

ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
 ROOF PARTS THAT CROSS MEET OR JOIN SHALL BE DETAIL AS SHOWN. CROSS MEMBERS SHALL BE DETAIL AS SHOWN. WITH A VERT POST TO THE TRUSS UNDERNEATH AT EACH CROSS POINT. THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'

12" FIN. OH.
 RSD. HEEL - 0" DROP
 (2" x 6" FASCIA) - FM
 ASPHALT SHINGLES
 2" X 6" BRG/BRICK

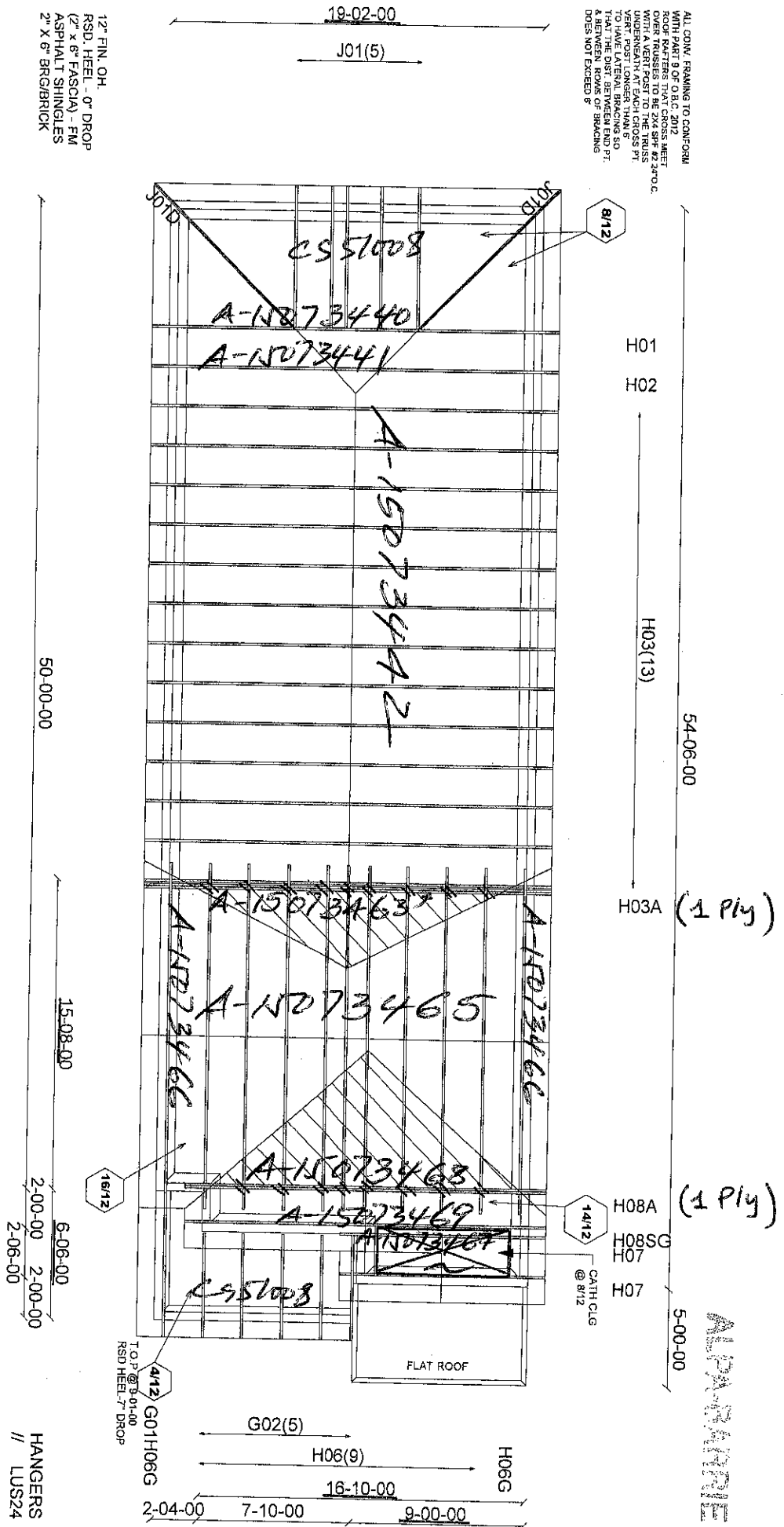


Job Track: 40297
 Layout ID: 252516
 Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
 Project: HUNTINGTON & NASHVILLE
 Date: 4/15/2015 Designer:

Model / Elevation: 25-2 / A
 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

CONVENTIONAL FRAMING BY OTHERS
 Milek Ver: 7.5.0



Mitek Ver: 7.5.0



CONVENTIONAL
FRAMING BY
OTHERS

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

OPT TRAY CLG
RAISED - 12"
@ 12/12 I.P.
INSET 16"
(15'-10"x7'-10")

50-00-00

15-08-00	6-06-00
2-00-00	2-00-00
2-06-00	

HANGERS
// LUS24

T.O.P @ 9-01-00
RSD HEEL-7" DROP

19-02-00
J01C J01(3)
J01B
J01A
J01

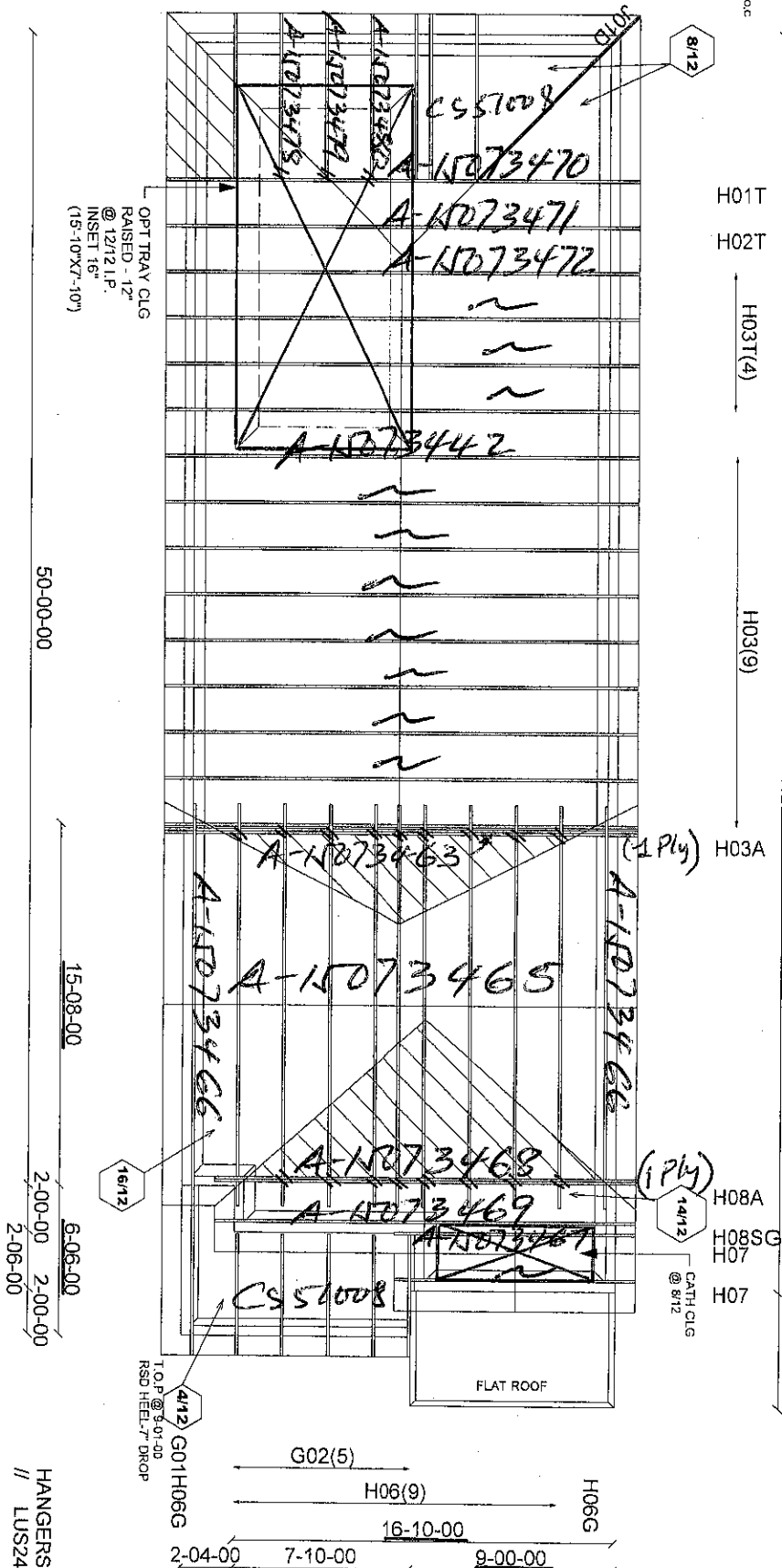
Timeline diagram showing the period from 2-04-00 to 9-00-00. The diagram includes labels for G01H06G, G02(5), H06(9), and H06G. A specific date range 16-10-00 is highlighted.

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.E.C. 2012
ROOF RATHERS THAT CROSS MEET
OVER TRUSSES TO BE 2X4 SFP @ 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'

54-06-00

5-00-00

THE
JOURNAL
OF
THE
ROYAL
ANTHROPOLOGICAL
INSTITUTE



Job Track: 40297
Layout ID: 252518
Plan Log: 79711

Builder / Location: **GOLD PARK / KLEINBURG**

Project: **HUNTINGTON & NASHVILLE**

Date: 4/16/2015	Designer:
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Model / Elevation:
25-2 / B

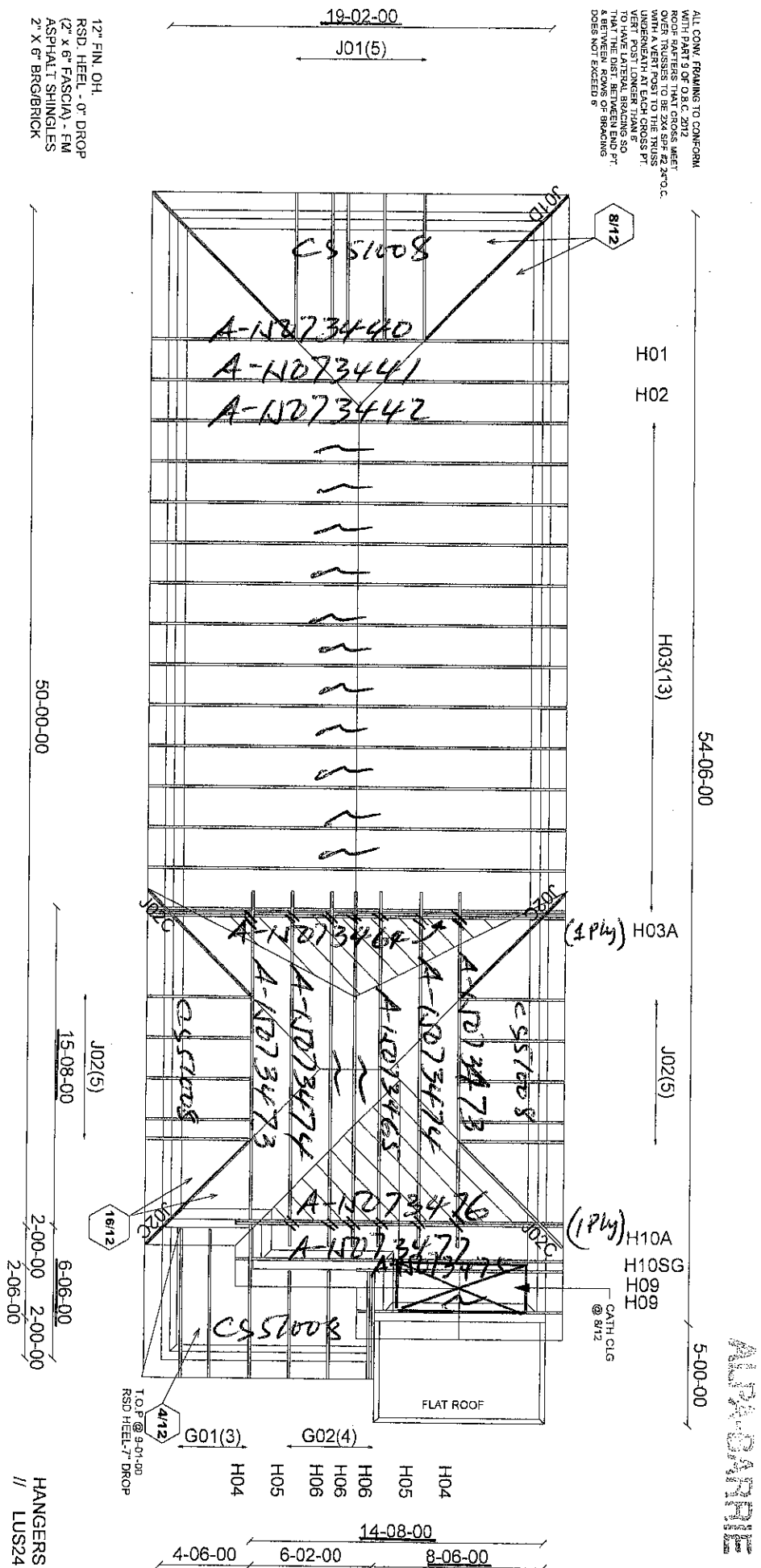
 CONVENTIONAL FRAMING BY OTHERS

Mitek Ver. 7.5.0

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

HANGERS
// LUS24

ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROD RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPS @ 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 PTS. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'



