



CERTIFICATE OF APPROVAL

No CF198

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

PREMDOR CROSBY LIMITED

Birthwaite Business Park, Huddersfield Road, Darton, Barnsley,
Yorkshire, S75 5JS, United Kingdom
Tel: 0844 371 5350

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT
FD30 Moulded Skin Chipboard
Core Assemblies

TECHNICAL SCHEDULE
TS10 Fire Resisting Door
Assemblies with Non Metallic
Leaves

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager

Issued: 24th September 1999
Revised: 14th August 2023
Valid to: 7th August 2024





CERTIFICATE No CF198 PREMDOR CROSBY LIMITED

PREMDOR CROSBY LIMITED - FD30 MOULDED SKIN CHIPBOARD CORE

This approval relates to the use of the above doors in providing fire resistance of 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.

1. This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
2. The doors are approved on the basis of:
 - i) Initial type testing
 - ii) A design appraisal against TS10
 - iii) Inspection and surveillance of factory production control
 - iv) Certification under a CERTIFIRE approved Quality Management System
 - v) Audit testing in accordance with TS10
3. The doors comprise door leaves with an extruded chipboard core within a softwood internal perimeter frame, for use with timber frames. (ITT FD30).
4. This approval is applicable to both complete door assemblies and door leaves. Where the door is not supplied in a fully fitted form it is a condition of this approval that an agreed Data Sheet accompanies the product and is complied with in its entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door.
5. This approval is applicable to latched and unlatched, single-acting, single and double-leaf, ITT door assemblies, at leaf dimensions up to those given in Table 1 and Table 2 below:

Assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
Single-Acting, Single-Leaf Latched / Unlatched	2135 (at 926 wide)	926 (at 2135 high)	1.98
Single-Acting, Double-Leaf Latched / Unlatched	2135 (at 926 wide)	926 (at 2135 high)	1.98

Table 1

Notes: Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

Double-leaf assemblies are permitted on the basis of square (unrebated) meeting edges only and may incorporate leaves of unequal width providing the smaller leaf is a minimum of 40% of the width of the larger leaf.



CERTIFICATE No CF198 PREMDOR CROSBY LIMITED

PREMDOR CROSBY LIMITED - FD30 MOULDED SKIN CHIPBOARD CORE

Door assemblies with Winkhaus STV Thunderbolt Multipoint Locks

Assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
Single-Acting, Single-Leaf Latched	2135 (at 926 wide)	926 (at 2135 high)	1.98

Table 2

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

6. Glazing shall only be undertaken by the door manufacturer, or a CERTIFIRE approved Licensed Door Processor, and shall be in accordance with the Data Information Sheet and Construction Specification. No site cutting or glazing of apertures is permitted.
7. Hardware items, including closing devices and intumescent fire seals, shall be as specified in the Data Sheet.
8. The door assembly shall be mechanically fixed to wall constructions having a fire resistance of at least 30 minutes.
9. Labels to the CERTIFIRE design, or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF198 and FD30 classifications resistance shall be affixed to each door in the prescribed position.
10. This approval relates to on-going production. The product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application when appropriate.

Page 3 of 3 Signed
E/114 & E/534

Issued: 24th September 1999
Revised: 14th August 2023
Valid to: 7th August 2024

**PREMDOR CROSBY LIMITED - FD30 MOULDED SKIN CHIPBOARD CORE
CF198 DATA SHEET**

1. General

This door leaf has been fire tested and is certified by CERTIFIRE as being capable of providing fire resistance of 30 minutes integrity as defined in BS 476: Part 22, when installed in accordance with the following conditions. Subject to these, the door will meet the relevant requirements of BS 9999 for FD 30 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 Premdor Crosby 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, ITT door assemblies at leaf dimensions up to those detailed within Table 1 below.

Assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m²)
Single-Acting, Single-Leaf Latched / Unlatched	2135 (at 926 wide)	926 (at 2135 high)	1.98
Single-Acting, Double-Leaf Latched / Unlatched	2135 (at 926 wide)	926 (at 2135 high)	1.98
Table 1			

Notes: Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

Double-leaf assemblies are permitted on the basis of square (unrebated) meeting edges only and may incorporate leaves of unequal width providing the smaller leaf is a minimum of 40% of the width of the larger leaf.

