



CSI: DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
 Section: 07 20 00—Thermal Protection

DIVISION: 10 00 00—SPECIALTIES
 Section: 10 44 13—Fire Protection Cabinets

DIVISION: 26 00 00—ELECTRICAL
 Section: 26 05 33—Raceway and Boxes for Electrical Systems

Product Certification System:

The ICC-ES product-certification system includes evaluating reports of tests of standard manufactured product, prepared by accredited testing laboratories and provided by the listee, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the listee’s quality system.

Products: FLAMEBAR FIRE RATED CABINET

Listee: CONQUEST FIRESPRAY LLC

Evaluation: **Flamebar Fire Rated Cabinets** are proprietary insulated junction boxes designed to protect UL 2196 certified cables. Each insulated junction box includes a bottom section (cable housing) and a top section (lid/enclosure seal). Both sections consist of inner and outer galvanized sheet steel shells with a proprietary insulation layer in between. The bottom sections include through-openings in the sides of the insulated junction box, in the configurations described in the ICC Design No., which have EMT conduit sleeves (inner and outer) attached to the inner and outer shells and centered over the through-openings for cable passage. An optional layer of minimum 5/8-inch (15.9 mm) thick Type X gypsum wallboard (GWB), complying with ASTM E1396, may be adhered to the inside of the box on all six sides (five sides of the bottom section, and one on the underside of the top section).

The top section (lid) must be fastened to the bottom section sleeve along the perimeter using 3/4-inch (19.1 mm) long self-drilling screws spaced at a maximum of 3-inches (76.2 mm) on center, and a minimum 3/8-inch (9.5 mm) diameter through-bolt at each corner. The outside dimensions of the Flamebar Fire Rated Cabinets (without connection flanges considered) are nominally 30 1/2-inch by 20 1/2-inch by 21 1/2-inch (775 mm by 521 mm by 546 mm) or 30 1/2-inch by 30 1/2-inch by 21 1/2-inch (775 mm by 775 mm by 546 mm) with nominal finished inside dimensions (without the optional layer of GWB thickness considered) of 19 3/4-inch by 9 3/4-inch by 10 1/2-inch (502 mm by 248 mm by 267 mm) or 19 3/4-inch by 19 3/4-inch by 10 1/2-inch (502 mm by 502 mm by 267 mm), respectively.

Flamebar Fire Rated Cabinets were evaluated based on testing consisting of building-material components described in the Design Listings, tested in accordance with the following standards:

- ASTM E119-18B and ASTM E119-16, Standard Test Methods for Fire Tests of Building Construction and Materials, ASTM International.
- UL 263-11 (with revisions through March 2018) and UL 263-11 (with revisions through June 2015), Standard for Fire Tests of Building Construction and Materials, Underwriters Laboratories, Inc.
- CAN/ULC-S101-14, Standard Methods of Fire Endurance Tests of Building Construction and Materials, ULC Standards.

Findings: Evaluation of Flamebar Fire Rated Cabinets is based on testing in accordance with the applicable test method as referenced in the ICC Design No., and as referenced in the applicable sections of the following code editions:

- 2021 and 2018 *International Building Code*® (IBC)
Applicable Section: 703.2
- 2021 and 2018 *International Residential Code*® (IRC)
Applicable Section: R302
- *National Building Code of Canada*® 2015
Applicable Section: Volume 1-Division B: Section 3.1.7

Identification:

1. The ICC-ES mark of conformity, electronic labeling, the listing report number (ICC-ES [ESL-1483](#)), and when applicable, the ICC-ES Listing Mark, along with the name, registered trademark, or registered logo of the listee must be included in the product label.
2. In addition, Flamebar Fire Rated Cabinets are identified by a label that includes the product name, the name (Conquest Firespray LLC), and address of the manufacturer.
3. The report holder's contact information is the following:

CONQUEST FIRESPRAY LLC
28408 LORNA AVENUE
WARREN, MICHIGAN 48092
(586) 576-7600
www.conquestfirespray.com

