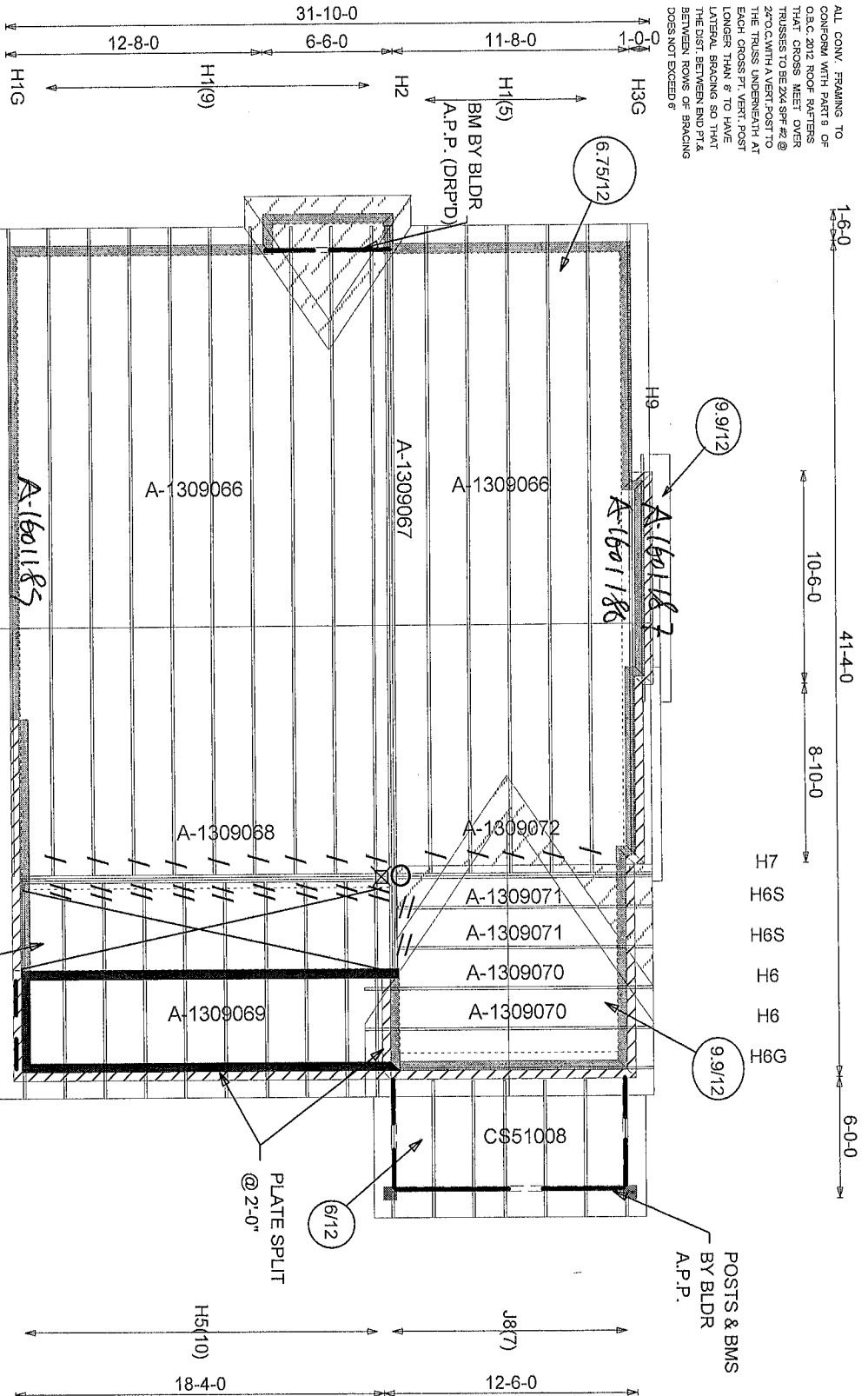
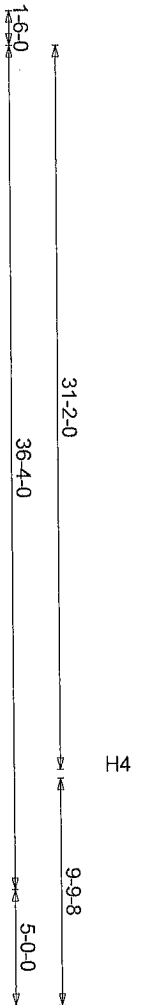


ALL CONV. FRAMING TO
CONFORM WITH PART 8 OF
O.B.C. 2012 ROOF RAFTERS
THAT CROSS MEET OVER
TRUSSES TO BE 2X4 SP#42 @
24" O.C. WITH A VERT. POST TO
THE TRUSS UNDERNEATH AT
EACH CROSS PT. VERT. POST
LONGER THAN 8' TO HAVE
LATERAL BRACING SO THAT
THE DIST. BETWEEN END PT'S
BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'



12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 5" FASCIA)-FM
ASPHALT SHINGLES
2" x 4" BRG/SIDING



/ LUS26DS
// LUS24
O HGUS26-2
X THGBH3



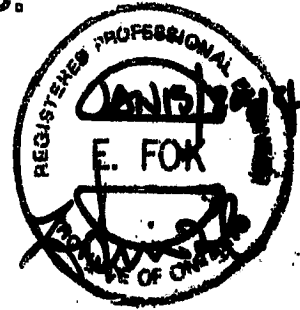
OLP Version 23.0.048



Job Track: 31379	Built/Location: ESQUIRE HOMES, CLARINGTON	Model / Elevation: 37-5 COR. / B
Layout ID: 263208	Project: NORTHGLEN	
Plan Log: 84245	Date: 01-05-16	Designer: jerzy
	Approved By:	
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

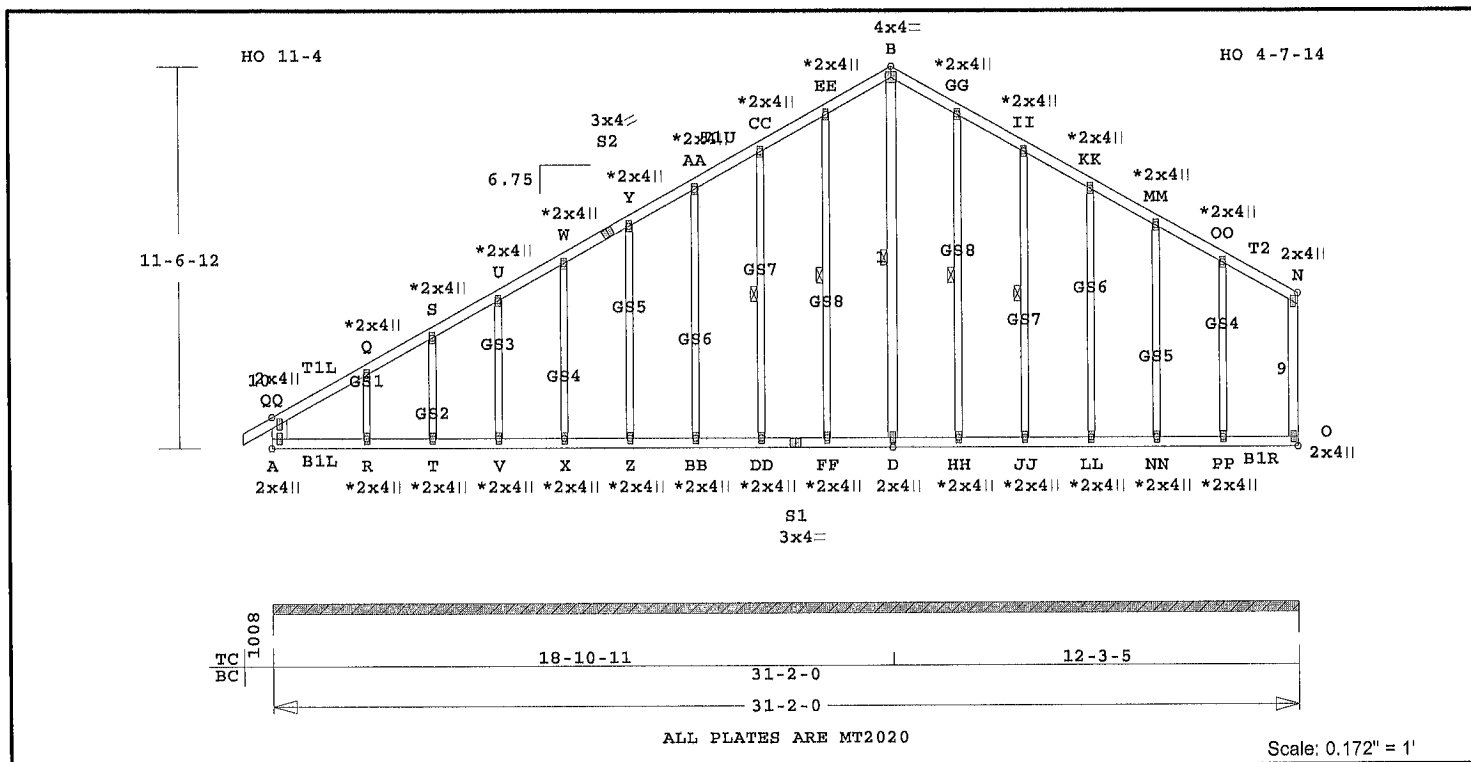
1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building 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

Job 263208	Mark HIG	Quan 1	Type DUAL	Span 370405	P1-H1 6.75	Left OH 10- 8	Right OH 0	Engineering
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Online Plus -- Version 23.0.048
RUN DATE: 06-JAN-16

CSI -Size- ---Lumber---
TC 0.08 2x 4 SPF-#2
BC 0.04 2x 4 SPF-#2
WB 0.10 2x 4 SPF-#2
-- 0.03 2x 6 SPF-#2
A -QQ
GW 0.25 2x 3 SPF-#2

Importance Category : Normal
Condition at Manufacture : Dry
Treatment : Untreated
Service Condition : Dry

Brace truss as follows:
O.C. From To
TC Cont. 0-0-0 31- 2- 0
BC 120.0\" 0-0-0 31- 2- 0
One Continuous Lateral Brace
D -B DD-CC FF-EE HH-GG
JJ-II
All braces 1x4"

psf-Ld Dead Live Snow
TC 3.0 0.0 29.0
BC 7.0 10.5 0.0
TC+BC 10.0 10.5 29.0
Total 49.5 Spacing 24.0"
Lumber Duration Factor 1.00
Plate Duration Factor 1.00
TC Fb=1.10 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Unfactored Reactions (Lbs)
Jt -DL- -LL- -SL-
A 629D 655D 1860D

