DEANTA UK LTD - TYPE 5 - FD30 TIMBER DOOR ASSEMBLIES
CF5740 DATA SHEET

1. General

This approval relates to the use of the above doors with flush faces in providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) and 30 minutes integrity as defined in BS 476: Part 22.

Subject to the undermentioned conditions, the doors would be expected to meet the relevant requirements of BS 9999 for FD30 door assemblies when used in accordance with the provisions therein.

In recognition of this, the leaf carries a prefixed label on the top or hanging edge of the door, issued under the terms of the CERTIFIRE scheme. This label uniquely identifies the door leaf, the manufacture of which complies with a CERTIFIRE approved Quality Management System and is subject to on-going surveillance. This label shall not be removed.

It is emphasised that the certification is conditional upon the following instructions being complied with in their entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door. Door assemblies supplied pre-fitted with components by Deanta UK Limited may be considered to meet the requirements in respect of those items.

2. Door Leaf Dimensions

This approval is applicable to single-action, single and double-leaf, latched and unlatched, assemblies at leaf dimensions up to those detailed within Table 1 below:

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m^2)
Intumescent Option 1 Single-Acting, Single-Leaf Latched / Unlatched **Timber-based Frame**	2900 (at 1350 wide)	1350 (at 2900 high)	3.92
Intumescent Option 2 Single-Acting, Single-Leaf Latched / Unlatched **Timber-based Frame**	2427 (at 1100 wide)	1113 (at 2400 high)	2.67
Intumescent Option 3 Single-Acting, Double-Leaf Latched / Unlatched **Timber-based Frame**	2480 (at 1000 wide)	1033 (at 2400 high)	2.48
Intumescent Option 4 Single-Acting, Double-Leaf Latched / Unlatched **Timber-based Frame**	2141 (at 950 wide)	968 (at 2101 high)	2.03
Intumescent Option 5 Single-Acting, Single-Leaf Latched / Unlatched **Timber-based Frame**	2164 (at 928 wide)	984 (at 2040 high)	2.01

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m^2)
Intumescent Option 6 Single-Acting, Single-Leaf Latched **Hardwood Frame**	2206 (at 927 wide)	1002 (at 2040 high)	2.04
Intumescent Option 7 Single-Acting, single-Leaf Latched / Unlatched **Timber-based Frame**	2200 (at 950 wide)	950 (at 2200 high)	2.09
Intumescent Option 8 Single-Acting, Double-Leaf Latched / Unlatched **Timber-based Frame**	2200 (at 950 wide)	950 (at 2200 high)	2.09
Intumescent/seal Option 9 'Malmo' design Single-acting, Single-leaf door assemblies Latched / Unlatched **Timber-based Frame**	2200 (at 950 wide)	950 (at 2200 high)	2.09

(1) Under no circumstances must the maximum height, maximum width or maximum area be exceeded without separate CERTIFIRE approval.
(2) All timber framed door assembly configurations may incorporate overpanels which include a transom rail as detailed within data sheet.
(3) Secondary leaves for unequal pairs shall be a min 50% of the primary leaf width tested.
(4) Both leaves of pairs are to be of identical construction, including core material, facing and thickness

3. Door Frame

To be any of the following:-

Deanta veneered engineered softwood, FR MDF & Plywood frame (Door assemblies including single point locks / latches only)	i) Density: ii) Dimensions: iii) Door Stop:	408 kg/m^3 min (softwood) 75 mm by 30 mm min. 12 mm deep pinned, screwed, or rebated from solid softwood or hardwood stop (408 kg/m^3 min) or MDF stop (700 kg/m^3 min) Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.

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MDF (Door assemblies including single point locks / latches only)	i) Density: ii) Dimensions: iii) Door Stop:	700 kg/m^3 min 75 mm by 25 mm min. 12 mm deep pinned, screwed, or rebated from solid softwood or hardwood stop (408 kg/m^3 min) or MDF stop (700 kg/m^3 min) Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
Softwood or Hardwood (Door assemblies including single point locks / latches only)	i) Density: ii) Dimensions: iii) Door Stop:	408 kg/m^3 min 70 mm by 30mm min. 12 mm deep pinned, screwed, or rebated from solid softwood or hardwood (408 kg/m^3 min) or MDF stop (700 kg/m^3 min) Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
Hardwood – For door assemblies including Multipoint locks	i) Density: ii) Dimensions: iii) Door Stop:	610 kg/m^3 min 70 mm by 30 mm min. 12 mm deep pinned, screwed, or rebated from solid hardwood stop (610 kg/m^3 min) or MDF stop (700 kg/m^3 min) Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
Jointing:	Butt joints, mortice and tenon, mitred or half lapped joints with the head screw fixed to the jambs using two steel screws	
Door to frame gaps:	Not to exceed 4 mm except at threshold where up to 8 mm is permitted and 4 mm at the meeting stiles	

4. Overpanels –

Overpanels may be included up to a maximum height of 1000 mm when used with a softwood/hardwood transom rail.

Overpanels will include an identical perimeter intumescent fire seals to those included in frame perimeter and a minimum 44 mm thick transom rail (excluding stops).

5. Glazed Fanlights and Sidelights

Deanta Fanlights and Sidelights will comply with the following specification details:

Fanlight Framing*:	
Manufacturer:	DEANTA UK LTD
Reference:	Head and bottom transom
Material:	Softwood
Density:	520 kg/m^3 minimum

Dimensions:	
Head and bottom transom	Minimum 95 mm deep x 59 mm high with 40 x 16 mm rebate (43 mm section within rebate)
Vertical jambs/mullions	Minimum 95 mm deep x 51 mm wide with 40 x 16 mm rebate (35 mm section within rebate)
Assembly Method:	Rebated corner joint, screwed and glued using 2No 4 mm Ø by 60 mm long woodscrews at 45 mm centres, and PVA adhesive.

