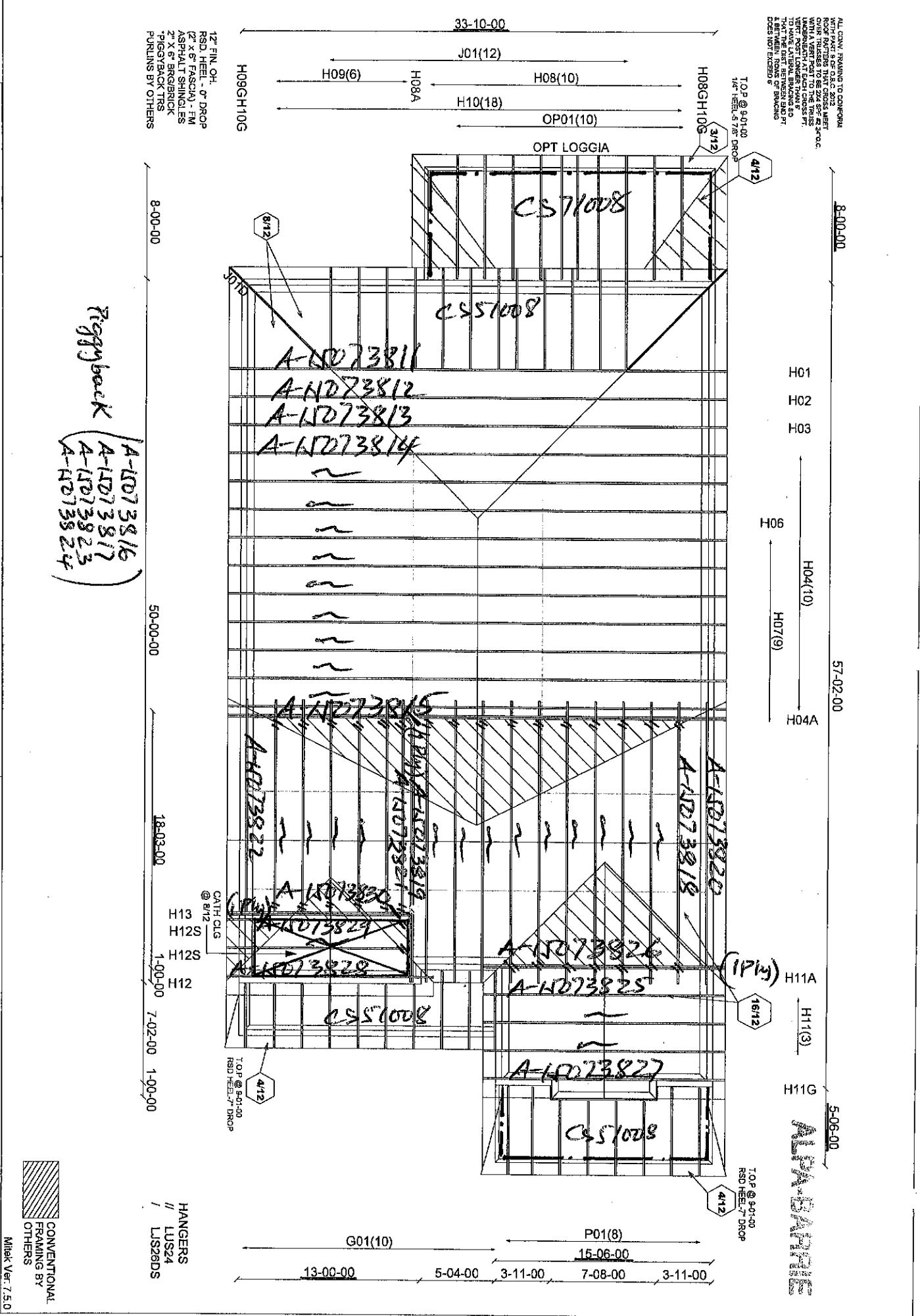




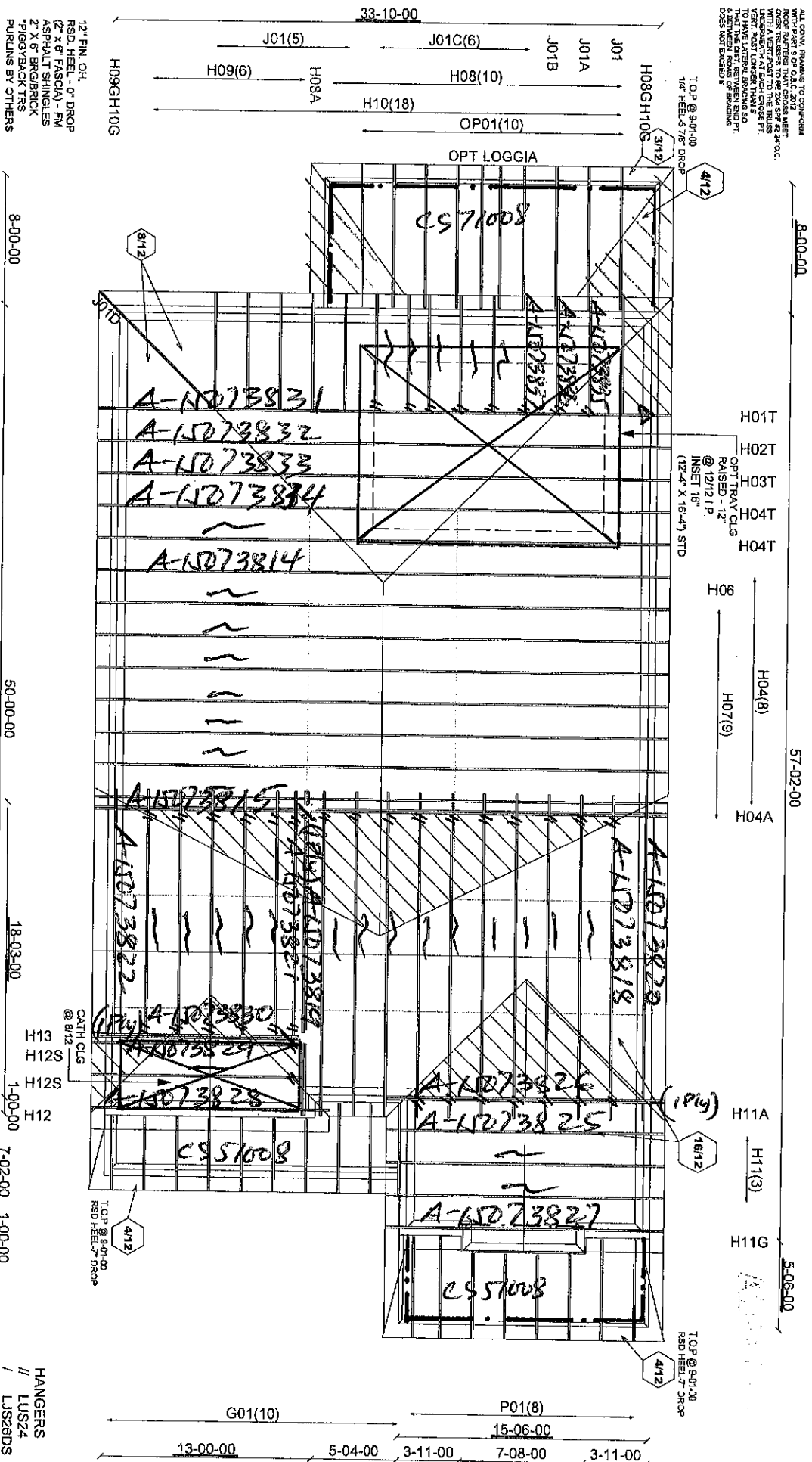


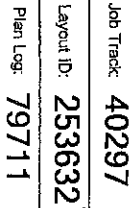
CONVENTIONAL
FRAMING BY
OTHERS

HANGERS
// LUS24
/ LJS26DS
A7C2C

Pyggyback

A-15073816
A-15073817
A-15073823
A-15073824





Builder / Location:
GOLD PARK / KLEINBURG

Project: **HUNTINGTON & NASHVILLE**

Date: 4/30/2015	Designer: chanye
------------------------	-------------------------

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.

Model / Elevation:	
42-3	/ B

STD OR OPT 2ND FLR.

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

Piggly back

A-15073844
 A-15073845
 A-15073846
 A-15073816
 A-15073817

8-00-00

50-00-00

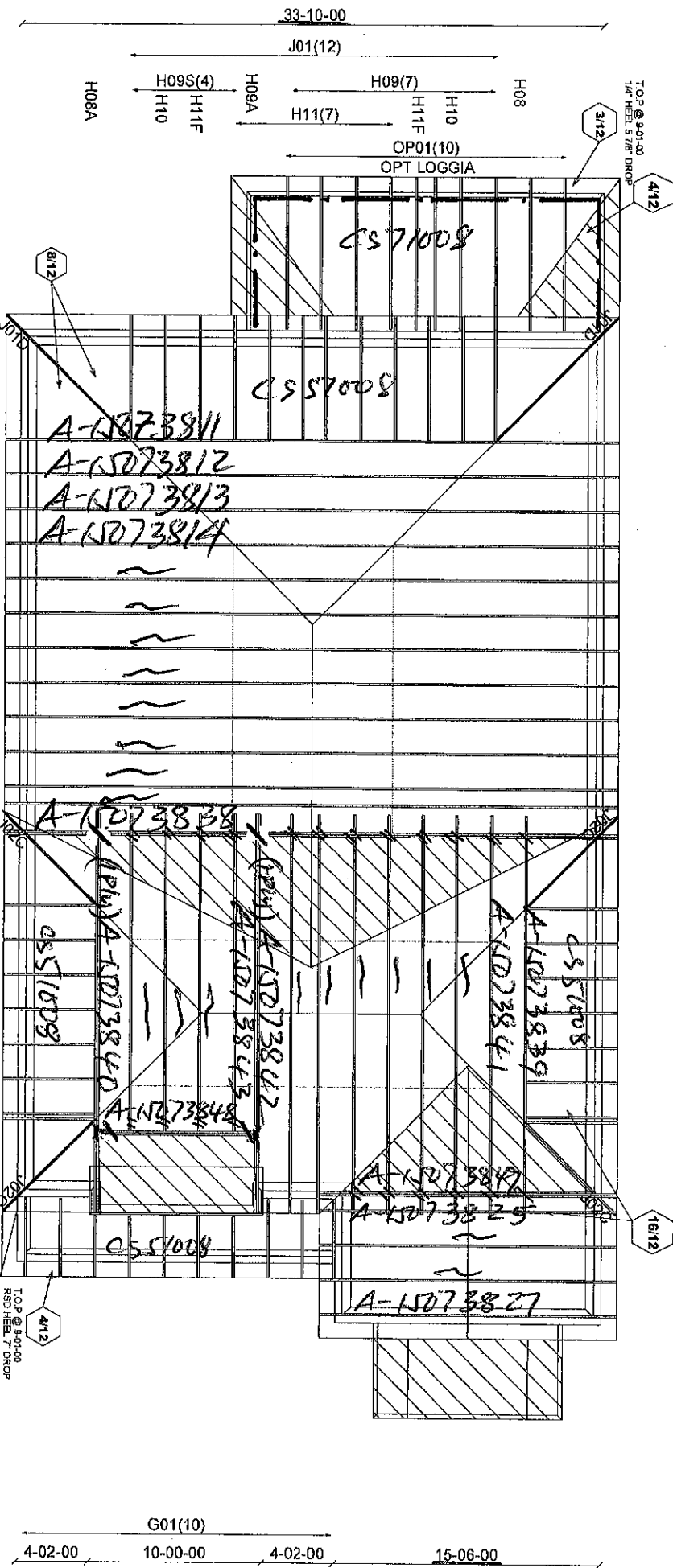
JO2(8)
21-03-0

#13 (1 P14)

1-800-333-6277

HANGERS
// LUS24
/ LJS26DS

CONVENTIONAL
FRAMING BY
OTHERS



ALL CORN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SIPS @ 24" O.C. WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN S TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. A BETWEEN ROOFS OF BRACING DOES NOT EXCEED 5'

8-00-00

H01

H02

H03

H06

H04(9)

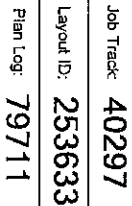
H07(8)

H04A

57-02-00

5-06-00	J02(8)
AP	

100



Builder / Location:
GOLD PARK / KLEINBURG

Project: **HUNTINGTON & NASHVILLE**

Date: 4/30/2015	Designer: cheryl
------------------------	-------------------------

Model / Elevation:
42-3

/ B OPT TRAY

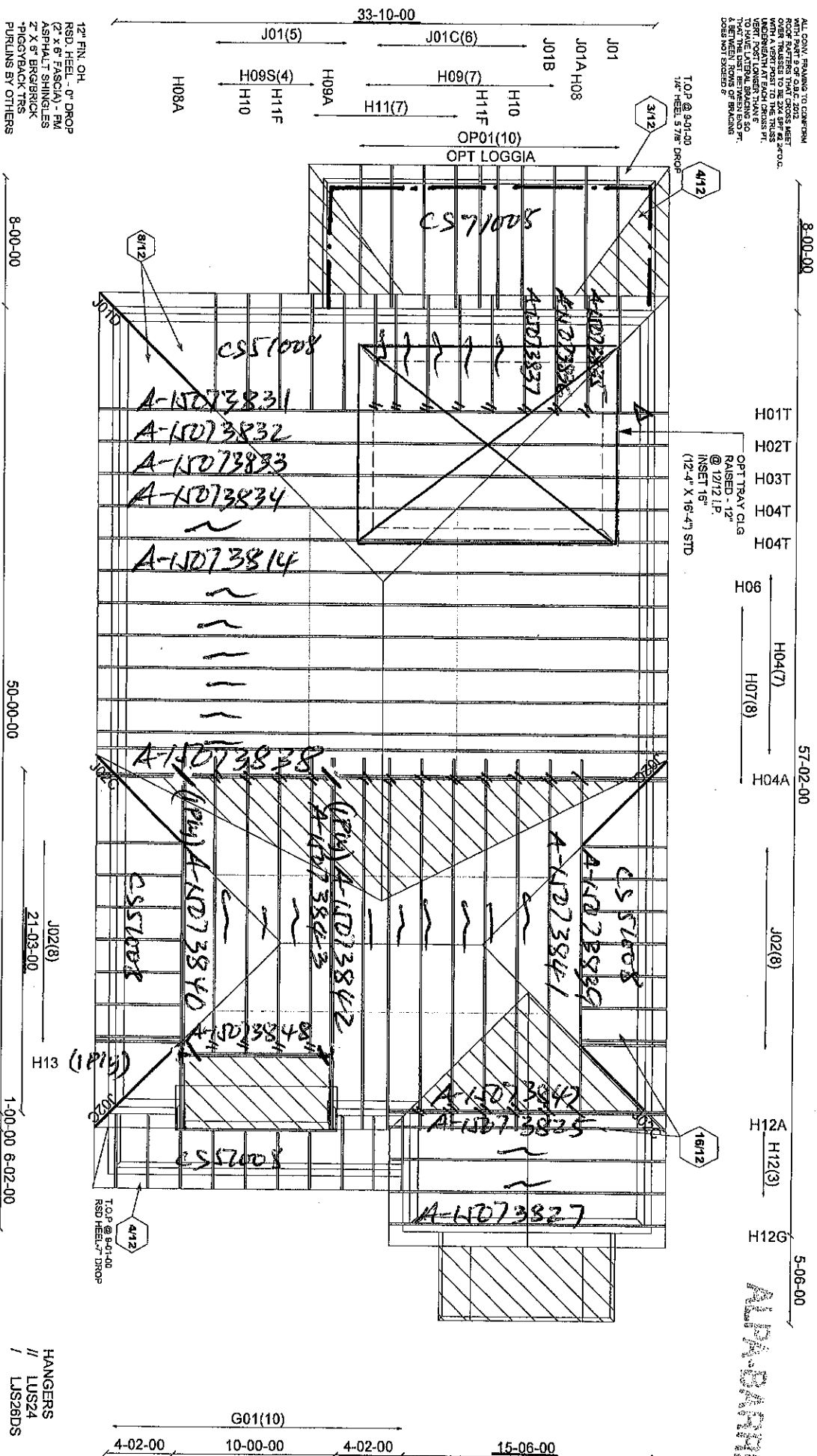
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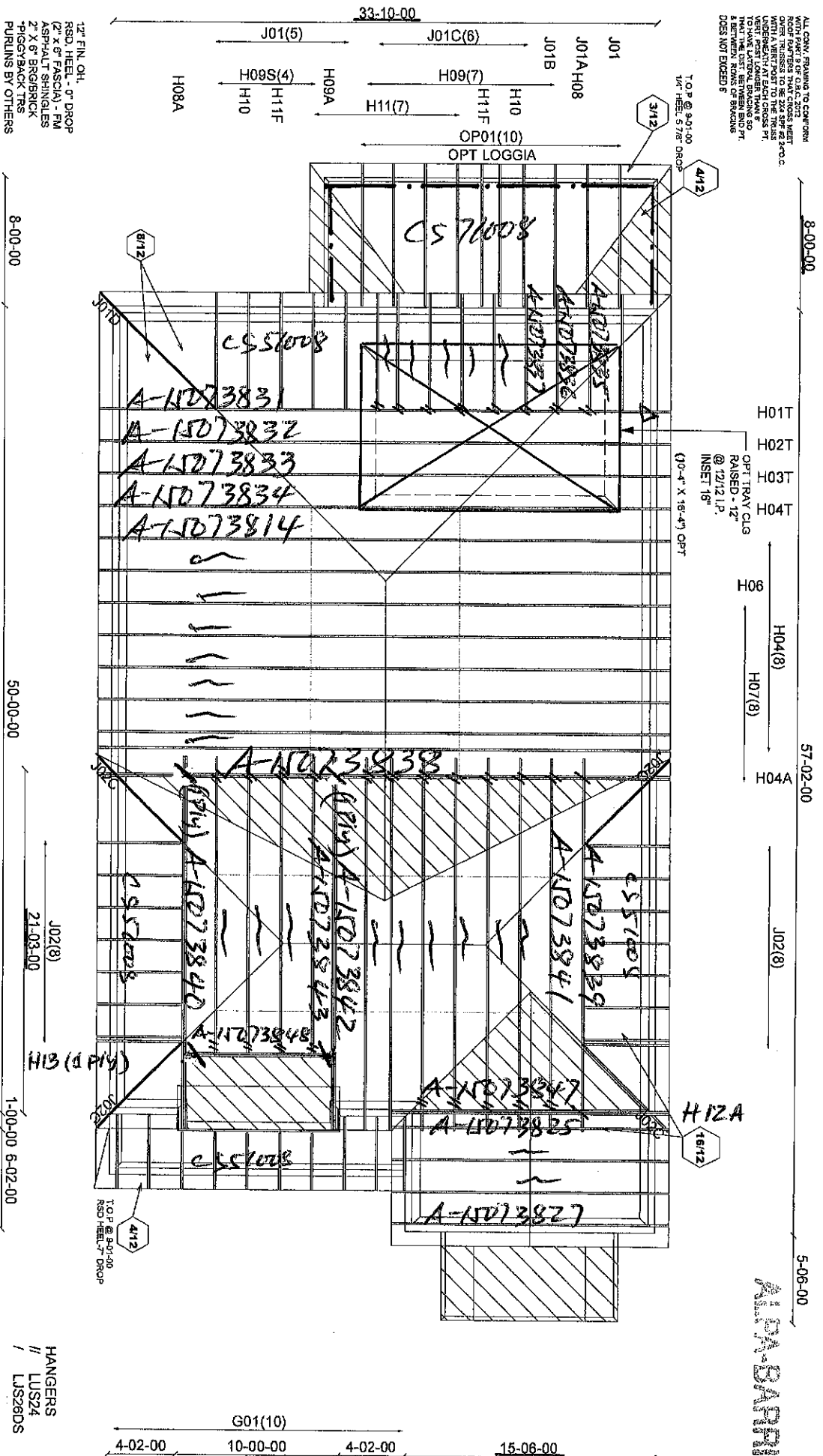
CONVENTIONAL
FRAMING BY
OTHERS

HANGERS
// LUS24
/ LJS26DS
ATC26

12" FIN. OH.
RSD. HEEL - 0" DROP
(2' x 6" FASCIA) - FM
ASPHALT SHINGLES
2' X 6" BRG/BRICK
*PIGGYBACK TRS
PURLINS BY OTHERS



ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF RAFTERS SHALL CROSS MEET OVER TRUSSES TO BE 2X4 SP@ 24" O.C. WITH A VERT. POST TO THE TRUSS UNDERMATH AT EACH CROSS PT. WERT. POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



CONVENTIONAL
FRAMING BY
OTHERS

HANGERS
// LUS24
/ LJS26DS
Δ TC226

Builder / Location: GOLD PARK / KLEINBURG	
Date: 4/30/2015	Designer: chenle
Project: HUNTINGTON & NASHVILLE	

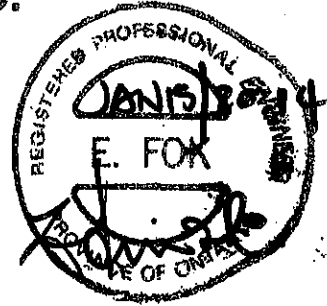
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

Model / Elevation:
42-3 / B OPT 2ND W/TRAY

Mike Ver. 7.5.0

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.

