
$$1/4'' = 1'-0''$$

**NOTE:
ALL ENGINEERED WOOD
PRODUCTS SHOWN ON THIS
PAGE MUST BE PROTECTED
FROM DIRECT EXPOSURE TO
WET CONDITONS**

1st Floor Dropped Beams			
Framing Schedule - Nominalized			
Tag	Qty	Product	Length
1B-DR-1	3	2 X 12 KD	14' 0"
1B-DR-2	1	W16X50 STEEL BEAM	34' 0"

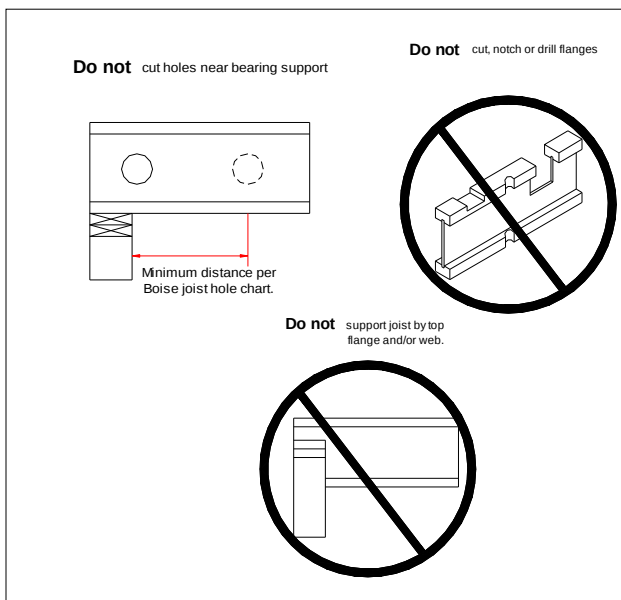
1st Floor Hangers Accessory Schedule					
Tag	Qty	Manufacturer	Product	Description	Nailing Pattern
H1	1	Simpson Strong-Tie, Inc.	HUSC210-2	HUSC210-2; (8) 10d; (8) 10d	Face Nail: (8) 10d; Joist Nail: (8) 10d
H3	50	Simpson Strong-Tie, Inc.	IUS2.56/9.5		Face Nail: (8) 10d x 1-1/2"; Joist Nail: (2) Strong-Grip
H4	14	Simpson Strong-Tie, Inc.	LSSUH310 (notes 1)		Face Nail: (14) 16d; Joist Nail: (12) 10d x 1-1/2"
Notes:					
1. Web stiffener required.					

Tag	Qty	Product	Length
1J1	1	9-1/2" AJS® 140 APG	25' 0"
1J2	1	9-1/2" AJS® 140 APG	23' 0"
1J3	1	9-1/2" AJS® 140 APG	22' 0"
1J4	1	9-1/2" AJS® 140 APG	21' 0"
1J5	1	9-1/2" AJS® 140 APG	20' 0"
1J6	1	9-1/2" AJS® 140 APG	19' 0"
1J7	1	9-1/2" AJS® 140 APG	17' 0"
1J8	1	9-1/2" AJS® 140 APG	16' 0"
1J9	1	9-1/2" AJS® 140 APG	15' 0"
1J10	25	9-1/2" AJS® 140 APG	14' 0"
1J11	1	9-1/2" AJS® 140 APG	13' 0"
1J12	12	9-1/2" AJS® 140 APG	11' 0"
1J13	5	9-1/2" AJS® 140 APG	10' 0"
1J14	4	9-1/2" AJS® 140 APG	9' 0"
1J15	3	9-1/2" AJS® 140 APG	8' 0"
1J16	1	9-1/2" AJS® 140 APG	3' 0"
1B-FF1	1	7" x 9-1/2" VERSA-LAM® 2.0 3100 DF	21' 0"
1B-FF2	2	1-1/2" x 9-1/2" VERSA-LAM® 1.7 2650 SP	8' 0"
1B-FF3	1	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	36' 0"
1B-FF4	1	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	17' 0"
1B-FF5	2	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	9' 0"
1B-FF6	1	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	8' 0"
1BLK1	BLK	9-1/2" AJS 140 BLK	33' 0"
1R1	TL	1-1/8" x 9-1/2" BC RIM BOARD™ OSB	72' 0"

National Lumber Company's design is limited to the new engineered wood products shown on this plan for gravity loads. Where new framing is supported on existing framing or foundations, it is the responsibility of the Contractor to ensure that those existing members have sufficient capacity to support the new loads.



11. Chesley Road, Newton, MA FIRST FLOOR DECK FRAMING Craig Bernabei	1009102		SE DRAWINGS ARE PROVIDED AS GUIDE TO THE INSTALLATION OF LUMBER AND ENGINEERED LUMBER. SEE DRAWINGS FOR SPECIFIC JOIST AND ROOF FRAMING COMPONENTS. TOTAL LUMBER COMPANY WILL BE RESPONSIBLE FOR ANY DEVIATION FROM THE CONTENT OF THESE DRAWINGS WITH REGARD TO THE LUMBER. LUMBER COMPANY HAS 24 HOUR WRITTEN AUTHORIZATION FROM NATIONAL LUMBER. National Lumber Engineered Wood Products Division 65 Maple Street, Mansfield, MA 02048 T: 508-339-8020 F: 508-261-6440 national-lumber.com/engineering Boise Cascade	REVISIONS: 10-30-10	BY: AAS
BC FRAMER® 3.0	SCALE: 1/4" = 1'-0"	DATE: 9/27/2010	BY: AAS/BW-9-28-10	FILE: 1009102.bcf	DWG: N1
SHEET: 1 / 2					



LOAD BEARING WALL ABOVE (PROVIDE BLOCKING WITH OR WITHOUT WALL ABOVE)

1-1015" BLOCKING PANEL, USE 3" (100) NAILS AT 4" O.C.

BLOCKING PANEL (bowl) MAXIMUM VERTICAL LOAD TRANSFER

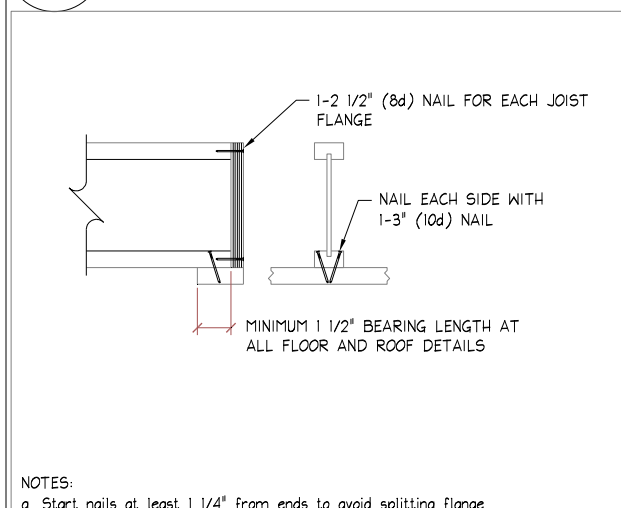
JOIST DEPTH (INCHES)	INCHES	LOAD (PSF)
8 1/2"	2200	
1 7/8"	1900	
1 1/2"	1800	
1 1/4"	1700	
1 1/2"	1600	

BEARING WALL OR BEAM BELOW

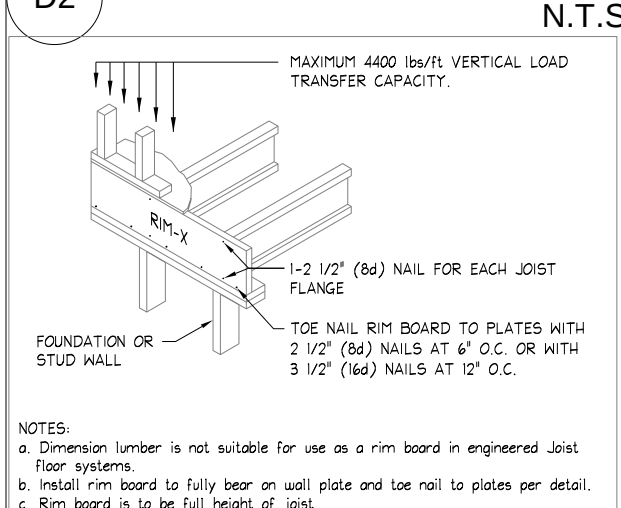
NOTES:

- Blocking panels are to be used in dry conditions only.
- Blocking panels are to be in full contact with upper floor and lower wall plates.
- Blocking panels must be adequately designed to act as a load transfer point for gravity loads from floor and roof above.
- Use 3" (100) nails at 4" o.c. for blocking panels.
- See table for maximum vertical load transfer per joist depth.
- Provide a minimum 1 1/2" surface end bearing.

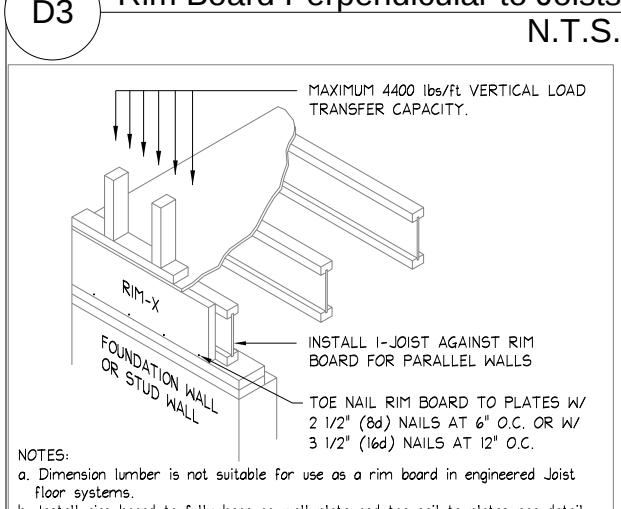
D1 Blocking Panels at Interior Bearing N.T.S.



