

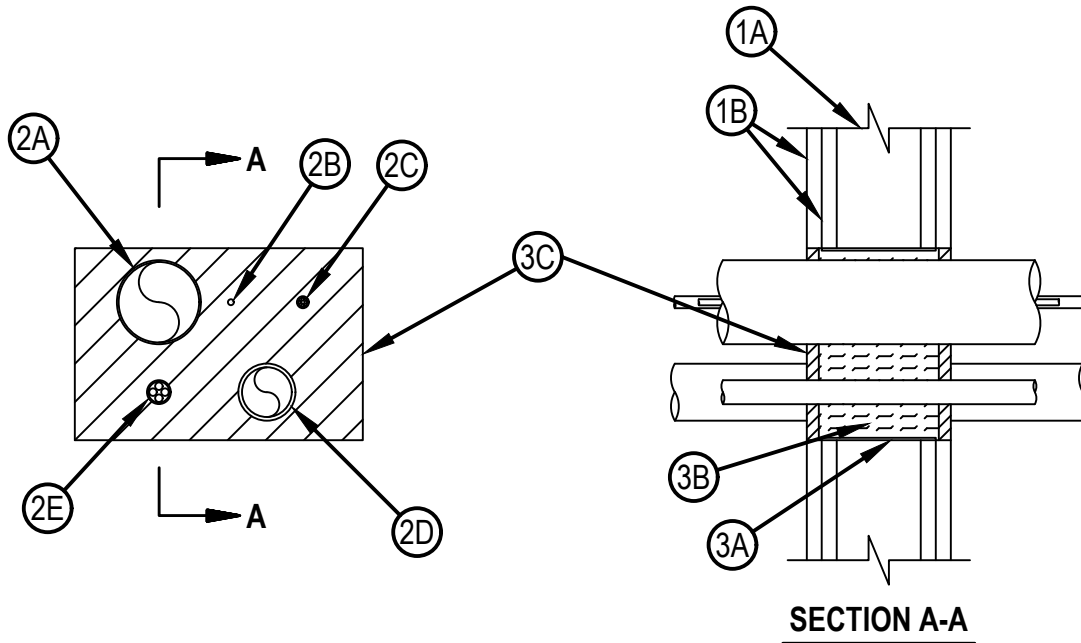


Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. W-L-8004

F Rating — 2 Hr
T Rating — 1/4 Hr

WL 8004



1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. OC. (610 mm) Additional framing (not shown) may be installed around the perimeter of the opening in lieu of the steel wire mesh (Item No. 3A).
- B. Gypsum Board* — Two layers of nom 5/8 in. (16 mm) thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max area of opening is 96 sq in. (692 cm²) with max dimension of 12 in. (305 mm) Max width of opening in wood stud walls is limited to 12 in. (305 mm).

2. Through Penetrants — The following types and sizes of pipes, conduits, tubing or cables may be used:

- A. Nom 3 in. (76 mm) diam (or smaller) electrical metallic tubing (EMT).
- B. Max 25 pair — No. 24 AWG (or smaller) telephone cable with polyvinyl chloride (PVC) insulation and jacket.
- C. Max 3/C with ground — No. 10 AWG (or smaller) Type NM cable with PVC insulation and jacket.
- D. Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping systems only.
- E. Max 300 kcmil (or smaller) power cable with PVC insulation and nylon jacket.



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
April 26, 2017

System No. W-L-8004

WL 8004

The through penetrating items to be rigidly supported on both sides of wall assembly and located as shown in the table below:

Item No.	Max Distance Between Adjacent Pen. Item In. (mm)	Min Distance Between Adjacent Pen. Item In. (mm)	Max Distance From Through Opening In. (mm)	Min Distance From Through Opening In. (mm)
2A	7-7/16 (189)	1-11/16 (43)	12 (305)	1/2 (13 mm)
2B	7-7/16 (189)	1-11/16 (43)	12 (305)	1/2 (13 mm)
2C	7-7/16 (189)	1-11/16 (43)	12 (305)	1/2 (13 mm)
2D	7-7/16 (189)	1-11/16 (43)	12 (305)	1/2 (13 mm)
2E	7-7/16 (189)	1-11/16 (43)	12 (305)	1-1/2 (32 mm)

3. Firestop System — The firestop system shall consist of the following:

- A. Steel Wire Mesh — No. 8 steel wire mesh having a min 1 in. (25 mm) lap along the longitudinal seam. Length of steel wire mesh to be 4-3/4 in., (120 mm) centered and formed to fit periphery of through opening. Steel wire mesh is not required when additional framing members (Item No. 1A) are used.
- B. Packing Material — Min 4.0 in. (102 mm) thickness of min 3.5 pcf (56 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
- C. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

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



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
April 26, 2017