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## CERTIFICATE OF APPROVAL

### No CF433

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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  
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Tel: (int+) 60 3 3291 2363 Fax: (int+) 60 3 3291 1019

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

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**CERTIFIED PRODUCT**  
FD30 Panelled Door Assemblies

**TECHNICAL SCHEDULE**  
TS10 Fire Resisting Door  
Assemblies with Non  
Metallic Leaves

Signed and sealed for and on behalf of Exova (UK) Limited trading as  
Warrington Certification



Paul Duggan  
Certification Manager



Issued: 23<sup>rd</sup> January 2006  
Revised: 19<sup>th</sup> December 2017  
Valid to: 19<sup>th</sup> November 2022

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## **CERTIFICATE No CF433**

# **CORINTHIAN INDUSTRIES (ASIA) SDN BHD**

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### **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 certificate is designed to demonstrate compliance of the product or system with Approved Document B (England and Wales), The Technical Handbooks (Scotland), Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.<sup>7</sup>
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 and latched, single-acting, single-leaf, unglazed ITT assemblies with leaves 35 mm thick overall, at leaf dimensions up to those given in Table 1.
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.

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### CORINTHIAN INDUSTRIES ASIA SDN BHD FD30 PANELLED TIMBER DOOR ASSEMBLIES

8. Glazed panels are permitted within 44 mm thick leaves only. 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.

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m <sup>2</sup> )
Single-Acting, Single-Leaf Latched / Unlatched <b>(44 mm thick leaf)</b>	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Double-Leaf Latched / Unlatched <b>(44 mm thick leaf only)</b>	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Single-Leaf Latched only <b>(35 mm thick leaf)</b>	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.

**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**

**44 mm thick door leaves**

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:

**35 mm thick door leaves**

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

<b>Door assembly configuration</b>	<b>Maximum Height (mm)</b>	<b>Maximum Width (mm)</b>	<b>Area (m<sup>2</sup>)</b>
Single-Acting, Single-Leaf Latched / Unlatched <b>(44 mm thick leaf)</b>	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Double-Leaf Latched / Unlatched <b>(44 mm thick leaf only)</b>	2100 (at 926 wide)	926 (at 2100 high)	1.94
Single-Acting, Single-Leaf Latched only <b>(35 mm thick leaf)</b>	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.

### 3. Door Frame

To be any of the following:

- |  |                  |   |
|--|------------------|---|
| <b>Softwood or Hardwood</b><br>(Excluding Ash, Beech,<br>Towri, Iroko and<br>Gerrongang) | i) Density:      | <b>44 mm thick doors</b> 450 kg/m <sup>3</sup> min.   |
|  |                  | <b>35 mm thick doors</b> 510 kg/m <sup>3</sup> 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.<br>Min. 38 mm long pin fixings required.<br>Where rebated from solid the min overall section size is to be increased to 77 mm by 37 mm min.<br>Minimum stop density 450 kg/m <sup>3</sup> . |
|  | iv) Stop Density | <b>44 mm thick doors</b> 450 kg/m <sup>3</sup> min.<br><b>35 mm thick doors</b> 510 kg/m <sup>3</sup> min.  |

#### **MDF**

##### **44 mm thick doors only**

- |                 |   |
|-----------------|---|
| i) Density:     | 720 kg/m <sup>3</sup> 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.<br>Min. 38 mm long pin fixings required.<br>Where rebated from solid the min overall section size is to be increased to 77 mm by 37 mm min.<br>Minimum stop density 720 kg/m <sup>3</sup> . |

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

Threshold seals: Exitex MDS 140 aluminium threshold sill may be used on 44 mm thick door leaves only.

### 4. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of minimum thickness 72 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.



## 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. 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 – 44 mm thick door leaves only

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<sup>2</sup> per leaf, (Subject to glass type).