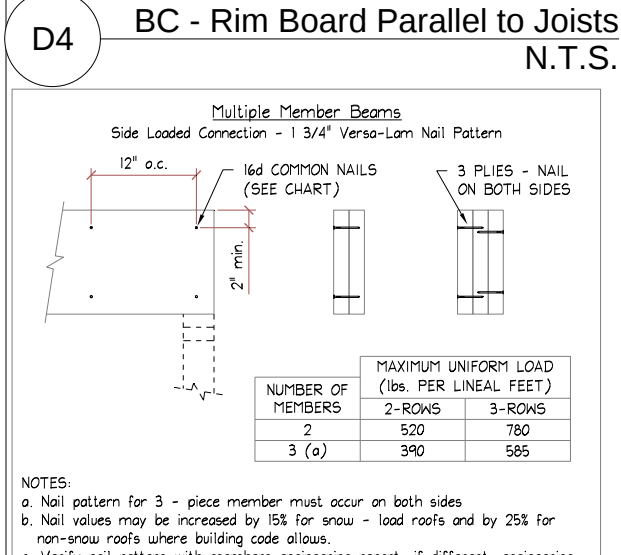
D2 BC - Joist Attachment at Ends N.T.S.



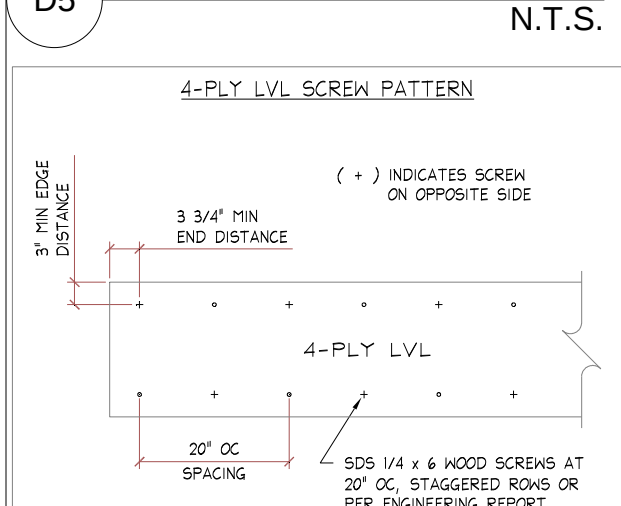
D3 Rim Board Perpendicular to Joists N.T.S.



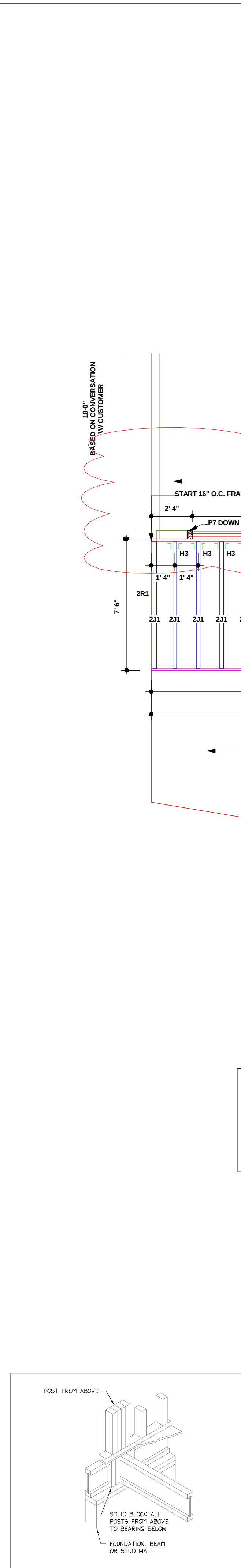
D4 BC - Rim Board Parallel to Joists N.T.S.



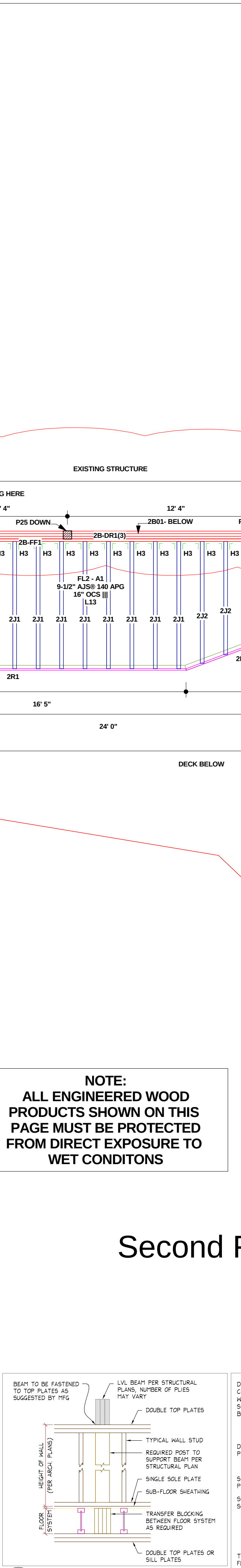
D5 Member Connection Nailing Pattern (Side Load) N.T.S.



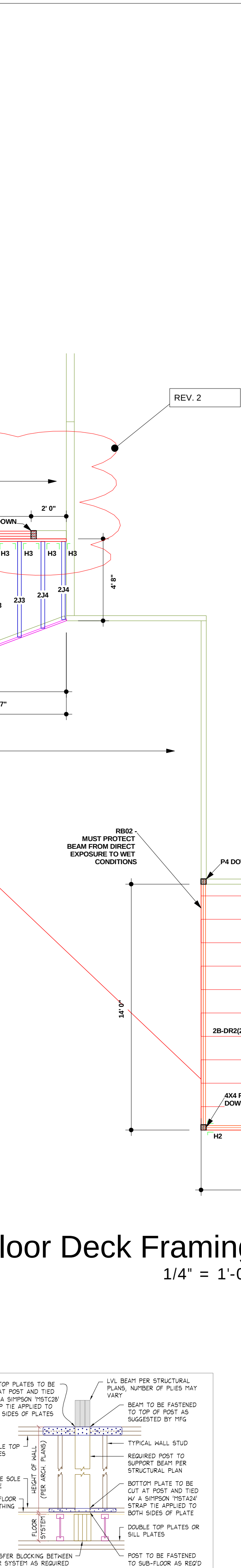
D6 BC - 4-ply LVL Screw Pattern N.T.S.



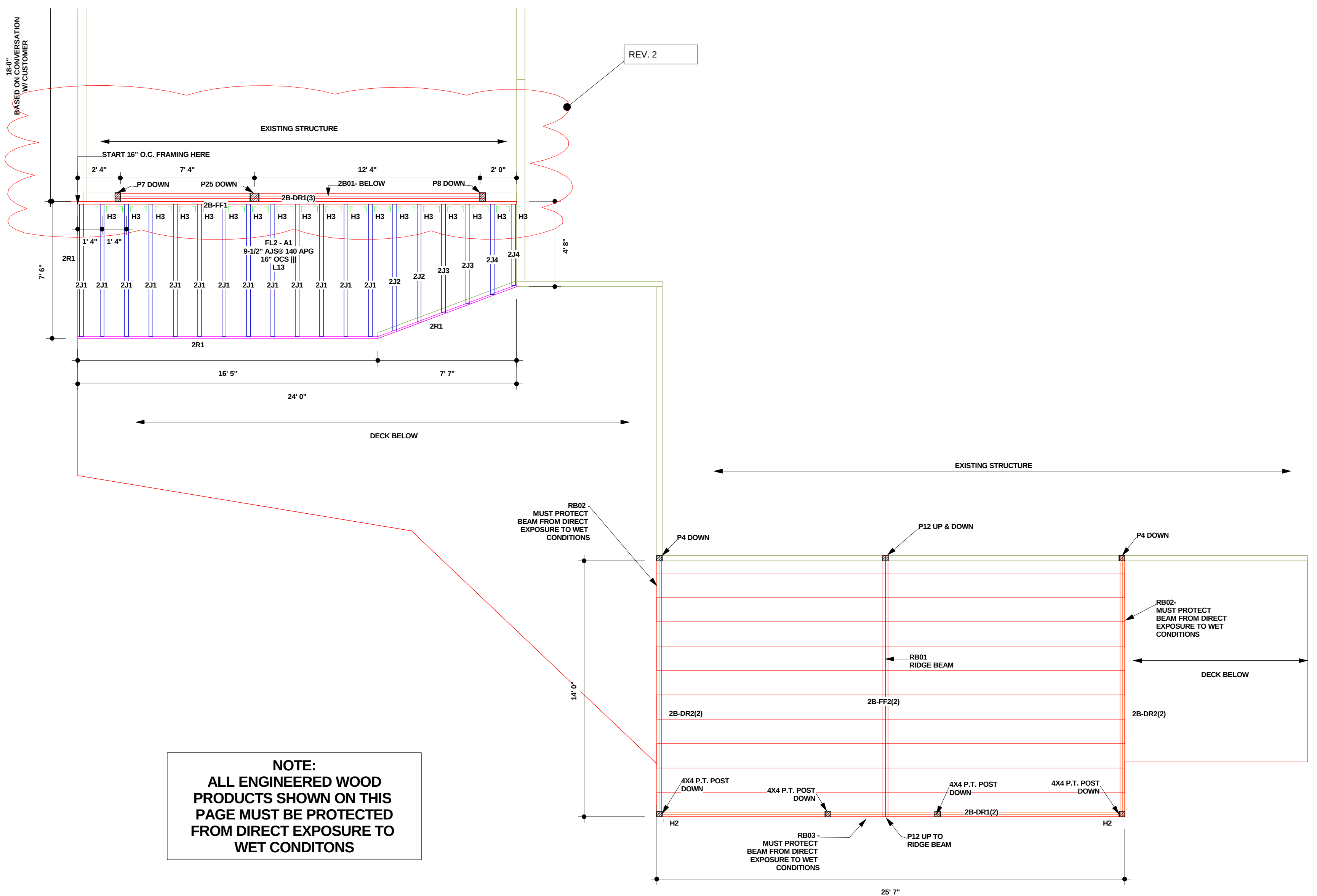
D14 BC - Post Between Floor Systems N.T.S.



