



Protect what matters.



UL-Certified Penetration and Joint Sealings

Classified in accordance with ANSI/UL 1479/UL2079

Subject to errors, misprints and changes. All information contained in this brochure reflects the state of the art or, if applicable, the requirements of the pertinent standard at the time of printing (12/2023).

Details about the legal and technical prerequisites applicable to your specific project and its environment, along with the relevant manufacturer specifications are available upon request.

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Material quantities indicated in this brochure are approximate only.

Quantity requirements depend on the type and size of the actual penetration opening as well as on its occupancy rate (percent fill); detailed information can be gleaned from the pertinent installation instructions.

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Clicking the underlined product name on the relevant product page then takes you back to the contents.

svt – Your Full-Service Provider for Passive Structural Fire Protection

For more than 50 years, the svt Group of Companies has been a leading innovator in the fields of passive fire protection, damage restoration and fire protection planning. The Group's overall focus is on saving what really matters: the lives of people, their property and all else they value.

The Group has seven corporate members, namely svt, Rolf Kuhn, Flamro, AIK, Odice, Securo, DDL and TFSG, all of whom also excel as highly specialised brand manufacturers in their own right. Together, they offer the most extensive portfolio of state-of-the-art fire protection products and industrial applications across Europe.

Thanks to the Group's in-house manufacturing facilities, R&D units as well as fire testing furnaces at several national and international locations, svt is able to deliver both certified standard solutions and perfectly customised fire protection solutions and services from one source.



Smart Solutions for All Your Needs

Whether you require fire protection solutions for residential structural engineering, industrial construction, infrastructure, energy, aviation, ships, rolling stock, fire protection doors, batteries, or solutions for customized industrial applications – you can rely on svt as your experienced and committed partner of choice.

Buildings

e. g. residential and office buildings, hospitals, department stores, airports



Industry

Proven applications in industrial areas, such as production facilities or heavy-industry environments



Power Plants

Solutions for conventional and nuclear power plants, renewable-energy facilities, as well as substations and utility tunnels



Aviation

Fire protection for all types of aircraft and air traffic environments



Ships & Offshore

Fire protection systems for the specific requirements of ships and offshore facilities



Rolling Stock

High-performance fire protection at any speed



Battery Applications

Fire protection that keeps pace with a fast-growing (e-mobility) market



Building Components

Fire protection materials for doors, glazing units and façades

Reliable Protection for Lives and Property

According to world statistics, a fire breaks out every minute of the day, whether in a residential building, an industrial plant, or in a public space. Fire incidents are likely to cause personal injury and considerable property damage, thus bringing great uncertainty and heavy losses to those involved. Sometimes, objects of value or documents destroyed in a fire can neither be recovered nor replaced and are lost forever. In many cases, the financial predicament resulting from process downtimes is so serious that companies are unable to resume their business operations properly, with some of them going bankrupt in the aftermath of the disaster.

But how and why is it that fire spreads so fast and far, and what are typical vulnerable spots to be aware of in buildings? For example, apertures accommodating electrical service penetrations and other installations (such as piping systems routed through walls and floors or installed at floor level) are relevant breeding grounds and hotbeds for fire hazards because they allow flames and smoke to propagate extremely fast from one building unit to the next, while heat transferred through metal pipes or droplets from burning-away cable jackets may ignite furniture as well as other flammable objects and substances in adjoining rooms.

So what can be done to effectively prevent fire from spreading across a building? In a nutshell, implementing passive structural fire protection measures devised by an expert in the field will fill the bill. The right passive fire protection system from a manufacturer and service provider with proven expertise will reliably confine a fire to its zone of origin – the so-called fire compartment – for a specified period of time. Thanks to this compartmentation effect, escape and rescue routes are kept clear during the fire-rated period so that people can safely leave the building without being obstructed, while persons in need of assistance can also be brought to safety.

Wisely implemented fire containment (firestopping) measures protect the whole building and thus significantly reduce the risk of personal injury and property damage. Downtimes are minimized, and business operations can soon be resumed:

With the right fire protection solution, all's well that ends well!



References

svt fire protection products and systems are installed in many industrial and infrastructural environments – they are ready to respond on the spot whenever their protective intervention is needed, whether in residential or commercial buildings, factory premises, or power plants.

Our clients appreciate our commitment to the protection of what they value. Therefore, countless projects all over the world have been accomplished with our expertise and support. svt products and systems have all it takes to excel: They are easy to use, economical in consumption, and they stand out as the epitome of quality. In other words: svt offers excellent value for money!

University W MEW Substation Kuwait

Installation of cable coatings and through-penetration firestop systems with PYRO-SAFE® FLAMMOTECT-A in acc. with FM 3971, ASTM E814, and UL 1479.



Lusail CP 1 Tunnels Qatar

Installation of cable coatings and through-penetration firestop systems for high-voltage cables up to 66 kV with PYRO-SAFE® FLAMMOTECT-A in acc. with FM 3971.



Shoaiba Power Plant Saudi Arabia

Installation of cable coatings and through-penetration firestop systems with PYRO-SAFE® FLAMMOTECT-A in acc. with FM 3971.



Kahramaa Substations Qatar

Installation of cable coatings and through-penetration firestop systems with PYRO-SAFE® FLAMMOTECT-A in acc. with FM 3971.



Certifications & Approvals

Boasting over 50 years of expertise in the in-house development and manufacture of state-of-the-art fire protection products, materials and systems, we are perfectly acquainted with the ins and outs of high-quality design. This is also reflected in our steadily rising number of official certifications and approvals.

Our products and systems are tested and approved in accordance with a large number of cross-industry and industry-specific standards at both national and international level (e.g. UL, FM, EN, BS, Warrington Certifire, or DNV GL). They comply not only with the stringent requirements that are specifically applicable to passive fire protection solutions, but they also meet further requirements: They are resistant to ambient weather, impervious to chemicals, and they are sound-insulated, as has been certified by independent accredited material testing institutes.

UL Listings

Penetration sealing systems are tested by UL in accordance with the ANSI/UL1479 standard; joint sealings are tested to ANSI/UL2079. These standards set out the appropriate method of testing and define the requirements applicable to sealings for penetrations and joints. A variety of svt fire protection sealing systems for cables and pipes have been tested and approved to date. Further testings and certifications for an even wider range of media lines are underway.

Visit the UL section on our website and use its search function and filter options to find and download the best suitable listings for your specific needs: svt-global.com/ul-applications

The svt UL Product Guide

Find the right fire protection solution quickly and directly – online!
The svt UL Product Guide is a practical tool designed to facilitate decision-making in passive structural fire protection. Step by step, it will take you to the optimum fire protection system for your specific needs.

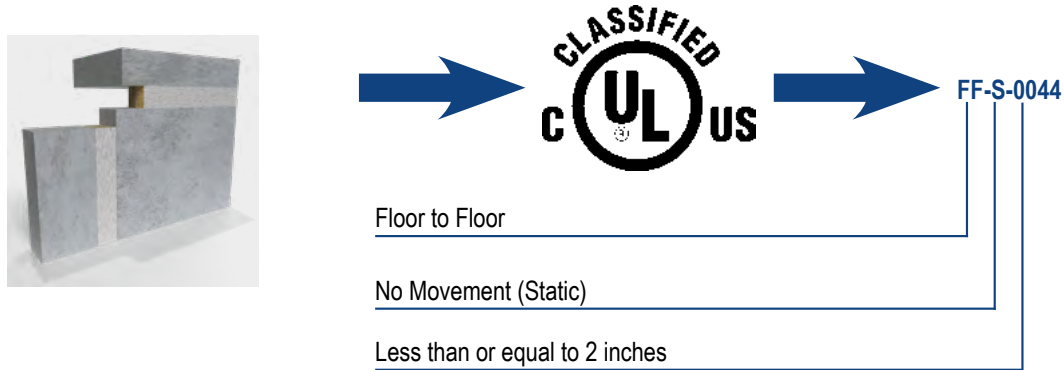
The svt UL Product Guide is available at: **svt-global.com/ul-productguide**



UL Listing No. for Joints

UL uses a combination of letters and numbers to designate firestop systems. The first two letters indicate the structural elements between which a joint is placed. The third letter describes the joint's movement capability, and the numbers identify the size of the joint. Details such as products used are specified individually in each UL listing.

For example, PYRO-SAFE® Flammotect joint sealing is UL-classified as follows:



First two letters	Description
FF	Floor to Floor
FW	Floor to Wall
WW	Wall to Wall
HW	Head of Wall
CG	Wall to Wall intended as Corner Guards
BW	Bottom of Wall

Third letter	Description
S	No movement (Static)
D	Dynamic

No. Range	Description
0000-0999	Less or equal to 2
1000-1999	Greater than 2 and less or equal to 6
2000-2999	Greater than 6 and less or equal to 12
3000-3999	Greater than 12 and less or equal to 24
4000-4999	Greater than 24

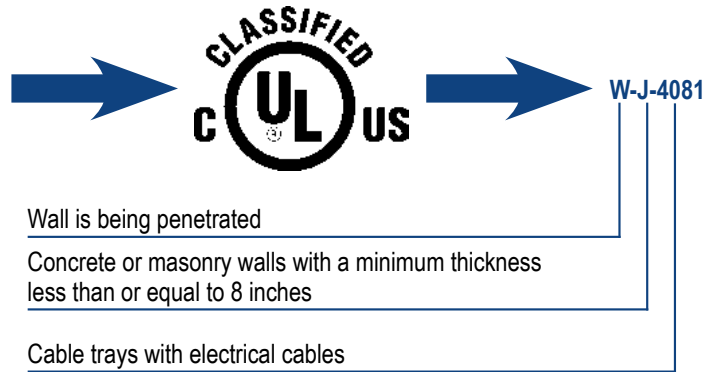
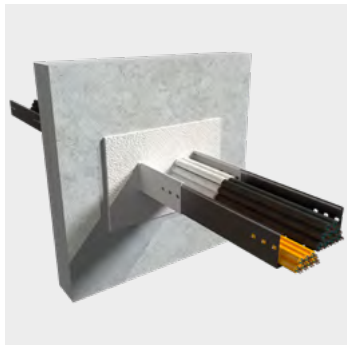
Specifications in inches



UL Listing No. for Penetrations

UL uses a combination of letters and numbers to designate firestop systems. The letters indicate the structural element and the location of the opening (wall/floor). The numbers identify the penetrating items that are routed through the penetration sealing system. With this clearly designed number-and-letter code, all key information can be gleaned at a glance. Details such as maximum pipe diameter, annular gaps, products used, etc. are specified individually in each UL listing.

