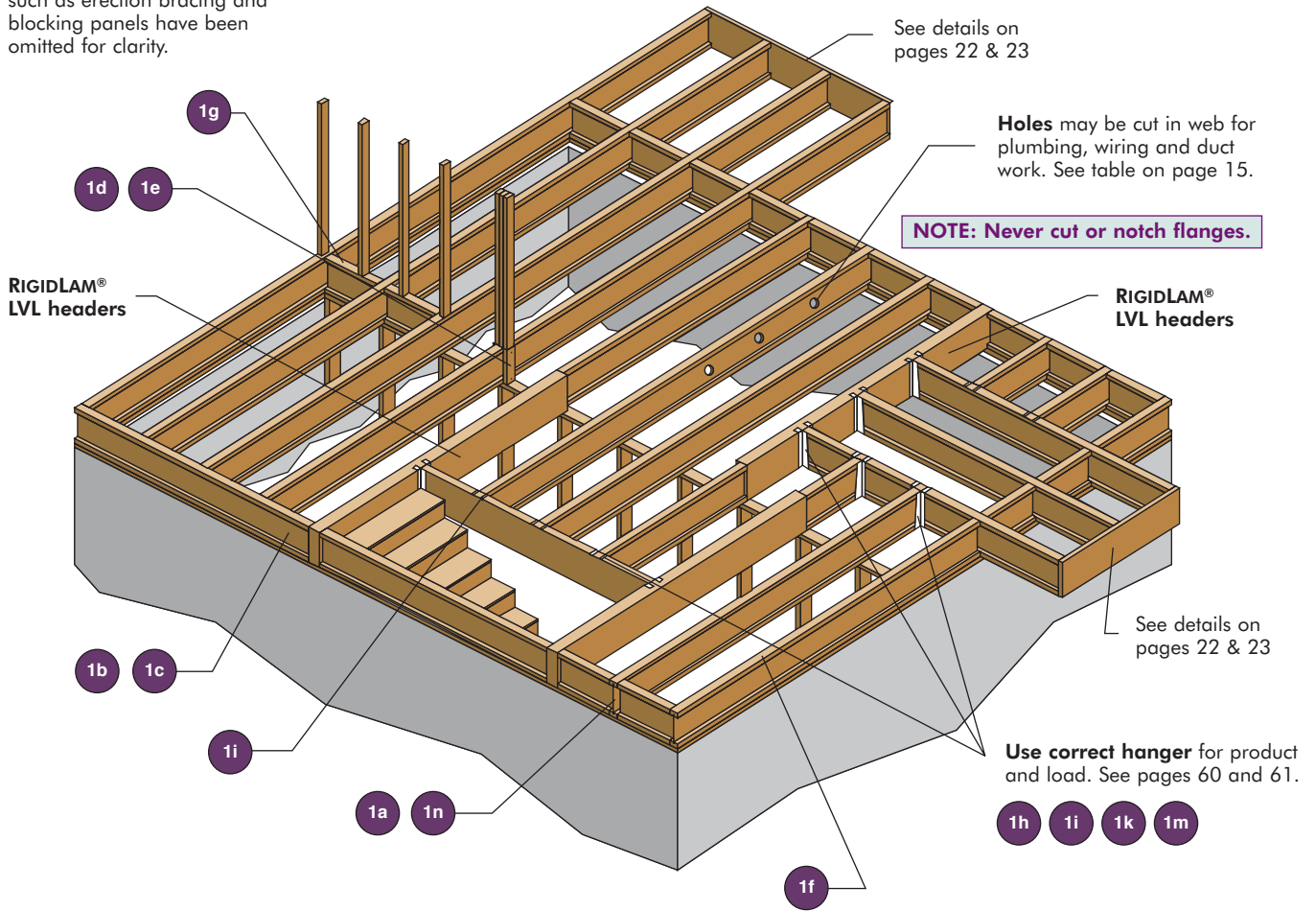


# FRAMING & CONSTRUCTION DETAILS

## TYPICAL RFPI-JOIST FLOOR FRAMING AND CONSTRUCTION DETAILS

Some framing requirements such as erection bracing and blocking panels have been omitted for clarity.



