HANGER NAILING FOR UNIFORMLY LOADED BEAMS

Joist & Beam Hanger Face Nailing Requirements* for 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 ½" nails.

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

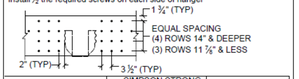
MULTIPLE PLY CONNECTION NAILING FOR UNIFORMLY LOADED BEAMS

2&3 PLY BEAMS	NAILED CONNECTION
9½" - 11⅞" 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	**NAILED CONNECTION**
9½" - 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 1⅜" thickness.
-Joist Hanger's connecting into the side of the beam must be installed with minimum 3" long nails.

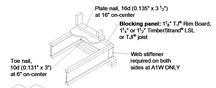
MULTIPLE PLY CONNECTION NAILING FOR POINT LOADS

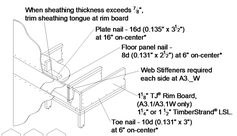
Hanger shown for reference. Install screws from side opposite of hanger. Install ½ the required screws on each side of hanger

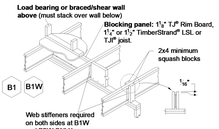


		SIMPSON STRONG-TIE® HANGERS				USP HANGERS		
	3 PLY SUPPORT BEAM	U	HU	HHUS	HGUS	HD	THD	THDH
	TOTAL # OF 3 ½" TRUSSLOK® SCREWS	4	6	8	14	6	12	16
	TOTAL # OF 3 ½" SIMPSON SDS SCREWS	4	4	6	12	6	10	12
	4 PLY SUPPORT BEAM	U	HU	HHUS	HGUS	HD	THD	THDH
	TOTAL # OF 6 ¾" TRUSSLOK® SCREWS	4	6	10	20	8	16	20
	TOTAL # OF 6" SIMPSON SDS SCREWS	6	8	12	24	10	20	26

- Connections based on FastenMaster TrussLok® and Simpson Strong-Tie® code reports.
- All plies assumed to be the same material, grade, and 1 ½" 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.

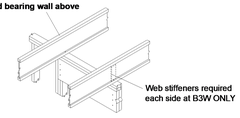




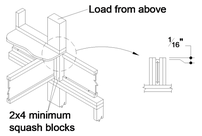


B2 B2W Blocking panels may be required with braced/shear walls above or below — see detail B1

No load bearing wall above



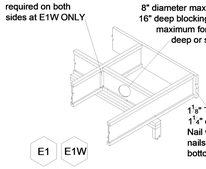
B3 B3W Blocking panels may be required with braced/shear walls above or below — see detail B1

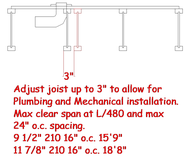


CS ***Use 2x4 minimum squash blocks to transfer load around TJI® joist***

SCAN WITH YOUR SMARTPHONE
INSTALLATION GUIDE FOR FLOOR AND ROOF FRAMING
ey.com/woodproducts/document.library/9.0001
TrusJoist

SCAN WITH YOUR SMARTPHONE
DAMAGE REPORTING MOBILE TOOL
damagereport.woodbywy.com
TrusJoist





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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/08/2023 4:48:54

Andrea Sessler
Digitally signed by Andrea Sessler
DN: CN=Andrea Sessler, OU=Development, OU=LS Users, DC=COLS, DC=LOC
Date: 2023.03.08 16:49:20-06'00'