For example, PYRO-SAFE® Novasit BM penetration sealing system for cables is UL-classified as follows:



First letter	Description
F	Floor is being penetrated
W	Wall is being penetrated
C	A floor or a wall is being penetrated

Second letter	Description
A	Concrete floors with a minimum thickness less than or equal to 5 inches
B	Concrete floors with a minimum thickness greater than 5 inches
C	Framed floors
D	Steel decks in marine vessels
E	Floor-ceiling assemblies consisting of concrete with membrane protection
F - I	Not used at present time
J	Concrete or masonry walls with a minimum thickness less than or equal to 8 inches
K	Concrete or masonry walls with a minimum thickness greater than 8 inches
L	Framed walls
M	Bulkheads in marine vessels
N	Composite panel walls
O - Z	Not used at present time

No. Range	Description
0000-0999	No penetrating items
1000-1999	Metallic pipe, conduit, or tubing
2000-2999	Non-metallic pipe, conduit, or tubing
3000-3999	Electrical cables
4000-4999	Cable trays with electrical cables
5000-5999	Insulated pipes
6000-6999	Miscellaneous electrical penetrants, such as bus ducts
7000-7999	Miscellaneous mechanical penetrants, such as air ducts
8000-8999	Groupings of penetrations, including any combination of items listed above
9000-9999	Not used at present time

PYRO-SAFE® FLAMMOTECT-A

Ablative Fire Protection Coating

Water-based ablative fire protection coating designed for sealing off penetrations and joints



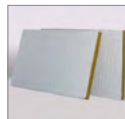
Product Benefits

- ✓ Resistant to environmental influences, e.g. permanent moisture, UV radiation, freeze-thaw cycles or salt water
- ✓ Resistant to a multitude of chemicals
- ✓ Does not contain asbestos, lead, mercury, hexavalent chromium or polybrominated biphenyl

Field of Application

- Penetration sealing for cables, pipes, air ducts, and combined penetrations in plasterboard walls, solid walls, and floors
- Sealing of joints between walls and floors, as well as in the bottom and top areas of walls

Related Products



**Mineral fiber board precoated on one side
with PYRO-SAFE® FLAMMOTECT-A**

1000 x 600 x 60 mm

Art. no. 01181160



PYRO-SAFE® DG-CR 1.5
Fire protection wrap

Roll of 10 m x 125 mm

Art. no. 01261125

Main Product



PYRO-SAFE® FLAMMOTECT-A
Fire protection coating

Coating

Pail of 15 kg

Art. no. 01155105

Solid emulsion

Pail of 15 kg

Art. no. 01155107

Filler

Pail of 15 kg

Art. no. 01155109

Cartridge of 310 ml

Art. no. 01155125



PYRO-SAFE® DG-CR BS
Fire protection wrap

Roll of 10 m x 100 mm

Art. no. 01264100



Mineral wool

Bag of 10 kg

Art. no. 01183000

Technical Data

Color		White, further colors available upon request			
Density (at +20 °C)		1.34 - 1.48 g/cm³			
Volatile organic compounds (VOC)		< 50 g/l (GS-11, Green Seal Standard)			
Viscosity	Coating	6,000 - 10,000 mPas	(The level of viscosity can be adjusted by adding water)		
	Solid emulsion	25,000 - 40,000 mPas			
	Filler	Pasty			
Field of application	Coating	Thin film coating			
	Solid emulsion	Thick film coating			
	Filler	For sealing large openings and joints, as well as for obtaining very high film thicknesses			
Application instructions		Recommended for use at temperatures ranging from +5°C to +30°C and at a relative air humidity below 85 %. The surfaces to be coated must be free of impurities and previous coatings.			
Type of application	Coating	• Brush or roller • Airless spray gun (nozzle bore > 0.019“ = 0.48 mm)			
	Solid emulsion	• Brush or spatula • Airless spray gun (nozzle bore > 0.019“ = 0.48 mm)			
	Filler	Application with spatula			
Use category		Type X in acc. with EOTA TR024			
Consumption example		Solid material (weight)	Consumption [g/m²]	Film thickness [mm]	
		66 - 86 %		wet	dry
			1,000	approx. 0.9	approx. 0.5
			2,000	approx. 1.8	approx. 1.0
Drying times at +23°C & 65 % relative humidity		Dust-dry	Overcoatable with itself	Completely dry	
	Coating	min. 4 hrs	min. 8 hrs	min. 4 days	
	Solid emulsion	min. 4 hrs	min. 8 hrs	min. 4 days	
	Filler	min. 6 hrs	-	min. 10 days	
General safety information		Non-hazardous material in accordance with the German Ordinance on Hazardous Substances (“GefStoffV”) as well as in accordance with the German Ordinance on Road Transport of Hazardous Materials (“GGVS”) and with the European Agreement on International Road Transport of Hazardous Materials (“ADR”). For further details, please refer to the product's Safety Data Sheet.			

Storage & Packaging

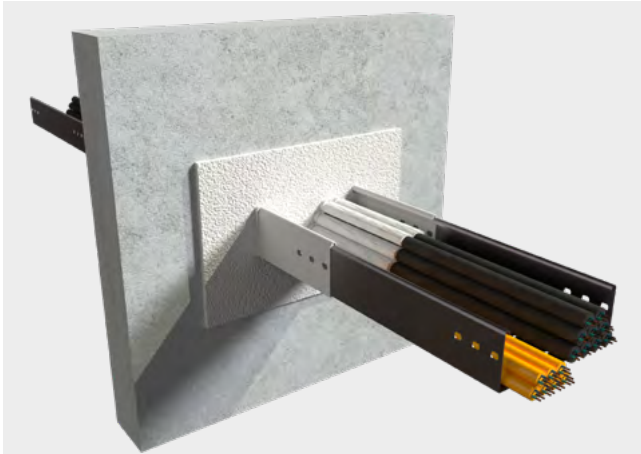
Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® FLAMMOTECT-A	Pail	15 kg	32	approx. 520
	Cartridge	310 ml	600	approx. 260

- Store at room temperature (+5 °C to +30 °C).
- Protect against frost!
- Shelf life at least 18 months when stored properly in original sealed packaging.

PYRO-SAFE® FLAMMOTECT-A

Ablative Fire Protection Coating

Through-penetration firestop system for cables, metallic and non-metallic pipes, as well as multiple penetrations



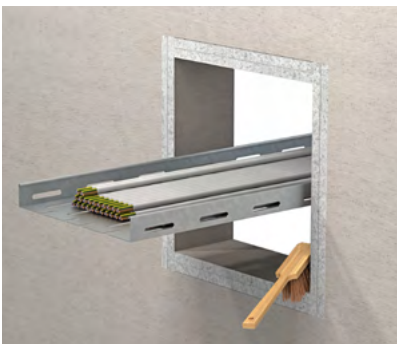
Fire Rating of the Penetration Sealing

F-Rating up to 3 hrs

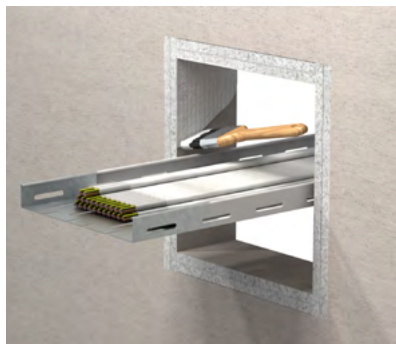
T-Rating up to 3 hrs

FT-Rating up to 3 hrs

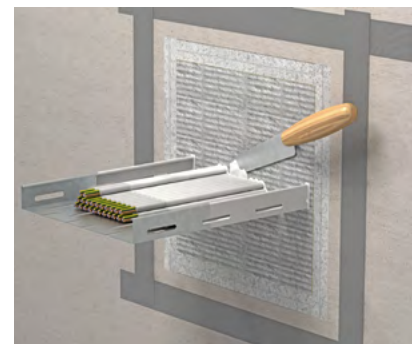
Installation Steps



1. Clean the inner surface of the opening in the structural element.

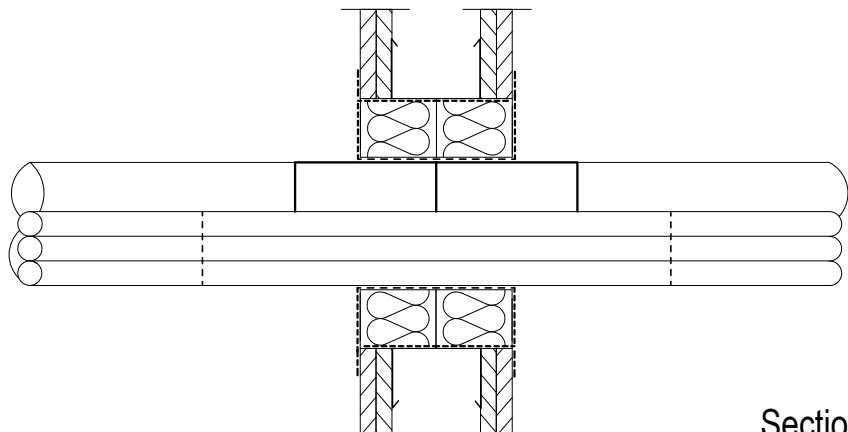
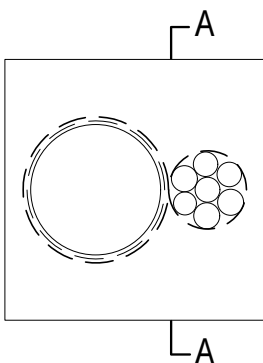


2. If necessary, install additional measures to protect the media lines in accordance with the pertinent UL Listing.



3. Insert mineral fiber boards, seal all remaining gaps, and coat the sealing surface with PYRO-SAFE® FLAMMOTECT-A.

Installation Examples



Section A-A

Listings

Cable penetrations

Structural Element	Media Lines	Listings
Floor or wall	Cable trays with electrical cables	C-AJ-4108
	Electrical cables	C-AJ-3387
Floor	Electrical cables	F-A-3062, F-A-3065, F-A-3070, F-A-3076
	Cable trays with electrical cables	F-A-4009, F-A-4016, F-A-4018, F-B-4008
Wall	Electrical cables	W-J-3225, W-J-3241, W-J-3264, W-J-3273
	Cable trays with electrical cables	W-J-4080, W-J-4089, W-J-4091, W-L-3442, W-L-3443, W-L-4095, W-L-4096, W-L-4099, W-J-4105

Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Metallic pipe, conduit, or tubing	C-AJ-1666, C-AJ-1680, C-AJ-1691, C-AJ-1762
	Non-metallic pipe, conduit, or tubing	C-AJ-2812, C-AJ-2813, C-AJ-2832, C-AJ-2833, C-AJ-2834
	Insulated pipe	C-AJ-5452, C-AJ-5453, C-AJ-5454, C-AJ-5455, C-AJ-5456
Floor	Metallic pipe, conduit, or tubing	F-A-1149, F-A-1150, F-A-1164, F-A-1165, F-A-1167
	Non-metallic pipe, conduit, or tubing	F-A-2278, F-A-2279, F-A-2280, F-A-2282, F-A-2295, F-A-2323, F-A-2324, F-A-2325, F-A-2327, F-A-2328, F-A-2329
	Insulated pipe	F-A-5060, F-A-5064
Wall	Metallic pipe, conduit, or tubing	W-J-1262, W-J-1263, W-J-1284, W-J-1285, W-J-1287, W-J-1302, W-J-1326, W-L-1546, W-L-1548
	Non-metallic pipe, conduit, or tubing	W-J-2325, W-J-2326, W-J-2328, W-J-2347, W-L-2684, W-L-2685, W-L-2687, W-L-2688, W-J-2360, W-J-2361, W-J-2362, W-J-2364, W-J-2365, W-J-2366, W-L-2690, W-L-2689, W-L-2747, W-L-2748, W-L-2749, W-L-2751, W-L-2752, W-L-2753
	Insulated pipe	W-J-5188, W-J-5199

Combined penetrations & blank seals

Structural Element	Listings
Floor or wall	C-AJ-8274, C-AJ-0156
Floor	F-A-8041, F-A-8044, F-A-8046, F-A-8054, F-A-8067, F-A-0036
Wall	W-J-8062, W-J-8065, W-J-8067, W-J-8077, W-J-8079, W-J-8080, W-J-8081, W-L-8111, W-L-8113, W-L-8114, W-L-8115, W-J-0028, W-L-0054, W-J-0032

Miscellaneous mechanical penetrants, such as air ducts

Structural Element	Listings
Wall	W-L-7273, W-L-7274, W-L-7275, W-J-1284, W-J-1285, W-J-1287
Floor	F-A-1167, F-A-1165, F-A-1164

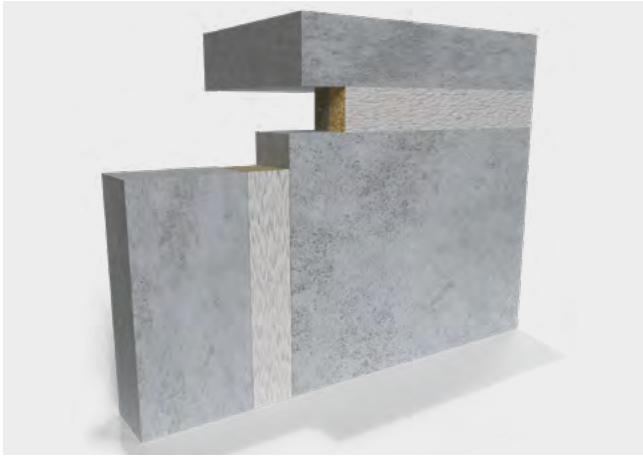


For technical details and applicable regulations, please refer to the relevant UL Listing.

