

Actual materials and quantities may vary due to jobsite conditions, design changes and installation variations. It is the responsibility of the Builder for this Layout to be reviewed and Approved by an appropriate Design Professional as required by the permitting authority.

ALL ROOF LOADS ASSUMED TO BE SUPPORTED AT EXTERIOR WALLS AND BEAMS BY OTHERS, IF APPLICABLE, UNLESS OTHERWISE NOTED.  
NO ROOF LOADS APPLIED TO FLOOR MEMBERS.

11 7/8" TJI  
210'S 16" O.C.  
UNLESS OTHERWISE NOTED

**RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/14/2024 10:38:57**

**HANGER NAILING FOR UNIFORMLY LOADED BEAMS**

**Joint & Beam Hanger Fastening Requirements for 2 & 4 Ply Supporting Members**

**For IUS or THF Hangers - Use 10d (0.148") x 3" nails.**

**For U, MIU, HU, HHUS, HGUS or HD, THD, THDH Hangers - Use 16d (0.162") x 3 1/2" nails.**

**\*For hangers that have joint fasteners/connections, fill all holes with the manufacturer's recommended fasteners.**

**MULTIPLE PLY CONNECTION NAILING FOR UNIFORMLY LOADED BEAMS**

**2&3 PLY BEAMS**

9 1/2" - 11 1/2" Depth (3) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

14" - 24" Depth (4) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

**4 PLY BEAM**

9 1/2" - 24" Depth (4) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

- 16d (0.131") pneumatic nails may be substituted for 10d (0.128") Box nails.

- Stagger nails by 6" per ply

- All plies must be same material, grade, and 1 1/2" thickness.

- Joint hangers connecting into the side of the beam must be installed with minimum 3" long nails.

**NAILING CONNECTION**

(3) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

(4) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

**MULTIPLE PLY CONNECTION NAILING FOR POINT LOADS**

**Hanger shown for reference. Install screws from side opposite of hanger.**

**Install 1/2 the required screws on each side of hanger.**

**3 PLY SUPPORT BEAM**

TOTAL # OF 3 1/2" TRUSSLOK® SCREWS

TOTAL # OF 3 1/2" SIMPSON SDS SCREWS

**4 PLY SUPPORT BEAM**

TOTAL # OF 3 1/2" TRUSSLOK® SCREWS

TOTAL # OF 6" SIMPSON SDS SCREWS

**SIMPSON STRONG TIE HANGERS**

U	HU	HHUS	HGUS
4	6	8	14
4	4	6	12

**USP HANGERS**

HD	THD	THDH
6	12	16
6	10	12

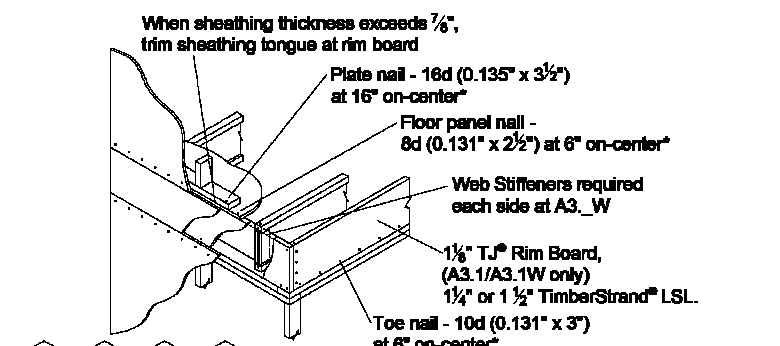
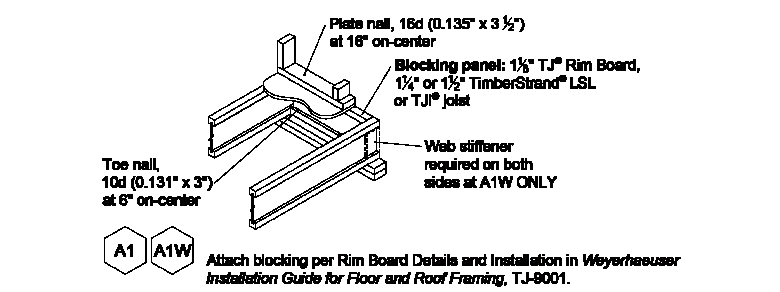
**Connections based on FastenMaster Truss-Tie® and Simpson Strong-Tie® code reports.**