Door Height Sidelight Framing*:	
Manufacturer:	DEANTA UK LTD
Reference:	Head and bottom transom
Material:	Softwood
Density:	520 kg/m^3 minimum
Dimensions:	
Head and bottom transom	Minimum 95 mm deep x 59 mm high with 40 x 16 mm rebate (43 mm high section within rebate)
Vertical jamb – wall side	Minimum 95 mm deep x 49 mm wide with 40 x 16 mm rebate (33 mm wide section within rebate)
Vertical mullion – **Hinge Jamb of door frame only**	Minimum 95 mm deep x 49 mm wide with 40 x 16 mm rebate (33 mm wide section within rebate)
Vertical mullion – **Lock Jamb of door frame**	Minimum 95 mm deep x 59 mm wide with 40 x 16 mm rebate (33 mm wide section within rebate)
Assembly Method:	Rebated corner joint, screwed and glued using 2No 4 mm Ø by 60 mm long woodscrews at 45 mm centres, and PVA adhesive.

Full Height Sidelight Framing*:	
Manufacturer:	DEANTA UK LTD
Reference:	Head and bottom transom
Material:	Softwood
Density:	520 kg/m^3 minimum
Dimensions:	
Head and bottom transom	Minimum 95 mm deep x 59 mm high with 40 x 16 mm rebate (43 mm high section within rebate)
Vertical jamb – wall side	Minimum 95 mm deep x 49 mm wide with 40 x 16 mm rebate (33 mm wide section within rebate)
Vertical mullion – **Lock or Hinge Jamb of door frame**	Minimum 95 mm deep x 59 mm wide with 40 x 16 mm rebate (43 mm wide section within rebate)
Assembly Method:	Rebated corner joint, screwed and glued using 2No 4 mm Ø by 60 mm long woodscrews at 45 mm centres, and PVA adhesive.

*In all of the above assemblies the door frame shall be a separate softwood frame with a minimum density of 520 kg/m^3 and shall incorporate a 15 x 4 mm Therm-A-Seal intumescent seals centrally in both the abutting door frame and fanlight/screen sections.

Door frame and fanlight/screen sections shall be fixed to each other using 5 mm Ø by 70 mm long woodscrews fixed from alternating sides at maximum 300 mm centres.

Toplight / Sidelight – 7 mm Pyrodur 30-105 - Non-insulated Glass			
Supplier:	Pilkington		
Configuration:	**Pyrodur 30-105**		
Thickness:	7 mm		
Maximum pane dimensions:	**Max. Height (mm)**	**Max. Width (mm)**	**Max. Area (m^2)**
Fanlight	520 (at 1888 wide)	2266 (at 433 high)	0.98
Door Height Sidelight	2384 (at 898 wide)	1078 (at 1987 high)	2.14
Full Height Sidelight	3011 (at 530 wide)	636 (at 2509 high)	1.6
Nominal edge coverage:	13.5 mm +/- 1.5 mm		
Setting Blocks:			
Reference:	Hardwood minimum 640 kg/m^3		
Dimensions:	50 mm x 3mm x 7 mm (to provide 3 mm packer depth)		
Location:	2No. at bottom edge and 1No. per side		
Glazing System:			
Supplier:	Sealmaster		
Description:	15 x 3 mm Intumescent Foam Glazing Tape		
Reference:	CF5645		
Dimensions:	10 mm x 3 mm		
Location:	Self-adhesive, applied to rebate and glazing bead		

Alternatively, any CERTIFIRE approved glazing systems may be used providing the specification and installation details given in the appropriate certification documents are adhered to.

6. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of minimum thickness 75 mm, providing at least 30 minutes fire resistance. Where stud partitions are used these should be suitably constructed to provide a secure fixing for the door assemblies as recommended by the partition manufacturer.

Where stud partitions are used these should be suitably constructed to provide a secure fixing for the door assemblies as recommended by the partition manufacturer.

Where brick, block, masonry walls are plasterboard faced, the plasterboard adjacent to the door assembly shall be mechanically fixed to ensure that it remains in-situ for the required integrity period.

7. Installation

The opening may be lined with softwood or hardwood which shall be continuous and of minimum width, 75mm. Each door frame jamb to be fixed through to the wall at not less than four points with steel or nylon fixings at maximum 600 mm centres penetrating the wall to at least 50 mm. Timber based architraves are optional with no restrictions on material, size or fixing.

Door assemblies shall be installed as stated in BS 8214. Suitable CERTIFIRE approved lineal gap sealing systems may also be utilised to protect the frame/supporting construction gap, subject to the conditions contained within the relevant certificate.

Additionally, the frame/supporting construction gap may be protected by 'Fire and Acoustic Seals Ltd FD60 fire door foam'. In this application the frame/supporting construction gap shall be 3 mm to 6 mm and the minimum frame depth 100 mm. The foam shall fill the entire void for the full frame depth. Additional architrave protection is not required in this application.

The use of third party accredited installers provides a means of ensuring that installations have been conducted by knowledgeable contractors, to appropriate standards, thereby increasing the reliability of the anticipated performance in fire.

Door leaves may be trimmed to fit the frame, providing a minimum lipping thickness of 3 mm is maintained to all edges.

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.

The labelled edge may be subjected to minor 'shooting-in', providing the label is not damaged or removed in the process, and the amount of material removed does not exceed that stated previously.

8. Glazed Apertures

All apertures to be factory prepared by Deanta UK Ltd, or a CERTIFIRE approved Licensed Door Processor. No site cutting of apertures permitted as this will invalidate the certification.

