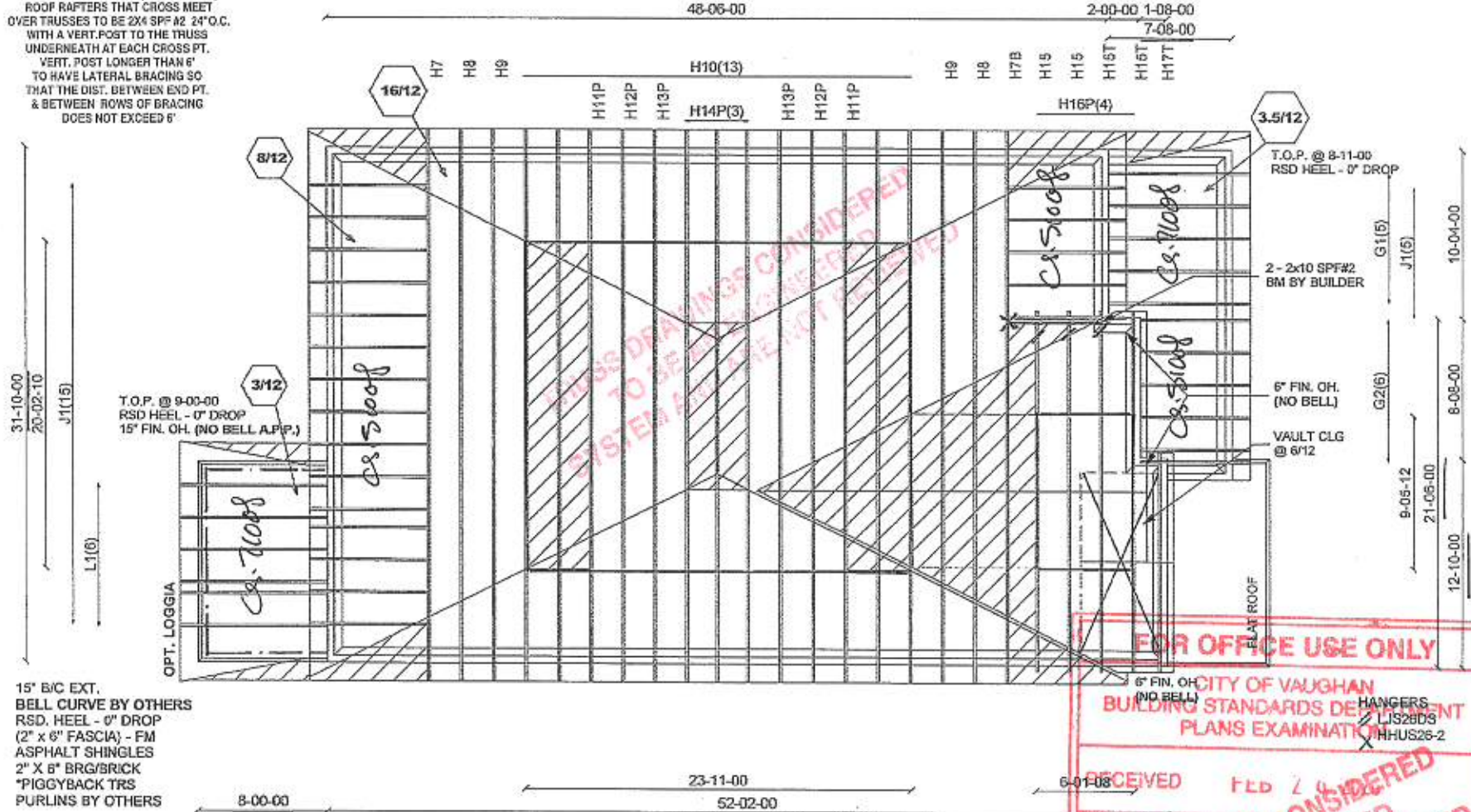


20-120002-64D-00-CM

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

ALPA-BARRIE



FOR OFFICE USE ONLY

CITY OF VAUGHAN
BUILDING STANDARDS DEPARTMENT
PLANS EXAMINATION

RECEIVED FEB 2 2018

DATE REVIEWED INITIAL

ZONING
GRADING
BUILDING CODE
MECHANICAL
ELECTRICAL
FIRE

CONVENTIONAL FRAMING BY OTHERS

A-18023088 - A-18023093
A-18023112 - A-18023114

VALLEYVIEW
4002



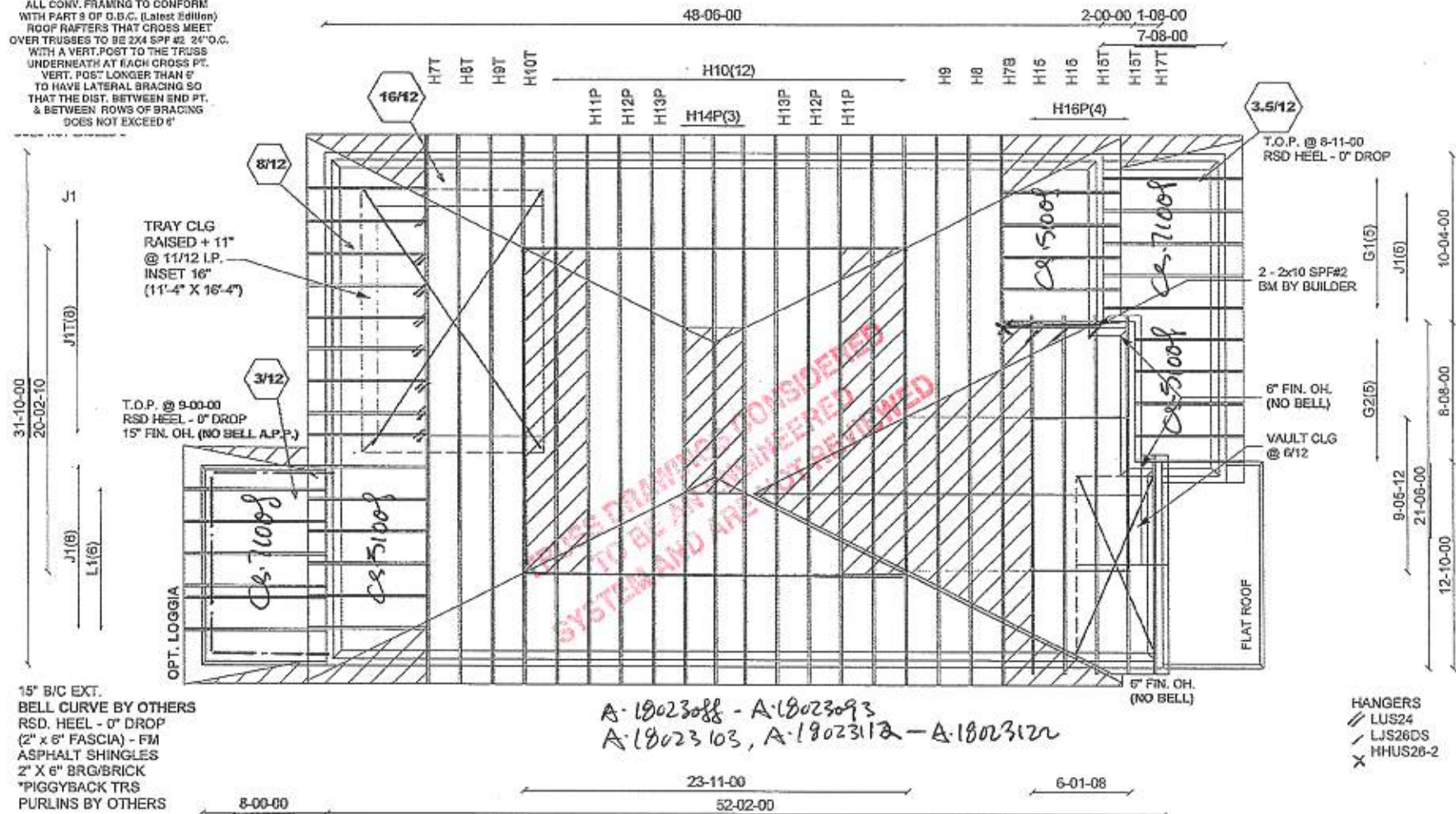
Job Track: 45147
Layout ID: 291798
Plan Log: 95233

Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/16/2018 Designer: AMANDA

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.

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24" O.C. WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'



HANGERS
 // LUS24
 / LJS26DS
 X HHUS26-2

CONVENTIONAL FRAMING BY OTHERS

VALLEYVIEW



Job Trade: 45147
 Layout ID: 292574
 Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN
 Project: **PINE VALLEY**
 Date: 1/15/2018 Designer: AMANDA

Model / Elevation:
4002 REV1 / A OPT TRAY
OR OPT LOGGIA

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



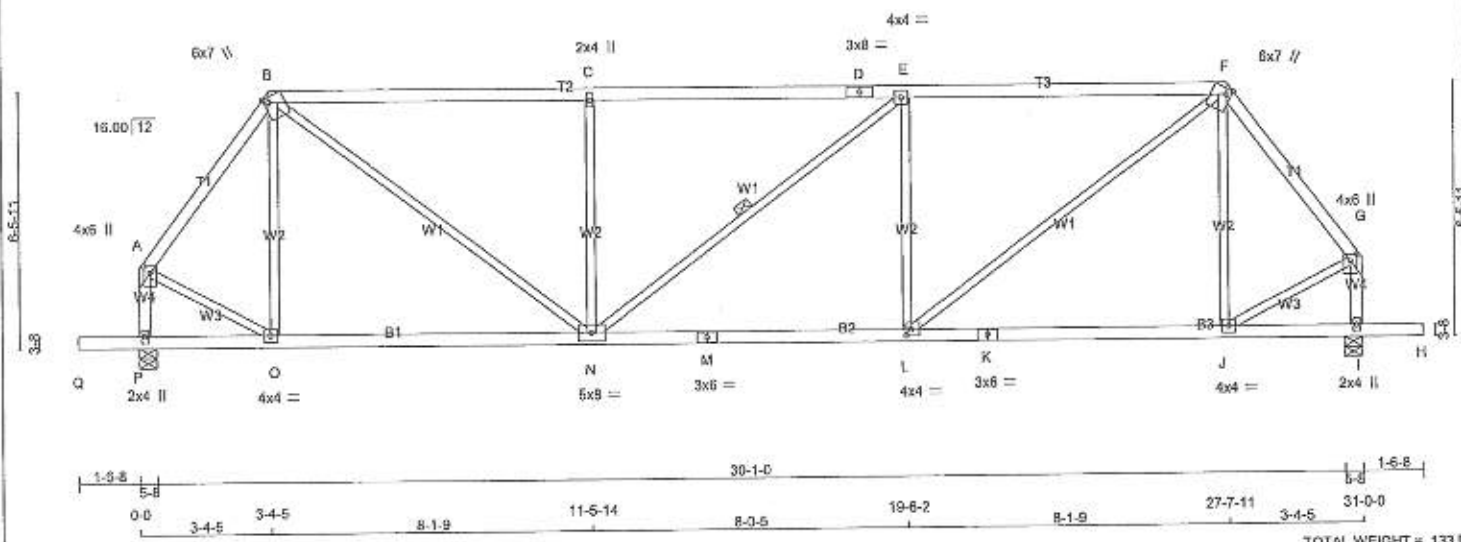
RESPONSIBILITIES

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



LUMBER

N. L. C. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
P - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
Q - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
K - 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
A	TMW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-l	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMW+w	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-l	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-l	MT20	4.0	4.0	1.75	1.50
M	BS-t	MT20	3.0	6.0		
N	BMWW-l	MT20	6.0	8.0		
O	BMWW-l	MT20	4.0	4.0		
P	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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	RECORD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1644	0	1644	0	5-8	2-7
I	1644	0	1644	0	5-8	2-7

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
I	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.67 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO			FR-TO			
A-B	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	O-B	-219 / 2	0.15 (1)	
B-C	-1844 / 0	-78.0	-78.0	0.90 (1)	3.69	B-N	0 / 1378	0.31 (1)	
C-D	-1844 / 0	-78.0	-78.0	0.90 (1)	3.67	N-E	-680 / 0	0.46 (1)	
D-E	-1844 / 0	-78.0	-78.0	1.00 (1)	3.67	N-E	-1 / 0	0.00 (1)	
E-F	-1845 / 0	-78.0	-78.0	0.99 (1)	3.67	E-F	-880 / 0	0.46 (1)	
F-G	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	L-F	0 / 1379	0.31 (1)	
P-A	-1487 / 0	0.0	0.0	0.17 (1)	6.72	J-F	-219 / 2	0.15 (1)	
I-G	-1486 / 0	0.0	0.0	0.17 (1)	6.72	A-C	0 / 825	0.19 (1)	
						J-G	0 / 825	0.19 (1)	
Q-P	0 / 0	-86.5	-86.5	0.16 (1)	10.00				
P-O	0 / 0	-18.5	-18.5	0.18 (1)	10.00				
O-N	0 / 745	-18.5	-18.5	0.31 (4)	10.00				
N-M	0 / 1845	-18.5	-18.5	0.43 (1)	10.00				
M-L	0 / 1845	-18.5	-18.5	0.43 (1)	10.00				
L-K	0 / 744	-18.5	-18.5	0.31 (4)	10.00				
K-J	0 / 744	-18.5	-18.5	0.31 (4)	10.00				
J-I	0 / 0	-18.5	-18.5	0.18 (4)	10.00				
I-H	0 / 0	-86.5	-86.5	0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 6.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.4 PSF
 TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (1.03")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.08")
 ALLOWABLE DEFL.(TL) = $L/360$ (1.03")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.19")

CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL) = $L/120$ (0.19")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
 ALLOWABLE DEFL.(TL) = $L/120$ (0.19")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CS: TC=1.00/1.00 (E-F:1), BC=0.43/1.00 (E-N:1), WB=0.46/1.00 (E-L:1), SS=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

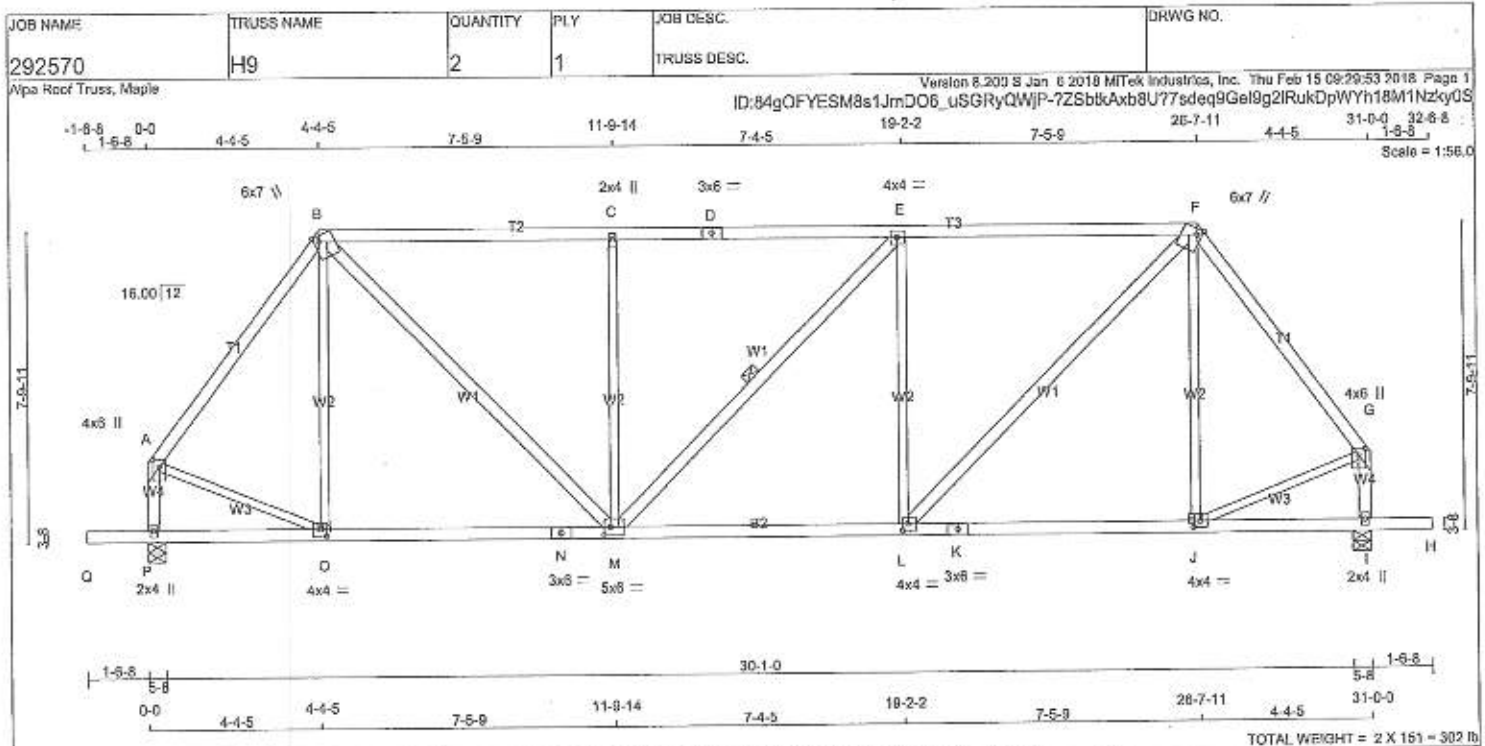
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 616 354 1867 766 1987 1036

