

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2x4 SPF #2 24"O.C. WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'

49-00-00
46-06-00

4-07-00
2-06-00

ALPHA-BARRIE

8/12

H1
H2
H3
H4
H5

H11P

H12P

H13P(3)

H10(11)

H12P

H11P

H9

H8

H7

H17A

H16T

H16T

6" FIN. OH.
(NO BELL)

3.5/12

T.O.P. @ 9-03-00
RSD HEEL - 0" DROP

VAULT CLG
@ 6/12

VAULT CLG
@ 6/12

3.5/12

16/12

16/12

16/12

16/12

16/12

16/12

16/12

20-03-06

31-10-00

J1(11)

CS-51008

CS-51008

CS-51008

CS-51008

3.5/12

VAULT CLG
@ 6/12

VAULT CLG
@ 6/12

3.5/12

P1(6)

J1S(6)

13-00-00

G2(4)

J1(4)

6-04-00

G1(6)

J1S(5)

12-06-00

HANGERS
LUS24

15' B/C EXT.
BELL CURVE BY OTHERS
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" x 6" BRG/BRICK
*PIGgyBACK TRS
PURLINS BY OTHERS

2-08-00

OFFICE USE ONLY
ENGINEERED FROM

19-03-00

51-10-00

6-00-00

6-00-00

A-18023083 TO
A-18023088

CONVENTIONAL
FRAMING BY
OTHERS



Job Track: 45147
Layout ID: 292570
Plan Log: 95914

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

Model / Elevation: SUMMERSDALE
4001 REV1 / A
SIO & CRT LAYOUT
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.

ALL CONV. FRAMING TO CONFORM WITH PART 3 OF O.B.C. (Latest Edition) ROOF PARTS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24" O.C. WITH A VERT POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

49-00-00
46-06-00

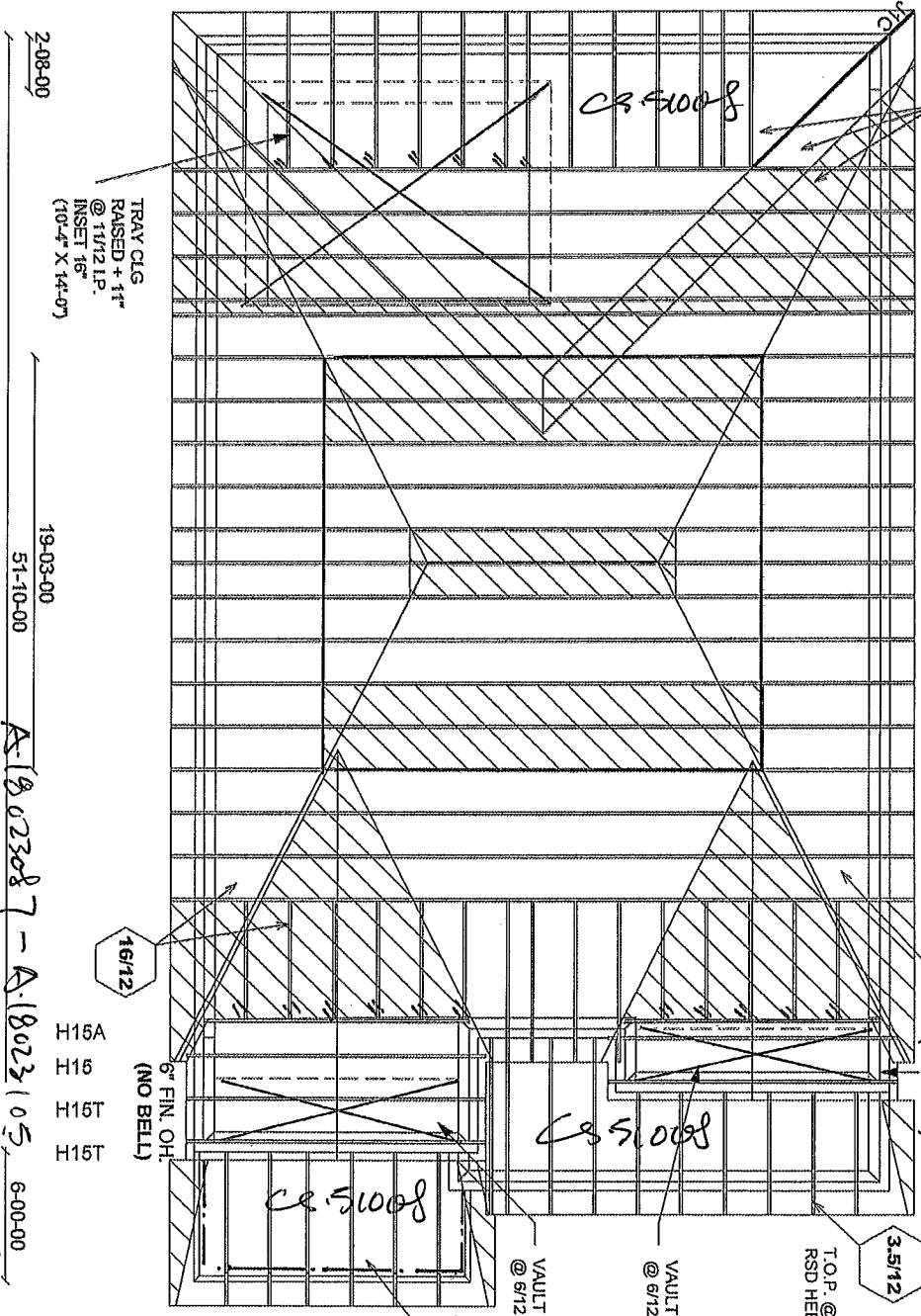
4-07-00
2-06-00

ALPA-BARRIE

20-03-06
31-10-00
J1T(5) J1(6)
J1TB J1TA J1

15" B/C EXT.
BELL CURVE BY OTHERS
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK
*PIGGYBACK TRS
PURLINS BY OTHERS

8/12 H1T H2T H3T H4T H9 H11P H12P H13P(3) H12P H11P H9 H8 H7 H17A H16T H16T 16/12 6" FIN. OH. (NO BELL) 3.5/12 T.O.P. @ 9-03-00 RSD HEEL - 0" DROP VAULT CLG @ 6/12 VAULT CLG @ 6/12 3.5/12



TRAY CLG
RAISED + 11"
@ 11/12 LP.
INSET 16"
(10'-4" X 14'-0")

H15A
H15
H15T
H15T

HANGERS
LUS24

CONVENTIONAL
FRAMING BY
OTHERS



Job Track: 45147
Layout ID: 292571
Plan Log: 95914

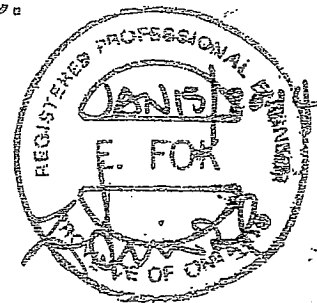
Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/16/2018 Designer: AMANDA

Model / Elevator: SUMNERDALE
4001 REV1 / A OPT TRAY
OR OPT LANSOD4

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

Stracon Engineering Inc.

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



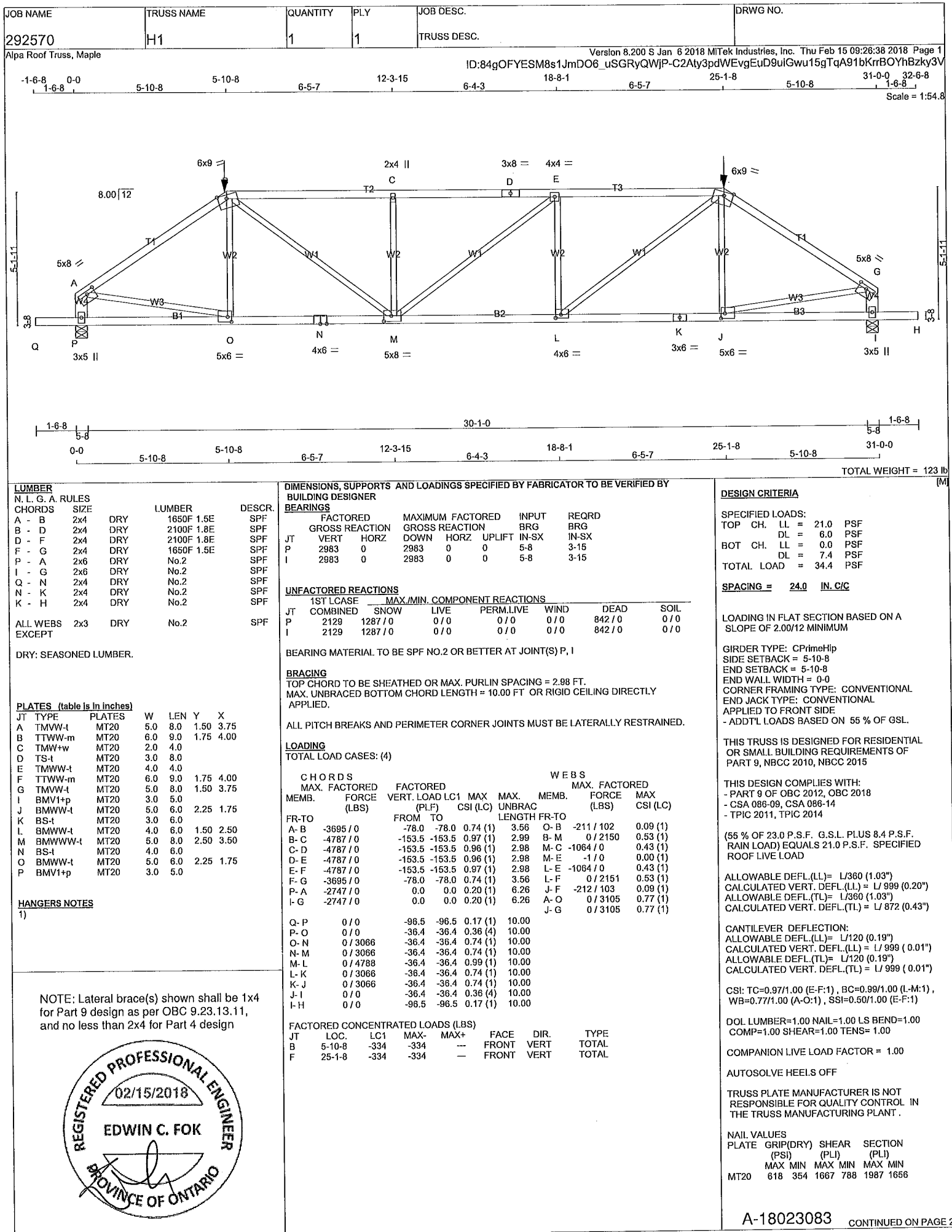
RESPONSIBILITIES

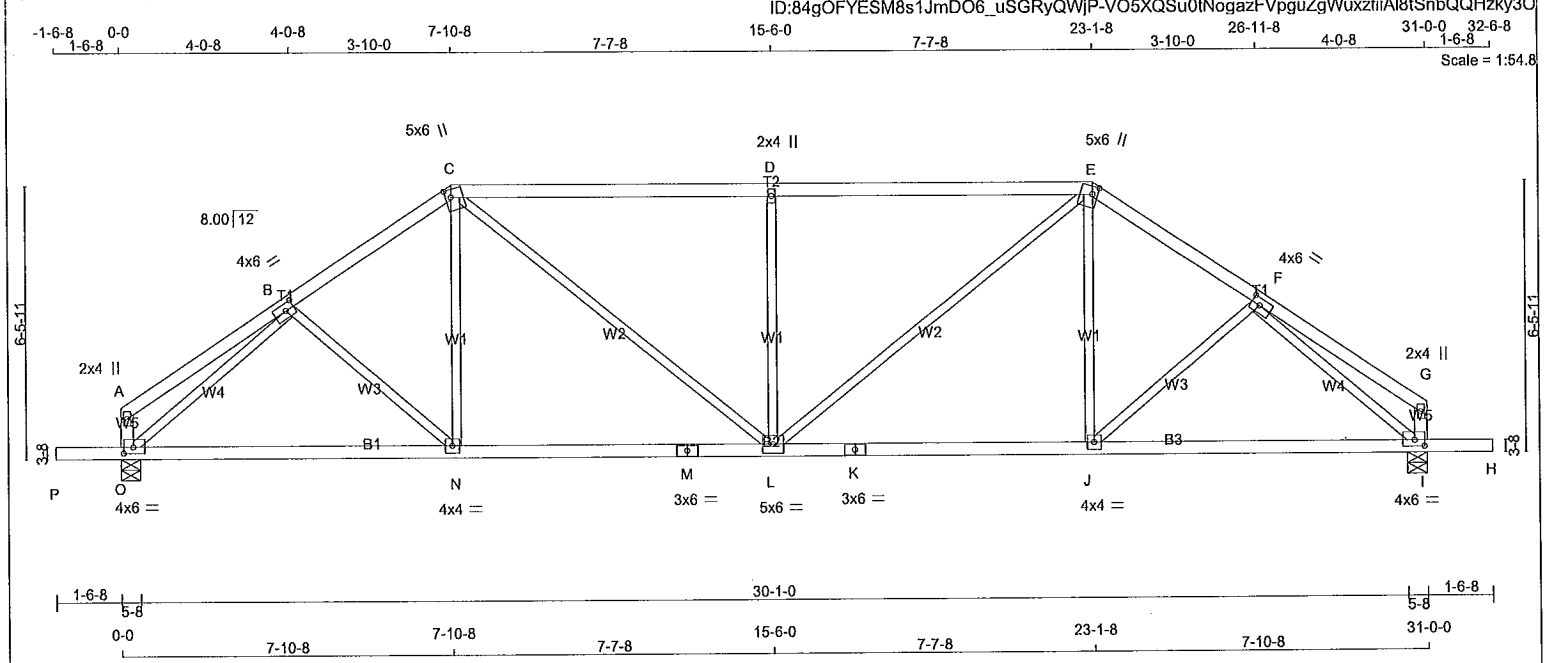
1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities with jurisdictions.
3. All dimensions are to be verified by owner contractor, architect or other authority before manufacture.
4. Stracon Engineering Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Stracon Engineering Inc. drawings is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacture's responsibility to ensure that trusses are manufactured in conformance with Stracon Engineering Inc. specifications outlined below.

SPECIFICATIONS

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

January 15, 2014





TOTAL WEIGHT = 126 lb

LUMBER

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

DRY: SEASONED LUMBER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	HORIZ	UPLIFT
O	1644	0	1644	0
I	1644	0	1644	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED
O	1172
I	1172

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.96 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
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FR-TO	FROM	TO	LENGTH	FR-TO
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A-B	0/18	-78.0	-78.0	0.18 (1)	10.00	B-N	-35/39	0.02 (1)
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B-C	-1753/0	-78.0	-78.0	0.17 (1)	4.90	N-C	0/188	0.06 (4)
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C-D	-1973/0	-78.0	-78.0	0.70 (1)	3.96	C-L	0/681	0.15 (1)
-----	---------	-------	-------	----------	------	-----	-------	----------

D-E	-1973/0	-78.0	-78.0	0.70 (1)	3.96	L-D	-732/0	0.50 (1)
-----	---------	-------	-------	----------	------	-----	--------	----------

E-F	-1753/0	-78.0	-78.0	0.17 (1)	4.90	L-E	0/681	0.15 (1)
-----	---------	-------	-------	----------	------	-----	-------	----------

F-G	0/18	-78.0	-78.0	0.18 (1)	10.00	J-E	0/188	0.06 (4)
-----	------	-------	-------	----------	-------	-----	-------	----------

O-A	-121/0	0.0	0.0	0.01 (1)	7.81	J-F	-35/39	0.02 (1)
-----	--------	-----	-----	----------	------	-----	--------	----------

I-G	-121/0	0.0	0.0	0.01 (1)	7.81	O-B	-1970/0	0.89 (1)
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P-O	0/0	-96.5	-96.5	0.16 (1)	10.00	F-I	-1970/0	0.89 (1)
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O-N	0/1467	-18.5	-18.5	0.42 (4)	10.00			
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N-M	0/1444	-18.5	-18.5	0.42 (4)	10.00			
-----	--------	-------	-------	----------	-------	--	--	--

M-L	0/1444	-18.5	-18.5	0.42 (4)	10.00			
-----	--------	-------	-------	----------	-------	--	--	--

L-K	0/1444	-18.5	-18.5	0.42 (4)	10.00			
-----	--------	-------	-------	----------	-------	--	--	--

K-J	0/1444	-18.5	-18.5	0.42 (4)	10.00			
-----	--------	-------	-------	----------	-------	--	--	--

J-I	0/1467	-18.5	-18.5	0.42 (4)	10.00			
-----	--------	-------	-------	----------	-------	--	--	--

I-H	0/0	-96.5	-96.5	0.16 (1)	10.00			
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NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
---------	----	---	------	-----

DL	=	6.0	PSF
----	---	-----	-----

BOT CH.	LL	=	0.0	PSF
---------	----	---	-----	-----

DL	=	7.4	PSF
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TOTAL LOAD	=	34.4	PSF
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SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