Additionally, the doors may incorporate CERTIFIRE approved glazing systems subject to the conditions contained within the relevant CERTIFIRE certificate (e.g. maximum size associated with glass, system, edge cover, aperture lining requirements, etc.), and the maximum pane dimensions given below (whichever is smaller):

Aperture dimensions: Doors may incorporate one or more vision panels to the maximum sizes identified in the table below:

Area: Maximum total glazed area of 1.42 m^2 per leaf (cut-out size)

Margins: Minimum 119 mm lock/hanging edge
Minimum 128 mm top edge
Minimum 47 mm horizontal margin between apertures
Minimum 87 mm vertical margin between apertures

Maximum Permitted Aperture Dimensions		
Max. Height (mm)	**Max. Width (mm)**	**Max. Area (m^2)**
2155 (at 688 wide)	849 (at 1747 high)	1.48

Note: Under no circumstances must the maximum height, maximum width or maximum area be exceeded without separate CERTIFIRE approval.

Hardwood or non-combustible setting blocks will be used to establish the correct edge cover.

Non-insulating glasses: 7 mm thick Pilkington Pyrodur 30-105 glass or other CERTIFIRE approved glass and glazing systems, subject to the conditions of the glass/system certificate.

Intumescent System	Bead Dimensions	Bead Material/ Density	Fixings	Rectilinear Apertures		Max. Dia.	Max. Area (m^2)
				Max. Height (mm)	Max. Width (mm)		
Lorient System 36 PLUS – No liner	15 mm high by 17 mm wide square flushbead (12 mm +2/-1 mm edge cover)	MDF min 700 kg/m^3	40 mm long pins or Tacwise air fired brads or No.6 screws. 50 mm from each corner and a maximum of 150 mm centres. Fitted at a 35^0 to the face of the glass	2010 (at 657 wide)	767 (at 1723 high)	N/A	1.32
Sealmaster 15 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	25 mm high by 22 mm wide square bolection bead including 5 mm x 5 mm bolection (20 mm +2/-1 mm edge cover)	Hardwood min 640 kg/m^3	40 mm long pins or Tacwise air fired brads or No.6 screws. 50 mm from each corner and a maximum of 100 mm centres. Fitted at a 35^0 to the face of the glass	1927 (at 506 wide)	607 (at 1606 high)	N/A	0.98
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	21 mm high by 25 mm wide bolection bead splayed at 10-15^O, including 8 mm high x 9 mm wide bolection (10 mm +/- 0.5 mm edge cover)	MDF min 700 kg/m^3 **Bead shall be primed /painted only; veneered beads are not permitted.**	40 mm long pins or Tacwise air fired brads or No.6 screws. 50 mm from each corner and a maximum of 100 mm centres. Fitted at a 30-35^0 to the face of the glass	1927 (at 506 wide)	607 (at 1606 high)	N/A	0.98

Non-insulating glasses: 7 mm thick Pyroguard EW30 IMPACT glass or other CERTIFIRE approved glass and glazing systems, subject to the conditions of the glass/system certificate.

Intumescent System	Bead Dimensions	Bead Material/ Density	Fixings	Rectilinear Apertures		Max. Dia.	Max. Area (m^2)
				Max. Height (mm)	Max. Width (mm)		
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	20 mm high x 20 mm wide bolection square bead, including 5 mm high x 5 mm wide bolection (11 mm +1 / - 1 mm edge cover)	MDF min 700 kg/m^3 Bead (painted)	1.6 mm dia. x 40 mm or 2mm dia. x long pins or air fired brads, or No. 8 x 40 mm long screws. 40 mm from each corner and a maximum of 150 mm centres. Fitted at a 45^0 to the face of the glass	1680 (at 506 wide)	610 (at 1393 high)	N/A	0.85
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	20 mm high x 20 mm wide bolection bead splayed at 15^O, including 5 mm high x 5 mm wide bolection (11 mm +1 / - 1 mm edge cover)	MDF min 700 kg/m^3 Bead (painted)	1.6 mm dia. x 50 mm long pins or air fired brads. 50 mm from each corner and a maximum of 150 mm centres. Fitted at a 45^0 to the face of the glass	1680 (at 506 wide)	610 (at 1393 high)	N/A	0.85

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Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	20 mm high x 20 mm wide bolection square bead, including 5 mm high x 5 mm wide bolection (11 mm +1 / - 1 mm edge cover)	Hardwood min 700 kg/m^3 Bead	1.6 mm dia. x 40 mm or 2mm dia. x long pins or air fired brads, or No. 8 x 40 mm long screws. 40 mm from each corner and a maximum of 150 mm centres. Fitted at a 45^0 to the face of the glass	1846 (at 710 wide)	760 (at 1724 high)	N/A	1.31
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	20 mm high x 20 mm wide bolection bead splayed at 20^O, including 5 mm high x 5 mm wide bolection (11 mm +1 / - 1 mm edge cover)	Hardwood min 700 kg/m^3 Bead	1.6 mm dia. x 50 mm long pins or air fired brads. 50 mm from each corner and a maximum of 150 mm centres. Fitted at a 45^0 to the face of the glass	1846 (at 710 wide)	760 (at 1724 high)	N/A	1.31

Non-insulating glasses: 7 mm thick Pyroguard Advance EW30/7-1 glass or other CERTIFIRE approved glass and glazing systems, subject to the conditions of the glass/system certificate.