**- All plies assumed to be the same material, grade, and 1 1/2" in thickness**

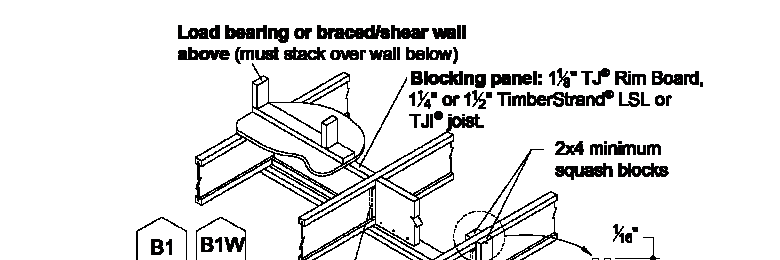
**- Connections based on given hangers maximum capacity at 100% Load Duration Factor. Adequate for 115% and 125% Load Duration Factor as well.**

**- Connection assumes the use of 16d nails and max nailing in hangers.**

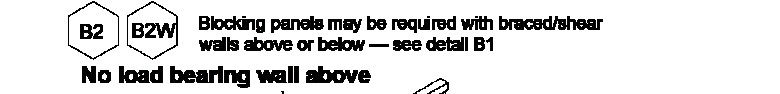
**- See TB-300 for alternate connector types and loading.**



For A3.1-A3.3 installation specifications see Rim Board Details and Installation in Weyerhaeuser Installation Guide for Floor and Roof Framing, T3-0001.



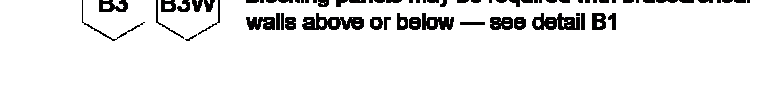
Blocking panels may be required with brace/shear walls above or below — see detail B1



Blocking panels may be required with brace/shear walls above or below — see detail B1



Blocking panels may be required with brace/shear walls above or below — see detail B1



Blocking panels may be required with brace/shear walls above or below — see detail B1



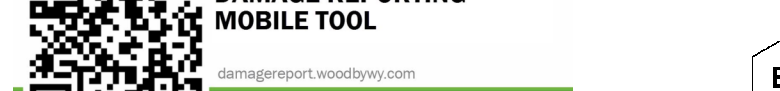
Blocking panels may be required with brace/shear walls above or below — see detail B1



