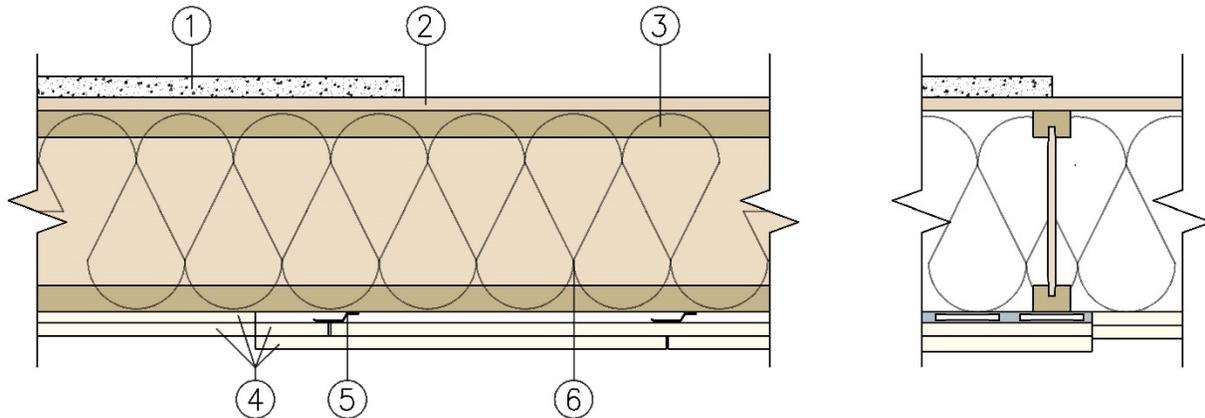


**Weyerhaeuser NR
WNR/WI 60-12
Wood I-Joists
TJI® Joists
ASTM E119, CAN/ULC S101
Rating: 1 Hour**



Floor/Ceiling Assembly

1. **TOPPING (Optional):** Lightweight concrete or proprietary topping.
2. **SUB-FLOORING:** Min. 5/8 in. tongue and groove plywood or oriented strand board (OSB) designed and installed per Code requirements. Square-edge panels are permitted when optional topping is used. When used as a roof/ceiling assembly, Item 2 is permitted to be any Code recognized wood decking.
3. **STRUCTURAL MEMBERS:** Wood I-Joists
 - A. **CERTIFIED PRODUCT:** Weyerhaeuser NR Company, TJI® Series Joists: 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:

Min. thickness: 1.5 in., Min. depth: 9-1/2 in., Max. spacing: 24 in. oc.
4. **GYPSUM BOARD:** Two layers of min. 5/8 in. thick Type X gypsum board. Max. 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 min. 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 min. 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 min. 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 min. 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 min. 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 min. 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 min. 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 min. of 1 in. beyond surface of base layer.

5. **STEEL FURRING CHANNELS (Optional):** 0.019 in. or thicker galvanized steel resilient channels fastened to each joist 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. Max. spacing 24 in. oc.
6. **INSULATION (Optional):** Fiberglass batt insulation or mineral wool insulation, friction fit between flanges or the webs of the joists. The joist cavity is permitted to be filled with insulation; however, the insulation must be placed above the resilient channels (where present) between the joist flanges.

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.