Dry Service Conditions

EXTERIOR EWP PRODUCTS:
Engineered Wood Products are designed for dry service conditions only.
Builder is responsible for protecting Engineered Wood Products from wet service conditions.
Build slope for drainage and ensure adequate ventilation in floor container.
Homeowner is resposible for maintaining exterior protection of the Engineered Wood Products.

(#) **STANDARD DETAILS.**
See detail schedule on page 3 of installation guide.

NAILING REQUIREMENTS

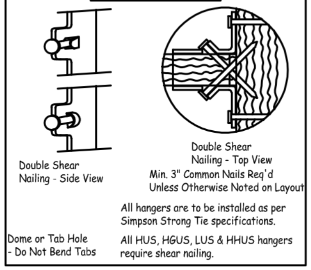
TJI® joists at bearings: Two 8d (2½") box nails (1 each side), 1½" minimum from end.

Blocking panels, rim joist or rim board to bearing plate:
TJI® blocking panels or rim joist: 10d (3") box nails at 6" o.c.
Trus Joist rim board: Toenail with 10d (3") box nails at 6" o.c. or 16d (3½") box nails at 12" o.c.
Shear transfer: Connections equivalent to decking nail schedule.

Rim board, rim joist or closure to TJI® joist:
1¾" width or less: Two 10d (3") box nails, one each at top and bottom flange.
2$\frac{1}{16}$" thru 2½" widths: Two 16d (3½") box nails, one each at top and bottom flange.
3½" width: Toenail joist to rim joist with one 10d (3") box nail each side of joist top flange.

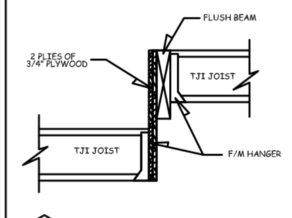
2x4 minimum squash blocks: Two 10d (3") box nails, one each at top and bottom flange.

Double Shear Nailing

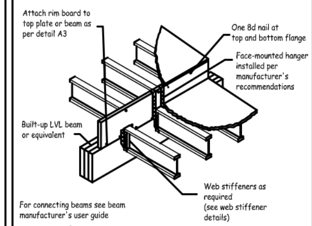


All hangers are to be installed as per Simpson Strong Tie specifications.

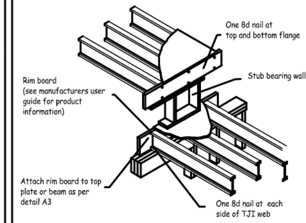
All HUS, HGUS, LUS & HHUS hangers require shear nailing.



DF1 DROPPED FLOOR DETAIL
NOT TO SCALE

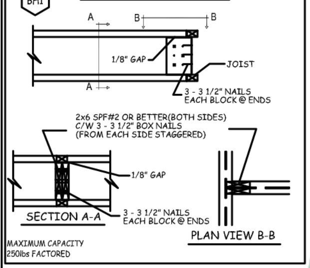


DF2 DROPPED FLOOR DETAIL
NOT TO SCALE



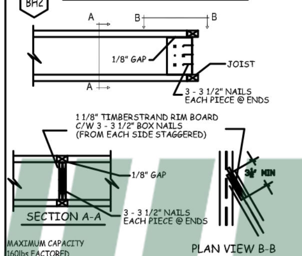
DF3 SPLIT LEVEL BEARING
NOT TO SCALE

BH1 2x6 Block Hangers 90°



MAXIMUM CAPACITY
250lbs FACTORED

BH2 2x6 Block Hangers 30° to 90°



MAXIMUM CAPACITY
160lbs FACTORED

NUMBER OF PLIES REQUIRED FOR 8' POST REACTION ONLY REACTIONS OVER 1000 lbs ARE SHOWN ON LAYOUT

MAXIMUM REACTION (UNBRACED CONDITIONS, TUL)

