
CERTIFICATE OF APPROVAL
No. ME0176

This is to certify that the referenced products of

SUNDART PRODUCTS LIMITED

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have been assessed against the requirements of the *warringtonfire – mideast certification scheme* and are approved for use within the scope of the test and/or assessment report(s) referenced.

Sundart Products Limited FD30 Lamcor Door Assemblies

30 Minutes Integrity Performance In Accordance With BS 476: Part 22: 1987

Assessment Report Reference	Valid Until
WFRC No. C82427 Plus all associated supplements	1 st May 2012
CERTIFIRE Certificate CF No. 408	30 th October 2010

Doorset configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single-Leaf, (Latched / Unlatched)	2600 (at 962 wide)	1210 (at 2066 high)	2.50
Single-Acting, Double-Leaf, (Latched / Unlatched)	2440 (at 1049 wide)	1210 (at 2115 high)	2.23
Double-Acting, Single and Double-Leaf, (Latched / Unlatched)	2600 (at 1181 wide)	1268 (at 2421 high)	3.07

(1) Under no circumstances must either the maximum height, maximum width or maximum area be exceeded without separate approval.

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Door Specification	
<p>Door frame – Softwood or Hardwood</p> <p>Mild/stainless steel clad hardwood*</p> <p>Mild/stainless steel (backfilled)</p>	<p>Minimum density 400kg/m³, minimum section size 70mm by 32mm plus stop of minimum size 12mm by 25 mm.</p> <p>Minimum density 500kg/m³, minimum section size 140mm by 40mm plus stop of minimum size 15mm by 78 mm (minimum density 400kg/m³. * hardwood except ash or iroko. Cladding of maximum 1mm thick Mild / stainless steel (interrupted at intumescent seal position), adhered to the door frame and stop using Lorient Polyproducts Limited Intumescent mastic.</p> <p>Backfilled with sand/cement mortar or concrete - Basic section sizes 70 mm deep by 30 mm wide, with a 15 mm integral doorstep.</p>
Door Gaps	Gaps between door and frame shall be 3mm ± 1mm. Leaf to cill gaps shall not exceed 10 mm.
Glazed Openings	Up to six glazed openings utilising the below approved glazing systems may be included up to a total maximum cut-out area of 0.65 m ² per door leaf. All apertures to be factory prepared. No site cutting of apertures is permitted.
Apertures	<p>Margins: No closer than 100 mm to the edge of the door leaf or between apertures</p> <p>Height: 900 mm maximum (cut-out size)</p> <p>Width: 600 mm maximum (cut-out size)</p>
Glazing systems	<p>The leaf/leaves may incorporate glazing systems subject to the following conditions:</p> <p>All apertures to be factory prepared. No site cutting of apertures permitted.</p> <p>Glass: 6 mm thick Georgian Wired Polished Plate</p> <p>Glazing Seal: 6 mm high (or equal to bead height) by 2 mm thick Lorient Polyproducts Limited Intumescent mastic</p> <p>Beads: i) Material: Hardwood ii) Dimensions: 20 mm high by 18 mm wide (minimum) iii) Density: 600 kg/m³ iv) Fixing: 40 mm long steel pins at 60 mm centres</p> <p>Any CERTIFIRE approved glazing system or system detailed within WFRC No. C82427 may be utilised subject to the conditions contained within the relevant certificate.</p>

