



Job Track **31379**
Layout ID: **263307**
Plan Log: **84245**

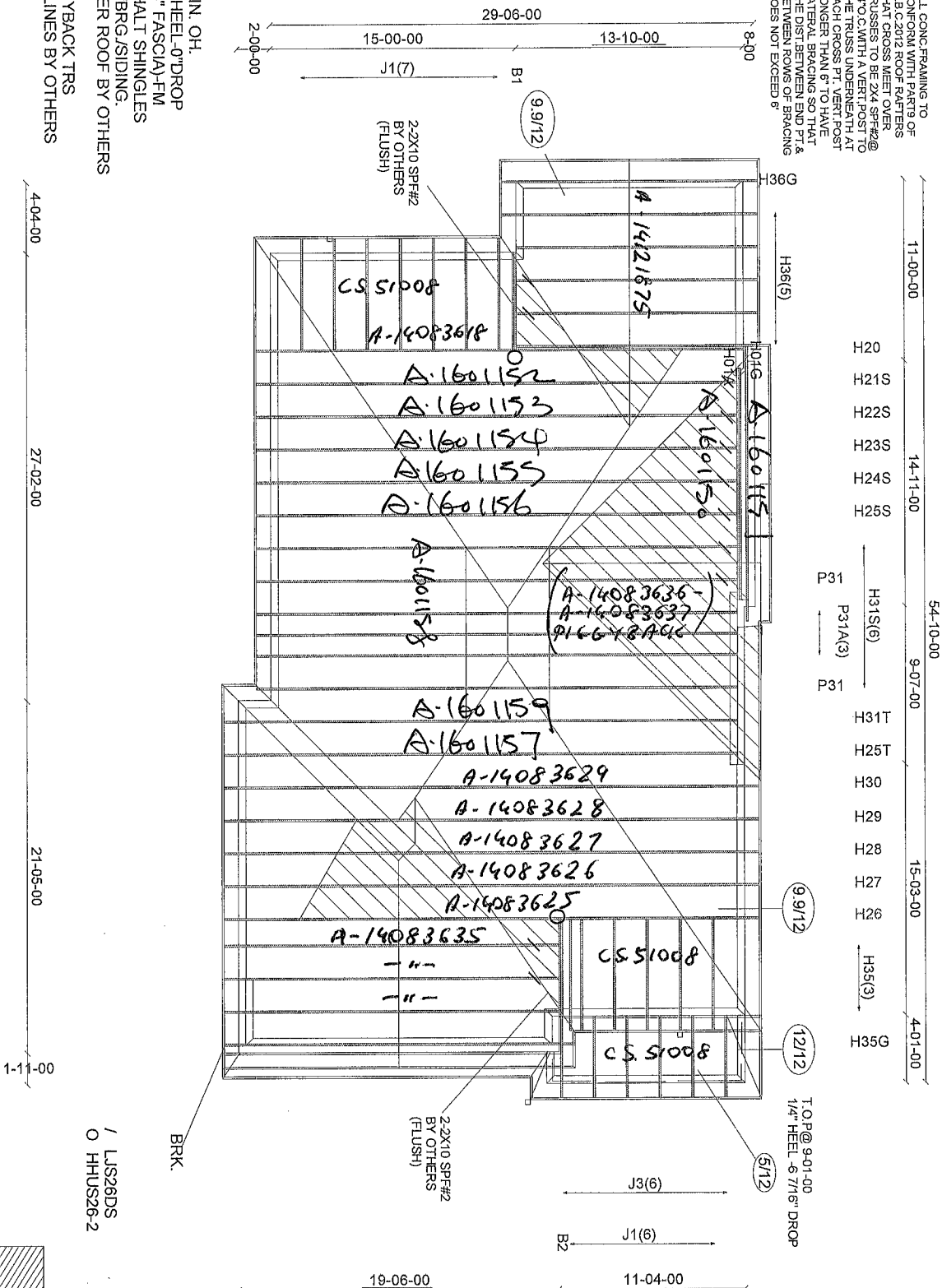
Builder / Location:
ESQUIRE HOMES / CLARINGTON
Project: **NORTHGLEN**
Date: **1/6/2016** Designer: **JERZY**

Model / Elevation:
37-8 COR. / B
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.

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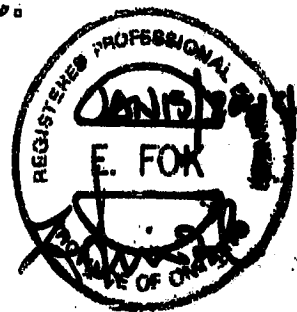


12" FIN. OH.
RSD HEEL-0" DROP
(2"x6" FASCIA)-FM
ASPHALT SHINGLES
2"x6" BRG./SIDING.
LOWER ROOF BY OTHERS
PIGGYBACK TRS
PURLINES BY OTHERS



Stracon Engineering Inc.

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



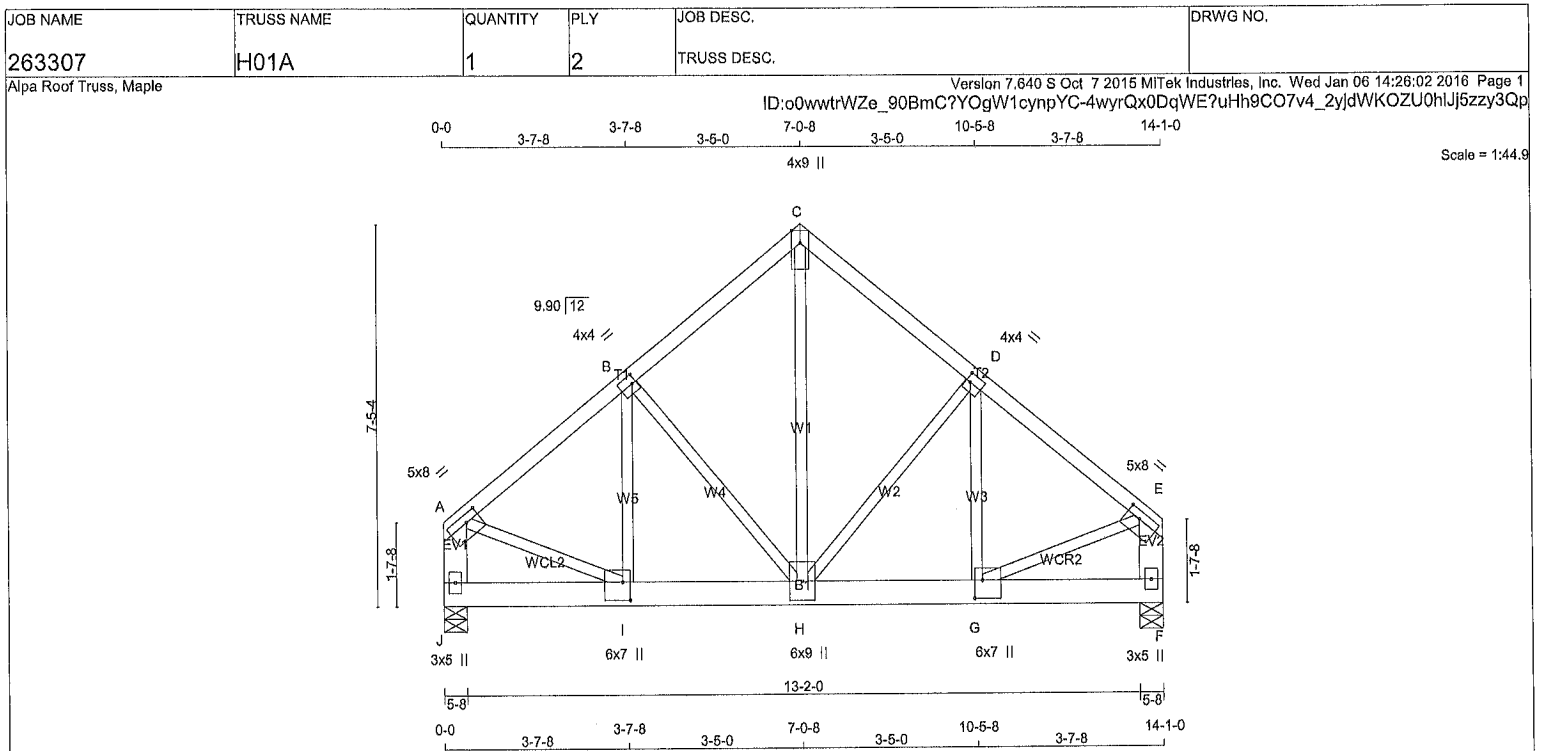
RESPONSIBILITIES

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



TOTAL WEIGHT = 2 X 76 = 152 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
J - A	2x6	DRY	No.2	SPF
F - E	2x6	DRY	No.2	SPF
J - F	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C 1	12	TOP
C - E 1	12	TOP
J - A 2	12	TOP
F - E 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J - F 2	6	SIDE(404.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	1.75	3.25
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
C	TTW+p	MT20	4.0	9.0	Edge	
D	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	TMVW-t	MT20	5.0	8.0	1.75	3.25

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	UPLIFT
J	6564	0	6564	0
F	6564	0	6564	0

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	COMBINED		5304	3109 / 0	1124 / 0	0 / 0	0 / 0	1071 / 0
F			5304	3109 / 0	1124 / 0	0 / 0	0 / 0	1071 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 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)	
FR-TO		FROM	TO	FR-TO			
A-B	-5712 / 0	-94.6	-94.6 0.23 (1)	H-C	0 / 5319	0.66 (1)	
B-C	-4415 / 0	-94.6	-94.6 0.16 (1)	H-D	-1614 / 0	0.40 (1)	
C-D	-4415 / 0	-94.6	-94.6 0.16 (1)	G-D	0 / 1722	0.21 (1)	
D-E	-5712 / 0	-94.6	-94.6 0.23 (1)	B-H	-1614 / 0	0.40 (1)	
J-A	-5268 / 0	0.0	0.0 0.19 (1)	I-B	0 / 1722	0.21 (1)	
F-E	-5268 / 0	0.0	0.0 0.19 (1)	A-I	0 / 4654	0.58 (1)	
				G-E	0 / 4654	0.58 (1)	
J-I	0 / 0	-837.6	-837.6 0.37 (1)				
I-H	0 / 4415	-837.6	-837.6 0.58 (1)				
H-G	0 / 4415	-837.6	-837.6 0.58 (1)				
G-F	0 / 0	-837.6	-837.6 0.37 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.0 PSF
DL = 3.0 PSF	
BOT CH.	LL = 10.5 PSF
DL = 7.0 PSF	
TOTAL LOAD	= 49.5 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: Cstd Girder

START DISTANCE = 0-0

START SPAN CARRIED = 28-5-0

END DISTANCE = 14-1-0

END SPAN CARRIED = 28-5-0

END WALL WIDTH = 0-0

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADD'L LOADS BASED ON 55 % OF GSL.

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 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.23 (D-E:1), BC=0.58 (G-H:1),
WB=0.66 (C-H:1), SSI=0.58 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 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
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.80)

JSI METAL= 0.55 (A) (INPUT = 1.00)

A1601150

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
263307	H01A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.640 S Oct 7 2015 MITek Industries, Inc. Wed Jan 06 14:26:02 2016 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	5.0		
G	BMWW+t	MT20	6.0	7.0	4.25	1.75
H	BMWWW+t	MT20	6.0	9.0		
I	BMWW+t	MT20	6.0	7.0	4.25	1.75
J	BMV1+p	MT20	3.0	5.0		

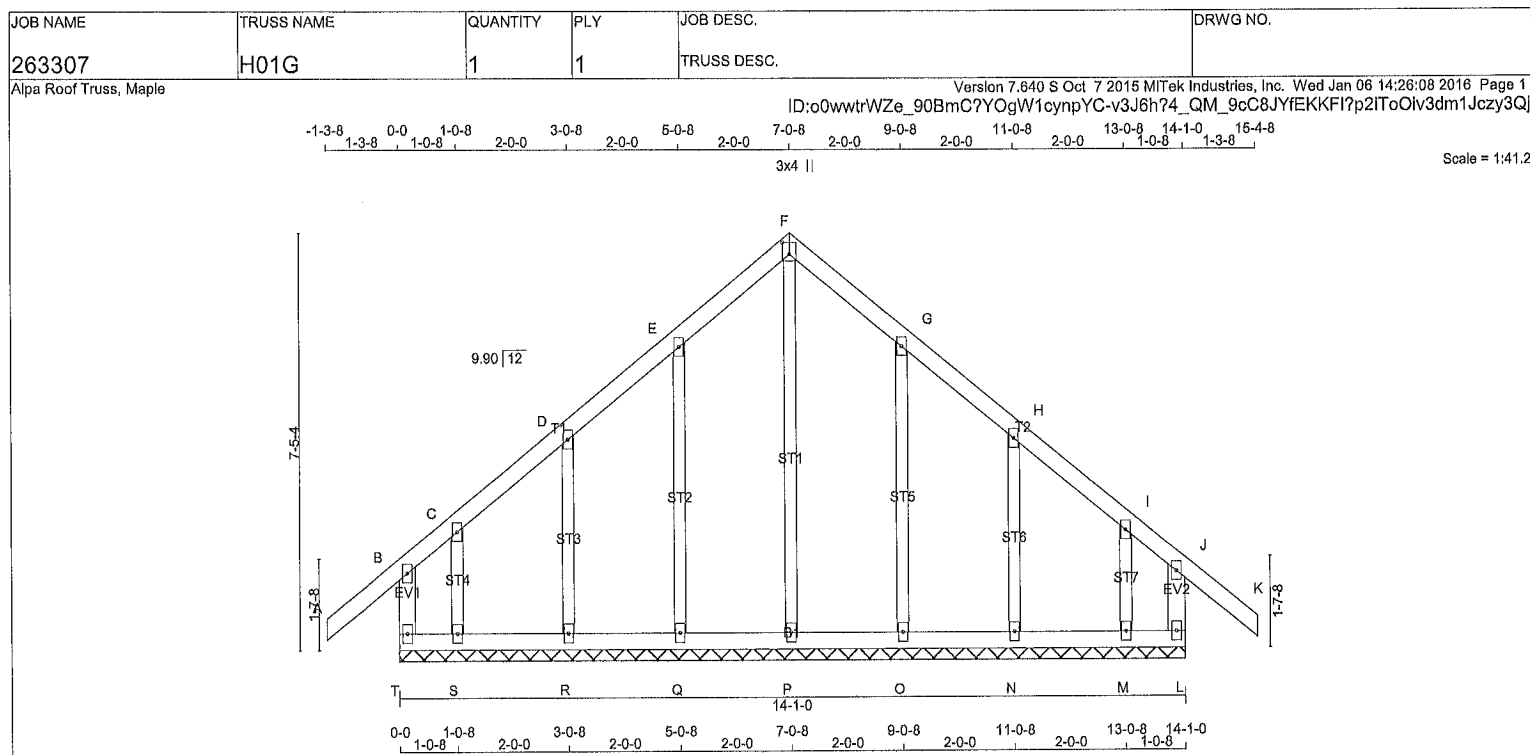
Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD.