**NOTE:**  
Roseburg does not require mid-span blocking or bridging in RFPI floor or roof applications

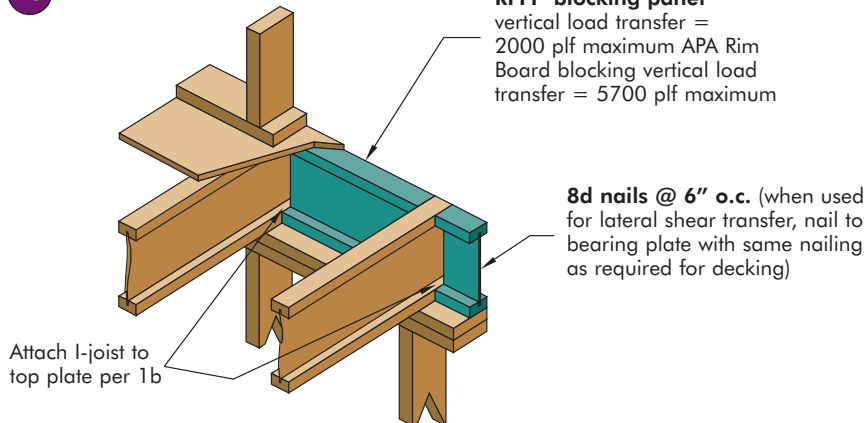
**Note:**  
See page 26 for additional installation recommendations.

# FLOOR DETAILS

## TYPICAL RFPPI-JOIST FLOOR FRAMING AND CONSTRUCTION DETAILS

All nails shown in the details below are assumed to be common nails unless otherwise noted. 10d box nails may be substituted for 8d common shown in details. If nails must be installed into the sides of LVL flanges, spacing shall not be closer than 3 inches o.c. for 8d common nails, and 4 inches o.c. for 10d common nails. Individual components not shown to scale for clarity.

### 1a RFPPI BLOCKING PANELS



## BLOCKING PANELS

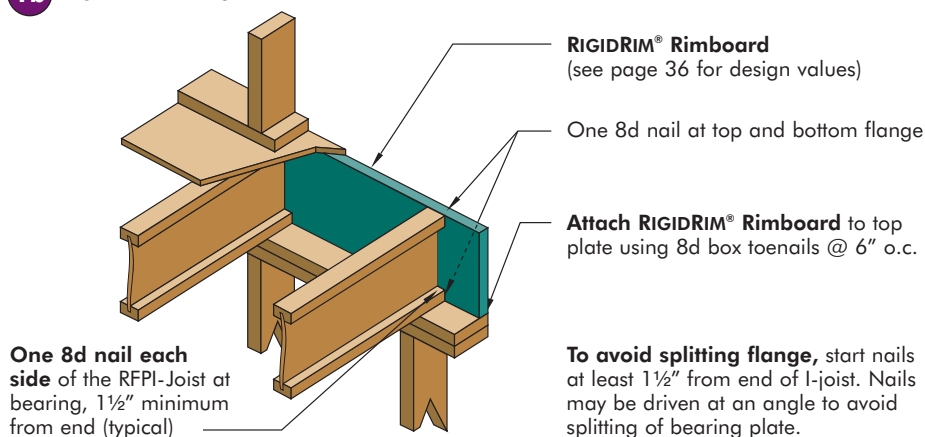
Blocking panels prevent floor joists from overturning and help transfer loads through the floor system into the structure below.

Due to differences in depth and possible shrinkage, common framing lumber set on edge is unacceptable as blocking. I-joist blocking panels must be cut to the proper length to fit between the I-joists, and their depth must match the depth of the I-joists.

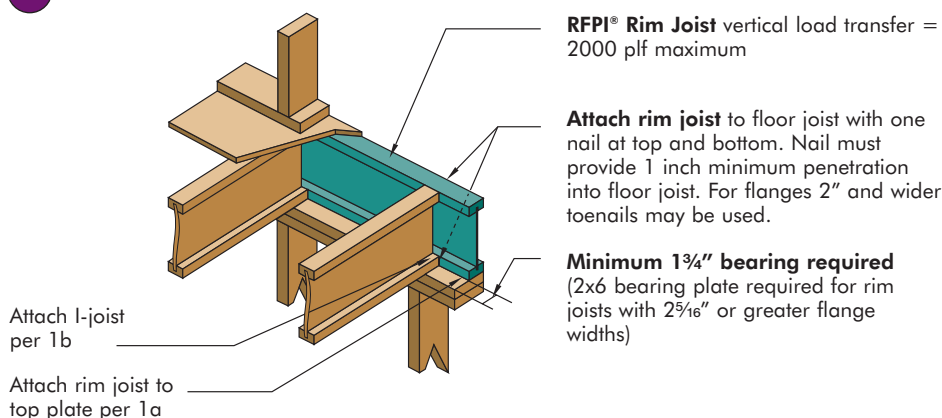
Blocking panels may be used:

1. To stabilize I-joists laterally at supports, as shown in Figures 1a and 1g. Lateral support is required during installation and is necessary to obtain design carrying capacity.
2. To transmit vertical loads up to 2,000 plf per blocking panel in accordance with Figures 1a, 1c, 1f, and 1g.
3. For closures such as that shown in Figures 1a and 1e.
4. To transmit lateral forces to shear walls. Shear transfer nailing into the flanges must be specified by the building designer.
5. To provide lateral stability to walls.

### 1b RIGIDRIM® RIMBOARD



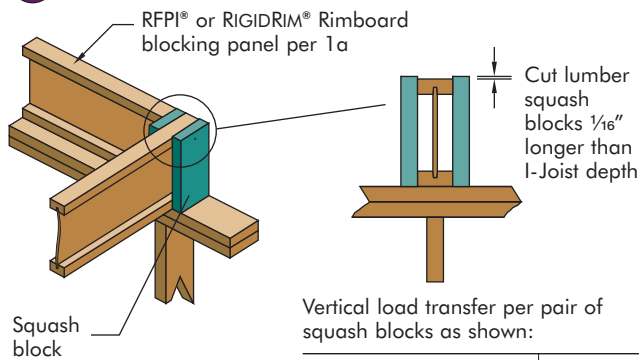
### 1c RFPPI® RIM JOIST



#### Note:

See page 26 for additional installation recommendations.

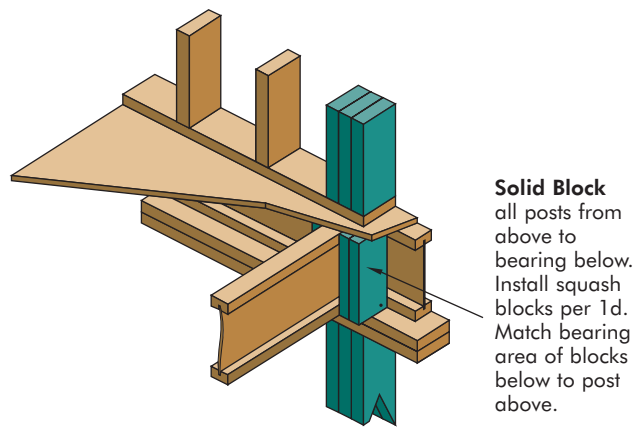
### 1d SQUASH BLOCK DETAIL



Provide lateral bracing per 1a, 1b, or 1c

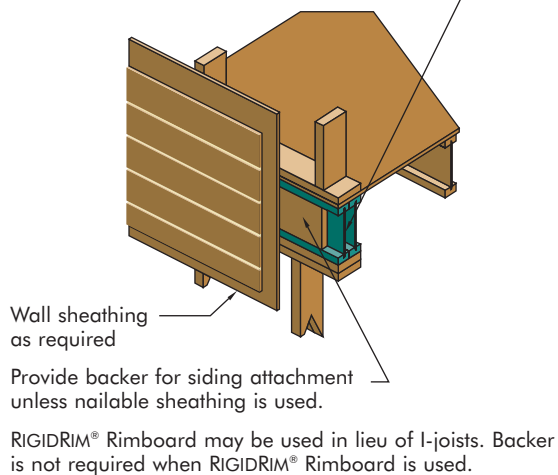
| Pair of Squash Blocks | (lb) |
|-----------------------|------|
| 2 x 4                 | 4000 |
| 1½" RIGIDRIM RimBoard | 3500 |
| 1¼" RIGIDRIM RimBoard | 5900 |