PYRO-SAFE® FLAMMOTECT-A

Ablative Fire Protection Coating

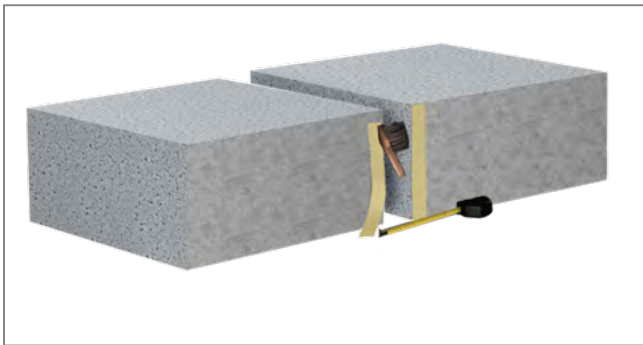
Mineral wool seal for joints



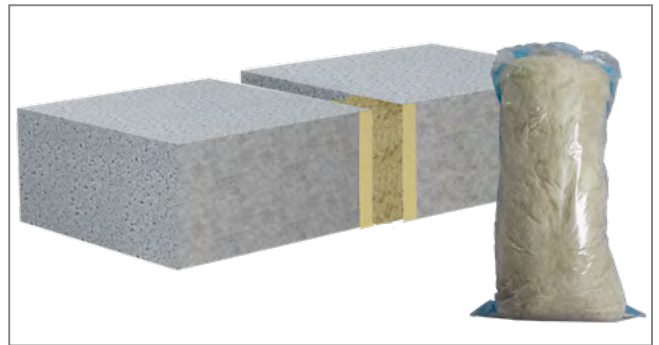
Fire Rating

Assembly rating up to 3 hrs

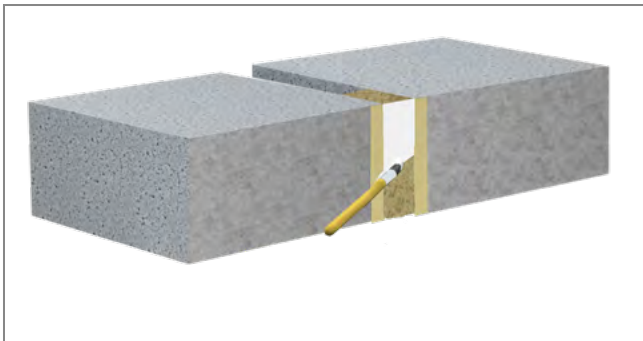
Installation Steps



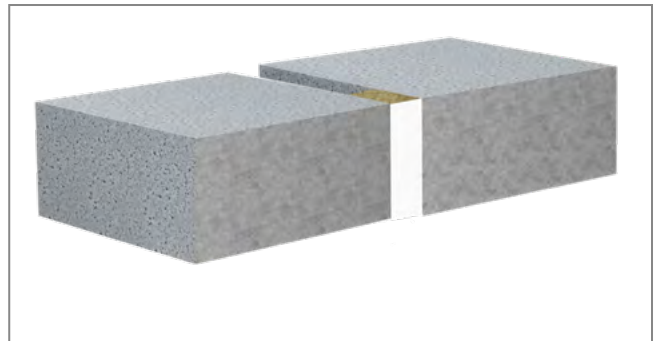
1. Clean the inner surface of the opening in the structural element, and check the joint for dimensional accuracy. Cover the adjacent surfaces with adhesive tape.



2. Fill the joint with mineral wool.



3. Coat the surfaces with PYRO-SAFE® FLAMMOTECT-A.



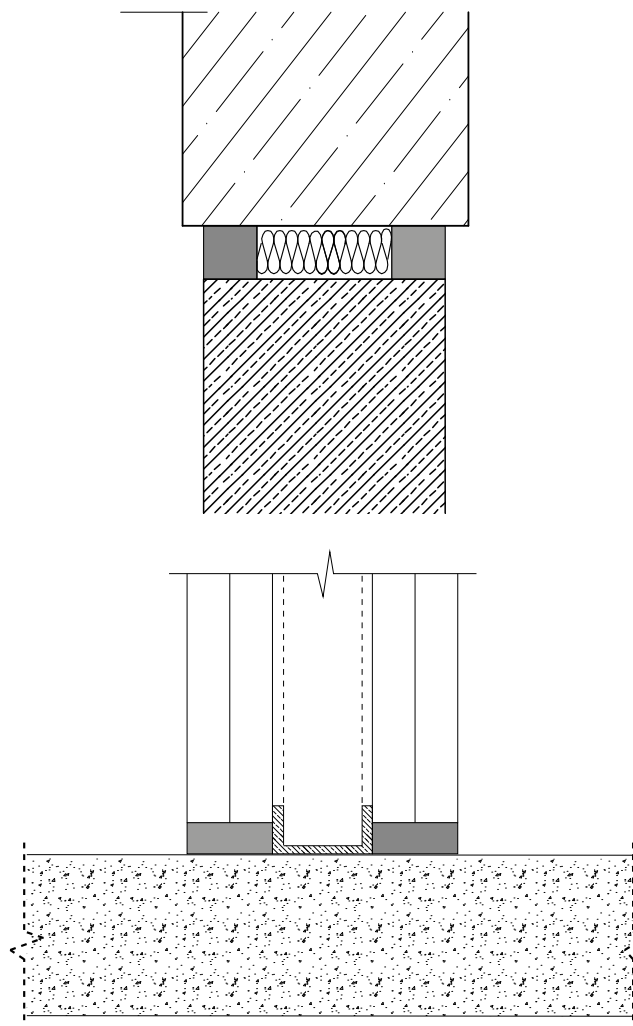
4. Remove the adhesive tape.

Listings

Joint Sealings

Structural Element	Listings
Floor to floor	FF-S-0044
Wall to wall	WW-S-0081
Bottom of wall	BW-S-0058
Head of wall	HW-S-0141, HW-S-0142, HW-S-0143, HW-S-0144

Installation Examples



For technical details and applicable regulations, please refer to the relevant UL Listing.

PYRO-SAFE® BIOFORM A

Acrylic Fire Protection Filler

Fire protection acrylate designed for sealing off joints



Product Benefits

- ✓ Overpaintable
- ✓ Resistant to ageing, weather conditions, and UV radiation; water-soluble

Field of Application

- Sealing of joints between walls and floors, as well as in the bottom and head of walls

Main Product



PYRO-SAFE® BIOFORM A
Acrylic fire protection filler
Cartridge of 310 ml

Art. no. 01156041

Related Product



Mineral wool
Bag of 10 kg

Art. no. 01183000

Technical Data

Coulour	Light gray
Density	approx. $1.56 \pm 0.04 \text{ g/cm}^3$
Load stability (DIN EN ISO 7390)	$\leq 2 \text{ mm}$
Penetration (DIN 51 579, 5 sec)	approx. $250 \pm 30 \text{ 1/10 mm}$
Shore-A hardness	$15 \pm 5 \text{ units}$
Mass reduction (ISO 10563)	max. 15 %
Temperature resistance (fully cured)	-25 °C to +80 °C
Skinning time (23 °C / 50 % rel. humidity)	approx. 10 min.
Movement	approx. 7,5 %
Application temperature	+5 °C to +40 °C
Application instructions	<ul style="list-style-type: none"> • Surfaces must be dry, stable, and free of dust and grease • Pretreat with diluted sealant for optimum adhesion to the surface
Consumption	With one catridge and joint dimensions of: 5 x 5 mm – approx. 12 m 10 x 10 mm – approx. 3 m
General safety information	Please refer to the product's Safety Data Sheet.

Storage & Packaging

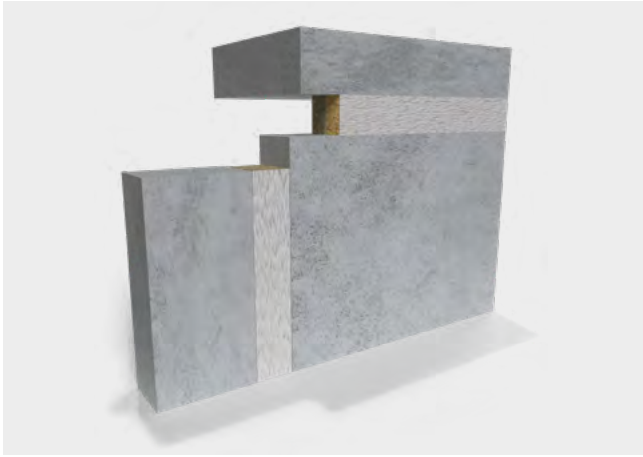
Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® BIOFERM A	Cartridge	310 ml	600	approx. 260

- Store at room temperature (+5 °C to +25 °C).
- Protect against frost!
- Shelf life is at least 18 months when stored properly in the original sealed packaging.

PYRO-SAFE® BIOFERM A

Acrylic Fire Protection Filler

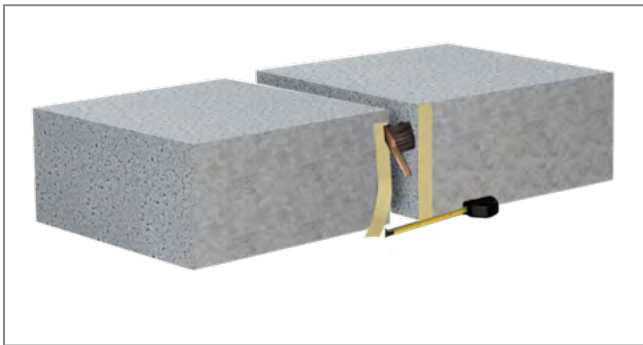
Mineral wool sealing for joints



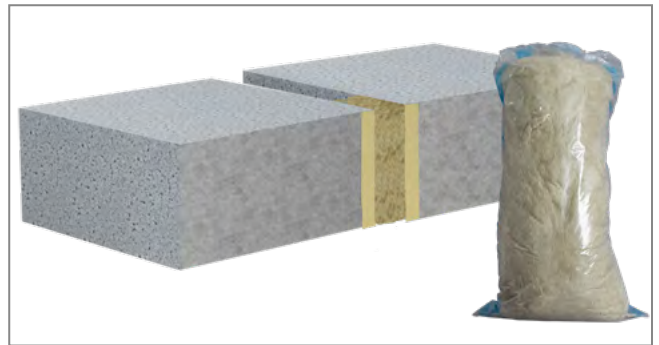
Fire Rating

Assembly rating up to 3 hrs

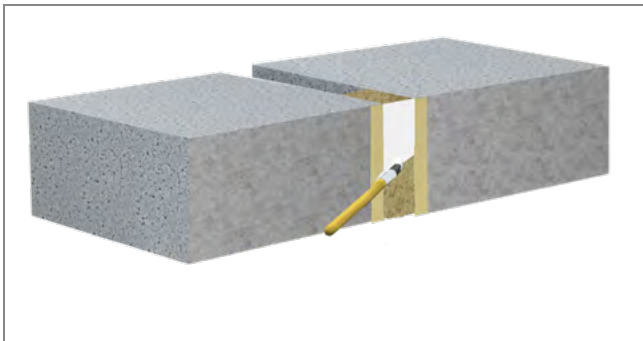
Installation Steps



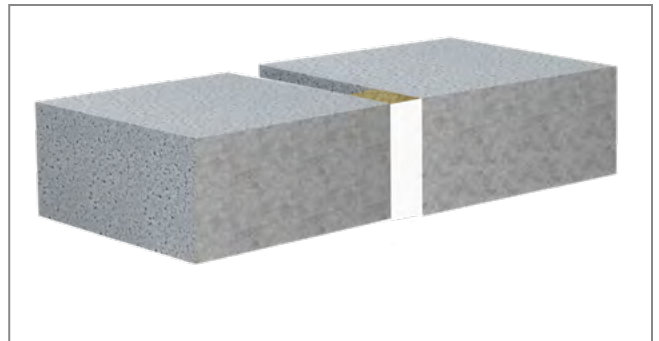
1. Clean the inner surface of the opening in the structural element, and check the joint for dimensional accuracy. Cover the adjacent surfaces with adhesive tape.



