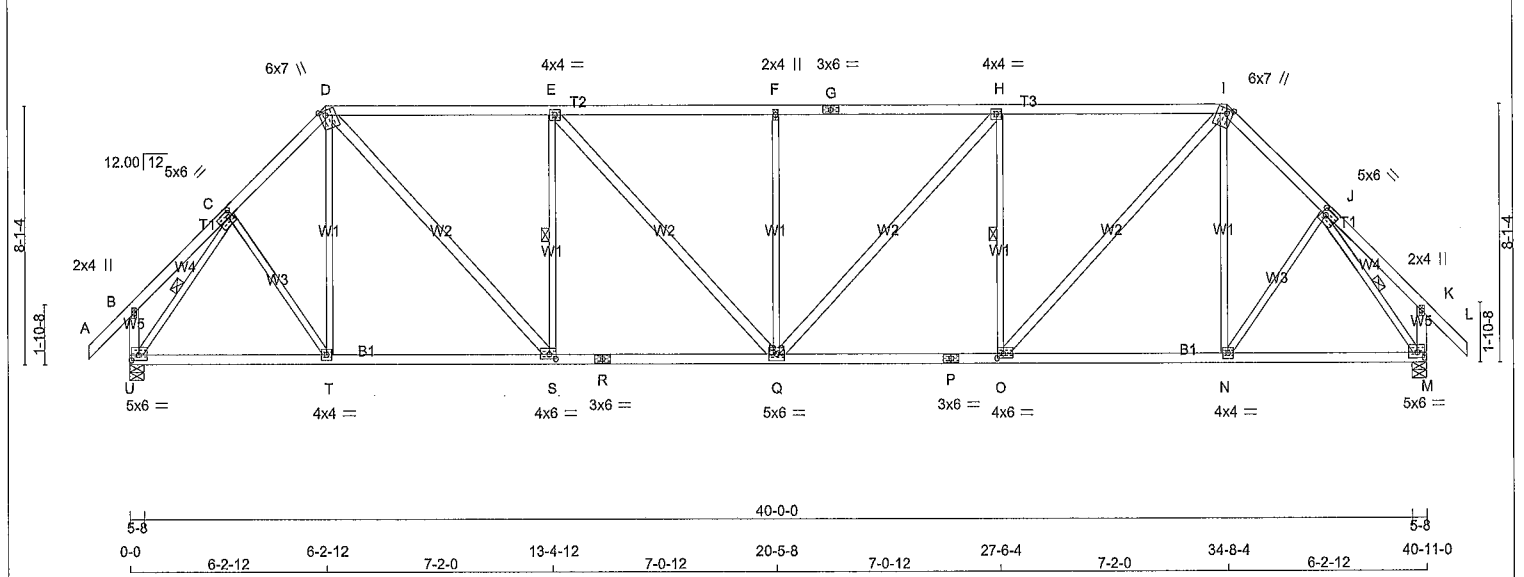
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.73 (P) (INPUT = 1.00)

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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

D - S

2x4

DRY

No.2

SPF

E - Q

2x4

DRY

No.2

SPF

Q - H

2x4

DRY

No.2

SPF

O - I

2x4

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

B

TMV+p

MT20

2.0

4.0

C

TMWW-t

MT20

5.0

6.0

2.25

1.75

D

TTWW+m

MT20

6.0

7.0

Edge

2.25

E

TMWW-t

MT20

4.0

4.0

F

TMW+w

MT20

2.0

4.0

G

TS-t

MT20

3.0

6.0

H

TMWW-t

MT20

4.0

4.0

I

TTWW+m

MT20

6.0

7.0

Edge

2.25

J

TMWW-t

MT20

5.0

6.0

2.25

1.75

K

TMV+p

MT20

2.0

4.0

L

BMVW1-t

MT20

5.0

6.0

2.00

2.75

M

BMWW-t

MT20

4.0

4.0

N

BMWW-t

MT20

4.0

4.0

O

BMWW-t

MT20

4.0

6.0

1.75

2.50

P

BS-t

MT20

3.0

6.0

Q

BMVW1-t

MT20

5.0

6.0

R

BS-t

MT20

3.0

6.0

S

BMWW-t

MT20

4.0

6.0

1.75

2.50

T

BMWW-t

MT20

4.0

4.0

U

BMVW1-t

MT20

5.0

6.0

2.00

2.75

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

U

2672

0

2672

0

0

5-8

3-11

M

2672

0

2672

0

0

5-8

3-11

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

U

1853

1419 / 0

0 / 0

0 / 0

0 / 0

434 / 0

0 / 0

M

1853

1419 / 0

0 / 0

0 / 0

0 / 0

434 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 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-S, H-O, C-U, J-M.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

CS1 (LC)

UNBRAC

LENGTH

FR-TO

MEMB.

MAX. FACTORED

FORCE

MAX

CS1 (LC)

FR-TO

A-B

0 / 52

-104.9

-104.9

0.15 (1)

10.00

C-T

0 / 267

0.06 (1)

B-C

0 / 23

-104.9

-104.9

0.14 (1)

10.00

T-D

-81 / 70

0.10 (1)

C-D

-2474 / 0

-104.9

-104.9

0.23 (1)

4.20

D-S

0 / 1873

0.30 (1)

D-E

-2993 / 0

-104.9

-104.9

0.93 (1)

3.50

S-E

-1247 / 0

0.62 (1)

E-F

-3360 / 0

-104.9

-104.9

0.98 (1)

3.30

Q-F

0 / 547

0.09 (1)

F-G

-3360 / 0

-104.9

-104.9

0.98 (1)

3.30

Q-F

-683 / 0

0.87 (1)

G-H

-3360 / 0

-104.9

-104.9

0.98 (1)

3.30

Q-H

0 / 547

0.09 (1)

H-I

-2993 / 0

-104.9

-104.9

0.93 (1)

3.50

O-H

-1247 / 0

0.52 (1)

I-J

-2474 / 0

-104.9

-104.9

0.23 (1)

4.20

O-I

0 / 1873

0.30 (1)

J-K

0 / 23

-104.9

-104.9

0.14 (1)

10.00

N-I

-81 / 70

0.10 (1)

K-L

0 / 52

-104.9

-104.9

0.15 (1)

10.00

N-J

0 / 267

0.06 (1)

U-B

-275 / 0

0.0

0.0

0.03 (1)

7.81

U-C

-2827 / 0

0.65 (1)

M-K

-275 / 0

0.0

0.0

0.03 (1)

7.81

J-M

-2827 / 0

0.65 (1)

U-T

0 / 1571

-18.5

-18.5

0.36 (1)

10.00

T-S

0 / 1724

-18.5

-18.5

0.38 (1)

10.00

S-R

0 / 2993

-18.5

-18.5

0.58 (1)

10.00

R-Q

0 / 2993

-18.5

-18.5

0.58 (1)

10.00

Q-P

0 / 2993

-18.5

-18.5

0.58 (1)

10.00

P-O

0 / 2993

-18.5

-18.5

0.58 (1)

10.00

O-N

0 / 1724

-18.5

-18.5

0.38 (1)

10.00

N-M

0 / 1571

-18.5

-18.5

0.36 (1)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 32.5 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 42.9 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014

- CSA 086-09

- TPIC 2011

(65% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.36")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.20")

ALLOWABLE DEFL.(TL)= L/360 (1.36")

CALCULATED VERT. DEFL.(TL)= L/ 999 (0.34")

CSI: TC=0.98/1.00 (F-H:1), BC=0.58/1.00 (Q-S:1);

WB=0.87/1.00 (F-Q:1), SSI=0.35/1.00 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)

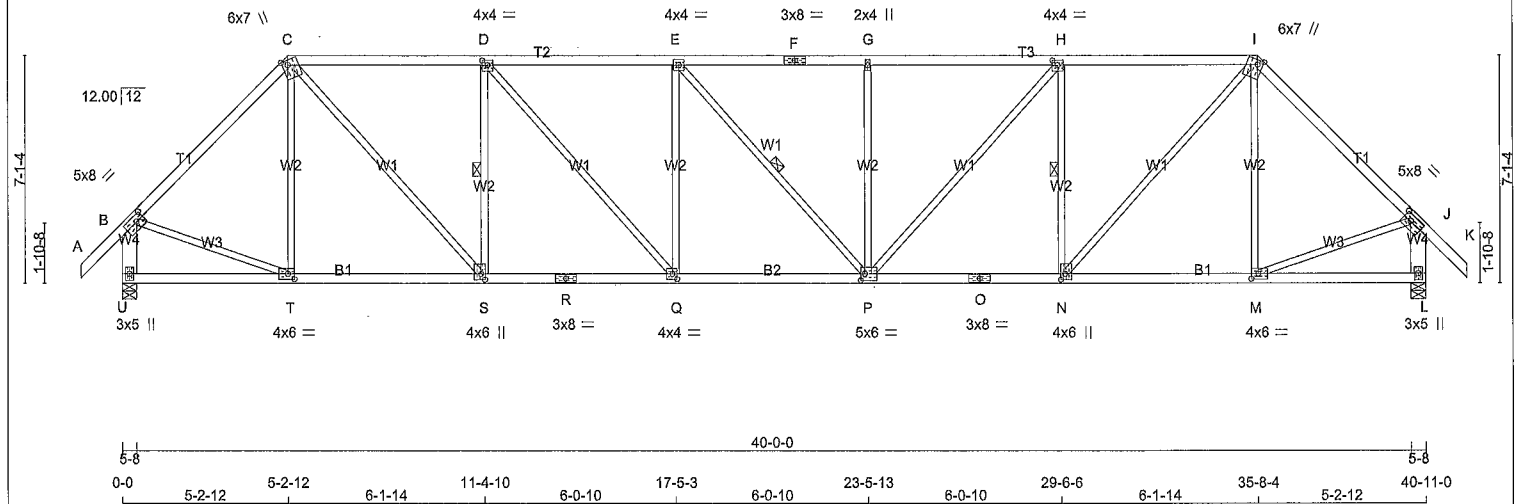
JSI METAL= 0.76 (P) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



