

Never stack building Once sheathed, do no trated loads from

Do not walk on I-joists until fully fas

and braced, or serious

injuries can result.

I-joists are unstable until completely installed with panels fully fastened to the

**SAFETY AND CONSTRUCTION PRECAUTIONS** 

Avoid Accidents by Following these Important Guidelines

 Brace and nail each I-joist as it is installed, using hangers, blocking panels, rim board, and/or cross-bridging at joist ends. 2. When the building is completed, the floor sheathing will provide lateral support for the top flanges of the I-joists. Until this sheathing is applied, temporary bracing, often called struts, or temporary sheathing must be applied to prevent I-joist rollover or buckling.

• Temporary bracing or struts must be 1x4 inch minimum, at least 8 feet long and spaced no more than 8 feet on center, and must be secured with a minimum of two 8d nails fastened to the top surface of each I-joist. Nail the bracing to a lateral restraint at the end of each bay. Lap ends of adjoining bracing over at least two I-joists.

 Or, sheathing (temporary or permanent) can be nailed to the top flange of the first 4 feet of I-joists at the end of the bay. 3. For cantilevered I-joists, brace top and bottom flanges, and brace ends with closure panels, rim board, or cross-bridging.

4. Install and nail permanent sheathing to each I-joist before placing loads on the floor system. Then, stack building materials over beams or walls only. 5. Never install a damaged I-joist.

Improper storage or installation, failure to follow applicable building codes, failure to follow span ratings for Nordic I-joists, failure to use allowable hole sizes and locations, or failure to use web stiffeners when required can result in serious accidents. Follow these installation guidelines corefully.

# **ALLOWABLE SPANS**

. Allowable spans are based on uniform loads. For applications with non-uniform loads, an engineering analysis may be required using the design properties found in the Nordic Joist Design/Construction Guide.

2. The allowable spans in the table indicate the allowable clear span for various joist spacings under typical residential uniform floor loads (40 psf live load and 10 psf dead load)

for glued-nailed systems. 3. The live load deflection is limited to L/480.

4. Minimum bearing length shall be 1-3/4 inches for the end bearings, and 3-1/2 inches for the intermediate bearings. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

6. Spans are based on a composite floor with glued-nailed Spans are based on a composite thoor with glued-nailed sheathing meeting the requirements for APA Roted Sheathing or APA Roted STURD-I-FLOOR conforming to PRP-108, PS 1, or PS 2 with a minimum thickness of 19/32 inch (40/20 or 20 oc) for a joist spacing of 19.2 inches or less, or 23/32 inch (48/24 or 24 oc) for a joist spacing of 24 inches. Adhesive shall meet APA Specification AFG-01 or ASTM D3498.

7. Bearing stiffeners are **not** required when I-joists are used with the spans and spacing given in this table, except as required for hangers.

8. SI units conversion: 1 inch = 25.4 mm1 foot = 0.305 m

■ A **bearing stiffener** is required in all engineered applications with design end reactions greater than 1,550 lbs, with the exception of NI-90x, which requires bearing

1,885 lbs. The gap between the stiffener and the flange is at the top.

■ A bearing stiffener is required when the I-joist is supported in a hanger and the sides of the hanger do not extend up to, and support, the top flange. The gap between the stiffener and flange is at the top.

**WEB STIFFENERS** 

RECOMMENDATIONS:

### 9-1/2" 16'-1" 17'-2" 18'-2" 19'-7" 19'-11" 21'-8" 24'-2" 24'-8" 26'-8" 27'-1" 28'-1" 19'-10" 21'-0" 22'-6" 24'-3" 24'-8" 25'-6" 17'-3" 19'-2" 19'-6" 21'-0" 21'-4" 14'-2" 17'-1" 19'-8" 21'-3" 21'-7" 18'-3" 20'-3" 18'-11' 20'-8" 22'-2" 22'-7" 23'-5" 26'-8" 28'-0" 30'-2" 30'-10" 32'-0" 23'-1" 25'-7" 27'-6" 28'-0" 29'-1" NI-40x 22'-11" 23'-6" 21'-2" 22'-2" 23'-9" 24'-3" 25'-2" 18'-10" 21'-7" NI-60 NI-70 NI-80 NI-90x 28'-4" 30'-5" 31'-1" 24'-7" 26'-4" 26'-10" 22'-10' 24'-6" 25'-0" 26'-0'

