



## IMPORTANT INSTALLATION INSTRUCTIONS FOR FIRE DOORS AND FRAMES FD30 - CF154 (J B KIND/IRMADE)

### **GENERAL:**

The door has been tested to BS 476: Part 22: 1987 and is CERTIFIRE approved for fire resistance up to 30 minutes and when installed in accordance with the following conditions the door will meet the relevant requirements of BS 9999. To identify this, the leaf carries a prefixed label on the top edge of the door and is issued under the terms of the British Woodworking Federation – CERTIFIRE Scheme. The label has a unique CERTIFIRE number and is fully traceable in manufacture to the ISO9001:2008 quality standards and is subject to continued rigorous surveillance.

### UNDER NO CIRCUMSTANCES MUST THE LABEL BE REMOVED OR OBSCURED

This 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.

#### IMPORTANT CHECKLIST

- CHECK THAT YOU ARE FITTING THE CORRECT TYPE OF DOOR FOR THE PURPOSE
- DOORS MUST BE STORED FLAT USING 3 EQUALLY SPACED BEARERS
- EXCESSIVE HUMIDITY MUST BE AVOIDED, ESPECIALLY IN FRESHLY PLASTERED SITUATIONS
- FIRE DOORS ARE HEAVY AND CARE MUST BE TAKEN WHEN LIFTING/HANDLING
- ONLY SKILLED TRADESMEN SHOULD UNDERTAKE INSTALLATION WORK
- DOORS INCLUDING ALL EDGES SHOULD BE PAINTED/STAINED WITHIN 24 HOURS OF BEING ON SITE

DOOR LEAF: This leaf may be used in single-acting, single and double leaf configurations up to a maximum size as detailed below in Table 1.

| Configuration  | Maximum Height   | Maximum Width    | Area               |
|--|------------------|------------------|--------------------|
| Single-acting, Single leaf (latched/unlatched) – Single    | 2345mm           | 950mm            | 1.94m <sup>2</sup> |
| LP1504 intumescent 15mm wide by 4mm thick                  | (at 826mm wide)  | (at 2040mm high) |                    |
| Oversized Single-acting, Single leaf latched only – Single | 2420mm           | 1100mm           | 2.42m <sup>2</sup> |
| LP2004 intumescent 20mm wide by 4mm thick                  | (at 1000mm wide) | (at 2200mm high) |                    |
| Single-acting, Double leaf (latched/unlatched) – 2no 15 x  | 2275mm           | 986mm            | 2.01m <sup>2</sup> |
| 4mm intumescents to meeting edge (see table 3)             | (at 884mm wide)  | (at 2040mm high) |                    |
| Oversized Latched only Single-acting Double-leaf - 1no     | 2640mm           | 1200mm           | 2.64m <sup>2</sup> |
| 20 x 4mm intumescents to meeting edge (see Table 3)        | At 1000mm wide)  | (at 2200mm high) |                    |

**Table 1. Maximum Permitted Door Leaf Dimensions** 

### **DOOR FRAMES:**

Softwood or Hardwood – minimum density 450kg/m3 and a minimum dimension of 68mm x 30mm plus a 12mm stop rebated from solid or planted.

MDF - minimum density 610kg/m3 and a minimum dimension of 69mm x 28mm plus a 12mm stop rebated from solid or planted.

DOOR GAPS: When fitted the gaps between the door and frame must not exceed 4mm. The leaf to cill gap must not exceed 12mm.

**SUPPORTING CONSTRUCTION:** The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of a minimum thickness of 70mm which must provide at least 30 minutes of 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.

**INSTALLATION:** The opening may be lined with softwood which shall be continuous and of minimum width 70mm. Any voids between lining and wall to be filled with mineral wool or if less than 6mm, with intumescent paste or mastic. Each door frame jamb to be fixed through to the wall at not less than 3 points with steel fixings penetrating the wall to at least 50mm. Any voids between door frame and wall to be filled as above for lining to wall gaps. Architraves are optional with no restriction on material, size or fixing. Door leaves may be trimmed to fit the frame by the following maximum amounts: Stiles (each) 3mm. Bottom 5mm. (Top not allowed.)

## **INTUMESCENT SEALS:**

| Configuration   | Position       | Specification   |
|---|----------------|---|
| Single-Acting Single-Leaf   | Head           | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
|   | Vertical edges | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
| Oversize Single-Acting Single-<br>leaf latched only (see Table 1) | Head           | Single LP2004 20mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
|   | Vertical edges | Single LP2004 20mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
| Single-Acting Double Leaf   | Head           | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
|   | Vertical edges | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
|   | Meeting edges  | Single LP1504 15mm wide by 4mm thick fitted 7mm from the face of both leaves (not opposing)     |
| Oversize Single-Acting Double-leaf latched only (see Table 1)     | Head           | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
| -   | Vertical edges | Single LP1504 15mm wide by 4mm thick fitted on centre line of leaf edge or within frame reveal. |
|   | Meeting edges  | Single LP2004 20mm wide by 4mm thick fitted centrally in secondary leaf only                    |

**Table 3. Intumescent Specification** 

Seals may be interrupted at hinge & latch positions and may be substituted for equivalent CERTIFIRE approved seals in accordance with TS35.