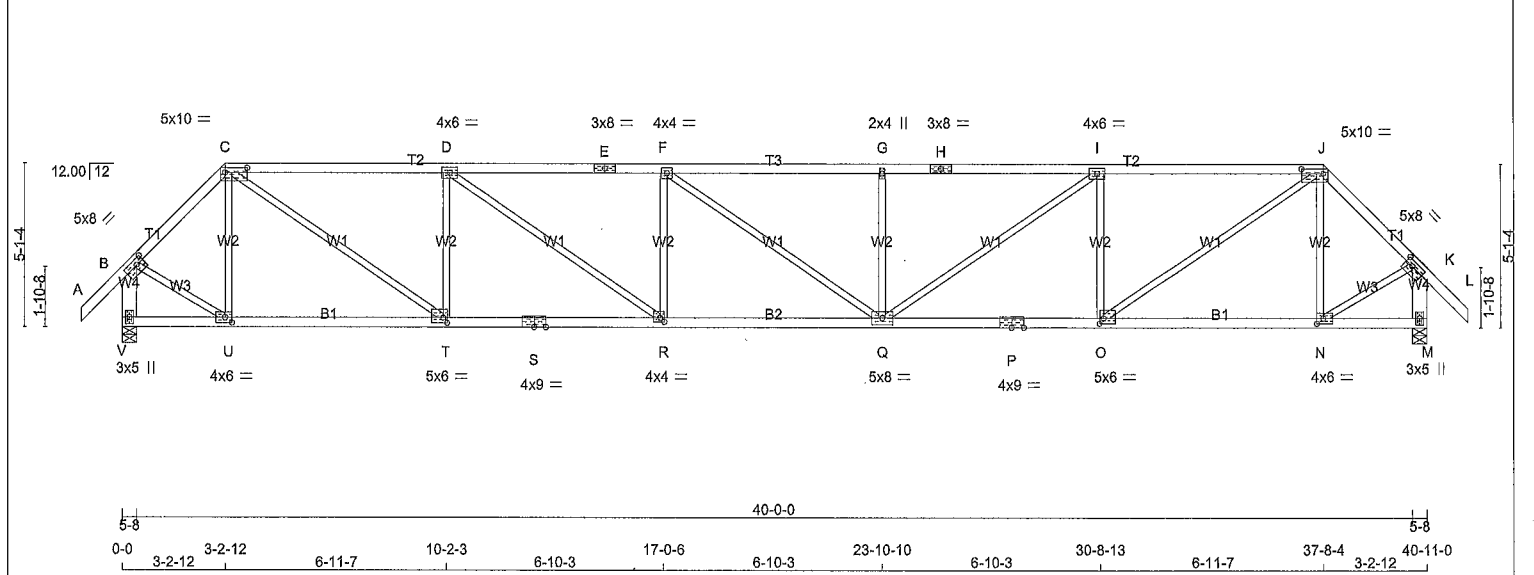
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - C 2x4 DRY No.2 SPF C - F 2x4 DRY 1650F 1.5E SPF F - I 2x4 DRY 1650F 1.5E SPF I - K 2x4 DRY No.2 SPF U - B 2x6 DRY No.2 SPF L - J 2x6 DRY No.2 SPF U - R 2x4 DRY No.2 SPF R - O 2x4 DRY No.2 SPF O - L 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED</th><th>MAXIMUM FACTORED</th><th>INPUT</th><th>REQRD</th></tr><tr><th></th><th>GROSS REACTION</th><th>GROSS REACTION</th><th>BRG</th><th>BRG</th></tr><tr><td>JT</td><td>VERT</td><td>DOWN</td><td>UP</td><td>IN-SX</td></tr><tr><td>U</td><td>2672</td><td>0</td><td>2672</td><td>0</td></tr><tr><td>L</td><td>2672</td><td>0</td><td>2672</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th></th><th>1ST LCASE</th><th>MAX./MIN.</th><th>COMPONENT REACTIONS</th></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE PERM.LIVE WIND DEAD SOIL</td></tr><tr><td>U</td><td>1853</td><td>1419 / 0</td><td>0 / 0 0 / 0 0 / 0 434 / 0 0 / 0</td></tr><tr><td>L</td><td>1853</td><td>1419 / 0</td><td>0 / 0 0 / 0 0 / 0 434 / 0 0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L 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. 1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-S, E-P, H-N. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) <table><tr><th colspan="3">CHORDS</th><th colspan="3">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED</th><th>FACTORED</th><th>MEMB.</th><th>MAX. FACTORED</th><th>FACTORED</th></tr><tr><th></th><th>FORCE (LBS)</th><th>VERT. LOAD LC1 (PLF)</th><th></th><th>FORCE (LBS)</th><th>MAX. CSI (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td>FR-TO</td><td></td><td></td></tr><tr><td>A-B</td><td>0 / 52</td><td>-104.9 -104.9 0.15 (1)</td><td>T-C</td><td>-370 / 15</td><td>0.32 (1)</td></tr><tr><td>B-C</td><td>-2431 / 0</td><td>-104.9 -104.9 0.80 (1)</td><td>C-S</td><td>0 / 2087</td><td>0.47 (1)</td></tr><tr><td>C-D</td><td>-3110 / 0</td><td>-104.9 -104.9 0.64 (1)</td><td>S-D</td><td>-1436 / 0</td><td>0.46 (1)</td></tr><tr><td>D-E</td><td>-3758 / 0</td><td>-104.9 -104.9 0.69 (1)</td><td>D-Q</td><td>0 / 975</td><td>0.22 (1)</td></tr><tr><td>E-F</td><td>-3757 / 0</td><td>-104.9 -104.9 0.54 (1)</td><td>Q-E</td><td>-617 / 0</td><td>0.54 (1)</td></tr><tr><td>F-G</td><td>-3757 / 0</td><td>-104.9 -104.9 0.54 (1)</td><td>E-P</td><td>-2 / 0</td><td>0.00 (1)</td></tr><tr><td>G-H</td><td>-3757 / 0</td><td>-104.9 -104.9 0.70 (1)</td><td>P-G</td><td>-616 / 0</td><td>0.54 (1)</td></tr><tr><td>H-I</td><td>-3111 / 0</td><td>-104.9 -104.9 0.64 (1)</td><td>P-H</td><td>0 / 972</td><td>0.22 (1)</td></tr><tr><td>I-J</td><td>-2431 / 0</td><td>-104.9 -104.9 0.80 (1)</td><td>N-H</td><td>-1436 / 0</td><td>0.46 (1)</td></tr><tr><td>J-K</td><td>0 / 52</td><td>-104.9 -104.9 0.15 (1)</td><td>N-I</td><td>0 / 2088</td><td>0.47 (1)</td></tr><tr><td>U-B</td><td>-2634 / 0</td><td>0.0 0.0 0.19 (1)</td><td>M-I</td><td>-370 / 14</td><td>0.32 (1)</td></tr><tr><td>L-J</td><td>-2634 / 0</td><td>0.0 0.0 0.19 (1)</td><td>B-T</td><td>0 / 1782</td><td>0.40 (1)</td></tr><tr><td>U-T</td><td>0 / 0</td><td>-18.5 -18.5 0.14 (4)</td><td>M-J</td><td>0 / 1782</td><td>0.40 (1)</td></tr><tr><td>T-S</td><td>0 / 1708</td><td>-18.5 -18.5 0.36 (1)</td><td></td><td></td><td></td></tr><tr><td>S-R</td><td>0 / 3111</td><td>-18.5 -18.5 0.56 (1)</td><td></td><td></td><td></td></tr><tr><td>R-Q</td><td>0 / 3111</td><td>-18.5 -18.5 0.56 (1)</td><td></td><td></td><td></td></tr><tr><td>Q-P</td><td>0 / 3758</td><td>-18.5 -18.5 0.66 (1)</td><td></td><td></td><td></td></tr><tr><td>P-O</td><td>0 / 3111</td><td>-18.5 -18.5 0.56 (1)</td><td></td><td></td><td></td></tr><tr><td>O-N</td><td>0 / 3111</td><td>-18.5 -18.5 0.56 (1)</td><td></td><td></td><td></td></tr><tr><td>N-M</td><td>0 / 1708</td><td>-18.5 -18.5 0.36 (1)</td><td></td><td></td><td></td></tr><tr><td>M-L</td><td>0 / 0</td><td>-18.5 -18.5 0.14 (4)</td><td></td><td></td><td></td></tr></table>											FACTORED	MAXIMUM FACTORED	INPUT	REQRD		GROSS REACTION	GROSS REACTION	BRG	BRG	JT	VERT	DOWN	UP	IN-SX	U	2672	0	2672	0	L	2672	0	2672	0		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	JT	COMBINED	SNOW	LIVE PERM.LIVE WIND DEAD SOIL	U	1853	1419 / 0	0 / 0 0 / 0 0 / 0 434 / 0 0 / 0	L	1853	1419 / 0	0 / 0 0 / 0 0 / 0 434 / 0 0 / 0	CHORDS			WEBS			MEMB.	MAX. FACTORED	FACTORED	MEMB.	MAX. FACTORED	FACTORED		FORCE (LBS)	VERT. LOAD LC1 (PLF)		FORCE (LBS)	MAX. CSI (LC)	FR-TO		FROM TO	FR-TO			A-B	0 / 52	-104.9 -104.9 0.15 (1)	T-C	-370 / 15	0.32 (1)	B-C	-2431 / 0	-104.9 -104.9 0.80 (1)	C-S	0 / 2087	0.47 (1)	C-D	-3110 / 0	-104.9 -104.9 0.64 (1)	S-D	-1436 / 0	0.46 (1)	D-E	-3758 / 0	-104.9 -104.9 0.69 (1)	D-Q	0 / 975	0.22 (1)	E-F	-3757 / 0	-104.9 -104.9 0.54 (1)	Q-E	-617 / 0	0.54 (1)	F-G	-3757 / 0	-104.9 -104.9 0.54 (1)	E-P	-2 / 0	0.00 (1)	G-H	-3757 / 0	-104.9 -104.9 0.70 (1)	P-G	-616 / 0	0.54 (1)	H-I	-3111 / 0	-104.9 -104.9 0.64 (1)	P-H	0 / 972	0.22 (1)	I-J	-2431 / 0	-104.9 -104.9 0.80 (1)	N-H	-1436 / 0	0.46 (1)	J-K	0 / 52	-104.9 -104.9 0.15 (1)	N-I	0 / 2088	0.47 (1)	U-B	-2634 / 0	0.0 0.0 0.19 (1)	M-I	-370 / 14	0.32 (1)	L-J	-2634 / 0	0.0 0.0 0.19 (1)	B-T	0 / 1782	0.40 (1)	U-T	0 / 0	-18.5 -18.5 0.14 (4)	M-J	0 / 1782	0.40 (1)	T-S	0 / 1708	-18.5 -18.5 0.36 (1)				S-R	0 / 3111	-18.5 -18.5 0.56 (1)				R-Q	0 / 3111	-18.5 -18.5 0.56 (1)				Q-P	0 / 3758	-18.5 -18.5 0.66 (1)				P-O	0 / 3111	-18.5 -18.5 0.56 (1)				O-N	0 / 3111	-18.5 -18.5 0.56 (1)				N-M	0 / 1708	-18.5 -18.5 0.36 (1)				M-L	0 / 0	-18.5 -18.5 0.14 (4)				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 32.5 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 42.9 PSF SPACING = 24.0 IN./C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55% OF 43.9 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.36") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25") ALLOWABLE DEFL.(TL)= L/360 (1.36") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.43") CSI: TC=0.80/1.00 (B-C:1), BC=0.66/1.00 (P-Q:1), WB=0.54/1.00 (E-Q:1), SSI=0.30/1.00 (H-I:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10 COMPANION LIVE LOAD FACTOR = 0.50 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 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL = 0.85 (C) (INPUT = 1.00)			
	FACTORED	MAXIMUM FACTORED	INPUT	REQRD																																																																																																																																																																																																												
	GROSS REACTION	GROSS REACTION	BRG	BRG																																																																																																																																																																																																												
JT	VERT	DOWN	UP	IN-SX																																																																																																																																																																																																												
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MEMB.	MAX. FACTORED	FACTORED	MEMB.	MAX. FACTORED	FACTORED																																																																																																																																																																																																											
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TOTAL WEIGHT = 167 lb

N. L. G. A. RULES				BUILDING DESIGNER										DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS										SPECIFIED LOADS:			
A - C	2x4	DRY	No.2	SPF	FACTORED					MAXIMUM FACTORED		INPUT	REQRD	TOP CH. LL = 32.5 PSF			
C - E	2x4	DRY	2100F 1.8E	SPF	GROSS REACTION					GROSS REACTION		BRG	BRG	DL = 3.0 PSF			
E - H	2x4	DRY	2100F 1.8E	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF				
H - J	2x4	DRY	2100F 1.8E	SPF	V	2672	0	2672	0	0	5-8	3-3	DL = 7.4 PSF				
J - L	2x4	DRY	No.2	SPF	M	2672	0	2672	0	0	5-8	3-3	TOTAL LOAD = 42.9 PSF				
V - B	2x6	DRY	No.2	SPF	UNFACTORED REACTIONS										SPACING = 24.0 IN.C/C		
M - K	2x6	DRY	No.2	SPF	1ST LCASE MAX./MIN. COMPONENT REACTIONS										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM		
V - S	2x4	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL					
S - P	2x4	DRY	No.2	SPF	V	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0					
P - M	2x4	DRY	No.2	SPF	M	1853	1419 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0					
ALL WEBS	2x3	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M												

DRY: SEASONED LUMBER.

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (L)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO		FROM TO			FR-TO		
A - B	0 / 52	-104.9 -104.9	0.15 (1)	10.00	U - C	-614 / 0	0.24 (1)
B - C	-2273 / 0	-104.9 -104.9	0.27 (1)	4.29	C - T	0 / 3086	0.69 (1)
C - D	-4129 / 0	-104.9 -104.9	0.75 (1)	3.64	T - D	-1624 / 0	0.62 (1)
D - E	-5303 / 0	-104.9 -104.9	0.90 (1)	3.19	D - R	0 / 1435	0.32 (1)
E - F	-5303 / 0	-104.9 -104.9	0.90 (1)	3.19	R - F	-699 / 0	0.27 (1)
F - G	-5304 / 0	-104.9 -104.9	0.72 (1)	3.40	F - Q	0 / 0	0.00 (1)
G - H	-5304 / 0	-104.9 -104.9	0.90 (1)	3.19	Q - G	-699 / 0	0.27 (1)
H - I	-5304 / 0	-104.9 -104.9	0.90 (1)	3.19	Q - I	0 / 1435	0.32 (1)
I - J	-4129 / 0	-104.9 -104.9	0.75 (1)	3.64	O - I	-1624 / 0	0.62 (1)
J - K	-2273 / 0	-104.9 -104.9	0.27 (1)	4.29	O - J	0 / 3086	0.69 (1)
K - L	0 / 52	-104.9 -104.9	0.15 (1)	10.00	N - J	-614 / 0	0.24 (1)
V - B	-2661 / 0	0.0	0.0	0.20 (1)	B - U	0 / 1759	0.40 (1)
M - K	-2661 / 0	0.0	0.0	0.20 (1)	N - K	0 / 1759	0.40 (1)
V - U	0 / 0	-18.5	-18.5	0.14 (4)	10.00		
U - T	0 / 1586	-18.5	-18.5	0.35 (1)	10.00		
T - S	0 / 4129	-18.5	-18.5	0.74 (1)	10.00		
S - R	0 / 4129	-18.5	-18.5	0.74 (1)	10.00		
R - Q	0 / 5303	-18.5	-18.5	0.93 (1)	10.00		
Q - P	0 / 4129	-18.5	-18.5	0.74 (1)	10.00		
P - O	0 / 4129	-18.5	-18.5	0.74 (1)	10.00		
O - N	0 / 1586	-18.5	-18.5	0.35 (1)	10.00		
N - M	0 / 0	-18.5	-18.5	0.14 (4)	10.00		

ALLOWABLE DEFL.(LL)= L/360 (1.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.41")
ALLOWABLE DEFL.(TL)= L/360 (1.36")
CALCULATED VERT. DEFL.(TL) = L/ 708 (0.69")

CSI: TC=0.90/1.00 (D-F:1), BC=0.93/1.00 (Q-R:1),
WB=0.69/1.00 (C-T:1), SS=0.34/1.00 (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 = 0.50

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 822 2284 1656

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

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.83 (S) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



A18012112

SITE COPY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264490	H01	1	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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ID:6Y8KH0VgPKPWwprlbEOlqlznGVz-74xprxRW2QAgGQCHdt6aSIPEucD_fFcSZUzdfXzsV6q

PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Y	X			
U	BMWW-t	MT20	5.0	10.0	2.25	2.75			
V	BMWW-t	MT20	5.0	10.0	2.25	4.75			
W	BS-t	MT18HS	6.0	14.0					
X	BMWW-t	MT20	8.0	9.0	4.25	3.50			
Y	BMWW-t	MT20	8.0	9.0	3.25	2.75			
Z	BMWW-t	MT20	5.0	8.0	2.25	2.50			
AA	BMV1-t	MT20	6.0	9.0	5.50				

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 170.6 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD, AND 2857.1 lbs FACTORED DOWN AT 11-3-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
C	2-2-12	-171	-171	---	FRONT	VERT	TOTAL		
X	11-3-8	-2857	-2857	---	FRONT	VERT	TOTAL		

MT18HS 580 354 2729 1405 4191 2010

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (V) (INPUT = 0.90)

JSI METAL= 1.00 (W) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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Alpa Roof Truss, Maple

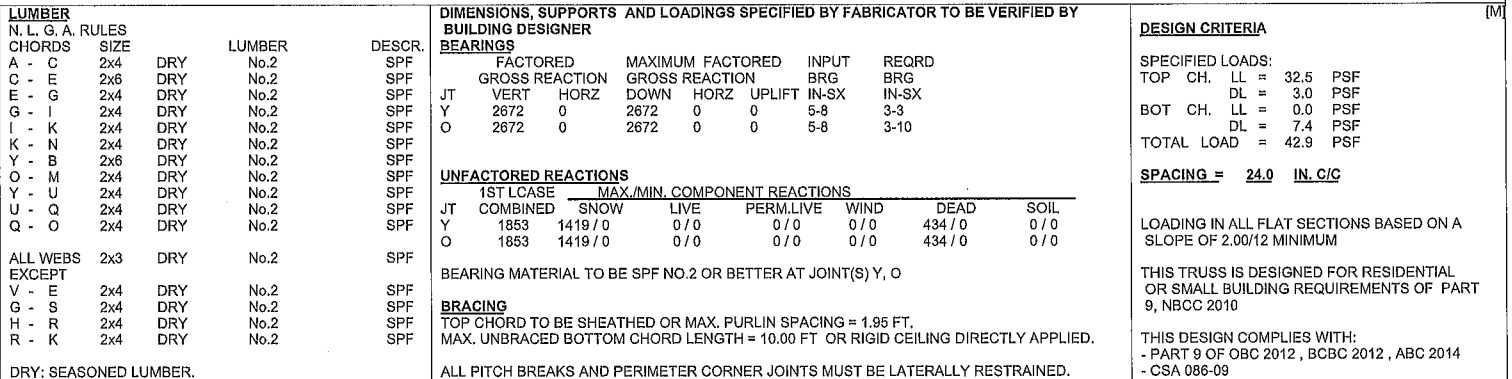
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Tue Jan 23 12:10:57 2018 Page 1

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-1-3-8 0-0 2-0-12 5-9-12 9-6-12 12-7-12 15-8-12 21-4-9 5-7-13 27-0-7 5-7-13 32-8-4 4-0-2 36-8-6 40-11-0 42-2-8

1-3-8 2-0-12 3-9-0 3-9-0 3-1-0 3-1-0 5-7-13 5-7-13 32-8-4 4-0-2 36-8-6 40-11-0 42-2-8

Scale = 1/71.1



NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 32.5 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 42.9 PSF

SPACING = 24.0 IN./C

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

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

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

(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.42")
ALLOWABLE DEFL.(TL)= L/360 (1.36")
CALCULATED VERT. DEFL.(TL) = L/687 (0.71")

CSI: TC=0.86/1.00 (E-F:1), BC=0.68/1.00 (V-W:1),
WB=0.97/1.00 (E-V:1), SSI=0.28/1.00 (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 = 0.50

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 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (V) (INPUT = 0.90)
JSI METAL= 0.91 (U) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H08A	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
V	BMWWW-t	MT20	8.0	12.0	2.00	4.00
W	BMWWW-t	MT20	5.0	6.0	1.75	1.50
X	BMWWW-t	MT20	4.0	6.0	1.50	3.00
Y	BMV1+p	MT20	3.0	5.0		

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H10	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