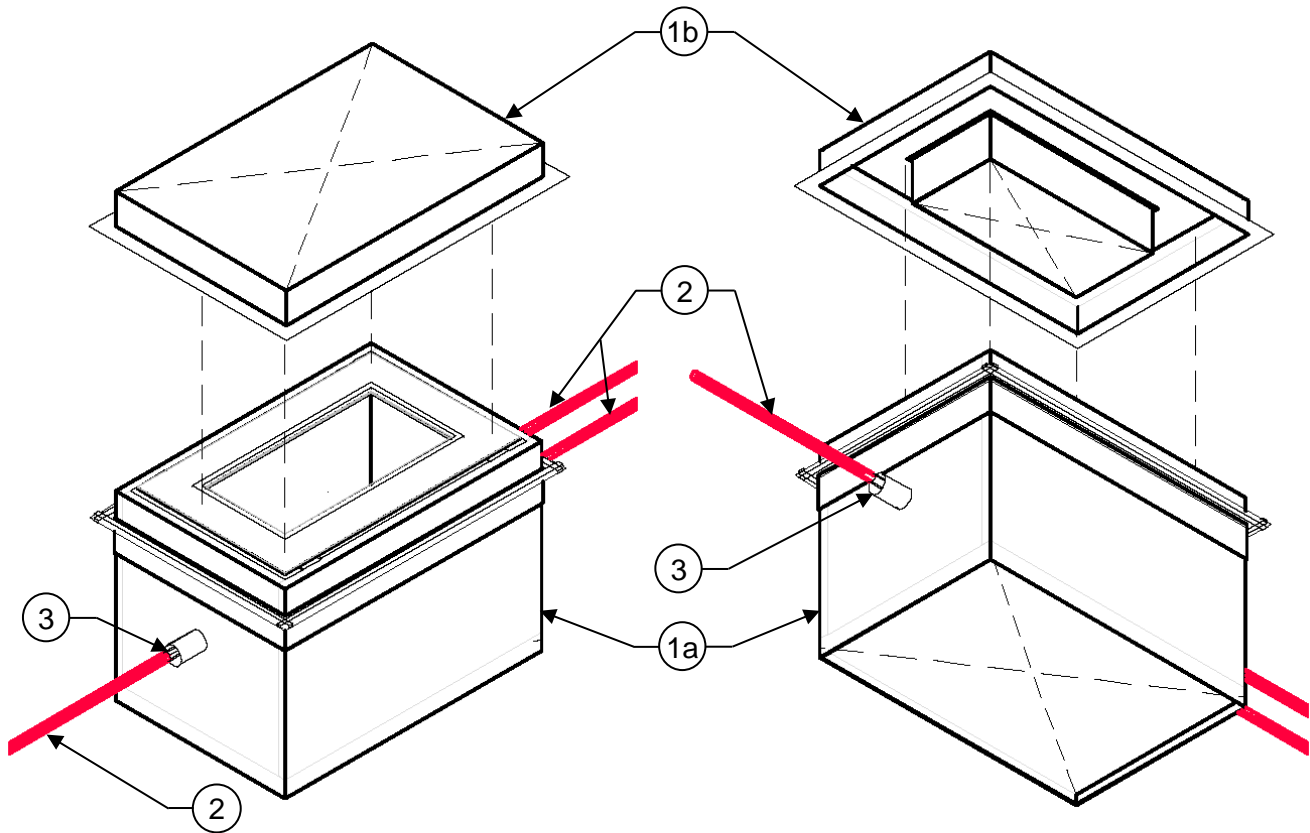
Installation: Flamebar Fire Rated Cabinets must be installed in accordance with Conquest Firespray LLC's published installation instructions and this listing.

Conditions of Listing:

1. The listing report addresses only conformance with the standards and code sections noted above.
2. Approval of the product's use is the sole responsibility of the local code official.
3. The listing applies only to the materials tested and as submitted for review by ICC-ES.
4. Flamebar Fire Rated Cabinets may be mounted to wall, floor, or deck assemblies with equal or greater fire-resistance periods.
5. The structural connections between the Flamebar Fire Rated Cabinet and fire-rated assembly (wall, floor, or deck assembly) are required to carry the weight of the cabinet for the full fire-resistance period, as listed in the ICC Design No. The means to attach the insulated junction box to structural assemblies shall be based on a rational analysis performed by the registered design professional and approved by the authority having jurisdiction. Connection to structural framing members and structural framing member capacity is outside of the scope of this report.
6. Conquest Firespray LLC's Flamebar Fire Rated Cabinets are manufactured under a quality control program with inspections by ICC-ES.

Applicant: CONQUEST FIRESPRAY LLC
Product: FLAMEBAR FIRE RATED CABINET
Standard: ASTM E119 (UL 263) / CAN/ULC-S101
Assembly Rating: 2-Hour (See Conditions of Listing Notes #4 and 5)

TMP = Thermal and Moisture Protection



COMPONENTS OF CONSTRUCTION:

1. **Insulated Junction Box** – Each Flamebar Fire Rated Cabinet consists of a bottom section (cable housing) and a top section (lid/enclosure seal), as detailed herein. Prior to the top section (lid) being installed over the bottom section (cable housing), Flamebar Intumescent Sealant must be applied at the corners and seals of the interface, and Flamebar Fibre Gasket installed along the bottom section's sleeve. The top section (lid) must be fastened to the bottom section sleeve along the perimeter using ¾-inch (19.1 mm) long self-drilling screws spaced at a maximum of 3-inches (76.2 mm) on center, and a minimum ⅜-inch (9.5 mm) diameter through-bolt at each corner. The outside dimensions of the boxes (without connection flanges considered) are nominally 30½-inch by 20½-inch by 21½-inch (775 mm by 521 mm by 546 mm) or 30½-inch by 30½-inch by 21½-inch (775 mm by 775 mm by 546 mm) with nominal finished inside dimensions of (without the optional layer of GWB thickness considered) 19¾-inch by 9¾-inch by 10½-inch (502 mm by 248 mm by 267 mm) or 19¾-inch by 19¾-inch by 10½-inch (502 mm by 502 mm by 267 mm), respectively.

