

## Technical Data

### ➤ Product Description

Nelson Firestop Sealant (LBS3™) is an elastomeric, water based, intumescent, fire protective sealant. It is designed for applications of through firestop penetrations and construction joints. It is used to seal against the spread of fire, smoke, gasses and water.

### ➤ Application

LBS3™ is ideally suited for through firestop penetrations of non-combustible pipe, insulated pipe and combustible pipe such as PVC, PEX, CPVC and ABS, in floors or walls. LBS3™ sealant can be applied using a conventional caulk gun, bulk loader or by trowel. For larger applications it can be pumped directly from the pail. Actual installation of Nelson LBS3™, may vary according to the type of firestop application. Apply the required depth of sealant beginning on the edge of the opening (use over various backing materials as required). Insure that the sealant makes complete contact with the inside surface of the opening and also the surface of the penetrating item(s).

### ➤ Availability

AA0892 – 10.3 oz Tube 18.5 in<sup>3</sup> (304ml) 12/Ctn.  
AA0893 – 20.2 oz Foil Pack 36.45 in<sup>3</sup> (597 ml) 12/Ctn.  
AA0894 – 30 oz Tube 54 in<sup>3</sup> (883ml) 10/Ctn.  
AA0895 – 5 Gallon Pail 1155 in<sup>3</sup> (19.0L)

### ➤ Approvals

Underwriters Laboratories Inc., Fill, Void or Cavity Material (XHHW),  
Underwriters Laboratories Inc., Fill, Void or Cavity Materials certified for Canada (XHHW7)  
City of New York, New York, Department of Buildings

- MEA 126-04-M

### ➤ Features

- Up to 3-hour Fire Rating
- Water-Based – Easy clean-up
- Elastomeric, Flexible cure
- Highly Intumescent
- Paintable
- Water Resistant
- No solvents, silicones or outgassing
- Acoustically Tested – Reduces noise transmission

### ➤ Physical Properties

- Color.....Red
- Cure Time (skin over).....Approx. 2 hr.  
(full cure).....3 to 4 weeks
- Asbestos Fillers.....None
- Solvents.....None
- Density.....10.0 lbs./gallon
- VOC Content.....10.86 g/l
- Application Temp...40°F (4°C) to 90°F (32°C)
- Activation Temp.....Exp. begins @ 250°
- STC Rating.....52

### ➤ Test Compliance

- ASTM E84 and UL 723  
Flame spread.....0  
Smoke developed.....5
- ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- ASTM E814 and UL1479 Test method for through stop fire penetrations.
- ASTM E1966 and UL2079 Test method for fire resistance of building joint systems.
- ASTM C719 Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement.

### ➤ Testing Data

For specific test criteria, refer to the UL Fire Resistance Directory.

### ➤ Storage & Handling

Nelson LBS3™ should be stored at temperatures between 40°F (4°C) and 90°F (32°C). Protect from freezing. Expected shelf life is one year from date of shipment.

### ➤ Related References

Underwriters Laboratories Inc. "Fire Resistance Directory". Application details are available in AutoCAD® format on request.

## **NELSON FIRESTOP PRODUCTS**

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➤ **INSTALLATION INSTRUCTIONS**

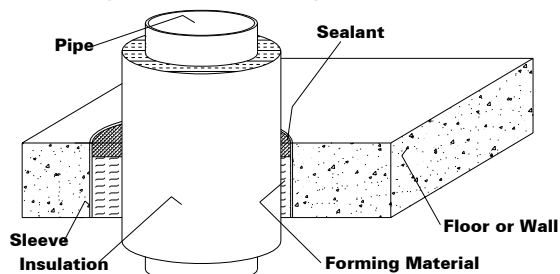
**GENERAL:** Areas to be protected must be clean and free of oil, loose dirt or rust. Installation temperatures must be between 40°F (4°C) and 90°F (32°C). Allow a cure time of less than 2 weeks for a 1/2" thickness.

**APPLICATION SYSTEM SELECTION:** Selection of an appropriate firestop application system design is critical to the fire protection process. Please consult the Nelson Firestop directory and application guide as well as the UL® Fire Resistance Directory for additional information.

**FORMING:** Some installations may require forming as either an integral part of the system or as an option to facilitate installation. In systems where forming is required, mineral wool batts with a minimum nominal density of 4PCF are generally required. Cut forming material oversized to allow for tight packing. Position forming material to allow for the proper depth of fill material.

**FILL MATERIAL:** Nelson Firestop LBS3™ may be installed by caulking gun or from bulk containers using a bulk loading caulk gun, or by manually trowelling using a mason's trowel or putty knife. For larger applications it can be pumped directly from the pail. Insure that the sealant makes complete contact with the inside surface of the opening and also the surface of the penetrating item(s). Work sealant into all areas exercising care to eliminate voids or seams. The surface of the sealant can be smoothed using a putty knife or sponge dipped in water. Adding water to the sealant itself is not recommended. LBS3™ can be painted.

