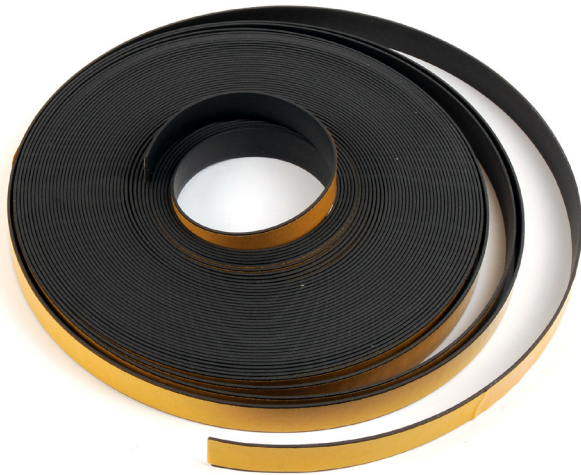


PRONIL INTUFLAME

Technical Data Sheet



PRODUCT DESCRIPTION

INTUFLAME is a Thermoplastic and expandable Graphite based intumescent flexible fire strip. It is easy to install and comes with self-adhesive backing.

Designed to expand to many times its installation size to prevent air circulation and the escape of hot gases and smoke between doors, frames and other potential gaps where fire resistance is required.

APPLICATION AREAS

INTUFLAME intumescent strips designed where fire resistance is necessary. It expands in a fire to prevent the passage of flame and smoke, for use in the following applications.

- Fire protection Steel doors and frame.
- Timber doors or aluminium.
- Glazing, façades, Safe box, letter box.
- Grille ventilation, air transfer plates.
- Intumescent pipe collar, pipe wrap strip.
- Intumescent duct wrap and sleeve.
- Intumescent socket box

USE OF INTUMESCENT SEALS

Fire resisting assemblies are invariably required in regulations to restrict the spread of fire from either side. Whilst the primary purpose will be to protect one area of a building from a perceived hazard in another area.

Correctly fitted sealing systems make a greater contribution to life safety in a fire than almost any other measure. Intumescent seals also make an important contribution to control of warm smoke.

APPLICATION INSTRUCTIONS

Clean the application surface from dust, oils, surface greases to get best adhesion.

Remove the self-adhesive backing liner from the intumescent strip and apply the strip to the surface. Insulation temperature between 0°C and +45°C.

PRODUCT TESTING

Our products have been extensively tested to the latest EU standards and have achieved Efectis Era approval assessed against the requirements of the technical schedules.

TEST INFORMATION

The thickness of the test pieces thickness 1.5mm. and 2 mm, width 15mm through to 40mm. The test pieces resisted fire for 180 minutes with no significant change and maintained integrity in accordance with criteria list E when the test was terminated.

Test Result: EN1366-4 2006. A1 2010 (E)

EN1363-1:1999, Fire resistance test-Part1: General requirements; EN 1363-2, Fire resistance tests-Part2: Alternative and additional procedures, EN ISO 13943:2000, Fire safety-Vocabulary (ISO 13943:2000)

Intumescent fire strips are tested by **Efectis Era**.
Certificate Nr: EAA-1600-000X

TECHNICAL DATA (SELF-ADHESIVE)

Product Description: Double Side Acrylic Adhesive
Clear PET Tape

Good initial tack and peel adhesion with very strong holding power by laminating to Foams, Rubbers, and Felts with wide range of working temperature performance. Complies RoHS directives – Regulation (EC) No. 1907/2006 & 1272/2008.

TECHNICAL FEATURES:

Adhesive: High Tackified Solvent Based Acrylic (modified version)

Backing: Clear Polyester (PET)

Total Thickness: 205 mic. (+/- 5%) --> without liner

Adhesion Strength on Steel: 28 N / 25mm (+/-3) (accor. to AFERA 5001)

Application Temperature: +10°C - +30°C

Working Temperature: -40°C , +130°C (short term: +145°C)

Release Liner: White Glassine Paper Liner

Widths: 1240mm (net usable width)

Lengths: 50mt

Please ask for different widths which we can rewind into any lengths.

STANDARD SIZES

THICKNESS	ROLL	LENGTH
1,5 mm x 15 mm	25 meters roll	300 meters in the box
2 mm x 15 mm	25 meters roll	300 meters in the box
1,5 mm x 20 mm	25 meters roll	225 meters in the box
2 mm x 20 mm	25 meters roll	225 meters in the box
1,5 mm x 30 mm	25 meters roll	150 meters in the box
2 mm x 30 mm	25 meters roll	150 meters in the box

500°C Thermal Expansion Testing of Intumescent Fire Strip

MATERIALS

Sample tested was INTUFLAME fire strip for to activate in the event of fire, expanding to fill the gap between door leaf and frame, preventing the leakage of smoke and heat from the compartment whilst also exerting positive pressure between frame and leaf to counteract any warpage of the door leaf due to the effects of applied heat

The sample provided was approximately 2 mm thick, 15 mm wide and 15 cm long, with a pressure-sensitive adhesive tape applied to one side to facilitate easy installation of the seal strip into the door leaf and / or frame.

For the purpose of testing the pressure sensitive adhesive tape was removed from the surface

METHOD

Set the furnace to 500°C

Prepare two sample lengths of INTUFLAME strip.

Apply two parallel runs of double-sided pressure sensitive adhesive tape to the metal plate, set at least 5 cm apart.

Apply length of the sample to each run tape, ensuring that the sample is firmly adhered to the plate.

Place the metal plate in furnace for 5 minutes,

Remove the plate from the furnace and place on an insulated board, photographing and measuring the dimensions of the specimens

OBSERVATION

The textured **THERMOPLASTIC INTUMESCENT** strip clearly contained graphite flake, the individual particles being visible on the front and back surfaces.

The material gave off an amount of smoke and fumes, beginning black sooty smoke at 55 seconds into the test and building up emission of white smoke and fumes until 4 minutes into the test.

The expansion was very pronounced in the height and width of the strip. There was no evidence of shrinkage along the length of strip. The structure of the expanded material was cohesive but very aerated, with the graphite being of low density. There was no obvious trace of any polymeric material remaining in the char after 5 minutes.

CONCLUSION

The INTUFLAME intumescent fire strip offered a good level of intumescence . The expanded char was relatively loose and voluminous.

