

## FS 657 Fire Block

### Product description

- Ready-to-use, intumescent flexible block designed to seal medium to large size openings

### Product features

- Suitable for re-penetration or new penetrations
- Economical to use with short installation times
- Easy installation — no special tools required
- Ideal for use in floors — no forming required
- One sided wall systems available
- Halogen, asbestos and solvent free
- Operational immediately after installation
- Paintable
- Smoke resistant

### Areas of application

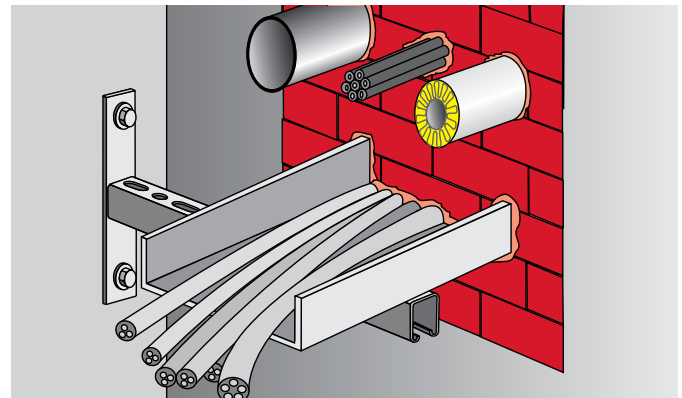
- Sealing single or multiple penetrations in small to large openings
- Temporary or permanent sealing of cables and cable tray penetrations
- Temporary or permanent sealing of insulated and non-insulated metallic pipes and combustible pipe penetrations

### For use with

- Walls (UL tested up to max. opening 52" x 48")
- Floors (UL tested up to max. opening 36" x 36")
- Concrete, porous concrete, masonry and gypsum wall assemblies
- Wall assemblies rated up to 4 hours
- Floor assemblies rated up to 3 hours

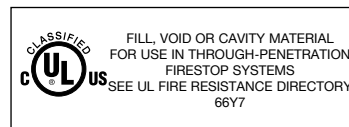
### Examples

- Completely dust and fiber free rooms and places where electrical installations are frequently used (ie: computer centers, hospitals, laboratories, etc.)
- New buildings in the construction phase and during renovation
- Large openings containing multiple penetrations as found in production bays, warehouses, hospitals etc.



Technical Data*	FS 657
Color	Red
Application temperature	40° F to 104° F (5° C to 40° C)
Temperature resistance	5° F to 140° F (-15° C to 60° C)
Intumescent activation	Approx. 572° F (300°C)
Expansion ratio (unrestricted)	Up to 1:3
Surface burning characteristics (ASTM E 84-96)	Flame Spread Index: 0 Smoke Development Index: 25
Sound transmission classification (ASTM E 90-99)	54 (Relates to specific construction)
<b>Approvals</b> <ul style="list-style-type: none"> <li>California State Fire Marshal - No. 4485-1200:106</li> <li>City of New York - MEA 325-96-M</li> </ul>	
<b>Tested in accordance with</b> <ul style="list-style-type: none"> <li>UL 1479 • ASTM E 814 • ASTM E 84</li> </ul>	

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



## Installation instructions for FS 657

### Notice

- Before handling, read Material Safety Data Sheet 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

- Clean the opening. Penetration and penetration supporting structures must be installed in compliance with local building and electrical standards.

### Application of Fire Blocks

- If no penetrations are located, build up FS 657 Fire Block firmly seated, within opening.
  - If penetrations are located, build up FS 657 Fire Block firmly seated, while cutting blocks with a knife to suit the placed penetrations.
- Finish building up Fire Blocks until entire opening is filled.
  - Completely fill cable spaces, gaps between blocks and pipes, and joints with FS-ONE Firestop Sealant.

- 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.

### Re-installing cables or other penetrations

- Remove or cut the block from the seal.
- Install the penetrant and re-lay the block in compliance with the approval. Fill gaps and spaces with FS-ONE.

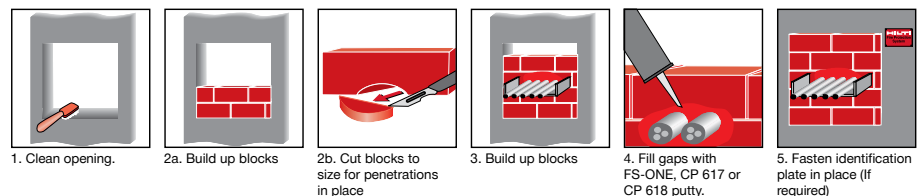
Single cables can be run through joints between blocks or a hole can be drilled through a block using a sharpened piece of metal pipe or tubing.

### Not for use

- In wet rooms, outdoors or exposed to the weather or UV radiation (can be done only after applying an additional silicone coating, i.e. CP 601S).