TL Factored Reactions (Lbs)
Jt Down Uplift Horiz-
A 3903

Jt Brg Size Required
A 374.0\" 0"-to- 374"

Maximum Downward Loadcase
LC# 1 Snow Loading
Dur Fctrs - Lbr 1.00 Plt 1.00
Plf TC Beg End From To
Dist Dead 6 6 0.0 31.2
Dist Snow 58 58 0.0 31.2
Plf BC Beg End From To
Dist Dead 14 14 0.0 31.2
Dist Live 21 21 0.0 31.2

Membr CSI P Lbs M01st M02nd
-----Top Chords-----
QQ-Q 0.08 19 C -481 -638
Q-S 0.06 14 C -510 -362

Robbins Engineering, Inc./Online Plus™
S -U 0.05 9 C -348 -389
U -W 0.05 9 C -374 -383
W -S2 0.05 24 C -373 115
S2-Y 0.05 22 T 115 -382
Y -AA 0.05 9 C -375 -380
AA-CC 0.05 9 C -375 -381
CC-EE 0.05 8 C -375 -421
EE-B 0.06 17 C -426 0
B -GG 0.05 17 C 0 -427
GG-II 0.05 8 C -416 -381
II-KK 0.05 8 C -375 -381
KK-MM 0.05 8 C -373 -379
MM-OO 0.05 9 C -368 -424
OO-N 0.06 4 C -420 -250

-----Bottom Chords-----
A -R 0.04 0 T 45 -263
R -T 0.02 0 T -157 -111
T -V 0.02 0 T -92 -122
V -X 0.02 0 T -106 -117
X -Z 0.02 0 T -107 -115
Z -BB 0.02 0 T -107 -121
BB-DD 0.02 0 T -115 -82
DD-S1 0.01 0 T -73 -25
S1-FF 0.01 0 T -25 -75
FF-D 0.02 0 T -78 -120
D -HH 0.02 0 T -115 -113
HH-JJ 0.02 0 T -107 -114
JJ-LL 0.02 0 T -109 -114
LL-NN 0.02 0 T -108 -115
NN-PP 0.02 0 T -106 -121
PP-O 0.02 0 T -114 -144

-----Webs-----
A -QQ 0.03 235 C -54 -224
D -B 0.10 144 C -5 0
O -N 0.05 112 C -140 238
-----Gable Webs-----
R -Q 0.06 226 C -106 128
T -S 0.04 180 C -19 14
V -U 0.07 190 C -16 14
X -W 0.11 189 C -10 9
Z -Y 0.17 189 C -8 6
BB-AA 0.25 189 C -5 4
DD-CC 0.11 187 C -8 5
FF-EE 0.16 208 C 2 -4
HH-GG 0.16 208 C -6 10
JJ-II 0.11 187 C -4 5
LL-KK 0.25 189 C -6 7
NN-MM 0.16 187 C -9 10
PP-QO 0.11 204 C -7 4

TL Defl 0.00\" in A -R L/999
TL Panel -0.01\" in QQ-Q L/999
(Note - TL = 1.33LL + DL)
LL Defl 0.00\" in A -R L/999
Shear // Grain in QQ-Q 0.08

Plates for each ply each face.
PLATING CONFORMS TO TPIC 2011
AND CSA 086.09 LIMIT STATES
VERIFY PLATE VALUES WITH

MITEK CANADA INC.
GRIP BASED ON NET AREA
METHOD FOR SPF LUMBER
CCMC ACCEPTANCE NO:
11996-L, 10319-L
12116-L, 12940-L, 12939-L
Plate - MT20 20 Ga, Net Area
Plate - MT8H 18 Ga, Net Area
Plate - MT16 16 Ga, Net Area
Jt Type Plt Size X Y JSI
QQ MT20 2.0x 4.0 Ctr Ctr 0.31
Q MT20 2.0x 4.0 Ctr Ctr 0.00
S MT20 2.0x 4.0 Ctr Ctr 0.00
U MT20 2.0x 4.0 Ctr Ctr 0.00
W MT20 2.0x 4.0 Ctr Ctr 0.00
S2 MT20 3.0x 4.0 Ctr Ctr 0.38
Y MT20 2.0x 4.0 Ctr Ctr 0.00
AA MT20 2.0x 4.0 Ctr Ctr 0.00
CC MT20 2.0x 4.0 Ctr Ctr 0.00
EE MT20 2.0x 4.0 Ctr Ctr 0.00
B MT20 4.0x 4.0 Ctr Ctr 0.47
GG MT20 2.0x 4.0 Ctr Ctr 0.00
II MT20 2.0x 4.0 Ctr Ctr 0.00
KK MT20 2.0x 4.0 Ctr Ctr 0.00
MM MT20 2.0x 4.0 Ctr Ctr 0.00
OO MT20 2.0x 4.0 Ctr Ctr 0.00
N MT20 2.0x 4.0 Ctr Ctr 0.31
A MT20 2.0x 4.0 Ctr Ctr 0.24
R MT20 2.0x 4.0 Ctr Ctr 0.00
T MT20 2.0x 4.0 Ctr Ctr 0.00
V MT20 2.0x 4.0 Ctr Ctr 0.00
X MT20 2.0x 4.0 Ctr Ctr 0.00
Z MT20 2.0x 4.0 Ctr Ctr 0.00
BB MT20 2.0x 4.0 Ctr Ctr 0.00
DD MT20 2.0x 4.0 Ctr Ctr 0.00
FF MT20 2.0x 4.0 Ctr Ctr 0.00
D MT20 2.0x 4.0 Ctr Ctr 0.24
HH MT20 2.0x 4.0 Ctr Ctr 0.00
JJ MT20 2.0x 4.0 Ctr Ctr 0.00
LL MT20 2.0x 4.0 Ctr Ctr 0.00
NN MT20 2.0x 4.0 Ctr Ctr 0.00
PP MT20 2.0x 4.0 Ctr Ctr 0.00
O MT20 2.0x 4.0 Ctr Ctr 0.24

Placement Tolerance Used 0.25 in.
Allowance For Ineffective Teeth
shall be 10.0%
Allowance for Rotation on Joint
shall be 5.0 deg.

NOTES:
Trusses Manufactured by:
ALPA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES , Standard Formula
NBCC2005
OH Loading
Refer to Gen Det 3 series for

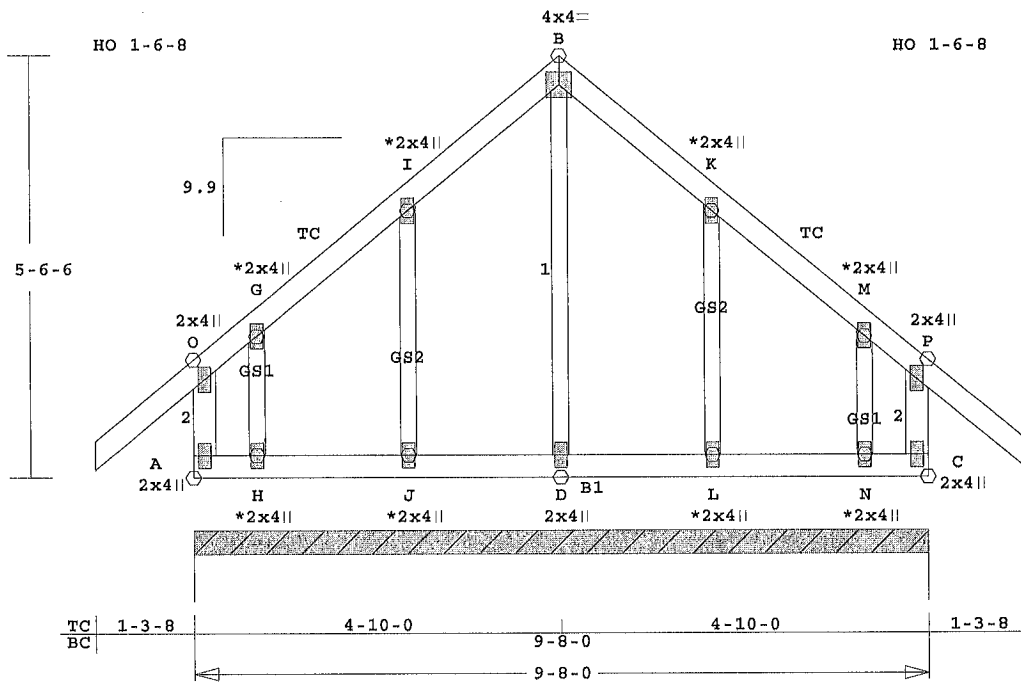
web bracing and plating.
Design Roof Snow Load Use:
Ground Snow Load = 37.6 psf
Rain Load = 8.4 psf
Non-slippery Roof
Importance Factor 1.00
Exposed to Wind Factor 1.00
Balanced Load Factor 0.55
Unbalanced Load Factor 0.00
FABRICATOR NOTES:
1. DESIGN CONFORMS TO OBC
PART 9 2012



A-1606485

Robbins Engineering, Inc./Online Plus™ © 1996-2009 Version 23.0.048 Engineering - Portrait 06/01/2016 3:10:12 PM Page 1

Job 263208	Mark H9	Quan 1	Type DUAL	Span 90800	P1-H1 9.9	Left OH 1- 3- 8	Right OH 1- 3- 8	Engineering
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ALL PLATES ARE MT2020

Scale: 0.397" = 1'

Online Plus -- Version 23.0.048
RUN DATE: 06-JAN-16

CSI -Size- ----Lumber----

TC	0.07	2x 4	SPF-#2
BC	0.04	2x 4	SPF-#2
WB	0.06	2x 4	SPF-#2
--	0.04	2x 3	SPF-#2
D -B			
GW	0.06	2x 3	SPF-#2

Importance Category : Normal
Condition at Manufacture : Dry
Treatment : Untreated
Service Condition : Dry

Brace truss as follows:

O.C.	From	To
TC Cont.	0- 0- 0	9- 8- 0
BC	72.0"	0- 0- 0 9- 8- 0

psf-Ld	Dead	Live	Snow
TC	3.0	0.0	29.0
BC	7.0	10.5	0.0
TC+BC	10.0	10.5	29.0
Total	49.5	Spacing	24.0"
Lumber Duration Factor	1.00		
Plate Duration Factor	1.00		
TC Fb=1.10	Fc=1.10	Ft=1.10	
BC Fb=1.10	Fc=1.10	Ft=1.10	