ICC-ES EVALUATION REPORT ESR-1742

32'-3"

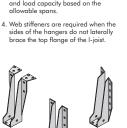
35'-6"

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

(ln)

Attachl-joist per detail 1b

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



Face Mount

gers should be selected based

**I-JOIST HANGERS** 

to support I-joists. 2. All nailing must meet the hanger

1. Hangers shown illustrate the three

nonly used metal hanger

### **STORAGE AND HANDLING GUIDELINES** 1. Bundle wrap can be slippery when wet. Avoid walking on wrapped 2. Store I-joists vertically, level, and in bundles. 3. Always stack and handle I-joists in the upright position only. -4. Do not store I-joists in direct contact with the ground. 6. Bundled units should be kept intact until time of installation. 7. When lifting I-joists with a crane on the job site, take a few simple precautions to prevent damage to the I-joists and injury to your work crew.

■ Pick I-joists in bundles as shipped by the supplier. Orient the bundles so that the webs of the I-joists are vertical.

■ Pick the bundles at the 5th points, using a spreader bar if necessary.

8. Do not handle I-joists in a horizontal orientation.

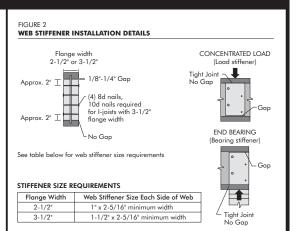
9. NEVER USE OR FIELD REPAIR A DAMAGED I-JOIST.

A load stiffener is required at locations where a concentrated load greater than 1,500 lbs is applied to the top flange between supports, or in the case of a cantilever, anywhere between the cantilever tip and the support. These values are for normal duration of load, and may be adjusted for other load durations as permitted by the code. The gap between the stiffener and the flange is at the bottom.

Wall sheathing,

(1k)

SI units conversion: 1 inch = 25.4 mm



(1g)

ALLOWABLE SPANS FOR NORDIC I-JOISTS

# **NORDIC I-JOIST SERIES** 2.1/2 S-P-F No.2 1950f MSR 2100f MSR 1950f MSR 2100f MSR NPG Lumbe 23 pieces 23 pieces per unit per unit 23 pieces per unit

Chantiers Chibougamau Ltd. harvests its own trees, which enables Nordic products to adhere to strict quality control procedures throughout the manufacturing process. Every phase of the operation, from forest to the finished product, reflects our commitment to quality.

Double I-joist header -

Flange Width

2-1/2"

3-1/2"

Nordic Engineered Wood I-joists use only finger-jointed black spruce lumber

Backer block (use if hanger load exceeds 250 lbs)
Before installing a backer block to a double 1-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 thelve 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

Material Thickness Required\*

1-1/2"

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.

(both sides for face-mour

Minimum Depth\*\*

5-1/2"

7-1/4"

hangers)

### **INSTALLING NORDIC I-JOISTS**

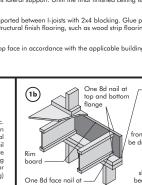
I-joist webs.

(1a)

