

5/26/22, 11:14 AM iquprospector.com/en/profile\_xHEZ.W-L-3441 - Through-penetration Firestop Systems | UL Product IQ

## UL Product IQ®

### XHEZ.W-L-3441 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

### XHEZ - Through-penetration Firestop Systems

#### XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

#### System No. W-L-3441

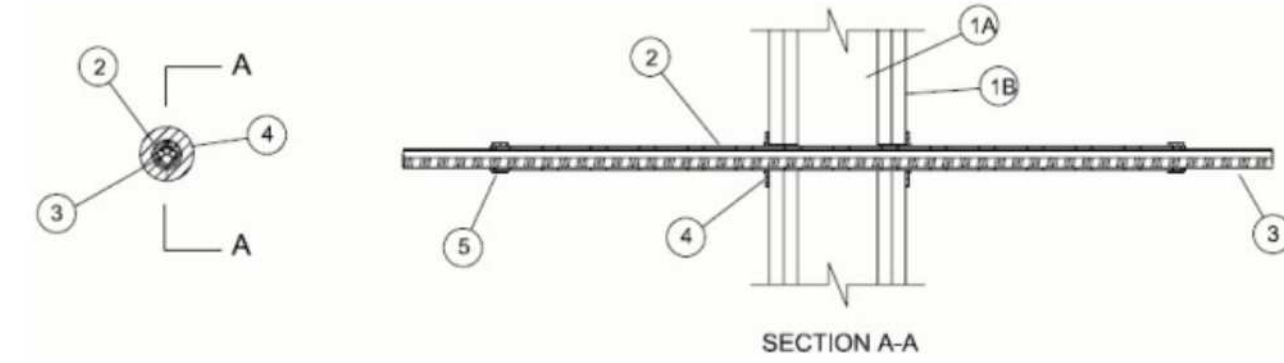
April 29, 2020

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 1 and 2 Hr (See Item 1)	FT Ratings — 1 and 2 Hr (See Item 1)
L Rating at Ambient — Less than 1 CFM/Opening	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating at 400 F — Less than 1 CFM/Opening	FTH Ratings — 1 and 2 Hr (See Item 1)
	L Rating at Ambient — Less than 5.1 L/s/m <sup>2</sup> /Opening
	L Rating at 204 C — Less than 5.1 L/s/m <sup>2</sup> /Opening

https://iquprospector.com/en/profile?e=236848

1/3

5/26/22, 11:14 AM iquprospector.com/en/profile\_xHEZ.W-L-3441 - Through-penetration Firestop Systems | UL Product IQ



**1. Wall Assembly** — The 1 or 2 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. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.

**B. Gypsum Board** — Nom 5/8 in. (16 mm) thick gypsum board, with square or tapered edges. 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. Opening may be round, rectangular or irregular with a max diam or dimension of 1-1/8 in. (19 mm).

The Ratings of the firestop system are equal to the fire rating of the wall assembly.

**2. Metallic Sleeve** — Nom 1 in. (25 mm) diam (or smaller) rigid steel conduit installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (point contact) to max 1/8 in. (3 mm). When opening dimension exceeds 1 in. (25 mm), max annular space is 3/8 in. (10 mm). The sleeve shall extend up to 12 in. (305 mm) beyond one or both wall surfaces. As an option, sleeve may extend continuously beyond one wall surface. The conduit sleeve shall be secured to the adjacent stud within the wall cavity with a steel conduit strap attached to web of stud with min two no. 8 sheet metal screws with washers or shall be rigidly supported on those sides of the wall where the sleeve is extended. As an option, the sleeve may be provided with a plastic grommet at the ends of the sleeve.

