

# Firestop Submittal Package

---

**Project:**

**Date:**

---

**Submitted by:**

---

*This submittal is auto-generated based on user-selected inputs.  
Therefore, Hilti makes no representation as to the suitability of these systems for their intended use.*

---

**Hilti. Outperform. Outlast.**



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

# Table of Contents

## Intertek Listings

HI/AF 120-02 .....1  
HI/AF 120-03 .....6

## CFP-ES ENDO-SHIELD

Product data Sheet for CFP-ES ENDO-SHIELD.....10  
UL Certificate of Compliance for CFP-ES ENDO-SHIELD.....11  
Safety Data Sheet (SDS) for CFP-ES ENDO-SHIELD.....13

## CP 606 Firestop acrylic sealant

Product Data Sheet for CP 606 Flexible Firestop Sealant .....20  
UL Certificate of Compliance for CP 606 Flexible Firestop Sealant .....21  
Safety Data Sheet (SDS) for CP 606 Flexible Firestop Sealant .....22  
LEED Information for CP 606 Flexible Firestop Sealant .....29

## FS-ONE MAX Firestop intumescent sealant

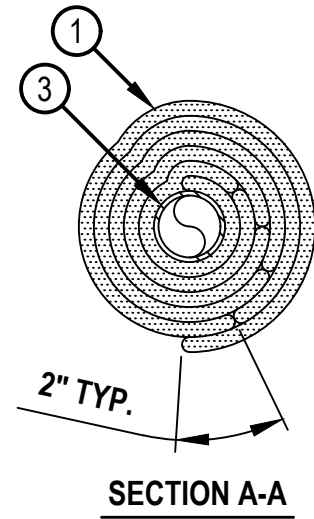
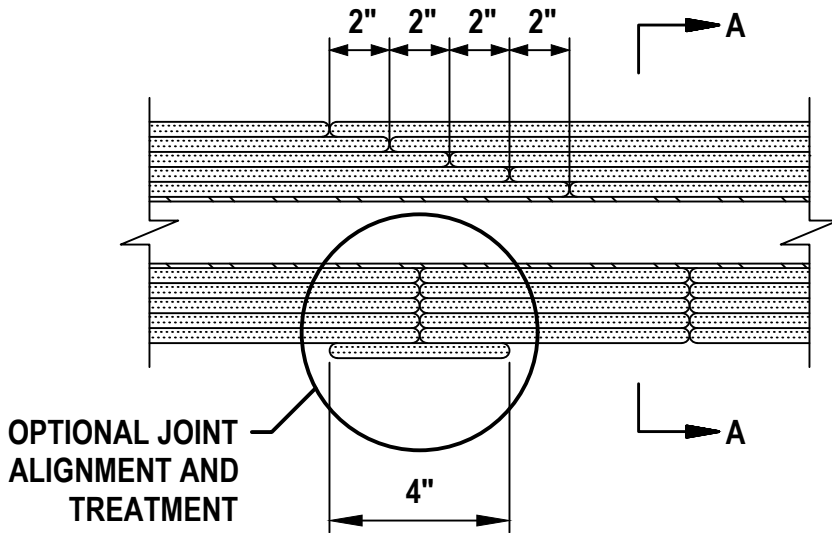
Product Data Sheet for FS-ONE MAX Intumescent Firestop Sealant .....30  
UL Certificate of Compliance for FS-ONE MAX Intumescent Firestop Sealant.....31  
Safety Data Sheet (SDS) for FS-ONE MAX Intumescent Firestop Sealant .....32  
LEED Information for FS-ONE MAX Intumescent Firestop Sealant .....38

Hilti Corporation  
 Design Number HI/AF 120-02  
 Applied Fireproofing  
 Hilti CPF-ES Endo-Shield  
 UL 1489

HI/AF 120-02

Min. 1 in. Tubing, 5 Layers of Hilti Endo-Shield: 2 Hour  
 Min. 4 in. Tubing, 4 Layers of Hilti Endo-Shield: 2 Hour

**METHOD 1**



**METHOD 2**

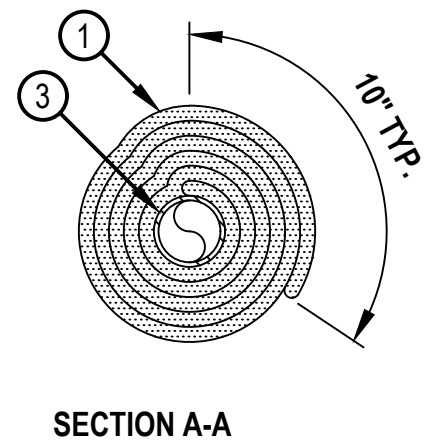
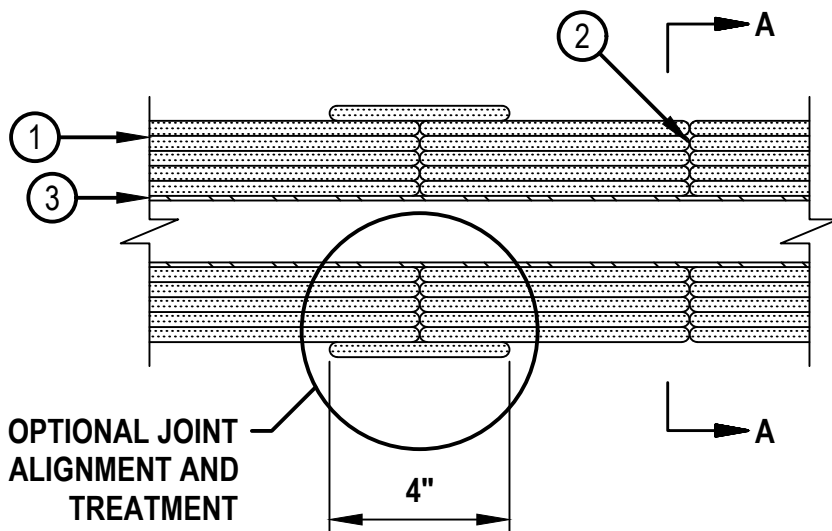


Figure 1. Min. 1 in. Pipe, 5 Layers of Hilti Endo-Shield Specifications

Hilti Corporation  
Design Number HI/AF 120-02  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

Min. 1 in. Tubing, 5 Layers of Hilti Endo-Shield: 2 Hour  
Min. 4 in. Tubing, 4 Layers of Hilti Endo-Shield: 2 Hour

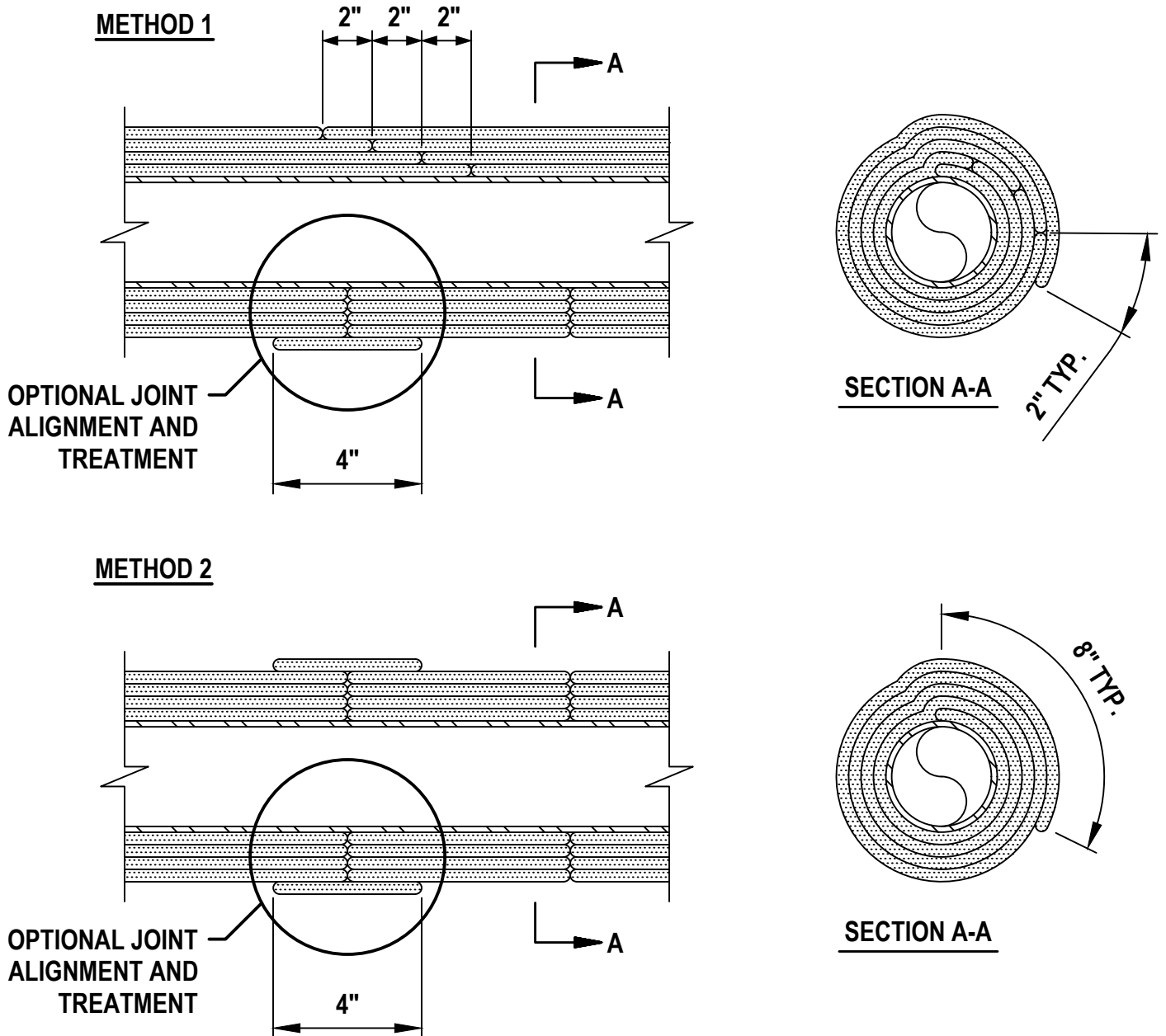


Figure 2. Min. 4 in. Pipe, 4 Layers of Hilti Endo-Shield Specifications

Hilti Corporation  
Design Number HI/AF 120-02  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