Intumescent System	**Bead Dimensions**	**Bead Material/ Density**	**Fixings**	**Rectilinear Apertures**		**Max. Dia.**	**Max. Area (m^2)**
				Max. Height (mm)	**Max. Width (mm)**		
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	13 mm high x 16 mm wide square flush bead (10 mm +/- 0.5 mm edge cover)	MDF min 700 kg/m^3 Bead (painted or veneered)	40 mm long pins or air fired brads or No.6 screws. 50 mm from each corner and a maximum of 150 mm centres. Fitted at a 30-35^0 to the face of the glass	2155 (at 688 wide)	849 (at 1747 high)	N/A	1.48
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape – No liner	21 mm high x 23.5 mm wide bolection bead splayed at 10-15^O, including 8 mm high x 8 mm wide bolection (10 mm +/- 0.5 mm edge cover)	MDF min 700 kg/m^3 Bead (painted or veneered)	40 mm long pins or air fired brads or No.6 screws. 50 mm from each corner and a maximum of 150 mm centres. Fitted at a 30-35^0 to the face of the glass	2155 (at 688 wide)	849 (at 1747 high)	N/A	1.48

Non-insulating glasses: 11 mm thick Pyrodur EW30-203 glass or other CERTIFIRE approved glass and glazing systems, subject to the conditions of the glass/system certificate.

Intumescent System	Bead Dimensions	Bead Material/ Density	Fixings	Rectilinear Apertures		Max. Dia.	Max. Area (m^2)
				Max. Height (mm)	Max. Width (mm)		
Sealmaster 10 x 3 mm Intumescent Closed Cell Foam Glazing Tape with Sealmaster FireGlaze compound to the perimeter of the glass	21 mm high x 22 mm wide bolection bead splayed at 10-15^{O}, including 8 mm high x 9 mm wide bolection (10 mm +/- 0.5 mm edge cover)	MDF min 700 kg/m^3 Bead (painted or veneered)	Beads bonded to door with Everbuild 502 adhesive and additionally fixed 50 mm long pins or air fired brads or No.6 screws. 50 mm from each corner and a maximum of 100 mm centres. Fitted at a 30-35^{0} to the face of the glass	2113 (at 630 wide)	788 (at 1690 high)	N/A	1.33

Insulating glasses: CERTIFIRE approved glass subject to the conditions of the glass certificate.

9. Intumescent Seals

CERTIFIRE certificated intumescent seals are required to be fitted to these doors as below.

For door assemblies to BS476: Part 22 – classified as FD30 – Timber-based frame

Door assembly Configuration*	Frame material	Position	Required Intumescent Protection
Intumescent Option 1 Single-acting, Single-leaf door assemblies latched / unlatched Max 2900 mm high and 1350 mm wide (Max 3.92m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Lorient 617 - positioned central to door thickness
		Vertical edges	Single 15 mm wide by 4 mm thick Lorient 617 - positioned central to door thickness
Intumescent Option 2 Single-acting, Single-leaf door assemblies latched / unlatched Max 2427 mm high and 1113 mm wide (Max 2.67m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Pyroplex FO8700 - positioned central to door thickness
		Vertical edges	Single 15 mm wide by 4 mm thick Pyroplex FO8700 - positioned central to door thickness
Intumescent Option 3 Single-acting, double-leaf door assemblies latched / unlatched Max 2480 mm high and 1033 mm wide (Max 2.48m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Lorient 617 - positioned central to door thickness
		Hanging edges	Single 15 mm wide by 4 mm thick Lorient 617 (positioned central to door thickness)
		Meeting edges	Primary leaf only – 2No. 10 mm by 4 mm thick Lorient 617 LP1004 - positioned central to door thickness and 10 mm apart

Intumescent Option 4 Single-acting, double-leaf door assemblies latched / unlatched Max 2141 mm high and 968 mm wide (Max 2.03m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Lorient 617 (positioned central to door thickness)
		Hanging edges	Single 15 mm wide by 4 mm thick Lorient 617 (positioned central to door thickness)
		Meeting edges	Primary and Secondary leaf - Single 15 mm by 4 mm thick Lorient 617 in each meeting edge (positioned central to door thickness - opposing)
Intumescent Option 5 Single-acting, Single-leaf door assemblies latched / unlatched Max 2164 mm high and 984 mm wide (Max 2.01m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Intumescent Seals Ltd Therm-A-Seal or Therm-A-Blade (positioned 16 mm from opening face)
		Vertical edges	Single 15 mm wide by 4 mm thick Intumescent Seals Ltd Therm-A-Seal or Therm-A-Blade (positioned 16 mm from opening face)
Intumescent Option 6 Single-acting, Single-leaf door assemblies latched Max 2206 mm high and 1002 mm wide (Max 2.04m^2)	Hardwood -Min. 640 kg/m^3	Head	2No. 10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals – the set 5 mm from the opening face of the frame and 25 mm from the opening face of the frame
		Vertical edges	2No. 10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals – the set 5 mm from the opening face of the frame and 25 mm from the opening face of the frame
Intumescent Option 7 Single-acting, single-leaf door assemblies latched/unlatched Max 2200 mm high and 950 mm wide (Max 2.09m^2)	Timber-based	Head	2No.10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals - positioned central to door thickness and 10 mm apart.
		Vertical edges	2No.10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals - positioned central to door thickness and 10 mm apart.
Intumescent Option 8 Single-acting, double-leaf door assemblies latched/unlatched Max 2200 mm high and 950 mm wide (Max 2.09m^2)	Timber-based	Head	2No.10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals - positioned central to door thickness and 10 mm apart.
		Vertical edges	2No.10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal perimeter intumescent fire seals - positioned central to door thickness and 10 mm apart.
		Meeting edges	Primary leaf - 2No. 10 x 4 mm ISL Therm-A-Blade or 10 x 4 mm ISL Therm-A-Seal intumescents (positioned centrally within the leaf thickness and 7 mm apart)
Intumescent/seal Option 9 'Malmo' design Single-acting, Single-leaf door assemblies latched / unlatched Max 2200 mm high and 950 mm wide (Max 2.09m^2)	Timber-based	Head	Single 15 mm wide by 4 mm thick Intumescent Seals Ltd Therm-A-Seal or Therm-A-Blade (positioned 16 mm from opening face)
		Vertical edges	Single 15 mm wide by 4 mm thick Intumescent Seals Ltd Therm-A-Seal or Therm-A-Blade (positioned 16 mm from opening face)
		Bottom edge	**Sealmaster DP2712 or Lorient LAS8001 dropseal

*See Table 1 for size restrictions
** The dropseals identified must be fitted in 'Malmo' doors Option 9 configurations.

