



Georgia-Pacific

Engineered Lumber

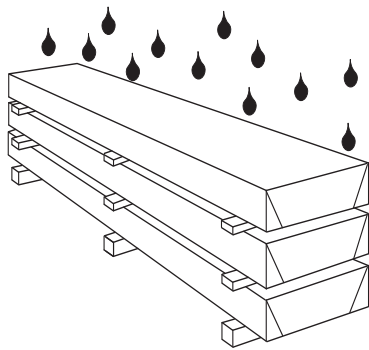
xj 85TM WOOD I BEAMTM JOIST

Installation Guide

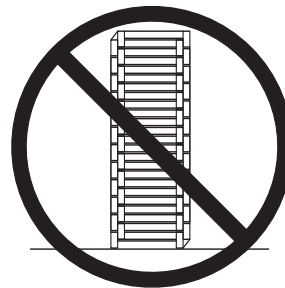


STORAGE AND HANDLING

- Wood I Beam™ joists and FiberStrong® rim board shall not be stored in direct contact with the ground and should be protected from weather. Provide air circulation under covering and around stacks of materials.
- Bundles should be stored level.
- Do not open bundles until time of installation. Use care when handling bundles and individual components to prevent injury to handlers or damage by forklifts or cranes.
- Stack and handle Wood I Beam joists in the upright position. Stack and handle FiberStrong rim board flatwise.
- Dropping joists, twisting joists, or applying loads to the joists when flat can damage the joist.
- Damaged products should not be used.



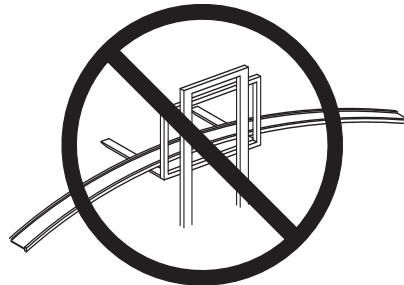
Protect products from sun and water.
Use support blocks at 10' o.c. to
keep bundles out of water.



DO NOT store
Wood I Beam joists flat.



DO NOT lift Wood I Beam
joists by top flange.



DO NOT lift Wood I Beam
joists in the flat orientation.

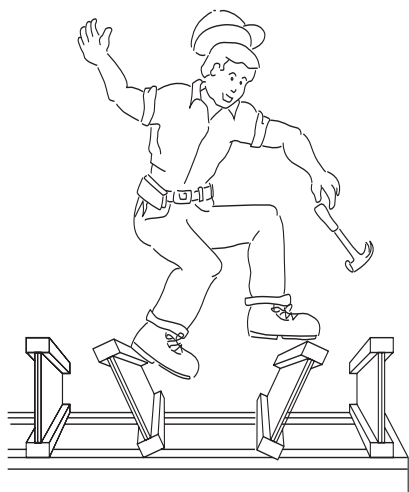
SAFETY WARNING

Handlers and installers should use appropriate personal protective equipment such as gloves and goggles.

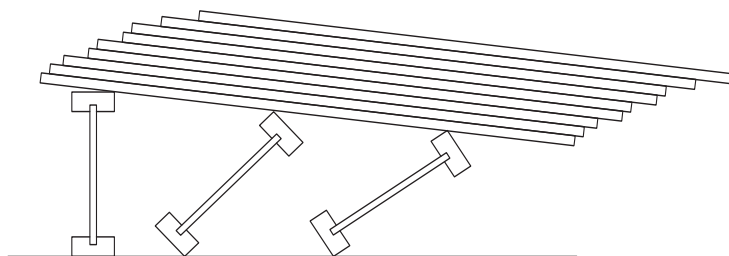
Wood I Beam™ joists will not support workers or other loads until properly installed and braced. To minimize risk of injury, each Wood I Beam joist shall be properly fastened as it is erected. Continuous closure and/or blocking panels must be installed and attached prior to installing floor or roof sheathing. Lateral restraint, such as an existing deck or braced end wall, must be established at the ends of the bay. Alternatively, a temporary or permanent deck (sheathing) may be nailed to the first 4 feet of joists at the end of the bay.

Rows of temporary bracing at right angles to joists must be fastened with a minimum of two 8d nails (10d box nails if net thickness of bracing exceeds 1") to the upper surface of each parallel joist and the established lateral restraint. Bracing should be 1x4 minimum and at least 8' long with on-center spacing not to exceed 10'. Ends of adjoining bracing should lap over at least two joists. Stack building materials over main beams or walls only.

The following can result in serious accidents: improper storage or installation, failure to follow applicable building codes, overloading or overspanning the joists, failure to use acceptable hole sizes and locations, or failure to use bearing stiffeners when required. Installation notes must be followed carefully.



