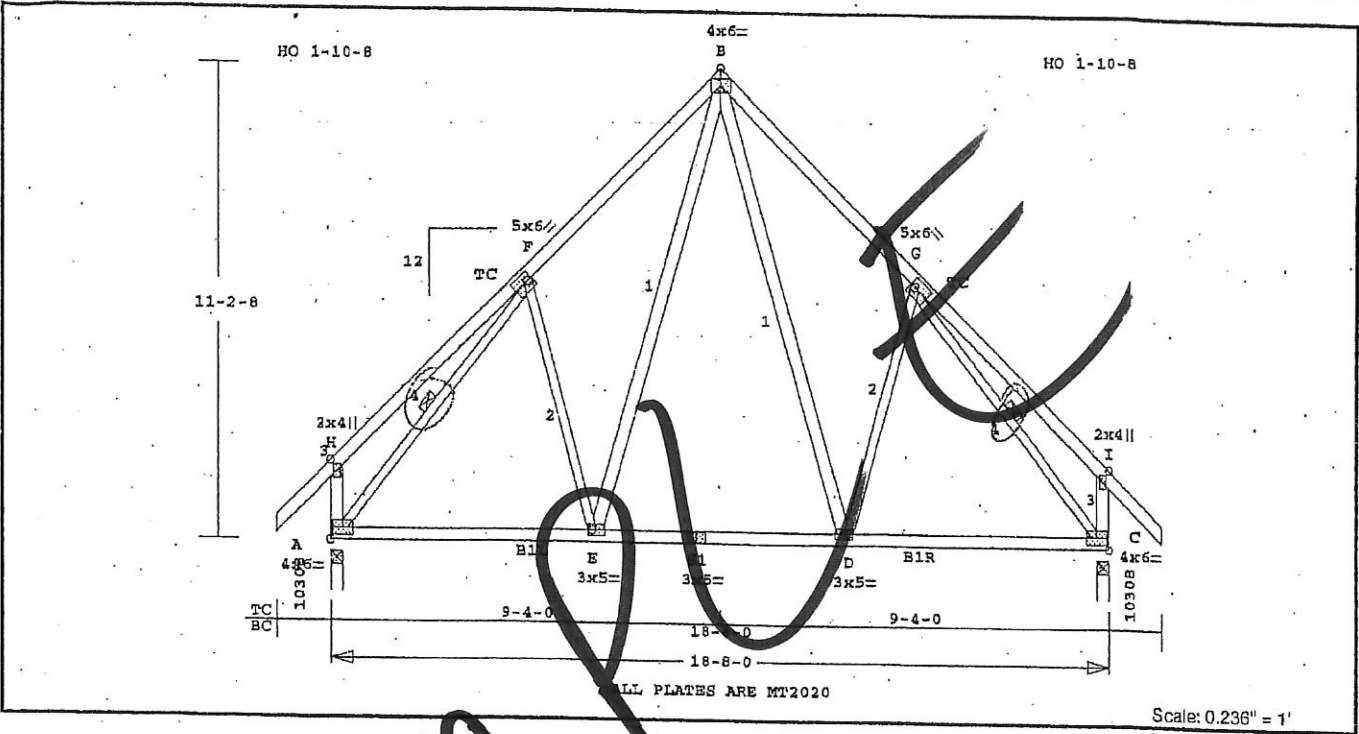


Job	Mark H12	Quan 5	Type FI	Span 180800	P1-H1 12	Left OH 1-3-8	Right OH 1-3-8	Engineering
-----	--------------------	-----------	------------	----------------	-------------	------------------	-------------------	-------------



Scale: 0.236" = 1'

Online Plus -- Version 21.0.063
RUN DATE: 12-FEB-08

CSI-Size	Lumber
TC 0.44	2x4 SPF-#2
BC 0.16	2x4 SPF-#2
WB 0.50	2x3 SPF-#2
-- 0.08	2x4 SPF-#2
A-H	E-B B-D C-I

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

Brace truss as follows:
O.C. F
TC Cont. 0-0-0 18-8-0
BC 120.0" 0-0-0 18-8-0
One Continuous Lateral Brace
A-F G-C
All braces 1x4"

psf-Ld	Dead	Live	Snow
A	3.0	0.0	37.1
BC	7.0	10.5	0.0
TC+BC	10.0	10.5	37.1
Total	57.6	Spacing 24.0"	
Lumber Duration Factor	1.00		
Plate Duration Factor	1.00		
TC Fw=1.10	Fw=1.10	Fw=1.10	
BC Fw=1.10	Fw=1.10	Fw=1.10	

Unfactored Reactions (Lbs)			
Jt	DL	LL	S-L
A	187D	196D	692D
C	187D	196D	692D

Factored Reactions (Lbs)			
Jt	Down	Uplift	Mom
A	1523		
C	1523		

Maximum Downward Loadings			
LCR	1	Snow Loading	
Dist	Dead	6	6 0.0 18.7
Dist	Snow	74	74 0.0 18.7
Dist	Dead	14	14 0.0 18.7
Dist	Live	21	21 0.0 18.7