Unfactored Reactions (Lbs)

Jt	-DL-	-LL-	-SL-
A	293D	274D	1061D

TL Factored Reactions (Lbs)

Jt	Down	Uplift	Horiz-
A	2095		

Jt	Brg Size	Required
A	116.0"	0"-to- 116"

Maximum Downward Loadcase
LC# 1 Snow Loading

Dur Fctrs	- Lbr	1.00	Plt	1.00
Plf	TC	Beg	End	From To
Dist	Dead	6	6	0.0 9.7
Dist	Snow	58	58	0.0 9.7
Plf	BC	Beg	End	From To
Dist	Dead	14	14	0.0 9.7
Dist	Live	21	21	0.0 9.7

Membr CSI P Lbs M@1st M@2nd

O -G	0.06	73 C	-412	61
G -I	0.07	31 C	-27	-572
I -B	0.07	58 C	-547	0
B -K	0.07	58 C	0	-547
K -M	0.07	31 C	-572	-27
M -P	0.06	73 C	61	-412

Robbins Engineering, Inc./Online Plus™

-----Bottom Chords-----

A -H	0.04	4 C	-276	294
H -J	0.03	1 T	234	-265
J -D	0.03	0 T	-226	-70
D -L	0.03	0 T	-70	-226
L -N	0.03	1 T	-265	234
N -C	0.04	4 C	294	-276

-----Webs-----

A -O	0.06	249 C	272	-186
D -B	0.04	87 C		
C -P	0.06	249 C	-272	186

-----Gable Webs-----

H -G	0.03	52 C	60	-89
J -I	0.06	233 C	-38	25
L -K	0.06	233 C	38	-25
N -M	0.03	52 C	-60	89

TL Defl 0.00" in L -N L/999
TL Panel 0.00" in B -K L/999
(Note - TL = 1.33LL + DL)
LL Defl 0.00" in L -N L/999
Shear // Grain in O -O 0.08

Plates for each ply each face.
PLATING CONFORMS TO TPIC 2011
AND CSA 086.09 LIMIT STATES
VERIFY PLATE VALUES WITH
MITEK CANADA INC.
GRIP BASED ON NET AREA
METHOD FOR SPF LUMBER
CCMC ACCEPTANCE NO:
11996-L, 10319-L
12116-L, 12940-L, 12939-L
Plate - MT20 20 Ga, Net Area
Plate - MT8H 18 Ga, Net Area
Plate - MT16 16 Ga, Net Area
Jt Type Plt Size X Y JSI
O MT20 2.0x 4.0 Ctr Ctr 0.17
G MT20 2.0x 4.0 Ctr Ctr 0.00
I MT20 2.0x 4.0 Ctr Ctr 0.00
B MT20 4.0x 4.0 Ctr Ctr 0.45
K MT20 2.0x 4.0 Ctr Ctr 0.00
M MT20 2.0x 4.0 Ctr Ctr 0.00
P MT20 2.0x 4.0 Ctr Ctr 0.17
A MT20 2.0x 4.0 Ctr Ctr 0.17
H MT20 2.0x 4.0 Ctr Ctr 0.00
J MT20 2.0x 4.0 Ctr Ctr 0.00
D MT20 2.0x 4.0 Ctr Ctr 0.17
L MT20 2.0x 4.0 Ctr Ctr 0.00
N MT20 2.0x 4.0 Ctr Ctr 0.00
C MT20 2.0x 4.0 Ctr Ctr 0.17

Placement Tolerance Used 0.25 in.
Allowance For Ineffective Teeth
shall be 10.0%
Allowance for Rotation on Joint
shall be 5.0 deg.

NOTES:

Trusses Manufactured by:
ALPA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES , Standard Formula
NBCC2005
OH Loading
Refer to Gen Det 3 series for
web bracing and plating.
Design Roof Snow Load Use:
Ground Snow Load = 37.6 psf
Rain Load = 8.4 psf
Non-slippery Roof
Importance Factor 1.00
Exposed to Wind Factor 1.00
Balanced Load Factor 0.55
Unbalanced Load Factor 0.00

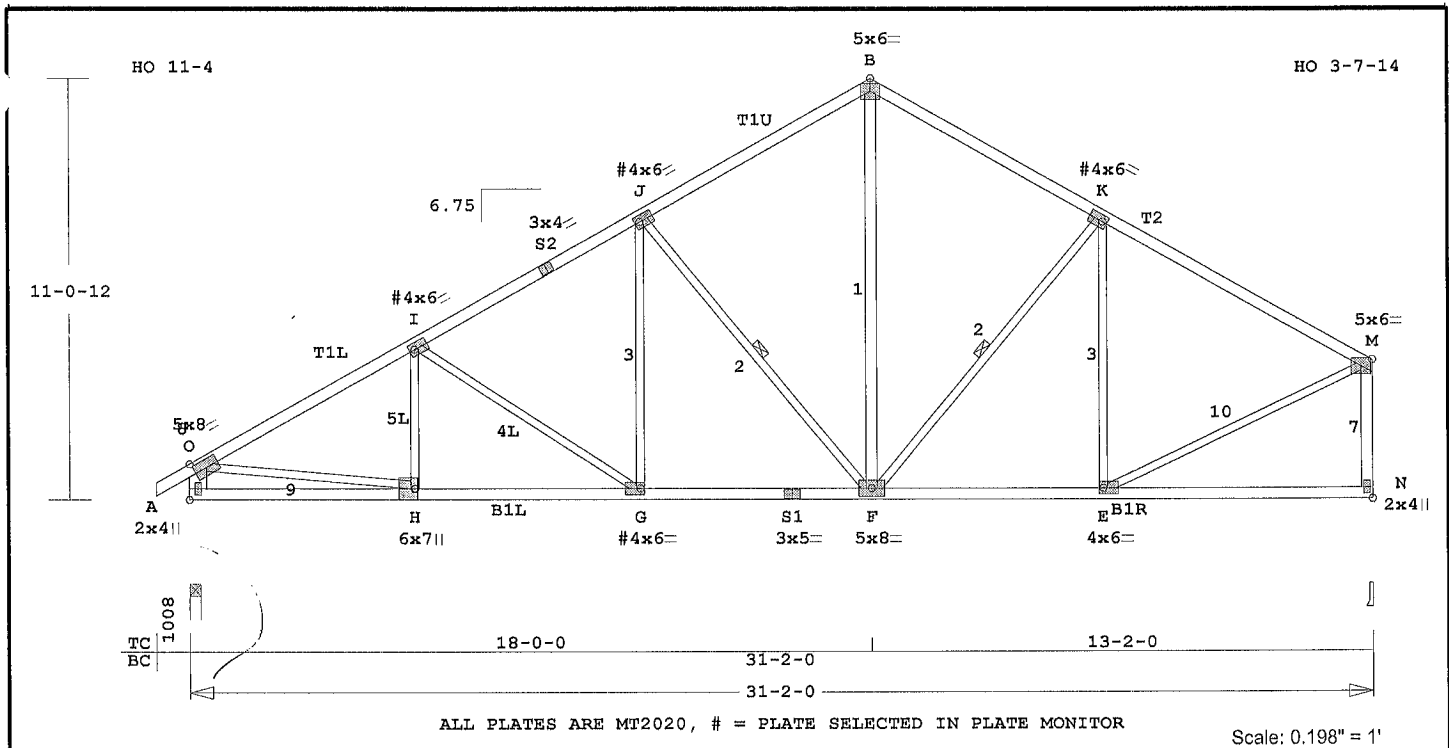
FABRICATOR NOTES:
1. DESIGN CONFORMS TO OBC
PART 9 2012



A:1606187

TYPE	SPAN	ESQUIRE HOMES CLARINGTON	Mark
DH	310200	31379/189946 31.3	H

A-1309066



Online Plus -- Version 23.0.048
RUN DATE: 27-AUG-13

CSI -Size- ---Lumber---
TC 0.63 2x 4 SPF-#2
BC 0.47 2x 4 SPF-#2
WB 0.60 2x 3 SPF-#2
-- 0.12 2x 6 SPF-#2
A -O
-- 0.29 2x 4 SPF-#2
F -B N -M

Importance Category : Normal
Condition at Manufacture : Dry
Treatment : Untreated
Service Condition : Dry

Brace truss as follows:
O.C. From To
TC Cont. 0- 0- 0 31- 2- 0
BC 120.0" 0- 0- 0 31- 2- 0
One Continuous Lateral Brace
J -F F -K
All braces 1x4"

psf-Ld Dead Live Snow
TC 3.0 0.0 29.0
BC 7.0 10.5 0.0
TC+BC 10.0 10.5 29.0
Total 49.5 Spacing 24.0"
Lumber Duration Factor 1.00
Plate Duration Factor 1.00
TC Fb=1.10 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Unfactored Reactions (Lbs)
Jt -DL- -LL- -SL-
A 318D 328D 958D
N 311D 326D 902D

TL Factored Reactions (Lbs)
Jt Down Uplift Horiz-
A 1999
N 1905

Jt Brg Size Required
A 3.5" 2.2"
N 3.5" 2.1"

Maximum Downward Loadcase
LC# 1 Snow Loading
Dur Fctrs - Lbr 1.00 Plt 1.00
Plf TC Beg End From To
Dist Dead 6 6 0.0 31.2
Dist Snow 58 58 0.0 31.2
Plf BC Beg End From To
Dist Dead 14 14 0.0 31.2
Dist Live 21 21 0.0 31.2

Membr CSI P Lbs M@1st M@2nd
-----Top Chords-----

Robbins Engineering, Inc./Online Plus™
= Plate Monitor used
Placement Tolerance Used 0.25 in.
Allowance For Ineffective Teeth
shall be 10.0%
Allowance for Rotation on Joint
shall be 5.0 deg.