2. Fill the joint with mineral wool.



3. Coat the surfaces with PYRO-SAFE® BIOFERM A.



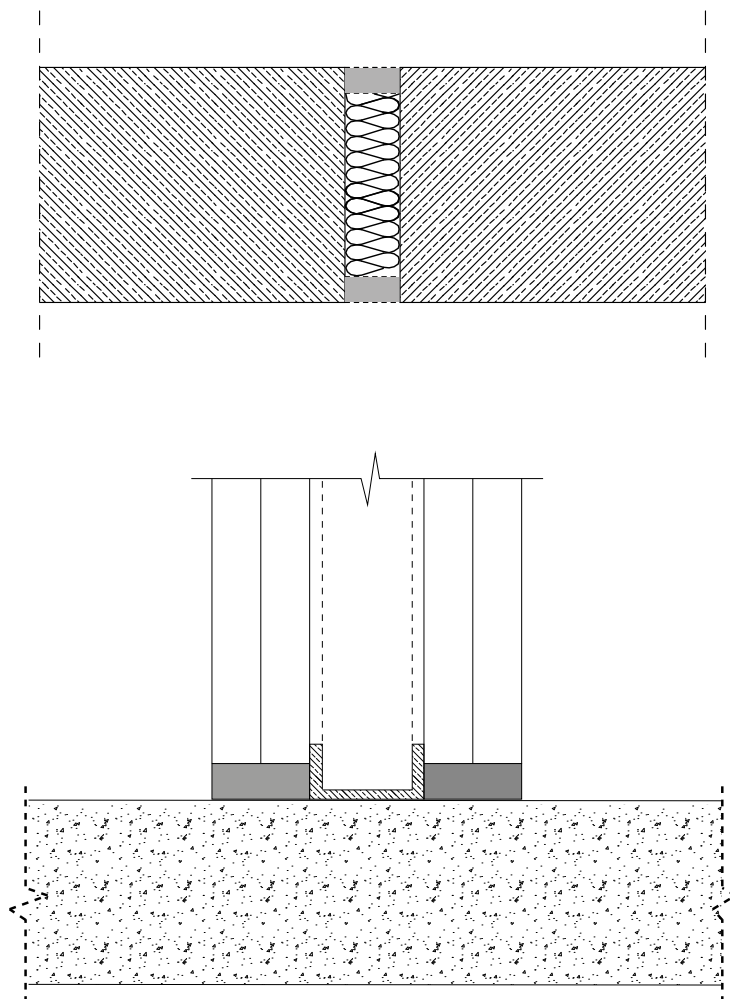
4. Remove the adhesive tape.

Listings

Joint Sealings

Structural Element	Listings
Floor to floor	FF-S-0045
Wall to wall	WW-S-0082
Bottom of wall	BW-S-0057
Head of wall	HW-S-0137, HW-S-0138, HW-S-0139, HW-S-0140

Installation Examples



For technical details and applicable regulations, please refer to the relevant UL Listing.

PYRO-SAFE® NOVASIT BM

Fire Protection Compound

Fiber-free special mortar designed for sealing off penetrations



Product Benefits

- ✓ Long-term quality – approved, certified, and applied worldwide for more than 30 years
- ✓ Easy to use, with excellent adhesion strength and stability
- ✓ Free from fibers, phenols, and halogens

Field of Application

- Sealing for cable penetrations and combined penetrations in solid walls and floors

Main Product



PYRO-SAFE® NOVASIT BM
Fire protection compound

Bag of 20 kg

Art. no. 01161030

Related Product



PYRO-SAFE® DG-CR 1.5
Fire protection wrap

Roll of 10 m x 125 mm

Art. no. 01261125

Technical Data

Fire behaviour	PYRO-SAFE® NOVASIT BM is classified as A1 in acc. with EN 13501-1	
Color	Cement-gray	
Density (wet mortar)	1,200 ± 100 kg/m ³	
Density (dry mortar)	≥ 900 kg/m ³	
Pressure resistance	M 2.5	
Application temperature	≥ +5 °C	
Application time	approx. 2 - 3 hrs	
Drying time	Fully cured after approx. 28 days	
Use category	Type Z ₂	in acc. with EOTA TR024
Application instructions	Surfaces must be firm and free from adhesion-reducing substances and dust. Absorbent substrates must be pre-moistened with water. The consistency of the mortar must be adjusted in such a way that all openings can be filled without leaving cavities.	
Consumption	6 - 7 l water + 20 kg dry mortar ≈ 20 l ready-to-use wet mortar ≈ 20 l volume after drying	
General safety information	Please refer to the product's Safety Data Sheet.	

Storage & Packaging

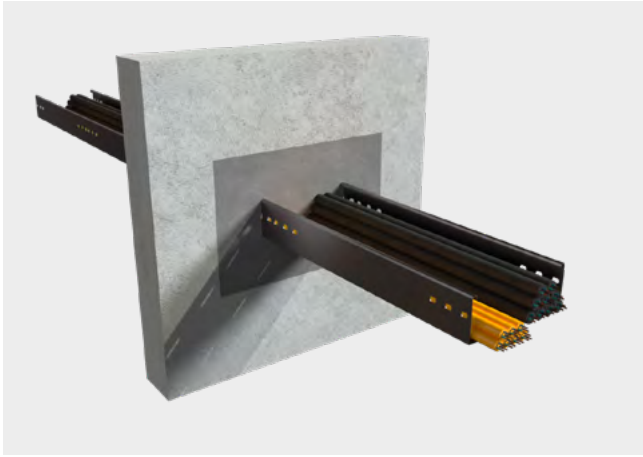
Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® NOVASIT BM	Bag	20 kg	50	approx. 1020
	Pail	10 kg	24	approx. 260

- Store in a cool and dry place.
- Shelf life is at least 12 months when stored properly in the original sealed packaging.

PYRO-SAFE® NOVASIT BM

Fire Protection Compound

Through-penetration firestop system for cables and multiple penetrations



Fire Rating

F-Rating up to 3 hrs

T-Rating up to 3 hrs

FT-Rating up to 3 hrs

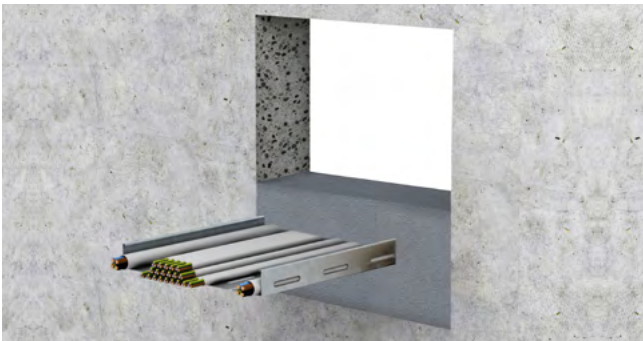
Installation Steps



1. Clean and moisture the inner surface of the opening in the structural element.



2. Mix the mortar as indicated on the packaging.



3. If necessary, install additional measures to protect the media lines in accordance with the pertinent UL Listing. Fill the opening with PYRO-SAFE® NOVASIT BM without leaving any voids or cavities.



4. Make sure that the mortar forms a firm and dense bond with the structural element. If necessary, rework after drying time.

Listings

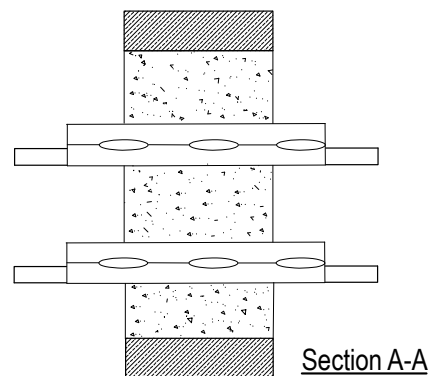
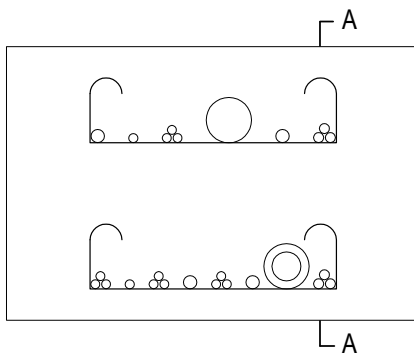
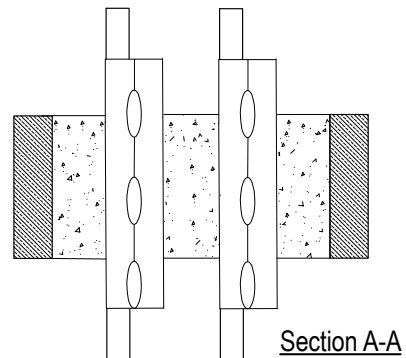
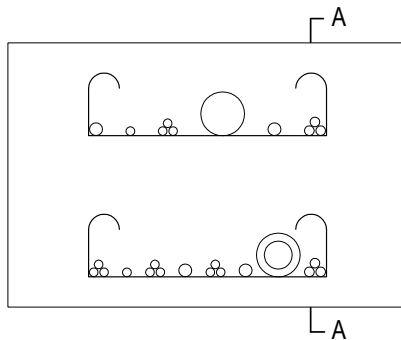
Cable penetrations

Structural Element	Listings
Floor	F-A-4010
Wall	W-J-4081

Combined penetrations & blank penetration seals

Structural Element	Listings
Floor	F-A-8042, F-A-8043, F-A-8045
Wall	W-J-8063, W-J-8064, W-J-8066

Installation Examples



PYRO-SAFE® GFM

Fire Protection Mortar

Fiber-free special mortar designed for sealing off penetrations



Product Benefits

- ✓ Easy to use, with excellent adhesion strength and stability
- ✓ Fit for universal use – to be applied either by pump or hand

Field of Application

- Penetration sealing in a hybrid construction, made of mortar and mineral fiber boards

Main Product



PYRO-SAFE® GFM
Fire protection mortar
Bag of 25 kg

Art. no. 01167030

Related Products



PYRO-SAFE® DG-CR BS
Fire protection wrap

Roll of 10 m x 100 mm

Art. no. 01264100



PYRO-SAFE® CT Cable Tube

Ø 120 / Length 200 mm

Art. no. 01281200

Technical Data

Fire behaviour	PYRO-SAFE® GFM is classified as A1 in acc. with EN 13501-1
Color	Cement-gray
Density (wet mortar)	2,000 kg/m ³ ± 10%
Density (dry mortar)	1.75 kg/dm ³ ± 10%
Pressure resistance	M 20 (MG III a)
Application temperature	≥ +5 °C
Application time	approx. 2 - 3 hrs
Drying time	Fully cured after approx. 28 days
Application instructions	Surfaces must be firm and free from adhesion-reducing substances and dust. Absorbent substrates must be pre-moistened with water. The consistency of the mortar must be adjusted in such a way that all openings can be filled without leaving cavities.
Consumption	4.0 - 5.0 l water + 25 kg dry mortar ≈ 15 - 18 l ready-to-use wet mortar ≈ 15 - 18 l volume after drying
General safety information	Please refer to the product's Safety Data Sheet.

