

- 1. Wall Assembly The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs Wall framing shall consist of min 3-1/2 in. (89 mm) wide steel channel studs spaced max 24 in. (610 mm) OC. Additional steel studs shall be used to completely frame the opening.
 - B. Gypsum Board* The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max area of opening is 1008 in.2 (6503 c m2) with a max dimension of 31-3/8 in. (797 m).

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T, FT and FTH Ratings are 0 and 3/4 hr for 1 and 2 hr rated assemblies respectively

- 2. Steel Duct Max 30 in. by 30 in. (762 mm by 762 mm), min 24 gauge galv steel duct to be installed either concentrically or eccentrically within the firestop system. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. The space between the steel duct and periphery of opening shall be min 1/4 in. 6 mm) to max 1-1/8 in. (51 mm). Steel duct to be rigidly supported on both sides of the wall assembly.
- 2A. Coated Duct* As an alternate to Item 2, nom 30 by 30 in. (762 by 762 mm) (or smaller) steel air duct; duct supplied coated with BW11 coating material. One duct to be installed within the firestop system with an annular space of min 1/4 in. (6 mm) to max 1-1/8 in. (51 mm). Duct sections shall be assembled using bolted flanges or SMACNA approved Transverse Joint Reinforcements. Duct to be rigidly supported on both sides of the wall assembly.

FIRESPRAY INTERNATIONAL LTD — FLAMEBAR BW11 FIRE RATED DUCTWORK



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System No. W-L-7250

- 3. Firestop System The firestop system shall consist of the following:
 - A. Packing Material Min 3-1/2 in. (89 mm) or 4-3/4 in. (121 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form for 1 and 2 hr rated walls, respectively. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
 - B. Fill, Void or Cavity Material* Sealant Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-ONE MAX Intumescent Sealant

- 4. Steel Angles Min 1-1/2 in. (38 mm) by 1-1/2 in. (38 mm), min No. 20 gauge galv steel angles secured to duct with No. 10 (or larger) sheet metal screws spaced max 1 in. (25 mm) from ends and max 3 in. (76 mm) OC or min No. 18 gauge galv steel angles secured to duct with No. 10 (or larger) sheet metal screws spaced max 1 in. (25 mm) from ends and max 6 in. (152 mm) OC. Angles attached to steel duct or coated duct on both sides of wall a max of 4 in. (102 mm) from wall.
- * 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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