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CERTIFICATE OF APPROVAL
No CF 5818

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

PYROGUARD UK LIMITED

MILLFIELD LANE, HAYDOCK, WA11 9GA, UNITED KINGDOM
TEL: 01942 710720

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	TECHNICAL SCHEDULE
'Pyroguard Advance 2-EW, 2-FD and 2-EI' Fire Resisting Glass	**TS 25 Fire Resistant Glass, Glazing Systems and Materials**

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager

Issued: 9th October 2021
Reissued: 21st September 2026
Valid to: 8th October 2031

warringtonfire certifire CERTIFICATION

certifire UKAS PRODUCT CERTIFICATION 0087

This certificate is the property of Warringtonfire Testing and Certification Limited
Registered in England and Wales
Registered Office: 3rd Floor, Davidson Building, 5 Southampton Street, London, WC2E 7HA. Company Registration No: 11371436

CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW, 2-FD and 2-EI Fire Resisting Glass

This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

This Certificate of Approval relates to the fire resistance of Pyroguard UK Ltd, 'Pyroguard Advance 2-EW, 2-FD and 2-EI' when used in the following applications, as defined in BS 476: Part 22: 1987, using test results achieved against the following standards:

BS 476-20:1987 Part 20: "Method for determination of the fire resistance of elements of construction (general principles)"
BS 476-22:1987: Part 22: "Methods for determination of the fire resistance of non-loadbearing elements of construction"
BS EN 1363-1 "Fire resistance tests - Part 1 General requirements"
BS EN 1364-1 "Fire resistance tests for non-loadbearing elements - Part 1: Walls".
BS EN 1364-3 "Fire resistance tests for non-loadbearing elements - Curtain walling. Full configuration (complete assembly)"
BS EN 1634-1 "Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware Part 1: Fire resistance test for door and shutter assemblies and openable windows".

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW, 2-FD and 2-EI Fire Resisting Glass

Glass Specification	Application	Fire Resistance Performance (mins)		Page No.
		Integrity	Insulation	
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	7
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	8
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	9
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	10
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	11
Pyroguard Advance 2-EW30/7-1	Multi-pane timber framed screens	30	0	12
Pyroguard Advance 2-EW30/7-1 VI [IGU]	Multi-pane timber framed screens	30	0	13
Pyroguard Advance 2-EW30/11-2	Multi-pane timber framed screens	30	0	14
Pyroguard Advance 2-EW30/11-1	Multi-pane timber framed screens	30	0	15
Pyroguard Advance 2-EW60/11-2	Multi-pane timber framed screens	60	0	16-19
Pyroguard Advance 2-EW30/7-1	Timber based doorsets	30	0	20-32
Pyroguard Advance 2-FD60/7-1	Timber based doorsets	60	0	33-34
Pyroguard Advance 2-FD60/11-1	Timber based doorsets	60	0	35
Pyroguard Advance 2-EW30/11-2	Timber based doorsets	30	0	36-37
Pyroguard Advance 2-EW60/11-2	Timber based doorsets	60	0	38-52
Pyroguard Advance 2-FD90/7-1	Timber based doorsets	90	0	53
Pyroguard Advance 2-FD90/11-1	Timber based doorsets	90	0	54
Pyroguard Advance 2-EW90/11-2	Timber based doorsets	90	0	55
Pyroguard Advance 2-EW30/7-1	Multi-pane steel framed screens	30	0	56
Pyroguard Advance 2-EW30/7-1 VI [IGU]	Multi-pane steel framed screens	30	0	57
Pyroguard Advance 2-EW30/11-2	Multi-pane steel framed screens	30	0	58
Pyroguard Advance 2-EW30/11-2	Multi-pane steel framed screens	30	0	59
Pyroguard Advance 2-EW60/11-2	Multi-pane steel framed screens	60	0	60
Pyroguard Advance 2-EW60/11-2 VI [IGU]	Multi-pane steel framed screens	60	0	61
Pyroguard Advance 2-EW30/7-1 VI [IGU]	Steel based doorsets	30	0	62
Pyroguard Advance 2-EW30/11-2	Steel based doorsets	30	0	63
Pyroguard Advance 2-EW60/11-2	Steel based doorsets	60	0	64
Pyroguard Advance 2-EW90/11-2	Steel based doorsets	90	0	65
Pyroguard Advance 2-EW30/11-2	Steel based doorsets	30	0	66
Pyroguard Advance 2-EW60/11-2	Steel based doorsets	60	0	67
Pyroguard Advance 2-EW30/11-2 VI [IGU]	Steel based doorsets	30	0	68
Pyroguard Advance 2-EW60/11-2 VI [IGU]	Steel based doorsets	60	0	69
Pyroguard Advance 2-EI30/16-3	Multi-pane timber framed screens	30	30	70
Pyroguard Advance 2-EI30/16-3	Multi-pane steel framed screens	30	30	71