Do not allow workers or loads on Wood I Beam joists until properly installed and braced as outlined above.



Stack building materials over main beams or walls only.

INSTALLATION NOTES

- A. Engineered lumber must not be installed in direct contact with concrete or masonry construction and shall be used in covered, dry use conditions only, where the in-service moisture content does not exceed 16%.
- B. Except for cutting to length, top and bottom flanges of Wood I Beam™ joists shall not be cut, drilled or notched.
- C. Concentrated loads shall only be applied to the upper surface of the XJ 85™ Wood I Beam™ top flange after consulting BlueLinX Technical Services, and not suspended from the bottom flange.
- D. When nailing sheathing to top flange, follow sheathing manufacturer's nailing recommendations, but fastener spacing must not be less than 4" o.c. or greater than 24" o.c. Maximum nail size is 12d common. If more than one row of nails is required, rows must be offset by at least 3/4" and staggered. 14 gauge staples may be substituted for 8d nails if staples penetrate the joist flange at least 1".
- E. End bearing length must be at least 1-3/4". Simple-span joist configurations only.
- F. Wood I Beam joists must be supported on walls, beams, or in hangers. They may not be supported by a non-structural ridge board or by toe-nailing into a beam.
- G. Wood I Beam joists must be restrained against rotation at the ends of joists by use of rim joists, blocking panels, or cross bridging. The top flange of a Wood I Beam joist must be laterally supported and kept straight within 1/2" of true alignment. Plywood or OSB subfloor nailed to the top flange (per Note D) is adequate to provide lateral support.
- H. When nail type is not specified, use common, box, or sinker.
- I. To help safeguard the structural integrity of connections with preservative treated wood, use only hot-dipped galvanized or stainless steel fasteners, connectors and hardware.

As a minimum requirement, hot-dipped galvanized coated fasteners should conform to ASTM Standard A153 and hot-dipped galvanized coated connectors should conform to ASTM Standard A653 (Class G-185). In demanding applications, or in highly corrosive environments, stainless steel fasteners and connectors should be utilized and may, in fact, be required by building codes.

Most commonly available electroplated galvanized fasteners do not have a sufficient coating of zinc and are not recommended. Aluminum should not be used in direct contact with preservative treated wood. Never mix galvanized steel with stainless steel in the same connection.
- J. Certain applications of staple-up radiant heating may cause additional deflection in I-joists with solid-sawn flanges due to unequal drying within the floor cavity. Contact BlueLinX for additional information.
- K. XJ 85 joists are manufactured without camber, but must be installed right side up.

INSTALLATION DO'S

DO install XJ 85™ joists right side up.

DO use strongbacks (Detail T22); although not required for structural performance, strongbacks add additional resistance to impact loadings.

DO provide appropriate bearing width at each end of the joist.

DO use an appropriately rated sub-floor that has been both glued and nailed/screwed to the top flange of the joist.

DO consult BlueLinx Technical Services about special loading or bearing conditions not addressed in these notes and accompanying construction details.

INSTALLATION DON'TS

DO NOT cut or notch flanges.

DO NOT bevel cut joist.

DO NOT cut any part of XJ 85 joists except within the "Trim Area". Cut to length only.

DO NOT cut additional holes or openings in XJ 85 joists.

DO NOT install the XJ 85 joist upside down without first consulting BlueLinx Technical Services.

DO NOT use a XJ 85 joist as a header or beam except as instructed by BlueLinx Technical Services.

DO NOT allow the XJ 85 joist to be supported by the top flange. All support must be from under the bottom flange.

DO NOT span XJ 85 joist over more than two supports. Simple-span only.

DO NOT depend on "toe-nailing" to provide adequate end support. Consult your local Georgia-Pacific engineered lumber dealer or BlueLinx Technical Services for proper hanger selection.

DO NOT apply special support or load conditions (concentrated loads/line loads) without first consulting BlueLinx Technical Services.

DO NOT treat XJ 85 joists with pressure-treated preservatives.