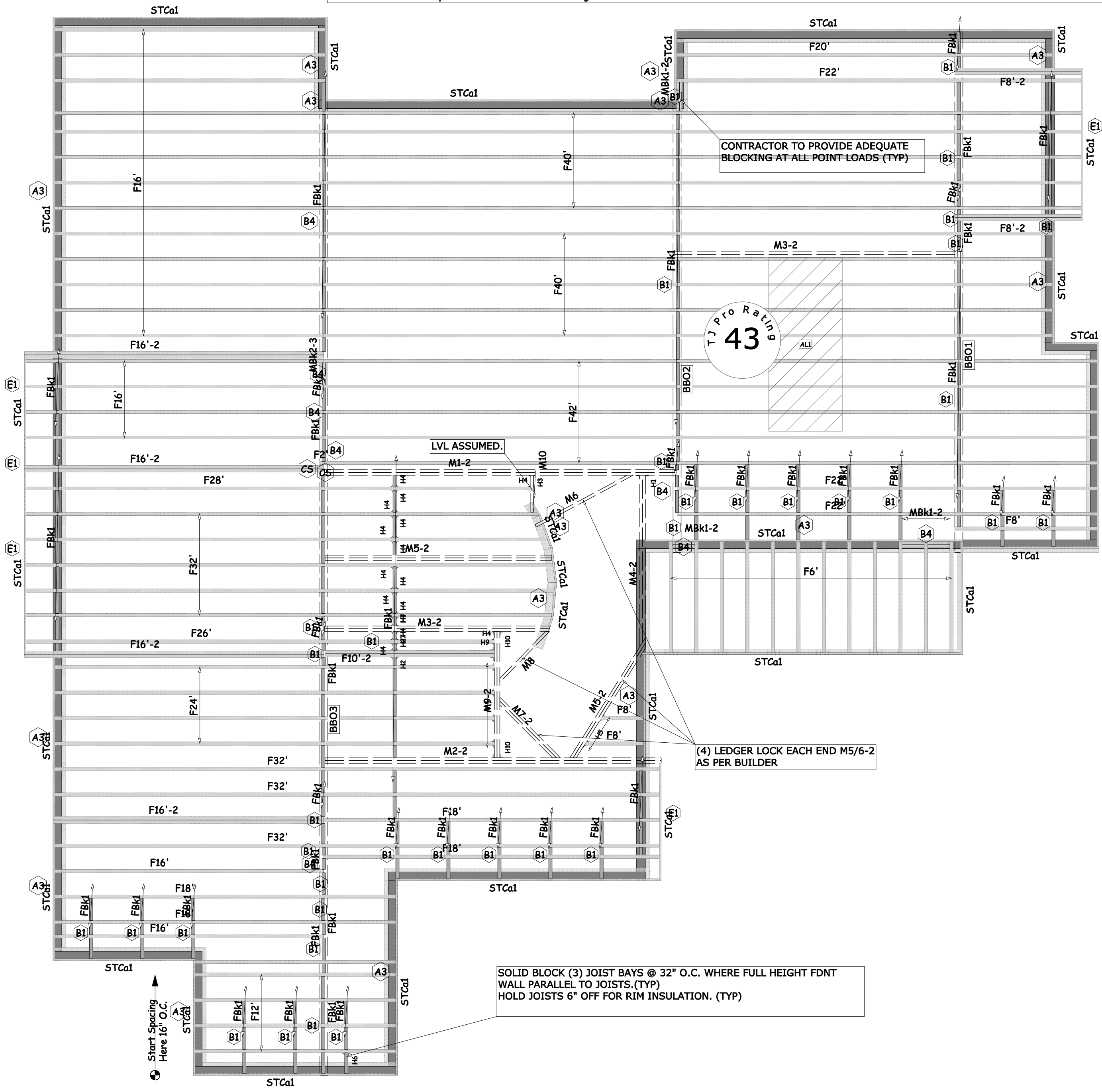
Blocking panels may be required with brace/shear walls above or below — see detail B1



Blocking panels may be required with brace/shear walls above or below — see detail B1



Blocking panels may be required with brace/shear walls above or below — see detail B1





Actual materials and quantities may vary due to jobsite conditions, design changes and installation variations. It is the responsibility of the Builder for this Layout to be reviewed and Approved by an appropriate Design Professional as required by the permitting authority.

ALL ROOF LOADS ASSUMED TO BE SUPPORTED AT EXTERIOR WALLS AND BEAMS BY OTHERS, IF APPLICABLE, UNLESS OTHERWISE NOTED. NO ROOF LOADS APPLIED TO FLOOR MEMBERS.