Min. 1 in. Tubing, 5 Layers of Hilti Endo-Shield: 2 Hour  
Min. 4 in. Tubing, 4 Layers of Hilti Endo-Shield: 2 Hour

## 1. FIRE-RESISTANT PIPE PROTECTION SYSTEM

**CERTIFIED MANUFACTURER:** Hilti Corporation

**CERTIFIED PRODUCT:** Applied Fireproofing

**CERTIFIED MODEL:** Hilti CPF-ES Endo-Shield

Install Hilti Endo-Shield layers to achieve the desired fire resistance rating.

### METHOD 1 - INDIVIDUALLY WRAPPED

LAYER 1 - Using 1/2 in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the tubing (Item 3). Wrap Hilti Endo-Shield tightly around the tubing and overlapping 2 in. at the longitudinal seam. For the longitudinal seam, apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the seam. Additional wrap sections are added to insulate all straight runs of tubing. The radial seams are butted end-to-end without an overlap.

For the radial seams, apply 3 in. wide aluminum foil tape or FSK tape over the seam and overlap 2 in. back onto itself.

The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the Hilti Endo-Shield is wrapped radially around the elbow. Using min. 1/2 in. wide filament tape, aluminum foil tape, or FSK tape, attach edge of gore segment to tubing and wrap segment tightly around tubing overlapping 2 in. at the longitudinal seam which shall be located at the long radius of the elbow. Apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the longitudinal seam. The radial seam butted between the gore end segment and adjoining straight section is filled with Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2). Apply 3 in. wide aluminum foil tape or FSK tape over the radial seam and overlap 2 in. back onto itself.

LAYER 2 - Wrap a second layer of Hilti Endo-Shield in the same manner as Layer 1. The start of Layer 2 begins at the longitudinal seam of Layer 1, secured with 3 in. wide aluminum foil tape or FSK tape covering the full length of the seam. Offset the Layer 2 radial seam 2 in. from the radial seam of Layer 1. Tightly wrap Layer 2 over Layer 1 and overlap the longitudinal seam by 2 in. Cover the full length of the longitudinal and radial seam with 3 in. wide aluminum foil tape or FSK tape.

The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the Hilti Endo-Shield is wrapped radially around the elbow in the same manner as Layer 1. The gore segment is attached to Layer 1 with 3 in. wide aluminum foil tape or FSK tape and wrapped tightly around Layer 1, overlapping 2 in. at the longitudinal seam. The longitudinal seam of Layer 2 is located at the short radius of the elbow. Apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the longitudinal seam. The radial seam butted between the gore end segment and adjoining straight Layer 2 section is filled with Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2). The elbow and straight section butt joints of Layer 1 and Layer 2 are in alignment and not offset. Apply 3 in. wide aluminum foil tape or FSK tape over the seams and overlap 2 in. back onto itself.

LAYER 3, 4, AND 5 - As required, wrap a third, fourth, or fifth layer of Hilti Endo-Shield in the same manner as Layer 2 to obtain desired rating.

The elbow longitudinal seam for Layer 3 is located at the middle radius of the elbow, rotated 90 degrees from the longitudinal seam of Layer 2. The elbow longitudinal seam for Layer 4 is located at the middle radius of the elbow, rotated 180 degrees from the longitudinal seam of Layer 3. The elbow longitudinal seam for Layer 5 is located at the long radius of the elbow.



Hilti Firestop Systems

Reproduced by HILTI, Inc.  
Courtesy of Intertek Group  
March 22, 2022

Intertek

Page: 3 of 5

Hilti Corporation  
Design Number HI/AF 120-02  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

**Min. 1 in. Tubing, 5 Layers of Hilti Endo-Shield: 2 Hour**  
**Min. 4 in. Tubing, 4 Layers of Hilti Endo-Shield: 2 Hour**

OPTIONAL JOINT ALIGNMENT AND TREATMENT (METHOD 1) - Alternatively, the radial seams of Layer 1 and subsequent layers can be aligned. When the radial seams are aligned, apply Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2) over the entire edge of the of Hilti Endo-Shield prior to installing the adjacent section.

**METHOD 2 - CONTINUOUSLY WRAPPED**

Hilti Endo-Shield may be continuously wrapped around the tubing. Using min. ½ in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the tubing (Item 3) and wrap continuously. Prior to installing the adjacent continuously wrapped section, apply 1/8 in. thick of CP 606 or FS-ONE MAX Firestop Sealant (Item 2) over the entire edge of the Hilti Endo-Shield. A 2 in. overlap of longitudinal seam shall be included for each layer required. For example, a 4 layer system requires an 8 in. overlap on final layer. Apply 3 in. wide aluminum foil tape or FSK tape over the full length of the longitudinal seam.

For elbow sections, follow details for Method 1, Layer 1, and Layer 2, and subsequent layers.

The outer layer for Method 1 and 2 is secured with min. 18 GA steel tie wire or 1/2 in. wide stainless steel banding located 1 in. from each radial seam. Space the steel tie wire 6 in. on center (oc) between the seams or the 1/2 in. wide stainless steel banding 12 in. oc. At the elbows, space the steel wire 2 in. oc or the stainless steel banding 2 in. oc, both at the short interior radius.

OPTIONAL JOINT ALIGNMENT AND TREATMENT (METHOD 1 AND 2) - As an alternative to applying sealant at radial seams and seams between the gore end segment and adjoining straight section, an additional 4 in. wide section of Hilti Endo-Shield may be centered over the radial seam of the final layer overlapping 2 in. at the longitudinal seam. Apply 3 in. wide aluminum foil or FSK tape over the longitudinal seam of the 4 in. wide section of Hilti Endo-Shield. Further secure section with min. 18 GA steel wire or ½ in. wide stainless steel banding located 1 in. from each edge.

When Hilti CPF-ES Endo-Shield is installed on a 4-in. pipe assembly where the radial seams are aligned, sealant (Item 2) and an additional 4 in. wide section of Hilti Endo-Shield are required in combination and must be installed as detailed in Optional Joint Alignment and Treatment. Refer to Figure 2.

OPTIONAL ELBOW TREATMENT (METHOD 1 AND 2) - As an alternative to gore segments Hilti Endo-Shield may be wrapped around the straight sections of pipe adjacent to the elbow per Method 1 or 2 above except material shall not be taped permanently to pipe. Each section to be cut to provide a 45° surface on the side of Hilti Endo-Shield closest to the elbow. Hilti CP 606 or FS-ONE MAX to be applied 1/8 in. thick to cover cut edges on one section. Both sections of Hilti Endo-Shield shall be slid together while aligning the 45° angled cuts. Apply 3 in. wide aluminum or FSK tape over the seam of the adjoining pieces of Hilti Endo-Shield. Further secure elbow treatment with min. 18 GA steel wire located 1 in. from interior radius of elbow treatment on both sections of Hilti Endo-Shield. Tie an additional 3 pieces of min. 18 GA steel wire, to existing wires, centered horizontally and vertically to form a basket around elbow protection.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc.  
Courtesy of Intertek Group  
March 22, 2022

**Intertek**

Page: 4 of 5

Hilti Corporation  
Design Number HI/AF 120-02  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

Min. 1 in. Tubing, 5 Layers of Hilti Endo-Shield: 2 Hour  
Min. 4 in. Tubing, 4 Layers of Hilti Endo-Shield: 2 Hour

**2. CERTIFIED MANUFACTURER:** Hilti Corporation

**CERTIFIED PRODUCT:** Sealant

**CERTIFIED MODEL:** CP 606 or FS-ONE MAX Firestop Sealant

Install CP 606 or FS-ONE MAX Firestop Sealant at seams of elbow gore segments and for any gap greater than 1/8 in. at a butted seam. Use only Hilti CP 606 Sealant bearing an UL Certified Mark and only FS-ONE MAX Firestop Sealant bearing an Intertek Certified Label.

**3. FUEL PIPE ASSEMBLY:** Min. nominal 1 in. diameter and max. 4 in. diameter Schedule 40 steel pipe. All fittings shall be welded. Pipe shall be supported by steel pipe hangers in conjunction with min. 3/8 in. diameter threaded steel rod. A minimum of two layers of wrap are required for the pipe support system. Refer to manufacturer's installation instructions regarding pipe support assembly.



