

Intumescent Fire & Smoke Seals



THERM-A-STOP FIRE & SMOKE SEALS

For use on fire resisting door assemblies

INTRODUCTION

The installation of intumescent fire and ambient temperature smoke seals around fire door assemblies is essential to meet the requirements of BS5588 'Fire precautions in the design and construction of buildings'. Throughout its code of practice, BS5588 designates certain fire resistant doorsets which are required to retard the passage of smoke at ambient temperatures with the suffix S. Hence:

FD20S represents a Fire Door with no less than 20 minutes integrity.
FD30S represents a Fire Door with no less than 30 minutes integrity.
FD60S represents a Fire Door with no less than 60 minutes integrity.

THE PRODUCT

THERM-A-STOP has been designed for use in fire resisting door assemblies which have been designated as smoke control doors. The seal slows the spread of smoke and fire through a building by reducing the flow of smoke and air through the gaps between the leaf and the frame or an adjacent leaf edge during the early stages of a fire. Activated by heat, the material rapidly expands to seal the air gaps between the leaf and frame, insulating and protecting the gaps - thereby significantly slowing the spread of fire through the doorset.

THERM-A-STOP is suitable for use on fire resisting door assemblies manufactured from timber, steel or combinations of both.

APPLICATION

THERM-A-STOP intumescent fire and ambient temperature smoke seals are available in PVC holders which are either 4 mm or 5 mm deep. For some latched single-leaf, single swing 30 minute (FD30S) timber fire resisting door assemblies, a single 10 mm x 4 mm strip down each jamb and across the head will usually meet these requirements but some

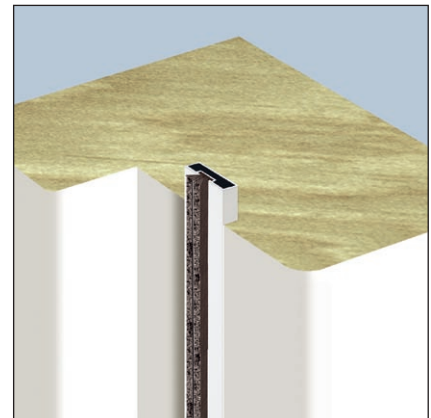
manufacturers use 15 mm x 4 mm seals to give a more consistent and reliable door performance.

Some latched single-leaf, single swing 60 minute (FD60S) timber fire resisting door assemblies will satisfy the requirements of BS476 : parts 20 and 22 (1987) test procedures when fitted with a single 20 mm x 4 mm strip across the head and down both jambs and some require two strips of 15 mm x 4 mm strip. There are several other combinations of seals for 60 minute applications so it is usually necessary to consult the door or seal manufacturer to identify the seals required.

Steel doors do not usually require intumescent seals. Fire doors tested to BSEN 1634 (the new European Standard which is more onerous than BS476) usually require better sealing performance and these seals are generally door specific. For advice, please contact Firewise.

DESCRIPTION

THERM-A-STOP's chemical formulation is based on expandable graphite which is manufactured in the UK to our unique formulation. The seal is supplied in a PVC casing. Unlike many other types of intumescent material, THERM-A-STOP is unaffected by atmospheric moisture and therefore does not require any further protection. It is also immune to degradation by carbon dioxide in the atmosphere.



AVAILABILITY

THERM-A-STOP is supplied as standard in brown or white casings although black, grey, cream, red and a light oak woodgrain finish are also available to order.*



Nominal sizes are available in the following dimensions:

10 mm x 4 mm
15 mm x 4 mm
20 mm x 4 mm
25 mm x 4 mm
30 mm x 4 mm
38 mm x 4 mm
Lengths 1050mm or 2100mm

The height of the pile projects 5 mm from the PVC holder - and is generally suitable for sealing an average gap of 3 mm to 4 mm between door and frame. If wider gaps have to be sealed, a higher brush profile can be supplied.

TEST EVIDENCE

THERM-A-STOP meets the requirements for fire and smoke performance of BS476 : parts 20, 22 & 31.1 . 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.