

The effective and ,easy to install' solution to gas and watertight as well as fire proof duct sealing requirements.

Introduction

Filoform/ISP Duct Sealing systems have been used for decades to provide a gas and watertight seals. These seals are now available for sealing against fire for up to 2 hours by finishing them with the special MD+ Fire Resistant Sealant“.



Gas- and watertight

Filoform/ISP duct sealing systems are based on a specially formulated expanding 2 component polyurethane resin. This resin is packed in a transparent twin pack. After removing the separation strip, the 2 components should be thoroughly mixed for 30 seconds.

The resin is now ready for use and the twin pack can easily be opened by installing the screw type filling nozzle. After pouring the resin in the duct, the resin expands due to the formation of CO₂. During this expansion, the resin penetrates into all gaps thus filling the duct and all gaps completely. This process takes place regardless of the shape or size of the duct. Once the resin has been injected the resin will begin to expand and cure to form a durable gas and watertight seal with excellent mechanical strength.

Fire resistant

Using the special MD+ Fire Resistant Sealant in combination with the Filoform/ISP MD-Duct Sealing Systems provides fire resistance for up to 2 hours in conformity with the standard BS EN1366-3:2009*.

Filoform/ISP duct sealing systems can thus be easily adjusted to the requirements in a specific situation.

*Fire resistance in conformity with the standard BS EN1366-3:2009 can only be achieved when the duct seal is installed in accordance with our installation instructions. The fire resistance in conformity with the standard BS EN1366-3:2009 has been tested and approved by Warrington Fire.

Benefits

- High levels of gas and watertightness
- Fire resistance up to 2 hours (see page 7 for details)
- Fire resistance tested on various types of cables and piping
- Suitable regardless of the shape and size of the duct
- Quick & easy installation
- A complete kit for one duct
- Suitable for all usual cable and pipe materials
- Excellent mechanical strength, after curing resistant to movements, shocks and vibrations
- Suitable for renovations, can be installed retrospectively
- Complies with ATEX regulations
- WIMES compliant 3.02 (clause 7.4.3.2.d)
- Over 25 years of operational experience

Fire resistant up to 2 hours!

Subject to change without notice

MD II-0 160 mm, sealing system

For openings max. Ø 160 mm and cables or pipes max. Ø 130 mm
Art. nr. 280241P

MD II-1 125 mm, sealing system

For openings max. Ø 125 mm and cables or pipes max. Ø 90 mm
Art. nr. 280251P

MD II-2 110 mm, sealing system

For openings max. Ø 110 mm and cables or pipes max. Ø 70 mm
Art. nr. 280261P

MD II-3 50 mm, sealing system

For openings max. Ø 50 mm and cables or pipes max. Ø 40 mm
Art. nr. 280271P



Duct sealing system type MD II has been developed to provide an effective and simple solution to all gas and watertight duct sealing requirements.

MDII Duct sealing systems will not only seal the space between the cable or pipe and duct but also the space between the duct and the wall of the duct in one operation. The Filoform / ISP two component filler provides not only a 100% gas and watertight seal but also offers excellent mechanical strength.

The MD II system is suitable in situations where more than one cable or pipe is in the duct (Fig 1). The opening of the duct does not need to be completely round.

Due to the design of the conical cap, it is possible to install the system also in existing situations. Installation of the cap can be done by trimming the cap to the desired diameter of the cable or pipe, after which the cap should be fixed with a flexible cord (Fig. 2). This enables a quick and easy installation of the cap against the wall.

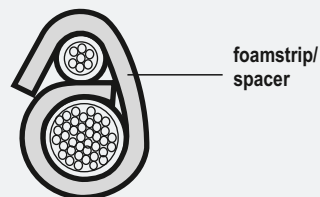


Fig.1

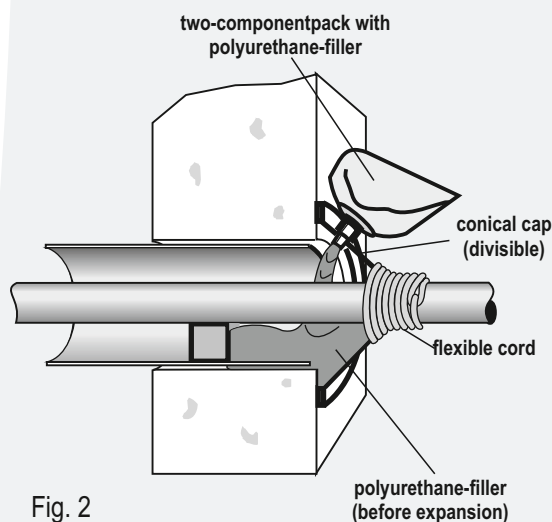


Fig. 2

Subject to change without notice

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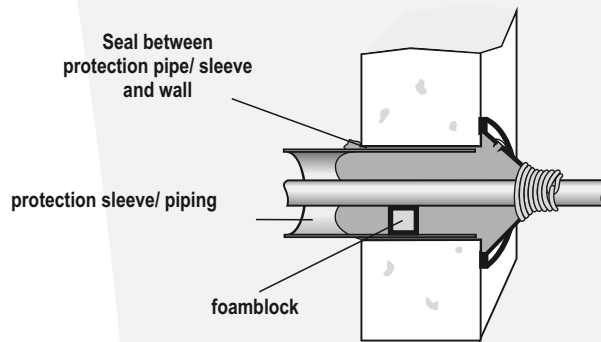