D15 Post In Wall Detail N.T.S.



D16 Post Thru Wall Plates Detail N.T.S.



NOTE:
ALL ENGINEERED WOOD PRODUCTS SHOWN ON THIS PAGE MUST BE PROTECTED FROM DIRECT EXPOSURE TO WET CONDITONS

Second Floor Deck Framing & Roof Bearing Plan

1/4" = 1'-0"

Tag	Qty	Manufacturer	Product	Description	Nailing Pattern
H2	2	Simpson Strong-Tie, Inc.	HUSC210-2	HUSC210-2; (8) 10d; (8) 10d	Face Nail: (8) 10d; Joist Nail: (8) 10d
H3	18	Simpson Strong-Tie, Inc.	IUS2.56/9.5		Face Nail: (8) 10d x 1-1/2"; Joist Nail: (2) Strong-Grip

Notes:
1. Web stiffener required.

Tag	Qty	Product	Length
2J1	13	9-1/2" AJS® 140 APG	8' 0"
2J2	2	9-1/2" AJS® 140 APG	7' 0"
2J3	2	9-1/2" AJS® 140 APG	6' 0"
2J4	2	9-1/2" AJS® 140 APG	5' 0"
2B-FF1	1	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	24' 0"
2B-DR1	3	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	21' 0"
2B-FF2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	15' 0"
2R1	TL	1-1/8" x 9-1/2" BC RIM BOARD™ OSB	36' 0"

Tag	Qty	Product	Length
2B-DR1	2	1-1/2" x 9-1/2" VERSA-LAM® 1.7 2650 SP	26' 0"
2B-DR2	4	1-1/2" x 9-1/2" VERSA-LAM® 1.7 2650 SP	15' 0"

Tag	Qty	Product	Length
2CLMN1	1	3-1/2" x 3-1/2" VERSA-LAM® 1.7 2650 SP	14' 0"
2CLMN2	1	3-1/2" x 3-1/2" VERSA-LAM® 1.7 2650 SP	3' 0"
2CLMN3	1	5-1/2" x 5-1/2" BOISE GLULAM® 24F-V4/DF	10' 0"
2CLMN4	4	4X4 P.T. POST 10'-0"	10' 0"

DRAWING FOR APPROVAL

DATE: mm/dd/yy

APPROVED BY: BASED ON CONVERSATION WITH CRAIG BERNABEI

DATE OF APPROVAL: 10-6-10

FOR INSTALLATION
ISSUED: 10-7-10

INSTALLATION SET

All Beams Flush unless specified



10/07/10

DESIGN NOTES:

[01] NOTE TO FRAMER - PLEASE BE AWARE THE LAYOUT PROGRAM (BCFRAMER) USED TO GENERATE THIS DRAWING WILL SOMETIMES OVERLAP STRUCTURAL MEMBER LABELS ON TOP OF EACH OTHER. IF YOU ARE UNABLE TO READ AND/OR UNDERSTAND A MEMBER'S LABEL, PLEASE CALL NATIONAL LUMBERS ENGINEERING DEPT. AT (508) 339-8020.

[02] THE FLOOR SYSTEM ON THIS PLAN WAS ENGINEERED WITH THE STANDARD DESIGN LOAD VALUES FROM THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE (780 CMR - 7TH EDITION) OR AS SHOWN WITHIN THE PLANS. ANY ADDITIONAL LOADS (i.e. GRANITE COUNTERTOPS, CERAMIC TILE, ETC...) THAT ARE NOT SPECIFIED WITHIN THE ENGINEERING CALCULATIONS OR PLANS MAY REQUIRE RE-ENGINEERING OF STRUCTURAL MEMBER(S) BY NATIONAL LUMBERS ENGINEERING DEPARTMENT.

[03] NATIONAL LUMBER CO. WILL MEET OR EXCEED ANY STRUCTURAL MEMBERS (i.e. JOISTS, BEAMS AND SUPPORTING MEMBERS) DESIGNED BY AN OUTSIDE ARCHITECT OR ENGINEER AS SHOWN ON THE CONSTRUCTION DOCUMENTS.

[04] REFERENCE ENGINEERED WOOD PRODUCTS (i.e. I-JOISTS, LVLs, RIM BOARDS, VERSA-LAM COLUMNS, ETC...) MANUFACTURER'S SPECIFIER GUIDE AND/OR INSTALLATION GUIDE (PROVIDED BY NATIONAL LUMBER AT TIME OF DELIVERY) FOR ADDITIONAL INSTALLATION DETAILS, TABLES AND/OR RECOMMENDATIONS. IF ONE IS NOT AVAILABLE PLEASE CALL NATIONAL LUMBER ENGINEERING WOOD PRODUCTS DEPARTMENT AT (508) 339-8020 FOR A COPY.

SPECIAL FRAMING NOTES:

[01] ALL 2 AND 3-PLY LVL BEAMS SHALL BE NAILED TOGETHER WITH 16d SINKER NAILS, UNLESS NOTED OTHERWISE ON THE BEAMS ENGINEERING CALCULATION DESIGN REPORT. SEE DESIGN REPORT FOR CONNECTION DIAGRAM.

[02] ALL 4-PLY LVL BEAMS SHALL BE SCREWED TOGETHER WITH SIMPSON SDS 1/4 X 6 WOOD SCREWS OR TRUSSLOK 1/4 X 6-3/4 WOOD SCREWS AS SPECIFIED ON THE BEAMS ENGINEERING CALCULATION DESIGN REPORT. IF SDS SCREWS ARE USED BOTH SIDES OF 4-PLY NEED TO HAVE SCREWS.

[03] JOISTS MAY BE MOVED UP TO 3" IN EITHER DIRECTION BUT SHALL NOT EXCEED THE SPECIFIED ON CENTER SPACING BY MORE THEN 3" BETWEEN ADJACENT JOISTS AND/OR BEAMS.

[04] SEE FOUNDATION PLAN FOR LALLY COLUMN LOCATIONS.

DESIGN LIVE LOADS

NON-SLEEPING ROOMS: 40 PSF
SLEEPING ROOMS: 30 PSF
ATTICS: 20 PSF
DECKS, BALCONIES, ETC.: 60 PSF

POSTS AND COLUMNS CHART
(Not all columns are used, refer to layout for locations)

P1: 3 1/2" DIA. LALLY COLUMN (CONC. FILLED)
P2: 4" DIA. 16GA LALLY COLUMN (CONC. FILLED)
P3: 2- 2" x 4" (#2+BTR) KD S-P-F POST
P4: 3- 2" x 4" (#2+BTR) KD S-P-F POST
P5: 4- 2" x 4" (#2+BTR) KD S-P-F POST
P6: 2- 2" x 6" (#2+BTR) KD S-P-F POST
P7: 3- 2" x 6" (#2+BTR) KD S-P-F POST
P8: 4- 2" x 6" (#2+BTR) KD S-P-F POST
P9: 4" x 4" (STD+BTR) DOUG FIR POST
P10: 4" x 6" (#2+BTR) DOUG FIR POST
P11: 6" x 6" (#2+BTR) DOUG FIR POST
P12: 3 1/2" x 3 1/2" VERSA-LAM POST
P13: 3 1/2" x 5 1/4" VERSA-LAM POST
P14: 3 1/2" x 7" VERSA-LAM POST
P15: 5 1/4" x 5 1/4" VERSA-LAM POST
P16: 5 1/4" x 7" VERSA-LAM POST
P17: 3" SCH 40 PIPE STEEL
P18: 3 1/2" SCH 40 PIPE STEEL
P19: 4" SCH 40 PIPE STEEL
P20: 3" x 3" x 1/4" TUBE STEEL
P21: 3 1/2" x 3 1/2" x 1/4" TUBE STEEL
P22: 4" x 4" x 1/4" TUBE STEEL
P23: 3-1/2"X5-1/2" GLULAM COLUMN
P24: 3-1/2"X7-1/2" GLULAM COLUMN
P25: 5-1/2"X5-1/2" GLULAM COLUMN
P26: 5-1/2"X7-1/2" GLULAM COLUMN
P27: 4" DIA., 11GA LALLY COLUMN (CONC. FILLED)
P28: 7" x 7" VERSA-LAM POST

BELOW IS AN EXPLANATION FOR THE TAG SETTINGS:
A. J11, J12, ETC = I-JOIST LABELS
B. 1BLK1, 1BLK2, ETC = BLOCKING PANEL LABELS
C. 1B-FF1, 1B-FF2, ETC = FLUSH FRAME BEAM LABELS
****the numbers in () parenthesis represent the number of plies for that beam
D. 1B-DR1, 1B-DR2, ETC. = DROPPED BEAM LABELS
E. CLMN1, CLM2, ETC. = COLUMN LABELS
F. H1, H2, ETC = HANGER LABELS

REVISIONS:

BY:

10-7-10

AAS

Boise Cascade

THESE DRAWINGS ARE PROVIDED AS A GUIDE TO THE INSTALLATION OF NATIONAL LUMBER COMPANY'S LUMBER PRODUCTS USED IN THIS PROJECT. AND/OR ROOF FRAMING COMPONENTS. NATIONAL LUMBER COMPANY WILL ASSUME NO RESPONSIBILITY FOR ANY DEVIATION FROM THE CONTENT OF THESE DRAWINGS WITH REGARDS TO THE WORKMANSHIP OF THE INSTALLER WITHOUT WRITTEN AUTHORIZATION FROM NATIONAL LUMBER.