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Supporting construction	The door assemblies are approved to be installed in brick, block, masonry, steel or timber stud of minimum thickness 70mm, providing at least 30 minutes fire resistance.																
Installation	<p>The opening may be lined with softwood or hardwood which shall be continuous and of minimum width, 70 mm. Each door frame jamb to be fixed through to the wall at not less than four points with steel or nylon frame fixings screwed and plugged at maximum 600mm centres and penetrating the wall to at least 50 mm. Architrave is optional with no restrictions on material, size or fixing.</p> <p>Door leaves may be trimmed to fit the frame by the following maximum amounts:</p> <table style="margin-left: 20px;"> <tr> <td>Stiles (each)</td> <td>3 mm</td> </tr> <tr> <td>Top</td> <td>3 mm</td> </tr> <tr> <td>Bottom</td> <td>5 mm</td> </tr> </table> <p>Note that the maximum door to frame and door to threshold gaps specified shall not be exceeded nor shall the door edge fitted with the CERTIFIRE label be trimmed since removal of the label will invalidate the certification.</p> <p>Fitting to be carried out in accordance with BS 8214: 1990, Table 3.</p>	Stiles (each)	3 mm	Top	3 mm	Bottom	5 mm										
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Hinges	<p>Hinges shall be CE marked for use on fire resisting timber doors, in addition to the specifications below:</p> <p>Number: 3 No. per leaf (minimum)</p> <p>Type: Steel butt, journal supported fixed or loose pin. Any washers or ball bearings to be of steel.</p> <p>Position: 250 mm from the head of the leaf, mid-height, and 250 mm from the base of the door leaf, additional hinges may be utilised between these positions.</p> <table style="margin-left: 20px;"> <tr> <td>i)</td> <td>Height</td> <td>-</td> <td>100 mm (± 10 mm)</td> </tr> <tr> <td>ii)</td> <td>Blade width</td> <td>-</td> <td>32-42 mm</td> </tr> <tr> <td>iii)</td> <td>Thickness</td> <td>-</td> <td>3 mm (± 0.5 mm)</td> </tr> <tr> <td>iv)</td> <td>Knuckle dia.</td> <td>-</td> <td>14 mm (± 1 mm)</td> </tr> </table> <p>Fixings: Steel screws, minimum 4 No. and no smaller than 5.0 mm diameter by 32 mm long.</p> <p>Intumescent: All hinge blades to be bedded onto 1 mm thick graphite based STJ 'F1' material.</p> <p>Any other CERTIFIRE approved hinges or hinges as detailed in WFRC No. C82427 may be utilised subject to the conditions contained within the relevant certificate.</p>	i)	Height	-	100 mm (± 10 mm)	ii)	Blade width	-	32-42 mm	iii)	Thickness	-	3 mm (± 0.5 mm)	iv)	Knuckle dia.	-	14 mm (± 1 mm)
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Intumescent Seals	<p>Seals may be interrupted at hinge and latch positions. Smoke seals may be included subject to the conditions contained within the relevant CERTIFIRE certificate for the smoke seal.</p> <table border="1" data-bbox="416 685 1423 1599"> <thead> <tr> <th>Doorset Configuration</th> <th>Frame</th> <th>Position</th> <th>Intumescent Specification</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Single-Acting, Single-Leaf</td> <td rowspan="2">Softwood/ Hardwood</td> <td>Head</td> <td>A single STJ 'S1' graphite based seal of dimensions 20mm wide by 4mm thick to be fitted centrally within the reveal to the frame.</td> </tr> <tr> <td>Vertical Edges</td> <td>A single STJ 'S1' graphite based seal of dimensions 10mm wide by 4mm thick to be fitted centrally within the reveal to the frame.</td> </tr> <tr> <td>Steel clad, hardwood core / Steel back-filled</td> <td>Head & Vertical Edges</td> <td>A single STJ 'S1' graphite based seal of overall dimensions 40mm wide by 6mm thick (intumescent material 38mm by 4mm) to be fitted adjacent to door stop position within the reveal to the frame.</td> </tr> <tr> <td rowspan="2">Double-Acting, Single-Leaf</td> <td rowspan="2">Softwood/ Hardwood</td> <td>Head</td> <td>A single STJ 'S1' graphite based seal of dimensions 30mm wide by 4mm thick to be fitted centrally within the reveal to the frame.</td> </tr> <tr> <td>Vertical Edges</td> <td>A single STJ 'S1' graphite based seal of dimensions 10mm wide by 4mm thick to be fitted centrally within the reveal to the frame.</td> </tr> <tr> <td rowspan="2">Double-Acting, Double-Leaf</td> <td rowspan="2">Softwood/ Hardwood</td> <td>Head & Hanging Edges</td> <td>A single STJ 'S1' graphite based seal of dimensions 30mm wide by 4mm thick to be fitted centrally within the frame.</td> </tr> <tr> <td>Meeting Edges</td> <td>3 No. STJ 'S1' graphite based seals of dimensions 10mm wide by 4mm thick to be fitted. (2 No. within one leaf and 1 No. within opposing leaf edge such that they are not directly opposing.</td> </tr> </tbody> </table>	Doorset Configuration	Frame	Position	Intumescent Specification	Single-Acting, Single-Leaf	Softwood/ Hardwood	Head	A single STJ 'S1' graphite based seal of dimensions 20mm wide by 4mm thick to be fitted centrally within the reveal to the frame.	Vertical Edges	A single STJ 'S1' graphite based seal of dimensions 10mm wide by 4mm thick to be fitted centrally within the reveal to the frame.	Steel clad, hardwood core / Steel back-filled	Head & Vertical Edges	A single STJ 'S1' graphite based seal of overall dimensions 40mm wide by 6mm thick (intumescent material 38mm by 4mm) to be fitted adjacent to door stop position within the reveal to the frame.	Double-Acting, Single-Leaf	Softwood/ Hardwood	Head	A single STJ 'S1' graphite based seal of dimensions 30mm wide by 4mm thick to be fitted centrally within the reveal to the frame.	Vertical Edges	A single STJ 'S1' graphite based seal of dimensions 10mm wide by 4mm thick to be fitted centrally within the reveal to the frame.	Double-Acting, Double-Leaf	Softwood/ Hardwood	Head & Hanging Edges	A single STJ 'S1' graphite based seal of dimensions 30mm wide by 4mm thick to be fitted centrally within the frame.	Meeting Edges	3 No. STJ 'S1' graphite based seals of dimensions 10mm wide by 4mm thick to be fitted. (2 No. within one leaf and 1 No. within opposing leaf edge such that they are not directly opposing.
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Overhead Closers	<p>All unlatched doorsets shall be fitted with a door closer covered by a Warringtonfire Mid-East or CERTIFIRE certificate or as detailed in WFRC No. C82427. Closers are not essential for fire performance if the doorset incorporates a latch and the leaf is in the closed and fully latched position. A self-closing device may, however, be required to be fitted to satisfy fire regulations and if fitted shall be a Warringtonfire Mid-East or CERTIFIRE approved product. Note: closers with mechanical hold-open mechanisms are not permitted to be used.</p>																									