9-1/2" TJI  
210'S 16" O.C.  
UNLESS OTHERWISE NOTED

**HANGER NAILING FOR UNIFORMLY LOADED BEAMS**

**Joint & Beam Hanger Fast Nailing Requirements for 2, 3 & 4 Ply Supporting Members**

**For IUS or THF Hangers - Use 10d (0.148") x 3" nails.**

**For U, MIU, HU, HHUS, HGUS or HD, THD, THDH Hangers - Use 16d (0.162") x 3 1/2" nails.**

**\*For hangers that have joint fasteners/connections, fill all holes with the manufacturer's recommended fasteners.**

**MULTIPLE PLY CONNECTION NAILING FOR UNIFORMLY LOADED BEAMS**

**2&3 PLY BEAMS**

9 1/2" - 11 1/2" Depth      (3) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

14" - 24" Depth          (4) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

**NAILING CONNECTION**

**4 PLY BEAM**

9 1/2" - 24" Depth      (4) Rows of 10d (0.128") x 3" Box Nails at 12" o.c.

**NAILING CONNECTION**

- 16d (0.131") pneumatic nails may be substituted for 10d (0.128") Box nails.

- Stagger nails by 6" per ply

- All plies must be same material, grade, and 1 1/2" thickness.

- Joint hangers connecting into the side of the beam must be installed with minimum 3" long nails.

**MULTIPLE PLY CONNECTION NAILING FOR POINT LOADS**

Hanger shown for reference. Install screws from side opposite of hanger.

Install 1/2 the required screws on each side of hanger

EQUAL SPACING

(4) ROWS 14" & DEEPER

(3) ROWS 11 1/2" & LESS

Z" (TYP) →

3 1/2" (TYP)

		SIMPSON STRONG-TIE® HANGERS				USP HANGERS	
		U	HU	HHUS	HGUS	HD	THD
3 PLY SUPPORT BEAM	TOTAL # OF 3 1/4" TRUSSLOK® SCREWS	4	6	8	14	6	12
	TOTAL # OF 3 1/4" SIMPSON SDS SCREWS	4	4	6	12	6	10
	4 PLY SUPPORT BEAM	U	HU	HHUS	HGUS	HD	THD
4 PLY SUPPORT BEAM	TOTAL # OF 3 1/4" TRUSSLOK® SCREWS	4	6	10	20	8	16
	TOTAL # OF 6" SIMPSON SDS SCREWS	6	8	12	24	10	20

