### Penetrants

- **System No. C-AJ-1605**
  - **Ratings:** F Rating 2 Hr, T Rating 0 Hr, **MAX Opening:** 256 in² (1652 cm²) with max dimension of 16 in. (406 mm).
  - **Penetrants:** **Steel Pipe** 12 in. (305 mm) diam (or smaller), **Iron Pipe** 12 in. (305 mm) diam (or smaller), **Conduit** 4 in. (102 mm) diam (or smaller), **IFTI Products Used:** Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460

- **System No. C-AJ-1624**
  - **Ratings:** F Rating 2 Hr, T Rating 2 Hr, **MAX Opening:** 64 in². (413 cm²) with max dimension of 8 in. (203 mm).
  - **Penetrants:** **Steel Pipe** 1 in. (25 mm) diam (or smaller), **Iron Pipe** 1 in. (25 mm) diam (or smaller) **Conduit** 1 in. (25 mm) diam (or smaller), **IFTI Products Used:** INSS 2460 Fire Barrier Silicone Sealant, FP05 Coated Firestop Board, GC99-20 Coating

- **System No. C-AJ-1624 Canada**
  - **Ratings:** F Rating 2 Hr, FT Rating 2 Hr, FH Rating 2 Hr, FTH Rating 2 Hr, **MAX Opening:** 64 in². (413 cm²) with max dimension of 8 in. (203 mm).
  - **Penetrants:** **Steel Pipe** 1 in. (25 mm) diam (or smaller), **Iron Pipe** 1 in. (25 mm) diam (or smaller) **Conduit** 1 in. (25 mm) diam (or smaller), **IFTI Products Used:** INSS 2460 Fire Barrier Silicone Sealant, FP05 Coated Firestop Board, GC99-20 Coating

- **System No. C-AJ-2710**
  - **Ratings:** F Rating 3 Hr, T Rating 2 Hr, **L Rating At Ambient - Less Than 1 CFM/sq ft.** **MAX Opening:** 254 mm (10 in.).
  - **Penetrants:** **Polyvinyl Chloride (PVC) Pipe** 203 mm (8 in.) diam (or smaller), **Chlorinated Polyvinyl Chloride (CPVC) Pipe** 203 mm (8 in.) diam (or smaller), **IFTI Products Used:** IFTI Firestop Collar SSCI-X, Intumescent Strip INFS0812, Fire Barrier Silicone Sealant INSS2460

- **System No. C-AJ-4097**
  - **Ratings:** F Rating 2 Hr, T Rating 2 Hr, **MAX Opening:** 128 in² (826 cm²).
  - **Penetrants:** **Cable Tray** Max 12 in. (305 mm) wide by max 4 in. (102 mm)Max 12 in. (305 mm) wide by max 4 in. (102 mm), **Cables** 2/C No. 14 AWG (or smaller) **IFTI Products Used:** INSS 2460 Fire Barrier Silicone Sealant, FP05 Coated Firestop Board, GC99-20 Coating

- **System No. C-AJ-4097 Canada**
  - **Ratings:** F Rating 2 Hr, FT Rating 2 Hr, FH Rating - 2 Hr, FTH Rating - 2 Hr, **MAX Opening:** 7742 cm² (1200 in²) with a max dimension of 1016 mm (40 in.).
  - **Penetrants:** **Cable Tray** 914 mm (36 in.) wide by max 152 mm (6 in.) deep open-ladder steel cable tray. **Cables** Aggregate cross-sectional area of max 10/C No. 10 AWG cable, **IFTI Products Used:** INSS 2460 Fire Barrier Silicone Sealant, FP05 Coated Firestop Board, GC99-20 Coating

- **System No. C-AJ-5331**
  - **Ratings:** F Rating 2 Hr, T Rating - 0 Hr, **MAX Opening:** 144 in² (929 cm²) with max dimension of 12 in. (305 mm).
  - **Penetrants:** **Steel Pipe** 6 in. (152 mm) diam (or smaller), **Iron Pipe** 6 in. (152 mm) diam (or smaller) **IFTI Products Used:** Firestop Sheet FP-04, Fire Barrier Silicone Sealant INSS2460