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
 JSI METAL= 0.84 (R) (INPUT = 1.00)





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+m	MT20	2.0	4.0		
D	TS-I	MT20	3.0	6.0		
E	TMW-I	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMW-I	MT20	4.0	4.0	2.00	1.75
K	SS-I	MT20	3.0	6.0		
L	BMW-I	MT20	4.0	4.0	2.00	1.50
M	BMW-I	MT20	5.0	6.0	2.50	2.00
N	BS-I	MT20	3.0	6.0		
O	BMW-I	MT20	4.0	4.0	2.00	1.75
P	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.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1644	0	1644	0	5-8	2-7
I	1644	0	1644	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERALIVE	WIND			
P	1172	715/0	0/0	0/0	0/0	457/0	0/0
I	1172	715/0	0/0	0/0	0/0	457/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-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				W F R S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. CS1 (LC)	MAX. UNBRAC. LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	-1277/0	-78.0 -78.0	0.33 (1)	5.35	Q-B	-151/78	0.17 (1)
B-C	-1521/0	-78.0 -78.0	0.74 (1)	4.35	B-M	0/1077	0.17 (1)
C-D	-1521/0	-78.0 -78.0	0.74 (1)	4.35	M-C	-824/0	0.71 (1)
D-E	-1521/0	-78.0 -78.0	0.74 (1)	4.35	M-E	-1/0	0.00 (1)
E-F	-1522/0	-78.0 -78.0	0.75 (1)	4.35	L-E	-824/0	0.71 (1)
F-G	-1277/0	-78.0 -78.0	0.33 (1)	5.35	L-F	0/1078	0.17 (1)
P-A	-1468/0	0.0 0.0	0.17 (1)	6.75	J-F	-152/78	0.17 (1)
I-G	-1468/0	0.0 0.0	0.17 (1)	6.75	A-O	0/810	0.18 (1)
				10.00	J-G	0/810	0.18 (1)
Q-P	0/0	-98.5 -98.5	0.16 (1)	10.00			
P-O	0/0	-18.5 -18.5	0.16 (4)	10.00			
O-N	0/790	-18.5 -18.5	0.27 (4)	10.00			
N-M	0/790	-18.5 -18.5	0.27 (4)	10.00			
M-L	0/1522	-18.5 -18.5	0.36 (1)	10.00			
L-K	0/790	-18.5 -18.5	0.27 (4)	10.00			
K-J	0/790	-18.5 -18.5	0.27 (4)	10.00			
J-I	0/0	-18.5 -18.5	0.16 (4)	10.00			
I-H	0/0	-98.5 -98.5	0.18 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL =	21.0 PSF
DL =	6.0 PSF
BOT CH. LL =	0.0 PSF
DL =	7.4 PSF
TOTAL LOAD =	34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (1.03")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.06")
ALLOWABLE DEFL. (TL) = $L/360$ (1.03")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.13")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL. (LL) = $L/120$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.01")
ALLOWABLE DEFL. (TL) = $L/120$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.01")

CS1: TC=0.75/1.00 (E-F:1), BC=0.36/1.00 (L-M:1), WB=0.71/1.00 (E-L:1), SS=0.27/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 I.S. BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1867 788 1867 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

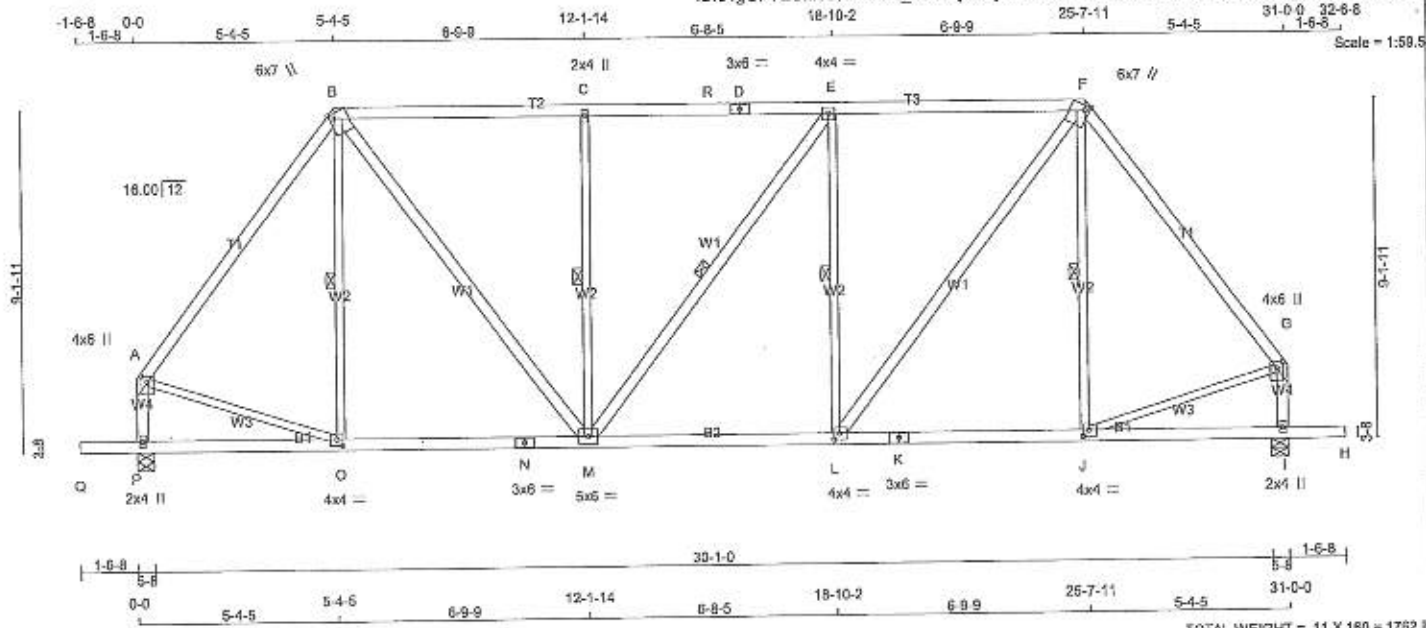
JSI GRIP= 0.86 (A) (INPUT = 0.80)
JSI METAL= 0.44 (A) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H10	11	1	TRUSS DESC.	

Alps Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 09:30:11 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRYQWJP-T1YPfuoEMgISld75bxasbyQB7h2cR2mBqqVJLzky0A



TOTAL WEIGHT = 11 X 160 = 1762 lb

LUMBER

N. I. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+P	MT20	4.0	8.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMVW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMVW-i	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	8.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-i	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
M	BMVW-w	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
P	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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD BRG
JT	VERT	HORZ	DOWN	HORZ
P	1720	0	0	0
I	1720	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE
P	1233	715 / 0	0 / 0	0 / 0
I	1233	715 / 0	0 / 0	0 / 0

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

BRACING

FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.22 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 B-O, C-M, E-M, E-L, F-J.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO							FR-TO			
A-B	-1366 / 0	-78.0	-78.0	0.37 (1)	5.22	0-B	-112 / 38	0.06 (1)		
B-C	-1383 / 0	-85.5	-85.5	0.49 (1)	2.00	D-M	0 / 841	0.15 (1)		
C-R	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-C	-822 / 0	0.34 (1)		
R-D	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-E	-2 / 0	0.00 (1)		
D-E	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	L-F	622 / 0	0.34 (1)		
E-F	-1384 / 0	-85.5	-85.5	0.49 (1)	2.00	L-F	0 / 844	0.15 (1)		
F-G	-1384 / 0	-78.0	-78.0	0.37 (1)	5.22	J-F	-113 / 36	0.05 (1)		
P-A	-1533 / 0	0.0	0.0	0.18 (1)	6.64	A-O	0 / 844	0.19 (1)		
I-G	-1533 / 0	0.0	0.0	0.18 (1)	6.64	J-G	0 / 843	0.19 (1)		
Q-P	0 / 0	-86.5	-86.5	0.16 (1)	10.00					
P-Q	0 / 0	-18.5	-18.5	0.16 (4)	10.00					
O-N	0 / 808	-18.5	-18.5	0.25 (4)	10.00					
N-M	0 / 808	-18.5	-18.5	0.25 (4)	10.00					
M-L	0 / 1385	-18.5	-18.5	0.31 (1)	10.00					
L-K	0 / 808	-18.5	-18.5	0.25 (4)	10.00					
K-J	0 / 806	-18.5	-18.5	0.25 (4)	10.00					
J-I	0 / 0	-16.3	-16.3	0.16 (4)	10.00					
I-H	0 / 0	-66.5	-66.5	0.18 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 34.4 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086.03, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.05")
ALLOWABLE DEFL.(TL) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.11")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.49/1.00 (E-F:1), BC=0.31/1.00 (L-M:1), WB=0.34/1.00 (E-L:1), SSI=0.27/1.00 (E-F:1)

DOI LUMBER=1.00 NAIL=1.00 L8 BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PL) (FL)
MAX MIN MAX MIN MAX MIN
MT20 816 354 1067 768 1987 1053

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)

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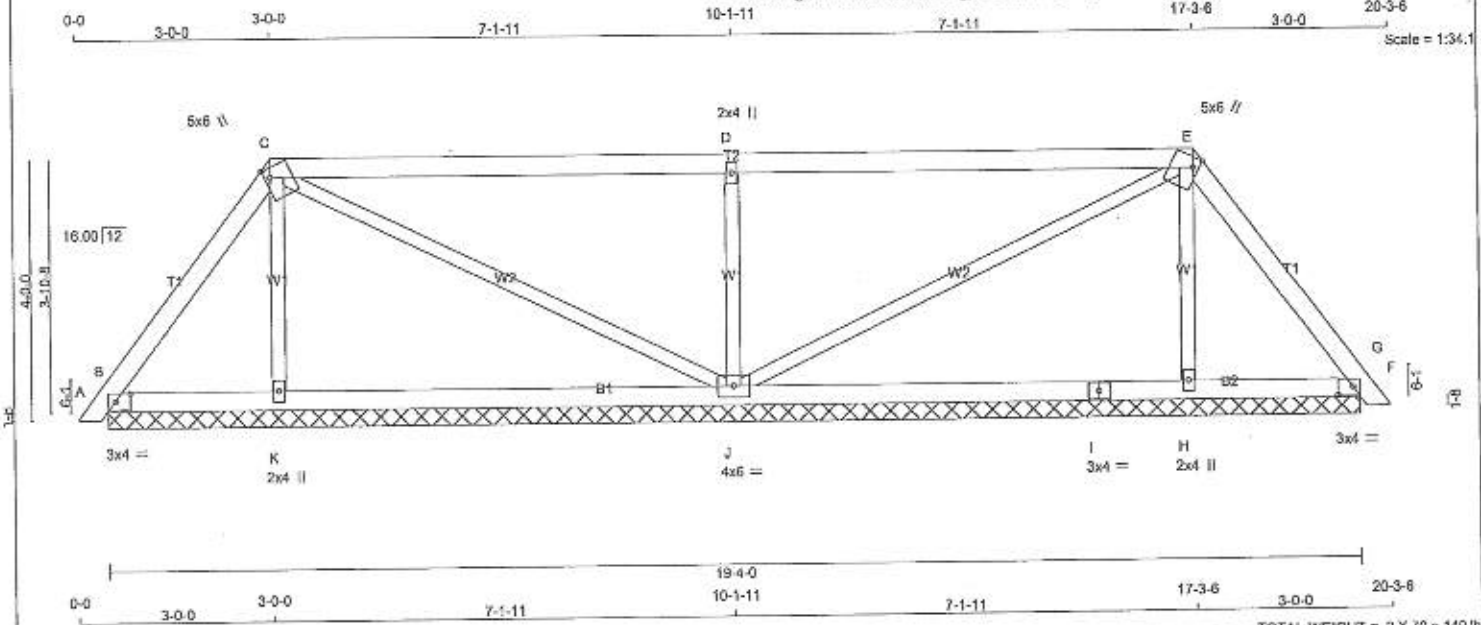


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H12P	2	1	TRUSS DESC.	

