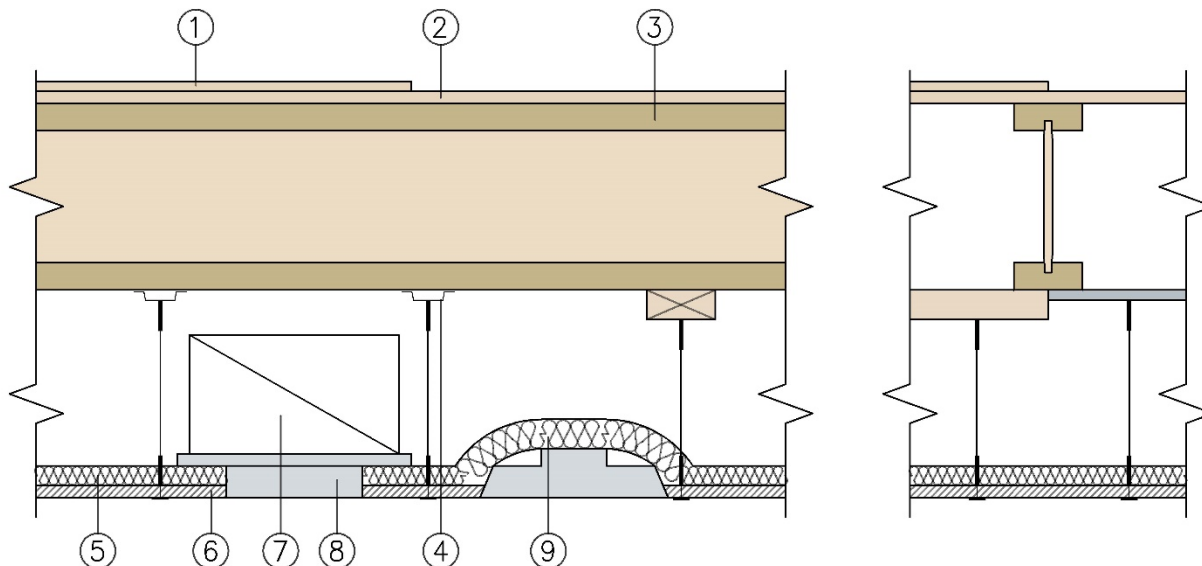


**Weyerhaeuser NR Company**  
**Design No. WNR/FCA 60-11**  
**Wood I-Joists**  
**TJI® Joists**  
**ASTM E119, CAN/ULC S101**  
**Rating: 1 Hour**



**1. FLOORING (OPTIONAL):** 1/2 in. wood panel sheathing.

Minimum thickness: 1.5 in. Minimum depth: 9-1/2 in. Maximum spacing: 48 in. oc.

**2. SUBFLOORING:** Minimum 5/8 in. tongue-and-groove plywood, or oriented strandboard (OSB) designed and installed per Code requirements.

**4. STEEL FURRING CHANNEL:** No. 16 gauge cold rolled channels, 1-1/2 in. wide, 1/2 in. deep having 1/2 in. flanges. Spaced maximum 24 in. oc, fastened directly to each joist with two 1-1/2 in. Type W screws.

**3. STRUCTURAL MEMBERS:** Wood I-Joists

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

Alternate: Wood furring – 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.

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

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

**5. MINERAL WOOL:** Minimum 1 in. thick, minimum 4 pcf Thermafiber® Sound Attenuation Fire Blankets or Fibrex®-FBX 1240 Industrial Board or Fibrex®-IF 1240 Flex Batts. Installed over the acoustical panels.



- 6. CEILING SYSTEM:** Suitable fire rated suspended ceiling system located a minimum distance of 10 in. below the joists. The grid system is suspended from the channels with 12 SWG galvanized steel wire. C.G.C. 3/4 in. Acoustone Firecode (No. 715) or 5/8 in. Auratone Firecode (No. 339) Acoustical Ceiling Panels. Hold down clips are required for acoustical ceiling panels weighing less than 1 psf. The weight of insulation bearing directly upon the panel may be included in the panel weight.

Alternatively, other components may be used that provide a 28 minute finish rating in an equivalent fire resistant assembly, to substitute for the Acoustical Panels covered by mineral wool.

- 7. DUCT:** No. 22 gauge steel, 18 in. x 6 in. with 12 in. diameter diffusers protected by rated fire

damper. Duct supported by 24 in. oc., 16 gauge, 3/4 in. cold rolled channel suspended from furring channels with No. 16 SWG wire at 40 in. intervals along the duct. Aggregate ceiling openings for air diffusers not to exceed 113 sq.ft per 100 sq.ft of ceiling and be spaced at least 6.6 ft. apart.

- 8. AIR DIFFUSER:** See #7 – Duct (above)
- 9. FIXTURE PROTECTION:** 24 in. x 48 in. x up to 5 in. deep, 26 gauge fixtures protected on all surfaces by a minimum thickness of 1-1/2 in. mineral wool blanket. Protection is to be securely tied at corners with No. 18 SWG steel wire. Aggregate area of fixtures not to exceed 11 sq ft per 215 sq ft of ceiling Equivalent protection may be used.

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.*