- **System No. C-AJ-7142**
  - **Ratings:** F Rating 2 Hr, T Rating - 0 Hr, **MAX Opening:** 74.9 sq ft (7 m²) with a max dimension of 110 in. (2.8 m).
  - **Penetrants:** Steel Duct 107 by 95 in. (2.7 by 2.4 m) **IFTI Products Used:** Firestop Sheet FP-04, Fire Barrier Silicone Sealant INSS2460

- **System No. C-AJ-8203**
  - **Ratings:** F Rating 3 Hr, T Rating 0 Hr, **MAX Opening:** 13.3 ft² (1.24 m²) with max dimension of 48 in. (1.22 m).
  - **Penetrants:** **Cable Tray** Max one 48 in. (1219 mm) wide by max 12 in. (305 mm) deep open ladder cable tray, **Cables** Aggregate cross-sectional area of cables in cable tray to be max 4 percent of the cross-sectional area of the cable tray based on a max 1 in. (25 mm) **Nonmetallic Pipe** Max two nonmetallic pipes or conduits to be installed within opening. The following types and sizes of nonmetallic through penetrants may be used: 1. **Polyvinyl Chloride (PVC) Pipe** 12 in. (305 mm) diam (or smaller), 2. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** 12 in. (305 mm) diam (or smaller) 3. **Rigid Nonmetallic Conduit (RNC)**6 in. (152 mm) diam (or smaller) **IFTI Products Used:** Firestop Sheet FP-04+, Firestop Putty FM011, Fire Barrier Silicone Sealant INSS2460

- **System No. C-BJ-0028**
  - **Ratings:** F Rating 2 Hr, T Rating 2 Hr, **MAX Opening:** 6 in.. **Penetrants:** **Packaging Material** 6-7/8 in. thickness of min 6 pcf ceramic batt insulation, **IFTI Products Used:** Fire Stopping Sealant INSS2460

- **System No. C-BJ-1057**
  - **Ratings:** F Rating 2 Hr, T Rating 2 Hr, **MAX Opening:** 0.09 m² with max dimension of 0.3 m **Penetrants:** **Steel Pipe** 90 mm outside diameter (or smaller) steel pipe with a 2.5 mm (or heavier) **Pipe Covering Materials:** 1 in. (25 mm) thick cellular glass insulation to be secured on steel pipe with Fire Caulk INSS2460 **IFTI Products Used:** Fire Barrier Silicone Sealant INSS2460, Firestop Collar SSCI-X, DC-309

- **System No. C-BJ-1060**
  - **Ratings:** F Rating 3 Hr, T Rating 1/2 Hr, **MAX Opening:** 256 in² (1652 cm²) with max dimension of 16 in. (406 mm)
  - **Penetrants:** **Steel Pipe** 12 in. (305 mm) diam (or smaller) **Iron Pipe** 12 in. (305 mm) diam (or smaller) **Conduit** Nom 4 in. (102 mm) diam (or smaller) electrical metallic tubing (EMT) or nom 6 in.(152 mm) rigid steel conduit **IFTI Products Used:** Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460,

- **System No. C-BJ-2031**
  - **Ratings:** F Rating 2 Hr, T Rating 0 Hr, **L Rating At Ambient - Less Than 1 CFM/sq ft.** **MAX Opening:** 13 in. (330 mm),
  - **Penetrants:** **Polyvinyl Chloride (PVC) Pipe** 12 in. (305 mm) diam (or smaller) **Chlorinated Polyvinyl Chloride (CPVC) Pipe** 12 in. (305 mm) diam (or smaller), **Rigid Nonmetallic Conduit** 6 in. (152 mm) diam (or smaller) **IFTI Products Used:** Firestop Collar SSCI-X, Intumescent Strip INFS0812, Fire Barrier Caulk INSS2440