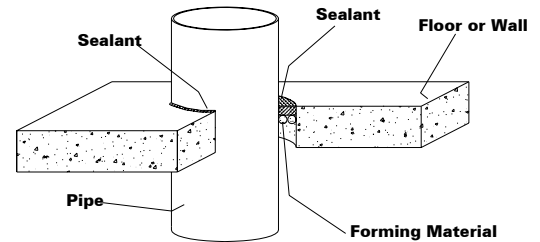
**UL System No. C-AJ-5288**  
**F Rating 3 Hr. T Rating 1, 1-1/2, 1-3/4 Hr.**



- FLOOR or WALL ASSEMBLY - Min. 4-1/2" thick lightweight or normal weight concrete floor or min. 5" thick wall, or CMU block wall. Max. diameter of opening is 30".
- METALLIC SLEEVE (optional) - Max. 30" diameter steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
- METALLIC PIPE - Max. nominal 24" diameter, or smaller, Sch. 20 or heavier steel or cast iron pipe. Max. nominal 6" diameter or smaller Type L or heavier copper pipe or tubing.
- PIPE INSULATION - Nominal 2" thick, or thinner, FIBERGLASS pipe insulation. The annular space is 5/16" to 1-1/4".
- FORMING MATERIAL - Tightly pack min. 4" thickness of min. 4pcf mineral wool batt insulation to fill the annular space.
- NELSON ES1399/LBS3 SEALANT - Apply sealant over the forming material to a min. 1/2" depth, flush with the topside of the floor or with both sides of the wall.

**DWG NO. FS-0648 RO**

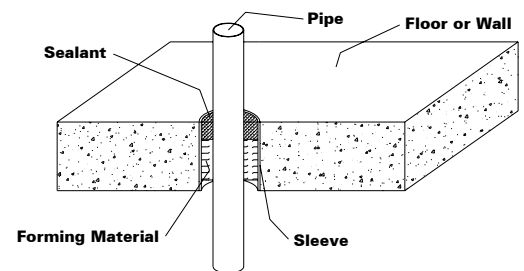
**UL System No. C-AJ-1487**  
**F Rating 2 Hr. T Rating 0 Hr.**



- FLOOR or WALL ASSEMBLY - Min. 2-1/2" thick concrete floor or wall, or CMU block wall. Max. diameter of opening is 24-7/8".
- METALLIC PIPE or CONDUIT - Nominal 24" diameter, steel or cast iron, max. 6" RMC, or 4" EMT or max. 6" Type L copper pipe or tubing. The annular space is 0" (point of contact) to 7/8".
- FORMING MATERIAL - Install backer rod into the opening and recess 1/2" from top surface of the floor or both surfaces of the wall.
- NELSON LBS3 SEALANT - Min. 1/2" depth over the forming material.

**DWG NO. FS-0526 RO**

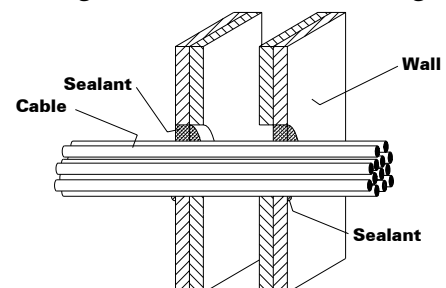
**UL System No. C-AJ-2462**  
**F Rating 2 Hr. T Rating 1/2 Hr.**



- FLOOR or WALL ASSEMBLY - Min. 4-1/2" thick concrete floor or wall or CMU block wall. Max. diam of opening is 4-1/4".
- METALLIC SLEEVE (optional) - Nom 4" steel pipe
- NONMETALLIC PIPE - Max. 2" Sch. 40 PVC pipe for use in closed (process or supply) piping systems. The nominal annular space range is 9/16" to 1-3/8".
- FORMING MATERIAL - Tightly pack min. 4pcf mineral wool batt insulation.
- NELSON LBS3 SEALANT - Min. 1" depth over the forming material.

**DWG NO. FS-0530 RO**

**UL System No. W-L-3242**  
**F Rating 1 or 2 Hr. T Rating 0 Hr.**



- WALL ASSEMBLY - Construct as specified in the U300 or U400 series designs per UL Fire Resistance Directory. The max. diameter of the opening is 4".
- CABLES - Max. 41% fill of max. 2/C #12awg copper conductor cable (12-2 ROMEX), max. R3/8 #18awg Type CATV copper conductor coaxial cable, max. 1/C 350 kcmil cable, max. 400pr #24awg copper telephone cables all with polyvinyl chloride (PVC) insulation and jacket, max. 1/C 350 kcmil cable with cross-linked polyethylene insulation and jacket or max. 4/C #2/0 aluminum or copper conductor, aluminum or steel jacketed METAL CLAD or ARMORED CLAD cable. The annular space between the cable bundle and the periphery of opening shall be a min. 0" (point of contact) to max. 1-1/4".
- NELSON LBS3 SEALANT - Min. 5/8" depth.

**DWG NO. FS-0600 RO**

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