**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

A. Firestopping systems.

**1.02 RELATED REQUIREMENTS**

**SECTION 078400**

**FIRESTOPPING**

A. Section 016116 - Volatile Organic Compound (VOC) Content Restrictions.

**1.03 REFERENCE STANDARDS**

A. ASTM E814 - Standard Test Method for Fire Tests of Penetration Firestop Systems 2013a

(Reapproved 2017).

B. UL 1479 - Standard for Fire Tests of Penetration Firestops Current Edition, Including All

Revisions.

**1.04 SUBMITTALS**

A. See Section 013000 - Administrative Requirements for submittal procedures.

B. Manufacturer's qualification statement.

C. Installer's qualification statement.

**1.05 QUALITY ASSURANCE**

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Installer Qualifications: Company specializing in performing the work of this section and:

1. Trained by manufacturer.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

A. Firestopping Manufacturers:

1. HoldRite, a Brand of Reliance Worldwide Corporation; [ ]:

[www.holdrite.com/#sle.](http://www.holdrite.com/#sle)

**2.02 MATERIALS**

A. Primers, Sleeves, Forms, Insulation, Packing, Stuffing, and Accessories: Provide type of materials as required for tested firestopping assembly.

**2.03 FIRESTOPPING ASSEMBLY REQUIREMENTS**

A. Through Penetration Firestopping: Use system that has been tested according to ASTM E814 to have fire resistance F Rating equal to required fire rating of penetrated assembly.

**2.04 FIRESTOPPING PENETRATIONS THROUGH CONCRETE AND CONCRETE MASONRY CONSTRUCTION**

A. Blank Openings:

1. In Floors or Walls:

a. 3 Hour Construction: UL System C-AJ-0176; HoldRite HydroFlame 300 CG (Caulk Grade - Walls or Floors) Silicone Firestop Sealant.

b. 2 Hour Construction: UL System C-AJ-0171; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

c. 2 Hour Construction: UL System C-AJ-0175; HoldRite HydroFlame 300 SL (Self- Leveling) Silicone Firestop Sealant.

B. Penetrations Through Floors or Walls By:

1. Multiple Penetrations in Large Openings:

a. 2 Hour Construction: UL System C-AJ-2863; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

2. Bathtub Drains:

a. Up to 3 Hour Construction: UL System F-A-2183; HoldRite HydroFlame HFPTB- NP-0200, HFPTB-TW-0200, TB-NP-0200, or TB-TW-0200.

3. Uninsulated Metallic Pipe, Conduit, and Tubing:

a. Up to 4 Hour Construction: UL System C-AJ-1739; HoldRite HydroFlame 300 CG (Caulk Grade - Walls or Floors) Silicone Firestop Sealant.

b. 3 Hour Construction: UL System C-AJ-1718; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

c. 2 and 3 Hour Construction: UL System C-AJ-1696; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

4. Uninsulated Non-Metallic Pipe, Conduit, and Tubing:

a. 3 Hour Construction: UL System C-AJ-2842; HoldRite HydroFlame Pipe Collar.

b. 3 Hour Construction: UL System C-AJ-2848; HoldRite HydroFlame Wrap Strip and HydroFlame 200 Intumescent Firestop Sealant.

c. 3 Hour Construction: UL System C-AJ-2851; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

5. Electrical Cables Not In Conduit:

a. 3 Hour Construction: UL System C-AJ-3360; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

b. 2 Hour Construction: UL System C-AJ-3375; HoldRite HydroFlame 300 CG (Caulk Grade) Silicone Firestop Sealant.

6. Insulated Pipes:

a. 3 Hour Construction: UL System C-AJ-5410; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

b. 3 Hour Construction: UL System C-AJ-5436; HoldRite HydroFlame 300 SL (Floors Only), or HoldRite HydroFlame 300 CG (Walls or Floors).

c. 2 Hour Construction: UL System C-AJ-5433; HoldRite HydroFlame 300 CG (Caulk Grade).

7. HVAC Ducts, Uninsulated:

a. 3 Hour Construction: UL System C-AJ-7204; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

b. 2 Hour Construction: UL System C-AJ-7224; HoldRite HydroFlame 300 SL (Floors Only), or HoldRite HydroFlame 300 CG (Walls or Floors).

c. 2 Hour Construction: UL System C-AJ-7222; HoldRite HydroFlame 300 CG (Caulk Grade).

C. Penetrations Through Floors By:

1. Multiple Penetrations in Large Openings:

a. 3 Hour Construction: UL System F-A-3052; HoldRite HydroFlame HFP-Px, HFP- PxB, HFP-Mx, or HFP-MxB Cast-In Device.

b. 3 Hour Construction: UL System F-A-8034; HoldRite HydroFlame HFP-P3, or

HFP-P3B Cast-In Device.

