# **Intumescent Fire & Smoke Seals**





## THERM-A-SEAL INTUMESCENT STRIP

Unique intumescent formulation

#### INTRODUCTION

The installation of intumescent fire seals around fire door assemblies is now universally regarded as essential if these are to comply with the criteria specified in the updated BS 476: parts 20 and 22: 1987 test protocol. To meet this requirement our intumescent seals have been developed to a unique intumescent formulation representing a breakthrough in intumescent product technology.

#### APPLICATION

THERM-A-SEAL has been developed primarily for sealing the air-gap between the edges of the leaves and the frames, or between the separate leaves and the frames, of both timber and steel fireresisting door assemblies in the event of a fire.

In a fire situation, an intumescent foam is produced which is voluminous and also capable of exerting a pressure high enough to restrain the edges adjacent to the seal. THERM-A-SEAL is therefore ideally suited to applications where some applied restraint combined with the normal gap-filling properties of intumescent materials is needed. Unlatched door leaves, or double swing assemblies are most likely to benefit from such characteristics across the head, although the seal is equally well suited to conventional latched single-leaf doors.

For most latched single-leaf singleswing 30 minute (FD30) timber fire-resisting door assemblies, a single 10mm x 4mm strip down each jamb and across the head will normally suffice. Unlatched single-leaf timber door assemblies will invariably provide a 30 minute rating, whether single or double-swing, with a 10mm x 4mm strip fitted down the jambs; depending upon the nature of the door, however, it may be prudent to increase this the size to 15mm x 4mm. Most latched single-leaf single-swing 60 minute (FD60) timber fire-resisting door assemblies, will satisfy the requirement of BS 476: parts 20 and 22: 1987 test procedures when fitted with a single 20mm strip across the head and down both jambs. Unlatched doors may require additional material across the head.

The intumescent foam produced by THERM-A-SEAL has high temperature tolerances and so is well suited for use with steel door assemblies where conventional intumescent foams may break down.

#### DESCRIPTION

THERM-A-SEAL is made from a unique chemical formulation based on expandable graphite. The seal is supplied in a PVC casing of various colours. The core material THERM-A-FLEX is capable of large expansion combined with significant pressure forming an excellent seal against the ingress of fire.

Unlike many other types of intumescent material, THERM-A-SEAL is not affected by moisture and therefore does not require any further protection; it is also unaffected by carbon dioxide.





#### AVAILABILITY

THERM-A-SEAL is supplied as standard in brown or white casings although black, cream, and a grey finish are also available to order.\*



Nominal sizes are available in the following dimensions:

<u>10mm x 4mm</u> <u>15mm x 4mm</u> <u>20mm x 4mm</u> <u>30mm x 4mm</u> 38mm x 4mm

THERM-A-SEAL is supplied with double-sided adhesive tape and in lengths 2100mm.

### TEST EVIDENCE

THERM-A-SEAL meets the requirements for fire and smoke performance of BS476: parts 20 and 22: 1987. It has also passed the more exacting standards required by Certifire.





\* Colours may vary slightly between examples illustrated in print, online and actual samples - which will depend upon lighting conditions in situ.