Latched or unlatched, single acting, single-leaves with maximum leaf dimensions 2040 mm high by 926 mm wide and of a minimum thickness of 43 mm may utilise alternative Intumescents in-line with the relevant CERTIFIRE approval for the proposed intumescent seal (excluding doorsets Yale 3 Deadbolt Lockmaster and Winkhaus AV2-F multipoint locks). All seals to be CERTIFIRE approved (to Technical Schedule 35).

All other door assembly configurations should include the specific intumescent size type and location as specified within the data sheet.

Intumescent seals may be interrupted at the hinge and latch positions.

Smoke seals may be included subject to the conditions contained within the relevant CERTIFIRE certificate for the smoke seal.

10. Hinges

Hinges shall be CE marked against EN 1935 for use on 30 minute timber fire door assemblies and have a grade suitable for the size/weight of door required.

Quantity:	Minimum three hinges	
Type:	Steel lift off or butt hinges.	
Positions:*	Top hinge:	Maximum 200 mm from head of leaf to top hinge
	Bottom hinge:	Maximum 200 mm from bottom of leaf to bottom hinge
	Third hinge:	• Positioned equidistant between the top and bottom hinges (±20 mm). • Positioned maximum 500 mm below the top hinge
Dimensions:	Height:	98 - 122 mm
	Blade width:	28 - 37 mm
	Thickness:	3 mm (±0.5 mm)
	Knuckle dia.:	14 mm (+1 mm/- 3 mm)
Fixings:	Minimum 4No. steel screws, No.8 by 25 mm long	
Intumescent protection**	None required	

10A. Eclipse 14858/14860 Grade 11 ball bearing hinges

Quantity:	Minimum three hinges	
Type:	Steel ball bearing butt hinges.	
Positions:*	Top hinge:	Maximum 200 mm from head of leaf to top hinge
	Bottom hinge:	Maximum 200 mm from bottom of leaf to bottom hinge
	Third hinge:	• Positioned equidistant between the top and bottom hinges (±20 mm). • Positioned maximum 500 mm below the top hinge
Dimensions:	Height:	102 mm
	Blade width:	30 mm
	Thickness:	3 mm
	Knuckle dia.:	14 mm
Fixings:	Minimum 4No. steel screws, minimum 4.4 mm dia. by 30 mm long	

Intumescent protection**	None required

10B. Eurospec HIN16300 adjustable hinges

Quantity:	Minimum three hinges	
Type:	Steel adjustable hinges.	
Positions:*	Top hinge:	Maximum 187 mm from head of leaf to top hinge
	Bottom hinge:	Maximum 205 mm from bottom of leaf to bottom hinge
	Third hinge:	Positioned equidistant between the top and bottom hinges.
Dimensions:	Height:	Frame blade - 65 mm Door blade - 30 mm
	Blade width:	Frame blade - 35 mm Door blade - 30 mm
	Thickness:	2.5 mm
	Knuckle dia.:	11.4 mm
Fixings:	Door - 3No. 4.5 mm dia. by 25 mm long. Frame - 3No. 4.5 mm dia. by 50 mm long	
Intumescent protection**	None required	

* The datum in all cases is the centreline of the hinge.

** The hinge specification above overrides any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified in the table above, specifically maximum dimensions and material.

Any other CERTIFIRE approved hinge may be fitted, providing the hinge dimension are no greater than 10% in blade width and 25% in blade height from that approved in the table above (excluding the tolerances stated). Where the Certifire approved hinge exceeds the specification given in the table above, the minimum requirement for intumescent protection to the hinges, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the hinge manufacture's CERTIFIRE certificate shall apply.

Double-action hinges are not permitted for use in conjunction with CERTIFIRE approved door assemblies, as they are not a controlled self-closing device, and therefore do not comply with Building regulation requirements.

Projection hinges and rising / falling butt hinges are not permitted for use in conjunction with CERTIFIRE approved door assemblies.

11. Locks and Latches

Locks / latches are not necessary in all application – see Table 1 above. When fitted locks / latches shall be CE marked in accordance with BS EN 12209 or BS EN 179 for use on 30 minute timber fire doors.

11a. Single-action, single- leaf doors only

Upright mortice locks & Tubular mortice locks/latches with automatic (sprung) latch bolt, or mechanical deadbolt

Max. case dimension:	110 mm high by 81 mm deep by 15 mm wide
Max. forend dimension:	165 mm high by 27 mm wide
Max. keep dimension:	180 mm high by 30 mm wide (excluding latch plate lip). Keep/strikeplate may include a steel backbox
Latchbolt material:	Brass or material with a melting point ≥ 800°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Latch/lock cases, forend and strike plate to be bedded onto 1 mm of Interdens sheet material. Alternatively Latch/lock cases, forend and strike plate may be bedded onto 1 mm of Therm-A-Strip mono ammonium phosphate-based sheet material.

Upright mortice DIN locks/latches with automatic (sprung) latch bolt, and/or deadlock

Max. case dimension:	165 mm high by 85 mm deep by 16 mm wide
Max. forend dimension:	235 mm high by 24 mm wide x 3 mm thick
Max. keep dimension:	170 mm high by 24 mm wide (excluding latch plate lip).
Latchbolt material:	Steel or material with a melting point ≥ 950°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Latch/lock cases, forend and strike plate to be bedded onto 1 mm of Interdens sheet material. Alternatively, 1 mm Therm-A-Strip Mono Ammonium Phosphate based sheet material to both faces of the case, 1 mm Therm-A-Flex graphite based sheet material to the case edges, and 2mm Therm-A-Flex graphite based sheet material behind the forend and strikeplate.