Alpine Roof Truss, Maple

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TOTAL WEIGHT = 2 X 70 = 140 lb

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

PLATES (tab/c in inches)	W	LEN	Y	X
JT TMB1-1	MT20	3.0	4.0	1.50 2.75
C TTWW1-m	MT20	5.0	6.0	1.75 1.00
O TWW+w	MT20	2.0	4.0	
E TTWW+m	MT20	5.0	6.0	1.75 1.00
F TMB1-1	MT20	3.0	4.0	1.50 2.75
H BMW1+w	MT20	2.0	4.0	
I BS-1	MT20	3.0	4.0	
J BMWW1-1	MT20	4.0	6.0	
K BMW1-w	MT20	2.0	4.0	

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	213	0	213	0	19.4-0 (4-0-0)-9-7	
B	310	0	310	0	19.4-0 (4-0-0)-9-7	
K	875	0	875	0	19.4-0 (4-0-0)-9-7	
J	310	0	310	0	19.4-0 (4-0-0)-9-7	
H	213	0	213	0	19.4-0 (4-0-0)-9-7	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST CASE	MAX MIN COMPONENT REACTIONS					
	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT COMBINED	148	113 / 0	0 / 0	0 / 0	35 / 0	0 / 0
B	228	109 / 0	0 / 0	0 / 0	116 / 0	0 / 0
K	620	396 / 0	0 / 0	0 / 0	224 / 0	0 / 0
J	228	109 / 0	0 / 0	0 / 0	116 / 0	0 / 0
H	148	113 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WES S				
MEMB.	MAX. FACTORED	FORCE (LBS)	FACTORED		MEMB.	MAX. FACTORED	FORCE (LBS)	
	VERT. LOAD		LC1	MAX. FACTORED		LC1		
FR-TO	FROM	PLF	CSI (LC)	UNBRAC	FR-TO	FROM	PLF	
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.03	K-C	-203 / 0	0.05 (1)
B-C	-104 / 0	-78.0	-78.0	0.09 (1)	6.25	C-J	-16 / 0	0.06 (1)
C-D	-13 / 0	-78.0	-78.0	0.68 (1)	6.25	J-D	-895 / 0	0.16 (1)
D-E	-13 / 0	-78.0	-78.0	0.68 (1)	6.25	J-E	-46 / 0	0.06 (1)
E-F	-104 / 0	-78.0	-78.0	0.09 (1)	6.25	H-E	-203 / 0	0.05 (1)
F-G	0 / 10	-78.0	-78.0	0.01 (1)	10.00			

B-K	0 / 60	-18.5	-18.5	0.14 (4)	10.00
K-J	0 / 54	-18.5	-18.5	0.21 (4)	10.00
J-I	0 / 54	-18.5	-18.5	0.21 (4)	10.00
I-H	0 / 54	-18.5	-18.5	0.21 (4)	10.00
H-F	0 / 60	-18.5	-18.5	0.14 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	34.4	PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 0.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.88/1.00 (C-D-1), BC=0.21/1.00 (H-J-4), WS=0.16/1.00 (D-J-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 = 1.00

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

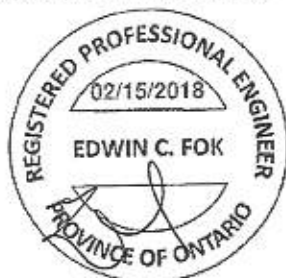
NAIL VALUES	PLATE GRIP (DRY) (PSI)	SHEAR (PLI) (PSI)	SECTION (PLI) (PSI)
MT20	618	354	1667
	788	1987	1056

PLATE PLACEMENT TOL = 0.250 inches

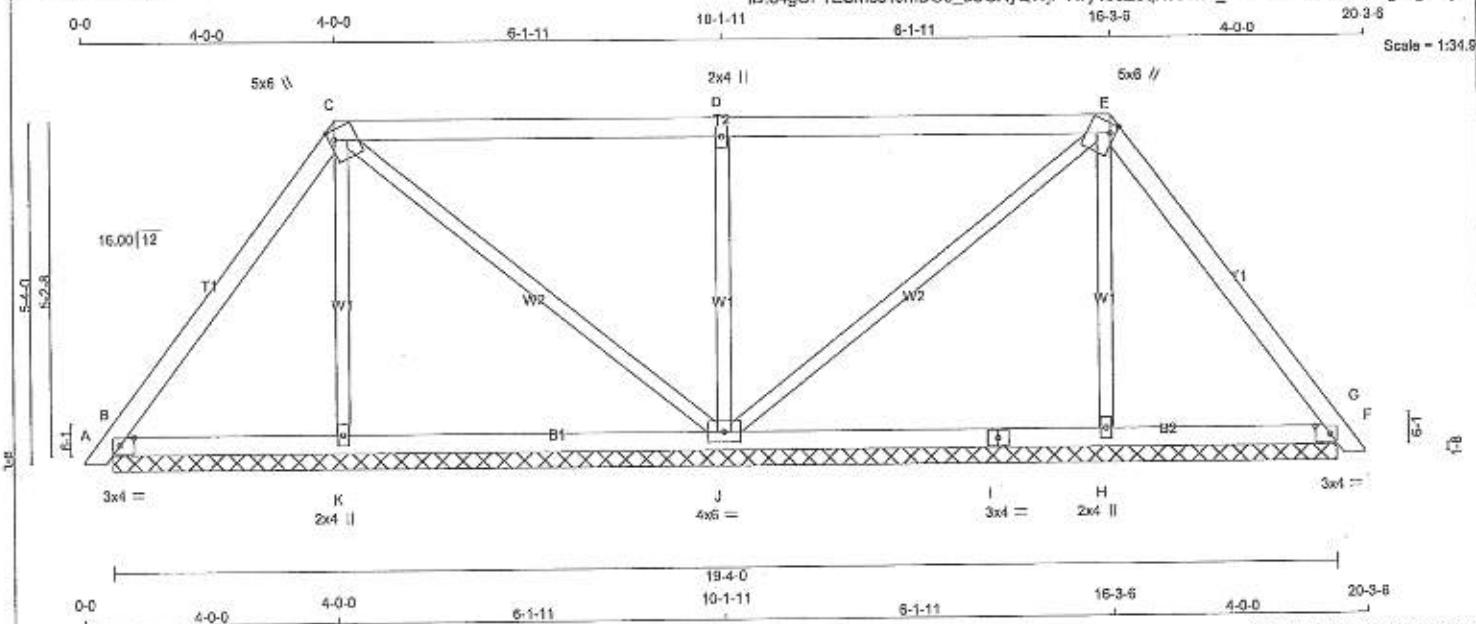
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.74 (J) (INPUT = 0.80)
JSI METAL = 0.15 (D) (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



A-18023092



TOTAL WEIGHT = 3 X 75 = 224 lb

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

PLATES (size is in inches)				
JT	TYPE	PLATES	W	LEN Y X
R	TMB1-I	MT20	3.0	4.0 1.50 2.75
C	TTWW+m	MT20	5.0	6.0 1.75 1.00
D	TWW+w	MT20	2.0	4.0
E	TTWW+m	MT20	5.0	6.0 1.75 1.00
F	TMB1-I	MT20	3.0	4.0 1.50 2.75
H	BMW1+w	MT20	2.0	4.0
I	BS-I	MT20	3.0	4.0
J	BMW1WW1-I	MT20	4.0	6.0
K	BKW1+w	MT20	2.0	4.0

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

BEARINGS			MAXIMUM FACTORED			INPUT	REQ'D
FACTORED			GROSS REACTION			BRG	BRG
	VERT	HORIZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX
JT	275	0	275	0	0	19-4-0	5-4-0
K	283	0	283	0	0	19-4-0	5-4-0
B	803	0	803	0	0	19-4-0	5-4-0
H	293	0	293	0	0	19-4-0	5-4-0
F	279	0	275	0	0	19-4-0	5-4-0

VALUE IN PARENTHESIS INDICATES EFFECTIVE HEARING LENGTH

UNFACTORED REACTIONS

STATION	MAX/MIN COMPONENT REACTIONS						
	1ST LOSE COMBINED	SNOW	LIVE	PERM/LIVE	WIND	DEAD	SOL.
JT	193	137 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0
K	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
J	569	369 / 0	0 / 0	0 / 0	0 / 0	169 / 0	0 / 0
H	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
F	153	137 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0

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

BRACING

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

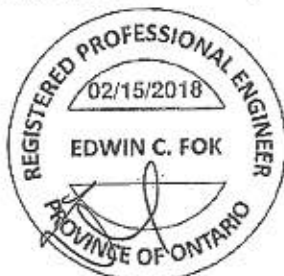
ALL FITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED				WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 (PLF)	MAX. CSI (C)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (C)	
FR-TO		FROM	TO			FR-TO			
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	K-C	-184 / 0	0.07 (1)	
B-C	-110 / 0	-78.0	-78.0	0.17 (1)	8.25	C-J	-71 / 0	0.09 (1)	
C-D	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-D	-598 / 0	0.24 (1)	
D-E	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-E	-71 / 0	0.09 (1)	
E-F	-110 / 0	-78.0	-78.0	0.17 (1)	8.25	H-E	-184 / 0	0.07 (1)	
F-G	0 / 10	-78.0	-78.0	0.01 (1)	10.00				
B-K	0 / 64	-18.5	-18.5	0.11 (4)	10.00				
K-J	0 / 80	-18.5	-18.5	0.15 (4)	10.00				
J-I	0 / 60	-18.5	-18.5	0.15 (4)	10.00				
I-H	0 / 80	-18.5	-18.5	0.15 (4)	10.00				
H-F	0 / 64	-18.5	-18.5	0.11 (4)	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



DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	21.0	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD				=	34.4 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 8 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.I., PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.50/1.00 (C-D:1), BC=2.15/1.00 (J-K:4),
WB=0.24/1.00 (D-E:1), SS=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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	782	1907	1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

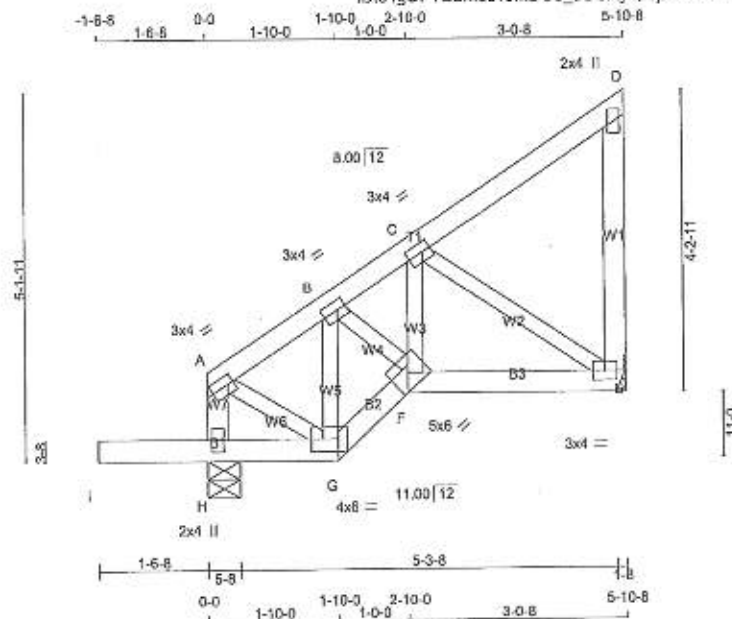
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	J1T	5	1	TRUSS DESC.	

Alps Roof Truss, Maple

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TOTAL WEIGHT = 5 X 30 = 150 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
H - A	2x4	DRY	No.2
A - D	2x4	DRY	No.2
E - D	2x4	DRY	No.2
I - G	2x4	DRY	No.2
G - F	2x4	DRY	No.2
F - E	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY, SEASONED LUMBER.			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-1	MT20	3.0	4.0	1.50	1.00
B	TMVW-1	MT20	3.0	4.0	1.50	1.50
C	TMVW-1	MT20	3.0	4.0	1.50	1.50
D	TMV-1p	MT20	2.0	4.0		
E	BMVW1-1	MT20	5.0	4.0		
F	BBVW-1	MT20	6.0	6.0		
G	BRVW-1	MT20	4.0	6.0	2.00	4.50
H	BMV1-1p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
JT	452	0	452	0	0	5-8	1-8		
H	264	0	264	0	0				
HANGER BY OTHERS MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE		
JT	322	187 / 0	0 / 0	0 / 0	125 / 0	0 / 0
H	188	115 / 0	0 / 0	0 / 0	73 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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. CS (I/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (I/C)	
FR-TO		FROM TO		FR-TO			
H-A	-223 / 0	0.0	0.0 0.02 (1)	A-G	0 / 154	0.03 (1)	
A-B	-165 / 0	-78.0	-78.0 0.04 (1)	G-B	-228 / 0	0.03 (1)	
B-C	-239 / 0	-78.0	-78.0 0.08 (1)	B-F	0 / 130	0.03 (1)	
C-D	-111 / 0	-78.0	-78.0 0.08 (1)	F-C	0 / 63	0.02 (4)	
E-D	-95 / 0	0.0	0.0 0.03 (1)	C-E	-258 / 0	0.06 (1)	
I-H	0 / 0	-98.5	-98.5 0.16 (1)				
H-G	0 / 0	-18.5	-18.5 0.16 (1)				
G-F	0 / 173	-18.5	-18.5 0.03 (1)				
F-E	0 / 216	-18.5	-18.5 0.07 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD = 34.4 PSF				

SPACING = 24.0 IN. O.C

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.06")
ALLOWABLE DEFL.(TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL) = $L/120$ (0.18")
CALCULATED VERT. DEFL.(LL) = $L/898$ (0.02")
ALLOWABLE DEFL.(TL) = $L/120$ (0.18")
CALCULATED VERT. DEFL.(TL) = $L/588$ (0.03")

CSI: TC=0.08/1.00 (B-C:1), BC=0.18/1.00 (G-H:1), WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 I.S BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.50)
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



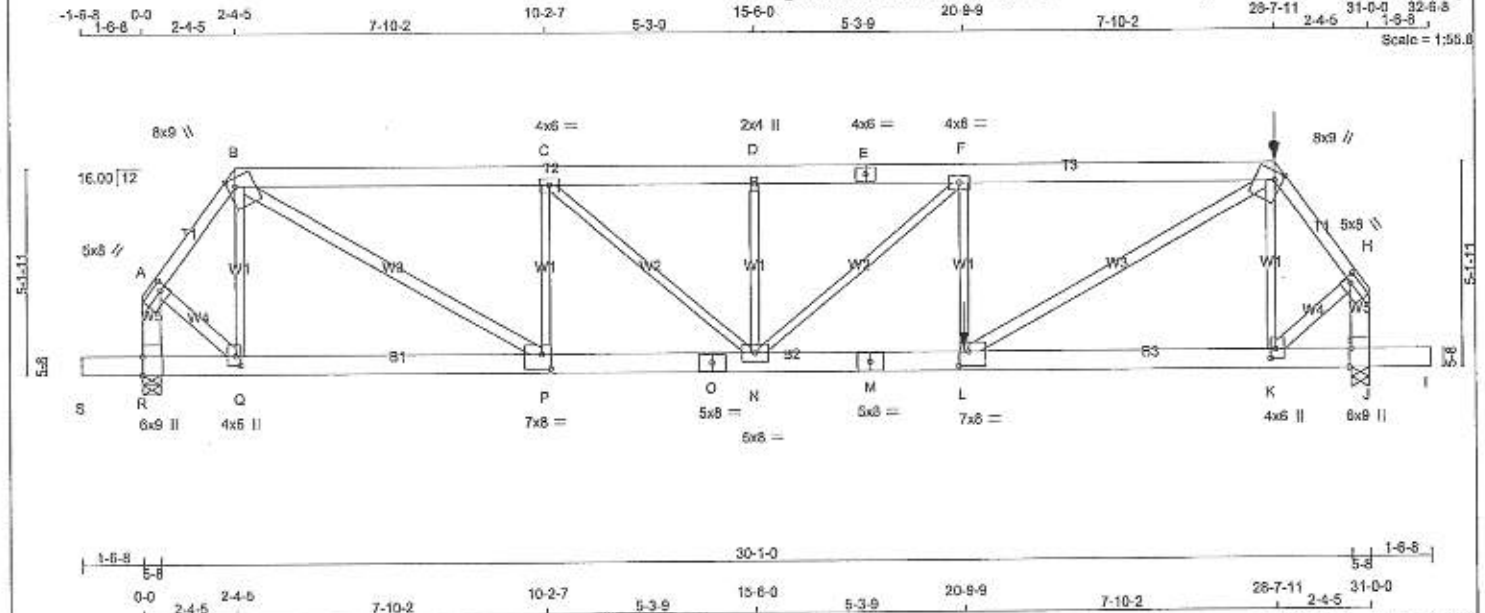
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	CRWG NO.
291798	H7B-Cond1	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF	
B - E	2x6	DRY	1850F 1.5E	SPF	
E - G	2x6	DRY	1850F 1.5E	SPF	
G - H	2x4	DRY	No.2	SPF	
R - A	2x6	DRY	No.2	SPF	
J - H	2x6	DRY	No.2	SPF	
S - O	2x6	DRY	No.2	SPF	
O - M	2x6	DRY	No.2	SPF	
M - I	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
B - P	2x4	DRY	No.2	SPF	
L - G	2x4	DRY	No.2	SPF	
A - Q	2x4	DRY	No.2	SPF	
K - H	2x4	DRY	No.2	SPF	