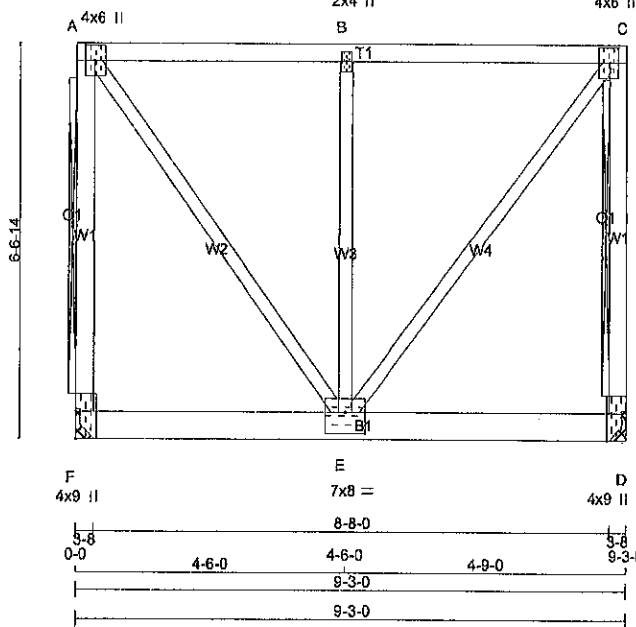
January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H13	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y7fa2EXF7DRQXsq4zMEz1-dgCHTq2KNFetA7EkHskWIDNqnMDnrEIV7c0McQyxBg1
Scale = 1:38.6



TOTAL WEIGHT = 67 lb
[M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
A	TMVW+p	MT20	4.0	8.0	3.00 1.75
B	TMVW+w	MT20	2.0	4.0	
C	TMVW+p	MT20	4.0	8.0	3.00 1.75
D	BMV1-H	MT20	4.0	9.0	Edge 0.50
E	BMVWW-I	MT20	7.0	8.0	4.25 4.00
F	BMV1-H	MT20	4.0	9.0	5.50

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

NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 8 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
F		2195	0	2195	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8	
D		2195	0	2195	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1546	1047 / 0	0 / 0	0 / 0	0 / 0	498 / 0	0 / 0
D	1546	1047 / 0	0 / 0	0 / 0	0 / 0	498 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.65FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT A-F, C-D
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	LENGTH	FR-TO			
F-A	-1671 / 0	0.0	0.0 0.37 (1)	7.81	A-E	0 / 1696	0.42 (1)
A-B	-996 / 0	-115.9	-115.9 0.45 (1)	5.55	E-B	-567 / 0	0.44 (1)
B-C	-996 / 0	-115.9	-115.9 0.45 (1)	5.55	E-C	0 / 1638	0.41 (1)
D-C	-1517 / 0	0.0	0.0 0.38 (1)	7.81			
F-E	0 / 0	-358.6	-358.6 0.61 (1)	10.00			
E-D	0 / 0	-358.6	-358.6 0.61 (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

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 0-0
END SETBACK = 4-7-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CSItdGilder
START DISTANCE = 0-0
START SPAN CARRIED = 17-0-0
END DISTANCE = 9-0-0
END SPAN CARRIED = 17-0-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL 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 086-08
- 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 (0.31")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.45 (B-C:1), BC=0.61 (D-E:1),
WB=0.44 (B-E:1), SSI=0.68 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 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

A-15073848

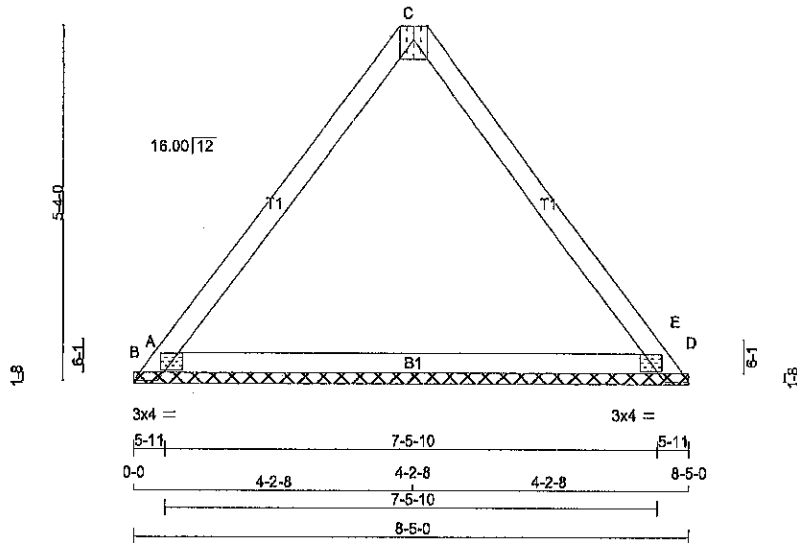


Version 7.620 S Apr 15 2015 M/Tek Industries, Inc. Fri Jul 17 11:13:01 2015 Page 1
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4x9 II Scale = 1:75.1



A N° 1071





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.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TMTM+P	MT20	5.0	6.0	Edge
D	TMB1-I	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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
A		-308	0	0	0	-308	8-5-0 (7-5-10) J-B		
E		-308	0	0	0	-308	8-5-0 (7-5-10) J-B		
B		667	0	667	0	0	8-5-0 (7-5-10) J-B		
D		667	0	667	0	0	8-5-0 (7-5-10) J-B		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): A, E

PROVIDE ANCHORAGE AT BEARING JOINT A FOR 308 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 308 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

		1ST CASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A		-209		0/-185	0/0	0/0	0/0	0/-24	0/0
E		-209		0/-185	0/0	0/0	0/0	0/-24	0/0
B		463		357/0	0/0	0/0	0/0	106/0	0/0
D		463		357/0	0/0	0/0	0/0	106/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, E, 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: (4)

		CHORDS		FACTORED		WEBS		FACTORED	
MEMB.		MAX. FORCE		VERT. LOAD	LC1 MAX	MAX	MEMB.	MAX. FORCE	MAX
		(LBS)		(PLF)	CS1 (LC)	UNBRAC		(LBS)	CS1 (LC)
FR-TO				FROM	TO	LENGTH	FR-TO		
A-B		0/228		-88.0	-88.0	0.19 (1)	10.00		
B-C		-150/0		-70.5	-70.5	0.16 (1)	6.25		
C-D		-150/0		-70.5	-70.5	0.16 (1)	6.25		
D-E		0/228		-88.0	-88.0	0.19 (1)	10.00		
B-D		0/74		-17.5	-17.5	0.29 (4)	10.00		

TOTAL WEIGHT = 2 X 24 = 48 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, CBC 2012, ABC 2014
- CSA 088-09
- 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

CSI: TC=0.19 (D-E:1), BC=0.29 (B-D:4),
WB=0.00 (n/a:0), 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) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1866

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (D) (INPUT = 0.90)
JSI METAL= 0.15 (D) (INPUT = 1.00)

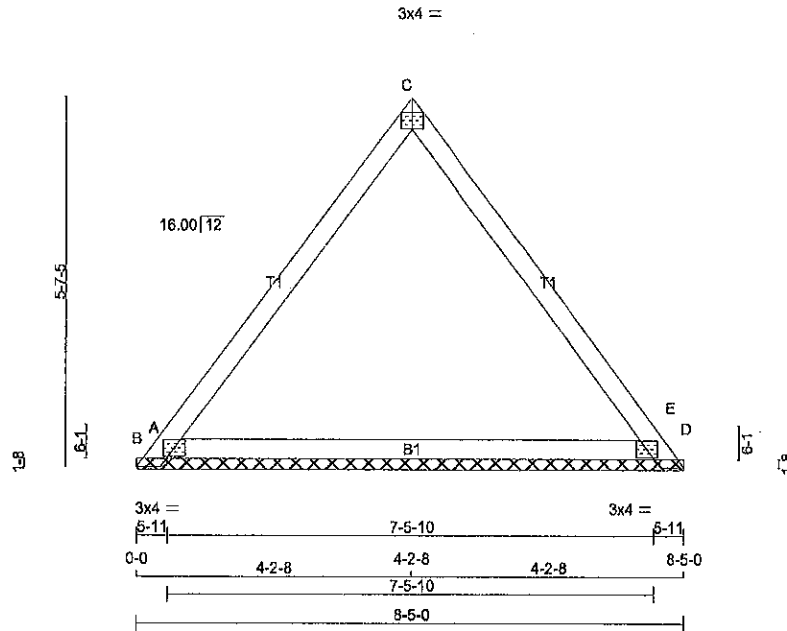


A-N073846

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H11	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:35.2



TOTAL WEIGHT = 6 X 24 = 147 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
B - D	2x4	DRY	No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-	MT20	3.0	4.0		
C	TT-p	MT20	3.0	4.0	3.25	Edge
D	TMB1-	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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD BRG
A	-308	0	0	0	-308	8-5-0 (7-5-10) 1-8	
E	-308	0	0	0	-308	8-5-0 (7-5-10) 1-8	
B	667	0	667	0	0	8-5-0 (7-5-10) 1-8	
D	667	0	667	0	0	8-5-0 (7-5-10) 1-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): A, E

PROVIDE ANCHORAGE AT BEARING JOINT A FOR 308 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT E FOR 308 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS
			SNOW LIVE PERM LIVE WIND DEAD SOIL
A	-209	0/-185	0/0 0/0 0/0 0/0 0/0 0/0
E	-209	0/-185	0/0 0/0 0/0 0/0 0/0 0/0
B	463	357/0	0/0 0/0 0/0 106/0 0/0 0/0
D	463	357/0	0/0 0/0 0/0 106/0 0/0 0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, E, 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: (4)

MEMB.	CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
		FORCE (LBS)	VERT. LOAD LC1 MAX (PLF) CSI (LC)		FORCE (LBS) CSI (LC)
FR-TO			FROM TO		LENGTH FR-TO
A-B	0/228	-88.0	-88.0 0.19 (1)	10.00	
B-C	-150/0	-70.5	-70.5 0.16 (1)	6.25	
C-D	-150/0	-70.5	-70.5 0.16 (1)	6.25	
D-E	0/228	-88.0	-88.0 0.19 (1)	10.00	
B-D	0/74	-17.5	-17.5 0.29 (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, NBC 2010

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

(58 % 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=0.19 (D-E:1), BC=0.29 (B-D:4),
WB=0.00 (n/a:0), SS=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)
MT20	618	354	1667 822 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (D) (INPUT = 0.90)
JSI METAL = 0.15 (D) (INPUT = 1.00)

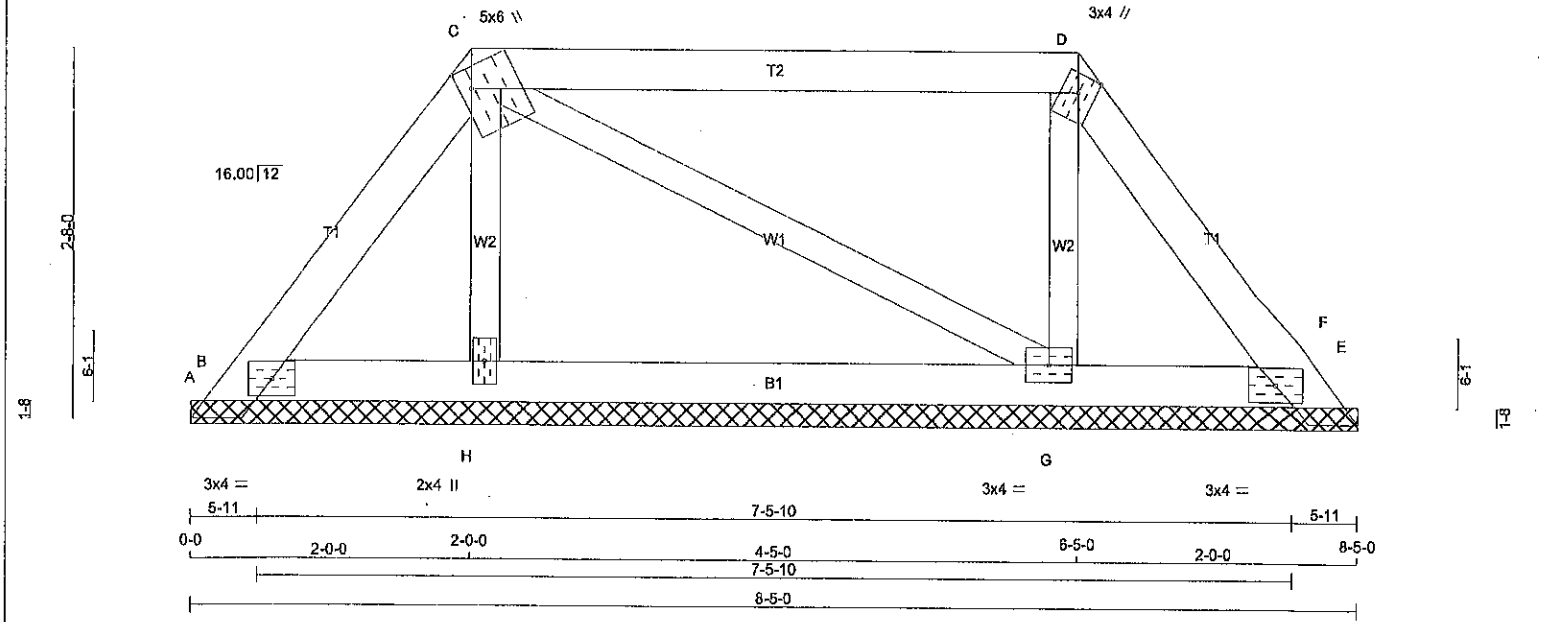


A-10073845

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H10	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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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
B - E	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 TMB1-I	MT20	3.0	4.0		
C TTWW+m	MT20	5.0	6.0	1.75	1.00
D TTW+m	MT20	3.0	4.0		Edge
E TMB1-I	MT20	3.0	4.0		
G BMWW1-I	MT20	3.0	4.0		
H BMW1+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 IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
A	-36	0	0	0	-36 8-5-0 (7-5-10) 1-8	
F	-37	0	0	0	-37 8-5-0 (7-5-10) 1-8	
B	199	0	199	0	8-5-0 (7-5-10) 1-8	
E	186	0	186	0	8-5-0 (7-5-10) 1-8	
H	191	0	191	0	8-5-0 (7-5-10) 1-8	
G	216	0	216	0	8-5-0 (7-5-10) 1-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): A, F

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

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	-24	0/-23	0/0	0/0	0/0	0/-1	0/0
F	-25	0/-24	0/0	0/0	0/0	0/-1	0/0
B	136	116/0	0/0	0/0	0/0	20/0	0/0
E	127	109/0	0/0	0/0	0/0	19/0	0/0
H	137	76/0	0/0	0/0	0/0	82/0	0/0
G	154	90/0	0/0	0/0	0/0	84/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, F, B, E, H, 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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
FR-TO		FROM TO		FR-TO			
A-B	0/36	-88.0	-88.0 0.03 (1)	10.00	H-C	-126/0	0.02 (1)
B-C	-90/0	-70.5	-70.5 0.02 (1)	8.25	C-G	-12/0	0.00 (1)
C-D	-28/0	-70.5	-70.5 0.23 (1)	6.25	G-D	-146/0	0.02 (1)
D-E	-73/0	-70.5	-70.5 0.03 (1)	8.25			
E-F	0/37	-88.0	-88.0 0.03 (1)	10.00			
B-H	0/46	-17.5	-17.5 0.05 (4)	10.00			
H-G	0/40	-17.5	-17.5 0.05 (4)	10.00			
G-E	0/38	-17.5	-17.5 0.05 (4)	10.00			

TOTAL WEIGHT = 2 X 28 = 56 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

(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=0.23 (C-D:1), BC=0.05 (B-H:4),
WB=0.02 (D-G:1), SS=0.12 (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 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (D) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

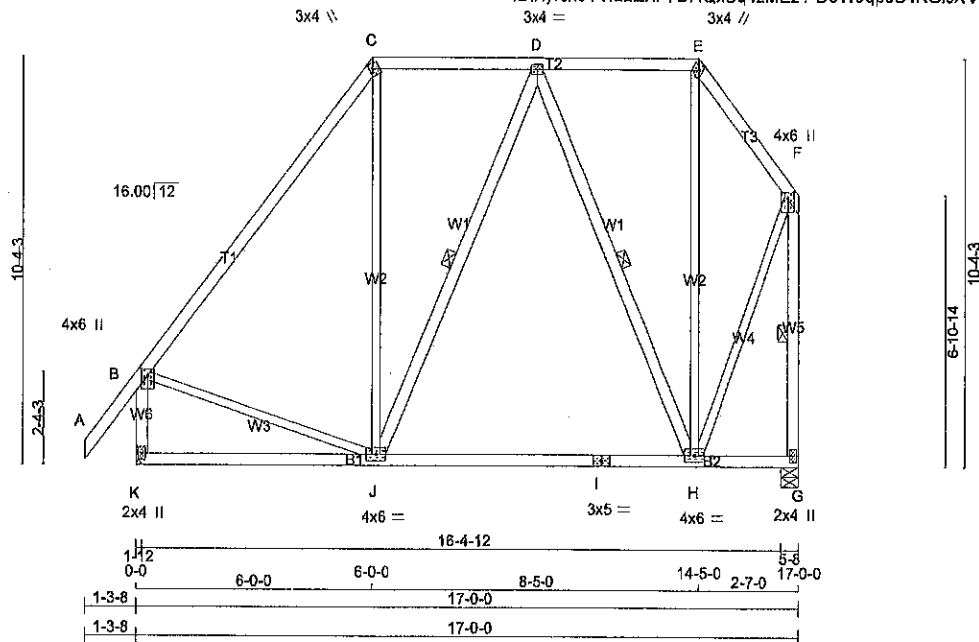


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H09S	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 4 X 109 = 436 lb
[M/F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW+m	MT20	3.0	4.0	1.75	1.00
D	TMVW-l	MT20	3.0	4.0		
E	TTW+m	MT20	3.0	4.0	1.75	1.00
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMVW-l	MT20	4.0	6.0		
I	BS-l	MT20	3.0	6.0		
J	BMVW-l	MT20	4.0	6.0		
K	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
K	872	0	872	0	0	HANGER BY OTHERS			
G	786	0	786	0	0	MIN. SEAT SIZE: 1-8	5-8	1-8	

UNFACTORED REACTIONS

JT	1ST LOASE	MAX / MIN.	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	814	418 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0
G	557	357 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	200 / 0	0 / 0

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-J, D-H, F-G.
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 (PL)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5 0.08 (1)	10.00	J-C	0 / 107	0.04 (4)	
B-C	-527 / 0	-70.5 -70.5 0.28 (1)	6.25	J-D	-44 / 17	0.03 (1)	
C-D	-315 / 0	-78.0 -78.0 0.18 (1)	6.25	D-H	-390 / 0	0.25 (1)	
D-E	-185 / 0	-78.0 -78.0 0.18 (1)	6.25	H-E	0 / 60	0.02 (4)	
E-F	-311 / 0	-70.5 -70.5 0.06 (1)	6.25	B-J	0 / 331	0.07 (1)	
K-B	-934 / 0	0.0 0.0 0.11 (1)	7.81	H-F	0 / 485	0.11 (1)	
G-F	-789 / 0	0.0 0.0 0.16 (1)	6.25				
K-J	0 / 0	-17.5 -17.5 0.23 (4)	10.00				
J-I	0 / 333	-17.5 -17.5 0.25 (4)	10.00				
I-H	0 / 333	-17.5 -17.5 0.25 (4)	10.00				
H-G	0 / 0	-17.5 -17.5 0.18 (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. G/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, CBC 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 (0.67")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.67")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.28 (B-C:1), BC=0.25 (H-J:4), WB=0.25 (D-H:1), SSI=0.16 (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 = 0.60

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1887 822	2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (J) (INPUT = 0.60)
JSI METAL= 0.20 (I) (INPUT = 1.00)

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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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.91FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-N, F-N, G-M
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				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.13 (1)	10.00	P-C	-294 / 0	0.22 (1)
B-C	-1069 / 0	-70.5	-70.5	0.16 (1)	5.99	C-O	0 / 85	0.02 (4)
C-D	-1069 / 0	-70.5	-70.5	0.16 (1)	5.99	D-Q	0 / 42	0.01 (1)
D-E	-875 / 0	-78.0	-78.0	0.30 (1)	6.08	D-N	0 / 650	0.13 (4)
E-F	-875 / 0	-78.0	-78.0	0.30 (1)	6.09	N-E	-384 / 0	0.33 (1)
F-G	-1690 / 0	-70.5	-70.5	0.32 (1)	4.80	N-F	-316 / 0	0.28 (4)
G-H	-2262 / 0	-198.1	-198.1	0.52 (1)	3.91	M-F	0 / 1199	0.44 (4)
H-I	0 / 40	-70.5	-70.5	0.13 (1)	10.00	M-G	-1180 / 0	0.50 (4)
Q-B	-1361 / 0	0.0	0.0	0.13 (1)	7.81	K-G	0 / 1521	0.59 (4)
J-H	-2997 / 0	0.0	0.0	0.30 (1)	5.97	B-P	0 / 708	0.20 (1)
						K-H	0 / 1580	0.48 (4)
Q-P	0 / 0	-17.5	-17.5	0.03 (4)	10.00			
P-O	0 / 616	-17.5	-17.5	0.10 (1)	10.00			
O-N	0 / 622	-17.5	-17.5	0.14 (4)	10.00			
N-M	0 / 931	-17.5	-17.5	0.20 (4)	10.00			
M-L	0 / 1379	-17.5	-17.5	0.44 (4)	10.00			
L-K	0 / 1379	-17.5	-17.5	0.44 (4)	10.00			
K-J	0 / 0	-49.2	-49.2	0.23 (4)	10.00			

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H09A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

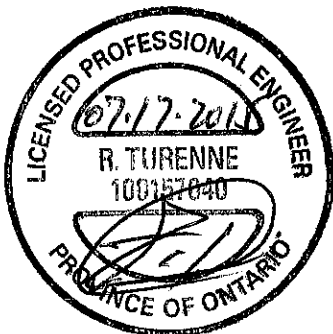
Version 7.820 S Apr 15 2015 MITek Industries, Inc. Fri Jul 17 11:12:58 2015 Page 2
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NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.89 (J) (INPUT = 0.80)
JSI METAL= 0.58 (H) (INPUT = 1.00)

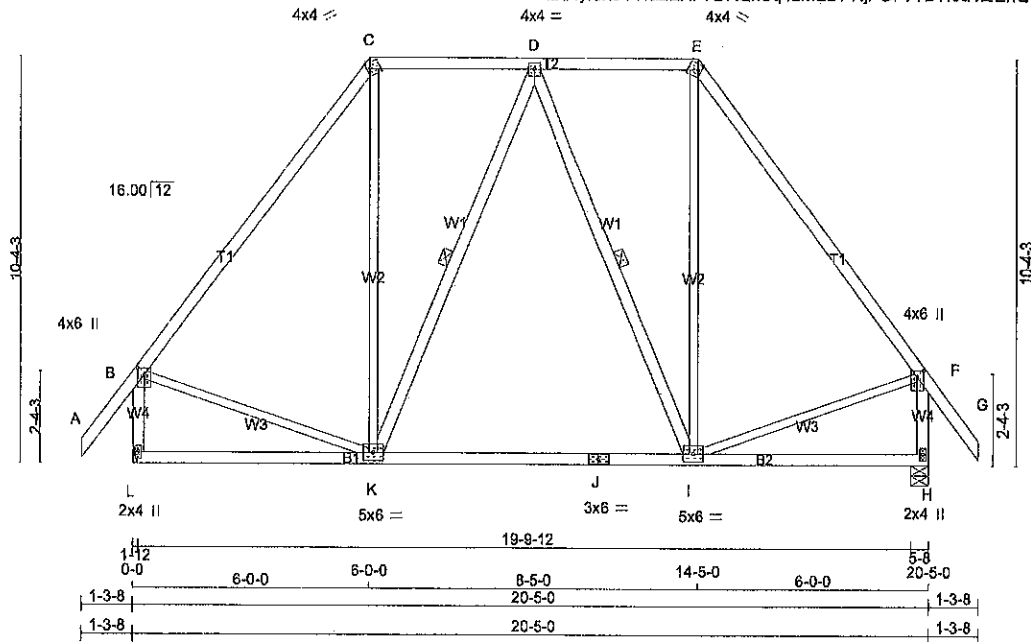


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Alpa Roof Truss, Maple

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TOTAL WEIGHT = 7 X 116 = 810 lb
(M)

LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER	DESCR.	SPF	
A - C	2x4	DRY	1650F 1.5E	SPF	
C - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	1650F 1.5E	SPF	
L - B	2x4	DRY	No.2	SPF	
H - F	2x4	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					
K - D	2x4	DRY	No.2	SPF	
D - I	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.00 2.00
C	TTW-m	MT20	4.0	4.0	1.75 1.00
D	TMVW-l	MT20	4.0	4.0	
E	TTW-m	MT20	4.0	4.0	1.75 1.00
F	TMVW+p	MT20	4.0	6.0	2.00 2.00
H	BMV1+p	MT20	2.0	4.0	
I	BMVW-l	MT20	5.0	6.0	
J	BS-l	MT20	3.0	6.0	
K	BMVW-l	MT20	5.0	6.0	
L	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
L	1029	0	0	1029	0	5-8	1-8
H	1029	0	0	1029	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
L	725	488 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0
H	725	488 / 0	0 / 0	0 / 0	0 / 0	238 / 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.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-K, D-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		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD	MAX. CS (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO	
A-B	0 / 40	-70.5	-70.5 0.08 (1)	K-C	0 / 207
B-C	-884 / 0	-70.5	-70.5 0.29 (1)	K-D	-214 / 0
C-D	-410 / 0	-78.0	-78.0 0.17 (1)	D-I	-214 / 0
D-E	-410 / 0	-78.0	-78.0 0.17 (1)	I-E	0 / 207
E-F	-684 / 0	-70.5	-70.5 0.29 (1)	B-K	0 / 429
F-G	0 / 40	-70.5	-70.5 0.08 (1)	I-F	0 / 429
L-B	-990 / 0	0.0	0.0 0.13 (1)		
H-F	-990 / 0	0.0	0.0 0.13 (1)		
L-K	0 / 0	-17.5	-17.5 0.21 (4)		
K-J	0 / 492	-17.5	-17.5 0.26 (4)		
J-I	0 / 492	-17.5	-17.5 0.26 (4)		
I-H	0 / 0	-17.5	-17.5 0.21 (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