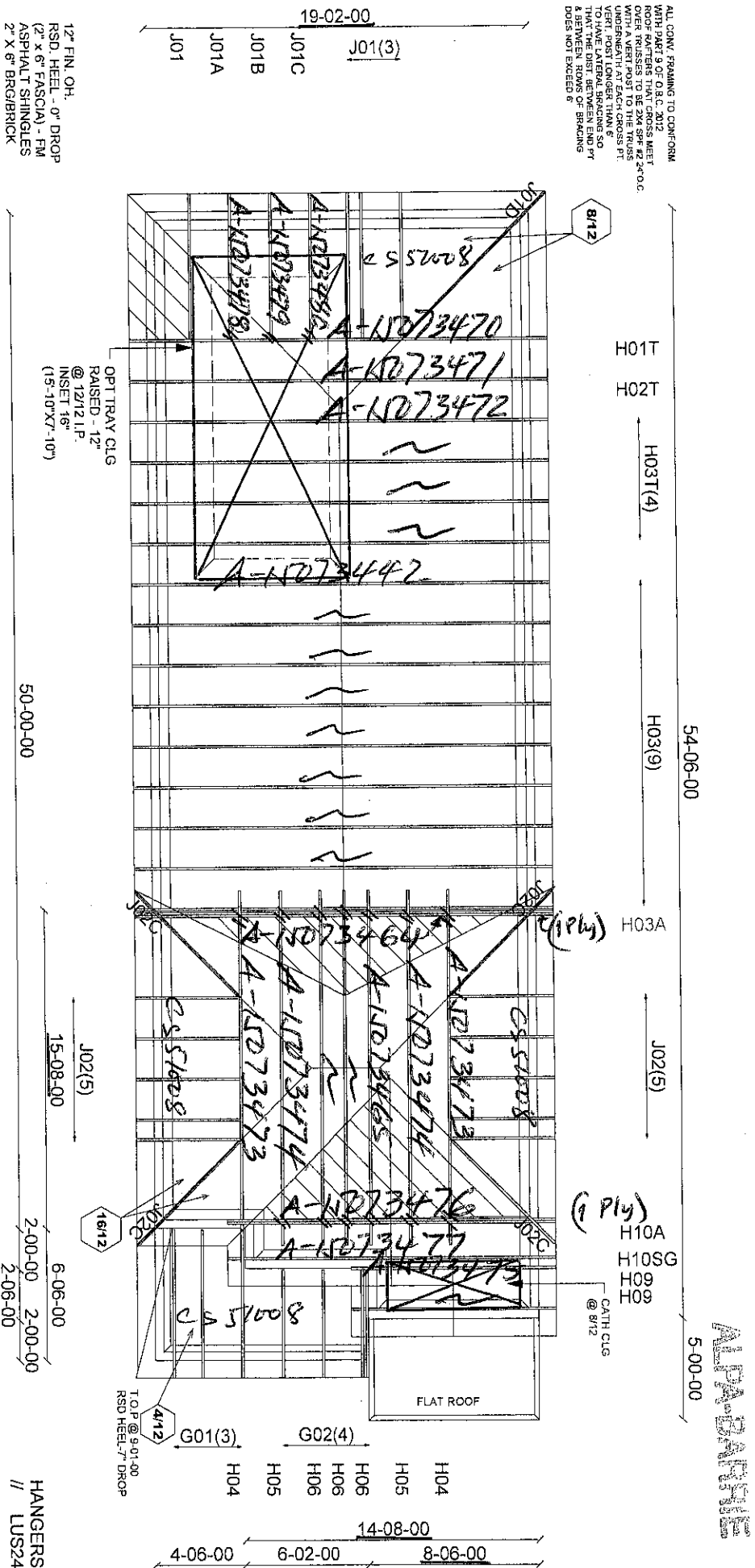
Mitek Ver: 7.5.0

CONVENTIONAL
FRAMING BY
OTHERS

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

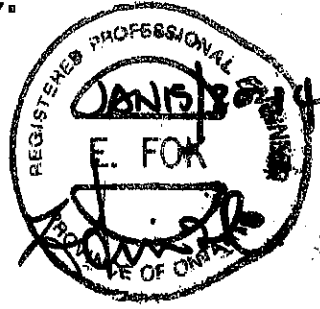
HANGERS
// LUS24

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2X6 SPS @ 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'



Stracon Engineering Inc.

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



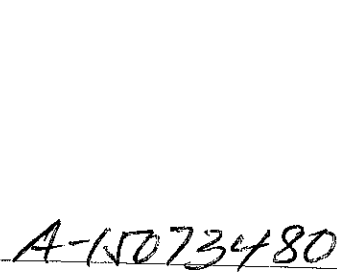
RESPONSIBILITIES

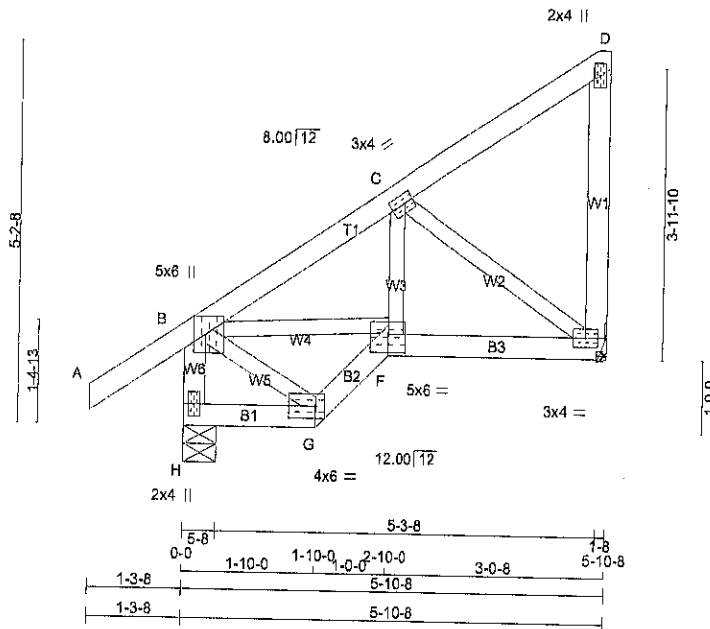
1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building 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				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - D	2x4	DRY	No.2	SPF	
E - D	2x4	DRY	No.2	SPF	
H - B	2x4	DRY	No.2	SPF	
H - G	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW+p	MT20	5.0	6.0	Edge	
C	TMWW-I	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-I	MT20	3.0	4.0		
F	BBWW-I	MT20	5.0	6.0	3.00	3.00
G	BBW-I	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	BRG	IN-SX	IN-SX
E	258	0	258	0	0	5-8	1-8		
H	355	0	355	0	0				

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	182	123 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0
H	248	181 / 0	0 / 0	0 / 0	0 / 0	67 / 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 = 6.25FT.
 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 / 27	-70.5 -70.5	0.09 (1)	10.00	B-F	0 / 209	0.05 (1)
B-C	-257 / 0	-70.5 -70.5	0.10 (1)	6.25	F-C	0 / 57	0.02 (4)
C-D	-13 / 0	-70.5 -70.5	0.10 (1)	6.25	C-E	-271 / 0	0.06 (1)
E-D	-79 / 0	0.0 0.0	0.02 (1)	7.81	B-G	0 / 20	0.01 (4)
H-B	-339 / 0	0.0 0.0	0.03 (1)	7.81			
H-G	0 / 0	-17.5 -17.5	0.02 (4)	10.00			
G-F	0 / 25	-17.5 -17.5	0.01 (4)	10.00			
F-E	0 / 223	-17.5 -17.5	0.06 (1)	10.00			

TOTAL WEIGHT = 30 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL	LOAD	=	31.0	PSF

SPACING = 24.0 IN. C/C

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

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

(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 (0.00")
 ALLOWABLE DEFL.(TL) = L/360 (0.20")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.10 (B-C:1), BC=0.06 (E-F:1), WB=0.06 (C-E:1), SS=0.06 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

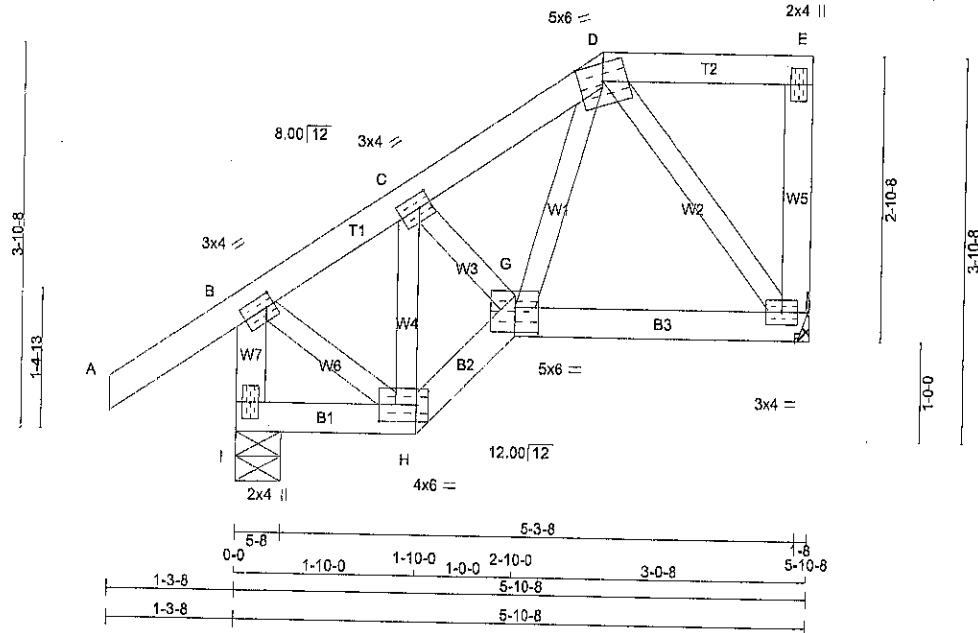
JSI GRIP= 0.52 (B) (INPUT = 0.90)
 JSI METAL= 0.08 (E) (INPUT = 1.00)



A-15073479

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252517	J01A	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Mon Jul 13 13:31:54 2015 Page 1
ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-Jr93CRyTeRHo8qX69wwPDlpabHNOa?bLMvc4?yyU?r
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LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4 DRY	No.2	SPF
D - E	2x4 DRY	No.2	SPF
F - E	2x4 DRY	No.2	SPF
I - B	2x4 DRY	No.2	SPF
I - H	2x4 DRY	No.2	SPF
H - G	2x4 DRY	No.2	SPF
G - F	2x4 DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.00
C	TMVW-I	MT20	3.0	4.0	1.50	1.50
D	TTVW-m	MT20	5.0	6.0	Edge	
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BBVW-I	MT20	5.0	6.0	3.00	3.00
H	BBVW-I	MT20	4.0	6.0	2.00	4.50
I	BMV1+p	MT20	2.0	4.0		

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.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT	REQD
VERT	HORZ	DOWN	HORZ	BRG	BRG
JT				IN-SX	IN-SX
F	247	0	247	0	0
I	366	0	366	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	174	117 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0
I	256	188 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25FT.
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. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 27	-70.5 -70.5	0.09 (1)	10.00	H-C	-170 / 0	0.03 (1)
B-C	-173 / 0	-70.5 -70.5	0.08 (1)	6.25	C-G	0 / 61	0.01 (1)
C-D	-197 / 0	-70.5 -70.5	0.04 (1)	6.25	G-D	0 / 119	0.03 (1)
D-E	0 / 0	-70.5 -70.5	0.06 (1)	10.00	D-F	-180 / 0	0.04 (1)
F-E	-76 / 0	0.0 0.0	0.01 (1)	7.81	B-H	0 / 148	0.03 (1)
I-B	-350 / 0	0.0 0.0	0.04 (1)	7.81			
I-H	0 / 0	-17.5 -17.5	0.02 (4)	10.00			
H-G	0 / 171	-17.5 -17.5	0.03 (1)	10.00			
G-F	0 / 123	-17.5 -17.5	0.06 (4)	10.00			

TOTAL WEIGHT = 29 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	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

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) = $L/999$ (0.00")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.01")

CSI: TC=0.09 (A-B:1), BC=0.06 (F-G:4), WB=0.04 (D-F:1), SS=0.06 (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

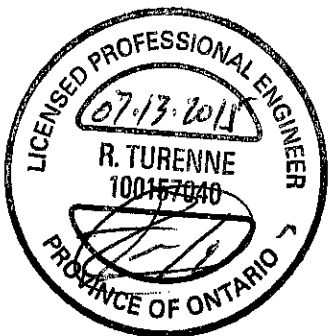
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

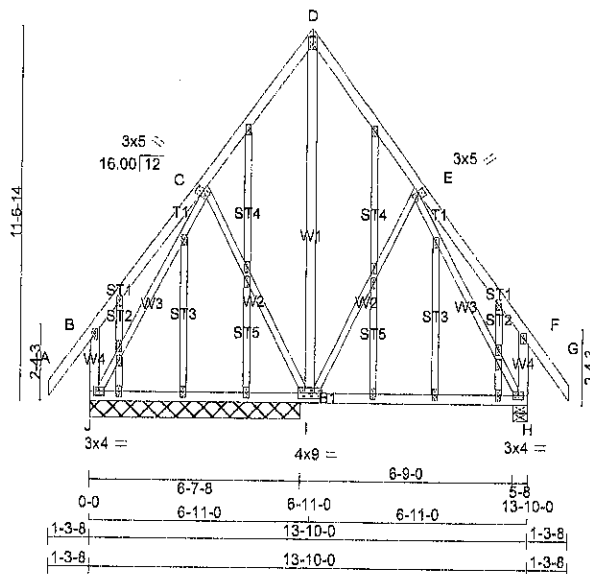
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.48 (B) (INPUT = 0.90)
JSI METAL=0.10 (B) (INPUT = 1.00)



A-15073478



LUMBER
 N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - G	2x4	DRY No.2	SPF
J - B	2x4	DRY No.2	SPF
H - F	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
ALL WEBS EXCEPT I - D	2x3	DRY No.2	SPF
ALL GABLE WEBS	2x3	DRY No.2	SPF
DRY: SEASONED LUMBER.			

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
C TMVW+1	MT20	3.0	5.0	2.25	0.75
D TTW+p	MT20	3.0	5.0	2.00	Edge
E TMVW+1	MT20	3.0	5.0	2.25	0.75
F TMV+p	MT20	2.0	4.0		
H BMVW+1	MT20	3.0	4.0		
I BMVW+1	MT20	4.0	9.0		
J BMVW+1	MT20	3.0	4.0		
K, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, Z					
K NP+w	MT20	2.0	4.0		

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.