DRY; SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-I	MT20	5.0	8.0	2.25	2.00
B	TTWV+m	MT20	8.0	9.0	2.50	2.25
C	TMWV-I	MT20	4.0	8.0		
D	TMWV+m	MT20	2.0	4.0		
E	TS-I	MT20	4.0	6.0		
F	TMWV-I	MT20	4.0	6.0		
G	TTWV+m	MT20	8.0	8.0	2.50	2.25
H	TMWV-I	MT20	5.0	8.0	2.25	2.00
J	BMV1+H	MT20	6.0	9.0	Edge	0.50
K	BMWV+H	MT20	4.0	6.0	2.75	1.50
L	BMWV-I	MT20	7.0	8.0	4.25	2.75
M	BS-I	MT20	5.0	8.0		
N	BMWV-I	MT20	5.0	8.0		
O	BS-I	MT20	5.0	8.0		
P	BMWV-I	MT20	7.0	8.0	4.25	2.75
Q	BMWV+H	MT20	4.0	6.0	2.75	1.50
R	BMV1+H	MT20	6.0	9.0	Edge	

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	MAXIMUM FACTORED	INPUT	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	UPLIFT	IN-SX
R	2343	0	2343	0
J	3490	0	3490	0

UNFACTORED REACTIONS

	1ST CASE	MAX MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
R	1660	1069 / 0	0 / 0
J	2489	1614 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	MAX. FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE	VERT. LOAD LG1	MAX. UNBRAC	MEMB.	FORCE
	(LBS)	(PLF)	LENGTH		(LBS)
FR-TO		FROM	TO		
A-B	-1820 / 0	-78.0	-78.0	Q-B	-514 / 0
B-C	-3789 / 0	-78.0	-78.0	D-P	0 / 3168
C-D	-4771 / 0	-78.0	-78.0	P-C	-1539 / 0
D-E	-4771 / 0	-78.0	-78.0	C-N	0 / 1298
E-F	-4771 / 0	-78.0	-78.0	N-D	-183 / 0
F-G	-5429 / 0	-153.5	-153.5	N-F	-878 / 0
G-H	-2824 / 0	-78.0	-78.0	L-F	-448 / 0
R-A	-2223 / 0	0.0	0.0	L-G	0 / 4370
J-H	-3398 / 0	0.0	0.0	K-G	-723 / 0
S-R	0 / 0	-98.5	-98.5	A-Q	0 / 1282
R-Q	0 / 0	-18.5	-18.5	K-H	0 / 1988
Q-P	0 / 1079	-18.5	-18.5		
P-O	0 / 3799	-18.5	-18.5		
O-N	0 / 3799	-18.5	-18.5		
N-M	0 / 5429	-18.5	-18.5		
M-L	0 / 5429	-18.5	-18.5		
L-K	0 / 1678	-38.4	-38.4		
K-J	0 / 0	-38.4	-38.4		
J-I	0 / 0	-98.5	-98.5		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	D/R.	TYPE
G	28-7-11	-134	-134	-	FRONT	VERT	TOTAL
L	20-9-8	-1635	-1635	-	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	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	34.4	PSF

SPACING = 24.0 IN. GIG

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

GIRDER TYPE: CPrimeHp
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
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 10'-4" OF SPAN
MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDTL. USER-DEFINED LOADS APPLIED TO
ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-05, CSA 088-14
- TPIC 2011, TPIC 2014

(55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F.
RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED
ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.18")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.18")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.61/1.00 (F-G:1), RC=0.77/1.00 (L-N:1),
WB=0.81/1.00 (F-N:1), SS=0.46/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 L.S. SEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

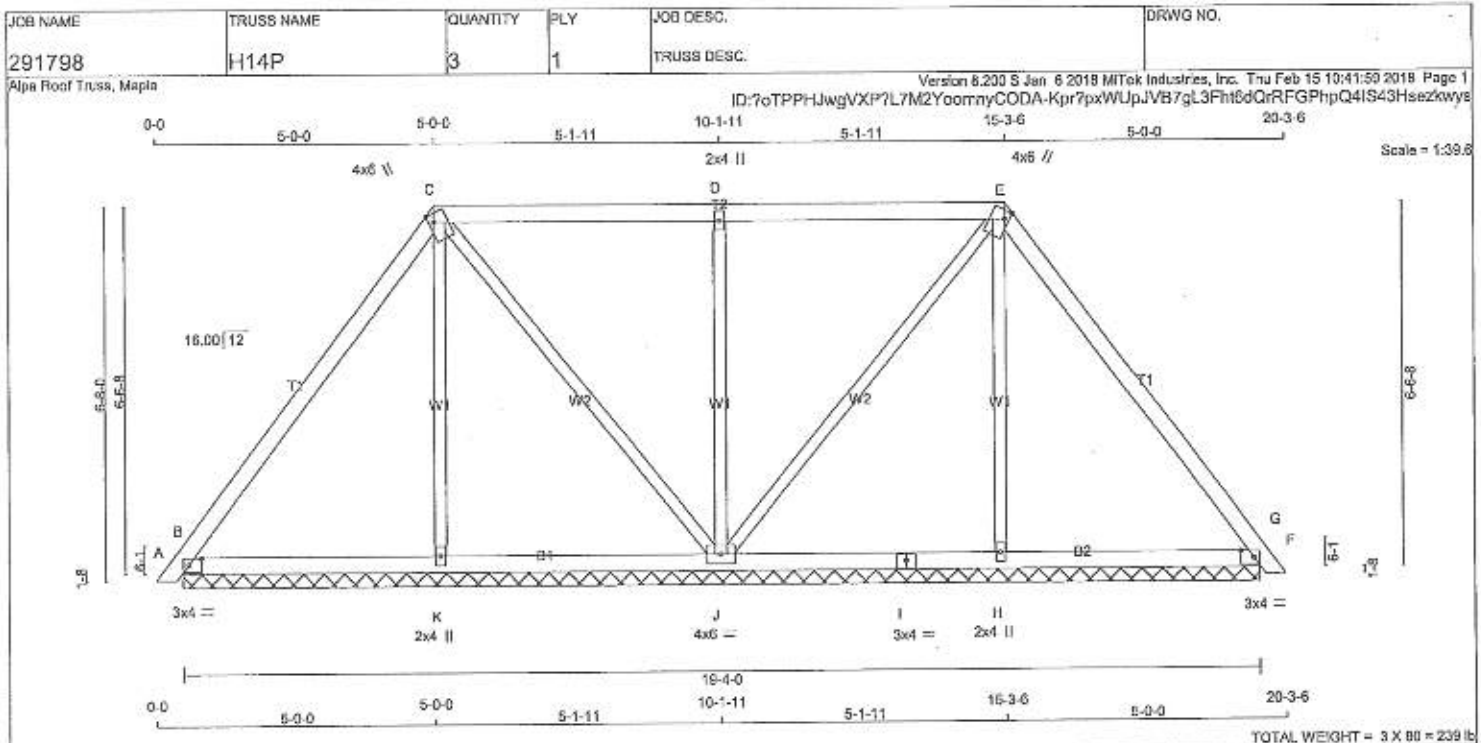
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVEHEELS OFF

A-18023112

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LUMBER

N.L.G.A. RULES

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMS1-I	MT20	3.0	4.0	1.50	2.75
C	TTWW+m	MT20	4.0	8.0	1.75	1.00
D	TMS1-I	MT20	2.0	4.0	1.50	2.75
E	TTWW+m	MT20	4.0	8.0	1.75	1.00
F	TMS1-I	MT20	3.0	4.0	1.50	2.75
H	BMW1+w	MT20	2.0	4.0	1.50	2.75
I	BS-I	MT20	3.0	4.0	1.50	2.75
J	BMWW1-I	MT20	4.0	8.0	1.75	1.00
K	BMW1+w	MT20	2.0	4.0	1.50	2.75

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
B	324	0	324	0	19-4-0 (6-4-0)	7-0
K	267	0	267	0	19-4-0 (6-4-0)	7-0
J	738	0	738	0	19-4-0 (6-4-0)	7-0
H	267	0	267	0	19-4-0 (6-4-0)	7-0
F	324	0	324	0	19-4-0 (6-4-0)	7-0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE			
B	228	157/0	0/0	0/0	71/0	0/0
K	186	89/0	0/0	0/0	108/0	0/0
J	521	349/0	0/0	0/0	172/0	0/0
H	186	89/0	0/0	0/0	108/0	0/0
F	228	157/0	0/0	0/0	71/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	FACTORED VERT. LOAD (LBS)		MAX. UNBRACED LENGTH (FT)	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
			FROM	TO				
FR-TO								
A-B	0/10	-78.0	-78.0	0.01 (1)	10.00	K-C	-166/0	0.12 (1)
B-C	-108/0	-78.0	-78.0	0.29 (1)	6.25	C-J	-98/0	0.13 (1)
C-D	0/1	-78.0	-78.0	0.35 (1)	10.00	J-D	-500/0	0.35 (1)
D-E	0/1	-78.0	-78.0	0.35 (1)	10.00	J-E	-98/0	0.13 (1)
E-F	-108/0	-78.0	-78.0	0.29 (1)	6.25	H-E	-108/0	0.12 (1)
F-G	0/10	-78.0	-78.0	0.01 (1)	10.00			
B-K	0/84	-18.5	-18.5	0.11 (4)	10.00			
K-J	0/81	-18.5	-18.5	0.11 (4)	10.00			
J-I	0/81	-18.5	-18.5	0.11 (4)	10.00			
I-H	0/81	-18.5	-18.5	0.11 (4)	10.00			
H-F	0/84	-18.5	-18.5	0.11 (4)	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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD = 34.4 PSF				

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 23.0 P.S.F. G.S.I., PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.35/1.00 (C-D:1), BC=0.11/1.00 (B-K:4), WB=0.35/1.00 (D-J:1), SSI=0.20/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1637 788 1987 1656

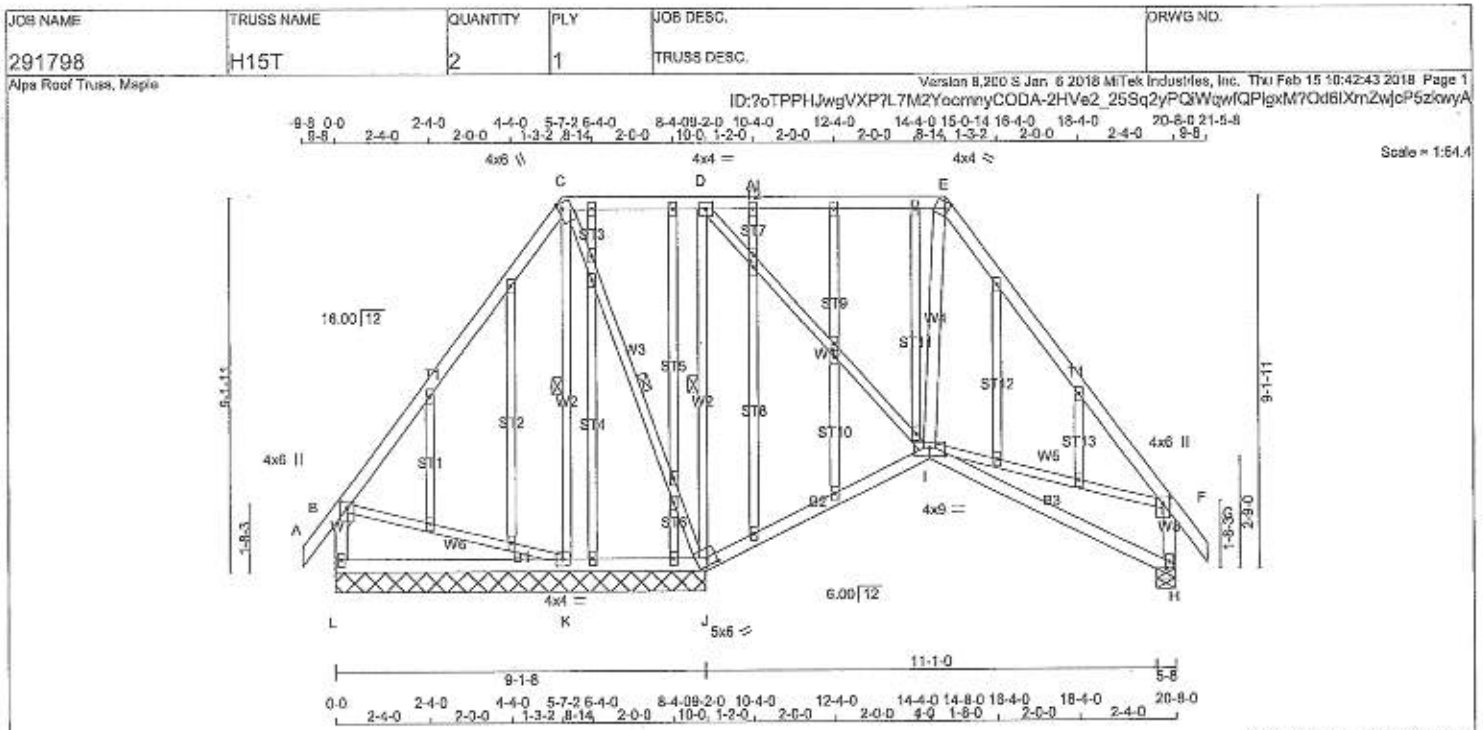
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.14 (F) (INPUT = 1.00)



A-18023113



TOTAL WEIGHT = 2 X 162 = 304 LBS

[M/F]

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
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - E	2x4	DRY	No.2	SPF

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

GABLE STUDS SPACED AT 24.0 O.C.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TMVW-i	MT20	4.0	4.0		
E	TTW-m	MT20	4.0	4.0	1.75	1.00
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0	Edge	
H	BBWWV-p	MT20	4.0	9.0	2.25	4.50
J	BBWWV-i	MT20	5.0	6.0	2.00	2.75
K	BMVWV-i	MT20	4.0	4.0		
L	BMV1+p	MT20	2.0	4.0		
M	NP+w	MT20	2.0	4.0	1.75	1.00
M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH						
M	NP+w	MT20	2.0	4.0		
AB	NP+w	MT20	2.0	4.0	1.75	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	REQD BRG
JT	VERT	HORIZ	UP/LIFT	IN-SX
L	351	0	0	2-3-15
J	1038	0	0	2-3-15
H	576	0	0	2-3-15
K	241	0	0	2-3-15

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	246	175/0	0/0	0/0	70/0	0/0
J	741	443/0	0/0	0/0	295/0	0/0
H	410	230/0	0/0	0/0	154/0	0/0
K	180	65/0	0/0	0/0	113/0	0/0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-K, C-J, D-J.

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. UNBRAC. LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	0/28	-78.0 -78.0 0.05 (1)	10.00	K-C	-133/0 0.07 (1)
B-C	-21/12	-78.0 -78.0 0.31 (1)	5.25	C-J	-144/0 0.09 (1)
C-D	0/45	-85.5 -85.5 0.40 (1)	2.00	J-D	-811/0 0.44 (1)
D-A	-202/0	-85.5 -85.5 0.35 (1)	2.00	D-I	0/376 0.08 (1)
A-E	-202/0	-85.5 -85.5 0.35 (1)	2.00	E-E	-145/3 0.07 (1)
E-F	-354/0	-78.0 -78.0 0.32 (1)	6.25	B-K	-8/13 0.00 (4)
F-G	0/28	-78.0 -78.0 0.05 (1)	10.00	I-F	0/218 0.05 (1)
L-B	-308/0	0.0 0.0 0.03 (1)	7.81		
H-F	-521/0	0.0 0.0 0.08 (1)	7.81		
L-K	0/0	-18.5 -18.5 0.13 (4)	10.00		
K-J	-8/11	-18.5 -18.5 0.10 (4)	10.00		
J-I	-50/0	-18.5 -18.5 0.12 (4)	6.25		
I-H	0/0	-18.5 -18.5 0.20 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0 PSF
	DL = 8.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.4 PSF
TOTAL LOAD	= 36.4 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 5.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2016
- CSA 086-08, CSA 086-14
- TPC 2011, TPC 2014

(55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.38")
CALCULATED VERT. DEFL. (LL) = L/999 (0.01")
ALLOWABLE DEFL. (TL) = L/360 (0.38")
CALCULATED VERT. DEFL. (TL) = L/999 (0.07")

CSI: TC=0.40/1.00 (C-D-1), SC=0.20/1.00 (H-H-4), WB=0.44/1.00 (D-E-1), SSI=0.24/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.93 (J) (INPUT = 0.90)
JSI METAL= 0.23 (J) (INPUT = 1.00)

A-18023115

CONTINUED ON PAGE 2

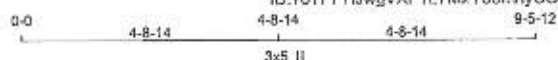


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H16P	4	1	TRUSS DESC.	