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

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

CALCULATED VERT. DEFL.(LL) = L/999 (0.08")

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

CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")

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

ALLOWABLE DEFL.(TL)= L/120 (0.19")

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

CSI: TC=0.70/1.00 (C-D:1), BC=0.42/1.00 (J-L:4), WB=0.89/1.00 (F-I:1), SSI=0.29/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
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(PSI)	(PLI)	(PLI)	(PLI)
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MAX	MIN	MAX	MIN	MAX	MIN
-----	-----	-----	-----	-----	-----

MT20	618	354	1667	788	1987
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PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90)

JSI METAL= 0.49 (F) (INPUT = 1.00)

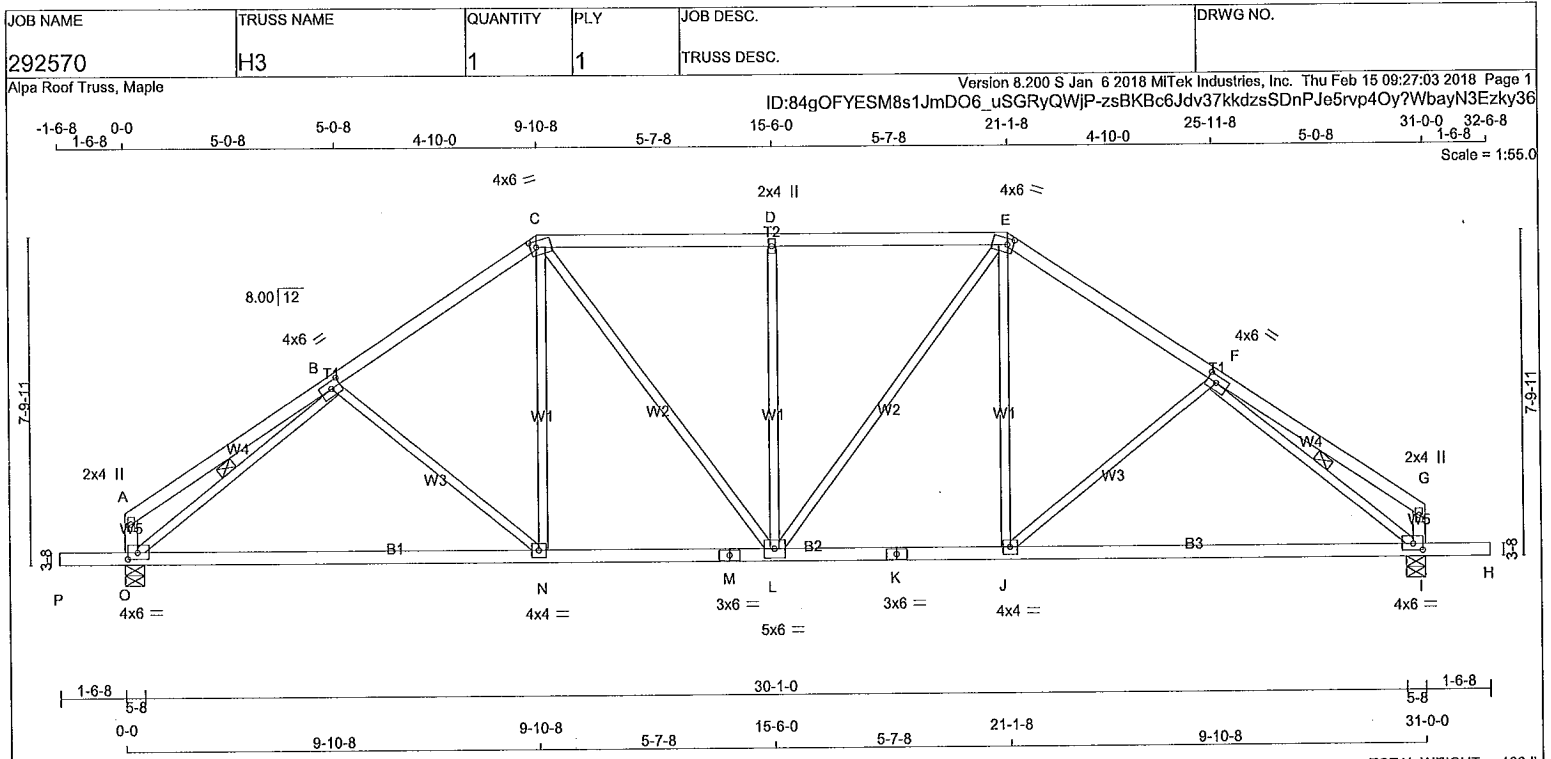
A-18023084

REGISTERED PROFESSIONAL ENGINEER

02/15/2018

EDWIN C. FOK

PROVINCE OF ONTARIO



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
O - A	2x4	DRY	No.2
I - G	2x4	DRY	No.2
P - M	2x4	DRY	No.2
M - K	2x4	DRY	No.2
K - H	2x4	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
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TTWW-m	MT20	4.0	6.0	1.75	1.75
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	1.75
F	TMWW-t	MT20	4.0	6.0	2.00	2.75
G	TMV+p	MT20	2.0	4.0		
J	BMVW-t	MT20	4.0	6.0	1.75	2.75
I	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	4.0	4.0		
O	BMVW-t	MT20	4.0	6.0	1.75	2.75

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1644	0	1644	0	5-8	1-12
I	1644	0	1644	0	5-8	1-12

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 24	-78.0 -78.0	0.30 (1)	10.00	B-N	-176 / 0	0.14 (1)
B-C	-1662 / 0	-78.0 -78.0	0.27 (1)	4.88	N-C	0 / 307	0.08 (4)
C-D	-1579 / 0	-78.0 -78.0	0.35 (1)	4.88	C-L	0 / 356	0.08 (1)
D-E	-1579 / 0	-78.0 -78.0	0.35 (1)	4.88	L-D	-536 / 0	0.61 (1)
E-F	-1662 / 0	-78.0 -78.0	0.27 (1)	4.88	L-E	0 / 356	0.08 (1)
F-G	0 / 24	-78.0 -78.0	0.30 (1)	10.00	J-E	0 / 307	0.08 (4)
O-A	-148 / 0	0.0 0.0	0.02 (1)	7.81	J-F	-176 / 0	0.14 (1)
I-G	-148 / 0	0.0 0.0	0.02 (1)	7.81	O-B	-1964 / 0	0.56 (1)
					F-I	-1964 / 0	0.56 (1)
P-O	0 / 0	-96.5 -96.5	0.16 (1)	10.00			
O-N	0 / 1496	-18.5 -18.5	0.54 (4)	10.00			
N-M	0 / 1365	-18.5 -18.5	0.54 (4)	10.00			
M-L	0 / 1365	-18.5 -18.5	0.54 (4)	10.00			
L-K	0 / 1365	-18.5 -18.5	0.54 (4)	10.00			
K-J	0 / 1365	-18.5 -18.5	0.54 (4)	10.00			
J-I	0 / 1496	-18.5 -18.5	0.54 (4)	10.00			
I-H	0 / 0	-96.5 -96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.31")

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

CSI: TC=0.35/1.00 (C-D:1), BC=0.54/1.00 (J-L:4), WB=0.61/1.00 (D-L:1), SSI=0.21/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

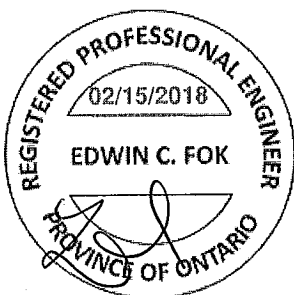
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

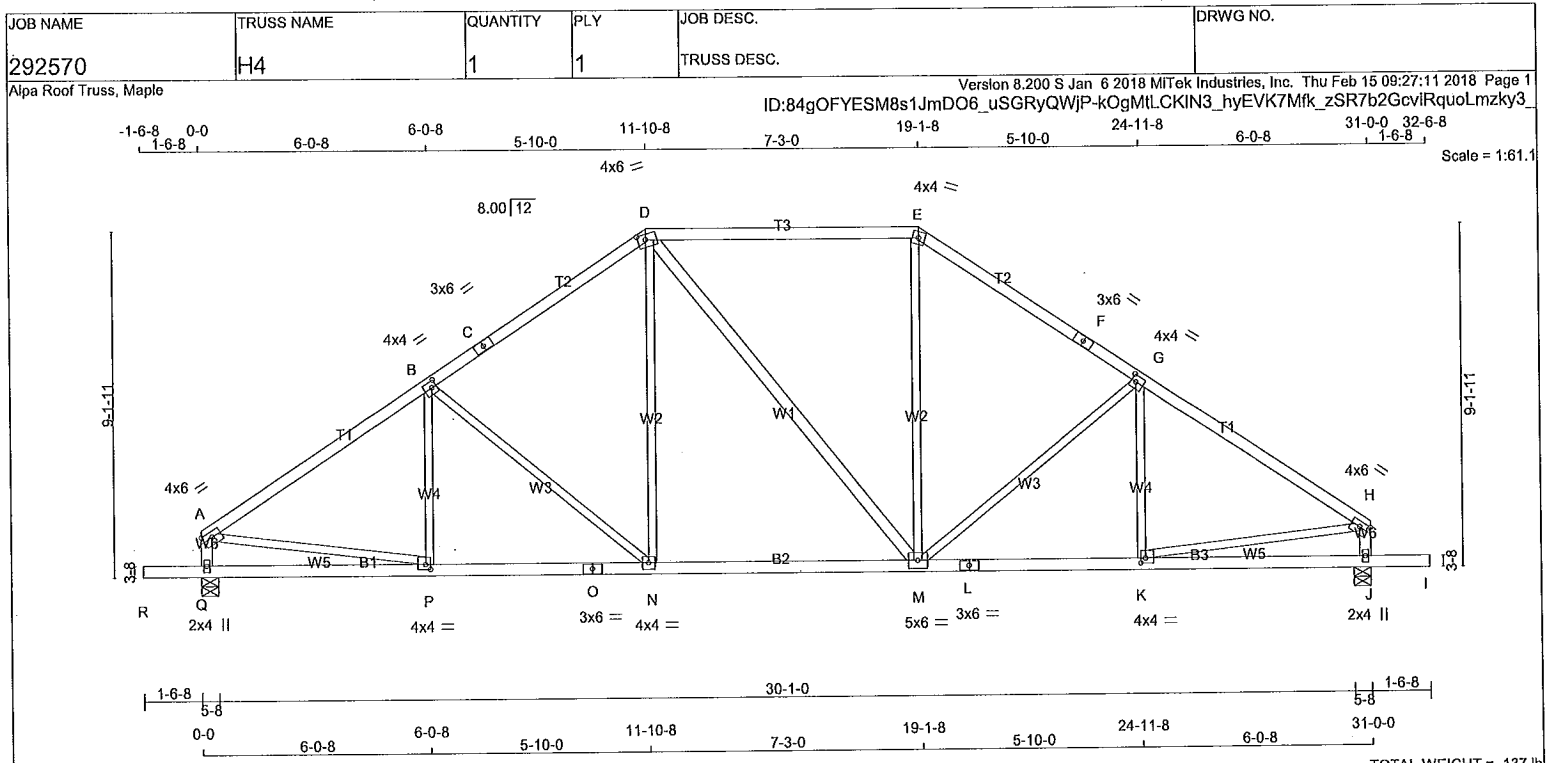
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.47 (F) (INPUT = 1.00)

A-18023085





LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - E	2x4	DRY	2100F 1.8E
E - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
Q - A	2x4	DRY	No.2
J - H	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - I	2x4	DRY	No.2
ALL WEBS EXCEPT D - M	2x3	DRY	No.2
D - M	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	Edge
B	TMVW-t	MT20	4.0	4.0	2.00	1.50
C	TS-t	MT20	3.0	6.0		
D	TTWV-m	MT20	4.0	6.0	1.75	2.50
E	TTW-m	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	4.0	6.0	1.75	Edge
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0	1.50	1.50
L	BS-t	MT20	3.0	6.0		
M	BMVWV-t	MT20	5.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
	VERT	HORZ	DOWN	UP
JT	1644	0	1644	0
Q	1644	0	1644	0
J	1644	0	1644	0

UNFACTORED REACTIONS

	1ST CASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
Q	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
J	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. MEMB. UNBRACED LENGTH FR-TO	MAX. FACTORED FORCE (LBS)	MAX. MEMB. UNBRACED LENGTH FR-TO	MAX. FACTORED FORCE (LBS)
FR-TO							
A-B	-1836 / 0	-78.0	-78.0 0.44 (1)	4.52	P-B	-115 / 45	0.05 (1)
B-C	-1528 / 0	-78.0	-78.0 0.40 (1)	4.89	B-N	-402 / 0	0.49 (1)
C-D	-1528 / 0	-78.0	-78.0 0.40 (1)	4.89	N-D	0 / 379	0.09 (1)
D-E	-1249 / 0	-78.0	-78.0 0.36 (1)	6.25	D-M	0 / 0	0.00 (1)
E-F	-1528 / 0	-78.0	-78.0 0.40 (1)	4.89	M-E	0 / 379	0.09 (1)
F-G	-1528 / 0	-78.0	-78.0 0.40 (1)	4.89	M-G	-401 / 0	0.49 (1)
G-H	-1835 / 0	-78.0	-78.0 0.44 (1)	4.52	K-G	-116 / 44	0.05 (1)
Q-A	-1448 / 0	0.0	0.0 0.15 (1)	6.79	A-P	0 / 1570	0.35 (1)
J-H	-1448 / 0	0.0	0.0 0.15 (1)	6.79	K-H	0 / 1570	0.35 (1)
R-Q	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
Q-P	0 / 0	-18.5	-18.5 0.14 (4)	10.00			
P-O	0 / 1553	-18.5	-18.5 0.34 (1)	10.00			
O-N	0 / 1553	-18.5	-18.5 0.34 (1)	10.00			
N-M	0 / 1248	-18.5	-18.5 0.29 (1)	10.00			
M-L	0 / 1553	-18.5	-18.5 0.34 (1)	10.00			
L-K	0 / 1553	-18.5	-18.5 0.34 (1)	10.00			
K-J	0 / 0	-18.5	-18.5 0.14 (4)	10.00			
J-I	0 / 0	-96.5	-96.5 0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

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

CSI: TC=0.44/1.00 (A-B:1), BC=0.34/1.00 (K-M:1), VB=0.49/1.00 (B-N:1), SSI=0.22/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

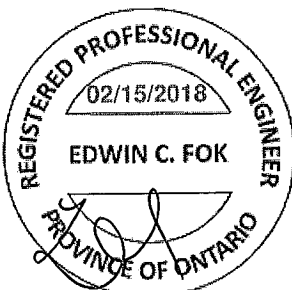
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

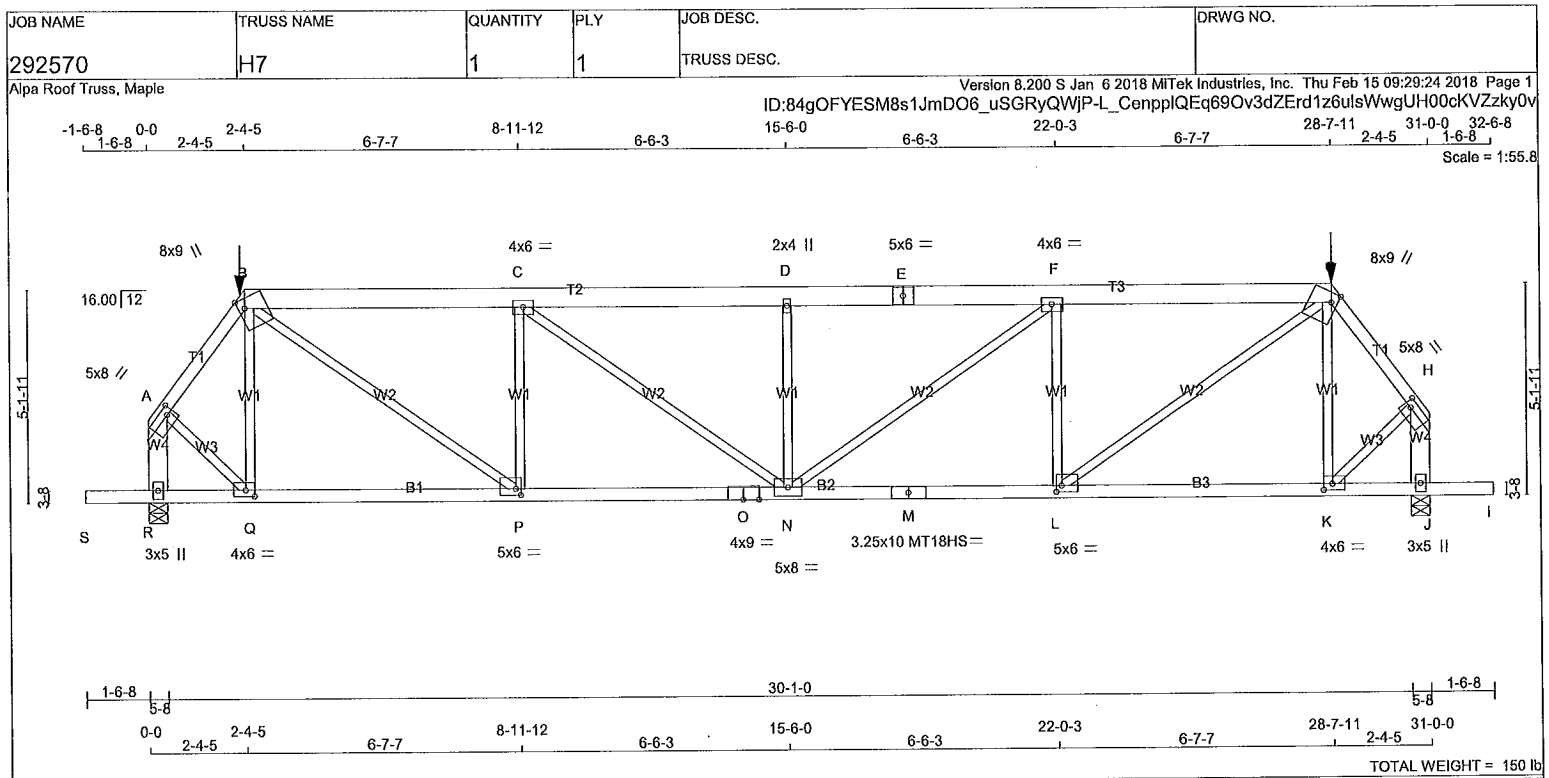
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.58 (P) (INPUT = 1.00)





LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4 DRY	No.2	SPF		
B - E	2x6 DRY	No.2	SPF		
E - G	2x6 DRY	No.2	SPF		
G - H	2x4 DRY	No.2	SPF		
R - A	2x6 DRY	No.2	SPF		
J - H	2x6 DRY	No.2	SPF		
S - O	2x4 DRY	No.2	SPF		
O - M	2x4 DRY	No.2	SPF		
M - I	2x4 DRY	No.2	SPF		

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.00	2.00
B	TTWW+m	MT20	8.0	9.0	2.75	1.75
C	TMVW-t	MT20	4.0	6.0		
D	TMVW-w	MT20	2.0	4.0		
E	TS-t	MT20	5.0	6.0		
F	TMVW-t	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	2.75	1.75
H	TMVW-t	MT20	5.0	8.0	2.00	2.00
J	BMV1+p	MT20	3.0	5.0		
K	BMVW-t	MT20	4.0	6.0	1.75	2.50
L	BMVW-t	MT20	5.0	6.0	1.75	1.50
M	BS-t	MT18HS	3.25	10.0		
N	BMVW+m	MT20	5.0	8.0		
O	BS-t	MT20	4.0	9.0		
P	BMVW-t	MT20	5.0	6.0	1.75	1.50
Q	BMVW-t	MT20	4.0	6.0	1.75	2.50
R	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

1)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP
R	3048	0	3048	0
J	3048	0	3048	0

UNFACTORED REACTIONS

	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED						
R	2174	1322 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0
J	2174	1322 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC1)	MAX. FACTORED UNBRACED LENGTH (FR-TO)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LC1)
FR-TO					FR-TO		
A-B	-2359 / 0	-78.0	-78.0	0.17 (1)	4.31	Q-B	-710 / 0
B-C	-4117 / 0	-153.5	-153.5	0.63 (1)	3.57	B-P	0 / 3348
C-D	-4916 / 0	-153.5	-153.5	0.69 (1)	3.22	P-C	-1717 / 0
D-E	-4916 / 0	-153.5	-153.5	0.69 (1)	3.22	C-N	0 / 990
E-F	-4916 / 0	-153.5	-153.5	0.69 (1)	3.22	N-D	-933 / 0
F-G	-4117 / 0	-153.5	-153.5	0.63 (1)	3.57	N-F	0 / 990
G-H	-2359 / 0	-78.0	-78.0	0.17 (1)	4.31	L-F	-1717 / 0
R-A	-2902 / 0	0.0	0.0	0.24 (1)	6.12	L-G	0 / 3348
J-H	-2902 / 0	0.0	0.0	0.24 (1)	6.12	K-G	-710 / 0
S-R	0 / 0	-96.5	-96.5	0.17 (1)	10.00	A-Q	0 / 1687
R-Q	0 / 0	-36.4	-36.4	0.27 (4)	10.00	K-H	0 / 1687
Q-P	0 / 1398	-36.4	-36.4	0.48 (4)	10.00		
P-O	0 / 4117	-36.4	-36.4	0.90 (1)	10.00		
O-N	0 / 4117	-36.4	-36.4	0.90 (1)	10.00		
N-M	0 / 4117	-36.4	-36.4	0.90 (1)	10.00		
M-L	0 / 4117	-36.4	-36.4	0.90 (1)	10.00		
L-K	0 / 1398	-36.4	-36.4	0.48 (4)	10.00		
K-J	0 / 0	-36.4	-36.4	0.27 (4)	10.00		
J-I	0 / 0	-96.5	-96.5	0.17 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
G	28-7-11	-134	-134	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
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, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.19")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/941 (0.40")

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

CSI: TC=0.69/1.00 (C-D:1), BC=0.90/1.00 (L-N:1), WB=0.83/1.00 (G-L:1), SS=0.40/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

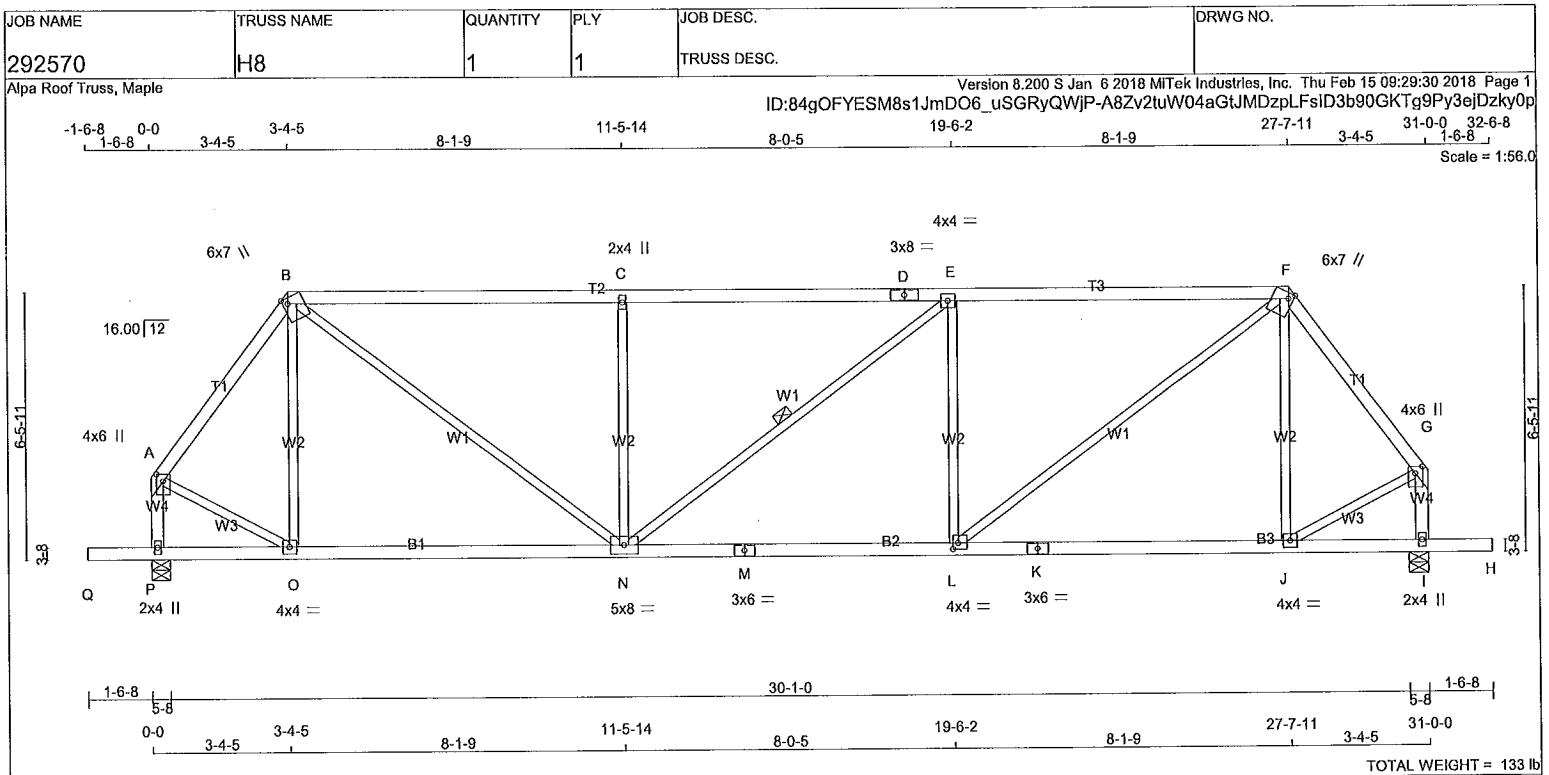
NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	788	1987	1656
MT18HS	511	354	2455	1382	3004	2010

A-18023087

CONTINUED ON PAGE 2





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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMWW+p	MT20	4.0	6.0 2.00 2.00
B	TTWW+m	MT20	6.0	7.0 Edge 1.50
C	TMWW+w	MT20	2.0	4.0
D	TS-t	MT20	3.0	8.0
E	TMWW-t	MT20	4.0	4.0
F	TTWW+m	MT20	6.0	7.0 Edge 1.50
G	TMWW+p	MT20	4.0	6.0 2.00 2.00
I	BMV1+p	MT20	2.0	4.0
J	BMWW-t	MT20	4.0	4.0
K	BS-t	MT20	3.0	6.0
L	BMWW-t	MT20	4.0	4.0 1.75 1.50
M	BS-t	MT20	3.0	6.0
N	BMWW-t	MT20	5.0	8.0
O	BMWW-t	MT20	4.0	4.0
P	BMV1+p	MT20	2.0	4.0

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		VERT. LOAD	LC1	MAX	MAX. UNBRAC	LENGTH	MEMB.	WEBS	
	MAX. FACTORED	FORCE							MAX. FACTORED	FORCE
FR-TO	(LBS)	(PLF)	FROM	TO	CSI (LC)	FR-TO	FR-TO	FR-TO	(LBS)	CSI (LC)
A-B	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	O-B	-219 / 2	0.15 (1)		
B-C	-1844 / 0	-78.0	-78.0	0.99 (1)	3.69	B-N	0 / 1378	0.31 (1)		
C-D	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67	N-C	-680 / 0	0.46 (1)		
D-E	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67	N-E	-1 / 0	0.00 (1)		
E-F	-1845 / 0	-78.0	-78.0	1.00 (1)	3.67	L-E	-680 / 0	0.46 (1)		
F-G	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	L-F	0 / 1379	0.31 (1)		
P-A	-1487 / 0	0.0	0.0	0.17 (1)	6.72	J-F	-219 / 2	0.15 (1)		
I-G	-1486 / 0	0.0	0.0	0.17 (1)	6.72	A-O	0 / 825	0.19 (1)		
						J-G	0 / 825	0.19 (1)		
Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00					
P-O	0 / 0	-18.5	-18.5	0.18 (4)	10.00					
O-N	0 / 745	-18.5	-18.5	0.31 (4)	10.00					
N-M	0 / 1845	-18.5	-18.5	0.43 (1)	10.00					
M-L	0 / 1845	-18.5	-18.5	0.43 (1)	10.00					
L-K	0 / 744	-18.5	-18.5	0.31 (4)	10.00					
K-J	0 / 744	-18.5	-18.5	0.31 (4)	10.00					
J-I	0 / 0	-18.5	-18.5	0.18 (4)	10.00					
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00					

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

(56 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

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

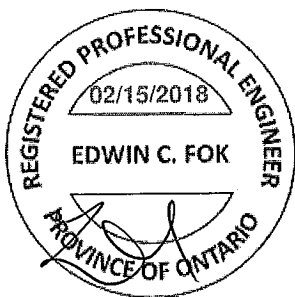
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

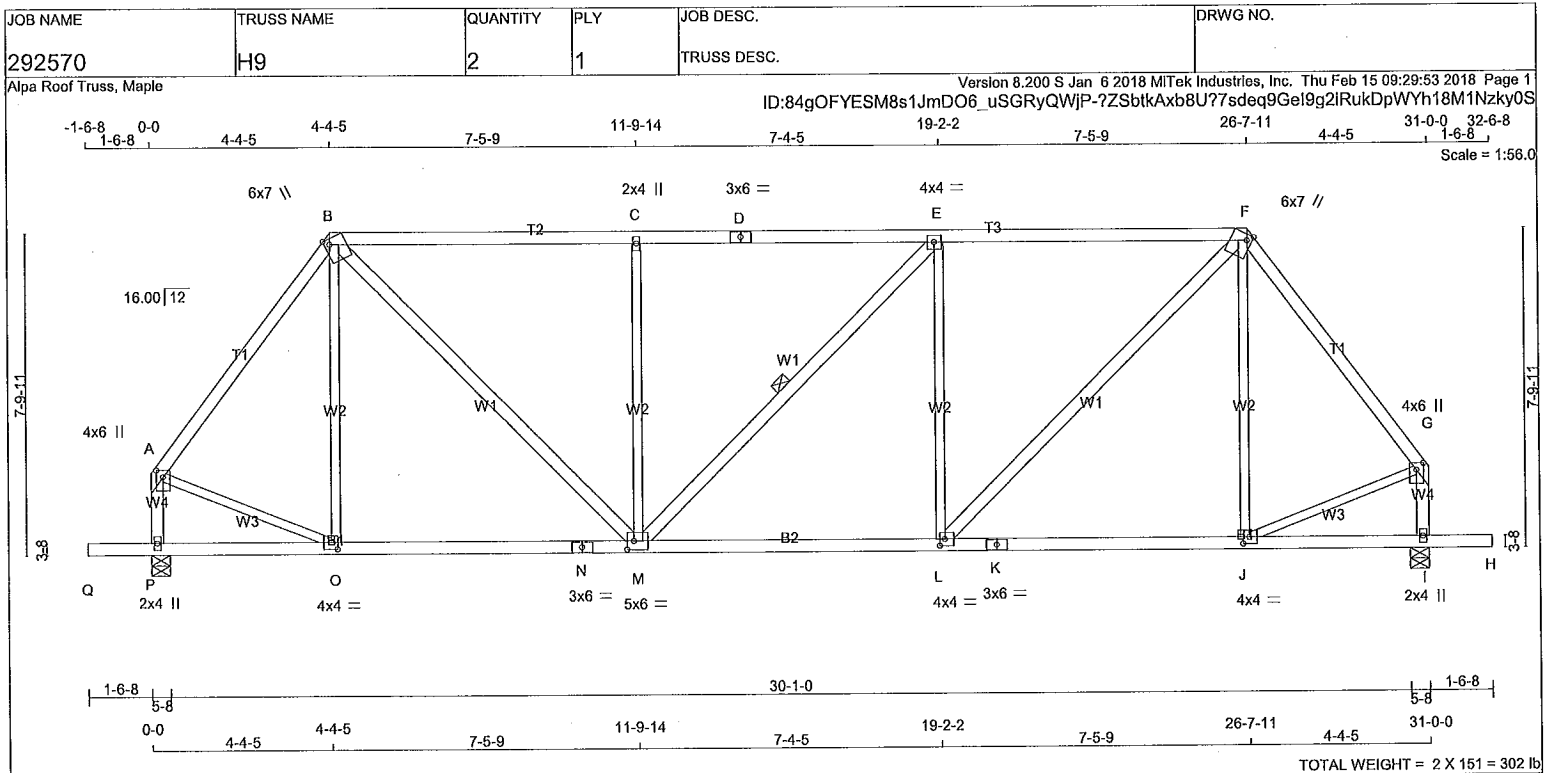
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.64 (M) (INPUT = 1.00)

A-18023088





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

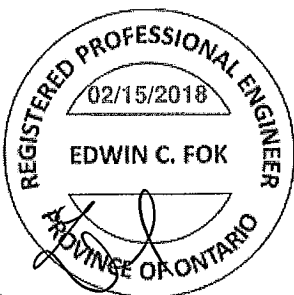
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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



