

rex 
Fire Protection Seals

- ▶ Safes
- ▶ Data protection cabinets
- ▶ Hazardous materials cabinets
- ▶ Fire doors
- ▶ Partition systems
- ▶ Fire protection flaps
- ▶ Smoke vents
- ▶ and much more

Rex offers both intumescent seals (= foaming in the event of fire) and „cold“ acting seals or a combination of both.

This leaflet is intended to give you an overview of the possibilities.

litaflex Sealing Elements



The litaflex sealing elements come in stripes and are used as fire resistant seals in buildings and constructions.

The core of non-combustible insulation foam litaflex is covered by a coated glass cloth thus providing excellent fire protection characteristics and good elastic sealing properties.

Properties

- High fire resistance because of incombustible litaflex core
- High adaptability because of glass cloth cover
- Lower counter pressure when closing the joint
- Fast and easy handling

Availability

Standard thickness:	5 · 10 · 15 · 20 · 25 mm
Standard widths:	10 · 15 · 20 · 25 · 30 · 40 · 60 mm
Standard lengths:	1000 mm up to max. 2200 mm
Cloth types:	Glass cloth black 440 g/m ² Glass cloth grey 440 g/m

Tubular Cloth Seals and Lip-Seals

Tubular Cloth Seal

The tubular cloth seal is made of a coated tubular glass cloth. With its round shape, and where required self-adhesive, it reliably protects door gaps from the primary heat and fire load. The tubular cloth seals are mainly used in connection with an intumescent (= foaming) sealing strip.



Lip-Seal

This sealing also consists of a coated glass cloth, which is formed to a loop or 'lip', and, if necessary, coated with a self-adhesive tape for easy and quick mounting. This variant is excellent for sealing middle gaps of double wing cabinet doors.



Properties of Tubular Cloth Seal and Lip-Seal

- Fast and easy assembly
- Good sealing effect at low counter pressure
- Good adaptation by easy deformation
- High compressibility allows larger component tolerances
- Low thermal conduction due to a larger air cushion
- High stability of shape under pressure force and temperature rise up to 600 °C

Tubular Cloth Seal

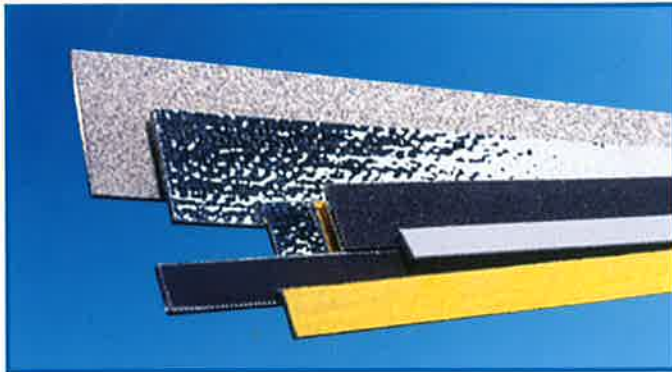
- Black or grey coated glass cloth of 440 g/m²
 - Available with or without self-adhesive film
- Standard size: 15 mm diameter (for joints and/or gaps from 7 to 12 mm)
 Length (standard): 1000 mm up to max. 2200 mm
 Other diameters and lengths are available on request.

Lip-Seal

- Black or grey coated glass cloth of 440 g/m²
 - Available with or without self-adhesive film
- Length (standard): 1000 mm up to max. 2200 mm possible
 Loop width: As of 25 mm

flaton VPG 12 Fire Protection Board

Insulating layer forming for the fire and heat protection



The rex fire protection board flaton VPG 12 is a mainly inorganic self-intumescenting material, which expands when exposed to fire or heat. Thus a very efficient barrier against smoke, fire and heat is produced. Flaton VPG 12 is very easy to handle and to install.

Application

Fire resistant protection in joints, slits and other openings in buildings and construction parts. Fields of application: Doors and gates, flaps, cabinet and dividing walls, security, data and switch cabinets, cable runs, ventilation flaps and other shut-off devices. Mainly stripes of flaton VPG 12, but also cut true to shape according to drawings are used.