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1009102

11 Chesley Road, Newton, MA

2nd Floor Deck Framing & Roof Bearing Plan

Craig Bernabei

BC FRAMER® 3.0

SCALE: 1/4" = 1'-0"

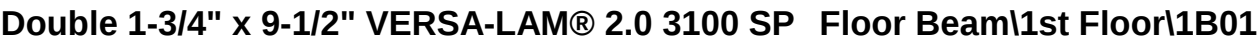
DATE: 9/27/2010

BY: AAS/BW-9-28-10

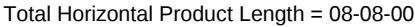
FILE: 1009102.bcf

DWG: N2

SHEET: 2 / 2



Job Name:	1009102	Description:	Beam Above Entrance
Address:	11 Chesley Road	Specifier:	Jamey Creason
City, State, Zip:	Newton, MA	Designer:	Amilcar A. Sicaju
Customer:	Craig Bernabei	Company:	National Lumber
Code reports:	ESR-1040	Misc:	65 Maple St, Mansfield, MA



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 BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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PLUS®, VERSA-RIM®,
VERSA-STRAND®, VERSA-STUD® are
trademarks of Boise Cascade, L.L.C.

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.

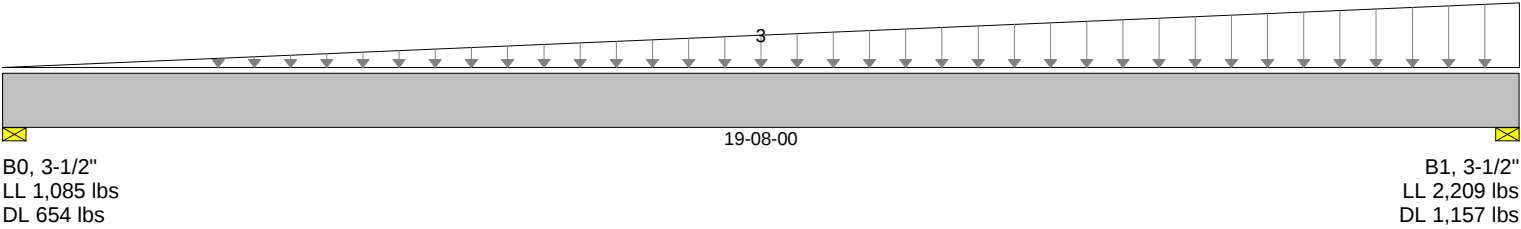
See Plan for Post Sizes

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

Calculated Side Load = 405.8 plf
Connectors are: 16d Sinker Nails

The engineer's approval is for structural Engineered Lumber Products (ELP) only and is based solely on the information provided to National Lumber by the Customer. National Lumber is not responsible for checking the validity of this information or to ascertain what further factors may be taken into consideration. It is the Customer's responsibility to satisfy themselves that the information and configuration shown is correct and satisfactory for the given structure and all parties involved.

Job Name:	1009102	File Name:	1009102
Address:	11 Chesley Road	Description:	Rim Beam @ Deck
City, State, Zip:	Newton, MA	Specifier:	Jamey Creason
Customer:	Craig Bernabei	Designer:	Amilcar A. Sicaju
Code reports:	ESR-1040	Company:	National Lumber
		Misc:	65 Maple St, Mansfield, MA



Total Horizontal Product Length = 19-08-00

					Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Tag	Description	Load Type	Ref.	Start End	100%	90%	115%	133%	125%	
3	1st Floor Deck	Trapezoidal (plf)	L	00-00-00 19-08-00	0 335	0 150				n/a n/a

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	12,237 ft-lbs	43.8%	100%	1	1 - Internal
End Shear	-2,836 lbs	22.4%	100%	1	1 - Right
Total Load Defl.	L/290 (0.796")	82.9%		1	1
Live Load Defl.	L/449 (0.514")	80.2%		1	1
Max Defl.	0.796"	79.6%		1	1
Span / Depth	24.3	n/a			1

Bearing Supports	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0	Wall/Plate 3-1/2" x 7"	1,739 lbs	16.7%	9.5%	Spruce Pine Fir
B1	Wall/Plate 3-1/2" x 7"	3,366 lbs	32.3%	18.3%	Spruce Pine Fir

Notes
Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.

User Notes
See Plan for Post Sizes

Disclosure
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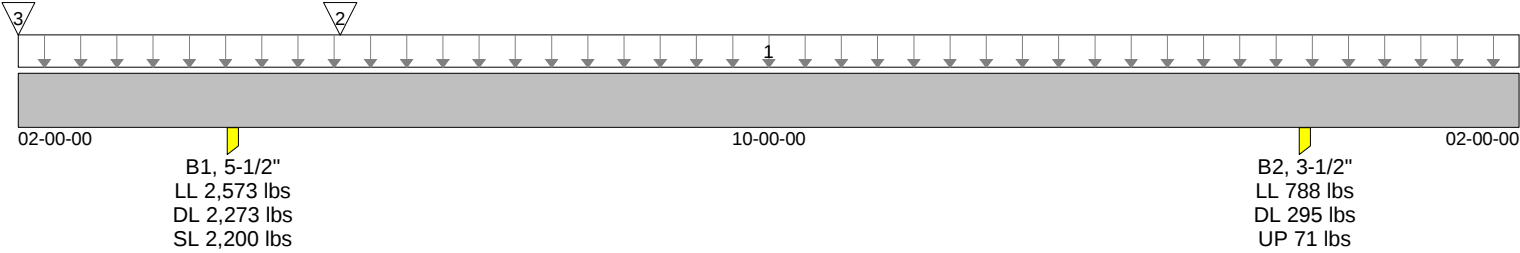
ENGINEERED WOOD DIVISION
65 Maple Street, Mansfield, MA 02048
(508) 339-8020



Lawrence S. Cotton
10/07/10

Job Name: 1009102
Address: 11 Chesley Road
City, State, Zip: Newton, MA
Customer: Craig Bernabei
Code reports: NLGA

File Name: 1009102
Description: Garage Door Header
Specifier: Jamey Creason
Designer: Amilcar A. Sicaju
Company: National Lumber
Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 14'-0"

						Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Load Summary											
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	133%	125%	
1	Deck	Unf. Area (psf)	L	00'-00"-00	14'-00"-00	60	27				01'-04"-00
2	1B02 at bearing B1	Conc. Pt. (lbs)	L	03'-00"-00	03'-00"-00	2,209	1,157				n/a
3	RB02 at bearing B0	Conc. Pt. (lbs)	L	00'-00"-00	00'-00"-00		745	1,833			n/a

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	2,488 ft-lbs	35.9%	100%	16	2 - Internal
Neg. Moment	-5,411 ft-lbs	68.1%	115%	13	1 - Right
Cont. Shear	3,099 lbs	68.0%	100%	18	2 - Left
Uplift	71 lbs	n/a		3	2 - Right
Total Load Defl.	2xL/623 (0.077")	38.5%		13	1 - Cantilever
Live Load Defl.	2xL/680 (0.071")	52.9%		13	1 - Cantilever
Total Neg. Defl.	2xL/-1,354 (-0.035")	17.7%		16	1 - Cantilever
Max Defl.	0.077"	7.7%		13	1 - Cantilever
Span / Depth	10.7	n/a			2

Disclosure
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Bearing Supports		Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B1	Post	5-1/2" x 4-1/2"	7,046 lbs	39.3%	67.0%	Spruce Pine Fir
B2	Post	3-1/2" x 4-1/2"	1,083 lbs	9.5%	16.2%	Spruce Pine Fir

Cautions
Uplift of 71 lbs found at span 2 - Right.

Notes
Design meets User specified (2xL/240) Total load deflection criteria.
Design meets User specified (2xL/360) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.

User Notes
See Plan for Post Sizes

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ENGINEERED WOOD DIVISION
65 Maple Street, Mansfield, MA 02048
(508) 339-8020

Lawrence S. Cotton
10/07/10



Current Date: 9/30/2010 3:42 PM
Units system: English
File name: L:\Work2010\1009_Sep\1009102\Production Coordination\ELP\Steel\1B04.rcb\

Design Results

Continuous Beam
Design code AISC 360-05 ASD

GENERAL INFORMATION:

Spans:

Span	Span length [ft]	Section	Material
1	33.00	W 16X50	A572 Gr50

Nodes:

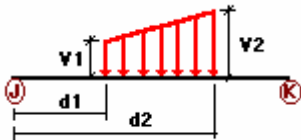
Distance [ft]	Restraint	Tx	Ty	Rz
0.00	Pinned	1	1	0
33.00	Pinned	1	1	0



Load conditions:

Condition	Description	Comb.	Category	Duration
DL	Dead Load	No	DL	--
LL	Live Load	No	LL	--
SK1	Skip Load 1	No	LL	--
SK2	Skip Load 2	No	LL	--
S1	DL+LL	Yes	Service	--
D1	DL+LL	Yes	Design	--

Distributed loads on spans



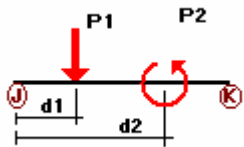
Condition	Span(s)	Dist1 [ft]	Dist2 [ft]	Val1 [Lb/ft]	Val2 [Lb/ft]
1 st Floor Deck					
DL	1	1.50	18.17	-129.00	-75.00
1 st Floor Deck					
DL	1	18.17	33.00	-75.00	-351.00