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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1277/0	-78.0 -78.0	0.33 (1)	5.35	O-B	-151/28	0.17 (1)
B-C	-1521/0	-78.0 -78.0	0.74 (1)	4.36	B-M	0/1077	0.17 (1)
C-D	-1521/0	-78.0 -78.0	0.74 (1)	4.35	M-C	-624/0	0.71 (1)
D-E	-1521/0	-78.0 -78.0	0.74 (1)	4.35	M-E	-1/0	0.00 (1)
E-F	-1522/0	-78.0 -78.0	0.75 (1)	4.35	L-E	-624/0	0.71 (1)
F-G	-1277/0	-78.0 -78.0	0.33 (1)	5.35	L-F	0/1078	0.17 (1)
P-A	-1469/0	0.0 0.0	0.17 (1)	6.75	J-F	-152/28	0.17 (1)
I-G	-1469/0	0.0 0.0	0.17 (1)	6.75	A-O	0/810	0.18 (1)
					J-G	0/810	0.18 (1)
Q-P	0/0	-96.5 -96.5	0.16 (1)	10.00			
P-O	0/0	-18.5 -18.5	0.16 (4)	10.00			
O-N	0/760	-18.5 -18.5	0.27 (4)	10.00			
N-M	0/760	-18.5 -18.5	0.27 (4)	10.00			
M-L	0/1522	-18.5 -18.5	0.36 (1)	10.00			
L-K	0/760	-18.5 -18.5	0.27 (4)	10.00			
K-J	0/760	-18.5 -18.5	0.27 (4)	10.00			
J-I	0/0	-18.5 -18.5	0.16 (4)	10.00			
I-H	0/0	-96.5 -96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CANTILEVER DEFLECTION:

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

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

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

NAIL VALUES

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

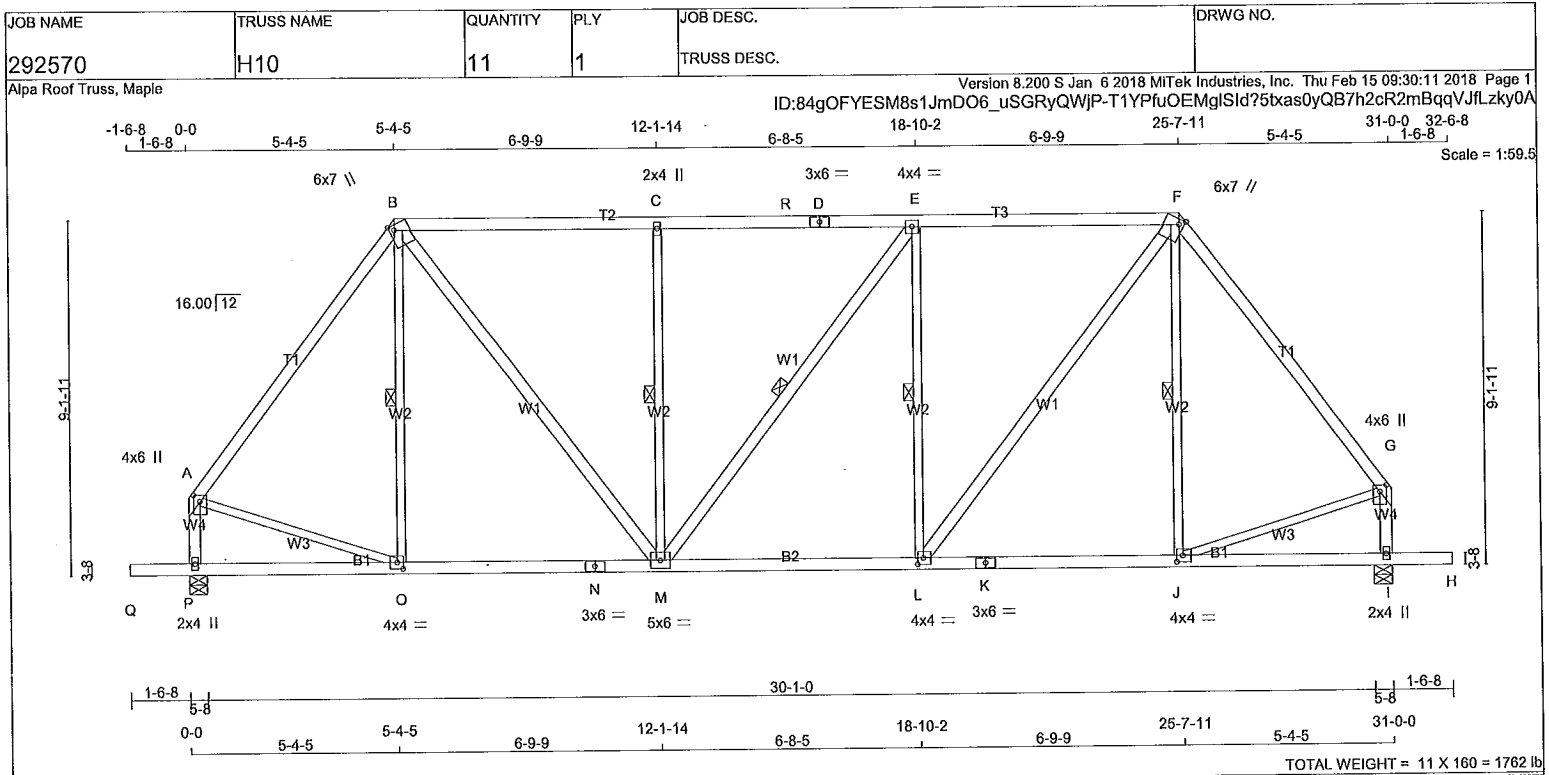
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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CONTINUED ON PAGE 2



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

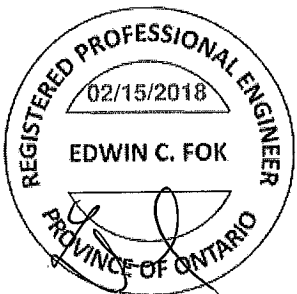
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWV-t	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMWV+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J, L, O						
J	BMWV-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
M	BMWVW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
P	NBMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
P	1720	0	1720	0	0	5-8	2-9	
I	1720	0	1720	0	0	5-8	2-9	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
P	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0
I	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0

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

BRACING

FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-O, C-M, E-M, E-L, F-J.

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

LOADING

TOTAL LOAD CASES: (4)

FR-TO	CHORDS MAX. FACTORED MEMB. FORCE (LBS)		FACTORED VERT. LOAD LC1 (PLF)		MAX. CS1 (LC)		MAX. UNBRAC LENGTH		WEBS MAX. FACTORED MEMB. FORCE (LBS)		MAX. CS1 (LC)	
	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
A-B	-1355 / 0	-78.0	-78.0	0.37 (1)	5.22	O-B	-112 / 36	0.06 (1)				
B-C	-1383 / 0	-85.5	-85.5	0.49 (1)	2.00	B-M	0 / 941	0.15 (1)				
C-R	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-C	-622 / 0	0.34 (1)				
R-D	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-E	-2 / 0	0.00 (1)				
D-E	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	L-E	-622 / 0	0.34 (1)				
E-F	-1384 / 0	-85.5	-85.5	0.49 (1)	2.00	L-F	0 / 944	0.15 (1)				
F-G	-1354 / 0	-78.0	-78.0	0.37 (1)	5.22	J-F	-113 / 36	0.06 (1)				
P-A	-1533 / 0	0.0	0.0	0.18 (1)	6.64	A-O	0 / 844	0.19 (1)				
I-G	-1533 / 0	0.0	0.0	0.18 (1)	6.64	J-G	0 / 843	0.19 (1)				

Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00
P-O	0 / 0	-18.5	-18.5	0.16 (4)	10.00
O-N	0 / 808	-18.5	-18.5	0.25 (4)	10.00
N-M	0 / 808	-18.5	-18.5	0.25 (4)	10.00
M-L	0 / 1385	-18.5	-18.5	0.31 (1)	10.00
L-K	0 / 808	-18.5	-18.5	0.25 (4)	10.00
K-J	0 / 808	-18.5	-18.5	0.25 (4)	10.00
J-I	0 / 0	-18.5	-18.5	0.16 (4)	10.00
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON 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, NBCC 2015

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

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

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

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

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

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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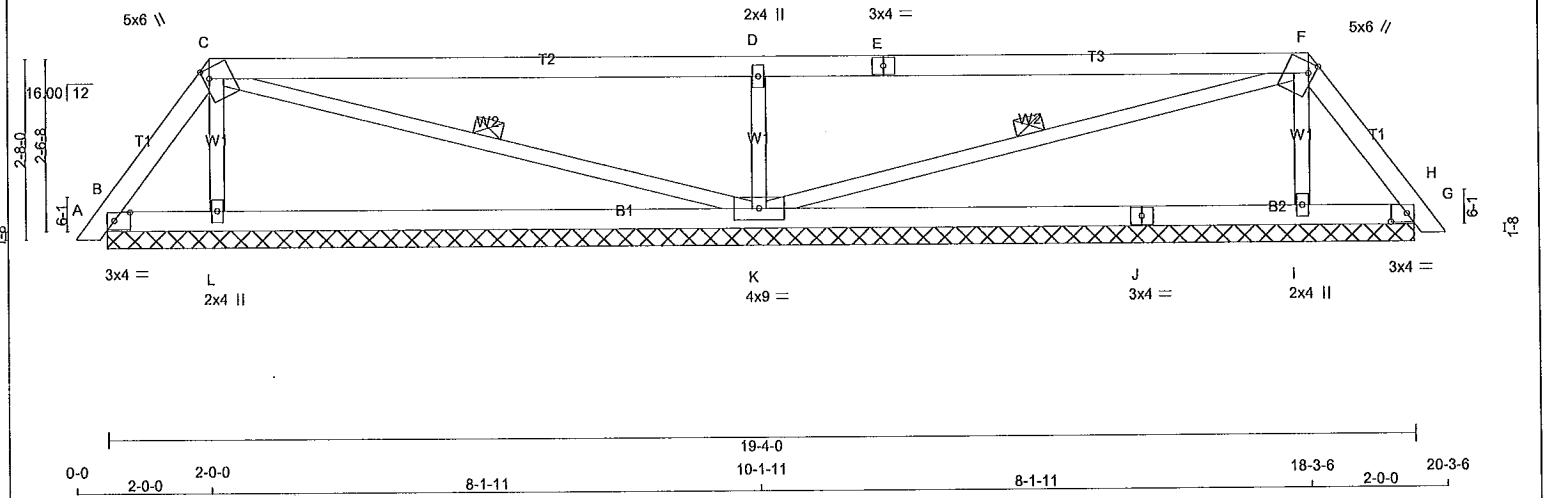
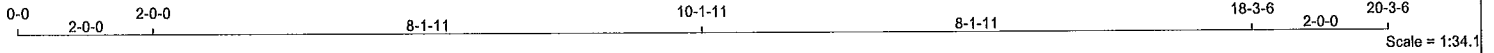
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H11P	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 2 X 66 = 132 lb

LUMBER				
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	
CHORDS				
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - G	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	1.50 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TMW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	4.0	
F	TTWW+m	MT20	5.0	6.0	1.75 1.00
G	TMB1-I	MT20	3.0	4.0	1.50 2.75
I	BMW1+w	MT20	2.0	4.0	
J	BS-t	MT20	3.0	4.0	
K	BMWW1-t	MT20	4.0	9.0	
L	BMW1+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
B	139	0	139	0	0	19-4-0 (4-0-0)	-11-14		
L	344	0	344	0	0	19-4-0 (4-0-0)	-11-14		
K	953	0	953	0	0	19-4-0 (4-0-0)	-11-14		
I	344	0	344	0	0	19-4-0 (4-0-0)	-11-14		
G	139	0	139	0	0	19-4-0 (4-0-0)	-11-14		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	93	93/0	0/0	0/0	0/0	0/-0	0/0
L	253	113/0	0/0	0/0	0/0	140/0	0/0
K	677	429/0	0/0	0/0	0/0	248/0	0/0
I	253	113/0	0/0	0/0	0/0	140/0	0/0
G	93	93/0	0/0	0/0	0/0	0/-0	0/0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0/10	-78.0	-78.0 0.01 (1)	10.00	L-C	-210/0	0.03 (1)
B-C	-104/0	-78.0	-78.0 0.03 (1)	6.25	C-K	-8/0	0.00 (1)
C-D	-41/0	-78.0	-78.0 0.88 (1)	6.25	K-D	-793/0	0.13 (1)
D-E	-43/0	-78.0	-78.0 0.88 (1)	6.25	K-F	-8/0	0.00 (1)
E-F	-43/0	-78.0	-78.0 0.88 (1)	6.25	I-F	-210/0	0.03 (1)
F-G	-104/0	-78.0	-78.0 0.03 (1)	6.25			
G-H	0/10	-78.0	-78.0 0.01 (1)	10.00			
B-L	0/60	-18.5	-18.5 0.19 (4)	10.00			
L-K	0/50	-18.5	-18.5 0.26 (4)	10.00			
K-J	0/50	-18.5	-18.5 0.26 (4)	10.00			
J-I	0/50	-18.5	-18.5 0.26 (4)	10.00			
I-G	0/60	-18.5	-18.5 0.19 (4)	10.00			

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

CSI: TC=0.88/1.00 (D-F:1), BC=0.26/1.00 (K-L:4), WB=0.13/1.00 (D-K:1), SSI=0.31/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

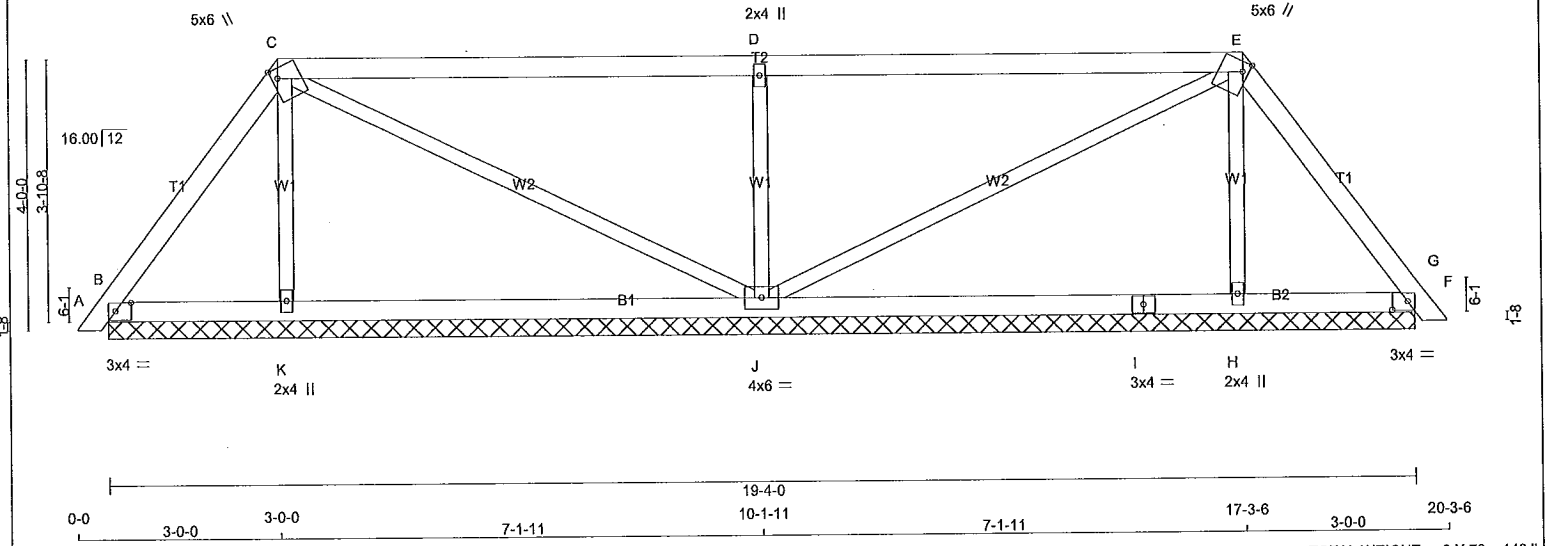
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.26 (E) (INPUT = 1.00)

A-18023091





TOTAL WEIGHT = 2 X 70 = 140 lb

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT		VERT	HORZ	UP/LIFT	IN-SX
B	213	0	213	0	19-4-0 (4-0-0)-9-7
K	310	0	310	0	19-4-0 (4-0-0)-9-7
J	875	0	875	0	19-4-0 (4-0-0)-9-7
H	310	0	310	0	19-4-0 (4-0-0)-9-7
F	213	0	213	0	19-4-0 (4-0-0)-9-7

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	148	113 / 0	0 / 0	0 / 0	0 / 0	35 / 0
K	226	109 / 0	0 / 0	0 / 0	0 / 0	116 / 0
J	620	396 / 0	0 / 0	0 / 0	0 / 0	224 / 0
H	226	109 / 0	0 / 0	0 / 0	0 / 0	116 / 0
F	148	113 / 0	0 / 0	0 / 0	0 / 0	35 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 10	K-C	-203 / 0
B-C	-104 / 0	C-J	-46 / 0
C-D	-13 / 0	J-D	-695 / 0
D-E	-13 / 0	J-E	-46 / 0
E-F	-104 / 0	H-E	-203 / 0
F-G	0 / 10		
B-K	0 / 60		
K-J	0 / 54		
J-I	0 / 54		
I-H	0 / 54		
H-F	0 / 60		

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.68/1.00 (C-D:1), BC=0.21/1.00 (H-J:4), WB=0.16/1.00 (D-J:1), SI=0.27/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