top plate per detail 1b

NI Joists

- 1. Before laying out floor system components, verify that I-joist flange widths match hanger widths. If not, contact your
- 2. Except for cutting to length, I-joist flanges should **never** be cut, drilled, or notched. 3. Install I-joists so that top and bottom flanges are within 1/2 inch of true vertical alignment.
- 4. I-joists must be anchored securely to supports before floor sheathing is attached, and supports for multiple-span joists must be level.
- 5. Minimum bearing lengths: 1-3/4 inches for end bearings and 3-1/2 inches for intermediate bearings. 6. When using hangers, seat I-joists firmly in hanger bottoms to minimize settlement
- 7. Leave a 1/16-inch gap between the I-joist end and a header.
- 8. Concentrated loads greater than those that can normally be expected in residential construction should only be applied to the top surface of the top flange. Normal concentrated loads include track lighting fixtures, audio equipment and security cameras. Never suspend unusual or heavy loads from the I-joist's bottom flange. Whenever possible, suspend all concentrated loads from the top of the I-joist. Or, attach the load to blocking that has been securely fastened to the
- 9. Never install I-joists where they will be permanently exposed to weather, or where they will remain in direct contact with
- 10. Restrain ends of floor joists to prevent rollover. Use rim board, rim joists or I-joist blocking panels
- 11. For I-joists installed over and beneath bearing walls, use full depth blocking panels, rim board, or squash blocks (cripple members) to transfer gravity loads through the floor system to the wall or foundation below.
- 13. Provide permanent lateral support of the bottom flange of all I-joists at interior supports of multiple-span joists. Similarly, support the bottom flange of all cantilevered I-joists at the end support next to the cantilever extension. In the completed structure, the gypsum wallboard ceiling provides this lateral support. Until the final finished ceiling is applied, temporary bracing or struts must be used.
- 14. If square-edge panels are used, edges must be supported between I-joists with 2x4 blocking. Glue panels to blocking to minimize squeaks. Blocking is not required under structural finish flooring, such as wood strip flooring, or if a separate underlayment layer is installed.
- 15. Nail spacing: Space nails installed to the flange's top face in accordance with the applicable building code requirements or approved building plans.



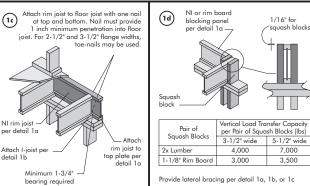
To avoid splitting flange, start nails at least 1-1/2' n end of I-joist. Nails may driven at an angle to avoid splitting of bearing plate.

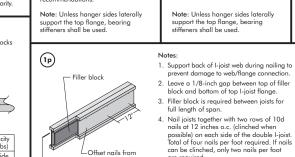
Uniform Vertical Load Transfer Capacity\* (plf) 1-1/8" Rim Board 4,850 \*The uniform vertical load capacity is limited to a rim board depth of 16 inches or less and is based on the normal (10-yr) load duration. It shall not be used in the design of a bending member, such as joist, header, o rafter. For concentrated vertical load transfer capacity, see detail 1d.

### Some framing requirements such as erection brac and blocking panels have been omitted for clarity Figures 3, 4 or 5 duct work. See Tables 1, 2 and Figure 7. NOTE: Never cut or or LVL or LVL

TYPICAL NORDIC I-JOIST FLOOR FRAMING AND CONSTRUCTION DETAILS

1b (1c) n current ICC-ES reports (1j). (1f) -(1h) (1j) (1k) (1m) (1a) (1n) All nails shown in the above details are assumed to be common nails unless otherwise noted. 10d box nails  $(0.128 \times 3 \text{ in.})$  may be substituted for 8d common nails  $(0.131 \times 2-1/2 \text{ in.})$  shown in details. Framing lumbe assumed to be Utility grade S-P-F (south) or stronger species. Individual components not shown to scale for clarity.





**WEB HOLES** 

Top- or face-mount hanger installed per manufacturer's

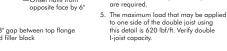
Transfer load from above to bearing below. Install squas

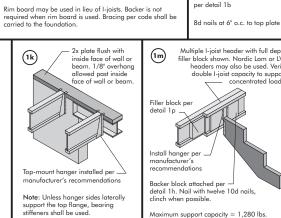
blocks per detail 1d. Match

bearing area of blocks below to post above.

(i)

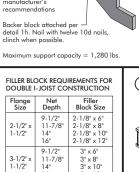
- Nordic Lam or LVL



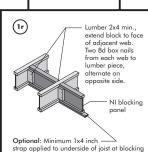


Use single I-joist for loads up to 2,000 plf, double I-joists for loads up to 4,000 plf (filler block not required). Attach I-joist to

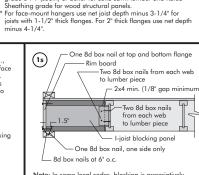
top plate using 8c nails at 6" o.c.