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		
J	708	0	708	0	6-7-8	1-8
H	708	0	708	0	5-8	1-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	496	349 / 0	0 / 0	0 / 0	0 / 0	147 / 0	0 / 0
H	496	349 / 0	0 / 0	0 / 0	0 / 0	147 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25FT.
 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				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	I-D	0 / 333	0.05 (1)	
B-C	0 / 23	-70.5	-70.5 0.14 (1)	I-E	-104 / 3	0.11 (1)	
C-D	-351 / 0	-70.5	-70.5 0.10 (1)	C-I	-104 / 3	0.11 (1)	
D-E	-351 / 0	-70.5	-70.5 0.10 (1)	J-C	-532 / 0	0.56 (1)	
E-F	0 / 23	-70.5	-70.5 0.14 (1)	E-H	-532 / 0	0.56 (1)	
F-G	0 / 40	-70.5	-70.5 0.10 (1)				
J-B	-190 / 0	0.0	0.0 0.02 (1)				
H-F	-190 / 0	0.0	0.0 0.02 (1)				
J-I	0 / 247	-17.5	-17.5 0.26 (4)				
I-H	0 / 247	-17.5	-17.5 0.26 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0	PSF
DL	= 3.0	PSF
BOT CH. LL	= 0.0	PSF
DL	= 7.0	PSF
TOTAL LOAD	= 31.0	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 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 (0.46")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
 ALLOWABLE DEFL.(TL)= L/360 (0.46")
 CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.14 (E-F:1), BC=0.26 (H-I:4), WB=0.56 (C-J:1), SSI=0.10 (H-I:4)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

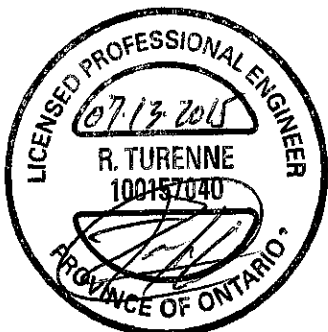
NAIL VALUES

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

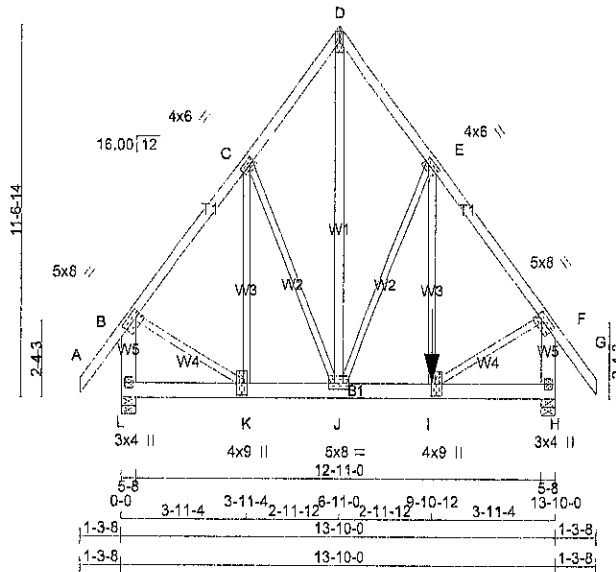
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (E) (INPUT = 0.90)
 JSI METAL = 0.26 (E) (INPUT = 1.00)



A-15073477



TOTAL WEIGHT = 106 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
L - B	2x8	DRY	No.2	SPF
H - F	2x8	DRY	No.2	SPF
L - H	2x8	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
J - O	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
L	2776	0	2776	0	5-8
H	2425	0	2425	0	5-8

UNFACTORED REACTIONS

JT	1ST LOASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1978	1213 / 0	0 / 0	0 / 0	0 / 0	766 / 0	0 / 0
H	1768	858 / 0	0 / 0	0 / 0	0 / 0	911 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.60FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 40	J-D	0 / 2231
B-C	-1865 / 0	J-E	-751 / 0
C-D	-1513 / 0	J-F	0 / 848
D-E	-1513 / 0	K-C	-610 / 0
E-F	-1958 / 0	K-D	0 / 583
F-G	0 / 40	K-E	0 / 1251
L-B	-2280 / 0	I-F	0 / 1311
H-F	-2369 / 0		
L-K	0 / 0		
K-J	0 / 1129		
J-I	0 / 1184		
I-H	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
I	9-10-12	-911	-911	---	FRONT	VERT	DEAD

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 = 3.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 31.0 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 9-11-8
START SPAN CARRIED = 3-10-8
END DISTANCE = 13-10-0
END SPAN CARRIED = 2-0-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 14-10-0
END DISTANCE = 9-11-8
END SPAN CARRIED = 14-10-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

*** 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, NBCC 2010

THIS DESIGN COMPLIES WITH:

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

(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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.26 (E-F:1), BC=0.36 (J-K:1), WB=0.92 (E-J:1), SSI=0.44 (K-L:1)

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

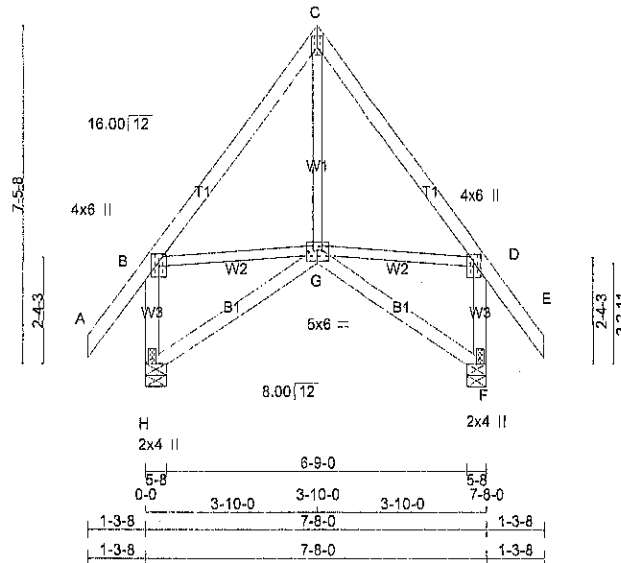
COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

A-15073476





TOTAL WEIGHT = 2 X 45 = 90 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	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 WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW+p	MT20	3.0	6.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0	Edge	
G	BBWWW+p	MT20	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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.

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
H	436	0	436	0	0
F	436	0	436	0	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	305	220 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
F	305	220 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FORCE (LBS)	LC1 MAX (LC)	UNBRAC LENGTH
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	G-C	0 / 87	0.03 (4)
B-C	-223 / 0	-70.5	-70.5 0.13 (1)	6.25	B-G	0 / 134	0.03 (1)
C-D	-223 / 0	-70.5	-70.5 0.13 (1)	6.25	G-D	0 / 134	0.03 (1)
D-E	0 / 40	-70.5	-70.5 0.10 (1)	10.00			
H-B	-403 / 0	0.0	0.0 0.06 (1)	7.81			
F-D	-403 / 0	0.0	0.0 0.06 (1)	7.81			
H-G	0 / 0	-17.5	-17.5 0.08 (4)	10.00			
G-F	0 / 0	-17.5	-17.5 0.08 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

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

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

(55 % OF 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 (0.26")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.13 (C-D:1), BC=0.08 (G-H:4),
WB=0.03 (D-G:1), SSI=0.06 (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 (PSI)	SECTION (PLI)
	MAX	MIN	MAX
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.51 (F) (INPUT = 0.90)
JSI METAL= 0.10 (H) (INPUT = 1.00)

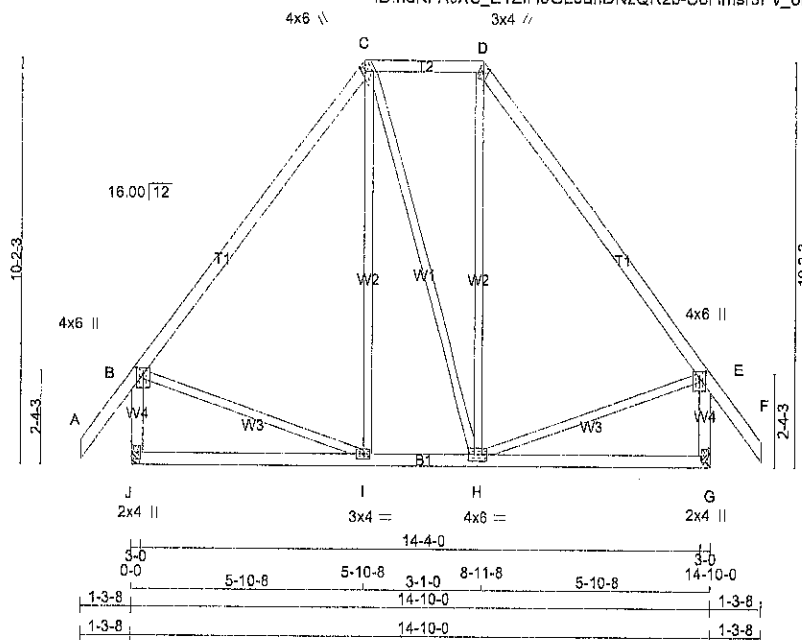


A-15073475

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252518	H05	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 16 2015 MITek Industries, Inc. Mon Jul 13 11:54:59 2015 Page 1
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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TTWW+m	MT20	3.0	4.0	Edge	
E	TMVW+p	MT20	4.0	6.0	2.00	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMVWW-t	MT20	4.0	6.0		
I	BMVWW-t	MT20	3.0	4.0		
J	BMV1+p	MT20	2.0	4.0		

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.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UP
J	752	0	752	0
G	752	0	752	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	
	COMBINED	SNOW	LIVE	PERM.LIVE
J	527	370 / 0	0 / 0	0 / 0
G	527	370 / 0	0 / 0	0 / 0

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)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5	10.00	I-C	0 / 89	0.02 (4)
B-C	-402 / 0	-70.5	-70.5	0.32 (1)	C-H	0 / 0	0.00 (1)
C-D	-240 / 0	-70.5	-70.5	0.09 (1)	H-D	0 / 70	0.02 (4)
D-E	-402 / 0	-70.5	-70.5	0.32 (1)	B-I	0 / 253	0.06 (1)
E-F	0 / 40	-70.5	-70.5	0.10 (1)	H-E	0 / 253	0.06 (1)
J-B	-707 / 0	0.0	0.0	0.09 (1)			
G-E	-707 / 0	0.0	0.0	0.09 (1)			
J-I	0 / 0	-17.5	-17.5	0.13 (4)			
I-H	0 / 240	-17.5	-17.5	0.14 (4)			
H-G	0 / 0	-17.5	-17.5	0.13 (4)			

TOTAL WEIGHT = 2 X 86 = 173 lb (MIF)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN./C

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

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

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

(55 % OF 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 (0.49")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.32 (D-E:1), BC=0.14 (H-I:4), WB=0.06 (E-H:1), SSI=0.10 (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 618 364 1667 822 2284 1856

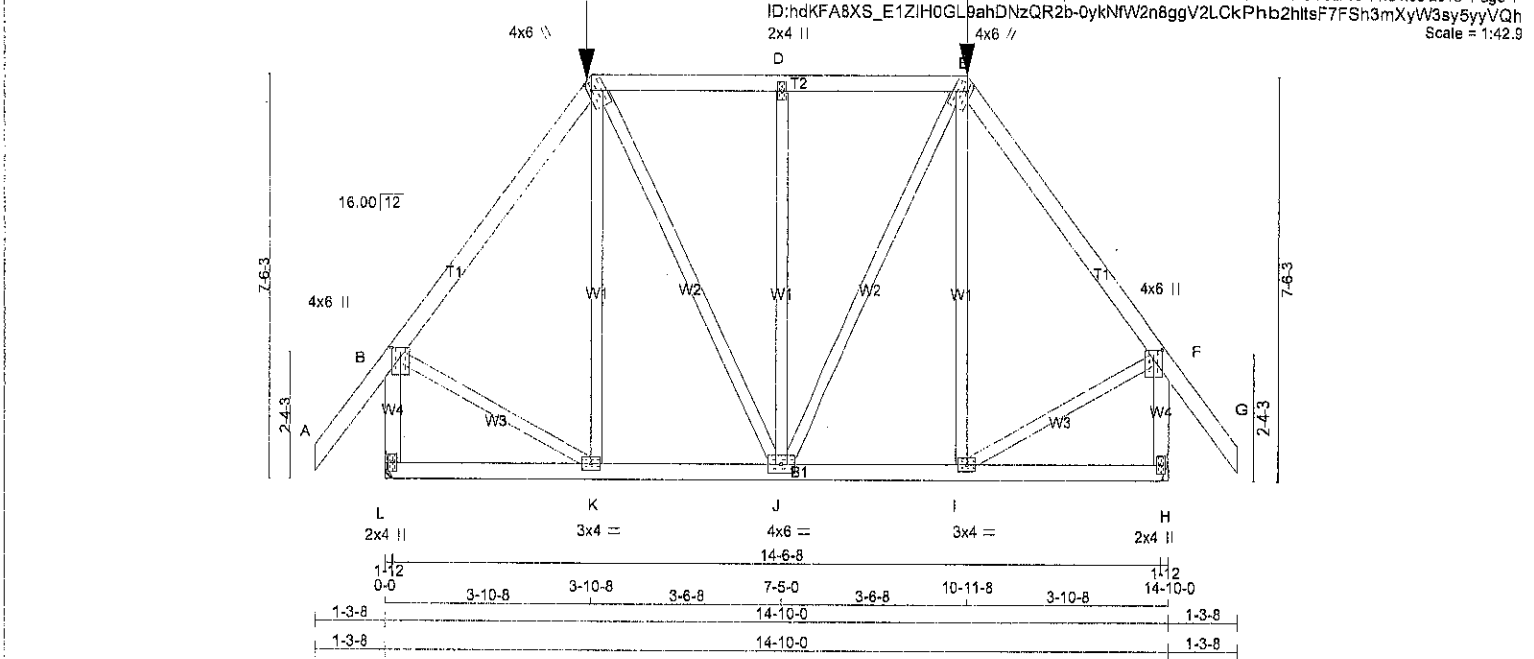
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (D) (INPUT = 0.90)
JSI METAL= 0.13 (G) (INPUT = 1.00)



A-15073474



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 - H	2x4	DRY	No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 108.1 lbs FACTORED DOWN AT 10-11-8, AND 108.1 lbs FACTORED DOWN AT 3-10-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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
L	1037 0	1037 0	0	0
H	1037 0	1037 0	0	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
L	729	504 / 0
H	729	504 / 0