- a. **Bottom Section of Insulated Junction Box (Cable Housing)** – Consists of an inner and outer shell of minimum 22-gauge (0.85 mm) thick galvanized sheet steel, proprietary insulation layers between the inner and outer shells, a minimum 20-gauge (1.01 mm) thick galvanized sheet steel sleeve connected to the outer shell, and a minimum 22-gauge (0.85 mm) thick galvanized sheet steel base attached to the inset bottom of the junction box. Corners and seams of the bottom section construction must be sealed with Flamebar Intumescent Sealant.

Optional minimum ⅝-inch (15.9 mm) thick Type X gypsum wallboard (GWB), complying with ASTM E1396, is adhered to the inside of the box on all five faces. Where optionally added, the corners and seams of the GWB layer must be sealed using 3M™ Fire Block Sealant FB136.

Maximum 1-inch (25.4 mm) diameter through-openings shall be allowed in the following configurations:

- A single through-opening on one of the four sides of the insulated junction box (one through-opening total).
- A single through-opening on two opposing sides of the insulated junction box (two through-openings total).
- A single through-opening on three of the four sides of the insulated junction box (three through-openings total).
- Two through-openings on one side, and one through-opening on the opposing side of the insulated junction box (three through-openings total).
- Two through-openings on two opposing sides of the insulated junction box (four through-openings total).

Note: Where the penetrating cable (Item 2) diameter is less than the maximum ½-inch (12.7 mm), the diameter of the through-opening shall be reduced proportionally to maintain a minimum 25% fill (penetrating cable area to through-opening area).

For both single and double through-openings on a single side, the elevation of the through-opening(s) must be 10-inches (25.4 cm) measured from the raw top edge of the bottom section of the insulated junction box to the center of the through-opening. For single through-openings, the hole must be centered on the face side-to-side. For double through-openings, the holes must be centered on the face and 3¾-inch (95.3 mm) apart from each other center-to-center (or 1 7/8-inch (47.6 mm) from the side's centerline to the center of the through-opening).

Each through-opening must have EMT conduit sleeves (inner and outer) centered over the through-openings and attached to the inner and outer shells of the insulated junction box for cable passage (1 ½-inch (38.1 mm) long, 2-inch (50.8 mm) diameter for inner sleeves protruding into box, and 3-inch (76.2 mm) long, 2-inch (50.8 mm) diameter for outer sleeves protruding out). Where optional minimum ⅝-inch (15.9 mm) thick Type X GWB is installed, the perimeter of the inner conduit sleeves must be sealed using 3M™ Fire Block Sealant FB136.

- b. **Top Section of Insulated Junction Box (Lid/Enclosure Seal)** – Consists of an outer shell layer and inner "plug" layer of minimum 22-gauge (0.85 mm) thick galvanized sheet steel and proprietary insulation layers between the outer shell and inner "plug" layers. Corners and seams of the top section construction must be sealed with Flamebar Intumescent Sealant.

Optional minimum ⅝-inch (15.9 mm) thick Type X gypsum wallboard (GWB), complying with ASTM E1396, may be adhered to the underside of the lid where the enclosure is sealed. Where optionally added, the corners and seams of the GWB layer must be sealed using 3M™ Fire Block Sealant FB136.

2. **Penetrating Item(s)** – One maximum ½-inch (12.7 mm) diameter UL 2196 certified cable may be installed centered through each through-opening of the insulated junction box. Prior to the installation of the UL 2196 certified cable, each cable must be wrapped with a single layer of 3M™ Fire Barrier Expanrol Flexible Intumescent Strip (E-FIS) over the 6-inch length of cable corresponding to where the cable will pass through the through-opening in the insulated junction box.
3. **Void Filler Material** – SpecSeal® SSP Intumescent Firestop Putty must be installed to fill the annular space between the penetrating item and the 2-inch (50.8 mm) diameter inner and outer conduit sleeves. The SpecSeal® SSP Intumescent Firestop Putty must be applied in accordance with the manufacturer's published installation instructions and pressed firmly to fill the void between the cable and the conduit sleeves to a minimum depth of ¾-inch (19.1 mm) on the inside (half of the length of the inner 1 ½-inch (38.1 mm) long conduit sleeve) and a minimum depth of 1 ½-inch (38.1 mm) on the outside (half of the length of the outer 3-inch (76.2 mm) long conduit sleeve).