### 1e SQUASH BLOCK DETAIL



### 1f RIM JOIST AT PARALLEL WALL

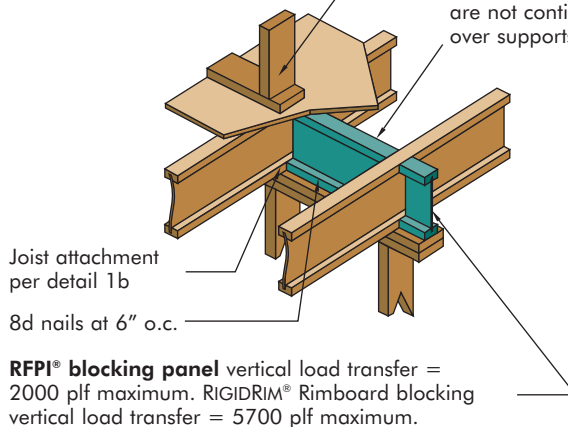
Use single I-joist for loads up to 2000 plf, double I-joists for loads up to 4000 plf (filler block not required)



### 1g RFPI BLOCKING PANELS WITH BEARING WALL ABOVE

Load bearing wall above shall align vertically with the wall below. Other conditions such as offset walls are not covered by this detail.

Blocking required over all interior supports under load-bearing walls or when floor joists are not continuous over supports.



### 1h BACKER BLOCK DETAILS

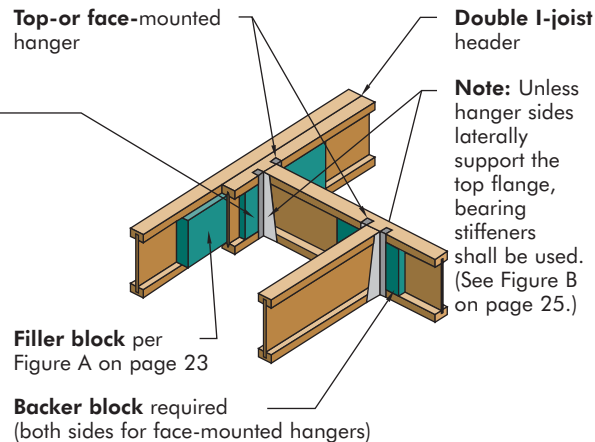
**Backer block (use if hanger load exceeds 250 lbs.)** Before installing a backer block to a double I-joist, drive 3 additional 10d nails through the webs and filler block where the backer block will fit and clinch. Install backer tight to top flange. Use twelve 10d nails, clinched when possible. Maximum capacity for hanger for this detail = 1280 lb.

**BACKER BLOCKS** (Blocks must be long enough to permit required nailing without splitting)

| Flange Width | Material Thickness Required* | Minimum Depth** |
|--------------|------------------------------|-----------------|
| 1½"          | 19/32"                       | 5½"             |
| 1¾"          | 23/32"                       | 5½"             |
| 25/16"       | 1"                           | 7¼"             |
| 3½"          | 1½"                          | 7¼"             |

\* Minimum grade for backer block material shall be Utility grade SPF (south) or better for solid sawn lumber and Rated Sheathing grade for wood structural panels.

\*\* For face-mount hangers use net joist depth minus 3¼" for joists with 1½" thick flanges.



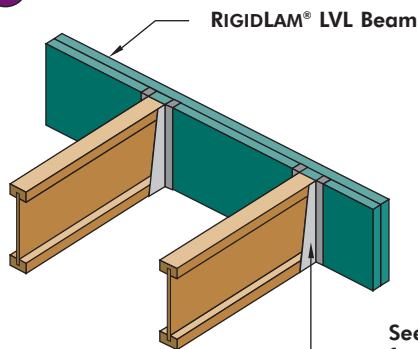
Filler block per Figure A on page 23

Backer block required (both sides for face-mounted hangers)

For hangers capacity see hanger manufacturer's recommendations. Verify double I-joist capacity to support concentrated loads.

**Note:** See page 26 for additional installation recommendations.

**1i HANGER TO LVL BEAM DETAIL**

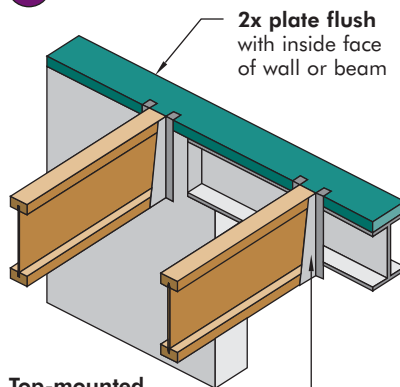


**Top- or face-mounted hanger** installed per manufacturer's recommendations

See page 47 for nailing schedules for multiple LVL beams.