3" x 7" 3" x 9" 3" x 11"



line or 1/2 inch minimum gypsum ceiling attached to underside of joists.

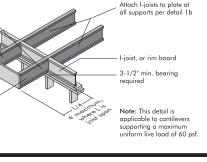


Note: In some local codes, blocking is prescriptively required in the first joist space (or first and second joist space) next to the starter joist. Where required, see local code requirements for spacing of the blocking.

# **CANTILEVER DETAILS FOR BALCONIES (NO WALL LOAD)** (3a) I-JOIST CANTILEVER DETAIL FOR BALCONIES (No Wall Load)

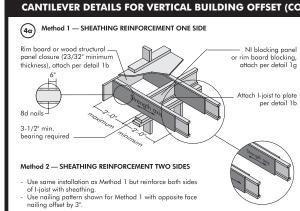
Uniform Vertical Load Transfer Capacity\* (plf) 2,000

Cantilever extension supporting uniform floor loads only structural panel CAUTION: Cantilevers ormed this way must be carefully detailed o prevent moisture ntrusion into the structu and potential decay of untreated I-joist extension

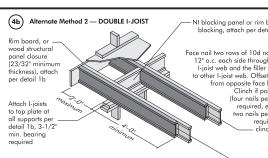


### (3b) LUMBER CANTILEVER DETAIL FOR BALCONIES (No Wall Load Full depth backer block with 1/8" gap between block and top flange of I-joist. — See detail 1h. Nail with 2 rows of 10d nails at 6" o.c. and clinch. plate at all supports per detail 1b 2x8 min. Nail to backer block and joist with 2 rows of -10d nails at 6" o.c. and clinch. (Cantilever nails may be used to attach backer block if length of nail is sufficient tilever extension supporting uniform — loads only Lumber or wood structural panel closure -3-1/2" min bearing required Note: This detail is applicable to cantilevers supporting a max uniform live load of 60 psf.

## CANTILEVER DETAILS FOR VERTICAL BUILDING OFFSET (CONCENTRATED WALL LOAD)



Note: APA RATED SHEATHING 48/24 (minimum thickness 23/32") required on sides of joist. Depth shall match the full height of the joist. Nail with 8d nails at 6" o.c., top and bottom flange. Install with face grain horizontal. Attach I-joist to plate at all supports per detail 1b. Verify reinforced I-joist capacity.



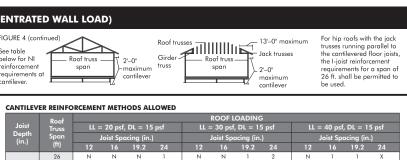
Provide full depth blocking between

Notes:

- Verify girder joist capacity if the back span

exceeds the joist spacing. Attach double I-joist per detail 1p, if required.

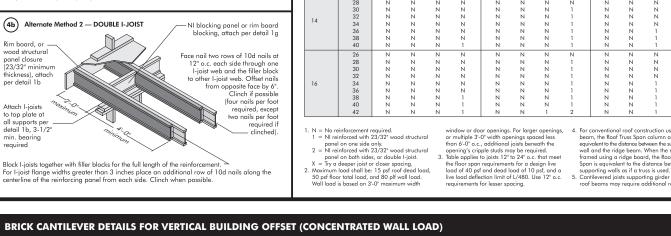
joists over support (not shown)