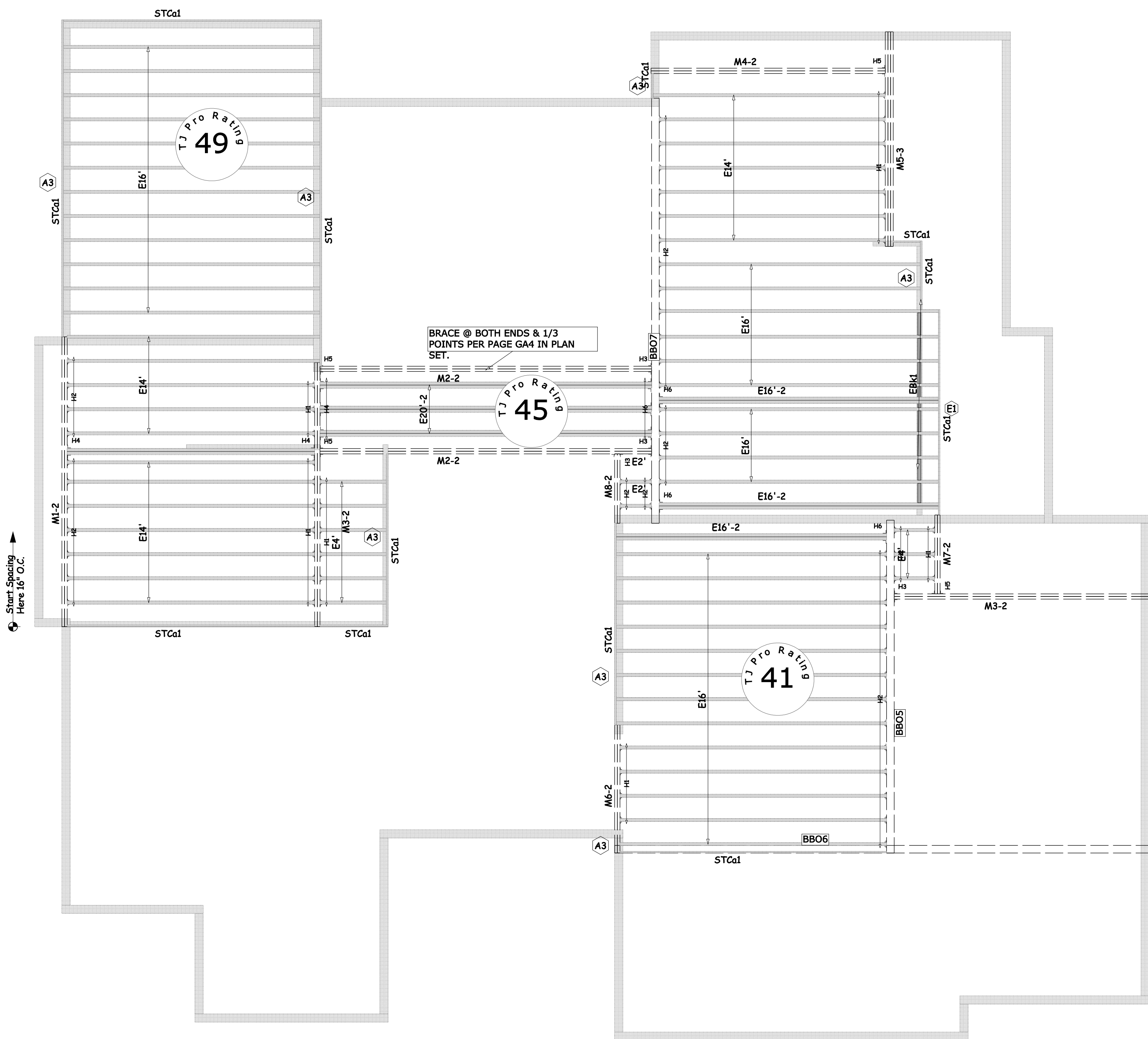
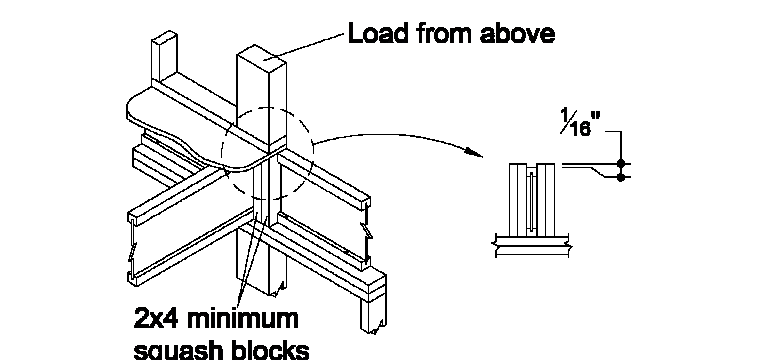
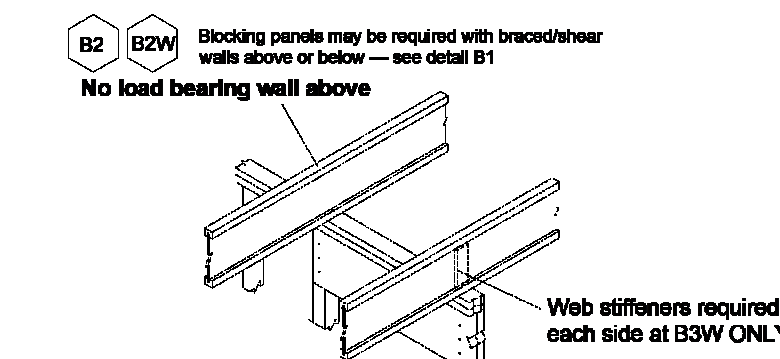
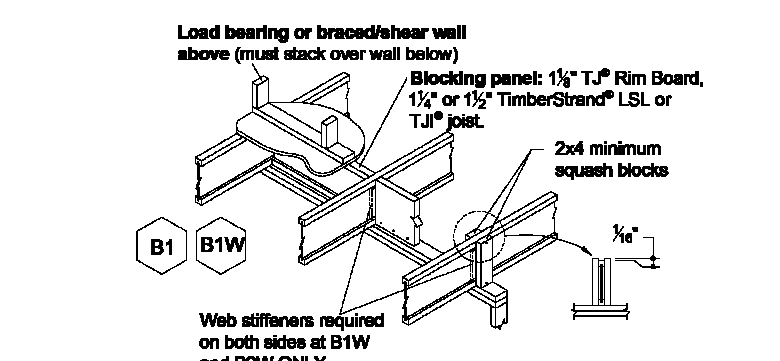
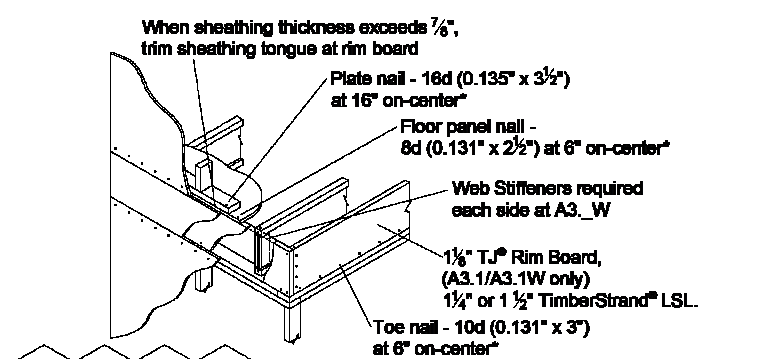
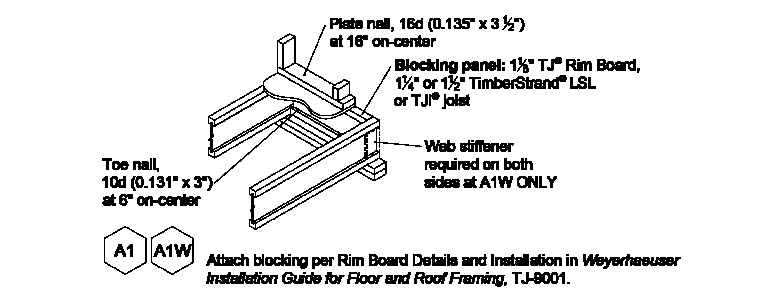
- Connections based on FastenMaster Trusslok® and Simpson Strong-Tie® code reports.