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

(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 (0.68")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.68")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.29 (B-C:1), BC=0.26 (H-K:4), WB=0.14 (D-I:1), SSI=0.16 (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)			
MT20	818	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

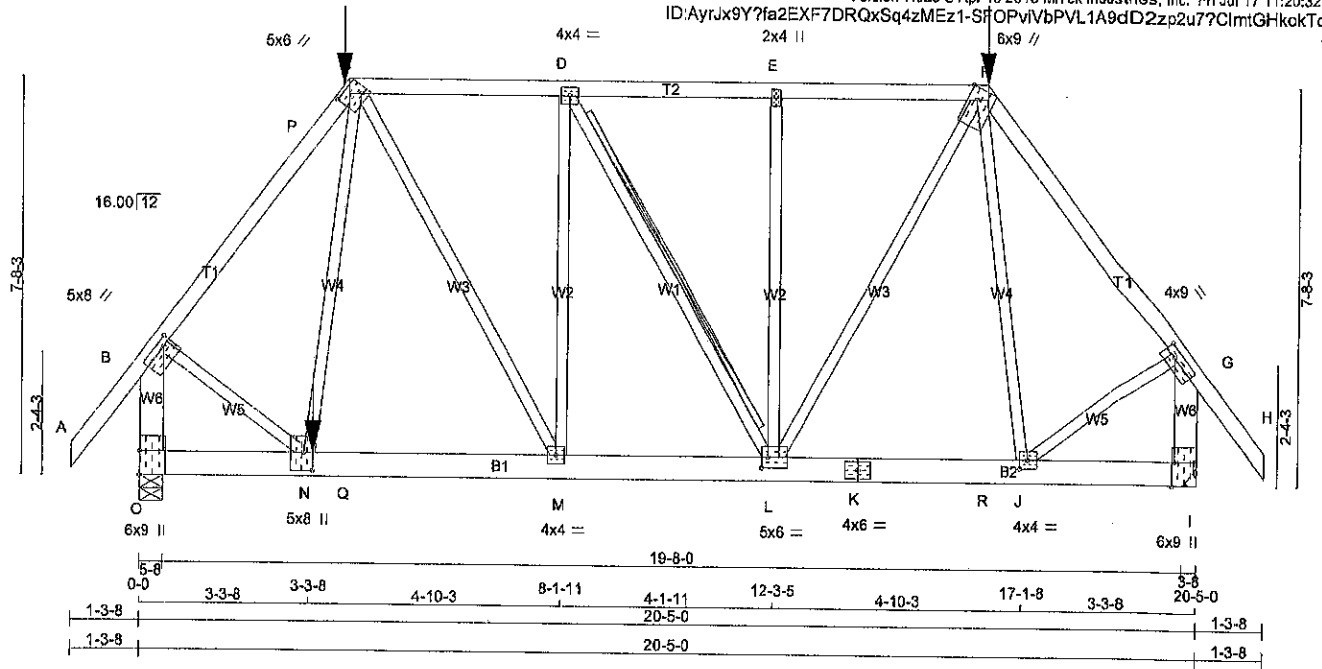
JSI GRIP= 0.81 (K) (INPUT = 0.60)
JSI METAL= 0.20 (J) (INPUT = 1.00)



A-N073841

Alpa Roof Truss, Maple

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ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-SfOPvVbPVL1A9dD2zp2u77ClmtGHkokTd1AOLyxBY:
Scale = 1:44.7



TOTAL WEIGHT = 127 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
O - B	2x6	DRY	No.2
I - G	2x6	DRY	No.2
O - K	2x6	DRY	No.2
K - I	2x6	DRY	No.2

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	5.0	8.0	1.50	2.00
C	TTWW-h	MT20	5.0	8.0	3.50	4.50
D	TMVW-I	MT20	4.0	4.0		
E	TMVW-h	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	9.0	Edge	2.00
G	TMVW-I	MT20	4.0	9.0	1.75	3.00
I	BMV1+p	MT20	6.0	9.0	Edge	0.50
J	BMVW-I	MT20	4.0	4.0	2.00	1.75
K	BS-I	MT20	4.0	6.0		
L	BMVW-h	MT20	5.0	6.0	2.50	1.50
M	BMVW-I	MT20	4.0	4.0		
N	BMVW-h	MT20	6.0	8.0	4.25	2.00
O	BMV1-h	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

1)

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
GROSS REACTION		GROSS REACTION		BRG	BRG	IN-SX	IN-SX
JT VERT	3754	0	3754	0	0	5-8	5-6
I	1817	0	1817	0	0		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
O	2643	1802 / 0	0 / 0	0 / 0	0 / 0	842 / 0	0 / 0	
I	1278	876 / 0	0 / 0	0 / 0	0 / 0	402 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT D-L
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 80% 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.11 (1)	N-C	0 / 1357	0.34 (1)	
B-P	-2772 / 0	-198.1 -198.1	0.93 (1)	C-M	0 / 264	0.08 (1)	
P-C	-2772 / 0	-70.5 -70.5	0.93 (1)	M-D	-45 / 79	0.05 (1)	
C-D	-1826 / 0	-105.7 -105.7	0.32 (1)	D-L	-480 / 0	0.26 (1)	
D-E	-1389 / 0	-105.7 -105.7	0.31 (1)	L-E	-459 / 0	0.48 (1)	
E-F	-1389 / 0	-105.7 -105.7	0.29 (1)	L-F	0 / 1105	0.27 (1)	
F-G	-1356 / 0	-70.5 -70.5	0.28 (1)	F-J	-326 / 0	0.35 (1)	
G-H	0 / 40	-70.5 -70.5	0.11 (1)	B-N	0 / 1889	0.47 (1)	
O-B	-3633 / 0	0.0 0.0	0.32 (1)	J-G	0 / 933	0.23 (1)	
I-G	-1793 / 0	0.0 0.0	0.16 (1)				
O-N	0 / 0	-58.0 -58.0	0.09 (1)				
N-Q	0 / 1500	-26.3 -26.3	0.27 (1)				
Q-M	0 / 1500	-26.3 -26.3	0.27 (1)				
M-L	0 / 1628	-26.3 -26.3	0.27 (1)				
L-K	0 / 842	-26.3 -26.3	0.16 (1)				
K-R	0 / 842	-26.3 -26.3	0.16 (1)				
R-J	0 / 842	-26.3 -26.3	0.16 (1)				
J-I	0 / 0	-26.3 -26.3	0.08 (4)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	4-0-0	-117	-117	---	FRONT	VERT	TOTAL
F	18-5-0	-117	-117	---	FRONT	VERT	TOTAL
N	3-4-4	-2194	-2194	---	FRONT	VERT	TOTAL
O	0-0	-9	-9	---	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. G/C

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

GIRDER TYPE: CPPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 9-3-0
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 3-4-4 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CPPrimeHip
SIDE SETBACK = 4-0-0
END SETBACK = 4-0-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- 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 8 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 (0.68")
CALCULATED VERT. DEFL. (LL) = L/999 (0.04")
ALLOWABLE DEFL. (TL) = L/360 (0.68")
CALCULATED VERT. DEFL. (TL) = L/999 (0.07")

CSI: TO=0.93 (B-C:1), BC=0.27 (L-M:1), WB=0.48 (E-L:1), SSI=0.22 (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



A-10138400 CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H08A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx8Y7fa2EXF7DRQxSq4zMEz1-SFOPviVbPVL1A9dD2zp2u7?CImtGHkokTd1AOLyxBY:

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 117.4 lbs FACTORED DOWN AT 16-5-0, AND 117.4 lbs FACTORED DOWN AT 4-0-0 ON TOP CHORD, AND 2194.3 lbs FACTORED DOWN AT 3-4-4 ON BOTTOM 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 8.23.13.11, and no less than 2x4 for Part 4 design.

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

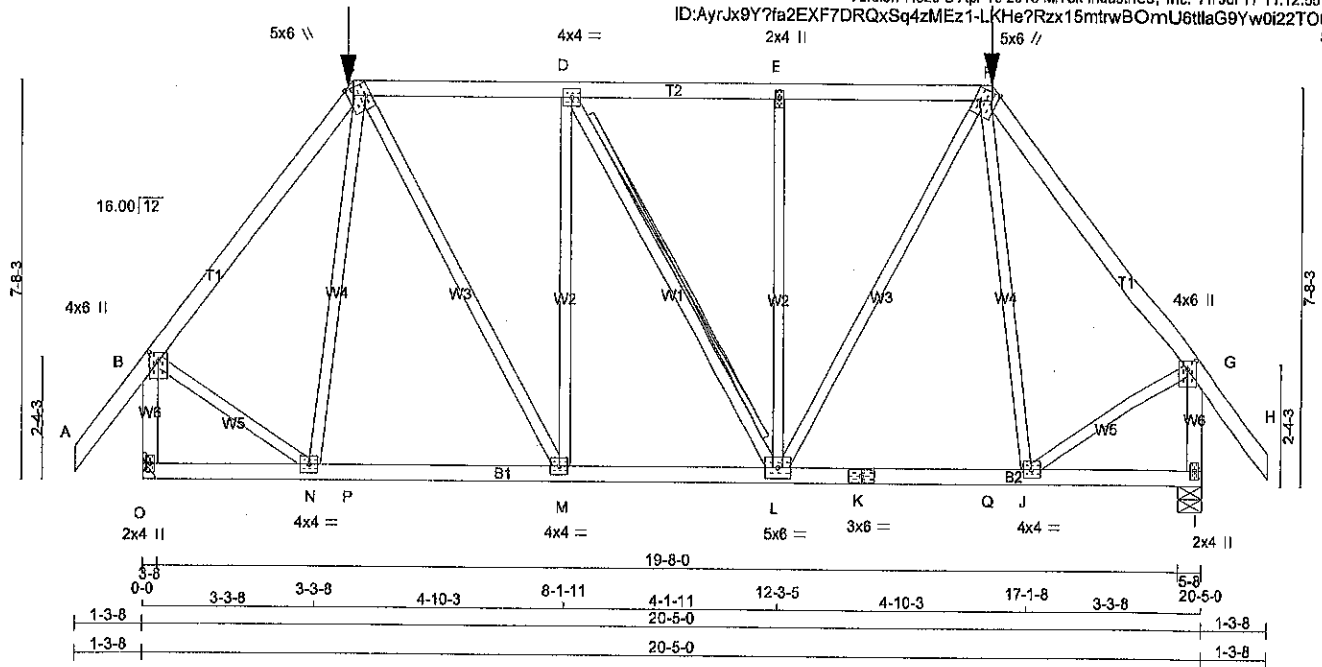
PLATE ROTATION TOL. = 5.0 Deg.

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

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



A-15073840(2)



TOTAL WEIGHT = 112 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	8.0	2.00	2.00
C	TTWW+m	MT20	5.0	6.0	Edge	3.75
D	TMVW-t	MT20	4.0	4.0		
E	TMVW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	Edge	3.75
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J, M, N						
J	BMVW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVW-t	MT20	6.0	6.0		
O	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) 117.4 lbs FACTORED DOWN AT 16-5.0, AND 117.4 lbs FACTORED DOWN AT 4-0-0 ON TOP 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
O	1422	0	1422	0		
I	1422	0	1422	0	5-8	1-9

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
O	1000	688 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
I	1000	688 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT D-L
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)	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	N-C	-235 / 20	0.27 (1)
B-C	-995 / 0	-70.5	-70.5	0.25 (1)	5.94	C-M	0 / 673	0.17 (1)
C-D	-948 / 0	-105.7	-105.7	0.28 (1)	5.98	M-D	-467 / 0	0.51 (1)
D-E	-945 / 0	-105.7	-105.7	0.28 (1)	5.97	D-L	-4 / 0	0.00 (1)
E-F	-944 / 0	-105.7	-105.7	0.27 (1)	5.99	L-E	-465 / 0	0.51 (1)
F-G	-995 / 0	-70.5	-70.5	0.25 (1)	5.94	L-F	0 / 668	0.17 (1)
G-H	0 / 40	-70.5	-70.5	0.11 (1)	10.00	F-J	-232 / 20	0.26 (1)
O-B	-1394 / 0	0.0	0.0	0.19 (1)	8.86	B-N	0 / 691	0.17 (1)
I-G	-1394 / 0	0.0	0.0	0.19 (1)	8.86	J-G	0 / 692	0.17 (1)
O-N	0 / 0	-26.3	-26.3	0.12 (4)	10.00			
N-P	0 / 816	-26.3	-26.3	0.18 (1)	10.00			
P-M	0 / 816	-26.3	-26.3	0.18 (1)	10.00			
M-L	0 / 947	-26.3	-26.3	0.23 (1)	10.00			
L-K	0 / 616	-26.3	-26.3	0.18 (1)	10.00			
K-Q	0 / 616	-26.3	-26.3	0.18 (1)	10.00			
Q-J	0 / 616	-26.3	-26.3	0.18 (1)	10.00			
J-I	0 / 0	-26.3	-26.3	0.12 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	4-0-0	-117	-117	--	FRONT	VERT	TOTAL
F	16-5-0	-117	-117	--	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. G/G

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

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 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 (0.68")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.68")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.28 (C-D:1), BC=0.23 (L-M:1), WB=0.51 (D-M:1), SS=0.22 (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 = 0.60

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	2204	1656

PLATE PLACEMENT TOL. = 0.250 inches

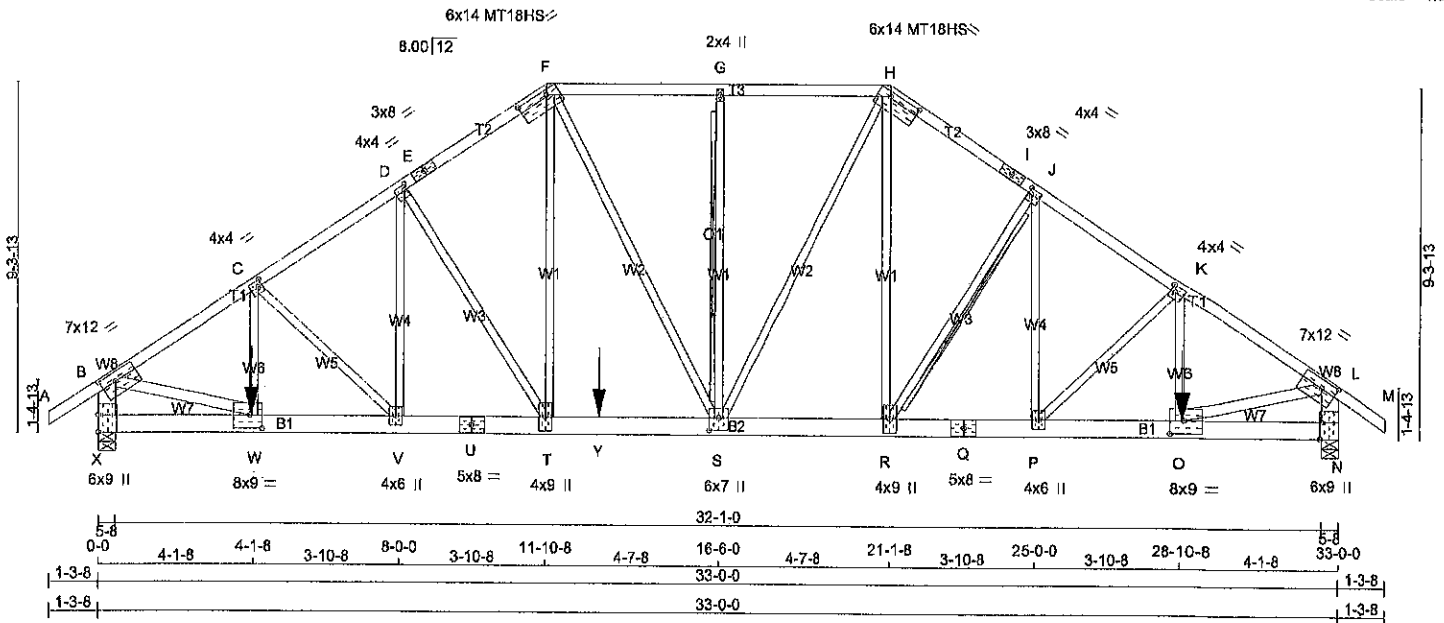
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (G) (INPUT = 0.90)
JSI METAL = 0.26 (I) (INPUT = 1.00)

A-10073839



Alpa Roof Truss, Maple



TOTAL WEIGHT = 2 X 180 = 379 lb
 (M)

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

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-E	12	TOP
E-F	12	TOP
F-H	12	TOP
H-I	12	TOP
I-M	12	TOP
X-B	2	TOP
N-L	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
X-U	2	SIDE(217.9)
U-Q	2	SIDE(257.3)
Q-N	2	SIDE(257.3)
WEBS : (0.122"x3") SPIRAL NAILS		
C-W	1	SIDE(418.1)
2x3	1	SIDE(344.6)
2x3	1	
2x4	1	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
X	10129	0	10129	0	0	5-8	5-8	5-8	5-8
N	9897	0	9897	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERMLIVE	WIND
X	7137	4628 / 0	0 / 0	0 / 0	2309 / 0
N	6974	4718 / 0	0 / 0	0 / 0	2257 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.14FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING		TOTAL LOAD CASES: (4)	
CHORDS		WEBS	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 27	A-B	0 / 74
B-C	-12969 / 0	B-C	-285 / 0
C-D	-12721 / 0	C-D	0 / 1868
D-E	-11683 / 0	D-E	-1834 / 0
E-F	-11683 / 0	E-F	0 / 14753
F-G	-10389 / 0	F-G	0 / 1567
G-H	-10389 / 0	G-H	-359 / 0
H-I	-11238 / 0	H-I	0 / 2214
I-J	-11238 / 0	I-J	0 / 3986
J-K	-12592 / 0	J-K	-2175 / 0
K-L	-12875 / 0	K-L	0 / 2278
L-M	0 / 27	L-M	-93 / 0
X-B	-10040 / 0	X-B	-169 / 2
N-L	-9817 / 0	N-L	0 / 11105
		O-L	0 / 10852
X-W	0 / 0		
W-V	0 / 10794		
V-U	0 / 10689		
U-T	0 / 10689		
T-Y	0 / 9869		
Y-S	0 / 9869		
S-R	0 / 9371		
R-Q	0 / 10482		
Q-P	0 / 10482		
P-O	0 / 10549		
O-N	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)		FACE		TYPE	
JT	LOC.	LC1	MAX-	MAX+	TYPE
O	28-11-4	-1419	-1419	---	FRONT VERT
W	4-0-12	-1814	-1814	---	FRONT VERT
X	0-0	---	---	---	FRONT VERT
Y	13-3-12	-1434	-1434	---	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

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.

GIRDER TYPE: CSStdGirder
 START DISTANCE = 0-0
 START SPAN CARRIED = 2-0-0
 END DISTANCE = 4-0-12
 END SPAN CARRIED = 4-0-0
 END WALL WIDTH = 0-0
 APPLIED TO FRONT SIDE OF BOTTOM CHORD.
 - ADDTL LOADS BASED ON 55% OF GSL.

GIRDER TYPE: CSStdGirder
 START DISTANCE = 28-11-4
 START SPAN CARRIED = 4-0-0
 END DISTANCE = 33-0-0
 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 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/989 (0.23")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/948 (0.42")

CSI: TC=0.84 (B-C:1), BC=0.73 (S-T:1), WB=1.00 (D-T:1), SSI=0.69 (S-T: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 = 0.80
 AND 7/28 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253632	H04A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y7fa2EXF7DRQXsq4zMEz1-JoNDbWCAODbe42qfsFIQDSu4PYB71DUyDqNGwyxBP

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-I	MT20	7.0	12.0	2.75	4.75
C	TMWW-I	MT20	4.0	4.0	2.00	1.50
D	TMWW-I	MT20	4.0	4.0	1.75	1.00
E	TS-I	MT20	3.0	8.0		
F	TTWW-h	MT18HS	6.0	14.0	1.50	10.00
G	TMW-w	MT20	2.0	4.0		
H	TTWW-h	MT18HS	6.0	14.0	1.50	10.00
I	TS-I	MT20	3.0	8.0		
J	TMWW-I	MT20	4.0	4.0	1.75	1.00
K	TMWW-I	MT20	4.0	4.0	2.00	1.50
L	TMWW-I	MT20	7.0	12.0	2.75	4.75
N	BMV1-t	MT20	6.0	9.0	Edge	0.50
O	BMWW-I	MT20	8.0	9.0	4.25	4.00
P	BMWW-I	MT20	4.0	6.0		
Q	BS-I	MT20	5.0	8.0		
R	BMWW-I	MT20	4.0	9.0		
S	BMWW-I	MT20	6.0	7.0	4.00	3.00
T	BMWW-I	MT20	4.0	9.0		
U	BS-I	MT20	5.0	8.0		
V	BMWW-I	MT20	4.0	8.0		
W	BMWW-I	MT20	8.0	9.0	4.25	4.00
X	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) 1813.9 lbs FACTORED DOWN AT 4-0-12, AND 1433.5 lbs FACTORED DOWN AT 13-3-12, AND 1419.3 lbs FACTORED DOWN AT 28-11-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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.