	. Roof		ROOF LOADING											
Joi	i iruss	LL =	LL = 20 psf, DL = 15 psf				LL = 30 psf, DL = 15 psf				LL = 40 psf, DL = 15 psf			
Depth (in.)	, spuii	Joist Spacing (in.)				Joist Spacing (in.)				Joist Spacing (in.)				
(	·) (ft)	12	16	19.2	24	12	16	19.2	24	12	16	19.2	24	
	26	N	Ν	N	1	N	N	1	2	N	1	1	Х	
	28	N	N	1	1	N	N	1	2	N	1	2	Х	
9-1/2	, 30	N	Ν	1	1	N	1	1	2	N	1	2	Х	
/-1/2	32	N	N	1	2	N	1	1	2	N	1	2	Х	
	34	N	N	1	2	N	1	2	X	N	1	2	Х	
	36	N	N	1	2	N	1	2	Х	N	2	Х	Х	
	26	N	N	N	1	N	N	1	2	N	1	1	2	
	28	N	N	N	1	N	N	1	2	N	1	1	2	
	30	N	N	1	1	N	N	1	2	N	1	2	Х	
11-7,		N	N	1	1	N	1	1	2	N	1	2	X	
	34	N	N	1	2	N	1	1	2	N	1	2	Х	
	36	N	N	1	2	N	1	2	Х	N	1	2	Х	
	38	N	N	1	2	N	1	2	Х	N	1	2	Х	
	26	N	N	N	N	N	N	N	N	N	Ν	Ν	1	
	28	N	N	N	N	N	N	N	N	N	N	N	1	
	30	N	N	N	N	N	N	N	1	N	N	N	1	
14	32	N	N	N	N	N	N	N	1	N	Ν	Ν	1	
14	34	N	N	N	N	N	N	N	1	N	Ν	Ν	2	
	36	N	N	N	N	N	N	N	1	N	N	1	2	
	38	N	N	N	N	N	N	N	1	N	N	1	2	
	40	N	N	N	1	N	N	N	1	N	N	1	2	
	26	N	N	N	N	N	N	N	N	N	N	N	1	
	28	N	N	N	N	N	N	N	1	N	N	N	1	
	30	N	Ν	Ν	N	N	N	N	1	N	N	N	1	
	32	N	N	N	N	N	N	Ν	1	N	N	N	1	
16	34	N	N	N	N	N	N	Ν	1	N	N	1	2	
	36	N	N	N	N	N	N	Ν	1	N	N	1	2	
	38	N	N	N	1	N	N	Ν	1	N	N	1	2	
	40	N	N	N	1	N	N	N	1	N	N	1	2	
	42	N	N	N	1	N	N	1	2	N	N	1	2	

Roof trusses

Girder Roof truss Topical Jack trusses



IGURE 5 (continued

9-1/2

11-7/8

## RULES FOR CUTTING HOLES AND DUCT CHASE OPENINGS:

full length of span.

prevent damage to web/flange connectio

Leave a 1/8-inch gap between top of filler block and bottom of top I-joist flange.

- 2. I-joist top and bottom flanges must NEVER be cut, notched, or otherwise modified. . Whenever possible, field-cut holes should be centered on the middle of the web. . The maximum size hole or the maximum depth of a duct chase opening that can be cut into an I-joist web shall equal the clear distance between the flanges of the I-joist minus 1/4 inch. A minimum of 1/8 inch should always be maintained between the top or bottom of the hole or opening and the adjacent I-joist flange.
- The sides of square holes or longest sides of rectangular holes should not exceed 3/4 of the diameter of the maximum round hole permitted at that location.
- 3/4 or the diameter of the maximum round note permitted at that location.

  Where more than one hole is necessary, the distance between adjacent hole edges shall exceed twice the diameter of the largest round hole or twice the size of the largest square hole (or twice the length of the longest side of the longest rectangular hole or duct chase opening) and each hole and duct chase opening shall be sized and located in compliance with the requirements of Tables 1 and 2, respectively.
- . A knockout is **not** considered a hole, may be utilized anywhere it occurs, and may be ignored for purposes of calculating minimum distances between holes and/a duct chase openings.
- Holes measuring 1-1/2 inches or smaller shall be permitted anywhere in a cantilevered section of a joist. Holes of greater size may be permitted providing they have been verified.
- A 1-1/2 inch hole or smaller can be placed anywhere in the web provided that it meets the requirements of item 6 above.
- 10. For continuous joists with more than one span, use the longest span to determine hole location in either span.
- 11. All holes and duct chase openings shall be cut in a workman-like ma accordance with the restrictions listed above and as illustrated in Figu
- 12. Limit three maximum size holes and one duct chase opening per span. 13. A group of round holes at approximately the same location shall be permitted if they
- meet the requirements for a single round hole circumscribed around them