<b>Maximum Permitted Aperture Dimensions</b>		
<b>Max. Height (mm)</b>	<b>Max. Width (mm)</b>	<b>Max. Area (m<sup>2</sup>)</b>
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 <sup>3</sup> (minimum)
	Dimensions:	22 mm high chamfered on the upper and lower edges at 15°
	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 <sup>2</sup> )
Therm-A-Strip, 10 mm by 2 mm	<b>Rebate</b> 25 mm deep by 13 mm high or 30 mm deep by 15 mm high	Hardwood* min. 510 kg/m <sup>3</sup>	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 <sup>2</sup>
	<b>Beads</b> 18 mm deep by 13 mm high, square with semi-circular moulding on face or 18 mm deep by 15 mm high played at 15°					

**Non-Insulating glasses: Pyroguard EW 30**

Intumescent System	Rebate / Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m <sup>2</sup> )
Therm-A-Strip, 10 mm by 2 mm	<b>Rebate</b> 25 mm deep by 13 mm high or 30 mm deep by 15 mm high	Hardwood* min. 510 kg/m <sup>3</sup>	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 <sup>2</sup>
	<b>Beads</b> 18 mm deep by 13 mm high, square with semi-circular moulding on face or 18 mm deep by 15 mm high played at 15°					

\* Excluding Ash, Beech, Iroko, Towri & Gerronggang

Typical configurations: Pattern 10, 2XG, 4XG, SC, 4XGG, 4XG, 2XGG.

**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 <sup>2</sup> )
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 <sup>3</sup>	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 <sup>2</sup>



## 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**

**44 mm thick door leaves: Using Intumescent Seals Ltd, Therm-A-Seal, Astroflame, AF1504 FO or Lorient Polyproducts LP1504 Type 617.**

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 centrally
	Frame Jambs or Vertical edges of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned centrally
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 centrally
	Frame Jambs or Vertical edges of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned centrally
	Meeting Stiles (Square / radiused)	Single 20 mm wide by 4 mm thick Intumescent to be positioned centrally  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

Seals may be interrupted at hinge and latch positions.

**35 mm thick door leaves: Using Lorient Polyproducts LP1504 Type 617.**

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 centrally
	Frame Jambs or Vertical edges of Leaf	Single 15 mm wide by 4 mm thick Intumescent to be positioned centrally





Alternative seals may be utilised in-line with the relevant CERTIFIRE approval for the proposed intumescent seal. All seals to be CERTIFIRE approved (to Technical Schedule 35).

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.
	Doors greater than 2040 mm high:	Minimum 4 No.
Type:	Steel lift off or butt hinges.	
Positions:*	Maximum 200 mm from the top of door to top hinge. Maximum 300 mm from the bottom of door to bottom hinge. Middle hinge fitted centrally in the leaf height.	
Dimensions:	i) Height: 80 - 100 mm ii) Blade width: 30 - 36 mm iii) Thickness: 3 mm (+/- 0.5 mm) iv) Knuckle dia.: 14 mm (+/- 1 mm)	
Fixings:	Minimum 4No. steel screws per hinge blade. Screw length varies to suit frame material see details below: Softwood frame: Minimum No.8 by 32 mm long screws. Hardwood frame: Minimum No.8 by 32 mm long screws. MDF frame: Minimum No.8 by 25 mm long screws.	
Intumescent Protection**	None required.	

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

\*\* This specification overrides any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified above, specifically maximum dimensions and material. Where alternative hinges exceed the specification given above the intumescent protection as identified in the hinge manufacturer's CERTIFIRE certificate shall apply.

Any other CERTIFIRE approved hinges may be used, subject to the conditions contained within the relevant certificate.

## **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.

### **44 mm thick door leaves**

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
Position:	Max. 1200 mm from bottom of door to centreline of lockcase





- Plates/signage can be bonded with a thermally softening adhesive. Additionally screws may be used.

#### **11b Flushbolts**

Not permitted

#### **11c 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.

#### **11d Air transfer grilles**

Not permitted

#### **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:

- These items are screw fixed or bonded only
- Are not bolted through the full thickness of the door

### **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 Exova (UK) Limited trading as Warrington Certification (Tel: +44 (0) 1925 646777)