16" XJ 85™ JOISTS – RESIDENTIAL FLOOR SPAN CHART

40 psf Live Load + 15 psf Dead Load

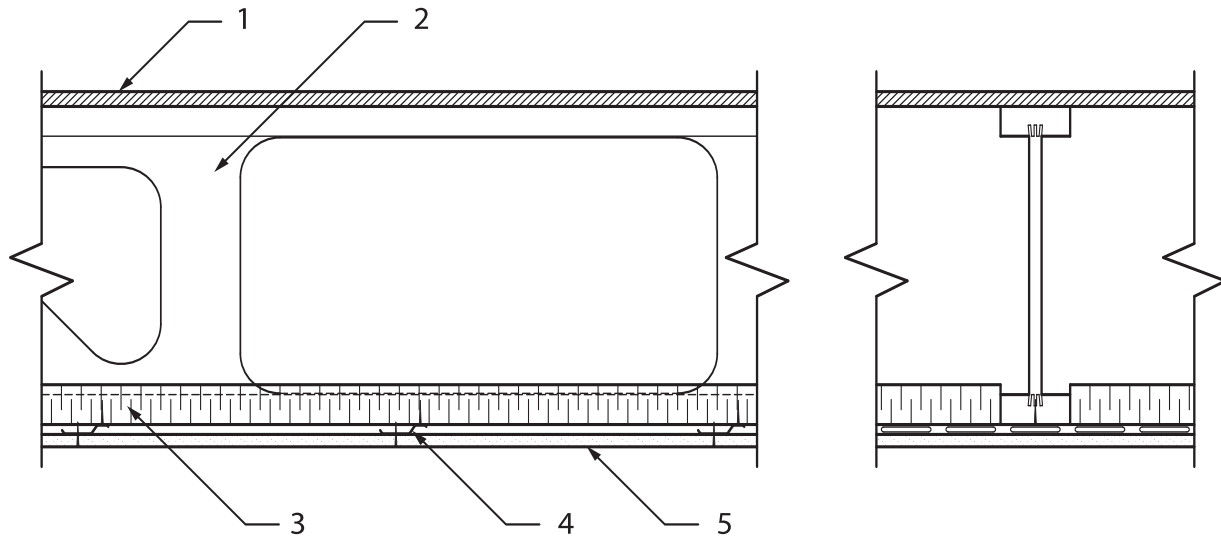
Simple spans only.

Stock Length	Joist Spacing		
	16" o.c.	19.2" o.c.	24" o.c.
6'	5' - 8"	5' - 8"	5' - 8"
8'	7' - 8"	7' - 8"	7' - 8"
10'	9' - 8"	9' - 8"	9' - 8"
12'	11' - 8"	11' - 8"	11' - 8"
14'	13' - 8"	13' - 8"	13' - 8"
16'	15' - 8"	15' - 8"	15' - 8"
18'	17' - 8"	17' - 8"	17' - 8"
20'	19' - 8"	19' - 8"	19' - 8"
22'	21' - 8"	21' - 8"	21' - 4"
24'	23' - 8"	23' - 8"	-
26'	25' - 8"	25' - 8"	-

NOTES:

1. This span chart is based on uniform loads, as noted above; live load deflection is limited to L/480 for better performance. Floor performance is greatly influenced by the stiffness of the floor joists. Experience has shown that joists designed to the code minimum live load deflection (L/360) will result in a floor which may not meet the expectations of some end users. BlueLinx strongly recommends floor spans for Wood I Beam™ joists in accordance with those given above, which are based on L/480 live load deflection (one-third stiffer than required by code).
2. Spans are clear distances between supports, and are based on composite action with glued-nailed APA Rated® sheathing or Sturd-I-Floor® of minimum thickness 19/32" (40/20 or 20 oc) for joist spacing of 19.2" or less, or 23/32" (48/24 or 24 oc) for a joist spacing of 24". Adhesive must meet APA AFG-01 or ASTM D3498. Apply a continuous line of adhesive (approximately 1/4" diameter) to top flange of joists. All surfaces must be clean and dry. If sheathing is nailed only (not recommended), reduce allowable span of 26' stock length at 19.2" o.c. to 25'-2".
3. **Minimum end bearing length is 1-3/4".**
4. For loading other than that shown above, use FASTBeam® software or contact BlueLinx Engineered Lumber Technical Services.

XJ 85™ WOOD I BEAM™ ONE-HOUR FIRE ASSEMBLY



- 1. Sub-Flooring** – APA Rated® Sturd-I-Floor® plywood or OSB, tongue and groove, nailed with 6d common or spiral nails, 6" o.c. at edges and 12" o.c. in field, and glued to structural members with construction adhesive. 5/8" thick when joists are 19.2" o.c. or less. 23/32" thick when joists are at or greater than 19.2" o.c. up to 24" o.c.
- 2. Structural Members** – 16" XJ 85™ series joists, maximum spacing 24" o.c. Web openings prefabricated by GP. No other web openings allowed. 55 psf maximum loading.
- 3. Insulation** – 2" thick, 4 pcf unbacked mineral wool, placed between joists, over resilient channels.
- 4. Resilient Channels** – Minimum 25 gauge steel, maximum spacing 16" o.c., fastened to the bottom flange of each joist with one 1-1/4" Type W screw.
- 5. Gypsum Board** – 5/8" type C gypsum board applied with long dimension perpendicular to resilient channels and fastened to resilient channels using 1-1/4" Type S screws at 6" o.c. with a 3/4" edge distance.

Testing Standards: ASTM E119

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Georgia-Pacific

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