

FS-ONE High Performance Intumescent Firestop Sealant

Product description

- Intumescent (expands when exposed to fire) firestop sealant that helps protect combustible and non-combustible penetrations for up to 4 hours fire rating

Product features

- Smoke, gas and water resistant after material has cured
- Contains no halogen, solvents or asbestos
- High fire rating properties
- Water based, easy to clean
- Protects most typical firestop penetration applications
- Can be painted
- Single component systems available
- Meets LEED™ requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings

Areas of application

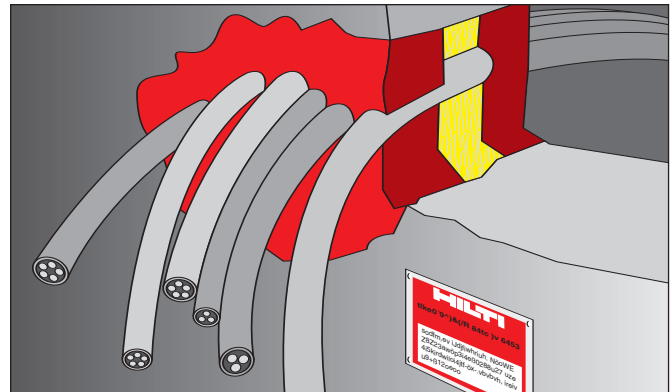
- Steel, copper and EMT pipes
- Insulated steel and copper pipes
- Cable bundles
- Closed or vented plastic pipes
- HVAC penetrations

For use with

- Concrete, masonry, drywall and wood floor assemblies
- Wall and floor assemblies rated up to 4 hours

Examples

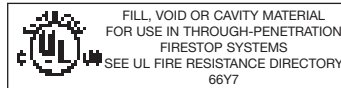
- Sealing around plastic pipe penetrations in fire rated construction
- Sealing around combustible and non-combustible penetrations in fire rated construction



FS-ONE Technical Data

Chemical basis	Water-based intumescent acrylic dispersion
Color	Red
Application temperature	40°F to 104°F (5°C to 40°C)
Skin forming time	Approx. 20-30 min.
Curing time	Approx. 2 mm / 3 days
Movement capability	Approx. 5%
Expansion rate (unrestricted):	Up to 3-5 times original volume
Temperature resistance (cured)	-40°F to 212°F (-40°C to 100°C)
Surface burning characteristics (ASTM E 84-96)	Flame Spread: 0 Smoke Development: 5
Sound transmission classification (ASTM E 90-99)	56 (Relates to specific construction)
Approvals	
California State Fire Marshal	Listing No. 4485-1200:108
City of New York	MEA 326-96-M Vol. IV
Tested in accordance with	• UL 1479 • ASTM E 814 • ASTM E 84

At 73°F (23°C) and 50% relative humidity



Installation instructions for FS-ONE

Notice

- Before handling, read Material Safety DataSheet and product label for safe usage and health information.
- Instructions below are general guidelines — always refer to the applicable drawing in the UL Fire Resistance Directory or Hilti Firestop Systems Guide for complete installation information

Opening

1. Clean the opening. Surfaces to which FS-ONE will be applied should be cleaned of loose debris, dirt, oil, moisture, frost and wax. Structures supporting penetrating items must be installed in compliance with local building and electrical standards.

Application of firestop sealant

2. Install the prescribed backfilling material type and depth to obtain the desired rating (if required). Leave sufficient depth for applying FS-ONE.
3. Application of firestop sealant: Apply FS-ONE to the required depth in order to obtain the desired fire rating. Make sure FS-ONE contacts all surfaces to provide maximum adhesion. For application of FS-ONE use a standard caulking gun, foil pack gun, bulk loader and bulk gun. With FS-ONE buckets, Graco type sealant pumps may be used. (Contact pump manufacturer for proper selection).

4. Smoothing of firestop sealant: To complete the seal, tool immediately to give a smooth appearance. Excess sealant, prior to curing, can be cleaned away from adjacent surfaces and tools with water.
5. Leave completed seal undisturbed for 48 hours.
6. For maintenance reasons, a penetration seal could be permanently marked with an identification plate. In such a case, mark the identification plate and fasten it in a visible position next to the seal.

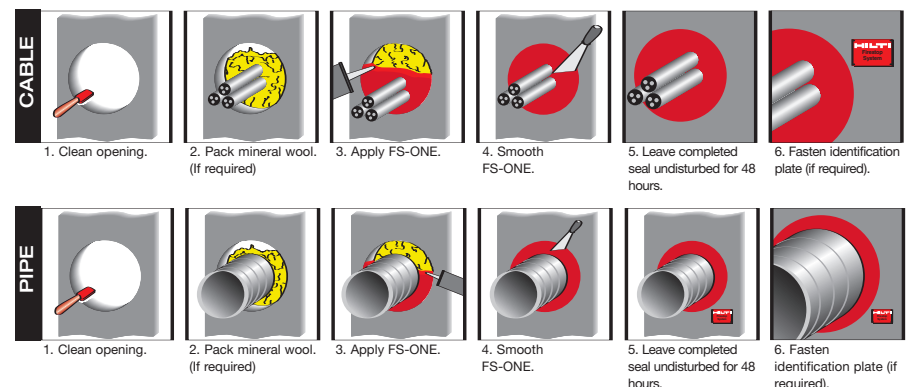
Not for use

- High movement expansion joints
- Underwater

- On materials where oil, plasticizers or solvents may bleed i.e. impregnated wood, oil based seals, green or partially vulcanized rubber
- In any penetration other than those specifically described in this manual or the test reports

Storage

- Store only in the original packaging in a location protected from moisture at temperatures between 40°F (5°C) and 86°F (30°C)
- Observe expiration date on the packaging



Hilti. Outperform. Outlast.