Hilti Firestop Systems

Reproduced by HILTI, Inc.  
Courtesy of Intertek Group  
March 22, 2022

Intertek

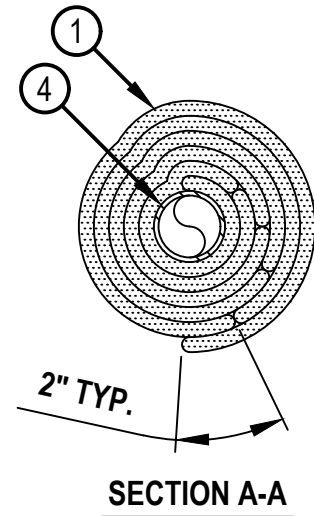
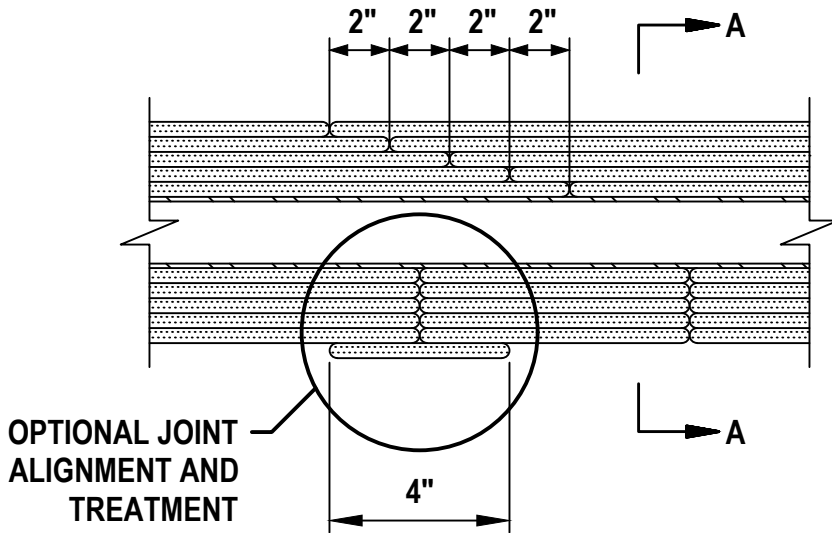
Page: 5 of 5

Hilti Corporation  
 Design Number HI/AF 120-03  
 Applied Fireproofing  
 Hilti CPF-ES Endo-Shield  
 UL 1489

HI/AF 120-02

Min. 3 in. Steel Pipe (Outer Containment Pipe), 5 Layers of Hilti Endo-Shield : 2 Hr  
 Min. 4 in. Steel Pipe (Outer Containment Pipe), 4 Layers of Hilti Endo-Shield : 2 Hr

**METHOD 1**



**METHOD 2**

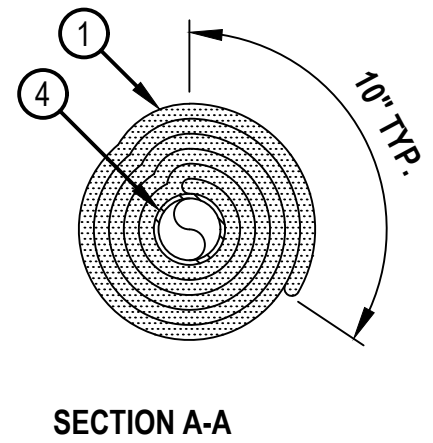
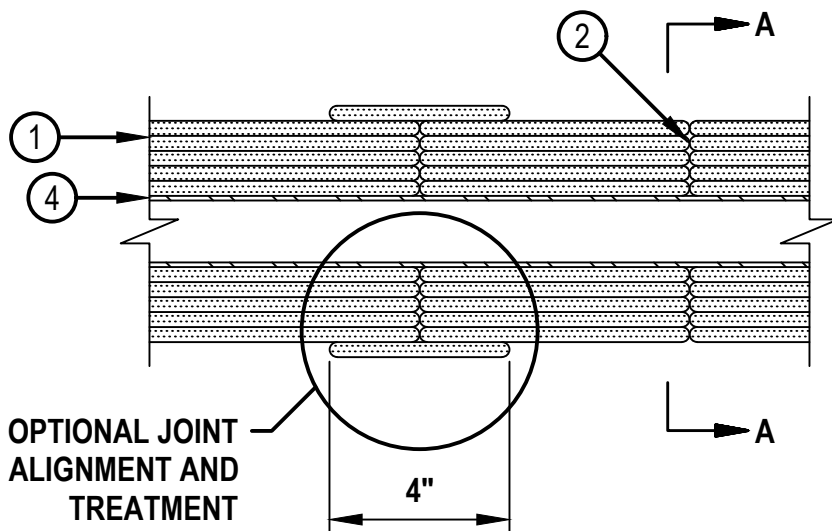


Figure 1. Min. 3 in. Steel Pipe, 5 Layers of Hilti Endo-Shield Specifications - Outer Containment Pipe Only Shown



Reproduced by HILTI, Inc.  
 Courtesy of Intertek Group  
 January 27, 2022





Hilti Corporation  
Design Number HI/AF 120-03  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

Min. 3 in. Steel Pipe (Outer Containment Pipe), 5 Layers of Hilti Endo-Shield : 2 Hr  
Min. 4 in. Steel Pipe (Outer Containment Pipe), 4 Layers of Hilti Endo-Shield : 2 Hr

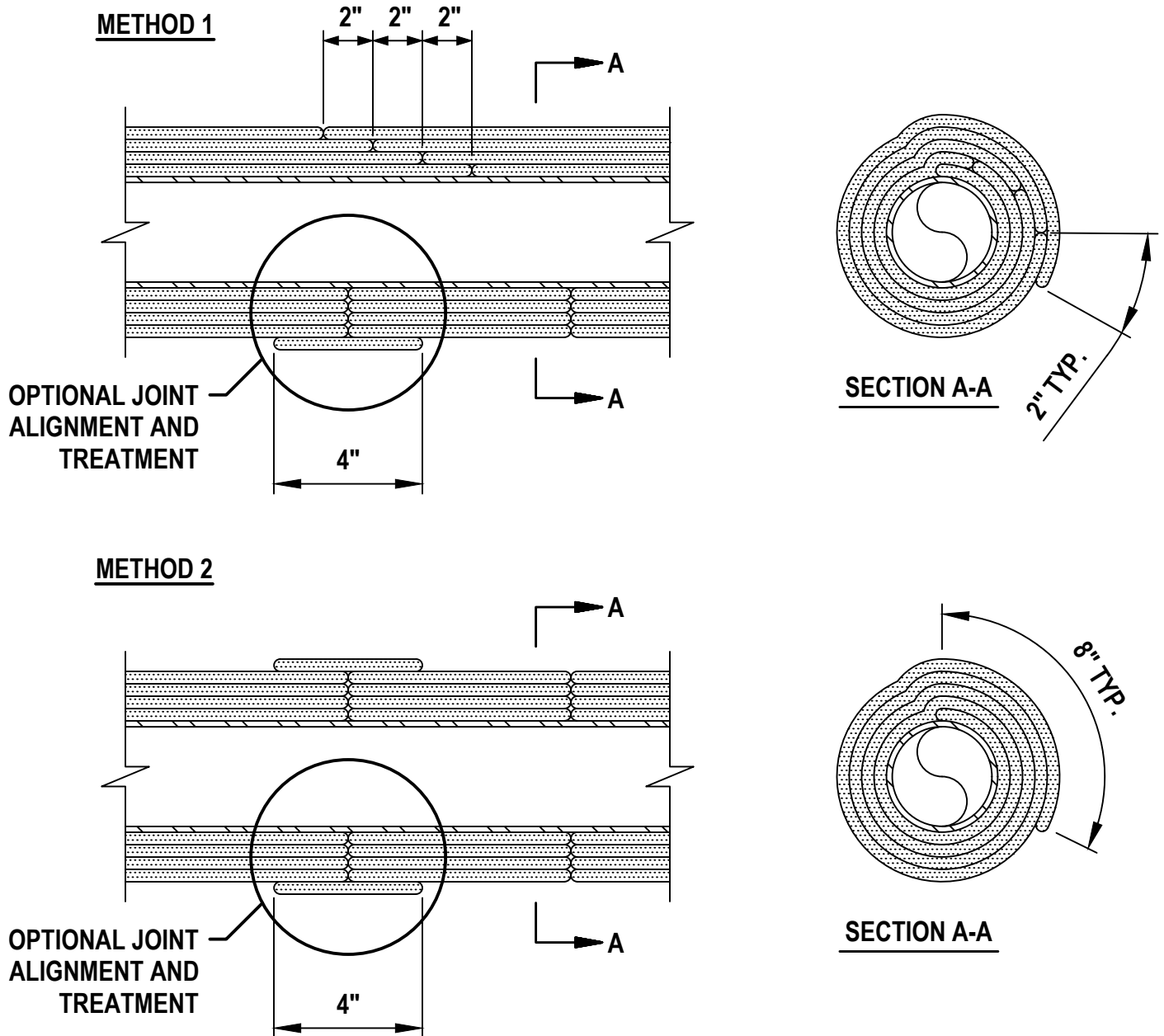


Figure 2. Min. 4 in. Steel Pipe, 4 Layers of Hilti Endo-Shield Specifications - Outer Containment Pipe Only Shown

Hilti Corporation  
Design Number HI/AF 120-03  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

**Min. 3 in. Steel Pipe (Outer Containment Pipe), 5 Layers of Hilti Endo-Shield : 2 Hr**  
**Min. 4 in. Steel Pipe (Outer Containment Pipe), 4 Layers of Hilti Endo-Shield : 2 Hr**

**1. FIRE-RESISTANT PIPE PROTECTION SYSTEM**

**CERTIFIED MANUFACTURER:** Hilti Corporation

**CERTIFIED PRODUCT:** Applied Fireproofing

**CERTIFIED MODEL:** Hilti CFP-ES Endo-Shield

Install Hilti Endo-Shield layers to achieve the desired fire resistance rating.