Door assemblies with Winkhaus STV Thunderbolt Multipoint Locks

Assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m²)
Single-Acting, Single-Leaf Latched	2135 (at 926 wide)	926 (at 2135 high)	1.98
Table 2			

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

3. Door Frame

To be any of the following:-

Softwood or Hardwood	i) Density:	450 kg/m ³ min.
	ii) Dimensions:	67 mm by 28 mm min.
	iii) Door Stop:	12 mm deep pinned, screwed, or rebated from solid (min stop density 450 kg/m ³). Where the stop is rebated from solid the overall frame thickness must be increased by the required amount to accommodate the 12 mm rebate depth.
MDF	i) Density:	700 kg/m ³ min.
	ii) Dimensions:	77 mm by 18 mm min.
	iii) Door Stop:	12 mm deep pinned, screwed, or rebated from solid (min stop density 700 kg/m ³). Where the stop is rebated from solid the overall frame thickness must be increased by the required amount to accommodate the 12 mm rebate depth.

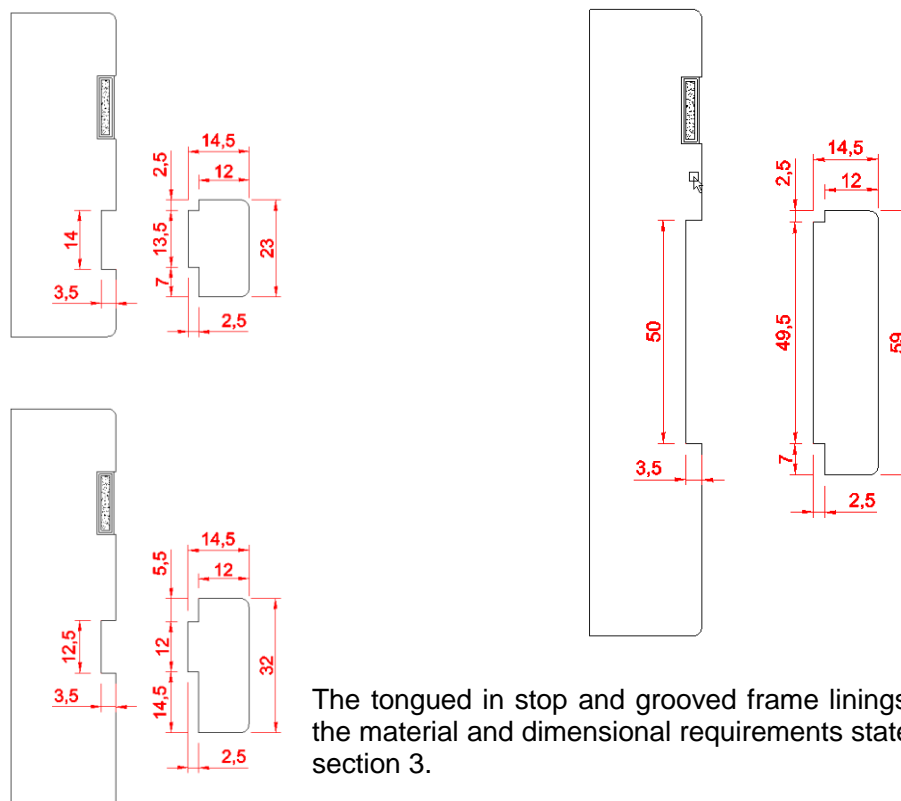
Frames for use with Winkhaus STV Thunderbolt Multipoint Locks

Softwood or Hardwood	i) Density:	450 kg/m ³ min.
	ii) Dimensions:	78 mm by 40 mm min.
	iii) Door Stop:	18 mm deep pinned, screwed, or rebated from solid (min stop density 450 kg/m ³). Where the stop is rebated from solid the overall frame thickness must be increased by the required amount to accommodate the 18 mm rebate depth.

Frame Jointing:	Butt joints, mortice and tenon, mitred or half lapped joints with the head screw fixed to the jambs using two steel screws as follows:	
	MDF Frames	Softwood / Hardwood Frames
	4 mm min gauge by min 40 mm long (Internal only Domestic installations)	5 mm min gauge by min 70 mm long (opening face) & 100 mm long (closing face)
Door to frame gaps:	Not to exceed 4 mm except at threshold where up to 10 mm is permitted and 3.5 mm at the meeting stiles	

Alternative Framing – Grooved frames / Tongued Stops

Door assemblies may incorporate tongued in stop variants complete with grooved frame linings as shown in the details below:



The tongued in stop and grooved frame linings are to comply with the material and dimensional requirements stated within the table in section 3.

