

SECTION 061733 WOOD I-JOISTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A Wood I-joists for floor framing.
- B Bridging, bracing, and anchorage.
- C Framing for openings.

1.02 RELATED REQUIREMENTS

- A Section 061000 - Rough Carpentry: Installation requirements for miscellaneous framing.

1.03 REFERENCE STANDARDS

- A PS 2 - Performance Standard for Wood Structural Panels 2018.

1.04 DESIGN REQUIREMENTS

- A Design Floor Live Load: 125 lbs/sq ft with deflection limited to 1/480 of span.

1.05 SUBMITTALS

- A Product Data: Manufacturer's literature describing materials, dimensions, allowable spans and spacings, bearing and anchor details, bridging and bracing requirements, and installation instructions; identify independent inspection agency.
- B Shop Drawings: Indicate sizes and spacing of joists, bracing and bridging, bearing stiffeners, holes to be cut (if any), and framed openings between joists.
- C Certificate: Certification by joist manufacturer that products delivered are of the same design and construction as those evaluated by the independent inspection agency.

1.06 QUALITY ASSURANCE

- A Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A Deliver products to site in manufacturer's original packaging with manufacturer's name and product identification intact and legible.
- B Protect products from damage due to weather and breakage.
- C Protect joists from warping or other distortion by stacking in upright position, braced to resist movement, with air circulation under coverings and around stacks.
- D Handle individual joists in the upright position.

PART 2 PRODUCTS

2.01 MATERIALS

- A Wood I-Joists: Solid lumber top and bottom flanges and oriented strand board (OSB) webs bonded together with structural adhesive, with published span rating to meet project requirements.
 - 1. Span Rating: Established and monitored in accordance with ASTM D5055 by independent inspection agency.
 - 2. Oriented Strand Board: Comply with PS 2.
 - 3. Adhesive: Tested for wet/exterior service in accordance with ASTM D2559.
 - 4. Depth: As indicated on drawings.

- 5. Fabrication Tolerances:
 - a. Flange Width: Plus/minus 1/32 inch.
 - b. Flange Thickness: Minus 1/16 inch.
 - c. Joist Depth: Plus 0, minus 1/8 inch.
- 6. Marking: Mark each piece with depth, joist spacing, and allowable span for joist spacing.
- B Wood-Based Components:
 - 1. Wood fabricated from old growth timber is not permitted.
- C Joist Bridging: Type, size and spacing recommended by joist manufacturer.
- D Fasteners: Electrogalvanized steel, type to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

- A Verify that supports and openings are ready to receive joists.
- B Verify that field measurements are as indicated on shop drawings.

3.02 PREPARATION

- A Coordinate placement of bearing items.

3.03 ERECTION

- A Install joists in accordance with manufacturer's instructions.
- B Set structural members level and plumb, in correct position.
- C Make provisions for erection loads and for sufficient temporary bracing to maintain structure plumb and in true alignment until completion of erection and installation of permanent bracing.
- D Do not field cut or alter structural members without approval of manufacturer.
- E Install permanent bridging and bracing and web blocking.
- F Install headers and supports to frame openings required.
- G Frame openings between joists with lumber in accordance with Section 061000.
- H Coordinate installation of sheathing/decking with work of this section.

3.04 TOLERANCES

- A Framing Members: 1/2 inch maximum, from true position.

END OF SECTION