### Storage

- Store only in the original packaging in a location protected from moisture and direct sunlight



# Hilti. Outperform. Outlast.

Hilti, Inc. (U.S.) 1-800-879-8000 • [www.us.hilti.com](http://www.us.hilti.com) • en español 1-800-879-5000 • Hilti Firestop Systems Guide



**Hilti Firestop**  
Saving lives  
through innovation  
and education



MSDS No.: 261  
Revision No.: 006  
Revision Date: 3/1/05  
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## MATERIAL SAFETY DATA SHEET

**Product name:** FS 657 Fire Block; CP 658T Firestop Plug  
**Description:** Intumescent polyurethane foam  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

## INGREDIENTS AND EXPOSURE LIMITS

These products are regarded as "articles" by definition under OSHA Regulation 29 CFR 1910.1200 (c). FS 657/CP 658T can best be described as a sponge-like polyurethane materials, which expand when exposed to excessive heat/fire conditions. The physical form of the products preclude exposure to workers under normal conditions of use or any foreseeable emergency.

## PHYSICAL DATA

<b>Appearance:</b>	Rust colored foam block	<b>Odor:</b>	None
<b>Vapor Density: (air = 1)</b>	Not applicable	<b>Vapor Pressure:</b>	Not applicable
<b>Ignition Point:</b>	420° C / 788° F	<b>VOC Content:</b>	3.9 g/l
<b>Evaporation Rate:</b>	Not applicable	<b>Solubility in Water:</b>	Not soluble
<b>Specific Gravity:</b>	0.25 g/cm <sup>3</sup>	<b>pH:</b>	Not applicable

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	Not applicable	<b>Flammable Limits:</b>	Not applicable
<b>Extinguishing Media:</b>	Not applicable		
<b>Special Fire Fighting Procedures:</b>	Not applicable		
<b>Unusual Fire and Explosion Hazards:</b>	None known		

## REACTIVITY DATA

<b>Stability:</b>	Stable.	<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	None known; see special handling and storage instructions		
<b>Decomposition Products:</b>	If heated to decomposition, can yield CO <sub>x</sub> , NO <sub>x</sub> , HCN, HCl, and/or HF		
<b>Conditions to Avoid:</b>	See handling and storage requirements.		

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	None known	<b>Routes of Exposure:</b>	None expected
<b>Signs and Symptoms of Exposure:</b>	None expected		
<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.		
<b>Medical Conditions Aggravated by Exposure:</b>	None known		

## EMERGENCY AND FIRST AID PROCEDURES

<b>Skin:</b>	No effects expected	<b>Inhalation:</b>	Not a route of exposure
<b>Eyes:</b>	No effects expected.		
<b>Ingestion:</b>	Not a likely route of exposure		
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of any injury/exposure.		

## CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	As appropriate for the work area or the work being done.
<b>Skin Protection:</b>	Not required.
<b>Respiratory Protection:</b>	Not applicable.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	For industrial use only. Keep out of reach of children. Observe good hygiene practices; i.e. wash after using and before eating or smoking. Store in a cool dry area out of direct sunlight. Storage above 140 F may degrade product.
<b>Spill Procedures:</b>	Not applicable

## REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard. 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 0, Flammability 0, Reactivity 0, PPE A
<b>DOT Shipping Name:</b>	Not regulated.
<b>IATA / ICAO Shipping Name:</b>	Not regulated.
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product is classified as an "article" and is not subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
<b>EPA Waste Code(s):</b>	Not regulated by EPA as a hazardous waste
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

## CONTACTS

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x6704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

# Certificate of Compliance

Certificate Number **20060214-R13240F**  
Report Reference **2006 February 14**  
Issue Date **2006 February 14**

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*Issued to:* **Hilti, Inc.**  
5400 S 122ND East Ave  
Tulsa, OK 74146 USA


*This is to certify that  
representative samples of* **Fill, Void or Cavity Materials**  
FS 657, CP 658T

*Have been investigated by Underwriters Laboratories Inc.® in  
accordance with the Standard(s) indicated on this Certificate.*


*Standard(s) for Safety:* **ANSI/UL 1479, CAN/ULC-S115-05**

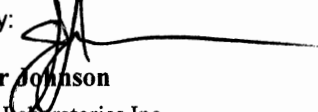
*Additional Information:* **FS 657 Fire Block for use in Through-Penetration Firestop Systems and CP 658T Firestop Plug for use in Through-Penetration Firestop Systems as currently described in the UL Fire Resistance Directory.**

**Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.**

The UL Classification Mark includes: UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory.

**Look for the UL Classification Mark on the product**

Issued by:  
  
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Reviewed by:   
Christopher Johnson  
Underwriters Laboratories Inc.