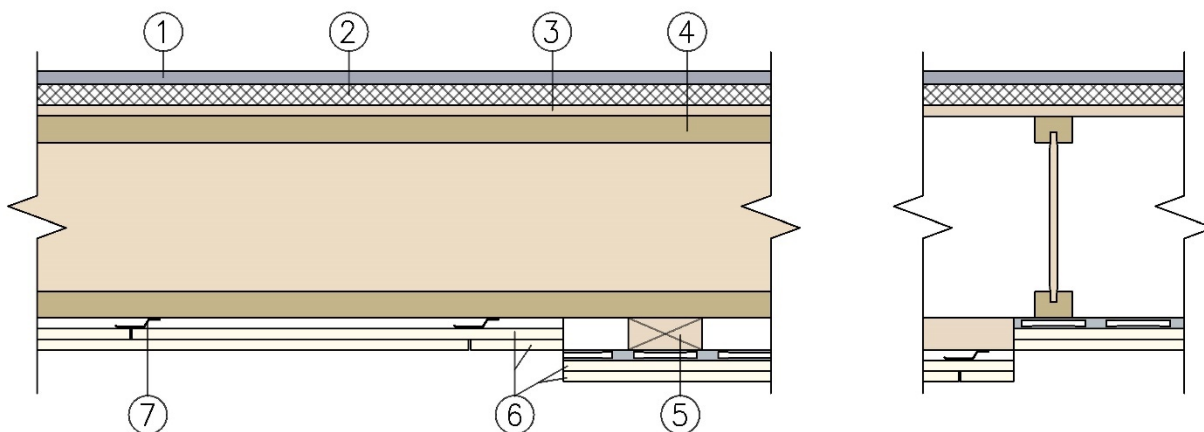


**Weyerhaeuser NR Company**  
**Design No. WNR/RCA 60-01**  
**Wood I-Joists**  
**TJI® Joists**  
**ASMT E119, CAN/ULC S101**  
**Rating: 60 minutes Roof /Ceiling Assembly**



**1. Roof Covering:** Suitable materials intended for built-up roof covering which provides Class A, B, C covering on combustible wood decks for fire resistant assemblies equivalent to this roof-ceiling/assembly.

Minimum depth: 9-1/2 in. Maximum spacing: 48 in. oc.

**2. Roof Insulation:** Sheathing material and adhesive products found suitable for use in one hour rated fire assemblies equivalent to this roof/ceiling assembly.

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: 48 in. oc.

**3. Sheathing:** Minimum 15/32 in. square edge plywood or oriented strand board (OSB) sheathing designed and installed per Code requirements, H clips midway between joists or as per code requirements.

**5. Wood Furring (Optional):** 2 x 4 lumber, minimum Standard & Better grade, placed perpendicular to joists and spaced maximum 24 in. oc, attached to each joist with one minimum 3 in. Type W screw. Required when joist spacing exceeds 24 in. oc.

**4. 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.

**6. Gypsum Board:** Two layers, minimum 1/2 in. Type X gypsum board. Maximum board width is 48 in. Joints to be taped and filled. Exposed screw heads to be filled.

**Application to Joists or Furring:**



Base layer applied to joists or furring with long edge perpendicular to supports and with end joints butted over supports. 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 supports and edges staggered 24 in. from base layer edges. End joints located over and attached to supports 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" 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 at a 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 in. beyond surface of base layer.

- 7. Steel Furring Channels:** 0.019 in. or thicker galvanized steel resilient channels, maximum spacing 24 in. oc fastened to each joist with one 1-1/4 in. Type W screw.

**Alternate:** Trusses may be spaced at 32 in. oc without wood furring if resilient channels are spaced 16 in. oc maximum.

*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.*