# Knockouts are prescored holes provided

Joist Depth	Joist Series	Minimum Distance from Inside Face of Any Support to Center of Hole (ft - in.)														Span Adjustment	
		Round Hole Diameter (in.)															
							6-1/4			8-5/8		10	10-3/4	- 11	12	12-3/4	Factor
9-1/2"	NI-20	0'-6"	1'-0"	2'-6"	3'-6"	5'-6"	6'-0"										13'-5"
	NI-40x	0'-6"	1'-6"	3'-0"	4'-6"	6'-0"	6'-6"										15'-0"
	NI-60	1'-6"	2'-6"	4'-0"	5'-6"	7'-0"	7'-6"										16'-7"
	NI-70	2'-0"	3'-6"	5'-0"	6'-6"	8'-0"	8'-6"										17'-8"
	NI-80	2'-6"	3'-6"	5'-0"	6'-6"	8'-6"	8'-6"										18'-2"
	NI-20	0'-6"	0'-6"	0'-6"	1'-0"	3'-0"	3'-0"	4'-6"	6'-6"	7'-6"							14'-2"
	NI-40x	0'-6"	0'-6"	1'-6"	2'-6"	4'-0"	4'-6"	5'-6"	7'-0"	8'-0"							17'-1"
11-7/8"	NI-60	0'-6"	1'-6"	3'-0"	4'-6"	5'-6"	6'-0"	7'-6"	9'-0"	10'-0"							19'-8"
11-770	NI-70	1'-6"	2'-6"	4'-0"	5'-6"	7'-0"	7'-6"	8'-6"	10'-0"	11'-0"							21'-3"
	NI-80	1'-6"	3'-0"	4'-0"	5'-6"	7'-0"	7'-6"	8'-6"	10'-6"	11'-6"							21'-7"
	NI-90x	0'-6"	0'-6"	0'-6"	2'-6"	4'-6"	5'-0"	6'-6"	***	***	***	***	***	***	***		22'-4"
	NI-40x	0'-6"	0'-6"	0'-6"	1'-0"	2'-6"	2'-6"	3'-6"	5'-0"	6'-0"	6'-6"	8'-0"	10'-0"				18'-10"
	NI-60	0'-6"	0'-6"	1'-6"	3'-0"	4'-0"	4'-6"	5'-6"	7'-0"	8'-0"	8'-6"	10'-6"	12'-0"				21'-7"
14"	NI-70	0'-6"	0'-6"	1'-6"	3'-0"	4'-6"	4'-6"	6'-0"	8'-0"	9'-0"	9'-6"	12'-0"	13'-6"				21'-9"
	NI-80	1'-0"	2'-0"	3'-6"	5'-0"	6'-0"	6'-6"	7'-6"	9'-0"	10'-0"	11'-0"	12'-6"	14'-0"				24'-6"
	NI-90x	0'-6"	0'-6"	0'-6"	2'-0"	4'-0"	4'-0"	5'-6"	7'-6"	8'-6"	9'-0"	***		***	***		25'-5"
16"	NI-60	0'-6"	0'-6"	0'-6"	0'-6"	1'-6"	2'-0"	3'-0"	4'-6"	5'-6"	6'-0"	8'-0"	9'-6"	10'-0"	12'-0"	14'-0"	21'-9"
	NI-70	0'-6"	0'-6"	0'-6"	0'-6"	2'-0"	2'-6"	3'-6"	5'-6"	6'-6"	7'-0"	9'-0"	10'-6"	11'-0"	13'-6"	15'-6"	21'-9"
10	NI-80	0'-6"	1'-0"	2'-0"	3'-6"	4'-6"	5'-0"	6'-0"	7'-6"	8'-6"	9'-0"	10'-6"	12'-0"	12'-6"	14'-6"	16'-0"	26'-3"
	NI-90x	0'-6"	0'-6"	0'-6"	2'-0"	3'-6"	4'-0"	5'-0"	7'-0"	8'-0"	8'-6"	10'-6"	11'-6"	12'-0"			28'-3"

Hole location distance is measured from inside face of supports to center of hole.
 For continuous joists with more than one span, use the longest span to determine hole location in either span.
 Distances are based on uniformly loaded floor joists that meet the span requirements for a design live load of 40 psf and dead load of 10 psf, and a live load deflection limit of L/480. For other applications, contact your local distributor.