Storage & Packaging

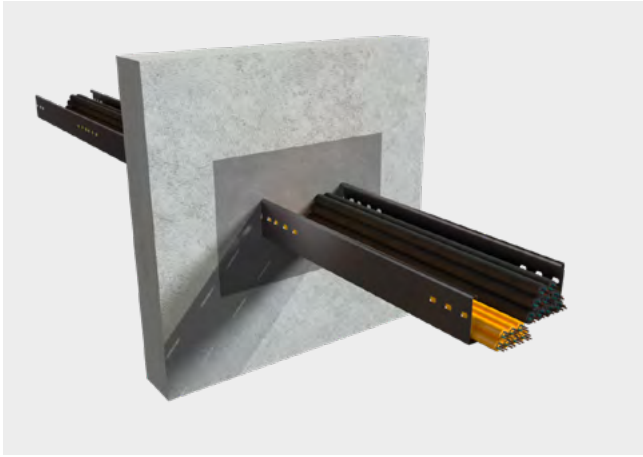
Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® GFM	Bag	25 kg	42	approx. 1070

- Store in a cool and dry place.
- Shelf life is at least 12 months when stored properly in the original sealed packaging.

PYRO-SAFE® GFM

Fire Protection Mortar

Fiber-free special mortar designed for sealing off penetrations



Fire Rating

F-Rating up to 3 hrs

T-Rating up to 1 hr

FT-Rating up to 1 hr

Installation Steps



1. Clean and moisture the inner surface of the opening in the structural element.



2. Mix the mortar as indicated on the packaging.



3. If necessary, install additional measures to protect the media lines in accordance with the pertinent UL Listing. Place a mineral fiber board on one side and fill the opening with PYRO-SAFE® GFM without leaving any voids or cavities.



4. Make sure that the mortar forms a firm and dense bond with the structural element. If necessary, rework after drying time.

Listings

Cable penetrations

Structural Element	Media Lines	Listings
Floor	Cable trays with electrical cables	F-A-4017, F-A-4019, F-A-4012*
Wall	Cable trays with electrical cables	W-J-4090, W-J-4092, W-J-4084*

Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Metallic pipe, conduit, or tubing	C-AJ-1681*, C-AJ-1682*, C-AJ-1761
Floor	Metallic pipe, conduit, or tubing	F-A-1166*
	Non-metallic pipe, conduit, or tubing	F-A-2294
Wall	Metallic pipe, conduit, or tubing	W-J-1286*
	Non-metallic pipe, conduit, or tubing	W-J-2346

Combined penetrations & blank penetration seals

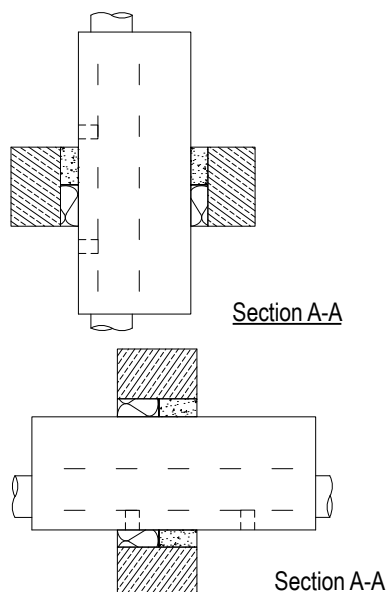
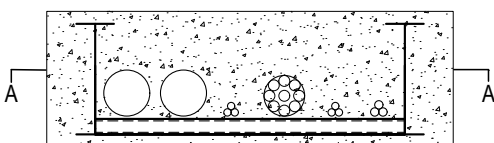
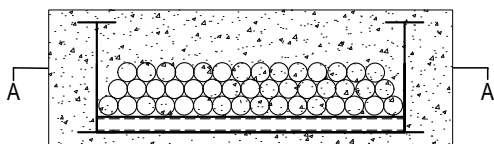
Structural Element	Listings
Floor	F-A-8054
Wall	W-J-8077

Miscellaneous electrical penetrants, e. g. bus ducts

Structural Element	Listings
Floor or wall	C-AJ-6050

* Listed as PYRO-SAFE® NOVASIT VGM with identical product specifications.

Installation Examples



PYRO-SAFE® DG-CR 1.5

Fire Protection Wrap

Flexible composite fiber glass fabric covered with an intumescent coating on one side



Product Benefits

- ✓ Flexible, resistant to weather conditions, and UV radiation
- ✓ When exposed to fire or extensive heat, the product forms a microporous, thermally insulating foam layer

Field of Application

- Penetration sealing, e. g. for different multilayer pipes and electrical installation conduits

Related Products



PYRO-SAFE® FLAMMOTECT-A Fire protection coating

Coating

Pail of 15 kg **Art. no. 01155105**

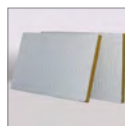
Solid emulsion

Pail of 15 kg **Art. no. 01155107**

Filler

Pail of 15 kg **Art. no. 01155109**

Cartridge of 310 ml **Art. no. 01155125**



Mineral fibre board precoated on one side with PYRO-SAFE® FLAMMOTECT-A

1000 x 600 x 60 mm **Art. no. 01181160**

Main Product



PYRO-SAFE® DG-CR 1.5 Fire protection wrap

Roll of 10 m x 125 mm

Art. no. 01261125



PYRO-SAFE® NOVASIT BM Fire protection compound

Bag of 20 kg

Art. no. 01161030

Technical Data

Form	Fabric covered with an intumescent fire protection coating on one side
Color	Outside gray, inside anthracite
Nominal thickness	1.5 mm
Weight per unit area	2,000 g/m ²
Reaction temperature	at approx. 150 °C
Interactions	No influence on other building materials such as polyethylene (PE) and polyvinyl chloride (PVC) in acc. with EOTA TR 024.
Application temperature	+ 5 °C – + 50 °C (< + 5 °C reduction of flexibility)
Application instructions	<ul style="list-style-type: none"> • Standard tools (such as a scissor or a knife) can be used to cut the fabric. • Can be painted over with approved paints based on acrylic dispersion, alkyd resin, polyurethane acrylic and epoxy resin in acc. with EOTA TR 024.
General safety information	Please refer to the product's Safety Data Sheet.

Storage & Packaging

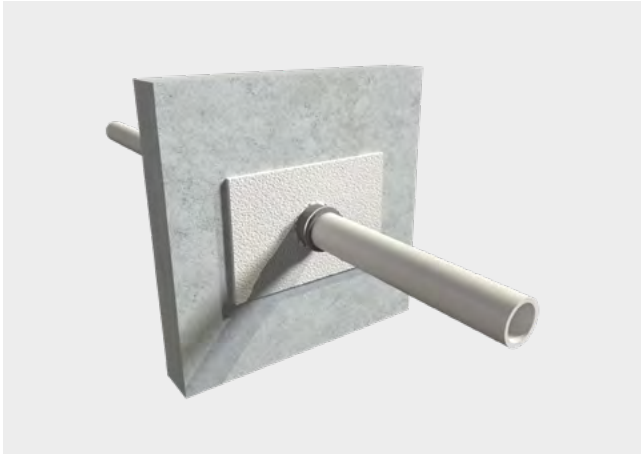
Product	Packaging	Net content	Qty. per pallet	Gross weight per pallet [kg]
PYRO-SAFE® DG-CR 1.5 (10m x 125 mm)	Box	approx. 3	128	approx. 404

- Store in a cool and dry place.
- Protect against compressive loads.

PYRO-SAFE® DG-CR 1.5

Fire Protection Wrap

Flexible composite fiber glass fabric with an intumescent coating on one side



Fire Rating

F-Rating up to 3 hrs

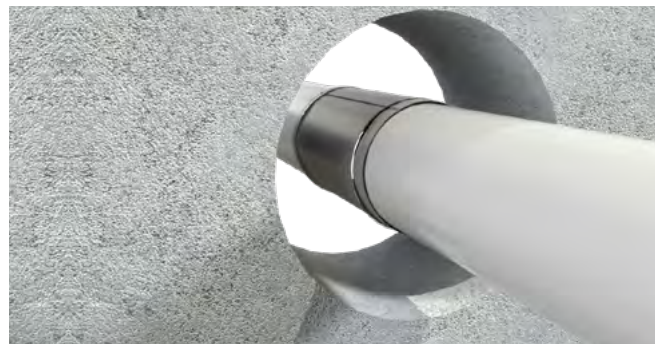
T-Rating up to 2 hrs

FT-Rating up to 2 hrs

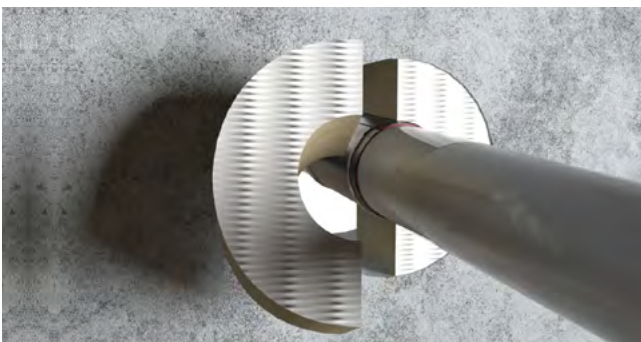
Installation Steps



1. Cut the wrap to the required length.



2. Fix the wrap around the installation.



3. Close the opening with PYRO-SAFE® FLAMMOTECT-A coated batts.



4. Coat the batts with PYRO-SAFE® FLAMMOTECT-A.

Listings

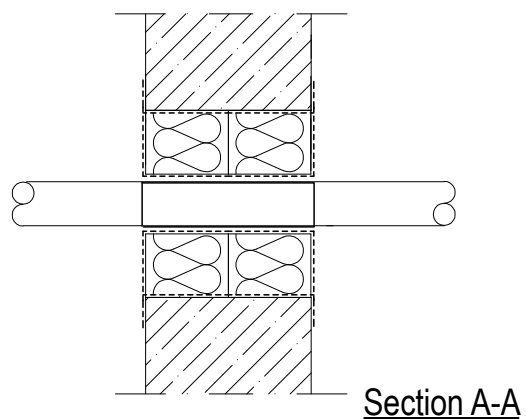
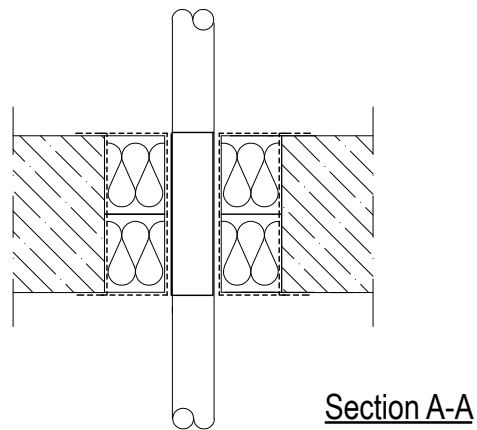
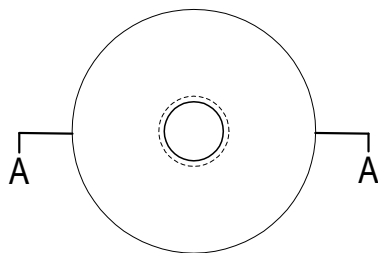
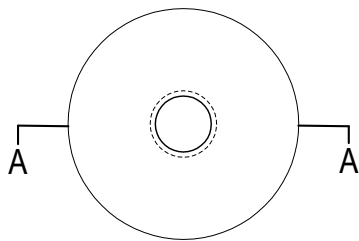
Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Non-metallic pipe, conduit, or tubing	C-AJ-2812
Floor	Non-metallic pipe, conduit, or tubing	F-A-2278
	Insulated pipe	F-A-5060
Wall	Non-metallic pipe, conduit, or tubing	W-J-2325, W-L-2687, W-L-2688, W-L-2689, W-L-2690
	Insulated pipe	W-J-5188