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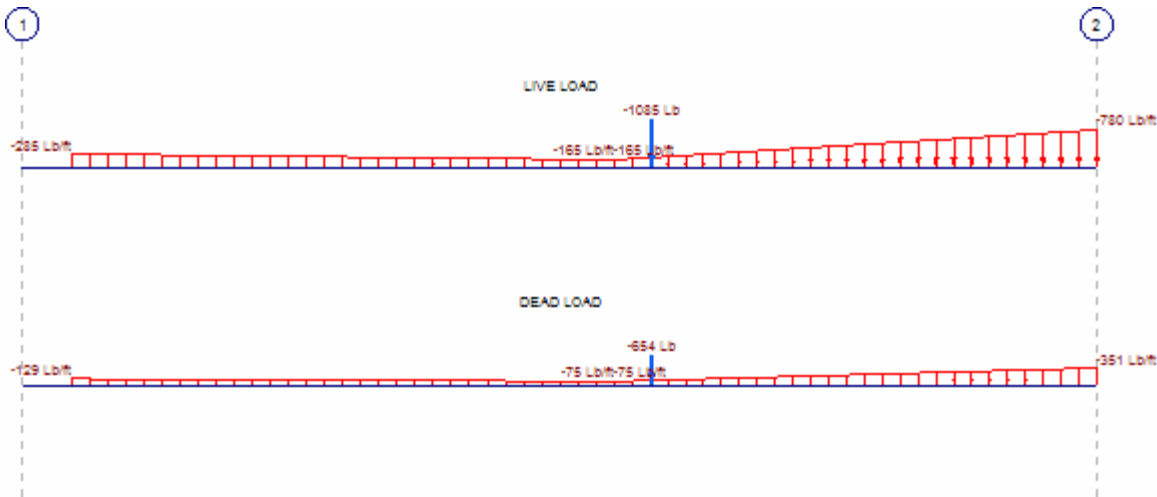
1 st Floor Deck				
LL	1	1.50	18.17	-285.00
1 st Floor Deck				
LL	1	18.17	33.00	-165.00
				-780.00

Concentrated forces and moments



Condition	Span	Dist [ft]	P [Lb]	M [Lb*ft]
1B02 at B0				
DL	1	19.33	-654.00	0.00
1B02 at B1				
LL	1	19.33	-1085.00	0.00

Loads summary



Skip loading:

Percentage of distribution: 100.00

Condition\Span	1
SK1	
SK2	--

Reactions:

Nodes	Load condition	Rx [Lb]	Ry [Lb]	Mz [Lb*ft]
1	D1	0.00	7285.00	0.00
2	D1	0.00	11724.27	0.00
1	Min.	0.00	7285.00	0.00
2	Min.	0.00	11724.27	0.00
1	Max.	0.00	7285.00	0.00
2	Max.	0.00	11724.27	0.00

Member forces and inflection points

Station [%]	Condition	Distance [ft]	Shear V [Lb]	Moment M [Lb*ft]
-------------	-----------	---------------	--------------	------------------

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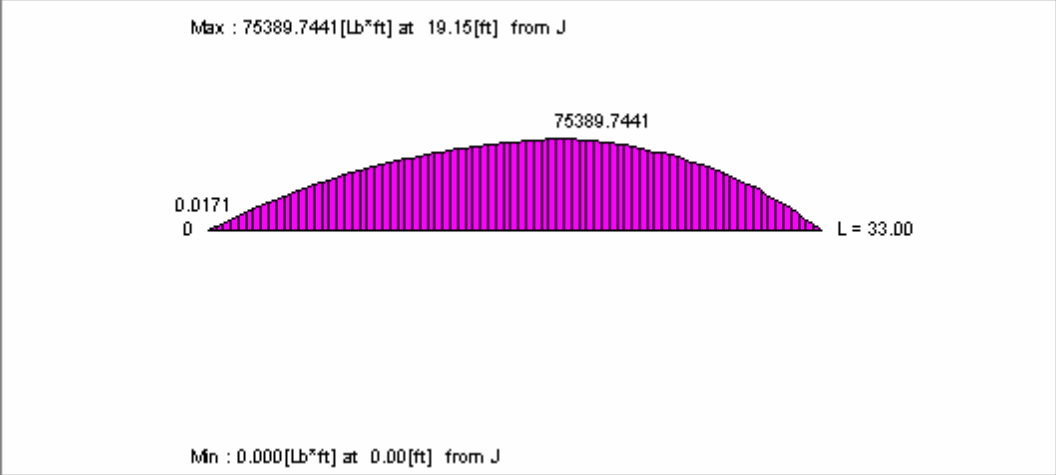
0	D1	0.00	7285.00	0.02
57	D1	18.97	670.64	75278.75
100	D1	33.00	-11724.27	0.00

Critical deflections

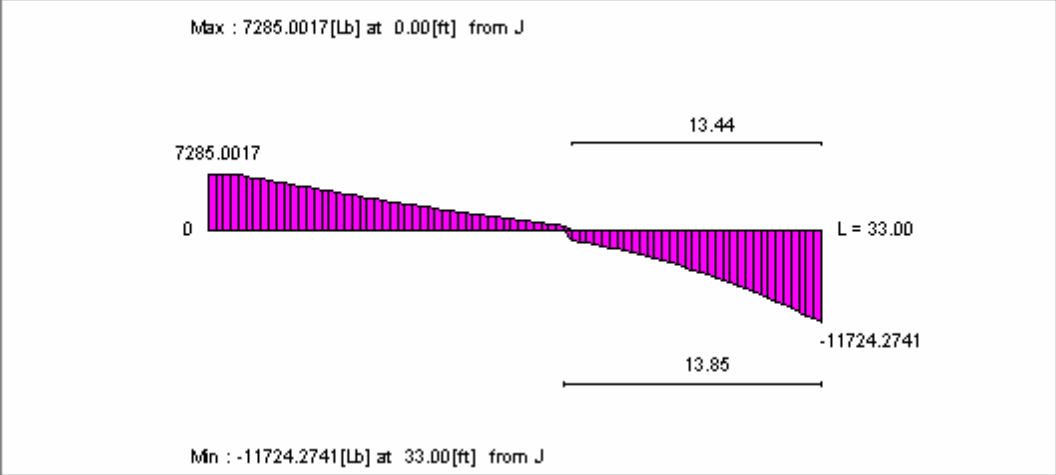
Condition	Span	Distance [ft]	@ [%]	Deflection		Allowable [in]
				[in]	f(L)	
S1	1	17.33	52.50	0.76901	(L/515)	1.65000

Envelopes :

M33 bending moment:
Moments [Lb*ft], Length [ft]



V2 shear forces:
Forces [Lb], Length [ft]

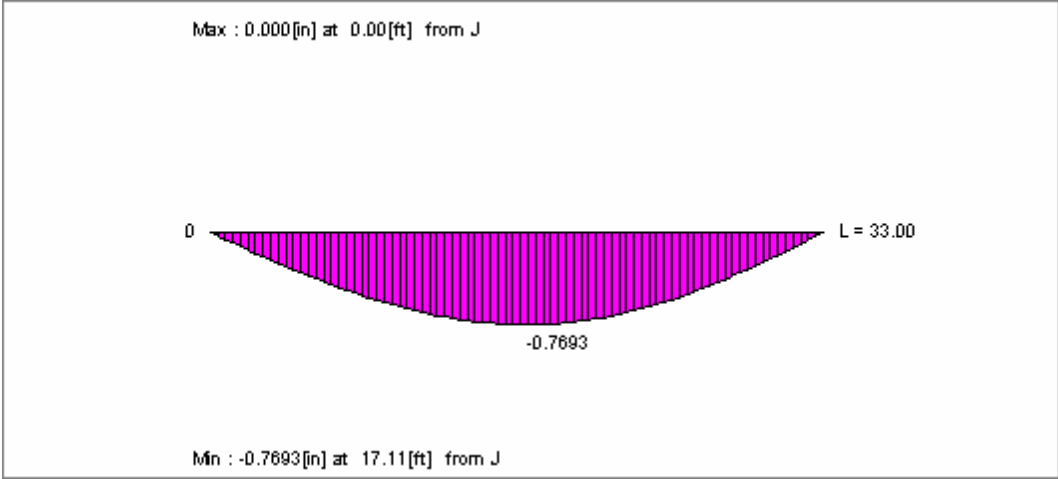


Vertical Translation
Deflection [in], Length [ft]

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NATIONAL
Lumber
ENGINEERED WOOD DIVISION
65 Maple Street, Mansfield, MA 02048
(508) 339-8020

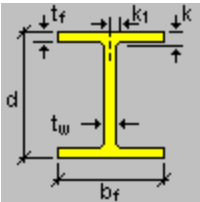
COMMONWEALTH OF MASSACHUSETTS
LAWRENCE S.
COTTON
STRUCTURAL
No. 30146
REGISTERED
PROFESSIONAL ENGINEER
Lawrence S. Cotton
10/07/10



DESIGN:

Span	:	1 (W 16X50_A572 Gr50)
Design status	:	OK

PROPERTIES
Section : W 16X50



Width (bf)	7.07	[in]
Depth (d)	16.30	[in]
Distance k (k)	1.03	[in]
Distance k1 (k1)	0.81	[in]
Flange thickness (tf)	0.63	[in]
Web thickness (tw)	0.38	[in]

Section properties

Full unreduced cross-sectional area (Ag)	[in2]	14.70	
Moment of Inertia (local axes) (I)	[in4]	659.00	37.20
Moment of Inertia (principal axes) (I')	[in4]	659.00	37.20
Bending constant for moments (principal axis) (J')	[in]	0.00	0.00
Radius of gyration (local axes) (r)	[in]	6.70	1.59
Radius of gyration (principal axes) (r')	[in]	6.70	1.59
Saint-Venant's torsion constant (J)	[in4]	1.52	
Warping constant of the section (Cw)	[in6]	2270.00	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.00	0.00
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	81.00	10.50
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	81.00	10.50
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	81.00	10.50
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	81.00	10.50
Plastic section modulus (local axis) (Z)	[in3]	92.00	16.30
Plastic section modulus (principal axis) (Z')	[in3]	92.00	16.30
Polar radius of gyration (ro)	[in]	6.88	
Area for shear (Aw)	[in2]	8.91	6.19
Torsional modulus (1/C)	[1/in3]	4.30E-01	