**METHOD 1 - INDIVIDUALLY WRAPPED**

**LAYER 1** - Using 1/2 in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the tubing (Item 3).

Wrap Hilti Endo-Shield tightly around the tubing and overlapping 2 in. at the longitudinal seam. For the longitudinal seam, apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the seam. Additional wrap sections are added to insulate all straight runs of tubing. The radial seams are butted end-to-end without an overlap. For the radial seams, apply 3 in. wide aluminum foil tape or FSK tape over the seam and overlap 2 in. back onto itself.

The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the Hilti Endo-Shield is wrapped radially around the elbow. Using min. 1/2 in. wide filament tape, aluminum foil tape, or FSK tape, attach edge of gore segment to tubing and wrap segment tightly around tubing overlapping 2 in. at the longitudinal seam which shall be located at the long radius of the elbow. Apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the longitudinal seam. The radial seam butted between the gore end segment and adjoining straight section is filled with Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2). Apply 3 in. wide aluminum foil tape or FSK tape over the radial seam and overlap 2 in. back onto itself.

**LAYER 2** - Wrap a second layer of Hilti Endo-Shield in the same manner as Layer 1. The start of Layer 2 begins at the longitudinal seam of Layer 1, secured with 3 in. wide aluminum foil tape or FSK tape covering the full length of the seam. Offset the Layer 2 radial seam 2 in. from the radial seam of Layer 1. Tightly wrap Layer 2 over Layer 1 and overlap the longitudinal seam by 2 in. Cover the full length of the longitudinal and radial seam with 3 in. wide aluminum foil tape or FSK tape.

The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the Hilti Endo-Shield is wrapped radially around the elbow in the same manner as Layer 1. The gore segment is attached to Layer 1 with 3 in. wide aluminum foil tape or FSK tape and wrapped tightly around Layer 1, overlapping 2 in. at the longitudinal seam. The longitudinal seam of Layer 2 is located at the short radius of the elbow. Apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the longitudinal seam. The radial seam butted between the gore end segment and adjoining straight Layer 2 section is filled with Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2). The elbow and straight section butt joints of Layer 1 and Layer 2 are in alignment and not offset. Apply 3 in. wide aluminum foil tape or FSK tape over the seams and overlap 2 in. back onto itself.

**LAYER 3, 4, AND 5** - As required, wrap a third, fourth, or fifth layer of Hilti Endo-Shield in the same manner as Layer 2 to obtain desired rating.

The elbow longitudinal seam for Layer 3 is located at the middle radius of the elbow, rotated 90 degrees from the longitudinal seam of Layer 2. The elbow longitudinal seam for Layer 4 is located at the middle radius of the elbow, rotated 180 degrees from the longitudinal seam of Layer 3. The elbow longitudinal seam for Layer 5 is located at the long radius of the elbow.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc.  
Courtesy of Intertek Group  
January 27, 2022



Hilti Corporation  
Design Number HI/AF 120-03  
Applied Fireproofing  
Hilti CPF-ES Endo-Shield  
UL 1489

HI/AF 120-02

**Min. 3 in. Steel Pipe (Outer Containment Pipe), 5 Layers of Hilti Endo-Shield : 2 Hr**  
**Min. 4 in. Steel Pipe (Outer Containment Pipe), 4 Layers of Hilti Endo-Shield : 2 Hr**

OPTIONAL JOINT ALIGNMENT AND TREATMENT (METHOD 1) - Alternatively, the radial seams of Layer 1 and subsequent layers can be aligned. When the radial seams are aligned, apply Hilti CP 606 or FS-ONE MAX Firestop Sealant (Item 2) over the entire edge of the of Hilti Endo-Shield prior to installing the adjacent section.

**METHOD 2 - CONTINUOUSLY WRAPPED**

Hilti Endo-Shield may be continuously wrapped around the tubing. Using min. 1/2 in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the tubing (Item 3) and wrap continuously. Prior to installing the adjacent continuously wrapped section, apply 1/8 in. thick of CP 606 or FS-ONE MAX Firestop Sealant (Item 2) over the entire edge of the Hilti Endo-Shield. A 2 in. overlap of longitudinal seam shall be included for each layer required. For example, a 4 layer system requires an 8 in. overlap on final layer. Apply 3 in. wide aluminum foil tape or FSK tape over the full length of the longitudinal seam.

For elbow sections, follow details for Method 1, Layer 1, and Layer 2, and subsequent layers.

The outer layer for Method 1 and 2 is secured with min. 18 GA steel tie wire or 1/2 in. wide stainless steel banding located 1 in. from each radial seam. Space the steel tie wire 6 in. on center (oc) between the seams or the 1/2 in. wide stainless steel banding 12 in. oc. At the elbows, space the steel wire 2 in. oc or the stainless steel banding 2 in. oc, both at the short interior radius.

OPTIONAL JOINT ALIGNMENT AND TREATMENT (METHOD 1 AND 2) - As an alternative to applying sealant at radial seams and seams between the gore end segment and adjoining straight section, an additional 6 in. wide section of Hilti Endo-Shield may be centered over the radial seam of the final layer overlapping 2 in. at the longitudinal seam. Apply 3 in. wide aluminum foil or FSK tape over the longitudinal seam of the 6 in. wide section of Hilti Endo-Shield. Further secure section with min. 18 GA steel wire or 1/2 in. wide stainless steel banding located 1 in. from each edge.

When Hilti CPF-ES Endo-Shield is installed on a 4 in. pipe assembly where the radial seams are aligned, sealant (Item 2) and an additional 4 in. wide section of Hilti Endo-Shield are required in combination and must be installed as detailed in Optional Joint Alignment and Treatment. Refer to Figure 2.

**2. CERTIFIED MANUFACTURER:** Hilti Corporation

**CERTIFIED PRODUCT:** Sealant

**CERTIFIED MODEL:** CP 606 or FS-ONE MAX Firestop Sealant

Install CP 606 or FS-ONE MAX Firestop Sealant at seams of elbow gore segments and for any gap greater than 1/8 in. at a butted seam. Use only Hilti CP 606 Sealant bearing an UL Certified Mark and only FS-ONE MAX Firestop Sealant bearing an Intertek Certified Label.

**3. FUEL PIPE ASSEMBLY:** (NOT SHOWN) Min. 1 in. and max. 2 in. diameter Schedule 40 steel pipe with continuously welded fittings installed symmetrically within the outer containment pipe (Item 4) utilizing steel pipe spacer.

**4. OUTER CONTAINMENT PIPE:** Min. 3 in and max. 4 in. diameter Schedule 40 steel pipe with continuously welded fittings. Outer containment pipe shall be sized 2 sizes larger than the fuel pipe assembly (Item 3). Outer containment pipe shall be supported by steel pipe hangers in conjunction with min. 3/8 in. diameter threaded steel rod. A minimum of two layers of wrap are required for the pipe support system. Refer to the manufacturer's installation instructions for additional details regarding pipe support assembly.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc.  
Courtesy of Intertek Group  
January 27, 2022



# CFP-ES ENDO-SHIELD

## Product description

- Hilti Endo-Shield is a high-temperature endothermic mat for passive fire protection of critical cable circuits, fuel lines, communication systems and many other MEP systems. It is the industry's first LBP (Low Bio Persistent) endothermic mat for passive fire protection. LBP materials allow fibers to more easily clear from the lungs compared to ceramic fibers, resulting in a safer non-carcinogenic product for the installer.

## Applications for use

- Fire protection of critical infrastructure, circuits and Distributed Antenna Systems which should remain operational under fire conditions
- Fire protection of cables within conduits
- Help protect fuel oil piping from fire — such as for backup generators
- Providing a T-rating for conduit, EMT or pipe penetrations — such as through floors in electrical, data or mechanical rooms
- Fire protection of large membrane penetrations — such as recessed electrical boxes/panels in rated barriers, fire extinguisher cabinets or medical gas box outlet

## Advantages

- Faster, easier fire protection — high flexibility and low weight makes Hilti endothermic mat a more efficient solution, especially for small diameter pipes
- Safer jobsites — CFP-ES Hilti Endo-Shield is made using non-carcinogenic LBP fibers, helping to remove a common safety hazard for installers
- Helps to lower total installed cost — this simpler method can translate to help reduce significant labor and time savings on-site compared to traditional fire protection solutions
- Extensive third-party performance verification — tested to ASTM E1725 for circuit integrity, UL1489 for fuel pipe protection and tested in accordance to UL1479 (ASTM E814) for membrane and through penetrations

## Installation instructions

- See Hilti Literature or third-party listings for complete application and installation details

## Technical Data

|  |   |
|--|---|
| Application temperature range                | -4 °F to 176 °F (-20°C to 80°C)   |
| Color  | Silver  |
| Density                                      | 32.6 lb/ft³   |
| Dimension                                    | (L x W) 20 ft. x 2 ft.  |
| Shelf life                                   | Unlimited   |
| Storage and transportation temperature range | -4 °F to 176 °F (-20°C to 80°C)   |
| Thickness                                    | 0.5 in.   |
| Weight                                       | 54.4 lbs  |
| Tested in accordance with                    | <ul style="list-style-type: none"> <li>• UL 1489 protection of fuel &amp; oil piping system</li> <li>• ASTM E1725 — circuit protection standard</li> <li>• UL 1479 (ASTM E814) for membrane and through penetrations</li> </ul> |

