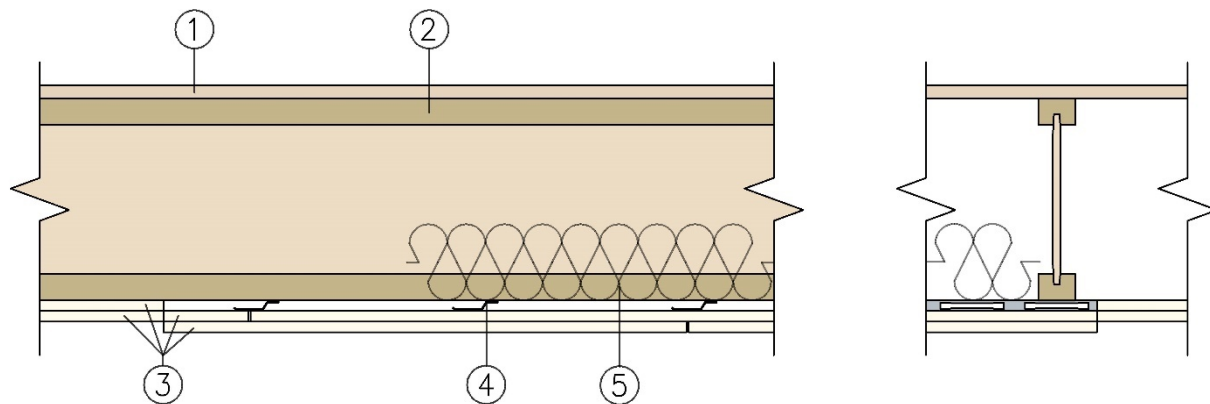


Weyerhaeuser NR Company
Design No. WNR/FCA 60-03
Wood I-Joists
TJI® Joists
ASTM E119, CAN/ULC S101
Rating: 1 Hour
STC 50 with Insulation and Resilient Channels



1. SUB-FLOORING: Min. 5/8 in. tongue and groove plywood or oriented strand board (OSB) designed and installed per Code requirements.

2. STRUCTURAL MEMBERS: Wood I-Joists

A. **CERTIFIED PRODUCT:** Weyerhaeuser NR Company: TJI® Series Joists: TJI 110, TJI 220, TJI 230, TJI 360, TJI 560, TJI 560D.

Minimum depth: 9-1/2 in.. Maximum spacing: 24 in. oc.

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

Minimum thickness: 1.5 in. Minimum depth: 9-1/2 in. Maximum spacing: 24 in. oc.

3. GYPSUM BOARD: Two layers of minimum 1/2 in. thick USG/CGC “Sheetrock Fire Code C” or

Westrock “Fireboard C” gypsum board. Maximum board width is 48 in. Exposed joints to be taped and filled. Exposed screw heads to be filled.

Application to Joists: Base layer applied to joists with long edge perpendicular to joists and with end joints butted over joists. Adjacent end joints staggered minimum 24 in. Base layer attached with Type W screws spaced 12 in. oc on intermediate supports and 6 in. oc at end supports. Screws must penetrate minimum 1 in. into wood member.

Face layer installed with long edge perpendicular to joists and edges staggered 24 in. from base layer edges. End joints located over and attached to joists and staggered minimum 24 in. from base layer end joints. Face layer attached with Type W screws spaced 12 in. oc on intermediate supports and 8 in. oc on end



supports. Screws must penetrate minimum 1 in. into wood member. Face layer also fastened to base layer with a row of Type G screws spaced 8 in. oc located 6 in. away from end joints in face layer. Type G screws must penetrate minimum of 1 in. beyond surface of base layer.

Application to Channels: Base layer applied to furring channels with long edge perpendicular to channels. End joints staggered minimum of two channel spacings. Base layer fastened to channels with Type S screws spaced 12 in. oc along channels. 7/8 in. screws required for base layer when using 1/2 in. gypsum board base layer, 1 in. screws required for base layer when using 5/8 in. gypsum board.

Face layer installed with long edges perpendicular to the channels. Long edges staggered 24 in. from base layer edges. End joints staggered a minimum of one channel spacing from the base layer end joints. Face layer attached with Type S screws spaced 12 in. oc on intermediate supports and 8 in. oc on end supports. 1-3/8 in. screws required for face

layer when using 1/2 in. gypsum board. 1-5/8 in. screws required for face layer when using 5/8 in. gypsum board. Face layer also fastened to base layer with a row of Type G screws spaced 8 in. oc located 6 in. away from end joints in face layer. Type G screws must penetrate minimum of 1" beyond surface of base layer.

4. **STEEL FURRING CHANNELS (Optional):** 0.019 in. or thicker galvanized steel resilient channels, fastened to each joint with one 1-1/4 in. Type W screw or 0.019 in. or thicker galvanized steel hat channels, fastened to each joist with two 1-1/4 in. Type W screws. Maximum spacing 24 in. oc.
5. **INSULATION (Optional, permitted only when resilient channel is used):** Max. 3-1/2 in. thick fiberglass batt insulation friction fit between flanges or the webs of the joists.

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.