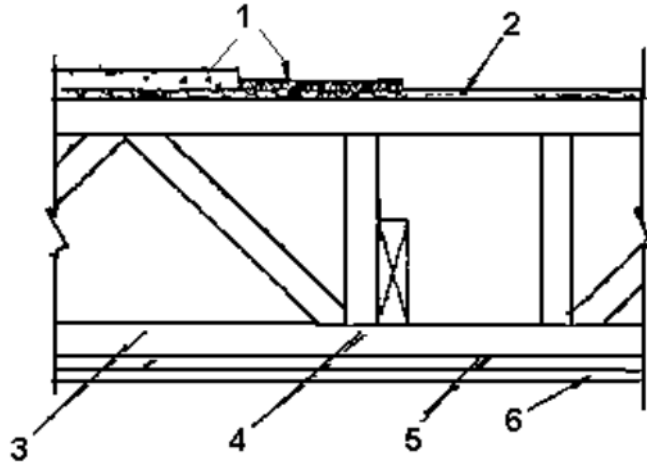


**Design Number BS/SFWT 60-09  
 OPEN JOIST 2000® JOIST SERIES**

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. 23/32 in. thick tongue & groove 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 min. 1-1/2 in. deep by 2-5/16 in. wide top and bottom flange dimensions. 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. FURRING CHANNEL:** Min. 0.0179 in. thick galvanized steel hat-shaped furring channels, attached perpendicular to joists spaced 24 in. oc. At channel splices, adjacent pieces overlapped a min. of 6 in.

and tied with a double strand of No. 18 GA galvanized steel wire at each end of the overlap. Channels secured to I-joists with Simpson Type CSC support clips at each intersection with the joists. Clips nailed to the side of joist bottom flange with one 1-1/2 in. long No 11 GA nail. Additional channels are required at gypsum board end joints so that each board is attached to a separate channel. These additional channels shall extend to the next joist on each side of the board end joint.

6. **GYPSUM BOARD:** Min. 1/2 in. thick Type C gypsum wallboard. Wallboard installed with long dimension perpendicular to furring channels and fastened to each channel with min. 1 in. long Type S drywall screws. Fasteners spaced 12 in. oc in the field of the wallboard, 6 in. oc at wallboard end joints, and 1-1/2 in. from panel edges and ends. Edge joints shall be centered between joists.

End joints shall be staggered one channel spacing and offset from insulation joints by a min. of one channel spacing.

7. **INSULATION (Not Shown):** Min. 1 in. thick mineral wool insulation batts – 6 pcf (min.). Batts installed on top of furring channels and under bottom flange of joists with the sides butted against support clips. Abutted ends of batts centered over furring channels with batts tightly butted at all joints.
8. **FINISH SYSTEM (Not Shown):** Face layer joints covered with tape and coated with joint compound. Screw heads covered with joint compound.