

INTUMESCENT FIRE SEALS - Installation Guide



Introduction

The purpose of this document is to give guidance to approved contractors and suppliers who are engaged in the fire stopping of fire rated structures using Astro STRIP. All Timber fire door assemblies must be fire stopped to prevent the passage of fire, smoke and hot gases. The key points for passive fire protection products are :-

- Prevent the spread of fire, smoke and hot gases through a building by containing it in the compartment of origin
- Maintain the integrity of escape routes from a building.
- Reduce loss or damage to property from the effect of fire and smoke.
- Maintain pressure differential between compartments and ventilation channels.

THE ASTRO STRIP SYSTEM

Intumescent Fire and smoke seals for fire door assemblies

An Astro intumescent graphite based fireseal contained within a PVC sleeve fitted into a rebate to either the leaves or the frame will, in the event of a fire, expand (intumesce) to many times its original volume and seal the gap around the door to provide a safe and effective barrier against the passage of fire, smoke and hot gases.

Astroflame Intumescent Fireseals are available with or without a cold smoke seal in the form of a nylon pile or rubber seal. Astroflame smoke seals provide a permanent barrier to smoke, acoustic and thermal applications and are particularly important as smoke travels faster and further than fire itself.

All Astro seals are supplied with a self adhesive backing tape as standard to facilitate quick and easy fitting. The seals are available in a choice of colours to suit your requirements or blend with decor.

Passed at BS 476 part 22 & 31 for 30 or 60 minutes rating Certifire approval CF 276

Smoke seal to 100,000 cycle test
NHBC Type Approval.

Installation

Astrostrip is passed and certified for use in single and double door assemblies (single and double action), and can provide fire and smoke resistance in excess of either half an hour or one hour.

If your fire door or frame is not pre-grooved check the door manufacturers data and test sheets to establish the size and quantity of intumescent seals required.

You should also note the tested position of the seals and whether any additional protection is required around the particularly vulnerable areas of the lock and hinges (Astro Protecta for hinges and locks).

Rebate the door or door frame to accommodate the chosen seal which should be fitted so that the PVC sleeve finishes flush with the face of the timber. (An allowance in the rebate width may be necessary to allow for timber shrinkage or for paint/stains, so we recommended grooving 3% greater than the chosen seal size).

We recommend that the gap between door and frame should be no greater than 4mm. To fix remove the release paper from the self-adhesive backing tape and push the seal firmly into the rebate along its full length. For alternate fixing methods use Astro intumescent mastic or steel pins

If the door or frame is to be painted/stained care should be taken to ensure the paint/stain does not come into contact with the brush pile on the Fire & Smoke seal. Periodically check the intumescent seal to confirm the integrity. All smoke seals are interchangeable to allow for change of uses within the building

Density: 1025 Kg/m³
Flexural strength: ---
Tensile strength: 2.8
Moisture content: 3% (max.)
Expansion (under 50 psi load): 85%
Free expansion ratio (400°C 15min): 20:1
Activation temperature under 50psi load: 200°C
Pressure generation expansion @ 400°C: 10 Bar

Compliance

Astro strip is manufactured in the EU, meeting the highest quality standard in compliance with ISO EN 9001:2000. For fire test certification contact Astroflame Fireseals Technical Department.

Fire Test or Assessment Reports

Certifire approval CF 276
Warrington Fire Research: Global Assessment C100767
C82223, C81825.
Trada/Chiltern: RF40523, RF95041, RF95079, RF95080

Storage and disposal

Astro STRIP should be stored indoors
No shelf life is given as the strips will not deteriorate in storage.

Disposal- please refer to COSHH sheet

For additional testing, certification or technical information please contact ASTROFLAME FIRESEALS LTD.

Issue 01/03

As part of our policy of ongoing improvements, we reserve the right to modify, alter or change product specifications without giving notice. Product illustrations are representations only. All information contained in this document is provided for guidance only, and as ASTROFLAME FIRESEALS LTD has no control over the installation methods of the products, or of the prevailing site conditions, no warranties expressed or implied are intended to be given as to the actual performance of the products mentioned or referred to, and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given of products mentioned or referred to herein.

The above information to the best of our knowledge is true and accurate and based upon current test data and is supplied for your guidance only. Customers should satisfy themselves to the suitability of the product in its intended use and no guarantee is given or implied since the conditions of actual use are beyond our control. ASTROflame (Fireseals) Ltd, disclaim any liability for loss, damage or other expense arising from the use of information, data or products mentioned or referred to and reserve the right to change any details or specifications without notice.

Astroflame (Fire Seals) Ltd. Intumescent House
Unit 8, The IO Centre, Stephenson Road, Segensworth
FAREHAM, ENGLAND PO15 5RU

tel 0800 023 2482
(01329 844500)

fax 0800 023 2483
(01329 844600)

intl
tel +44 1329 844500

fax +44 1329 844600

email sales@astroflame.com