Bottom Chords-----
A -H 0.15 0 T -8 -874
H -G 0.47 2299 T -874 -921
G -S1 0.41 1925 T -921 470
S1 -F 0.42 1925 T 470 -941
F -E 0.40 1466 T -941 -1449
E -N 0.22 0 T -1449 -3

Webs-----
A -O 0.12 1924 C
O -H 0.52 2318 T
H -I 0.04 127 C
I -G 0.44 449 C
G -J 0.09 418 T
J -F 0.60 936 C 1 Br
F -B 0.17 1052 T
B -K 0.14 220 C 1 Br
E -K 0.56 518 C
E -M 0.37 1636 T
N -M 0.29 1820 C

TL Defl -0.20" in G -F L/999
TL Panel -0.37" in K -M L/255
(Note - TL = 1.33LL + DL)
LL Defl -0.15" in H -G L/999
Shear // Grain in K -M 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPIC 2007
AND CSA 086.01 LIMIT STATES
VERIFY PLATE VALUES WITH
MITEK CANADA INC.
GRIP BASED ON NET AREA
METHOD FOR SPF LUMBER
CCMC ACCEPTANCE NO:
11996-L, 10319-L
12116-L, 12940-L, 12939-L
Plate - MT20 20 Ga, Net Area
Plate - MT8H 20 Ga, Net Area
Plate - MT16 20 Ga, Net Area
Jt Type Plt Size X Y JSI
O MT20 5.0x 8.0 Ctr Ctr 0.71
I# MT20 4.0x 6.0 Ctr Ctr 0.27
S2 MT20 3.0x 4.0 Ctr Ctr 0.69
J# MT20 4.0x 6.0 Ctr Ctr 0.45
B MT20 5.0x 6.0 Ctr-0.2 0.47
K# MT20 4.0x 6.0 Ctr Ctr 0.35
M MT20 5.0x 6.0 Ctr-0.2 0.77
A MT20 2.0x 4.0 Ctr Ctr 0.58
H MT20 6.0x 7.0-2.0 Ctr 0.79
G# MT20 4.0x 6.0-0.5 Ctr 0.31
S1 MT20 3.0x 5.0 Ctr Ctr 0.73
F MT20 5.0x 8.0 Ctr Ctr 0.39
E MT20 4.0x 6.0 0.5 Ctr 0.65
N MT20 2.0x 4.0 Ctr Ctr 0.55

NOTES:
Trusses Manufactured by:
ALPA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES , Modified Formula
NBCC2005
OH Loading
NOTE: USER MODIFIED PLATES
This design may have plates
selected through a plate
monitor.
Design Roof Snow Load Use:
Ground Snow Load = 37.6 psf
Rain Load = 8.4 psf
Non-slippery Roof
Importance Factor 1.00
Exposed to Wind Factor 1.00
Balanced Load Factor 0.55
Unbalanced Load Factor 0.00

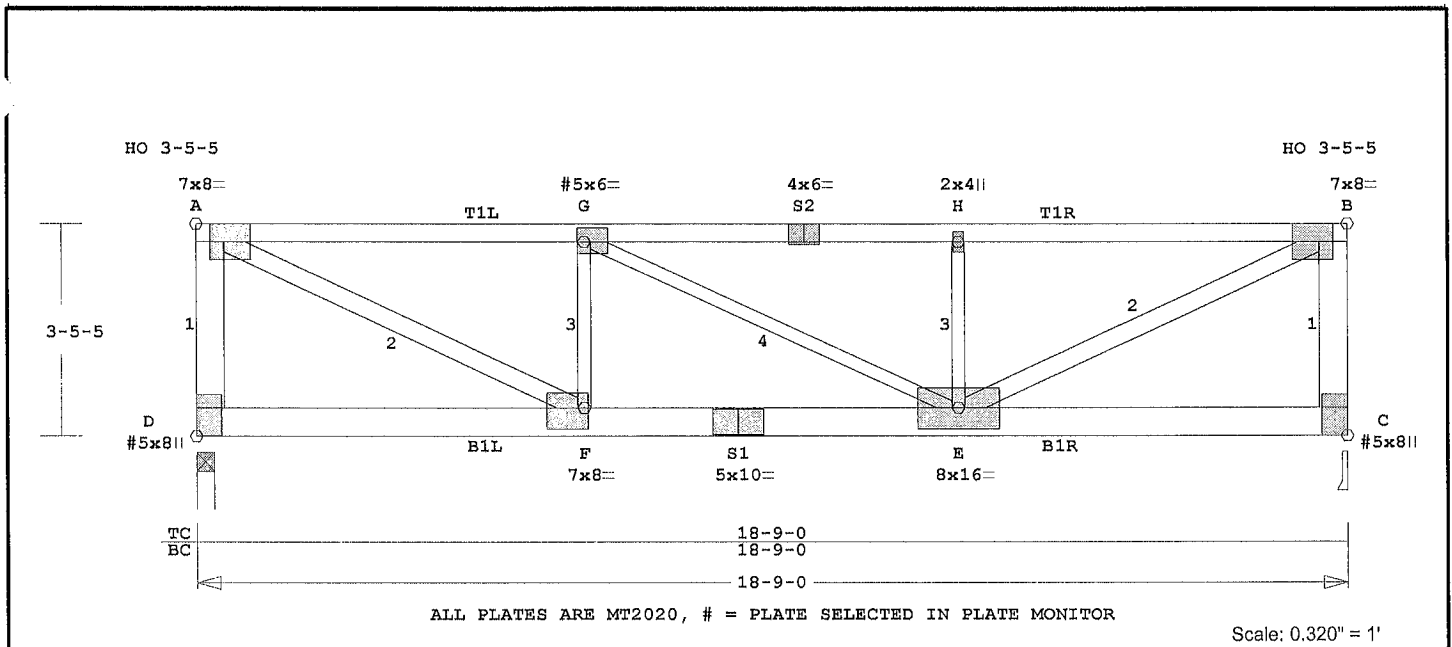
DESIGN CONFORMS TO
OBC PART 9 2012



A-1309066

TYPE	SPAN	ESQUIRE HOMES, 4 ARINGTON		Mark:
FLAT	180900	31379/189946	37-5	H4

A-1309068



Online Plus -- Version 23.0.048
 RUN DATE: 27-AUG-13

 * 3-Ply Truss *

CSI -Size- ----Lumber-----
 TC 0.72 2x 4 SPF-#2
 BC 0.96 2x 6 2100S1.8
 WB 0.87 2x 4 SPF-#2
 -- 0.21 2x 6 SPF-#2
 D -A C -B
 -- 0.02 2x 3 SPF-#2
 F -G G -E E -H

Importance Category : Normal
 Condition at Manufacture : Dry
 Treatment : Untreated
 Service Condition : Dry

Brace truss as follows:
 O.C. From To
 TC Cont. 0-0-0 18-9-0
 BC 114.0" 0-0-0 18-9-0

psf-Ld Dead Live Snow
 TC 3.0 0.0 0.0
 BC 7.0 10.5 261.0
 TC+BC 10.0 10.5 261.0
 Total 281.5 Spacing 24.0"
 Lumber Duration Factor 1.00
 Plate Duration Factor 1.00
 TC Fb=1.10 Fc=1.10 Ft=1.10
 BC Fb=1.10 Fc=1.10 Ft=1.10

Unfactored Reactions (Lbs)
 Jt -DL- -LL- -SL-
 D 1686D 1770D 4893D
 C 1686D 1770D 4893D

TL Factored Reactions (Lbs)
 Jt Down Uplift Horiz-
 D 10332
 C 10332

Jt Brg Size Required
 D 3.5" 3.0"
 C 3.5" 3.0"

Maximum Downward Loadcase
 LC# 1 Girder & Snow Load
 Dur Fctrs - Lbr 1.00 Plt 1.00
 Plf TC Beg End From To
 Plf BC Beg End From To
 Dist Dead 180 180 0.0 18.8
 Dist Live 189 189 0.0 18.8
 Dist Snow 522 522 0.0 18.8

Membr CSI P Lbs M@1st M@2nd
 -----Top Chords-----
 A -G 0.71 14443 C 0 1313
 S2 0.59 14383 C 1313 1535
 G2-H 0.57 14383 C 1535 1690
 H -B 0.72 14383 C 1690 0
 -----Bottom Chords-----
 D -F 0.94 0 T -347-41736

Robbins Engineering, Inc./Online Plus™
 F -S1 0.65 14443 T-41736 18535
 S1-E 0.63 14443 T 18535-39891
 E -C 0.96 0 T-39891 -347

-----Webs-----
 D -A 0.21 7285 C
 A -F 0.87 16168 T
 F -G 0.00 43 T
 G -E 0.02 67 C
 E -H 0.00 28 T
 E -B 0.86 16101 T
 C -B 0.21 7259 C

TL Defl -0.35" in F -E L/629
 TL Panel -0.04" in G -H L/999
 (Note - TL = 1.33LL + DL)
 LL Defl -0.28" in F -E L/773
 Shear // Grain in D -F 0.78

Plates for each ply each face.
 PLATING CONFORMS TO TPIC 2007
 AND CSA 086.01 LIMIT STATES
 VERIFY PLATE VALUES WITH
 MITEK CANADA INC.
 GRIP BASED ON NET AREA
 METHOD FOR SPF LUMBER
 CMC ACCEPTANCE NO:
 11996-L, 10319-L

12116-L, 12940-L, 12939-L
 Plate - MT20 20 Ga, Net Area
 Plate - MT8H 20 Ga, Net Area
 Plate - MT16 20 Ga, Net Area
 Jt Type Plt Size X Y JSI
 A MT20 7.0x 8.0 1.2 Ctr 0.91
 G# MT20 5.0x 6.0 0.5 0.2 0.14
 S2 MT20 4.0x 6.0 Ctr-0.2 0.75
 H MT20 2.0x 4.0 Ctr Ctr 0.17
 B MT20 7.0x 8.0-1.2 Ctr 0.91
 D# MT20 5.0x 8.0-0.2-1.5 0.23
 F MT20 7.0x 8.0-2.0-0.6 0.91
 S1 MT20 5.0x10.0 Ctr Ctr 0.70
 E MT20 8.0x16.0 Ctr-0.1 0.91
 C# MT20 5.0x 8.0 0.2-1.5 0.23

= Plate Monitor used
 Placement Tolerance Used 0.25 in.
 Allowance For Ineffective Teeth
 shall be 10.0%
 Allowance for Rotation on Joint
 shall be 5.0 deg.