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW, 2-FD and 2-EI Fire Resisting Glass

This product is approved on the basis of:

a) Initial type testing
b) A design appraisal against TS25
c) Product surveillance under BS EN ISO 9001: 2015
d) Audit testing

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

General Requirements

Where the glass is installed in a timber or steel framed screen, the orientation of the screen shall be no more than ±10º from the vertical.

The edge cover to each pane shall be no less than 10mm minimum with an expansion gap in the rebate top and sides no less than 3mm.

Options

i. Setting blocks: Hardwood and other non-combustible materials may be used. The dimensions may vary in order to centralised and stabilize the glazing within the aperture. It has also been proven that setting blocks may be removed with no detriment to performance provided that sufficient edge cover is provided on all four sides of the glazing.

ii. Closed cell foam tapes: The closed cell foam glazing tapes listed below, may be used in 30 minute integrity only applications for timber screens and timber doorsets as a replacement for the approved glazing tapes.

Arbo F42
Compriband e TP601
Fire & Acoustic Seals
Scapa 3259
Technibond

iii. Neutral silicone capping: Where a glazing tape is used it may, optionally, be sealed with a neutral silicone capping. This can only be used on applications where the 2-EW30/7-1 (7mm) glass is utilised for 30 minute applications or the 2-EW60/11-2 (11mm) glass is utilised for 60 minute applications.

iv. Beads: In cases where flush or square timber beads are tested in doors or partition. Flush timber beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method. Chamfered and bolection beads may only be increased in dimension.

v. Section: The tested framing sections may be increased but not decreased in dimension.

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Pyroguard Advance 2-EW, 2-FD and 2-EI Fire Resisting Glass

vi. Insulated glass units (IGU, DGU, VI): The orientation of the unit with respect to the fire risk is critical to the fire resistance performance and is specified in this certificate for each application.

The approved insulated glass units may be modified in the following ways:

Counterpanes may be selected from the following list:

Annealed glass
Laminated glass (counterpane to the fire side only unless stated otherwise)
Low E glass
Obscured glass
Patterned glass
Solar Control glass
Toughened glass
'PassivGlas' vacuum glass.

Spacers may be of dimensions 6-20 mm.

Spacers materials may be selected from the listed types:

Aluminium
Stainless steel
Steel
Technoform Mww SP14 [Warm Edge]

Seal materials may be selected from types:

Hot-melt butyl
Polyurethane
Polysulphide
Silicone

Integral Blinds: Insulating Glass Units (IGUs) may also have an integrated blind within the airspace provided the Pyroguard glass pane is glazed on the non-fire side when combined with a non-fire rated laminated glass or either side when combined with a float or toughened glass.

vii. Decorative: All systems may include decorative self-adhesive leading or plant-on beads on either or both faces or may be frosted or patterned on one face.

viii. Application of films: The glass may have 3M – Ultra 400 clear or Llumar Window Film SCL SR PS4 applied to either face or an alternative film applied to the known fire risk side only. If the fire risk may be from either side or it cannot be determined which side of the glass will be on the fire risk side, then films other than 3M – Ultra 400 clear or Llumar Window Film SCL SR PS4 shall not be applied.

