## fire screens 30 minutes



Illustrations are not to scale

technical sheet TDS 3

Noberne Doors in conjunction with Sealmaster are able to offer 30 minute fire rated timber glazed screens as manufacured by Noberne Doors and successfully tested by Sealmaster to BS476 Part 22. The 30 minute screen achieved a result of 45 minutes for the largest single pane, test Warres No 61492 refers utilizing Pilkington Pyroshield Safety Glass\*. The largest single pane being 5.31m² with additional panes to include a mullion and a transom.

30 minute

	30 minute
GLASS	Pyroshield 1800(w) x 2950(h)mm
BEAD	20mm deep, 15° chamfer
FIXING	38mm screws at 150mm centres, 45° to vertical
LINER	none
FRAME	80 x 25mm 650kgm³ min. density
SEAL	Fireglaze 20 x 2mm

Intumescent seals provide a means of maintaining the integrity of the frame as the exposed beads are burnt away and the unexposed beads gradually deteriorate from the effects of radiated heat and heat conducted through the beads. Conditions at the unexposed top bead are even more severe due due to the convected heat rising up the face of the glass. For 30 minute performance the Fireglaze intumescent compound needs to maintain the integrity of the glass-to-bead gap against the heat flow mechanisms. This is achieved using the gun grade flexible sealant applied to both sides of the glass between the beads. Care should be exercised to ensure during installation the Fireglaze intumescent compound fills the gap between the glass and beads to the full depth of the beads. If necessary it is acceptable to use Fireglaze Liner spacers to maintain a consistent 2mm gap between beads and the glass. It is important to ensure there are no visible airholes in the compound. Fireglaze intumescent compound does not emit any toxic gasses or other hazardous materials and apart from normal standards of industrial hygiene no special precautions are required during use, cleaning of glass surfaces should be undertaken after one week using a mild liquid detergent solution.

It is possible to offer softwood framed screens. However we recommend hardwood due to the greater resistance to wear and tear offered by using more dense timber.

An approved installation service is available for 30 minute and 60 minute Fire Resisiting Glazed Screens, further details available on request.

\*Pyroshield Safety Glass is manufactured by Pilkington Glass and was previously known as Georgian Wired Safety Polished Glass. Information reproduced with kind permission of Sealmaster Ltd.

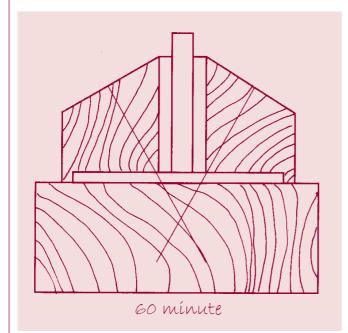
## fire screens 60 minutes



Illustrations are not to scale

technical sheet TDS 3

Noberne Doors in conjunction with Sealmaster are able to offer 60 Minute fire rated timber glazed screens as manufactured by Noberne Doors and successfully tested by Sealmaster to BS476 Part 22.



The 60 minute screen achieved a result of 64 mlnutes as a pair of panes with a mullion, each pane being 4.16 m² again utilizing Pyroshield Safety Glass test Warres No. 60280 refers.

An alternative 60 minute screen achieved a result of 74 minutes as a pair of panes with a mullion the largest pane being 2.41 m² utilizing Schott Pyran Glass, test Yarsley FT/92532.1/MAW/93 refers.

For 60 minute applications the situation is far more onerous than for 30 minute Fire Resisting Screens as other modes of failure may occur. At 30 to 40 minutes the glass reaches it softening point and the pane only remains stable if there is adequate support in the bead region. At about 40 to 50 minutes hot gasses may permeate through fissures in the timber or through imperfect seals to ignite beads on the unexposed side. For these reasons it is essential not only to create a barrier between bead and glass but also to introduce a barrier between the bead and the frame. The Fireglaze Liner of the appropriate width is required to perform this function and and is used to line out out the screen prior to the glass and beads being fitted in conjunction with the Fireglaze Compound.

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	60 minute	60 minute
GLASS	Pyran 1200(w) x 2000(h)mm	Pyroshield 1420(w) x 2930(h)mm
BEAD	20mm deep, 20° chamfer	34mm deep, 25° chamfer
FIXING	63mm screws at 200mm centres, 30° to vertical	76mm screws at 200mm centres, 25° to vertical
LINER	GL60 45 x 2mm	GL60 63 x 2mm
FRAME	90 x 45mm 650kgm³ min. density	93 x 44mm 650kgm³ min. density
SEAL	Fireglaze 20 x 4mm	Fireglaze 34 x 4mm

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