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NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	7.0	2.25	2.00
C	TTWW+m	MT20	7.0	8.0	Edge	2.25
D	TMWW-t	MT20	4.0	6.0	1.75	3.00
E	TTWW-m	MT20	6.0	7.0		
F	TTWW-h	MT20	5.0	6.0	1.50	3.00
G	TMW+w	MT20	2.0	4.0		
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	4.0		
J	TTWW+m	MT20	5.0	6.0	2.00	1.50
K	TMWW-t	MT20	4.0	6.0	2.00	1.75
L	TMV+p	MT20	2.0	4.0		
N	BMVW1+p	MT20	4.0	6.0	3.00	1.75
O	BMWW-t	MT20	4.0	4.0		
P	BMWW-t	MT20	4.0	4.0	2.00	1.50
Q	BS-t	MT20	4.0	6.0		
R	BMWWW-t	MT20	5.0	6.0		
S	BMWW-t	MT20	6.0	7.0	2.75	3.00
T	BS-t	MT20	5.0	8.0		
U	BMWW+t	MT20	4.0	6.0	3.00	1.50
V	BMWW+t	MT20	5.0	8.0	3.75	1.50
W	BMWW-t	MT20	5.0	6.0	2.50	2.25
X	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 157.8 lbs FACTORED DOWN AT 2-0-12 ON TOP CHORD, AND 3212.7 lbs FACTORED DOWN AT 7-4-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-0-12	-158	-158	---	FRONT	VERT	TOTAL
AA	7-4-8	-3213	-3213	---	FRONT	VERT	TOTAL

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 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.88 (T) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

A18012456(2)

SITE COPY

JOB NAME: 264491 TRUSS NAME: H11E QUANTITY: 1 PLY: 1 JOB DESC.: TRUSS DESC. DRWG NO.: JT 38514
Alpa Roof Truss, Maple
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Tue Jan 23 12:10:59 2018 Page 1
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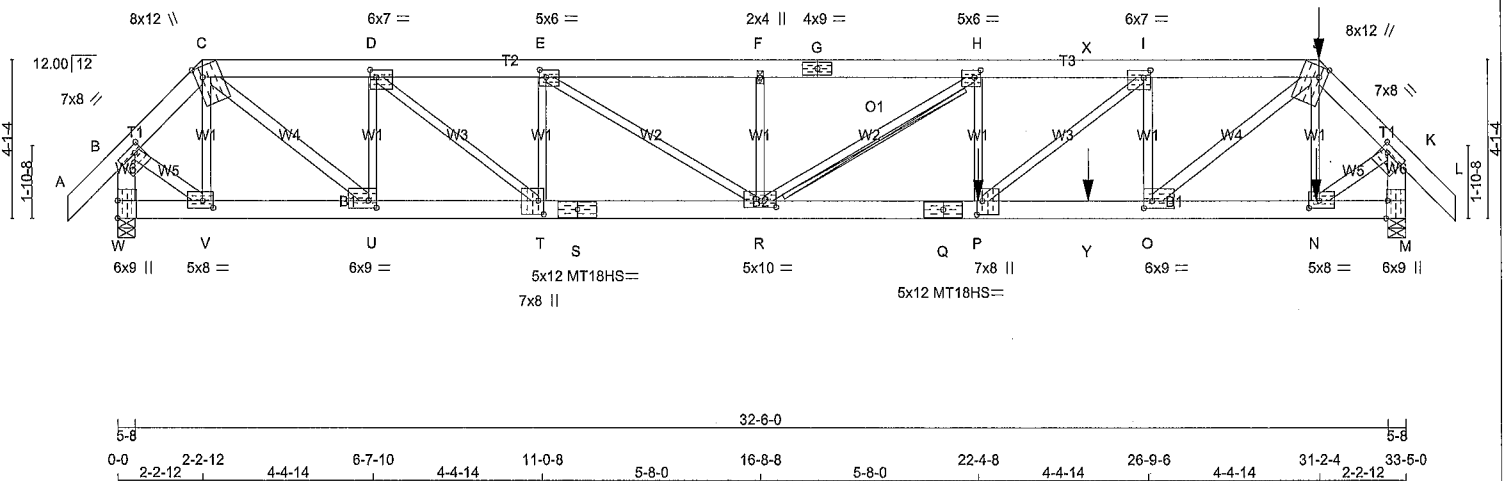


Table with 4 columns: LUMBER, N. L. G. A. RULES, SIZE, DESCR. It lists various lumber specifications for different parts of the truss, including chord sizes (e.g., 2x6, 2x8, 2x10) and descriptions (e.g., DRY, No.2, 1650F 1.5E).

DRY: SEASONED LUMBER.

PLATES (table is in inches)

Table with 5 columns: JT, TYPE, PLATES, W, LEN, Y, X. It lists plate specifications for various joints (JT) and types (e.g., TMVW-t, MT20), including dimensions for width, length, and other factors.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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

Table with 4 columns: BEARINGS, FACTORED, MAXIMUM FACTORED, INPUT, REQD. It lists bearing specifications for different parts of the truss, including joint types (JT, W, M) and dimensions.

UNFACTORED REACTIONS

Table with 4 columns: 1ST LCASE, MAX./MIN. COMPONENT REACTIONS, 2ND LCASE, MAX./MIN. COMPONENT REACTIONS. It lists unfactored reaction values for different load cases (JT, W, M).

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, M
BEARING SIZE FACTOR = 1.15 AT JNT(S) M (BASED ON SUPPORT DEPTH = 1-8)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.80 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.

2x4 DRY SPF No.2 T-BRACE AT H-R

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

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

LOADING

TOTAL LOAD CASES: (4)

Table with 4 columns: CHORDS, MAX. FACTORED, WEBS, MAX. FACTORED. It lists loading specifications for different parts of the truss, including chord types (A-B, B-C, C-D, etc.) and web types (V-C, C-U, U-D, etc.).

FACTORED CONCENTRATED LOADS (LBS)

Table with 4 columns: JT, LOC, LC1, MAX. It lists factored concentrated load values for different joints (JT) and locations (LOC).

DESIGN CRITERIA

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

SPECIFIED LOADS:

Table with 2 columns: TOP CH, LL, DL, BOT CH, LL, DL. It lists specified load values for different parts of the truss.

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 2-2-12
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 2-2-12 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***

ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.11")
CALCULATED VERT. DEFL.(LL) = L/884 (0.45")
ALLOWABLE DEFL.(TL) = L/360 (1.11")
CALCULATED VERT. DEFL.(TL) = L/535 (0.75")

CSI: TC=0.62/1.00 (H-I:1), BC=0.97/1.00 (O-P:1), WB=0.96/1.00 (I-P:1), SSI=0.42/1.00 (O-P: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 = 0.50

AUTOSOLVE HEELS OFF

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

SITE COPY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H11E	1	1	TRUSS DESC.	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.		FACTORED CONCENTRATED LOADS (LBS)								NAIL VALUES							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		PLATE	GRIP(DRY)	SHEAR	SECTION					
Y	25-2-12	-771	-771	---	FRONT	VERT	TOTAL			(PSI)	(PLI)	(PLI)					
										MAX	MIN	MAX	MIN				
									MT20	618	354	1667	822				
									MT18HS	580	354	2729	1405				
												4191	2010				

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 170.6 lbs FACTORED DOWN AT 31-2-4 ON TOP CHORD, AND 771.5 lbs FACTORED DOWN AT 25-2-12, AND 771.5 lbs FACTORED DOWN AT 31-1-4, AND 2199.3 lbs FACTORED DOWN AT 22-4-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

D. O'CONNOR

100009580

01/23/2018

PROVINCE OF ONTARIO

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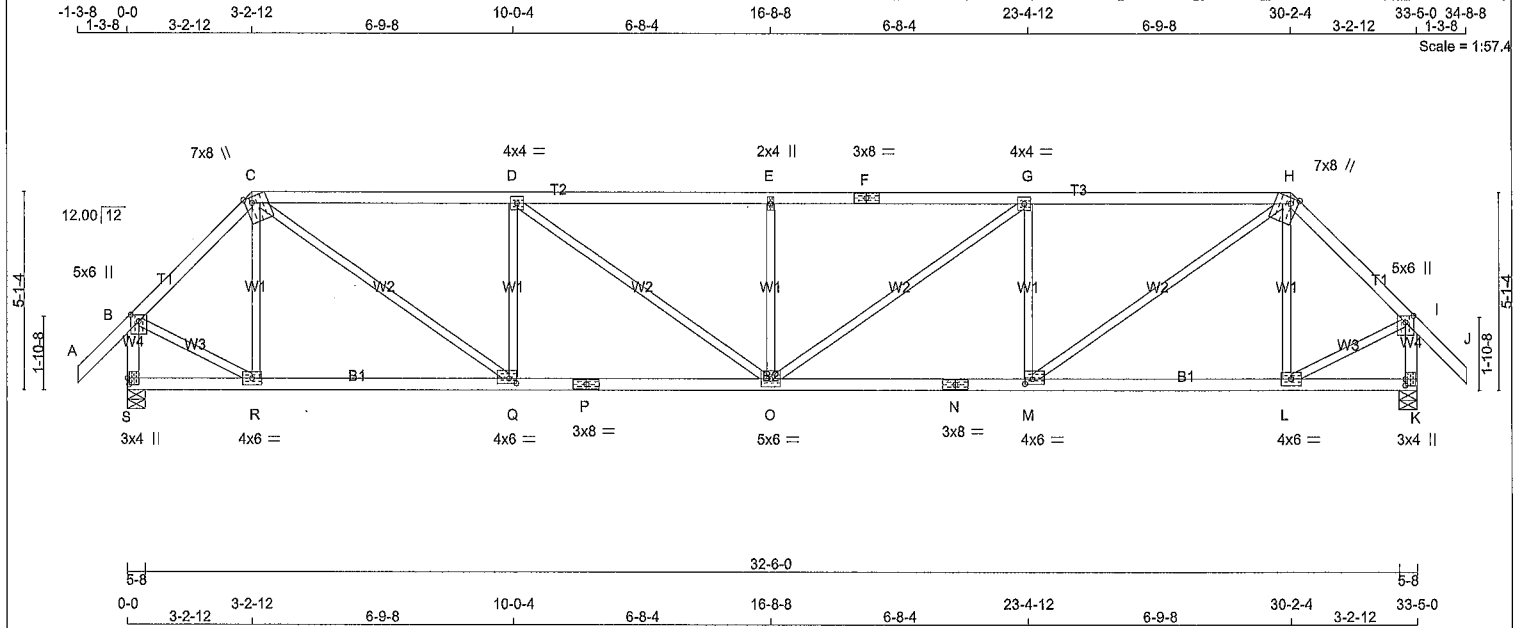
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H12A	1	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 137 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	2.00	2.50
C	TTWW+m	MT20	7.0	8.0	Edge	2.25
D	TMWW-t	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	8.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW+m	MT20	7.0	8.0	Edge	2.25
I	TMVW+p	MT20	5.0	6.0	2.00	2.50
K	BMV1+p	MT20	3.0	4.0	2.00	
L	BMWW-t	MT20	4.0	6.0		
M	BMWW-t	MT20	4.0	6.0	1.50	2.25
N	BS-t	MT20	3.0	8.0		
O	BMWW-t	MT20	5.0	6.0		
P	BS-t	MT20	3.0	8.0		
Q	BMWW-t	MT20	4.0	6.0	1.50	2.25
R	BMWW-t	MT20	4.0	6.0		
S	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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
S	2209	0	2209	0	0
K	2209	0	2209	0	0

UNFACTORED REACTIONS						
1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	1532	1176 / 0	0 / 0	0 / 0	356 / 0	0 / 0
K	1532	1176 / 0	0 / 0	0 / 0	356 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	MAX. UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 52	-104.9 -104.9	0.15 (1)	10.00	R-C	-474 / 0	0.18 (1)
B-C	-1822 / 0	-104.9 -104.9	0.24 (1)	4.72	C-Q	0 / 2261	0.51 (1)
C-D	-3121 / 0	-104.9 -104.9	0.82 (1)	3.63	Q-D	-1178 / 0	0.45 (1)
D-E	-3656 / 0	-104.9 -104.9	0.88 (1)	3.34	D-O	0 / 659	0.15 (1)
E-F	-3656 / 0	-104.9 -104.9	0.88 (1)	3.34	O-E	-648 / 0	0.25 (1)
F-G	-3656 / 0	-104.9 -104.9	0.88 (1)	3.34	O-G	0 / 659	0.15 (1)
G-H	-3121 / 0	-104.9 -104.9	0.82 (1)	3.63	M-G	-1178 / 0	0.45 (1)
H-I	-1822 / 0	-104.9 -104.9	0.24 (1)	4.72	M-H	0 / 2261	0.51 (1)
I-J	0 / 52	-104.9 -104.9	0.15 (1)	10.00	L-H	-474 / 0	0.18 (1)
S-B	-2196 / 0	0.0 0.0	0.24 (1)	5.74	B-R	0 / 1410	0.32 (1)
K-I	-2196 / 0	0.0 0.0	0.24 (1)	5.74	L-I	0 / 1410	0.32 (1)
S-R	0 / 0	-18.5 -18.5	0.13 (4)	10.00			
R-Q	0 / 1272	-18.5 -18.5	0.29 (1)	10.00			
Q-P	0 / 3121	-18.5 -18.5	0.58 (1)	10.00			
P-O	0 / 3121	-18.5 -18.5	0.58 (1)	10.00			
O-N	0 / 3121	-18.5 -18.5	0.58 (1)	10.00			
N-M	0 / 3121	-18.5 -18.5	0.58 (1)	10.00			
M-L	0 / 1272	-18.5 -18.5	0.29 (1)	10.00			
L-K	0 / 0	-18.5 -18.5	0.13 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	32.5	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	42.9	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

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.11")
CALCULATED VERT. DEFL.(LL) = L/999 (0.22")
ALLOWABLE DEFL.(TL)= L/360 (1.11")
CALCULATED VERT. DEFL.(TL) = L/999 (0.37")

CSI: TC=0.88/1.00 (E-G:1), BC=0.58/1.00 (O-Q:1), WB=0.51/1.00 (H-M:1), SSI=0.33/1.00 (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 = 0.50

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
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (M) (INPUT = 0.90)
JSI METAL= 0.84 (N) (INPUT = 1.00)



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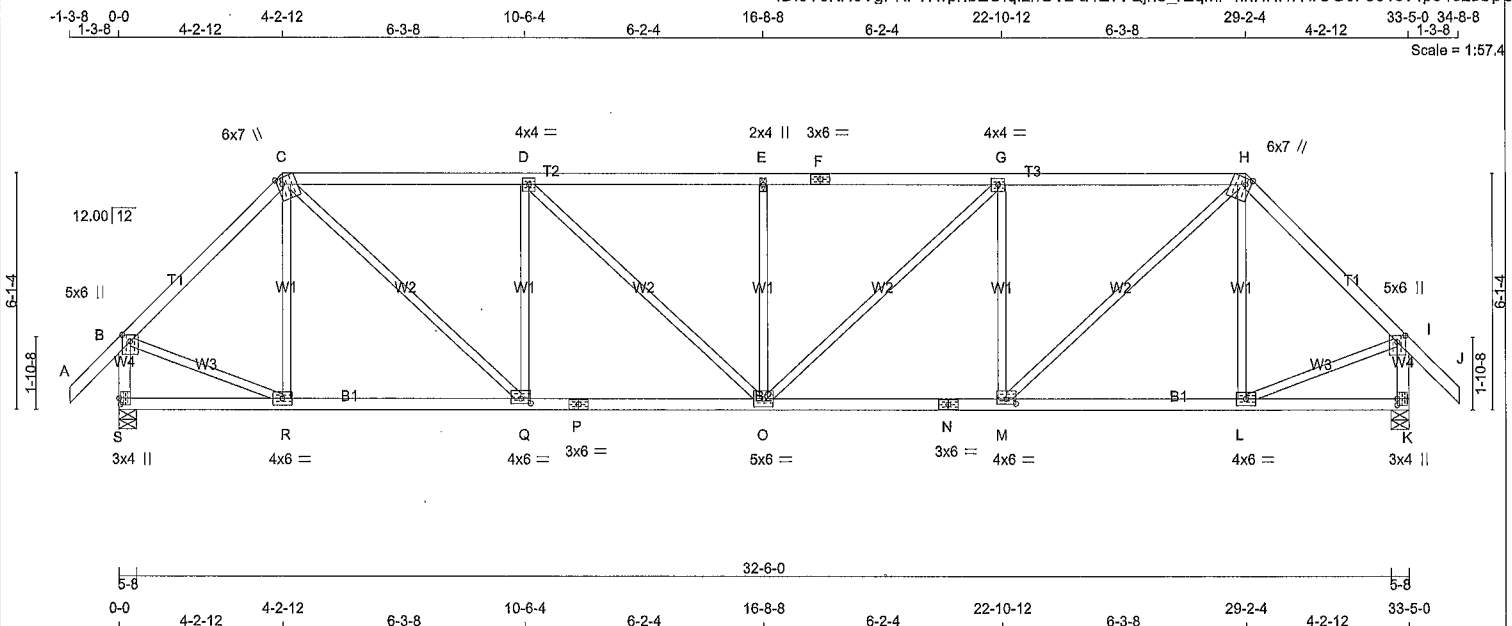
JOB NAME 264491	TRUSS NAME H13A	QUANTITY 1	PLY 1	JOB DESC. TRUSS DESC.	DRWG NO. JT 38514
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Alpa Roof Truss, Maple

