



CERTIFICATE OF APPROVAL No CF 297

This is to certify that, in accordance with TS00 General Requirements for Certification of Fire Protection Products The undermentioned products of

HODGSON SEALANTS (HOLDINGS) LIMITED

Belprin Road, Beverley, East Yorkshire, HU17 0LN Tel: 01482 868321 Fax: 01482 870729 sales@hodgsonsealants.com

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT

Firestrip 30 Firestrip 30FD Firestrip 60

TECHNICAL SCHEDULE

TS25 Fire Resistant Glass, Glazing Systems and **Materials**

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight

Chairman - Management Council

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FIRESTRIP 30, FIRESTRIP 30FD & FIRESTRIP 60 GLAZING SYSTEMS

This Certificate of Approval relates to the fire resistance of various Firestrip glazing methods when used in timber screens and timber door leaves, for a period of 30 or 60 minutes fire resistance, as defined in BS 476: Part 22: 1987 subject to the undermentioned conditions.

This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section D of the Technical Standards (Scotland), Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.'

Glazing Seal Specification	Glass Specification	Application	Fire Resistance Performance (mins)		Page No.
			Integrity	Insulation	
Firestrip 30	Pyroshield 2 / Pyrodur Plus / Pyran S / Firelite / Pyroguard C & W	Timber doorsets	30	0	4
Firestrip 30	Pyranova 11	Timber doorsets	30	30	5
Firestrip 30	Pyrostop 15/18	Timber doorsets	30	30	6
Firestrip 30	Pyroshield 2 / Pyran S / Pyrodur Plus / Firelite / Pyroguard C & W / Pyrobelite / Pyrostop / Pyrobel / Pyrodur / Contraflam	Timber screens	30	0 – 30 (depending on glass)	7
Firestrip 30	Pyran S	Timber screens	30	0	8
Firestrip 30	Pyroshield 2	Timber screens	30	0	9
Firestrip 30	Pyrostop 15/18	Timber screens	30	30	10
Firestrip 30FD	Pyroshield 2 / Pyran S / Pyroguard C & W / Firelite	Timber screens	30	0	11
Firestrip 60	Pyrodur 10	Timber doorsets	60	0	12
Firestrip 60	Pyrostop 23	Timber doorsets	60	60	13
Firestrip 60	Pyrodur 10	Timber screens	60	0	14
Firestrip 60	Pyrostop 23	Timber screens	60	60	15

This product is approved on the basis of:

- i) Initial type testing
- ii) A design appraisal against TS25
- iii) Certification of quality management system to ISO 9001: 2008.
- iv) Inspection and surveillance of factory production control

This Certificate of Approval must be read in conjunction with CERTIFIRE Technical Schedule TS25, Fire Resistant Glass, Glazing Systems and Materials.

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FIRESTRIP 30, FIRESTRIP 30FD & FIRESTRIP 60 GLAZING SYSTEMS

General Requirements

Where the system and glass is installed in a timber screen, the orientation of the screen shall be no more than $\pm 10^{\circ}$ from the vertical.

There is no restriction to the direction of exposure for the glazing methods i.e. the systems are symmetrical.

Any number of panes may be included in the screens/door leaves covered below providing the framing system/door leaf is capable of supporting this principle.

Production

This approval relates to on going production. Product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application when appropriate.

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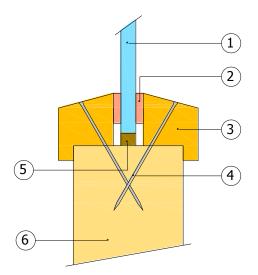
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 for use in timber doors for periods of 30 minutes fire resistance (integrity)



- 1 Pyroshield 2 / Pyrodur Plus / Pyran S / Firelite / Pyroguard C & W
- 2) 12 mm wide by 3 mm thick Firestrip 30 glazing seal
- 3 Hardwood glazing beads 21 mm high by 22 mm wide (minimum) including 6 mm high by 6 mm wide bolection with 10 15° chamfer, minimum density 640 kg/m³
- 4 50 mm long steel pins or screws at 100 mm centres (30-45° to glass) and nominally 50 mm from each corner
- (5) Non-combustible / hardwood setting blocks
- (6) Nominally 44 mm thick FD30 door leaf

The doorset shall be CERTIFIRE approved or have test evidence for the inclusion of apertures of the proposed dimensions.