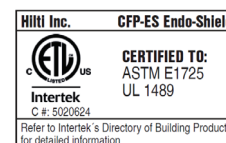
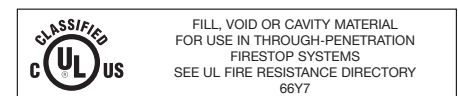


## Order Information

| Designation              | Qty per package | Item number |
|--------------------------|-----------------|-------------|
| Hilti Endo-Shield CFP-ES | 1 roll          | 2331829     |

## Specified Divisions

|                  |   |
|------------------|---|
| Section 07 80 00 | Fire and Smoke Protection                     |
| Section 07 84 00 | Firestopping                                  |
| Section 26 01 00 | Operation & Maintenance of Electrical Systems |
| Section 27 20 00 | Data Communications                           |



# CERTIFICATE OF COMPLIANCE

**Certificate Number** R13240  
**Report Reference** R13240-20210714  
**Date** 2021-July-23

**Issued to:** HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC  
7250 Dallas Pky, Legacy Tower Suite 1000  
Plano TX, 75024 US

**This is to certify that representative samples of** FILL, VOID OR CAVITY MATERIALS  
See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

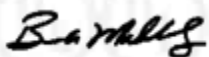
**Standard(s) for Safety:** ANSI/UL 1479, Fire Tests of Penetration Firestops  
CAN/ULC S115, Standard Method of Fire Tests of Firestop Systems

**Additional Information:** See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

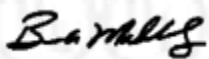


# CERTIFICATE OF COMPLIANCE

**Certificate Number** R13240  
**Report Reference** R13240-20210714  
**Date** 2021-July-23

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

CFP-ES Endo-Shield for use in specific Through Penetration Firestop Systems published in the Fire Resistance Directory.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

Issue date: 07/21/2021

Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

|              |                                       |
|--------------|---------------------------------------|
| Product form | Article                               |
| Product name | CFP-ES Endo-Shield                    |
| Product code | BU Fire Protection_Safety Information |



#### 1.2. Recommended use and restrictions on use

#### 1.3. Supplier

|  |   |
|--|---|
| <b>Supplier</b><br>Hilti (Canada) Corp.<br>2360 Meadowpine Boulevard<br>L5N 6S2 Mississauga, Ontario - Canada<br>T +1905 8139200<br>1-800-363-4458 toll free - F +1 905 813 9009 | <b>Department issuing data specification sheet</b><br>Hilti AG<br>Feldkircherstraße 100<br>9494 Schaan - Liechtenstein<br>T +423 234 2111<br><a href="mailto:chemicals.hse@hilti.com">chemicals.hse@hilti.com</a> |
|--|---|

#### 1.4. Emergency telephone number

|                  |   |
|------------------|---|
| Emergency number | Chem-Trec<br>Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)<br>Tel.: 703 527 3887 (Other countries) |
|------------------|---|

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS CA)

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS CA labelling

No labelling applicable

#### 2.3. Other hazards

|   |  |
|---|--|
| Other hazards which do not result in classification | A Safety Data Sheet is not required due to the classification of these products as "articles" according to Regulation (EC) No. 1907/2006 of 18 December 2006 (EU) / 29CFR 1910.1200 (U.S.A.). Consequently, these products are exempted from CLP / OSHA Labeling and SDS requirements. |
|---|--|

#### 2.4. Unknown acute toxicity (GHS CA)

No data available

# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                    | Chemical name / Synonyms  | Product identifier    | %       | Classification (GHS CA) |
|-------------------------|---|-----------------------|---------|-------------------------|
| Alkaline earth silicate | AES (=alkaline earth silicate fibre) / AES wools (=alkaline earth silicate wools) / alkaline earth silicate wools / mineral wool, earth alkali silicate / synthetic fibers, alk. earth silicate | (CAS-No.) 436083-99-7 | 95 – 98 | Not classified          |

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.                         |
| First-aid measures after skin contact | Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.                         |
| First-aid measures after eye contact  | Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion    | Rinse mouth out with water. Drink plenty of water.   |
| First-aid measures general            | Never give anything by mouth to an unconscious person.   |

#### 4.2. Most important symptoms and effects (acute and delayed)

|   |   |
|---|---|
| Symptoms/effects                                    | Not expected to present a significant hazard under anticipated conditions of normal use.                  |
| Symptoms/effects after inhalation                   | Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. |
| Symptoms/effects after skin contact                 | Product dust may cause mechanical irritation to the skin and mucous membranes.                            |
| Symptoms/effects after eye contact                  | Dust from this product may cause eye irritation.  |
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met.   |

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

|                              |  |
|------------------------------|--|
| Suitable extinguishing media | The product itself does not burn. Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
|------------------------------|--|

#### 5.2. Unsuitable extinguishing media

|                                |                                  |
|--------------------------------|----------------------------------|
| Unsuitable extinguishing media | Do not use a heavy water stream. |
|--------------------------------|----------------------------------|

#### 5.3. Specific hazards arising from the hazardous product

#### 5.4. Special protective equipment and precautions for fire-fighters

|                                |   |
|--------------------------------|---|
| Firefighting instructions      | Prevent fire fighting water from entering the environment.                                    |
| Protection during firefighting | Do not enter fire area without proper protective equipment, including respiratory protection. |





# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

### Other information:

Limit use of power tools unless in conjunction with local exhaust ventilation. Use hand tools whenever possible.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                   |
|---|-------------------|
| Physical state                                  | Solid             |
| Appearance                                      | No data available |
| Colour  | white             |
| Odour   | odourless         |
| Odour threshold                                 | No data available |
| pH  | No data available |
| Relative evaporation rate (butylacetate=1)      | No data available |
| Relative evaporation rate (ether=1)             | No data available |
| Melting point                                   | 1500 – 1550 °C    |
| Freezing point                                  | No data available |
| Boiling point                                   | No data available |
| Flash point                                     | No data available |
| Auto-ignition temperature                       | No data available |
| Decomposition temperature                       | No data available |
| Flammability (solid, gas)                       | No data available |
| Vapour pressure                                 | No data available |
| Vapour pressure at 50 °C                        | No data available |
| Relative density                                | 2.6               |
| Solubility                                      | Insoluble.        |
| Partition coefficient n-octanol/water (Log Pow) | No data available |
| Explosive limits                                | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | The product is non-reactive under normal conditions of use, storage and transport. |
| Chemical stability                 | Stable under normal conditions.  |
| Possibility of hazardous reactions | None under normal use.   |
| Conditions to avoid                | No additional information available  |
| Incompatible materials             | No additional information available  |
| Hazardous decomposition products   | No hazardous decomposition products known.   |
| Hardening time:                    | No additional information available  |

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                             |                |
|-----------------------------|----------------|
| Acute toxicity (oral)       | Not classified |
| Acute toxicity (dermal)     | Not classified |
| Acute toxicity (inhalation) | Not classified |

# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

|   |   |
|---|---|
| Skin corrosion/irritation                           | Not classified  |
| Serious eye damage/irritation                       | Not classified  |
| Respiratory or skin sensitization                   | Not classified  |
| Germ cell mutagenicity                              | Not classified  |
| Carcinogenicity                                     | Not classified  |
| Reproductive toxicity                               | Not classified  |
| STOT-single exposure                                | Not classified  |
| STOT-repeated exposure                              | Not classified  |
| Aspiration hazard                                   | Not classified  |
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met.   |
| Symptoms/effects                                    | Not expected to present a significant hazard under anticipated conditions of normal use.                  |
| Symptoms/effects after inhalation                   | Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. |
| Symptoms/effects after skin contact                 | Product dust may cause mechanical irritation to the skin and mucous membranes.                            |
| Symptoms/effects after eye contact                  | Dust from this product may cause eye irritation.  |

## SECTION 12: Ecological information

### 12.1. Toxicity

|   |                |
|---|----------------|
| Hazardous to the aquatic environment, short-term (acute)  | Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | Not classified |

### 12.2. Persistence and degradability

| Alkaline earth silicate (436083-99-7) |                  |
|---------------------------------------|------------------|
| Persistence and degradability         | Not established. |

### 12.3. Bioaccumulative potential

| Alkaline earth silicate (436083-99-7) |                  |
|---------------------------------------|------------------|
| Bioaccumulative potential             | Not established. |

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

|       |                |
|-------|----------------|
| Ozone | Not classified |
|-------|----------------|

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|  |   |
|--|---|
| Product/Packaging disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. |
|--|---|

# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

| ADR                                     | IMDG           | IATA           | RID            |
|---|----------------|----------------|----------------|
| <b>14.1. UN number</b>                  |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable |
| <b>14.2. UN proper shipping name</b>    |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable |
| <b>14.4. Packing group</b>              |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable |
| <b>14.5. Environmental hazards</b>      |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable |
| No supplementary information available  |                |                |                |

#### 14.6. Special precautions for user

##### Overland transport

Not applicable

##### Transport by sea

Not applicable

##### Air transport

Not applicable

##### Rail transport

Not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. National regulations

|   |   |
|---|---|
| <b>CFP-ES Endo-Shield</b>   |   |
| Canada DSL & NDSL Flags   | All components of this product are listed, or excluded from listing, on the Canadian Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL) |
| <b>Alkaline earth silicate (436083-99-7)</b>  |   |
| Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) |   |