NOTES:
 Trusses Manufactured by:
 ALPA ROOF TRUSSES INC.
 Analysis Conforms To:
 TPIC-RES , Standard Formula
 NBCC2005

Girder Common
 Loading BC
 Spans 31- 2- 0 + 4- 9- 8
 3 COMPLETE TRUSSES REQUIRED.
 -----Nailing (3" CW)-----
 #Rows Spacing (in)
 TC 2x 4 1 12
 BC 2x 6 2 6
 WB 2x 3 1 6

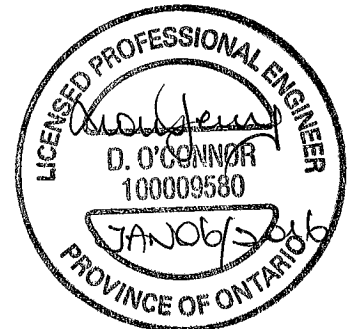
"Standard Term" loading
 dur. fac. used in table with
 seasoned, untreated lumber.
 When 3" power driven nails
 are used, reduce nail spacing
 to 69% of original spacing.
 Provide drainage to prevent
 water ponding.

Use properly rated hangers for
 loads framing into girder
 truss.

This truss must be installed
 as shown. It cannot be
 installed upside-down.
 NOTE: USER MODIFIED PLATES
 This design may have plates
 selected through a plate
 monitor.

Design Roof Snow Load Use:
 Ground Snow Load = 37.6 psf
 Rain Load = 8.4 psf
 Non-slippery Roof
 Importance Factor 1.00
 Exposed to Wind Factor 1.00
 Balanced Load Factor 0.55
 Unbalanced Load Factor 0.00

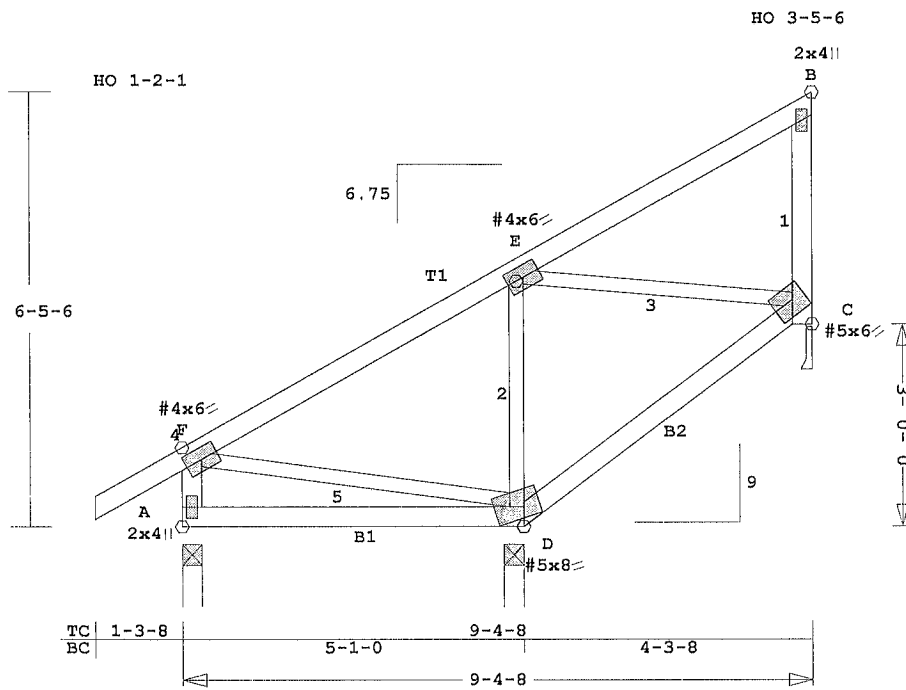
DESIGN CONFORMS TO
 OBC PART 9 2012



A-1309068

TYPE	SPAN	ESQUIRE HOMES, CARRINGTON		Mark:
MON4	90408	31379/189946	37-5	H5

A-1309069



ALL PLATES ARE MT2020, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.351" = 1'

Online Plus -- Version 23.0.048
RUN DATE: 27-AUG-13

CSI -Size- ---Lumber---
TC 0.26 2x 4 SPF-#2
BC 0.26 2x 4 SPF-#2
WB 0.12 2x 3 SPF-#2
-- 0.04 2x 4 SPF-#2
A -F C -B

Importance Category : Normal
Condition at Manufacture : Dry
Treatment : Untreated
Service Condition : Dry

Brace truss as follows:
O.C. From To
TC Cont. 0- 0- 0 9- 4- 8
BC 120.0" 0- 0- 0 9- 4- 8

psf-Ld Dead Live Snow
TC 3.0 0.0 29.0
BC 7.0 10.5 0.0
TC+BC 10.0 10.5 29.0
Total 49.5 Spacing 24.0"
Lumber Duration Factor 1.00
Plate Duration Factor 1.00
TC Fb=1.10 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Unfactored Reactions (Lbs)
Jt -DL- -LL- -SL-
A 60D 55D 225D
D 92D 95D 271D
C 42D 44D 131D

TL Factored Reactions (Lbs)
Jt Down Uplift Horiz-
A 491
D 569
C 314

Jt Brg Size Required
A 3.5" 1.5"
D 3.5" 1.5"
C 3.5" 1.5"

Maximum Downward Loadcase
LC# 1 Snow Loading
Dur Fctrs - Lbr 1.00 Plt 1.00
Plf TC Beg End From To
Dist Dead 6 6 0.0 9.4
Dist Snow 58 58 0.0 9.4
Plf BC Beg End From To
Dist Dead 14 14 0.0 9.4
Dist Live 21 21 0.0 9.4

Membr CSI P Lbs M@1st M@2nd
-----Top Chords-----
F -E 0.26 48 C -225 -1761

Robbins Engineering, Inc./Online Plus™

E -B 0.25 27 C -2836 -12
-----Bottom Chords-----
A -D 0.26 0 T -6 0
D -C 0.14 59 T
-----Webs-----
A -F 0.04 365 C
F -D 0.01 62 T
D -E 0.12 489 C
E -C 0.01 48 C
C -B 0.03 189 C

TL Defl -0.08" in A -D L/716
TL Panel -0.12" in F -E L/566
(Note - TL = 1.33LL + DL)
LL Defl -0.05" in A -D L/999
Hz Disp LL DL TL
Jt C 0.00" 0.00" 0.00"
Shear // Grain in F -E 0.18

Plates for each ply each face.
Plate - MT20 20 Ga, Net Area
Jt Type Plt Size X Y JSI
F# MT20 4.0x 6.0 Ctr Ctr 0.15
E# MT20 4.0x 6.0 Ctr Ctr 0.21
B MT20 2.0x 4.0 Ctr Ctr 0.17
A MT20 2.0x 4.0 Ctr Ctr 0.17
D# MT20 5.0x 8.0-1.2 3.8 0.42
C# MT20 5.0x 6.0-0.5-0.5 0.10

= Plate Monitor used
Placement Tolerance Used 0.25 in.
Allowance For Ineffective Teeth
shall be 10.0%
Allowance for Rotation on Joint
shall be 5.0 deg.

NOTES:
Trusses Manufactured by:
ALPA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES , Modified Formula
NBCC2005

OH Loading
NOTE: USER MODIFIED PLATES
This design may have plates
selected through a plate
monitor.

Design Roof Snow Load Use:
Ground Snow Load = 37.6 psf
Rain Load = 8.4 psf
Non-slippery Roof
Importance Factor 1.00
Exposed to Wind Factor 1.00
Balanced Load Factor 0.55
Unbalanced Load Factor 0.00

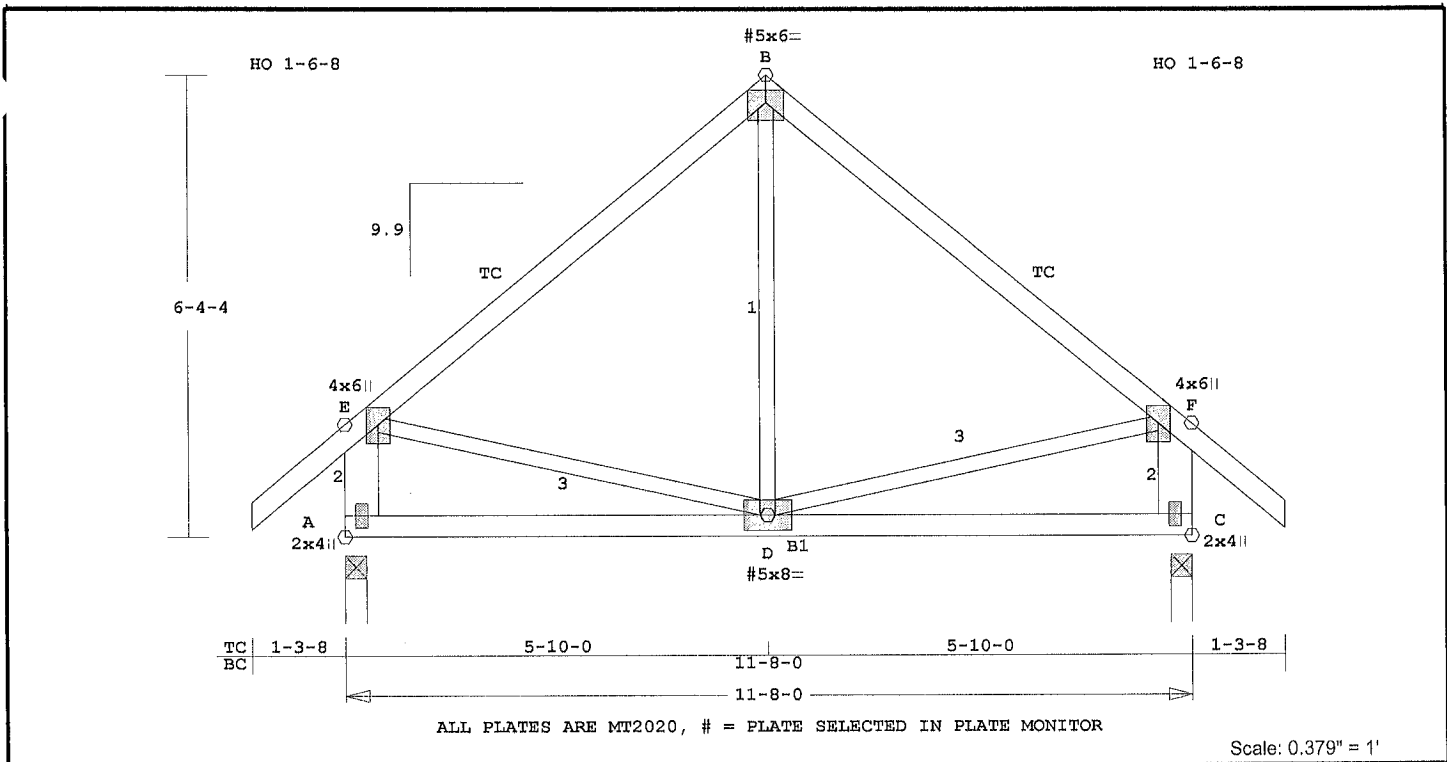
DESIGN CONFORMS TO
OBC PART 9 2012



A-1309069

TYPE	SPAN	ESQUIRE HOMES, CHARLINGTON	Mark:
KI	110800	31379/189946 37-5	H6

A-1309070



Online Plus -- Version 23.0.048
 RUN DATE: 27-AUG-13

CSI -Size- ----Lumber-----
 TC 0.52 2x 4 SPF-#2
 BC 0.19 2x 4 SPF-#2
 WB 0.08 2x 3 SPF-#2
 -- 0.05 2x 6 SPF-#2
 A -E C -F