- **System No. C-BJ-2032**
  - **Ratings:** F Rating 3 Hr, T Rating 3 Hr, **MAX Opening:** 144 in² (929 cm²) with max dimension of 12 in. (305 mm),
  - **Penetrants:** **Polyvinyl Chloride (PVC) Pipe** 8 in. (203 mm) diam (or smaller) **Chlorinated Polyvinyl Chloride (CPVC) Pipe** 8 in. (203 mm) diam (or smaller) **Rigid Nonmetallic Conduit** 6 in. (152 mm) diam (or smaller) **IFTI Products Used:** Firestop Collar SSCI-X, Intumescent Strip INFS0812, Fire Barrier Caulk INSS2440, Firestop Sheet FP-04+

- **System No. C-BJ-4033**
  - **Ratings:** F Rating 3 Hr, T Rating 3 Hr, **MAX Opening:** 0.06 m² with max dimension of 0.3 m.,
  - **Penetrants:** **(Cable Tray)** Max 200 mm wide by max 120 mm deep open ladder, **Duct Wrap Materials:** Fireproof Blanket FB01-15, **IFTI Products Used:** Fire Barrier Silicone Sealant INSS2460, Firestop Putty FM011, Fireproof Blanket FB01-15, DC-309

- **System No. C-BJ-5017**
  - **Ratings:** F Rating 3 Hr, T Rating 3 Hr, **MAX Opening:** 100 in² (645 cm²) with max dimension of 10 in. (254 mm),
  - **Penetrants:** **Stainless Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) by min 0.105 in. thick, Type 304 stainless steel **Pipe Covering Materials** — 1 in. (25 mm) thick, **IFTI Products Used:** FP-03 Board, Fire Barrier Silicone Sealant INSS2460, DC 309
### System No. C-BJ-6001
**Ratings** F Rating 2 Hr, T Rating 2 Hr, **MAX Opening**: 0.06 m² with max dimension of 0.3 m. **Penetrants**: (Busway+), Nom 115 mm wide (or smaller)

**Duct Wrap Materials**: Fireproof Blanket FB01-15, **IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460, Fireproof Blanket FB01-15, DC-309

### System No. C-BJ-7001
**Ratings** F Rating 3 Hr, T Rating 3 Hr, **MAX Opening**: 256 in² (1652 cm²) with max dimension of 16 in. (406 mm), **Penetrants**: Steel Duct — Max 8 by 8 in. (203 by 203 mm) by No. 18 gauge (or heavier)

**Forming Material** — 1 in. (25 mm) thick by min 4.0 pcf mineral wool batt insulation sized to the outside dimensions of the steel duct, **IFTI Products Used**: FP-03 INCAWOOL Board, Fire Barrier Silicone Sealant INSS2460

### System No. C-BJ-7004
**Ratings** F Rating 3 Hr, T Rating 1-1/4 Hr, **MAX Opening**: 74.9 sq ft (7.0 m²) with a max dimension of 110 in. (2.8 m), **Penetrants**: Steel Duct — Max 107 by 95 in. (2.7 by 2.4 m) No. 18 gauge (or heavier), **IFTI Products Used**: Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460

### System No. C-BJ-8021
**Ratings** F Rating 3 Hr, T Rating 3 Hr, **MAX Opening**: 0.06 m² with max dimension of 300 mm., **Penetrants**: (Cable Tray) Max 200 mm wide by max 120 mm deep open ladder **Duct Wrap Materials**: Fireproof Blanket FB01-15. **IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460, Fireproof Blanket FB01-15, DC-309

### System No. C-BJ-8023
**Ratings** F Rating 3 Hr, T Rating 1/4, 1/2, 1-1/2 and 2 Hr, **MAX Opening**: 1600 in² (10322 cm²) with max dimension of 40 in. (1016 mm), **Penetrants**: Cable Tray — Max one 4 (610 mm) wide by max 12 in. (305 mm), **Cables** — Aggregate cross-sectional area of cables in cable tray to be max 11 percent of the cross-sectional area of the cable tray based on a max 1 in. (25 mm).

