
Technical Data

➤ Product Description

Nelson Firestop Elastomeric Sealant (ES1399™) is a cost effective, water based acrylic latex, endothermic, fire protective sealant. It is designed for applications of through firestop penetrations and in construction joints.

➤ Application

ES1399™ 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. ES1399™ is applicable for through firestop penetrations and for floor to wall, floor-to-floor and head of wall applications. It is flexible and is ideal for applications where joint expansion and contraction can occur. 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). On joints, the surfaces should be clean and free of dust, dirt, oil, grease, loose material, rust or other substances. Apply the required thickness in the joint or over the insulation if required.

➤ Availability

AA0870 – Non/Sag-10.3 oz Tube 18.5 in³ (304ml) 12/Ctn.
AA0874 - Non/Sag -20.2 oz Foil Pack 36.45 in³ (597 ml) 12/Ctn.
AA0890 – Non/Sag - 30 oz Tube 54 in³ (883ml) 12/Ctn.
AA0871 – Non/Sag – 5 Gallon Pail 1155 in³ (19.0L)

➤ Approvals

Underwriters Laboratories Inc. Fill, Void or Cavity Material (XHHW), FM
City of New York, New York, Department of Buildings.

- MEA 125-04-M

➤ Features

- Up to 4-Hour ratings
- Water-Based– Easy clean-up
- Economical
- Elastomeric (Flexible Cure)
- Paintable
- Water Resistant
- Acoustically Tested – Reduces noise transmission

➤ Physical Properties

- Color.....Red
- Weight.....10.75 lbs. per gallon
- Cure Time3 – 4 weeks (full cure)
- Consistency.....Thixotropic
- Application Temp...40°F (4°C) to 90°F (32°C)
- STC Rating.....52
- VOC content5.4 g/l

➤ Test Compliance

- ASTM E84
Flame spread.....10
Smoke developed.....0
- 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 E1399 Test method for cyclic movement and measuring min. and max. joint width.
- ASTM E1966 and UL2079 Test method for fire resistance of building joint systems.

➤ Testing Data

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

➤ Storage & Handling

Nelson ES1399™ should be stored at temperatures between 40°F (4°C) and 90°F (32°C). Protect from freezing. When properly stored, the expected shelf life of ES1399 is 2 years from date of manufacture.

➤ Related References

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

➤ INSTALLATION INSTRUCTIONS

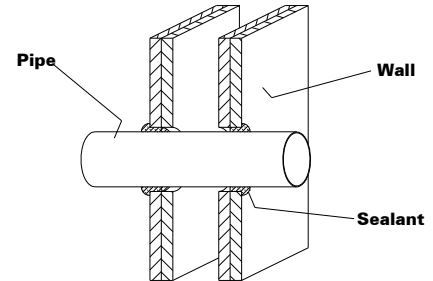
GENERAL: Areas to be protected must be clean and free of oil, loose dirt or rust. Installation temperatures must be between 40°F (4°C) and 90°F (32°C). Allow a cure time of approx 2 weeks for a 1/2" thickness.

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 ES1399™ 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. ES1399™ can be painted.

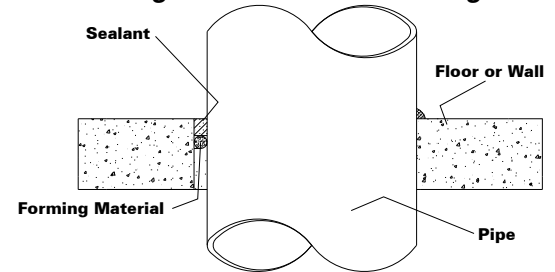
UL System No. W-L-1276 F Rating 1 or 2 Hr. T Rating 0 Hr.



- WALL ASSEMBLY - Constructed in the manner specified in the U300 or U400 series designs. The annular space is 0" (point of contact) to 2".
- METALLIC PIPE or CONDUIT - Max. nominal 24" steel, cast iron pipe, or 6" RMC or 4" EMT. Max. 6" Max. 6" Type L copper pipe or tubing.
- FORMING MATERIAL - Install backer rod within the annular space, and recess 5/8" from both surfaces of wall.
- NELSON ES1399 SEALANT - Apply a 5/8" depth

DWG NO. **FS-0348 R0**

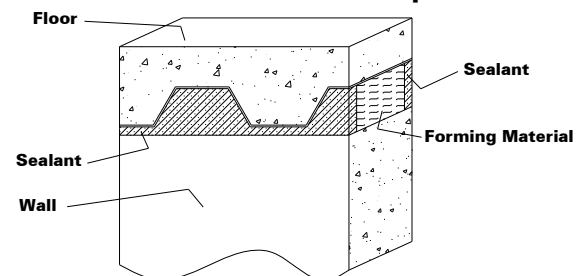
UL System No. C-AJ-1414 F Rating 3 Hr. T Rating 0 Hr.



- FLOOR or WALL ASSEMBLY - Min. 4-1/2" concrete floor or wall, or CMU block wall. The annular space may range from 0" (point of contact) to a max. of 1-7/8".
- METALLIC SLEEVE (optional) - Max. 8" steel sleeve
- METALLIC PIPE or CONDUIT - Max. 24" steel or cast iron, 6" RMC, 4" EMT, or 6" Type L or heavier, copper pipe or tubing.
- FORMING MATERIAL - Tightly pack min. 4pcf mineral wool batt insulation or 1" diameter backer rod
- NELSON ES1399 SEALANT - Min. 1/2" depth.

DWG NO. **FS-0352 R0**

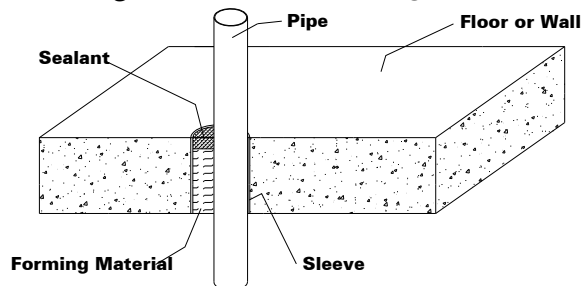
UL System No. HW-D-0230 F Rating 2 Hr. Nominal Joint Width - 1" Class II Movement - 25% Compression



- FLOOR ASSEMBLY - Min. 3" concrete poured over fluted steel decking.
- WALL ASSEMBLY - Min. 8" concrete wall or CMU block wall. The max separation between bottom of floor and top of wall is 1".
- FORMING MATERIAL - Tightly pack min. 4pcf mineral wool batt insulation
- NELSON ES1399 SEALANT - Min. 5/8" depth.

DWG NO. **FS-0375 R0**

UL System No. C-AJ-2525 F Rating 3 Hr. T Rating 2-1/2 Hr.



- FLOOR or WALL ASSEMBLY - Min. 4-1/2" concrete floor or 5" thick wall or CMU block wall. Max. diameter of opening is 4".
- METALLIC SLEEVE (optional) - Nom 4" steel sleeve flush with floor or wall surfaces.
- NONMETALLIC PIPE - Max. 2" PVC or SDR17 CPVC or ENT pipe for use in closed (process or supply) piping. The annular space is min. 0" (point of contact) to max. 1-3/4" pipe.
- FORMING MATERIAL - Tightly pack min. 4pcf mineral wool batt insulation
- NELSON ES1399 SEALANT - Min. 1/2" depth

DWG NO. **FS-0647 R0**

NELSON FIRESTOP PRODUCTS

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