- All plies assumed to be the same material, grade, and 1 1/2" in thickness.

- Connections based on given hangers maximum capacity at 100% Load Duration Factor. Adequate for 115% and 125% Load Duration Factor as well.

- Connection assumes the use of 16d nails and max nailing in hangers.

- See TB-300 for alternate connector types and loading.



Framing Connector Summary											
PlotID	Qty	Manuf	Product	Design Method	Face Nails	Top Nails	Member Nails	Skew	Slope	Backer Blks	Filler
H1	30	Simpson	ITS2.06/9.5	Designed	2- 10dx1.5	4- 10dx1.5	2- Strong-Grip	-	-	No	No
H2	47	Simpson	IUS2.06/9.5	Designed	8- 10dx1.5	-	2- Strong-Grip	-	-	No	No
H3	4	Simpson	IUS3.56/9.5	Designed	10- 10dx1.5	-	2- 10dx1.5	-	-	No	No
H4	5	Simpson	MIT4.28/9.5	Designed	4- 10dx1.5	4- 10dx1.5	2- 10dx1.5	-	-	No	No
H5	4	Simpson	MIT4.9	Designed	4- 10dx1.5	4- 10dx1.5	2- 10dx1.5	-	-	No	No
H6	6	Simpson	MIU4.28/9	Designed	16- 10dx1.5	-	2- 10dx1.5	-	-	No	No