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		FACTORED			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX UNBRACED LENGTH
FR-TO		FROM	TO		
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00
B-C	-894 / 0	-70.5	-70.5	0.22 (1)	8.25
C-D	-536 / 0	-103.5	-103.5	0.23 (1)	6.25
D-E	-536 / 0	-103.5	-103.5	0.23 (1)	6.25
E-F	-694 / 0	-70.5	-70.5	0.22 (1)	6.25
F-G	0 / 40	-70.5	-70.5	0.11 (1)	10.00
L-B	-997 / 0	0.0	0.0	0.14 (1)	7.80
H-F	-997 / 0	0.0	0.0	0.14 (1)	7.80
L-K	0 / 0	-25.7	-25.7	0.10 (4)	10.00
K-J	0 / 413	-25.7	-25.7	0.14 (4)	10.00
J-I	0 / 413	-25.7	-25.7	0.14 (4)	10.00
I-H	0 / 0	-25.7	-25.7	0.10 (4)	10.00

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
C	3-10-8	-108	-108	---	FRONT	VERT
E	10-11-8	-108	-108	---	FRONT	VERT

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 3-10-8

END SETBACK = 3-10-8

END WALL WIDTH = 0-0

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

ADDT'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

- TPC 2011

(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 (0.49")

CALCULATED VERT. DEFL.(LL) = L/999 (0.01")

ALLOWABLE DEFL.(TL) = L/360 (0.49")

CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.23 (C-D:1), BC=0.14 (I-J:4), WB=0.45 (D-J:1), SSI=0.18 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

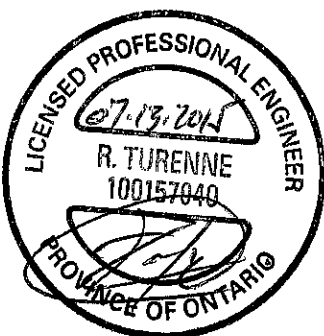
PLATE PLACEMENT TOL. = 0.250 Inches

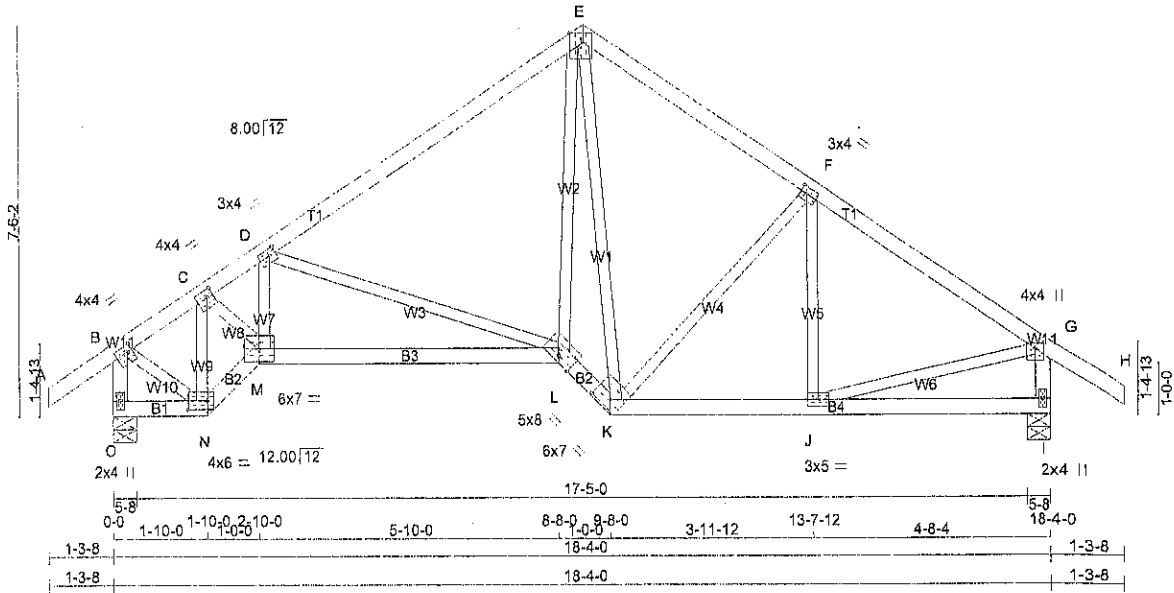
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (K) (INPUT = 0.90)

JSI METAL= 0.18 (H) (INPUT = 1.00)

A-10073473





TOTAL WEIGHT = 4 X 88 = 343 lb
 [M][F]

LUMBER
 N. L. G. A. RULES

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

ALL WEBS 2x3 DRY No.2 SPF
 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	1.50	1.00
C	TMVW-t	MT20	4.0	4.0	1.75	1.50
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TTVW+P	MT20	5.0	6.0	Edge	3.00
F	TMVW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW+P	MT20	4.0	4.0	1.25	2.00
I	BMV1+P	MT20	2.0	4.0		
J	BMVW-t	MT20	3.0	5.0		
K	BBVW-h	MT20	6.0	7.0	3.75	6.00
L	BBVW-h	MT20	5.0	8.0	Edge	
M	BBVW-t	MT20	6.0	7.0		
N	BBVW-t	MT20	4.0	6.0	2.00	4.50
O	BMV1+P	MT20	2.0	4.0		

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.

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		
O	907	0	907	0	5-8	1-8
I	899	0	899	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	636	444 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
I	631	440 / 0	0 / 0	0 / 0	0 / 0	191 / 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. FURLIN SPACING = 5.57 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING
 TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (LC)	UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 27	-70.5 -70.5	0.09 (1)	10.00	N-C	-768 / 0	0.12 (1)
B-C	-677 / 0	-70.5 -70.5	0.08 (1)	6.25	C-M	0 / 888	0.20 (1)
C-D	-1162 / 0	-70.5 -70.5	0.30 (1)	5.57	M-D	-104 / 57	0.02 (4)
D-E	-781 / 0	-70.5 -70.5	0.33 (1)	6.25	D-L	-512 / 0	0.35 (1)
E-F	-656 / 0	-70.5 -70.5	0.19 (1)	6.25	L-E	0 / 781	0.18 (1)
F-G	-838 / 0	-70.5 -70.5	0.20 (1)	6.25	E-K	-313 / 0	0.32 (1)
G-H	0 / 27	-70.5 -70.5	0.09 (1)	10.00	K-F	-272 / 0	0.15 (1)
O-B	-890 / 0	0.0 0.0	0.09 (1)	7.81	J-F	-79 / 51	0.02 (1)
I-G	-865 / 0	0.0 0.0	0.09 (1)	7.81	B-N	0 / 607	0.14 (1)
					J-G	0 / 734	0.17 (1)
O-N	0 / 0	-17.5 -17.5	0.02 (4)	10.00			
N-M	0 / 693	-17.5 -17.5	0.11 (1)	10.00			
M-L	0 / 1096	-17.5 -17.5	0.28 (1)	10.00			
L-K	0 / 777	-17.5 -17.5	0.13 (1)	10.00			
K-J	0 / 715	-17.5 -17.5	0.16 (1)	10.00			
J-I	0 / 0	-17.5 -17.5	0.09 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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 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 (0.61")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
 ALLOWABLE DEFL.(TL)= L/360 (0.61")
 CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.33 (D-E:1), BC=0.28 (L-M:1), WB=0.35 (D-L:1), SSI=0.21 (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

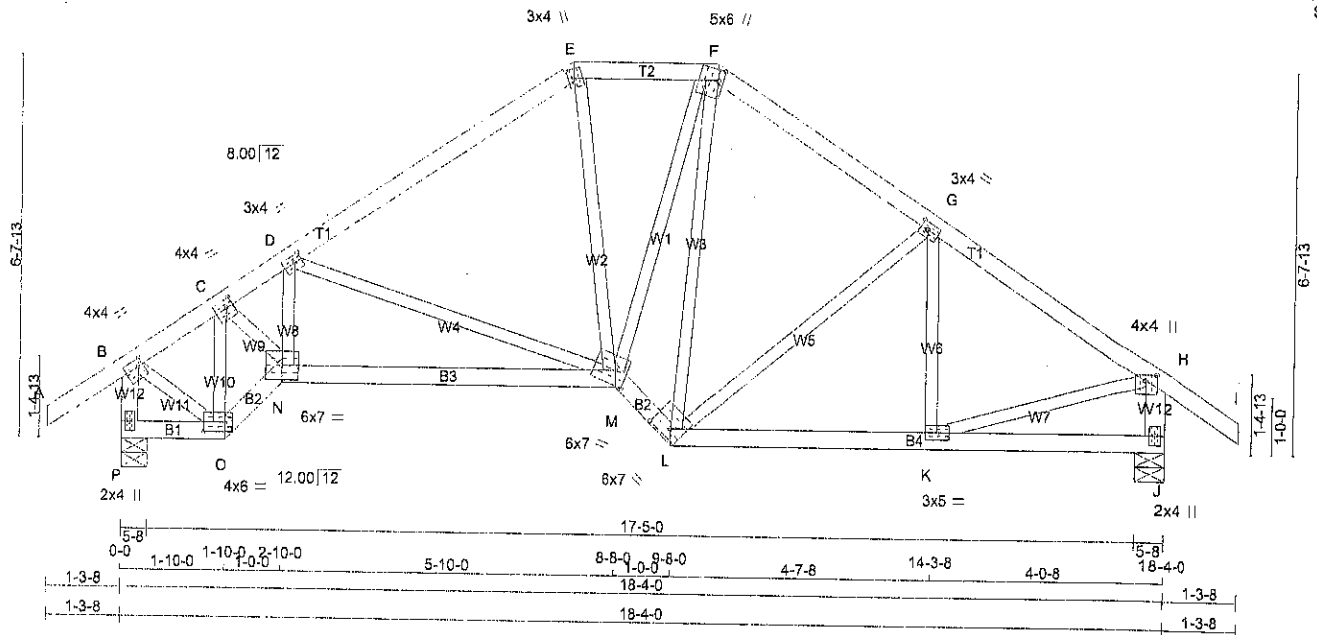
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (C) (INPUT = 0.90)
 JSI METAL= 0.29 (B) (INPUT = 1.00)



A-15073472



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - L	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	4.0	4.0	1.50	1.00
C TMVW-t	MT20	4.0	4.0	1.75	1.50
D TMVW-t	MT20	3.0	4.0	1.50	1.50
E TTW+m	MT20	3.0	4.0	2.00	1.25
F TTW+m	MT20	5.0	6.0	2.25	1.00
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW+p	MT20	4.0	4.0	1.25	2.00
J BMV1+p	MT20	2.0	4.0		
K BMVW-t	MT20	3.0	5.0		
L BBVW-h	MT20	6.0	7.0	2.00	4.25
M BBVW-m	MT20	6.0	7.0	3.00	2.50
N BBVW-l	MT20	6.0	7.0		
O BBVW-l	MT20	4.0	6.0	2.00	4.50
P 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	REORD BRG
	VERT	HORZ	DOWN	HORZ		
P	907	0	907	0	5-8	1-8
J	899	0	899	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	836	444 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
J	831	440 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.73FT.
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 LC1 (PLF)	MAX UNBRAC LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRAC LENGTH (FT)	MEMB.
FR-TO				FR-TO			
A-B	0 / 27	-70.5 -70.5 0.09 (1)	10.00	O-C	-782 / 0	0.13 (1)	
B-C	-682 / 0	-70.5 -70.5 0.07 (1)	6.25	C-N	0 / 797	0.18 (1)	
C-D	-1151 / 0	-70.5 -70.5 0.18 (1)	5.73	N-D	-28 / 67	0.02 (4)	
D-E	-797 / 0	-70.5 -70.5 0.20 (1)	8.25	D-M	-416 / 0	0.26 (1)	
E-F	-677 / 0	-70.5 -70.5 0.06 (1)	8.25	E-M	0 / 203	0.05 (1)	
F-G	-679 / 0	-70.5 -70.5 0.14 (1)	6.25	M-F	0 / 532	0.12 (1)	
G-H	-838 / 0	-70.5 -70.5 0.15 (1)	6.25	L-F	-331 / 0	0.25 (1)	
H-I	0 / 27	-70.5 -70.5 0.09 (1)	10.00	L-G	-210 / 0	0.13 (1)	
P-B	-890 / 0	0.0 0.0 0.09 (1)	7.81	K-G	-104 / 42	0.03 (1)	
J-H	-872 / 0	0.0 0.0 0.09 (1)	7.81	B-O	0 / 618	0.14 (1)	
P-O	0 / 0	-17.5 -17.5 0.02 (4)	10.00	K-H	0 / 737	0.17 (1)	
O-N	0 / 706	-17.5 -17.5 0.12 (1)	10.00				
N-M	0 / 1040	-17.5 -17.5 0.27 (1)	10.00				
M-L	0 / 718	-17.5 -17.5 0.12 (1)	10.00				
L-K	0 / 712	-17.5 -17.5 0.16 (1)	10.00				
K-J	0 / 0	-17.5 -17.5 0.09 (4)	10.00				

TOTAL WEIGHT = 87 lb [M][P]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	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

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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.20 (D-E:1), BC=0.27 (M-N:1),
WB=0.26 (D-M:1), SSI=0.14 (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 (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822
		2284 1656