This Certificate of Approval relates to the sizes of Pyroshield 2 / Pyrodur Plus / Pyran S / Firelite / Pyroguard C & W glass shown in Table 1 below, when used in conjunction with the above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyroshield 2	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Pyran S	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Pyroguard C & W	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Firelite	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Pyrodur Plus	2358 mm (at 950 mm wide)	1093 mm (at 2050 mm high)	2.24 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 1. Maximum Permitted Glass Dimensions

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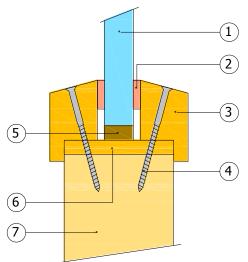
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 for use in timber doors for periods of 30 minutes fire resistance (integrity and insulation)



- 1) 11 mm thick Pyranova S2.0
- 2) 12 mm wide by 3 mm thick Firestrip 30 glazing seal
- 3 Hardwood glazing beads 25 mm high by 20 mm wide (minimum) including 9 mm high by 6 mm wide bolection, either square or up to 15° chamfer, minimum density 640 kg/m³
- (4) 45 mm long steel screws at 150 mm centres (30-45° to glass) and nominally 50 mm from each corner.
- 5) Non-combustible / hardwood setting blocks
- (6) Hardwood liner 6 mm thick
- (7) Nominally 44 mm thick FD30 door leaf

The doorset shall be CERTIFIRE approved or have test evidence for the inclusion of apertures of the proposed dimensions.

This Certificate of Approval relates to the sizes of Pyranova glass shown in Table 2 below, when used in conjunction with the above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
11 mm Pyranova	1642 mm (at 493 mm wide)	900 mm (at 900 mm high)	0.81 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 2. Maximum Permitted Glass Dimensions

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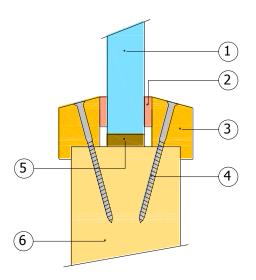
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 for use in timber doors for periods of 30 minutes fire resistance (integrity and insulation)



- (1) Pyrostop 15/18
- 2) 12 mm wide by 3 mm thick Firestrip 30 glazing seal
- (3) Hardwood glazing beads 20 mm high by 16.5 mm wide (minimum) including 5 mm high by 5 mm wide bolection, either square or up to 15° chamfer, minimum density 640 kg/m³
- (4) 60 mm long steel screws at 150 mm centres (30-45° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- (6) Nominally 44 mm thick FD30 door leaf

The doorset shall be CERTIFIRE approved or have test evidence for the inclusion of apertures of the proposed dimensions.

This Certificate of Approval relates to the sizes of Pyrostop glass shown in Table 3 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyrostop 15/18	2250 mm (at 1000 mm wide)	1000 mm (at 2250 mm high)	2.25 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 3. Maximum Permitted Glass Dimensions

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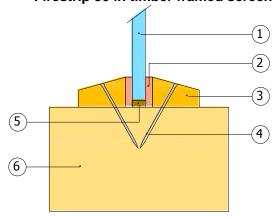
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 in timber framed screens for periods of 30 minutes fire resistance