**3. Cables** — Within the sleeve (Item 2), the cables may represent a 0 to 100 percent visual fill. Cables to be tightly bundled within the sleeve and rigidly supported on both sides of wall assembly. Any combination of the following types of cables may be used:

- A. Max 3/C No. 8 AWG NM copper conductor cable (Romex) with PVC insulation and jacket.
- B. Type RG 6/U coaxial cable with fluorinated ethylene or PVC insulation and jacketing.
- C. Max 24 fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation.
- D. Max 4 pr No. 22 AWG (or smaller) Cat 5 or Cat 6 computer cables with PVC or plenum rated insulation and jacketing.
- E. Maximum 3/C No. 10 AWG copper conductor metal-clad cable.
- F. **Through Penetrating Product\*** — Max two copper conductor No. 18 AWG (or smaller) Power or Non-Power Limited Fire Alarm Cable with or without a jacket under a metal armor.
- G. Max 7/C-No. 12 AWG copper conductor control cable with PVC or XLPE insulation and jacket.
- H. Max 100 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with PVC or plenum rated insulation and jacketing.

https://iquprospector.com/en/profile?e=236848

2/3

5/26/22, 11:14 AM iquprospector.com/en/profile\_xHEZ.W-L-3441 - Through-penetration Firestop Systems | UL Product IQ

**4. Fill, Void or Cavity Material\*** — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the sleeve at each surface of wall to lap min 5 mm onto sleeve and firmly pressed to lap onto the wall around periphery of opening. Disc seams to be firmly pressed and sealed tight. Discs to be installed at both sides of wall opening.  
**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** — CFS-D 1" Firestop Cable Disc

**5. Fill, Void or Cavity Material\*** — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the cable/cable bundle at exit from each end of sleeve, lapping min 5 mm onto cables to completely cover opening and firmly pressed to lap onto the sleeve periphery. Disc seam to be firmly pressed and sealed tight. Discs to be installed at both sides of wall opening.  
**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** — CFS-D 1" Firestop Putty Disc

**6. Fill, Void or Cavity Material\*— Sealant** — As an alternate to Item 4, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the sleeve/wall interface. Fill material installed symmetrically on both sides of the wall.  
**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** — CP 606 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.**

Last Updated on 2020-04-29

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2022 UL LLC"

https://iquprospector.com/en/profile?e=236848

3/3

6C A616 FIRE STOP - WALLS - FRAMED WALLS - ELECTRIC CABLE - F 1HR&2HR - T 1HR&2HR - L 5 - HILTI - XHEZ.W-L-3441 12" = 1'-0"

5/26/22, 11:16 AM iquprospector.com/en/profile\_xHEZ.W-L-1095 - Through-penetration Firestop Systems | UL Product IQ