Material : A572 Gr50

Properties	Unit	Value
Yield stress (Fy):	[Lb/ft2]	7200000.00
Tensile strength (Fu):	[Lb/ft2]	9360000.00
Elasticity Modulus (E):	[Lb/ft2]	4.176E09
Shear modulus for steel (G):	[Lb/ft2]	1.657143E09

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DESIGN CRITERIA

Description	Unit	Major axis	Minor axis
Top unbraced length between lateral supports (LbTop)	[ft]	0.00	
Bottom unbraced length between lateral supports (LbBop)	[ft]	33.00	
Effective length factor (K)	--	1.00	1.00
Effective length factor for torsion	--	1.00	
Length for axial tension (L)	[ft]	33.00	
Unbraced compression length (Lx, Ly)	[ft]	33.00	33.00
Length for torsion and lateral-torsional buckling	[ft]	33.00	
Additional hypotheses			
Continuous lateral torsional restraint		No	
Tension field action		No	

SERVICE CONDITIONS

Verification	Unit	Value	Ctrl EQ	Reference
Tension				
Maximum geometric slenderness (L/r)	--	248.93		(Sec. D1)
Compression				
Geometric critical slenderness (KL/r)	--	248.93		(Sec. E2)
Slenderness greater than 200: Not recommended by the AISC Manual				
Compression and flexure				
Deflection	[in]	-0.77	S1 at 52.50%	

DESIGN CHECKS

DESIGN FOR FLEXURE ($\Omega=1.67$)

Bending about major axis, M33

Ratio	:	0.33		
Capacity	:	229540.90 [Lb*ft]	Reference	: (Sec. F)
Demand	:	74974.02 [Lb*ft]	Ctrl Eq.	: D1 at 56.25%

Intermediate results	Unit	Value	Reference
Yielding (Mp)	[Lb*ft]	383333.30	(Sec. F)
Lateral-torsional buckling (LTB Mn)	--	N/A	(Sec. F)
Limiting unbraced length for yielding (Lp)	[ft]	5.62	(Sec. F)
Limiting unbraced length for inelastic LTB (Lr)	[ft]	17.21	(Sec. F)
Web local buckling (WLB Mn)	--	N/A	(Sec. F)
Local buckling (LB Mn)	--	N/A	(Sec. F)
Flange local buckling (FLB Mn)	--	N/A	(Sec. F)
Slenderness parameter for flange (λ)	--	5.61	(Sec. B4)
Limiting slenderness parameter for compact flange (λ_p)	--	9.15	(Sec. B4)
Limiting slenderness parameter for noncompact flange (λ_r)	--	24.08	(Sec. B4)
Tension flange yielding (TFY Mn)	--	N/A	(Sec. F)

Bending about minor axis, M22

Ratio	:	0.00		
Capacity	:	40668.66 [Lb*ft]	Reference	: (Sec. F)
Demand	:	0.00 [Lb*ft]	Ctrl Eq.	: D1 at 0.00%

Intermediate results	Unit	Value	Reference
Yielding (Mp)	[Lb*ft]	67916.67	(Sec. F)
Flange local buckling (FLB Mn)	--	N/A	(Sec. F)
Slenderness parameter for flange (λ)	--	5.61	(Sec. B4)

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Limiting slenderness parameter for compact flange (λ_p)	--	9.15	(Sec. B4)
Limiting slenderness parameter for noncompact flange (λ_r)	--	24.08	(Sec. B4)

DESIGN FOR SHEAR

Shear parallel to major axis, V3 ($\Omega= 1.67$)

Ratio	:	0.00		
Capacity	:	160059.90 [Lb]	Reference	: (Sec. G)
Demand	:	0.00 [Lb]	Ctrl Eq.	: D1 at 0.00%

Intermediate results	Unit	Value	Reference
Web Shear coefficient (Cv)	--	1.00	
Web plate buckling coefficient (kv)	--	1.20	(Sec. G2)

Shear parallel to minor axis, V2 ($\Omega= 1.50$)

Ratio	:	0.09		
Capacity	:	123800.00 [Lb]	Reference	: (Sec. G)
Demand	:	11724.27 [Lb]	Ctrl Eq.	: D1 at 100.00%

Intermediate results	Unit	Value	Reference
Web Shear coefficient (Cv)	--	1.00	
Web plate buckling coefficient (kv)	--	5.00	(Sec. G2)

DESIGN FOR TENSION ($\Omega= 1.67$)

Tension

Ratio	:	0.00		
Capacity	:	440119.80 [Lb]	Reference	: (Sec. D)
Demand	:	0.00 [Lb]	Ctrl Eq.	: D1 at 0.00%

DESIGN FOR COMPRESSION ($\Omega= 1.67$)

Compression

Ratio	:	0.00		
Capacity	:	35656.07 [Lb]	Reference	: (Sec. E)
Demand	:	0.00 [Lb]	Ctrl Eq.	: D1 at 0.00%

Intermediate results	Unit	Value	Reference
Slenderness parameter for web (λ_w)	--	37.47	(Sec. B4)
Limiting slenderness parameter for noncompact web (λ_{rw})	--	35.88	(Sec. B4)
Slenderness parameter for flange (λ_f)	--	5.61	(Sec. B4)
Limiting slenderness parameter for noncompact flange (λ_{rf})	--	13.49	(Sec. B4)
Elastic flexural stress (Fex)	[Lb/ft2]	1.178251E07	(Eq. E4-9)
Elastic flexural stress (Fey)	[Lb/ft2]	665113.00	(Ec. E4-10)
Elastic torsional buckling stress (Fez)	[Lb/ft2]	4474840.00	(Eq. E4-11)
Critical flexural buckling stress (Fcr)	[Lb/ft2]	583304.10	(Sec.E)
Stress reduction factor in unstiffened elements (Qs)	--	1.00	(Sec.E7)
Effective section reduction factor in stiffened elements (Qa)	--	1.00	(Sec.E7)
Effective area at a uniform stress (Aeff)	[in2]	14.70	(Sec.E7)

DESIGN FOR TORSION ($\Omega= 1.67$)

Torsion

Ratio	:	0.00		
Capacity	:	3481.54 [Lb*ft]	Reference	: (Sec. H3)
Demand	:	0.00 [Lb*ft]	Ctrl Eq.	: D1 at 0.00%

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Intermediate results	Unit	Value	Reference
Critical stress (Fcr)	[Lb/ft2]	4320000.00	(Sec. H)

INTERACTION ✓

Combined axial and flexure interaction value

Ratio	:	0.33		
Ctrl Eq.	:	D1 at 56.25%	Reference	: (H1-1b)

Combined shear and torsion interaction value

Ratio	:	0.09		
Ctrl Eq.	:	D1 at 100.00%	Reference	: (Ec. 4.9) DG 9

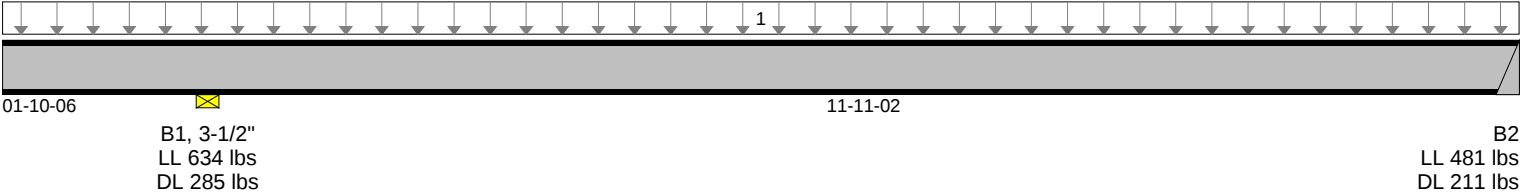
CRITICAL STRENGTH RATIO ✓

Ratio	:	0.33		
Ctrl Eq.	:	D1 at 56.25%	Reference	: (Sec. F)

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Job Name:	1009102	File Name:	1009102
Address:	11 Chesley Road	Description:	Deck Joist
City, State, Zip:	Newton, MA	Specifier:	Jamey Creason
Customer:	Craig Bernabei	Designer:	Amilcar A. Sicaju
Code reports:	ESR-1144	Company:	National Lumber
		Misc:	65 Maple St, Mansfield, MA



Total Horizontal Product Length = 13-09-08

						Live	Dead	Snow	Wind	Roof Live	OCS (in.)
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	133%	125%	
1	1st Floor Deck	Unf. Area (psf)	L	00-00-00	13-09-08	60	27				16

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	1,996 ft-lbs	81.5%	100%	16	2 - Internal
Neg. Moment	-202 ft-lbs	8.2%	100%	14	1 - Right
End Reaction	693 lbs	68.8%	100%	16	2 - Right
Int. Reaction	919 lbs	39.1%	100%	1	2 - Left
Cont. Shear	686 lbs	59.1%	100%	1	2 - Left
Total Load Defl.	L/557 (0.255")	43.1%		16	2
Live Load Defl.	2xL/504 (0.089")	71.4%		16	1 - Cantilever
Total Neg. Defl.	2xL/-360 (-0.124")	66.6%		16	1 - Cantilever
Max Defl.	0.255"	25.5%		16	2
Span / Depth	14.9	n/a			2

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 BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

Bearing Supports	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 2-1/2"	919 lbs	24.7%	n/a	Spruce Pine Fir
B2	Hanger Load 2" x 2-1/2"	693 lbs	89.4%	n/a	IUS2.56/9.25

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Cautions
Design assumes Top and Bottom flanges to be restrained at cantilever.