Alpha Roof Truss, Maple

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ID: 7oTPPHJwgVXP7L7M2YoomnyCODA-lbEAS5CddWZFrGcqXSIEuEA1jWlwo5XKndFqOzkwy



Scale = 1:10.7

LUMBER				DESIGN CRITERIA			
N. L. G. A. RULES				SPECIFIED LOADS:			
CHORDS	SIZE	DRY	LUMBER	TOP CH. LL = 21.0 PSF			
A - C	2x4	DRY	No.2	DL = 6.0 PSF			
C - F	2x4	DRY	No.2	BOT CH. LL = 0.0 PSF			
B - D	2x4	DRY	No.2	DL = 7.4 PSF			
ALL WEBS 2x3 DRY No.2				TOTAL LOAD = 34.4 PSF			
DRY: SEASONED LUMBER				SPACING = 24.0 IN. C/C			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-1	MT20	3.0	4.0	1.50	2.75
C	TTW+P	MT20	3.0	5.0	2.00	Edge
D	TMB1-1	MT20	3.0	4.0	1.50	2.75
F	BMW1+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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
B	314	0	314	0	8-6	9-10
D	314	0	314	0	8-6	9-10
F	249	0	249	0	8-6	9-10

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
B	221	153/0	0/0	0/0	68/0	0/0
D	221	153/0	0/0	0/0	68/0	0/0
F	183	81/0	0/0	0/0	102/0	0/0

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

BRACING

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

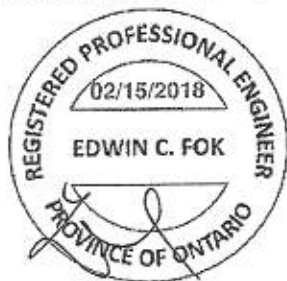
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. CS (L/C)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (L/C)
FR-TO		FROM TO			FR-TO		
A-B	0/10	-78.0	-78.0	0.01 (1)	10.00		
B-C	-113/0	-78.0	-78.0	0.24 (1)	6.25		
C-D	-113/0	-78.0	-78.0	0.24 (1)	6.25		
D-E	0/10	-78.0	-78.0	0.01 (1)	10.00		
B-F	0/67	-18.5	-18.5	0.10 (4)	10.00		
F-D	0/67	-18.5	-18.5	0.10 (4)	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

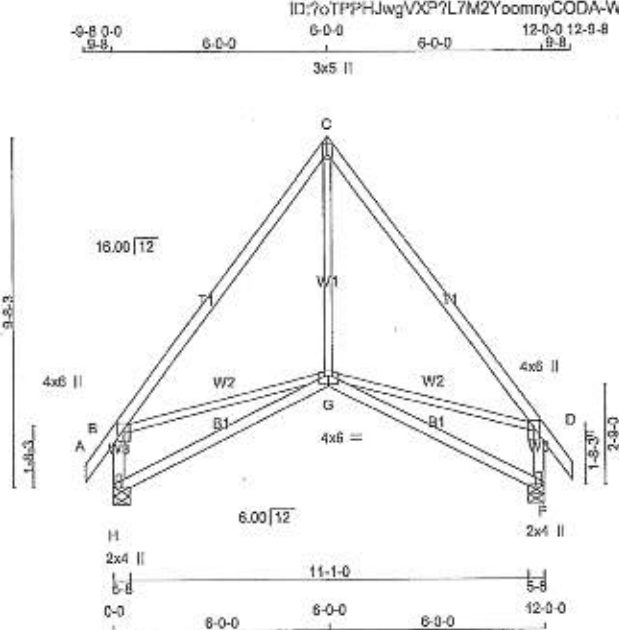


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
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291798 H17T 1 1 TRUSS DESC. Version 8.200 5 Jan 6 2018 M/Tok Industries, Inc. Thu Feb 15 10:43:01 2018 Page 1

Alpa Roof Truss, Maple



Scale = 1/8"=1'-0"

TOTAL WEIGHT = 60 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4 DRY	2100F 1.8E	SPF		
C - E	2x4 DRY	2100F 1.8E	SPF		
H - B	2x4 DRY	No.2	SPF		
F - D	2x4 DRY	No.2	SPF		
H - G	2x4 DRY	No.2	SPF		
G - F	2x4 DRY	No.2	SPF		

ALL WERS 2x3 DRY No.2 SPF EXCEPT

DRY, SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMW+p	MT20	4.0	8.0	2.00	2.00
C TTW+p	MT20	3.0	5.0	2.00	Edge
D TMW+p	MT20	4.0	8.0	2.00	2.00
F BMV1+p	MT20	2.0	4.0	Edge	Edge
G BBWVW+p	MT20	4.0	8.0	2.50	3.00
H BMV1+p	MT20	2.0	4.0	Edge	Edge

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
GROSS REACTION		DOWN		GROSS REACTION		ORG		BRD	
JT	VERT	H-ORZ	DOWN	JT	VERT	H-ORZ	UPLIFT	JT	IN-SX
H	850	0	850	0	0	0	5-8	1-8	
F	850	0	850	0	0	0	5-8	1-8	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	MAX	MEMB.	FORCE (LBS)	MAX	MAX
FR-TO		FROM	TO	CS1 (LC)	UNBRAC LENGTH	FR-TO			
A-B	0/28	-78.0	-78.0	0.03 (1)	10.00	G-C	0/242	0.06 (4)	
B-C	-443/0	-78.0	-78.0	0.24 (1)	6.25	B-G	0/274	0.06 (1)	
C-D	-443/0	-78.0	-78.0	0.24 (1)	6.25	G-D	0/274	0.06 (1)	
D-E	0/28	-78.0	-78.0	0.03 (1)	10.00				
H-B	-594/0	0.0	0.0	0.07 (1)	7.81				
F-D	-594/0	0.0	0.0	0.07 (1)	7.81				
H-G	0/0	-18.5	-18.5	0.20 (4)	10.00				
G-F	0/0	-18.5	-18.5	0.20 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. CG

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 066-09, CSA 066-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.07")

CS1: TC=0.24/1.00 (B-C-1), BC=0.20/1.00 (G-H-1), WB=0.06/1.00 (D-G-1), SS1=0.11/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 518 354 1667 758 1587 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (G) (INPUT = 0.00)
JSI METAL= 0.25 (G) (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

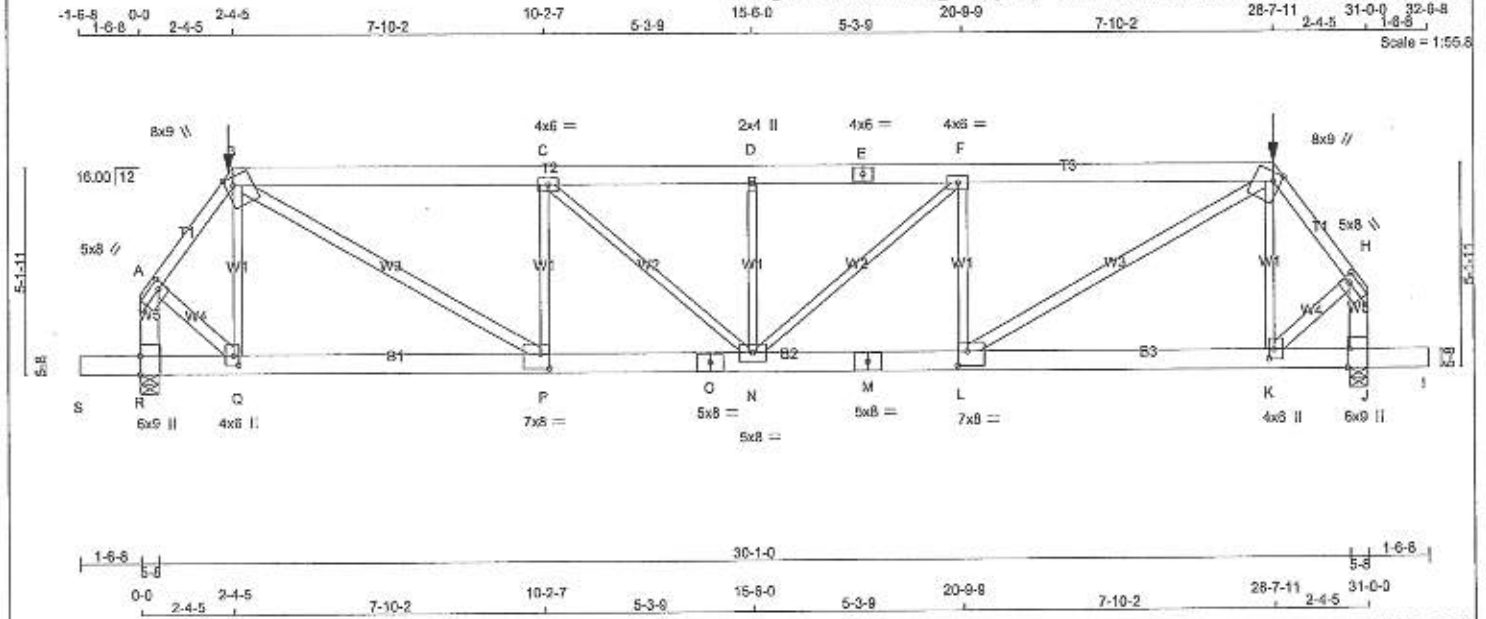


A-18023117

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291798	H7B-Cond2	2	1	TRUSS DESC.	

Alpha Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-VaN1Hed4FaBhFgrv8Yldpnr0R0ITuMPRZ7MGwzkoX_0



LUMBER	N.L.G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF	
B - E	2x6	DRY	1650F 1.5E	SPF	
E - H	2x6	DRY	1650F 1.5E	SPF	
G - H	2x4	DRY	No.2	SPF	
R - A	2x6	DRY	No.2	SPF	
J - H	2x6	DRY	No.2	SPF	
S - O	2x6	DRY	No.2	SPF	
O - M	2x6	DRY	No.2	SPF	
M - I	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
B - P	2x4	DRY	No.2	SPF	
L - G	2x4	DRY	No.2	SPF	
A - Q	2x4	DRY	No.2	SPF	
K - H	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMWW-I	MT20	5.0	8.0	2.25	2.00
B	TTWW-m	MT20	8.0	9.0	2.50	2.25
C	TMWW-I	MT20	4.0	6.0		
D	TMWW-m	MT20	2.0	4.0		
E	TS-I	MT20	4.0	6.0		
F	TMWW-I	MT20	4.0	6.0		
G	TTWW-m	MT20	8.0	9.0	2.50	2.25
H	TMWW-I	MT20	5.0	8.0	2.25	2.00
J	BMV1-t	MT20	6.0	9.0	Edge	0.50
K	BMWW-I	MT20	4.0	6.0	2.75	1.50
L	BMWW-I	MT20	7.0	8.0	4.25	2.75
M	BS-I	MT20	5.0	8.0		
N	BMWW-I	MT20	5.0	8.0		
O	BS-I	MT20	5.0	8.0		
P	BMWW-I	MT20	7.0	8.0	4.25	2.75
D	BMWW-I	MT20	4.0	6.0	2.75	1.50
R	BMV1-t	MT20	6.0	9.0	Edge	

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	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	UPLIFT	IN-SX
R	3048	0	0	5-8
J	3048	0	0	5-8

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
R	2174	1322/0	0/0
J	2174	1322/0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX. UNBRACED	MEMB.	FORCE	MAX
	(LBS)	(PLF)			(LC)	LENGTH		(LBS)	(LC)
FR-TO		FROM							
A-B	-2431/0	-78.0	-78.0	0.17 (1)	4.25	Q-B	-613/0	0.22 (1)	
B-C	-4515/0	-153.5	-153.5	0.53 (1)	4.09	B-P	0/3576	0.63 (1)	
C-D	-4302/0	-153.5	-153.5	0.50 (1)	3.94	P-C	-1595/0	0.56 (1)	
D-E	-4802/0	-153.5	-153.5	0.50 (1)	3.94	C-N	0/516	0.13 (1)	
E-F	-4802/0	-153.5	-153.5	0.50 (1)	3.94	N-D	-523/0	0.18 (1)	
F-G	-4515/0	-153.5	-153.5	0.53 (1)	4.09	D-F	0/516	0.13 (1)	
G-H	-2431/0	-78.0	-78.0	0.17 (1)	4.25	L-F	-1595/0	0.56 (1)	
R-A	-2939/0	0.0	0.0	0.24 (1)	6.09	L-G	0/3576	0.63 (1)	
J-H	-2839/0	0.0	0.0	0.24 (1)	6.09	K-G	-513/0	0.22 (1)	
						A-Q	0/1713	0.30 (1)	
						K-H	0/1713	0.30 (1)	
S-R	0/0	-98.5	-98.5	0.08 (1)	10.00				
R-Q	0/0	-36.4	-36.4	0.21 (4)	10.00				
Q-P	0/1443	-36.4	-36.4	0.34 (1)	10.00				
P-O	0/4615	-36.4	-36.4	0.68 (1)	10.00				
O-N	0/4615	-36.4	-36.4	0.68 (1)	10.00				
N-M	0/4615	-36.4	-36.4	0.68 (1)	10.00				
M-L	0/4615	-36.4	-36.4	0.68 (1)	10.00				
L-K	0/1443	-36.4	-36.4	0.34 (1)	10.00				
K-J	0/0	-36.4	-36.4	0.21 (4)	10.00				
J-I	0/0	-98.5	-98.5	0.08 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)	JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
						FRONT	VERT	TOTAL
B	2-4-5	-134	-134					
G	28-7-11	-134	-134					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: OptiHlp
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL. LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2015
- CSA 086-09, CSA 086-14
- TPIIC 2011, TPIIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.18")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.18")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.53/1.00 (B-C-1), BC=0.68/1.00 (N-P-1),
WB=0.83/1.00 (B-P-1), SS=0.47/1.00 (B-C-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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 1687 788 1687 1656

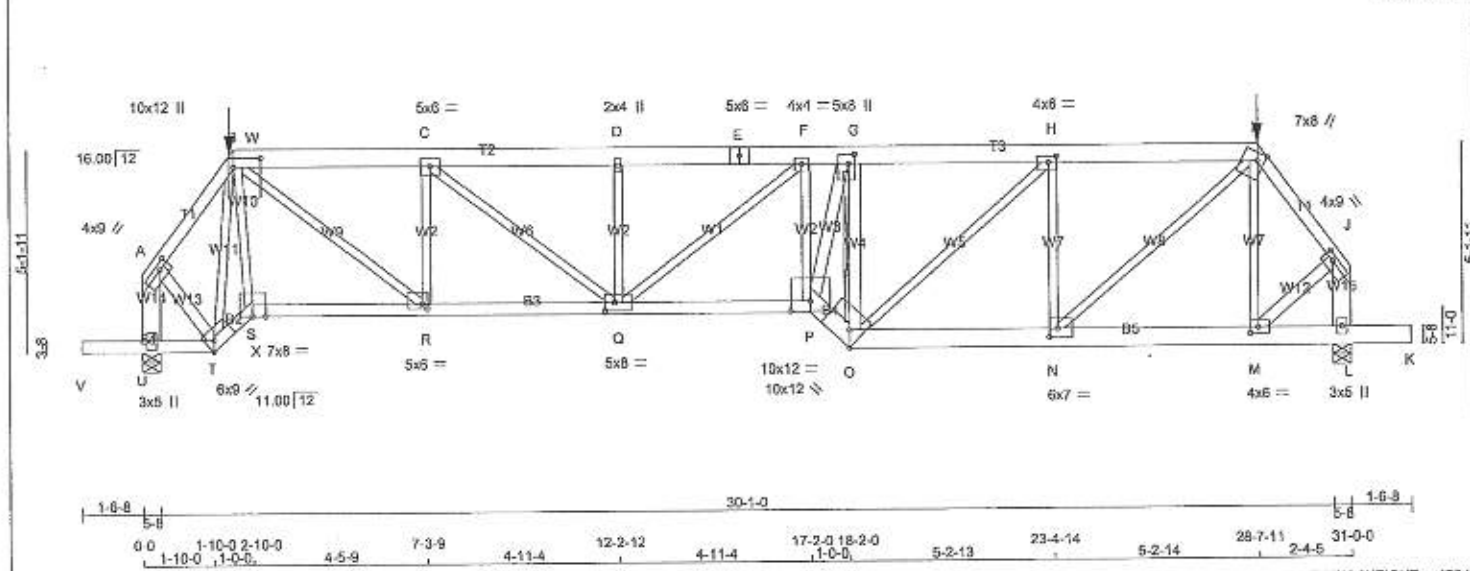
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H7T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple
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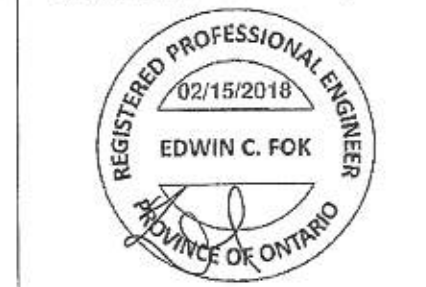


LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF	
B - E	2x6	DRY	No.2	SPF	
E - I	2x6	DRY	No.2	SPF	
I - J	2x4	DRY	No.2	SPF	
U - A	2x6	DRY	No.2	SPF	
L - J	2x6	DRY	No.2	SPF	
V - T	2x4	DRY	No.2	SPF	
T - S	2x4	DRY	No.2	SPF	
S - P	2x4	DRY	No.2	SPF	
P - Q	2x6	DRY	No.2	SPF	
Q - K	2x6	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF	
P - G	2x4	DRY	No.2	SPF	
O - G	2x4	DRY	No.2	SPF	
A - T	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMWV-I	MT20	4.0	9.0	1.50	3.00
B	TTWWV+P	MT20	10.0	12.0	3.00	8.25
C	TMWV-I	MT20	5.0	6.0		
D	TMWV+P	MT20	2.0	4.0		
E	TS-I	MT20	5.0	6.0		
F	TMWV-I	MT20	4.0	4.0		
G	TMWV+P	MT20	5.0	8.0	3.00	1.75
H	TMWV-I	MT20	4.0	6.0	2.00	2.50
I	TTWWV+P	MT20	7.0	8.0	2.50	2.25
J	TMWV-I	MT20	4.0	9.0	1.50	3.00
L	BMV-I+P	MT20	3.0	5.0		
M	RMWV-I	MT20	4.0	6.0	2.00	2.50
N	BMWV-I	MT20	6.0	7.0	2.75	2.50
O	BSWV-h	MT20	10.0	12.0	4.00	Edge
P	BSWV-I	MT20	10.0	12.0	3.00	6.00
Q	BSWVW-I	MT20	6.0	8.0	2.50	3.00
R	BSWV-I	MT20	5.0	6.0	1.50	1.50
S	BSW-I	MT20	7.0	8.0		

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	INFLUENT BRG	REQD BRG
JT	VERT 2066	DOWN 3056	0	5-8
U	HORZ 0	UP/LIFT 0	IN-SX 0	4-3
L	VERT 3040	DOWN 3048	0	5-8

UNFACTORED REACTIONS			MAX. MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	2179	1326 / 0	0 / 0	0 / 0	0 / 0	854 / 0	0 / 0
L	2175	1323 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT G-O

FASTEN T AND F-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" 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)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD LG1 (PLF)	MAX. UNBRACED LENGTH FR-TO (FT)	W E B S	MAX. FACTORED MEMB. FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO (FT)
FR-TO						
A-B	-2095 / 0	-78.0	78.0 0.15 (1)	4.57	T-B	-2477 / 0
B-W	-4393 / 0	-153.5	153.5 0.28 (1)	3.92	B-S	0 / 1626
W-C	-4390 / 0	-78.0	78.0 0.28 (1)	3.92	R-C	-1601 / 0
C-D	-5780 / 0	-78.0	78.0 0.33 (1)	3.43	C-Q	0 / 1801
D-E	-5780 / 0	-78.0	78.0 0.45 (1)	3.30	Q-D	-447 / 0
E-F	-5780 / 0	-78.0	78.0 0.45 (1)	3.30	Q-F	-247 / 0
F-G	-5978 / 0	-153.5	153.5 0.36 (1)	3.33	P-F	0 / 185
G-H	-4899 / 0	-153.5	153.5 0.48 (1)	3.51	P-G	0 / 4448
H-I	-3723 / 0	-153.5	153.5 0.42 (1)	4.02	O-G	-4952 / 0
I-J	-2406 / 0	-78.0	78.0 0.17 (1)	4.27	Q-H	0 / 1492
U-A	-2811 / 0	0.0	0.0 0.24 (1)	6.20	N-H	-1907 / 0
L-J	-2808 / 0	0.0	0.0 0.23 (1)	6.11	N-I	0 / 3079
					M-I	-679 / 0
V-U	0 / 0	-96.5	-96.5 0.17 (1)	10.00	A-T	0 / 1633
U-T	0 / 0	-36.4	-36.4 0.17 (1)	10.00	M-J	0 / 1894
T-X	0 / 2049	-36.4	-36.4 0.37 (1)	10.00	B-R	0 / 3367
X-S	0 / 2049	-36.4	-36.4 0.37 (1)	10.00		
S-R	0 / 1711	-112.0	-112.0 0.36 (1)	10.00		
R-Q	0 / 4360	-112.0	-112.0 0.60 (1)	10.00		
Q-P	0 / 5873	-112.0	-112.0 0.73 (1)	10.00		
P-O	0 / 6224	-36.4	-36.4 0.61 (1)	10.00		
O-N	0 / 3723	-36.4	-36.4 0.57 (1)	10.00		
N-M	0 / 1426	-36.4	-36.4 0.28 (1)	10.00		
M-L	0 / 0	-36.4	-36.4 0.10 (1)	10.00		
L-K	0 / 0	-96.5	-96.5 0.08 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
JT	2-4-5	-134	-134	-	FRONT	VERT	TOTAL
I	28-7-11	-134	-134	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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 = 2-4-5
END SETBACK = 5-10-5
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 2-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CSIdGirder
START DISTANCE = 2-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 17-2-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-5
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 13-10-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

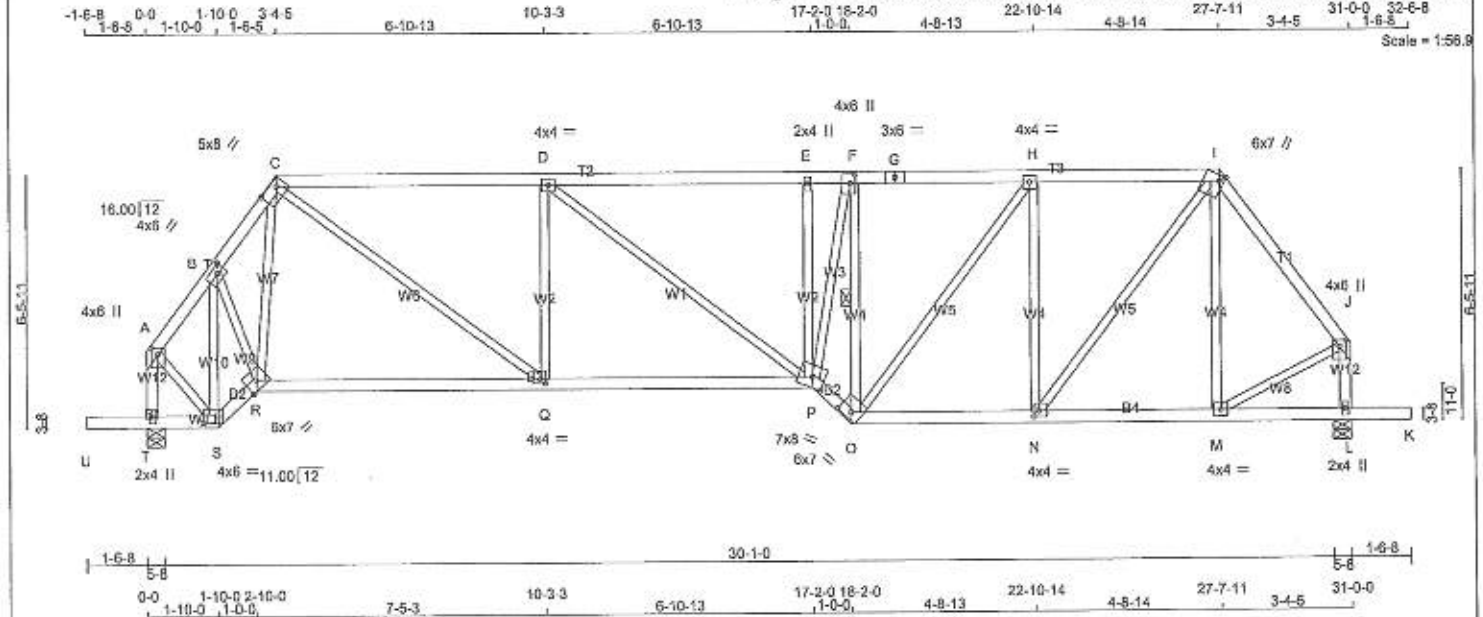
ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/988 (0.30")
ALLOWABLE DEFL.(TL) = L/380 (1.03")
CALCULATED VERT. DEFL.(TL) = L/629 (0.59")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.18")
A-18023119

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H8T	1	1	TRUSS DESC.	

Alpe Roof Truss, Maple

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ID:84gOFYEM8s1JmDO6 uSGRYQWJP-lh7_g_u37dUbRNMyA4s8m_kpV6yNRWv97RTzkWt



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - G	2x4	DRY	No.2	SPF	
G - I	2x4	DRY	No.2	SPF	
I - J	2x4	DRY	No.2	SPF	
T - A	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
U - S	2x4	DRY	No.2	SPF	
S - R	2x4	DRY	No.2	SPF	
R - P	2x4	DRY	No.2	SPF	
P - O	2x4	DRY	No.2	SPF	
O - K	2x4	DRY	No.2	SPF	

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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE PLATES				
A TMWW+p	MT20	4.0	6.0	2.00 2.00
B TMWW-i	MT20	4.0	6.0	2.00 2.50
C TTWW-h	MT20	5.0	8.0	1.75 5.50
D TMWW-i	MT20	4.0	4.0	
E TMWW-h	MT20	2.0	4.0	
F TMWW-h	MT20	4.0	6.0	2.75 1.50
G TS-i	MT20	3.0	6.0	
H TMWW-i	MT20	4.0	4.0	
I TTWW+m	MT20	6.0	7.0	Edge 1.50
J TMWW+p	MT20	4.0	6.0	2.00 2.00
L BMV1+p	MT20	2.0	4.0	
M BMWW-i	MT20	4.0	4.0	
N BMWW-i	MT20	4.0	4.0	1.75 1.50
O BMWW-h	MT20	6.0	7.0	2.00 4.00
P BMWW-m	MT20	7.0	8.0	3.25 3.75
Q BMWW-i	MT20	4.0	4.0	1.50 1.50
R BMWW-h	MT20	6.0	7.0	Edge
S BMWW-i	MT20	4.0	6.0	2.00 4.00
T 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

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	1640	1640	0	2-7
T VERT	1640	1640	0	2-7
L VERT	1640	1640	0	2-7

UNFACTORED REACTIONS	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	PERALIVE	WIND	DEAD	SOIL
JT COMBINED	1175	717.0	0.0	0.0	455.0	0.0
T COMBINED	1175	714.0	0.0	0.0	455.0	0.0
L COMBINED	1175	714.0	0.0	0.0	455.0	0.0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 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-O.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MAX. UNBRACED LENGTH (FT)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)
FR-TO					FR-TO		
A-B	-1026.0	-78.0	-78.0 0.04 (1)	6.15	S-B	-1110.0	0.30 (1)
B-C	-1413.0	-78.0	-78.0 0.05 (1)	5.45	S-R	0.700	0.16 (1)
C-D	-2032.0	-78.0	-78.0 0.77 (1)	3.86	R-C	-50.21	0.02 (1)
D-E	-2211.0	-78.0	-78.0 0.79 (1)	3.70	C-Q	0.1497	0.34 (1)
E-F	-2204.0	-78.0	-78.0 0.27 (1)	4.32	Q-D	-751.0	0.35 (1)
F-G	-1835.0	-78.0	-78.0 0.33 (1)	4.81	D-P	0.1224	0.05 (1)
G-H	-1835.0	-78.0	-78.0 0.33 (1)	4.81	P-E	-336.0	0.18 (1)
H-I	-1478.0	-78.0	-78.0 0.31 (1)	5.04	P-F	0.1958	0.44 (1)
I-J	-1239.0	-78.0	-78.0 0.19 (1)	5.57	O-F	-2081.0	0.58 (1)
J-K	-1419.0	0.0	0.0 0.16 (1)	8.84	O-H	0.585	0.13 (1)
L-K	-1469.0	0.0	0.0 0.17 (1)	6.76	N-H	-877.0	0.80 (1)
					N-I	0.1218	0.27 (1)
U-T	0.0	-96.5	-96.5 0.16 (1)	10.00	M-I	-289.0	0.18 (1)
T-S	0.0	-18.5	-18.5 0.16 (1)	10.00	A-S	0.817	0.18 (1)
S-R	0.789	-18.5	-18.5 0.13 (1)	10.00	M-J	0.814	0.18 (1)
R-Q	0.838	-18.5	-18.5 0.35 (4)	10.00			
Q-P	0.2032	-18.5	-18.5 0.47 (1)	10.00			
P-O	0.2443	-18.5	-18.5 0.40 (1)	10.00			
O-N	0.1478	-18.5	-18.5 0.29 (1)	10.00			
N-M	0.734	-18.5	-18.5 0.17 (4)	10.00			
M-L	0.0	-18.5	-18.5 0.07 (4)	10.00			
L-K	0.0	-96.5	-96.5 0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 2018
- CSA 086-03, CSA 086-14
- TPIC 2011, TPIC 2014

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

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03')
CALCULATED VERT. DEFL.(LL) = L/999 (0.13')
ALLOWABLE DEFL.(TL) = L/360 (1.03')
CALCULATED VERT. DEFL.(TL) = L/999 (0.28')

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.18')
CALCULATED VERT. DEFL.(LL) = L/999 (0.01')
ALLOWABLE DEFL.(TL) = L/120 (0.18')
CALCULATED VERT. DEFL.(TL) = L/999 (0.01')

CSI: TC=0.79/1.00 (D-E-1), BC=0.47/1.00 (P-Q-1), WB=0.60/1.00 (I-H-1), SS=0.26/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1657 1656

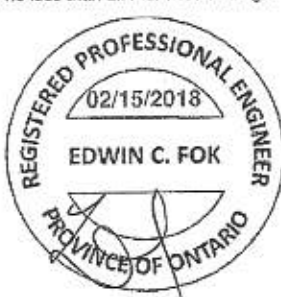
PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.45 (Q) (INPUT = 1.00)

A-18023120

CONTINUED ON PAGE 2

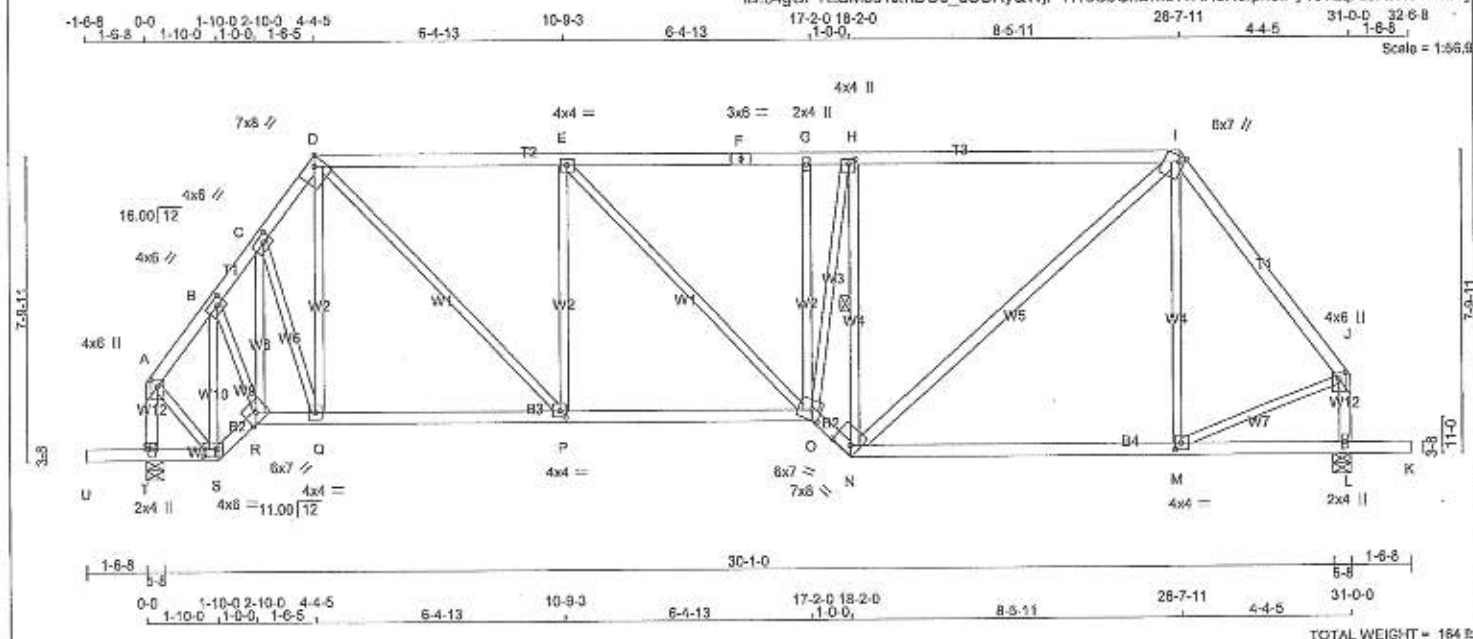


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H9T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-H1dSbGIIIdmavvRN6Ncrph6Py15vLqXl6XeN52zkwky



TOTAL WEIGHT = 184 lb

LUMBER	N.L.G.A. RULES	SIZE	DRY	LUMBER	DESCR
CHORDS					
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	1850F 1.5E	SPF	
F - I	2x4	DRY	1850F 1.5E	SPF	
I - J	2x4	DRY	No.2	SPF	
J - A	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
U - S	2x4	DRY	No.2	SPF	
S - R	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - N	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
N - I	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE PLATES				
A TMVW+p	MT20	4.0	8.0	2.00 2.00
B TMVW+1	MT20	4.0	8.0	2.00 2.60
C TMVW+1	MT20	4.0	8.0	2.00 2.50
D TMVW+1	MT20	7.0	8.0	Edge 2.75
E TMVW+1	MT20	4.0	4.0	
F TS+1	MT20	3.0	6.0	
G TMVW+1	MT20	2.0	4.0	
H TMVW+1	MT20	4.0	4.0	1.50 1.75
I TMVW+m	MT20	6.0	7.0	Edge 1.50
J TMVW+p	MT20	4.0	6.0	2.00 2.00
L BMV1+p	MT20	2.0	4.0	
M BMVW+1	MT20	4.0	4.0	2.00 1.75
N BMVW+1	MT20	7.0	8.0	2.25 5.50
O BMVW+1	MT20	6.0	7.0	3.00 3.00
P BMVW+1	MT20	4.0	4.0	1.75 1.75
Q BMVW+1	MT20	4.0	4.0	
R BMVW+1	MT20	6.0	7.0	Edge
S BMVW+1	MT20	4.0	6.0	2.00 4.50
T BMV1+p	MT20	2.0	4.0	

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	DOWN	UPLIFT	IN-SK
T	1848	0	0	2-7
L	1640	0	0	2-7

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE PERM.LIVE WIND DEAD SOIL
T	1175	717/0	0/0 0/0 0/0 458/0 0/0
L	1168	714/0	0/0 0/0 0/0 456/0 0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING	CHORDS	FACTORED	WEBS
TOTAL LOAD CASES: (4)	MAX. FACTORED MEMB. FORCE (LBS)	VERT. LOAD LC1 MAX (PLF) CSI (LC)	MAX. FACTORED MEMB. FORCE (LBS) MAX. CSI (LC)
	FR-TO	FROM TO	LENGTH FR-TO
	A-B	-1026/0	-78.0 -78.0 0.04 (1) 6.15
	B-C	-1413/0	-78.0 -78.0 0.04 (1) 5.47
	C-D	-1432/0	-78.0 -78.0 0.05 (1) 5.42
	D-E	-1648/0	-78.0 -78.0 0.48 (1) 5.16
	E-F	-1753/0	-78.0 -78.0 0.48 (1) 5.03
	F-G	-1753/0	-78.0 -78.0 0.48 (1) 5.03
	G-H	-1755/0	-78.0 -78.0 0.09 (1) 4.38
	H-I	-1578/0	-78.0 -78.0 0.64 (1) 4.58
	I-J	-1285/0	-78.0 -78.0 0.33 (1) 5.34
	T-A	-1419/0	0.0 0.0 0.18 (1) 8.84
	L-J	-1477/0	0.0 0.0 0.17 (1) 6.74
	U-T	0/0	-86.5 -86.5 0.16 (1) 10.00
	T-S	0/0	-18.5 -18.5 0.16 (1) 10.00
	S-R	0/799	-18.5 -18.5 0.13 (1) 10.00
	R-Q	0/844	-18.5 -18.5 0.20 (1) 10.00
	Q-P	0/848	-18.5 -18.5 0.27 (4) 10.00
	P-O	0/1646	-18.5 -18.5 0.36 (1) 10.00
	O-N	0/2103	-18.5 -18.5 0.34 (1) 10.00
	N-M	0/765	-18.5 -18.5 0.36 (4) 10.00
	M-L	0/0	-18.5 -18.5 0.28 (4) 10.00
	L-K	0/0	-86.5 -86.5 0.16 (1) 10.00

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
OL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.0/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2015
- CSA 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

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

(55 % OF 23.0 P.S.F. O.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/998 (0.24")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.84/1.00 (H-H:1), BC=0.36/1.00 (O-P:1), WB=0.79/1.00 (H-N:1), SSI=0.35/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

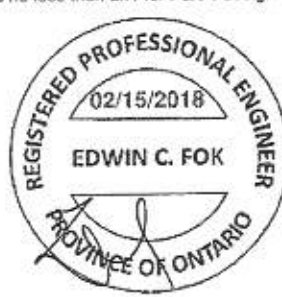
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL = 0.44 (J) (INPUT = 1.00)



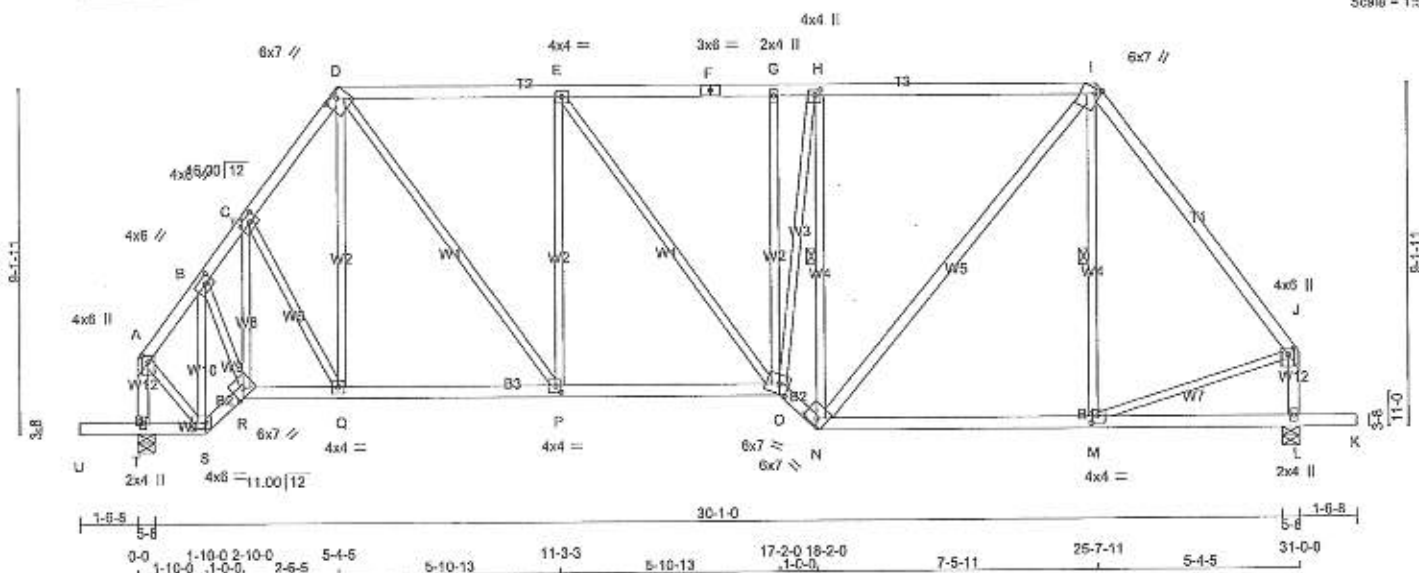
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292574	H10T	1	1	TRUSS DESC.	

Alpine Roof Truss, Maple

Version 8.200 S Jan 8 2018 MITEX Industries, Inc. Thu Feb 15 10:57:03 2018 Page 1

ID:84gOFYEM8s1JmDO6_uSGRyQWJP-skTIX2TXw3PwabRoCY55G3Hqkguic8MKQ27bEzkwwk

1-6-8 0-0 1-10-0 2-10-0 2-6-5 5-4-5 5-10-13 11-3-3 5-10-13 17-2-0 18-2-0 1-0-0 7-5-11 25-7-11 5-4-5 31-0-0 32-6-8 1-0-0
Scale = 1:50.0



TOTAL WEIGHT = 174 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQ'D BRG	SPECIFIED LOADS:	
A - D	2x4	DRY	No.2	SPF	VERT	1648	1648	0	0	TOP CH. LL = 21.0 PSF	
D - F	2x4	DRY	No.2	SPF	HORZ	0	0	0	0	DL = 6.0 PSF	
F - I	2x4	DRY	No.2	SPF						BOT CH. LL = 0.0 PSF	
I - J	2x4	DRY	No.2	SPF						DL = 7.4 PSF	
T - A	2x4	DRY	No.2	SPF						TOTAL LOAD = 34.4 PSF	
L - J	2x4	DRY	No.2	SPF							
U - S	2x4	DRY	No.2	SPF							
S - R	2x4	DRY	No.2	SPF							
R - O	2x4	DRY	No.2	SPF							
O - N	2x4	DRY	No.2	SPF							
N - K	2x4	DRY	No.2	SPF							
ALL WEBS	2x3	DRY	No.2	SPF							
EXCEPT											
N - I	2x4	DRY	No.2	SPF							

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	6.0	2.00	2.00
B	TMWW-l	MT20	4.0	6.0	2.00	2.50
C	TMWW-l	MT20	4.0	6.0	2.00	2.50
D	TTWW-h	MT20	6.0	7.0	1.50	3.75
E	TMWW-l	MT20	4.0	4.0		
F	TS-l	MT20	3.0	6.0		
G	TMWW-l	MT20	2.0	4.0		
H	TMWW-l	MT20	4.0	4.0	1.75	1.75
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMWW-l	MT20	4.0	6.0	2.00	2.00
L	BMV1+p	MT20	2.0	4.0		
M	BMWW-l	MT20	4.0	4.0	2.00	1.75
N	BMWW-h	MT20	6.0	7.0	2.00	4.00
Q	BMWW-m	MT20	6.0	7.0	3.00	3.00
P	BMWW-l	MT20	4.0	4.0	2.00	1.75
R	BMWW-l	MT20	4.0	4.0		
S	BMWW-h	MT20	6.0	7.0	Edge	
R	BMWW-l	MT20	4.0	6.0	2.00	4.50
T	BMV1+p	MT20	2.0	4.0		

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

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

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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-1026 / 0	-78.0	-78.0 0.05 (1)	S-B	-1107 / 0	0.30 (1)	
B-C	-1398 / 0	-78.0	-78.0 0.06 (1)	B-R	0 / 747	0.17 (1)	
C-D	-1410 / 0	-78.0	-78.0 0.08 (1)	R-C	-134 / 0	0.05 (1)	
D-E	-1389 / 0	-78.0	-78.0 0.49 (1)	Q-D	-39 / 0	0.02 (1)	
E-F	-1454 / 0	-78.0	-78.0 0.48 (1)	Q-D	0 / 112	0.03 (4)	
F-G	-1454 / 0	-78.0	-78.0 0.48 (1)	D-P	0 / 626	0.21 (1)	
G-H	-1455 / 0	-78.0	-78.0 0.64 (1)	E-O	-629 / 0	0.02 (1)	
H-I	-1324 / 0	-78.0	-78.0 0.76 (1)	E-O	0 / 777	0.02 (1)	
I-J	-1279 / 0	-78.0	-78.0 0.54 (1)	Q-H	0 / 1100	0.25 (1)	
T-A	-1419 / 0	0.0	0.0 0.16 (1)	Q-H	0 / 1100	0.25 (1)	
T-J	-1459 / 0	0.0	0.0 0.17 (1)	N-H	-1787 / 0	0.57 (1)	
				N-I	0 / 868	0.14 (1)	
U-T	0 / 0	-86.5	-86.5 0.16 (1)	M-I	-77 / 78	0.04 (1)	
T-S	0 / 0	-18.5	-18.5 0.16 (1)	A-S	0 / 815	0.18 (1)	
S-R	0 / 797	-18.5	-18.5 0.13 (1)	M-J	0 / 798	0.18 (1)	
R-Q	0 / 851	-18.5	-18.5 0.19 (1)				
Q-P	0 / 834	-18.5	-18.5 0.24 (1)				
P-O	0 / 1399	-18.5	-18.5 0.31 (1)				
O-N	0 / 1758	-18.5	-18.5 0.29 (1)				
N-M	0 / 783	-18.5	-18.5 0.31 (1)				
M-L	0 / 0	-18.5	-18.5 0.23 (1)				
L-K	0 / 0	-86.5	-86.5 0.16 (1)				

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 758 1687 1656

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

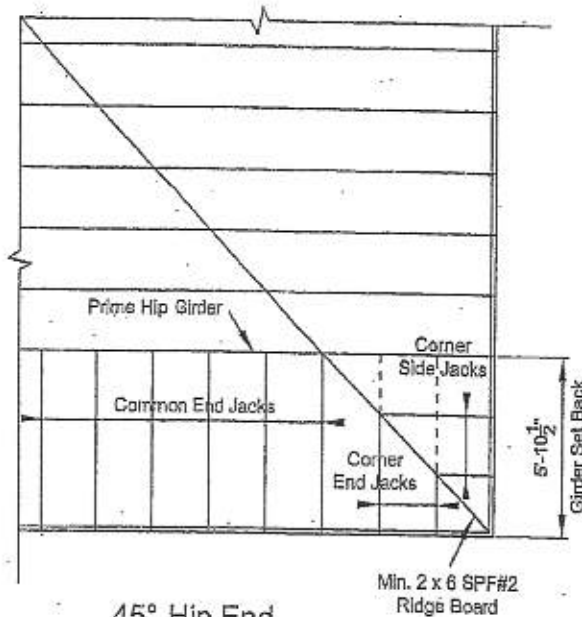
JSI GRIP= 0.88 (N) (INPUT = 0.80)
JSI METAL= 0.45 (J) (INPUT = 1.00)

A-18023122

CONTINUED ON PAGE 2



STRACON ENGINEERING INC.



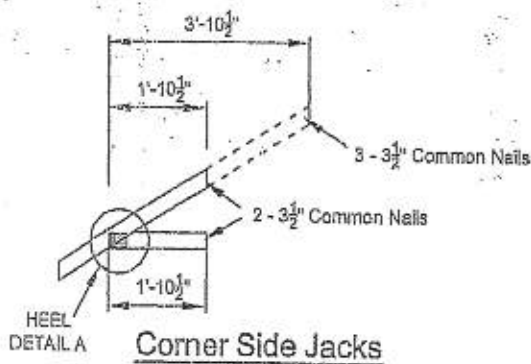
45° Hip End

LUMBER SPECIFICATION

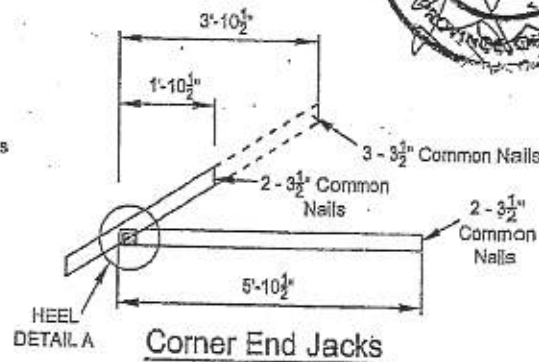
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

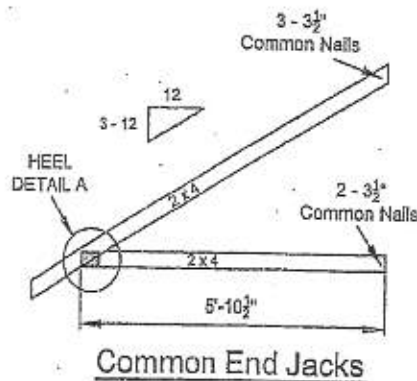
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



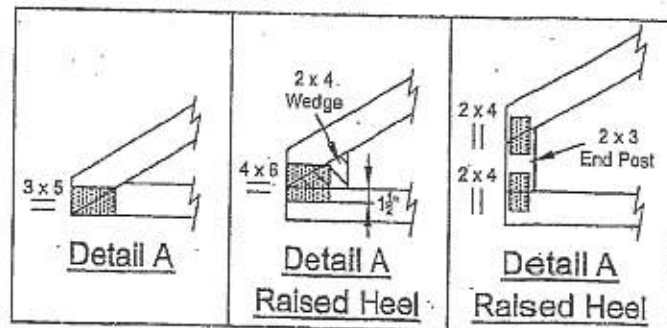
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008

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 cauce

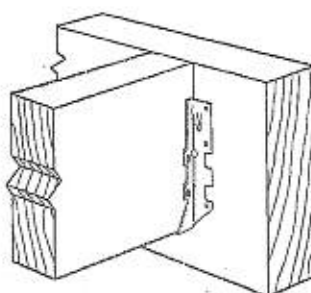
Finish: G90 galvanized

Design:

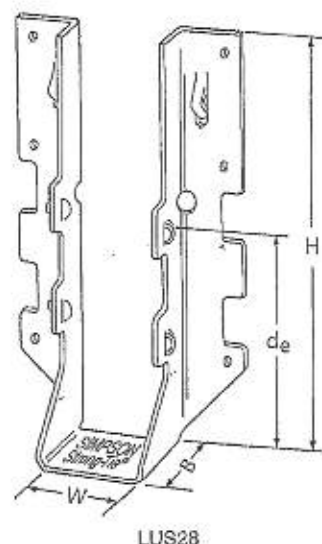
- Factored resistances are in accordance with CSA C86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

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



Typical LUS Installation

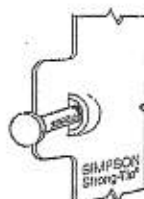


Options:

- These hangers cannot be modified

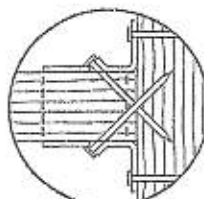
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	α_1	Face	Jolst	D.Fir-L		S-P-F	
								Uplift ($K_0=1.15$)	Normal ($K_0=1.00$)	Uplift ($K_0=1.15$)	Normal ($K_0=1.00$)
LUS24	18	1 3/16	3 1/2	1 3/4	1 1/16	(4) 10d	(2) 10d	710	1630	646	1155
LUS24-2	18	3 1/4	3 1/4	2	1 1/16	(4) 16d	(2) 16d	835	2020	630	1435
LUS26	18	1 1/8	4 3/4	1 3/4	3 3/4	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/4	4 3/4	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 3/4	4 5/8	2	3 3/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 3/8	6 3/4	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/2	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 3/4	6 3/4	2	3 3/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/16	1 3/4	3 3/4	(6) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 3/4	9	2	6	(6) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 5/8	8 3/8	2	5 1/4	(6) 16d	(6) 16d	2580	3345	2320	2375

1. d_0 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
5,503,580



Double
Shear
Nailing
Top View

LIMIT
STATES
DESIGN

Accepted for publication 29 June 2018 and published online 10 July 2018 as part of the
The Fertiliser Supplementation Programme, which will be closed by 30 June 2019.
Contact: Simon Storch, simon.storch@flh.uni-hannover.de

001-2-2303-515-1 0015371-150

T-SPEC1151713/17 EXP: 6/19

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strongtie.com

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:

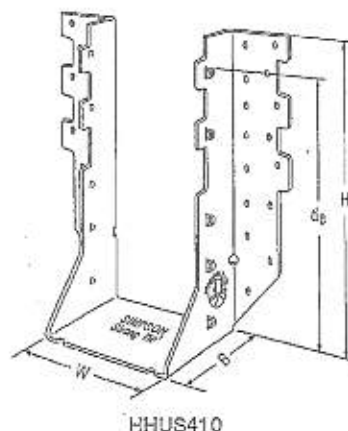
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

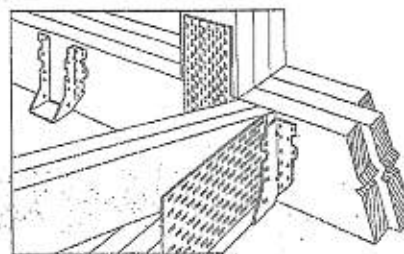
- Use all specified fasteners
- Nails: 16d = 0.182" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

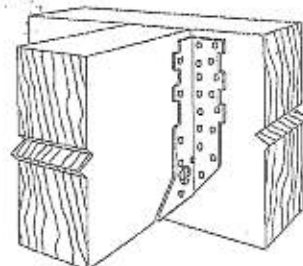
- See current catalogue for options



HHUS410



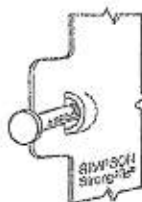
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

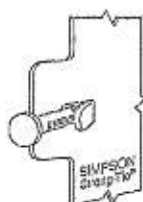
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
HHUS26-2	14	3 1/2	5 1/2	3	3 1/2	(14) 16d	(5) 16d	2850	7335	2065	5205
HHUS28-2	14	3 3/4	7 1/2	3	3 1/2	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 3/4	9 3/4	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 1/4	9	3	7 1/2	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	4 3/4	8 3/4	3	7 1/2	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 3/4	5 1/2	3	3 1/2	(14) 16d	(5) 16d	2540	7335	2085	5205
HHUS48	14	3 3/4	7 1/2	3	6 1/2	(22) 16d	(8) 16d	3765	8945	2287	6345
HHUS410	14	3 3/4	9	3	8	(30) 16d	(10) 16d	4745	9855	4310	7000
HHUS5.60/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4745	10645	4310	7485
HHUS7.25/10	14	7 1/4	9	3 1/2	7 3/4	(30) 16d	(10) 16d	4745	10770	4310	7650

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

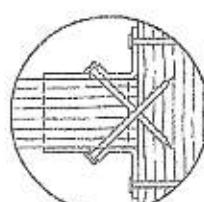


Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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T-SPEC-HHUS17 01/17 exp. 9/19

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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:

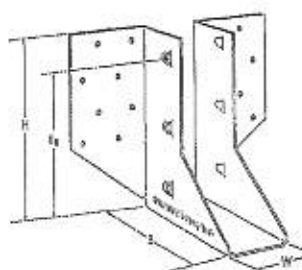
- Factored resistances are in accordance with CSA O88-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

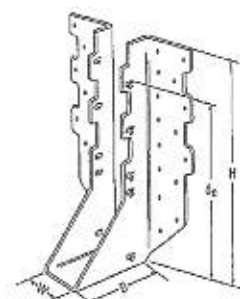
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

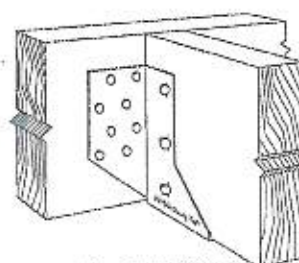
- See current catalogue for options



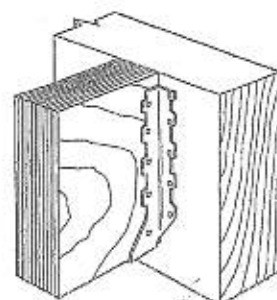
LJS26DS



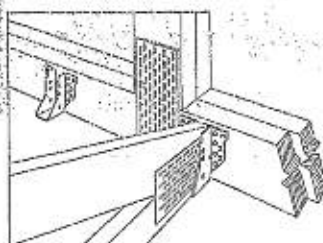
HUS210
(HUS26, HUS28, similar)



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 _a	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LJS26DS	18	1 1/4	5	5 1/2	4 1/2	(16) 16d	(8) 16d	2055	4265	1460	4115
HUS28	18	1 1/4	5 1/2	3	3 1/4	(14) 16d	(8) 16d	2705	4940	2085	3875
HUS28	18	1 1/4	7 1/2	3	8 1/2	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	18	1 1/4	9 1/2	3	7 1/2	(30) 16d	(10) 16d	4505	6795	4010	4740
HUS1.81/10	18	1 1/4	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

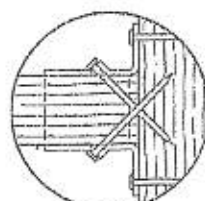
1. d_a is the distance from the seat of the hanger to the highest joist nail.



Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 6,603,660



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

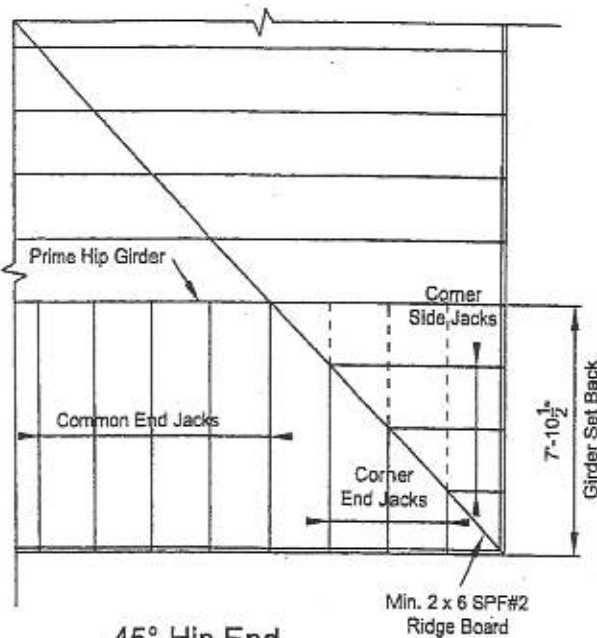
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T-SPEC-HUS17 3/17 exp. 6/19

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strongtie.com

STRACON ENGINEERING INC.



45° Hip End

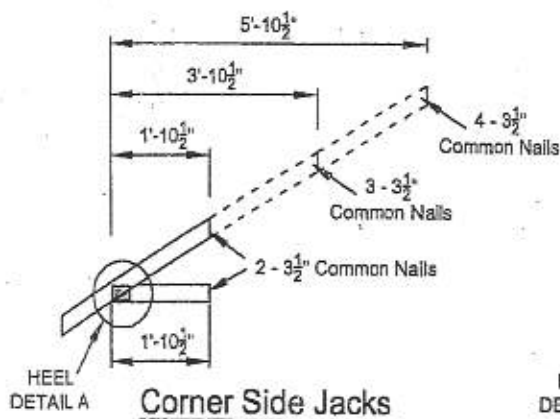
LUMBER SPECIFICATION

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

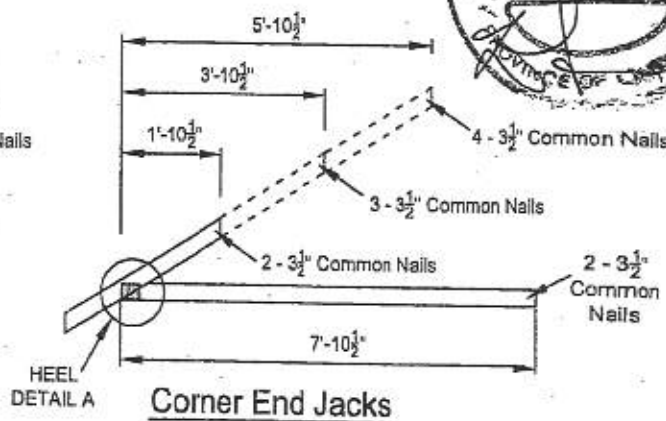
DESIGN LOAD

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.

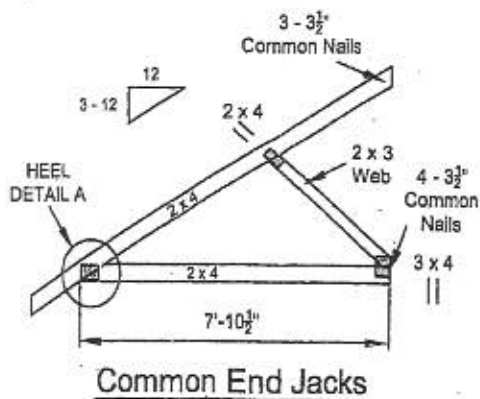
TOTAL LOAD : 44.8 P.S.F



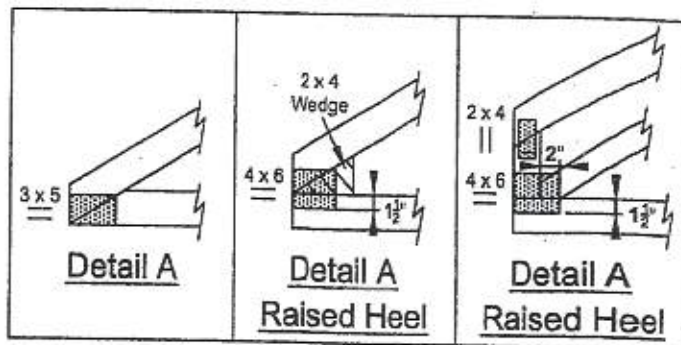
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-71008N