

# UL System No. BW-S-0008

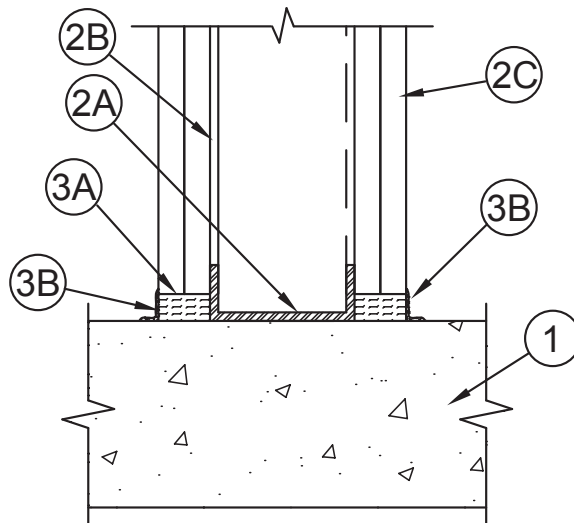
March 20, 2017

## ANSI/UL2079

Assembly Ratings – 1 and 2 Hr (See Item 2)  
 Joint Width – 2 in. Max  
 L Rating at Ambient – Less than 1 CFM/Lin Ft  
 L Rating at 400°F – Less than 1 CFM/Lin Ft

## CAN/ULC S115

F Ratings – 1 and 2 Hr (See Item 2)  
 FT Ratings – 1 and 2 Hr (See Item 2)  
 FH Ratings – 1 and 2 Hr (See Item 2)  
 FTH Ratings – 1 and 2 Hr (See Item 2)  
 Joint Width – 51 mm Max  
 L Rating at Ambient – Less than 1.55 L/s/lin m  
 L Rating at 204°C – Less than 1.55 L/s/lin m



1. **Floor Assembly** – Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) structural concrete. Floor may also be constructed of any 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units\***.  
 See **Precast Concrete Units** category in the Fire Resistance Directory for names of manufacturers.
2. **Wall Assembly** – The 1 or 2 hr fire-rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory. In addition, the wall may incorporate a head-of-wall joint system constructed as specified in the HW Series Joint Systems in the UL Fire Resistance Directory. The wall shall include the following construction features:
  - A. **Steel Floor Runner** – Floor runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2C). Floor runners to be provided with flanges a min of 1/4 in. (6 mm) greater than the joint width. Runners secured with steel fasteners spaced 12 in. (305 mm) OC.
  - B. **Studs** – Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm) less in length than assembly height with bottom nesting in, resting on and fastened to floor runner with sheet metal screws. Stud spacing not to exceed 24 in. (610 mm) OC.
  - C. **Gypsum Board\*** – Gypsum board installed to a min total thickness of 5/8 or 1-1/4 in. (16 or 32 mm) on each side of wall for a 1 or 2 hr rated wall, respectively. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory, except that a max 2 in. (51 mm) gap shall be maintained between the bottom of gypsum board and top of concrete floor.  
**The hourly fire rating of the joint system is equal to the hourly fire rating of the wall.**
3. **Joint System – Max separation between top of floor and bottom of gypsum board is 2 in. (51 mm).** The joint system consists of forming material and a fill material, as follows:
  - A. **Packing Material** – Min 5/8 and 1-1/4 in. (16 and 32 mm) thickness of min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation for 1 and 2 hr rated assemblies, respectively. Packing material to be firmly packed into gap between the bottom of the gypsum board and the top of the concrete floor on each side of the wall, flush with each surface of the wall.
  - B. **Fill, Void or Cavity Material\*** – Min 1/16 in. (1.6 mm) dry thickness (1/8 in. or 3.2 mm wet thickness) of fill material sprayed or brushed on each side of the wall to completely cover mineral wool between the bottom of the gypsum board and the top of the concrete floor. When 3M Fire Barrier Watertight Spray is used, min wet (and dry) thickness of spray is 1/10 in. (2.5 mm) and spray shall lap min 1/2 in. (13 mm) onto the floor and wall.  
**3M COMPANY** – FireDam™ Spray 200, 3M Fire Barrier Watertight Spray
  - B1. **Fill, Void or Cavity Material\* – Tape** (not shown) – As an alternate to Item 3B, Tape cut to size and press applied along length of joint to completely cover mineral wool between the bottom of the gypsum board and the top of the concrete floor, lapping minimum 1 in. (25 mm) onto wall and floor. Tape shall be applied in minimum 1 ft (305 mm) lengths along the joint at each side of wall and adjoining lengths of Tape shall overlap min 1/2 in. (13 mm).  
**3M COMPANY** – 3M Fire and Water Barrier Tape

\*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. 

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Construction Joints

Bottom of Wall Static

**BWS**