Importance Category : Normal
 Condition at Manufacture : Dry
 Treatment : Untreated
 Service Condition : Dry

Brace truss as follows:
 O.C. From To
 TC Cont. 0- 0- 0 11- 8- 0
 BC 120.0\"

psf-Ld Dead Live Snow
 TC 3.0 0.0 29.0
 BC 7.0 10.5 0.0
 TC+BC 10.0 10.5 29.0
 Total 49.5 Spacing 24.0\"

Unfactored Reactions (Lbs)
 Jt -DL- -LL- -SL-
 A 125D 122D 415D
 C 124D 122D 412D

TL Factored Reactions (Lbs)
 Jt Down Uplift Horiz-
 A 840
 C 835

Jt Brg Size Required
 A 3.5\"

Maximum Downward Loadcase
 LC# 1 Snow Loading
 Dur Fctrs - Lbr 1.00 Plt 1.00
 Plf TC Beg End From To
 Dist Dead 6 6 0.0 11.7
 Dist Snow 58 58 0.0 11.7
 Plf BC Beg End From To
 Dist Dead 14 14 0.0 11.7
 Dist Live 21 21 0.0 11.7

Membr CSI P Lbs M@1st M@2nd
 -----Top Chords-----
 E -B 0.50 436 C -365 0
 B -F 0.52 433 C 0 -29
 -----Bottom Chords-----
 A -D 0.19 0 T -8 -1238

Robbins Engineering, Inc./Online Plus™
 D -C 0.14 0 T -1238 -8
 -----Webs-----
 A -E 0.05 773 C
 E -D 0.08 344 T
 D -B 0.01 27 T
 D -F 0.08 344 T
 C -F 0.05 768 C

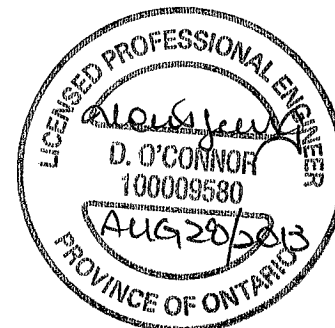
TL Defl -0.04\"

Plates for each ply each face.
 PLATING CONFORMS TO TPIC 2007
 AND CSA 086.01 LIMIT STATES
 VERIFY PLATE VALUES WITH
 MITEK CANADA INC.
 GRIP BASED ON NET AREA
 METHOD FOR SPF LUMBER
 CCMC ACCEPTANCE NO:
 11996-L, 10319-L
 12116-L, 12940-L, 12939-L
 Plate - MT20 20 Ga, Net Area
 Plate - MT8H 20 Ga, Net Area
 Plate - MT16 20 Ga, Net Area
 Jt Type Plt Size X Y J81
 E MT20 4.0x 6.0 Ctr-0.1 0.33
 B# MT20 5.0x 6.0 Ctr-0.5 0.41
 F MT20 4.0x 6.0 Ctr-0.1 0.33
 A MT20 2.0x 4.0 Ctr Ctr 0.23
 D# MT20 5.0x 8.0 Ctr Ctr 0.15
 C MT20 2.0x 4.0 Ctr Ctr 0.23

= Plate Monitor used
 Placement Tolerance Used 0.25 in.
 Allowance For Ineffective Teeth
 shall be 10.0%
 Allowance for Rotation on Joint
 shall be 5.0 deg.

NOTES:
 Trusses Manufactured by:
 ALPA ROOF TRUSSES INC.
 Analysis Conforms To:
 TPIC-RES , Modified Formula
 NBCC2005
 OH Loading
 NOTE: USER MODIFIED PLATES
 This design may have plates
 selected through a plate
 monitor.
 Design Roof Snow Load Use:
 Ground Snow Load = 37.6 psf
 Rain Load = 8.4 psf
 Non-slippery Roof
 Importance Factor 1.00
 Exposed to Wind Factor 1.00

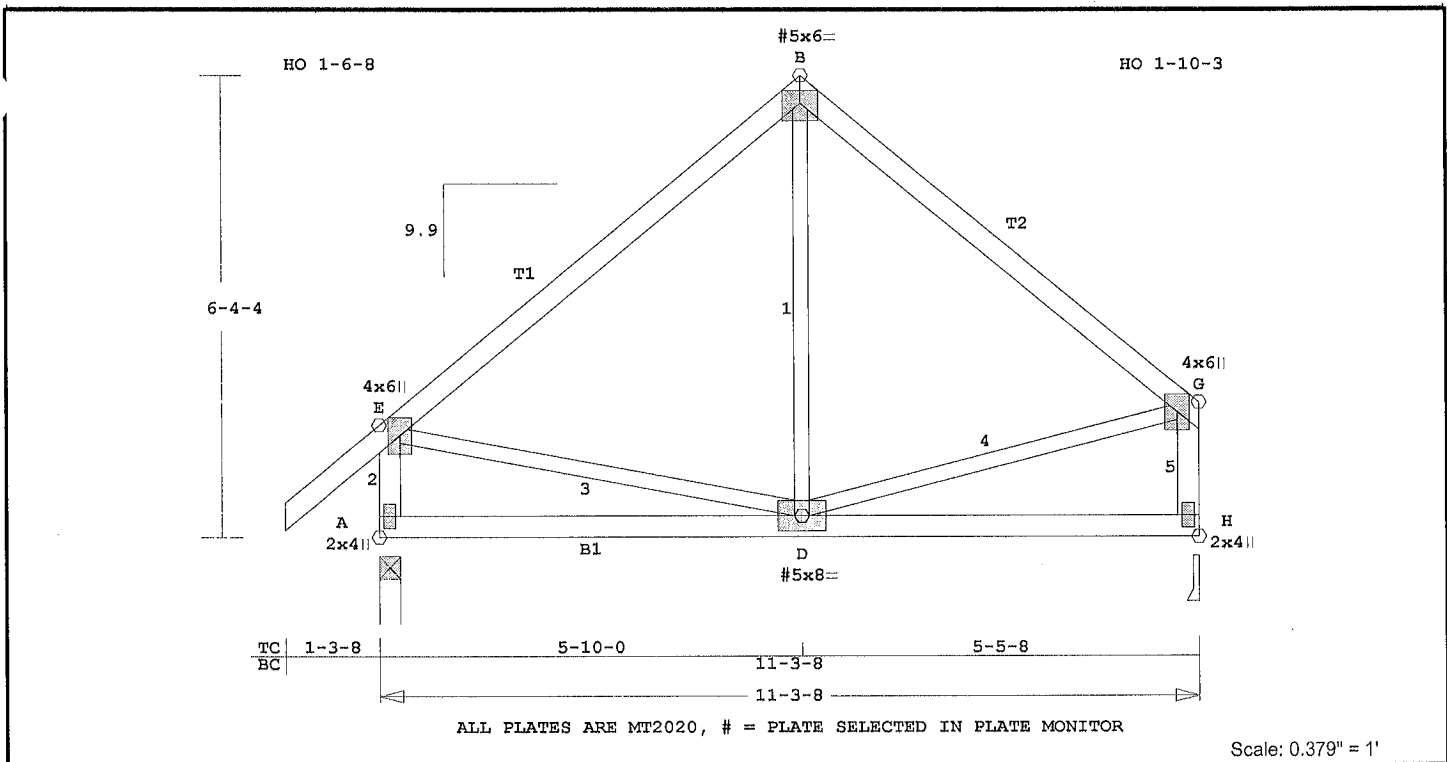
DESIGN CONFORMS TO
 OBC PART 9 2012



A-1309070

TYPE	SPAN	ESQUIRE HOMES, O'ARINGTON	Mark:
KI	110308	31379/189946 37-	HC

A-1309071



Online Plus -- Version 23.0.048
RUN DATE: 27-AUG-13

CSI -Size- ---Lumber---
TC 0.53 2x 4 SPF-#2
BC 0.18 2x 4 SPF-#2
WB 0.08 2x 4 SPF-#2
-- 0.08 2x 3 SPF-#2
E -D D -B D -G

Importance Category : Normal
Condition at Manufacture : Dry
Treatment : Untreated
Service Condition : Dry

Brace truss as follows:
O.C. From To
TC Cont. 0- 0- 0 11- 3- 8
BC 120.0" 0- 0- 0 11- 3- 8

psf-Ld Dead Live Snow
TC 3.0 0.0 29.0
BC 7.0 10.5 0.0
TC+BC 10.0 10.5 29.0
Total 49.5 Spacing 24.0"
Lumber Duration Factor 1.00
Plate Duration Factor 1.00
TC Fb=1.10 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Unfactored Reactions (Lbs)
Jt -DL- -LL- -SL-
A 121D 119D 404D
H 113D 119D 327D

TL Factored Reactions (Lbs)
Jt Down Uplift Horiz-
A 816
H 691

Jt Brg Size Required
A 3.5" 1.5"
H 3.5" 1.5"

Maximum Downward Loadcase
LC# 1 Snow Loading
Dur Fctrs - Lbr 1.00 Plt 1.00
Plf TC Beg End From To
Dist Dead 6 6 0.0 11.3
Dist Snow 58 58 0.0 11.3
Plf BC Beg End From To
Dist Dead 14 14 0.0 11.3
Dist Live 21 21 0.0 11.3

Membr CSI P Lbs M@1st M@2nd
-----Top Chords-----
E -B 0.53 420 C -225 0
B -G 0.46 418 C 0 -12
-----Bottom Chords-----
A -D 0.14 0 T -3 -1196

Robbins Engineering, Inc./Online Plus™
D -H 0.18 0 T -1196 -3
-----Webs-----
A -E 0.08 749 C
E -D 0.07 331 T
D -B 0.00 15 T
D -G 0.08 337 T
H -G 0.07 630 C