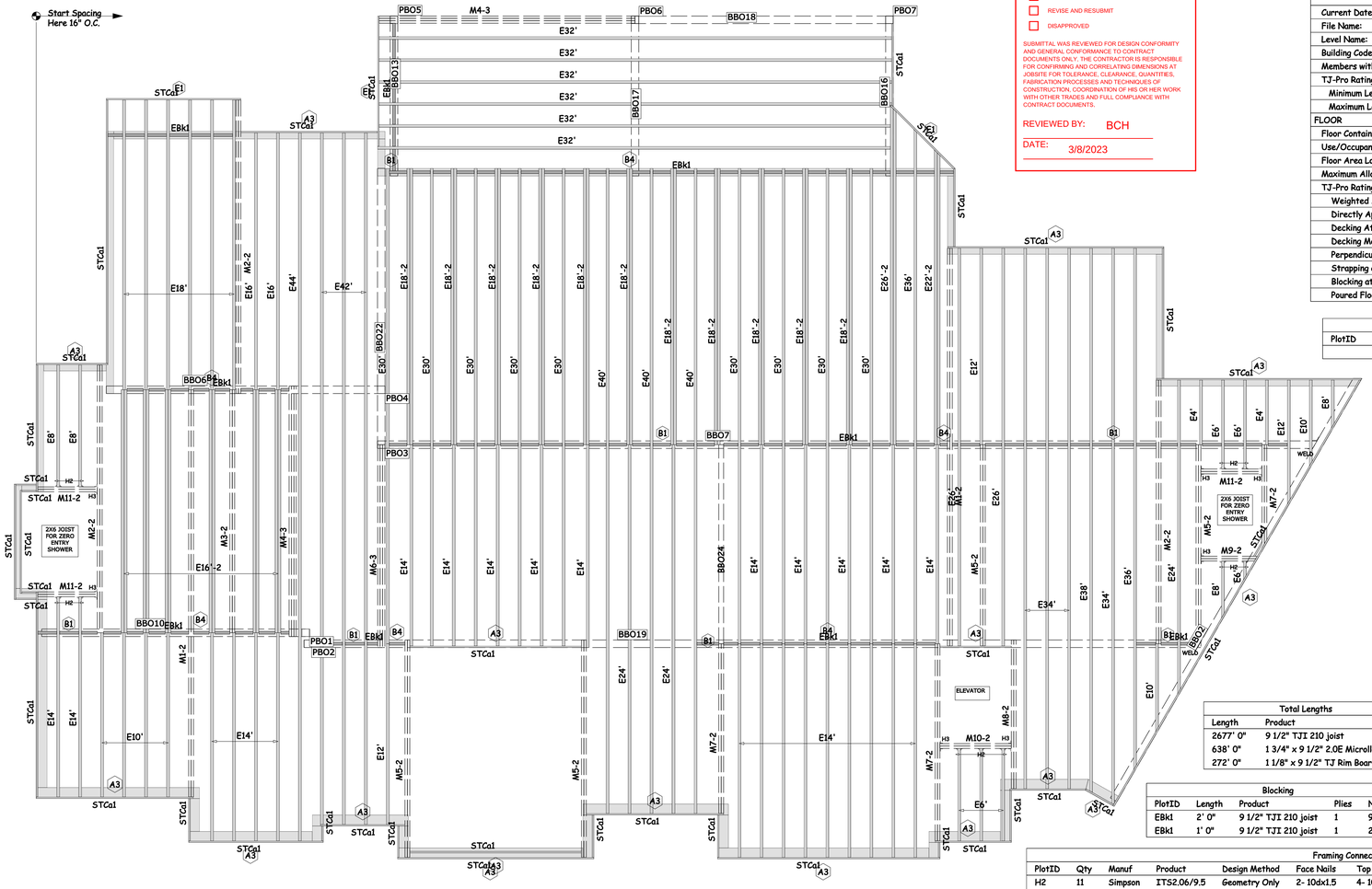
APEX ENGINEERS, INC.
SHOP DRAWING / SUBMITTAL REVIEW

- [x] APPROVED
- [ ] APPROVED AS NOTED
- [ ] REVISE AND RESUBMIT
- [ ] DISAPPROVED

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS OR HER WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

REVIEWED BY: BCH

DATE: 3/8/2023



LEVEL NOTES	
Current Date:	3/8/2023
File Name:	FP23-0232 CUNDIFF RESIDENCE.jvl
Level Name:	Foundation
Building Code - Design Methodology:	IBC 2018
Members with Design Overridden:	
TJ-Pro Rating (Weighted Average):	40
Minimum Level TJ - Pro Rating & Joist:	TJ-Pro rating = 30, joist = E30'(i735)
Maximum Level TJ - Pro Rating & Joist:	TJ-Pro rating = 72, joist = E12'(i605)
FLOOR	
Floor Container:	FC1
Use/Occupancy:	ResidentialLivingAreas
Floor Area Loading is:	40.0 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:	40
Directly Applied Ceiling:	None
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

Accessories

PlotID	Length	Product	Plies	Net Qty
		23/32"x48"x96" Weyerhaeuser Edge Panel (0/24) T&G FF	1	98