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Pyroguard Advance 2-EW, 2-FD and 2-EI Fire Resisting Glass

ix. Obscured: Pyroguard Advance 2 glass may be sandblasted, acid etched, bevelled or incorporate grooves subject to the minimum glass thickness being maintained i.e. by utilising thicker glass sheets bevelled at the edge or grooved to standard thickness. Switchable privacy application may also be achieved by lamination using Priva-see film. This shall be limited to the FR glass oriented to the unexposed face only. The manufacturer shall be consulted where this is required.

x. Shapes: It is acceptable to include Pyroguard Advance 2-EW, 2-FD and 2-EI in shaped apertures, i.e. circles, ovals, arches, quadrants, etc. within timber door leaves or screens (subject to limitations in the framing systems). For rectilinear apertures angles between adjoining perimeter beads should not be less than 45°. Where shaped apertures are included, only finger jointed glazing beads are acceptable. Maximum linear dimensions or areas as approved should not be exceeded.

xi. Glazing: Glazing may be substituted for other, thicker, glazing from the same product family. For example, 2-EW30/7-1 may be substituted by 8-1, 9-1, 11-1 etc, provided that the minimum bead dimensions are respected and that there is no reduction in the thickness of the interlayer component.

xii. Where multiple panes are approved for use within a single door leaf, the certificate holder should be contacted in regards minimum spacing requirements and further restrictions.

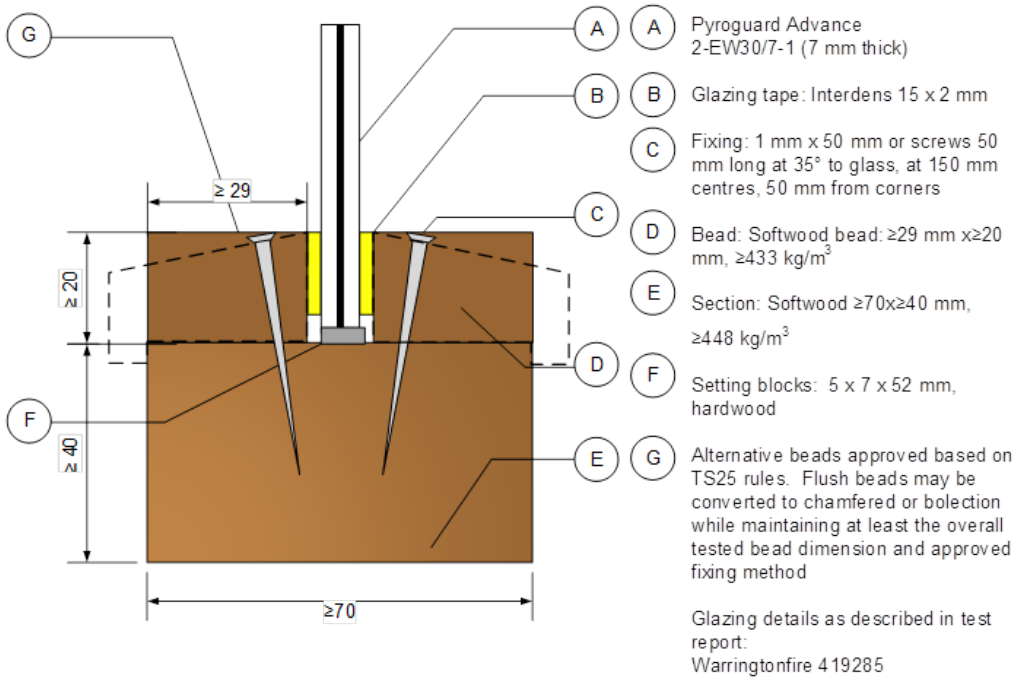
xiii. It shall be noted that where a screen is listed in the following pages it may be single-paned (fixed light) or multi-paned.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
930mm wide @ 2740mm high	2831mm high @ 900mm wide	2.54m^2
2025mm wide @ 900mm high	930mm high @ 1960mm wide	1.82m^2

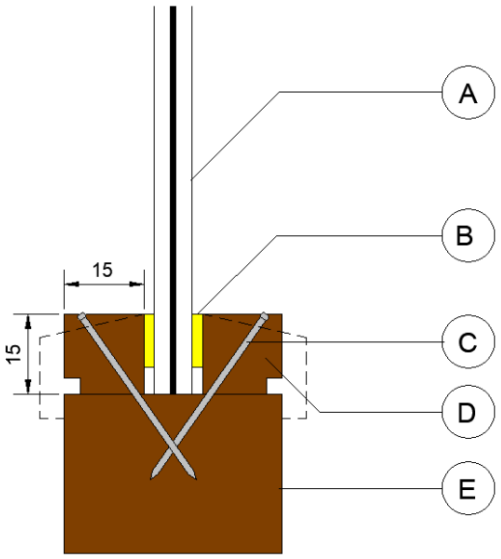
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape: Pyrostrip 500 FSA 10 mm x 2 mm
[Mann McGowan]

Ⓒ Fixings: 16 swg x 38 mm pins at 50 mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hardwood ≥640 kg/m³ ≥15 mm wide x ≥15 mm deep with optional 3 mm x 3 mm shadow gap.