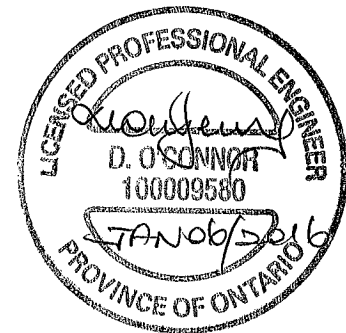
DESIGN CONFORMS TO
OBC PART 9 2012

TL Defl -0.04" in A -D L/999
TL Panel -0.43" in E -B L/204
(Note - TL = 1.33LL + DL)
LL Defl -0.02" in A -D L/999
Shear // Grain in E -B 0.16

Plates for each ply each face.
PLATING CONFORMS TO TPIC 2007
AND CSA 086.01 LIMIT STATES
VERIFY PLATE VALUES WITH
MITEK CANADA INC.
GRIP BASED ON NET AREA
METHOD FOR SPF LUMBER
CCMC ACCEPTANCE NO:
11996-L, 10319-L
12116-L, 12940-L, 12939-L
Plate - MT20 20 Ga, Net Area
Plate - MT8H 20 Ga, Net Area
Plate - MT16 20 Ga, Net Area
Jt Type Plt Size X Y JSI
E MT20 4.0x 6.0 Ctr-0.1 0.32
B MT20 5.0x 6.0 Ctr-0.5 0.41
G MT20 4.0x 6.0 Ctr-0.1 0.28
A MT20 2.0x 4.0 Ctr Ctr 0.22
D# MT20 5.0x 8.0 Ctr Ctr 0.15
H MT20 2.0x 4.0 Ctr Ctr 0.19

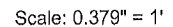
= Plate Monitor used
Placement Tolerance Used 0.25 in.
Allowance For Ineffective Teeth
shall be 10.0%
Allowance for Rotation on Joint
shall be 5.0 deg.

NOTES:
Trusses Manufactured by:
ALPA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES , Modified Formula
NBCC2005
OH Loading
NOTE: USER MODIFIED PLATES
This design may have plates
selected through a plate
monitor.
Design Roof Snow Load Use:
Ground Snow Load = 37.6 psf
Rain Load = 8.4 psf
Non-slippery Roof
Importance Factor 1.00
Exposed to Wind Factor 1.00



A-1309071

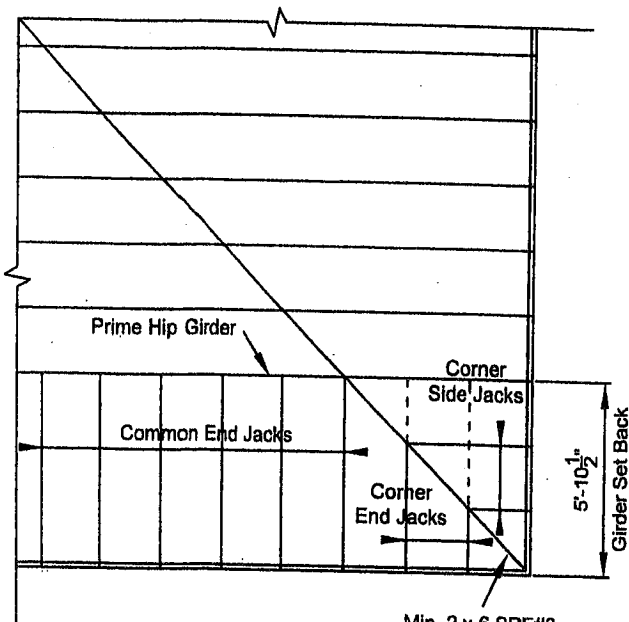
Abstract



A circular professional seal for a Licensed Professional Engineer in the Province of Ontario. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "PROVINCE OF ONTARIO" at the bottom. In the center, the name "D. O'CONNOR" and license number "100009580" are printed. A handwritten signature "D. O'Connor" is written across the center. Below the signature, the date "AUG 28/2013" is stamped.

A-1309072

STRACON ENGINEERING INC.



45° Hip End

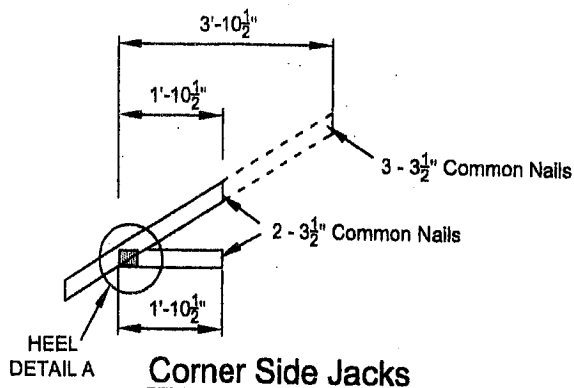
LUMBER SPECIFICATION

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

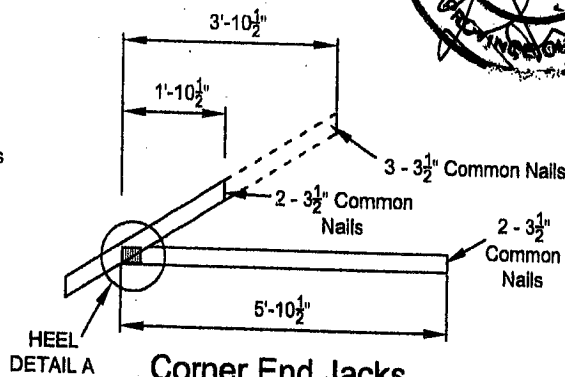
DESIGN LOAD

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

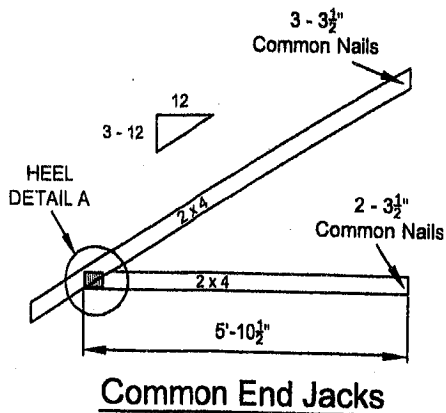
TOTAL LOAD : 50.5 P.S.F.



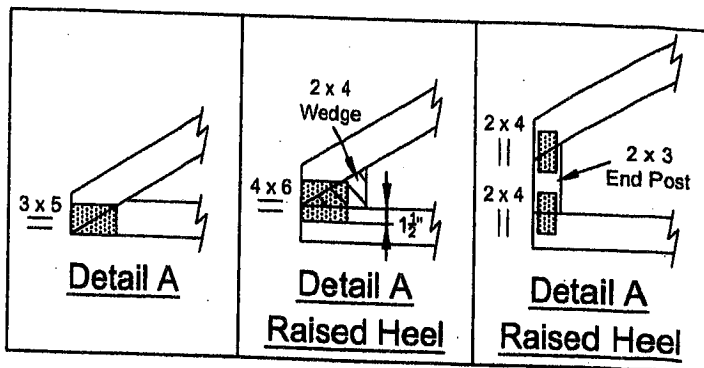
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008

HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: See table

FINISH: G90 galvanized

DESIGN:

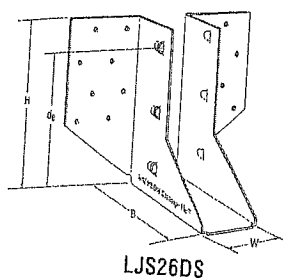
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

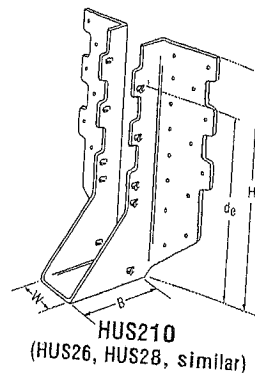
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

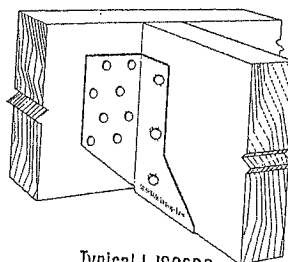
- See current catalogue for options



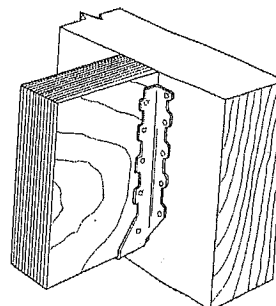
LJS26DS



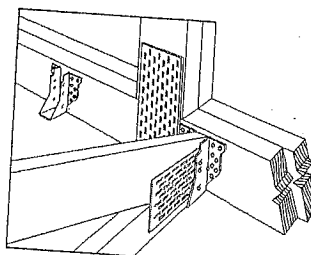
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



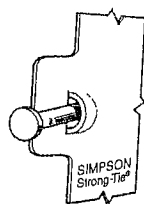
Typical HUS
Installation



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

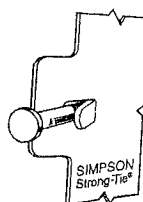
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D. Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LJS26DS	18	1 9/16	5	3 1/2	4 5/8	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1 5/8	5 3/8	3	3 15/16	14-16d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

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

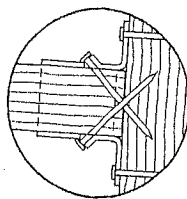


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

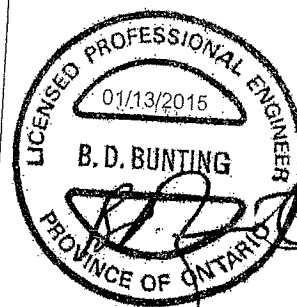
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

This technical bulletin is effective until December 31, 2015, and contains information available as of January 1, 2015. This information is provided for informational purposes only and should not be relied upon for design or construction. For the most current information and product literature, please visit our website at www.strongtie.com.

© 2015 Simpson Strong-Tie Company

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 18 gauge

FINISH: G90 galvanized

DESIGN:

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

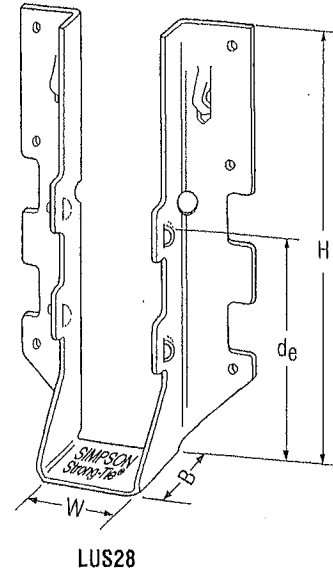
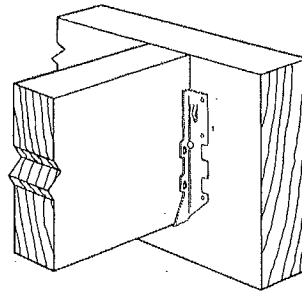
INSTALLATION:

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

OPTIONS:

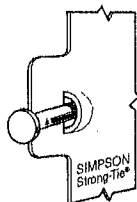
- These hangers cannot be modified.