NOTES- (1)

- 1) 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-1601150(?)



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - F	2x4	DRY	No.2
F - K	2x4	DRY	No.2
T - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
T - L	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			
GABLE STUDS SPACED AT 2'-0" OC.			

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMV+p	MT20	2.0	4.0	
C, D, E, G, H, I				
C TMW+w	MT20	2.0	4.0	
F TTW+p	MT20	3.0	4.0	2.50 1.50
J TMV+p	MT20	2.0	4.0	
L BMV1+p	MT20	2.0	4.0	
M, N, O, P, Q, R, S				
M BMW1+w	MT20	2.0	4.0	
T BMV1+p	MT20	2.0	4.0	

NOTES- (1)
1) 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

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)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 42	-94.6 -94.6	0.13 (1)	10.00	P-F	-237 / 0	0.23 (1)
B-C	-14 / 0	-94.6 -94.6	0.09 (1)	6.25	Q-E	-192 / 0	0.10 (1)
C-D	0 / 29	-94.6 -94.6	0.05 (1)	10.00	R-D	-195 / 0	0.05 (1)
D-E	0 / 29	-94.6 -94.6	0.05 (1)	10.00	S-C	-76 / 0	0.01 (1)
E-F	0 / 32	-94.6 -94.6	0.05 (1)	10.00	O-G	-192 / 0	0.10 (1)
F-G	0 / 32	-94.6 -94.6	0.05 (1)	10.00	N-H	-195 / 0	0.05 (1)
G-H	0 / 29	-94.6 -94.6	0.05 (1)	10.00	M-I	-76 / 0	0.01 (1)
H-I	0 / 29	-94.6 -94.6	0.05 (1)	10.00			
I-J	-14 / 0	-94.6 -94.6	0.09 (1)	6.25			
J-K	0 / 42	-94.6 -94.6	0.13 (1)	10.00			
T-B	-215 / 0	0.0 0.0	0.04 (1)	7.81			
L-J	-215 / 0	0.0 0.0	0.04 (1)	7.81			
T-S	-14 / 0	-28.0 -28.0	0.02 (3)	6.25			
S-R	-17 / 0	-28.0 -28.0	0.02 (2)	6.25			
R-Q	-22 / 0	-28.0 -28.0	0.02 (2)	6.25			
Q-P	-26 / 0	-28.0 -28.0	0.02 (2)	6.25			
P-O	-26 / 0	-28.0 -28.0	0.02 (2)	6.25			
O-N	-22 / 0	-28.0 -28.0	0.02 (2)	6.25			
N-M	-17 / 0	-28.0 -28.0	0.02 (2)	6.25			
M-L	-14 / 0	-28.0 -28.0	0.02 (3)	6.25			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	29.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	49.5	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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.13 (A-B:1), BC=0.02 (N-O:2), WB=0.23 (F-P:1), SS=0.08 (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.

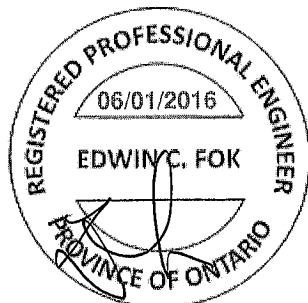
NAIL VALUES

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

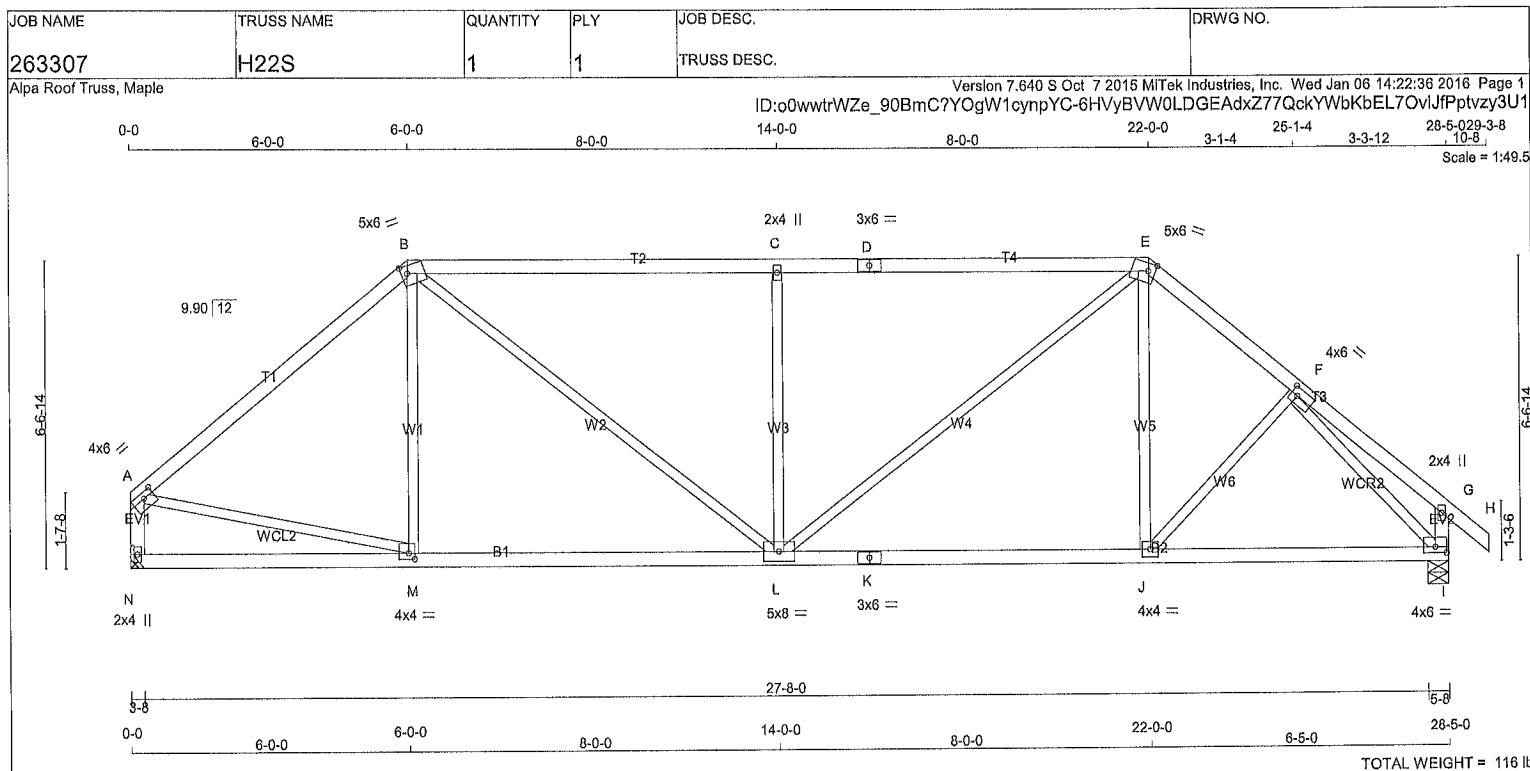
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (F) (INPUT = 0.90)
JSI METAL= 0.08 (F) (INPUT = 1.00)



A-160115 |



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	1850F 1.8E	SPF			
B - D	2x4	DRY	2100F 1.8E	SPF			
D - E	2x4	DRY	2100F 1.8E	SPF			
E - H	2x4	DRY	No.2	SPF			
N - A	2x4	DRY	No.2	SPF			
I - G	2x4	DRY	No.2	SPF			
N - K	2x4	DRY	No.2	SPF			
K - I	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
A	TMVW-t	MT20	4.0	6.0	1.50	2.75
B	TTWW-m	MT20	5.0	6.0	2.00	1.50
C	TMVW-w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TTWW-m	MT20	5.0	6.0	2.00	1.75
F	TMVW-t	MT20	4.0	6.0	2.00	1.75
G	TMV-p	MT20	2.0	4.0		
I	BMVW1-t	MT20	4.0	6.0	1.50	3.00
J	BMVW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVWW-t	MT20	5.0	8.0		
M	BMVW-t	MT20	4.0	4.0	1.50	1.50
N	BMV1-p	MT20	2.0	4.0		

NOTES- (1)
1) 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		
N	1742	0	1742	0	0	HANGER BY OTHERS
I	1833	0	1833	0	0	MIN. SEAT SIZE: 2-3

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. LIVE		PERM. LIVE	WIND	DEAD	SOIL
	SNOW	LIVE	SNOW	LIVE				
N	1407	825 / 0	298 / 0	0 / 0	0 / 0	0 / 0	284 / 0	0 / 0
I	1469	881 / 0	298 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.39 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)	
FR-TO		FROM TO		FR-TO			
A-B	-1741 / 0	-94.6	-94.6 0.61 (1)	4.88	M-B	-66 / 244	0.05 (3)
B-C	-2107 / 0	-94.6	-94.6 0.83 (1)	4.39	B-L	0 / 974	0.22 (1)
C-D	-2108 / 0	-94.6	-94.6 0.83 (1)	4.39	L-C	-929 / 0	0.66 (1)
D-E	-2108 / 0	-94.6	-94.6 0.83 (1)	4.39	L-E	0 / 890	0.20 (1)
E-F	-1843 / 0	-94.6	-94.6 0.18 (1)	4.78	J-E	0 / 315	0.07 (2)
F-G	0 / 19	-94.6	-94.6 0.13 (1)	10.00	J-F	0 / 116	0.03 (3)
G-H	0 / 29	-94.6	-94.6 0.06 (1)	10.00	A-M	0 / 1371	0.31 (1)
N-A	-1679 / 0	0.0	0.0 0.18 (1)	6.41	F-I	-2078 / 0	0.76 (1)
I-G	-212 / 0	0.0	0.0 0.02 (1)	7.81			
N-M	0 / 0	-28.0	-28.0 0.33 (3)	10.00			
M-L	0 / 1340	-28.0	-28.0 0.50 (2)	10.00			
L-K	0 / 1406	-28.0	-28.0 0.50 (2)	10.00			
K-J	0 / 1406	-28.0	-28.0 0.50 (2)	10.00			
J-I	0 / 1382	-28.0	-28.0 0.49 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	29.0	PSF
	DL =	3.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	49.5	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, NBCC 2010

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.96")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.96")
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.83 (C-E:1), BC=0.50 (J-L:2), WB=0.76 (F-I:1), SSI=0.37 (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

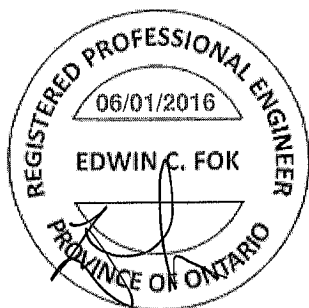
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

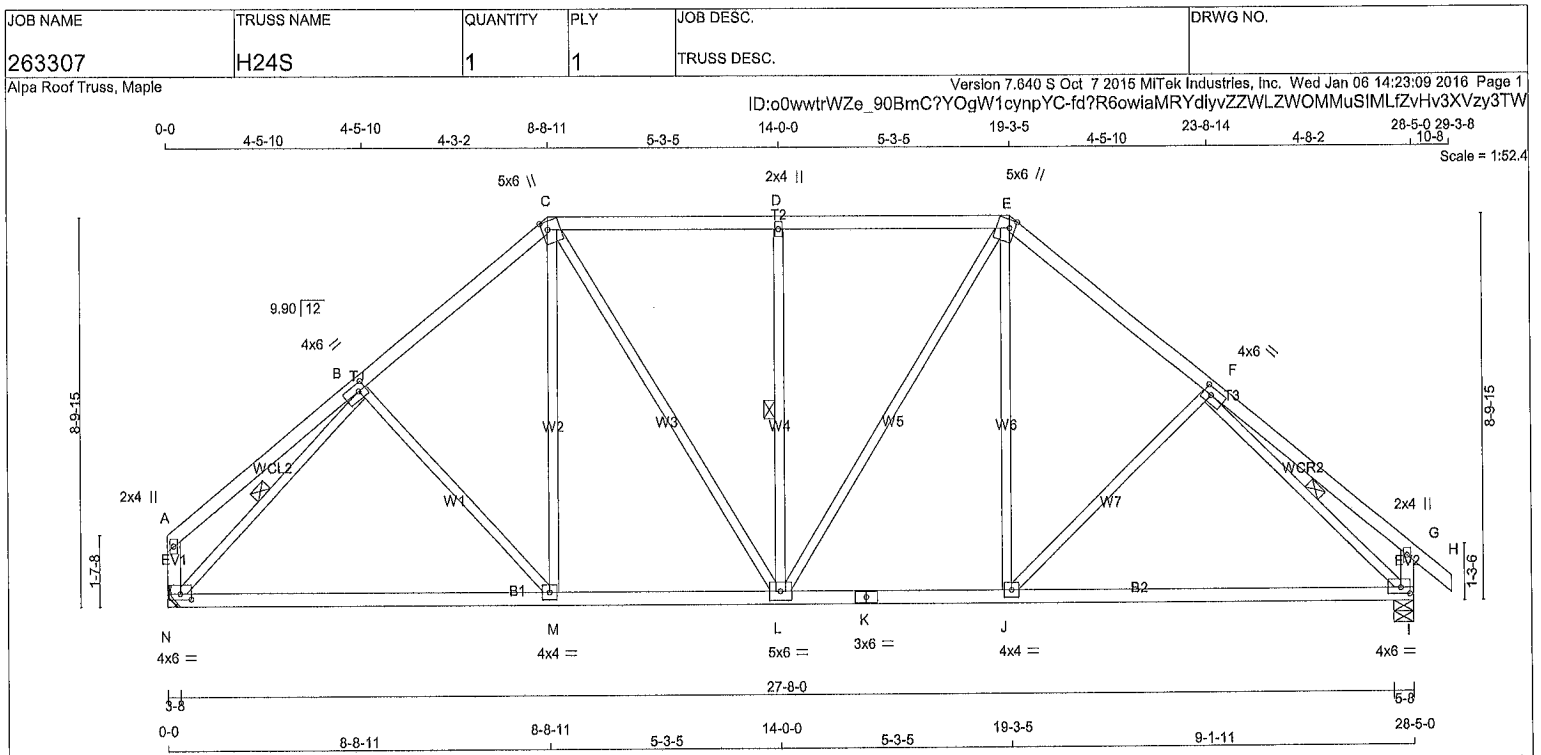
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.51 (F) (INPUT = 1.00)