Blocking				
PlotID	Length	Product	Plies	Net Qty
EBk1	2' 0"	9 1/2" TJI 210 joist	1	7
EBk1	1' 0"	9 1/2" TJI 210 joist	1	2

Accessories				
PlotID	Length	Product	Plies	Net Qty
		23/32"x48"x96" Weyerhaeuser Edge Panel (0/24) T&G FF	1	40

Total Lengths	
Length	Product
1126' 0"	9 1/2" TJI 210 joist
32' 0"	13/4" x 14" 2.0E Microllam LVL
244' 0"	13/4" x 9 1/2" 2.0E Microllam LVL
128' 0"	1 1/8" x 9 1/2" TJ Rim Board

PlotID	Length	Product	Plies	Net Qty
E20'-2	20' 0"	9 1/2" TJI 210 joist	2	6
E16'-2	16' 0"	9 1/2" TJI 210 joist	2	6
E16'	16' 0"	9 1/2" TJI 210 joist	1	35
E14'-2	14' 0"	9 1/2" TJI 210 joist	2	2
E14'	14' 0"	9 1/2" TJI 210 joist	1	19
E4'	4' 0"	9 1/2" TJI 210 joist	1	9
E2'	2' 0"	9 1/2" TJI 210 joist	1	2
M1-2	16' 0"	13/4" x 14" 2.0E Microllam LVL	2	2
M2-2	20' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	4
M3-2	16' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	4
M4-2	14' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	2
M5-3	12' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	3	3
M6-2	8' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	2
M7-2	6' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	2
M8-2	4' 0"	13/4" x 9 1/2" 2.0E Microllam LVL	2	2
STCa1	16' 0"	1 1/8" x 9 1/2" TJ Rim Board	1	8

LEVEL NOTES	
Current Date:	5/14/2024
File Name:	fps24-0489_wr-157 -369 nw patch_mead_lumber -grandview rev 5-14-24 print.jvl
Level Name:	1st Floor
Building Code - Design Methodology:	IBC 2018
Members with Design Overrides:	
TJ-Pro Rating (Weighted Average):	45
Minimum Level TJ - Pro Rating & Joist:	TJ-Pro rating = 41, joist = E16' (I23364)
Maximum Level TJ - Pro Rating & Joist:	TJ-Pro rating = 56, joist = E14'-2(I23508)
FLOOR	
Floor Container:	FC8
Use/Occupancy:	ResidentialLivingAreas
Floor Area Loading is:	30.0 lb/ft² Live Load & 12.0 lb/ft² Dead Load
Maximum Allowed Deflection:	L/480 Live Load & L/240 Total Load
TJ-Pro Rating Information:	
Weighted Average:	45
Directly Applied Ceiling:	Gypsum 1/2"
Decking Attachment:	Glue and Nail
Decking Material:	23/32"x48"x96" Weyerhaeuser Edge Panel (0/24) T&G FF
Perpendicular Partition:	No
Strapping at max 8' o.c.:	None
Blocking at max 8' o.c.:	No
Poured Flooring:	No

Van Deurzen and Associates, P.A.  
11011 King Street, Suite 130  
Overland Park, KS 66210  
(913) 451-6305 FAX: (913) 451-1021

This shop drawing has been reviewed for conformance with the design concept and information given in the Contract Documents.

☒ Reviewed with no exceptions noted.  
☐ Reviewed as noted.  
☐ Returned for correction.  
☐ Not Reviewed.