- 1 Pyroshield 2 / Pyran S / Firelite / Pyroguard C & W / Pyrobelite / Pyrostop / Pyrobel / Pyrodur / Contraflam
- 2) 12 mm by 3 mm 'Firestrip 30' glazing seal
- (3) Hardwood glazing beads 13 mm high by 21 mm wide (minimum) with 10-20° chamfer, minimum density 650 kg/m³
- (4) 32 mm long steel pins or screws at 150 mm centres (30° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- 6 80 mm by 45 mm (minimum) softwood or hardwood frame, minimum density 560 kg/m³

This Certificate of Approval relates to the sizes of Pyroshield 2 / Pyran S / Firelite / Pyroguard C & W / Pyrobelite / Pyrostop / Pyrobel / Pyrodur / Pyrodur Plus / Contraflam glass shown in Table 4 below, when used in conjunction with above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area
Pyroshield 2	2632	1900 mm	3.6 m ²
D 0	(at 1367 mm wide) 2632	(at 1900 mm high) 1900 mm	3.6 m ²
Pyran S	(at 1367 mm wide)	(at 1900 mm high)	3.6 M
Firelite	2632	1900 mm	3.6 m ²
	(at 1367 mm wide)	(at 1900 mm high)	0.0
Pyroguard C & W	2000 mm (at 1200 mm wide)	1549 mm (at 1549 mm high)	2.4 m ²
Pyrobelite	2000 mm (at 1400 mm wide)	1673 mm (at 1673 mm high)	2.8 m ²
Pyrostop	2000 mm (at 1400 mm wide)	1673 mm (at 1673 mm high)	2.8 m ²
Pyrobel	2000 mm (at 1400 mm wide)	1673 mm (at 1673 mm high)	2.8 m ²
Pyrodur	2000 mm (at 1400 mm wide)	1673 mm (at 1673 mm high)	2.8 m ²
Pyrodur Plus	2050 mm (at 1790mm wide)	2050 mm (at 1790 mm high)	3.7 m ²
Contraflam*	2000 mm (at 1400 mm wide)	1673 mm (at 1673 mm high)	2.8 m ²

The aspect ratio of the glass may be unlimited within these glass dimensions.

Table 4. Maximum Permitted Glass Dimensions

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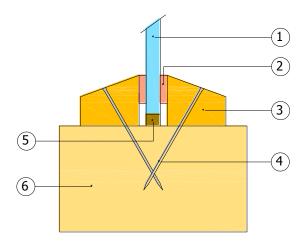
^{*} The frame section width shall be increased to compensate for the glass thickness above 6mm





FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 in timber framed screens for periods of 30 minutes fire resistance



- (1) Pyran S
- (2) 12 mm by 3 mm 'Firestrip 30' glazing seal
- (3) Hardwood glazing beads 21.5 mm high by 25 mm wide (minimum) with 10 20° chamfer, minimum density 650 kg/m³
- (4) 50 mm long steel pins or screws at 150 mm centres (30° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- 6 80 mm by 45 mm (minimum) softwood or hardwood frame, minimum density 450 kg/m³

This Certificate of Approval relates to the sizes of Pyran S glass shown in Table 5 below, when used in conjunction with above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyran S	3629 mm (at 1750 mm wide)	2520 mm (at 2520 mm high)	6.35 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions.				

Table 5. Maximum Permitted Glass Dimensions

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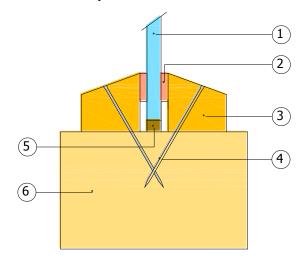
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 in timber framed screens for periods of 30 minutes fire resistance



- 1 Pyroshield 2
- (2) 12 mm by 3 mm 'Firestrip 30' glazing seal
- 3 Hardwood glazing beads 13 mm high by 21 mm wide (minimum) with 20° chamfer, minimum density 610 kg/m³
- 4) 32 mm long by 1.5 mm steel pins or screws at 150 mm centres (at maximum 45° to vertical) and nominally 50 mm from each corner
- (5) Non-combustible / hardwood setting blocks
- 6 80 mm by 45 mm (minimum) softwood or hardwood frame, minimum density 560 kg/m³ fixed using minimum 100 mm long by 4 mm diameter screws at maximum 450 mm centres

This Certificate of Approval relates to the sizes of Pyroshield 2 glass shown in Table 6 below, when used in conjunction with above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area		
Pyroshield 2	2632 mm (at 1367 mm wide	2632 mm (at 1367 mm wide	3.6 m ²		
The aspect ratio of the glass may be unlimited within these glass dimensions.					