#### 15.2. International regulations

|   |  |
|---|--|
| <b>Alkaline earth silicate (436083-99-7)</b>                                  |  |
| Not listed on the United States TSCA (Toxic Substances Control Act) inventory |  |

### SECTION 16: Other information

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis



# CFP-ES Endo-Shield

## Safety Data Sheet

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis

---

Issue date

07-21-2021

SDS\_CA\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

## Flexible Firestop Sealant (CP 606)

### Product description

- An acrylic based firestop sealant that provides movement capability in fire rated joints and seals through-penetrations applications

### Product features

- Silicone free
- Halogen, asbestos and solvent free
- Paintable
- Tested up to 33% movement with 500 cycles in accordance to UL 2079 and ASTM 1966
- Smoke and fume resistant
- Easy clean up with water
- 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

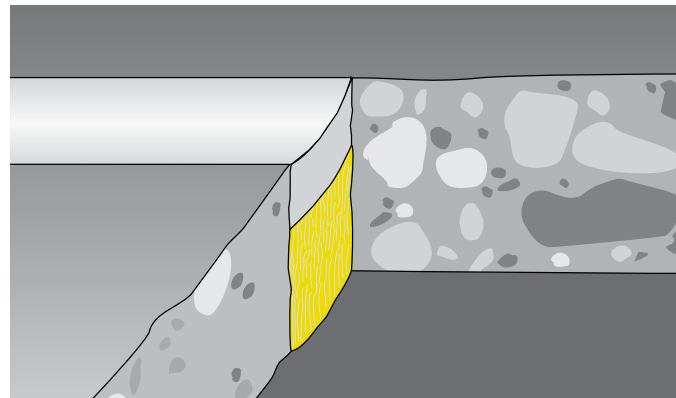
- Sealing construction/expansion joints
- Top-of-wall joints
- Metal pipes
- Cable bundles
- HVAC penetrations

### For use with

- Various base materials such as masonry, concrete, gypsum, etc.
- Wall and floor assemblies rated up to 3 hours

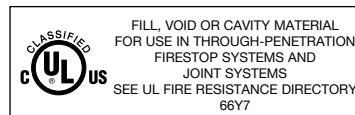
### Examples

- Where a gypsum wall assembly meets the underside of a metal or concrete deck
- Sealing expansion joints to impede the passage of fire, smoke and toxic fumes
- Sealing around HVAC penetrations through fire-rated assemblies



| Technical Data*  | CP 606   |
|--|--|
| <b>Chemical basis</b>  | Acrylic based firestop sealant   |
| <b>Color</b>   | Available in red, white and gray   |
| <b>Application temperature</b>   | 40°F to 104°F (5°C to 40°C)  |
| <b>Skin-forming time</b>   | Approx. 15 min   |
| <b>Curing time</b>   | Approx. 3 mm / 3 days  |
| <b>Average volume shrinkage (ASTM C1241)</b>                                     | 22.2%  |
| <b>Movement capability</b>   | Approx. 10%  |
| <b>Temperature resistance</b>  | -22°F to 176°F (-30°C to 80°C)   |
| <b>Surface burning characteristics (ASTM E 84-96)</b>                            | Flame Spread: 10<br>Smoke Development: 0   |
| <b>Sound transmission classification (ASTM E 90-99)</b>                          | 56<br>(Relates to specific construction)   |
| <b>Tested in accordance with</b>   |  |
| <ul style="list-style-type: none"> <li>• UL 2079</li> <li>• ASTM E 84</li> </ul> | <ul style="list-style-type: none"> <li>• ASTM E 814</li> <li>• UL 1479</li> <li>• ASTM E 1966</li> <li>• ASTM G21</li> <li>• CAN/ULC-S115</li> <li>• CAN/ULC-S102</li> </ul> |

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



## Installation instructions for CP 606

### 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
- The use of backing material is recommended to control the sealant depth and help ensure assembly seal is complete

### Opening

1. Clean the opening. Surfaces to which CP 606 will be applied should be cleaned of loose debris, dirt, oil, wax and grease. The surface should be moisture and frost free.

### Application of firestop

2. Insert fill of mineral wool or backer (as required).
3. Apply firestop over backer.
4. Smooth firestop sealant with a trowel before the skin forms. Once cured, CP 606 can only be removed mechanically.
5. For maintenance reasons, a penetration seal can be

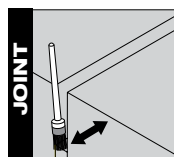
permanently marked with an identification plate and fastened in a visible position next to the seal.

### Not for use

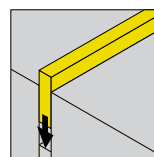
- On areas immersed in water

### Storage

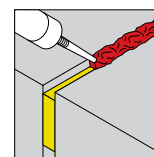
- Store only in the original packaging in a location protected from moisture at a temperature of 40°F to 77°F (5°C to 25°C)
- Observe expiration date on package



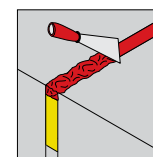
1. Clean opening



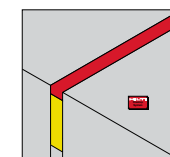
2. Insert backing material compressed per UL System



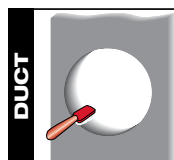
3. Apply CP 606



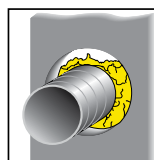
4. Smooth CP 606



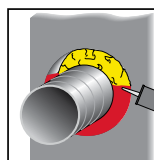
5. Fasten identification plate (if required)



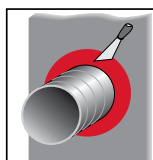
1. Clean opening



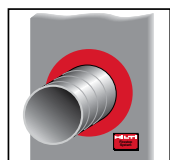
2. Insert backing material



3. Apply CP 606



4. Smooth CP 606



5. Fasten identification plate (if required)



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

**Hilti. Outperform. Outlast.**

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20160930-R13240  
**Report Reference** R13240  
**Issue Date** 2016-September-30

**Issued to:** Hilti Construction Chemicals, Div of Hilti Inc.  
5400 S 122<sup>nd</sup> East Ave  
Tulsa, OK 74146

**This is to certify that representative samples of** Fill, Void or Cavity Materials  
Fill, Void or Cavity Materials Certified for Canada

CP 606 Sealant for use in Through-Penetration Firestop, Joint in wall and partition Systems as currently described in the UL Fire Resistance Directory and in the Products Certified for Canada Directory.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** ANSI/UL 1479, "Fire Tests of Through-Penetration Firestops,"  
ANSI/UL 2079, "Tests for Fire Resistance of Building Joint Systems,"  
CAN/ULC-S115, "Standard Method of Fire Tests of Firestop Systems."

**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

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

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/07/2016


Revision date: 01/07/2016

Supersedes: 01/07/2016

Version: 4.2

### SECTION 1: Identification

#### 1.1. Identification

|                    |   |
|--------------------|---|
| Product form       | Mixture   |
| Name               | Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606                                  |
| Product code       | BU Chemicals  |
| Chemical structure |  |

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Hilti, Inc.  
 Legacy Tower, Suite 1000  
 75024 Plano - USA  
 T +1 9724035800  
 1-800-879-8000 toll free - F +1 918 254 0522

**Supplier**  
 Hilti, Inc.  
 Legacy Tower, Suite 1000  
 75024 Plano - USA  
 T +1 9724035800  
 1-800-879-8000 toll free - F +1 918 254 0522

**Department issuing data specification sheet**  
 Hilti AG  
 Feldkircherstraße 100  
 9494 Schaan - Liechtenstein  
 T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

#### 1.4. Emergency telephone number

|                  |   |
|------------------|---|
| Emergency number | Chem-Trec<br>Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)<br>Tel.: 703 527 3887 (Other countries)<br>+1 918 8723000<br>1-800-879-8000 toll free |
|------------------|---|

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**GHS-US classification**

Not classified

#### 2.2. Label elements

**GHS-US labelling**

No labelling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable



# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | Get medical advice/attention if you feel unwell.   |
| First-aid measures after skin contact | Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | Get medical advice/attention if you feel unwell.   |

#### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                              |  |
|------------------------------|--|
| Suitable extinguishing media | Water spray. Dry powder. Foam. Carbon dioxide. |
|------------------------------|--|

#### 5.2. Special hazards arising from the substance or mixture

|            |  |
|------------|--|
| Reactivity | The product is non-reactive under normal conditions of use, storage and transport. |
|------------|--|

#### 5.3. Advice for firefighters

|                                |   |
|--------------------------------|---|
| Protection during firefighting | Self-contained breathing apparatus. Complete protective clothing. |
|--------------------------------|---|

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective equipment | For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|--|

#### 6.2. Environmental precautions

No additional information available

#### 6.3. Methods and material for containment and cleaning up

|                         |                                   |
|-------------------------|-----------------------------------|
| Methods for cleaning up | Recover mechanically the product. |
|-------------------------|-----------------------------------|

#### 6.4. Reference to other sections

For further information refer to section 13.

# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                               |  |
|-------------------------------|--|
| Precautions for safe handling | Wear personal protective equipment.  |
| Hygiene measures              | Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

#### 7.2. Conditions for safe storage, including any incompatibilities

|                     |                                  |
|---------------------|----------------------------------|
| Storage conditions  | Keep cool. Store in a dry place. |
| Storage temperature | 41 - 77 °F                       |

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Personal protective equipment Protective clothing. Safety glasses. Gloves.



|                          |                                    |
|--------------------------|------------------------------------|
| Hand protection          | Protective gloves. EN 374.         |
| Eye protection           | Safety glasses. EN 166. EN 170.    |
| Skin and body protection | Wear suitable protective clothing. |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|  |                       |
|--|-----------------------|
| Physical state                             | Liquid                |
| Appearance                                 | Pasty.                |
| Colour                                     | red white Grey        |
| Odour                                      | characteristic        |
| Odour threshold                            | Not determined        |
| pH   | ≈ 9 Not applicable    |
| Melting point                              | Not applicable        |
| Freezing point                             | No data available     |
| Boiling point                              | No data available     |
| Flash point                                | Not applicable        |
| Relative evaporation rate (butylacetate=1) | No data available     |
| Flammability (solid, gas)                  | No data available     |
| Explosive limits                           | No data available     |
| Explosive properties                       | No data available     |
| Oxidising properties                       | No data available     |
| Vapour pressure                            | No data available     |
| Relative density                           | No data available     |
| Relative vapour density at 20 °C           | No data available     |
| Density                                    | 1.6 g/cm <sup>3</sup> |
| Molecular mass                             | Not determined        |
| Solubility                                 | No data available     |

# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|                           |                   |
|---------------------------|-------------------|
| Log Pow                   | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity                 | No data available |
| Viscosity, kinematic      | No data available |
| Viscosity, dynamic        | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|  |  |
|--|--|
| Acute toxicity                                     | Not classified                           |
| Skin corrosion/irritation                          | Not classified<br>pH: ≈ 9 Not applicable |
| Serious eye damage/irritation                      | Not classified<br>pH: ≈ 9 Not applicable |
| Respiratory or skin sensitisation                  | Not classified                           |
| Germ cell mutagenicity                             | Not classified                           |
| Carcinogenicity                                    | Not classified                           |
| Reproductive toxicity                              | Not classified                           |
| Specific target organ toxicity (single exposure)   | Not classified                           |
| Specific target organ toxicity (repeated exposure) | Not classified                           |
| Aspiration hazard                                  | Not classified                           |

# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general

The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on the global warming

No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

|                             |                |
|-----------------------------|----------------|
| Proper Shipping Name (ADR)  | Not applicable |
| Proper Shipping Name (IMDG) | Not applicable |
| Proper Shipping Name (IATA) | Not applicable |
| Proper Shipping Name (ADN)  | Not applicable |
| Proper Shipping Name (RID)  | Not applicable |

#### 14.3. Transport hazard class(es)

##### ADR

Transport hazard class(es) (ADR) Not applicable

##### IMDG

Transport hazard class(es) (IMDG) Not applicable

##### IATA

Transport hazard class(es) (IATA) Not applicable

##### ADN

Transport hazard class(es) (ADN) Not applicable

##### RID

# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport hazard class(es) (RID) Not applicable

### 14.4. Packing group

|                      |                |
|----------------------|----------------|
| Packing group (ADR)  | Not applicable |
| Packing group (IMDG) | Not applicable |
| Packing group (IATA) | Not applicable |
| Packing group (ADN)  | Not applicable |
| Packing group (RID)  | Not applicable |

### 14.5. Environmental hazards

|                               |  |
|-------------------------------|--|
| Dangerous for the environment | No                                     |
| Marine pollutant              | No                                     |
| Other information             | No supplementary information available |

### 14.6. Special precautions for user

**- Overland transport**

**- Transport by sea**

No data available

**- Air transport**

No data available

**- Inland waterway transport**

|                           |    |
|---------------------------|----|
| Carriage prohibited (ADN) | No |
| Not subject to ADN        | No |

**- Rail transport**

|                           |    |
|---------------------------|----|
| Carriage prohibited (RID) | No |
|---------------------------|----|

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

**CANADA**

|  |   |
|--|---|
| Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606 |   |
| WHMIS Classification                             | Uncontrolled product according to WHMIS classification criteria |

**EU-Regulations**

No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

**National regulations**

No additional information available

# Hilti Firestop Acrylic Sealant CFS-S ACR; CP 606

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Revision date 01/07/2016

HMIS III Rating

|                     |   |
|---------------------|---|
| Health              | 0 Minimal Hazard - No significant risk to health  |
| Flammability        | 0 Minimal Hazard - Materials that will not burn   |
| Physical            | 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |
| Personal Protection | B<br>B - Safety glasses, Gloves   |

SDS\_US\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*



February 26, 2010

To Whom It May Concern:

Re: Hilti CP 606 Flexible Firestop – LEEDs Info.

The Hilti CP 606 Flexible Firestop Sealant is manufactured in Germany.

The CP 606 pail is made of polyethylene and can be completely recycled. There is no post-consumer or post-industrial content in CP 606 and it cannot be recycled. The CP 606 does not contain any Rapidly Renewable Materials. The VOC content for CP 606 is 71.0 grams/liter.

CP 606 is not regulated as a hazardous waste by the Federal EPA Standards. The regulations for the disposal of non-regulated industrial waste can vary from state to state and even city to city. For this reason, you should consult your local and state regulatory agencies for direction on disposal.

Please feel free to contact me at (918) 872-3704 if you have questions.

Sincerely,

A handwritten signature in black ink, reading "Jerry Metcalf". The signature is written in a cursive style.

Jerry Metcalf MPH, CHMM  
Safety/Environmental Manager  
Hilti Inc.  
918 872 3704  
[jerry.metcalf@hilti.com](mailto:jerry.metcalf@hilti.com)

Rev. Date: 2/26/10

Hilti, Inc.  
5400 South 122<sup>nd</sup> East Avenue  
Tulsa, OK 74146

1-800-879-8000  
[www.hilti.com](http://www.hilti.com)

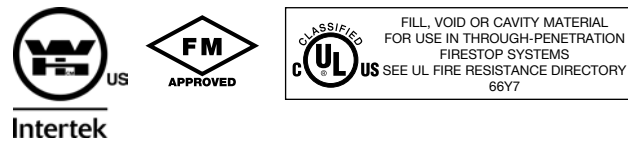
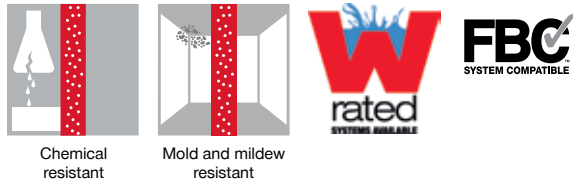
## High-performance intumescent firestop sealant FS-ONE MAX

### Applications

- For effectively sealing most common through penetrations in a variety of base materials
- For use on concrete, masonry and drywall
- Mixed and multiple penetrations
- Metal pipe penetrations: copper, steel and EMT
- Insulated metal pipe penetrations: steel and copper
- Plastic pipe penetrations: closed or vented

### Advantages

- US-produced: "Buy American" compliant
- One product for a variety of common through penetrations
- Cost-effective, easy-to-use solution
- Water-based and paintable
- Industry-leading VOC results
- Ethylene glycol-free



| Technical data                                    |   |
|---|---|
| Chemical basis                                    | Water-based acrylic dispersion  |
| Approx. Density                                   | 84.3 lb/ft <sup>3</sup>   |
| Color   | Red   |
| Application temperature range                     | 41 - 104 °F   |
| Approx. cure time <sup>1)</sup>                   | 4 mm/3 days   |
| Temperature resistance range                      | -4 to 212 °F  |
| Mold and mildew performance                       | Class 0 (ASTM G21-96)   |
| Mold and mildew resistance                        | Yes   |
| Surface burning characteristics UL 723 (ASTM E84) | Flame spread: 0<br>Smoke development: 10                                |
| Tested in accordance with                         | UL 1479, ASTM E814, ASTM E84, CAN/ULC-S115, ASTM G21, ASTM E90          |
| California State fire marshal approval            | CSFM Listing 4485-1200:0108 for FS-ONE MAX Intumescent Firestop Sealant |
| Expansion ratio (unrestricted, up to)             | 1:5   |

<sup>1)</sup> at 75°F/24°C, 50% relative humidity



| Order Designation                    | Package Content   | Item number |
|--------------------------------------|---|-------------|
| FS-ONE MAX 20oz foil (3 case + disp) | 1x Foil pack dispenser manual CS 270-P1, 75x Firestop sealant FS-ONE MAX 20 oz foil | 3530252     |
| FS-ONE MAX 10oz tube (1 case)        | 12x Firestop sealant FS-ONE MAX 10 oz cartridge                                     | 3530249     |
| FS-ONE MAX 5 gallon (18 pails)       | 18x Firestop sealant FS-ONE MAX 5 gallon pail                                       | 3530263     |
| FS-ONE MAX 20oz foil (1 case)        | 25x Firestop sealant FS-ONE MAX 20 oz foil  | 3530250     |
| FS-ONE MAX 20oz foil (3 cases)       | 75x Firestop sealant FS-ONE MAX 20 oz foil  | 3530251     |
| FS-ONE MAX 20oz Foil-Pallet          | 600x FSONE-MAX 20 oz foil, 290x Bulk Shipping Condition                             | 3534713     |
| FS-ONE MAX 10 oz cartridge           |   | 2101531     |
| FS-ONE MAX 5 gallon pail             |   | 2101533     |



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20150108-R13240  
**Report Reference** R13240  
**Issue Date** 2015-January-08

**Issued to:** Hilti Construction Chemicals, Div of Hilti Inc.  
5400 S 122<sup>nd</sup> East Ave  
Tulsa, OK 74146

**This is to certify that  
representative samples of**


Fill, Void or Cavity Materials  
Fill, Void or Cavity Materials Certified for Canada  
FS-ONE MAX Intumescent Sealant for use in Through-  
Penetration Firestop and Joint Systems in the UL Fire  
Resistance Directory and in the Products Certified for  
Canada Directory.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

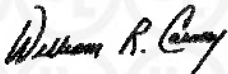
**Standard(s) for Safety:** ANSI/UL 1479, "Fire Tests of Through-Penetration  
Firestops," – Edition 4  
ANSI/UL 2079, "Tests for Fire Resistance of Building Joint  
Systems," – Edition 4 – Revision Date 2014/12/17  
CAN/ULC-S115, "Standard Method of Fire Tests of Firestop  
Systems." – Edition 4 – Issue Date 2011/06/01

**Additional Information:** See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

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: 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.