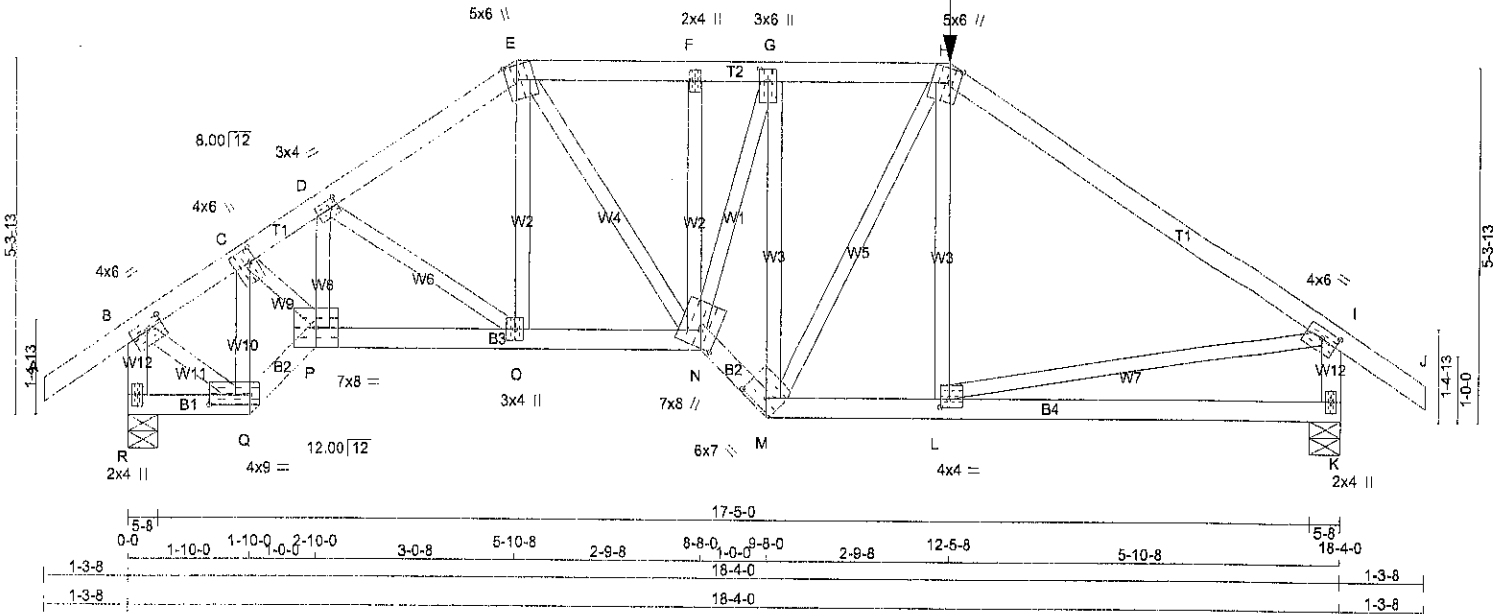
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (E) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)



A-10073471



TOTAL WEIGHT = 90 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
B	TMVW-t	MT20	4.0	6.0	1.50 3.00
C	TMVW-t	MT20	4.0	6.0	2.50 1.00
D	TMVW-t	MT20	3.0	4.0	1.50 1.50
E	TTVW+m	MT20	5.0	6.0	Edge 1.75
F	TMVW-t	MT20	2.0	4.0	
G	TMVW-t	MT20	3.0	6.0	2.25 1.50
H	TTVW+m	MT20	5.0	6.0	Edge 1.75
I	TMVW-t	MT20	4.0	6.0	1.75 3.00
K	BMV1+p	MT20	2.0	4.0	
L	BMVW-t	MT20	4.0	4.0	1.50 1.50
M	BMVW-t	MT20	6.0	7.0	2.00 4.25
N	BMVW-t	MT20	7.0	8.0	3.00 3.00
O	BMVW-t	MT20	3.0	4.0	
P	BMVW-t	MT20	7.0	8.0	
Q	BMVW-t	MT20	4.0	9.0	1.75 7.25
R	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
R		1730	0	1730	0	0	5-8	2-2	
K		1553	0	1553	0	0	5-8	1-11	

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
R		1215	842 / 0	0 / 0	0 / 0	0 / 0	373 / 0	0 / 0	
K		1096	737 / 0	0 / 0	0 / 0	0 / 0	358 / 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 = 4.32FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING		TOTAL LOAD CASES: (4)							
		CHORDS		WEBS					
		MAX. FACTORED		MAX. FACTORED					
		MEMB. FORCE (LBS)		MEMB. FORCE (LBS)					
		VERT. LOAD LC1		MAX UNBRACED LENGTH					
		FROM TO		FROM TO					
FR-TO		FROM TO		FROM TO					
A-B	0 / 27	-70.5	-70.5 0.10 (1)	10.00	Q-C	-1680 / 0	0.29 (1)		
B-C	-1413 / 0	-138.7	-138.7 0.13 (1)	5.33	C-P	0 / 1378	0.34 (1)		
C-D	-2377 / 0	-138.7	-138.7 0.13 (1)	4.32	P-D	0 / 220	0.05 (1)		
D-E	-1980 / 0	-70.5	-70.5 0.15 (1)	4.64	D-O	-422 / 0	0.11 (1)		
E-F	-1885 / 0	-70.5	-70.5 0.16 (1)	4.72	O-E	0 / 568	0.14 (1)		
F-G	-1883 / 0	-138.7	-138.7 0.16 (1)	4.72	E-N	0 / 402	0.10 (1)		
G-H	-1536 / 0	-138.7	-138.7 0.17 (1)	5.11	N-F	-83 / 3	0.02 (1)		
H-I	-1648 / 0	-70.5	-70.5 0.61 (1)	4.43	N-G	0 / 1441	0.36 (1)		
I-J	0 / 27	-70.5	-70.5 0.10 (1)	10.00	M-G	-1758 / 0	0.76 (1)		
R-B	-1698 / 0	0.0	0.0 0.19 (1)	6.33	M-H	0 / 342	0.08 (1)		
K-I	-1468 / 0	0.0	0.0 0.17 (1)	6.71	L-H	-57 / 151	0.06 (4)		
R-Q	0 / 0	-34.5	-34.5 0.04 (4)	10.00	B-Q	0 / 1324	0.33 (1)		
Q-P	0 / 1512	-34.5	-34.5 0.27 (1)	10.00	L-I	0 / 1392	0.34 (1)		
P-O	0 / 1990	-102.7	-102.7 0.50 (1)	10.00					
O-N	0 / 1654	-102.7	-102.7 0.44 (1)	10.00					
N-M	0 / 2120	-34.5	-34.5 0.38 (1)	10.00					
M-L	0 / 1368	-34.5	-34.5 0.41 (4)	10.00					
L-K	0 / 0	-34.5	-34.5 0.29 (4)	10.00					

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
H	12-5-8	-302	-302	-	FRONT	VERT	TOTAL		

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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 = 0-0
 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 2-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CSidGlrder
 START SPAN CARRIED = 2-10-0
 START SPAN CARRIED = 5-10-8
 END DISTANCE = 8-8-0
 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 = 5-10-8
 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 9-8-0 OF SPAN MEASURED FROM THE RIGHT.

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 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

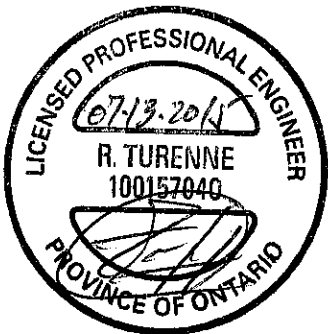
ALLOWABLE DEFL.(LL)= L/360 (0.61")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
 ALLOWABLE DEFL.(TL)= L/360 (0.61")
 CALCULATED VERT. DEFL.(TL)= L/999 (0.13")

CSI: TC=0.61 (H-I-I), BC=0.50 (O-P-1), WB=0.76 (G-M-1) SSI=0.18 (B-F-1)

A-11073470
 CONTINUED ON PAGE 2



HANGERS NOTES 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 301.8 lbs FACTORED DOWN AT 12-5-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER. 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.	DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES <table border="1"> <thead> <tr> <th>PLATE</th> <th>GRIP(DRY)</th> <th>SHEAR</th> <th>SECTION</th> </tr> <tr> <th>(PSI)</th> <th>(PLI)</th> <th>(PLI)</th> <th></th> </tr> </thead> <tbody> <tr> <td>MAX</td> <td>MIN</td> <td>MAX</td> <td>MIN</td> </tr> <tr> <td>MT20</td> <td>618</td> <td>354</td> <td>1687</td> </tr> <tr> <td></td> <td></td> <td>822</td> <td>2284</td> </tr> <tr> <td></td> <td></td> <td></td> <td>1656</td> </tr> </tbody> </table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (G) (INPUT = 0.90) JSI METAL= 0.51 (L) (INPUT = 1.00)	PLATE	GRIP(DRY)	SHEAR	SECTION	(PSI)	(PLI)	(PLI)		MAX	MIN	MAX	MIN	MT20	618	354	1687			822	2284				1656
PLATE	GRIP(DRY)	SHEAR	SECTION																						
(PSI)	(PLI)	(PLI)																							
MAX	MIN	MAX	MIN																						
MT20	618	354	1687																						
		822	2284																						
			1656																						

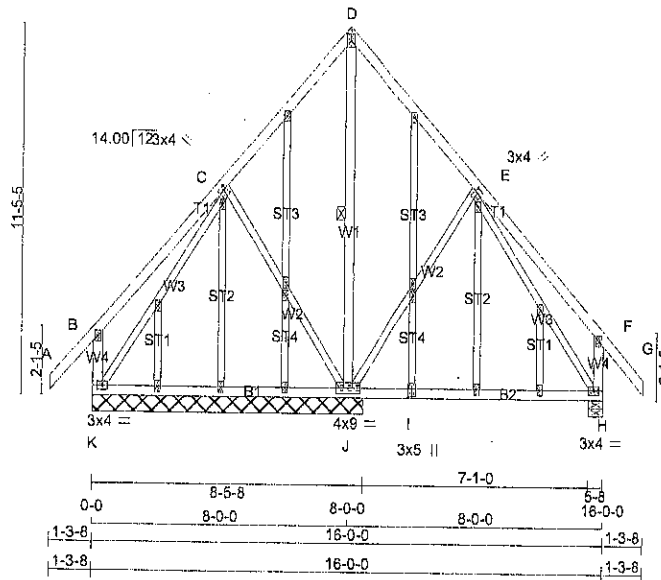


A-15073470(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252516	H08SG	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-_bD7uid8JxysVvwvxHB_EtRL04lyLZWixTwyXtyyVik
3x5 ||
Scale = 1:71.4



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMVW+H	MT20	3.0	4.0	1.50 1.00
D	TTW+p	MT20	3.0	5.0	2.75 1.50
E	TMVW+H	MT20	3.0	4.0	1.50 1.00
F	TMV+p	MT20	2.0	4.0	
H	BMVW1-t	MT20	3.0	4.0	
I	BSW+H	MT20	3.0	5.0	3.00 1.50
J	BMVW1-t	MT20	4.0	9.0	
K	BMVW1-t	MT20	3.0	4.0	
L, L, M, N, O, P, Q, R, S, T, U, V, W, X					
L	NP+H	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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	782	0	782	0	0	8-5-8	1-8
K	412	0	412	0	0	8-5-8	1-8
H	412	0	412	0	0	5-8	1-8

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS		1ST LCASE		COMBINED		SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	JT	COMBINED	SNOW	LIVE
J	553	361 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0	J	553	361 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0	J	553	361 / 0	0 / 0
K	286	214 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	K	286	214 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	K	286	214 / 0	0 / 0
H	286	214 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	H	286	214 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	H	286	214 / 0	0 / 0

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

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF 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)	LC1 MAX CS1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 38	-70.5	-70.5 0.10 (1)	10.00	J-D	-253 / 0	0.17 (1)
B-C	0 / 27	-70.5	-70.5 0.19 (1)	10.00	J-E	-210 / 0	0.24 (1)
C-D	-2 / 0	-70.5	-70.5 0.15 (1)	10.00	C-J	-210 / 0	0.24 (1)
D-E	-2 / 0	-70.5	-70.5 0.15 (1)	10.00	K-C	-185 / 0	0.20 (1)
E-F	0 / 27	-70.5	-70.5 0.19 (1)	10.00	E-H	-185 / 0	0.20 (1)
F-G	0 / 38	-70.5	-70.5 0.10 (1)	10.00			
K-B	-202 / 0	0.0	0.0 0.02 (1)	7.81			
H-F	-202 / 0	0.0	0.0 0.02 (1)	7.81			
K-J	0 / 98	-17.5	-17.5 0.33 (4)	10.00			
J-I	0 / 98	-17.5	-17.5 0.33 (4)	10.00			
I-H	0 / 98	-17.5	-17.5 0.33 (4)	10.00			

TOTAL WEIGHT = 119 lb
(MNF)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 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.(TL) = L/380 (0.27")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.19 (B-C:1), BC=0.33 (H-J:4), WB=0.24 (C-J:1), SSI=0.12 (J-K:4)

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

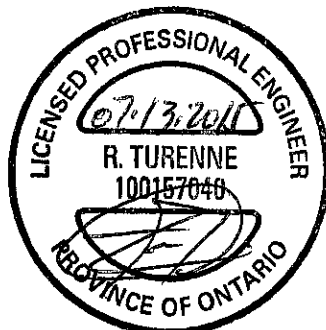
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.26 (E) (INPUT = 0.90)
JSI METAL= 0.11 (E) (INPUT = 1.00)



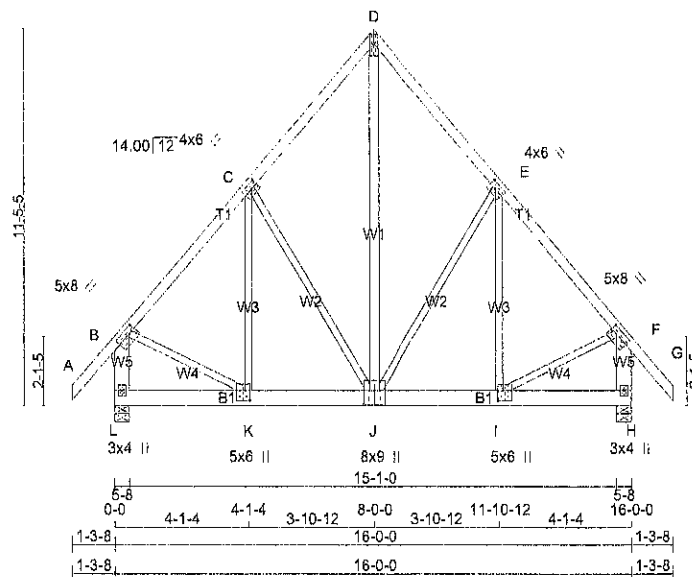
A-15073469

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252516	H08A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:hdKFA8XS_E1ZiH0GL9ahDNzQR2b-_bD7uld8JxysVwvbxHB_EiRj4gXLQclxTwgXtyyVik
Scale = 1:70.4



TOTAL WEIGHT = 108 lb [M]

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

ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
J - D	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	2.00	2.50
C	TMVW-t	MT20	4.0	6.0	2.00	2.75
D	TTW+p	MT20	3.0	8.0	3.75	Edge
E	TMVW-t	MT20	4.0	6.0	2.00	2.75
F	TMVW-t	MT20	5.0	8.0	2.00	2.50
H	BMV1+p	MT20	3.0	4.0		
I	BMVW+t	MT20	5.0	6.0	3.75	1.75
J	BSVW+t	MT20	8.0	9.0	5.25	4.00
K	BMVW+t	MT20	5.0	6.0	3.75	1.75
L	BMV1+p	MT20	3.0	4.0		

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.