Alternative Framing - Speedset Framing System

The 'Speedset' system comprises eight polypropylene clips to be fitted to the closing face of the frame and ten steel clips fitted to the opening face of the frame. The frame is screw fixed via the clips into the face of the supporting construction with 4 mm min gauge by min 40 mm long steel screws. The clips are masked with MDF architraves. The gap between the door frame and the supporting wall must be tightly packed to full depth with mineral fibre or back filled in accordance with BS 8214 accordingly.

Frame dimensions to be a minimum of 70 mm by 25 mm.

Premdor Crosby Ltd, Speedset installation instructions must be adhered to.

4. Overpanels / sidepanels

Overpanels incorporating a transom rail 30 mm thick (minimum), may be included up to a maximum size of 1000 mm high

Sidepanels incorporating a mullion rail 30 mm thick (minimum), may be included up to a maximum width of 1000mm

Overpanels / sidepanels to be manufactured as per door leaf specification, bedded against beads or the stop of the rebate and be screw fixed at minimum 400 mm centres, maximum 100 mm from each corner through the centre of the panel to a depth of at least 30 mm.

Overpanels / sidepanels will include an identical intumescent specification to the door leaves

Entire overpanel / sidepanel may be glazed in accordance with point 5 below.

5. Glazed Fanlights and Sidelights

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 supporting construction of minimum overall thickness 70 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 in accordance with the following:

- The steel studs supporting the door frame must have adequate timber bracing to ensure that they are stable in a fire.
- The steel stud manufacturer must be consulted for advice on this. Failing this, the steel studs that support the hinges and latch legs of the door frame must be braced floor to ceiling with timber at least 38mm thick by the width of the steel stud or fitted internally within the back of the steel stud.
- The timber bracing must be firmly fixed to the floor and ceiling and the door frame must be firmly fixed to this timber bracing at least 4 points on each leg of the frame with steel fixings at maximum 600mm centres.

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, 85mm. 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 45 mm, except in domestic locations (excluding flat entrance doorsets) where a minimum 30 mm wall penetration is permitted. 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.

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 by the following maximum amounts:

- Stiles (each): 10 mm*
- Top: 3 mm
- Bottom: 10 mm*

*only softwood stiles and/or rails may be trimmed to 10 mm. For homogeneous wood stiles/rails, maximum trimming allowed is 3 mm for stiles and 5 mm for bottom.

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 Premdor Crosby Limited, or a CERTIFIRE approved Licensed Door Processor. No site cutting of apertures permitted as this will invalidate the certification.

Door 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 on the basis that each leaf of double-leaf door assemblies must be similarly glazed:

Area: Maximum total glazed area of 1.215 m² per leaf

Margins: 94 mm from the perimeter edge, 76 mm between apertures.

Maximum Permitted Aperture Dimensions		
Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
1719 (at 707 wide)	707 (at 1719 high)	1.215
1247 (at 585 wide)	812 (at 898 high)	0.73

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

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

Mann McGowan Pyrostrip 500P Intumescents

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf latched / unlatched	Frame Head	Single 15 mm wide by 4 mm thick Mann McGowan 500P
	Frame Jamb	Single 15 mm wide by 4 mm thick Mann McGowan 500P
Single-acting, Double-leaf latched / unlatched	Frame Head	Single 15 mm wide by 4 mm thick Mann McGowan 500P
	Hang Jamb	Single 15 mm wide by 4 mm thick Mann McGowan 500P
	Meeting Edges (Square only)	2 No.10 mm wide by 4 mm thick Mann McGowan 500P seals to the meeting edge of the active leaf only, positioned centrally, 8 mm apart.
Note: Perimeter Intumescent seals specified to the frame jamb and head may alternatively be positioned within the top and vertical door leaf edges.		