Technical data

Density:	Approx. 700 kg/m ³
Thickness:	2.5 mm (standard)
Begin of swelling:	At approx. 180 °C
Height of swelling:	> 4.5 fold at 2.5 mm thickness
Swelling pressure:	> 0.55 N/mm ² at 2.5 mm thickness
Swelling behaviour:	High inherent stability
Fire behaviour according to DIN 4102 Part 1:	Classification B1 in combination with steel elements, classification B2 in combination with other materials
Dripping behaviour:	No dripping
Moisture behaviour:	Insensitive to moisture
Solvents:	Largely resistant
Chemicals:	Largely resistant
Approval by:	German Institute for Building Technology, Berlin No. Z-19.11-457
Availability	
Standard dimension:	2000 x 1000 x 2.5 mm
or	strips up to 2200 mm and > 10 mm width
Lamination	
Standard:	Glass mesh cloth (mesh width 5 x 5 mm)

Other laminations are possible, depending on use and/or application:

- Self-adhesive finish
- Aluminium foil 0.05 or 0.1 mm
- Glass cloth approx. 200 g/m², coloured in grey or black

flaton-flex A

Insulating layer forming for the fire and heat protection

flaton-flex A is a highly flexible material, which does not break even at extreme load and therefore makes the application possible even at difficult geometries.

Based on the low begin of swelling, approx. 145 °C, the quick swelling in a very short time, as well as the great swelling volume, flaton-flex A has an advantage against competition.

flaton-flex A is halogen-, antimony-silicone- and solvent-free.



The mode of action is based on the forming of a temperature-reducing foam in case of fire. Joints, gaps and other openings will be filled by the formed foam and prevent the conductivity of temperature.

Application

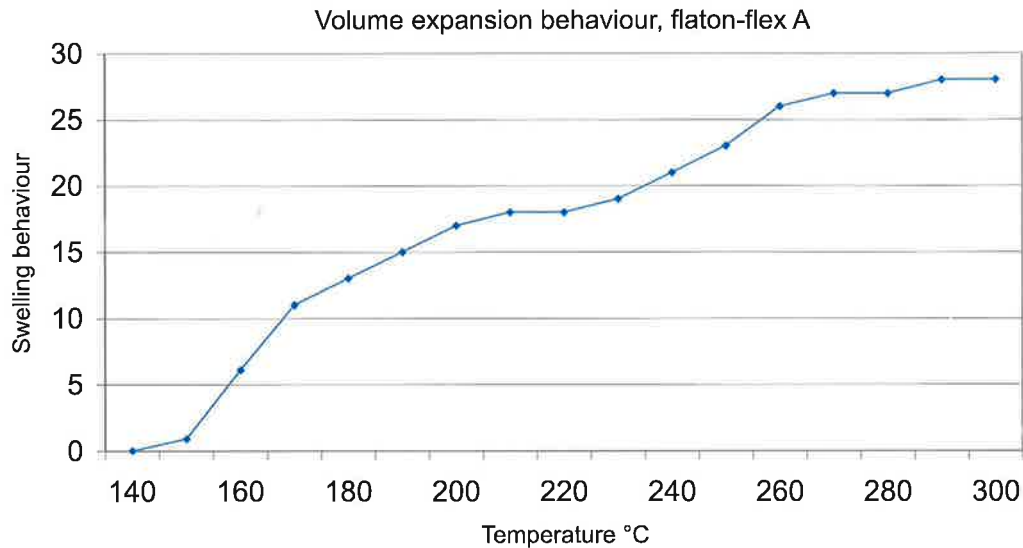
Fire resistant protection in joints, gaps and other openings in building parts and special construction parts. Fields of application: Doors and gates, flaps, cabinet and partition walls, security, data and switch cabinets, cable runs, ventilation flaps and other shut-off devices.

Technical data

Material thickness	1.0	1.5	2.0
Surface weight kg/m ²	1.15	1.4	1.7
Begin of swelling °C	145	145	145
Foam height 30 min. 450 °C with load	≥ 13 fold	≥ 13 fold	≥ 13 fold
Swelling pressure at 300 °C N/mm ²	≥ 1.35	≥ 1.6	≥ 1.9
Moisture behaviour	Insensitive	Insensitive	Insensitive
Swelling behaviour (without load)	See table on next page		
Fire behaviour acc. to DIN 4102 Part 1	Building Material Classification B 2		
Approval	German Institute for Building Technology, Berlin No. Z-19.11-1713		

Important remark

The three-dimensional forming of volume, as well as the high swelling pressure during foaming allow a significant reduction of the material being used in comparison with other insulating materials of this type.



Expansion behaviour in the initial phase of the fire: Increasing temperatures will lead to an increasing expansion height!

Availability

Standard thickness in 1.0 mm, 1.5 mm and 2.0 mm

Supply in rolls of different width and 15 m length

Cut stripes in 2.5 m length

Cut parts according to drawings. With or without self-adhesive finish.

Prices and package units upon request.

**REX Industrie-Produkte
Graf von Rex GmbH
Großaltdorfer Straße 59
D-74541 Vellberg**

**Telephone +49 (0) 79 07 / 96 20 - 25 / 26 / 28
Telefax +49 (0) 79 07 / 96 20 - 80**

**e-mail: info@rex-industrie-produkte.de
www.rex-industrie-produkte.de**

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