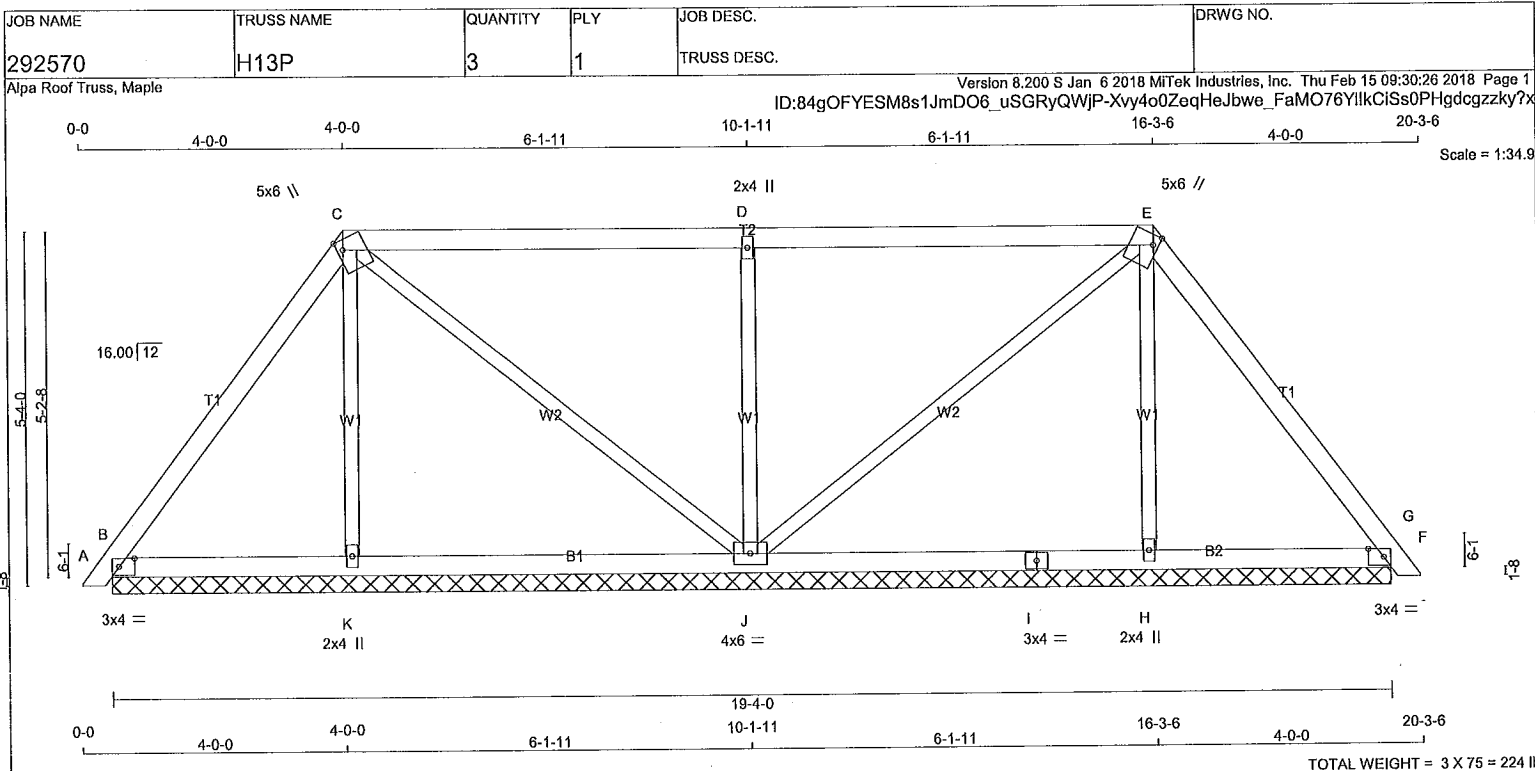
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.80)
 JSI METAL= 0.15 (D) (INPUT = 1.00)



A-18023092



LUMBER

N. L. G. A. RULES

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	275	0	275	0	19-4-0 (5-4-0)-7-8	
K	283	0	283	0	19-4-0 (5-4-0)-7-8	
J	803	0	803	0	19-4-0 (5-4-0)-7-8	
H	283	0	283	0	19-4-0 (5-4-0)-7-8	
F	275	0	275	0	19-4-0 (5-4-0)-7-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LC CASE	MAX/MIN. COMPONENT REACTIONS					WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE	UP/LIFT				
B	193	137 / 0	0 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0	
K	207	99 / 0	0 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0	
J	569	369 / 0	0 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0	
H	207	99 / 0	0 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0	
F	193	137 / 0	0 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	K-C	-184 / 0
B-C	-110 / 0	-78.0	-78.0	0.17 (1)	6.25	C-J	-71 / 0
C-D	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-D	-598 / 0
D-E	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-E	-71 / 0
E-F	-110 / 0	-78.0	-78.0	0.17 (1)	6.25	H-E	-184 / 0
F-G	0 / 10	-78.0	-78.0	0.01 (1)	10.00		
B-K	0 / 64	-18.5	-18.5	0.11 (4)	10.00		
K-J	0 / 60	-18.5	-18.5	0.15 (4)	10.00		
J-I	0 / 60	-18.5	-18.5	0.15 (4)	10.00		
I-H	0 / 60	-18.5	-18.5	0.15 (4)	10.00		
H-F	0 / 64	-18.5	-18.5	0.11 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.50/1.00 (C-D:1), BC=0.15/1.00 (J-K:4), WB=0.24/1.00 (D-J:1), SSI=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

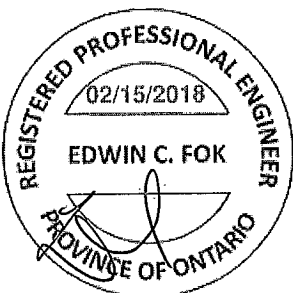
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1665

PLATE PLACEMENT TOL. = 0.250 inches

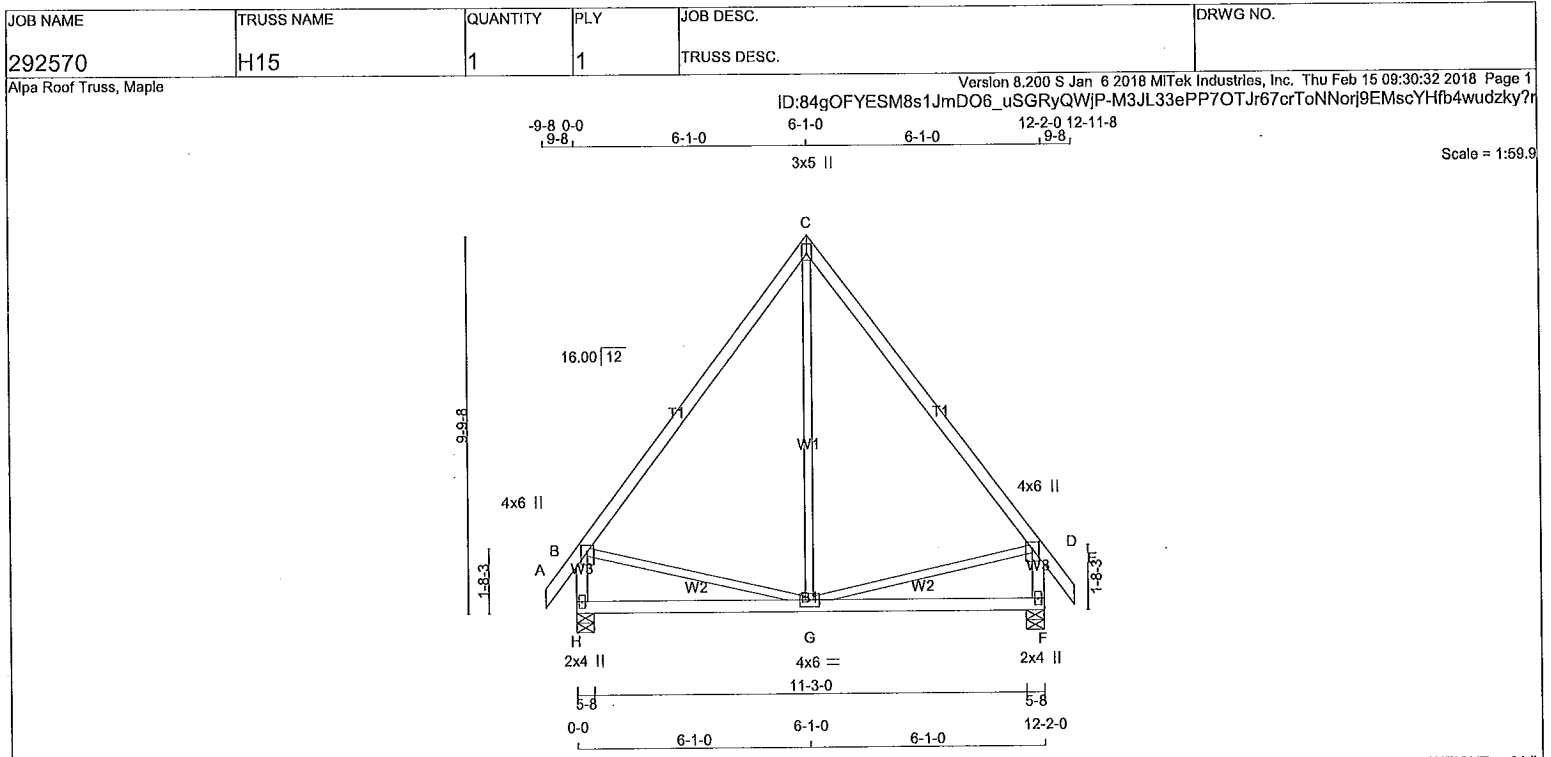
PLATE ROTATION TOL. = 5.0 Deg.

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

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



A-18023093



TOTAL WEIGHT = 61 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	2100F 1.8E	SPF
C - E	2x4	DRY	2100F 1.8E	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - 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	5.0	2.00 Edge
D	TMVW+p	MT20	4.0	6.0	2.00 2.00
F	BMV1+p	MT20	2.0	4.0	
G	BMVWW-t	MT20	4.0	6.0	
H	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
H	658	0	658	0	0	5-8	1-8		
F	658	0	658	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	467	294 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0
F	467	294 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO		FROM	TO				
A-B	0 / 28	-78.0	-78.0 0.03 (1)	10.00	G-C	0 / 121	0.04 (4)
B-C	-331 / 0	-78.0	-78.0 0.25 (1)	6.25	B-G	0 / 203	0.05 (1)
C-D	-331 / 0	-78.0	-78.0 0.25 (1)	6.25	G-D	0 / 203	0.05 (1)
D-E	0 / 28	-78.0	-78.0 0.03 (1)	10.00			
H-B	-615 / 0	0.0	0.0 0.07 (1)	7.81			
F-D	-615 / 0	0.0	0.0 0.07 (1)	7.81			
H-G	0 / 0	-18.5	-18.5 0.20 (4)	10.00			
G-F	0 / 0	-18.5	-18.5 0.20 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.25/1.00 (B-C:1), BC=0.20/1.00 (F-G:4), WB=0.05/1.00 (D-G:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (G) (INPUT = 0.90)
JSI METAL= 0.18 (D) (INPUT = 1.00)

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



A-18023094

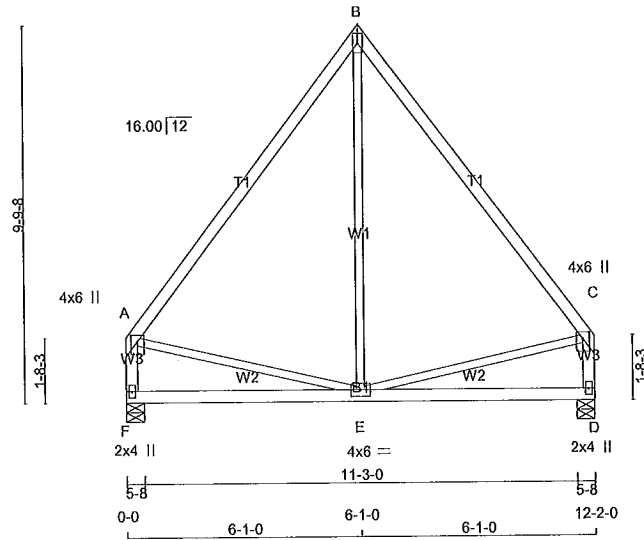
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H15A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

ID:84gOFYESM8s1JmDO6_uSGRYQWjP-fhmP5HxTmVQ3BXl0tuQLRnvBqI9URRepAKuCkEzky?T

0-0 6-1-0 6-1-0 6-1-0 12-2-0
3x6 II

Scale = 1:59.9



TOTAL WEIGHT = 58 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A - TMVW+p	MT20	4.0	6.0	2.00	2.00	
B - TTW+p	MT20	3.0	6.0			
C - TMVW+p	MT20	4.0	6.0	2.00	2.00	
D - BMV1+p	MT20	2.0	4.0			
E - BMVWW-t	MT20	4.0	6.0			
F - BMV1+p	MT20	2.0	4.0			

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	1155	0	1155	0
D	1155	0	1155	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
F	824	503 / 0	0 / 0	0 / 0	321 / 0
D	824	503 / 0	0 / 0	0 / 0	321 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	CS1 (LC)	UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)
FR-TO												
A-B	-713 / 0	-78.0	-78.0	0.40	(1)	6.25	E-B	0 / 666	0.16	(1)		
B-C	-713 / 0	-78.0	-78.0	0.40	(1)	6.25	A-E	0 / 437	0.11	(1)		
F-A	-898 / 0	0.0	0.0	0.11	(1)	7.81	E-C	0 / 437	0.11	(1)		
D-C	-898 / 0	0.0	0.0	0.11	(1)	7.81						
F-E	0 / 0	-112.0	-112.0	0.76	(1)	10.00						
E-D	0 / 0	-112.0	-112.0	0.76	(1)	10.00						

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSId Girder
START DISTANCE = 0-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 12-2-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/813 (0.18")

CSI: TC=0.40/1.00 (A-B:1), BC=0.76/1.00 (D-E:1), WB=0.16/1.00 (B-E:1), SSI=0.36/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (E) (INPUT = 0.80)
JSI METAL= 0.28 (A) (INPUT = 1.00)

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



A-18023095

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H15T	2	1	TRUSS DESC.	

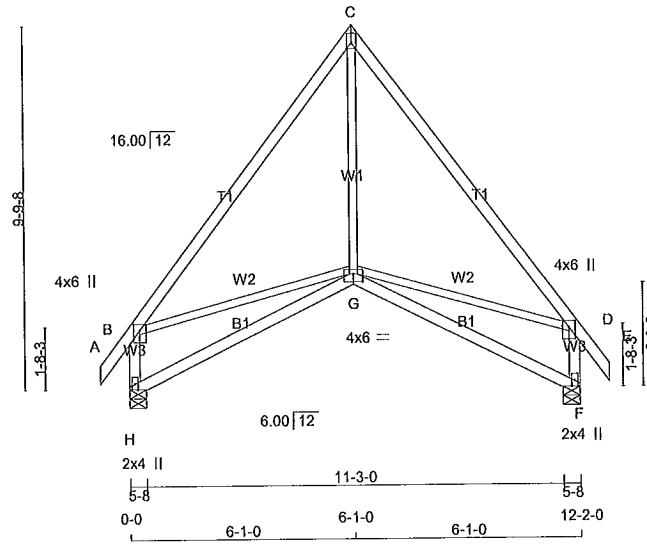
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 09:31:06 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-McMBBh2kPageO4Igb_4mlyCf5sqFq?iHTuJk5ezky?J

-9-8 0-0 6-1-0 6-1-0 6-1-0 12-2-0 12-11-8
9-8 9-8 9-8

Scale = 1:62.1



TOTAL WEIGHT = 2 X 61 = 122 lb

(M/F)

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

ALL 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	TTVW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0	Edge	
G	BBWWW-p	MT20	4.0	6.0	2.50	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	658	0	658	0	0
F	658	0	658	0	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED		
H	467	294 / 0	0 / 0
F	467	294 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX. MEMB.	FORCE (LBS)	MAX. MEMB.	FORCE (LBS)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 28	-78.0	-78.0	0.03 (1)	10.00	G-C	0 / 247
B-C	-451 / 0	-78.0	-78.0	0.25 (1)	6.25	B-G	0 / 279
C-D	-451 / 0	-78.0	-78.0	0.25 (1)	6.25	G-D	0 / 279
D-E	0 / 28	-78.0	-78.0	0.03 (1)	10.00		
H-B	-601 / 0	0.0	0.0	0.07 (1)	7.81		
F-D	-601 / 0	0.0	0.0	0.07 (1)	7.81		
H-G	0 / 0	-18.5	-18.5	0.20 (4)	10.00		
G-F	0 / 0	-18.5	-18.5	0.20 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (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=0.25/1.00 (B-C:1), BC=0.20/1.00 (G-H:4)
WB=0.06/1.00 (B-G:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

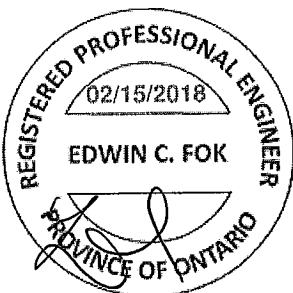
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (C) (INPUT = 0.90)
JSI METAL= 0.25 (H) (INPUT = 1.00)