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	MIN	MIN
MT20	618	354	1867
MT18HS	580	354	2729

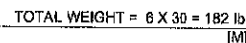
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.99 (B) (INPUT = 1.00)



A-N073838(2)



BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT	REQ'D
		GROSS REACTION		GROSS REACTION		BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	355	0	355	0	0	5-8	1-8
E	258	0	258	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 1-8							

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
H-B	-339 / 0	0.0	0.0	0.03 (1)	7.81	B-G	0 / 20	0.01 (4)
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)	8.25	F-C	0 / 57	0.02 (4)
C-D	-13 / 0	-70.5	-70.5	0.10 (1)	8.25	C-E	-271 / 0	0.06 (1)
E-D	-79 / 0	0.0	0.0	0.02 (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	0.08 (1)	10.00			

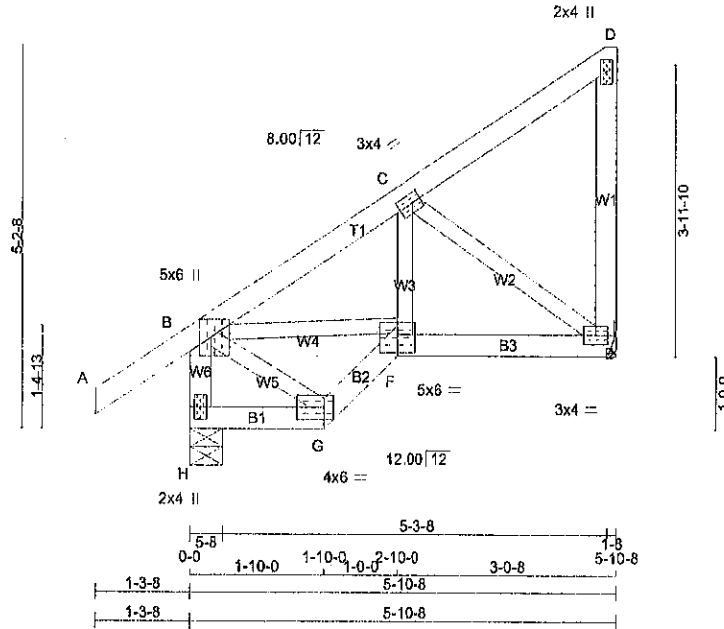
JSI GRIP= 0.52 (B) (INPUT = 0.90)
JSI METAL= 0.08 (E) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253630	J01B	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:hdKFA8XS_E1ZIH0GL9ahDNzQR2b-VwZ1clQcm7Nx1746oo2y7XIA5rYvSu7U0eJXnhyxD5E
Scale = 1:31.6



TOTAL WEIGHT = 30 lb [M]

LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER	DESCR.	SPF	
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	TMVWW-l	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVWl-l	MT20	3.0	4.0		
F	BBWW-l	MT20	5.0	6.0	3.00	3.00
G	BBW-l	MT20	4.0	6.0	2.00	4.50
H	BMVl+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		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
E	258	0	258	0	0	5-8	1-8		
H	355	0	355	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST LOASE	MAX./MIN.	COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
E	182	123 / 0	0 / 0	0 / 0	0 / 0	59 / 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 = 8.25FT.
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 (PLF)	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 27	-70.5	-70.5 0.09 (1)	B-F	0 / 209	0.06 (1)	
B-C	-257 / 0	-70.5	-70.5 0.10 (1)	F-C	0 / 57	0.02 (4)	
C-D	-13 / 0	-70.5	-70.5 0.10 (1)	C-E	-271 / 0	0.06 (1)	
E-D	-79 / 0	0.0	0.0 0.02 (1)	B-G	0 / 20	0.01 (4)	
H-B	-339 / 0	0.0	0.0 0.03 (1)				
H-G	0 / 0	-17.5	-17.5 0.02 (4)				
G-F	0 / 25	-17.5	-17.5 0.01 (4)				
F-E	0 / 223	-17.5	-17.5 0.06 (1)				

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

A-N073836



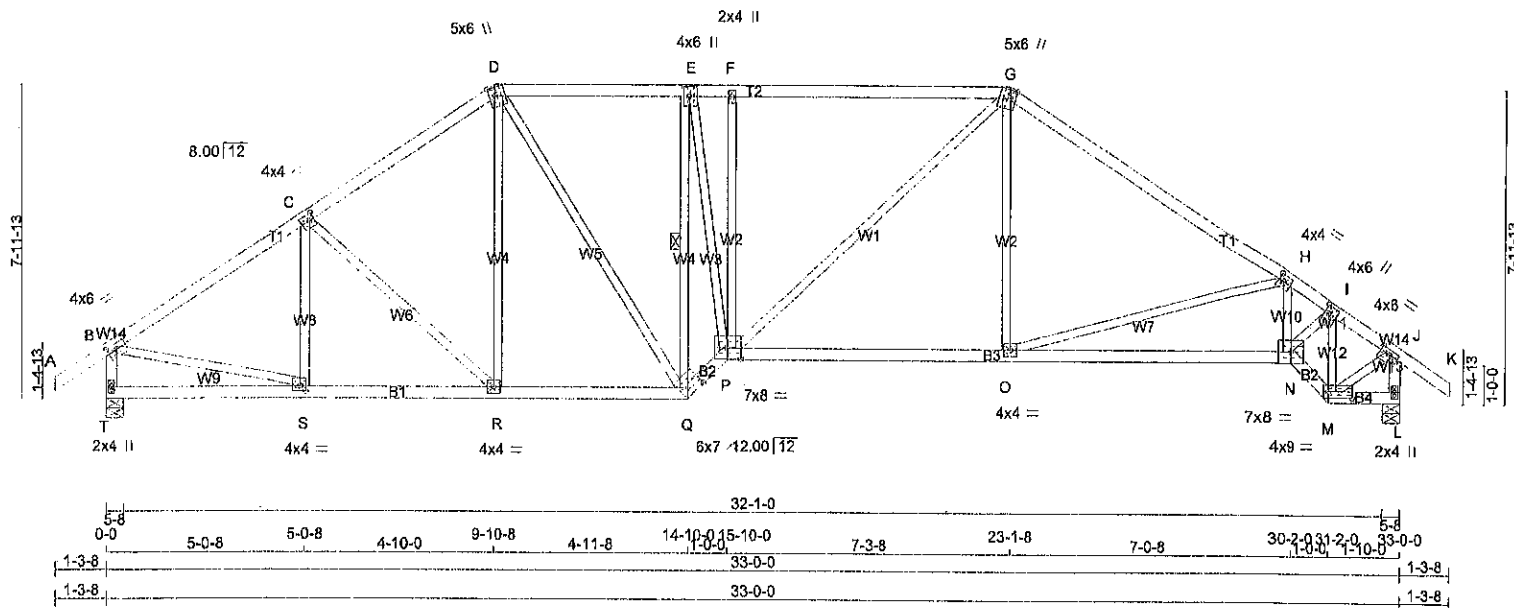


SPECIFIED LOADS:				
TOP CH.	LL =	21.0	PSF	
	DL =	3.0	PSF	
BOT CH.	LL =	0.0	PSF	
	DL =	7.0	PSF	
TOTAL LOAD		=	31.0	PSF

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

A-15073835

Alpa Roof Truss, Maple



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - K	2x4	DRY	No.2
T - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
T - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - M	2x4	DRY	No.2
M - L	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-t	MT20	4.0	6.0 1.75 3.00
C	TMVW-t	MT20	4.0	4.0 2.00 1.50
D	TTVW+m	MT20	5.0	6.0 Edge 1.75
E	TMVW-t	MT20	4.0	6.0 3.00 1.50
F	TMVW-t	MT20	2.0	4.0
G	TTVW+m	MT20	5.0	6.0 2.50 1.50
H	TMVW-t	MT20	4.0	4.0 2.00 1.50
I	TMVW-t	MT20	4.0	6.0 2.50 1.25
J	TMVW-t	MT20	4.0	6.0 1.50 3.00
L	BMV1+p	MT20	2.0	4.0
M	BBWW-t	MT20	4.0	8.0 2.00 7.50
N	BBWW-t	MT20	7.0	8.0
O	BBWW-t	MT20	4.0	4.0
P	BBWW-t	MT20	7.0	8.0 3.25 4.25
Q	BBWW-t	MT20	6.0	7.0 2.25 4.50
R	BBWW-t	MT20	4.0	4.0
S	BMVW-t	MT20	4.0	4.0 1.50 1.50
T	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
T	1546	0	1546	0	5-8	1-11
L	1650	0	1650	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
T	1087	749 / 0	0 / 0	0 / 0	338 / 0	0 / 0	0 / 0
L	1090	751 / 0	0 / 0	0 / 0	338 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.11 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-Q.
 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		MAX. FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	MAX UNBRAC LENGTH	FR-TO	MEMB.	FORCE (LBS)	MAX (CSI (LC))	FR-TO
A-B	0 / 27	-70.5	-70.5 0.09 (1)	10.00	S-C	-219 / 8	0.07 (1)		
B-C	-1715 / 0	-70.5	-70.5 0.26 (1)	4.85	C-R	-184 / 0	0.15 (1)		
C-D	-1598 / 0	-70.5	-70.5 0.25 (1)	4.88	R-D	0 / 212	0.05 (1)		
D-E	-1585 / 0	-70.5	-70.5 0.24 (1)	5.04	D-Q	0 / 467	0.11 (1)		
E-F	-1835 / 0	-70.5	-70.5 0.37 (1)	4.54	Q-E	-1928 / 0	0.77 (1)		
F-G	-1842 / 0	-70.5	-70.5 0.51 (1)	4.40	E-P	0 / 1825	0.41 (1)		
G-H	-1843 / 0	-70.5	-70.5 0.52 (1)	4.44	P-F	-457 / 0	0.38 (1)		
H-I	-2272 / 0	-70.5	-70.5 0.41 (1)	4.11	P-G	0 / 444	0.10 (1)		
I-J	-1294 / 0	-70.5	-70.5 0.13 (1)	5.55	O-G	0 / 302	0.07 (4)		
J-K	0 / 27	-70.5	-70.5 0.09 (1)	10.00	O-H	-583 / 0	0.63 (1)		
T-B	-1507 / 0	0.0	0.0 0.16 (1)	6.68	N-H	-176 / 41	0.03 (1)		
L-J	-1534 / 0	0.0	0.0 0.16 (1)	6.64	N-I	0 / 1629	0.37 (1)		
T-S	0 / 0	-17.5	-17.5 0.06 (4)	10.00	M-I	-1525 / 0	0.24 (1)		
S-R	0 / 1445	-17.5	-17.5 0.29 (1)	10.00	B-S	0 / 1478	0.33 (1)		
R-Q	0 / 1311	-17.5	-17.5 0.27 (1)	10.00	M-J	0 / 1187	0.27 (1)		
Q-P	0 / 2245	-17.5	-17.5 0.36 (1)	10.00					
P-O	0 / 1514	-17.5	-17.5 0.39 (1)	10.00					
O-N	0 / 2069	-17.5	-17.5 0.48 (1)	10.00					
N-M	0 / 1366	-17.5	-17.5 0.22 (1)	10.00					
M-L	0 / 0	-17.5	-17.5 0.02 (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

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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.52 (G-H:1), BC=0.48 (N-O:1),
 WB=0.77 (E-Q:1), SSI=0.27 (H-I:1).

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (S) (INPUT = 0.90)
 JSI METAL= 0.54 (S) (INPUT = 1.00)

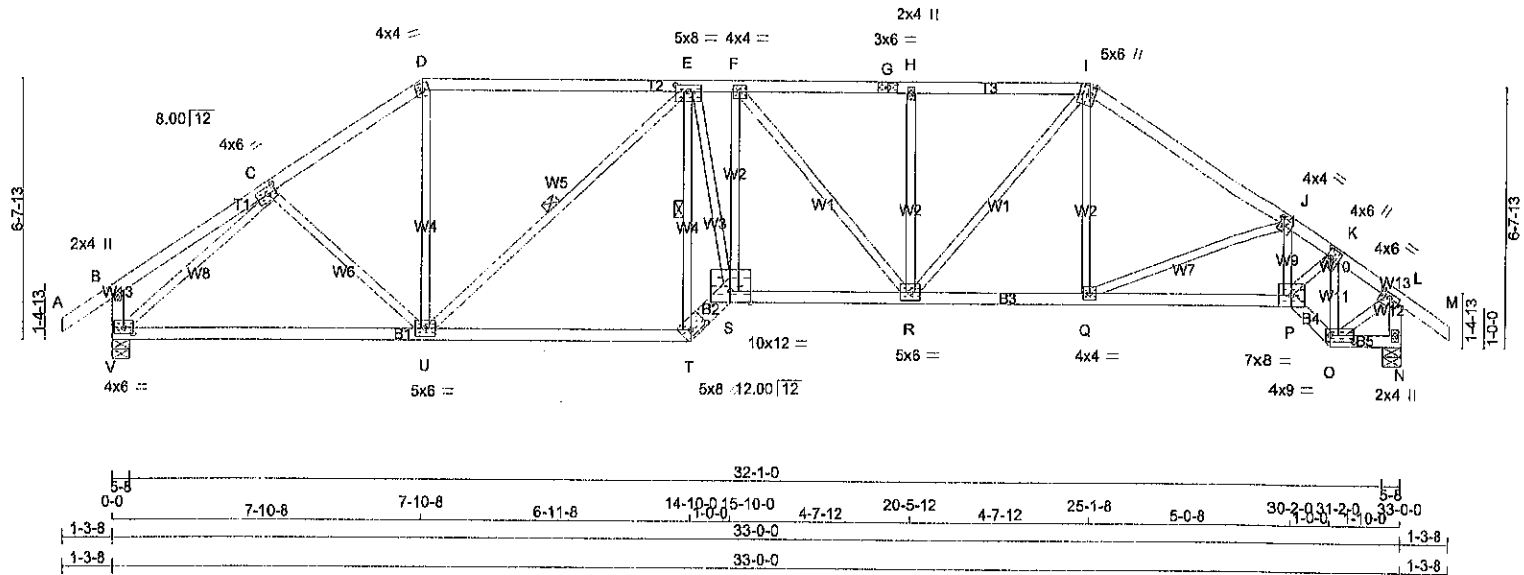


A-15073832

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253630	H02T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-5Luv_HOKTC?MAGLX7fUfVu1YBdPzFKT2Kg5IAMyxD5E
Scale = 1:59.3



TOTAL WEIGHT = 150 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	
G - I	2x4	DRY	No.2	SPF	
I - M	2x4	DRY	No.2	SPF	
V - B	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
V - T	2x4	DRY	No.2	SPF	
T - S	2x6	DRY	No.2	SPF	
S - P	2x4	DRY	No.2	SPF	
P - O	2x4	DRY	No.2	SPF	
O - N	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	TMW+p	MT20	2.0	4.0		
C	TMWW-I	MT20	4.0	6.0	2.00	2.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-I	MT20	5.0	8.0	2.00	4.00
F	TMWW-I	MT20	4.0	4.0		
G	TS-I	MT20	3.0	6.0		
H	TMW+w	MT20	2.0	4.0		
I	TTWW+m	MT20	5.0	6.0	2.50	1.50
J	TMWW-I	MT20	4.0	4.0	2.00	1.50
K	TMWW-I	MT20	4.0	6.0	2.75	1.25
L	TMWW-I	MT20	4.0	6.0	1.50	3.00
N	BMV1+p	MT20	2.0	4.0		
O	BBWW-I	MT20	4.0	9.0	2.00	7.50
P	BBWW-I	MT20	7.0	8.0		
Q	BMWW-I	MT20	4.0	4.0		
R	BMWW-I	MT20	5.0	6.0		
S	BBWW-I	MT20	10.0	12.0	Edge	
T	BBWW-I	MT20	5.0	8.0	1.75	5.00
U	BMWW-I	MT20	5.0	6.0		
V	BMV1-I	MT20	4.0	6.0	1.75	3.00

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
N	1560	0	1560	0
V	1546	0	1546	0

UNFACTORED REACTIONS

1ST CASE	COMBINED	SNOW	LIVE	PERMLIVE	WIND	DEAD	SOIL
JT	N	1090	751/0	0/0	0/0	338/0	0/0
V	N	1087	749/0	0/0	0/0	338/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.81FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-U, E-T.
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)	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO						FR-TO		
A-B	0/27	-70.5	-70.5	0.09 (1)	10.00	C-U	0/63	0.02 (4)
B-C	0/16	-70.5	-70.5	0.16 (1)	10.00	U-D	0/825	0.14 (1)
C-D	-1884/0	-70.5	-70.5	0.20 (1)	4.83	U-E	-745/0	0.45 (1)
D-E	-1396/0	-70.5	-70.5	0.59 (1)	4.75	T-E	-1830/0	0.52 (1)
E-F	-2287/0	-70.5	-70.5	0.54 (1)	3.81	E-S	0/1752	0.39 (1)
F-G	-2133/0	-70.5	-70.5	0.32 (1)	4.35	S-F	0/280	0.06 (1)
G-H	-2133/0	-70.5	-70.5	0.32 (1)	4.35	F-R	-198/0	0.18 (1)
H-I	-2133/0	-70.5	-70.5	0.32 (1)	4.35	R-H	-392/0	0.19 (1)
I-J	-1970/0	-70.5	-70.5	0.30 (1)	4.55	R-I	0/771	0.17 (1)
J-K	-2270/0	-70.5	-70.5	0.26 (1)	4.27	Q-I	0/228	0.05 (1)
K-L	-1302/0	-70.5	-70.5	0.11 (1)	5.54	Q-J	-381/0	0.19 (1)
L-M	0/27	-70.5	-70.5	0.09 (1)	10.00	P-J	-58/46	0.02 (4)
V-B	-206/0	0.0	0.0	0.02 (1)	7.81	P-K	0/1478	0.33 (1)
N-L	-1534/0	0.0	0.0	0.16 (1)	6.84	Q-K	-1550/0	0.25 (1)
V-U	0/1363	-17.5	-17.5	0.38 (4)	10.00	V-C	-1872/0	0.89 (1)
U-T	0/1938	-17.5	-17.5	0.46 (1)	10.00	O-L	0/1206	0.27 (1)
T-S	0/2687	-17.5	-17.5	0.32 (1)	10.00			
S-R	0/2261	-17.5	-17.5	0.41 (1)	10.00			
R-Q	0/1627	-17.5	-17.5	0.32 (1)	10.00			
Q-P	0/1976	-17.5	-17.5	0.37 (1)	10.00			
P-O	0/1377	-17.5	-17.5	0.22 (1)	10.00			
O-N	0/0	-17.5	-17.5	0.02 (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

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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.59 (D-E:1), BC=0.46 (T-U:1), WB=0.89 (C-V:1), SI=0.26 (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 = 0.60

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 (C) (INPUT = 0.90)
JSI METAL = 0.46 (C) (INPUT = 1.00)



A-15073832



DESCR
SPF
SPF
SPF
SPF
SPF
SPF
SPF
SPF
SPF
SPF
SPF
SPF

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	BMWV-p	MT20	6.0	7.0	2.25 2.75
C	TTWW-m	MT20	6.0	9.0	Edge
D	TMW-w	MT20	2.0	4.0	
E	BMWVW-I	MT20	7.0	8.0	2.00 1.60
F	TMWV-L	MT20	4.0	4.0	
G	TS-t	MT20	2.0	4.0	
H	TMW-w	MT20	2.0	4.0	
I	TTWW-m	MT20	6.0	9.0	1.75 3.50
J	TMWV-L	MT20	4.0	4.0	2.00 1.60
K	TMWV+I	MT20	5.0	8.0	3.25 1.60
L	TMWV-p	MT20	5.0	8.0	1.25 3.50
N	BMV+I-h	MT20	6.0	8.0	Edge 2.60
O	BBWV-h	MT20	10.0	12.0	5.00 9.25
P	BBWV-I	MT20	8.0	9.0	4.75 4.50
Q	BMWV-L	MT20	4.0	4.0	
R	BMWVW-L	MT20	5.0	8.0	2.25 1.75
S	BBWV+p	MT20	8.0	12.0	Edge
T	BSV-h	MT20	10.0	12.0	3.50 7.75
U	BMWVW-L	MT20	5.0	8.0	2.25 3.00
V	BMWV-L	MT20	5.0	6.0	2.50 1.75
W	BMV+I-h	MT20	6.0	9.0	5.50

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
W	2838	0	2838	0	0	5-B	5-B
N	2877	0	2877	0	0	5-B	5-B

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
W	2000	1352 / 0	0 / 0	0 / 0	0 / 0	648 / 0	0 / 0
N	2096	1435 / 0	0 / 0	0 / 0	0 / 0	680 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.92FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED

2x4 DRY SPF No.2 I-BRACE REQUIRED AT E-T

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				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 27	-70.5	-70.5	0.10 (1)	10.00	V-C	-252 / 86	0.10 (1)
B-C	-3622 / 0	-70.5	-70.5	1.00 (1)	2.93	C-U	0 / 1942	0.48 (1)
C-D	-4228 / 0	-138.7	-138.7	0.51 (1)	3.45	U-D	-687 / 0	0.28 (1)
D-E	-4228 / 0	-138.7	-138.7	0.51 (1)	3.45	E-F	-954 / 0	0.74 (1)
E-F	-6137 / 0	-138.7	-138.7	0.40 (1)	2.97	T-E	-4595 / 0	0.98 (1)
F-G	-5592 / 0	-70.5	-70.5	0.64 (1)	3.03	E-S	0 / 5041	0.89 (1)
G-H	-5592 / 0	-70.5	-70.5	0.64 (1)	3.03	S-F	0 / 236	0.06 (1)
H-I	-5592 / 0	-70.5	-70.5	0.68 (1)	3.03	F-R	-662 / 0	0.66 (1)
I-X	-4322 / 0	-70.5	-70.5	0.38 (1)	3.08	R-H	-453 / 0	0.12 (1)
X-J	-4322 / 0	-138.7	-138.7	0.38 (1)	3.08	R-I	0 / 2433	0.60 (1)
J-K	-4648 / 0	-138.7	-138.7	0.37 (1)	2.92	Q-I	0 / 735	0.18 (1)
K-L	-2661 / 0	-138.7	-138.7	0.21 (1)	4.03	Q-J	-387 / 0	0.10 (1)
L-M	0 / 27	-70.5	-70.5	0.10 (1)	10.00	P-J	0 / 91	0.03 (4)
W-B	-2750 / 0	0.0	0.0	0.31 (1)	5.13	P-K	0 / 2728	0.68 (1)
N-L	-2946 / 0	0.0	0.0	0.33 (1)	4.96	O-K	-3176 / 0	0.54 (1)
						B-V	0 / 2967	0.73 (1)
						O-L	0 / 2485	0.82 (1)
W-V	0 / 0	-34.5	-34.5	0.14 (4)	10.00			
V-U	0 / 2821	-34.5	-34.5	0.46 (1)	10.00			
U-T	0 / 4861	-34.5	-34.5	0.74 (1)	10.00			
T-S	0 / 5735	-34.5	-34.5	0.88 (1)	10.00			
S-R	0 / 6131	-102.7	-102.7	0.66 (1)	10.00			
R-Q	0 / 3694	-102.7	-102.7	0.40 (1)	10.00			
Q-Y	0 / 3900	-102.7	-102.7	0.43 (1)	10.00			
Y-P	0 / 3900	-34.5	-34.5	0.43 (1)	10.00			
P-O	0 / 2863	-34.5	-34.5	0.51 (1)	10.00			
O-N	0 / 0	-34.5	-34.5	0.02 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	5-10-8	-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: CPrimeIip
SIDE SETBACK = 6-10-8
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 16-10-0 OF SPAN
MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 15-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 29-3-8
END SPAN CARRIED = 6-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 55 % OF GSL

GIRDER TYPE: CPrimeIip
SIDE SETBACK = 0-0
END SETBACK = 6-10-8
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 3-8-8 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 , CBC 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)= $L/360$ (1.10")
 CALCULATED VERT. DEFL.(LL)= $L/999$ (0.36")
 ALLOWABLE DEFL.(TL)= $L/360$ (1.10")
 CALCULATED VERT. DEFL.(TL)= $L/613$ (0.65")

CSI: TC=1.00 (B-C:1), BC=0.88 (S-T:1), WB=0.96 (E-T:1), SSI=0.32 (C-D:1)

4-1003831 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253630	H01T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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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 5-10-8
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.