2. Uninsulated Metallic Pipe, Conduit, and Tubing:

a. 3 Hour Construction: UL System F-B-1038; HoldRite HydroFlame HFP-M/P8, HFP-M/P10, or HFP-M/P12 Cast-In Device.

3. Uninsulated Non-Metallic Pipe, Conduit, and Tubing:

a. 3 Hour Construction: UL System F-B-1038; HoldRite HydroFlame HFP-P8, HFP- P10, or HFP-P12 Cast-In Device.

b. 2 and 3 Hour Construction: UL System F-A-1133; HoldRite HydroFlame HFP-Px, HFP-PxB Cast-In Device.

4. Electrical Cables Not In Conduit:

a. 3 Hour Construction: UL System F-A-3052; HoldRite HydroFlame HFP-Px, HFP- PxB, HFP-Mx, or HFP-MxB Cast-In Device.

5. Insulated Pipes:

a. 3 Hour Construction: UL System F-A-5013; HoldRite HydroFlame HFP-M/P8, HFP-M/P10, or HFP-M/P12 Cast-In Device.

b. 2 and 3 Hour Construction: UL System F-A-5043; HoldRite HydroFlame HFP-Px, or HFP-PxB Cast-In Device.

D. Penetrations Through Walls By:

1. Uninsulated Metallic Pipe, Conduit, and Tubing:

a. 3 Hour Construction: UL System C-AJ-1700; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

2. Electrical Cables Not In Conduit:

a. 2 Hour Construction: UL System C-AJ-3357; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

3. Insulated Pipes:

a. 2 Hour Construction: UL System C-AJ-5407; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

4. HVAC Ducts, Uninsulated:

a. 3 Hour Construction: UL System C-AJ-7204; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

**2.05 FIRESTOPPING PENETRATIONS THROUGH FRAMED FLOORS**

A. Metallic Pipe, Conduit, and Tubing Penetrations in Framed Floors:

|  |  |  |
| --- | --- | --- |
|  | 1. | 1 and 2 Hour Construction: UL System F-C-1177; HoldRite HydroFlame 200  Intumescent Firestop Sealant. |
| B. | No | -Metallic Pipe, Conduit or Tubing in Framed Floors: |
|  | 1. | 1 and 2 Hour Construction: UL System F-C-2473; HoldRite HydroFlame 200  Intumescent Firestop Sealant. |
|  | 2. | 1 Hour Construction: UL System F-C-2487; HoldRite HydroFlame 200 Intumescent  Firestop Sealant. |

n

C. Electrical Cable in Framed Floors:

1. 1 and 2 Hour Construction: UL System F-C-3121; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

D. Insulated Pipe in Framed Floors:

1. 2 Hour Construction: UL System F-C-5090; HoldRite HydroFlame 200 Intumescent

Firestop Sealant.

**2.06 FIRESTOPPING PENETRATIONS THROUGH GYPSUM BOARD WALLS**

A. Penetrations By:

1. Multiple Penetrations in Large Openings:

a. 1 and 2 Hour Construction: UL System W-L-1568; HoldRite HydroFlame 100

Intumescent Firestop Sealant.

2. Uninsulated Metallic Pipe, Conduit, and Tubing:

a. 3 and 4 Hour Construction: UL System W-L-1560; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

b. 1 and 2 Hour Construction: UL System W-L-1558; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

3. Uninsulated Non-Metallic Pipe, Conduit, and Tubing:

a. 4 Hour Construction: UL System W-L-2704; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

b. 1 and 2 Hour Construction: UL System W-L-2710; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

4. Electrical Cables Not In Conduit:

a. 1 and 2 Hour Construction: UL System W-L-3453; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

5. Insulated Pipes:

a. 1 and 2 Hour Construction: UL System W-L-5357; HoldRite HydroFlame 200

Intumescent Firestop Sealant.

**2.07 FIRESTOPPING SYSTEMS PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify openings are ready to receive the work of this section.

**3.02 PREPARATION**

A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other materials that could adversely affect bond of firestopping material.

B. Remove incompatible materials that could adversely affect bond.

**3.03 INSTALLATION**

A. Install materials in manner described in fire test report and in accordance with manufacturer's instructions, completely closing openings.

**3.04 CLEANING**

A. Clean adjacent surfaces of firestopping materials.

**3.05 PROTECTION**

A. Protect adjacent surfaces from damage by material installation.

**END OF SECTION**