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

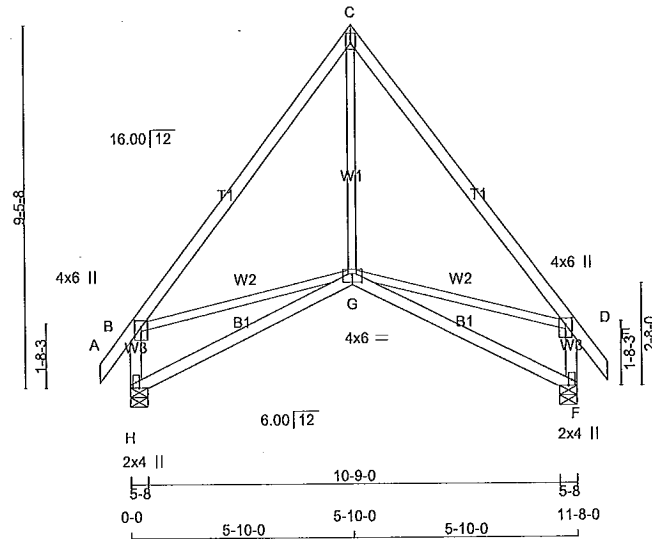


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Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:31:14 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-78rDtR8lW1hVLJC3fDe4EX?R4aNickTJ8F9NBzky?B

$\frac{-9-8}{9-8} \frac{0-0}{5-10-0} \frac{5-10-0}{5-10-0} \frac{11-8-0}{9-8} \frac{12-5-8}{9-8}$
 $3 \times 5 \parallel$



M)[F]

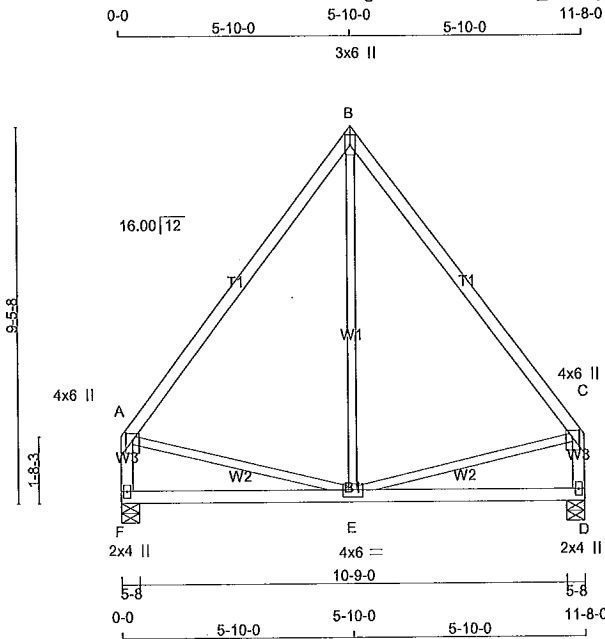
CHORDS					WEBS			
MAX. FACTORED		FACTORED			MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO			
A- B	0 / 28	-78.0	-78.0	0.04 (1)	10.00	G- C	0 / 230	
B- C	-428 / 0	-78.0	-78.0	0.29 (1)	6.25	B- G	0 / 264	
C- D	-428 / 0	-78.0	-78.0	0.29 (1)	6.25	G- D	0 / 264	
D- E	0 / 28	-78.0	-78.0	0.04 (1)	10.00			
H- B	-580 / 0	0.0	0.0	0.07 (1)	7.81			
F- D	-580 / 0	0.0	0.0	0.07 (1)	7.81			
H- G	0 / 0	-18.5	-18.5	0.18 (4)	10.00			
G- F	0 / 0	-18.5	-18.5	0.18 (4)	10.00			

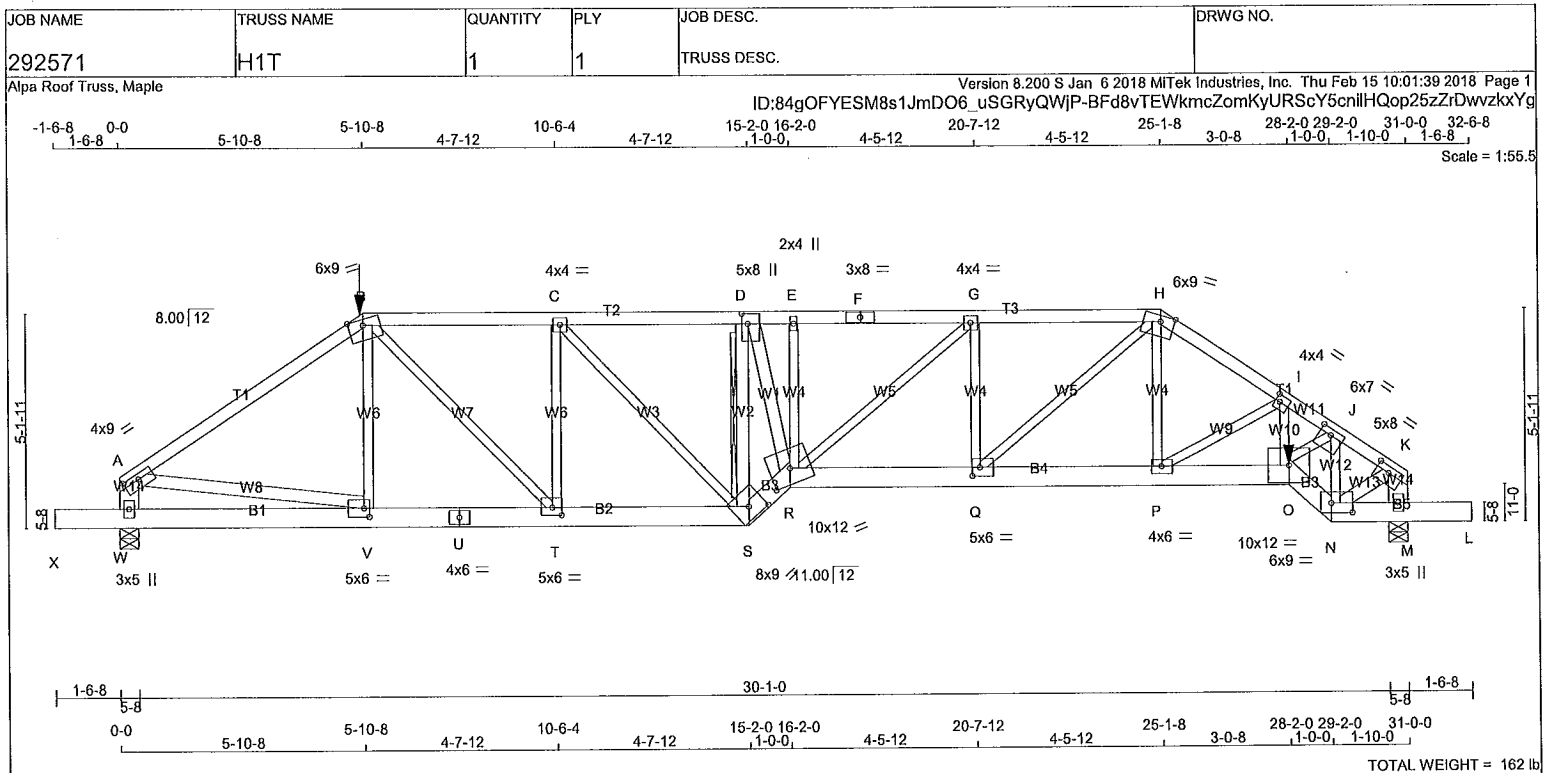
A-18023097

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H17A	1	1	TRUSS DESC.	

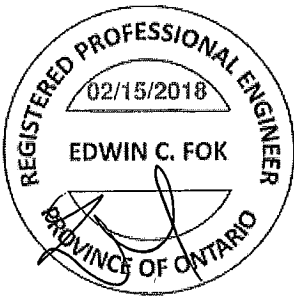
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:31:38 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-QmliveRptPi5E_9pTieG2IX3Vme_JR9?qt3QCozky_p





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - B 2x4 DRY 1650F 1.5E SPF B - F 2x4 DRY 1650F 1.5E SPF F - H 2x4 DRY 1650F 1.5E SPF H - K 2x4 DRY 1650F 1.5E SPF W - A 2x6 DRY No.2 SPF M - K 2x6 DRY No.2 SPF X - U 2x6 DRY No.2 SPF U - S 2x6 DRY No.2 SPF S - R 2x6 DRY No.2 SPF R - O 2x6 DRY No.2 SPF O - N 2x6 DRY No.2 SPF N - L 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT S - D 2x4 DRY No.2 SPF D - R 2x4 DRY No.2 SPF A - V 2x4 DRY No.2 SPF N - K 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX W 2988 0 2988 0 0 5-8 4-0 M 3253 0 3253 0 0 5-8 4-13 UNFACTORED REACTIONS 1ST LCASE MAX/MIN COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL W 2132 1291/0 0/0 0/0 0/0 842/0 0/0 M 2312 1454/0 0/0 0/0 0/0 859/0 0/0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, M BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.95 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 2x4 DRY SPF No.2 T-BRACE AT D-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 WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. FACTORED VERT. LOAD (PLF) MAX. UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED VERT. LOAD (PLF) FR-TO FROM TO A-B -3755/0 -78.0 -78.0 0.75 (1) 3.53 V-B -201/84 0.08 (1) B-C -4515/0 -153.5 -153.5 0.65 (1) 3.17 B-T 0/2000 0.50 (1) C-D -5026/0 -153.5 -153.5 0.68 (1) 2.97 T-C -1324/0 0.50 (1) D-E -6168/0 -153.5 -153.5 0.40 (1) 2.96 C-S 0/728 0.18 (1) E-F -6170/0 -78.0 -78.0 0.50 (1) 2.95 S-D -4848/0 0.79 (1) F-G -6170/0 -78.0 -78.0 0.50 (1) 2.95 D-R 0/4485 0.79 (1) G-H -5540/0 -78.0 -78.0 0.45 (1) 3.16 R-E -70/0 0.02 (1) H-I -4660/0 -78.0 -78.0 0.24 (1) 3.59 R-G 0/827 0.20 (1) I-J -5650/0 -78.0 -78.0 0.26 (1) 3.25 Q-G -944/0 0.25 (1) J-K -3233/0 -78.0 -78.0 0.16 (1) 4.27 Q-H 0/2167 0.54 (1) W-A -2745/0 0.0 0.0 0.19 (1) 6.26 P-H 0/917 0.23 (1) M-K -3025/0 0.0 0.0 0.21 (1) 6.01 P-I -952/0 0.23 (1) O-I 0/833 0.21 (1) X-W 0/0 -96.5 -96.5 0.08 (1) 10.00 O-J 0/3049 0.75 (1) W-V 0/0 -36.4 -36.4 0.15 (4) 10.00 N-J -3452/0 0.57 (1) V-U 0/3116 -36.4 -36.4 0.47 (1) 10.00 A-V 0/3150 0.56 (1) U-T 0/3116 -36.4 -36.4 0.47 (1) 10.00 N-K 0/2900 0.51 (1) T-S 0/4515 -36.4 -36.4 0.66 (1) 10.00 S-R 0/6615 -36.4 -36.4 0.86 (1) 10.00 R-Q 0/5540 -112.0 -112.0 0.88 (1) 10.00 Q-P 0/3894 -112.0 -112.0 0.82 (1) 10.00 P-O 0/4680 -112.0 -112.0 0.73 (1) 10.00 O-N 0/3369 -18.5 -18.5 0.44 (1) 10.00 N-M -1/0 -18.5 -18.5 0.08 (1) 10.00 M-L 0/0 -96.5 -96.5 0.08 (1) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE B 5-10-8 -334 -334 --- FRONT VERT TOTAL O 28-2-0 -423 -423 --- FRONT VERT TOTAL				DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 PSF SPACING = 24.0 IN./C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM GIRDER TYPE: CStdGirder START DISTANCE = 16-2-0 START SPAN CARRIED = 5-10-8 END DISTANCE = 28-2-12 END SPAN CARRIED = 5-10-8 END WALL WIDTH = 0-0 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CPrimeHip SIDE SETBACK = 5-10-8 END SETBACK = 5-10-8 END WALL WIDTH = 0-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 16-2-0 OF SPAN MEASURED FROM THE LEFT. *** 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, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, OBC 2018 - CSA 086-09, CSA 086-14 - TPIC 2011, TPIC 2014 DESIGN ASSUMPTIONS - OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL) = L/360 (1.03") CALCULATED VERT. DEFL.(LL) = L/999 (0.30") ALLOWABLE DEFL.(TL) = L/360 (1.03") CALCULATED VERT. DEFL.(TL) = L/637 (0.58") CANTILEVER DEFLECTION: ALLOWABLE DEFL.(LL) = L/120 (0.19") CALCULATED VERT. DEFL.(LL) = L/332 (0.06") A-18023099 CONTINUE ON PAGE 2			
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	H1T	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 10:01:39 2018 Page 2					
ID:84gOFYESM8s1JmDO6 uSGRyQWjP-BFd8vTEWkmcZomKyURScY5cnllHQop25zZrDwvzkxYg					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S	BBWW-h	MT20	8.0	9.0	3.25	4.50
T	BMWW-l	MT20	5.0	6.0	2.25	2.75
U	BS-l	MT20	4.0	6.0		
V	BMWW-l	MT20	5.0	6.0	2.50	1.50
W	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 334.0 lbs FACTORED DOWN AT 5-10-8 ON TOP CHORD, AND 423.2 lbs FACTORED DOWN AT 28-2-0 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/172 (0.11")

CSI: TC=0.75/1.00 (A-B:1) , BC=0.88/1.00 (Q-R:1)
, WB=0.79/1.00 (D-S:1) , SSI=0.37/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

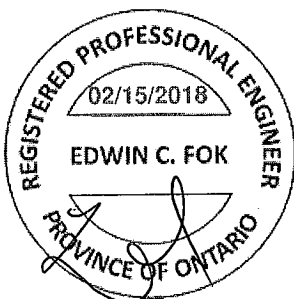
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

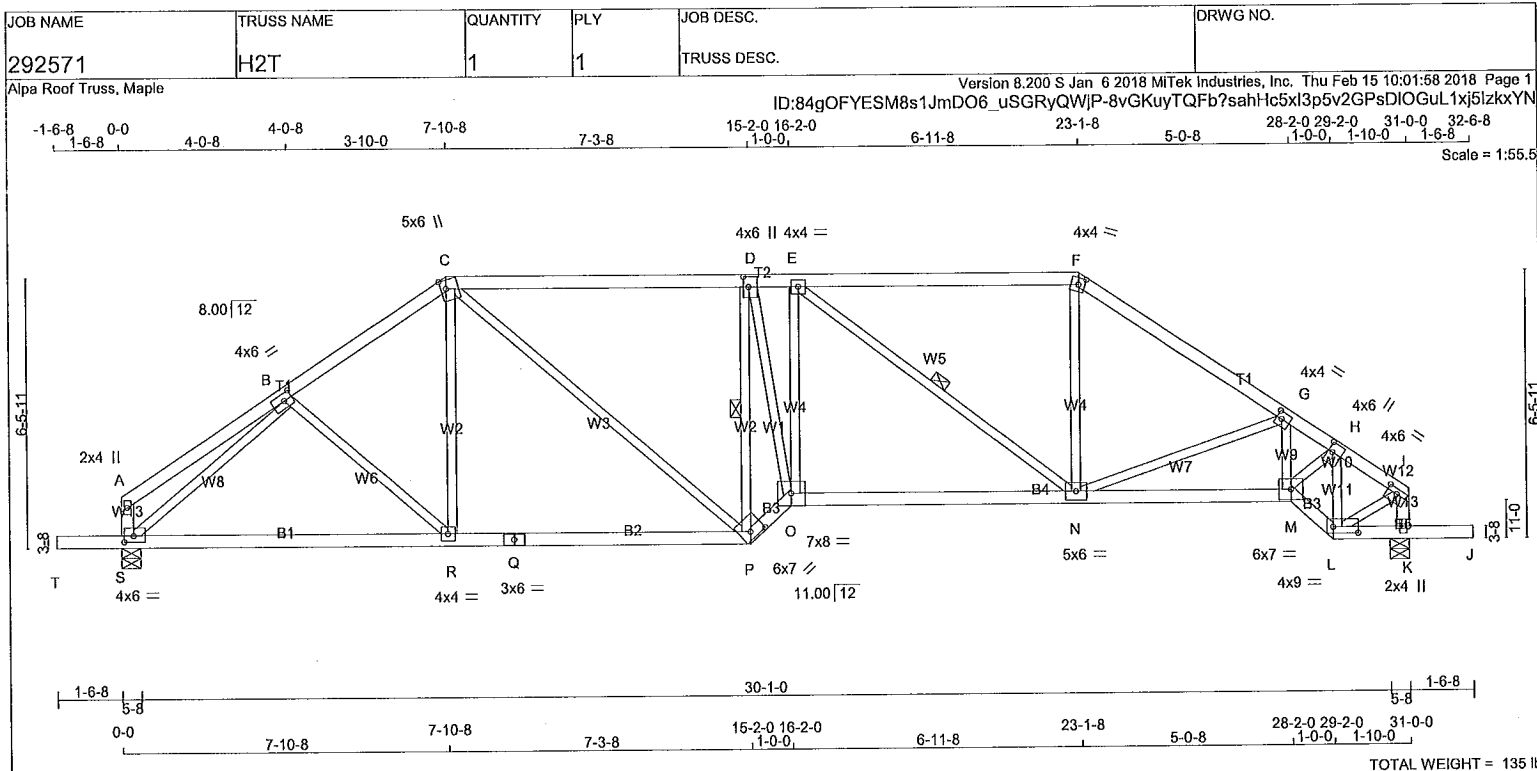
JSI GRIP= 0.90 (Q) (INPUT = 0.90)

