# protech from SENTRY

## Highly Adaptable • Totally Reliable



#### **Construction Specification:**

**PROTECH** PROTECH comprises a trilayer core faced with 9mm exterior grade hardwood plywood. (Exterior glue lines). For PROTECH 50 the facing thickness is adjusted to 7 mm to create the unique 50 mm / FD60 construction.

#### Size Adjustment:

Leaves may be reduced in height and width without restriction, providing the leaf is re-lipped (please refer to door edge lippings section).

#### Glazing:

Up to 0.5 m<sup>2</sup> of glazing per leaf is approved in **Sentry PROTECH** (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 include:

Pyroshield 2, Pyran S, Pyrodur 60-10, Pyroguard El60, E130 and EW Maxi, Pyrostop 60-101, Pyrobell 25 and 16 and Contraflam Lite. Please refer to the Tech Library for details regarding approved glass options.

Alternative glass products may be used, providing relevant evidence generated in suitable timber door construction can be provided.

### Approved proprietary glazing systems include:

Lorient System 36/15 and System 63 (circular apertures only), Pyroglaze 60, Therm-A-Glaze 60, Fireglaze 60, Halspan 60. Installation must be in accordance with the glass / glazing system manufacturer's recommendations.

#### Acoustic Performance:

Sentry PROTECH has achieved 37dB in testing; please refer to the Tech Library for details.

#### Door frames:

Hardwood is approved in minimum density 640 kg/m<sup>3</sup> in a minimum section of 70 x 32 mm after rebating / profiling.

#### U Value:

The thermal performance of **PROTECH** evaluated 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:- 1.6 W/m2K. Build Check report CU14027-1 refers.

#### Door edge lippings:

6mm - 12mm square or 6 - 12mm rounded (maximum 2mm profiling) hardwood (minimum density 640 kg/m<sup>3</sup>) are required to all edges.

#### **Overpanels:**

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

#### Supporting Technical Data:

Test report RF13144, RF12077 and others covering Sentry PROTECH; fire resistance tested to BS EN 1634-1:2008 at the laboratories of Chiltern International Fire Ltd provide the basis for Assessment CHILT/ A13227 Revision A.

#### 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 re-coated 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.





Sentry product information is available on the worldwide web at **www.sentrypanelproducts.com** email: info@sentrypanelproducts.com

Head Office: Sentry Panel Products Ltd Muirhouses Bo'ness Edinburgh EH51 9SS

**Tel** 00 44 (0) 1506 827538 **Fax** 00 44 (0) 1506 825996

#### **Regional Office:**

Sentry Panel Products Ltd Unit 10, M11 Business Link Parsonage Lane, Stansted CM24 8GF

**Tel** 00 44 (0) 1279 815285 **Fax** 00 44 (0) 1279 812975