11b. Single-action, single- leaf & single-action, double- leaf doors

Alternative - Tubular mortice locks only

Max. case dimension:	22 mm high by 80 mm deep by 15 mm wide
Max. forend dimension:	58 mm high by 26 mm wide x 2.5 mm
Max. keep dimension:	57 mm high by 36 mm wide (excluding latch plate lip). Keep/strikeplate
Latchbolt material:	Brass or material with a melting point ≥ 800°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Not Required

Upright mortice locks & Tubular mortice locks/latches

Max. case dimension:	110 mm high by 80 mm deep by 15 mm wide
Max. forend dimension:	155 mm high by 22 mm wide
Max. keep dimension:	65 mm high by 25 mm wide (excluding latch plate lip).
Latchbolt material:	Brass or material with a melting point ≥ 800°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Latch/lock cases, forend and strike plate to be bedded onto 1 mm of Interdens sheet material. Alternatively latch cases, forend and strike plate to be bedded onto 1 mm of Therm-A-Strip graphite-based sheet material.

Note: This lock size is only approved for use in single-action, double- leaf doors where the primary leaf incorporates 2No. 10 mm by 4 mm thick Lorient LP1004 or ISL Therm-A-Blade/Seals (positioned as detailed in section 9).

Upright mortice locks & Tubular mortice locks/latches

Max. case dimension:	110 mm high by 80 mm deep by 15 mm wide
Max. forend dimension:	60 mm high by 27 mm wide
Max. keep dimension:	60 mm high by 27 mm wide
Latchbolt material:	Brass or material with a melting point ≥ 800°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection 1*	Latch cases, forend and strike plate to be bedded onto 1 mm of Interdens.

Intumescent: protection 2*	Latch cases and forend to be bedded onto 0.8 mm and the keep, strike plate bedded on 1 mm Smith & Locke graphite-based sheet material; in addition, the base of the latchbolt recess is to include 1 mm Smith & Locke graphite-based sheet material.

Upright mortice DIN locks/latches

Max. case dimension:	165 mm high by 85 mm deep by 16 mm wide
Max. forend dimension:	235 mm high by 24 mm wide x 3 mm thick
Max. keep dimension:	170 mm high by 24 mm wide (excluding latch plate lip).
Latchbolt material:	Steel or material with a melting point $\geq$ 950°C
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Latch/lock cases, forend and strike plate to be bedded onto 1 mm of Interdens sheet material. Alternatively, 1 mm Therm-A-Strip Mono Ammonium Phosphate based sheet material to both faces of the case, 1 mm Therm-A-Flex graphite based sheet material to the case edges, and 2mm Therm-A-Flex graphite based sheet material behind the forend and strikeplate.

* This specification overrides any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified above, specifically maximum dimensions and material.

Any other CERTIFIRE approved lock/latch may be fitted, providing no lock/strikeplate dimension is more than 25% of that approved in the table above and subject to the conditions contained within the relevant certificate. Where the Certifire approved lock/latch exceeds the specification given in the table above, the minimum requirement for intumescent protection to the locks, latches and strikeplates, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the lock/latch manufacture's CERTIFIRE certificate shall apply.

- Recessing for locks and keeps shall result in a tight fit, allowing for the intumescent protection specified.

- No restriction on type and material of face fixed mechanical lever handles and knobs providing these are wholly surface mounted (with the exception of the spindle and fixing holes) and the spindle hole is a maximum 16 mm in diameter.

- **Only Euro profile single cylinder, double cylinder or cylinder / thumbturns are acceptable, only where intumescent protection is incorporated to both faces of the lock case**. The Euro profile cylinder recess in the door face shall follow the shape of the cylinder and result in a tight fit.

- The use of mechanical locks in conjunction with electronic handles must be either CERTIFIRE approved for the application or subject to specific appraisal.

Salto XS4 Original handles

- Approved for use with any currently approved upright mortice lock/latch.
- Cylinders shall not be fitted
- The upright mortice locks be protected by intumescent sheet material identified above.
- Any cylinder hole within the door shall be lined with 2 mm Sealmaster Therm-A-Flex graphite-based intumescent sheet material

11a. <u>Multipoint locks</u>

Yale 3 Deadbolt Lockmaster

Single-action, single- leaf doors only		
Frames to be Hardwood only; with a minimum density of 610 kg/m^3		
Option 1 (Lorient 15 x 4 mm 617 intumescent seals) only		
Multipoint locks are required to be latched at the centre latchbolt only.		
Dimensions:	Lock Forend:	1770 mm high by 20 mm wide by 3 mm thick
	Centre lock case:	200 mm high by 60 mm wide by 14 mm thick
	Top & Bottom Case:	120mm high by 40 mm wide by 14 mm thick
	Centre Strike Plate:	210 mm high by 20 mm wide (excluding latchbolt lip) by 2.5 mm thick
	Top & Bottom Keep:	120 mm high by 20 mm wide (excluding latchbolt lip) by 2.5 mm thick
Position:	Max. 1050 mm from bottom of door to centreline of the spindle.	
Cylinder:	Euro profile single cylinder, double cylinder or cylinder / thumbturn CE marked in accordance with BS EN 1303 as suitable for use on FD30 fire resistant assemblies.	
Intumescent protection:	Centre, Top & Bottom Lock cases:	All 3No lock cases shall incorporate 1 mm thick Lorient Polyproducts MAP to the full face/both sides. In addition 1 mm thick Flexifire graphite sheet material shall be included to the top, bottom and back edge of the all 3 lock cases.
	Centre, Top & Bottom Keeps:	All keeps to be bedded on 1 mm thick Flexifire graphite sheet material.

