
Title

Field of Application for:
Falcon Strebord® 54 Doorsets

For 60 Minutes Fire Resistance

Report No.:

Chilt/A02067 Revision N

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Prepared for:

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10.2 Intumescent to Hardware

The intumescent materials used to protect hardware that have been tested and assessed for this doorset design are detailed below. Note that any one of the product/manufacturer options listed in the table may be used in the specific application noted. However, only 1 No manufacturer should be considered per doorset application.

The door gap perimeter intumescent seal specifications are documented in conjunction with the leaf envelope size limitations in section 4.5.

| Hardware Intumescent Specification | | |
|------------------------------------|---|--|
| Item | Location | Product/Manufacturer |
| Butt or Lift Off Hinges | For frame options 1 or 2 | <ol style="list-style-type: none"> 1. 1mm Interdens - Dufaylite Developments Ltd. 2. 1mm MAP paper - Lorient Polyproducts Ltd. 3. 1mm Pyrostrip 300 - Mann McGowan Fabrications Ltd. 4. 1mm Therm-A-Strip - Intumescent Seals Ltd 5. 1mm NOR910 – Norsound Ltd. 6. 1mm STS Graphite – Sealed Tight Solutions Ltd |
| | For frame option 3 | <ol style="list-style-type: none"> 1. 1mm MAP paper - Lorient Polyproducts Ltd. |
| | Frame Option 1 with PVC Edge Protectors | <ol style="list-style-type: none"> 1. 2mm Interdens |
| Concealed Hinges | Refer to Section 10.8.2 for intumescent details | |
| Lock/latches | Under forend & keep for all double leaf doorsets | <ol style="list-style-type: none"> 1. 1mm Interdens - Dufaylite Developments Ltd. 2. 1mm MAP paper - Lorient Polyproducts Ltd. 3. 1mm Pyrostrip 300 - Mann McGowan 4. 1mm Therm-A-Strip - Intumescent Seals Ltd. 5. 1mm NOR910 – Norsound Ltd.1 (<i>see note 1 below for restrictions</i>) 6. 1mm STS Graphite – Sealed Tight Solutions Ltd 7. STS DIN 60 Kit - Sealed Tight Solutions Ltd (<i>Refer to Section 10.2.1.1 for installation details and restrictions</i>) |
| | Under forend & keep for all single leaf doorsets | <ol style="list-style-type: none"> 1. 1mm Interdens - Dufaylite Developments Ltd. 2. 1mm MAP paper - Lorient Polyproducts Ltd. 3. 1mm Pyrostrip 300 - Mann McGowan 4. 1mm Therm-A-Strip - Intumescent Seals Ltd. 5. 1mm NOR910 – Norsound Ltd.1 (<i>see note 1 below for restrictions</i>) 6. 1mm STS Graphite – Sealed Tight Solutions Ltd 7. STS DIN 60 Kit - Sealed Tight Solutions Ltd – (<i>Refer to Section 10.2.1.1 for installation details and restrictions</i>) |
| | Under latch strike and keep for all doorsets with PVC Edge Protectors | <ol style="list-style-type: none"> 1. 2mm Interdens |
| Concealed overhead closers | <p>Refer to Section 10.9.3.1 for Single Action Closer intumescent details</p> <p>Refer to Section 10.9.3.2 for Double Action Closer intumescent details</p> | |

| Hardware Intumescent Specification | | |
|------------------------------------|---|---|
| Item | Location | Product/Manufacturer |
| Top pivots & bottom straps | Refer to Section 10.9.4 for intumescent details | |
| Flush bolts | Encasing the entire body of the flush bolt including the back surface of the face plate | <ol style="list-style-type: none"> 1mm MAP paper - Lorient Polyproducts Ltd. 1mm Pyrostrip 300 - Mann McGowan |

Notes:

1. The maximum latch forend size for use with 1mm NOR910 is 155mm high by 25mm wide.



Example of hinge protection detail



Example of lock & latch protection detail

Gaskets must be fitted where required by supporting evidence, for example, test evidence or Certifire certificates. If gaskets are not required by the supporting evidence but are within this Field of Application, the requirements of this Field of Application take precedence.

Where it is stated that intumescent is not required for a particular element of hardware, it is permitted to use up to 2mm thick MAP, Interdens or graphite-based gasket tested for the particular application [as appropriate for the hardware]. It is the opinion of Warringtonfire that the additional protection will not detract from the fire resistance performance under test conditions.

10.2.1.1 STS DIN 60 Kit – Sealed Tight Solutions

The STS DIN 60 Kit is only permitted for use where a minimum of 2No perimeter intumescent seals are installed with a minimum of 7.5mm of any graphite-based type of seal running past both sides of the latch forend in the meeting edge of a double leaf door or closing edge of a single leaf door.

For single leaf doorsets where the 2No. seals are fitted in the frame reveal, a minimum total of 15mm of any graphite-based type of seal must run past the strike plate in the frame reveal (e.g. one 15mm(w) strip uninterrupted to run continuous past the strike plate with the other strip fully interrupted, or both 15mm(w) strips partially interrupted but with the total minimum width of each strip equal to 15mm running past both sides of the strike plate).

For smaller locksets, all pieces of the DIN 60 Kit must be fitted to the latch body, forend and strike plate. It is only permitted to trim the gaskets where the pieces supplied with the kit are too large for latch body, forend and strike plate. The pieces must be trimmed tight to the edges (i.e. the amount of intumescent protection is increasing relative to the size of the latch or lock).

It is permitted to cut essential holes to allow for cylinders and spindles etc, providing the hole is cut tight to the aperture required.

The STS DIN 60 Kit is depicted below, including dimensions of the individual pieces to be fitted to the lock body, forend and strike:

