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Title:

Field of Application for:

Falcon Stredor® 54 and Strebord® 54 Fire Resisting Doorsets.

60 Minutes Fire Resistance

Issue Date:

18th May 2020

Valid Until:

18th May 2025

Report No:

WF427764

WF Reference:

WF 427764

Prepared for:

Falcon Panel Products Ltd.

Clock House,

Station Approach,

Shepperton,

Middlesex,

TW17 8AN

11.3.10 Threshold drop Seals

A Lorient 8001Si and Sealmaster DRP drop seals were successfully tested in reports WF401039 and CFR1902142 and are acceptable in all door designs. The drop seal must be fitted with 1mm thick Interdens to all sides of the rebate under the drop seal. The following types of automatic threshold drop seals may be recessed into the bottom of leaves without compromising the performance.

Product	Manufacturer
IS8010si, IS8010Si	Lorient Polyproducts Ltd.
RP8Si	Raven Products Ltd.
Schall-Ex Duo L-15	Athmer HG
NOR810, NOR810S, NOR810dB+	Norsound Ltd.
FAS45	Fire & Acoustic Seals Ltd.
DRP2712	Sealmaster (Dixon International Group Ltd)
STS 422, STS 422GT	Sealed Tight Solutions Ltd

All drop seals must be fitted in line with the manufacturing's instructions and intumescent protections for 60 minutes in the appropriate door blank.

11.3.11 Letter Boxes/Plates

Letter boxes/plates must be Certifire approved for 60 minutes in ITT doorsets with solid timber door leaves. Restriction relating to size, location and intumescent protection around the Letter box/plate must be complied with.

The area of the letter plate (and air transfer grille if present) plus any glazing must not exceed the total permitted area for glazing in the leaf.

12 Installation

12.1 Door Gaps

For fire resistance performance, door gaps and alignment tolerances must fall within the following range.

Location	Dimensions
Door edge gaps	A minimum of 2mm and a maximum of 4mm
Alignment tolerances	Leaves must not be proud of each other or from the door frame by more than 1mm
Threshold	10mm between bottom of leaf and top of floor covering[1]

Note:

[1] Tolerances are for fire resistance performance. Refer to section 14 for smoke control tolerances.

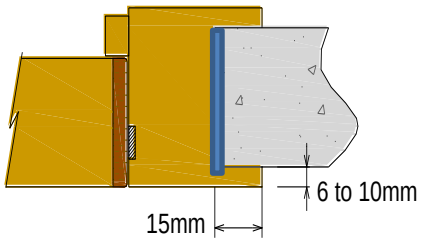
12.2 Onsite Leaf Size Adjustment

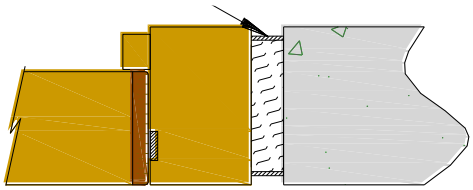
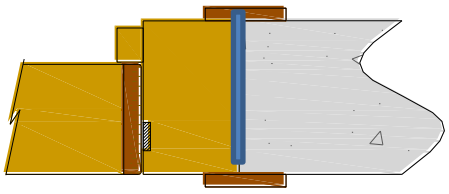
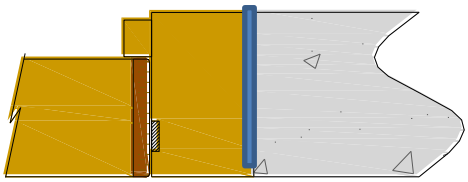
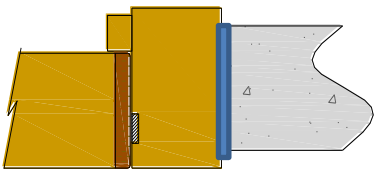
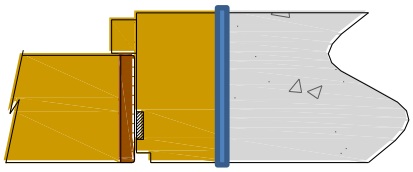
Door leaves may be altered as follows.

Element	Reduction
Lipping	The lipping thickness can be reduced by 1mm to assist with onsite fitting of leaf.