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)	(PLI)
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= 0.90 (U) (INPUT = 0.90)
JSI METAL= 0.84 (E) (INPUT = 1.00)

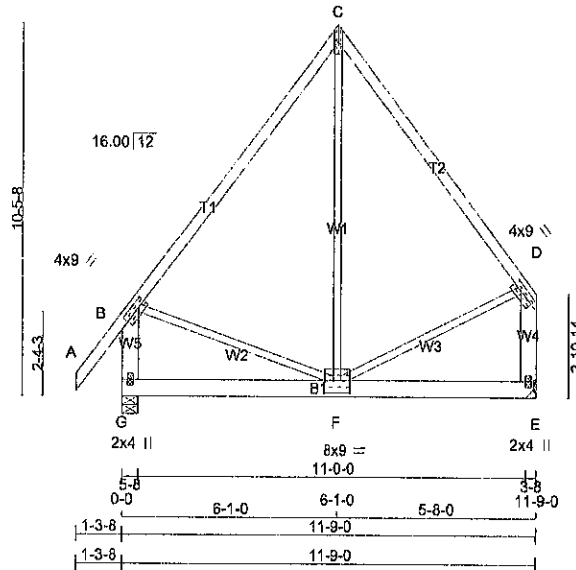


A-1073831(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H13	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-04s0lvco4UoyDbQ2hMCKJYBewfb04FyeXHGkJGyxE5\3x8 II
Scale = 1:65.1



TOTAL WEIGHT = 72 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	1650F 1.6E	SPF
C - D	2x4	DRY	No.2	SPF
E - B	2x6	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
G - E	2x6	DRY	1650F 1.6E	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	TMW-I	MT20	4.0	9.0	2.00	3.00
C	TTW-p	MT20	3.0	8.0	3.75	Edge
D	TMW-I	MT20	4.0	9.0	1.75	3.00
E	BMV1+p	MT20	2.0	4.0		
F	BMWWW-I	MT20	8.0	9.0	4.25	4.50
G	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	HORZ	UPLIFT
G	2521	0	2521	0	0
E	2422	0	2422	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	1774	1215 / 0	0 / 0	0 / 0	0 / 0	0 / 0	558 / 0	0 / 0
E	1706	1168 / 0	0 / 0	0 / 0	0 / 0	0 / 0	551 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX. FACTORED	CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.09 (1)	10.00	F-C	0 / 1850
B-C	-1415 / 0	-70.5	-70.5	0.59 (1)	5.44	B-F	0 / 889
C-D	-1415 / 0	-70.5	-70.5	0.67 (1)	4.80	F-D	0 / 924
G-B	-1708 / 0	0.0	0.0	0.16 (1)	7.55		
E-D	-1998 / 0	0.0	0.0	0.19 (1)	7.57		
G-F	0 / 0	-341.8	-341.8	0.70 (1)	10.00		
F-E	0 / 0	-341.8	-341.8	0.70 (1)	10.00		

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

*** NON STANDARD GIRDER ***

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

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

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

(55 % OF 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) = $L/360$ (0.39")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.09")
ALLOWABLE DEFL.(TL) = $L/360$ (0.39")
CALCULATED VERT. DEFL.(TL) = $L/834$ (0.17")

CSI: TC=0.67 (C-D:1), BC=0.70 (F-G:1),
WB=0.46 (C-F:1), SSI=0.84 (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	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (G) (INPUT = 0.90)
JSI METAL = 0.34 (G) (INPUT = 1.00)

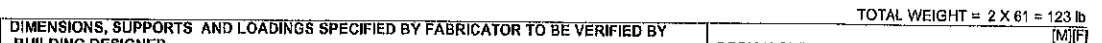


A-N073830

Alpa Roof Truss, Maple

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3x5 II Scale = 1:87.9



UNFACTORED REACTIONS

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

LOADING	ALLOWABLE DEFL.(LL)= L/360 (0.39")
TOTAL LOAD CASES: (4)	CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
	ALLOWABLE DEFL.(TL)= L/360 (0.39")
	CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

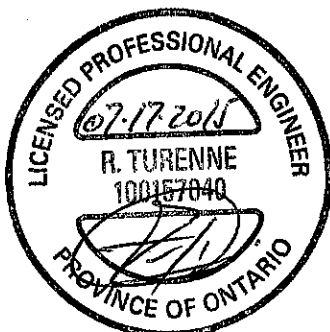
		NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION		
	(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN	
MT20	618	364	1667	822	2284	1856	

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP = 0.71 (G) (INPUT = 0.90)
JSI METAL = 0.13 (G) (INPUT = 1.00)

JSI GRIP= 0.71 (G) (INPUT = 0.90)
JSI METAL= 0.13 (G) (INPUT = 1.00)

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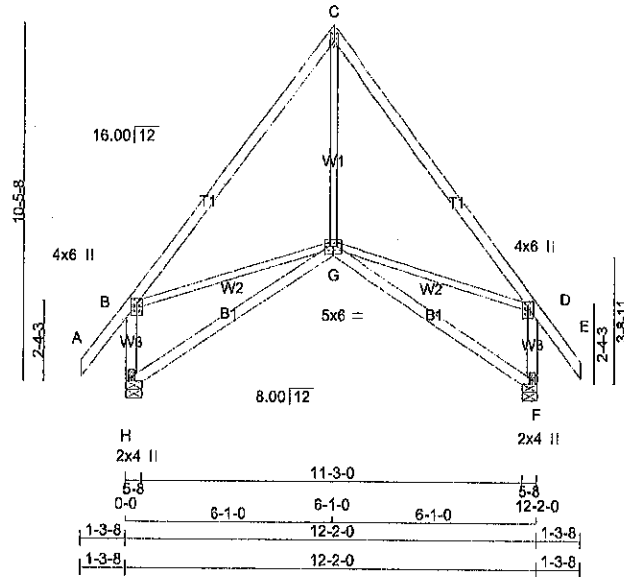
A-15773829



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H12	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-YtleYZc9KBg5cRr7egVmLeZ8FOILvvVJdWBmpyxE5W
3x5 II Scale = 1:67.9



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4 DRY	1650F 1.6E	SPF		
C - E	2x4 DRY	1650F 1.6E	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	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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
H	634	0	634	0
F	634	0	634	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS	WIND	DEAD	SOIL
H	445	314 / 0	0 / 0	130 / 0	0 / 0
F	445	314 / 0	0 / 0	130 / 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 = 8.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX	LC1	
FR-TO		FROM TO	CS1 (LC)	LENGTH	FR-TO				
A-B	0 / 40	-70.5	-70.5	0.06 (1)	10.00	G-C	0 / 268	0.06 (1)	
B-C	-429 / 0	-70.5	-70.5	0.29 (1)	8.25	B-G	0 / 268	0.06 (1)	
C-D	-429 / 0	-70.5	-70.5	0.29 (1)	8.25	G-D	0 / 268	0.06 (1)	
D-E	0 / 40	-70.5	-70.5	0.08 (1)	10.00				
H-B	-581 / 0	0.0	0.0	0.08 (1)	7.81				
F-D	-581 / 0	0.0	0.0	0.08 (1)	7.81				
H-G	0 / 0	-17.5	-17.5	0.19 (4)	10.00				
G-F	0 / 0	-17.5	-17.5	0.19 (4)	10.00				

TOTAL WEIGHT = 65 lb [M/JF]

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) = $L/360$ (0.41")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.41")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.08")

CSI: TC=0.29 (C-D:1), BC=0.19 (G-H:4),
WB=0.06 (D-G:1), SSI=0.10 (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 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (H) (INPUT = 0.90)
JSI METAL= 0.14 (F) (INPUT = 1.00)

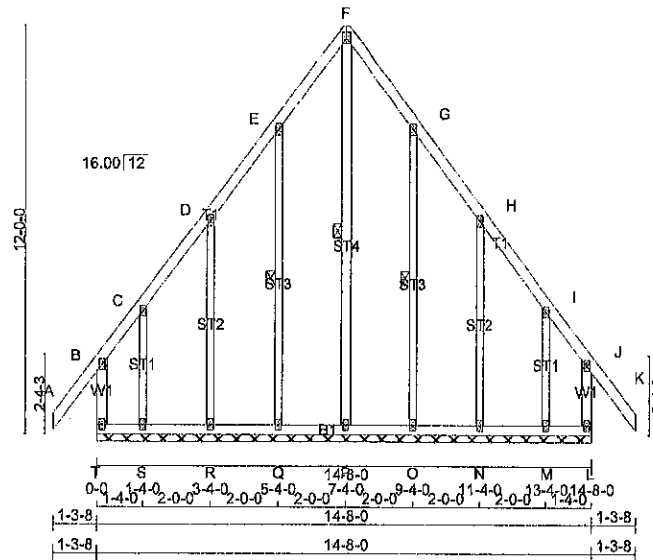


A-N073828

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H11G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.820 S Apr 15 2015 MTek Industries, Inc. Fri Jul 17 08:27:08 2015 Page 1
ID:AyrJx9Y7fa2EXF7DRQXsq4zMz1-4hkGKDbXZiYE_HGfZx9GE76RGr4FcQHL4zndENyx5>
3x4 II
Scale = 1:88.0



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	2x3	DRY	No.2	SPF
EXCEPT				
P - F	2x4	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
EXCEPT				
ST1	2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMV+p	MT20	2.0	4.0	
C, D, E, G, H, I				
C TMW+w	MT20	2.0	4.0	
F TTW+p	MT20	3.0	4.0	1.75 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 = 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 (CSI)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (CSI)	MAX UNBRACED LENGTH	
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	-10 / 0	-70.5 -70.5	0.07 (1)	10.00	Q-E	-141 / 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	-72 / 0		0.02 (1)	
E-F	0 / 27	-70.5 -70.5	0.04 (1)	10.00	O-G	-141 / 0		0.08 (1)	
F-G	0 / 27	-70.5 -70.5	0.04 (1)	10.00	N-H	-146 / 0		0.11 (1)	
G-H	0 / 23	-70.5 -70.5	0.04 (1)	10.00	M-I	-72 / 0		0.02 (1)	
H-I	0 / 25	-70.5 -70.5	0.04 (1)	10.00					
I-J	-10 / 0	-70.5 -70.5	0.07 (1)	10.00					
J-K	-10 / 40	-70.5 -70.5	0.10 (1)	10.00					
T-B	-161 / 0	0.0 0.0	0.03 (1)	7.81					
L-J	-161 / 0	0.0 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 = 98 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 (A-B:1), BC=0.01 (Q-R:4), WB=0.15 (F-P:1), SSI=0.05 (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 616 354 1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (F) (INPUT = 0.90)
JSI METAL = 0.06 (F) (INPUT = 1.00)

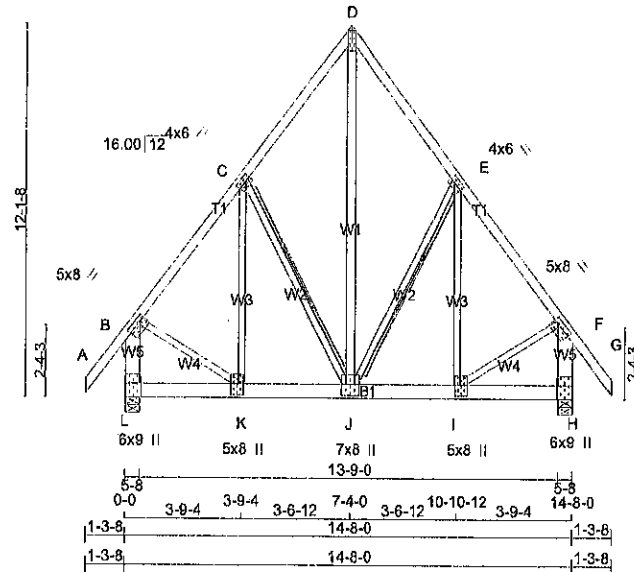


A-15073827

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H11A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID: AyrJx9Y?fa2EXF7DRQxSq4zMEz1-4hkGKDbXZ1YE_HGFZx9GE76NkrxLcKpL4zndENyx5)
3x8 II Scale = 1:75.4



TOTAL WEIGHT = 109 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 - 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	1.75	2.00
C TMWW-t	MT20	4.0	8.0	2.00	2.25
D TTW+p	MT20	3.0	8.0	3.75	Edge
E TMWW-t	MT20	4.0	8.0	2.00	2.25
F TMVW-t	MT20	5.0	8.0	1.75	2.00
H BMV1-t	MT20	8.0	9.0	Edge	0.50
I BMWW-t	MT20	5.0	8.0	4.25	2.00
J BMWWW-t	MT20	7.0	8.0	4.25	3.50
K BMWW-t	MT20	5.0	8.0	4.25	2.00
L BMV1-t	MT20	6.0	9.0	5.50	

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	HORZ
L	4012	0	4012	0
H	4012	0	4012	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
L	2825	1926 / 0	0 / 0	0 / 0	898 / 0	0 / 0
H	2825	1926 / 0	0 / 0	0 / 0	898 / 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 = 3.93FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-J, C-J
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

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 / 40	-70.5	-70.6	0.11 (1)	10.00	J-D	0 / 3184
B-C	-2769 / 0	-70.5	-70.5	0.33 (1)	3.93	J-E	-879 / 0
C-D	-2136 / 0	-70.5	-70.5	0.24 (1)	4.44	I-E	0 / 1012
D-E	-2136 / 0	-70.5	-70.5	0.24 (1)	4.44	C-J	-879 / 0
E-F	-2769 / 0	-70.5	-70.5	0.33 (1)	3.93	K-C	0 / 1012
F-G	0 / 40	-70.5	-70.5	0.11 (1)	10.00	B-K	0 / 1868
L-B	-3272 / 0	0.0	0.0	0.29 (1)	5.81	I-F	0 / 1868
H-F	-3272 / 0	0.0	0.0	0.29 (1)	5.81		
L-K	0 / 0	-463.2	-463.2	0.44 (1)	10.00		
K-J	0 / 1673	-463.2	-463.2	0.58 (1)	10.00		
J-I	0 / 1673	-463.2	-463.2	0.58 (1)	10.00		
I-H	0 / 0	-463.2	-463.2	0.44 (1)	10.00		

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

SPACING = 24.0 IN./C/C

*** NON STANDARD GIRDER ***

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 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/989 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL)= L/969 (0.11")

CSI: TC=0.33 (E-F:1), BC=0.58 (J-K:1), WB=0.56 (D-J:1), SSI=0.87 (H-I: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
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.59 (D) (INPUT = 1.00)

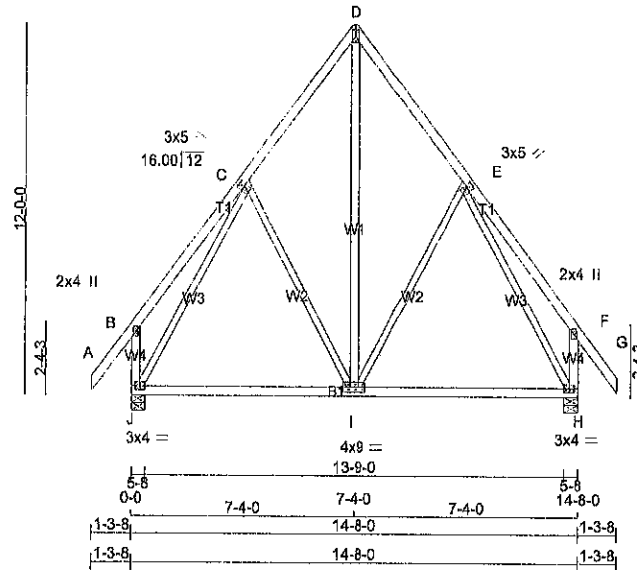
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H11	3	1	TRUSS DESC.	

Alpe Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-cVBu7lavoZQNM7hT?Ee1hwZFhSgltrqCrJ14xyxE5)
3x5 II Scale = 1:75.1



TOTAL WEIGHT = 3 X 92 = 275 lb
(MIF)

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
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+I	MT20	3.0	5.0	2.25	0.75
D	TTW+p	MT20	3.0	5.0		
E	TMWW+I	MT20	3.0	5.0	2.25	0.75
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-I	MT20	3.0	4.0		
I	BMVWW-I	MT20	4.0	9.0		
J	BMVW1-I	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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
J	744	0	744	0
H	744	0	744	0

UNFACTORED REACTIONS

JT	1ST LC CASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
J	COMBINED	SNOW	LIVE	PERM.LIVE	
J	522	367 / 0	0 / 0	0 / 0	155 / 0
H	522	367 / 0	0 / 0	0 / 0	155 / 0

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

BRACING

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

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 / 40	-70.5	-70.5 0.10 (1)	I-D	0 / 359	0.08 (1)	
B-C	0 / 25	-70.5	-70.5 0.16 (1)	I-E	-115 / 2	0.14 (1)	
C-D	-378 / 0	-70.5	-70.5 0.12 (1)	C-I	-115 / 2	0.14 (1)	
D-E	-378 / 0	-70.5	-70.5 0.12 (1)	J-C	-567 / 0	0.67 (1)	
E-F	0 / 25	-70.5	-70.5 0.18 (1)	E-H	-567 / 0	0.67 (1)	
F-G	0 / 40	-70.5	-70.5 0.10 (1)				
J-B	-195 / 0	0.0	0.0 0.02 (1)				
H-F	-195 / 0	0.0	0.0 0.02 (1)				
J-I	0 / 265	-17.5	-17.5 0.29 (4)				
I-H	0 / 265	-17.5	-17.5 0.29 (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

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

(65 % 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 (0.06")

CSI: TC=0.16 (B-C:1), BC=0.29 (H-I:4), WB=0.67 (E-H:1), SSI=0.11 (I-J: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 = 0.60

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (C) (INPUT = 0.90)
JSI METAL = 0.28 (C) (INPUT = 1.00)

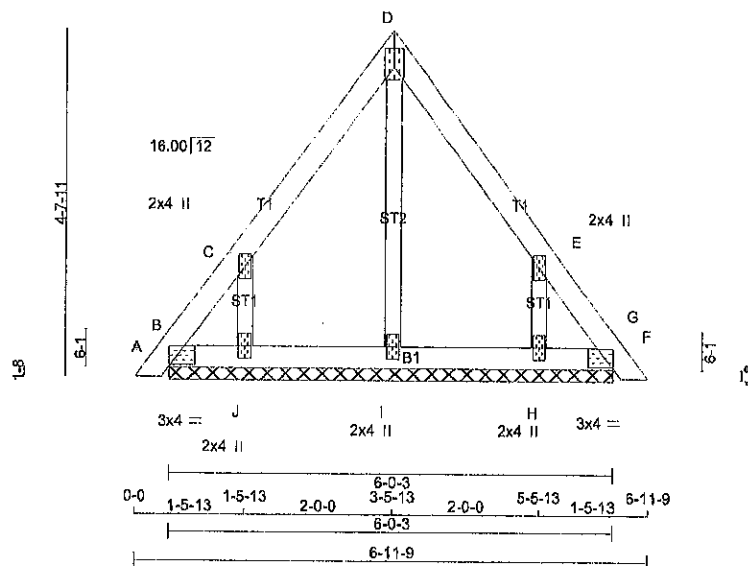


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H10G	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-BldWwXZH1GIWz6HSV7o8i06m2OibYp3dfiWAVyxE5Z
3x5 II
Scale = 1:31.1



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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TMW+w	MT20	2.0	4.0		
D	TTW+p	MT20	3.0	5.0	2.00	Edge
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H, I, J						
H	BMW1+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 8.23.13.11, 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 = 6.25FT.
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 VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO		FR-TO			
A-B	0/9	-70.5	-70.5 0.01 (1)	I-D	-59/0	0.02 (1)	
B-C	-37/0	-70.5	-70.5 0.04 (1)	J-C	-132/0	0.02 (1)	
C-D	-50/0	-70.5	-70.5 0.04 (1)	H-E	-132/0	0.02 (1)	
D-E	-50/0	-70.5	-70.5 0.04 (1)				
E-F	-37/0	-70.5	-70.5 0.04 (1)				
F-G	0/9	-70.5	-70.5 0.01 (1)				
B-J	0/36	-17.5	-17.5 0.01 (1)				
J-I	0/24	-17.5	-17.5 0.02 (4)				
I-H	0/24	-17.5	-17.5 0.02 (4)				
H-F	0/36	-17.5	-17.5 0.01 (1)				

TOTAL WEIGHT = 2 X 26 = 50 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

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

CSI: TC=0.04 (C-D:1), BC=0.02 (I-J:4), WB=0.02 (E-H:1), SSI=0.04 (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)	(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= 0.15 (B) (INPUT = 0.90)

JSI METAL = 0.04 (E) (INPUT = 1.00)

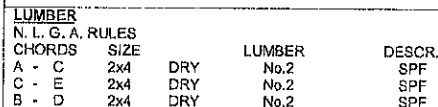


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Alpa Roof Truss, Maple

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DRY; SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-	MT20	3.0	4.0	1.50	2.75
C	TT-p	MT20	3.0	4.0	3.25	Edge
D	TMB1-	MT20	3.0	4.0	1.50	2.75

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

LOADING BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	289	0	289	0	0	6-0-3	1-8
D	289	0	289	0	0	6-0-3	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	203	141 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
D	203	141 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 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: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 9	-70.5	-70.5	0.01 (1)	10.00		
B-C	-131 / 0	-70.5	-70.5	0.11 (1)	6.25		
C-D	-131 / 0	-70.5	-70.5	0.11 (1)	6.25		
D-E	0 / 9	-70.5	-70.5	0.01 (1)	10.00		
B-D	0 / 77	-17.5	-17.5	0.19 (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

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

CSI: TC=0.11 (C-D:1), BC=0.19 (B-D:4),
WB=0.00 (n/a:0), SS=0.07 (B-D: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.

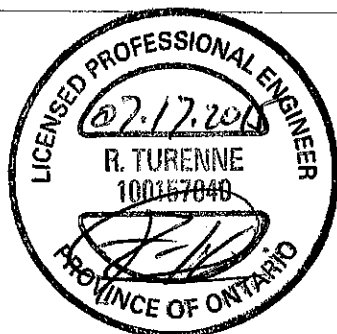
NAIL VALUES

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

PLATE PLACEMENT TOL. $\approx$ 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (D) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

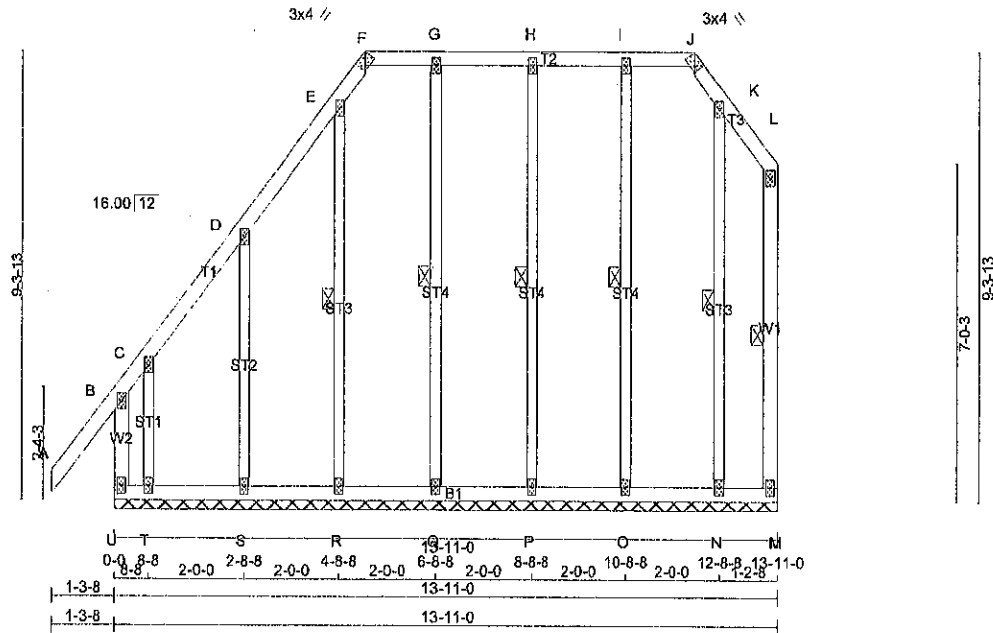


A-N7073823

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H09G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-g637BYfGyAf7pX4upcZcVUw1e2QP4NvO?Yzd2yxE6:
Scale: 1/4"=1'



TOTAL WEIGHT = 91 lb
[M]

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

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 = 8.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.
1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF L-M, H-P, G-Q, E-R, I-O, K-N.
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)	VERT. LOAD (PLF)	MAX FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)	UNBRAC LENGTH
FR-TO				FR-TO			
A-B	0/40	-70.5	-70.5 0.10 (1)	P-H	-153/0	0.09 (1)	
B-C	-73/0	-70.5	-70.5 0.09 (1)	Q-G	-163/0	0.09 (1)	
C-D	-4/0	-70.5	-70.5 0.03 (1)	R-E	-144/0	0.07 (1)	
D-E	-3/0	-70.5	-70.5 0.03 (1)	S-D	-142/0	0.08 (1)	
E-F	-44/0	-70.5	-70.5 0.03 (1)	T-C	-5/0	0.00 (1)	
F-G	0/1	-78.0	-78.0 0.04 (1)	O-I	-168/0	0.10 (1)	
G-H	0/0	-78.0	-78.0 0.04 (1)	N-K	-119/0	0.06 (1)	
H-I	0/0	-78.0	-78.0 0.04 (1)				
I-J	0/2	-78.0	-78.0 0.04 (1)				
J-K	-40/0	-70.5	-70.5 0.02 (1)				
K-L	0/6	-70.5	-70.5 0.02 (1)				
U-B	-208/0	0.0	0.0 0.02 (1)				
M-L	-30/0	0.0	0.0 0.01 (1)				
U-T	0/5	-17.5	-17.5 0.02 (1)				
T-S	0/5	-17.5	-17.5 0.01 (4)				
S-R	0/2	-17.5	-17.5 0.01 (4)				
R-Q	0/0	-17.5	-17.5 0.01 (4)				
Q-P	0/0	-17.5	-17.5 0.01 (4)				
P-O	0/0	-17.5	-17.5 0.01 (4)				
O-N	0/0	-17.5	-17.5 0.01 (4)				
N-M	0/1	-17.5	-17.5 0.01 (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

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, CBC 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 (A-B:1), BC=0.02 (T-U:1), WB=0.10 (I-O:1), SSI=0.07 (I-J: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)	(PLI)
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

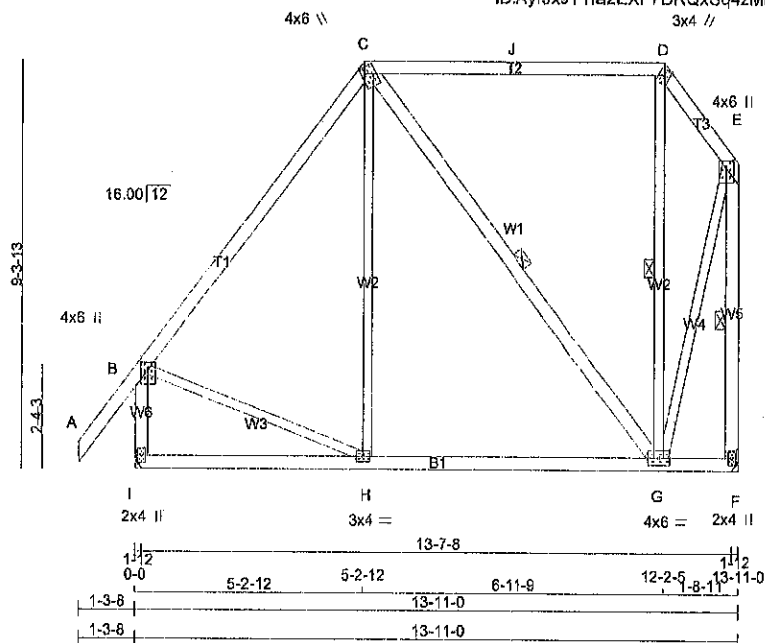
PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C, D, E, G, H, I, K				
C	TMW+w	MT20	2.0	4.0
F	TT-h	MT20	3.0	4.0
J	TT-h	MT20	3.0	4.0
L	TMV+p	MT20	2.0	4.0
M	BMV1+p	MT20	2.0	4.0
N, O, P, Q, R, S, T				
N	BMW1+w	MT20	2.0	4.0
U	BMV1+p	MT20	2.0	4.0

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.