Fig. 3

When a cable protection pipe or pipe sleeve is installed, the space between the protection pipe or pipe sleeve and the wall will also be sealed effectively (Fig. 3).

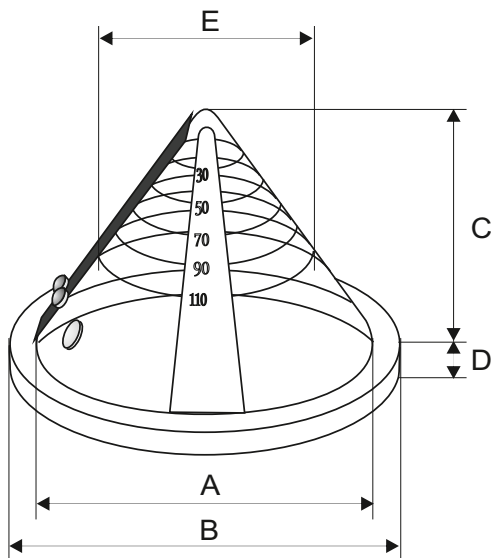


Fig. 4

Table of dimensions, sealingsystem MD II

	Type MDII-0	Type MDII-1	Type MDII-2	Type MDII-3
A	200	150	130	80
B	220	170	150	100
C	90	70	75	80
D	15	15	15	16
E	130	90	70	40

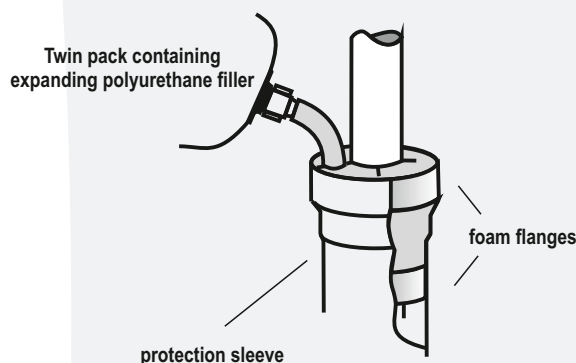
Different sizes available on request (Sizes in mm).

Content of one set type MD II-0, MD II-1, MD II-2 and MD II-3

- Conical cap with diameter indication rings and sealingplug
- 1 foam support block, 1 foam strip (2 pcs for MD II-0)
- 1 flexible cord
- two-component pack with expanding polyurethane-filler equipped with a screw-ring
- screw type nipple
- set of protective gloves
- sandpaper
- installation instructions



MDIII-50 mm
For openings to max Ø 50 mm Art. Nr. 282550P
MDIII-75 mm
For openings to max Ø 75 mm Art. nr. 282575P
MDIII-110 mm
For openings to max Ø 110 mm Art. nr. 280295P
MDIII-160 mm
For openings to max Ø 160 mm Art. nr. 280296P
MDIII-200 mm
For openings to max Ø 200 mm Art. nr. 2802973P



Duct sealing systems MDIII-50 up to MDIII-200 have been developed to provide an effective and simple solution for gas and watertight sealing of cable and piping in protection tubes or ducts. The system can be used in combination with all common PVC and (HD)PE tubes and drinking water conduits.

The specially formulated expanding polyurethane can be easily injected due to the convenient easy and safe to use twin pack with screw type nipple and filling-hose. The polyurethane will expand and thus create a gas and watertight seal.

In situations where there is not only space between the cable or pipe and the tube/sleeve but also between the wall of the duct and the tube/sleeve, then we advise to use our sealing system MD II.

Content of one MDIII duct sealing kit

- Twin pack containing expanding polyurethane filler and screw type ring
- 2 foam flanges
- Screw type nipple + filling-hose
- Set of protective gloves
- Sandpaper
- Installation instructions

MD IV-1 sealing system

For openings min. Ø 75 mm max. Ø 95 mm
Art. nr. 280301P

MD IV-3 sealing system

For openings min. Ø 95 mm max. Ø 125 mm
Art. nr. 280321P

MD IV-4 sealing system

For openings min. Ø 125 mm max. Ø 160 mm
Art. nr. 280331P



Sealing system type MD IV has been developed to create effective gas and watertight sealing of ducts in which cables or pipes have to be installed at a later date.

The sealing system Type MD IV consists of a plug-in coil shaped part with two foam-plastic flanges and an easy and safe to use twin pack containing a special expanding polyurethane filler.