Products

PlotID	Length	Product	Plies	Net Qty
E44'	44' 0"	9 1/2" TJI 210 joist	1	1
E42'	42' 0"	9 1/2" TJI 210 joist	1	3
E40'	40' 0"	9 1/2" TJI 210 joist	1	3
E38'	38' 0"	9 1/2" TJI 210 joist	1	1
E36'	36' 0"	9 1/2" TJI 210 joist	1	2
E34'	34' 0"	9 1/2" TJI 210 joist	1	4
E32'	32' 0"	9 1/2" TJI 210 joist	1	6
E30'	30' 0"	9 1/2" TJI 210 joist	1	9
E26'-2	26' 0"	9 1/2" TJI 210 joist	2	2
E26'	26' 0"	9 1/2" TJI 210 joist	1	2
E24'	24' 0"	9 1/2" TJI 210 joist	1	3
E22'-2	22' 0"	9 1/2" TJI 210 joist	2	2
E18'-2	18' 0"	9 1/2" TJI 210 joist	2	22
E18'	18' 0"	9 1/2" TJI 210 joist	1	6
E16'-2	16' 0"	9 1/2" TJI 210 joist	2	12
E16'	16' 0"	9 1/2" TJI 210 joist	1	2
E14'	14' 0"	9 1/2" TJI 210 joist	1	25
E12'	12' 0"	9 1/2" TJI 210 joist	1	3
E10'	10' 0"	9 1/2" TJI 210 joist	1	6
E8'	8' 0"	9 1/2" TJI 210 joist	1	4
E6'	6' 0"	9 1/2" TJI 210 joist	1	6
E4'	4' 0"	9 1/2" TJI 210 joist	1	2
M1-2	26' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	4
M2-2	18' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	6
M4-3	16' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	3	6
M3-2	16' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	2
M6-3	14' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	3	3
M5-2	14' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	8
M7-2	12' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	6
M8-2	10' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	2
M9-2	8' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	2
M10-2	6' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	2
M11-2	4' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL	2	6
STCa1	16' 0"	1 1/8" x 9 1/2" TJ Rim Board	1	17

Total Lengths

Length	Product
2677' 0"	9 1/2" TJI 210 joist
638' 0"	1 3/4" x 9 1/2" 2.0E Microllam LVL
272' 0"	1 1/8" x 9 1/2" TJ Rim Board

Blocking

PlotID	Length	Product	Plies	Net Qty
EBk1	2' 0"	9 1/2" TJI 210 joist	1	90
EBk1	1' 0"	9 1/2" TJI 210 joist	1	29

Framing Connector Summary

PlotID	Qty	Manuf	Product	Design Method	Face Nails	Top Nails	Member Nails	Skew	Slope	Backer Blks	Filler	Web Stiff
H2	11	Simpson	IT52.06/9.5	Geometry Only	2- 10dx1.5	4- 10dx1.5	2- Strong-Grip	-	-	No	No	No
H3	7	Simpson	HU410	Geometry Only	14- 10dx1.5	-	6- 10d	-	-	No	No	No

WARNING

Joists are unstable until braced laterally

Bracing Includes:

- Blocking
- Hangers
- Sheathing
- Rim Board
- Strut Lines
- 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 unsheathed joists. Stack only over beams or walls.

WARNING NOTES:

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

1. All blocking, hangers, rim boards and rim joists at the end supports of the TJI® joists must be completely installed and properly nailed.
2. 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.
3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area (as 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.
4. Sheathing must be completely attached to each TJI® joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. The flanges must remain straight within 1/2" from true alignment.

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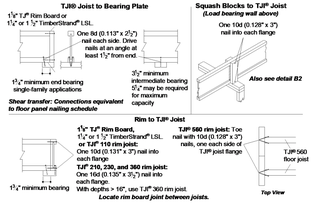
NAILING AT BEARING (FLOOR)



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.

TrusJoist ENGINEERED WOOD PRODUCTS
Weyerhaeuser

Symbol Legend

- User Defined Point Load
- User Defined Line Load
- User Defined Area Load
- BBO Beam By Others
- PBO 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.)

FOREST PRODUCTS SUPPLY CO

PREPARED BY
JOHN KLOZIK
FOREST PRODUCTS SUPPLY
913-441-7000

H C Owen Lumber

Cundiff Residence - Lot #1602 Winterset Ridge

Juan Cisneros

197 SW Winter Road, Lee's Summit, MO 64081

STRUCTURAL DATE:

ARCHITECTURAL DATE:

SCALE
1/4"=1'-0"

PROJECT #: FP 23-0232

2/13/2023

SHEET
1OF 1