Alternative bead may be approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Section: Softwood ≥510 kg/m³ ≥41 mm wide x ≥30 mm high.

Glazing details as described in test report:
Warringtonfire WF541872

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

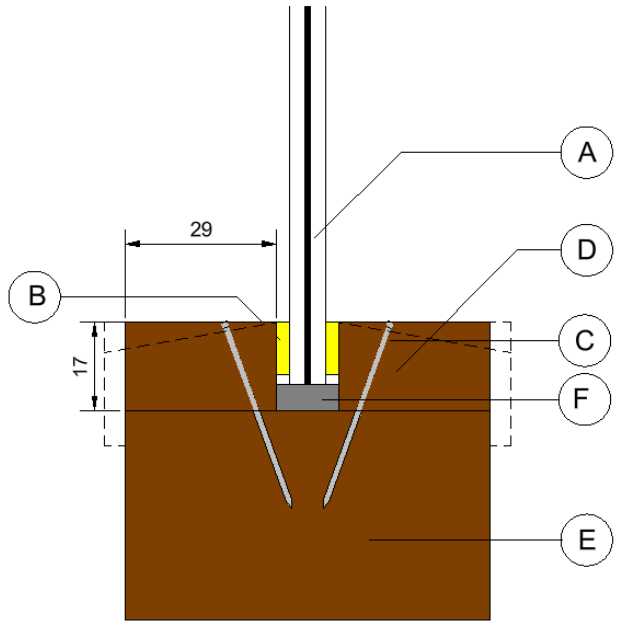
Maximum Width	Maximum Height	Maximum Area
1000mm wide @ 2640mm high	3160mm high @ 834mm wide	2.64m^2
1900mm wide @ 410mm high	494mm high @ 1579mm wide	0.78m^2

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape: Pyroglaze 30 500F 10 mm x 3 mm.[Mann McGowan]

Ⓒ Fixing: Ø1.6 x 50 mm nails. 50 mm from corners, maximum 150 mm centres.

Ⓓ Beads: Softwood glazing beads, ≥500 kg/m³. ≥29 mm wide x ≥17 mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Section: Softwood ≥480 Kg/m³ ≥70 mm x ≥40 mm.

Ⓕ Setting Blocks: hardwood or non-combustible material.

Glazing details as described in test report: Warringtonfire WF544027

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

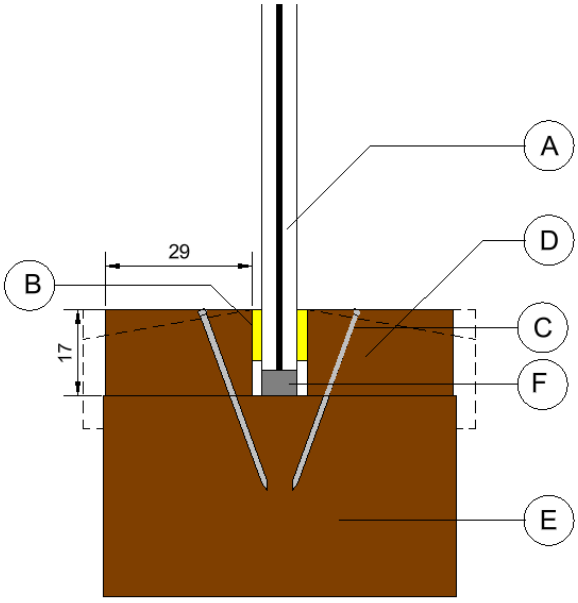
Maximum Width	Maximum Height	Maximum Area
993mm wide @ 2770mm high	2936mm high @ 936mm wide	2.75m^2

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape Pyrostrip 500 FSA 10 mm x 2 mm.
[Mann McGowan]

Ⓒ Fixing: Ø1.6 x 50 mm nails. 50 mm from corners, maximum 150 mm centres.

