Standard Loading Criteria:

Floor Loading (non-bedroom): 40 psf Live / 10 psf Dead
Sleeping Rooms:: 30 psf Live / 10 psf Dead
Attic/Ceiling Light Storage: 20 psf Live / 10 psf Dead
Attic/Ceiling No Storage: 10 psf Live / 8 psf Dead
Roof Loading: 20 psf Live / 15 psf Dead

Loading Durations: 100% Floor / 125% Roof

Roof Live Loads may be reduced due to pitch and tributary area per CABO Table R301.5

(Where applicable:)
Conventional Roof System assumes Ceiling Joist direction as code prescribed. All loading to be associated with bearing locations.

(Where applicable:)
Compression Roof applied to structure assumes adequate thrust resistance by Rafter connection to Bearing Plate and Floor Diaphragm. ***Floor must be fully sheathed***

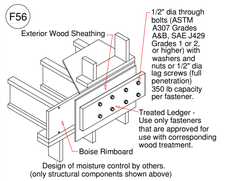
Builder to verify the loading criteria listed is in accordance with loacal building code requirements. Floor dead loads are based on carpet, hardwood or vinyl. Roof dead loads are based on asphalt-shingle and stick built roofs only. Tile, marble, slate, brick, stone etc will increase dead load requirements. It is the Builders responsibility to notify of any increased dead loads other than those listed.

Products other than Boise Engineered Wood Products may be called out to represent transferring load paths through the structure only (Ie)...Steel Beams, Headers/2 x Lumber (BBO), Dropped Sills or Girders, Posts, or Framing/Squash blocks. Consult local building codes for specific product requirements in these instances.

Refer to Boise Manufcturer's Installation Guide for additional information of product installation, connection and nailing requirements.

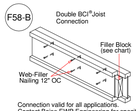
All accessories are provided by others.

F56



Design of moisture control by others.
(only structural components shown above)

F58-B

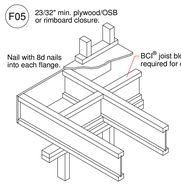


Connection valid for all applications.
Contact Boise EWP Engineering for specific conditions.

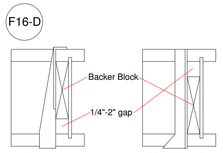
Backer and Filler Block Dimensions

BCI® Joist Series	Backer Block Thickness	Filler Block Thickness
5000s 1.8	3/4" or 7/8" wood panels	Two 3/4" wood panels or 2 x __
6000s 1.8	1-1/8" or two 1/2" wood panels	2 x __ + 5/8" or 3/4" wood panel
6500s 1.8	1-1/8" or two 1/2" wood panels	2 x __ + 5/8" or 3/4" wood panel
80 2.0	1-1/8" or two 1/2" wood panels	2 x __ + 5/8" or 3/4" wood panel
90 2.0	2 x __ lumber	Double 2 x __ lumber

F05



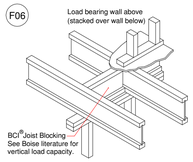
F16-D



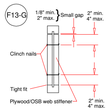
Backer block shall be tight to bottom of top flange with 1/4"-2" gap at top of bottom flange.

Backer block shall be tight to top of bottom flange with 1/4"-2" gap at bottom of top flange.

F06



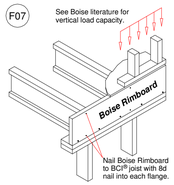
F13-G



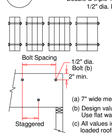
Web Stiffener Fastener Schedule

Joist Series	Depth	Bearing Location End	Intermediate
BCI 4500s®	9-1/2"	2-8d	2-8d
BCI 5000s®	11-7/8"	2-8d	2-8d
	14"	2-8d	2-8d
	9-1/2"	2-8d	2-8d
BCI 6000s®	11-7/8"	2-8d	3-8d
BCI 6500s®	14"	2-8d	3-8d
	16"	2-8d	3-8d
BCI 90s®	11-7/8"	3-8d	3-8d
	14"	2-8d	3-8d
	16"	3-10d	3-10d
	11-7/8"	3-10d	3-10d
BCI 90s®	14"	5-10d	5-10d
	16"	6-10d	6-10d

F07



B12-B

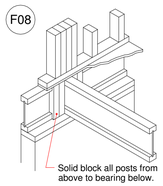


Max. Uniform Load (lbs. per lin. ft.)