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TOTAL WEIGHT = 6 X 87 = 521 lb

DRY: SEASONED LUMBER.

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
CBC 9.23.13.11, and no less than 2x4 for Part 4 design.

BEARINGS

UNFACTORED REACTIONS

BRACING

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-G, D-G, E-F.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN
THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX CSI (LC)	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	H-C	0 / 102	0.04 (4)
B-C	-405 / 0	-70.5	-70.5	0.25 (1)	6.25	C-G	-206 / 0	0.14 (1)
C-J	-117 / 0	-78.0	-78.0	0.54 (1)	6.25	G-D	-170 / 0	0.10 (1)
J-D	-117 / 0	-78.0	-78.0	0.54 (1)	6.25	B-H	0 / 258	0.06 (1)
D-E	-201 / 0	-70.5	-70.5	0.03 (1)	6.25	G-E	0 / 447	0.10 (1)
I-B	-697 / 0	0.0	0.0	0.09 (1)	7.81			
F-E	-653 / 0	0.0	0.0	0.15 (1)	6.25			
I-H	0 / 0	-17.5	-17.5	0.16 (4)	10.00			
H-G	0 / 242	-17.5	-17.5	0.18 (4)	10.00			
G-F	0 / 0	-17.5	-17.5	0.12 (4)	10.00			

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
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 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 (0.04")

CSI: TC=0.64 (C-D:1), BC=0.18 (G-H:4),
WB=0.14 (C-G: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= 0.76 (G) (INPUT = 0.90)
JSI METAL= 0.13 (G) (INPUT = 1.00)

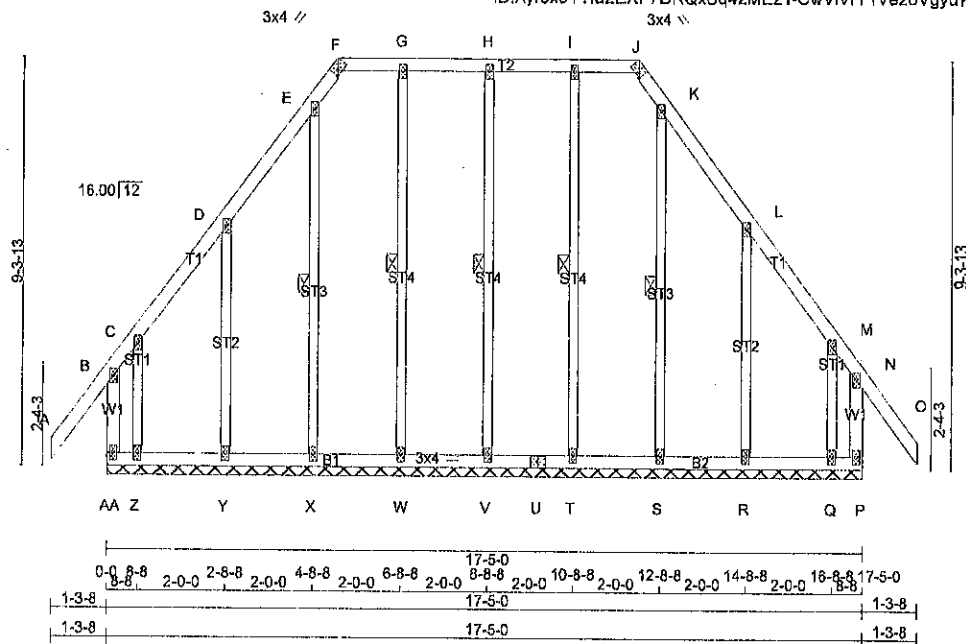


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H08G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:53.0



TOTAL WEIGHT = 105 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - F	2x4	DRY	No.2
F - J	2x4	DRY	No.2
J - O	2x4	DRY	No.2
AA - B	2x4	DRY	No.2
P - N	2x4	DRY	No.2
AA - U	2x4	DRY	No.2
U - P	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

GABLE STUDS SPACED AT 2-0-0 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, K, L, M					
C TMW+w	MT20	2.0	4.0		
F TT-h	MT20	3.0	4.0	Edge	1.25
J TT-h	MT20	3.0	4.0	Edge	1.25
N TMV+p	MT20	2.0	4.0		
P BMV1+p	MT20	2.0	4.0		
Q, R, S, T, V, W, X, Y, Z					
Q BMW1+w	MT20	2.0	4.0		
U BS-l	MT20	3.0	4.0		
AA 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
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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF H-V, G-W, E-X, I-T, K-S.
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				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	V-H	-152 / 0	0.09 (1)
B-C	-61 / 0	-70.5	-70.5 0.08 (1)	6.25	W-G	-187 / 0	0.10 (1)
C-D	0 / 9	-70.5	-70.5 0.03 (1)	10.00	X-E	-152 / 0	0.07 (1)
D-E	0 / 11	-70.5	-70.5 0.04 (1)	10.00	Y-D	-141 / 0	0.08 (1)
E-F	-36 / 0	-70.5	-70.5 0.03 (1)	6.25	Z-C	-17 / 0	0.00 (1)
F-G	0 / 10	-78.0	-78.0 0.04 (1)	10.00	T-I	-167 / 0	0.10 (1)
G-H	0 / 9	-78.0	-78.0 0.04 (1)	10.00	S-K	-152 / 0	0.07 (1)
H-I	0 / 9	-78.0	-78.0 0.04 (1)	10.00	R-L	-141 / 0	0.08 (1)
I-J	0 / 10	-78.0	-78.0 0.04 (1)	10.00	Q-M	-17 / 0	0.00 (1)
J-K	-36 / 0	-70.5	-70.5 0.03 (1)	6.25			
K-L	0 / 11	-70.5	-70.5 0.04 (1)	10.00			
L-M	0 / 9	-70.5	-70.5 0.03 (1)	10.00			
M-N	-51 / 0	-70.5	-70.5 0.08 (1)	6.25			
N-O	0 / 40	-70.5	-70.5 0.10 (1)	10.00			
AA-B	-186 / 0	0.0	0.0 0.02 (1)	7.81			
P-N	-186 / 0	0.0	0.0 0.02 (1)	7.81			
AA-Z	-3 / 0	-17.5	-17.5 0.01 (1)	10.00			
Z-Y	-3 / 0	-17.5	-17.5 0.01 (4)	10.00			
Y-X	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
X-W	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
W-V	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
V-U	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
U-T	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
T-S	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
S-R	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
R-Q	-3 / 0	-17.5	-17.5 0.01 (4)	10.00			
Q-P	-3 / 0	-17.5	-17.5 0.01 (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

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 086-09
- TPC 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 (A-B:1), BC=0.01 (X-Y:4), WB=0.10 (G-W:1), SSI=0.07 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667 822 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (F) (INPUT = 0.80)
JSI METAL = 0.05 (N) (INPUT = 1.00)

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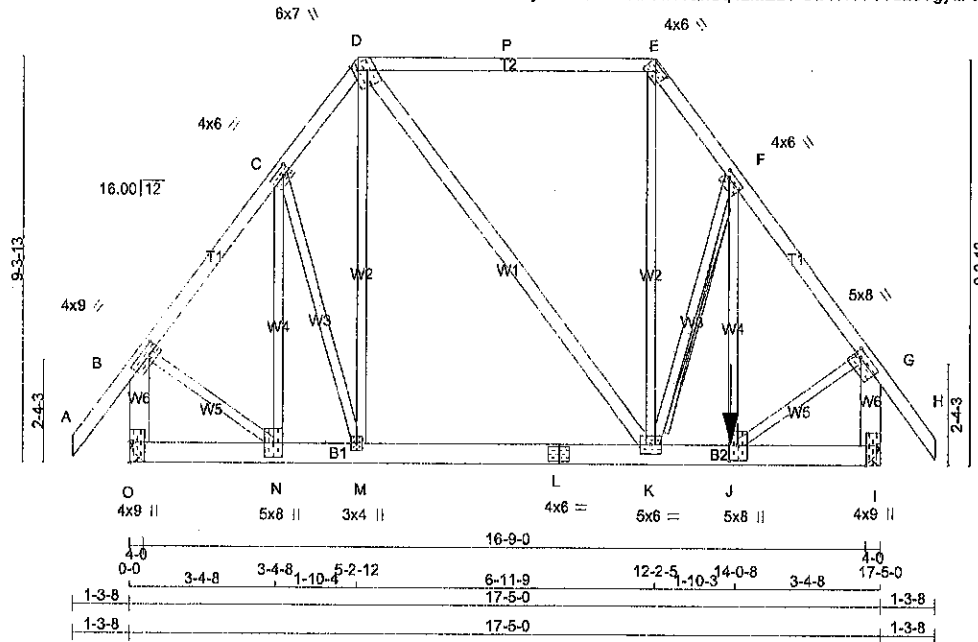


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H08A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:53.4



TOTAL WEIGHT = 124 lb

LUMBER					DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER			
A - D	2x4	DRY	No.2	SPF		
D - E	2x4	DRY	1650F 1.6E	SPF		
E - H	2x4	DRY	No.2	SPF		
O - B	2x6	DRY	No.2	SPF		
I - G	2x6	DRY	No.2	SPF		
O - L	2x6	DRY	No.2	SPF		
L - I	2x6	DRY	No.2	SPF		
ALL WEBS	2x3	DRY	No.2	SPF		
EXCEPT						
D - K	2x4	DRY	No.2	SPF		

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	9.0	2.00	3.00
C	TMVW-I	MT20	4.0	6.0	2.00	2.50
D	TTWV+m	MT20	6.0	7.0	Edge	1.50
E	TTWV-h	MT20	4.0	6.0	1.50	3.00
F	TMVW-I	MT20	4.0	6.0	1.50	1.50
G	TMVW-I	MT20	5.0	8.0	1.75	2.00
I	BMV1-I	MT20	4.0	9.0	Edge	1.50
J	BMVW-I	MT20	5.0	8.0	4.25	2.25
K	BMVWV-I	MT20	5.0	6.0		
L	BS-I	MT20	4.0	6.0		
M	BMVWV-I	MT20	3.0	4.0		
N	BMVWV-I	MT20	5.0	8.0		
O	BMV1-p	MT20	4.0	9.0	Edge	0.25

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 2421.3 lbs FACTORED DOWN AT 13-11-2 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
O	1442	0	1442	0	0	HANGER BY OTHERS
I	3499	0	3499	0	0	HANGER BY OTHERS

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERMLIVE				
O	1016	687 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
I	2405	1669 / 0	0 / 0	0 / 0	0 / 0	796 / 0	0 / 0

BRACING

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

2x4 DRY SPF No.2 T-BRACE REQUIRED AT F-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. UNBRAC. CSI (L/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC. CSI (L/C)		
FR-TO		FROM TO		FR-TO				
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	N-C	-298 / 0	0.23 (1)
B-C	-1061 / 0	-70.5	-70.5	0.14 (1)	5.95	C-M	0 / 34	0.01 (4)
C-D	-1136 / 0	-70.5	-70.5	0.13 (1)	5.79	M-D	0 / 60	0.02 (4)
D-P	-1100 / 0	-78.0	-78.0	0.06 (1)	5.53	D-K	0 / 730	0.13 (1)
P-E	-1100 / 0	-78.0	-78.0	0.06 (1)	5.53	K-E	0 / 1181	0.28 (1)
E-F	-1848 / 0	-70.5	-70.5	0.09 (1)	4.84	K-F	-1487 / 0	0.58 (1)
F-G	-2500 / 0	-70.5	-70.5	0.28 (1)	4.13	J-F	0 / 1745	0.43 (1)
G-H	0 / 40	-70.5	-70.5	0.11 (1)	10.00	B-N	0 / 738	0.18 (1)
O-B	-1414 / 0	0.0	0.0	0.13 (1)	7.81	J-G	0 / 1714	0.42 (1)
I-G	-3039 / 0	0.0	0.0	0.27 (1)	6.00			
O-N	0 / 0	-17.5	-17.5	0.03 (4)	10.00			
N-M	0 / 646	-17.5	-17.5	0.09 (4)	10.00			
M-L	0 / 654	-17.5	-17.5	0.22 (1)	10.00			
L-K	0 / 654	-17.5	-17.5	0.22 (1)	10.00			
K-J	0 / 1505	-17.5	-17.5	0.35 (1)	10.00			
J-I	0 / 0	-231.9	-231.9	0.34 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
J	13-11-2	-2421	-2421	--	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/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.

GIRDER TYPE: CstdGirder

START DISTANCE = 13-11-12
START SPAN CARRIED = 11-9-0
END DISTANCE = 17-5-0
END SPAN CARRIED = 11-9-0
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 (0.58")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.58")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.66 (D-E:1), BC=0.35 (J-K:1), WB=0.53 (F-K:1), SSI=0.31 (J-I:1)

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

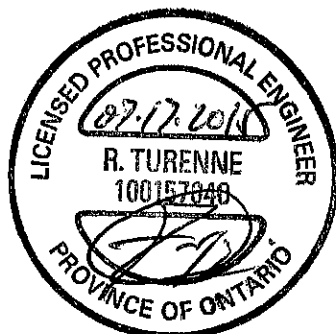
COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

A-ND73819

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H08A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Fri Jul 17 08:27:04 2015 Page 2
ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-CwVIVrY1Ve2oVgyuK55K3HxdcEd3gWLm9LpQ5cyxE5t

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.

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (J) (INPUT = 0.90)
JSI METAL = 0.50 (G) (INPUT = 1.00)

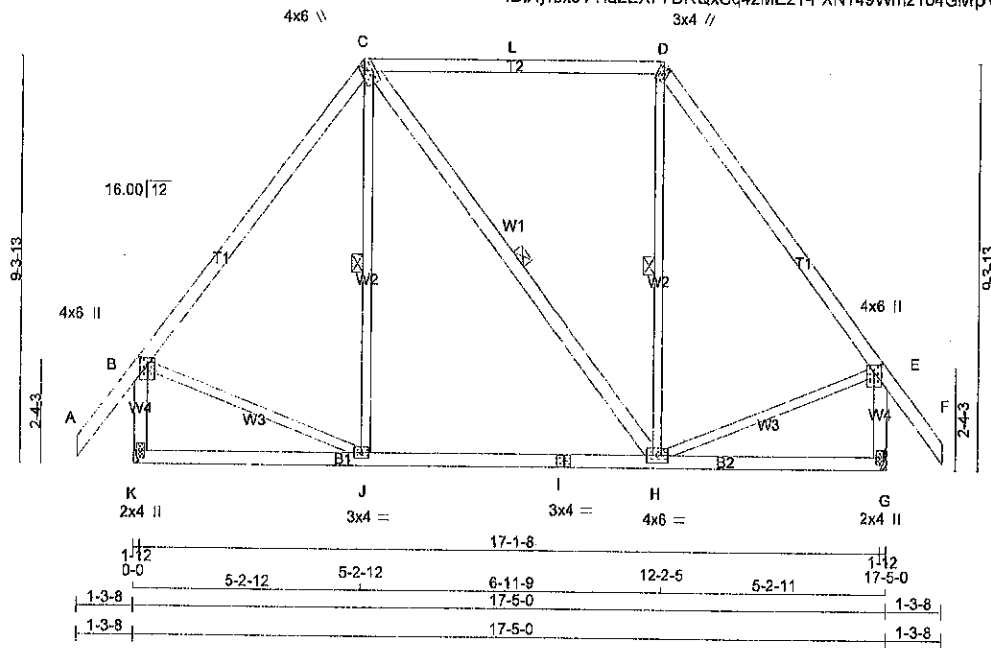


A-15073819(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H08	10	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MTEK Industries, Inc. Fri Jul 17 08:27:02 2015 Page 1
ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-FXN749Wmz1o4GMpVDg2s_ssJwR7ECjsT11KJ1jyxE5c
Scale = 1:53.2



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TTWW+m	MT20	3.0	4.0	1.75	1.00
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	BS-t	MT20	3.0	4.0		
J	BMVWW-t	MT20	3.0	4.0		
K	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	IN-SX	IN-SX
K	891	0	891	0	0	HANGER BY OTHERS
G	891	0	891	0	0	MIN. SEAT SIZE: 1-8 HANGER BY OTHERS

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
K	628	425 / 0	0 / 0	204 / 0	0 / 0
G	628	425 / 0	0 / 0	204 / 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.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-J, C-H, D-H.
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		FACTORED		WEBS		FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	MEMB. FORCE (LBS)	MAX	CS1 (LC)	MAX
FR-TO		FROM TO			FR-TO			
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	J-C	-6 / 86	0.03 (4)
B-C	-561 / 0	-70.5	-70.5	0.26 (1)	6.25	C-H	0 / 0	0.00 (1)
C-L	-335 / 0	-78.0	-78.0	0.54 (1)	6.25	H-D	-6 / 86	0.03 (4)
L-D	-335 / 0	-78.0	-78.0	0.54 (1)	6.25	B-J	0 / 357	0.08 (1)
D-E	-561 / 0	-70.5	-70.5	0.26 (1)	6.25	H-E	0 / 357	0.08 (1)
E-F	0 / 40	-70.5	-70.5	0.10 (1)	10.00			
K-B	-856 / 0	0.0	0.0	0.11 (1)	7.81			
G-E	-856 / 0	0.0	0.0	0.11 (1)	7.81			
K-J	0 / 0	-17.5	-17.5	0.15 (4)	10.00			
J-I	0 / 335	-17.5	-17.5	0.18 (4)	10.00			
I-H	0 / 335	-17.5	-17.5	0.18 (4)	10.00			
H-G	0 / 0	-17.5	-17.5	0.15 (4)	10.00			

TOTAL WEIGHT = 10 X 93 = 933 lb (M)(F)

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. G/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

(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 (0.58")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.58")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.54 (C-D:1), BC=0.18 (H-J:4), WB=0.08 (B-J: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 = 0.60

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 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (H) (INPUT = 0.80)
JSI METAL= 0.16 (G) (INPUT = 1.00)

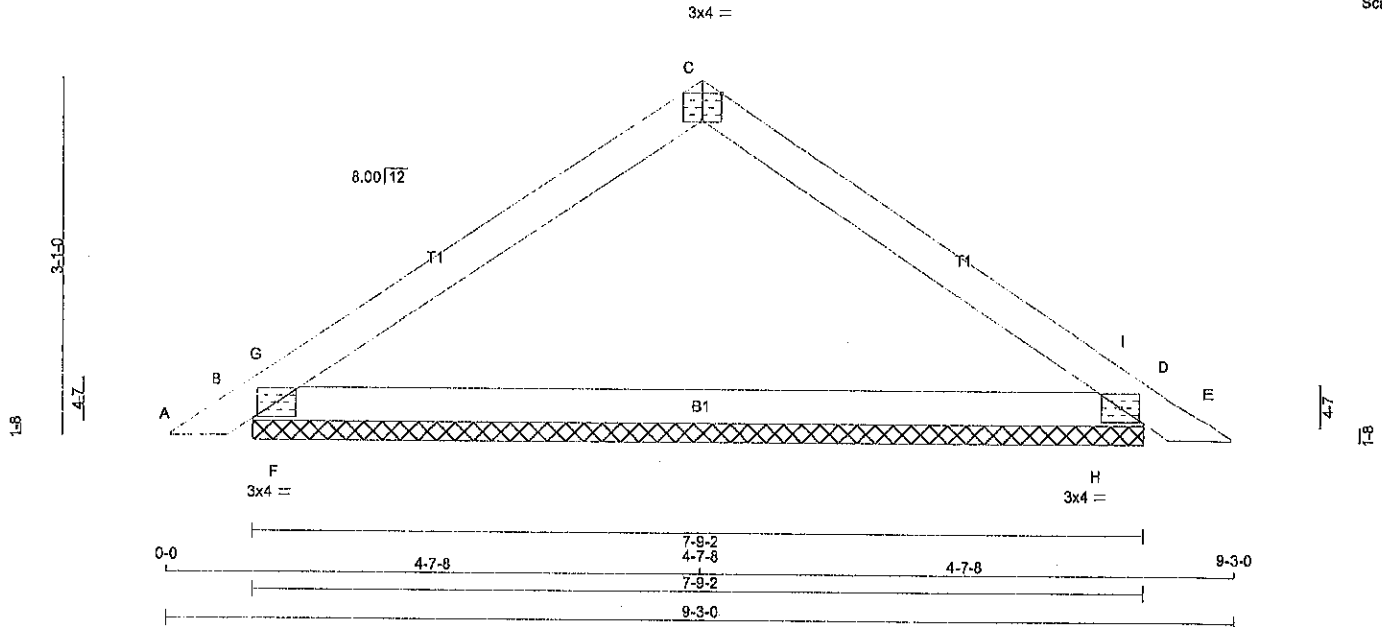


A-15073818

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H07	9	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:20.0



TOTAL WEIGHT = 9 X 21 = 193 lb (M)

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

DRY: SEASONED LUMBER.