Combined penetrations & blank seals

Structural Element	Listings
Floor or wall	C-AJ-8274
Floor	F-A-8041, F-A-8042, F-A-8043, F-A-8044, F-A-8045, F-A-8046
Wall	W-J-8062, W-J-8063, W-J-8064, W-J-8065, W-J-8066, W-J-8067, W-J-8081, W-L-8111, W-L-8113

Installation Examples



PYRO-SAFE® DG-CR BS

Fire Protection Wrap

Flexible composite fiber glass fabric with an intumescent coating on both sides



Product Benefits

- ✓ Flexible, resistant to weather conditions and UV radiation
- ✓ When exposed to fire or extensive heat, the product forms a microporous, thermally insulating foam layer

Field of Application

- Penetration sealing for a variety of non-metallic pipes

Related Products



PYRO-SAFE® GFM
Fire protection mortar
Bag of 25 kg - Art. no. 01167030



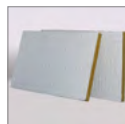
PYRO-SAFE® FLAMMOTECT-A
Fire protection coating

Coating	
Pail of 15 kg	Art. no. 01155105
Solid emulsion	
Pail of 15 kg	Art. no. 01155107
Filler	
Pail of 15 kg	Art. no. 01155109
Cartridge of 310 ml	Art. no. 01155125

Main Product



PYRO-SAFE® DG-CR BS
Fire protection wrap
Roll of 10 m x 100 mm **Art. no. 01264100**



**Mineral fibre board precoated on one side
with PYRO-SAFE® FLAMMOTECT-A**
1000 x 600 x 60 mm **Art. no. 01181160**

Technical Data

Color	Anthracite / red
Nominal thickness	1.5 mm
Weight per unit area	1,580 – 1,950 g/m ²
Application temperature	+ 5 °C – + 50 °C (< + 5 °C reduction of flexibility)
Application instructions	Standard tools (such as a scissor or a knife) can be used to cut the fabric.
General safety information	Please refer to the product's Safety Data Sheet.

Storage & Packaging

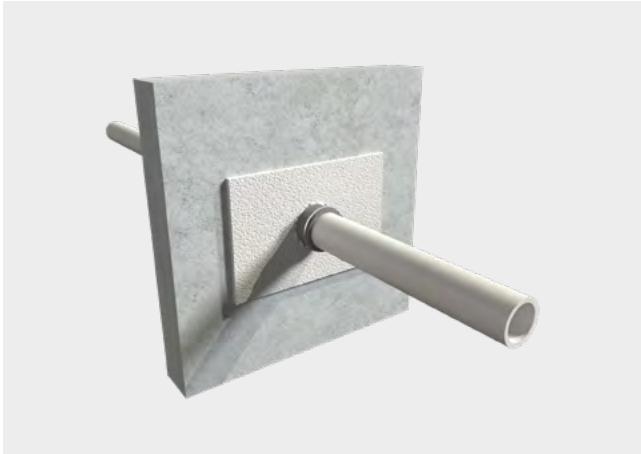
Product	Packaging	Net content	Qty. per pallet	Gross weight per pallet [kg]
PYRO-SAFE® DG-CR BS (10 m x 100 mm)	Box	approx. 3	128	approx. 404

- Store in a cool and dry place.
- Protect against compressive loads.

PYRO-SAFE® DG-CR BS

Fire Protection Wrap

Through-penetration firestop system for cables, pipes, and combined penetrations



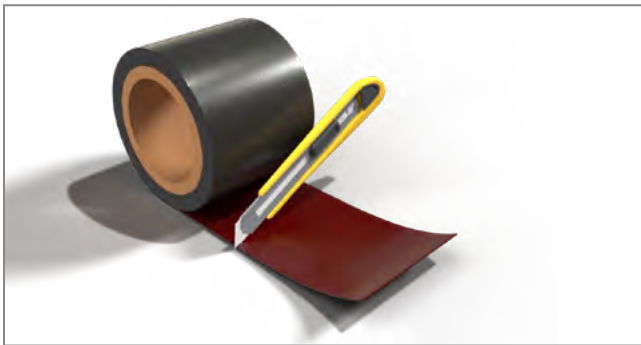
Fire Rating

F-Rating up to 3 hrs

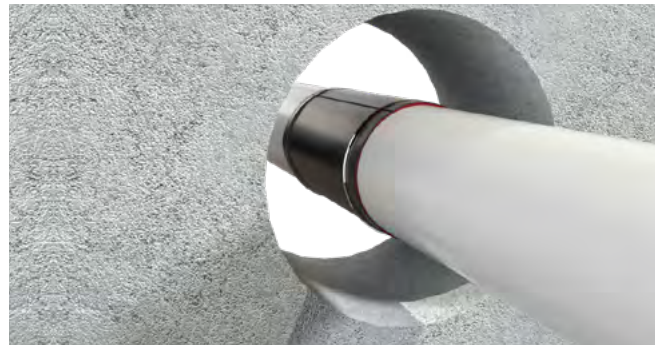
T-Rating up to 3 hrs

FT-Rating up to 3 hrs

Installation Steps



1. Cut the wrap on required length.



2. Fix the wrap around the installation.



3. Mix PYRO-SAFE® GFM mortar indicated on the packaging.



4. Fill the opening with PYRO-SAFE® GFM.

Listings

Cable penetrations

Structural Element	Media Lines	Listings
Floor or wall	Electrical cables	C-AJ-3387
Floor	Electrical cables	F-A-3076
Wall	Electrical cables	W-J-3273

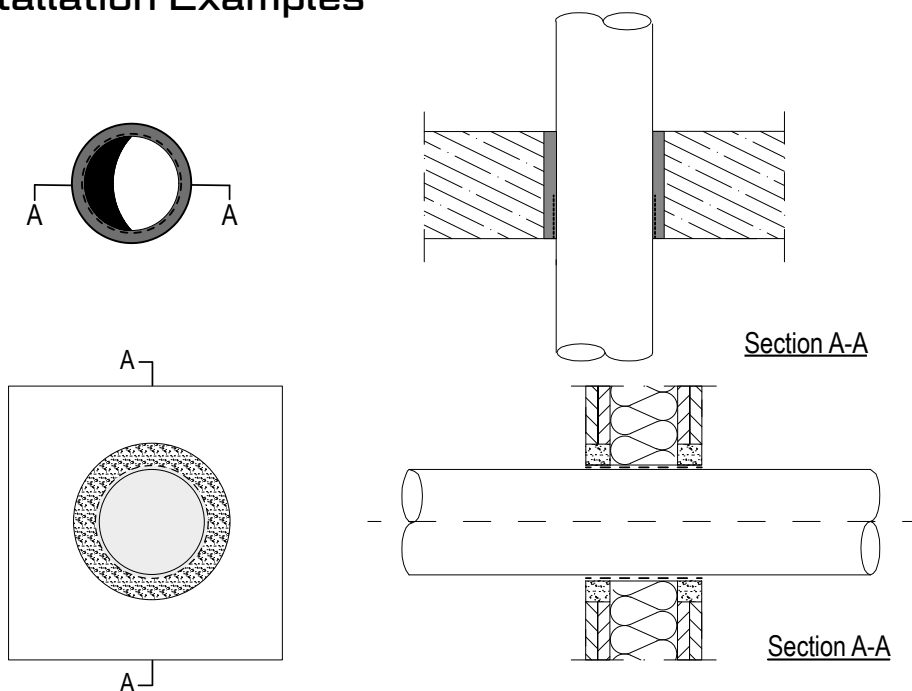
Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Non-metallic pipe, conduit, or tubing	C-AJ-2813, C-AJ-2832
	Insulated pipe	C-AJ-5453, C-AJ-5454, C-AJ-5455, C-AJ-5456
Floor	Non-metallic pipe, conduit, or tubing	F-A-2279, F-A-2282, F-A-2294, F-A-2295, F-A-2326, F-A-2334, F-A-2335, F-A-2336, F-A-2337, F-A-2338, F-A-2339, F-A-2340, F-A-2341
Wall	Non-metallic pipe, conduit, or tubing	W-J-2326, W-J-2328, W-J-2347, W-J-2363, W-J-2367, W-J-2368, W-J-2369, W-J-2370, W-J-2371, W-J-2372, W-J-2373, W-J-2374, W-L-2684, W-L-2685, W-L-2686, W-L-2750, W-L-2758, W-L-2759, W-L-2760, W-L-2761, W-L-2765

Combined penetrations & blank seals

Structural Element	Listings
Wall	W-J-8079, W-L-8111, W-L-8114

Installation Examples



For technical details and applicable regulations, please refer to the relevant UL Listing.

PYRO-SAFE® BIOBAG

Fire Protection Bag

High-temperature resistant mineral wool with a covering of nonflammable glass fiber designed for sealing off penetrations



Product Benefits

- ✓ Suitable for temporary installation, reusable
- ✓ Highly flexible for easy installation around media lines
- ✓ Dust-free installation

Field of Application

- Penetration sealing for cable trays in walls and floors

Main Product



PYRO-SAFE® BIOBAG Fire Protection Bags

Size 0: 150 x 200 x 40 mm **Art. no. 01170000**
Size 1: 300 x 200 x 40 mm **Art. no. 01171000**
Size 2: 300 x 200 x 100 mm **Art. no. 01172000**

Related Product



PYRO-SAFE® FLAMMOTECT-A Fire protection coating

Filler

Pail of 15 kg
Cartridge of 310 ml

Art. no. 01155109
Art. no. 01155125

Technical Data

Density	50 – 60 kg/m ³		
Melting point	≥ 1,000 °C		
Consumption / Sizes & dimensions	Size 0	150 x 200 x 40 mm	For small openings and e.g. in and around cable trays
	Size 1	300 x 200 x 40 mm	approx. 120 pcs./m ²
	Size 2	300 x 200 x 100 mm	approx. 50 pcs./m ²
Application instructions	Easy to apply without the use of tools.		
General safety information	Please refer to the product's Safety Data Sheet.		

Storage & Packaging

Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® BIOBAG Size 0 (150 x 200 x 40 mm)	Box	125	750	approx. 120
PYRO-SAFE® BIOBAG Size 1 (300 x 200 x 40 mm)	Box	80	480	approx. 120
PYRO-SAFE® BIOBAG Size 2 (300 x 200 x 100 mm)	Box	35	210	approx. 120

- Store in a dry place.