William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
contact a local UL Customer Service Representative at [www.ul.com/contactus](http://www.ul.com/contactus)



# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 02/06/2019

Revision date: 02/06/2019

Supersedes: 12/17/2015

Version: 1.3

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

|              |                     |
|--------------|---------------------|
| Product form | Mixture             |
| Trade name   | FS-ONE MAX; CFS-FIL |
| Product code | BU Fire Protection  |



#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

|                                   |                             |
|-----------------------------------|-----------------------------|
| Recommended uses and restrictions | For professional users only |
|-----------------------------------|-----------------------------|

#### 1.3. Details of the supplier of the safety data sheet

Hilti (Canada) Corp.  
2360 Meadowpine Boulevard  
L5N 6S2 Mississauga, Ontario - Canada  
T +1905 8139200  
1-800-363-4458 toll free - F +1 905 813 9009

#### Supplier

Hilti (Canada) Corp.  
2360 Meadowpine Boulevard  
L5N 6S2 Mississauga, Ontario - Canada  
T +1905 8139200  
1-800-363-4458 toll free - F +1 905 813 9009

#### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
9494 Schaan - Liechtenstein  
T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

#### 1.4. Emergency telephone number

|                  |   |
|------------------|---|
| Emergency number | Chem-Trec<br>Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)<br>Tel.: 703 527 3887 (Other countries) |
|------------------|---|

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS CA)

Not classified

#### 2.2. Label elements

##### GHS CA labelling

No labelling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS CA)

No data available

# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | Get medical advice/attention if you feel unwell.   |
| First-aid measures after skin contact | Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | Get medical advice/attention if you feel unwell.   |

#### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Unsuitable extinguishing media

No additional information available

#### 5.3. Specific hazards arising from the hazardous product

No additional information available

#### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

#### 6.2. Methods and materials for containment and cleaning up

Methods for cleaning up Mechanically recover the product.

#### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                               |   |
|-------------------------------|---|
| Precautions for safe handling | Wear personal protective equipment.   |
| Hygiene measures              | Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.<br>Always wash hands after handling the product. |

#### 7.2. Conditions for safe storage, including any incompatibilities

|                    |                                  |
|--------------------|----------------------------------|
| Storage conditions | Keep cool. Store in a dry place. |
|--------------------|----------------------------------|

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

|                        |  |
|------------------------|--|
| Additional information | The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product. |
|------------------------|--|

#### 8.2. Appropriate engineering controls

No additional information available

#### 8.3. Individual protection measures/Personal protective equipment

Personal protective equipment Protective clothing. Safety glasses. Gloves.



|                          |                                     |
|--------------------------|-------------------------------------|
| Hand protection          | Protective gloves. EN 374.          |
| Eye protection           | Chemical goggles or safety glasses. |
| Skin and body protection | Wear suitable protective clothing.  |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|  |                   |
|--|-------------------|
| Physical state                             | Solid             |
| Appearance                                 | Pasty.            |
| Molecular mass                             | Not determined    |
| Colour                                     | red.              |
| Odour                                      | characteristic.   |
| Odour threshold                            | Not determined    |
| pH   | ≈ 7.85            |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point                              | Not applicable    |
| Freezing point                             | No data available |
| Boiling point                              | No data available |
| Flash point                                | Not applicable    |
| Auto-ignition temperature                  | No data available |
| Decomposition temperature                  | No data available |
| Flammability (solid, gas)                  | Not applicable    |
| Vapour pressure                            | No data available |
| Relative vapour density at 20 °C           | No data available |

# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

|                      |                          |
|----------------------|--------------------------|
| Relative density     | No data available        |
| Density              | ≈ 1.35 g/cm <sup>3</sup> |
| Solubility           | No data available        |
| Log Pow              | No data available        |
| Viscosity, kinematic | No data available        |
| Viscosity, dynamic   | No data available        |
| Explosive properties | No data available        |
| Oxidising properties | No data available        |
| Explosive limits     | No data available        |

### 9.2. Other information

|             |       |
|-------------|-------|
| VOC content | 9 g/l |
|-------------|-------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | The product is non-reactive under normal conditions of use, storage and transport.                   |
| Chemical stability                 | Stable under normal conditions.  |
| Possibility of hazardous reactions | No dangerous reactions known under normal conditions of use.   |
| Conditions to avoid                | None under recommended storage and handling conditions (see section 7).                              |
| Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |                              |
|-----------------------------------|------------------------------|
| Acute toxicity (oral)             | Not classified               |
| Acute toxicity (dermal)           | Not classified               |
| Acute toxicity (inhalation)       | Not classified               |
| Skin corrosion/irritation         | Not classified<br>pH: ≈ 7.85 |
| Serious eye damage/irritation     | Not classified<br>pH: ≈ 7.85 |
| Respiratory or skin sensitization | Not classified               |
| Germ cell mutagenicity            | Not classified               |
| Carcinogenicity                   | Not classified               |
| Reproductive toxicity             | Not classified               |
| STOT-single exposure              | Not classified               |
| STOT-repeated exposure            | Not classified               |
| Aspiration hazard                 | Not classified               |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |   |
|-------------------|---|
| Ecology - general | The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
|-------------------|---|

# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|  |   |
|--|---|
| Waste treatment methods                    | Dispose in a safe manner in accordance with local/national regulations. |
| Product/Packaging disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. |

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR                                     | IMDG   | IATA                                  | RID                                   |
|---|--|---------------------------------------|---------------------------------------|
| <b>14.1. UN number</b>                  |  |                                       |                                       |
| Not applicable                          | Not applicable   | Not applicable                        | Not applicable                        |
| <b>14.2. UN proper shipping name</b>    |  |                                       |                                       |
| Not applicable                          | Not applicable   | Not applicable                        | Not applicable                        |
| <b>14.3. Transport hazard class(es)</b> |  |                                       |                                       |
| Not applicable                          | Not applicable   | Not applicable                        | Not applicable                        |
| <b>14.4. Packing group</b>              |  |                                       |                                       |
| Not applicable                          | Not applicable   | Not applicable                        | Not applicable                        |
| <b>14.5. Environmental hazards</b>      |  |                                       |                                       |
| Dangerous for the environment :<br>No   | Dangerous for the environment :<br>No<br>Marine pollutant : No | Dangerous for the environment :<br>No | Dangerous for the environment :<br>No |
| No supplementary information available  |  |                                       |                                       |

### 14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

Carriage prohibited (RID) No

# FS-ONE MAX; CFS-FIL

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

## SECTION 15: Regulatory information

### 15.1. National regulations

No additional information available

### 15.2. International regulations

No additional information available

## SECTION 16: Other information

|                 |            |
|-----------------|------------|
| SDS Major/Minor | None       |
| Date of issue   | 02-06-2019 |
| Revision date   | 02-06-2019 |
| Supersedes      | 12-17-2015 |

Indication of changes:

| Section | Changed item | Change   | Comments |
|---------|--------------|----------|----------|
|         |              | Modified | Layout   |

SDS\_CA\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*



June 17, 2019

To Whom It May Concern:

Re: **Hilti FS-ONE Max Firestop – LEED Info.**

Item Numbers:

|         |
|---------|
| 2101531 |
| 2101532 |
| 2101533 |

The Hilti FS-ONE MAX Firestop is manufactured in the United States

There is no post-consumer or post-industrial recycled content in FS-ONE MAX and it cannot be recycled. The VOC content for FS-ONE MAX is 9 grams/liters.

FS-ONE MAX is not regulated as a hazardous waste by the Federal EPA Standards. The regulations for the disposal of non-regulated industrial waste can vary from state to state and even city to city. For this reason, you should consult your local and state regulatory agencies for direction on disposal.

Please feel free to contact me at (918) 872-3704 if you have questions.

Sincerely,

Jerry Metcalf MPH, CHMM  
Sr. Manager, Safety/Environmental  
Hilti Inc  
(918) 872 3704  
[jerry.metcalf@hilti.com](mailto:jerry.metcalf@hilti.com)

Rev. Date: 5/30/19

The manufacturing plant location on this certificate has been provided for LEED reporting purposes only. It should never be used for Country of Origin certification or a representation of compliance/non-compliance with Buy American or Buy America requirements, as those requirements differ.

The manufacturing plant location(s) identified on the certificate represent standard Hilti catalog products only. "Specially" produced non-catalog Hilti products may have differing manufacturing plant locations.

Contact your Hilti representative in cases of "specially" produced products for a custom LEED certificate.

**Hilti, Inc.**  
5400 South 122<sup>nd</sup> East Avenue  
Tulsa, OK 74146  
1-800-879-8000  
[www.hilti.com](http://www.hilti.com)