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Scale = 1:57.4



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	5.0	6.0	2.00 2.50
C	TTWW+m	MT20	6.0	7.0	Edge 1.75
D	TMWW-t	MT20	4.0	4.0	
E	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	3.0	6.0	
G	TMWW-t	MT20	4.0	4.0	
H	TTWW+m	MT20	6.0	7.0	Edge 1.75
I	TMVW+p	MT20	5.0	6.0	2.00 2.50
K	BMV1+p	MT20	3.0	4.0	2.00
L	BMWW-t	MT20	4.0	6.0	
M	BMWW-t	MT20	4.0	6.0	1.50 3.00
N	BS-t	MT20	3.0	6.0	
O	BMWW-t	MT20	5.0	6.0	
P	BS-t	MT20	3.0	6.0	
Q	BMWW-t	MT20	4.0	6.0	1.50 3.00
R	BMWW-t	MT20	4.0	6.0	
S	BMV1+p	MT20	3.0	4.0	2.00 0.50

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
S	2209	0	2209	0	0	5-8	3-11		
K	2209	0	2209	0	0	5-8	3-11		

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
S	1532	1176 / 0	0 / 0	0 / 0	0 / 0
K	1532	1176 / 0	0 / 0	0 / 0	0 / 0

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

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

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

LOADING		TOTAL LOAD CASES: (4)	
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (PLF)	MAX. FACTORED MAX. UNBRACED LENGTH FR-TO
A-B	0 / 52	-104.9 -104.9 0.15 (1)	10.00
B-C	-1894 / 0	-104.9 -104.9 0.43 (1)	4.45
C-D	-2639 / 0	-104.9 -104.9 0.87 (1)	3.29
D-E	-3018 / 0	-104.9 -104.9 0.93 (1)	3.03
E-F	-3018 / 0	-104.9 -104.9 0.93 (1)	3.03
F-G	-3018 / 0	-104.9 -104.9 0.93 (1)	3.03
G-H	-2639 / 0	-104.9 -104.9 0.87 (1)	3.29
H-I	-1894 / 0	-104.9 -104.9 0.43 (1)	4.45
I-J	0 / 52	-104.9 -104.9 0.15 (1)	10.00
S-B	-2181 / 0	0.0 0.0 0.24 (1)	5.75
K-I	-2181 / 0	0.0 0.0 0.24 (1)	5.75
S-R	0 / 0	-18.5 -18.5 0.12 (4)	10.00
R-Q	0 / 1328	-18.5 -18.5 0.29 (1)	10.00
Q-P	0 / 2640	-18.5 -18.5 0.49 (1)	10.00
P-O	0 / 2640	-18.5 -18.5 0.49 (1)	10.00
O-N	0 / 2640	-18.5 -18.5 0.49 (1)	10.00
N-M	0 / 2640	-18.5 -18.5 0.49 (1)	10.00
M-L	0 / 1328	-18.5 -18.5 0.29 (1)	10.00
L-K	0 / 0	-18.5 -18.5 0.12 (4)	10.00

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL	= 32.5 PSF
DL	= 3.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 42.9 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

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.11")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.11")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.93/1.00 (D-E:1), BC=0.49/1.00 (O-Q:1), WB=0.64/1.00 (G-M:1), SSI=0.31/1.00 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.89 (I) (INPUT = 0.90)
JSI METAL= 0.68 (P) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



A18012150

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A18012160

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

- Members:**
 - Top chord: D-E, E-F, F-G, G-H, H-I.
 - Bottom chord: A-B, B-C, C-D, D-E, E-F, F-G, G-H, H-I, I-J.
 - Verticals: W1 (D-E), W2 (E-F), W3 (F-G), W4 (G-H), W5 (H-I).
 - Diagonals: W6 (A-B), W7 (B-C), W8 (C-D), W9 (D-E), W10 (E-F), W11 (F-G), W12 (G-H), W13 (H-I).
 - Other: T1 (A-B), T2 (B-C), T3 (C-D), T4 (D-E), T5 (E-F), T6 (F-G), T7 (G-H), T8 (H-I).
- Joints:** A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- Dimensions:**
 - Overall width: 32'-8" (0'-0" to 32'-8").
 - Overall height: 8'-14" (1'-10-8" to 8'-14").
 - Segment widths: 5'-8", 6'-2-12", 6'-2-12", 7'-0-4", 13'-3-0", 6'-11-0", 20'-2-0", 7'-0-4", 27'-2-4", 6'-2-12", 3'-8", 33'-6-0".
 - Segment heights: 1'-10-8", 8'-14", 1'-10-8", 8'-14".
- Notes:**
 - 6x7 // (at joint D)
 - 4x4 // (at joint E)
 - 3x8 // (at joint F)
 - 2x4 // (at joint G)
 - 6x7 // (at joint H)
 - 12.00 // 12' 4x6 // (at joint I)
 - 4x6 // (at joint J)
 - 2x4 // (at joint K)
 - 4x6 // (at joint L)
 - 4x4 // (at joint M)
 - 3x6 // (at joint N)
 - 5x6 // (at joint O)
 - 4x4 // (at joint P)
 - 3x6 // (at joint Q)
 - 4x4 // (at joint R)
 - 4x6 // (at joint S)
 - 2x4 // (at joint T)
 - 4x6 // (at joint U)
 - 2x4 // (at joint V)
 - 4x6 // (at joint W)
 - 2x4 // (at joint X)
 - 4x6 // (at joint Y)
 - 2x4 // (at joint Z)

DRY: SEASONED LUMBER.	BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.34 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.	9, NBCC 2010
PLATES (if applicable)	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.	THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011

H	TWWW+m	MT20	6.0	7.0	Edge 1.75
I	TMWW-t	MT20	4.0	6.0	1.50 2.00
J	TMV+p	MT20	2.0	4.0	
L	BMVW1+p	MT20	4.0	6.0	2.75 1.75
M	BMWW-I	MT20	4.0	4.0	
N	BS-t	MT20	3.0	6.0	
O	BMWWW-t	MT20	5.0	6.0	2.25 1.50
P	BMWW-I	MT20	4.0	4.0	1.75 1.50
Q	BS-t	MT20	3.0	6.0	
R	BMWW-I	MT20	4.0	4.0	
S	BMVW1+p	MT20	4.0	6.0	2.75 1.75

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

CHORDS						WEBS						
MAX. FACTORED			FACTORED			MAX. FACTORED			FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX.	MAX.	MEMB.	FORCE	MAX	UNBRAC	MEMB.	FORCE	MAX
	(LBS)	(PLF)		CSI (LC)			(LBS)				(LBS)	CSI (LC)
FR-TO			FROM TO			FR-TO				FR-TO		
A-B	0 / 52		-104.9 -104.9	0.15 (1)	10.00	C-R	0 / 158		0.04 (1)			
B-C	0 / 24		-104.9 -104.9	0.14 (1)	10.00	R-D	0 / 90		0.03 (4)			
D-E	-1947 / 0		-104.9 -104.9	0.20 (1)	4.86	D-P	0 / 1239		0.20 (1)			
E-F	-2184 / 0		-104.9 -104.9	0.97 (1)	3.34	P-E	-793 / 0		1.00 (1)			
F-G	-2183 / 0		-104.9 -104.9	0.96 (1)	3.34	E-O	-2 / 0		0.00 (1)			
G-H	-2182 / 0		-104.9 -104.9	0.96 (1)	3.34	O-G	-792 / 0		1.00 (1)			
H-I	-1947 / 0		-104.9 -104.9	0.20 (1)	4.86	O-H	0 / 1237		0.20 (1)			
I-J	0 / 24		-104.9 -104.9	0.14 (1)	10.00	M-I	0 / 158		0.04 (1)			
J-K	0 / 52		-104.9 -104.9	0.15 (1)	10.00	S-C	-2272 / 0		0.52 (1)			
S-B	-274 / 0		0.0 0.0	0.03 (1)	7.81	I-L	-2272 / 0		0.52 (1)			

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

CSI: TC=0.97/1.00 (D-E:1), BC=0.44/1.00 (O-P:1),
WB=1.00/1.00 (E-P:1), SSI=0.34/1.00 (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 = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION

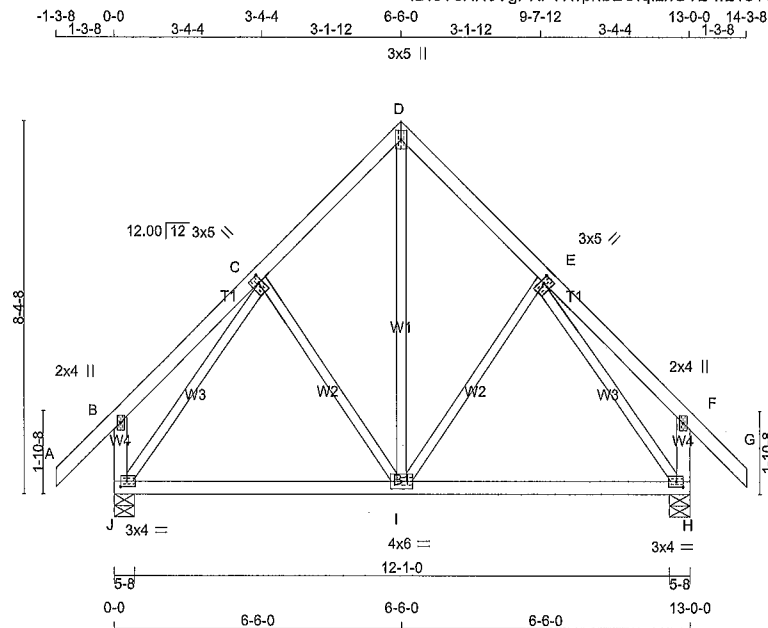
A circular professional engineer seal for the Province of Ontario. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "PROVINCE OF ONTARIO" at the bottom. Inside the ring, the name "D. O'CONNOR" is printed, with a handwritten signature "D. O'Connor" written over it. Below the name is the license number "100009580". At the bottom of the seal, the expiration date "01/23/2018" is printed.

<u>DESIGN CRITERIA</u>				
SPECIFIED LOADS:				
TOP CH.	LL =	32.5	PSF	
	DL =	3.0	PSF	
BOT CH.	LL =	0.0	PSF	
	DL =	7.4	PSF	
TOTAL LOAD	=	42.9	PSF	
<u>SPACING = 24.0 IN.C/C</u>				
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM				
THIS TRUSS IS SPECIFIED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010				
THIS DESIGN COMPLIES WITH:				
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014				
- CSA 086-09				
- TPIC 2011				
(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD				
ALLOWABLE DEFL.(LL)= L/360 (1.11")				
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.11")				
ALLOWABLE DEFL.(TL)= L/360 (1.11")				
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.19")				
CSI: TC=0.97/1.00 (D-E:1), BC=0.44/1.00 (O-P:1), WB=1.00/1.00 (E-P:1), SSI=0.34/1.00 (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 = 0.50				
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 922	2284 1656	
PLATE PLACEMENT TOL. = 0.250 inches				
PLATE ROTATION TOL. = 5.0 Deg.				
JSI GRIP= 0.87 (I) (INPUT = 0.90)				
JSI METAL= 0.55 (I) (INPUT = 1.00)				

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H17A	3	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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ID:6Y8KH0VgPKPWwprlbEOlqlznGVz-w21oY8npzWTXwXl1YEsS_B?upHoGpKmt2MXqLzUpJ



Scale = 1:50.0

TOTAL WEIGHT = 3 X 68 = 204 lb
(M)F

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF		
D - G	2x4 DRY	No.2	SPF		
J - B	2x4 DRY	No.2	SPF		
H - F	2x4 DRY	No.2	SPF		
J - H	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	TMV+p	MT20	2.0	4.0		
C	TMWW+t	MT20	3.0	5.0	2.00	1.00
D	TTW+p	MT20	3.0	5.0		
E	TMWW+t	MT20	3.0	5.0	2.00	1.00
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	3.0	4.0	1.50	1.75
I	BMVWW1-t	MT20	4.0	6.0		
J	BMVW1-t	MT20	3.0	4.0	1.50	1.75

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
J	949	0	949	0
H	949	0	949	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
J	656	513 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0
H	656	513 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	
FR-TO				FR-TO			
A-B	0 / 52	-104.9	-104.9 0.15 (1)	I-D	0 / 404	0.09 (1)	
B-C	0 / 28	-104.9	-104.9 0.18 (1)	I-E	-156 / 6	0.09 (1)	
C-D	-503 / 0	-104.9	-104.9 0.14 (1)	C-I	-156 / 6	0.09 (1)	
D-E	-503 / 0	-104.9	-104.9 0.14 (1)	J-C	-758 / 0	0.41 (1)	
E-F	0 / 28	-104.9	-104.9 0.18 (1)	E-H	-758 / 0	0.41 (1)	
F-G	0 / 52	-104.9	-104.9 0.15 (1)				
J-B	-275 / 0	0.0	0.0 0.03 (1)				
H-F	-275 / 0	0.0	0.0 0.03 (1)				
J-I	0 / 425	-18.5	-18.5 0.25 (4)				
I-H	0 / 425	-18.5	-18.5 0.25 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	32.5	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	42.9	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.43")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.43")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

CSI: TC=0.18/1.00 (B-C:1), BC=0.25/1.00 (I-J:4), WB=0.41/1.00 (E-H:1), SSI=0.12/1.00 (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 = 0.50

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

NAIL VALUES	PLATE GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (H) (INPUT = 0.90)
JSI METAL= 0.35 (E) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



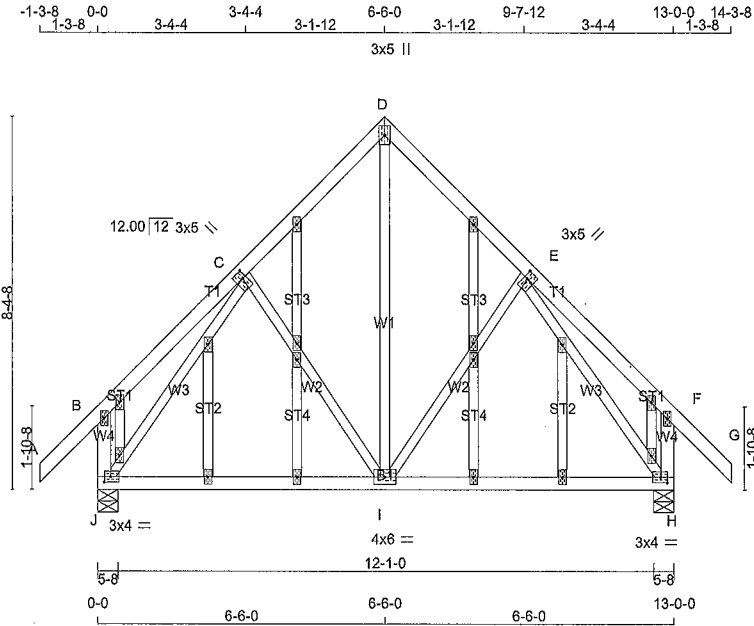
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H17G	1	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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ID:6Y8KH0VgPKPWwprlbEOIqlznGVz-PeBAIUnRkqcOYhtD6yOhWOX3Zh7VYn00H0GNlnzsUpI



Scale = 1:50.0

TOTAL WEIGHT = 85 lb. [M][F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF		
D - G	2x4 DRY	No.2	SPF		
J - B	2x4 DRY	No.2	SPF		
H - F	2x4 DRY	No.2	SPF		
J - H	2x4 DRY	No.2	SPF		
ALL WEBS EXCEPT	2x3 DRY	No.2	SPF		
ALL GABLE WEBS	2x3 DRY	No.2	SPF		
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT	2-0-0 OC.				