12.3 Door Frame Installation

Diagrams indicate acceptable and unacceptable configurations for frame installations:

<table>
<tr><th colspan="2">Permitted Installations</th></tr>
<tr><td> 

6-10mm is the maximum a frame is permitted to be proud of the structural surround when combined with a 15mm bolection return. Projecting frames outside these dimensions will require specific test evidence or assessment.</td><td>Max 10 x 10mm shadow gap with 2mm intumescent mastic capping or
10 x 4mm PVC encased intumescent seal
 
Shadow gaps are permitted as shown in the above diagram providing the frame to structural surround junction is infilled with timber of the same density as the frame or a non-combustible material such as plasterboard. Other shadow gap dimensions will require specific test evidence or assessment.</td></tr>
<tr><td> 
Architraves overlapping the frame to structural surround junction are always permitted where required but may be mandatory depending on the size of frame to surround junction gap and the fire stopping used. See section 12.5.</td><td> 
Depending on the size of the frame to surround junction gap and the fire stopping methods used, it may be permitted to install doorsets without architraves. See section on Sealing to the Structural Surround.</td></tr>
<tr><th colspan="2">Installations Not Permitted</th></tr>
<tr><td> 
Unless the frame thickness is increased to include the thickness of a bolection return, (i.e. 47mm) projecting frames without bolection returns are not permitted without specific test evidence or assessment due to the potential for increased charring to the back of the frame.</td><td> 
Quirks between the leaf and frame are not permitted without specific test evidence or assessment due to the potential for increased charring of the leaf to frame gap.</td></tr>
</table>

Notes:

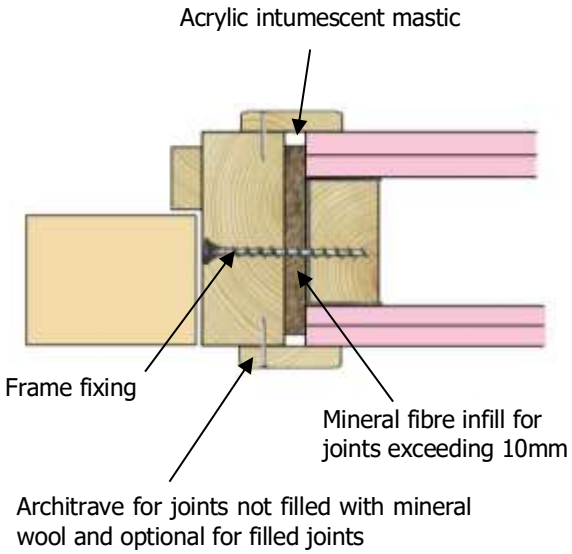
1. Dark brown = lippings and architraves; blue = 5-10mm fitting tolerance for sealing.
2. Structural openings (walls) may be thicker than frames providing the minimum frame sections in section 7 are maintained and frame to structural opening junctions are sealed in accordance with section 12.5.
3. The diagrams above are representative; actual installation must be as the text within this document specifies.

12.4 Fixings

The supporting construction must be capable of staying in place and intact for the full period of fire resistance required from the doorset. The frame jambs are to be fixed to the supporting construction using steel fixings at 600mm maximum centres and maximum of 150mm from corner. The fixings must be of the appropriate type for the supporting construction and must penetrate to a minimum depth of 50mm. It is not necessary to fix the frame head, although packers must be inserted.

12.5 Sealing to Structural Opening

The door frame to structural opening gap must be protected using one of the following methods.

<table>
<tr><th colspan="2">Door Frame to Supporting Structure Fire Stopping Specification</th></tr>
<tr><td>1. Gaps up to 10mm must be sealed on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Joints must be fitted with 15mm thick architraves overlapping at least 15mm each side.</td><td rowspan="2"> 
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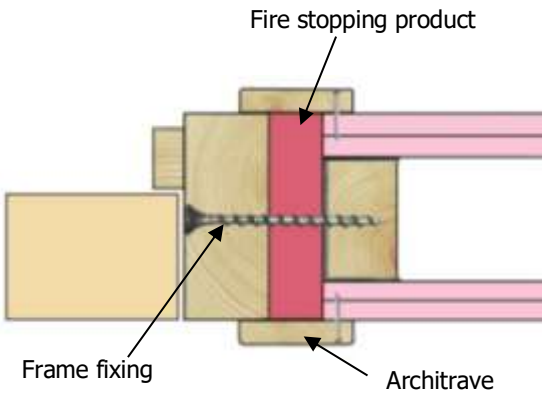
<tr><td>2. Gaps between 10mm and 20mm must be tightly packed with mineral fibre capped on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Architraves are optional.</td></tr>
<tr><td>3. Gaps up to 20mm filled with proprietary fire stopping product (e.g. expanding PU foam or preformed compressible intumescent foam). Products must be tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Joints can be fitted without architrave if this has been successfully tested. If this isn't the case, a 15mm thick architraves overlapping at least 15mm each side.</td><td> 
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