A-1601153



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	
N - A	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMWW-t	MT20	4.0	6.0	2.00	2.25
G	TMV+p	MT20	2.0	4.0		
I	BMVW1-t	MT20	4.0	6.0	1.75	2.50
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	BMWW-t	MT20	4.0	4.0		
N	BMVW1-t	MT20	4.0	6.0	1.50	3.00

NOTES- (1)
1) 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	
JT	GROSS REACTION	SNOW	LIVE	DOWN	UP	BRG	IN-SX	BRG	IN-SX
N	1742	0	1742	0	0	5-8	2-0		
I	1833	0	1833	0	0	5-8	2-0		

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	1407	825 / 0	298 / 0	0 / 0	0 / 0	284 / 0	0 / 0	0 / 0
I	1469	881 / 0	298 / 0	0 / 0	0 / 0	290 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 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-L, B-N, 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		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 30	-94.6	-94.6 0.28 (1)	10.00	B-M	-92 / 95	0.07 (1)
B-C	-1665 / 0	-94.6	-94.6 0.26 (1)	4.90	M-C	0 / 423	0.10 (2)
C-D	-1484 / 0	-94.6	-94.6 0.36 (1)	4.97	C-L	0 / 422	0.10 (1)
D-E	-1484 / 0	-94.6	-94.6 0.36 (1)	4.97	L-D	-606 / 0	0.30 (1)
E-F	-1709 / 0	-94.6	-94.6 0.29 (1)	4.82	L-E	0 / 358	0.08 (1)
F-G	0 / 32	-94.6	-94.6 0.31 (1)	10.00	J-E	0 / 482	0.11 (2)
G-H	0 / 29	-94.6	-94.6 0.06 (1)	10.00	J-F	-187 / 62	0.15 (1)
N-A	-158 / 0	0.0	0.0 0.02 (1)	7.81	N-B	-1986 / 0	0.57 (1)
I-G	-257 / 0	0.0	0.0 0.03 (1)	7.81	F-I	-2046 / 0	0.59 (1)
N-M	0 / 1321	-28.0	-28.0 0.63 (2)	10.00			
M-L	0 / 1262	-28.0	-28.0 0.63 (2)	10.00			
L-K	0 / 1296	-28.0	-28.0 0.68 (2)	10.00			
K-J	0 / 1296	-28.0	-28.0 0.68 (2)	10.00			
J-I	0 / 1423	-28.0	-28.0 0.68 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	29.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	49.5	PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.95")
CALCULATED VERT. DEFL.(LL) = L/999 (0.29")
ALLOWABLE DEFL.(TL)= L/360 (0.95")
CALCULATED VERT. DEFL.(TL) = L/721 (0.47")

CSI: TC=0.36 (C-D:1), BC=0.68 (I-J:2), WB=0.59 (F-I:1), SSI=0.24 (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

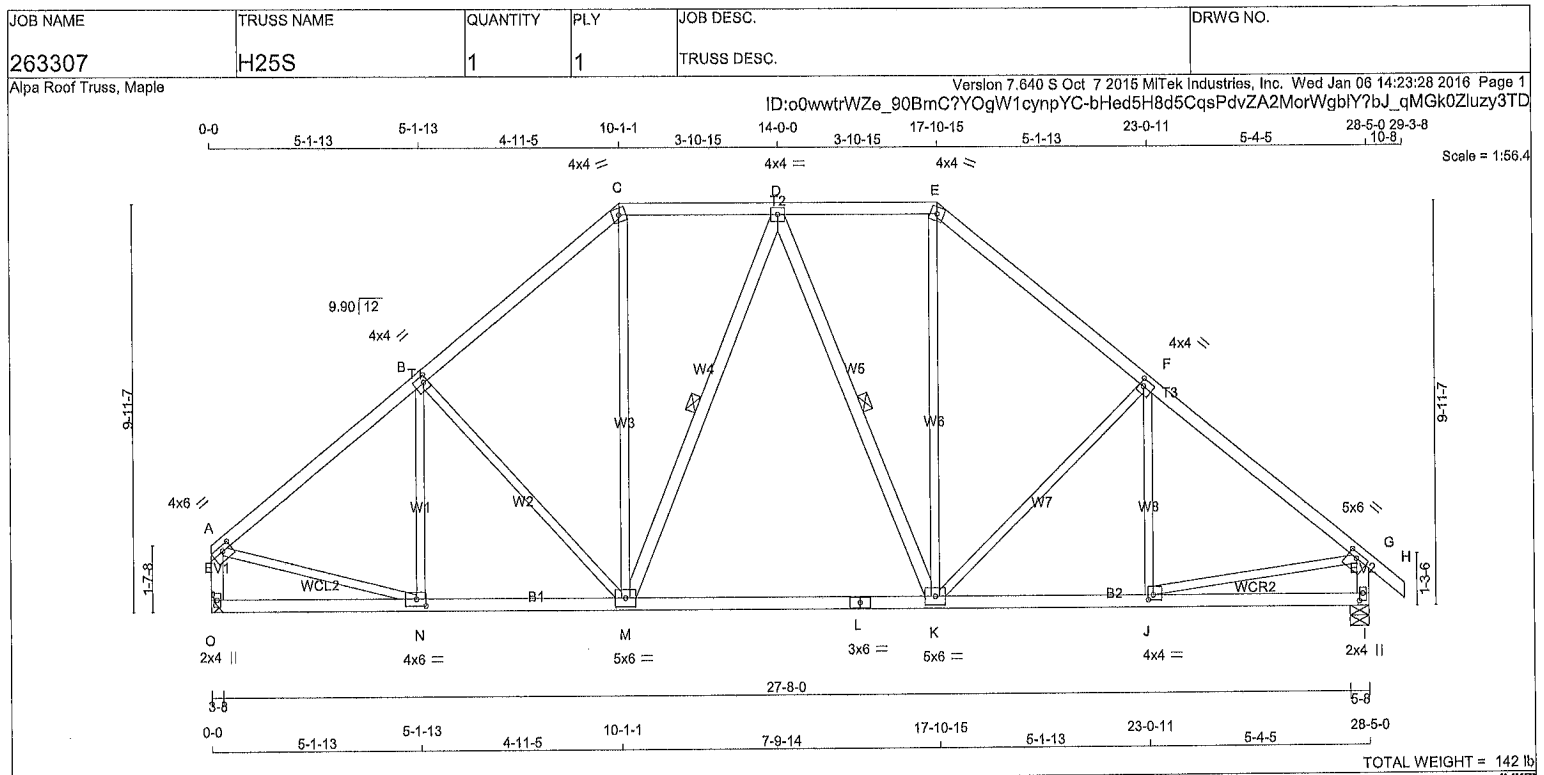
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.50 (F) (INPUT = 1.00)



A-1601155



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
O - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
M - D	2x4	DRY	No.2	SPF
D - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	4.0	6.0 1.50 2.75
B	TMWW-t	MT20	4.0	4.0 2.00 1.25
C	TTW-m	MT20	4.0	4.0
D	TMWW-t	MT20	4.0	4.0
E	TTW-m	MT20	4.0	4.0
F	TMWW-t	MT20	4.0	4.0 2.00 1.25
G	TMVW-t	MT20	5.0	6.0 1.50 2.75
I	BMV1+p	MT20	2.0	4.0 2.25 1.00
J	BMWW-t	MT20	4.0	4.0 1.50 1.50
K	BMWWW-t	MT20	5.0	6.0
L	BS-t	MT20	3.0	6.0
M	BMWWW-t	MT20	5.0	6.0
N	BMWW-t	MT20	4.0	6.0 2.00 2.75
O	BMV1+p	MT20	2.0	4.0

NOTES- (1)
1) 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		
O	1772	0	1772	0	0	0
I	1862	0	1862	0	5-8	2-9

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
O	1431	825 / 0	298 / 0	0 / 0	0 / 0	308 / 0	0 / 0
I	1493	881 / 0	298 / 0	0 / 0	0 / 0	313 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 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-M, D-K.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	-1798 / 0	-94.6 -94.6 0.37 (1)	4.63	N-B -214 / 86 0.11 (1)
B-C	-1816 / 0	-94.6 -94.6 0.35 (1)	4.85	B-M -295 / 0 0.33 (1)
C-D	-1222 / 0	-102.1 -102.1 0.20 (1)	5.58	M-C 0 / 671 0.15 (1)
D-E	-1243 / 0	-102.1 -102.1 0.20 (1)	5.54	M-D -284 / 0 0.16 (1)
E-F	-1644 / 0	-94.6 -94.6 0.38 (1)	4.77	D-K -227 / 0 0.13 (1)
F-G	-1918 / 0	-94.6 -94.6 0.41 (1)	4.46	K-E 0 / 880 0.15 (1)
G-H	0 / 29	-94.6 -94.6 0.06 (1)	10.00	K-F -389 / 0 0.44 (1)
O-A	-1709 / 0	0.0 0.0 0.18 (1)	6.36	J-F -119 / 142 0.06 (1)
I-G	-1798 / 0	0.0 0.0 0.18 (1)	6.23	A-N 0 / 1458 0.33 (1)
				J-G 0 / 1531 0.34 (1)
O-N	0 / 0	-28.0 -28.0 0.16 (2)	10.00	
N-M	0 / 1414	-28.0 -28.0 0.42 (2)	10.00	
M-L	0 / 1327	-28.0 -28.0 0.41 (2)	10.00	
L-K	0 / 1327	-28.0 -28.0 0.41 (2)	10.00	
K-J	0 / 1508	-28.0 -28.0 0.44 (2)	10.00	
J-I	0 / 0	-28.0 -28.0 0.17 (2)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.0 PSF
	DL = 3.0 PSF
BOT CH.	LL = 10.5 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 49.5 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, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 080-09
- TPIC 2011

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.95")
CALCULATED VERT. DEFL.(LL)= L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.95")
CALCULATED VERT. DEFL.(TL)= L/999 (0.20")

CSI: TC=0.41 (F-G:1), BC=0.44 (J-K:2), WB=0.44 (F-K:1), SSI=0.19 (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

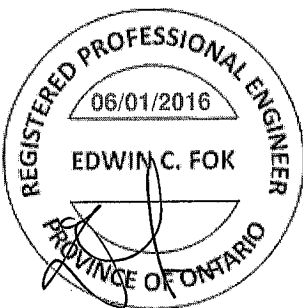
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 822 2284 1656

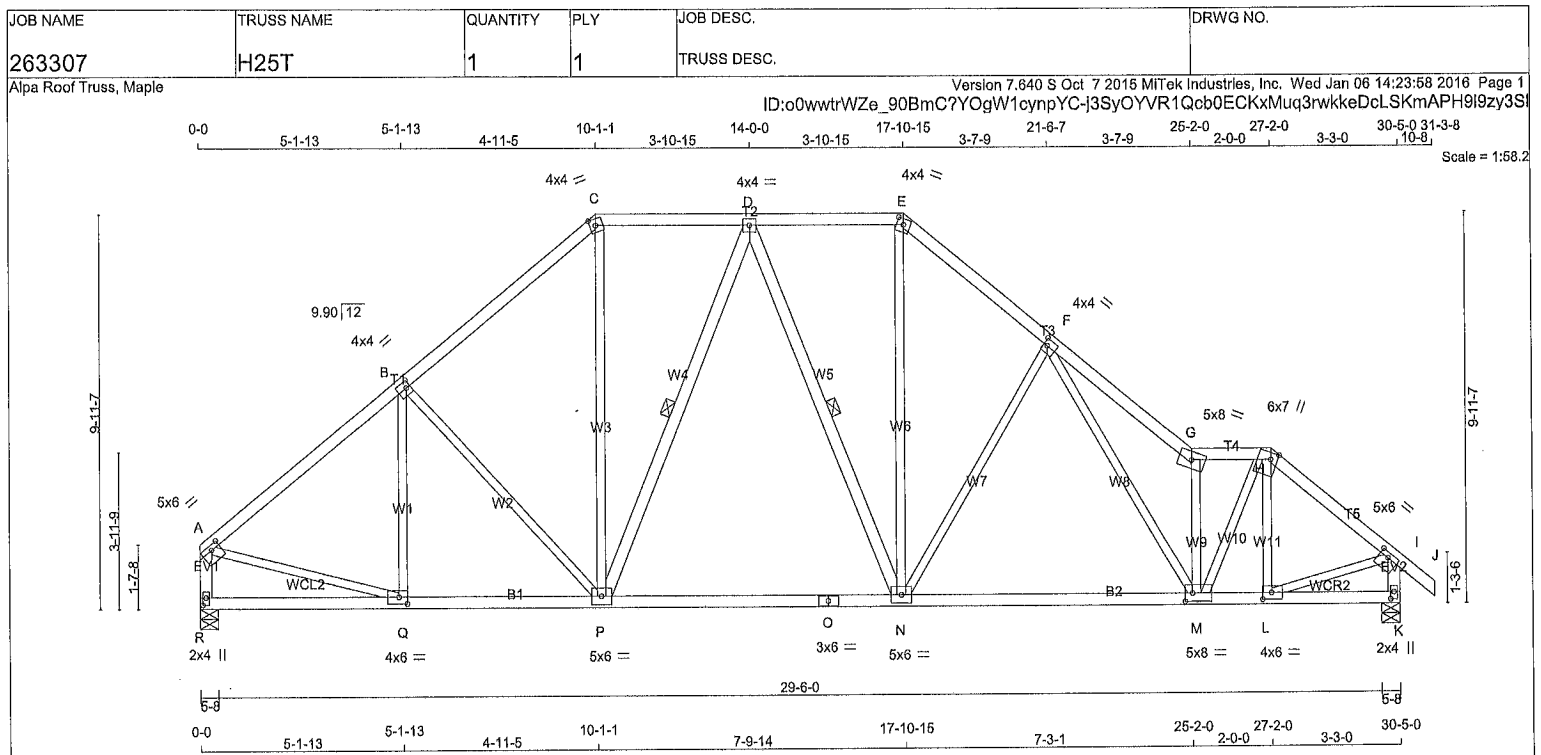
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (O) (INPUT = 0.90)
JSI METAL= 0.56 (J) (INPUT = 1.00)



A-1601156



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 - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
R - A	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
P - D	2x4	DRY	No.2	SPF
D - N	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	6.0	1.50	2.75
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTW-m	MT20	4.0	4.0	2.00	1.75
D	TMVW-t	MT20	4.0	4.0		
E	TTW-m	MT20	4.0	4.0	1.75	2.00
F	TMVW-t	MT20	4.0	4.0	2.00	1.25
G	TTW-m	MT20	5.0	8.0		
H	TTWV+m	MT20	6.0	7.0	2.00	2.00
I	TMVW-t	MT20	5.0	6.0	1.50	2.75
K	BMV1+p	MT20	2.0	4.0	2.25	1.00
L	BMVW-t	MT20	4.0	6.0	2.00	2.75
M	BMVW-t	MT20	5.0	8.0	2.50	2.25
N	BMVW-t	MT20	5.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	5.0	6.0		
Q	BMVW-t	MT20	4.0	6.0	2.00	2.50
R	BMV1+p	MT20	2.0	4.0	2.25	1.00

NOTES-

- (1) 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
R	1864	1864	5-8	2-9
K	1956	1956	5-8	2-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX MIN SNOW	PERM. LIVE	WIND	DEAD	SOIL
R	1507	883 / 0	319 / 0	0 / 0	304 / 0	0 / 0
K	1569	939 / 0	319 / 0	0 / 0	310 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.90 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-P, D-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO					FR-TO			
A-B	-1910 / 0	-94.6	-94.6	0.38 (1)	Q-B	-232 / 86	0.12 (1)	
B-C	-1740 / 0	-94.6	-94.6	0.36 (1)	B-P	-282 / 0	0.31 (1)	
C-D	-1319 / 0	-94.6	-94.6	0.19 (1)	P-C	0 / 760	0.17 (1)	
D-E	-1443 / 0	-94.6	-94.6	0.19 (1)	P-D	-403 / 0	0.23 (1)	
E-F	-1891 / 0	-94.6	-94.6	0.21 (1)	D-N	-65 / 74	0.04 (1)	
F-G	-2883 / 0	-94.6	-94.6	0.27 (1)	N-E	0 / 910	0.20 (1)	
G-H	-2192 / 0	-94.6	-94.6	0.10 (1)	N-F	-704 / 0	0.82 (1)	
H-I	-1950 / 0	-94.6	-94.6	0.17 (1)	F-M	0 / 962	0.22 (1)	
I-J	0 / 29	-94.6	-94.6	0.06 (1)	M-G	-2068 / 0	0.50 (1)	
R-A	-1803 / 0	0.0	0.0	0.19 (1)	M-H	0 / 1525	0.34 (1)	
K-I	-1916 / 0	0.0	0.0	0.20 (1)	L-H	-355 / 0	0.09 (1)	
					A-Q	0 / 1547	0.35 (1)	
					L-I	0 / 1558	0.35 (1)	
R-Q	0 / 0	-28.0	-28.0	0.15 (2)				
Q-P	0 / 1601	-28.0	-28.0	0.40 (2)				
P-O	0 / 1467	-28.0	-28.0	0.53 (2)				
O-N	0 / 1467	-28.0	-28.0	0.53 (2)				
N-M	0 / 1779	-28.0	-28.0	0.56 (2)				
M-L	0 / 1489	-28.0	-28.0	0.35 (2)				
L-K	0 / 0	-28.0	-28.0	0.08 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.0 PSF
DL = 3.0 PSF	
BOT CH.	LL = 10.5 PSF
DL = 7.0 PSF	
TOTAL LOAD = 49.5 PSF	

SPACING = 24.0 IN. C/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, NBC 2010

THIS DESIGN COMPLIES WITH:

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.25")

CSI: TC=0.38 (A-B:1), BC=0.56 (M-N:2),
WB=0.82 (F-N:1), SI=0.18 (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)	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	364	1687
	822	2284	1656

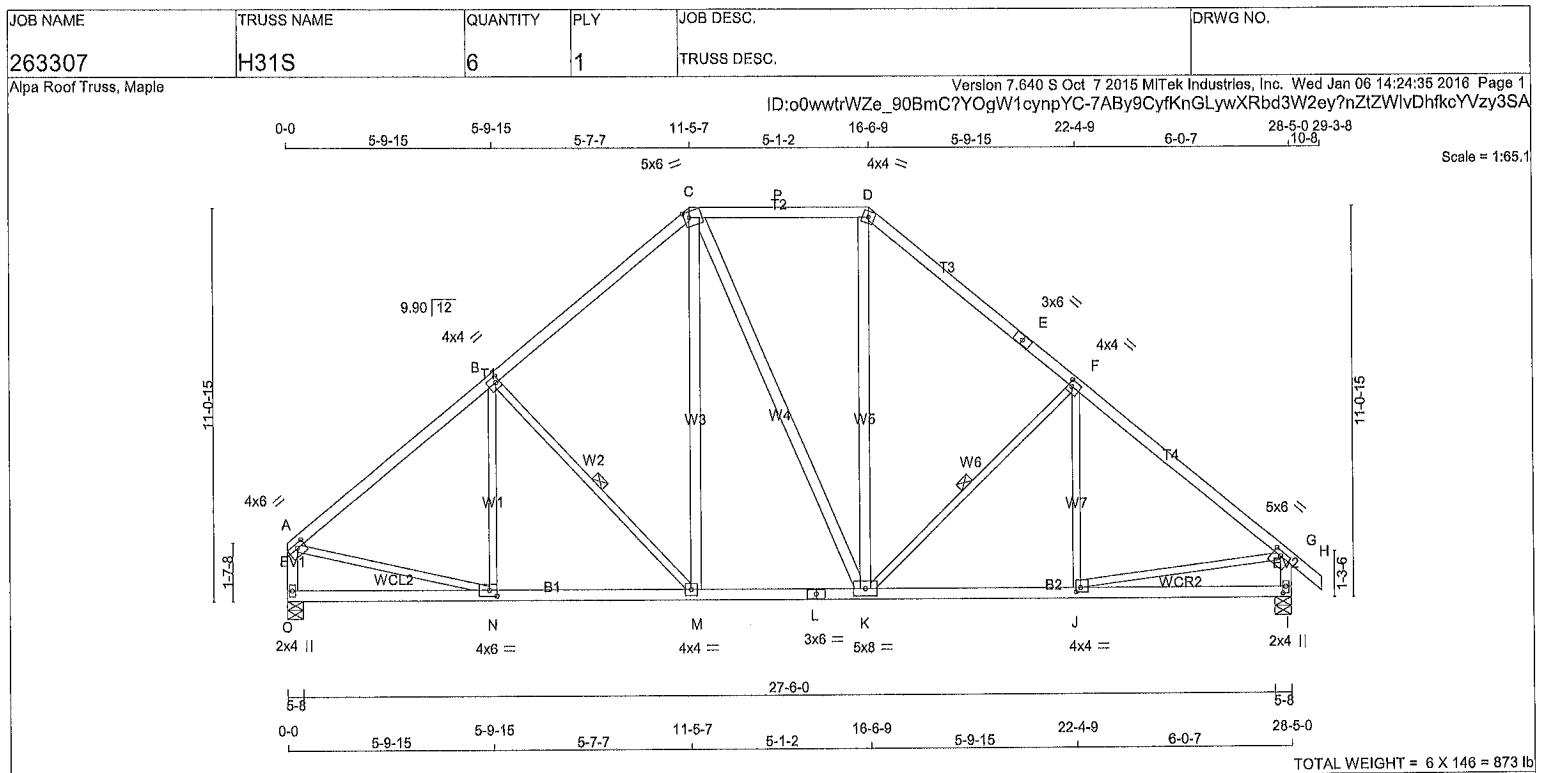
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.63 (G) (INPUT = 1.00)



A-1601157



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	2.75
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW-m	MT20	5.0	6.0	2.00	1.75
D	TTWW-m	MT20	4.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0	2.00	1.25
G	TMVW-t	MT20	5.0	6.0	1.50	2.75
I	BMV1+p	MT20	2.0	4.0	2.25	1.00
J	BMVW-t	MT20	4.0	4.0	1.50	1.50
K	BMVW-t	MT20	5.0	8.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	4.0	4.0		
N	BMVW-t	MT20	4.0	6.0	2.00	2.50
O	BMV1+p	MT20	2.0	4.0		

NOTES- (1)
1) 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	UPLIFT
O	1761	0	1761	0
I	1852	0	1852	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
O	1423	825 / 0	298 / 0	0 / 0	0 / 0	300 / 0	0 / 0
I	1485	881 / 0	298 / 0	0 / 0	0 / 0	305 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32 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-M, F-K.

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	-1797 / 0	-94.6 -94.6	0.49 (1)	4.48	N-B	-130 / 180	0.09 (1)
B-C	-1507 / 0	-94.6 -94.6	0.45 (1)	4.85	B-M	-423 / 0	0.20 (1)
C-P	-1146 / 0	-102.1 -102.1	0.47 (1)	5.30	M-C	0 / 451	0.07 (2)
P-D	-1146 / 0	-102.1 -102.1	0.47 (1)	5.30	C-K	0 / 31	0.00 (1)
D-E	-1524 / 0	-94.6 -94.6	0.49 (1)	4.76	K-D	0 / 478	0.08 (1)
E-F	-1524 / 0	-94.6 -94.6	0.49 (1)	4.76	K-F	-509 / 0	0.24 (1)
F-G	-1902 / 0	-94.6 -94.6	0.55 (1)	4.32	J-F	-47 / 228	0.05 (3)
G-H	0 / 29	-94.6 -94.6	0.06 (1)	10.00	A-N	0 / 1452	0.33 (1)
O-A	-1695 / 0	0.0 0.0	0.18 (1)	6.38	J-G	0 / 1518	0.34 (1)
I-G	-1783 / 0	0.0 0.0	0.18 (1)	6.26			
O-N	0 / 0	-28.0 -28.0	0.24 (3)	10.00			
N-M	0 / 1418	-28.0 -28.0	0.39 (2)	10.00			
M-L	0 / 1133	-28.0 -28.0	0.28 (2)	10.00			
L-K	0 / 1133	-28.0 -28.0	0.28 (2)	10.00			
K-J	0 / 1601	-28.0 -28.0	0.42 (2)	10.00			
J-I	0 / 0	-28.0 -28.0	0.25 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.0	PSF
DL = 3.0	PSF	
BOT CH.	LL = 10.5	PSF
DL = 7.0	PSF	
TOTAL LOAD = 49.5	PSF	

SPACING = 24.0 IN./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

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

(65 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.95")
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.95")
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")

CSI: TC=0.55 (F-G:1), BC=0.42 (J-K:2), WB=0.34 (G-J:1), SSI=0.21 (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

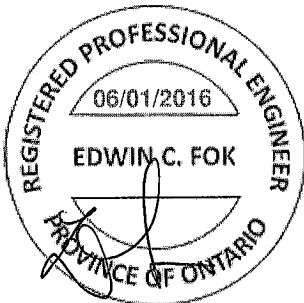
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

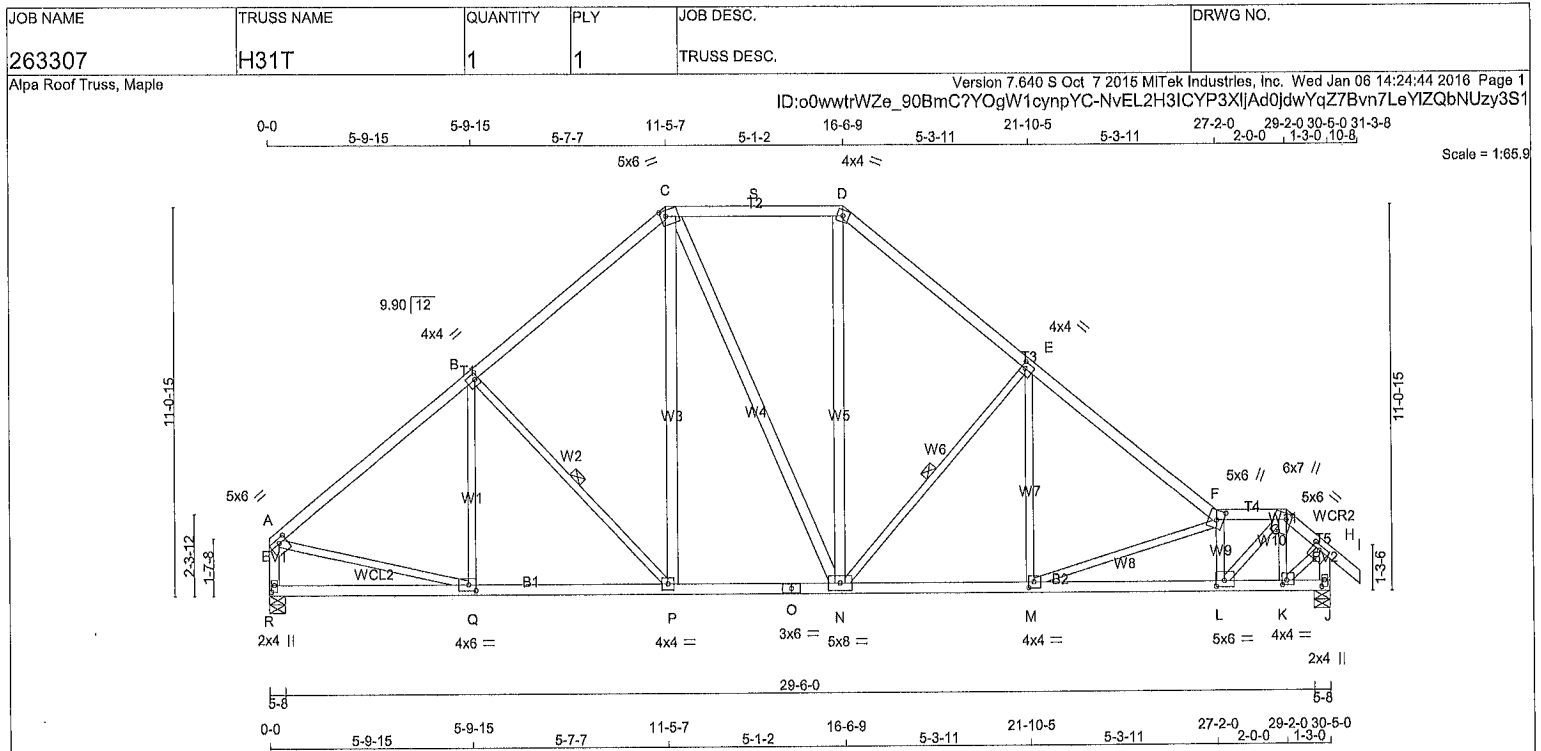
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (O) (INPUT = 0.90)
JSI METAL= 0.56 (J) (INPUT = 1.00)



A-1601158



TOTAL WEIGHT = 156 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	6.0	1.50	2.75
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTW-m	MT20	5.0	6.0	2.00	1.75
D	TTW-m	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	4.0	2.00	1.25
F	TTW-m	MT20	5.0	6.0	3.25	2.25
G	TTW-m	MT20	6.0	7.0	2.00	1.75
H	TMVW-t	MT20	5.0	6.0	1.50	2.75
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BMVW-t	MT20	4.0	4.0	1.50	1.50
L	BMVW-t	MT20	5.0	6.0	2.00	2.75
M	BMVW-t	MT20	4.0	4.0	2.00	1.75
N	BMVW-t	MT20	5.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0		
Q	BMVW-t	MT20	4.0	6.0	2.00	2.50
R	BMV1+p	MT20	2.0	4.0	2.25	1.00

NOTES- (1)
1) 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	UP	IN-SX
R	1884	0	1884	0	5-8
J	1975	0	1975	0	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1522	882 / 0	319 / 0	0 / 0	0 / 0	321 / 0	0 / 0
J	1584	940 / 0	319 / 0	0 / 0	0 / 0	324 / 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 = 4.03 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-P, E-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		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	-1948 / 0	-94.6	-94.6 0.51 (1)	Q-B	-157 / 168	0.11 (1)	
B-C	-1676 / 0	-94.6	-94.6 0.46 (1)	B-P	-403 / 0	0.19 (1)	
C-S	-1332 / 0	-102.1	-102.1 0.48 (1)	P-C	0 / 442	0.07 (2)	
S-D	-1332 / 0	-102.1	-102.1 0.48 (1)	C-N	0 / 164	0.03 (1)	
D-E	-1758 / 0	-94.6	-94.6 0.41 (1)	N-D	0 / 647	0.10 (1)	
E-F	-2399 / 0	-94.6	-94.6 0.46 (1)	N-E	-861 / 0	0.41 (1)	
F-G	-2625 / 0	-94.6	-94.6 0.12 (1)	M-E	0 / 515	0.12 (2)	
G-H	-1541 / 0	-94.6	-94.6 0.07 (1)	M-F	-876 / 0	0.50 (1)	
H-I	0 / 29	-94.6	-94.6 0.06 (1)	L-F	-1625 / 0	0.23 (1)	
R-A	-1817 / 0	0.0	0.0 0.19 (1)	L-G	0 / 2183	0.49 (1)	
J-H	-1978 / 0	0.0	0.0 0.20 (1)	K-G	-726 / 0	0.11 (1)	
				A-Q	0 / 1572	0.35 (1)	
				K-H	0 / 1418	0.32 (1)	
R-Q	0 / 0	-28.0	-28.0 0.24 (3)				
Q-P	0 / 1534	-28.0	-28.0 0.40 (2)				
P-O	0 / 1264	-28.0	-28.0 0.29 (2)				
O-N	0 / 1264	-28.0	-28.0 0.29 (2)				
N-M	0 / 1884	-28.0	-28.0 0.40 (1)				
M-L	0 / 2704	-28.0	-28.0 0.54 (1)				
L-K	0 / 1124	-28.0	-28.0 0.22 (1)				
K-J	0 / 0	-28.0	-28.0 0.04 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.0 PSF
DL = 3.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.5 PSF

SPACING = 24.0 IN./C/C

LOADING IN HIGHEST 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.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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 088-09
- TPIC 2011

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

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.01")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.51 (A-B:1), BC=0.54 (L-M:1), WB=0.50 (F-M:1), SSI=0.20 (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.

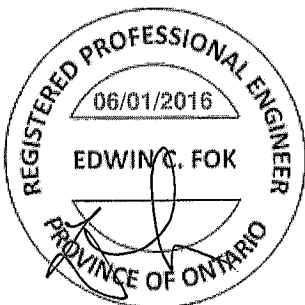
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)
JSI METAL= 0.53 (A) (INPUT = 1.00)

A.1601159

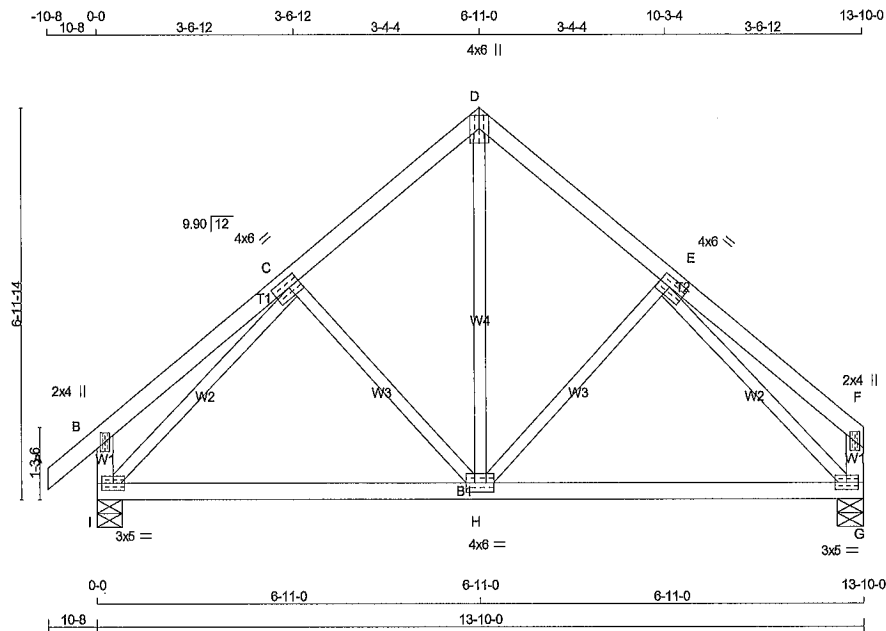


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
248710	H36	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.600 S Oct 3 2014 MiTek Industries, Inc. Mon Dec 08 10:46:49 2014 Page 1

ID:o0wwtrWZe_90BmC?YOgW1cynpYC-vL0LWQI04BZ_U8m_G5RR1e59skhMTGm9wC0hFgyB3UK



Scale = 1:41.4

TOTAL WEIGHT = 5 X 61 = 304 lb

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

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	2.00	2.50
D	TTW+p	MT20	4.0	6.0	Edge	
E	TMWW-t	MT20	4.0	6.0	2.00	2.50
F	TMV+p	MT20	2.0	4.0		
G	BMWW1-t	MT20	3.0	5.0		
H	BMWW1-t	MT20	4.0	6.0		
I	BMWW1-t	MT20	3.0	5.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	UPLIFT	IN-SX
I	939	0	0	5-8
G	848	0	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
I	747	458 / 0	145 / 0	0 / 0	144 / 0	0 / 0
G	685	402 / 0	145 / 0	0 / 0	138 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 29	-94.6 -94.6	0.06 (1)	H-D	0 / 510	0.11 (1)	
B-C	0 / 24	-94.6 -94.6	0.18 (1)	H-E	-184 / 26	0.08 (1)	
C-D	-625 / 0	-94.6 -94.6	0.14 (1)	C-H	-184 / 26	0.08 (1)	
D-E	-625 / 0	-94.6 -94.6	0.14 (1)	I-C	-876 / 0	0.37 (1)	
E-F	0 / 24	-94.6 -94.6	0.18 (1)	E-G	-876 / 0	0.37 (1)	
I-B	-217 / 0	0.0 0.0	0.02 (1)				
G-F	-125 / 0	0.0 0.0	0.01 (1)				
I-H	0 / 589	-28.0 -28.0	0.45 (2)	10.00			
H-G	0 / 589	-28.0 -28.0	0.45 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.0 PSF
DL = 3.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.5 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, CBC 2012
- CSA 086-09
- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.18 (B-C:1), BC=0.45 (H-I:2), WB=0.37 (C-I:1), SSI=0.16 (H-I:3)

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

COMPANION LIVE LOAD FACTOR = 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= 0.21 (E) (INPUT = 1.00)



A.14121875

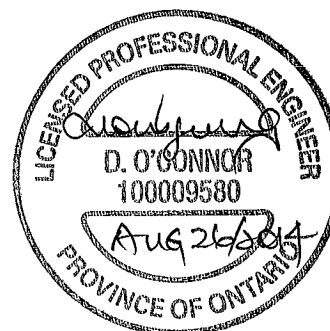
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244676	H20	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 7.500 S Oct 23 2013 MITek Industries, Inc. Tue Aug 26 11:38:22 2014 Page 2					
ID:o0wwtrWZe_90BmC?YOgW1cynpYC-XznGYlgvpggCM0nGrHwhE_PQJJrOVu6VVvsR4aHyk?a7					

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.

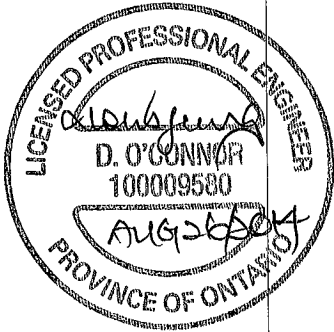
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 JSI METAL= 0.85 (N) (INPUT = 1.00)



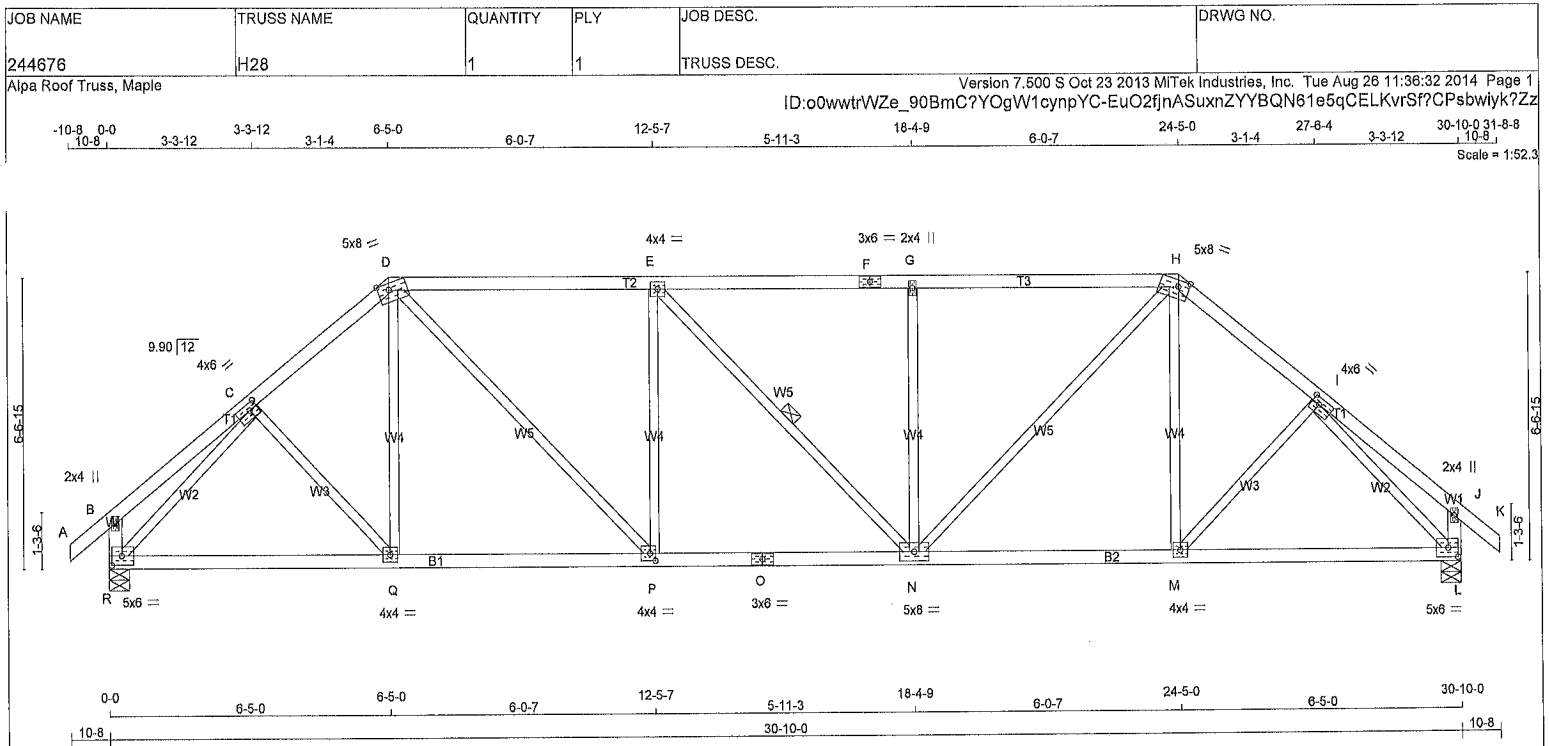
A.H083618(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
244676	H26	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 7.500 S Oct 23 2013 MITek Industries, Inc. Tue Aug 26 11:38:29 2014 Page 2					
ID:o0wwtrWZe_90BmC?YOgW1cynpYC-qJv0hlAzZCi5pdFYK0TCeN8DCe7VYVRexKNyk?a0					

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 (O) (INPUT = 0.90)
 JSI METAL= 0.99 (Q) (INPUT = 1.00)



