

I-JOIST CONNECTION WITH TIE STRAP

10e

Blocking panel or x-bridging. (Validate use of x-bridging with local building code.)

Tie strap nailed at a minimum of 3" spacing or in accordance with manufacturer's recommendations

Strap nails: Leave 2-3/8" minimum end distance

Double-beveled bearing plate

I-JOIST OVERHANG FOR FASCIA SUPPORT WITH BIRDSMOUTH CUT

10k

Blocking panel or x-bridging. (Validate use of x-bridging with local building code.)

Birdsmouth cut at bearing

Web stiffener required each side

Attach joist to top plate per detail 10h

2x block for fascia support

LUMBER OVERHANG WITH BEVELED PLATE

10r

8d nails at 6" o.c.

2x filler

2x4 min. beveled bearing block cut to fit

2x4 overhang attached to web of I-joist with 1 row of 8d nails at 8" o.c. clinched

Attach I-joist per detail 10a

NOTE: Blocking panel or x-bridging not shown for clarity.

NOTE: Additional connection may be required for wind uplift.

BACKER BLOCK

1h

Double I-joist header

Top- or face-mount hanger

Filler block per detail 1p

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

Note: Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.

Before installing a backer block to a double I-joist, drive three additional 10d nails through the webs and filler block where the backer block will fit. Clinch. Install backer tight to top flange. Use twelve 10d nails, clinched when possible. Maximum capacity for hanger for this detail = 1,280 lbs.

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

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

Flange Width	Material Thickness Required*	Minimum Depth**
2-1/2"	1"	5-1/2"
3-1/2"	1-1/2"	7-1/4"

* Minimum grade for backer block material shall be Utility grade S-P-F (south) or better for solid sawn lumber and Rated Sheathing grade for wood structural panels.
** For face-mount hangers use net joist depth minus 3-1/4" for joists with 1-1/2" thick flanges. For 2" thick flanges use net depth minus 4-1/4".

ROOF OPENING TOP-MOUNT HANGERS

10f

Top-mount hanger per manufacturer's recommendations

Bearing stiffeners required when hanger does not support I-joist top flange

Filler blocking per detail 1p

Backer block per detail 1h. If top-mount hanger is fully supported by top flange, backer block only required on hanger side. If face nailing is required, then backer block (filler block if multiple I-joist) is required on both sides. Nail with twelve 10d nails.

Application limited to 4:12 slope or less

BLOCKING PANEL AT BEVELED PLATE

10m

Blocking panel attached per detail 10a. See detail 10v for vent holes.

Overhang

Attach joist to beveled plate per detail 10a

Beveled plate

NOTE: Additional connection may be required for wind uplift.

I-JOIST OVERHANG FOR FASCIA SUPPORT WITH BIRDSMOUTH CUT

10s

Birdsmouth cut at bearing

Attach I-joist per detail 10h

Bearing stiffener required each side

Blocking panel attached per detail 10a, or x-bridging. (Validate use of x-bridging with local building code.) See detail 10v for vent holes.

8d nails at 6" o.c. clinched

2x block for fascia support

NOTE: Additional connection may be required for wind uplift.

FILLER BLOCK

1p

Filler block

Offset nails from opposite face by 6"

1/8" gap between top flange and filler block

FILLER BLOCK REQUIREMENTS FOR DOUBLE I-JOIST CONSTRUCTION

Flange Size	Net Depth	Filler Block Size
2-1/2" x 1-1/2"	9-1/2" 11-7/8" 14" 16"	2-1/8" x 6" 2-1/8" x 8" 2-1/8" x 10" 2-1/8" x 12"
3-1/2" x 1-1/2"	9-1/2" 11-7/8" 14" 16"	3" x 6" 3" x 8" 3" x 10" 3" x 12"
3-1/2" x 2"	11-7/8" 14" 16"	3" x 7" 3" x 9" 3" x 11"

NOTES:

- Support back of I-joist web during nailing to prevent damage to web/flange connection.
- Leave a 1/8-inch gap between top of filler block and bottom of top I-joist flange.
- Filler block is required between joists for full length of span.
- Nail joists together with two rows of 10d nails at 12 inches o.c. (clinched when possible) on each side of the double I-joist. Total of four nails per foot required. If nails can be clinched, only two nails per foot are required.
- The maximum load that may be applied to one side of the double joist using this detail is 620 lb/ft. Verify double I-joist capacity.