*See Table 1 on page 1 for size restrictions

Lorient Polyproducts Limited Intumescent

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf latched / unlatched	Frame Head	Single 15 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seal
	Frame Jamb	Single 15 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seal
	Note: Intumescent seals to Single-acting, single-leaf assemblies may alternatively be positioned within the top and vertical door leaf edges.	
Single-acting, Double-leaf latched / unlatched	Frame Head & Top Edge of Door	Single 15 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seal to frame head and a Single 10 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seal to the top edge of the door leaf.
	Hang Jamb	Single 15 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seal
	Meeting Edges (Square)	2 No.10 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seals or 1 No. 20 mm wide x 4mm thick Type 617 or Palusol based strips. Strips may be fitted into one leaf only, strips should not oppose each other,
	Meeting Edges (Rebated)	2 No.10 mm wide by 4 mm thick Lorient Polyproducts, Palusol or Type 617 Seals with one strip positioned in the rebate to each leaf edge.

*See Table 1 on page 1 for size restrictions

Intumescent for use with Winkhaus STV Thunderbolt Multipoint Locks

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf Latched	Frame Head	1No. 15 mm by 4 mm thick Pyroplex Rigid box intumescent (CF355), positioned 14 mm from the opening face of the frame.
	Frame Jamb	1No. 15 mm by 4 mm thick Pyroplex Rigid box intumescent (CF355), positioned 14 mm from the opening face of the frame.

*See Table 2 on page 1 for size restrictions

Seals may be interrupted at hinge and latch positions.

Latched or unlatched, single-acting, single-leaves with maximum leaf dimensions 2040 mm high by 926 mm wide and of a minimum thickness of 42 mm may utilise alternative intumescent of the same dimensions as stated above, in-line with the relevant CERTIFIRE approval for the proposed intumescent seal. All seals to be CERTIFIRE approved to Technical Schedule 35. This rule does not apply to doorsets incorporating a Winkhaus STV Thunderbolt multipoint lock.

All other door assembly configurations, including those fitted with a Winkhaus STV Thunderbolt multipoint lock should include the specific intumescent size, type and location as specified within the tables above.

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 in accordance with the following specification.

Number:	Minimum 3No.	
Type:	Steel lift-off or butt hinges	
Positions*:	Top Hinge:	Max. 250 mm from top of door to top hinge
	Bottom Hinge:	Max. 275 mm from bottom of door to bottom hinge
	Middle Hinge:	Middle hinge fitted centrally in the leaf height or minimum 200 mm from the top hinge position.
Hinge Dimensions:	Blade height:	100 mm (+/- 20%)
	Blade width:	30 mm (+/- 3 mm)
	Blade thickness:	3 mm (+/- 0.5 mm)
	Knuckle dia.:	13 mm (+/- 1mm)
Fixings:	Minimum 4 No. steel screws per blade	
	Minimum No.8 by 32 mm long	
Intumescent protection**	1 mm thick Interdens (Mono Ammonium Phosphate) or Graphite intumescent sheet material.	

Speedset/Doorkit Hinge Specifications

Hinges shall be CE Marked against EN 1935 for use on 30 minute timber fire door assemblies.

Number:	Minimum 3No.		
Type:	Steel construction, fixed pin		
Positions*:	Top Hinge:	Max. 250 mm from top of door to top hinge	
	Middle Hinge:	Mid-height of door	
	Bottom Hinge:	Max. 250 mm from bottom of door to bottom hinge	
Hinge Dimensions:	Blade height:	Door	55 mm (+/- 2 mm)
		Frame	65 mm (+/- 2 mm)
	Blade width:	Door	43 mm (+/- 2 mm)
		Frame	32 mm (+/- 2 mm)
	Blade thickness:	Door	2.5 mm to 6.5 mm
		Frame	3 mm (+/- 0.5 mm)
Knuckle dia.:	12.5 mm (+/- 1mm)		
Fixings:	Minimum 3 No. steel screws per blade		
	Door:	Minimum 4 mm by 40 mm long	
	Frame:	Minimum 4 mm by 25 mm long	
	Door assemblies may utilise an alloy fixing plug to the door leaf, at the centre fixing position of the adjustable hinges.		
Intumescent protection**	None required.		
Door Frame:	Minimum MDF door frame thickness to be 25 mm for all door options		

* 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. 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.

Intumescent door edge seals may be fully interrupted by the hinges.

11. Locks and Latches

Locks / latches are not necessary. Where fitted locks / latches shall be CE Marked for use on 30 minute timber fire doors.

Mortice type, automatic (sprung) latch bolt and knobsets.

