certifire

CERTIFICATE OF APPROVAL
No CF433

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

CORINTHIAN INDUSTRIES (ASIA) SDN BHD

LOT. 37217, Jalan Genting, Off 4th Mile, Jalan Kapar, 42100 Rantau Panjang, Klang, Selangor Darul Ehsan, Malaysia
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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	TECHNICAL SCHEDULE
FD30 Panelled Door Assemblies	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: 23rd January 2006
Reissued: 23rd May 2023
Valid to: 22nd May 2028

UKAS PRODUCT CERTIFICATION 0087

CERTIFICATE No CF433
CORINTHIAN INDUSTRIES (ASIA) SDN BHD

CORINTHIAN INDUSTRIES ASIA SDN BHD FD30 PANELLED TIMBER DOOR ASSEMBLIES

This approval relates to the use of the above doors in providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) and integrity as defined in BS 476: Part 22: 1987. 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 a softwood or hardwood framing which retains glazed or solid panels, in various finishes for use with timber frames incorporating intumescent edge seals (code 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, glazed and unglazed ITT assemblies with leaves 44 mm thick overall, at leaf dimensions up to those given in Table 1.

Door assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m^2)
Single-Acting, Single-Leaf Latched / Unlatched	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Double-Leaf Latched / Unlatched	2100 (at 926 wide)	926 (at 2100 high)	1.94

Table 1

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

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Both leaves of double-leaf assemblies are to be of identical construction and design.

Secondary leaves for unequal pairs shall be a min 50% of the primary leaf width.

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6. Hardware items, including closing devices and intumescent fire seals, shall be as specified in the data sheet.

7. The doorset shall be mechanically fixed to wall constructions having a fire resistance of at least 30 minutes.

8. Glazed panels are permitted. All apertures to be factory prepared by Corinthian Industries (Asia) SDN BHD. No site cutting of apertures permitted as this will invalidate the certification. Glazing shall only be undertaken in accordance with the Data Information Sheet and Construction Specification.

9. Labels to the CERTIFIRE design or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF433 and FD30 classifications resistance be affixed to each door in the prescribed position.

10 The approval relates to on-going production. The Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application when appropriate.

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CORINTHIAN INDUSTRIES ASIA SDN BHD
FD30 PANELLED TIMBER DOOR ASSEMBLIES
CF433 DATA SHEET

1. General

This door leaf has been tested and is certified by CERTIFIRE as being capable of providing fire resistance of 30 minutes integrity and 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) 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 FD30 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 JELD-WEN or Corinthian Industries (Asia) SDN BHD may be considered to meet the requirements in respect of those items.

2. Door Leaf Dimensions

This leaf may be used in latched and unlatched, single-acting, single and double-leaf assemblies at leaf dimensions up to those detailed within Table 1 below:

Door assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m^2)
Single-Acting, Single-Leaf Latched / Unlatched	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Double-Leaf Latched / Unlatched	2100 (at 926 wide)	926 (at 2100 high)	1.94
Table 1			

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

Both leaves of double-leaf assemblies are to be of identical construction and design.

Secondary leaves for unequal pairs shall be a min 50% of the primary leaf width.

3. Door Frame

To be any of the following:

Softwood or Hardwood (Excluding Ash, Beech, Towri, Iroko and Gerrongang)	i) Density:	450 kg/m^3 min.
	ii) Dimensions:	77 mm by 25 mm min.
	iii) Door Stop:	12 mm deep by 25 mm wide pinned, screwed or rebated from solid. Min. 38 mm long pin fixings required. Where rebated from solid the min overall section size is to be increased to 77 mm by 37 mm min. Minimum stop density 450 kg/m^3.
	iv) Stop Density	450 kg/m^3 min.
MDF	i) Density:	720 kg/m^3 min.
	ii) Dimensions:	77 mm by 25 mm min.
	iii) Door Stop:	12 mm deep by 25 mm wide pinned, screwed or rebated from solid. Min. 38 mm long pin fixings required. Where rebated from solid the min overall section size is to be increased to 77 mm by 37 mm min. Minimum stop density 720 kg/m^3.
Jointing:	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 6 mm is permitted and 3.5 mm at the meeting stiles	
Threshold seals:	Exitex MDS 140 aluminium threshold sill may be used.	

4. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of minimum thickness 85 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 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.