### **GLAZED APERTURES:**

ALL GLASS OPENINGS MUST BE J B KIND OR IRMADE FACTORY FITTED OR CARRIED OUT BY AN APPROVED CERTIFIRE INSTALLER.

NO SITE CUTTING OF OPENINGS IS PERMITTED

Height: 1600mm maximum. Width: 600mm maximum. Area: Maximum glazed area per leaf of aperture size: 0.96m2.

Non-Insulating Glasses: Any CERTIFIRE approved glass subject to the conditions of the glass certificate.

Glazing Systems: CERTIFIRE certificated for the appropriate size and glass type. Apertures must incorporate a 1mm Interdens liner.

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

**Number:** 3no - Type: Steel Lift off or Butt - **Positions:** Max 280mm from top of door to top hinge, Max 280mm from bottom of door to bottom hinge, Middle hinge fitted centrally in the leaf height

Dimensions: 100mm - 110mm high with a blade width of 35mm - 40mm and a knuckle diameter maximum 14mm (+/- 1mm. Blade thickness 3mm (+/- 0.5mm) - Fixings - steel screws minimum of 4no, min No 8 by 32mmin length.

Intumescent: Bedded onto 2mm thick Interdens (Single-acting double-leaf door sets only).

Where a 4th hinge is required this can be fitted in a 2no top, 1no bottom & 1no middle configuration or a 1no top & bottom with the remaining hinges fitted equally between. A further 3no hinge configuration is permitted whereby the middle hinge is positioned 300mm (+/-100mm) below the top hinge. This hinge configuration is limited to the following leaf configurations and sizes as detailed in table 4

| Configuration   | Maximum Height  | Maximum Width    | Area               |
|---|-----------------|------------------|--------------------|
| Single-acting, Single leaf (latched/unlatched) – Single | 2345mm          | 950mm            | 1.94m²             |
| LP1504 intumescent 15mm wide by 4mm thick               | (at 826mm wide) | (at 2040mm high) |                    |
| Single-acting, Double leaf (latched/unlatched) – 2no 15 | 2275mm          | 986mm            | 2.01m <sup>2</sup> |
| x 4mm intumescents to meeting edge (see table 3)        | (at 884mm wide) | (at 2040mm high) |                    |

Table 4. Max leaf sizes for a 2no top & 1no bottom hinge configuration

LOCKS & LATCHES: Latches where fitted, shall be CE marked for use on 30 minute timber fire doors in addition to the specification below.

Mortise type, automatic (sprung) latch bolt.

Maximum case dimensions: 120mm high, 90mm wide, 22mm thick.

Max forend dimension: 176mm by 26mm. Max Keep dimension: 176mm by 26mm.

Latch bolt material: Steel.

Position: Max 1100mm from bottom of the door to centreline of lockcase. Intumescent protection: Encapsulated within Interdens liner (Single-acting double leaf door sets only).

No restriction on type or material of handles.

**OVERHEAD CLOSERS:** Not essential for fire performance if doors are fitted with a latch. A self-closing device is normally required to satisfy fire regulations and if fitted must be a CERTIFIRE approved product. **Note: closers with mechanical hold open mechanisms are not permitted.** 

# ANCILLARY ITEMS:

Protection Plates & Signage: Surface Mounted plastic, steel, aluminium or brass plates are acceptable on the basis that they are:

- <2mm thick</p>
- 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 the door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally, screws may be used.

Flushbolts: Not Permitted.

**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.

Air transfer grilles: No site cutting of apertures permitted as this will invalidate the certification. Where apertures are pre-cut by J B Kind, Irmade 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 on them by the CERTIFIRE certificate with regards to position of the Air Transfer Grille within the door assembly.

**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 1500mm from the threshold. The viewer should have an external diameter of not greater than 15mm and shall be tightly fitted within the leaf. The aperture provided for the installation of the viewer should be lined with intumescent mastic.

Letter plates: Where letter plates are fitted, the aperture 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 set.

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 100mm to any non-insulated glazing

**Further Information:** For further information or details contained in this data sheet may be obtained from: IRMADE SA: Tel. 00351 249 540 030 Further information regarding the CERTIFIRE certification and other approved products please contact: CERTIFIRE: Tel. 01925 646777. Further information regarding BWF labelling requirements can be obtained from the British Woodworking Federation: Tel. 0844 209 2610.