OPTIONAL HOLE CALCULATION:

Dreduced = \(\frac{L\_actual}{SAF}\) x D \[ \text{When calculating hole locations by this optional method, the minimum distance between the center of the hole and the inside face of the support shall be the lesser of two diameters or 12 inches plus 1/2 diameter, rounded up to the nearest 1/2 foot along the joist. Distance from the inside face of any support to center of hole, reduced for less-than-maximum span applications (ft). The actual measured span distance between the inside faces of supports (ft).

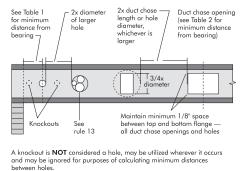
Span Adjustment Factor given in Table 1.

The minimum distance from the inside face of any support to center of hole from Table 1 above.

If \*Lactual is greater than 1.0, use 1.0 in the above calculation for \*Lactual.\*

SAF\*

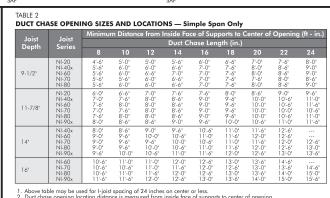
SAF\*



for the contractor's convenience to insta electrical or small plumbing lines. They are 1-1/2 inches in diameter, and are Never drill, cut or



should be cut with a sharp saw. stress concentrations. Slightly rounding the corners is recommended. Starting the rectangular hole by drilling a 1-inch diameter hole in each of the four corne and then making the cuts between the holes is another good method to minimize damage to the I-joist.



## **INSTALLING THE GLUED FLOOR SYSTEM**

- Wipe any mud, dirt, water, or ice from I-joist flanges before gluing.
- Snap a chalk line across the I-joists four feet in from the wall for panel edge alignment and as a boundary for spreading glue. 3. Spread only enough glue to lay one or two panels at a time, or follow specific recommendations from the glue manufacturer.
- 4. Lay the first panel with tongue side to the wall, and nail in place. This protects the tongue of the next panel from damage when tapped into place with a block and sledgehammer.
- 5. Apply a continuous line of glue (about 1/4-inch diameter) to the top flange of a single I-joist. Apply glue in a winding pattern on wide areas, such as with double I-joists.
- 6. Apply two lines of glue on I-joists where panel ends butt to assure proper gluing of each end. 7. After the first row of panels is in place, spread glue in the groove of one or two panels at a time before laying the next row. Glue line may be continuous or spaced, but avoid squeeze-out by ap a thinner line (1/8 inch) than used on 1-joist flanges.
- 8. Tap the second row of panels into place, using a block to protect groove edges. Stagger end joints in each succeeding row of panels. A 1/8-inch space between all end joints and 1/8-inch at all edges, including T&G edges, is recommended. (Use a spacer tool or an 8d common nail to assure accurate and consistent spacing.)
- 10. Complete all nailing of each panel before glue sets. Check the manufacturer's recommendation for cure time. (Warm weather accelerates glue setting.) Use 6d ring- or screw-shank nails for panels 3/4-inch thick or less, and 8d ring- or screw-shank nails for thicker panels. Space nails per the table below. Closer nail spacing may be required by some codes, or for diaphragm construction. The finished deck can be walked on right away and will carry construction loads without damage to the alue band.