Winkhaus AV2-F

Single-action, single- leaf doors only		
Frames to be Hardwood only; with a minimum density of 640 kg/m^3		
Option 6 (ISL 10 x 4 mm Therm-A-Blade and 10 x 4 mm Therm-A-Seal) only		
Multipoint locks are required to be latched and bolted (auto-bolting unit).		
Dimensions:	Lock Forend:	1770 mm high by 20 mm wide by 3 mm thick
	Centre lock case:	186 mm high by 72 mm wide by 16 mm thick
	Top & Bottom Case:	113 mm high by 41 mm wide by 15 mm thick
	Centre Strike Plate:	251 mm high by 24 mm wide (excluding latchbolt lip) by 4.5 mm thick
	Top & Bottom Keep:	153 mm high by 24 mm wide (excluding latchbolt lip) by 2.5 mm thick
Position:	Max. 1050 mm from bottom of door to centreline of the spindle.	
Cylinder:	Euro profile cylinder / thumbturn CE marked in accordance with BS EN 1303 as suitable for use on 30 fire resistant assemblies.	

Intumescent protection:	Centre, Top & Bottom Lock cases:	None
	Centre, Top & Bottom Keeps:	Winkhaus AV2 intumescent lock kit consisting of a 0.8 mm graphite sheet material included to all faces of the latch case/hook cases (top and bottom) in the door, and behind the strikeplate and hook keep faces. Additionally the Therm-A-Blade intumescent seal positioned towards the opening face of the frame shall bypass all 3 strikeplates/keeps by 5 mm, except at the latchbolt lip.
	Handle backplate	32 mm x 255 mm Winkhaus AV2 intumescent lock kit consisting of a 0.8 mm graphite sheet material included behind both handle backplates.

- Recessing for locks and keeps shall result in a tight fit, allowing for the intumescent protection specified.
- No restriction on type and material of face fixed mechanical lever handles and knobs providing these are wholly surface mounted (with the exception of the spindle and fixing holes) and the spindle hole is a maximum 16 mm in diameter.
- The Euro profile cylinder recess in the door face shall follow the shape of the cylinder and result in a tight fit.

Salto XS4 Original handles

- Approved for use with any currently approved multi-point locks.
- Cylinders shall not be fitted
- The upright mortice locks be protected by intumescent sheet material identified above.
- Any cylinder hole within the door shall be lined with 2 mm Sealmaster Therm-A-Flex graphite-based intumescent sheet material

12. Self-Closing Devices

All doors are required to be fitted with a CERTIFIRE certificated self-closing device. The exceptions are doors to cupboards and service ducts, when kept locked shut, in accordance with the Building Regulations. Building Regulations may also identify locations within domestic environments where self-closing devices are not mandatory. Note: closers with mechanical hold-open mechanisms are not permitted to be used.

The closers shall have a power rating appropriate to the leaf sizes, subject to the closer having the ability to close the door from any angle and against any latch and/ or seals fitted. The closer shall have the ability to provide a minimum size 3 closing force. Where doors are unlatched a minimum size 3 shall be maintained.

Closers shall be CE Marked against EN 1154 and categorised as grade 1 – suitable for use on fire / smoke door assemblies.

Uninsulated glass shall not be included directly below the body of surface mounted overhead closers.

12a. Surface mounted overhead closers

Any CERTIFIRE approved surface mounted overhead closer may be fitted, subject to the conditions contained within the relevant certificate.

12c. Concealed overhead closers

Rutland ITS.11204

Frames to be Softwood or Hardwood only; with a minimum density of 510 kg/m^3		
Dimensions:	Body:	210/243 mm long x 32 mm wide x 55 mm deep body with 292 mm long x 32 mm wide x 3 mm thick forend
	Non-hold open single-action guiderail with lever arm	29 mm wide x 19 mm high x 460 mm long.
	Frame head:	Minimum thickness of 30 mm (excluding any stop).
Position:	Closer body shall be mounted in the top edge of the door only, with the guiderail fitted in the frame head.	
Intumescent protection:	Closer body	2 mm thickness of graphite-based intumescent sheet material (ref. IP.114), exposed over the entire forend and recess in the top edge of the door.
	Guiderail	2 mm thickness of graphite-based intumescent sheet material (ref. IP.114), to the vertical sides and edges only of the guiderail.

Synergy S1000

Frames to be Softwood or Hardwood only; with a minimum density of 510 kg/m^3		
Dimensions:	Body:	242 + 33.5 mm long x 33 mm wide x 46 mm deep body with 338 mm long x 33 mm wide x 3 mm thick forend
	Non-hold open single-action guiderail with lever arm	23 mm wide x 14.5 mm high x 440 mm long.
	Frame head:	Minimum thickness of 30 mm (excluding any stop).
Position:	Closer body shall be mounted in the top edge of the door only, with the guiderail fitted in the frame head.	
Intumescent protection:	Closer body	2mm thick ammonium phosphate based intumescent sheet material, exposed over the entire forend and all faces of the recess in the top edge of the door.
	Guiderail	2mm thick ammonium phosphate based intumescent sheet material, to the vertical sides and edges only of the guiderail.

Alternatively, any CERTIFIRE approved concealed overhead closers may be fitted in accordance with the following:

- Concealed overhead closers are to be CERTIFIRE approved for use with single-acting, latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance of 30 minutes (code ITT).

- Intumescent protection to the closer body and arm channel is to be in accordance with the CERTIFIRE certificate of approval for the specified closer.

- Closer body and arm positioning to be in accordance with the CERTIFIRE certificate of approval for the specified closer.

- The minimum required frame density and section size are to be in accordance with the CERTIFIRE certificate of approval for the specified closer.