**Note:** Unless hanger sides laterally support the top flange, web stiffeners shall be used. (See Figure B on page 25)

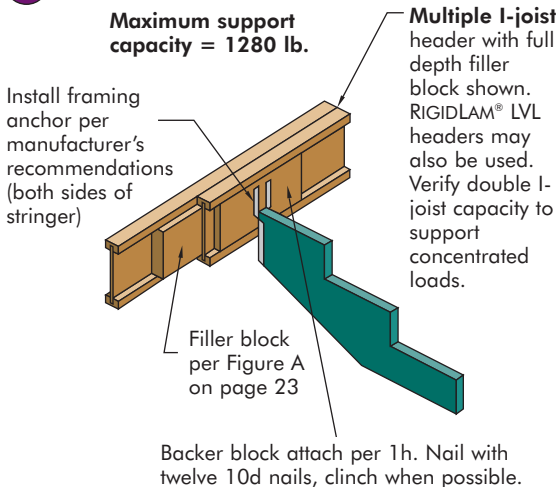
**1k HANGER TO 2X PLATE DETAIL**



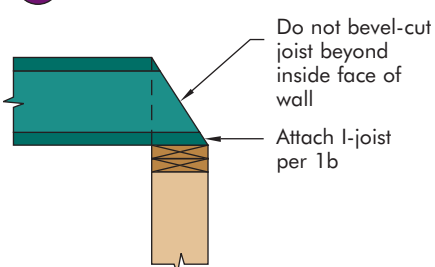
**Top-mounted hanger** installed per manufacturer's recommendations

**Note:** Unless hanger sides laterally support the top flange, web stiffeners shall be used. (See Figure B on page 25)

**1m STRINGER TO JOIST DETAIL**



**1n BEVEL CUTS ON I-JOIST**



**Note:** Blocking required at bearing for lateral support, not shown for clarity.

**HEADER DETAIL**

Backer block required for face-mount hangers (both sides of I-joist) & when top mount hanger load exceeds 250 lbs.

Install backer block tight to the top flange.

Attach backer block to web with 16 - 10d common nails, clinched. See chart for maximum capacity for this detail.

Backer block must be long enough to permit required nailing without splitting (min. length of 12" recommended)

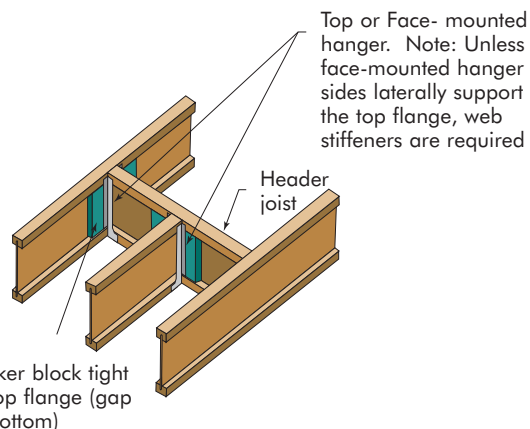
See charts for backer block thickness & depth.

**GENERAL NOTES:**

For hanger capacity see hanger manufacture recommendations.

Verify I-joist capacity to support concentrated load from "header joist" in addition to all other loads.

If a double I-joist is required to support "header joist" load, refer to RFP Design Guide for double I-joist connection guidelines.



| I-Joist Flange Width | Backer block Material Thickness Required <sup>(a) (b)</sup> | Max. load capacity using 16 - 10d com. nails |
|----------------------|---|--|
| 1-1/2"               | 19/32"  | 850 lbs.                                     |
| 1-3/4"               | 23/32"  | 980 lbs.                                     |
| 2-5/16"              | 1"  | 1250 lbs.                                    |
| 3-1/2"               | 1-1/2"  | 1250 lbs.                                    |

| Backer Block Depth                            |        |         |         |         |
|---|--------|---------|---------|---------|
| Joist Depth                                   | 9-1/2" | 11-7/8" | 14"     | 16"     |
| Top Mount Hangers - Min. Backer Block Depth   | 5-1/2" | 5-1/2"  | 7-1/4"  | 7-1/4"  |
| Face Mount Hangers - Req'd Backer Block Depth | 6-1/4" | 8-5/8"  | 10-3/4" | 12-3/4" |

(a) Minimum grade for backer material shall be Utility grade SPF or better for solid sawn lumber and Rated Sheathing grade for wood structural panels.  
 (b) Glue 2-ply backer blocks together with construction grade adhesive (ASTM D-3498)