**Metallic Pipe** — Max two metallic pipes or conduits to be installed within opening, **Steel Pipe** — Nom 6 in. (152 mm) diam (or smaller), **Iron Pipe** — Nom 6 in. (152 mm) diam (or smaller)

**Conduit** — Nom 4 in. (102 mm) diam (or smaller), **Steel Duct** — Max one 24 by 12 in. (610 by 305 mm or smaller)

**IFTI Products Used**: Firestop Putty FM011, Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460

### System No. C-BJ-8025
**Ratings** F Rating 2 Hr, T Rating 0 Hr, **MAX Opening**: 0.06 m² with max dimension of 300 mm., **Penetrants**: Busway+ 150 mm (6 in.) wide by 80 mm (3-1/8 in.) deep (or smaller), **Steel Duct** Max 250 mm (9-3/4 in.) by 200 mm (7-7/8 in.) with 1.1 mm (0.042 in.) in thickness (or thicker), **Steel Pipe** 114 mm O.D. (4 in.) (or smaller), **Iron Pipe** — Nom 202 mm (8 in.) diam (or smaller)

**Conduit** — Nom 102 mm (4 in.) diam (or smaller), **IFTI Products Used**: FP-03 INCAWOOL Board, Fire Barrier Foam US150, Fireproof Blanket FB01-15, Mordable Firestop Putty FM011, Firestop Sheet FP-02, DC-309

### System No. C-BK-3003
**Ratings** F Rating 2 Hr, T Rating 1 Hr, **MAX Opening**: 6 in., **Penetrants**: Cable — Min separation between cables shall be 2 in. Min distance from edge of opening shall be 1 in. Cables to be rigidly supported on both sides of floor or wall assembly. **IFTI Products Used**: Fire Stopping Sealant INSS2460

### System No. F-A-1114
**Ratings** F Rating 2 Hr, T Rating 0 Hr, L Rating At Ambient - Less Than 1 CFM/sq ft, **MAX Opening**: 993 cm² (154 in.²) with a max diameter of 356 mm (14 in.), **Penetrants**: Steel Pipe — Nom 305 mm (12 in.) diam (or smaller)

**IFTI Products Used**: FP-03 INCAWOOL Board, Fire Barrier Foam US110, Fire Barrier Silicone Sealant INSS2460

### System No. F-A-1114 Canada
**Ratings** F Rating 2 Hr, FT Rating 0 Hr, FH Rating - 2 Hr, FTH Rating - 0 Hr, L Rating At Ambient - Less Than 5.1 L/s m², **MAX Opening**: 993 cm² (154 in.²) with a max diameter of 356 mm (14 in.), **Penetrants**: Steel Pipe — Nom 305 mm (12 in.) diam (or smaller)

**IFTI Products Used**: FP-03 INCAWOOL Board, Fire Barrier Foam US110, Fire Barrier Silicone Sealant INSS2460

### System No. F-B-2242
**Ratings** F Rating 2 Hr, T Rating 2 Hr, L Rating At Ambient - Less Than 1 CFM/sq ft, **MAX Opening**: 993 cm² (154 in.²) with a max diameter of 356 mm (14 in.), **Penetrants**: Polyvinyl Chloride (PVC) Pipe — Nom 305 mm (12 in.) diam (or smaller)

**IFTI Products Used**: Firestop Collar SSCI-X, Intumescent Strip INFS0812, FP-03 INCAWOOL Board, Fire Barrier Foam US110, Fire Barrier Silicone Sealant INSS2460

### System No. F-B-1013
**Ratings** F Rating 2 Hr, T Rating 0 Hr, **MAX Opening**: 59 in² with max diameter of 8-5/8 in. (220 mm), **Penetrants**: Steel Pipe — One nom 4 in. diam (115 mm O.D.) (or smaller), **IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460

### System No. FF-S-1033
**Ratings** Assembly Rating — 3 Hr, Nominal Joint Width - 3 In., **MAX Opening Floor Assembly**: Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) **structural concrete**, **Penetrants**: Forming Material — Min 4 pcf (64 kg/m³) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm))

**IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460+ **System No. FF-S-1033 Canada**

**Ratings** F Rating — 3 Hr, FT Rating — 3 Hr, FH Rating — 3 Hr, TTH Rating — 3 Hr, Nominal Joint Width - 77 mm **MAX Opening Floor Assembly**: Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) **structural concrete**, **Penetrants**: Forming Material — Min 4 pcf (64 kg/m³) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm))

**IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460+

### System No. FW-S-1019
**Ratings** Assembly Rating — 3 Hr, Nominal Joint Width - 3 In., **MAX Opening Floor Assembly**: Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete., **Penetrants**: Forming Material — Min 4 pcf (64 kg/m³) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm) and installed edge-first into joint opening.) **IFTI Products Used**: Fire Barrier Silicone Sealant INSS2460+
Click on System No. in Red to see Full System

<table>
<thead>
<tr>
<th>System No.</th>
<th>FTI Products Used</th>
<th>Wall Assembly —</th>
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<tbody>
<tr>
<td>FW-S-1019 Canada</td>
<td>Fire Barrier Silicone Sealant INSS2460+</td>
<td><strong>MAX Opening Floor Assembly</strong>: Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete, <strong>Penetrants</strong>: Fire Barrier Silicone Sealant INSS2460+ — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm) and installed edge-first into joint opening.</td>
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<tr>
<td>HW-S-1015 Canada</td>
<td>Fire Barrier Silicone Sealant INSS2460+</td>
<td><strong>MAX Opening Floor Assembly</strong>: Max width of joint is 3 in. (76 mm), <strong>Penetrants</strong>: Forming Material* — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm) and installed edge-first into joint opening, parallel with joint direction, such that batt sections are compressed min 50 percent in thickness and flush with both wall surfaces. Adjoining lengths of batt to be tightly-buttet butted seams spaced min 36 in. (914 mm) apart along the length of the joint3)</td>
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<tr>
<td>W-1430</td>
<td>Fire Barrier Silicone Sealant INSS2460</td>
<td><strong>MAX Opening Joint System</strong>: Max width of joint is 3 in. (76 mm), <strong>Penetrants</strong>: Forming Material* — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm) and installed edge-first into joint opening, parallel with joint direction, such that batt sections are compressed min 50 percent in thickness and flush with both wall surfaces. Adjoining lengths of batt to be tightly-buttet butted seams spaced min 36 in. (914 mm) apart along the length of the joint3)</td>
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<tr>
<td>W-L-5277</td>
<td>Fire Barrier Silicone Sealant INSS2460</td>
<td><strong>MAX Opening</strong>: 256 in² (1652 cm²) with max dimension of 16 in. (406 mm), <strong>Penetrants</strong>: Steel Pipe — Nom 12 in. (305 mm) diam (or smaller), <strong>Iron Pipe</strong> — Nom 12 in. (305 mm) diam (or smaller), <strong>Conduit</strong> — Nom 4 in. (102 mm) diam (or smaller), <strong>IFTI Products Used</strong>: Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460</td>
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<tr>
<td>W-L-8080</td>
<td>Fire Barrier Silicone Sealant INSS2460</td>
<td><strong>MAX Opening</strong>: The 1 or 2 hr fire-rated gypsum, <strong>Penetrants</strong>: Cable Tray Max one 48 in. (1219 mm) wide by max 12 in. (305 mm) deep open ladder Cables max 4 percent of the cross-sectional area of the cable tray based on a max 1 in. (25 mm) <strong>IFTI Products Used</strong>: Firestop Collar SSCI-X, Intumescent Strip INF50812, Firestop Putty FM011, Firestop Sheet FP-04+, Fire Barrier Silicone Sealant INSS2460</td>
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<td>WW-S-1035</td>
<td>Fire Barrier Silicone Sealant INSS2460</td>
<td><strong>MAX Joint System</strong>: Max width of joint is 3 in. (76 mm), <strong>Penetrants</strong>: Forming Material* — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm)</td>
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<td>WW-S-1035 Canada</td>
<td>Fire Barrier Silicone Sealant INSS2460+</td>
<td><strong>MAX Joint System</strong>: Max width of joint is 3 in. (76 mm), <strong>Penetrants</strong>: Forming Material* — Min 4 pcf (64 kg/m3) mineral wool batt insulation installed in joint opening as a permanent form. Pieces of batt cut to min width of 6 in. (152 mm) <strong>IFTI Products Used</strong>: Fire Barrier Silicone Sealant INSS2460+</td>
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