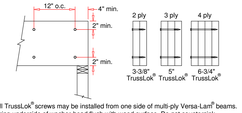
Number of Members	24" o.c.	12" o.c.	6" o.c.
1-3/4" Versa-Lam®			
2	505	1010	2020
3	375	755	1515
4 (a)	335	670	1345
3-1/2" Versa-Lam®			
2	855	1715	N/A

(a) 7" wide members must be loaded from both sides.
(b) Design values apply to common bolts (grade A&B, 1 or 2) Use flat washers each side and drill holes 1/2" dia.
(c) All values in the table above may be increased 15% for snow loaded roofs and 25% for non-snow load roofs where code allows.

F08

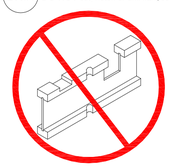


B10-C

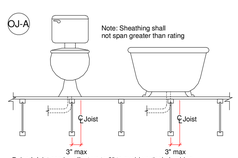


- All TrussLok® screws may be installed from one side of multi-ply Versa-Lam® beams.
- Bring underside of washer-head flush with wood surface. Do not countersink.

DN01 **DO NOT** cut, notch or drill flanges



OJ-A



Boise I-Joist can be offset up to 3" to avoid vertical plumbing.

Products

PlotID	Net Qty	Product	Length	Plies
J1	3	16" BCI® 4500s-1.8	18' 0"	1
J2	2	16" BCI® 4500s-1.8	18' 0"	2
J3	12	16" Trim Joist	22' 0"	1
J4	4	16" Trim Joist	22' 0"	2
J5	11	16" Trim Joist	14' 0"	1
J6	2	16" Trim Joist	14' 0"	2
J7	5	16" Trim Joist	12' 0"	1
J8	2	16" Trim Joist	12' 0"	2
J9	13	16" Trim Joist	8' 0"	1
J10	4	16" Trim Joist	8' 0"	2
FB1	3	1-3/4" x 16" VERSA-LAM® LVL 2.1E 3100 SP	22' 0"	3
DB1	3	1-3/4" x 16" VERSA-LAM® LVL 2.1E 3100 SP	18' 0"	3
FB2	2	1-3/4" x 16" VERSA-LAM® LVL 2.1E 3100 SP	12' 0"	2
FB3	2	1-3/4" x 16" VERSA-LAM® LVL 2.1E 3100 SP	8' 0"	2
RIM1	8	1-1/8" x 16" BC RIM BOARD OSB	12' 0"	1
Blkg1	1	16" BCI® 4500s-1.8	3' 0"	1

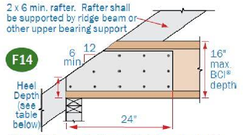
Connector Summary

PlotID	Qty	Manuf	Product
H1	17	Simpson	THA422
H2	3	Simpson	THA422-2

BCI® Joist Slope Cut Reinforcement
Detail below restores original allowable shear/reaction value to cut end of BCI® joist. BCI® Joist shall not be used as a collar or rafter tension tie.

2 x 6 min. rafter. Rafter shall be supported by ridge beam or other upper bearing support.

