



PRODUCT DATA SHEET

GRABBERGARD EFC

Description

GRABBERGARD EFC is a superior performance latex-based endothermic firestop caulk. It has excellent adhesion and bonding characteristics and will not slump or sag out after it has been properly installed. GRABBERGARD EFC elastomeric caulk has been designed to stop the passage of fires, smoke and fumes through fire-rated assemblies after it has been fully cured. GRABBERGARD EFC is chemically compatible with plastic pipes and cable jackets and is water resistant after fully cured. Once cured Grabbergard EFC provides a durable and flexible firestop and can be repaired if damaged or cut.

Applications

GRABBERGARD EFC firestop caulk provides an effective firestop seal when used as a single or multiple component system for through-penetrations, construction joints and voids. To make certain installation is correct, consult manufacturer's current listings, as well as, Third Party published Fire Resistance Directories and/or their websites. GRABBERGARD EFC common uses and features are listed below:

- Used on:** Single and multiple penetrations
- Metallic pipes
 - Copper, steel, cast iron
 - Conduits
 - Non-metallic pipes
 - ABS, CPVC, FRPP, PE, PEX, PVC
 - Rigid and ENT conduit
 - Insulated pipes
 - Fiberglass
 - AB/PVC
 - Electrical cables and wires
 - Jacket & non-jacketed
 - Cable trays
 - Mechanical ducts
 - Construction joints/gaps
 - Top-of-Wall
 - Horizontal and vertical joints
 - Perimeter floor joints
 - Voids
 - Common construction substrate materials:
 - Concrete
 - Concrete block
 - Steel deck
 - Wood
 - Gypsum wallboard

Features: Red Color

- Non-toxic
- Safe and easy to use
- Easy clean up (Water Only)
- Low volatile organic content (VOC)
- No asbestos or PCB
- Water resistance (when fully cured)
- Mildew resistant (when fully cured)
- Paintable (with latex based paints)
- Excellent application characteristics
 - Flows easily
 - No slump
 - Superior bond and adhesion
- Excellent acoustic properties
- Seals smoke and gases
- One-component systems

Advantages

Endothermic – When GRABBERGARD EFC is exposed to high temperatures or direct fire, it releases water vapor, forms a solid char and retards the spread of fire.

Single Component

GRABBERGARD EFC Caulk can be used as a single component firestop in many applications. Just install the caulk directly into the opening without using fibrous insulation materials. In many situations GRABBERGARD EFC will replace the more conventional intumescent firestop devices such as pipe collars and wrap strips. This will reduce both the cost and installation time.

Versatility

GRABBERGARD EFC adheres to dry and damp concrete, wood, metals and other common construction material surfaces to form an air and watertight bond. GRABBERGARD EFC can be painted over using a latex-based paint after fully cured.

Flexibility

When installed GRABBERGARD EFC is properly installed in construction joints it will allow up to 33 per cent extension and compression movement of the intersecting assemblies. It will also accommodate longitudinal and lateral movement of through and partial service penetrating items installed in the assembly. GRABBERGARD EFC will remain flexible after it has fully cured.

Disclaimer: All technical advice, recommendations and services rendered by the seller gratis. They are based on technical data, which the seller believes to be reliable, and are intended for use by persons having the skills and know how, at their own discretion and risk. In no event will the seller be liable for any consequential damages arising out of the use of this product.





PRODUCT DATA SHEET

GRABBERGARD EFC

Limitations

Consult the Installation Instructions, Storage and Handling and Transportation Sections.

Exposure to rain, running or standing water; before, the sealant is cured may cause the installed material(s) to wash out. The curing process occurs naturally through the evaporation of its water content into the atmosphere. Slower cure times may be experienced if the sealant is installed at low temperatures, damp and/or in high humidity environments. Any materials used in the firestop system for damming, insulation or support that may not allow for the free passage of air could result in longer curing times. The environment in which the compound is being used should be considered when estimating cure times.