Notes
Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (2xL/360) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.
Header for the hanger IUS2.56/9.25 at B2 is a Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP.
Hanger IUS2.56/9.25 requires (8) 10d x 1-1/2" face nails, (2) Strong-Grip joist nails.
Hanger Manufacturer: Simpson Strong-Tie, Inc.
Composite EI value based on 23/32" thick sheathing glued and nailed to joist.

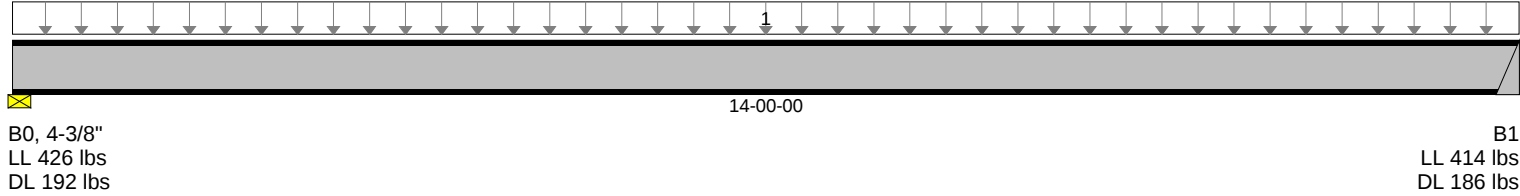
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65 Maple Street, Mansfield, MA 02048
(508) 339-8020

Lawrence S. Cotton
10/07/10

Job Name: 1009102
Address: 11 Chesley Road
City, State, Zip: Newton, MA
Customer: Craig Bernabei
Code reports: ESR-1144

File Name: 1009102
Description: 1st Floor\1J02
Specifier: Jamey Creason
Designer: Amilcar A. Sicaju
Company: National Lumber
Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 14-00-00

						Live	Dead	Snow	Wind	Roof Live	OCS (in.)
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	133%	125%	
1	1st Floor Deck	Unf. Area (psf)	L	00-00-00	14-00-00	60	27				12

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	2,010 ft-lbs	82.0%	100%	1	1 - Internal
End Reaction	600 lbs	59.7%	100%	1	1 - Right
Total Load Defl.	L/480 (0.34")	50.0%		1	1
Live Load Defl.	L/696 (0.234")	68.9%		1	1
Max Defl.	0.34"	34.0%		1	1
Span / Depth	17.2	n/a			1

Bearing Supports	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0	Wall/Plate 4-3/8" x 2-1/2"	618 lbs	13.3%	n/a	Spruce Pine Fir
B1	Hanger Load 2" x 2-1/2"	600 lbs	77.5%	n/a	IUS2.56/9.5

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (L/480) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.
Header for the hanger IUS2.56/9.5 at B1 is a Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP.
Hanger IUS2.56/9.5 requires (8) 10d x 1-1/2" face nails, (2) Strong-Grip joist nails.
Hanger Manufacturer: Simpson Strong-Tie, Inc.
Composite EI value based on 23/32" thick sheathing glued and nailed to joist.

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65 Maple Street, Mansfield, MA 02048
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10/07/10

Job Name: 1009102

Address: 11 Chesley Road

City, State, Zip: Newton, MA

Customer: Craig Bernabei

Code reports: ESR-1040

File Name: 1009102

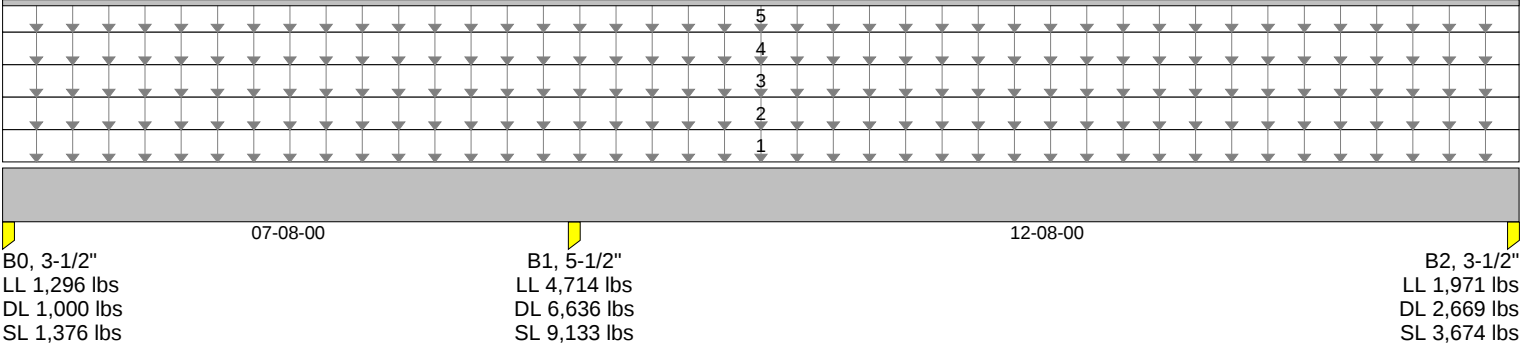
Description: New to support existing

Specifier: Jamey Creason

Designer: Amilcar A. Sicaju

Company: National Lumber

Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 20-04-00

						Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	133%	125%	
1	2nd Floor	Unf. Area (psf)	L	00-00-00	20-04-00	40	12				09-00-00
2	Ceiling Joists- Non Accessibl...	Unf. Area (psf)	L	00-00-00	20-04-00		10				09-00-00
3	Existing Roof	Unf. Area (psf)	L	00-00-00	20-04-00		15	40			09-00-00
4	New Deck	Unf. Area (psf)	L	00-00-00	20-04-00		15	90			03-09-00
5	Wall	Unf. Lin. (plf)	L	00-00-00	20-04-00		100				n/a

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	20,230 ft-lbs	55.1%	115%	15	2 - Internal
Neg. Moment	-22,976 ft-lbs	62.6%	115%	2	1 - Right
End Shear	-6,310 lbs	46.3%	115%	15	2 - Right
Cont. Shear	9,669 lbs	71.0%	115%	2	2 - Left
Total Load Defl.	L/456 (0.327")	52.6%		15	2
Live Load Defl.	L/664 (0.225")	54.2%		15	2
Total Neg. Defl.	L/-2,251 (-0.04")	10.7%		15	1
Max Defl.	0.327"	32.7%		15	2
Span / Depth	12.6	n/a			2

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Bearing Supports	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0 Post	3-1/2" x 5-1/4"	3,672 lbs	12.1%	26.6%	Glulam 24F-V4
B1 Post	5-1/2" x 5-1/4"	20,482 lbs	43.0%	94.6%	Glulam 24F-V4
B2 Post	3-1/2" x 5-1/4"	8,314 lbs	27.4%	60.3%	Glulam 24F-V4

Notes

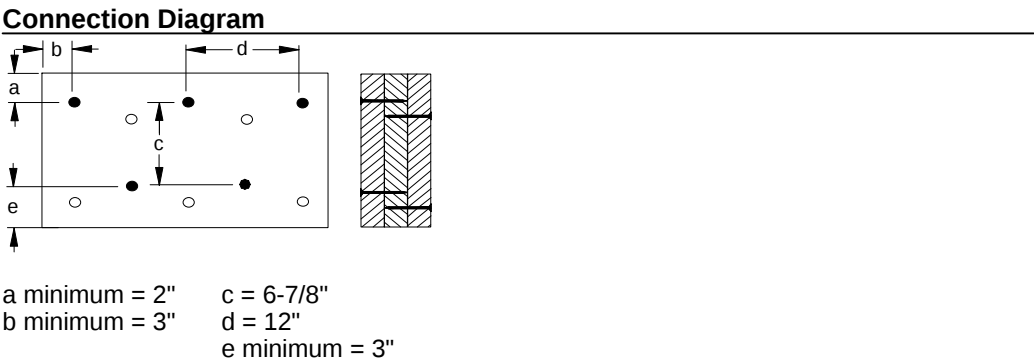
Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum load deflection criteria.

User Notes

See Plan for Post Sizes



Nailing schedule applies to both sides of the member.

Member has no side loads.

Edge nailing are: 16d Sinker Nails

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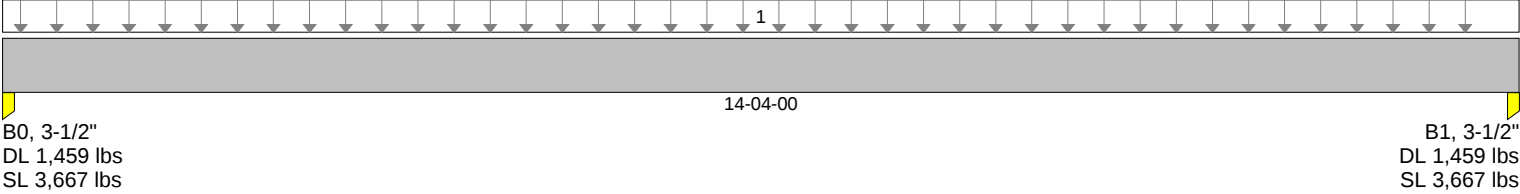


LAWRENCE S. COTTON
STRUCTURAL
No. 30146
REGISTERED
PROFESSIONAL ENGINEER

Lawrence S. Cotton
10/07/10

Job Name: 1009102
Address: 11 Chesley Road
City, State, Zip: Newton, MA
Customer: Craig Bernabei
Code reports: ESR-1040

File Name: 1009102
Description: Ridge Beam
Specifier: Jamey Creason
Designer: Amilcar A. Sicaju
Company: National Lumber
Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 14-04-00

						Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	133%	125%	
1	Roof Snow Load	Unf. Area (psf)	L	00-00-00	14-04-00		15	40			12-09-08

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	17,212 ft-lbs	70.3%	115%	3	1 - Internal
End Shear	4,210 lbs	46.4%	115%	3	1 - Left
Total Load Defl.	L/273 (0.611")	66.0%		3	1
Live Load Defl.	L/381 (0.437")	63.0%		3	1
Max Defl.	0.611"	61.1%		3	1
Span / Depth	14.0	n/a			1

Bearing Supports	Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0 Post	3-1/2" x 3-1/2"	5,126 lbs	49.2%	55.8%	Douglas Fir
B1 Post	3-1/2" x 3-1/2"	5,126 lbs	49.2%	55.8%	Douglas Fir

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.
For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

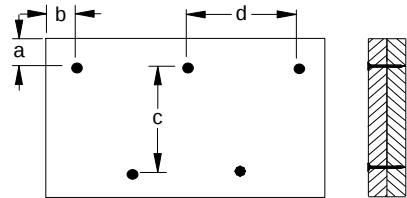
Notes

Design meets Code minimum (L/180) Total load deflection criteria.
Design meets Code minimum (L/240) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.