SPF#3/stud grade	SPF#2/or better	Post Req'd
1844 lbs	2547 lbs	2-2x4
4536 lbs	6717 lbs	3-2x4
7017 lbs	10858 lbs	4-2x4
2898 lbs	3870 lbs	2-2x6
7130 lbs	10545 lbs	3-2x6
11031 lbs	17148 lbs	4-2x6

Maximum reactions assumed to be centered over the column. This table is in accordance with the 2017 Canadian Wood Design Manualand is provided for reference only

NUMBER OF PLIES REQUIRED FOR 9' POST REACTION ONLY REACTIONS OVER 1000 lbs ARE SHOWN ON LAYOUT

MAXIMUM REACTION (UNBRACED CONDITIONS, TUL)

SPF#3/stud grade	SPF#2/or better	Post Req'd
1466lbs	1907 lbs	2-2x4
3992 lbs	5752 lbs	3-2x4
6398 lbs	8744 lbs	4-2x4
2299 lbs	3005 lbs	2-2x6
6285 lbs	9055 lbs	3-2x6
10255 lbs	15735 lbs	4-2x6

Maximum reactions assumed to be centered over the column. This table is in accordance with the 2017 Canadian Wood Design Manualand is provided for reference only

NUMBER OF PLIES REQUIRED FOR 10' POST REACTION ONLY REACTIONS OVER 1000 lbs ARE SHOWN ON LAYOUT

MAXIMUM REACTION (UNBRACED CONDITIONS, TUL)

SPF#3/stud grade	SPF#2/or better	Post Req'd
1160 lbs	1484 lbs	2-2x4
3479 lbs	4886 lbs	3-2x4
5303 lbs	7005 lbs	4-2x4
1822 lbs	2337 lbs	2-2x6
5477 lbs	7700 lbs	3-2x6
9466 lbs	14233 lbs	4-2x6

Maximum reactions assumed to be centered over the column. This table is in accordance with the 2017 Canadian Wood Design Manualand is provided for reference only

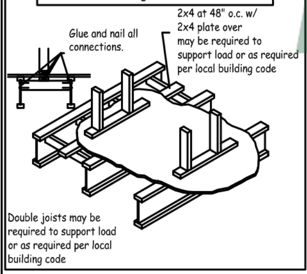
NUMBER OF PLIES REQUIRED FOR 12' POST REACTION ONLY REACTIONS OVER 1000 lbs ARE SHOWN ON LAYOUT

MAXIMUM REACTION (UNBRACED CONDITIONS, TUL)

SPF#2/or better	Post Req'd
942 lbs	2-2x4
3480 lbs	3-2x4
4640 lbs	4-2x4
1482 lbs	2-2x6
5566 lbs	3-2x6
11539 lbs	4-2x6

Maximum reactions assumed to be centered over the column. This table is in accordance with the 2017 Canadian Wood Design Manualand is provided for reference only

Non Load Bearing Wall Parallel To Joist

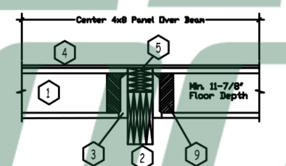


Semi-Flush Beam Design Notes

1. - Floor joists (11-7/8" or 14"). (Deeper joists require engineering review)
2. - Semi-Flush LVL beam. Beam designed as flush beam. Lamination detail as indicated on floor layout. Beam drop 6" maximum (7" maximum for 14" joists).
3. - Face/Top mount hanger.
4. - Subfloor sheathing. Screwed and glued.
5. - SPF No.2 blocking on flat. Nail using 2-rows of 3" nails @ 8" o/c per ply. (Adhesive optional) Blocking to be continuous for the full length of the beam and cut only as required for plumbing and/or mechanical.
6. - SPF No.2 blocking on edge. Nail using 2-rows of 3" nails @ 8" o/c per ply. (Adhesive optional) Blocking to be continuous for the full length of the beam and cut only as required for plumbing and/or mechanical.
7. - CS16 straps attaching the SPF No.2 blocking to the LVL beam @ joist spacing (Full depth of the beam and blocking)
8. - 1" OSB/Plywood filler applied at the center of the blocking.
9. - Web stiffeners both sides as required based on hanger height and/or bearing requirement.