By: JWH Date: 05/15/2024

ENGINEERED WOOD PRODUCTS

Weyerhaeuser

Symbol Legend

- User Defined Point Load
- User Defined Line Load
- User Defined Area Load
- Beam By Others
- Post By Others
- Layout Start Location
- Construction Detail Callout (See Framer's Pocket Guide)
- Excessive Point Load (WARNING: Member design did not include this load. Special consideration is required by the designer of record.)
- Required Bearing Length (Only placed at insufficient bearing locations.)

PREPARED BY  
MIKE CARIOSCIA  
FOREST PRODUCTS SUPPLY  
913-441-7000

MEAD LUMBER - GRANDVIEW

369 NW PATCH - WOODSIDE RIDGE LOT 157

SKY MARTIN

STRUCTURAL DATE:

ARCHITECTURAL DATE:

SCALE  
1/4"=1'-0"

PROJECT #: FPS 24-0489

5/14/2024

SHEET  
20F 2

## WARNING

Joists are unstable until braced laterally

Bracing includes:

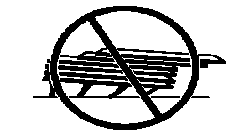
- Blocking
- Hangers
- Sheathing
- Rim Board
- Rim Joist



DO NOT walk on joists until braced. INJURY MAY RESULT.



DO NOT walk on joists that are lying flat.



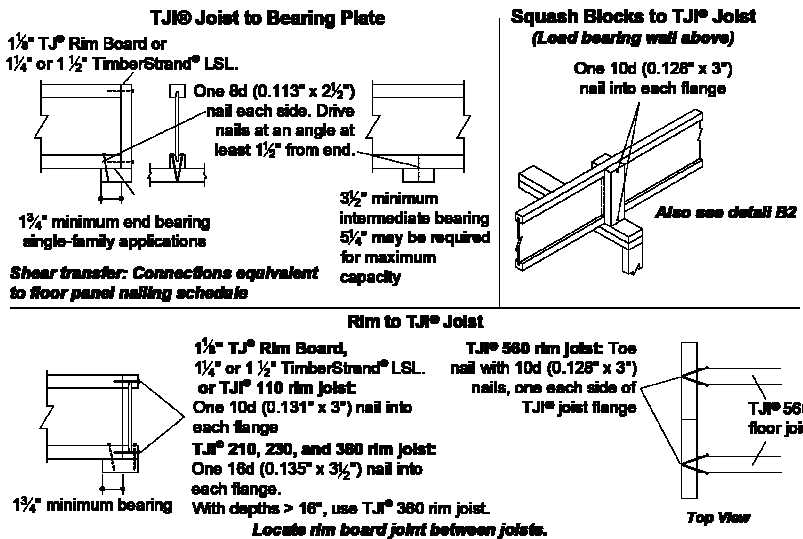
DO NOT stack building materials on unbraced joists. Stack only over beams or walls.

Lack of proper bracing during construction can result in serious accidents. Observe the following guidelines:

- All blocking, hangers, rim boards and rim joists at the end supports of the TJI® joist must be completely installed and properly nailed.
- Lateral strength, like braced end wall or an existing deck, must be established at the ends of the bay. This can also be accomplished by a temporary or permanent deck (sheathing) fastened to the first 4 feet of joists at the end of the bay.
- Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area (see in note 2) and to each joist. Without this bracing, buckling sideways or rollover is highly probable under light construction loads - such as a worker or one layer of unnailed sheathing.
- Sheathing must be completely attached to each TJI® joist before additional loads can be placed on the system.
- Ends of cantilevers require safety bracing on both the top and bottom flanges.
- The flanges must remain straight within 1/2" from true alignment.

Weyerhaeuser, Microllam, Parallam, TimberStrand, TJI, TJ, and Trus Joist are registered trademarks of Weyerhaeuser/NR. © 2014 Weyerhaeuser/NR Company. All rights reserved.

## NAILING AT BEARING (FLOOR)



This layout is intended for product application assurance and is not intended to circumvent the need for a design professional as determined by the Building Codes. The designer of record and/ or builder/ framer is responsible to assure these drawings are compatible with the overall project.