Member CSI P Lbs Ax1-CSI-Bnd
---Top Chords---

H-F	0.44				
F-B	0.31	1044	0.02	0.31	
B-G	0.31	1044	0.02	0.31	
G-I	0.44	45	0.04	0.40	
-----Bottom Chords-----					
E	0.26	784	0.09	0.13	
E-H	0.22	567	0.09	0.13	
H-I	0.22	567	0.09	0.13	
I-C	0.26	784	0.09	0.13	
-----Webbs-----					
A	0.02	221	C		
A	0.50	1329	C	1	Br
F	0.24	317	C		
E-B	0.08	513	T		
B-D	0.08	513	T		
D-G	0.24	317	C		
G-C	0.50	1329	C	1	Br
C-I	0.02	221	C		

TL Defl -0.13" in D-C L/999
TL Panel -0.14" in F-B L/577
Plate - TL = 1.33LL + DL
LL Defl = 0.09" in D-C L/999
Shear // Grain in H-F 0.18

Plates for each ply each face.
PLATING CONFORMS TO TPIC 1996
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, 13939-L
Plate - MT20 20 Ga, Net Area
Plate - MT28 20 Ga, Net Area
Plate - MT16 16 Ga, Net Area
Jt Type Plt Size X Y JGI
H MT20 2.0x 4.0 Ctr Ctr 0.40
F MT20 5.0x 6.0 Ctr Ctr 0.72
B MT20 4.0x 6.0 Ctr-0.1 0.90
O MT20 5.0x 6.0 Ctr Ctr 0.72
I MT20 2.0x 4.0 Ctr Ctr 0.40
A MT20 4.0x 6.0 Ctr Ctr 0.65
E MT20 3.0x 5.0 Ctr Ctr 0.59
S1 MT20 3.0x 5.0 Ctr Ctr 0.59
D MT20 3.0x 5.0 Ctr Ctr 0.59
C MT20 4.0x 6.0 Ctr Ctr 0.65

NOTES:
Trusses Manufactured by:
ALRA ROOF TRUSSES INC.
Analysis Conforms To:
TPIC-RES, Modified Formula
NBCC2005
OH Loading
Design Roof Snow Load Use:

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 2005

MUST STAMPED
& SIGNED BY
LICENSED P.E.N.G.
OF ONTARIO



Double 1-3/4" x 9-1/2" VERSA-LAM® 20 2100 SP Wall Header/9' Door Lintel

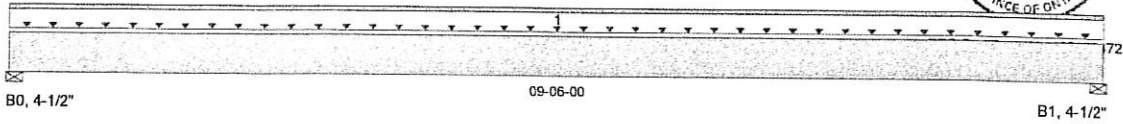
14 0043

BC CALC® Design Report

Dry | 1 span | 01-00-00 OCS

Build:
 Job Name:
 Address:
 City, Province, Postal Code:
 Customer:
 Code reports:

File Name:
 Description: Designs/9' Door Lintel
 Specifier:
 Designer:
 Company:
 Misc:



Total Horizontal Product Length = 09-06-00

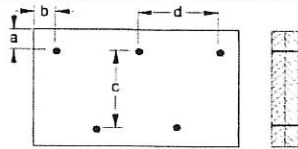
Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	OCS
1	Roof Loads	Unf. Lin. (lb/ft)		00-00-00	09-06-00	1.00	0.65	1.00	1.15	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	8,038 ft-lbs	20,038 ft-lbs	0.43	1	04-09-00
End Shear	3,122 lbs	11,571 lbs	0.28	1	04-02-00
Total Load Defl.	L/13 (0.174")	0.444"	0.39	4	04-09-00
Live Load Defl.	L/13 (0.135")	0.296"	0.46	5	04-09-00
Max Defl.	0.24"	1"	0.17	4	04-09-00
Span / Depth	11.2	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand/Resistance Support	Demand/Resistance Member	Material
B0	Wall/Plate 4-1/2" x 3-1/2"	270 lbs	0.44	0.22	Spruce Pine Fir
B1	Wall/Plate 4-1/2" x 3-1/2"	270 lbs	0.44	0.22	Spruce Pine Fir

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets User specified (1") Maximum total load deflection criteria.
 Calculation assumes member is partially braced. See engineering report for the unbraced length.
 Resistance Factor phi has been applied to all presented results per CS 1086.
 BC CALC® analysis is based on Canadian Limit States Design as per NBCC and CSA O86.
 Design based on Dry Service Condition.
 Importance Factor: Normal Part code: Part
 Deflections less than 1/8" were ignored in the results.

Connection Diagram



a minimum = 2" c = 5-1/2"
 b minimum = 3" d = 12"

Member has no side loads.
 Connectors are: 16d Common Nails

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask for more information, please call.

BOARD™, BC1®, IMP™

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