

- B Approved Document B − Fire Resistance ✓
- 🔳 Approved Document E Acoustic Performance 🗸
- Approved Document L Thermal Performance ✓
- + PAS 23 & 24
- O Comprehensive approvals for 30 minute fire resistance applications including glazing
- O Plywood faces / 4mm exterior grade
- O Tri-layer / lightweight laminated timber core
- O Optional mdf (6mm) / particle-board (6mm) faces

# **Construction Specification:**

The core of PRO LITE comprises a tri-layer low density hardwood construction. The core is faced with 4mm exterior grade hardwood plywood. (Exterior glue lines).

### **Size Adjustment:**

Leaves may be reduced in height and width without restriction but the top rail must remain unaltered – vertical edges must be lipped in accordance with the instructions below (please refer to door edge lippings section).

Single leaves up to 2260mm in height and up to 968mm in width may have the top rail removed but all edges must be lipped.

# Glazing:

Up to 0.91 m² of glazing per leaf is approved in Sentry PRO LITE (all configurations). Apertures must not be less than 100mm from any door edge. Multiple apertures are acceptable up to the maximum approved total area, with a minimum dimension of 80mm between apertures. The aperture shape is not restricted, providing the intumescent material and beads are proven to be compatible with that shape.

# Approved glasses are:

6/7mm Pyroshield, 7mm Pyrobelite, 7.2mm Pyroguard, 7.5 Pyrodur Plus, 10mm Pyrodur, 12mm Pyrobel, 15mm Pyrostop. Alternative glass products may be used, providing relevant evidence generated in suitable timber door construction can be provided.

# Approved proprietary glazing systems are:

Lorient System 36, Sealmaster Fireglaze 30, ISL Therm-A-Glaze 30, Mann McGowan Pyroglaze 30, Reddiplex R8193 glazing channel, Lorient Flexible Figure 1. Installation must be in accordance with the glass / glazing system manufacturer's recommendations.

# **Door frames:**

Softwood or hardwood is approved in minimum density 510 kg/m³ in a minimum section of 70 x 32 mm after rebating / profiling. Single acting door frames must incorporate a 12 mm rebated or planted stop. Double acting frames must be scalloped or fitted with shoulders to maintain specified gap dimensions. Frame joints must be morticed and tenoned, nailed or screwed and with no gaps. MDF doorframes are also approved. Please refer to the global assessment for details.

#### **U Value:**

The thermal performance of Sentry PRO LITE evaluate with softwood door frame section 70 x 32, in flush door format, in accordance with B.S.EN ISO 10077-2: 2003, performed in an Approved Document L compliant configuration is:- 2.0W/m2K Report Reference Chiltern Dynamics Chilt/T04005 refers.

# **Door edge lippings:**

6mm - 18mm square or 8 - 20mm rounded (maximum 2mm profiling) hardwood (minimum density 640 kg/m³) are required to vertical edges only. In areas of high humidity, all edges should be lipped. Glue lines should be UF, Cascamite or P.U. adhesives.

# **Overpanels:**

Overpanels are permitted in all approved configurations providing they incorporate a transom of a minimum specification to that stated for door frames.

# **Installation Instructions:**

Guidance for various methods of sealing the frame to structural opening gap is given in BS 8214:2008, code of practice for Timber Fire Door Assemblies. If you are required to cut down the overall size of the door, it is important that any reduction in leaf height is done from the bottom of the leaf so as to retain the top rail. Lip all edges with exterior grade H/W using a weather proof glue line.

Three hinges should be fitted for all exterior doors, doors weighing over 20kg and interior doors where opposing sides are exposed to extreme variations in temperature and humidity, such as bathrooms and airing cupboards. When installing in an exterior location the door frame should be set back from the outer face of the wall, be protected by a canopy or the head of the frame should be provided with a projecting head drip. Particular attention should be given to the protection provided for an outward opening external door.

The installation of a weather bar at the threshold is considered good practice for exterior doors. Mortise locks - Ensure the mortise is accurately machined and a snug fit for the lock is maintained. The mortise should be properly sealed before fitting the lock.

If cutting or drilling is required on an exterior door or frame you must coat the newly exposed timber with a suitable preservative and re-coat with primer or stain. Glazing rebates and the back of beads must be sealed with an appropriate sealant. Glazed panels in doors must comply with the requirements observed for safety glass. Glazing beads must be correctly fitted using approved compound or glazing tapes to both sides of the glass. Approved material must be used for fire doors. If installing letter plates, these should be of the sleeved type to ensure against water ingress into the door core. In fire doors letter plates must be of an approved fire resisting design.

Door Gaps: It is essential that door gaps between leaf edges and the door frame and between leaves at the meeting edge/overpanel junction in double leaves are a minimum of 2mm and a maximum of 4mm. Note: The leaf contains identical top and bottom rails so it is important to identify the top of the leaf prior to trimming the leaf height and lipping. NB: Ensure correct compliant Ironmongery and glazing systems when using in a fire door application.

Finishing: At least one of the finishing coats should be applied to exterior doors and frames as soon after delivery or installation as possible. If any deterioration of the factory applied primer or base coat is detected it should be recoated before further finishing coats are applied. Finishing of exterior doors and frames should be carried out in dry weather using good exterior quality materials in accordance with the manufacturer's instructions.

The finish for exterior doors should be exterior quality paint or 'high build' stain. 'Low build' stains are not suitable for external applications. Please note that if dark coloured paint or stain finishes are used on exterior doors this may result in high surface temperatures on the door and can increase the risk of distortion if the door is located on a south or south west elevation of the building. The full finishing system must be applied to external doors and all doors that will be subjected to moisture take up. The bottom edge should be coated before installation.

Factory finished doors must be checked for any onsite damage to the finish and any small areas made good as per manufacturer's instructions. Sentry may refuse responsibility for any defect or failure that may consequently occur which is attributed to non-compliance either wholly or in part with the advice given in this information sheet.

PRO LITE from Sentry	Latched Single Acting Doorsets	Unlatched & Double Acting Single Doorsets	Latched Single Acting Double Doorsets	Unlatched & Double Acting Double Doorsets
Leaf Sizes From: To:	2415 x 1513mm 3020 x 1210mm	2415 x 1488mm 2970 x 1210mm	2110 x 976mm 2406 x 915mm	2110 x 951mm 2356 x 915mm
Maximum Glazed Area:	Up to 0.91m² per leaf for all configurations			
Frame Specification:	70 x 32mm Softwood/Hardwood - min density 510kg/m²			
Approved Inturmescent Materials Head/Jambs:	1 No. 15 x 4mm fitted centrally fitted centrally increase to 20 x 4mm for leaves over 2400mm high x 1200mm wide or if MDF frame used 25 x 4mm for leaves over 2800mm high		No. 15 x 4mm fitted centrally increase to 20 x 4mm if MDF frame used <b>Meeting Edges:</b> No. 15 x 4mm fitted centrally in one leaf only	
Supporting Technical Data:	Test reports RF04016, RF00158, RF015096 (AR2) covering Sentry PRO LITE Doors fire resistance tested to BS476 Post 22:1987 in various configurations and leaf sizes at the laboratories of Chiltern International Fire Ltd provide the basis for Assessment CHILTA04030 REV.A. conducted to BS476:Part 22:1987			



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