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW+H	MT20	3.0	5.0	2.00	1.00
D	TTW+p	MT20	3.0	5.0		
E	TMWW+H	MT20	3.0	5.0	2.00	1.00
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-I	MT20	3.0	4.0	1.50	1.75
I	BMVWW1-I	MT20	4.0	6.0		
J	BMVW1-I	MT20	3.0	4.0	1.50	1.75
K, L, M, N, O, P, Q, R, S, T, U, V, W, X						
K	NP+w	MT20	2.0	4.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
J	949	0	949	0
H	949	0	949	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
J	656	513 / 0	0 / 0
H	656	513 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, H
BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING													
TOTAL LOAD CASES: (4)													
CHORDS								WEBS					
MEMB.		MAX. FACTORED	FORCE		FACTORED		VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
			(LBS)		(PLF)				CSI (LC)	UNBRAC		FORCE	MAX
FR-TO										LENGTH	FR-TO	(LBS)	CSI (LC)
A-B	0 / 52		-104.9	-104.9	0.15	(1)	10.00	I-D		0 / 404		0.09	(1)
B-C	0 / 28		-104.9	-104.9	0.18	(1)	10.00	I-E		-156 / 6		0.09	(1)
C-D	-503 / 0		-104.9	-104.9	0.14	(1)	6.25	C-I		-156 / 6		0.09	(1)
D-E	-503 / 0		-104.9	-104.9	0.14	(1)	6.25	J-C		-758 / 0		0.41	(1)
E-F	0 / 28		-104.9	-104.9	0.18	(1)	10.00	E-H		-758 / 0		0.41	(1)
F-G	0 / 52		-104.9	-104.9	0.15	(1)	10.00						
J-B	-275 / 0		0.0	0.0	0.03	(1)	7.81						
H-F	-275 / 0		0.0	0.0	0.03	(1)	7.81						
J-I	0 / 425		-18.5	-18.5	0.25	(4)	10.00						
I-H	0 / 425		-18.5	-18.5	0.25	(4)	10.00						

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 32.5 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 42.9 PSF
SPACING = 24.0 IN. C/C

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

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

(55% OF 43.9 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.43")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
 ALLOWABLE DEFL.(TL)= L/360 (0.43")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.18/1.00 (E-F:1), BC=0.25/1.00 (H-I:4), WB=0.41/1.00 (E-H:1), SSI=0.12/1.00 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

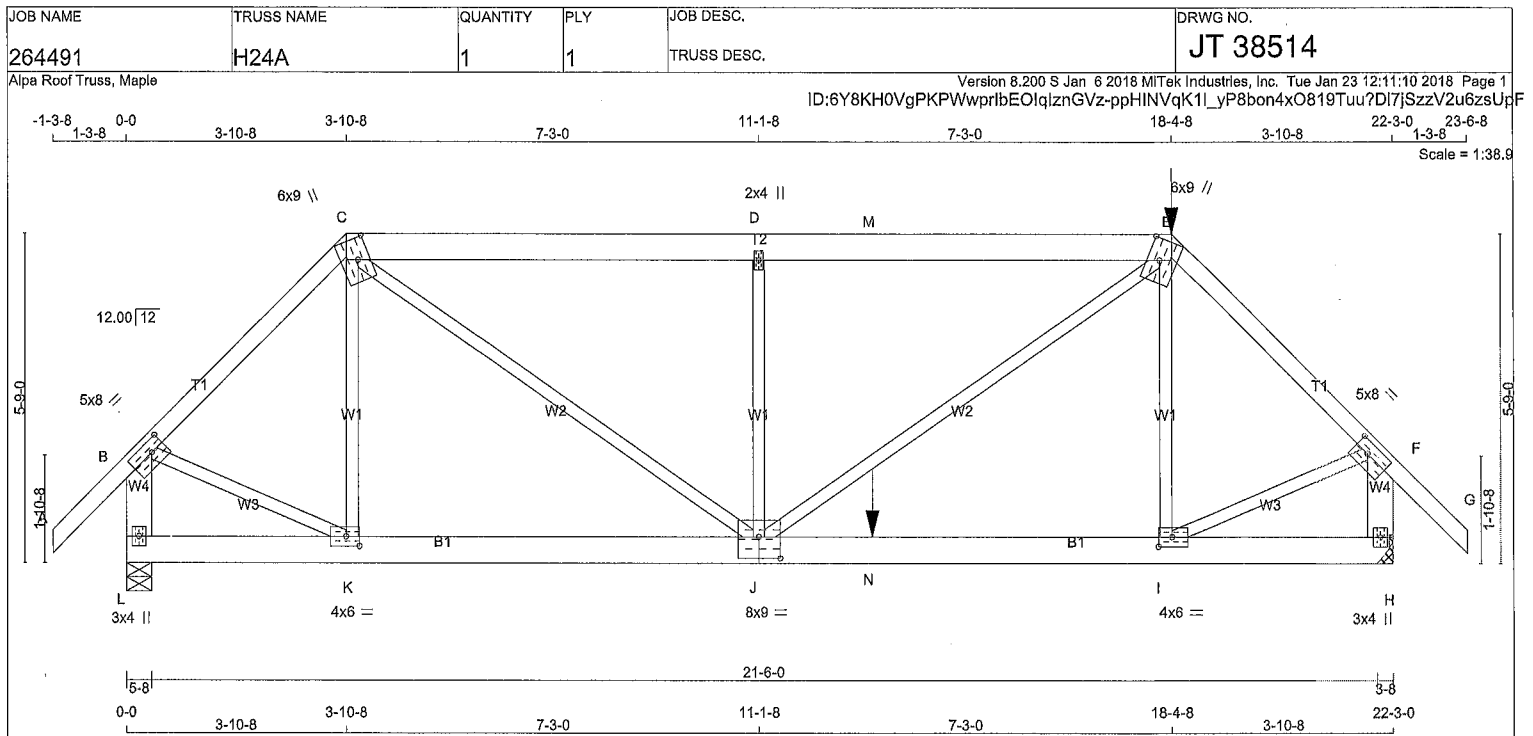
JSI GRIP= 0.87 (H) (INPUT = 0.90)
 JSI METAL= 0.35 (E) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x6	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
J - H	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-t	MT20	5.0	8.0	2.25	3.00
C	TTWW+m	MT20	6.0	9.0	4.50	2.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	6.0	9.0	4.50	2.50
F	TMVW-t	MT20	5.0	8.0	2.25	3.00
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0	2.00	2.75
J	BSWWW-l	MT20	8.0	9.0	4.50	4.50
K	BMWW-t	MT20	4.0	6.0	2.00	2.75
L	BMV1+p	MT20	3.0	4.0		

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 160.9 lbs FACTORED DOWN AT 18-4-8 ON TOP CHORD, AND 898.2 lbs FACTORED DOWN AT 13-1-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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		
JT	1392	0	2008	0	5-8	2-3
H	2428	0	2428	0	0	HANGER BY OTHERS

MIN. SEAT SIZE: 2-10

UNFACTORED REACTIONS

JT	1ST LCASE MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1392	1071 / 0	0 / 0	0 / 0	0 / 0	321 / 0	0 / 0
H	1685	1287 / 0	0 / 0	0 / 0	0 / 0	397 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 52	-104.9 -104.9	0.16 (1)	K-C	-420 / 0	0.19 (1)	
B-C	-1668 / 0	-104.9 -104.9	0.37 (1)	C-J	0 / 1894	0.47 (1)	
C-D	-2701 / 0	-104.9 -104.9	0.62 (1)	J-D	-1061 / 0	0.48 (1)	
D-M	-2701 / 0	-104.9 -104.9	0.62 (1)	J-E	0 / 1394	0.35 (1)	
M-E	-2701 / 0	-154.1 -154.1	0.62 (1)	I-E	-56 / 133	0.05 (4)	
E-F	-2227 / 0	-104.9 -104.9	0.43 (1)	B-K	0 / 1256	0.31 (1)	
F-G	0 / 52	-104.9 -104.9	0.16 (1)	I-F	0 / 1677	0.42 (1)	
L-B	-1955 / 0	0.0 0.0	0.15 (1)				
H-F	-2493 / 0	0.0 0.0	0.19 (1)				
L-K	0 / 0	-18.5 -18.5	0.06 (1)	10.00			
K-J	0 / 1173	-18.5 -18.5	0.53 (1)	10.00			
J-N	0 / 1576	-18.5 -18.5	0.88 (1)	10.00			
N-I	0 / 1576	-27.2 -27.2	0.88 (1)	10.00			
I-H	0 / 0	-27.2 -27.2	0.36 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
E	18-4-8	-161	-161	---	FRONT	VERT	TOTAL
N	13-1-8	-898	-898	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:
TOP CH. LL = 32.5 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 42.9 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 3-10-8
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-1-8 OF SPAN
MEASURED FROM THE RIGHT.

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

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

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

(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.74")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/999 (0.25")

CSI: TC=0.62/1.00 (C-D:1), BC=0.88/1.00 (I-J:1), WB=0.48/1.00 (D-J:1), SSI=0.49/1.00 (I-J: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 = 0.50

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

NAIL VALUES

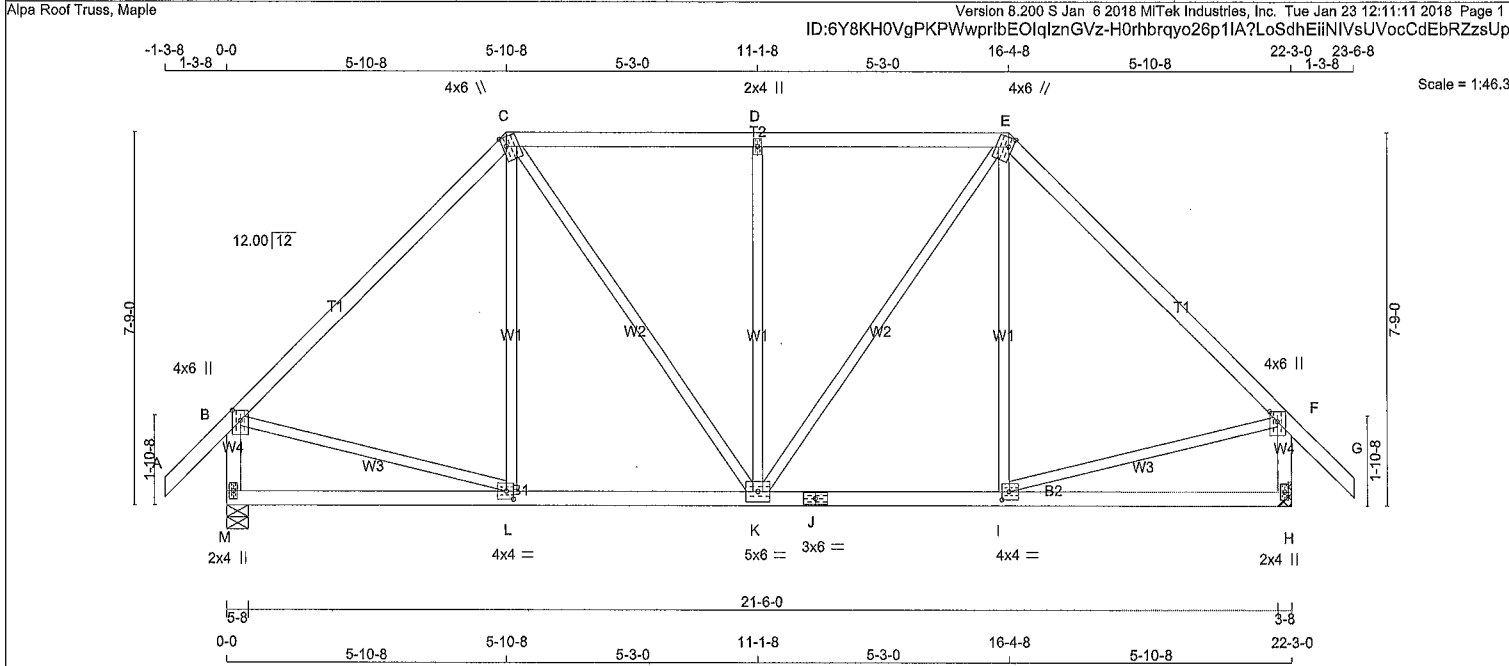
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	R22	2284	1656



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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H25A	1	1	TRUSS DESC.	JT 38514



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	2100F 1.8E	SPF
C - E	2x4	No.2	SPF
E - G	2x4	2100F 1.8E	SPF
M - B	2x4	No.2	SPF
H - F	2x4	No.2	SPF
M - J	2x4	No.2	SPF
J - H	2x4	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

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
M	1520	0	1520	0
H	1520	0	1520	0

UPLIFT IN-SX 5-8 2-4

HANGER BY OTHERS

MIN. SEAT SIZE: 1-10

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 32.5 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 42.9 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

THIS DESIGN COMPLIES WITH:

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.74")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

ALLOWABLE DEFL.(TL)= L/360 (0.74")

CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.38/1.00 (C-D:1), BC=0.22/1.00 (I-K:1), WB=0.75/1.00 (D-K:1), SSI=0.27/1.00 (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 = 0.50

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	1667

MAX MIN MAX MIN MAX MIN

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)

JSI METAL= 0.30 (L) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.50	2.00
C	TTWW+m	MT20	4.0	6.0	Edge	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	4.0	6.0	Edge	1.00
F	TMVW+p	MT20	4.0	6.0	2.50	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	4.0	4.0	2.00	1.75
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	5.0	6.0		
L	BMWW-t	MT20	4.0	4.0	2.00	1.75
M	BMV1+p	MT20	2.0	4.0		

