

# **K-FLEX K-FIRE HP SEALANT**

## INTRODUCTION

K-FLEX K-FIRE HP SEALANT is a graphite based product which, when exposed to fire, expands protecting penetrations including cables, cable bunches, cable trays, plastic and metallic pipes.

K-FLEX K-FIRE HP SEALANT maintains the integrity and insulation performance of the seal through masonry and plasterboard.

K-FLEX K-FIRE HP SEALANT is supplied in a rigid cartridge format for application with an applicator gun; it has excellent non slump properties coupled with ease of application due to its water based nature.

The sealant is intended for use in service penetrations through walls and floors where fire integrity and insulation needs to be preserved. Under fire conditions the product swells and exerts pressure to the surrounding substrates leading to closure of the penetration. The integrity and insulation are then maintained by the stability of the remaining product char.

#### CHARACTERISTICS AND FEATURES

- Fire resistance testing to EN 1366-3 EI 120, EN 1366-4 EI 120.
- Air permeability testing to EN 1026 to 600Pa.
- Suitable for use in Block Wall, Concrete, Masonry and Plasterboard Partition.
- Tested in Linear Joints up to 20mm wide.
- Tested in large service openings up to 300 x 100mm.
- Tested with Metallic Pipes, Cables, Cable Bunches (inc Telecommunication), Cable Trays and Cable Ladders.
- Tested with Combustible Pipes up to Ø 125mm PVC, HDPE and ABS.
- Tested for use with sealing, flexible elastomeric foam and glass wool insulation.
- Suitable for use in irregular applications.
- Causes no known effects to plastic pipes, plastic cables, sheathing or metallic components.
- Contributes to Green Building.
- Easy clean up with water and is odorless.
- Long life and paintable.
- Smoke, gas, water tight and air tight.
- High Expansion Ratio.
- Resists fungi and vermin.

#### SPECIFICATION

Description	Aqueous thixotropic paste
Density	Ca. 1.23 - 1.33g/cm <sup>3</sup>
Shore Hardness A	68 - ISO 7619-1:2010
Colour	Grey / Red / Black
Application Temperature	+5 ℃ to 35 ℃
Expansion Onset Temperature	Ca. 180 ℃
Expansion	Up to 20 times
Skin Time	15 minutes @ 25 °C/ 50%RH
Cure Time	1.7mm per 24hrs
Shelf Life	18 months in unopened
рН	8 ÷ 9



## INSTALLATION

- Ensure the opening and any substrate which the product will come into contact with is clean, free from dust, loose particles, oil and grease.
- Mineral wool (min 80kg/m<sup>3</sup>) or PE backing rod can be used as a backer.
- The sealant should be applied around the service on both exposed faces using the table as in the installation manual.
- Installation Up to 75mm pipe Ø = 10mm annular gap
- Over 75mm pipe  $\emptyset = 1/8$  of pipe  $\emptyset$  Depth to be 25mm.

i.e. 110mm pipe Ø divided 8 = 14mm annular gap x 25mm depth.

- The sealant can be tooled and smoothed with a pallet knife using water.
- All dimensions and tolerances should be in line with the recommended guidelines as dictated by the relevant test data and assessments.

For further information, contact L'Isolante K-Flex SpA Technical Department.

#### COMPLIANCE

K-FLEX K-FIRE HP SEALANT is manufactured in the EU, meeting the highest quality standard.

For fire test certification, contact L'Isolante K-Flex Spa Technical Department.

#### STORAGE AND DISPOSAL

K-FLEX K-FIRE HP SEALANT should ideally be stored between +5°C and +25°C indoors, above ground level in dry well ventilated conditions, in unopened and original packaging.

Dispose of waste in accordance with local authority regulations.

## **ENVIRONMENT**

K-FLEX K-FIRE HP SEALANT contributes to a Green Building :

- Low VOC (air quality).
- No Power Tools required for installation (no energy source required).
- Dust free.
- Low Ozone Depletion Potential (ODP).
- Low Global Warming Potential (GWP).
- No water pollution.
- Smoke and Air Tightness.
- Noise Reduction.
- Thermal Insulation.
- Recycling of Packaging.
- Avoidance of Air Filtration.
- Does not emit halogenated by-products.
- Contains no raw materials known to have an estrogenic effect.
- The life cycle of K-FLEX K-FIRE HP SEALANT is over 10 years.