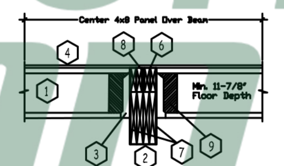
SF-A Semi-Flush Beam Detail - A

Blocking on Flat - Face Mount Hangers



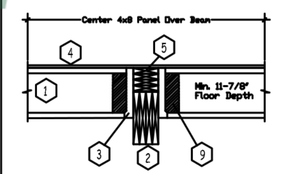
SF-B Semi-Flush Beam Detail - B

Blocking on Edge - Face Mount Hangers



SF-C Semi-Flush Beam Detail - C

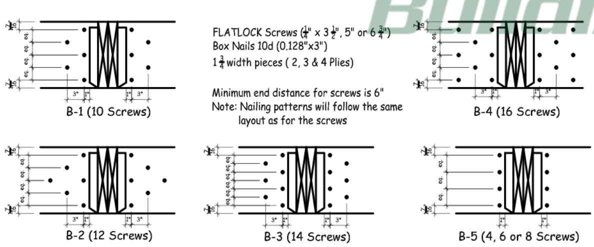
Blocking on Flat - Top Mount Hangers



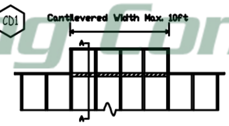
Screw Patterns for Side Loaded Point Loads

FLATLOCK Screws (¼" x 3½", 5" or 6¾")
Box Nails 10d (0.128"x3")
1¾ width pieces (2, 3 & 4 Plies)

Minimum end distance for screws is 6"
Note: Nailing patterns will follow the same layout as for the screws

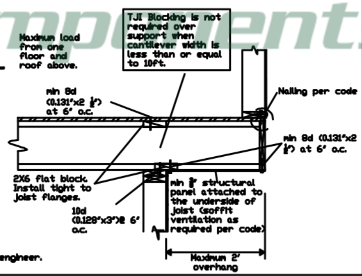


CD1

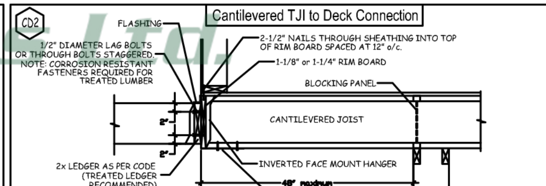


General Notes:

Detail applies to Part 9 residential applications only.
Design of TJI® floor members in iLevel software or literature is required.
Web stiffeners at bearings or cantilever reinforcement may be required depending on the design
Refer to detail W of iLevel Specifier's Guide TJ-4500 for web stiffener nailing instructions
Applies to dry use conditions only
Blocking at the cantilever bearing to be added at the discretion of the building designer or engineer.



CD2 Cantilevered TJI to Deck Connection



LSTA9 OR MSTA9 STRAP TIE EVERY 48" OR SHEATHING FASTENED TO BOTTOM OF TJI JOIST AND CONNECTED TO RIMBOARD WITH 2-1/2" NAILS @ 6" o/c.

Reduction Factor For face Mount Hangers in Rimboard Applications [1]
(apply these factors to hanger capacities found in Wood Const. Connection Cat. [C-CAN12])

Joist Hanger	Face Nails Specified [2]	Face Nails For TJ Rimboard Attachment [3]	1-1/8" TJ Rimboard	1-1/4" Timberstrand LSL
LF	10d	10d clinched	0.75	1.0
IUS	10d	10d clinched	0.75	1.0
MIU, U, HU	16d	16d clinched	0.75	1.0

(1) Maximum factored download permitted by any hanger on SCL rimboard is 5780 lbs.
(2) NAILS: 10d = 0.148" dia. x 3" long, 16d = 0.162" dia. x 3-1/2" long.
(3) Do not use 10d x 1-1/2" face nails.

PB1 Blocking Installation Detail

ABSOLUTELY NO TOENAILING ALLOWED