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

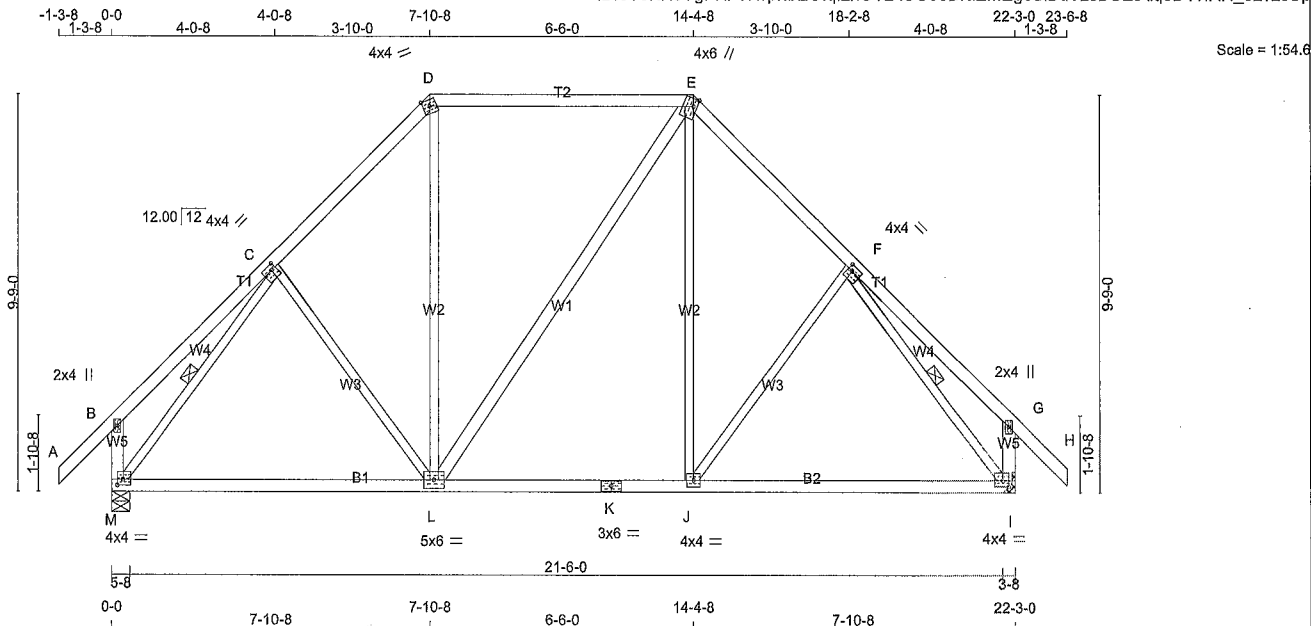
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H26A	1	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	2100F 1.8E	SPF
E - H	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
L - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	4.0	1.50	1.25
D	TTW-m	MT20	4.0	4.0	Edge	
E	TTWW+m	MT20	4.0	6.0	Edge	1.00
F	TMWW-t	MT20	4.0	4.0	1.50	1.25
G	TMV+p	MT20	2.0	4.0		
I	BMVW1-t	MT20	4.0	4.0	1.75	1.75
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	6.0		
M	BMVW1-t	MT20	4.0	4.0	1.75	1.75

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
M	1520	0	1520	0	0	5-8	1-10		
I	1520	0	1520	0	0			HANGER BY OTHERS	MIN. SEAT SIZE: 1-10

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1053	813 / 0	0 / 0	0 / 0	0 / 0	0 / 0	240 / 0	0 / 0
I	1053	813 / 0	0 / 0	0 / 0	0 / 0	0 / 0	240 / 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 = 5.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-M, F-I.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 52	-104.9 -104.9	0.15 (1)	10.00	C-L	-136 / 19	0.12 (1)
B-C	0 / 34	-104.9 -104.9	0.26 (1)	10.00	L-D	0 / 252	0.06 (1)
C-D	-1097 / 0	-104.9 -104.9	0.22 (1)	5.80	L-E	0 / 0	0.00 (1)
D-E	-752 / 0	-104.9 -104.9	0.38 (1)	6.25	J-E	0 / 252	0.06 (1)
E-F	-1097 / 0	-104.9 -104.9	0.22 (1)	5.80	J-F	-136 / 19	0.12 (1)
F-G	0 / 34	-104.9 -104.9	0.26 (1)	10.00	M-C	-1423 / 0	0.43 (1)
G-H	0 / 52	-104.9 -104.9	0.15 (1)	10.00	F-I	-1423 / 0	0.43 (1)
M-B	-302 / 0	0.0	0.03 (1)	7.81			
I-G	-302 / 0	0.0	0.03 (1)	7.81			
M-L	0 / 831	-18.5 -18.5	0.28 (4)	10.00			
L-K	0 / 752	-18.5 -18.5	0.28 (4)	10.00			
K-J	0 / 752	-18.5 -18.5	0.28 (4)	10.00			
J-I	0 / 831	-18.5 -18.5	0.28 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	32.5	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	42.9	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

THIS DESIGN COMPLIES WITH:

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

(55% OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.74")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.74")
CALCULATED VERT. DEFL.(TL)= L/999 (0.14")

CSI: TC=0.38/1.00 (D-E:1), BC=0.28/1.00 (I-J:4), WB=0.43/1.00 (C-M:1), SSI=0.27/1.00 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PS)	(PL)	(PL)	(PL)
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (E) (INPUT = 0.90)
JSI METAL= 0.53 (C) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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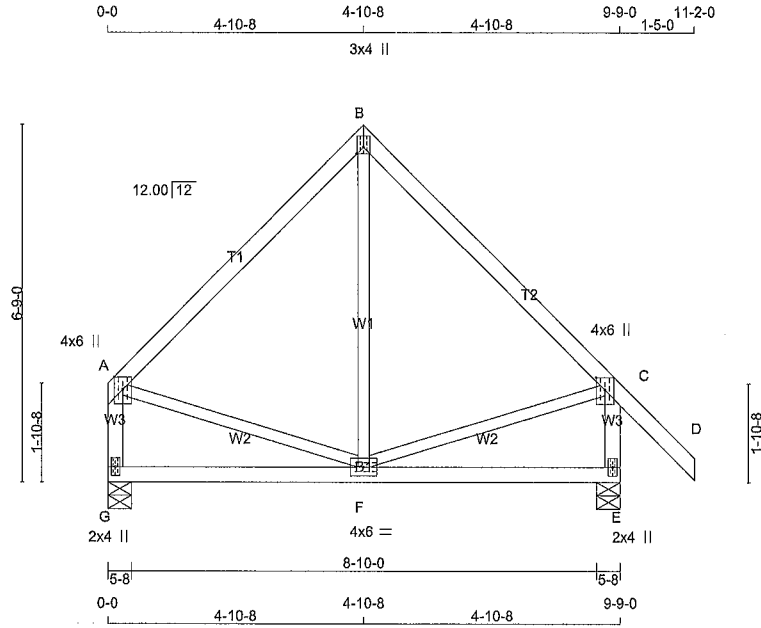
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H28	4	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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Scale = 1:42.1



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - B 2x4 DRY No.2 SPF B - D 2x4 DRY No.2 SPF G - A 2x4 DRY No.2 SPF E - C 2x4 DRY No.2 SPF G - E 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. PLATES (table is in inches) JT TYPE PLATES W LEN Y X A TMVW+p MT20 4.0 6.0 2.75 2.00 B TTW+p MT20 3.0 4.0 Edge C TMVW+p MT20 4.0 6.0 2.75 2.00 E BMV1+p MT20 2.0 4.0 F BMWWW-t MT20 4.0 6.0 G BMV1+p MT20 2.0 4.0 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 32.5 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 42.9 PSF SPACING = 24.0 IN. C/C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 43.9 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.33") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00") ALLOWABLE DEFL.(TL)= L/360 (0.33") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01") CSI: TC=0.32/1.00 (B-C:1) , BC=0.13/1.00 (E-F:4) , WB=0.06/1.00 (A-F:1) , SSI=0.14/1.00 (B-C:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 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 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.51 (C) (INPUT = 0.90) JSI METAL= 0.13 (E) (INPUT = 1.00)				BEARINGS FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX G 602 0 602 0 0 5-8 1-8 E 761 0 761 0 0 5-8 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL G 418 317 / 0 0 / 0 0 / 0 0 / 0 101 / 0 0 / 0 E 526 415 / 0 0 / 0 0 / 0 0 / 0 111 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, E BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX. MAX. UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. CSI (LC) FR-TO FROM TO A - B -335 / 0 -104.9 -104.9 0.32 (1) 6.25 F - B -37 / 86 0.03 (4) B - C -335 / 0 -104.9 -104.9 0.32 (1) 6.25 A - F 0 / 248 0.06 (1) C - D 0 / 56 -104.9 -104.9 0.17 (1) 10.00 F - C 0 / 248 0.06 (1) G - A -567 / 0 0.0 0.0 0.06 (1) 7.81 E - C -727 / 0 0.0 0.0 0.08 (1) 7.81 G - F 0 / 0 -18.5 -18.5 0.13 (4) 10.00 F - E 0 / 0 -18.5 -18.5 0.13 (4) 10.00			
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NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



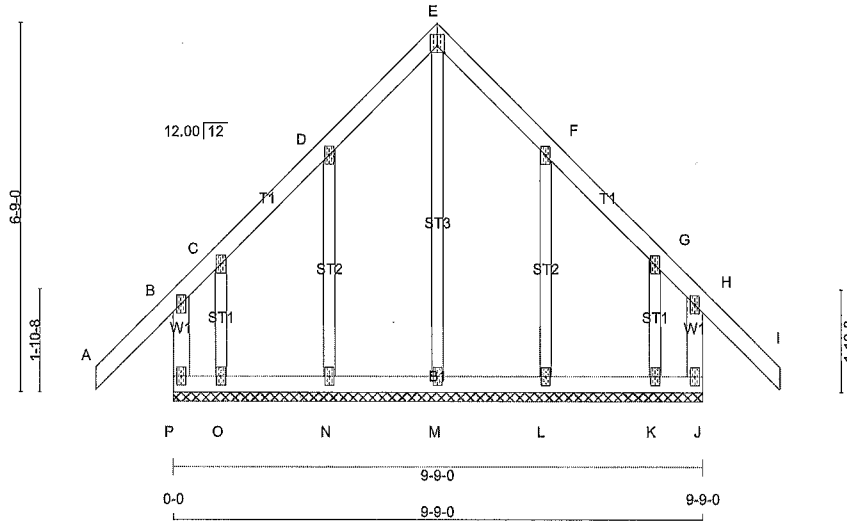
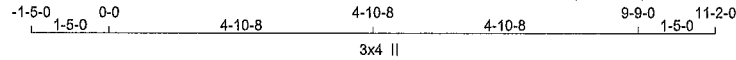
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
264491	H28G	1	1	TRUSS DESC.	JT 38514

Alpa Roof Truss, Maple

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ID:6Y8KH0VgPKPWwprlbEOqlznGVz-hbWpDttq5zUOulvZ0w0KltKGsWZkh_72ubTF1tzzUpB



TOTAL WEIGHT = 51 lb [M]

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

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMV+p	MT20	2.0	4.0	
C, D, F, G				Edge
C TMW+w	MT20	2.0	4.0	
E TTW+p	MT20	3.0	4.0	
H TMV+p	MT20	2.0	4.0	
J BMV1+p	MT20	2.0	4.0	
K, L, M, N, O				
K BMW1+w	MT20	2.0	4.0	
P BMV1+p	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
P-B	-261 / 0	0.0 0.0 0.05 (1)	7.81	M-E	-274 / 0	0.20 (1)	
A-B	0 / 56	-104.9 -104.9 0.17 (1)	10.00	N-D	-227 / 0	0.07 (1)	
B-C	-26 / 0	-104.9 -104.9 0.11 (1)	6.25	O-C	-47 / 0	0.01 (1)	
C-D	0 / 45	-104.9 -104.9 0.06 (1)	10.00	L-F	-227 / 0	0.07 (1)	
D-E	0 / 41	-104.9 -104.9 0.06 (1)	10.00	K-G	-47 / 0	0.01 (1)	
E-F	0 / 45	-104.9 -104.9 0.06 (1)	10.00				
F-G	0 / 41	-104.9 -104.9 0.06 (1)	10.00				
G-H	-26 / 0	-104.9 -104.9 0.11 (1)	6.25				
H-I	0 / 56	-104.9 -104.9 0.17 (1)	10.00				
J-H	-261 / 0	0.0 0.0 0.05 (1)	7.81				
P-O	-24 / 0	-18.5 -18.5 0.01 (4)	6.25				
O-N	-26 / 0	-18.5 -18.5 0.02 (4)	6.25				
N-M	-31 / 0	-18.5 -18.5 0.02 (4)	6.25				
M-L	-31 / 0	-18.5 -18.5 0.02 (4)	6.25				
L-K	-26 / 0	-18.5 -18.5 0.02 (4)	6.25				
K-J	-24 / 0	-18.5 -18.5 0.01 (4)	6.25				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 32.5 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 42.9 PSF

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.17/1.00 (A-B:1), BC=0.02/1.00 (M-N:4), WB=0.20/1.00 (E-M:1), SSI=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

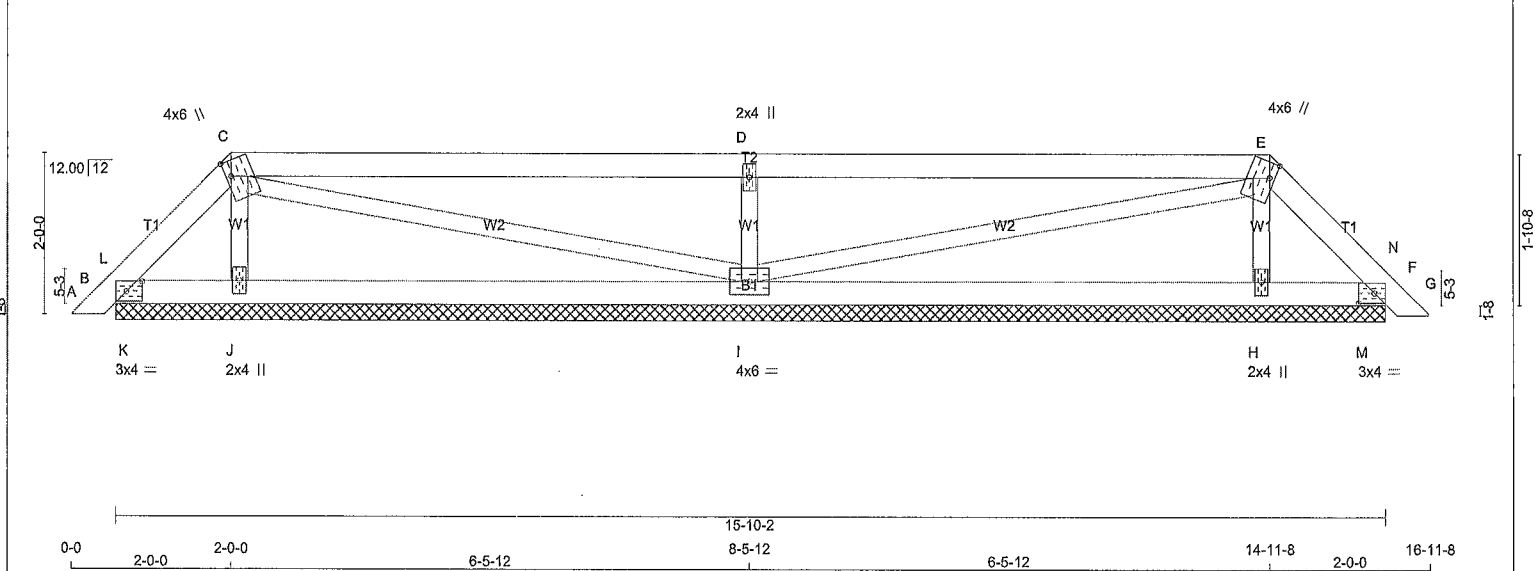
JSI GRIP= 0.44 (E) (INPUT = 0.90)
JSI METAL= 0.08 (E) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



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TOTAL WEIGHT = 2 X 53 = 105 lb [M]

