

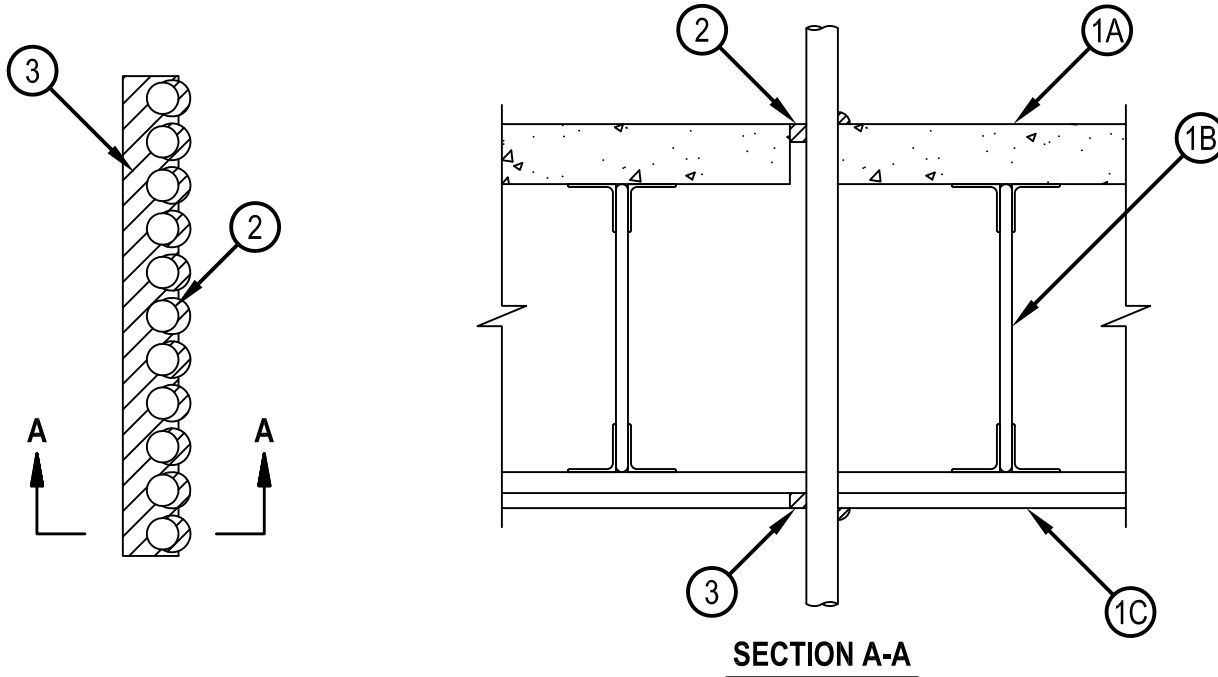


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

## System No. F-E-3012

FE 3012

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 Hr	F Rating — 1 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 1 Hr
	FTH Rating — 1 Hr



1. Floor-Ceiling Assembly — The 1 hr fire rated concrete and steel joist Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual G500 Series Design in the UL Fire Resistance Directory, as summarized below:

  - A. Flooring — Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete as specified in the individual G500 Series Design. Max area of floor opening is 40 in<sup>2</sup> (258 cm<sup>2</sup>) with max dimension of 20 in. (508 mm).
  - B. Joists — Steel joists or Structural Steel Members\* as specified in the individual G500 Series Design.
  - C. Gypsum Board\* — Min 5/8 in. (16 mm) thick, screw-attached to furring channels as specified in the individual G500 Series Design. Max area of opening in ceiling is 40 in<sup>2</sup> (258 cm<sup>2</sup>) with max dimension of 20 in. (508 mm).
2. Cables — One or more cables to be installed either concentrically or eccentricity within the firestop system. The annular space between each cable and the periphery of the opening shall be 0 in. (point contact) to max 1 in. (25 mm). The annular space between individual cables shall be min 1/4 in. (6 mm) to max 1/2 in. (13 mm). Cables to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of cables may be used:

  - A. Max 3/C (with ground) No. 2/0 AWG aluminum conductor service entrance cable with PVC insulation and jacket materials.
3. Fill, Void or Cavity Material\* — Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor. At the bottom of assembly, a min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with the surface of the ceiling. Additional fill material to be installed such that a min 1/2 in. (13 mm) diam bead is applied at the cable/floor and cable/ceiling interface at all point contact locations.

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**

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