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

JT	FACTORED		MAXIMUM FACTORED		INPUT	REQD
	GROSS REACTION	GROSS REACTION	DOWN	BRG		
L	3060	0	3060	0	5-8	4-7
H	3060	0	3060	0	5-8	4-7

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
L	2163	1472 / 0	0 / 0	0 / 0	0 / 0	682 / 0	0 / 0
H	2163	1472 / 0	0 / 0	0 / 0	0 / 0	682 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.27FT.
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. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
A-B	0 / 38	-70.5 -70.5 0.11 (1)	10.00	J-D	0 / 2373	0.42 (1)	
B-C	-2256 / 0	-70.5 -70.5 0.32 (1)	4.27	J-E	-722 / 0	0.81 (1)	
C-D	-1727 / 0	-70.5 -70.5 0.26 (1)	4.81	I-E	0 / 713	0.18 (1)	
D-E	-1727 / 0	-70.5 -70.5 0.26 (1)	4.81	C-J	-722 / 0	0.81 (1)	
E-F	-2256 / 0	-70.5 -70.5 0.32 (1)	4.27	K-C	0 / 713	0.18 (1)	
F-G	0 / 38	-70.5 -70.5 0.11 (1)	10.00	B-K	0 / 1598	0.40 (1)	
L-B	-2542 / 0	0.0 0.0 0.21 (1)	8.46	I-F	0 / 1598	0.40 (1)	
H-F	-2542 / 0	0.0 0.0 0.21 (1)	8.46				
L-K	0 / 0	-299.7 -299.7 0.33 (1)	10.00				
K-J	0 / 1482	-299.7 -299.7 0.49 (1)	10.00				
J-I	0 / 1482	-299.7 -299.7 0.49 (1)	10.00				
I-H	0 / 0	-299.7 -299.7 0.33 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
DL =	3.0	PSF
BOT CH.	LL = 0.0	PSF
DL =	7.0	PSF
TOTAL LOAD	= 31.0	PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 14-10-0
END DISTANCE = 16-0-0
END SPAN CARRIED = 14-10-0
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, NBCC 2010

THIS DESIGN COMPLIES WITH:

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

(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 (0.53")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.53")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.32 (B-C:1), BC=0.49 (J-K:1), WB=0.81 (C-J:1), SS=0.47 (K-L: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	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1656

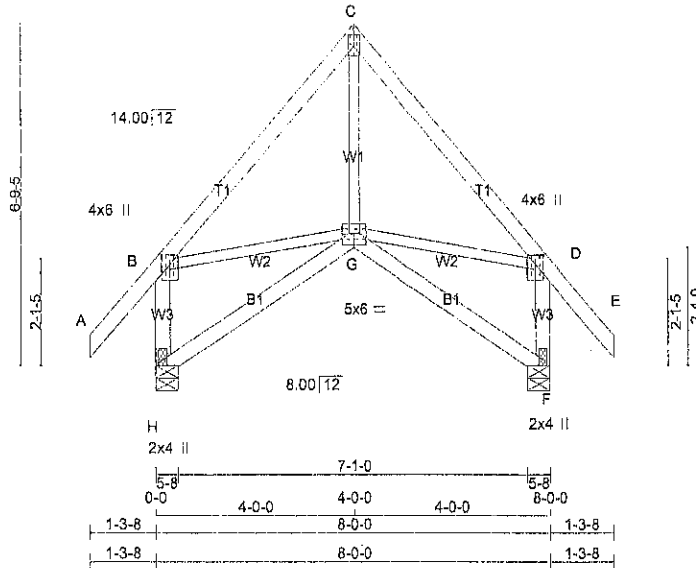
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.46 (B) (INPUT = 1.00)



A-H073468



TOTAL WEIGHT = 2 X 44 = 88 lb
 (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
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 WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.25	2.00
C	TTW+p	MT20	3.0	5.0	2.75	1.50
D	TMVW+p	MT20	4.0	6.0	2.25	2.00
F	BMV1+p	MT20	2.0	4.0	Edge	
G	BBVWW+p	MT20	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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.

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
H	451	0	451	0
F	451	0	451	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	315	227 / 0	0 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0
F	315	227 / 0	0 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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)	LC1 MAX	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)	
FR-TO		FROM	TO		FR-TO				
A-B	0 / 38	-70.5	-70.5	0.10 (1)	10.00	G-C	0 / 124	0.03 (4)	
B-C	-267 / 0	-70.5	-70.5	0.15 (1)	6.25	B-G	0 / 176	0.04 (1)	
C-D	-267 / 0	-70.5	-70.5	0.15 (1)	6.25	G-D	0 / 178	0.04 (1)	
D-E	0 / 38	-70.5	-70.5	0.10 (1)	10.00				
H-B	-418 / 0	0.0	0.0	0.05 (1)	7.81				
F-D	-418 / 0	0.0	0.0	0.05 (1)	7.81				
H-G	0 / 0	-17.5	-17.5	0.08 (4)	10.00				
G-F	0 / 0	-17.5	-17.5	0.08 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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

(66% 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) = $L/360$ (0.27")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.27")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CSI: TC=0.15 (B-C:1), BC=0.08 (G-H:4),
 WB=0.04 (B-G:1), SSI=0.07 (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.

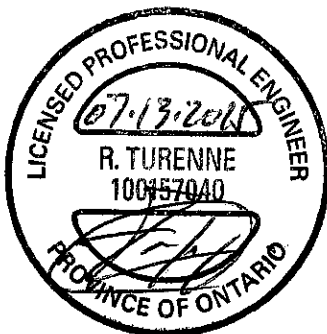
NAIL VALUES

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

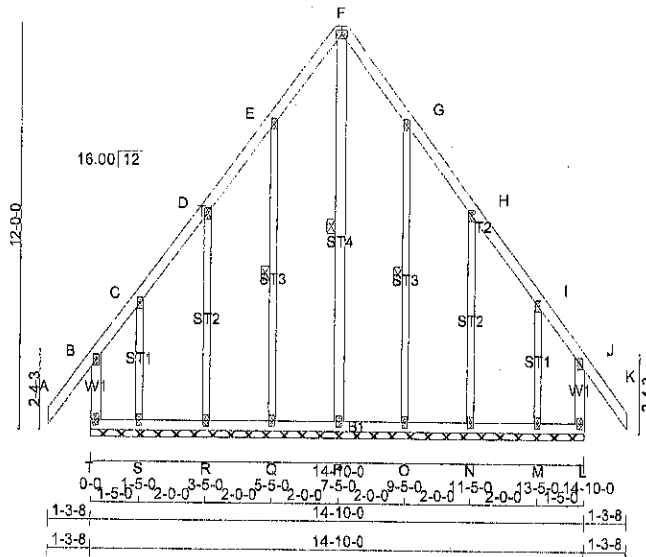
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (H) (INPUT = 0.90)
 JSI METAL= 0.10 (H) (INPUT = 1.00)



A-H073467



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - F	2x4 DRY	No.2	SPF		
F - K	2x4 DRY	No.2	SPF		
T - B	2x4 DRY	No.2	SPF		
L - J	2x4 DRY	No.2	SPF		
T - L	2x4 DRY	No.2	SPF		
ALL WEBS EXCEPT P - F	2x3 DRY	No.2	SPF		
ALL GABLE WEBS EXCEPT ST1	2x3 DRY	No.2	SPF		
ST1	2x4 DRY	No.2	SPF		
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			
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 = 10.00FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-P, E-Q, G-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	MAX CS1 (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.10 (1)	10.00	P-F	-192 / 0	0.15 (1)
B-C	-8 / 0	-70.5 -70.5	0.07 (1)	10.00	Q-E	-142 / 0	0.08 (1)
C-D	0 / 25	-70.5 -70.5	0.04 (1)	10.00	R-D	-145 / 0	0.11 (1)
D-E	0 / 23	-70.5 -70.5	0.04 (1)	10.00	S-C	-78 / 0	0.02 (1)
E-F	0 / 27	-70.5 -70.5	0.04 (1)	10.00	O-G	-142 / 0	0.08 (1)
F-G	0 / 27	-70.5 -70.5	0.04 (1)	10.00	N-H	-145 / 0	0.11 (1)
G-H	0 / 23	-70.5 -70.5	0.04 (1)	10.00	M-I	-78 / 0	0.02 (1)
H-I	0 / 25	-70.5 -70.5	0.04 (1)	10.00			
I-J	-8 / 0	-70.5 -70.5	0.07 (1)	10.00			
J-K	0 / 40	-70.5 -70.5	0.10 (1)	10.00			
T-B	-161 / 0	0.0	0.03 (1)	7.81			
L-J	-161 / 0	0.0	0.03 (1)	7.81			
T-S	-9 / 0	-17.5 -17.5	0.01 (4)	10.00			
S-R	-11 / 0	-17.5 -17.5	0.01 (4)	6.25			
R-Q	-14 / 0	-17.5 -17.5	0.01 (4)	6.25			
Q-P	-16 / 0	-17.5 -17.5	0.01 (4)	6.25			
P-O	-16 / 0	-17.5 -17.5	0.01 (4)	6.25			
O-N	-14 / 0	-17.5 -17.5	0.01 (4)	6.25			
N-M	-11 / 0	-17.5 -17.5	0.01 (4)	6.25			
M-L	-9 / 0	-17.5 -17.5	0.01 (4)	10.00			

TOTAL WEIGHT = 2 X 99 = 197 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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 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

CSI: TC=0.10 (J-K:1), BC=0.01 (Q-R:4), WB=0.15 (F-P:1), SSI=0.05 (J-K:1)

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

COMPANION LIVE LOAD FACTOR = 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 622 2294 1656

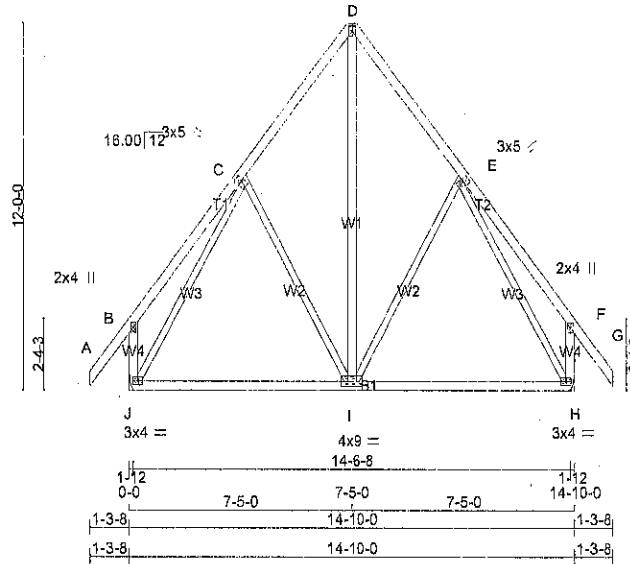
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (F) (INPUT = 0.90)
JSI METAL= 0.08 (F) (INPUT = 1.00)



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TOTAL WEIGHT = 9 X 92 = 831 lb
[M/F]

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

DRY, SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW+1	MT20	3.0	5.0	2.25	0.75
D	TTW+p	MT20	3.0	4.0		
E	TMWW+1	MT20	3.0	5.0	2.25	0.75
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	3.0	4.0		
I	BMWWV-t	MT20	4.0	9.0		
J	BMVW1-t	MT20	3.0	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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT	VERT	JT	HORZ	JT	BRG	JT	BRG
J	752	0	752	0	0	0	0
H	752	0	752	0	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	527	370 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0
H	527	370 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0

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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	MAX	LC1 (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5 0.10 (1)	I-D	0 / 365	0.06	(1)
B-C	0 / 25	-70.5	-70.5 0.16 (1)	I-E	-117 / 2	0.15	(1)
C-D	-381 / 0	-70.5	-70.5 0.12 (1)	C-I	-117 / 2	0.15	(1)
D-E	-381 / 0	-70.5	-70.5 0.12 (1)	J-C	-574 / 0	0.70	(1)
E-F	0 / 25	-70.5	-70.5 0.16 (1)	E-H	-574 / 0	0.70	(1)
F-G	0 / 40	-70.5	-70.5 0.10 (1)				
J-B	-196 / 0	0.0	0.0 0.03 (1)				
H-F	-196 / 0	0.0	0.0 0.03 (1)				
J-I	0 / 270	-17.5	-17.5 0.30 (4)				
I-H	0 / 270	-17.5	-17.5 0.30 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	=	21.0	PSF
DL	=	3.0	PSF
BOT CH. LL	=	0.0	PSF
DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

(56 % OF 23.0 P.S.F. G.S.L. PLUS
5.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.49")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.16 (E-F:1), BC=0.30 (I-J:4), WB=0.70 (E-H:1), SSI=0.11 (H-I:4)

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= 0.74 (C) (INPUT = 0.90)
JSI METAL= 0.28 (E) (INPUT = 1.00)