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N.L.G.A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL	=	32.5 PSF
A - C	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	DL	=	3.0 PSF	
E - G	2x4	DRY	No.2	VERT	DOWN	UPLIFT	IN-SX	BOT CH.	LL	=	0.0 PSF
B - F	2x4	DRY	No.2	HORZ	HORZ		IN-SX	DL	=	7.4 PSF	
ALL WEBS	2x3	DRY	No.2	JT	JT	JT	JT	TOTAL LOAD	=	42.9 PSF	
DRY: SEASONED LUMBER.				B	158	0	15-10-2				
				F	158	0	15-10-2				
				J	376	0	15-10-2				
				I	982	0	15-10-2				
				H	376	0	15-10-2				

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS. FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT F FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
1ST LCASE	MAX/MIN	COMPONENT REACTIONS		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010			
JT	COMBINED	SNOW	LIVE	THIS DESIGN COMPLIES WITH:			
B	104	111 / 0	0 / 0	- PART 9 OF OBC 2012, BCBC 2012, ABC 2014			
F	104	111 / 0	0 / 0	- CSA 086-09			
J	267	167 / 0	0 / 0	- TPIC 2011			
I	679	532 / 0	0 / 0	(55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD			
H	267	167 / 0	0 / 0	CSI: TC=0.75/1.00 (C-D:1), BC=0.16/1.00 (H-I:4), WB=0.12/1.00 (D-I:1), SSI=0.33/1.00 (C-D:1)			

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

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

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

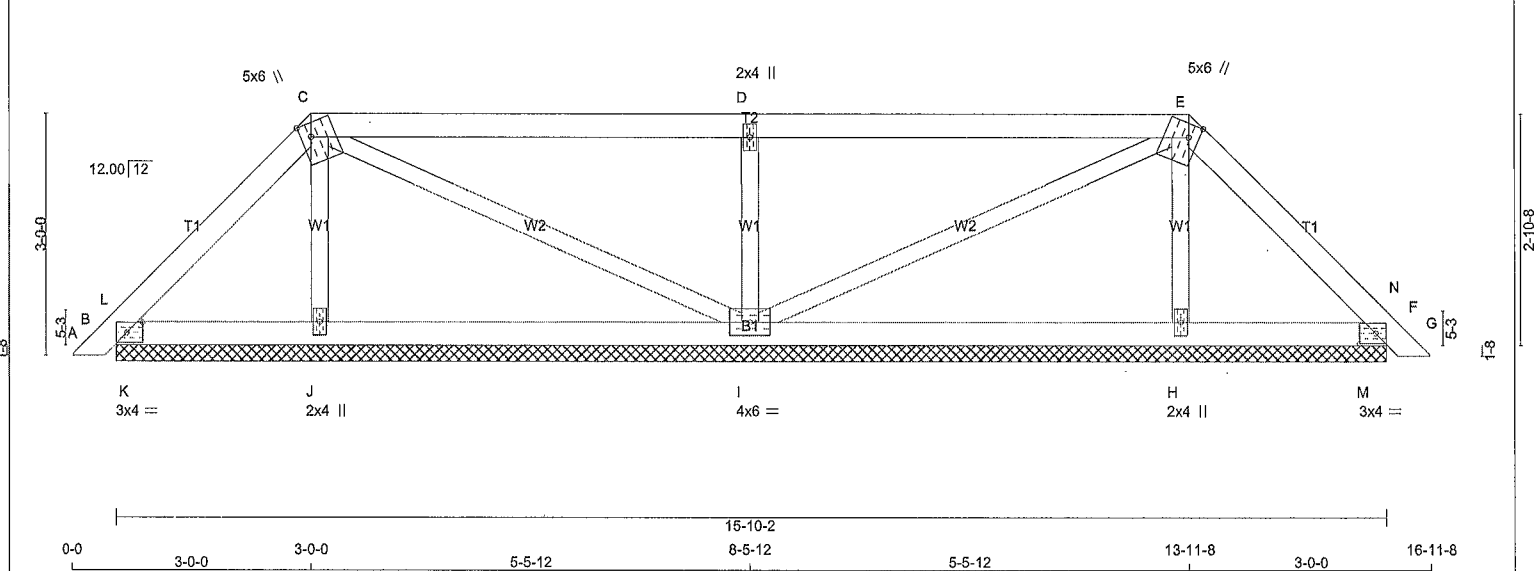
LOADING
 TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
A-B	0 / 15	-104.9 -104.9	0.02 (1)	J-C	-252 / 0	0.04 (1)	
B-L	-21 / 40	-104.9 -104.9	0.03 (4)	C-I	-21 / 0	0.02 (1)	
L-C	-80 / 0	-104.9 -104.9	0.02 (1)	I-D	-849 / 0	0.12 (1)	
C-D	-12 / 1	-104.9 -104.9	0.75 (1)	I-E	-21 / 0	0.02 (1)	
D-E	-12 / 1	-104.9 -104.9	0.75 (1)	H-E	-252 / 0	0.04 (1)	
E-N	-80 / 0	-104.9 -104.9	0.02 (1)	K-L	-149 / 0	0.00 (1)	
N-F	-21 / 40	-104.9 -104.9	0.03 (4)	M-N	-149 / 0	0.00 (1)	
F-G	0 / 15	-104.9 -104.9	0.02 (1)				

B-K	0 / 50	-18.5 -18.5	0.04 (1)	10.00
K-J	0 / 50	-18.5 -18.5	0.12 (4)	10.00
J-I	0 / 33	-18.5 -18.5	0.16 (4)	10.00
I-H	0 / 33	-18.5 -18.5	0.16 (4)	10.00
H-M	0 / 50	-18.5 -18.5	0.12 (4)	10.00
M-F	0 / 50	-18.5 -18.5	0.04 (1)	10.00

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

LICENSED PROFESSIONAL ENGINEER
D. O'CONNOR
100009580
01/23/2018
PROVINCE OF ONTARIO



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - C 2x4 DRY No.2 SPF C - E 2x4 DRY No.2 SPF E - G 2x4 DRY No.2 SPF B - F 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td></td><td colspan="2">FACTORED GROSS REACTION</td><td colspan="2">MAXIMUM FACTORED GROSS REACTION</td><td>INPUT BRG</td><td>REQRD BRG</td></tr><tr><td>JT</td><td></td><td>VERT</td><td>HORZ</td><td>DOWN</td><td>HORZ</td><td>UPLIFT</td><td>IN-SX</td></tr><tr><td>B</td><td>260</td><td>0</td><td></td><td>260</td><td>0</td><td>0</td><td>15-10-2</td></tr><tr><td>F</td><td>260</td><td>0</td><td></td><td>260</td><td>0</td><td>0</td><td>15-10-2</td></tr><tr><td>J</td><td>334</td><td>0</td><td></td><td>334</td><td>0</td><td>0</td><td>15-10-2</td></tr><tr><td>I</td><td>860</td><td>0</td><td></td><td>860</td><td>0</td><td>0</td><td>15-10-2</td></tr><tr><td>H</td><td>334</td><td>0</td><td></td><td>334</td><td>0</td><td>0</td><td>15-10-2</td></tr></table>												FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	B	260	0		260	0	0	15-10-2	F	260	0		260	0	0	15-10-2	J	334	0		334	0	0	15-10-2	I	860	0		860	0	0	15-10-2	H	334	0		334	0	0	15-10-2	DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 32.5 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 42.9 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 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 43.9 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 32.5 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.53/1.00 (D-E:1), BC=0.12/1.00 (I-J:4), WB=0.12/1.00 (D-I:1), SSI=0.28/1.00 (C-D:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10 COMPANION LIVE LOAD FACTOR = 0.50 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 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.38 (D) (INPUT = 0.90) JSI METAL= 0.13 (D) (INPUT = 1.00)																																																																																																																																																																																																					
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PLATES (table is in inches) <table><tr><td>JT</td><td>TYPE</td><td>PLATES</td><td>W</td><td>LEN</td><td>Y</td><td>X</td></tr><tr><td>B</td><td>TMB1-I</td><td>MT20</td><td>3.0</td><td>4.0</td><td>1.50</td><td>2.50</td></tr><tr><td>C</td><td>TTWW+m</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.00</td><td>1.50</td></tr><tr><td>D</td><td>TMW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>E</td><td>TTWW+m</td><td>MT20</td><td>5.0</td><td>6.0</td><td>2.00</td><td>1.50</td></tr><tr><td>F</td><td>TMB1-I</td><td>MT20</td><td>3.0</td><td>4.0</td><td>1.50</td><td>2.50</td></tr><tr><td>H</td><td>BMW1+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>I</td><td>BMWWW1-I</td><td>MT20</td><td>4.0</td><td>6.0</td><td></td><td></td></tr><tr><td>J</td><td>BMW1+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr></table>					JT	TYPE	PLATES	W	LEN	Y	X	B	TMB1-I	MT20	3.0	4.0	1.50	2.50	C	TTWW+m	MT20	5.0	6.0	2.00	1.50	D	TMW+w	MT20	2.0	4.0			E	TTWW+m	MT20	5.0	6.0	2.00	1.50	F	TMB1-I	MT20	3.0	4.0	1.50	2.50	H	BMW1+w	MT20	2.0	4.0			I	BMWWW1-I	MT20	4.0	6.0			J	BMW1+w	MT20	2.0	4.0			UNFACTORED REACTIONS <table><tr><td></td><td>1ST LCASE</td><td colspan="6">MAX./MIN. COMPONENT REACTIONS</td></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM.LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>B</td><td>177</td><td>155 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>22 / 0</td><td>0 / 0</td></tr><tr><td>F</td><td>177</td><td>155 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>22 / 0</td><td>0 / 0</td></tr><tr><td>J</td><td>236</td><td>155 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>81 / 0</td><td>0 / 0</td></tr><tr><td>I</td><td>595</td><td>467 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>128 / 0</td><td>0 / 0</td></tr><tr><td>H</td><td>236</td><td>155 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>81 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, J, I, H BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) <table><tr><td colspan="3">CHORDS</td><td colspan="4">WEBS</td></tr><tr><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>FACTORED VERT. LOAD (PLF)</td><td>LC1 MAX. CSI (LC)</td><td>MAX. UNBRAC LENGTH</td><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>MAX. CSI (LC)</td></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>A-B</td><td>0 / 15</td><td>-104.9 -104.9</td><td>0.02 (1)</td><td>10.00</td><td>J-C</td><td>-224 / 0</td><td>0.04 (1)</td></tr><tr><td>B-L</td><td>-12 / 3</td><td>-104.9 -104.9</td><td>0.04 (1)</td><td>6.25</td><td>C-I</td><td>-50 / 0</td><td>0.03 (1)</td></tr><tr><td>L-C</td><td>-116 / 0</td><td>-104.9 -104.9</td><td>0.07 (1)</td><td>6.25</td><td>I-D</td><td>-718 / 0</td><td>0.12 (1)</td></tr><tr><td>C-D</td><td>-20 / 0</td><td>-104.9 -104.9</td><td>0.53 (1)</td><td>6.25</td><td>I-E</td><td>-50 / 0</td><td>0.03 (1)</td></tr><tr><td>D-E</td><td>-20 / 0</td><td>-104.9 -104.9</td><td>0.53 (1)</td><td>6.25</td><td>H-E</td><td>-224 / 0</td><td>0.04 (1)</td></tr><tr><td>E-N</td><td>-116 / 0</td><td>-104.9 -104.9</td><td>0.07 (1)</td><td>6.25</td><td>K-L</td><td>-256 / 0</td><td>0.00 (1)</td></tr><tr><td>N-F</td><td>-12 / 3</td><td>-104.9 -104.9</td><td>0.04 (1)</td><td>6.25</td><td>M-N</td><td>-256 / 0</td><td>0.00 (1)</td></tr><tr><td>F-G</td><td>0 / 15</td><td>-104.9 -104.9</td><td>0.02 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>B-K</td><td>0 / 75</td><td>-18.5 -18.5</td><td>0.08 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>K-J</td><td>0 / 75</td><td>-18.5 -18.5</td><td>0.08 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>J-I</td><td>0 / 66</td><td>-18.5 -18.5</td><td>0.12 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>I-H</td><td>0 / 66</td><td>-18.5 -18.5</td><td>0.12 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>H-M</td><td>0 / 75</td><td>-18.5 -18.5</td><td>0.08 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>M-F</td><td>0 / 75</td><td>-18.5 -18.5</td><td>0.08 (1)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											1ST LCASE	MAX./MIN. COMPONENT REACTIONS						JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	B	177	155 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0	F	177	155 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0	J	236	155 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0	I	595	467 / 0	0 / 0	0 / 0	0 / 0	128 / 0	0 / 0	H	236	155 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0	CHORDS			WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	FR-TO		FROM TO			FR-TO			A-B	0 / 15	-104.9 -104.9	0.02 (1)	10.00	J-C	-224 / 0	0.04 (1)	B-L	-12 / 3	-104.9 -104.9	0.04 (1)	6.25	C-I	-50 / 0	0.03 (1)	L-C	-116 / 0	-104.9 -104.9	0.07 (1)	6.25	I-D	-718 / 0	0.12 (1)	C-D	-20 / 0	-104.9 -104.9	0.53 (1)	6.25	I-E	-50 / 0	0.03 (1)	D-E	-20 / 0	-104.9 -104.9	0.53 (1)	6.25	H-E	-224 / 0	0.04 (1)	E-N	-116 / 0	-104.9 -104.9	0.07 (1)	6.25	K-L	-256 / 0	0.00 (1)	N-F	-12 / 3	-104.9 -104.9	0.04 (1)	6.25	M-N	-256 / 0	0.00 (1)	F-G	0 / 15	-104.9 -104.9	0.02 (1)	10.00				B-K	0 / 75	-18.5 -18.5	0.08 (1)	10.00				K-J	0 / 75	-18.5 -18.5	0.08 (4)	10.00				J-I	0 / 66	-18.5 -18.5	0.12 (4)	10.00				I-H	0 / 66	-18.5 -18.5	0.12 (4)	10.00				H-M	0 / 75	-18.5 -18.5	0.08 (4)	10.00				M-F	0 / 75	-18.5 -18.5	0.08 (1)	10.00			
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NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

LICENSED PROFESSIONAL ENGINEER

D. O'CONNOR

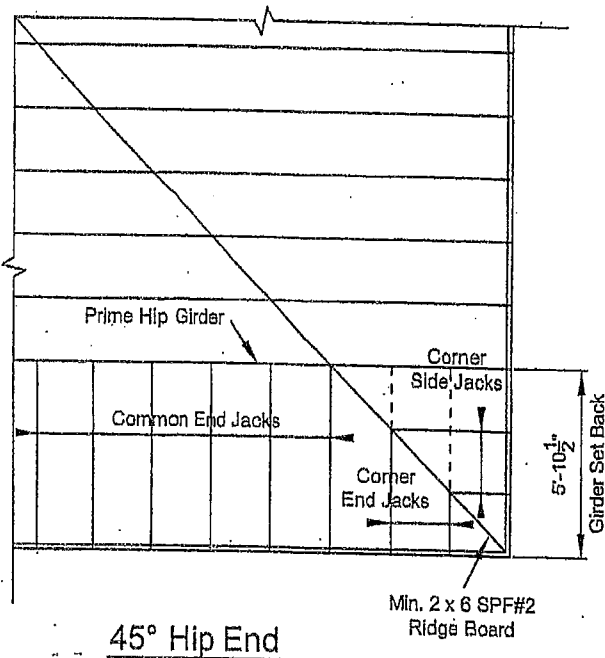
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01/23/2018

PROVINCE OF ONTARIO

A18012472

STRACON ENGINEERING INC.



