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to UL 1479 and CAN/ULC-S115

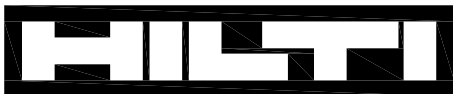
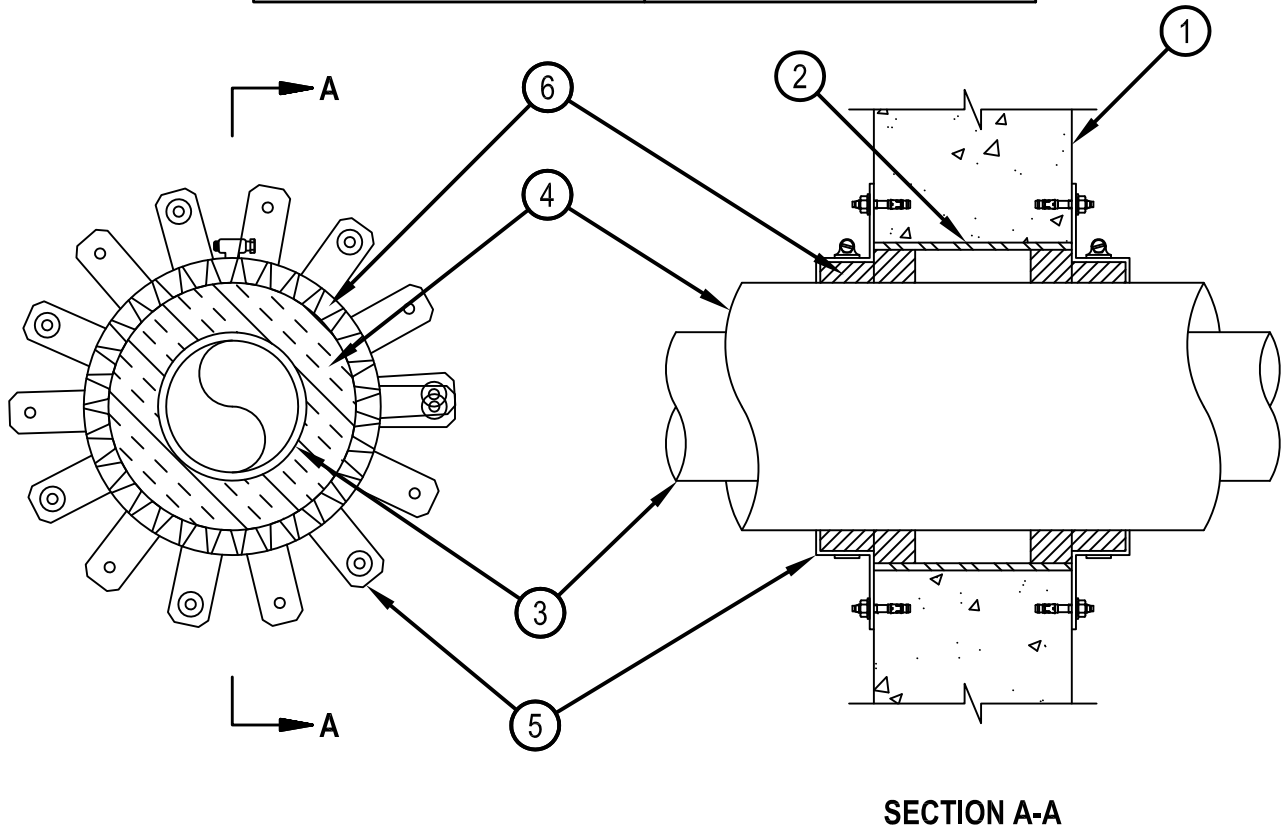
System No. W-J-5003

F Rating — 2 Hr

T Rating — 1-3/4 Hr

WJ 5003

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|-------------------------|-----------------------|
| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
| F Rating — 2 Hr | F Rating — 2 Hr |
| T Rating — 1-3/4 Hr | FT Rating — 1-3/4 Hr |
| | FH Rating — 2 Hr |
| | FTH Rating — 1-3/4 Hr |



Hilti Firestop Systems

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January 21, 2015

System No. W-J-5003

WJ 5003

1. Wall Assembly — Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 18 in. (457 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Metallic Sleeve — (Optional) — Nom 18 in. (457 mm) diam (or smaller) Schedule 40 steel pipe cast or grouted into wall assembly.
3. Through-Penetrants — One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes or tubing may be used:
 - A. Steel Pipe — Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - C. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
4. Pipe Covering* — Nom 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. An annular space of min 1 to max 1-1/8 in. (29 mm) is required within the firestop system.
See Pipe and Equipment Covering — Materials (BRGU) category in the Building Materials Directory for the names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
5. Steel Collar — Collar fabricated from precut 0.017 in. (0.432 mm) thick (28 MSG) galv sheet steel available from the sealant manufacturer. Collar shall be nom 2 in. (51 mm) deep with min 1-1/4 in. (32 mm) wide by 2 in. (51 mm) long anchor tabs for securement to the concrete wall surfaces. Retainer tabs, 1/4 in. (6 mm) wide by 3/4 in. (19 mm) long and located opposite the anchor tabs are folded 90 degrees toward pipe surface to maintain the annular space around the pipe and to retain the fill material. Collar secured to the concrete surface with 1/4 in. (6 mm) diameter by min 1 in. (25 mm) long steel Hilti Kwik fasteners or min 0.145 in. (3.68 mm) diam by min 1-1/4 in. (32 mm) long powder actuated steel fasteners in every other tab. A nom 1/2 in. (13 mm) wide stainless steel hose clamp is secured to each of the collars at mid-depth.
6. Fill, Void or Cavity Material* — Sealant — Min 1-1/4 in. (32 mm) thickness of fill material applied within the annulus on both sides of the wall assembly. Additional fill material applied to completely fill the collars.
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.



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Page: 2 of 2