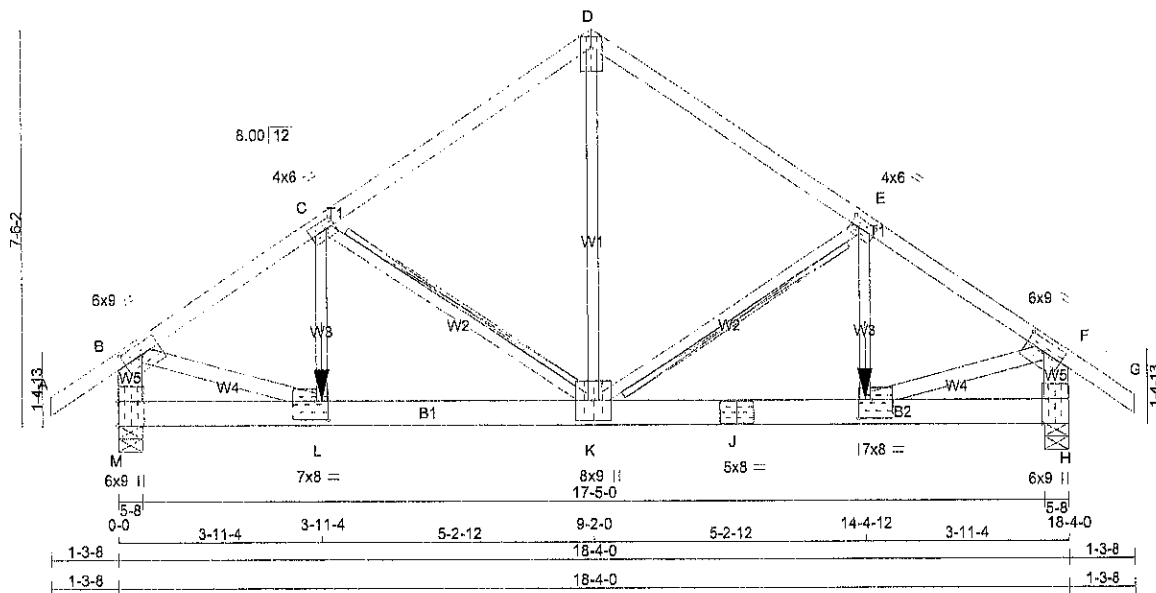


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Alpa Roof Truss, Maple

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ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-a0X?GHbG00aHeSC0G8eHdFpictbx83HsFVh0wYyyVt3
5x8 II
Scale = 1:43.9



TOTAL WEIGHT = 94 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
M - B	2x6	DRY	No.2
H - F	2x6	DRY	No.2
M - J	2x6	DRY	1650F 1.5E
J - H	2x6	DRY	1650F 1.5E

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
B - L	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	6.0	9.0	2.50	4.50
C	TMVW-I	MT20	4.0	6.0	2.00	2.00
D	TTW+P	MT20	5.0	8.0	Edge	
E	TMVW-I	MT20	4.0	6.0	2.00	2.00
F	TMVW-I	MT20	6.0	9.0	2.50	4.50
H	BMV1+I	MT20	6.0	9.0	Edge 0.50	
I	BMVW-I	MT20	7.0	8.0	4.25	2.75
J	BS-I	MT20	5.0	8.0		
K	BMVW+I	MT20	8.0	9.0		
L	BMVW-I	MT20	7.0	8.0	4.25	2.75
M	BMV1+I	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1034.7 lbs FACTORED DOWN AT 14-4-12, AND 1034.7 lbs FACTORED DOWN AT 3-11-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
	VERT	HORZ	DOWN	UP
JT	VERT	HORZ	UPLIFT	IN-SX
M	3496	0	3496	0
H	3496	0	3496	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
M	2461	1679 / 0	0 / 0
H	2461	1679 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-K, C-K
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED	FORCE	VERT. LOAD	MAX	MAX	MEMB.	MAX. FACTORED
	(LBS)	(PLF)	LC1	CS1 (LC)	UNBRAC		(LBS)
FR-TO		FROM TO			LENGTH	FR-TO	
A-B	0 / 27	-70.5	-70.5	0.10 (1)	10.00	K-D	0 / 3166
B-C	-4266 / 0	-70.5	-70.5	0.56 (1)	2.94	K-E	-1189 / 0
C-D	-3149 / 0	-70.5	-70.5	0.54 (1)	3.51	I-E	0 / 915
D-E	-3149 / 0	-70.5	-70.5	0.54 (1)	3.51	C-K	-1189 / 0
E-F	-4266 / 0	-70.5	-70.5	0.56 (1)	2.94	L-C	0 / 915
F-G	0 / 27	-70.5	-70.5	0.10 (1)	10.00	B-L	0 / 3680
M-B	-3478 / 0	0.0	0.0	0.26 (1)	5.66	I-F	0 / 3680
H-F	-3478 / 0	0.0	0.0	0.26 (1)	5.66		
M-L	0 / 0	-17.5	-59.4	0.09 (1)	10.00		
L-K	0 / 3568	-299.7	-299.7	0.74 (1)	10.00		
K-J	0 / 3568	-299.7	-299.7	0.74 (1)	10.00		
J-I	0 / 3568	-299.7	-299.7	0.74 (1)	10.00		
I-H	0 / 0	-59.4	-17.5	0.09 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	MAX+	FACE	DIR.	TYPE
I	14-4-12	-1035	-1035	--	FRONT	VERT	TOTAL
L	3-11-4	-1035	-1035	--	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 = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 31.0	PSF

SPACING = 24.0 IN./C

GIRDER TYPE: CSIdGirder
START DISTANCE = 3-10-8
START SPAN CARRIED = 14-10-0
END DISTANCE = 14-5-8
END SPAN CARRIED = 14-10-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CSIdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 2-0-0
END DISTANCE = 3-10-8
END SPAN CARRIED = 3-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CSIdGirder
START DISTANCE = 14-5-8
START SPAN CARRIED = 3-10-8
END DISTANCE = 18-4-0
END SPAN CARRIED = 2-0-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

*** 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, NBCC 2010

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.61")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.56 (B-C:1), BC=0.74 (K-L:1), WB=0.78 (D-K:1), SSI=0.61 (I-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BAND=1.00
COP=1.00 STAP=1.00 TENS=1.00

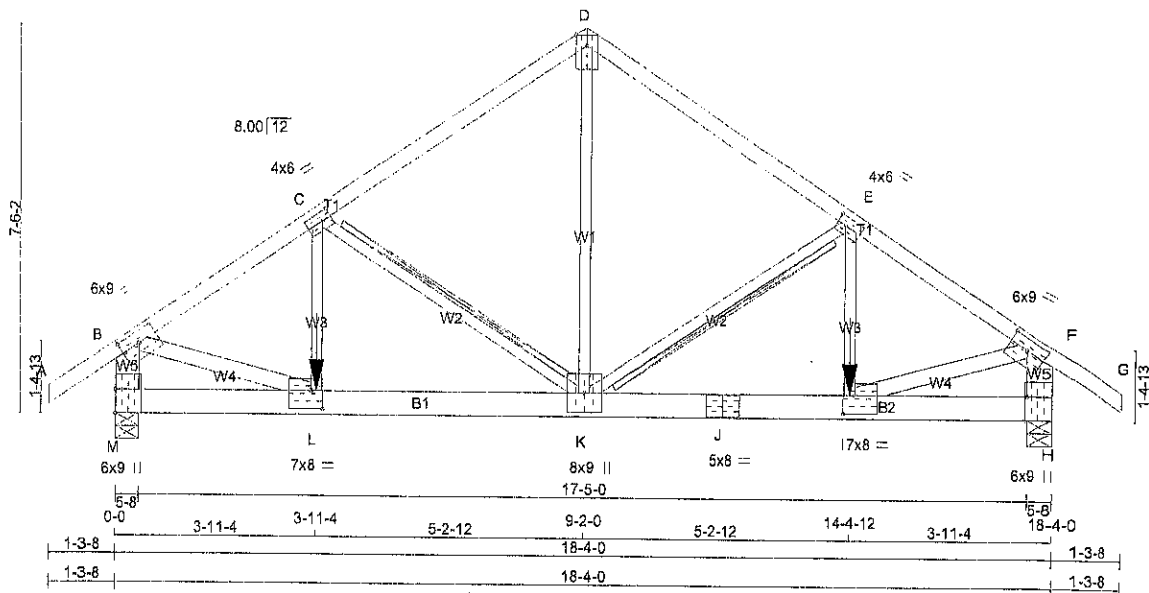
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252516	H03A-Cond1	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-a0X?GHbG00aHeSC0G8eHdFpJ0tbv82wsFVh0wYyyV13
5x8 II
Scale = 1:44.7



TOTAL WEIGHT = 94 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B - TMVW-t	MT20	6.0	9.0	2.50	4.50
C - TMVW-t	MT20	4.0	6.0	2.00	2.00
D - TTW+p	MT20	5.0	8.0	Edge	
E - TMVW-t	MT20	4.0	6.0	2.00	2.00
F - TMVW-t	MT20	6.0	9.0	2.50	4.50
H - BMV1+t	MT20	6.0	9.0	Edge	0.60
I - BMVW-t	MT20	7.0	8.0	4.25	2.75
J - BS-t	MT20	5.0	8.0		
K - BMVW+t	MT20	8.0	9.0		
L - BMVW-t	MT20	7.0	8.0	4.25	2.75
M - BMV1+t	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1034.7 lbs FACTORED DOWN AT 14'-4-12, AND 1034.7 lbs FACTORED DOWN AT 3'-11-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
M	4524	0	4524	0
H	4524	0	4524	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. COMPONENT REACTIONS	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	3185	2170 / 0	0 / 0	0 / 0	0 / 0	1015 / 0	0 / 0
H	3185	2170 / 0	0 / 0	0 / 0	0 / 0	1015 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.61FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-K, C-K
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3"
COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

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 / 27	-70.5	-70.5 0.10 (1)	10.00	K-D	0 / 3515	0.87 (1)
B-C	-4985 / 0	-70.5	-70.5 0.67 (1)	2.61	K-E	-1574 / 0	0.50 (1)
C-D	-3466 / 0	-70.5	-70.5 0.61 (1)	3.31	I-E	0 / 1371	0.34 (1)
D-E	-3466 / 0	-70.5	-70.5 0.61 (1)	3.31	C-K	-1574 / 0	0.50 (1)
E-F	-4985 / 0	-70.5	-70.5 0.67 (1)	2.61	L-C	0 / 1371	0.34 (1)
F-G	0 / 27	-70.5	-70.5 0.10 (1)	10.00	B-L	0 / 4296	0.76 (1)
M-B	-4029 / 0	0.0	0.0 0.29 (1)	5.29	I-F	0 / 4296	0.76 (1)
H-F	-4029 / 0	0.0	0.0 0.29 (1)	5.29			
M-L	0 / 0	-299.7	-299.7 0.21 (1)	10.00			
L-K	0 / 4165	-299.7	-299.7 0.74 (1)	10.00			
K-J	0 / 4165	-299.7	-299.7 0.74 (1)	10.00			
J-I	0 / 4165	-299.7	-299.7 0.74 (1)	10.00			
I-H	0 / 0	-299.7	-299.7 0.21 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	FACE	DIR.	TYPE
I	14'-4-12	-1035	-1035	---	FRONT	VERT
L	3'-11-4	-1035	-1035	---	FRONT	VERT

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	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN./C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 14-10-0
END DISTANCE = 18-4-0
END SPAN CARRIED = 14-10-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
* ADDTL LOADS BASED ON 55 % OF GSL.

*** 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

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

(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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL) = L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.67 (B-C-1), BC=0.74 (K-L-1), WB=0.87 (D-K-1), SSI=0.57 (K-L-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 SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 822 2284 1656

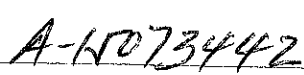
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 3.0 DEGS



A-ND739663

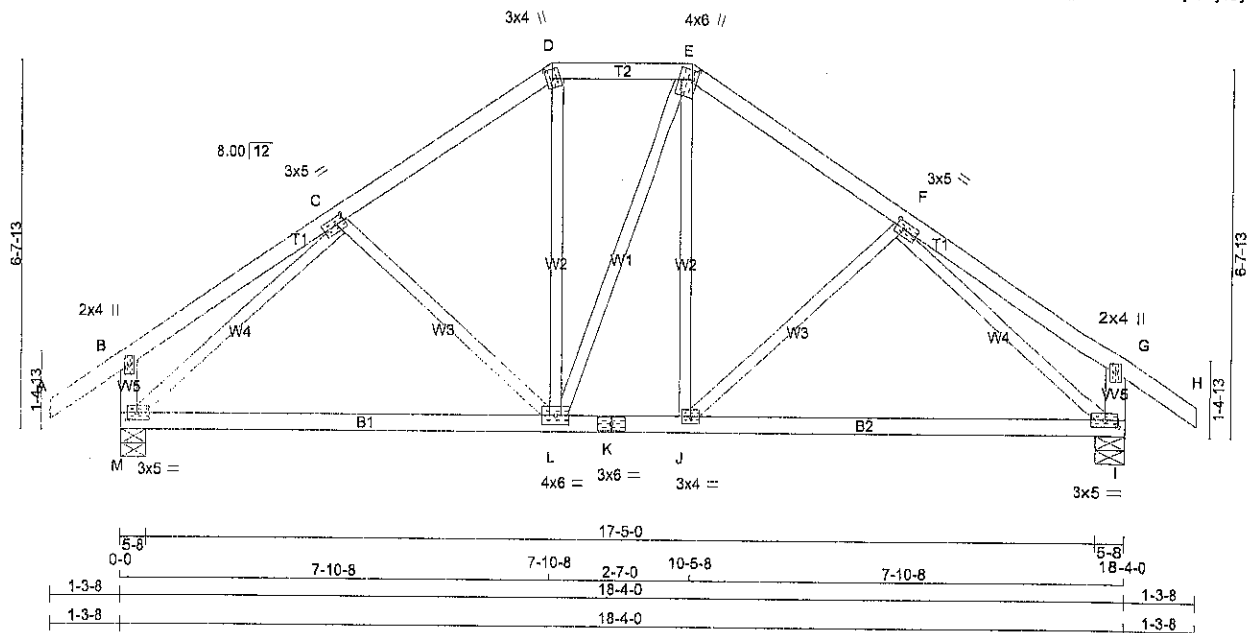
Version 7.620 S Apr 15 2015 MTEK Industries, Inc. Mon Jul 13 08:58:51 2015 Page 1
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4x6 II Scale = 1:44.8



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
252512	H02	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID: gUzNWMPyWh_3Mf_ncsznAqzVRmF-v1kdtHAThzLqpQurtwV2wNj2rVj1Jyv94_gBZ4yyY?o
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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
M - B	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	3.0	5.0	1.50	2.00
D	TTW+m	MT20	3.0	4.0	2.00	1.25
E	TTWW+m	MT20	4.0	6.0	2.00	1.00
F	TMWW-t	MT20	3.0	5.0	1.50	2.00
G	TMV+p	MT20	2.0	4.0		
I	BMVW1-t	MT20	3.0	5.0	1.50	2.25
J	BMWW-t	MT20	3.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	6.0		
M	BMVW1-t	MT20	3.0	5.0	1.50	2.25

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	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
M	903	0	903	0
I	903	0	903	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX	MIN	COMPONENT REACTIONS	PERM	LIVE	WIND	DEAD	SOIL
M	634	442	0	0	0	0	0	192	0
I	634	442	0	0	0	0	0	192	0

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

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)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO						FR-TO			
A-B	0/27	-70.5	-70.5	0.09 (1)	10.00	C-L	-133/10	0.07 (1)	
B-C	0/18	-70.5	-70.5	0.17 (1)	10.00	L-D	0/192	0.04 (1)	
C-D	-719/0	-70.5	-70.5	0.14 (1)	6.25	L-E	0/1	0.00 (1)	
D-E	-586/0	-70.5	-70.5	0.06 (1)	6.25	J-E	0/191	0.04 (1)	
E-F	-719/0	-70.5	-70.5	0.14 (1)	6.25	J-F	-133/10	0.07 (1)	
F-G	0/18	-70.5	-70.5	0.17 (1)	10.00	M-C	-936/0	0.44 (1)	
G-H	0/27	-70.5	-70.5	0.09 (1)	10.00	F-I	-936/0	0.44 (1)	
M-B	-203/0	0.0	0.0	0.02 (1)	7.81				
I-G	-203/0	0.0	0.0	0.02 (1)	7.81				
M-L	0/681	-17.5	-17.5	0.28 (4)	10.00				
L-K	0/586	-17.5	-17.5	0.28 (4)	10.00				
K-J	0/586	-17.5	-17.5	0.28 (4)	10.00				
J-I	0/681	-17.5	-17.5	0.27 (4)	10.00				

TOTAL WEIGHT = 83 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN./C/C

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

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

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

(56 % OF 23.0 P.S.F. G.S.L. PLUS
6.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.61")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.17 (F-G:1), BC=0.28 (J-L:4), WB=0.44 (C-M:1), SSI=0.11 (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

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.