Compliance/Approvals

GRABBERGARD EFC has been Third Party tested for many firestop applications. They meet or exceed the requirements of ASTM E 814; ASTM E 119; UL 1479; UL 2079; ULC S 115-M95; ULC S 101; ASTM E 84. Underwriters Laboratories (UL) and Intertek Warnock Hersey are Third Party fire endurance testing agencies accredited by ICBO, BOCA, and SBCCI (National Evaluation Services) in the United States.

Additional Testing

GRABBERGARD EFC caulk becomes an integral component in a complete building system of walls, floor/ceiling assemblies, service penetration, joints and the like. For this reason, its physical compatibility to other materials used in these complex configurations requires more than the routine firestopping product testing. The results of these additional tests are listed in Table 1, Physical and Chemical Properties.

GRABBERGARD EFC caulk has proven that it has all the physical and chemical characteristics desired in a firestopping product. After it has been installed and fully cured, it has excellent stability and flexibility, even after four weeks at freezing temperatures of -15°F (-26°C) and exposure to extreme temperatures of 300°F(149°C) for 24 hours. Dimensional changes were well within the accepted standards (<2% per ASTM C 356). Dynamic testing has demonstrated the high elasticity properties of GRABBERGARD EFC.

Installation Instructions

GRABBERGARD EFC must be installed in compliance with the listed system designs published by Third Party testing laboratories (UL, ITS Warnock Hersey). Refer to their respective published Fire Resistance Directories and/or their Websites. GRABBERGARD EFC does not require mineral wool insulation in many applications.

Prep-work

To install properly, remove excessive dust, dirt, debris, grease, oil and standing water.

Application

Apply caulking material with standard cartridge or bulk-loading application guns or trowel in place with standard troweling tools. Install the required amount of caulking material into the opening using sufficient pressure to ensure it is in contact with all surfaces, substrates and/or penetrating items. The manufacturer recommends tooling the surface with a moist putty knife or similar tooling utensil. Tooling the caulking material will create a stronger bond and a smooth finish especially on irregular or porous surfaces. Do not apply GRABBERGARD EFC to mineral wool that is or was wet from exposure to water, standing water, rain or snow.

Caution: Mineral wool may cause eye, skin or respiratory tract irritation. Avoid contact with eyes, skin or clothing. Recommend using gloves and goggles. Refer to mineral wool manufacturer's Material Safety Data Sheets.

Installation Temperature

For best results, installation temperatures should be between 45°-90°F(7°-32°C).

Maintenance

No special maintenance is required after the GRABBERGARD EFC sealant is installed and fully cured. If, after installation, the GRABBERGARD EFC sealant is damaged or cut, repairs should be made with the same sealant.

Disclaimer: All technical advice, recommendations and services rendered by the seller gratis. They are based on technical data, which the seller believes to be reliable, and are intended for use by persons having the skills and know how, at their own discretion and risk. In no event will the seller be liable for any consequential damages arising out of the use of this product.





PRODUCT DATA SHEET GRABBERGARD EFC

Manufacturer's Recommendations

The manufacturer recommends this product be installed by those trained in proper installation procedures (Approved Installer Card) and be able to read and understand a firestop system design listing (i.e. UL or WHI Listed System Design).

Storage and Handling

Keep product stored in a protected covered area in its original unopened containers. Manufacturer recommends storage temperatures to between 40°-90°F(4°-32°C).

DO NOT ALLOW TO FREEZE

Product has a shelf life of one(1) year. Stock rotation program is recommended.

Transportation

Recommended transportation temperatures should be between 40°-90°F(4°-32°C).

DO NOT ALLOW TO FREEZE

First Aid

In case of contact with eyes, flush with water and consult a physician. Skin contact, clean up thoroughly with water or soapy water. Consult a physician if eye or skin irritation develops or is persistent. **SEE MSDS FOR ADDITIONAL INFORMATION.**

Availability

GRABBERGARD EFC caulk is supplied in:

- 10 fl. oz. (300ml) plastic cartridges
- 29 fl. oz. (850ml) cartridges
- 20 fl. oz. (590ml) sausages
- 5 gal. (18.9L) tapered plastic pails

Coverage

Estimated product usage will vary depending on opening size and configuration. Check GRABBERGARD'S estimating charts for coverage.