PLATES (table in inches)					
JT	TYPE	PLATES	W	LEN	X
B	TMB1-I	MT20	3.0	4.0	
C	TT-p	MT20	3.0	4.0	Edge 2.00
D	TMB1-I	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

BEARINGS							
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD
B	387	0	387	0	0	7-9-2	1-8
D	387	0	387	0	0	7-9-2	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	271	190/0	0/0	0/0	0/0	0/0	81/0
D	271	190/0	0/0	0/0	0/0	0/0	81/0

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: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	UNBRAC LENGTH FR-TO
A-B	0/11	-70.5	-70.5 0.02 (1)	F-G	0/235	0.00 (1)	
B-G	-393/0	-70.5	-70.5 0.14 (4)	H-I	0/235	0.00 (1)	
G-C	-246/0	-70.5	-70.5 0.20 (1)				
C-I	-246/0	-70.5	-70.5 0.20 (1)				
I-D	-393/0	-70.5	-70.5 0.14 (4)				
D-E	0/11	-70.5	-70.5 0.02 (1)				
B-F	0/212	-17.5	-17.5 0.12 (4)				
F-H	0/212	-17.5	-17.5 0.17 (1)				
H-D	0/212	-17.5	-17.5 0.12 (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.I. PLUS
8.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.20 (C-G:1), BC=0.17 (F-H:1),
WB=0.00 (F-G:1), SSI=0.21 (B-G: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

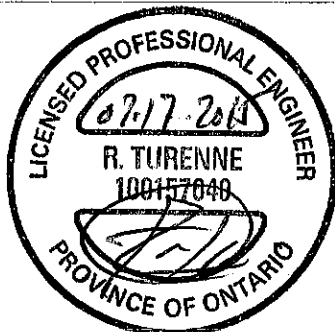
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.36 (D) (INPUT = 0.80)
JSI METAL= 0.09 (D) (INPUT = 1.00)



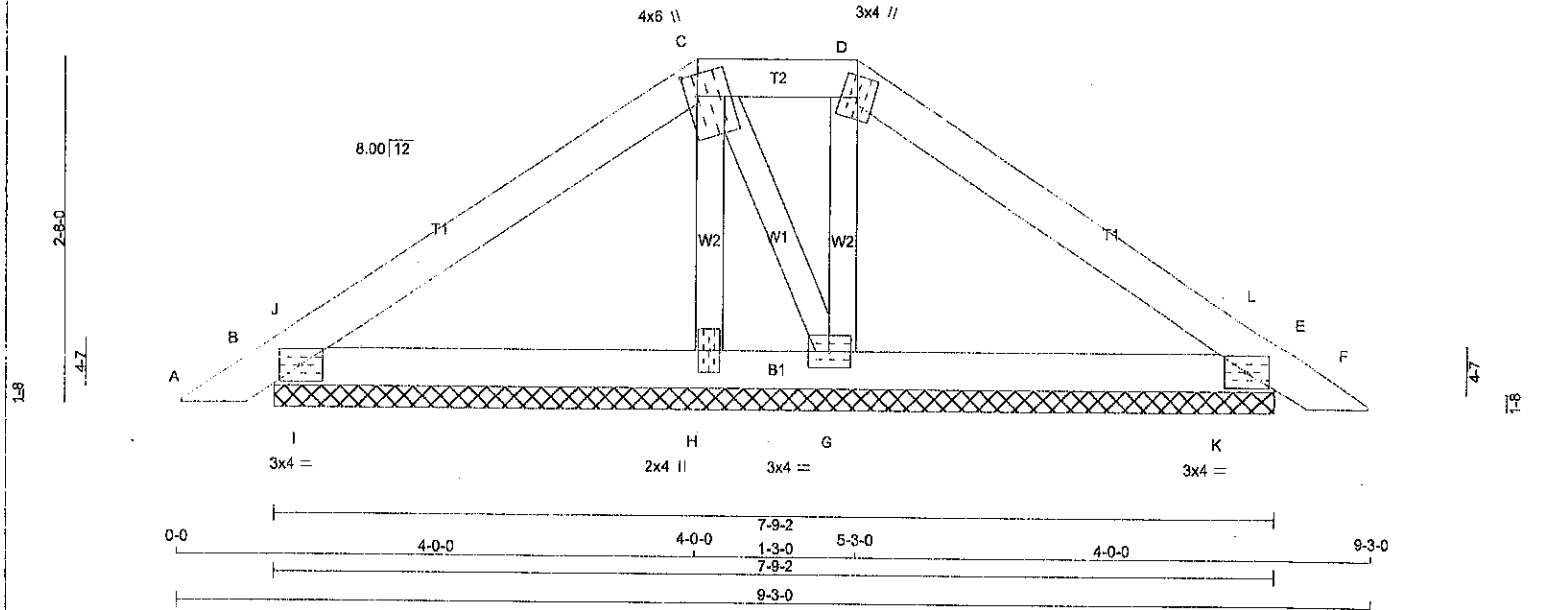
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H06	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMz1-nLpdsqV8CjgDeCEJfzXdRfJFB1gVTHbKTNaUHyxE5e Scale = 1:17.9



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
B - E	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	TMB1-I	MT20	3.0	4.0	
C	TTWW+m	MT20	4.0	6.0	2.00 1.00
D	TTWW+m	MT20	3.0	4.0	
E	TMB1-I	MT20	3.0	4.0	
G	BMWV1-t	MT20	3.0	4.0	
H	BMW1+w	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
B	224	0	224	0	0	7-8-2	1-8		
E	214	0	214	0	0	7-8-2	1-8		
H	130	0	130	0	0	7-8-2	1-8		
G	206	0	206	0	0	7-8-2	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
B	156	116 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0	
E	149	110 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0	
H	93	54 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0	
G	146	100 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 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 = 6.26FT.
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 / 11	-70.5 -70.5	0.02 (1)	10.00	H-C	-65 / 0	0.01 (1)
B-J	-42 / 0	-70.5 -70.5	0.03 (1)	6.25	C-G	-37 / 0	0.01 (1)
J-C	-62 / 0	-70.5 -70.5	0.09 (1)	6.25	G-D	-108 / 0	0.02 (1)
C-D	-45 / 0	-70.5 -70.5	0.02 (1)	6.25	I-J	-178 / 11	0.00 (1)
D-L	-64 / 0	-70.5 -70.5	0.09 (1)	6.25	K-L	-180 / 10	0.00 (1)
L-E	-29 / 0	-70.5 -70.5	0.03 (1)	6.25			
E-F	0 / 11	-70.5 -70.5	0.02 (1)	10.00			
B-I	0 / 65	-17.5 -17.5	0.08 (1)	10.00			
I-H	0 / 65	-17.5 -17.5	0.08 (1)	10.00			
H-G	0 / 62	-17.5 -17.5	0.06 (1)	10.00			
G-K	0 / 50	-17.5 -17.5	0.08 (1)	10.00			
K-E	0 / 50	-17.5 -17.5	0.08 (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

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.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.09 (D-L:1), BC=0.08 (B-I:1), WB=0.02 (D-G:1), SSI=0.14 (E-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=f.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 2264 1666

PLATE PLACEMENT TOL. = 0.250 inches

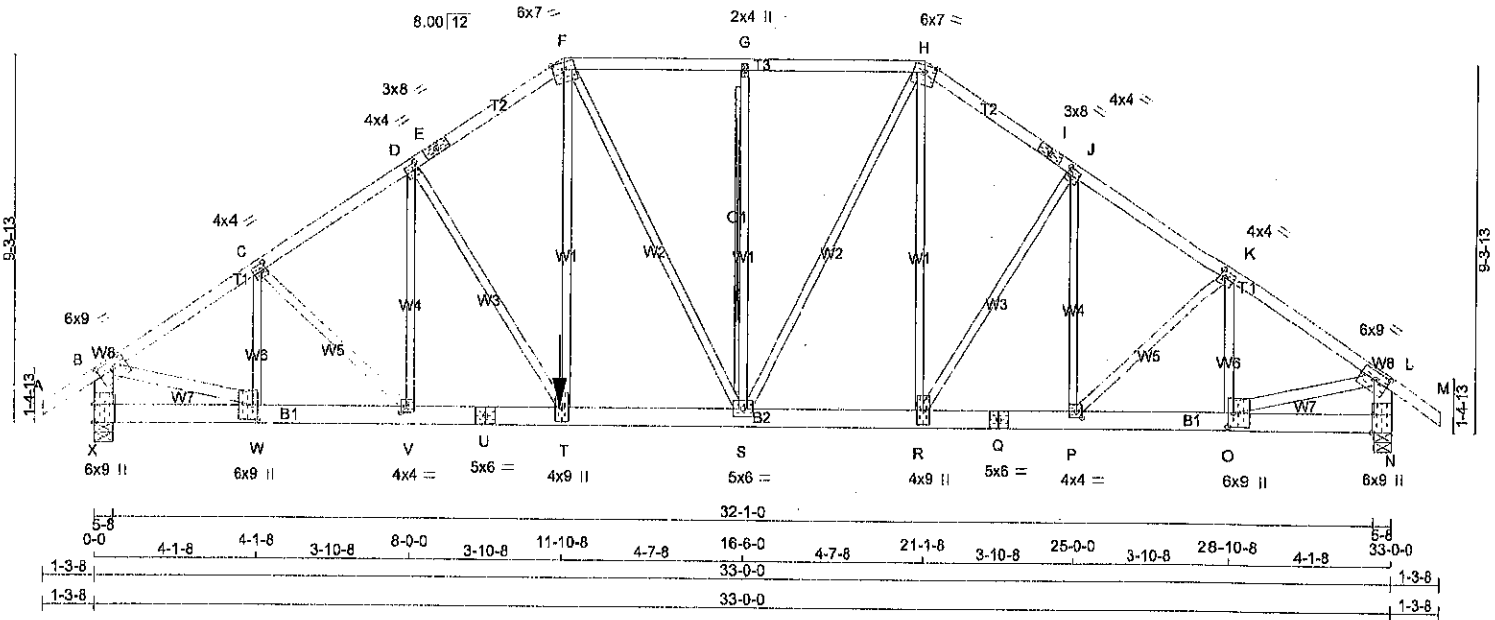
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)



A-15073816

Alpa Roof Truss, Maple



TOTAL WEIGHT = 2 X 189 = 379 lb
 [M]

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR
A - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
H - I	2x4	DRY	No.2
I - M	2x4	DRY	No.2
X - B	2x6	DRY	No.2
N - L	2x6	DRY	No.2
X - U	2x6	DRY	No.2
U - Q	2x6	DRY	No.2
Q - N	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
B - W	2x4	DRY	No.2
O - L	2x4	DRY	No.2

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-E	12	TOP
E-F	12	TOP
F-H	12	TOP
H-I	12	TOP
I-M	12	TOP
X-B	12	TOP
N-L	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
X-U	12	SIDE(162.2)
U-Q	12	SIDE(222.8)
Q-N	12	SIDE(222.8)
WEBS : (0.122"x3") SPIRAL NAILS		
T-F	6	SIDE(178.5)
2x3	6	
2x4	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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	JT	HORZ	JT	IN-SX	JT	IN-SX
X	8685	0	8685	0	5-8	5-8	5-8
N	9196	0	9196	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LC CASE		MAX./MIN. COMPONENT REACTIONS		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	JT	SNOW	JT	LIVE	JT	WIND	JT	DEAD	JT	SOIL
X	6106	4129 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1878 / 0	0 / 0	0 / 0	0 / 0
N	6480	4383 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2097 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.82FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT G-S
 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		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LOC1 MAX	MAX UNBRAC	CSI (LC)	MEMB.	FORCE (LBS)	MAX UNBRAC	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 27	-70.5	-70.5	0.05 (1)	10.00	W-C	-617 / 0	0.08 (1)	
B-C	-10319 / 0	-70.5	-70.5	0.56 (1)	2.72	C-V	0 / 278	0.03 (1)	
C-D	-10564 / 0	-70.5	-70.5	0.51 (1)	2.72	V-D	0 / 1063	0.13 (1)	
D-E	-9854 / 0	-70.5	-70.5	0.49 (1)	2.83	D-T	-1165 / 0	0.63 (1)	
E-F	-9854 / 0	-70.5	-70.5	0.49 (1)	2.83	T-F	0 / 4125	0.51 (1)	
F-G	-8776 / 0	-78.0	-78.0	0.44 (1)	3.03	F-S	0 / 1198	0.16 (1)	
G-H	-8776 / 0	-78.0	-78.0	0.44 (1)	3.03	S-G	-374 / 0	0.16 (1)	
H-I	-9562 / 0	-70.5	-70.5	0.46 (1)	2.90	S-H	0 / 1744	0.22 (1)	
I-J	-9562 / 0	-70.5	-70.5	0.46 (1)	2.90	H-R	0 / 3479	0.43 (1)	
J-K	-10665 / 0	-70.5	-70.5	0.62 (1)	2.70	R-J	-1758 / 0	0.96 (1)	
K-L	-10748 / 0	-70.5	-70.5	0.61 (1)	2.82	P-J	0 / 1782	0.22 (1)	
L-M	0 / 27	-70.5	-70.5	0.05 (1)	10.00	P-K	-107 / 0	0.03 (1)	
X-B	-8034 / 0	0.0	0.0	0.29 (1)	5.31	O-K	-158 / 8	0.02 (1)	
N-L	-8367 / 0	0.0	0.0	0.30 (1)	5.21	B-W	0 / 8839	0.78 (1)	
						O-L	0 / 9203	0.81 (1)	
X-W	0 / 0	-341.8	-341.8	0.21 (1)	10.00				
W-V	0 / 8692	-341.8	-341.8	0.89 (1)	10.00				
V-U	0 / 8792	-341.8	-341.8	0.76 (1)	10.00				
U-T	0 / 8792	-341.8	-341.8	0.76 (1)	10.00				
T-S	0 / 8225	-463.2	-463.2	0.87 (1)	10.00				
S-R	0 / 7874	-463.2	-463.2	0.85 (1)	10.00				
R-Q	0 / 8889	-463.2	-463.2	0.82 (1)	10.00				
Q-P	0 / 8869	-463.2	-463.2	0.82 (1)	10.00				
P-O	0 / 8946	-463.2	-463.2	0.76 (1)	10.00				
O-N	0 / 0	-463.2	-463.2	0.28 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LOC1	MAX.	MAX-	FACE	DIR.	TYPE
T	11-9-12	-1442	-1442		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. G/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.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

CSI: TC=0.81 (K-L:1), BC=0.87 (S-T:1), WB=0.96 (J-R:1), SSI=0.38 (S-T: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 618 364 1867 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-11073815

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H04A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Fri Jul 17 08:27:00 2015 Page 2
ID:AyrJx9Y7fa2EXF7DRQxSq4zMz1-J8FEfUVWRQYM12f75F0OvRmyQd81kbbAEjrCyryxE5f

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

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.97 (W) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	6.0	8.0	2.50	4.50
C	TMWW-I	MT20	4.0	4.0	2.00	1.50
D	TMWW-I	MT20	4.0	4.0	2.00	1.00
E	TS-I	MT20	3.0	8.0		
F	TTVW-m	MT20	6.0	7.0	Edge	
G	TMW+w	MT20	2.0	4.0		
H	TTVW-m	MT20	6.0	7.0	Edge	
I	TS-I	MT20	3.0	8.0		
J	TMWW-I	MT20	4.0	4.0	2.00	1.00
K	TMWW-I	MT20	4.0	4.0	2.00	1.50
L	TMVW-I	MT20	6.0	9.0	2.50	4.50
N	BMV1-I	MT20	6.0	9.0	Edge	0.50
O	BMWW-I	MT20	6.0	9.0	4.50	1.50
P	BMWW-I	MT20	4.0	4.0	2.00	1.50
Q	BS-I	MT20	6.0	6.0		
R	BMWW-I	MT20	4.0	9.0		
S	BMWW-I	MT20	5.0	6.0		
T	BMWW-I	MT20	4.0	9.0		
U	BS-I	MT20	5.0	6.0		
V	BMWW-I	MT20	4.0	4.0	2.00	1.50
W	BMWW-I	MT20	6.0	9.0	4.50	1.50
X	BMV1-I	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

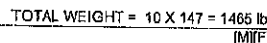
- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1442.0 lbs FACTORED DOWN AT 11-9-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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.



A-15073815(2)



JSI GRIP= 0.89 (R) (INPUT = 0.90)
JSI METAL= 0.57 (R) (INPUT = 1.00)

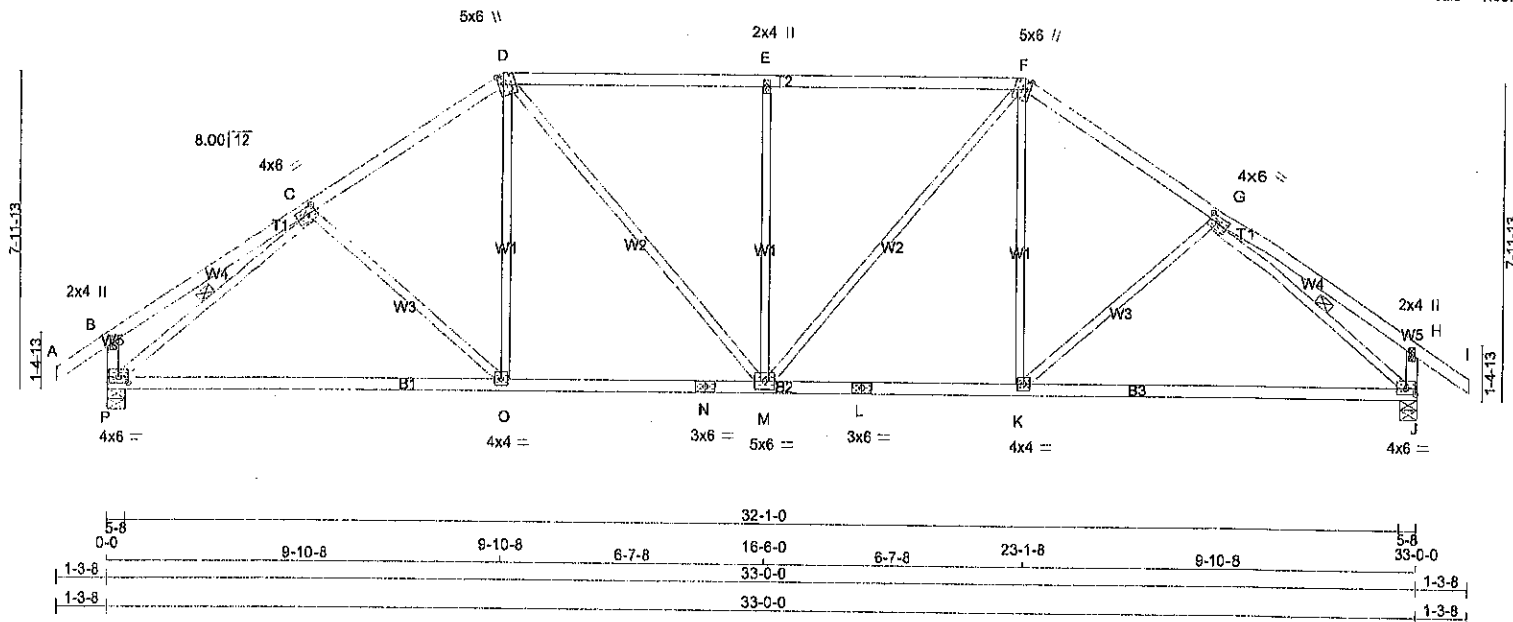


A-15073.8/4

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H03	1	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Fri Jul 17 08:26:59 2016 Page 1
ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-ryisS8Uug6QWPu4wXYV9MEEqADuf7DW1035fQOyxES
Scale = 1:58.4



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
P - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
L - J	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	TMVW+I	MT20	4.0	6.0	2.00	2.75
D	TTVW+m	MT20	5.0	6.0	2.50	1.50
E	TMVW+w	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	6.0	2.50	1.50
G	TMVW+I	MT20	4.0	6.0	2.00	2.75
H	TMV+p	MT20	2.0	4.0		
J	BMVW+I	MT20	4.0	6.0	1.75	3.00
K	BMVW+I	MT20	4.0	4.0		
L	BS-I	MT20	3.0	8.0		
M	BMVW+I	MT20	5.0	8.0		
N	BS-I	MT20	3.0	8.0		
O	BMVW+I	MT20	4.0	4.0		
P	BMVW+I	MT20	4.0	6.0	1.75	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

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
P 1548 0	1548 0	0 5-8	1-11
J 1548 0	1548 0	0 5-8	1-11

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
JT COMBINED	SNOW	LIVE	PERM.LIVE	
P 1088 750 / 0	0 / 0	0 / 0	338 / 0	0 / 0
J 1088 750 / 0	0 / 0	0 / 0	338 / 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 = 4.72FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-P, G-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	MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO							FR-TO			
A-B	0 / 27	-70.5	-70.5	0.09 (1)	10.00		C-O	-106 / 34	0.09 (1)	
B-C	0 / 22	-70.5	-70.5	0.27 (1)	10.00		O-D	0 / 253	0.06 (4)	
C-D	-1618 / 0	-70.5	-70.5	0.25 (1)	4.87		D-M	0 / 423	0.10 (1)	
D-E	-1608 / 0	-70.5	-70.5	0.45 (1)	4.72		M-E	-573 / 0	0.70 (1)	
E-F	-1608 / 0	-70.5	-70.5	0.45 (1)	4.72		M-F	0 / 423	0.10 (1)	
F-G	-1618 / 0	-70.5	-70.5	0.25 (1)	4.97		K-F	0 / 263	0.08 (4)	
G-H	0 / 22	-70.5	-70.5	0.27 (1)	10.00		K-G	-106 / 34	0.09 (1)	
H-I	0 / 27	-70.5	-70.5	0.09 (1)	10.00		P-C	-1879 / 0	0.55 (1)	
P-B	-231 / 0	0.0	0.0	0.02 (1)	7.81		G-J	-1879 / 0	0.55 (1)	
J-H	-231 / 0	0.0	0.0	0.02 (1)	7.81					
P-O	0 / 1407	-17.5	-17.5	0.49 (4)	10.00					
O-N	0 / 1330	-17.5	-17.5	0.49 (4)	10.00					
N-M	0 / 1330	-17.5	-17.5	0.49 (4)	10.00					
M-L	0 / 1330	-17.5	-17.5	0.49 (4)	10.00					
L-K	0 / 1330	-17.5	-17.5	0.49 (4)	10.00					
K-J	0 / 1407	-17.5	-17.5	0.49 (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. G/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-08
- 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/380 (1.10")
CALCULATED VERT. DEFL.(LL)= L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL)= L/999 (0.30")

CSI: TC=0.45 (D-E:1), BC=0.49 (K-M:4),
WB=0.70 (E-M:1), SSI=0.23 (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 818 354 1887 822 2284 1656

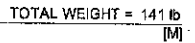
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

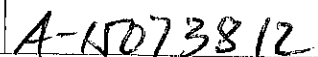
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.46 (G) (INPUT = 1.00)

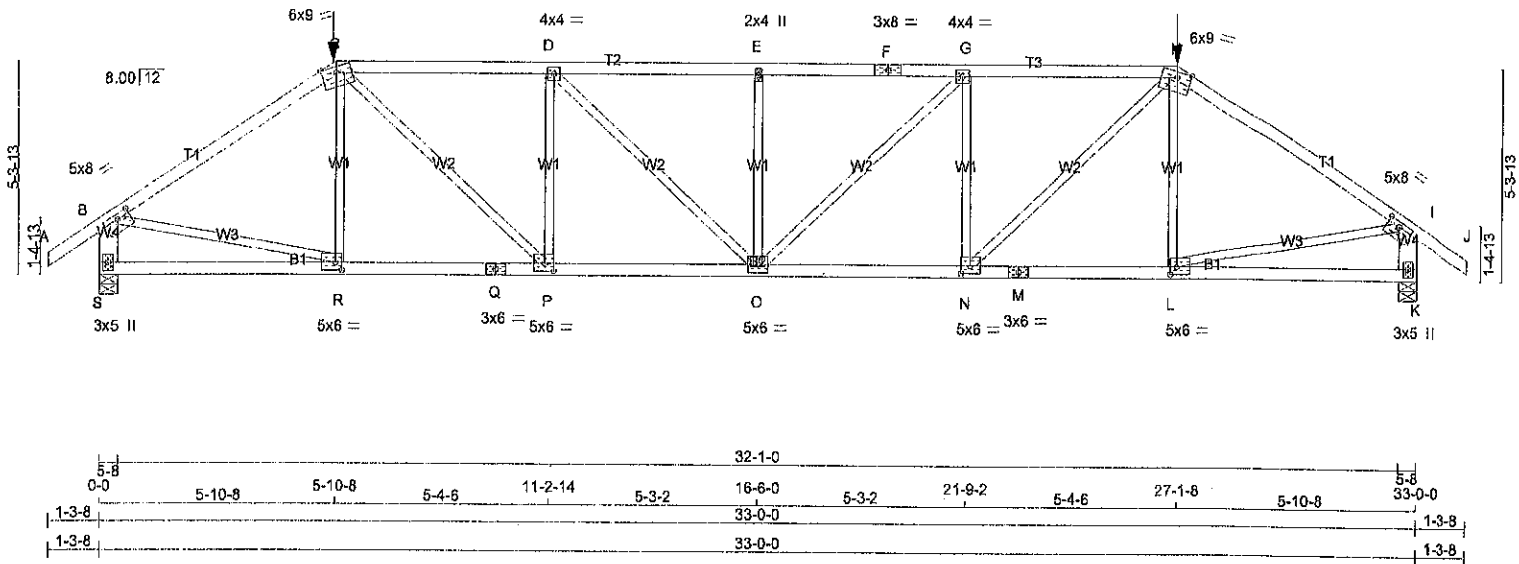


A-NO73813



JSI GRIP= 0.88 (I) (INPUT = 0.90)
JSI METAL= 0.46 (I) (INPUT = 1.00)