## UL Product IQ®

### XHEZ.W-L-1095 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

### XHEZ - Through-penetration Firestop Systems

#### XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

#### System No. W-L-1095

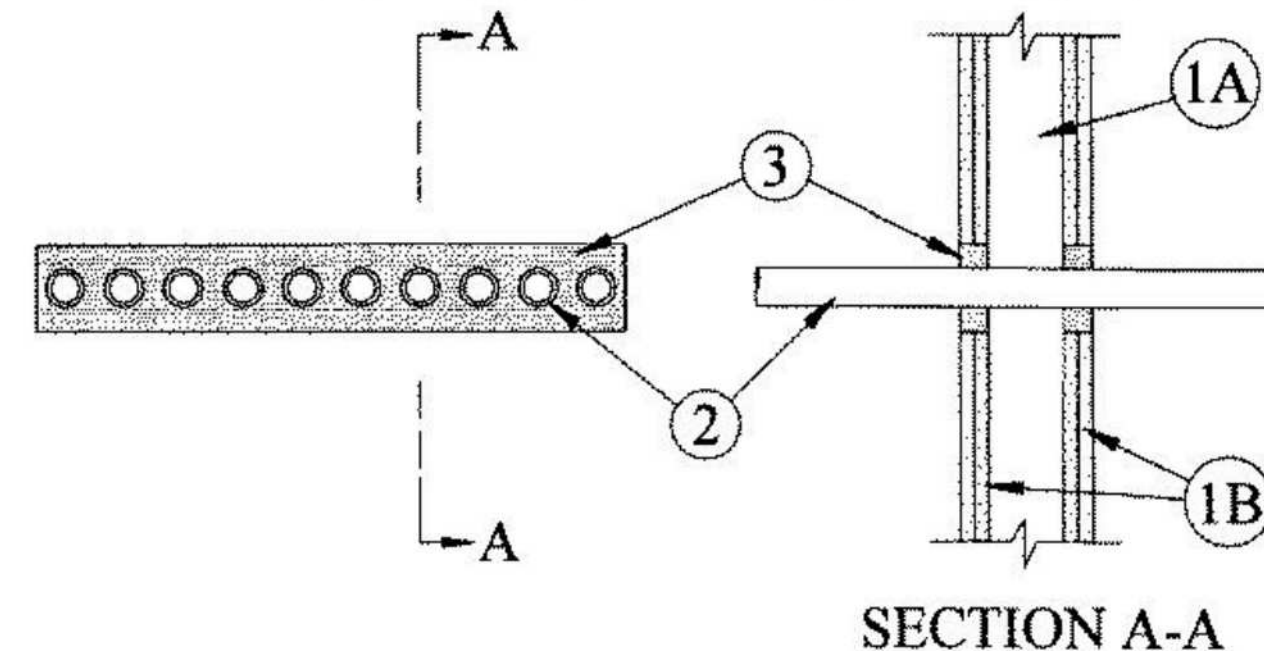
January 21, 2015

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 & 2 Hr (See Item 1)	F Ratings — 1 & 2 Hr (See Item 1)
T Ratings — 1 & 2 Hr (See Item 3)	FT Ratings — 1 & 2 Hr (See Item 3)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 & 2 Hr (See Item 1)
L Rating At 400 F — 4 CFM/sq ft	FTH Ratings — 1 & 2 Hr (See Item 3)
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — 4 CFM/sq ft

https://iquprospector.com/en/profile?e=176471

1/3

5/26/22, 11:16 AM iquprospector.com/en/profile\_xHEZ.W-L-1095 - Through-penetration Firestop Systems | UL Product IQ



**1. Wall Assembly** — The 1 or 2 h fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 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. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

**B. Gypsum Board** — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max size of opening 2-5/8 in. (67 mm) by 18 in. (457 mm). The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

**2. Electric Metallic Tubing (EMT)** — One or more nom 1 in. (25 mm) diam steel electric tubing. The annular space shall be min 1/2 in. (13 mm) to a max 1 in. (25 mm). Conduit to be rigidly supported on both sides of wall assembly.

**3. Fill, Void or Cavity Material\*** — Sealant — For 2 h F Rating, min 1-1/4 in. (32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. For 1 h F Rating, 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 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.**

Last Updated on 2015-01-21

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2022 UL LLC"

https://iquprospector.com/en/profile?e=176471

2/3

5/26/22, 11:16 AM iquprospector.com/en/profile\_xHEZ.W-L-1095 - Through-penetration Firestop Systems | UL Product IQ

from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2022 UL LLC"

https://iquprospector.com/en/profile?e=176471

3/3

6A A616 FIRE STOP - WALLS - FRAMED WALLS - METALLIC PIPE, CONDUIT OR TUBING - F 1HR&2HR - T 1HR&2HR - L 5 - HILTI - XHEZ.W-L-1095 12" = 1'-0"

This project, like most OpeningDesign's projects, is open source. (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0) -freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

**RENOVATION Wranglers**  
 Owner: Renovation Wranglers  
 102 E 26th St  
 Bryan, TX 77803  
 Katerinecasar@me.com | 979.450.9969

**ARCHITECTURE**  
 Architect of Record: LKB Architecture  
 2929 Allen Pkwy Suite 200  
 Houston, TX 77019  
 isa@lkbarchitecture.com | 713.425.3076

**DUDDLEY**  
 Structural: Dudley  
 Firm # 18677  
 6102 Imperial Loop Drive  
 College Station, TX 77845  
 corleka@dudleyeng.com | (979) 777-0720

**amc ENGINEERS**  
 MEP: AMC Engineers  
 Texas Firm #9441  
 508 E Jackson St # 552  
 Bunes, TX 78611  
 info@amcengineers.com | 512.535.6427

**openingdesign**  
 Architect: OpeningDesign  
 17 S Fairchild | FL 7  
 Madison, WI 53703  
 ryan@openingdesign.com | 773.425.6456

Date	Description
04/10/2022	Issued for Permit
08/26/2022	Permit Revisions