A.14003625(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
H - K	2x4	DRY	No.2
R - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - L	2x4	DRY	No.2
WEBS	2x3	DRY	No.2
EPT			

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	1.75	2.25
D	TTWW-m	MT20	5.0	8.0	1.75	3.00
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW-m	MT20	5.0	8.0	1.75	3.00
I	TMWW-t	MT20	4.0	6.0	1.75	2.25
J	TMV+p	MT20	2.0	4.0		
L	BMVW1-t	MT20	5.0	6.0	2.50	2.75
M	BMWW-t	MT20	4.0	4.0		
N	BMWW-t	MT20	5.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMWW-t	MT20	4.0	4.0	2.00	1.50
Q	BMWW-t	MT20	4.0	4.0		
R	BMVW1-t	MT20	5.0	6.0	2.50	2.75

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
R	1981	0	1981	0
L	1981	0	1981	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW
R	1589	951 / 0
L	1589	951 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.0FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED 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

LOADING

TOTAL LOAD CASES: (3)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	0 / 29	-94.6	0.06 (1)	10.00
B-C	0 / 19	-94.6	0.13 (1)	10.00
C-D	-2034 / 0	-94.6	0.15 (1)	4.63
D-E	-2298 / 0	-94.6	0.48 (1)	4.04
E-F	-2294 / 0	-94.6	0.44 (1)	4.10
F-G	-2294 / 0	-94.6	0.44 (1)	4.10
G-H	-2294 / 0	-94.6	0.48 (1)	4.04
H-I	-2035 / 0	-94.6	0.15 (1)	4.63
I-J	0 / 19	-94.6	0.13 (1)	10.00
J-K	0 / 29	-94.6	0.06 (1)	10.00
R-B	-213 / 0	0.0	0.02 (1)	7.81
L-J	-213 / 0	0.0	0.02 (1)	7.81
R-Q	0 / 1509	-28.0	0.44 (2)	10.00
Q-P	0 / 1553	-28.0	0.45 (2)	10.00
P-O	0 / 2298	-28.0	0.46 (1)	10.00
O-N	0 / 2298	-28.0	0.46 (1)	10.00
N-M	0 / 1553	-28.0	0.45 (2)	10.00
M-L	0 / 1509	-28.0	0.44 (2)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.0 PSF
DL = 3.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 49.5 PSF

SPACING = 24.0 IN./C/C

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

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

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 29.0 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 (0.21")

CSI: TC=0.48 (D-E:1), BC=0.48 (N-P:1), WB=0.83 (I-L:1), SSI=0.27 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

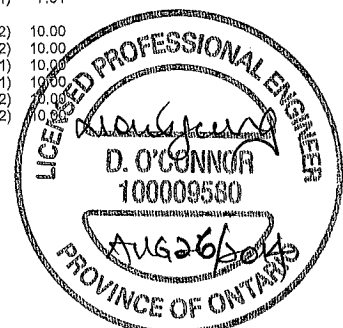
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

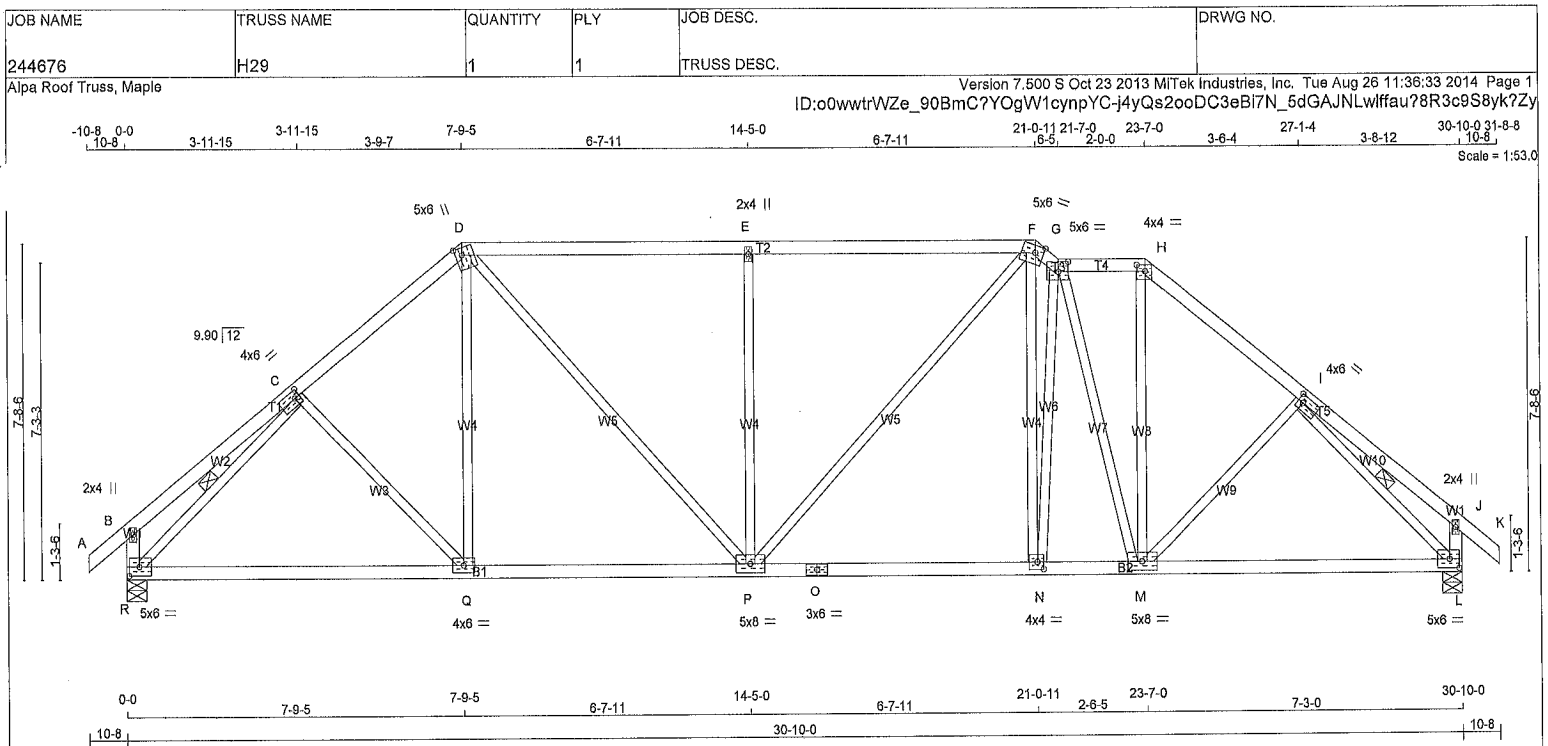
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.89 (O) (INPUT = 1.00)



A.14083627



TOTAL WEIGHT = 147 lb										[M][F]	
LUMBER											
N. L. G. A. RULES											
CHORDS SIZE LUMBER DESCR.											
A - D 2x4 DRY No.2 SPF											
D - F 2x4 DRY No.2 SPF											
F - G 2x4 DRY No.2 SPF											
G - H 2x4 DRY No.2 SPF											
H - K 2x4 DRY No.2 SPF											
R - B 2x4 DRY No.2 SPF											
L - J 2x4 DRY No.2 SPF											
R - O 2x4 DRY No.2 SPF											
O - L 2x4 DRY No.2 SPF											
WEBS 2x3 DRY No.2 SPF											
ACCEPT											
DRY: SEASONED LUMBER.											
PLATES (table is in inches)											
JT TYPE PLATES W LEN Y X											
B TMV+p MT20 2.0 4.0											
C TMVW-t MT20 4.0 6.0 2.00 1.50											
D TTWW+m MT20 5.0 6.0 2.00 1.75											
E TMV+w MT20 2.0 4.0											
F TTWW-m MT20 5.0 6.0 2.00 2.25											
G TTWW-l MT20 5.0 6.0 2.75 2.75											
H TTW-l MT20 4.0 4.0 1.75 2.25											
I TMVW-t MT20 4.0 6.0 2.00 1.50											
J TMV+p MT20 2.0 4.0											
L BMVW-l-t MT20 5.0 6.0 2.50 2.75											
M BMVWW-t MT20 5.0 8.0											
N BMVW-t MT20 4.0 4.0 2.00 1.75											
O BS-t MT20 3.0 8.0											
P BMVWW-t MT20 5.0 8.0											
Q BMVW-t MT20 4.0 6.0											
R BMVW-l-t MT20 5.0 6.0 2.50 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											
R 1981 0 1981 0 0 5-8 2-2											
L 1981 0 1981 0 0 5-8 2-2											
UNFACTORED REACTIONS											
1ST LCASE MAX/MIN COMPONENT REACTIONS											
JT COMBINED SNOW LIVE WIND DEAD											
R 1589 951 / 0 324 / 0 0 / 0 314 / 0											
L 1589 951 / 0 324 / 0 0 / 0 314 / 0											
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, L											
BRACING											
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.02FT.											
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.											
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-R, I-L.											
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW											
LOADING											
TOTAL LOAD CASES: (3)											
CHORDS											
MAX. FACTORED FACTORED											
MEMB. FORCE VERT. LOAD LC1 MAX MAX											
(LBS) (PLF) CSI (LC) UNBRAC											
FR-TO FROM TO LENGTH FR-TO											
A-B 0 / 29 -94.6 -94.6 0.06 (1) 10.00 C-Q -58 / 61 0.03 (1)											
B-C 0 / 25 -94.6 -94.6 0.21 (1) 10.00 Q-D 0 / 363 0.08 (2)											
C-D -1984 / 0 -94.6 -94.6 0.22 (1) 4.61 D-P 0 / 790 0.18 (1)											
D-E -2038 / 0 -94.6 -94.6 0.61 (1) 4.02 P-E -767 / 0 0.84 (1)											
E-F -2038 / 0 -94.6 -94.6 0.61 (1) 4.02 P-F 0 / 483 0.11 (1)											
F-G -2237 / 0 -94.6 -94.6 0.05 (1) 4.55 N-F 0 / 795 0.18 (1)											
G-H -1539 / 0 -94.6 -94.6 0.07 (1) 5.26 N-G -701 / 0 0.87 (1)											
H-I -2003 / 0 -94.6 -94.6 0.19 (1) 4.63 G-M -874 / 0 0.89 (1)											
I-J 0 / 22 -94.6 -94.6 0.17 (1) 10.00 M-H 0 / 1033 0.23 (1)											
J-K 0 / 29 -94.6 -94.6 0.06 (1) 10.00 M-I -13 / 85 0.02 (2)											
R-B -234 / 0 0.0 0.0 0.02 (1) 7.81 R-C -2267 / 0 0.53 (1)											
L-J -227 / 0 0.0 0.0 0.02 (1) 7.81 I-L -2267 / 0 0.49 (1)											
R-Q 0 / 1548 -28.0 -28.0 0.55 (2) 10.00											
Q-P 0 / 1511 -28.0 -28.0 0.56 (2) 10.00											
P-O 0 / 1715 -28.0 -28.0 0.42 (2) 10.00											
O-N 0 / 1715 -28.0 -28.0 0.42 (2) 10.00											
N-M 0 / 1769 -28.0 -28.0 0.52 (2) 10.00											
M-L 0 / 1533 -28.0 -28.0 0.48 (2) 10.00											
DESIGN CRITERIA											
SPECIFIED LOADS:											
TOP CH. LL = 29.0 PSF											
DL = 3.0 PSF											
BOT CH. LL = 10.5 PSF											
DL = 7.0 PSF											
TOTAL LOAD = 49.5 PSF											
SPACING = 24.0 IN. C/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 2012											
- CSA 086-09											
- TPIC 2011											
(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 29.0 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 (0.28")											
CSI: TC=0.61 (D-E:1), BC=0.56 (P-Q:2), WB=0.89 (G-M:1), SSI=0.30 (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 1856											
PLATE PLACEMENT TOL. = 0.250 inches											
PLATE ROTATION TOL. = 5.0 Deg.											
JSI GRIP= 0.88 (H) (INPUT = 0.90)											
JSI METAL= 0.56 (C) (INPUT = 1.00)											

PROFESSIONAL ENGINEER

D. O'CONNOR

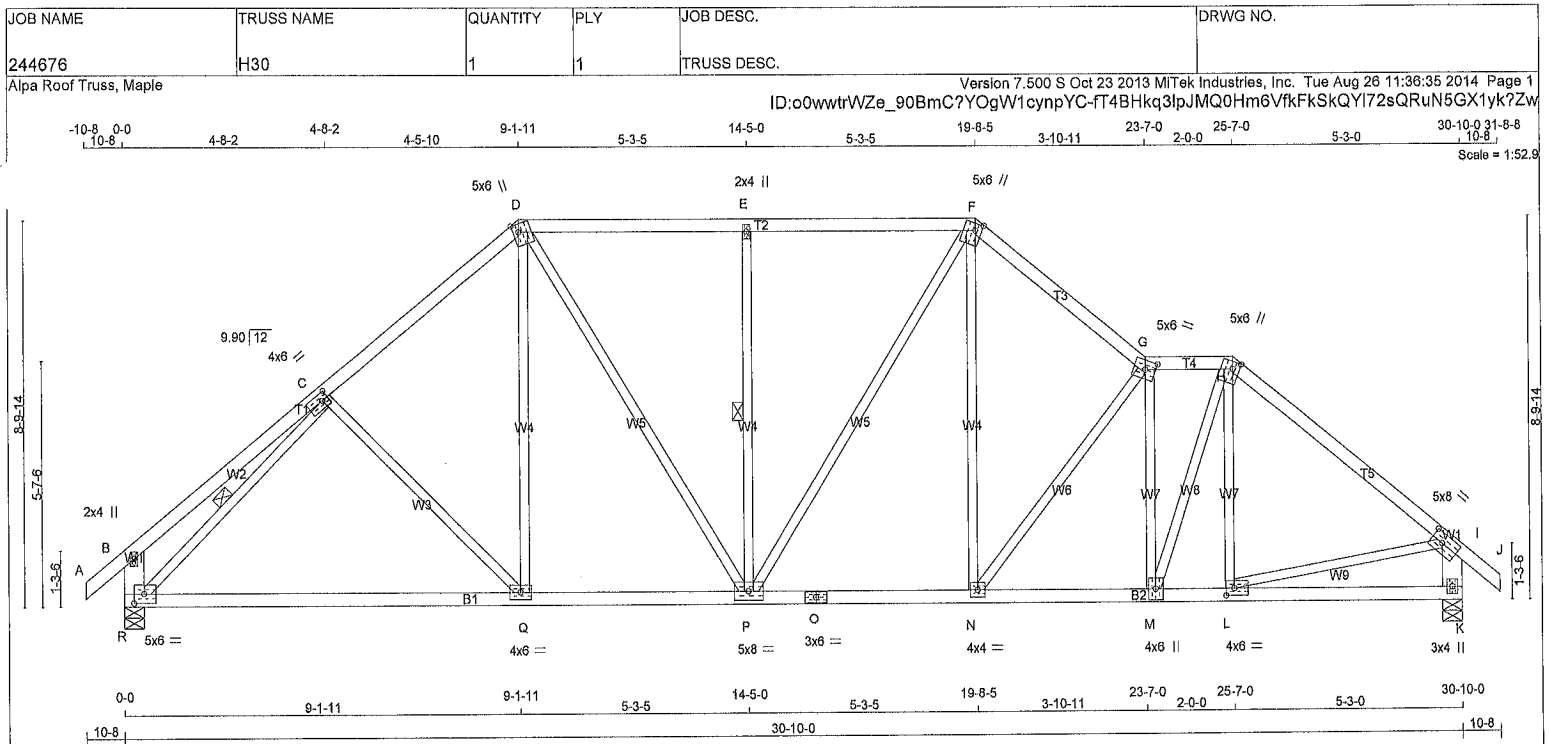
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August 30, 2014