PYRO-SAFE® BAG

Fire Protection Bag

Through-penetration firestop system for cables



Fire Rating

F-Rating up to 3 hrs

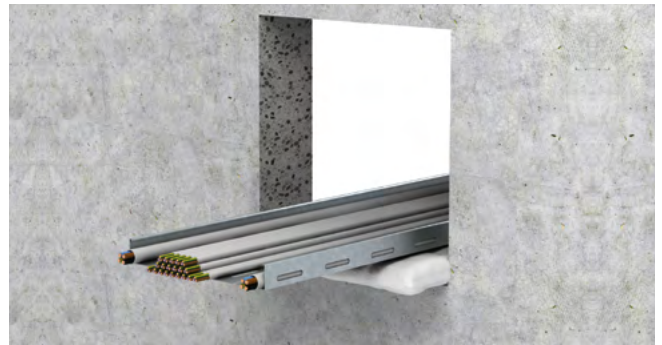
T-Rating up to 3 hrs

FT-Rating up to 3 hrs

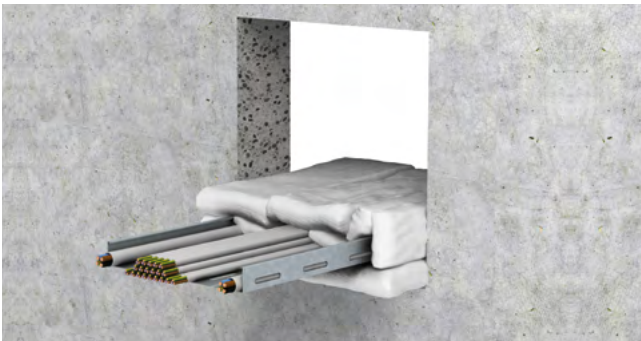
Installation Steps



1. Clean the inner surface of the opening in the structural element.



2. The first layer of bags should be placed beneath the cables.



3. Insert the bags tightly packed into the opening and around the cables.
Use bags of different sizes to best fill the space.



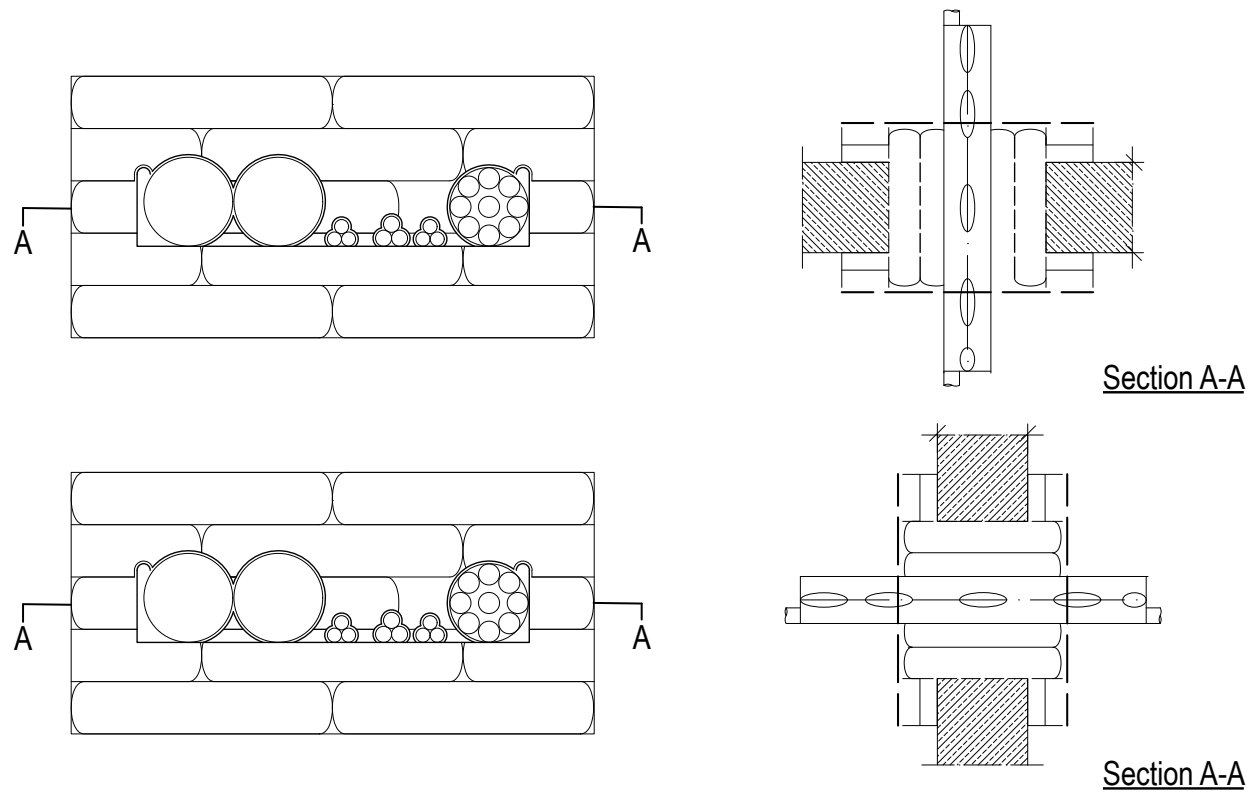
4. Fill any free space between the cables and the bags to the full depth with PYRO-SAFE® FLAMMOTECT-A.

Listings

Cable penetrations

Structural Element	Media Lines	Listings
Floor	Cable trays with electrical cables	F-B-4008
Wall	Cable trays with electrical cables	W-J-4093

Installation Examples



PYRO-SAFE® CT

Cable Tube

Plastic shells lined with a fire-protective intumescent inlay designed for sealing off penetrations



Product Benefits

- ✓ Easy-to-use product, available with a design variant for installation at floor level
- ✓ Subsequent installation around existing installations (retrofit)
- ✓ Resistant to moisture, freeze-thaw cycling, and UV radiation

Field of Application

- Penetration Sealing in walls and floors
- Installation at floor level with PYRO-SAFE® CT ML Cable Tube

Related Products



PYRO-SAFE® GFM
Fire protection mortar
Bag of 25 kg

Art. no. 01167030



PYRO-SAFE® FLAMMOTECT-A
Fire protection coating
Filler

Pail of 15 kg
Cartridge of 310 ml

Art. no. 01155109
Art. no. 01155125

Main Product



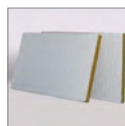
PYRO-SAFE® CT
Cable Tube
Ø 120 / Length 200 mm

Art. no. 01281200



PYRO-SAFE® CT ML
Cable Tube
Length 200 mm

Art. no. 01282200



Mineral fibre board precoated on one side
with PYRO-SAFE® FLAMMOTECT-A
1000 x 600 x 60 mm

Art. no. 01181160



Mineral wool
Bag of 10 kg

Art. no. 01183000

Technical Data

Color	Gray, red inlay
Material	<ul style="list-style-type: none"> • Shells made of PVC • Intumescent inlay • Plugs made of soft foam
Half-shell lock	Click lock
Sound insulation	64 (-2;-6) dB Dn, e; Dn, w (C; Ctr)
General safety information	Non-hazardous material in accordance with the German Ordinance on Hazardous Substances ("GefStoffV").

Storage & Packaging

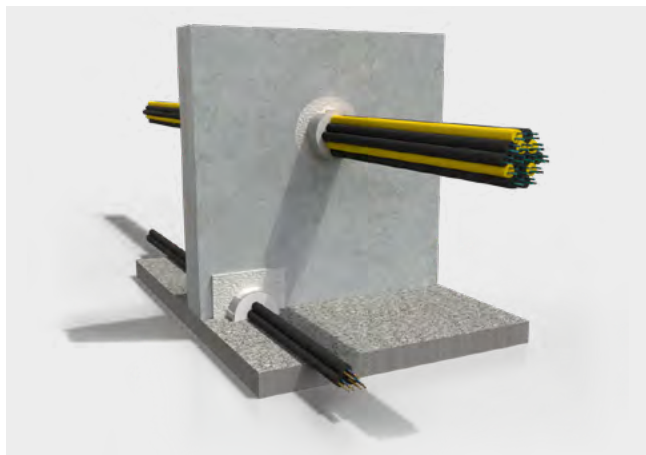
Product	Packaging	Net content	Qty. per pallett	Gross weight per pallett [kg]
PYRO-SAFE® CT Cable Tube Ø 120 / Length 200 mm	Box	18	162	approx. 120
PYRO-SAFE® CT ML Cable Tube Ø 120 / Length 200 mm	Box	36	324	approx. 120

- Store in a dry place.

PYRO-SAFE® CT

Cable Tube

Through-penetration firestop system for various media lines routed in walls, floors, or at floor level



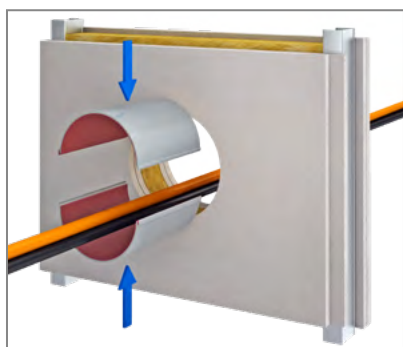
Fire Rating

F-Rating up to 3 hrs

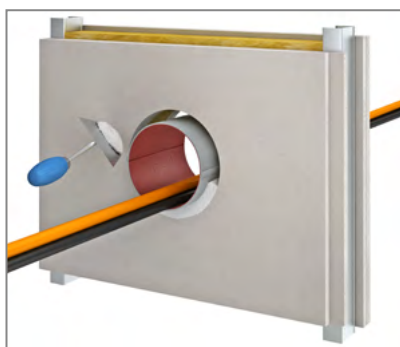
T-Rating up to 3 hrs

FT-Rating up to 3 hrs

Installation Steps for PYRO-SAFE® CT



1. Click the tube around the installation and place it in the middle of the opening.



2. Fill the gap around the tube with fire protection mortar or PYRO-SAFE® FLAMMOTECT-A coated batts.



3. Crop the foam plugs and place them on either side. Seal the opening with PYRO-SAFE® FLAMMOTECT-A.

Installation Steps for PYRO-SAFE® CT ML



1. Place the tube around the installation.



2. Fill the opening with PYRO-SAFE® FLAMMOTECT-A coated batts, crop the foam plug and place it in the tube.



3. Seal the mineral-fibre boards and the foam plug with PYRO-SAFE® FLAMMOTECT-A.

Listings

Cable penetrations

Structural Element	Media Lines	Listings
Floor	Electrical cables	F-A-3065
Wall	Electrical cables	W-J-3241, W-L-3442

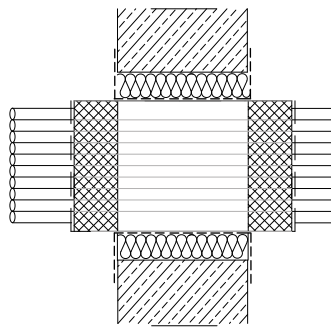
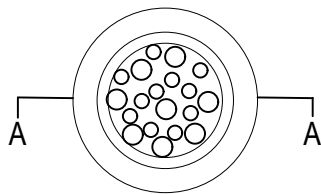
Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Metallic pipe, conduit, or tubing	C-AJ-1680, W-J-1326
	Non-metallic pipe, conduit, or tubing	C-AJ-2833

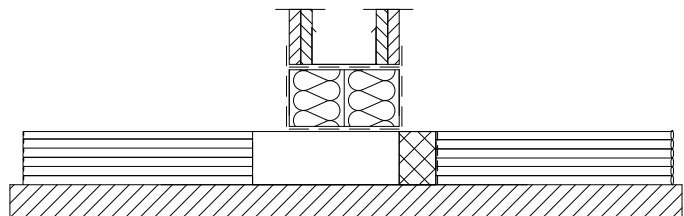
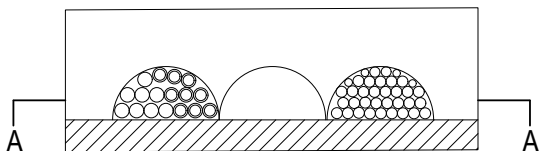
Combined penetrations & blank seals

Structural Element	Listings
Floor	F-A-8054
Wall	W-J-8077, W-J-8080, W-L-8115

Installation Examples



Section A-A



Section A-A

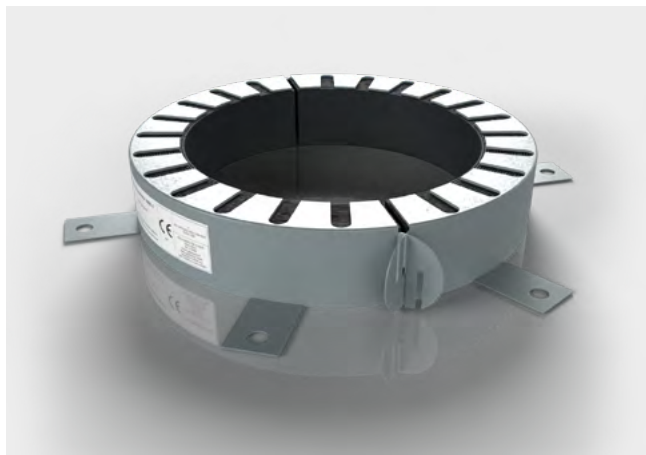


For technical details and applicable regulations, please refer to the relevant UL Listing.

