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### **TRUS JOIST® PRODUCT TECHNICAL INFORMER**

(NW-N102)

# Flexibility • Efficiency • Performance

Multiple Large Holes in TJI® Joists

TJI<sup>®</sup> joists offer **flexible**, **cost efficient**, **and high-performance** solutions for floor systems with HVAC, electrical, sprinkler and plumbing hole requirements. Products are stocked locally, making it readily available. Field modifications and repairs are quick when they conform to literature or guidance from Weyerhaeuser. ICC-ES code recognition eliminates the need for TJI<sup>®</sup> joists to be custom designed and layout changes are easily revised using the Javelin<sup>®</sup> software. Additionally, <u>Forte<sup>®</sup>WEB single member sizing software</u> can help specifiers design TJI<sup>®</sup> joists to meet floor performance needs and deliver a quality solution, which is easy to install.

- Multiple Large Rectangular, Oval and Circular Holes
- Superior Quality & Consistency
- Locally Available
- No Mid-Span Lateral Bracing or Bridging Required
- Quick In-Field Repairs and Modifications
- National Association of Home Builders & Sustainable Forestry Initiative Certification



### **OPTIMIZE YOUR FLOOR SYSTEM WITHOUT COMPROMISING FLOOR PERFORMANCE**

With emerging energy code and energy program requirements, we are seeing more mechanical systems transitioning into conditioned spaces. TJI<sup>®</sup> joists can offer an efficient and quality solution.

A 14" TJI<sup>®</sup> 210 at 24" on center with <sup>7</sup>⁄<sub>%</sub>" Weyerhaeuser Edge Gold, direct applied ceiling and a 10" x 16" HVAC hole at the middle of a 15ft span has a TJ-Pro<sup>™</sup> Rating of 56.

A **16" TJI<sup>®</sup> 210 at 24" on center** with <sup>7</sup>⁄<sub>4</sub>" Weyerhaeuser Edge Gold, direct applied ceiling allows for a **13" diameter heat duct hole** at the middle of a 20ft span and has a **TJ-Pro<sup>™</sup> Rating of 46.** 



# TRUS JOIST<sup>®</sup> PRODUCT TECHNICAL INFORMER

#### <u>Flexibility</u>

- Easy installation: TJI<sup>®</sup> joists are lightweight and can be trimmed which makes them a flexible in-field solution.
- **Multiple Large Holes:** Multiple large holes may be cut in a TJI<sup>®</sup> web to accommodate HVAC and reduce the potential for pinching or reduced air flow when "stuffing" flexible duct work through irregular spaces. Likewise, Weyerhaeuser does not require additional strapping for plumbing or sprinkler through the web of a TJI<sup>®</sup> joist.
- **Pre-punched knockout holes:** Pre-punched knockout holes are located in the web approximately 12" on center for quick installation of electrical runs.
- **Software:** Forte<sup>®</sup>WEB can size multiple large holes in TJI<sup>®</sup> joists. Also, our NextPhase<sup>®</sup> solution provides precise, pre-cut holes for electrical, plumbing, and HVAC. Contact your local Trus Joist<sup>®</sup> product representative for more information on NextPhase<sup>®</sup> availability.
- Safety: TJI<sup>®</sup> joists are all wood and have no sharp metal edges or extra fasteners which may be exposed.
- No Special Framing: Strongback bracing or bridging is not required for TJI<sup>®</sup> joists.
- **Draft Stops:** A TJI<sup>®</sup> joist system does not require any special draft stopping other than what is required for solid wood construction.

#### **Efficiency**

- Affordability: TJI<sup>®</sup> joists do not rely on the volatility of commodity markets for lumber and steel, making it easier for the builder to budget a project.
- Availability: TJI<sup>®</sup> joists are stocked at local dealer yards. If they do not carry a particular joist, most products can be shipped from our distribution faculty within a couple of days.
- **Design:** TJI<sup>®</sup> joists have code recognized design properties which allow them to be used for various span, bearing, and load conditions.
- **Repairs:** The local Weyerhaeuser technical support team is dedicated to providing quick responses to field issues. Since TJI<sup>®</sup> joists have published design properties and are available in single pieces, cut to length, attachments and repairs are possible along the full length of the joist.
- Sustainable: Trus Joist<sup>®</sup> products are 'Green' certified by the National Association of Home Builder Research Center (NAHB). To ensure all the wood in our products is responsible, our procurement practices are certified to the Sustainable Forestry Initiative<sup>®</sup> Fiber Sourcing Standard. When sourced from well-managed forests, wood is a renewable and sustainable choice for building material.

#### Performance

- **Consistency and Quality:** TJI<sup>®</sup> joists are uniformly manufactured to specific criteria under 3<sup>rd</sup> party supervision, providing predictable and constant performance.
- Warranty: TJI<sup>®</sup> joists are warranted against manufacture defects and are backed by Weyerhaeuser for the lifetime of the structure.
- **Technical Support:** Weyerhaeuser has a dedicated team of technical support associates to address field concerns, repairs, and questions.
- **Design Support:** The Weyerhaeuser design team can provide material lists and placement plans which show HVAC and plumbing runs.
- Floor Performance: TJI<sup>®</sup> floors can be designed to estimate floor performance and evaluate the relationship between cost and "feel" of any given floor system using the TJ-Pro<sup>™</sup> Rating system.
- **Sound Performance:** Squeaks are a concern for every wood floor. TJI<sup>®</sup> joists are all wood which eliminates the possibility of a metal connector rubbing against nails or hangers. If installed properly, TJI<sup>®</sup> joists will not squeak.

Contact your local Trus Joist<sup>®</sup> representative or access <u>Forte<sup>®</sup>WEB single member sizing software</u> from <u>www.Weyerhaeuser.com</u> to size TJI<sup>®</sup> joists with multiple large holes.