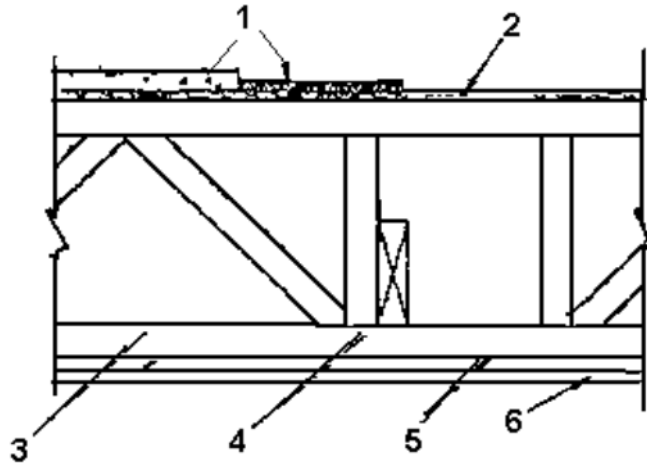


**Design Number BS/SFWT 60-06
 OPEN JOIST 2000® JOIST SERIES**

By Barrette Structural Inc.
 ASTM E119 and CAN/ULC S101
 Load Bearing Fire Resistance Rated Roof/Ceiling, Floor/Ceiling Assembly
 1-Hour Fire Rating



Acoustic Performance for 11-7/8 in. Depth Joist

| Required Components | STC | IIC |
|--|-----|-----|
| With carpet, pad and insulation | 53 | 72 |
| With carpet, pad without insulation | 52 | 67 |
| With vinyl flooring and insulation | 53 | 50 |
| With vinyl flooring without insulation | 52 | --- |
| Bare Gypcrete and insulation | 53 | --- |
| Bare Gypcrete without insulation | 52 | --- |

Note:

- Carpet and pad are 37 oz., 7/8 in. carpet with woven polypropylene backing and 40 oz. felt pad
- Vinyl flooring: Armstrong Starstep
- 3/4 in. Gypcrete 2000

1. FLOOR TOPPING (Optional): Gypsum concrete, lightweight or normal concrete topping.

2. SUB-FLOORING: Min. 5/8 in. thick plywood or OSB or equivalent.

3. CERTIFIED MANUFACTURER: Barrette Structural Inc.

CERTIFIED PRODUCT: Open Joist Series

CERTIFIED MODEL: Open Joist 2000®

Open Joist 2000®, 9-1/4 in. min. depth, installed up to 24 in. oc, with structural

graded nominal 2 x 3 or 2 x 4 chords per NLGA grading rules. Structural member should bear the Intertek certification mark.

4. BRIDGING: Continuous 2 x 4 lumber nailed to the bottom chord and the sides of the diagonals with 2 in. long nails at 7 ft. oc.

5. RESILIENT CHANNEL (Optional): Min. 0.019 in. thick galvanized steel resilient channel attached perpendicular to the bottom flange of the I-joists with 1-1/4 in. drywall screw. Channels spaced a max. of 16 in. oc (24 in. oc when I-joists are spaced a max. of 16 in. oc).

6. GYPSUM BOARD: Two layers of min. 1/2 in. thick Type X gypsum wallboards attached with the long dimension perpendicular to the resilient channels or joists as follows:

- A. **WALLBOARD BASE LAYER** – Base layer of wallboard attached to resilient channels or joists using 1-1/4 in. Type S drywall screws at 12 in. oc. When the resilient channels are installed, edge joints shall be centered between joists. End joints of wallboard staggered a min. of one channel or joist spacing.
- B. **WALLBOARD FACE LAYER** – Face layer of wallboard attached to resilient channels or joists through base layer using 1-5/8 in. Type S drywall screws spaced 12 in. oc. Edge joints of wallboard face layer offset a distance equal to the joist spacing from those of

base layer. End joints shall be offset from base layer joints by a min. of one channel or joist spacing. Additionally, wallboard face layer attached to base layer with 1-1/2 in. Type G drywall screws spaced 8 in. oc, placed 1-1/2 in. from face layer end joints.

- 7. **INSULATION (Optional, Not Shown):** When installed, insulation shall be installed above the joist flanges and supported by stay wires spaced 12 in. oc.
- 8. **FINISH SYSTEM (Not Shown):** Face layer joints covered with tape and coated with joint compound. Screw heads covered with joint compound.