Max. case dimension:	165 mm by 98 mm by 19 mm
Max. forend dimension:	235 mm high by 25 mm wide
Max. keep dimension:	165 mm high by 24 mm wide (excluding lip)
Latchbolt material:	Steel or Brass
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	Forends / keeps shall be bedded on intumescent mastic OR both side faces of lockcase to be lined with 1 mm thick Interdens (Mono Ammonium Phosphate) or Graphite intumescent sheet material – minimum dimensions of sheet to be 30 mm wide by full height of lockcase.

Tubular latches.

Max. case dimension:	20.5 mm by 76 mm by 20.5 mm
Max. forend dimension:	57 mm high by 25 mm wide
Max. keep dimension:	57 mm high by 20.5 mm wide (excluding lip)
Latchbolt material:	Steel or Brass
Position:	Max. 1100 mm from bottom of door to centreline of lockcase
Intumescent: protection*	None required.

Tubular latches with dimensions in excess of those shown above will require intumescent protection as specified for use with mortice type locks.

Where the meeting stile of paired assemblies incorporates rebates the latch type is restricted to the use of tubular latches only complete with a rebate kit. Tubular latches fitted within rebated meeting stiles with dimensions in excess of those shown above will require intumescent protection as specified for use with mortice type locks.

* The lock specification above overrides any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified in the table 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 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 15 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.
- The use of oval profile cylinders is not permitted.
- Intumescent door edge seals may be fully interrupted by the strikeplate / keep and or forend.

Winkhaus STV Thunderbolt Multipoint Locks		
Dimensions:	Lock Forend:	1770 mm high x 20 mm wide x 3 mm thick
	Centre Lock Case:	186 mm high by 63 mm wide by 16 mm thick
	Top & Bottom case:	114 mm high by 45 mm wide by 15 mm thick
	Centre Strikeplate:	235 mm high by 22 mm wide by 37 mm deep by 2.5 mm thick (including 52 mm high by 13 mm deep lip)
	Top & Bottom Strikeplate:	176 mm high by 24 mm wide by 24 mm deep by 2.5 mm thick.
Latchbolt material:	Steel	
Position:	1045 mm from bottom of door to centreline of spindle	
Lock Configuration:	Central latch bolt:	Engaged
	Central Lock Bolt:	Engaged or disengaged
	Top & Bottom:	Engaged or disengaged
Cylinder	Euro profile double cylinder or cylinder / thumbturn CE marked in accordance with BS EN 1303 as suitable for use on FD30 fire resistant assemblies.	
Intumescent protection:	All lock cases:	Intumescent Seals, Therm-A-Strip intumescent sheet material, 1.2 mm thick applied to the faces of all 3No lock cases
	Forend:	Intumescent Seals, Therm-A-Flex, 10 mm wide by 2 mm thick graphite intumescent behind the forend

- Recessing for locks 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 15 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.
- The use of oval profile cylinders is not permitted.
- Intumescent door edge seals may be fully interrupted by the strikeplates / keeps.

12. Self-Closing Devices

All doors are required to be fitted with a CERTIFIRE certificated self-closing device. The exceptions are doors kept locked shut such as service access doors. Note: closers with mechanical hold-open mechanisms are not permitted to be used. Building Regulations may identify locations within domestic buildings where self-closing devices are not mandatory.

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 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.

12a Surface mounted overhead closers

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

12b Transom Mounted Closers

Not permitted

12c Concealed Overhead Closers

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 only) in accordance with the specification requirements stated below:

- Door leaves shall not be less than **44 mm thick**.
- Single-acting assemblies only.
- 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 is to be in accordance with the CERTIFIRE certificate of approval for the specified closer, with the exception of the Arrone AR7383 concealed closer which may be fitted within solid or engineered softwood frames with a minimum density of 430kg/m³.
- The minimum required frame section size is 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.
- Door assemblies, complete with CERTIFIRE approved concealed overhead closers will include perimeter intumescents in accordance with the details below:

Required Perimeter Intumescents
Single 15 mm wide by 4 mm thick Mann McGowan Pyrostrip 500P to the frame jambs and head positioned 15 mm from the opening face of the frame. Intumescents to meeting stiles to be in accordance with CF198

12d Floor Springs

Not permitted

12e Jamb mounted Door Springs

The Perko (R1/R2) or Perkomatic (R85), Carlisle Brass AA45, Ian Firth Hardware 'IFN13-02' and Astra 3000 series jamb mounted door springs may be used in accordance with the guidance stated within Approved Document B as follows:

- May be used on doors within a dwellinghouse, excluding doors between a dwellinghouse and an integral garage.
- May be used on doors within flats, **excluding flat entrance doors**.
- May be used on doors to cupboards and service ducts which are normally kept locked.
- All other fire doors should be fitted with a self-closing device as previously stated.