JSI METAL= 0.93 (H) (INPUT = 1.00)

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



A-18023099(2)



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
S - A	2x4	DRY	No.2
K - I	2x4	DRY	No.2
T - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - L	2x4	DRY	No.2
L - J	2x4	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
A - TMV+p	MT20	2.0	4.0	
B - TMVW-t	MT20	4.0	6.0	2.00 2.50
C - TTWW+m	MT20	5.0	6.0	2.50 1.50
D - TMVW-t	MT20	4.0	6.0	3.00 1.50
E - TMVW-t	MT20	4.0	4.0	
F - TTW-m	MT20	4.0	4.0	2.00 1.75
G - TMVW-t	MT20	4.0	4.0	2.00 1.50
H - TMVW-t	MT20	4.0	6.0	2.75 1.25
I - TMVW-t	MT20	4.0	6.0	1.50 3.00
K - BMV1+p	MT20	2.0	4.0	
L - BBWW-t	MT20	4.0	9.0	1.75 7.25
M - BBWW-t	MT20	6.0	7.0	
N - BMVW-t	MT20	5.0	6.0	
O - BBWW-t	MT20	7.0	8.0	
P - BBWW-h	MT20	6.0	7.0	2.00 4.00
Q - BS-t	MT20	3.0	6.0	
R - BMVW-t	MT20	4.0	4.0	
S - BMVW-t	MT20	4.0	6.0	1.75 2.75

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
S	1640	0	1640	0	0	5-8	1-12		
K	1648	0	1648	0	0	5-8	2-7		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
S	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0		
K	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0		

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MAX. UNBRACED LENGTH (LC2)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	MAX. UNBRACED LENGTH (LC2)	MEMB.
FR-TO					FR-TO				
A-B	0 / 18	-78.0	-78.0 0.18 (1)	10.00	B-R	-35 / 39	0.02 (1)		
B-C	-1749 / 0	-78.0	-78.0 0.17 (1)	4.90	R-C	0 / 190	0.06 (4)		
C-D	-1940 / 0	-78.0	-78.0 0.60 (1)	4.17	C-P	0 / 653	0.15 (1)		
D-E	-2260 / 0	-78.0	-78.0 0.53 (1)	3.91	P-D	-2161 / 0	0.59 (1)		
E-F	-1683 / 0	-78.0	-78.0 0.49 (1)	4.58	D-O	0 / 1686	0.38 (1)		
F-G	-2026 / 0	-78.0	-78.0 0.29 (1)	4.50	O-E	0 / 213	0.05 (1)		
G-H	-2426 / 0	-78.0	-78.0 0.23 (1)	4.22	E-N	-727 / 0	0.36 (1)		
H-I	-1404 / 0	-78.0	-78.0 0.10 (1)	5.41	N-F	0 / 734	0.17 (1)		
S-A	-121 / 0	0.0	0.0 0.01 (1)	7.81	N-G	-464 / 0	0.23 (1)		
K-I	-1419 / 0	0.0	0.0 0.14 (1)	6.84	M-G	0 / 48	0.02 (4)		
					M-H	0 / 1459	0.33 (1)		
T-S	0 / 0	-96.5	-96.5 0.16 (1)	10.00	L-H	-1575 / 0	0.24 (1)		
S-R	0 / 1464	-18.5	-18.5 0.44 (4)	10.00	S-B	-1986 / 0	0.89 (1)		
R-Q	0 / 1441	-18.5	-18.5 0.45 (4)	10.00	L-I	0 / 1279	0.29 (1)		
Q-P	0 / 1441	-18.5	-18.5 0.45 (4)	10.00					
P-O	0 / 2671	-18.5	-18.5 0.43 (1)	10.00					
O-N	0 / 2255	-18.5	-18.5 0.48 (1)	10.00					
N-M	0 / 2101	-18.5	-18.5 0.45 (1)	10.00					
M-L	0 / 1456	-18.5	-18.5 0.24 (1)	10.00					
L-K	0 / 0	-18.5	-18.5 0.12 (1)	10.00					
K-J	0 / 0	-96.5	-96.5 0.16 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.29")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/738 (0.03")

CSI: TC=0.60/1.00 (C-D:1), BC=0.48/1.00 (N-O:1), WB=0.89/1.00 (B-S:1), SSI=0.27/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

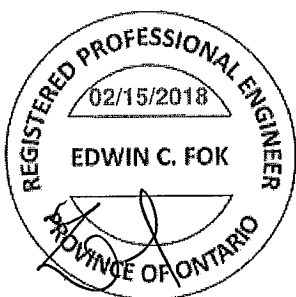
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 Inches

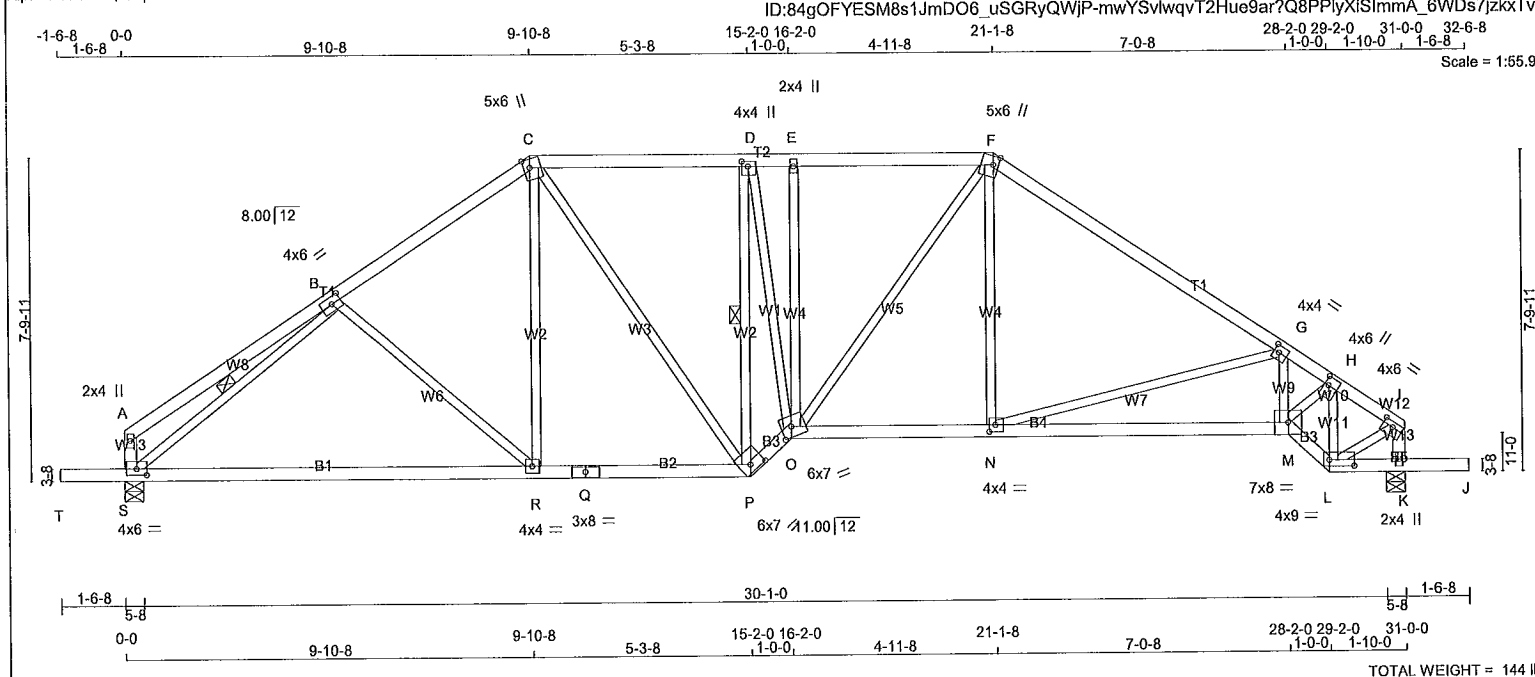
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (N) (INPUT = 0.90)
JSI METAL= 0.48 (B) (INPUT = 1.00)

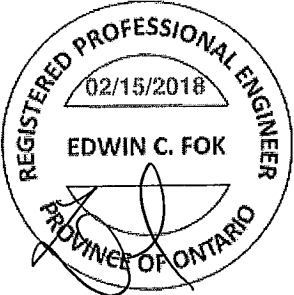


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	H3T	1	1	TRUSS DESC.	

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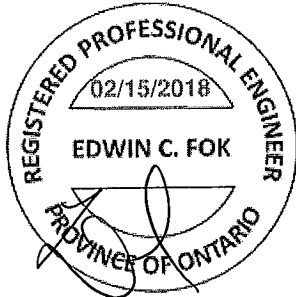
TOTAL WEIGHT = 144 lb

LUMBER				BUILDING DESIGNER				DESIGN CRITERIA									
N. L. G. A. RULES								SPECIFIED LOADS:									
CHORDS		SIZE	LUMBER	DESCR.	BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD				
							GROSS REACTION		GROSS REACTION		BRG		BRG				
A - C		2x4	DRY	No.2	JT		VERT		DOWN		HORZ		UPLIFT				
C - F		2x4	DRY	No.2	S		1640		0		1640		0				
F - I		2x4	DRY	No.2	K		1648		0		1648		0				
S - A		2x4	DRY	No.2							5-8		1-12				
K - I		2x4	DRY	No.2							5-8		2-7				
T - Q		2x4	DRY	No.2													
Q - P		2x4	DRY	No.2													
P - O		2x4	DRY	No.2													
O - M		2x4	DRY	No.2													
M - L		2x4	DRY	No.2													
L - J		2x4	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											
A	TMV+p	MT20	2.0	4.0													
B	TMWW-t	MT20	4.0	6.0	2.00	2.75											
C	TTWW+m	MT20	5.0	6.0	Edge	1.75											
D	TMWW+t	MT20	4.0	4.0	1.50	1.75											
E	TMW+w	MT20	2.0	4.0													
F	TTWW+m	MT20	5.0	6.0	2.50	1.50											
G	TMWW-t	MT20	4.0	4.0	2.00	1.50											
H	TMWW+t	MT20	4.0	6.0	2.50	1.25											
I	TMWW-t	MT20	4.0	6.0	1.50	3.00											
K	BMV1+p	MT20	2.0	4.0													
L	BBWW-I	MT20	4.0	9.0	1.75	7.25											
N	BBWW-t	MT20	7.0	8.0													
O	BBWWW-m	MT20	4.0	4.0	2.00	1.75											
P	BBWW-h	MT20	6.0	7.0	3.00	3.00											
Q	BS-t	MT20	3.0	8.0													
R	BBWW-t	MT20	4.0	4.0													
S	BMVW1-t	MT20	4.0	6.0	1.75	3.00											
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																	
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design																	
																	

BUILDING DESIGNER							DESIGN CRITERIA						
SPECIFIED LOADS:							SPECIFIED LOADS:						
TOP CH. LL = 21.0 PSF							TOP CH. LL = 21.0 PSF						
DL = 6.0 PSF							DL = 6.0 PSF						
BOT CH. LL = 0.0 PSF							BOT CH. LL = 0.0 PSF						
DL = 7.4 PSF							DL = 7.4 PSF						
TOTAL LOAD = 34.4 PSF							TOTAL LOAD = 34.4 PSF						
SPACING = 24.0 IN. C/C							SPACING = 24.0 IN. C/C						
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM							LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM						
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015							THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015						
THIS DESIGN COMPLIES WITH:							THIS DESIGN COMPLIES WITH:						
- PART 9 OF OBC 2012, OBC 2018							- PART 9 OF OBC 2012, OBC 2018						
- CSA 086-09, CSA 086-14							- CSA 086-09, CSA 086-14						
- TPIC 2011, TPIC 2014							- TPIC 2011, TPIC 2014						
DESIGN ASSUMPTIONS							DESIGN ASSUMPTIONS						
-OVERHANG NOT TO BE ALTERED OR CUT OFF.							-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							(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD						
ALLOWABLE DEFL.(LL)= L/360 (1.03")							ALLOWABLE DEFL.(LL)= L/360 (1.03")						
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")							CALCULATED VERT. DEFL.(LL) = L/999 (0.11")						
ALLOWABLE DEFL.(TL)= L/360 (1.03")							ALLOWABLE DEFL.(TL)= L/360 (1.03")						
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")							CALCULATED VERT. DEFL.(TL) = L/999 (0.34")						
CANTILEVER DEFLECTION:							CANTILEVER DEFLECTION:						
ALLOWABLE DEFL.(LL)= L/120 (0.19")							ALLOWABLE DEFL.(LL)= L/120 (0.19")						
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")							CALCULATED VERT. DEFL.(LL) = L/999 (0.01")						
ALLOWABLE DEFL.(TL)= L/120 (0.19")							ALLOWABLE DEFL.(TL)= L/120 (0.19")						
CALCULATED VERT. DEFL.(TL) = L/694 (0.03")							CALCULATED VERT. DEFL.(TL) = L/694 (0.03")						
CSI: TC=0.57/1.00 (F-G:1), BC=0.53/1.00 (P-R:4), WB=0.75/1.00 (G-N:1), SSI=0.28/1.00 (G-H:1)							CSI: TC=0.57/1.00 (F-G:1), BC=0.53/1.00 (P-R:4), WB=0.75/1.00 (G-N:1), SSI=0.28/1.00 (G-H:1)						
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10							DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10						
COMPANION LIVE LOAD FACTOR = 1.00							COMPANION LIVE LOAD FACTOR = 1.00						
AUTOSOLVE RIGHT HEEL ONLY							AUTOSOLVE RIGHT HEEL ONLY						
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.							TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.						
NAIL VALUES							NAIL VALUES						
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)							PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)						
MAX MIN MAX MIN MAX MIN							MAX MIN MAX MIN MAX MIN						
MT20 618 354 1667 788 1987 1656							MT20 618 354 1667 788 1987 1656						
PLATE PLACEMENT TOL. = 0.250 inches							PLATE PLACEMENT TOL. = 0.250 inches						
PLATE ROTATION TOL. = 5.0 Deg.							PLATE ROTATION TOL. = 5.0 Deg.						
JSI GRIP= 0.90 (S) (INPUT = 0.90)							JSI GRIP= 0.90 (S) (INPUT = 0.90)						
JSI METAL= 0.64 (Q) (INPUT = 1.00)							JSI METAL= 0.64 (Q) (INPUT = 1.00)						
A-18023101							A-18023101						

CONTINUED ON PAGE

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

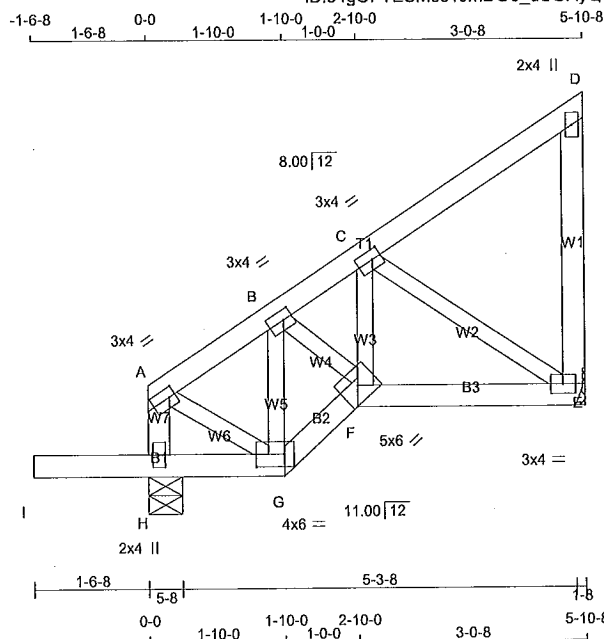


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	J1T	5	1	TRUSS DESC.	

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-XkZu9IEV09BkOUZNPIN?whHKtn4_6FHfsvngVnzKxTW



Scale = 1:31.0

TOTAL WEIGHT = 5 X 30 = 150 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
H - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
I - 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
 DRY: SEASONED LUMBER.