PROVINCE OF ONTARIO

A.14083628

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LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - G	2x4	DRY	No.2
G - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
R - B	2x6	DRY	No.2
K - I	2x6	DRY	No.2
R - O	2x4	DRY	No.2
O - K	2x4	DRY	No.2
WEBS	2x3	DRY	No.2
ACCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW-t	MT20	4.0	6.0	2.00	1.75
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMV+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	1.75
G	TTWW-m	MT20	5.0	6.0	2.50	2.75
H	TTWW+m	MT20	5.0	6.0	2.00	1.75
I	TMVW-t	MT20	5.0	6.0	2.50	3.25
K	BMV1+p	MT20	3.0	4.0		
L	BMVW-t	MT20	4.0	6.0	2.00	2.25
M	BMVW+t	MT20	4.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	5.0	8.0		
Q	BMVW-t	MT20	4.0	6.0		
R	BMVW-t	MT20	5.0	6.0	2.50	2.75

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
	VERT	HORZ	DOWN	UP
JT	1981	0	1981	0
R	1981	0	1981	0
K	1981	0	1981	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD
	COMBINED	SNOW	LIVE	
JT	1589	951 / 0	324 / 0	314 / 0
R	1589	951 / 0	324 / 0	314 / 0
K	1589	951 / 0	324 / 0	314 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.34FT.

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-P, C-R.

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: (3)

	CHORDS	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	CS1 (LC)	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO											
A-B	0 / 29		-94.6	-94.6	0.06 (1)	10.00		C-Q	-164 / 17	0.13 (1)	
B-C	0 / 31		-94.6	-94.6	0.31 (1)	10.00		Q-D	0 / 458	0.10 (2)	
C-D	-1915 / 0		-94.6	-94.6	0.30 (1)	4.60		D-P	0 / 541	0.12 (1)	
D-E	-1739 / 0		-94.6	-94.6	0.37 (1)	4.66		P-E	-604 / 0	0.30 (1)	
E-F	-1739 / 0		-94.6	-94.6	0.37 (1)	4.66		F-P	0 / 285	0.06 (1)	
F-G	-2049 / 0		-94.6	-94.6	0.24 (1)	4.53		N-F	0 / 680	0.15 (1)	
G-H	-1952 / 0		-94.6	-94.6	0.09 (1)	4.77		N-G	-652 / 0	0.52 (1)	
H-I	-2041 / 0		-94.6	-94.6	0.42 (1)	4.34		M-G	-1062 / 0	0.51 (1)	
I-J	0 / 29		-94.6	-94.6	0.06 (1)	10.00		M-H	0 / 1136	0.26 (1)	
R-B	-257 / 0		0.0	0.0	0.02 (1)	7.81		L-H	-109 / 77	0.05 (1)	
K-I	-1921 / 0		0.0	0.0	0.13 (1)	7.25		R-C	-2251 / 0	0.64 (1)	
								L-I	0 / 1596	0.36 (1)	
R-Q	0 / 1565		-28.0	-28.0	0.68 (2)	10.00					
Q-P	0 / 1454		-28.0	-28.0	0.68 (2)	10.00					
P-O	0 / 1589		-28.0	-28.0	0.35 (1)	10.00					
O-N	0 / 1589		-28.0	-28.0	0.35 (1)	10.00					
N-M	0 / 1973		-28.0	-28.0	0.41 (1)	10.00					
M-L	0 / 1569		-28.0	-28.0	0.36 (1)	10.00					
L-K	0 / 0		-28.0	-28.0	0.18 (2)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 29.0 PSF

DL = 3.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.0 PSF

TOTAL LOAD = 49.5 PSF

SPACING = 24.0 IN. C/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 2012

- CSA 086-09

- TPIC 2011

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")

CALCULATED VERT. DEFL.(LL) = L/999 (0.30")

ALLOWABLE DEFL.(TL)= L/360 (1.03")

CALCULATED VERT. DEFL.(TL) = L/751 (0.49")

CSI: TC=0.42 (H-I:1), BC=0.68 (P-Q:2), WB=0.64 (C-R:1), SSI=0.24 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 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

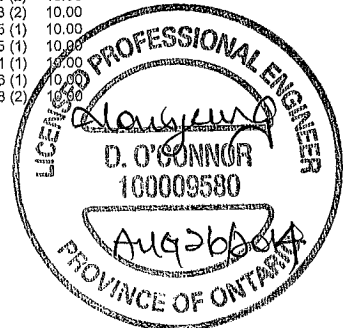
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

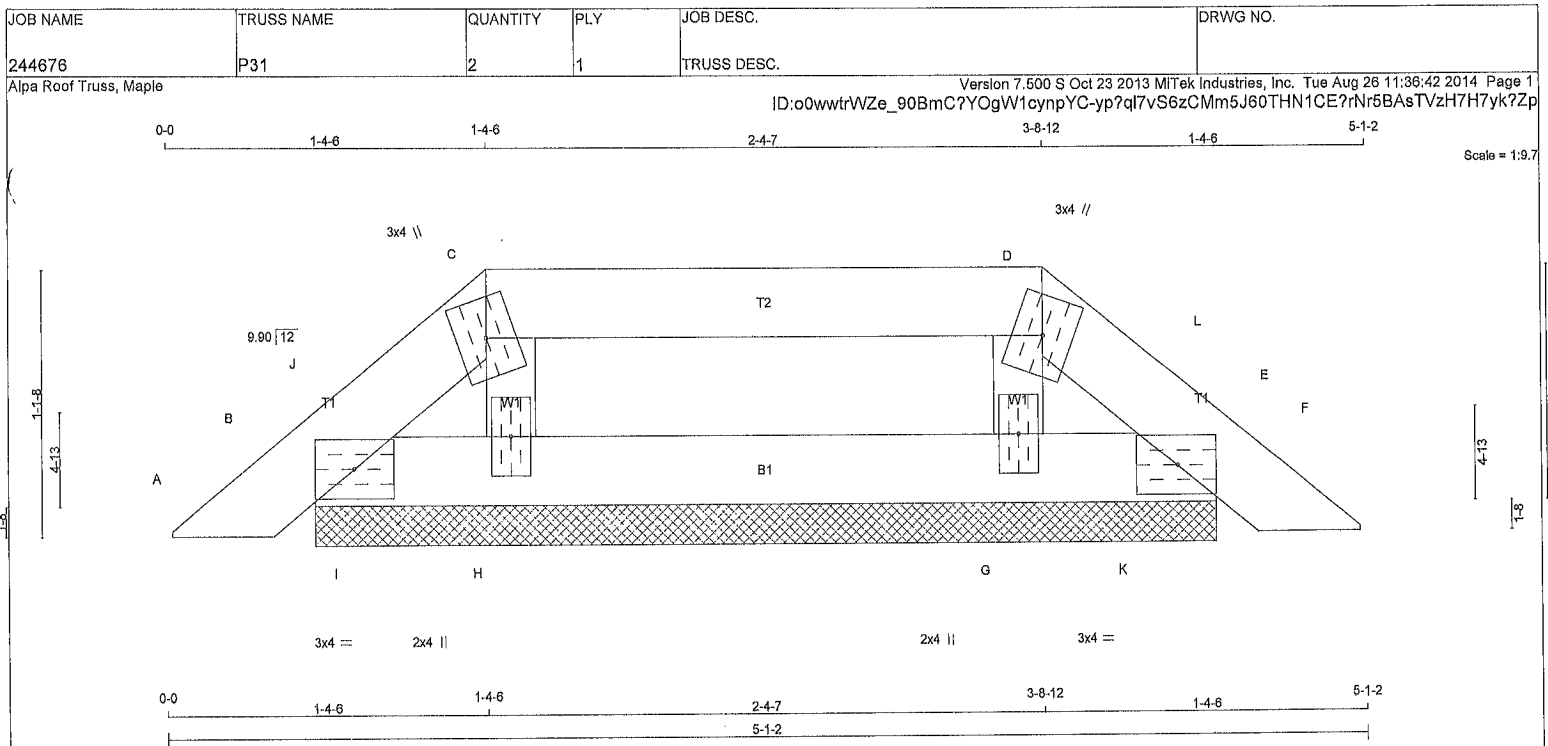
PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.56 (C) (INPUT = 1.00)



A.140803629



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
B - E	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY; SEASONED LUMBER.			

ES (table is in inches)

J	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTW+m	MT20	3.0	4.0		
D	TTW+m	MT20	3.0	4.0		
E	TMB1-I	MT20	3.0	4.0		
G	BMW1+w	MT20	2.0	4.0		
H	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ UPLIFT		
B	123	0	123	0	3-9-14	1-8
E	123	0	123	0	3-9-14	1-8
H	161	0	161	0	3-9-14	1-8
G	161	0	161	0	3-9-14	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS			
		SNOW	LIVE	WIND	DEAD
B	83	75 / 0	0 / 0	0 / 0	8 / 0
E	83	75 / 0	0 / 0	0 / 0	8 / 0
H	140	66 / 0	40 / 0	0 / 0	34 / 0
G	140	66 / 0	40 / 0	0 / 0	34 / 0

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD		MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC2 (LC)	MEMB. LENGTH	MAX. FACTORED VERT. LOAD		
		(PLF)	TO				(LBS)	CSI (LC)	
FR-TO		FROM	TO						
A-B	0 / 14	-94.6	-94.6	0.02 (1)	10.00	H-C	-106 / 0	0.01 (1)	
B-J	-54 / 0	-94.6	-94.6	0.02 (1)	6.25	G-D	-106 / 0	0.01 (1)	
J-C	-35 / 0	-94.6	-94.6	0.01 (1)	6.25	I-J	-14 / 0	0.00 (1)	
C-D	-5 / 0	-94.6	-94.6	0.09 (1)	10.00	K-L	-14 / 0	0.00 (1)	
D-L	-35 / 0	-94.6	-94.6	0.01 (1)	6.25				
L-E	-54 / 0	-94.6	-94.6	0.02 (1)	6.25				
E-F	0 / 14	-94.6	-94.6	0.02 (1)	10.00				
B-I	0 / 21	-28.0	-28.0	0.00 (1)	10.00				
I-H	0 / 21	-28.0	-28.0	0.02 (2)	10.00				
H-G	0 / 5	-28.0	-28.0	0.02 (2)	10.00				
G-K	0 / 21	-28.0	-28.0	0.02 (2)	10.00				
K-E	0 / 21	-28.0	-28.0	0.00 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	DL
LL	= 29.0 PSF	
DL	= 3.0 PSF	
BOT CH.	LL	DL
LL	= 10.5 PSF	
DL	= 7.0 PSF	
TOTAL LOAD = 49.5 PSF		

SPACING = 24.0 IN. C/C

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

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

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

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

(65 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.09 (C-D:1), BC=0.02 (G-K:2), WB=0.01 (C-H:1), SSI=0.09 (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.