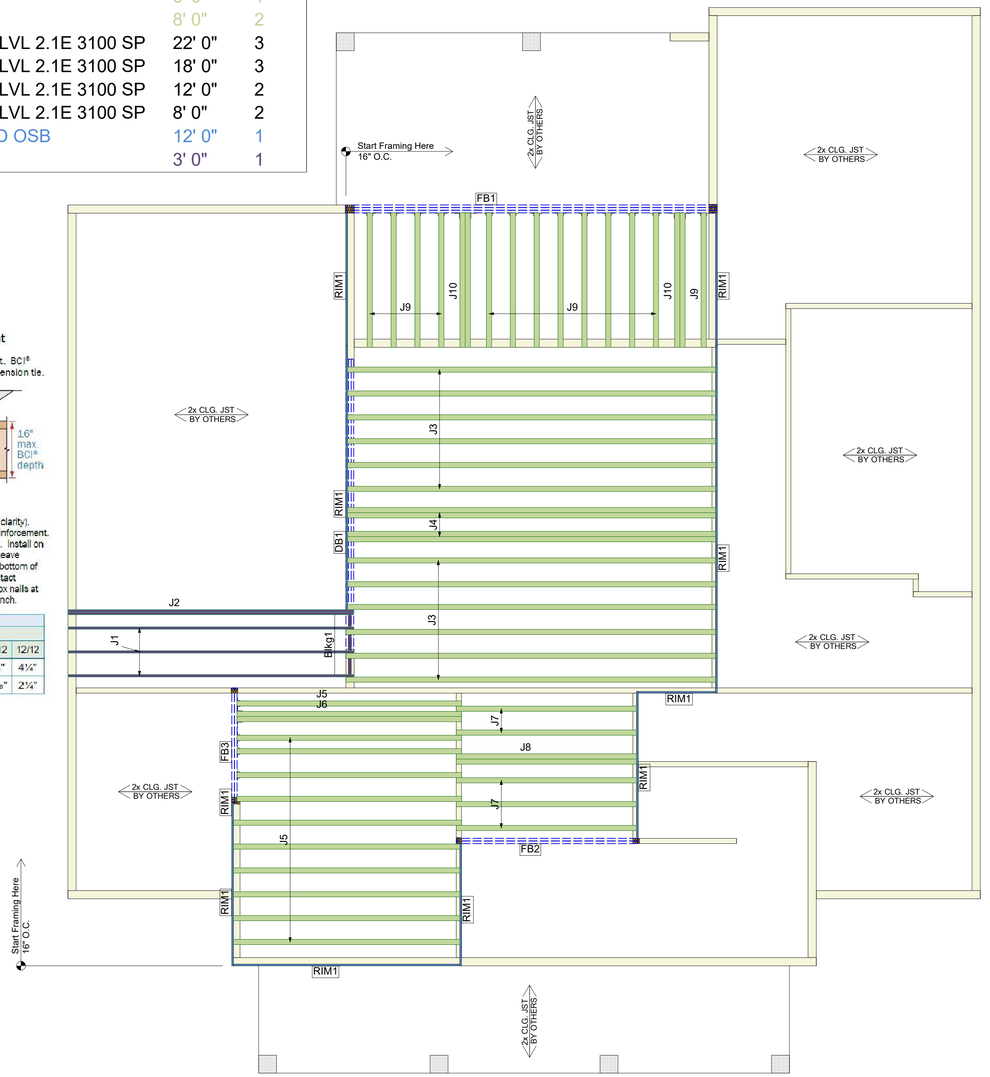
F14



2x blocking required at bearing (not shown for clarity).
23/32" min. plywood/OSB rated sheathing as reinforcement. Install reinforcement with face grain horizontal. Install on both sides of the joist, tight to bottom flange. Leave minimum 1/4" gap between reinforcement and bottom of top flange. Apply construction adhesive to contact surfaces and fasten with 3 rows of min. 10d box nails at 6" o.c. Alternate nailing from each side and clinch.

Minimum Heel Depth

End Wall Bearing	Roof Pitch 6/12	7/12	8/12	9/12	10/12	12/12
2 x 4	4 3/8"	4 5/16"	4 1/4"	4 1/4"	4 1/4"	4 1/4"
2 x 6	3 3/8"	3 5/16"	2 5/16"	2 3/4"	2 5/16"	2 1/4"



PRELIMINARY LAYOUT FOR QUOTING PURPOSES

NOT FOR CONSTRUCTION

2ND FLOOR FRAMING PLAN
1/4" = 1'-0"

Revisions:	BY:

Boise Cascade

NOTE:
ALL MEASUREMENTS TO BE VERIFIED IN THE FIELD.

SALES PRESENTATION DRAWING

No structural or dimensional check has been made of this design unless specifically requested. Customer must verify and approve all dimensions, quantities, loads, and details carefully. This drawing has not been check by Boise Engineering.

218 Marlin
84 Lumber Gulfport

BC FRAMER
25-750
Scale: as noted
Date: 9-2-2025
By: th
Pages dated 5-23-2025
DWG: Preliminary
Sheet: 2/2