ROKU® AWM II

Fire Protection Collar

ROKU® AWM II consists of a solid metal sleeve which is equipped with several layers of the high performance intumescent material.



Product Benefits

- ✓ Very low installation height of the collar
- ✓ Suitable for the application in wet and humid areas
- ✓ Easy and excellent usability

Field of Application

- Penetration Sealing for plastic pipes in walls and floors

Main Product



ROKU® AWM II Fire Protection Collar

Ø 32 mm	Art. no. 0705000320
Ø 40 mm	Art. No. 0705000400
Ø 50 mm	Art. no. 0705000500
Ø 63 mm	Art. no. 0705000630
Ø 75 mm	Art. no. 0705000750
Ø 90 mm	Art. no. 0705000900
Ø 110 mm	Art. no. 0705001100
Ø 125 mm	Art. no. 0705001250
Ø 140 mm	Art. no. 0705001400
Ø 160 mm	Art. no. 0705001600

Related Products



PYRO-SAFE® GFM
Fire protection mortar
Bag of 25 kg

Art. no. 01167030

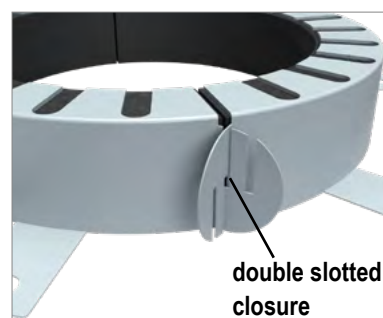
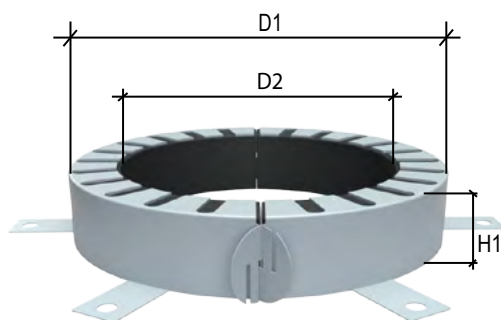
Technical Data

Material	<ul style="list-style-type: none"> • powder-coated sheet steel housing up to external Ø 200 mm • galvanised sheet steel housing from external Ø 225 mm • intumescent inlay 	
Coating	<ul style="list-style-type: none"> • light grey (housing) • anthracite (inlay) 	
Expansion rate	18 to 38 times	
Usage category	Type X	in acc. with EOTA TR024

Dimensions

Collar size Ø	Internal Ø D2	External Ø D1	Installation height H1	Number of tabs [n]	Size adjustable
32	40	50	26.0	2	✓
40	48	58	26.0	2	
50	57	68	26.0	2	
63	70	94	26.0	4	
75	83	106	26.0	4	
90	100	132	26.6	4	
110	120	155	26.6	4	
125	135	172	40.0	4	
140	152	200	40.0	6	
160	169	220	40.0	6	

All specifications in mm



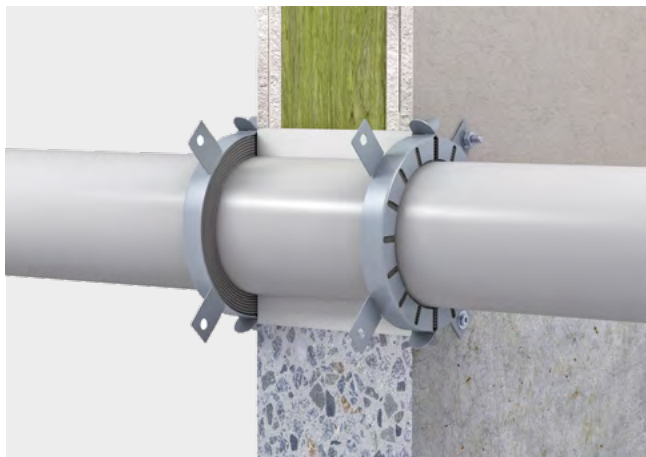
Storage & Packaging

- Store in a cool and dry place

ROKU® AWM II

Fire Protection Collar

Through-penetration firestop system for non-metallic pipes



Fire Rating Penetration Sealing

F-Rating up to 3 hrs.

T-Rating up to 3 hrs.

FT-Rating up to 3 hrs.

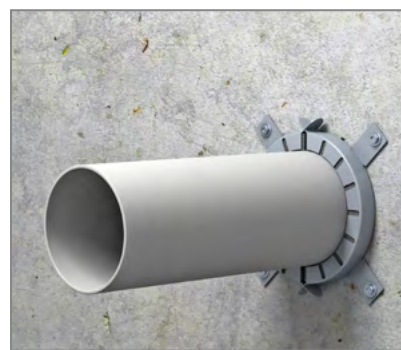
Installation Steps



1. Fill the opening on complete depth with gypsum or mortar.



2. Place Collar around the pipe, in walls on both sides, in floors on bottom side, and close it.



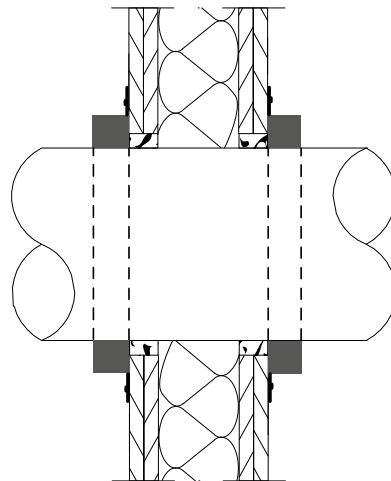
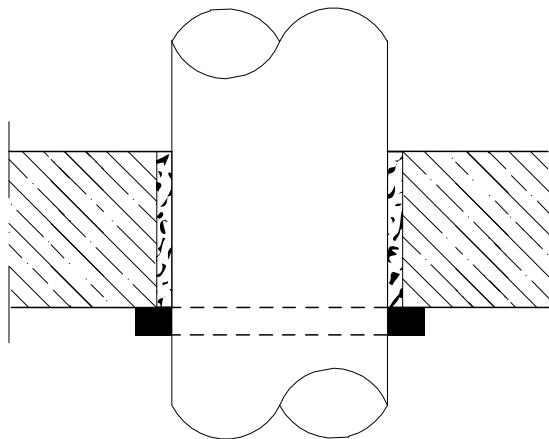
3. Fix the collar to the component with steel anchors or steel screws.

Listings

Pipe penetrations

Structural Element	Media Lines	Listings
Floor or wall	Non-metallic pipe, conduit, or tubing	C-AJ-2938
Floor penetration	Non-metallic pipe, conduit or tubing	F-A-2369
Wall penetration	Non-metallic pipe, conduit or tubing	W-L-2812

Installation Examples



For technical details and regulations see the relevant UL-Listing

Product Overview



PYRO-SAFE® FLAMMOTECT-A

Coating

Pail of 15 kg

Art. no. 01155105

Solid emulsion

Pail of 15 kg

Art. no. 01155107

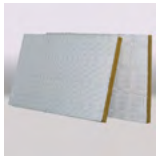
Filler

Pail of 15 kg

Art. no. 01155109

Cartridge of 310 ml

Art. no. 01155125



Mineral fibre board precoated on one side with PYRO-SAFE® FLAMMOTECT-A

Precoated on one side

1000 x 600 x 60 mm

Art. no. 01181160



Mineral wool

Bag of 10 kg

Art. no. 01183000



PYRO-SAFE® BIOFERM A

Cartridge of 310 ml
Light gray

Art. no. 01156041



PYRO-SAFE® NOVASIT BM

Bag of 20 kg

Art. no. 01161030



PYRO-SAFE® GFM

Bag of 25 kg

Art. no. 01167030



PYRO-SAFE® DG-CR 1.5

Roll of 10 m x 125 mm

Art. no. 01261125



PYRO-SAFE® DG-CR BS

Roll of 10 m x 100 mm

Art. no. 01264100



PYRO-SAFE® BIOBAG

Size 0

150 x 200 x 40 mm

Art. no. 01170000

Size 1

300 x 200 x 40 mm

Art. no. 01171000

Size 2

300 x 200 x 100 mm

Art. no. 01172000



PYRO-SAFE® CT

Ø 120 / Length 200 mm

Art. no. 01281200



PYRO-SAFE® CT ML

Ø 120 / Length 200 mm

Art. no. 01282200



ROKU® AWM II

Ø 32 mm

Art. no. 0705000320

Ø 40 mm

Art. No. 0705000400

Ø 50 mm

Art. no. 0705000500

Ø 63 mm

Art. no. 0705000630

Ø 75 mm

Art. no. 0705000750

Ø 90 mm

Art. no. 0705000900

Ø 110 mm

Art. no. 0705001100

Ø 125 mm

Art. no. 0705001250

Ø 140 mm

Art. no. 0705001400

Ø 160 mm

Art. no. 0705001600

At Work Around the World

svt International

svt has made a name for itself in the international marketplace, and our products are “in action” across the globe. They are sold on an international scale by our sales team. In other words: Wherever you are, we are, too!

- AIK Flammadur Brandschutz GmbH, Turkey
- CH Materials Ltd., England
- Fire Glass UK Ltd., England
- Firelab de Marly SAS, France
- Odice S.A.S., France
- Odice LLC, USA
- Pyroguard France S.a.r.l., France
- Pyroguard Netherlands B.V., Netherlands
- Pyroguard UK Ltd., England
- Rolf Kuhn Brandschutz GmbH, Austria
- Securo AS, Norway
- svt Asia Pacific Pte Ltd., Singapur
- svt Middle East FZE, United Arab Emirates
- svt Polska Sp. z o.o., Poland
- svt Products GmbH, Germany
- svt Products BV, Netherlands

Contact Details

For further information, please check out our website **svt-global.com** or contact us.

We look forward to hearing from you!

svt Headquarter

Gluesinger Strasse 86
21217 Seevetal
Germany
T +49 4105 4090-0
E global@svt.de

svt Asia Pacific Pte. Ltd.

German Centre #05-109B,
25 International Park
Singapore 609916
E asiapacific@svt.de

svt Middle East Fire Protection Trading LLC

The One Tower 23rd floor, Office number 16,
PO Box: 390114
Dubai – Barsha Heights | United Arab Emirates
E mena@svt.de

#TEAMLIFEPROTECTORS



Protect what matters.

svt Products GmbH

svt Middle East Fire Protection Trading LLC

The One Tower 23rd floor, Office number 16,
PO Box: 390114
Dubai – Barsha Heights | United Arab Emirates
E mena@svt.de
W middle-east.svt-global.com

Headquarter

Gluesinger Strasse 86
21217 Seevetal
Germany