User Notes

See Plan for Post Sizes

Connection Diagram



a minimum = 2" c = 7-7/8"
b minimum = 3" d = 12"

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

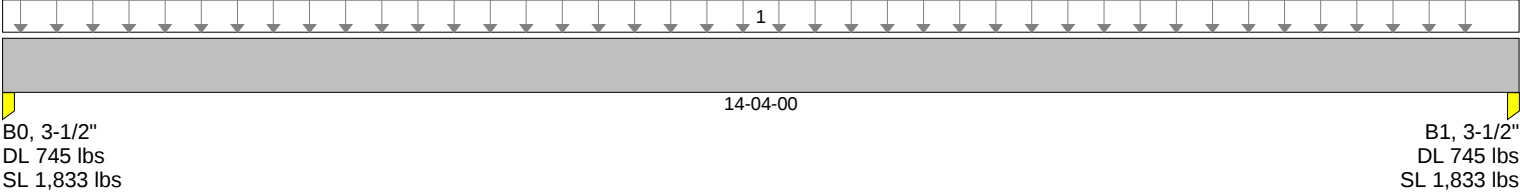
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65 Maple Street, Mansfield, MA 02048
(508) 339-8020

Lawrence S. Cotton
10/07/10

Job Name: 1009102
Address: 11 Chesley Road
City, State, Zip: Newton, MA
Customer: Craig Bernabei
Code reports: ESR-1040

File Name: 1009102
Description: Beam Supporting Roof
Specifier: Jamey Creason
Designer: Amilcar A. Sicaju
Company: National Lumber
Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 14-04-00

						Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Load Summary						100%	90%	115%	133%	125%	
Tag	Description	Load Type	Ref.	Start	End						
1	Roof Snow Load	Unf. Area (psf)	L	00-00-00	14-04-00		15	40			06-04-12

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	8,658 ft-lbs	73.6%	115%	3	1 - Internal
End Shear	2,189 lbs	35.1%	115%	3	1 - Left
Total Load Defl.	L/202 (0.823")	89.0%		3	1
Live Load Defl.	L/284 (0.585")	84.4%		3	1
Max Defl.	0.823"	82.3%		3	1
Span / Depth	17.5	n/a			1

Bearing Supports		Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0	Post	3-1/2" x 3"	2,578 lbs	28.9%	32.7%	Douglas Fir
B1	Post	3-1/2" x 3"	2,578 lbs	28.9%	32.7%	Douglas Fir

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.
For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

Notes

Design meets Code minimum (L/180) Total load deflection criteria.
Design meets Code minimum (L/240) Live load deflection criteria.
Design meets arbitrary (1") Maximum load deflection criteria.
Fastener Manufacturer: TrussLok (tm)

User Notes

MUST PROTECT BEAM FROM DIRECT EXPOSURE TO WET CONDITIONS

See Plan for Post Sizes

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 BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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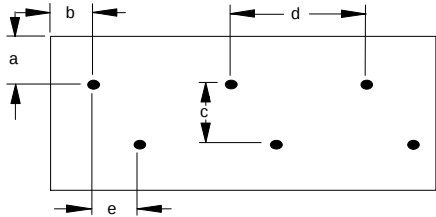
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ENGINEERED WOOD DIVISION
65 Maple Street, Mansfield, MA 02048
(508) 339-8020

Lawrence S. Cotton
10/07/10

Job Name:	1009102	File Name:	1009102
Address:	11 Chesley Road	Description:	Beam Supporting Roof
City, State, Zip:	Newton, MA	Specifier:	Jamey Creason
Customer:	Craig Bernabei	Designer:	Amilcar A. Sicaju
Code reports:	ESR-1040	Company:	National Lumber
		Misc:	65 Maple St, Mansfield, MA

Connection Diagram



a minimum = 2" c = 5-1/2"
b minimum = 4" d = 24"
e minimum = 1"

Install Screws with screw heads in the loaded ply.
All TrussLok screws may be installed from one side of multiply Versa-Lam beams.
Member has no side loads.
Connectors are: FMTSL338

Disclosure

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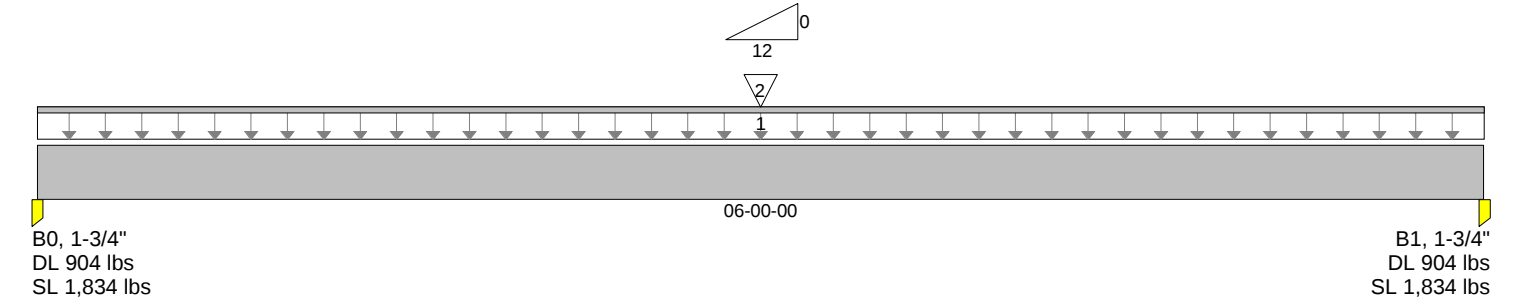
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Lawrence S. Cotton
10/07/10

Job Name: 1009102
Address: 11 Chesley Road
City, State, Zip: Newton, MA
Customer: Craig Bernabei
Code reports: ESR-1040

File Name: 1009102
Description: Beam Supporting Ridge Post
Specifier: Jamey Creason
Designer: Amilcar A. Sicaju
Company: National Lumber
Misc: 65 Maple St, Mansfield, MA



Total Horizontal Product Length = 06-00-00

						Live	Dead	Snow	Wind	Roof Live	Trib. (in.)
Load Summary						100%	90%	115%	133%	125%	
Tag	Description	Load Type	Ref.	Start	End						
1	Gable	Unf. Lin. (plf)	L	00-00-00	06-00-00		50				n/a
2	RB01 at bearing B0	Conc. Pt. (lbs)	L	03-00-00	03-00-00		1,459	3,667			n/a

Controls Summary	Value	% Allowable	Duration	Case	Span
Pos. Moment	7,714 ft-lbs	65.6%	115%	3	1 - Internal
End Shear	2,683 lbs	43.1%	115%	3	1 - Left
Total Load Defl.	L/669 (0.105")	26.9%		3	1
Live Load Defl.	L/973 (0.072")	24.7%		3	1
Max Defl.	0.105"	10.5%		3	1
Span / Depth	7.4	n/a			1

Disclosure

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Bearing Supports		Dim. (L x W)	Value	% Allow Support	% Allow Member	Material
B0	Post	1-3/4" x 3"	2,737 lbs	61.3%	69.5%	Douglas Fir
B1	Post	1-3/4" x 3"	2,737 lbs	61.3%	69.5%	Douglas Fir

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.

For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

Notes

Design meets Code minimum (L/180) Total load deflection criteria.

Design meets Code minimum (L/240) Live load deflection criteria.

Design meets arbitrary (1") Maximum load deflection criteria.

Fastener Manufacturer: TrussLok (tm)

User Notes

MUST PROTECT BEAM FROM DIRECT EXPOSURE TO WET CONDITIONS

See Plan for Post Sizes

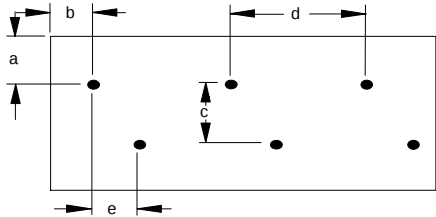
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10/07/10

Job Name:	1009102	File Name:	1009102
Address:	11 Chesley Road	Description:	Beam Supporting Ridge Post
City, State, Zip:	Newton, MA	Specifier:	Jamey Creason
Customer:	Craig Bernabei	Designer:	Amilcar A. Sicaju
Code reports:	ESR-1040	Company:	National Lumber
		Misc:	65 Maple St, Mansfield, MA

Connection Diagram



a minimum = 2" c = 5-1/2"
b minimum = 4" d = 24"
 e minimum = 1"

Connection design assumes point load is 'top-loaded'. For connection design of 'side-loaded' point loads, please consult a technical representative or professional of Record.
Install Screws with screw heads in the loaded ply.
All TrussLok screws may be installed from one side of multiply Versa-Lam beams.
Member has no side loads.
Concentrated loads are not considered in side load analysis.
Connectors are: FMTSL338

Disclosure

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10/07/10