This filler is brought in the coil through an opening, after which the coil needs to be positioned in the borehole (Fig. 1). The polyurethane filler will expand thus sealing the duct for water and gas effectively (Fig. 2).

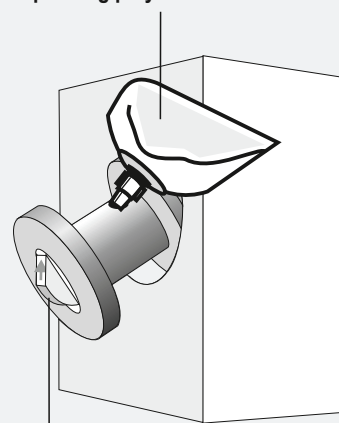
If the duct needs to be utilised at a later date for cables or pipes then the MD IV can be removed easily by using a saw blade. The duct can then be re-sealed by using our MDII system.

The sealing system MD IV can also be used for sealing of vertically positioned ducts (Fig. 3).

Kit contents sealing system type MDIV

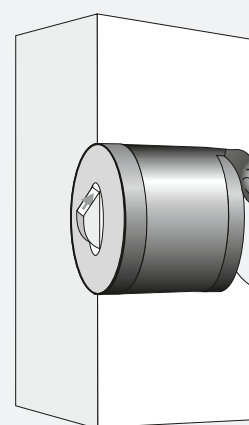
- Twin pack containing expanding polyurethane filler equipped with screw-ring
- Coil shaped unit
- Screw type nipple
- Set of protective gloves
- Sandpaper
- Installation instructions

Twin pack containing expanding polyurethane filler



Sealing system MD IV

Fig. 1



Polyurethane filler (after expansion)

Fig. 2

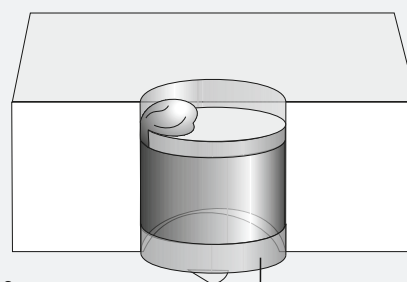


Fig. 3

Sealing system in vertical position

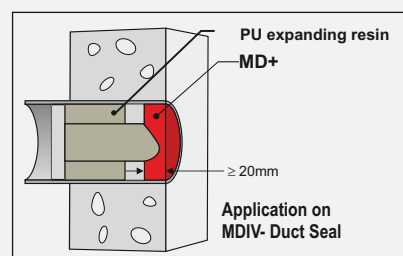
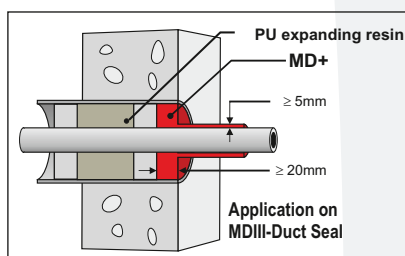
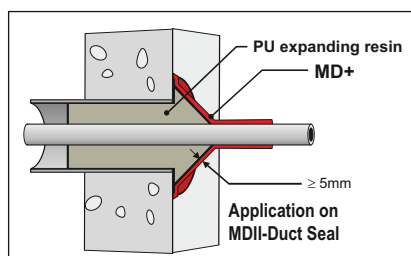
MD+ Fire resistant sealant for ducts
Art.nr. 280000


Application

The high quality MD+ Sealant is a fire resistant and flexible one-component product.

This fire resistant sealing compound is based on a silicon combination. After application, the thixotropic compound cures with atmospheric moisture to form a durable seal.

MD+ is also suitable to provide a fire resistant finish to the Filoform MD-series duct sealing systems, if applied as follows:



Other applications for MD+ Sealant are cable- and piping ducts, telecom technique and constructions where a reliable gastight, watertight and fire resistant seal is required.

Characteristics

- Flexible, one-component, adhesive and sealing compound in a cartridge (310 ml.)
- gastight and watertight seal
- fire resistant
- tested on various cable- and piping types
- excellent adhesion
- good resistance against water, alkaline, chemical agents, oil and greases
- non corrosive
- solvent free
- shock absorbing
- safe usage; non-toxic, neutral and almost odourless

Technical specifications

Fire resistant		: up to 2 hours depending on application
Density		: 1,2 gr / cm ³
Flow	ISO 7390	: < 2 mm
Colour		: red-brown
Skin over time (23C/55%RH)		: ± 15 minutes
Curing		: 1,5 mm / 24 hours
Hardness	DIN 53505	: 30 shore A
Elongation	DIN 53504	: 100 %
Tensile strength	DIN 53504	: 0,8 N / mm ²
Operating temperature		: +5°C tot +40°C
Temperature resistance		: -40°C tot +120°C

Operation: the surface has to be clean, dust free and grease free.

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