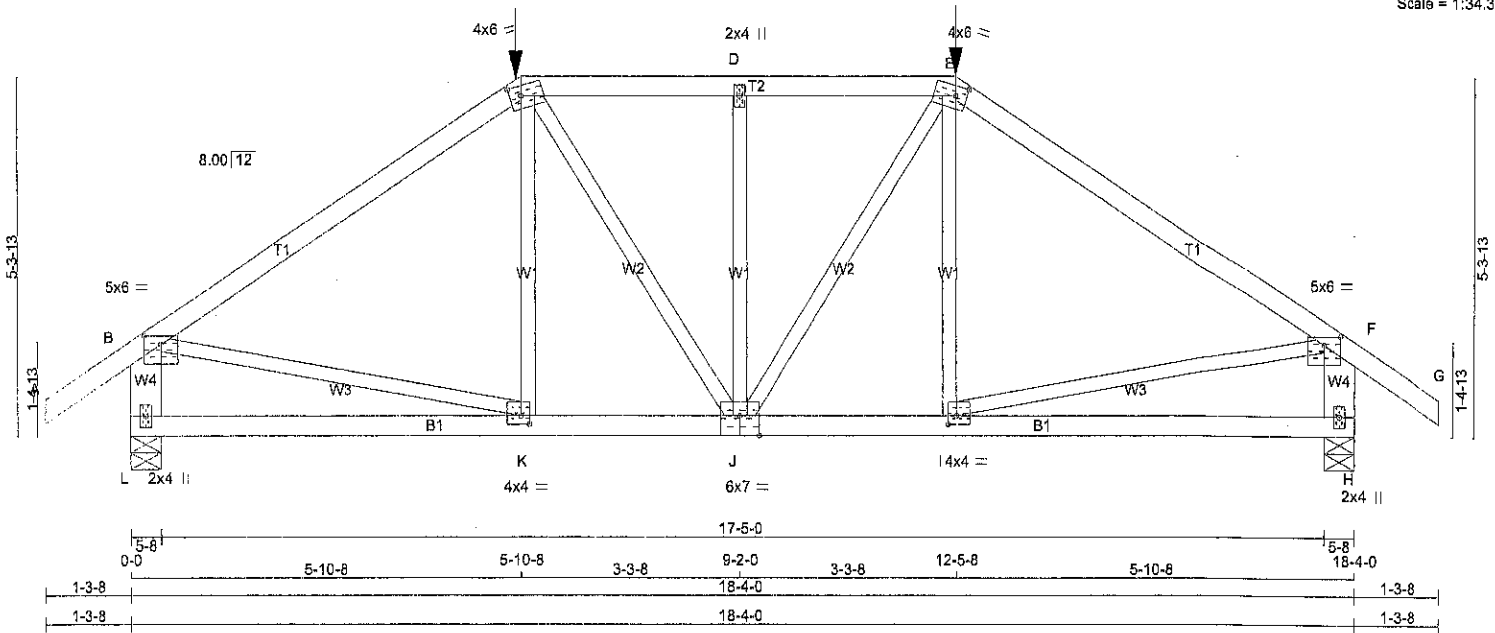
JSI GRIP= 0.88 (E) (INPUT = 0.90)
JSI METAL= 0.42 (K) (INPUT = 1.00)



A-15073441

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 M/Tek Industries, Inc. Mon Jul 13 08:58:50 2015 Page 1
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Scale = 1:34.3



TOTAL WEIGHT = 82 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	4.0	6.0	1.75	2.00
D	TMVW-w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.00
F	TMVW-p	MT20	5.0	6.0	1.50	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	4.0	1.50	1.50
J	BSWWW-l	MT20	6.0	7.0	Edge	3.50
K	BMVW-t	MT20	4.0	4.0	1.50	1.50
L	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 301.8 lbs FACTORED DOWN AT 12-5-8, AND 301.8 lbs FACTORED DOWN AT 6-10-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)
1)

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

BEARINGS

	FACTORED GROSS REACTION	FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UP/LIFT
L	1585	0	1585	0
H	1585	0	1585	0

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX/MIN SNOW	MAX/MIN LIVE	MAX/MIN PERM. LIVE	WIND	DEAD	SOIL
L	1117	766 / 0	0 / 0	0 / 0	0 / 0	361 / 0	0 / 0
H	1117	766 / 0	0 / 0	0 / 0	0 / 0	361 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.38FT.
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 LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO					FR-TO		
A-B	0 / 27	-70.5	-70.5 0.10 (1)	10.00	K-C	-37 / 163	0.06 (4)
B-C	-1694 / 0	-70.5	-70.5 0.62 (1)	4.38	C-J	0 / 341	0.08 (1)
C-D	-1594 / 0	-138.7	-138.7 0.29 (1)	4.86	J-D	-544 / 0	0.24 (1)
D-E	-1594 / 0	-138.7	-138.7 0.29 (1)	4.86	J-E	0 / 341	0.08 (1)
E-F	-1694 / 0	-70.5	-70.5 0.62 (1)	4.38	I-E	-37 / 163	0.06 (4)
F-G	0 / 27	-70.5	-70.5 0.10 (1)	10.00	B-K	0 / 1430	0.35 (1)
L-B	-1500 / 0	0.0	0.0 0.11 (1)	7.81	I-F	0 / 1430	0.35 (1)
H-F	-1500 / 0	0.0	0.0 0.11 (1)	7.81			
L-K	0 / 0	-34.5	-34.5 0.29 (4)	10.00			
K-J	0 / 1407	-34.5	-34.5 0.41 (4)	10.00			
J-I	0 / 1407	-34.5	-34.5 0.41 (4)	10.00			
I-H	0 / 0	-34.5	-34.5 0.29 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	5-10-8	-302	-302	---	FRONT	VERT	TOTAL
E	12-5-8	-302	-302	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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 = 5-10-8
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, NBCC 2010

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

(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 (0.61")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

CSI: TC=0.62 (B-C:1), BC=0.41 (J-K:4), WB=0.35 (F-I:1), SSI=0.24 (C-D: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 SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 818 354 1687 822 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.53 (K) (INPUT = 1.00)



A-15073440

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 18 gauge

FINISH: G90 galvanized

DESIGN:

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

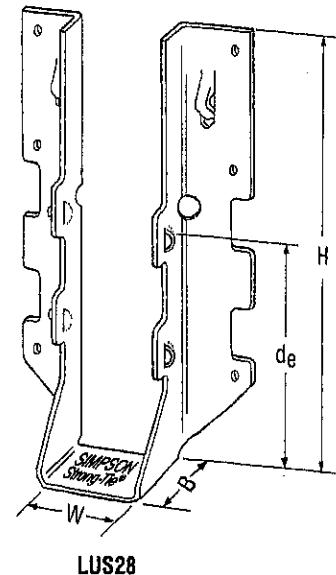
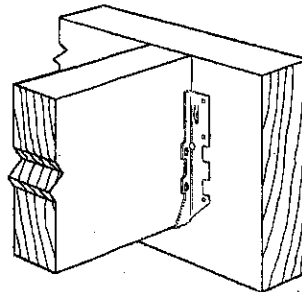
INSTALLATION:

- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 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

OPTIONS:

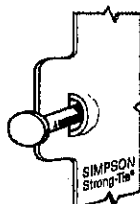
- These hangers cannot be modified.

Typical LUS
Installation



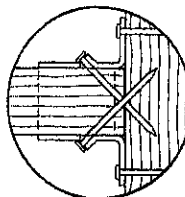
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D. Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1¾	1½	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	4-16d	2-16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3½	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	6-10d	4-10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	6-16d	4-16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¾	2	3¼	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¾	3¾	8-10d	4-10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	8-16d	6-16d	2580	4500	2320	3195
LUS210-3	18	4¾	8¾	2	5¼	8-16d	6-16d	2580	3345	2320	2375

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

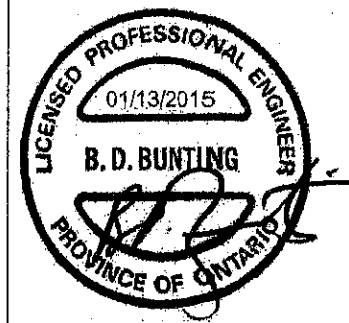


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580

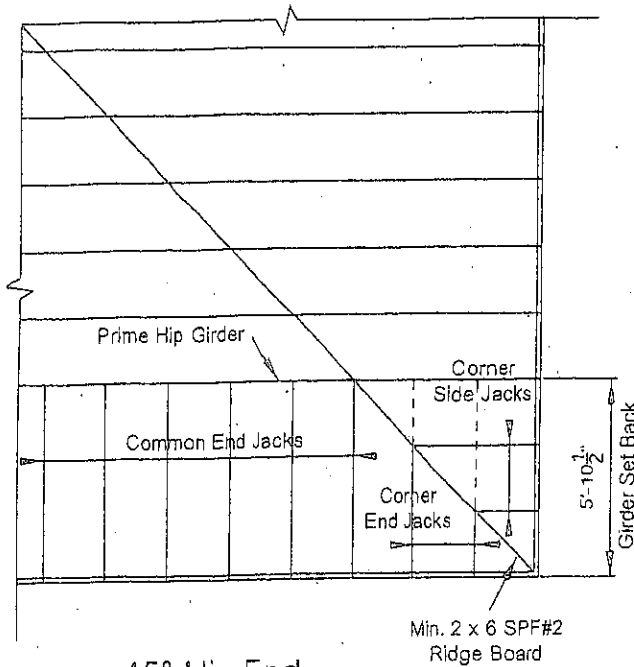


Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

STRACON ENGINEERING INC.



45° Hip End

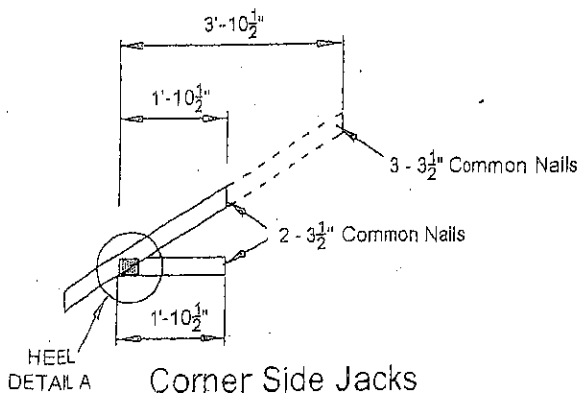
LUMBER SPECIFICATION

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

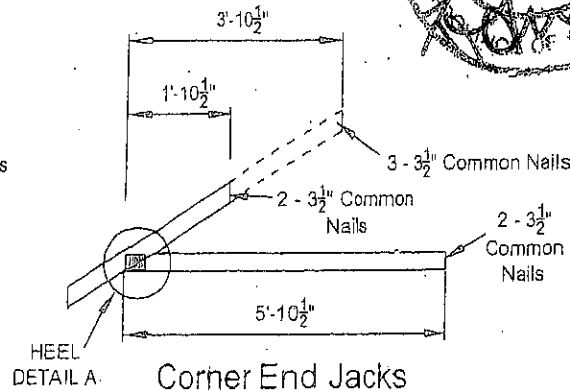
DESIGN LOAD

TOP CHORD SNOW LOAD : 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.

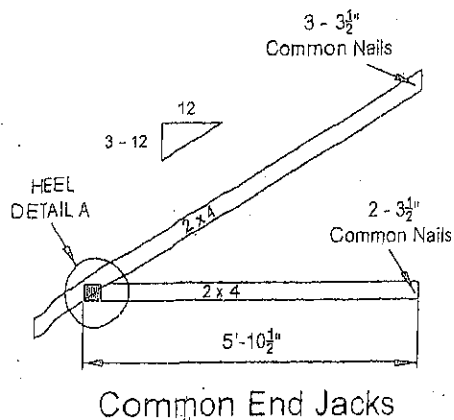
TOTAL LOAD : 50.5 P.S.F



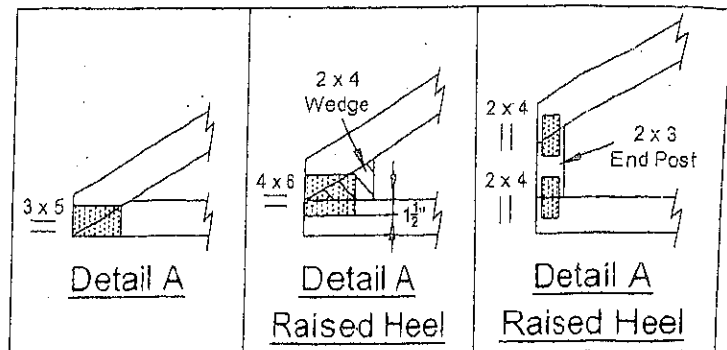
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008