Typical LUS
Installation



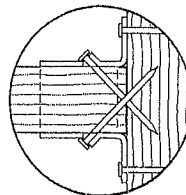
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1⅞	3⅞	1¾	1⅞	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3⅞	3⅞	2	1⅞	4-16d	2-16d	835	2020	590	1435
LUS26	18	1⅞	4¾	1¾	3⅞	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3⅞	4¾	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4⅞	4¾	2	3¼	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1⅞	6⅞	1¾	3¾	6-10d	4-10d	1420	2520	1290	1790
LUS28-2	18	3⅞	7	2	4	6-16d	4-16d	1720	3325	1545	2575
LUS28-3	18	4⅞	6¼	2	3¼	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1⅞	7⅞	1¾	3⅞	8-10d	4-10d	1420	2785	1290	2210
LUS210-2	18	3⅞	9	2	6	8-16d	6-16d	2580	4500	2320	3195
LUS210-3	18	4⅞	8⅞	2	5¼	8-16d	6-16d	2580	3345	2320	2375

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

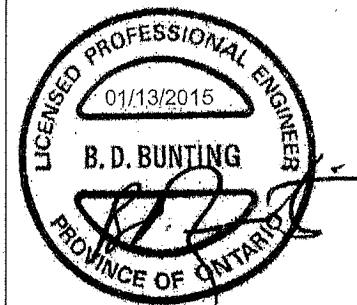


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



Double Shear Nailing
Top View.



800-999-5099
www.strongtie.com

HGUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 12 gauge

FINISH: G90 galvanized

DESIGN:

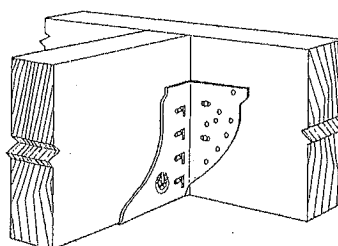
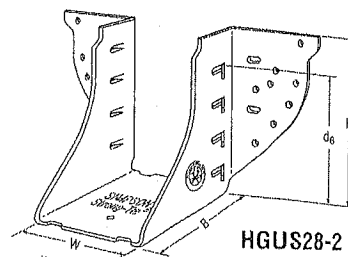
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

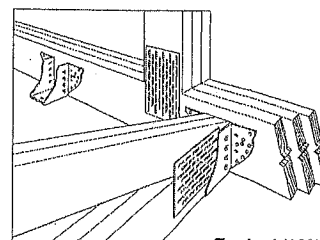
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



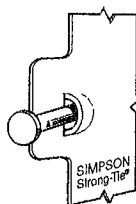
Typical HGUS Installation



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

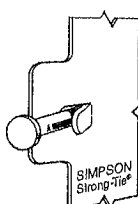
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
HGUS26	12	1 1/8	5 3/8	5	4 3/8	20-16d	8-16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	20-16d	8-16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/2	4	4 1/8	20-16d	8-16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/8	20-16d	8-16d	4385	8950	3100	6355
HGUS28	12	1 1/8	7 3/8	5	6 1/8	36-16d	12-16d	3310	7675	3100	6900
HGUS28-2	12	3 1/8	7 1/8	4	6 1/8	36-16d	12-16d	6070	12980	4310	9215
HGUS28-3	12	4 1/8	7 1/4	4	6 1/8	36-16d	12-16d	6070	12980	4310	9215
HGUS28-4	12	6 1/8	7 1/8	4	6 1/8	36-16d	12-16d	6070	12980	4310	9215
HGU210-2	12	3 1/8	9 1/8	4	8 1/8	46-16d	16-16d	6840	14645	4855	10400
HGUS210-3	12	4 1/8	9 1/4	4	8 3/8	46-16d	16-16d	6840	14645	4855	10400
HGUS210-4	12	6 1/8	9 1/8	4	8 1/8	46-16d	16-16d	6840	14645	4855	10400
HGUS212-4	12	6 1/8	10 3/8	4	10 1/8	56-16d	20-16d	7640	14995	5425	10645
HGUS214-4	12	6 1/8	12 3/8	4	11 1/8	66-16d	22-16d	10130	16400	7195	11645

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

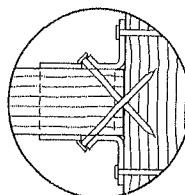


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

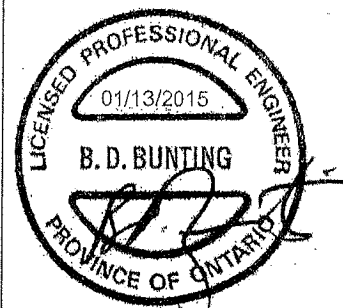
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



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THGB/THGBH – Truss Girder Hangers

SIMPSON
Strong-Tie

MATERIAL: 3 gauge

FINISH: Simpson Strong-Tie® gray paint

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

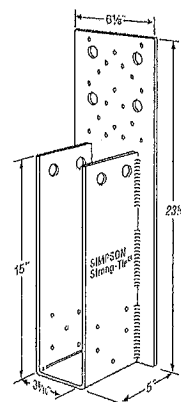
- Uplift resistances have been increased 15%. When using 10-10d nails only for carried member, uplift is 2945 lbs for D.Fir-L and 2590 lbs for S-P-F. No further increase is permitted.
- Designer must ensure that vertical web member supporting hanger is capable of resisting loads based on net cross section
- Vertical webs on supporting girder truss must be 2x8 (min) for THGB and 2x12 for THGBH
- ¼"x3" Strong-Drive® SDS screws must have a minimum 2 ply member
- Vertical web in hanger must be 2x8 to achieve full uplift values
- Bottom chord bearing assumes Q_r/A_b and $Q_r'/A_b' = 812$ psi D.Fir and 614 psi S-P-F. Truss plates on supported member must be as per 6.5.4 and 7.5.9 TPIC 2014 to achieve values shown.
- Maximum bottom chord depth to be 11 7/8"

INSTALLATION: • Use all specified fasteners

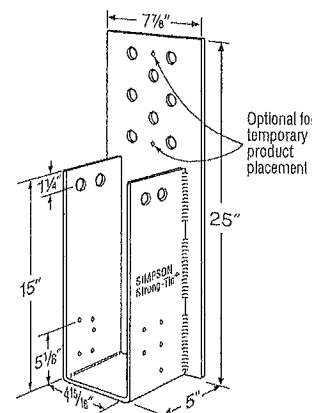
- Nails: 10d = 0.148" dia. x 3" long common wire
- Bolts must be minimum ASTM A307 grade A
- All multiple members must be fastened together to act as a single unit
- See current catalogue for SDS screws
- SDS screws driven through truss plates must be approved by the truss designer. Pre-drilling using a 5/32" bit is required.

OPTIONS:

- See current catalogue for options

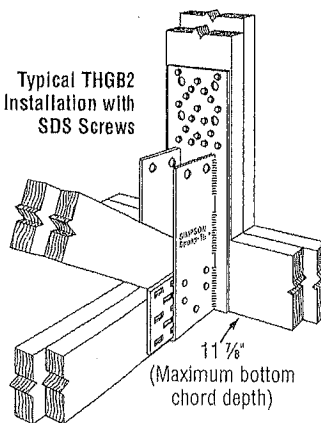


THGB2

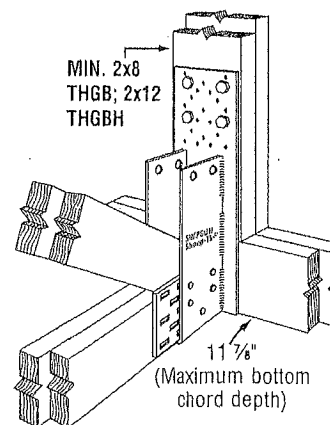


THGBH3
(THGBH2 & THGBH4 similar)

Typical THGB2
Installation with
SDS Screws

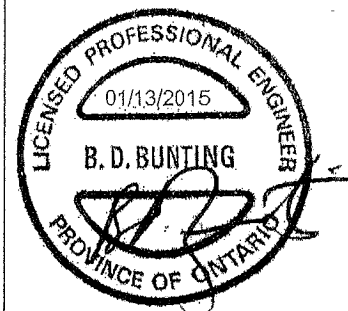


MIN. 2x8
THGB; 2x12
THGBH



Typical THGB2
Installation

Model No.	Width (in)	Fasteners		Minimum Header Thickness (in)	Factored Resistance (lbs)			
					D.Fir-L		S-P-F	
		Joist	Header		Uplift ($K_p=1.15$)	Normal ($K_p=1.00$)	Uplift ($K_p=1.15$)	Normal ($K_p=1.00$)
THGB2	3 5/8	10-10d & 2-3/4" MB	4-3/4" MB	3	5175	8290	4085	6545
				4 1/2	5175	12435	4085	9815
				6	5175	13615	4085	10750
			19-SDS 1/4"x3"	3	5175	13805	4085	9940
THGBH2	3 5/8	10-10d & 2-3/4" MB	8-3/4" MB	3	5175	12435	4085	9815
				4 1/2	5175	14385	4085	11355
				6	5175	14385	4085	11355
			19-SDS 1/4"x3"	3	7760	8290	6125	6545
THGB3	4 1/8	10-10d & 2-3/4" MB	4-3/4" MB	3	7760	12435	6125	9815
				4 1/2	7760	13615	6125	10750
				6	7760	13805	6125	9940
			19-SDS 1/4"x3"	3	7760	12435	6125	9815
THGBH3	4 1/8	10-10d & 2-3/4" MB	8-3/4" MB	3	7760	18390	6125	14520
				4 1/2	7760	18605	6125	14690
				6	8850	12435	8170	9815
			19-SDS 1/4"x3"	3	8850	18650	8170	14725
THGBH4	6 3/8	10-10d & 2-3/4" MB	8-3/4" MB	3	8850	21865	8170	17265
				4 1/2	8850	21865	8170	17265
				6	8850	21865	8170	17265



STRONG-TIE
DESIGN

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