5. Installation

The opening may be lined with softwood or hardwood which shall be continuous and of minimum width, 70mm. 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.

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): 4 mm
- Bottom: 6 mm

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.

6. Glazed Panels

All apertures to be factory prepared by Corinthian Industries (Asia) SDN BHD. 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:

Area: Maximum total glazed area of 1.38 m^2 per leaf, (Subject to glass type).

Maximum Permitted Aperture Dimensions		
Max. Height (mm)	**Max. Width (mm)**	**Max. Area (m^2)**
1855 (at 744 wide)	745 (at 1852 high)	1.38

Hardwood lay-bars, surface mounted to the face of the glass may be included at maximum spacing of 250 mm in line with the following specification:

Glazing bars	Material:	Hardwood
	Density:	350 kg/m^3 (minimum)
	Dimensions:	22 mm high chamfered on the upper and lower edges at 15^o
	Fixing:	Glued and stapled
	Intumescent:	22 mm by 2 mm FGL30 material

PVCu or timber frets may be adhered to the face of the glass via either double-sided, self-adhesive tape or hot melt glue.

Non-Insulating glasses: Pyroshield 2 (cut 2 mm less than the aperture height & Width)

Intumescent System	Rebate / Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m^2)
Therm-A-Strip, 10 mm by 2 mm	**Rebate** 25 mm deep by 13 mm high or 30 mm deep by 15 mm high **Beads** 18 mm deep by 13 mm high, square with semi-circular moulding on face or 18 mm deep by 15 mm high splayed at 15°	Hardwood* min. 510 kg/m^3	1.6 by 38 mm long pins at max 150 mm centres, max. 50 mm in from corners. Fixings angled at 15° to 30° to the plane of the leaf. Pins applied to both faces of the leaf.	1855 (at 702 wide)	745 (at 1707 high)	1.38 m^2

Non-Insulating glasses: Pyroguard EW 30

Intumescent System	Rebate / Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m^2)
Therm-A-Strip, 10 mm by 2 mm	**Rebate** 25 mm deep by 13 mm high or 30 mm deep by 15 mm high **Beads** 18 mm deep by 13 mm high, square with semi-circular moulding on face or 18 mm deep by 15 mm high splayed at 15°	Hardwood* min. 510 kg/m^3	1.6 by 38 mm long pins at max 150 mm centres, max. 50 mm in from corners. Fixings angled at 15° to 30° to the plane of the leaf. Pins applied to both faces of the leaf.	1855 (at 345 wide)	745 (at 859 high)	0.64 m^2

Non-Insulating glasses: 6 mm Pyroshield 2, 6 mm Pyran S or Pyroguard EW 30

Intumescent System	Glazing Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m^2)
Therm-A-Bead complete with Fireglaze mastic in glazing pocket Or Fireglaze compound 10 mm wide by 4 mm thick	Formed from stile and rail profiles providing 14 mm wide by 9 mm deep groove for glazing system	Hardwood* min. 510 kg/m^3	1.6 by 38 mm long pins at max 150 mm centres, max. 50 mm in from corners. Fixings angled 20° to the plane of the leaf. Pins applied to both faces of the leaf. Minimum 2No. pins per bead. Door leaves factory glazed with Fireglaze compound may be glazed without pins	1070 (at 345 wide)	345 (at 1070 high)	0.37 m^2

***** Excluding Ash, Beech, Iroko, Towri & Gerronggang
Typical configurations: Pattern 10, 2XG, 4XG, SC, 4XGG, 4XG, 2XGG.

7. 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

Using Intumescent Seals Ltd, Therm-A-Seal, Astroflame, AF1504 FO or Lorient Polyproducts LP1504 Type 617 intumescent seals.

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf door assemblies latched / unlatched	Frame Head or Top edge of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned 14.5 mm from the opening face of the frame, within the frame reveal, or centrally within the door leaf thickness.
	Frame Jambs or Vertical edges of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned 14.5 mm from the opening face of the frame, within the frame reveal, or centrally within the door leaf thickness.
Single-acting, Double-leaf door assemblies latched / unlatched	Frame Head or Top edge of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned 14.5 mm from the opening face of the frame, within the frame reveal, or centrally within the door leaf thickness.
	Frame Jambs or Vertical edges of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned 14.5 mm from the opening face of the frame, within the frame reveal, or centrally within the door leaf thickness.
	Meeting Stiles (Square / radiused)	Single 20 mm wide by 4 mm thick Intumescent to be positioned centrally within the door leaf thickness. Or 2No. 10 mm wide by 4 mm thick opposing seals offset by 2-3 mm
	Meeting Stiles (Equal rebated)	2No. 10 mm wide by 4 mm thick positioned 2-3 mm from the rebate

