SINGLE ACTION FD30/FD30S FIRE DOOR INSTALLATION GUIDE v1

LININGS/DOOR FRAMES

- **The material must be a minimum of 510kg/m3 softwood or hardwood, and the size must be a minimum of 32mm x 70mm for door linings fitted with a 12mm x 25mm door stop pinned using a 1mm x 40mm steel pin. A door frame with a minimum thickness of 45mm x 70mm complete with a 12mm deep rebate may also be used.**
- **2 number 5mm minimum gauge by a minimum 70mm steel screws with countersunk heads are to be used to fix the head to the jambs. Countersunk pilot holes (5.5mm diameter) needs to be drilled through the head to avoid splitting of the timber.**

INTUMESCENT SEALS

- **CERTIFIRE approved 4mm x 15mm intumescent seal must be installed 15mm from the opening face of the door lining within the door lining reveal, or centrally in the door for a FD30 fire rating. For FD30S fire rating then the intumescent seal must incorporate a smoke seal.**

GAPS AND ALIGNMENT TOLERANCES

- **The maximum door leaf perimeter gaps at verticals and head are 4mm.**
- **For FD30 the maximum gap between the bottom of the door and the floor covering is 10mm.**
- **For FD30S the maximum gap between the bottom of the door and floor covering is 3mm (BS 8214:2016).**
- **EXCEEDING GAPS INVALALIDATES CERTIFICATION AND AFFECTS PERFORMANCE IN A FIRE.**

MAXIMUM DOOR REDUCTION

- **A reduction of 12mm maximum can be removed equally from the sides of the door, and 12mm from the bottom of the door.**
- **NO REDUCTION IS PERMITTED FROM THE TOP OF THE DOOR.**

INSTALLATION

- **At each fixing point a packer needs to be inserted between the back side of the frame and wall.**
- **The packer must be the exactly the same thickness as the gap to prevent frame distortion when fixed in place.**

- **The mechanical fixings must be compatible with the wall type and CE marked for structure use.**
- **The fixing must achieve a depth of a minimum of 70mm into the wall construction (excluding any fixing gaps).**
- **The fixing must be a maximum of 150mm from the top and bottom the frame with intermediate fixings at a maximum of 600mm. A minimum of 4 fixing per jamb.**
- **Frames over 910mm in width must have a head fixing.**
- **Pilot holes (5.5mm diameter) through the frame should be drilled to accommodate the size of the fixing**
- **The gap between the frame and wall must be filled with a CERTIFIRE approved Intumescent mastic or foam to the manufactures instructions that is suitable for the 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.**

HINGES

- **A minimum of 3 number CERTIFIRE approved steel lift off or butt hinges.**
- **The top hinge is to be fitted at a maximum of 220mm from the top of the door to centreline of the hinge. The bottom hinge is to be fitted at a maximum of 275mm from the bottom of the door to centreline of the hinge. The middle hinge is to be fitted at a maximum of 1100mm from the bottom of the door.**
- **The dimensions of the hinges are to be 110mm high (+/- 10mm). Blade width of 35mm (+0/-3mm). Knuckle dimension of 14mm (+/- 1mm).**
- **Fixings are to be 30mm long steel screws.**
- **Intumescent protection is not required.**

TUBULAR LATCHES

- **Option 1 - CERTIFIRE approved tubular latches with a forend with maximum overall dimensions of 58mm high by 26mm wide, a strike plate with maximum overall dimensions of 57mm high by 24mm wide (excluding strike plate lip), and a case with maximum overall dimensions 19mm high by 15mm thick by 64mm long. Intumescent protection is not needed.**
- **Option 2 - CERTIFIRE approved tubular latches with a forend with maximum overall dimensions of 60mm high by 25mm wide, a strike plate with maximum overall dimensions of 66mm high by 25mm wide (excluding strike plate lip), and a case with maximum overall dimensions 23mm high by 16mm thick by78.5mm long. No intumescent protection needed. CERTIFIRE approved 1mm graphite intumescent sheet wrapped around the lock case and keep body, and behind the forend and strike plate.**
- **A maximum of 1000mm from the bottom of the door to the centre line of the spindle.**
- **No restriction on the type of material of face fixing mechanical lever handles and knobs, with respect to material, colour, finish, style, providing these are wholly**

surface mounted (with exception of the spindle and fixing holes) and the spindle hole is a maximum 16mm in diameter.

DOOR CLOSERS

- **CERTIFIRE approved surface mounted overhead door closers are permitted that are approved for use on 30 minute fire resisting timber doors.**

PROTECTIVE PLATES

- **Surface mounted plastic, steel, aluminium or brass plates are permitted subject to the below.**
- **They do not exceed 2mm in thickness.**
- **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)**
- **Protective plates can be bonded with a thermally softening adhesive. Additionally, screws may be used.**

PULL HANDLES

- **Screw-fixed bolt-fixed from the back and back to back fixed pull handles of steel, brass, aluminium and nylon coated and permitted proving and through-bolt fixings are of steel and a maximum bolt to bolt centres do not exceed 1000mm.**
- **A maximum 15mm diameter recess is permitted for bolt through fixings.**
- **Bolt through fixings will require CERTIFIRE approved intumescent protection in the form of a 1mm thick graphite tube, or intumescent mastic to the full dept of the recess.**

FLUSH BOLTS

- **CERTIFRE approved flush bolts in all steel construction with a maximum height of 150mm high by 19mm wide by 15mm deep complete with a 2.6mm thick face plate with a 35mm return top edge.**
- **The flush bolt if fitted in a 25mm deep rebate.**
- **The base of the bolt is to be lined with a CERTIFIER approved 1mm thick graphite based intumescent sheet.**