Notes

1. **The use of Perko (R1/R2) or Perkomatic (R85), Carlisle Brass AA45, Ian Firth Hardware IFN13-02 and Astra 3000 series jamb mounted door springs 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 door springs are 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.**
2. **IFN13-02 door springs are to include 1.8 mm thick Fire Force ISM 200 graphite intumescent protection.**
3. **Astra 3000 series door springs are to include 94 mm by 250 mm by 1 mm thick Mono Ammonium Phosphate intumescent, wrapped around the door spring body and a 30 mm diameter by 2.5 mm thick graphite end disk (provided with an 8 mm diameter hole to go over the adjustment screw)**

13. Ancillary items

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

13a 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 fixing is of steel.

13b 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.

13c Flushbolts

Steel Flushbolts	
Max. flushbolt dimension:	Maximum 150 mm high by 19 mm wide by 15 mm deep complete with a 2.6 mm thick face plate with a 35 mm returned top edge. The flushbolt is fitted into a maximum 25 mm deep rebate.
Max. keep dimension:	Maximum 18 mm wide by 32 mm
Material:	All Steel construction required
Operation:	Flushbolts must be fully engaged.
Intumescent: protection:	Base of mortise of bolt to be lined with 1 mm thick Therm-A-Flex graphite based intumescent sheet material.
Intumescent specification required to door assembly:	<p>Single 15 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seal to the frame jambs.</p> <p>Single 10 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seal to the frame head and a single 20 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seal to the top edge of the door leaf. (Alternatively, a single 20 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seal to the frame head and a single 10 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seal to the top edge of the door leaf).</p> <p>2No. 10 mm wide by 4 mm thick Lorient Polyproducts, Type 617 seals to the meeting edge of the active leaf with 8 mm spacing.</p>

Zinc Alloy Flushbolts	
Max. flushbolt dimension:	152 mm high x 20 mm deep x 19 mm wide
Max. keep dimension:	Maximum 18 mm wide by 32 mm
Material:	Zinc alloy
Position:	Top and bottom on door edge
Intumescent: protection:	2 mm thick Graphite intumescent sheet material to base of bolt body & beneath keep
Perimeter Intumescents:	2No. 10 mm wide by 4 mm thick Lorient Type 617 intumescents positioned centrally within the lock edge of the primary leaf, positioned 8 mm apart.

13d Air transfer grilles

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

Where apertures are pre-cut by Premdor Crosby Limited, or a CERTIFIRE approved Licensed Door Processor and lined with minimum 6 mm thick hardwood, 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

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 1500 mm from the bottom of the door leaf.

The door viewer should have an external diameter of not greater than 15 mm be tightly fitted within the leaf. The aperture provided for the installation of the viewer should be lined with intumescent mastic.

A second compliant door viewer may be fitted on the basis that 100 mm minimum margins are maintained between viewers.

13g Dropseals

Door assemblies may incorporate CERTIFIRE approved dropseals with maximum dimensions of 35 mm high by 14 mm wide to the bottom edge of the door leaf.

Alternatively, door assemblies may be fitted with the following dropseals mortised into the bottom edge of the door leaf:

- Norsound NOR810
- Norsound NOR811
- Halspan SLS DRP-100
- Exitex Concealex A8100
- Exitex Concealex A8100 Superior
- Exitex Concealex Superior Variseal
- Exitex Concealex Chronoseal
- Lorient LAS8001si
- Lorient LAS8002si
- Lorient AAS8501
- Fire And Acoustic Seals FAS45

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 within Section 3 of the Data Sheet are to be maintained.

13h Electric Strikes / Electromechanical locks

Not permitted

13i 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

14. Further Information

Further information regarding the details contained in this data sheet may be obtained from Premdor Crosby Limited (Tel: +44 (0) 1226 383434).

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