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - F	2x4	DRY 1650F 1.6E	SPF
F - H	2x4	DRY 1650F 1.6E	SPF
H - J	2x4	DRY No.2	SPF
S - B	2x6	DRY No.2	SPF
K - I	2x6	DRY No.2	SPF
S - Q	2x4	DRY No.2	SPF
Q - 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 in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-I	MT20	5.0	8.0	1.50	3.75
C	TTWW-m	MT20	6.0	9.0	Edge	4.25
D	TMWW-I	MT20	4.0	4.0		
E	TMWW-w	MT20	2.0	4.0		
F	TS-I	MT20	3.0	8.0		
G	TMWW-I	MT20	4.0	4.0		
H	TTWW-m	MT20	6.0	9.0	Edge	4.25
I	TMWW-I	MT20	5.0	8.0	1.50	3.75
K	BMV1+p	MT20	3.0	5.0		
L	BMWW-I	MT20	5.0	6.0	2.25	2.00
M	BS-I	MT20	3.0	6.0		
N	BMWW-I	MT20	5.0	6.0	2.25	2.75
O	BMWW-I	MT20	5.0	6.0		
P	BMWW-I	MT20	6.0	6.0	2.25	2.75
Q	BS-I	MT20	3.0	6.0		
R	BMWW-I	MT20	5.0	6.0	2.25	2.00
S	BMV1+p	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	REQD BRG
JT	VERT	DOWN	IN-SX	IN-SX
S	2855	0	0	5-8
K	2855	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	2011	1362 / 0	0 / 0	0 / 0	0 / 0	649 / 0	0 / 0
K	2011	1362 / 0	0 / 0	0 / 0	0 / 0	649 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.89 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 (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM TO		FR-TO			
A-B	0 / 27	-70.5	-70.5 0.10 (1)	10.00	R-C	-301 / 85	0.13 (1)
B-C	-3492 / 0	-70.5	-70.5 0.99 (1)	2.94	C-P	0 / 2087	0.52 (1)
C-D	-4421 / 0	-138.7	-138.7 0.77 (1)	3.08	P-O	-1256 / 0	0.55 (1)
D-E	-4870 / 0	-138.7	-138.7 0.81 (1)	2.89	O-D	0 / 620	0.15 (1)
E-F	-4870 / 0	-138.7	-138.7 0.81 (1)	2.89	D-O	-873 / 0	0.29 (1)
F-G	-4870 / 0	-138.7	-138.7 0.81 (1)	2.89	O-G	0 / 620	0.15 (1)
G-H	-4421 / 0	-138.7	-138.7 0.77 (1)	3.08	N-G	-1256 / 0	0.55 (1)
H-I	-3492 / 0	-70.5	-70.5 0.99 (1)	2.94	N-H	0 / 2087	0.52 (1)
I-J	0 / 27	-70.5	-70.5 0.10 (1)	10.00	L-H	-301 / 85	0.13 (1)
S-B	-2770 / 0	0.0	0.0 0.20 (1)	6.24	B-R	0 / 2949	0.73 (1)
K-I	-2770 / 0	0.0	0.0 0.20 (1)	6.24	L-I	0 / 2949	0.73 (1)
S-R	0 / 0	-34.5	-34.5 0.30 (4)	10.00			
R-Q	0 / 2896	-34.5	-34.5 0.68 (1)	10.00			
Q-P	0 / 2896	-34.5	-34.5 0.68 (1)	10.00			
P-O	0 / 4421	-34.5	-34.5 0.68 (1)	10.00			
O-N	0 / 4421	-34.5	-34.5 0.68 (1)	10.00			
N-M	0 / 2896	-34.5	-34.5 0.68 (1)	10.00			
M-L	0 / 2896	-34.5	-34.5 0.68 (1)	10.00			
L-K	0 / 0	-34.5	-34.5 0.30 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	5-10-8	-302	-302	---	FRONT	VERT	TOTAL
H	27-1-8	-302	-302	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 137 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

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 088-09
 - TPIC 2011

(65 % OF 23.0 P.S.F. G.S.L. PLUS
 8.4 P.S.F. RAIN LOAD EQUALS
 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.25")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/875 (0.45")

CSI: TC=0.99 (H-I:1), BC=0.88 (N-O:1), WB=0.73 (I-L:1), SSI=0.38 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 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 2294 1668

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
 JSI METAL= 0.77 (Q) (INPUT = 1.00)

A-15073811



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253629	H01	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Fri Jul 17 08:26:57 2015 Page 2

ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-vaa61SSe8V9oAbwYQ7ThHp8L5Q7EXITkYlcYLVWyx5

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 301.8 lbs FACTORED DOWN AT 27'-1-8" AND 301.8 lbs FACTORED DOWN AT 5'-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.



A-1073811 (2)

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 18 gauge

FINISH: G90 galvanized

DESIGN:

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

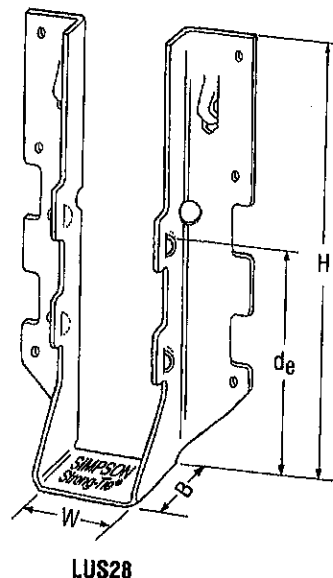
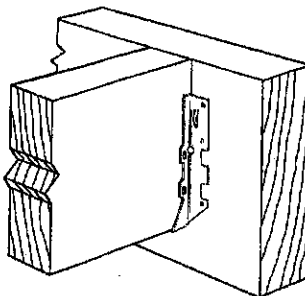
INSTALLATION:

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

OPTIONS:

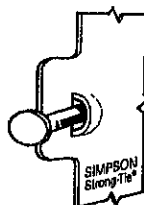
- These hangers cannot be modified.

Typical LUS
Installation



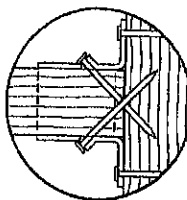
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1 1/16	3 1/8	1 3/4	1 15/16	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	4-16d	2-16d	835	2020	590	1435
LUS26	18	1 9/16	4 3/4	1 3/4	3 3/8	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 3/8	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4 3/8	4 3/8	2	3 1/4	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1 1/16	6 3/8	1 3/4	3 3/4	6-10d	4-10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	6-16d	4-16d	1720	3325	1545	2575
LUS28-3	18	4 3/8	6 1/4	2	3 1/4	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1 1/16	7 13/16	1 3/4	3 3/8	8-10d	4-10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	8-16d	6-16d	2580	4500	2320	3195
LUS210-3	18	4 3/8	8 3/16	2	5 1/4	8-16d	6-16d	2580	3345	2320	2375

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

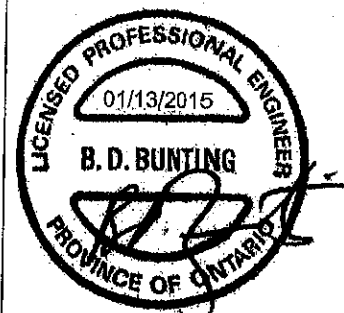


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



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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:

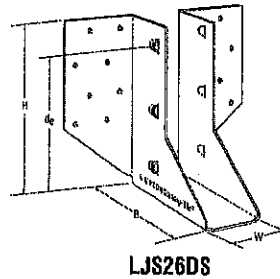
- Factored resistances are in accordance with CSA 086-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

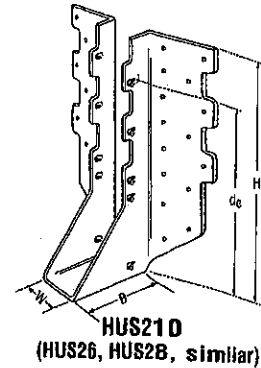
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

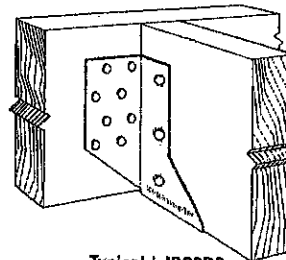
- See current catalogue for options



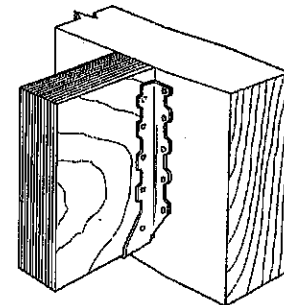
LJS26DS



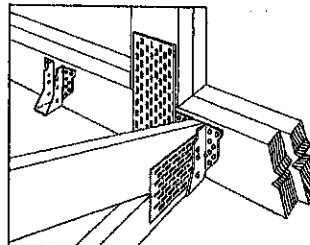
HUS21D
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



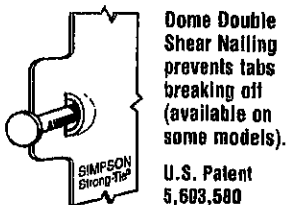
Typical HUS
Installation



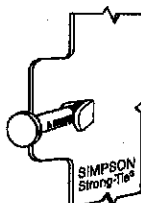
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D. Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LJS26DS	18	1¾	5	3½	4¾	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1¾	5¾	3	3½	14-16d	6-16d	2705	4940	2065	3875
HUS28	16	1¾	7¾	3	6¾	22-16d	8-16d	3605	5365	2875	4345
HUS210	16	1¾	9¾	3	7¾	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1¾	9	3	8	30-16d	10-16d	4505	6450	4010	5200

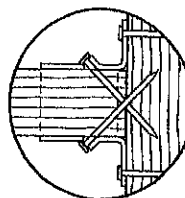
1. d_g is the distance from the seat of the hanger to the highest joist nail.



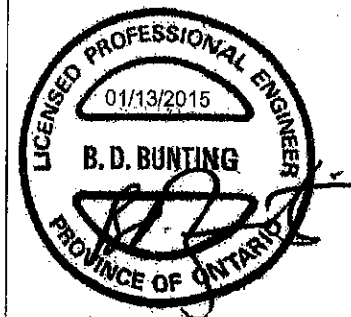
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,693,580



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



Double
Shear
Nailing
Top View.



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TC – Truss Connectors

SIMPSON
Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

MATERIAL: 16 gauge

FINISH: G90 galvanized

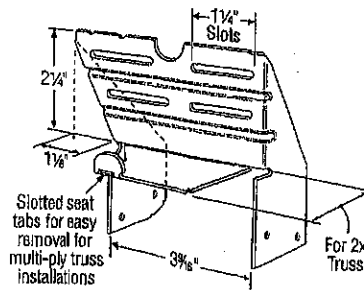
DESIGN: Factored resistances are in accordance with CSA 086-14

INSTALLATION:

- Use all specified fasteners
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

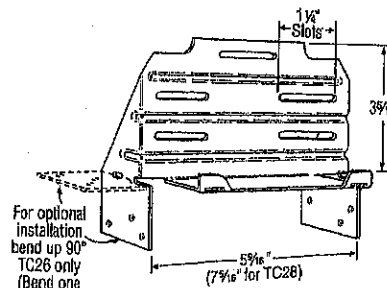
Optional TC Installation

- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



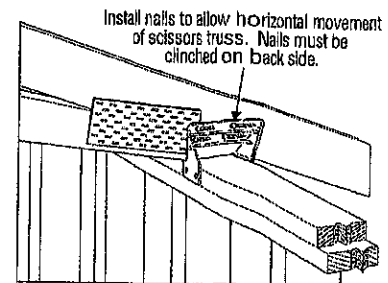
TC24

U.S. Patent 4,932,173

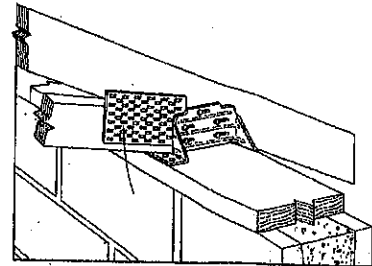


TC26

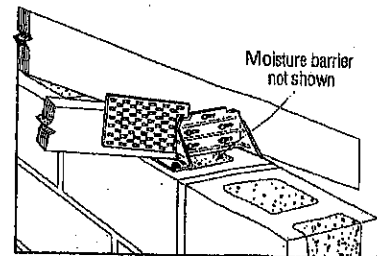
(TC28 Similar)



Typical TC24 Installation



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer (8", 10", 12" Wall Installation Similar)



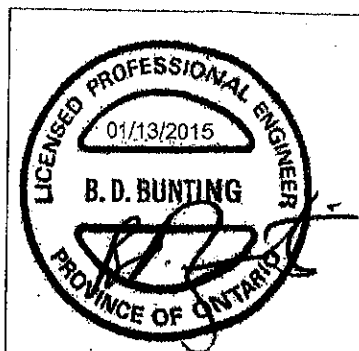
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K _D = 1.15)
TC24	4-10d	4-10d	605	430
TC26	5-10d	6-10d	1015	720
TC28	5-10d	6-10d	1015	720

OPTIONAL TC INSTALLATION TABLE

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K _D = 1.15)
TC26	5-10d	6-10dx1½"	810	660
	5-10d	6-10d	930	660

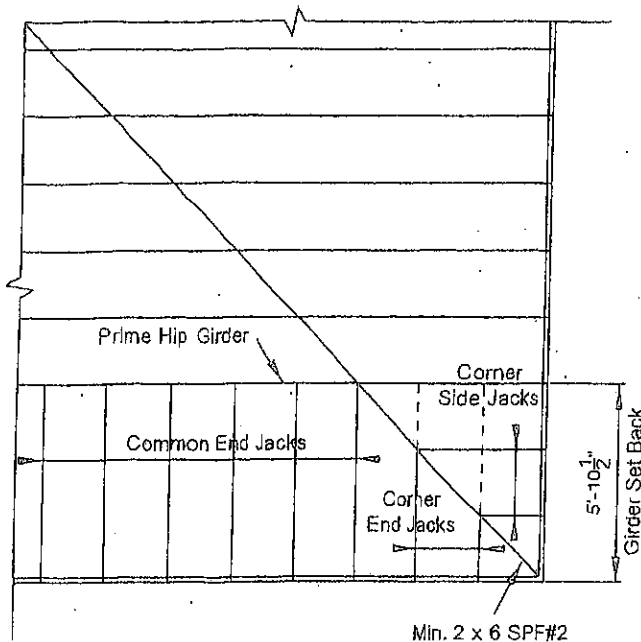
1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (8) - ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lbs.



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45° Hip End

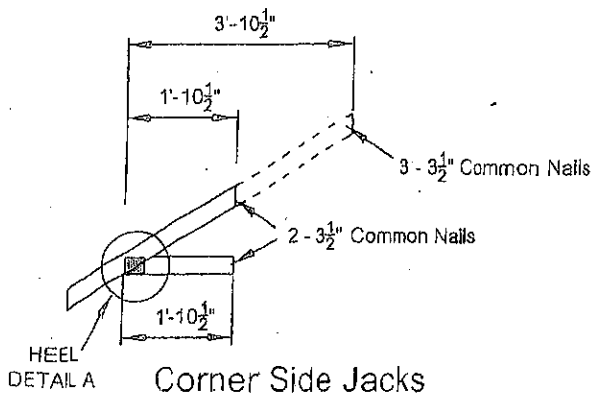
LUMBER SPECIFICATION

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

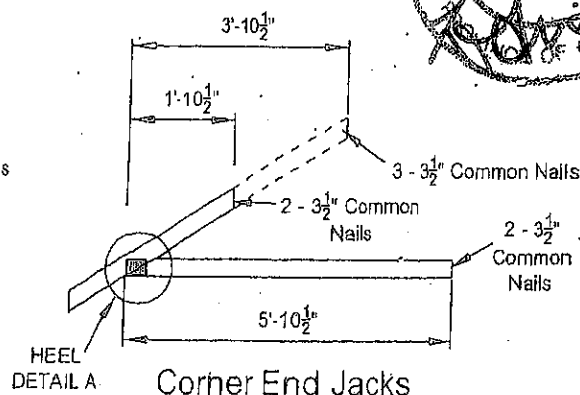
DESIGN LOAD

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

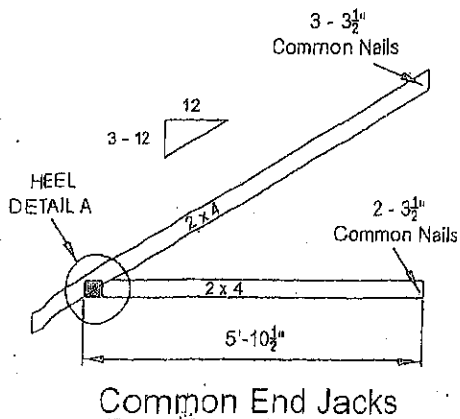
TOTAL LOAD : 50.5 P.S.F.



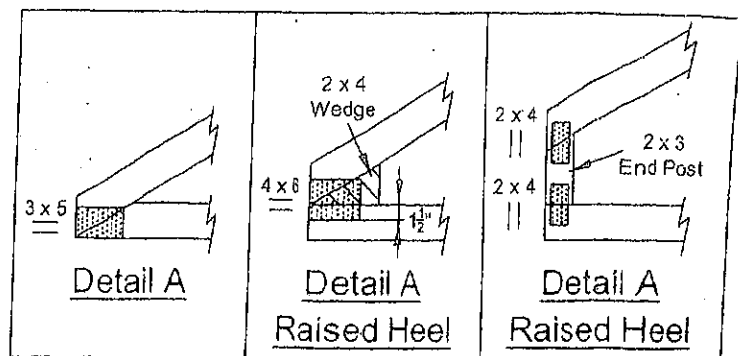
Corner Side Jacks



Corner End Jacks



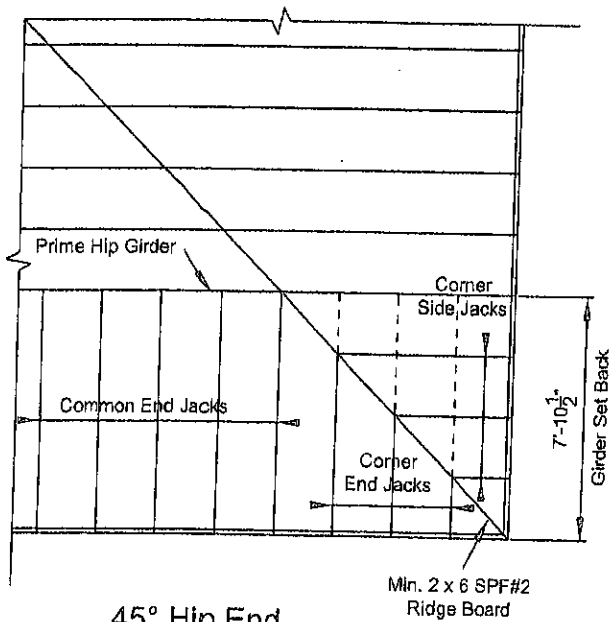
Common End Jacks



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

CS-51008

STRACON ENGINEERING INC.



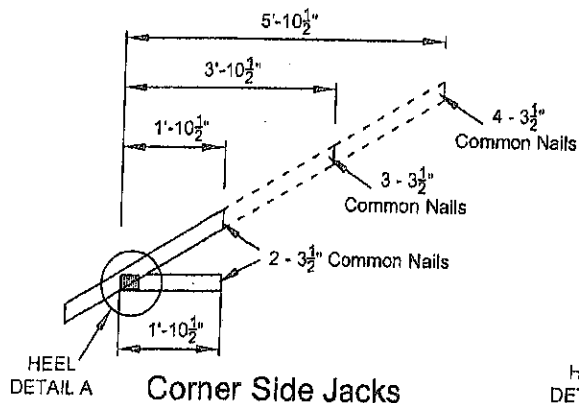
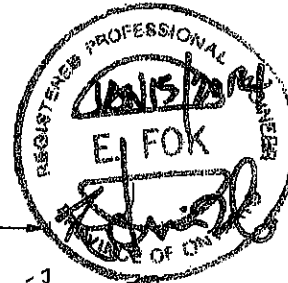
45° Hip End

LUMBER SPECIFICATION

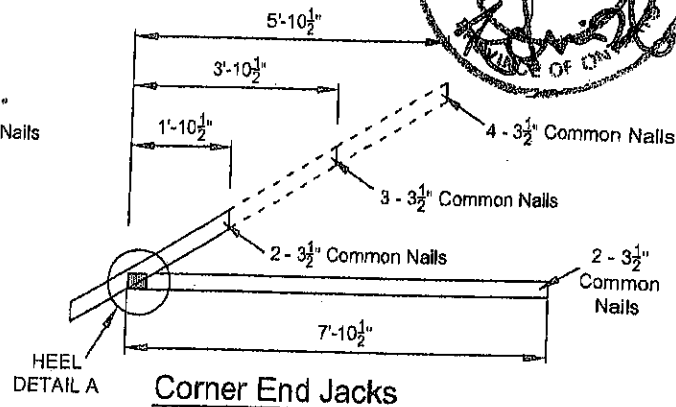
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

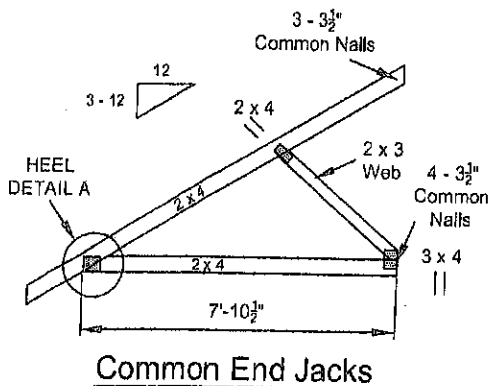
TOP CHORD SNOW LOAD : 34.8 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 44.8 P.S.F.



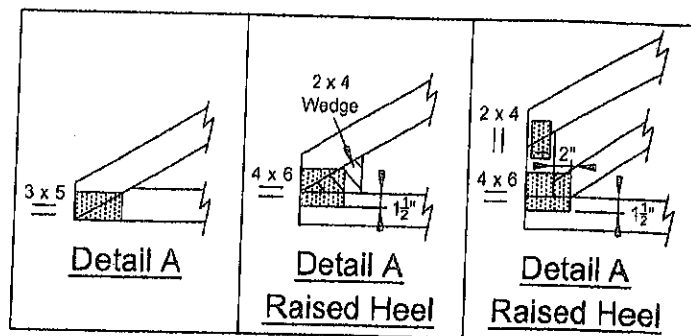
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-71008N