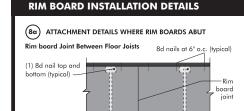
# APA RATED STURD-I-FLOOR FASTENER SCHEDULES FOR NI's(1)

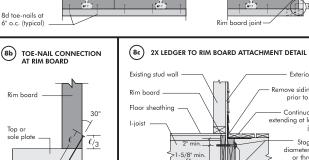
Joist Spacing	Thickness <sup>(2)</sup>	Nail Size	Maximum Spacing (in.)				
(in.)	(in.)	and Type	Supported Panel Edges	Intermediate Supports			
16	23/32(5)	6d ring-or screw-shank <sup>(4)</sup>	12	12			
20	23/32(5)	6d ring-or screw-shank <sup>(4)</sup>	12	12			
24	23/32, 3/4 7/8	6d ring-or screw-shank <sup>(4)</sup> 8d ring-or screw-shank <sup>(4)</sup>	12 6	12 12			

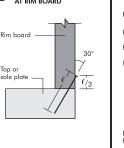
(3) Use only adhesives conforming to APA Specification AFG-01, or ASTM D3498 applied in accordance

with the manufacturer's recommendations. If OSB panels with sealed surfaces and edges are to be used, use only solvent-based glues; check with panel manufacturer.

IMPORTANT NOTE:
Floor sheathing must be field glued to the I-joist flanges in order to achieve the allowable spans shown in this document. If sheathing is nailed only, reduce I-joist spans in the Allowable Spans Table by 1 foot.

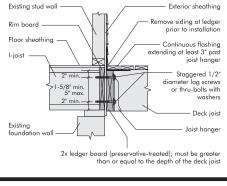






8d toe-nails at

5" o.c. (typical)

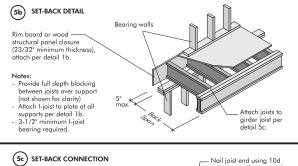


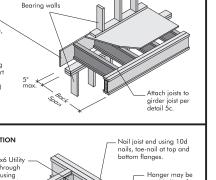
Rim board Joint at Corner

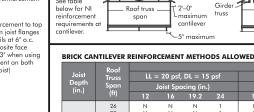
8d nails -











and bottom joist flang with 8d nails at 6" o.c.

(offset opposite face nailing by 3" when using reinforcement on both sides of I-joist)

Note: APA RATED SHEATHING 48/24 (minimum thickness 23/32\*) required on sides of joist. Depth shall match the full height of the joist. Nali with 8d nails at 6\* o.c., top and bottom flange. Install with face grain horizontal. Attach I-joist to plate at all sunports are detail 11. Waife prinforce. all supports per detail 1b. Verify reinforced

window or door openings. For larger openings, or multiple 3'-0" width openings spaced less than 6'-0" o.c., additional joists beneath the opening's cripple studs may be required.

Table applies to joists 12' to 24' o.c. that meet the floor span requirement for a training. N = No reinforcement required.
 N = NI reinforced with 23/32" wood structural. I = In reinforced with 23/32 wood structural ponel on one side only.

20 HI reinforced with 23/32 wood structural X = In reinforced with 23/32 wood structural X = In reinforced in 50 side of closer spocing.

21 Maximum lood shall be 15 par food feed lood, 50 par floor total lood, and 80 pt fivell lood.

22 Maximum lood shall be 15 par food feed lood, 50 par floor total lood, and 80 pt fivell lood.

23 Wolf lood is based on 3-0° maximum width

LL = 20 psf, DL = 15 psf

the floor span requirements for a design live load of 40 psf and dead load of 10 psf, and a live load deflection limit of L/480. Use 12" o.c. requirements for lesser spacing.

trusses running parallel to the cantilevered floor joists, the I-joist reinforcement

requirements for a span of 26 ft. shall be permitted to

(1) Special conditions may impose heavy traffic and concentrated loads that require construction in excess of the minimums shown. (2) Panels in a given thickness may be manufactured in more than one allowable span. Panels with an allowable span greater than the actual joist spacing may be substituted for panels of the same thickness with an allowable span matching the actual joist spacing. For example, 19/32-inch-thick Sturd-1-Floor 20 oc may be substituted for 19/32-inch-thick Sturd-1-Floor 10 oc ower joists 16 inches

8d common nails may be substituted if ring- or screw-shank nails are not available.

(5) Recommended minimum thickness for use with I-joists.