Table 6. Maximum Permitted Glass Dimensions

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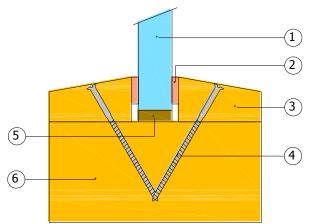
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30 in timber framed screens for periods of 30 minutes fire resistance



- 1) Pyrostop 15/18
- 2) 12 mm by 3 mm 'Firestrip 30' glazing seal
- 3 Hardwood glazing beads 20 mm high by 37 mm wide (minimum) either square or up to 15° chamfer, minimum density 640 kg/m³
- 4) 60 mm long steel screws at 150 mm centres (30° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- (6) 95 mm by 45 mm (minimum) hardwood frame, minimum density 640 kg/m³

This Certificate of Approval relates to the sizes of Pyrostop 15/18 glass shown in Table 7 below, when used in conjunction with above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyrostop 15/18	3629 mm (at 1750mm wide)	2520 mm (at 2520 mm high)	6.35 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions.				

Table 7. Maximum Permitted Glass Dimensions

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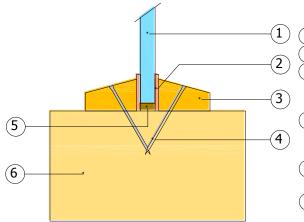
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FIRESTRIP 30 GLAZING SYSTEM

Firestrip 30FD in timber framed screens for periods of 30 minutes fire resistance



- Pyroshield 2 / Pyran S / Pyroguard C & W / Firelite
- 2 15 mm by 1.5 mm 'Firestrip 30FD' seal
- 3 Hardwood glazing beads 13 mm high by 21 mm wide (minimum) with 15 20° chamfer, minimum density 610 kg/m³
- 4) 32 mm long steel pins or screws at 150 mm centres (30° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks setting blocks
- (6) 80 mm by 45 mm (minimum) softwood or hardwood frame, minimum density 560 kg/m³

This Certificate of Approval relates to the sizes of Pyroshield 2 / Pyran S / Pyroguard C & W / Firelite glass shown in Table 8 below, when used in conjunction with above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyroshield 2	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Pyran S	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Pyroguard C & W	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
Firelite	875 mm (at 651 mm wide)	758 mm (at 752 mm high)	0.57 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 8. Maximum Permitted Glass Dimensions

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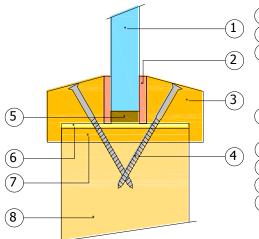
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FIRESTRIP 60 GLAZING SYSTEM

Firestrip 60 for use in timber doors for periods of 60 minutes fire resistance



- Pyrodur 10
- 20 mm wide by 3 mm thick Firestrip 60 glazing seal
 - Hardwood glazing beads 20 mm high by 24 mm wide (minimum) including 6 mm high by 6 mm wide bolection, either square or up to 15° chamfer, minimum density 640 kg/m³
- 4) 50 mm long steel screws at 150 mm centres (30-45° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- 6) Norseal Liner N
- (7) Hardwood liner 6 mm thick
- 8 Nominally 54 mm thick FD60 door leaf

The doorset shall be CERTIFIRE approved or have test evidence for the inclusion of apertures of the proposed dimensions.