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Other approved closers	<ul style="list-style-type: none"> ▪ Dorma TS71 ▪ Briton 121
Latches	<p>Where fitted, latches shall be CE marked for use on fire resisting timber doors, in addition to the specification below:</p> <p>Lock case dims: 150 mm long by 80 mm deep by 15 mm thick maximum</p> <p>Forend dims: 200 mm long by 25 mm wide maximum</p> <p>Strike plate: 130 mm long by 28 mm wide by 2 mm thick maximum</p> <p>Latch bolt: Steel or material with a melting point greater than 950^oC</p> <p>Handles: No restriction on type or material</p> <p>Position: Shall be fitted at a maximum height of 1025 mm from the spindle to the bottom of the door.</p> <p>Any other CERTIFIRE approved latches or latches as detailed in WFRC No. C82427 may be utilised subject to the conditions contained within the relevant certificate.</p>
Flush bolts	Mild or stainless steel flush bolts of maximum dimensions 300 mm high by 22 mm wide bedded onto 2 mm thick graphite based intumescent material.

Certification is awarded on the basis of initial type testing to BS 476: Part 22: 1987, initial inspection and ongoing surveillance of factory production control, and ongoing compliance with the scheme requirements including the use of labels supplied by **warringtonfire**. The currency of the certification may be verified at www.warringtonfire.net/mideast.

Signed for and on behalf of Warrington Certification



Sir Ken Knight
Chairman - Management Council

Issued: 29th June 2009
Valid to: 28th June 2014