

Weyerhaeuser NR Company

Design No. WNR/FCA 60-05

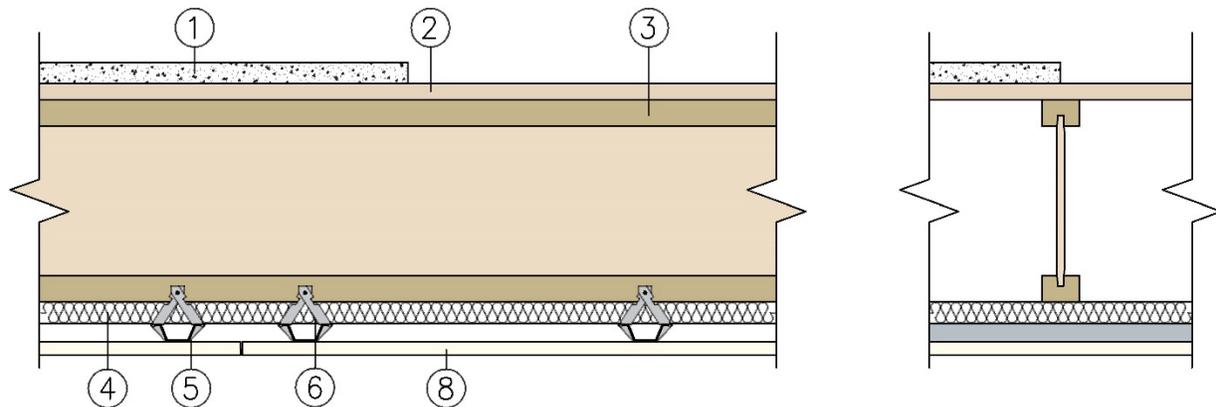
Wood I-Joists

TJI® Joists

ASTM E119, CAN/ULC S101

Rating: 1 Hour

STC 47 with 8 pcf Density Insulation, STC 58 with Min. 1-1/2 in. Topping and 8 pcf Density Insulation



1. TOPPING (Optional): Lightweight concrete or proprietary topping.

Min. thickness: 1.5 in., Min. depth: 9-1/2 in.,
Max. spacing: 24 in. oc.

2. SUB-FLOORING: Min. 23/32 in. tongue and groove plywood or oriented strandboard (OSB) designed and installed per Code requirements, and installed with nails and construction adhesive onto joist and also into grooved edge of panels. Alternate 5/8 in. thick tongue and groove or square edge plywood or OSB when optional Topping is used.

4. MINERAL WOOL: 1 in. thick, min. 6 pcf, Thermafiber mineral wool fire proofing, or Fibrex FBX 1280 industrial board, or Fibrex-IF 1280 Flex Batt, installed with width of batt equal to oc spacing of joists. Batts inserted between furring channels and bottom flanges of joists with long dimension perpendicular to furring channels, and with butted ends centered over furring channels.

3. STRUCTURAL MEMBERS: Wood I-Joists

A. CERTIFIED PRODUCT: Weyerhaeuser NR Company, TJI® Joists Series: TJI 110, TJI 210, TJI 230, TJI 360, TJI 560, TJI 560D:

Min. depth: 9-1/2 in., Max. spacing: 24 in. on center (oc).

B. Code Compliant Weyerhaeuser Timberstand LSL, Microllam LVL, or Parallam PSL Certified to ASTM D5456:

5. STEEL FURRING CHANNEL: 0.019 in. or thicker galvanized steel hat channels installed perpendicular to joists. Additional furring channels spaced 1-1/2 in. from and on each side of gypsum board end joints, extending 24 in. either side past end joint. Channels secured to joists with support clips at each joist location. At channel splices, adjacent pieces overlapped 6 in. and tied with double strand of No. 18 SWG galvanized steel wire at each end of overlaps.



6. **SUPPORT CLIPS:** One Simpson Company Type CSC support clip to be used to support furring channels at each joist intersection. Support clips nailed to one side of joist bottom flange with one 1-1/2 in. long, 0.125 in. diameter nail.
7. **STABILIZER STRAP (Not Shown):** 3/4 in. x 6 in., 24 GA galvanized steel strap used to prevent rotation of the support clips (Item 6) at wallboard end joints and along walls. At wallboard end joints (3 in. oc spacing of furring channels), stabilizer straps span between the channels and are screw-attached to the furring channels adjacent to each support clip location using No. 8 self-tapping steel screws. On furring channels nearest to and parallel with walls, one end of the stabilizer strap is screw-attached to the furring channel, adjacent to each support

clip location, using No. 8 self-tapping steel screws. The free end of the stabilizer strap is twisted 90 degrees bent upward and screw or nail attached to the side of the joist bottom flange on the side of the support clip nearest the wall.

8. **GYPSUM:** One layer 5/8 in. Type X. Max. board width is 48 in. Joints to be taped and filled. Screw heads to be filled.

Applied to furring channels with long edge perpendicular to channels and located midway between joists. End joints staggered. Gypsum board fastened to channels with 1 in. Type S screws with two rows located 3/4 in. and 6 in. away from long edge and the remainder spaced 12 in. oc along channel.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.