- Compliance is required with all additional requirements as stated within the CERTIFIRE certificate of approval for the specified closer.

12b. Jamb Mounted Closers

Recessed Deanta DH single-chain door Jamb Mounted closers with a maximum 58 x 27 mm forend and 22 mm diameter x 150 mm deep body are permitted to be used with the above mentioned doorset references within the following constraints:

i) On internal, single-leaf, single-acting, latched door assemblies
ii) In single occupancy, domestic dwellings including on a door between an integral garage and the living accommodation.
iii) On internal doors ONLY within a single residence (flat) of multiple occupancy domestic dwellings
iv) Use on individual entrance (flat entrance) doors and in common areas within multiple occupancy dwellings and flats and all industrial and commercial applications are expressly excluded.

The forend within the door edge and frame shall be bedded on 1 mm Interdens intumescent sheet material.

(1) Note: use of uncontrolled jamb mounted closers is permitted on the basis that, when the door is latched shut, it will not detract from the fire performance of the door assembly in the event of a fire. The closing device is not CERTIFIRE approved, and no claims are made or should be implied or inferred on the ability of the device to close and latch the door or in respect of its mechanical performance or durability.

12d. Transom Mounted and Concealed Closers

Not permitted

12c Floor Springs

Not permitted

13. Ancillary items

Please note that hardware items other than those discussed within this certificate of approval are not permitted.

13a Protection plates and signage

Surface mounted plastic, steel, aluminium or brass plates are acceptable on the basis that they are:

- ≤ 2mm thick
- Do not occupy more than 20% of the door leaf in total or exceed 500mm in height for kickplates and 300mm for mid-plates, whichever is the smaller.
- Do not wrap around the vertical edges, and on the closing face do not extend beneath the door stops (generally 40-50mm narrower than door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally, screws may be used, subject to a maximum length of 25 mm.

13b. Flushbolts

Doorsets may incorporate a flushbolt to the top of the secondary leaf only in accordance with the following specification requirements:

Zoo ZAS02	
Maximum flushbolt dimension:	154 mm high by 35 mm deep by 19.5 mm wide
Maximum keep dimension:	42 mm long by 20 mm wide by 2 mm thick
Material:	Steel
Position:	Top meeting door edge only
Intumescent protection:	2 mm thick Vanquish Flexifire graphite based intumescents sheet material, encasing the rear of the flushbolt body and behind the keep plate within the frame head
Configuration:	The primary leaf may be latched or unlatched
	Flushbolts may be engaged or disengaged where fitted

Bolts which are wholly surface mounted and do not encroach into the door/frame gap may be fitted providing these items are screw fixed only, and not bolted through the full thickness of the door.

When fitted to the closing face of the door assembly, the wholly surface mounted bolt may be located within a tight recess to the frame head stop.

13c. Pull Handles

Screw-fixed, bolt-fixed from the back and back-to-back fixed pull handles of steel, brass, aluminium and nylon coated are permitted providing any through-bolt fixings are of steel and maximum bolt to bolt centres do not exceed 1000 mm.

A maximum 15 mm diameter recess is permitted for through bolt fixings.

Bolt through fixings will require intumescent protection in the form of a 1 mm thick graphite tube, or Intumescent mastic to the full depth of the recess.

13d. Air transfer grilles

No site cutting of apertures permitted as this will invalidate the certification.

Where apertures are pre-cut by Deanta UK Ltd, or a CERTIFIRE approved Licensed Door Processor, Intumescent Air Transfer Grilles may be fitted on site by NON-CERTIFIRE approved staff, however, the Intumescent Air Transfer Grilles shall be CERTIFIRE approved for use in FD30 timber based doors. The air transfer grilles must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the air transfer grille. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the air transfer grille within the door assembly.

13e. Letter Plates

Where letter plates are fitted, the aperture for a letter plate may be formed on site by NON-CERTIFIRE approved staff, however, the letter plates shall be CERTIFIRE approved for use in FD30 timber based doors. The letter plates must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the letter plate. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the letter plate within the door assembly.

13f. Door Viewers

Door viewers may be fitted into the leaf providing the viewer comprises a metal sleeve and an optical glass lens and is not positioned higher than 1650 mm or lower than 1100 mm from the bottom edge of the door leaf to the centre of the viewer.

The viewer shall have an external barrel diameter of not greater than 14 mm and be tightly fitted within the leaf.

A second door viewer may be included providing it is positioned no closer than 100 mm to each other and the maximum/minimum height is maintained.

13g. Coat Hooks and Other Surface Mounted Hardware

Ancillary items which are wholly surface mounted may be fitted providing:

- These items are screw fixed or bonded only
- Are not bolted through the full thickness of the door
- Are not directly above, or closer than 100 mm to any non-insulated glazing

13h. Dropseals

Lorient LAS8001 (35 x 14 mm) dropseals are specifically approved without additional intumescent protection.

Fire and Acoustic Seals Ltd FAS45 (28 x 12 mm) dropseals are specifically approved without additional intumescent protection.

Sealmaster DRP 2712 (27 x 12 mm) dropseals are specifically approved without additional intumescent protection.

Any other CERTIFIRE approved dropseal with a maximum dimension of 35 x 14 mm may be used, subject to the conditions contained within the relevant certificate.

Where dropseals are fitted, the recess for a dropseal may be formed on site by NON-CERTIFIRE approved staff. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate.

Note: Threshold gaps as stated in Section 3 are to be maintained

13i. Electric Strikes / Electromechanical locks

Not permitted

13k. Edge Protectors

Not permitted

14. Further Information

Further information regarding the details contained in this data sheet may be obtained from DEANTA UK LTD (Tel: 01353 698602).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from Warrington Certification Fire (Tel: +44 (0) 1925 646777)