Latched or unlatched, single acting, single-leaves with maximum leaf dimensions 2040 mm high by 926 mm wide and of a minimum thickness of 44 mm, when hung within timber based frames, may utilise alternative Intumescents in-line with the relevant CERTIFIRE approval for the proposed intumescent seal. All seals to be CERTIFIRE approved to Technical Schedule 35.

All other door assembly configurations shall include the specific intumescent size type and location as specified within the data sheet. (Include for 30 minute certificates only)

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.

8. Hinges

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

Number:	Doors up to 2040 mm high:		Minimum 3 No. hinges
	Doors greater than 2040 mm high:		Minimum 4 No. hinges
Hinge Type:	Steel lift off or butt hinges.		
Hinge Positions:*	Top Hinge:	Max 200 mm from the top of the door to top hinge.	
	Middle Hinge:	Middle hinge fitted centrally in the leaf height.	
	Bottom.	Max 300 mm from the bottom of the door to bottom hinge	
	Note: Where 4No hinges are required the 2No middle hinges should be positioned equally between the top and bottom hinges within the leaf height		
Hinge Dimensions:	blade height:	100 mm (+/- 20%)	
	Blade width:	35 mm (+ 1 mm / - 5 mm)	
	Thickness:	3 mm (+/- 0.5 mm)	
	Knuckle dia.:	14 mm (+/- 1 mm)	
Hinge Fixings:	Quantity:	4No. steel screws (minimum) per hinge blade	
	To Frame	Softwood frame:	No.8 by 32 mm long (minimum).
		Hardwood frame:	No.8 by 32 mm long (minimum).
		MDF frame:	No.8 by 25 mm long (minimum).
	To Door:	No.8 by 32 mm long (minimum).	
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.

9. Locks and Latches

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

Type:	Mortice type, automatic (sprung) latch bolt, cylinder rim nightlatches and knobsets.
Max. case dimension:	120 mm high by 90 mm deep by 19 mm wide
Max. forend dimension:	160 mm high by 25 mm wide
Max. keep dimension:	160 mm high by 25 mm wide (excluding latch plate)
Latchbolt material:	Steel or material with a melting point greater than 800°C
Cylinder:	Euro profile single cylinder, double cylinder or cylinder / thumbturn, suitable for use on FD30 fire resistant assemblies in accordance with EN 1303
Position:	Max. 1200 mm from bottom of door to centreline of lockcase
Intumescent: protection*	None required

* 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.

The following points relate to all locks & latches discussed within this section of the Data Sheet:

- 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 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. The preparation for single cylinders shall penetrate through only half the thickness of the door leaf.
- The use of oval profile cylinders is not permitted.
- Note rebate conversion kit bedded onto intumescent mastic may be used on rebated double-leaf doorsets. Maximum case dimensions of 57 mm high by 78 mm wide by 25 mm thick.

A Winkhaus multi-point lock may be fitted and shall be bedded onto Pyromas A intumescent

mastic.

10. Surface mounted 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 locations 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 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 exceed 20% of the overall door leaf area and shall not be included directly below the body of surface mounted overhead closers.

10a Surface mounted overhead closers

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

10b Transom Mounted and Concealed Closers

Not permitted

10c Floor Springs

Not permitted

11. Ancillary items

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

11a Protection plates and signage

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

- < 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. The use of bolt through fixings is not permitted).

11b Flushbolts

Not permitted

11c Air transfer grilles

Not permitted

11d 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.

11e Letter Plates

Not permitted

11f Door Viewers

Not permitted

11g Coat Hooks and Other Surface Mounted Hardware

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

Ancillary items which are wholly surface mounted may be applied to the door leaf face 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

11h. Dropseals

Not permitted

11i. Threshold plates / cills

Not permitted

11j. Electric Strikes / Electromechanical locks

Not permitted

11k. Edge Protectors

Not permitted

12. Further Information

Further information regarding the details contained in this data sheet may be obtained from Corinthian Industries Asia Sdn. Berhad. (Tel. Int+ 60 3 3291 2363).

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