

Pyrostrip®

CONCEALED INTUMESCENT FIRE SEALS

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Introduction

Using Mann McGowan's range of high performance intumescent seals, it is possible for fire door manufacturers to produce doors, with the intumescent concealed into the door lipping.

This allows Architects the opportunity to specify high quality fire resisting doors, without exposed seals conflicting with the decorative finish.

Description

PYROSTRIP 100EC or 500 intumescent seals are nominally 2mm thick, and are produced to the necessary width to suit the required fire performance.

PYROSTRIP 100EC is white in colour, and PYROSTRIP 500 is charcoal grey.

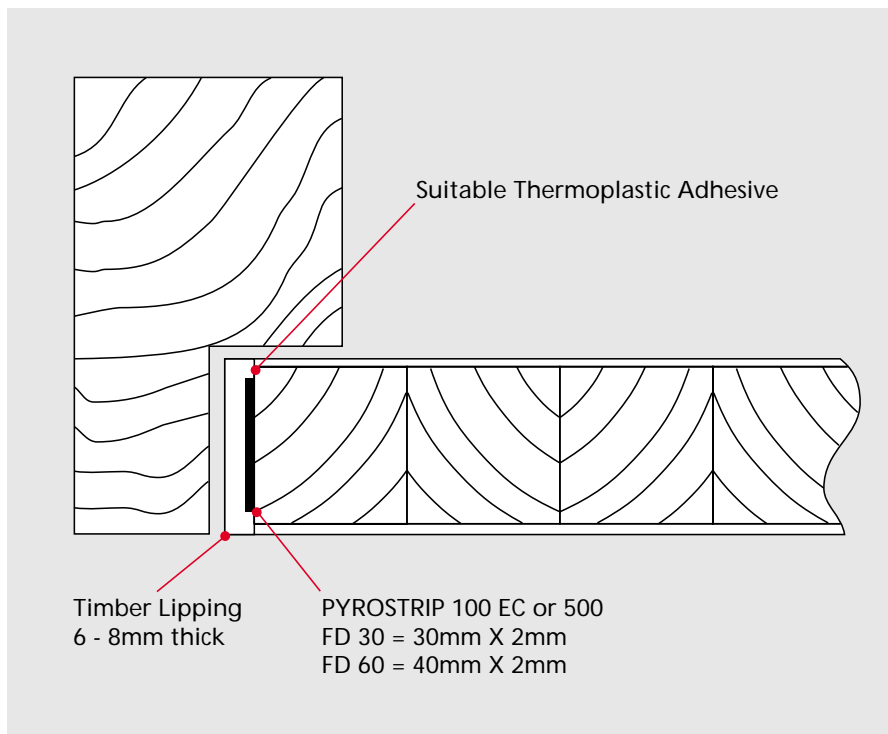
Applications

PYROSTRIP 100EC and 500 can be inserted into the back of timber lippings on the hanging and swinging stiles of fire resisting doors.

The lipping should be grooved slightly bigger than the seal to allow for shrinkage of the timber.

Action

In a fire situation, the adhesive bonding of the lipping softens. As the temperature of the intumescent reaches approximately 100°C it begins to expand pushing off the lipping, wedging it against the door frame. This seals the gap and prevents the passage of smoke, hot gases and flames.



Performance

PYROSTRIP 100EC and 500 has been successfully fire tested to BS 476 parts 8 and 22, NEN 6069, by

various door manufacturers. A brief summary of some of the tests are as follows:

IT 198B	PYROSTRIP 500	30mm x 2mm	39 minutes
W 39230	PYROSTRIP 100EC	30mm x 2mm	39 minutes
FR 743/1	PYROSTRIP 100EC	40mm x 2mm	64 minutes
FR 650	PYROSTRIP 100EC	32mm x 2mm	40 minutes
FR 657	PYROSTRIP 100EC	32mm x 2mm	43 minutes
FR 643	PYROSTRIP 100EC	25mm x 2mm	35 minutes
FR 784	PYROSTRIP 100EC	38mm x 2mm	64 minutes

Construction

It is recommended that the width of the PYROSTRIP should be set between 7 to 10mm in from either face of the door leaf.

The timber lipping should be between 6 to 8mm.

For FD30 doors, it is possible to have PYROSTRIP concealed along the vertical edges and across the head of the door.

For FD60 doors, PYROSTRIP can be concealed along the vertical edges, but the head of the door/frame must have an exposed pvc encapsulated version.

As a general rule the width of PYROSTRIP should be as follows:

FD30 30mm x 2mm

FD60 40mm x 2mm

The above is based on experience of successful fire tests conducted by numerous fire door manufacturers.

Suitable adhesives must be used for bonding the lippings. They should exhibit a thermoplastic nature under fire conditions, such as, 2 pack polyurethane, hot melt adhesives or a suitably modified pva adhesive.

Suitably tested hinges must be used within the construction, to minimise the restriction of expansion of the PYROSTRIP in these areas.

Storage

PYROSTRIP 100EC and 500 should be stored flat in dry conditions. The products should be handled with care.

Technical Services

The above advice is generic and gives guidance on how to achieve 30 and 60 minutes fire resistance in accordance with BS 476 Part 22 1987.

PYROSTRIP 100EC and 500 are high performance components used in the complete construction of a fire resisting doorset.

Mann McGowan can advise on the use and application of any of our products. We can also provide presentations or site surveys at your request.

Ordering

PYROSTRIP 100EC and 500 can be ordered directly from our Sales Office.

Quality Management

Mann McGowan's quality management system has been registered to ISO 9002.

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Advanced Intumescent Technology



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Certificate No: 93/2172

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