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		
H	452	0	452	0	5-8	1-8
E	264	0	264	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO			FR-TO			
H-A	-223 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 154	0.03 (1)	
A-B	-165 / 0	-78.0	-78.0	0.04 (1)	6.25	G-B	-220 / 0	0.03 (1)	
B-C	-239 / 0	-78.0	-78.0	0.08 (1)	6.25	B-F	0 / 130	0.03 (1)	
C-D	-11 / 0	-78.0	-78.0	0.08 (1)	6.25	F-C	0 / 63	0.02 (4)	
E-D	-95 / 0	0.0	0.0	0.03 (1)	7.81	C-E	-259 / 0	0.06 (1)	
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (1)	10.00				
G-F	0 / 173	-18.5	-18.5	0.03 (1)	10.00				
F-E	0 / 216	-18.5	-18.5	0.07 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
 ALLOWABLE DEFL.(TL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/588 (0.03")

CSI: TC=0.08/1.00 (B-C:1), BC=0.16/1.00 (G-H:1), WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

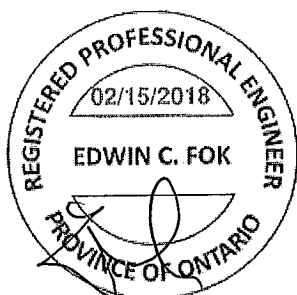
PLATE	GRIP(DRY)		SHEAR	SECTION	
	(PSI)	(PLI)		(PSI)	(PLI)
MT20	618	354	1667	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
 JSI METAL= 0.08 (E) (INPUT = 1.00)

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

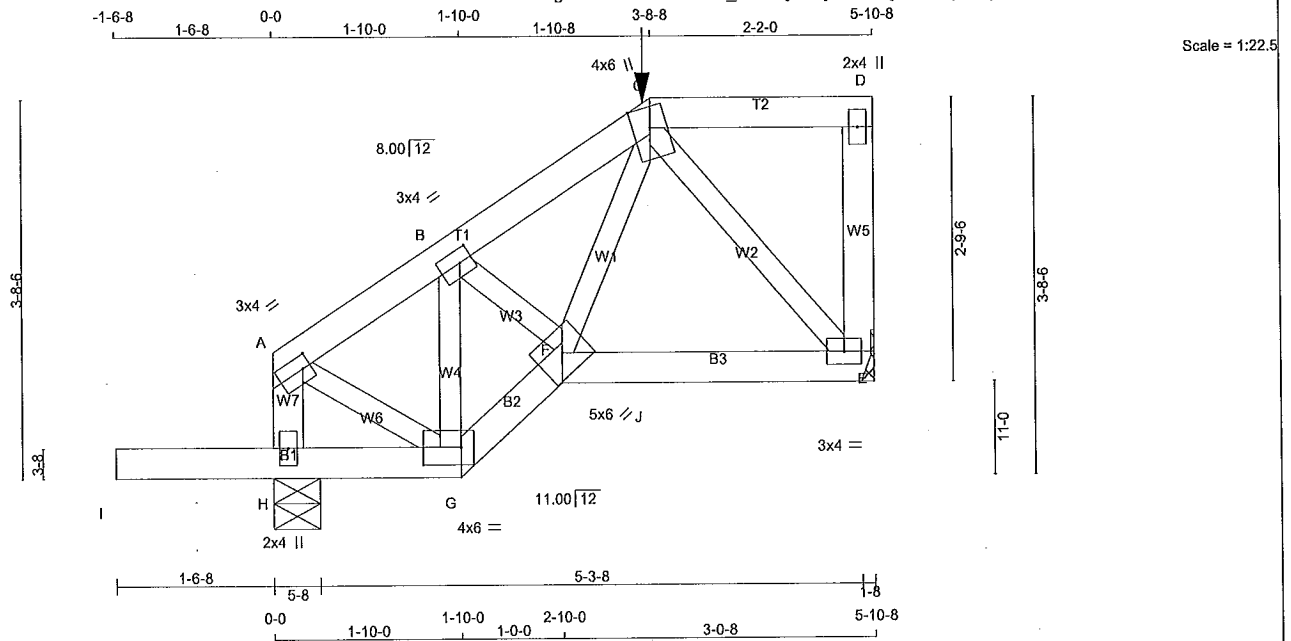


A-18023103

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	J1TA	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-H2eoynK1IXqrSeqnnz8og_c6UTspW_R_teJPwVzkxb7



TOTAL WEIGHT = 28 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - A	2x4	DRY	No.2	SPF
I - 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
A	TMVW-t	MT20	3.0	4.0 1.50 1.00
B	TMVW-t	MT20	3.0	4.0 1.50 1.50
C	TTVW+m	MT20	4.0	6.0 Edge
D	TMV+p	MT20	2.0	4.0
E	BMVW-t	MT20	3.0	4.0
F	BBVW-h	MT20	5.0	6.0
G	BBVW-t	MT20	4.0	6.0 2.00 4.50
H	BMV1+p	MT20	2.0	4.0

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 106.4 lbs FACTORED DOWN AT 3-8-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT
JT	413	0	413	0	0
E					
H	527	0	527	0	0

UNFACTORED REACTIONS							
	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	294	183 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
E							
H	377	225 / 0	0 / 0	0 / 0	0 / 0	152 / 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 = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-243 / 0	-78.0 -78.0	0.04 (1)	6.25	G-B	-302 / 0	0.05 (1)
B-C	-339 / 0	-78.0 -78.0	0.04 (1)	6.25	B-F	0 / 118	0.03 (1)
C-D	0 / 0	-111.3 -111.3	0.10 (1)	10.00	F-C	0 / 157	0.04 (1)
E-D	-121 / 0	0.0 0.0	0.02 (1)	7.81	C-E	-338 / 0	0.07 (1)
H-A	-292 / 0	0.0 0.0	0.03 (1)	7.81	A-G	0 / 231	0.06 (1)
I-H	0 / 0	-96.5 -96.5	0.17 (1)	10.00			
H-G	0 / 0	-26.4 -26.4	0.17 (1)	10.00			
G-F	0 / 261	-26.4 -26.4	0.05 (1)	10.00			
F-J	0 / 223	-26.4 -26.4	0.10 (4)	10.00			
J-E	0 / 223	-26.4 -26.4	0.10 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE DIR.
C	3-8-8	-106	-106	---	FRONT VERT

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-8-8
RIGHT SETBACK = 0-0
END SETBACK = 3-8-8
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, NBCC 2015

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

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

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

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

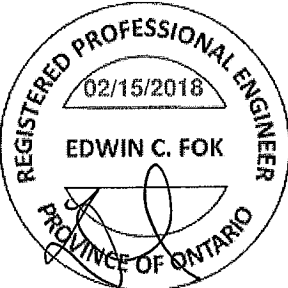
CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/617 (0.03")

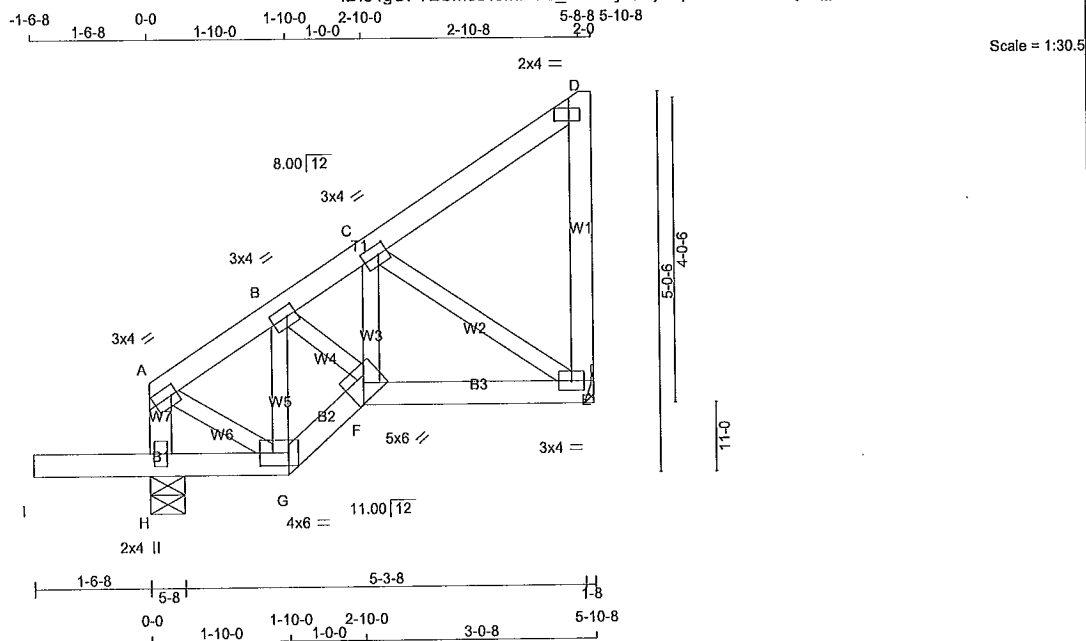
CSI: TC=0.10/1.00 (C-D:1), BC=0.17/1.00 (G-H:1), WB=0.07/1.00 (C-E:1), SSI=0.13/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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





TOTAL WEIGHT = 30 lb (M)

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
I - A	2x4	DRY	No.2	SPF
I - 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
A	TMVW-I	MT20	3.0	4.0	1.50 1.00
B	TMVW-I	MT20	3.0	4.0	1.50 1.50
C	TMVW-I	MT20	3.0	4.0	1.50 1.50
D	TMVW-I	MT20	2.0	4.0	0.50 2.25
E	BMVW-I	MT20	3.0	4.0	
F	BBVW-I	MT20	5.0	6.0	
G	BBVW-I	MT20	4.0	6.0	2.00 4.50
H	BMVW-I	MT20	2.0	4.0	

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
E	264	0	264	0	0	5-8	1-8		
H	452	0	452	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0		
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)	MAX. UNBRAC LENGTH FR-TO	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	-165 / 0	-78.0	-78.0 0.04 (1)	6.25	G-B	-220 / 0	0.03 (1)
B-C	-239 / 0	-78.0	-78.0 0.08 (1)	6.25	B-F	0 / 130	0.03 (1)
C-D	-11 / 0	-78.0	-78.0 0.08 (1)	6.25	F-C	0 / 63	0.02 (4)
E-D	-95 / 0	0.0	0.0 0.03 (1)	7.81	C-E	-259 / 0	0.06 (1)
H-A	-223 / 0	0.0	0.0 0.02 (1)	7.81	A-G	0 / 154	0.03 (1)
I-H	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
H-G	0 / 0	-18.5	-18.5 0.16 (1)	10.00			
G-F	0 / 173	-18.5	-18.5 0.03 (1)	10.00			
F-E	0 / 216	-18.5	-18.5 0.07 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/588 (0.03")

CSI: TC=0.08/1.00 (B-C:1) , BC=0.16/1.00 (G-H:1) , WB=0.06/1.00 (C-E:1) , SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

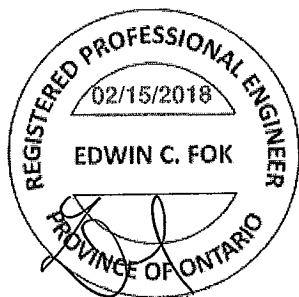
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

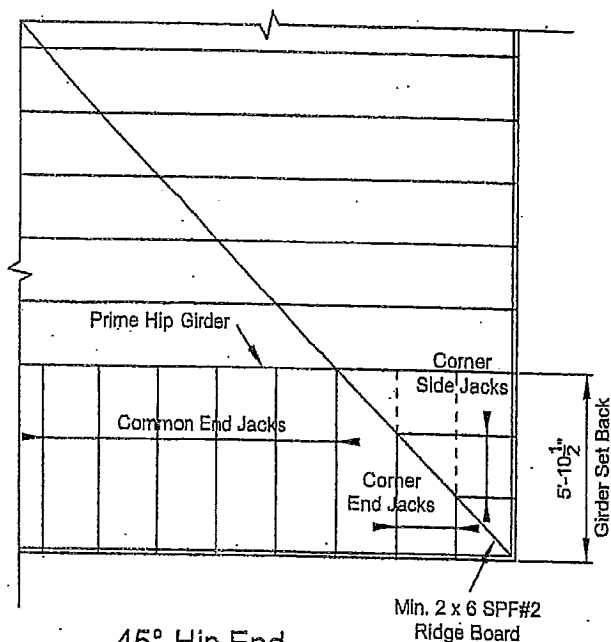
JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (D) (INPUT = 1.00)

A-18023105

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



STRACON ENGINEERING INC.



45° Hip End

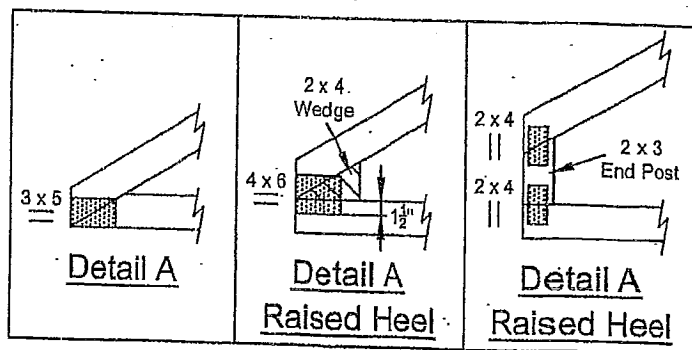
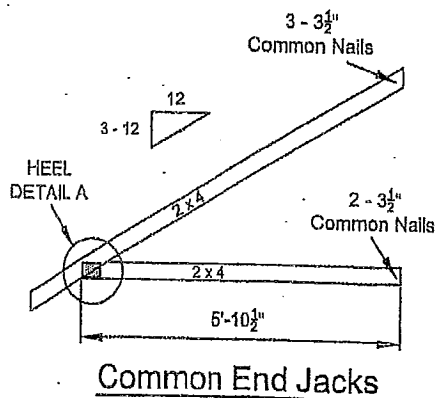
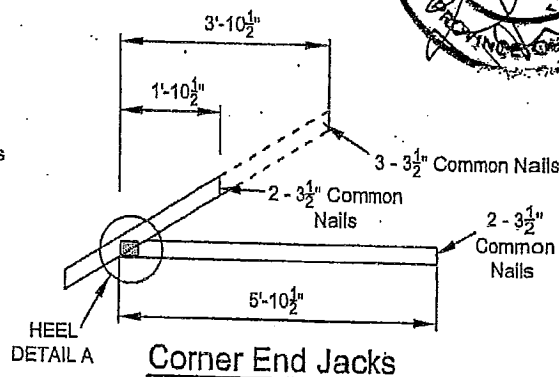
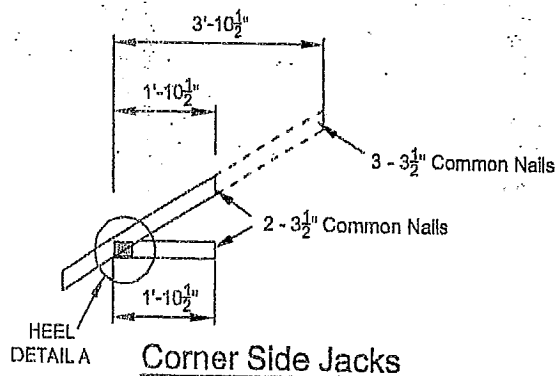
LUMBER SPECIFICATION

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

DESIGN LOAD

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

TOTAL LOAD : 50.5 P.S.F



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

CS-51008

LUS – Double Shear Joist Hangers



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

Material: 18 gauge

Finish: G90 galvanized

Design:

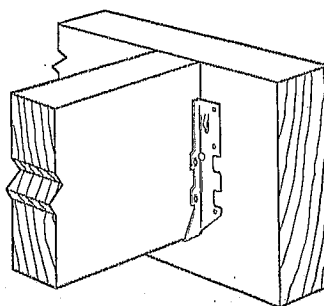
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

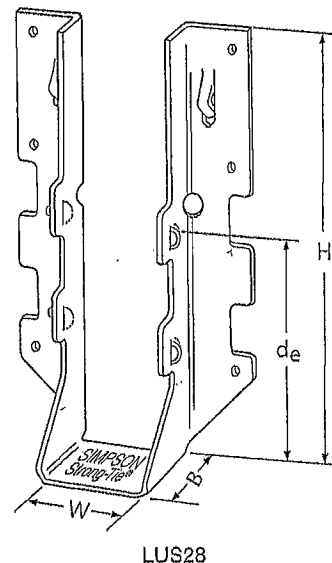
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



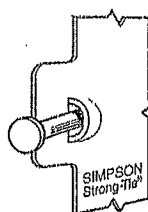
Typical LUS Installation



LUS28

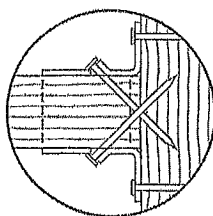
Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1 1/8	3 1/8	1 1/4	1 1/8	(4) 10d	(2) 10d		710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1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

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

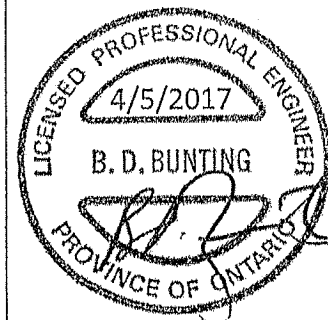


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2019, and reflects information available as of March 1, 2017. This information is updated periodically and should not be relied upon after June 30, 2019. Contact Simpson Strong-Tie for current information and limited warranty. www.strongtie.com

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

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