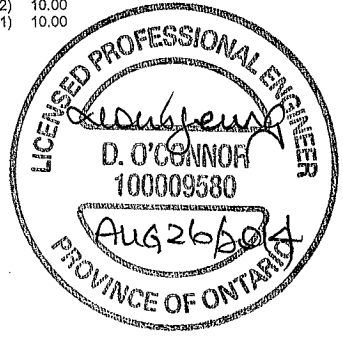
NAIL VALUES

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

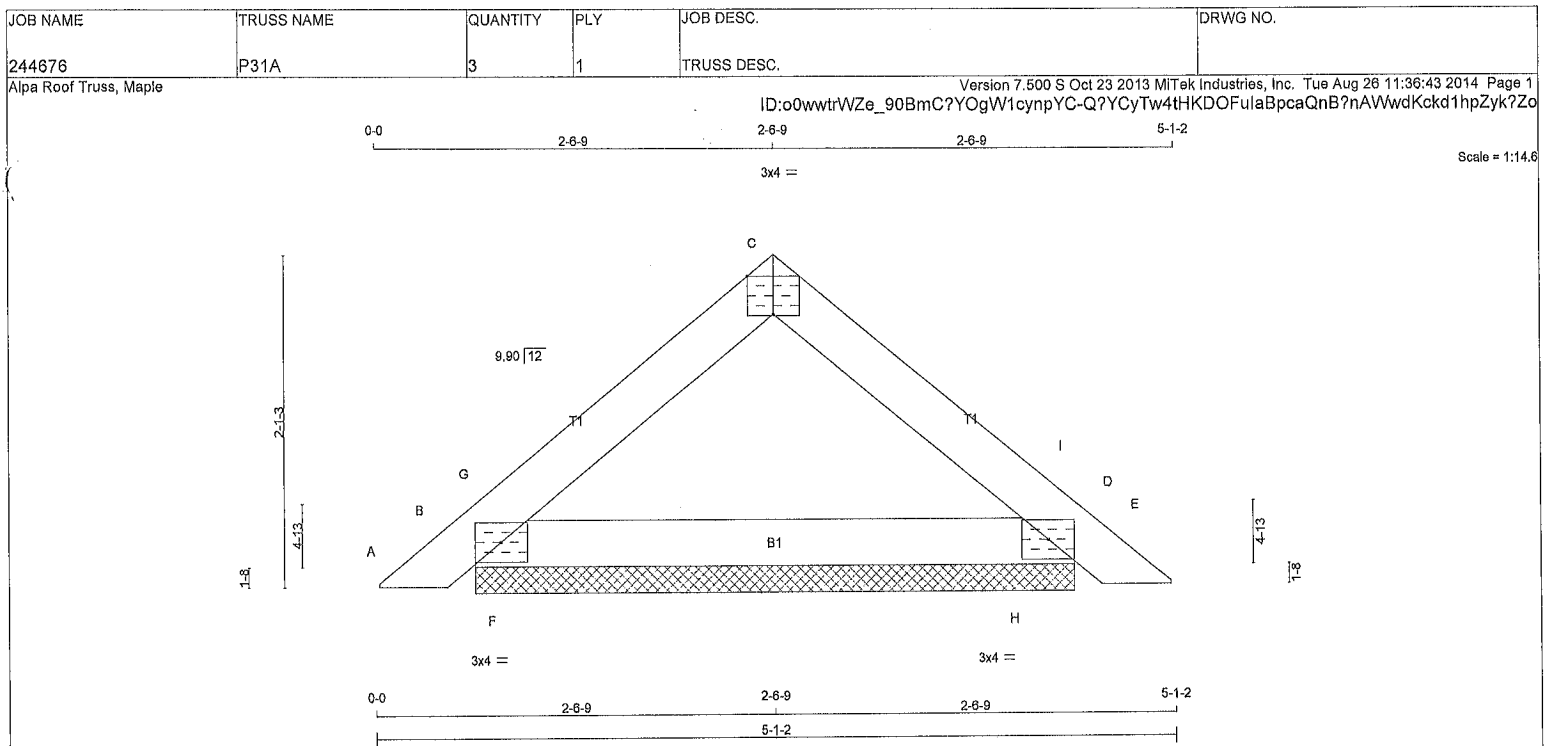
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (C) (INPUT = 0.90)
JSI METAL= 0.02 (E) (INPUT = 1.00)



A.4083636



TOTAL WEIGHT = 3 X 12 = 36 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
B - D	2x4 DRY	No.2	SPF

DRY: SEASONED LUMBER.

NOTES (table is in inches)

TYPE	PLATES	W	LEN	Y	X
MB1-I	MT20	3.0	4.0		
TT-p	MT20	3.0	4.0	Edge	2.00
TMB1-I	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP/LIFT
JT	284	0	284	0
B	284	0	284	0
D	284	0	284	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	WIND	DEAD
JT	223	142 / 0	40 / 0	0 / 0	41 / 0
B	223	142 / 0	40 / 0	0 / 0	41 / 0
D	223	142 / 0	40 / 0	0 / 0	41 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (3)

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 / 14	-94.6	-94.6 0.02 (1)	10.00	F-G	0 / 170	0.00 (1)
B-G	-241 / 0	-94.6	-94.6 0.08 (2)	6.25	H-I	0 / 170	0.00 (1)
G-C	-138 / 0	-94.6	-94.6 0.08 (1)	6.25			
C-I	-138 / 0	-94.6	-94.6 0.08 (1)	6.25			
I-D	-241 / 0	-94.6	-94.6 0.08 (2)	6.25			
D-E	0 / 14	-94.6	-94.6 0.02 (1)	10.00			
B-F	0 / 113	-28.0	-28.0 0.04 (2)	10.00			
F-H	0 / 113	-28.0	-28.0 0.08 (2)	10.00			
H-D	0 / 113	-28.0	-28.0 0.04 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	29.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	49.5	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 2012
- CSA 086-09
- TPIC 2011

(65 % OF 37.6 P.S.F. G.S.L. PLUS
8.4 P.S.F. RAIN LOAD EQUALS
29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.06 (C-G:1), BC=0.08 (F-H:2), WB=0.00 (n/a:0), SSI=0.09 (D-I:2)

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

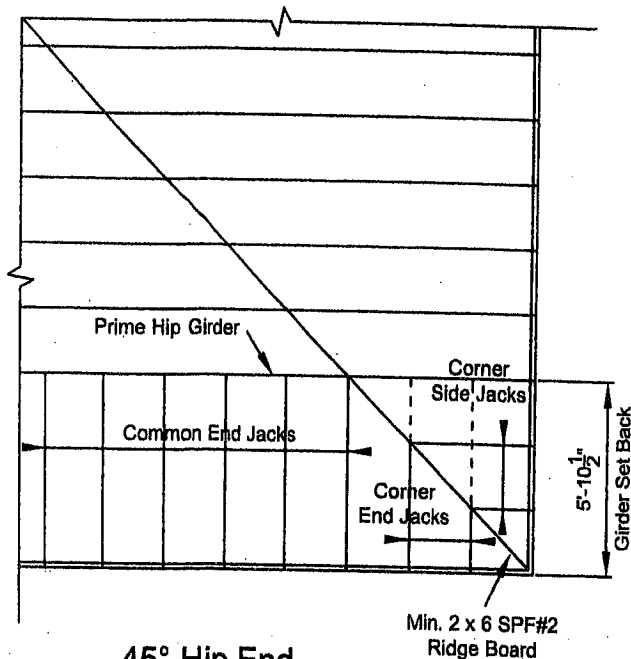
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.06 (D) (INPUT = 1.00)



A.14083637

STRACON ENGINEERING INC.



45° Hip End

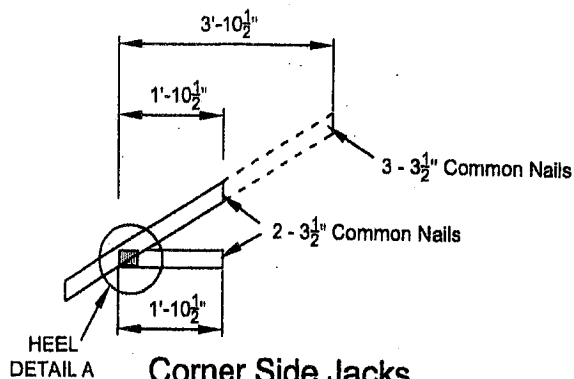
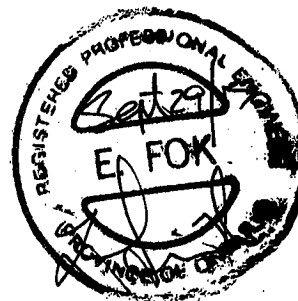
LUMBER SPECIFICATION

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

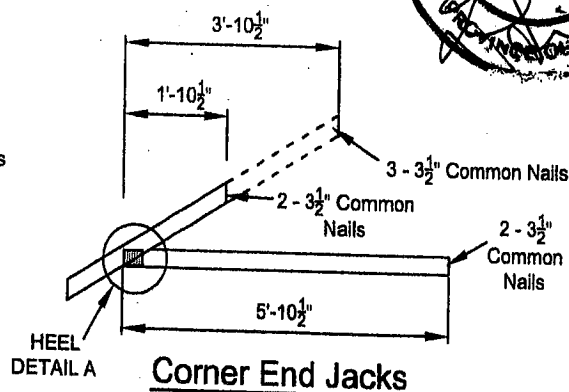
DESIGN LOAD

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.

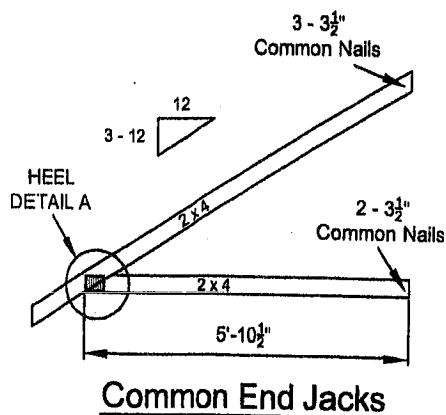
TOTAL LOAD : 50.5 P.S.F



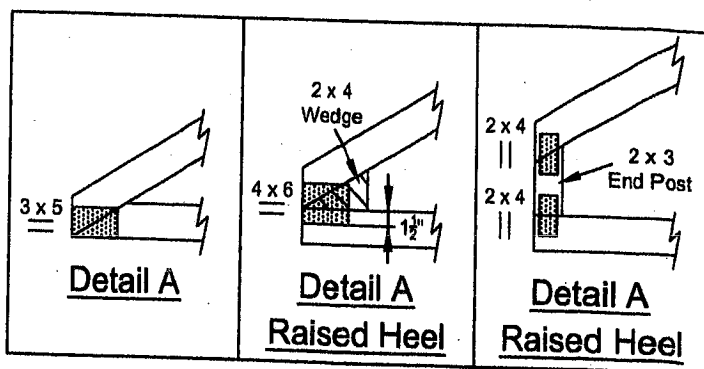
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: See table

FINISH: G90 galvanized

DESIGN:

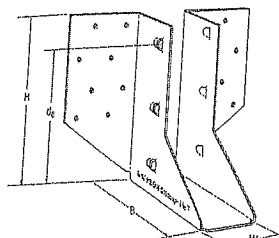
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

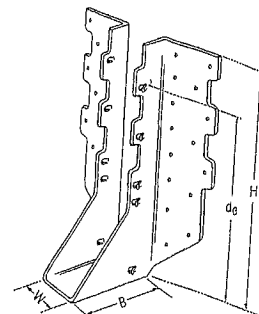
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

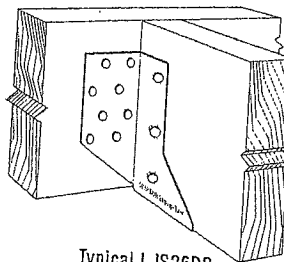
- See current catalogue for options



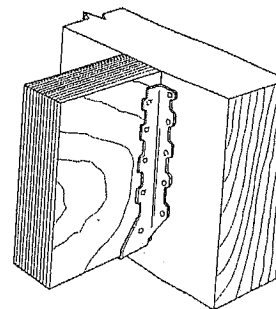
LJS26DS



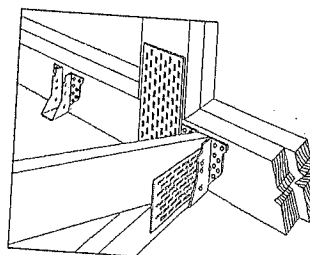
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



Typical HUS
Installation

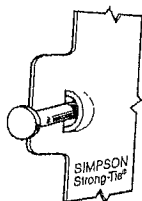


Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga	Dimensions (in)			Fasteners			Factored Resistance (lbs)			
								D.Fir-L		S-P-F	
		W	H	B	d _e ¹	Face	Joist	Uplift	Normal	Uplift	Normal
								(K _o =1.15)	(K _o =1.00)	(K _o =1.15)	(K _o =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 3/8	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1 5/8	5 5/8	3	3 15/16	14-16d	6-16d	2705	4940	2065	3875
HUS28	16	1 5/8	7 3/32	3	6 3/32	22-16d	8-16d	3605	5365	2675	4345
HUS210	16	1 5/8	9 3/32	3	7 31/32	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	30-16d	10-16d	4505	6450	4010	5200

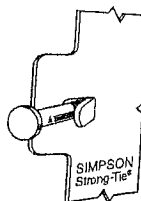
1. d_e is the distance from the seat of the hanger to the highest joist nail

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

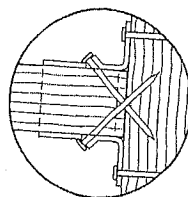


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

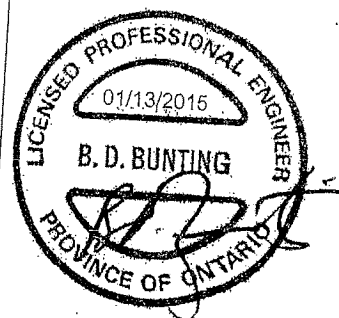
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



800-999-5099
www.strongtie.com

HHUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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:

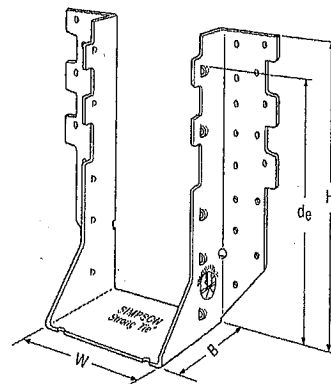
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

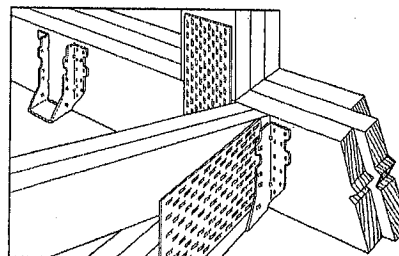
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



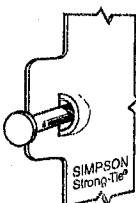
HHUS410



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

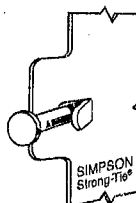
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
HHUS26-2	14	3 1/16	5 1/16	3	3 1/16	14-16d	6-16d	2850	7335	2065	5205
HHUS28-2	14	3 1/16	7 1/32	3	6 3/32	22-16d	8-16d	3765	8940	2675	6345
HHUS210-2	14	3 1/16	9 1/32	3	8	30-16d	10-16d	4745	9660	4310	7000
HHUS210-3	14	4 1/16	9	3	7 1/16	30-16d	10-16d	4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 29/32	3	7 29/32	30-16d	10-16d	4745	10545	4310	7485
HHUS46	14	3 1/8	5 1/32	3	3 1/8	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	2675	6345
HHUS410	14	3 3/8	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 3/8	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.

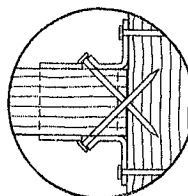


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

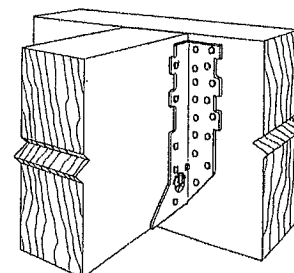
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



Typical HHUS Installation



800-999-5099
www.strongtie.com