ROOF OPENING FACE-MOUNT HANGERS

10g

Backer block on both sides of web (or backer block and filler block, if multiple I-joists), nail with twelve 10d nails, clinch when possible

Header may be I-joist, Nordic Lam, or LVL

Filler blocking per detail 1p

Bearing stiffeners required when hanger does not support I-joist top flange

Face-mount hanger per hanger manufacturer's recommendations

I-JOIST WITH BEVEL-CUT END

10n

Do not bevel-cut joist beyond inside face of wall

Attach I-joist per detail 10a

NOTE: Blocking panel or x-bridging required at bearing for lateral support, not shown for clarity.

NOTE: Additional connection may be required for wind uplift.

I-JOIST OVERHANG FOR FASCIA SUPPORT WITH BEVELED PLATE

10t

Blocking panel attached per detail 10a, or x-bridging. (Validate use of x-bridging with local building code.) See detail 10v for vent holes.

Attach I-joist per detail 10a

Beveled plate, attach per detail 10a

2x block for fascia support (cut to fit)

Attach per detail 10s

NOTE: Additional connection may be required for wind uplift.

BIRDSMOUTH CUT & BEVEL CUT BEARING STIFFENER

10h (Permitted on low end of I-joist only)

Bearing stiffeners required each side of I-joist. Bevel-cut bearing stiffener to match roof slope. Install tight to top of bottom flange.

1/8" gap at top

One 10d box nail, face nail at each side of bearing (face nail where flange is 7/8" to 1" thick)

Four 8d nails (two each side) clinched when possible

Birdsmouth cut shall bear fully and not overhang the inside face of plate

NOTE: Additional connection may be required for wind uplift.

OUTRIGGER

10p

Do not notch I-joist flange

Notch 2x outrigger around I-joist flange. Nail through web into outrigger.

Maximum overhang same as rafter spacing (not to exceed 2'-0")

Blocking between outriggers

End wall

Toe-nail blocking to end wall for roof sheathing $\le 5/8''$. Match nail type and spacing with roof sheathing edge nailing ("boundary nailing" for engineered diaphragm applications). Use minimum 8d nails.

NOTE: Additional connection may be required for wind uplift.

BIRDSMOUTH CUT

10u (Permitted at low end of I-joist only)

Blocking panel attached per detail 10a. See detail 10v for vent holes.

Beveled web stiffeners required on both sides

2x4 block for soffit support

NOTE: Corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material shall cover the ventilation holes per code.

BIRDSMOUTH CUT WITH OVERHANG

10j (Permitted on low end of I-joist only)

Blocking panel or x-bridging. (Validate use of x-bridging with local building code.) See detail 10v for vent holes.

Bearing stiffener required each side (attach per detail 10h)

Attach joist to top plate per detail 10h

Birdsmouth cut at bearing

Attach blocking per detail 10a

NOTE: Outside corner of blocking panel may be trimmed if it interferes with roof sheathing. In such cases, position blocking panel on top plate to minimize trimming and still allow required nailing into top plate.

I-JOIST OVERHANG WITH BEVELED PLATE

10q

Blocking panel attached per detail 10a. (Validate use of x-bridging with local building code.) See detail 10v for vent holes.

Attach joist to beveled plate per detail 10a

NOTE: Additional connection may be required for wind uplift.

VENTILATION HOLES IN BLOCKING PANELS

10v

Rim board blocking

I-joist blocking

Allowable zone for ventilation holes (round holes preferred)

NOTES:

- Corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material shall cover the ventilation holes per code.
- The maximum allowable round hole diameter for a lateral restraint-only blocking panel shall be 2/3 of the lesser dimension of blocking panel depth or length.
- Whenever possible, field-cut holes should be centered in the blocking panel both vertically and horizontally.

PRODUCT WARRANTY

Chantiers Chibougamau guarantees that, in accordance with our specifications, Nordic products are free from manufacturing defects in material and workmanship.

Furthermore, Chantiers Chibougamau warrants that our products, when utilized in accordance with our handling and installation instructions, will meet or exceed our specifications for the lifetime of the structure.