This Certificate of Approval relates to the sizes of Pyrodur 10 glass shown in Table 9 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyrodur 10	1950 mm (at 800 mm wide)	867 mm (at 1800 mm high)	1.56 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 9. Maximum Permitted Glass Dimensions

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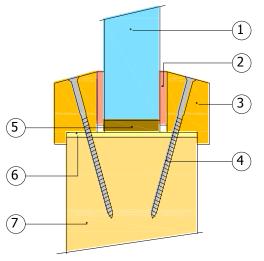
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FIRESTRIP 60 GLAZING SYSTEM

Firestrip 60 for use in timber doors for periods of 60 minutes fire resistance



- 1 Pyrostop 23
- 2) 20 mm wide by 3 mm thick Firestrip 60 glazing seal
- 3 Hardwood glazing beads 25 mm high by 17.5 mm wide (minimum) including 5 mm high by 5 mm wide bolection, either square or up to 15° chamfer, minimum density 640 kg/m³
- 4) 60 mm long steel screws at 100 mm centres (30-45° to glass) and nominally 50 mm from each corner.
- (5) Non-combustible / hardwood setting blocks
- 6 Norseal Liner N
- (7) Nominally 54 mm thick FD60 door leaf

The doorset shall be CERTIFIRE approved or have test evidence for the inclusion of apertures of the proposed dimensions.

This Certificate of Approval relates to the sizes of Pyrostop 23 glass shown in Table 10 below, when used in conjunction with the above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area	
Pyrostop 23	2250 mm (at 800 mm wide)	1000 mm (at 1800 mm high)	1.80 m ²	
The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 10. Maximum Permitted Glass Dimensions

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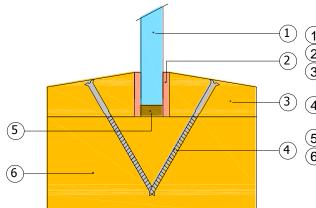
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FIRESTRIP 60 GLAZING SYSTEM

Firestrip 60 for use in timber screens for periods of 60 minutes fire resistance



- 1 Pyrodur 10
 - 20 mm wide by 3 mm thick Firestrip 60 glazing seal
 - Hardwood glazing beads 20 mm high by 40 mm wide (minimum), minimum density 640 kg/m³
 - 60 mm long steel screws at 150 mm centres (30-45° to glass) and nominally 50 mm from each corner.
- 5) Non-combustible / hardwood setting blocks
- 95 mm by 45 mm (minimum) hardwood frame, minimum density 640 kg/m³

This Certificate of Approval relates to the sizes of Pyrodur 10 glass shown in Table 11 below, when used in conjunction with the above system.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area		
Pyrodur 10	2200 mm (at 900 mm wide)	1407 mm (at 1407 mm high)	1.98 m ²		
The aspect ratio of	The aspect ratio of the glass may be unlimited within these glass dimensions				

Table 11. Maximum Permitted Glass Dimensions

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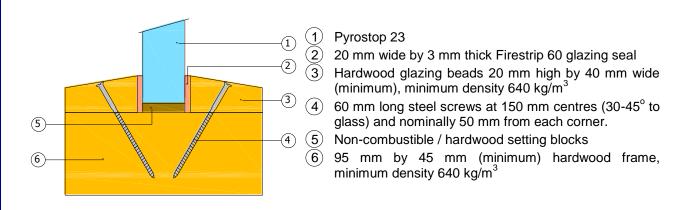
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FIRESTRIP 60 GLAZING SYSTEM

Firestrip 60 for use in timber screens for periods of 60 minutes fire resistance



This Certificate of Approval relates to the sizes of Pyrostop 23 glass shown in Table 12 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Glass	Maximum Glass Height	Maximum Glass Width	Maximum Glass Area
Pyrostop 23	2250 mm (at 800 mm wide)	1000 mm (at 1800 mm high)	1.80 m ²
The aspect ratio of the glass may be unlimited within these glass dimensions			

Table 12. Maximum Permitted Glass Dimensions

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