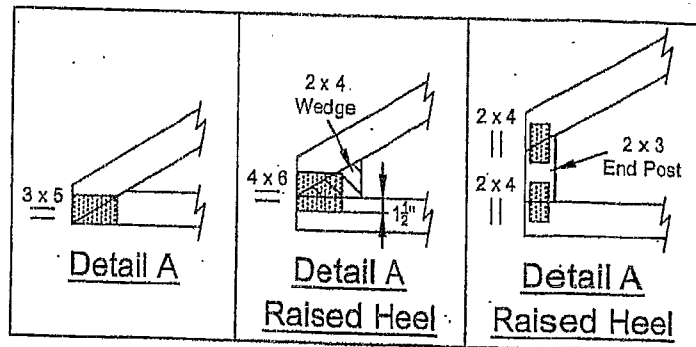
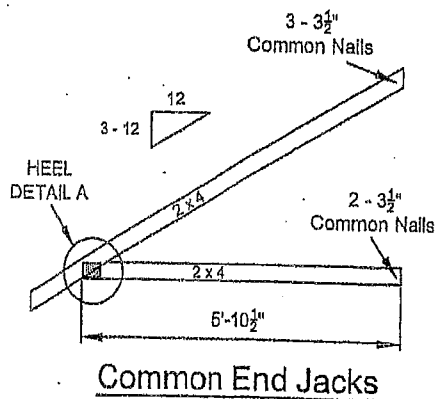
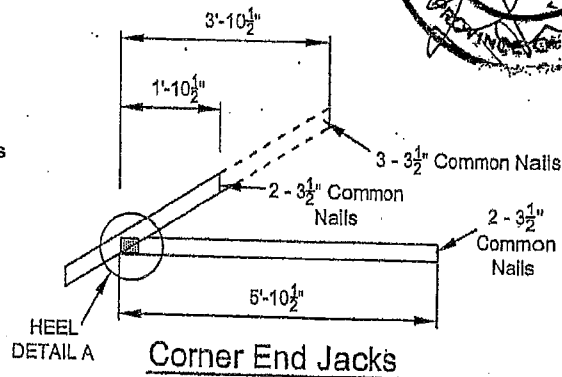
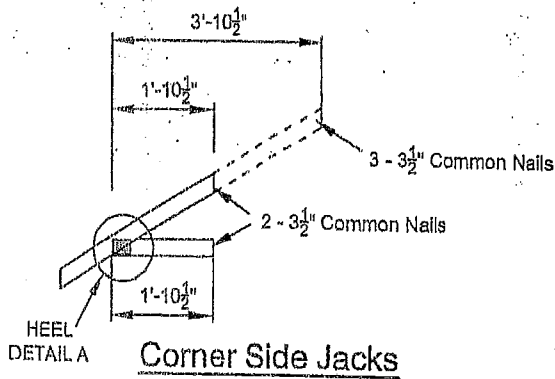
LUMBER SPECIFICATION

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

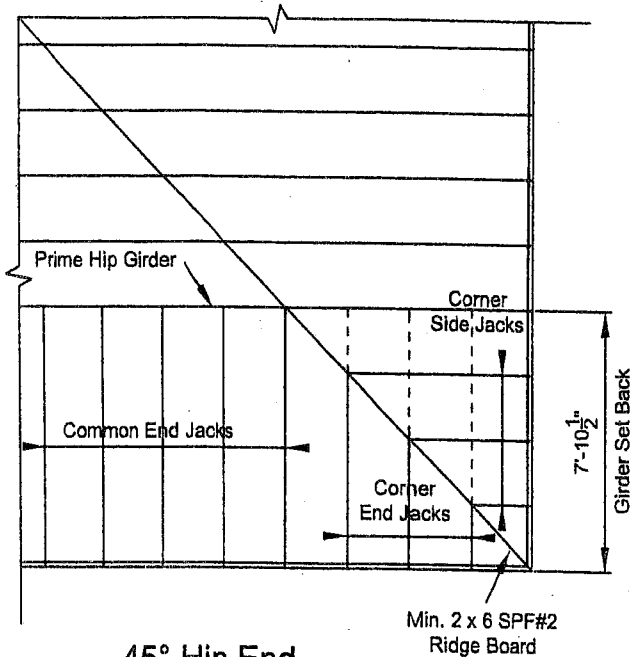


NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

CS-51008

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STRACON ENGINEERING INC.



45° Hip End

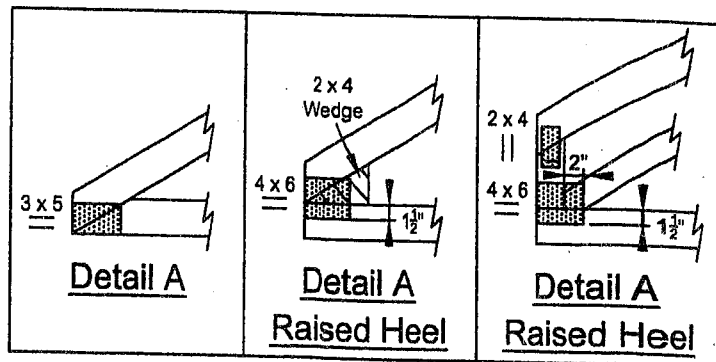
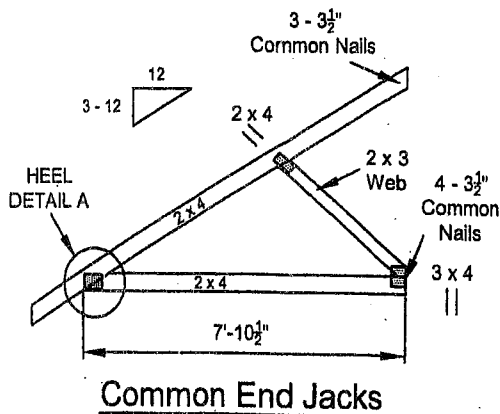
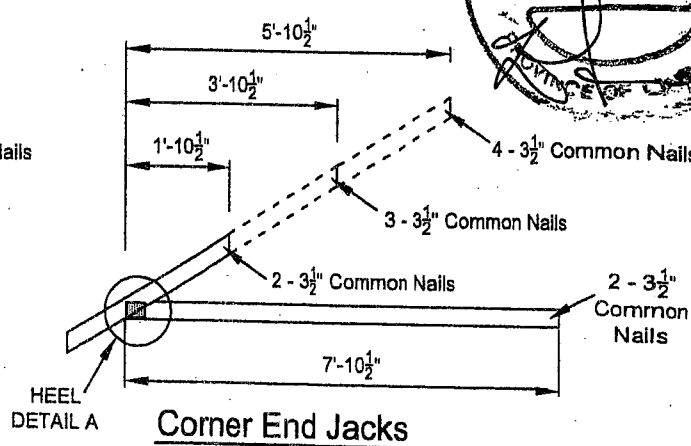
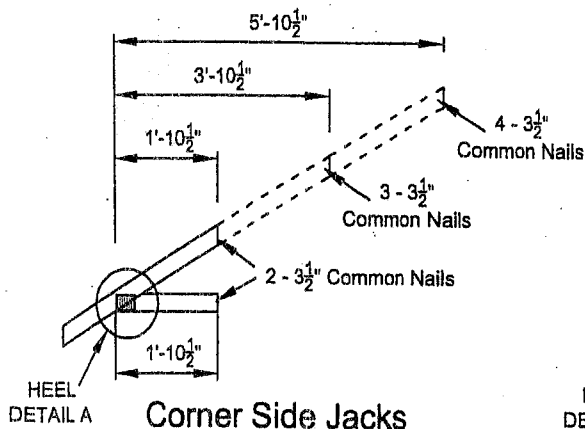
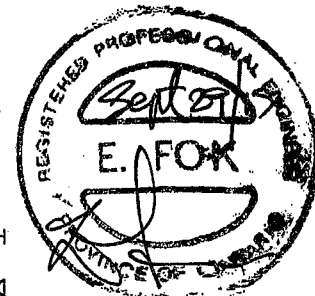
LUMBER SPECIFICATION

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 : 34.8 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 : 44.8 P.S.F



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

CS-71008N

SITE COPY

LUS – Double Shear Joist Hangers



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

Material: 18 gauge

Finish: G90 galvanized

Design:

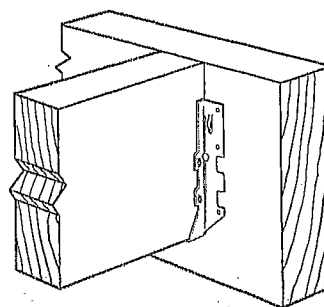
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

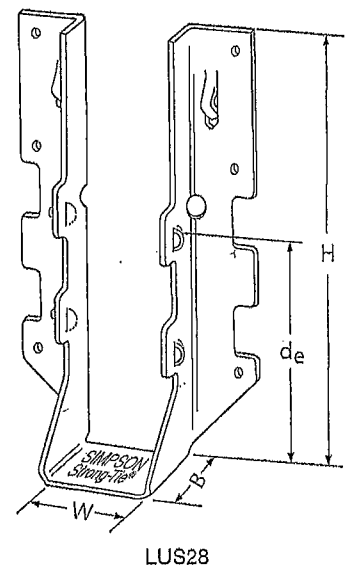
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



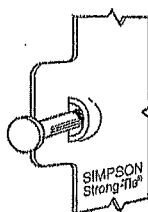
Typical LUS Installation



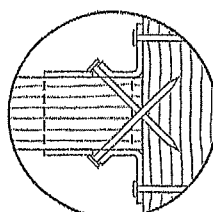
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.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)
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 1/8	3 1/2	2	1 1/8	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 1/8	4 3/4	1 1/4	3/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 3/4	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 3/8	4 3/4	2	3/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 1/8	6 3/4	1 1/4	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 3/8	6 1/4	2	3/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/8	1 1/4	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 3/8	8 3/4	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

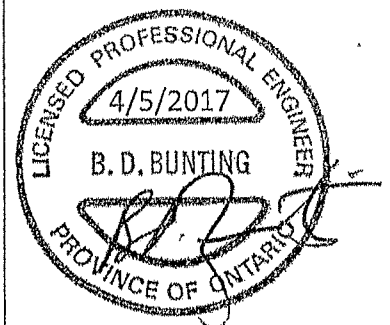
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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



Double Shear Nailing Top View.



LIMIT STATES DESIGN

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T-SPEC LUS17 3/17 exp. 6/19

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HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

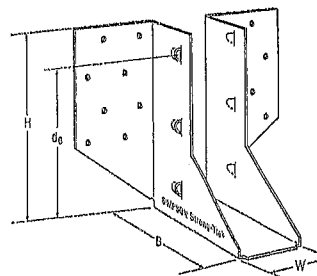
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

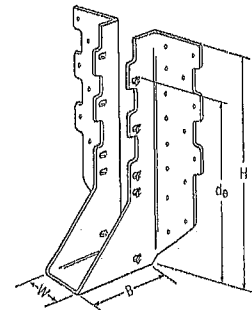
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

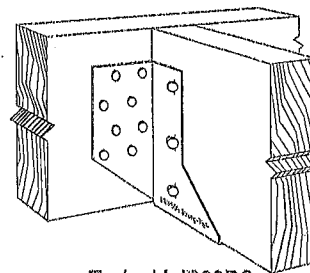
- See current catalogue for options



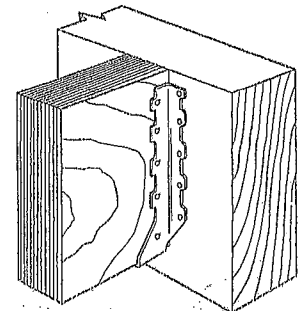
LJS26DS



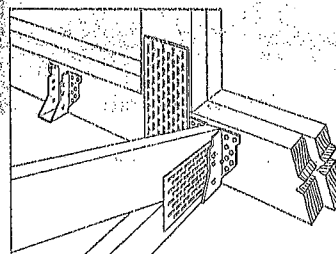
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



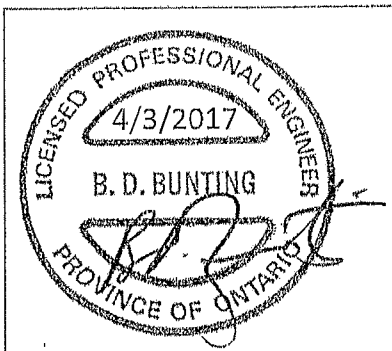
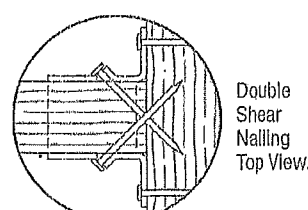
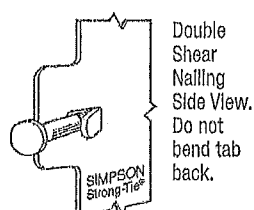
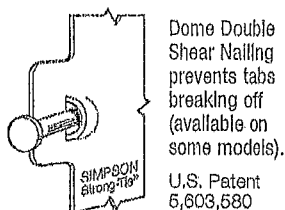
Typical HUS
Installation



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 ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 1/8	5 3/8	3	3 1/16	(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 3/2	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 1/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d₀ is the distance from the seat of the hanger to the highest joist nail.



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HHUS – Double Shear Joist Hangers



All HHUS 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: 14 gauge

Finish: G90 galvanized

Design:

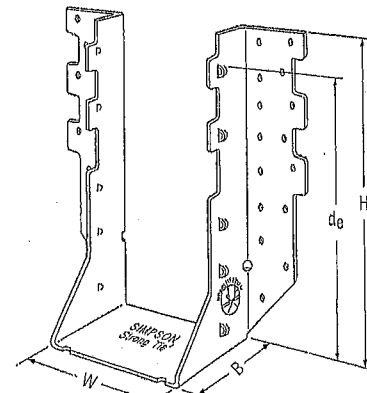
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

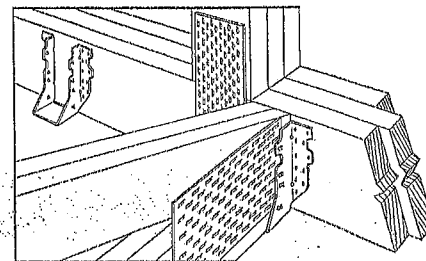
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

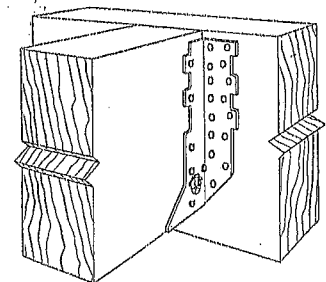
- See current catalogue for options



HHUS410



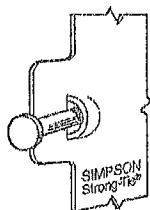
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

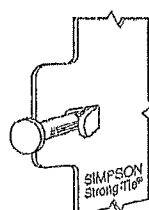
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _p =1.15)	(K _p =1.00)	(K _p =1.15)	(K _p =1.00)
HHUS26-2	14	3 5/16	5 1/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 7/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 9/32	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 1/16	9	3	7 15/16	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	6 1/16	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 3/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 3/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8945	2267	6345
HHUS410	14	3 5/8	9	3	8	(30) 16d	(10) 16d	4745	9855	4310	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS7.25/10	14	7 1/4	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4745	10770	4310	7650

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

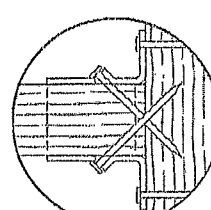


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

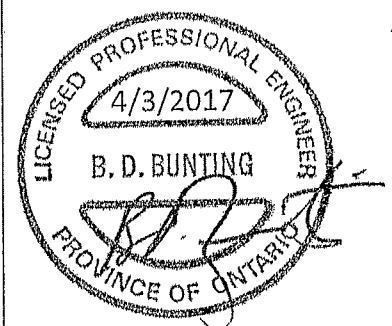
U.S. Patent 5,603,680



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



Double Shear Nailing Top View.



LIMIT STATES DESIGN

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