Warranty

John Wagner & Associates dba Grabber Construction Products will not accept liability for more than product refund. Any claim regarding product defect must be received in writing within 1 year from date of shipment. Grabber makes no other Warranty or Guarantee express or implied, including warranties of fitness for a particular purpose or merchantability. The seller shall assume no other liability for incidental or consequential damages arising out of the sale or use of this product.

Disclaimer: All technical advice, recommendations and services rendered by the seller gratis. They are based on technical data, which the seller believes to be reliable, and are intended for use by persons having the skills and know how, at their own discretion and risk. In no event will the seller be liable for any consequential damages arising out of the use of this product.

Technical Services

For technical information and assistance regarding application information, code requirements and performance specifications:

Toll Free

1-866-237-GRAB(4722)

Web Site

www.grabberman.com





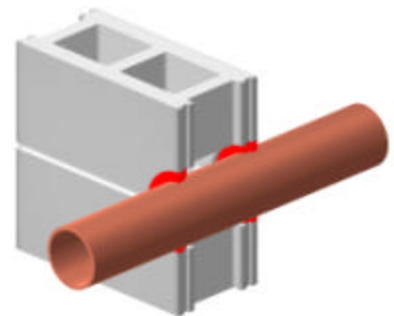
PRODUCT DATA SHEET

GRABBERGARD EFC

Table 1 – Physical and Chemical Properties

As Supplied

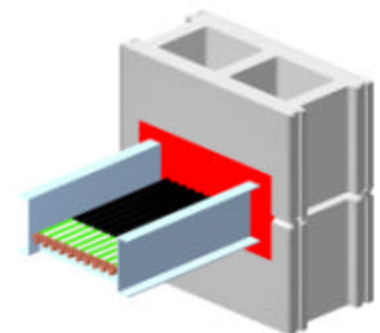
Type of Polymer	Waterborne Resin
Odor	Mild Latex
Solids Content (Wt%)	77±2%
Application Temperatures	45°-90°F(7°-32°C)
Viscosity (ASTM D-2196)	560000-744000cps
Extrudability	Passed
Color - (ASTM C-834)	Rust Red
Specific Gravity - (ASTM D-1475)	1.40-1.50
Dry Time - (ASTM D-1640)	
Dry to touch @ 6mils	20-30 mins
Full Cure Time	7-21 days
(depends on thickness & environment)	
pH - (ASTM E-70)	8-9



Typical Pipe Penetration

As Cured

In Service Temperature	up to 120°F(49°C)
Moisture Absorption	<4%
Stability	Passed
[Dimensional, Cracking, Blisters, Flexibility]	
Corrosion - (ASTM C-655)	Passed
[for Aluminum, Copper, Steel, Galvanized Steel, Stainless Steel]	
Volume Shrinkage - (ASTM C-1241)	Passed
Chemical Compatibility - (ASTM D-543)	Passed
Slump Test - (ASTM D-2202 - Modified)	Passed
Hardness - (ASTM D-2240, Shore A)	22
Freeze/Thaw - (ASTM D-2243)	Excellent
Tensile Properties - (ASTM D-2370)	
Tensile Strength	26 psi
Maximum Elongation	1400%
Corrosion - (ASTM D-5894)	Passed
Surface Burning Characteristics - (ASTM E-84)	
Flame Spread Index	<25
Smoke Developed Index	<50
STC Sound Transmission Loss - (ASTM 90-99)	Full Recovery



Typical Cable Tray Penetration

Disclaimer: All technical advice, recommendations and services rendered by the seller gratis. They are based on technical data, which the seller believes to be reliable, and are intended for use by persons having the skills and know how, at their own discretion and risk. In no event will the seller be liable for any consequential damages arising out of the use of this product.