Ⓓ Beads: Softwood glazing beads, ≥500 kg/m³. ≥29 mm wide x ≥17 mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Section: Softwood ≥480 Kg/m³ ≥70 mm x ≥40 mm.

Ⓕ Setting Blocks: hardwood or non-combustible material.

Glazing details as described in test report: Warringtonfire WF544027

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

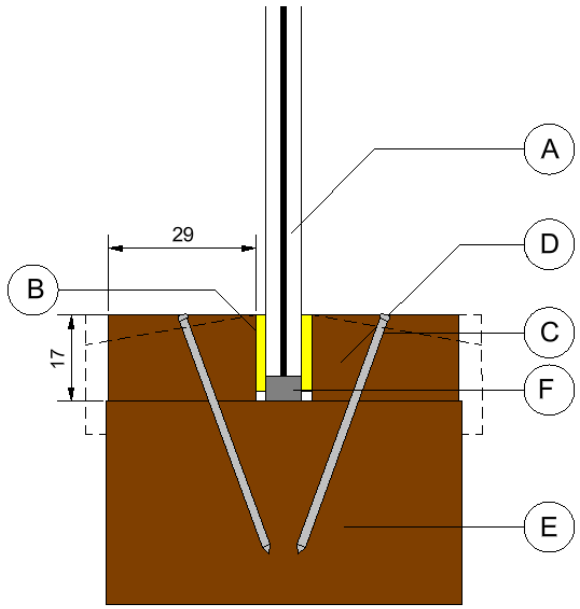
Maximum Width	Maximum Height	Maximum Area
993mm wide @ 2477mm high	2623mm high @ 937mm wide	2.46m^2

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Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape Pyrostrip Interdens SA 15 mm x 2 mm. [Mann McGowan]

Ⓒ Fixing: Ø1.6 x 50 mm nails. 50 mm from corners, maximum 150 mm centres.

Ⓓ Beads: Softwood glazing beads, ≥500 kg/m³. ≥29 mm wide x ≥17 mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Section: Softwood ≥480 Kg/m³ ≥70 mm x ≥40 mm.

Ⓕ Setting Blocks: hardwood or non-combustible material.

Glazing details as described in test report: Warringtonfire WF544027

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

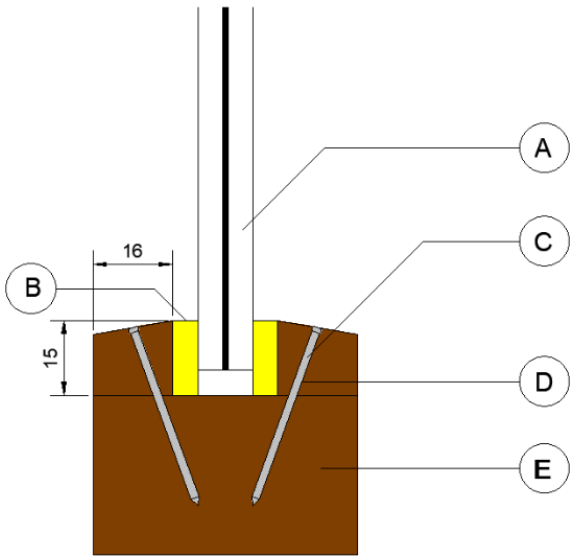
Maximum Width	Maximum Height	Maximum Area
993mm wide @ 2477mm high	2623mm high @ 937mm wide	2.46m²

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Pyroguard Advance 2-EW30/7-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape : Intumescent Foam Tape 15 mm x 5 mm. [Sealmaster]

Ⓒ Fixing: 16 swg x 38 mm steel pins mitred glazing beads, 50 mm from corners, maximum 150 mm centres

Ⓓ Beads: Hardwood glazing beads, ≥691 kg/m³. ≥16 mm high x ≥15 mm high 15º chamfer.

Ⓔ Section: Softwood ≥552 Kg/m³ ≥53 mm x ≥32 mm.

Glazing details as described in test report: CFR2208031

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1022mm wide @ 2730mm high	3357mm high @ 831mm wide	2.79m²
2250mm wide @ 649mm high	799mm high @ 1828mm wide	1.46m²

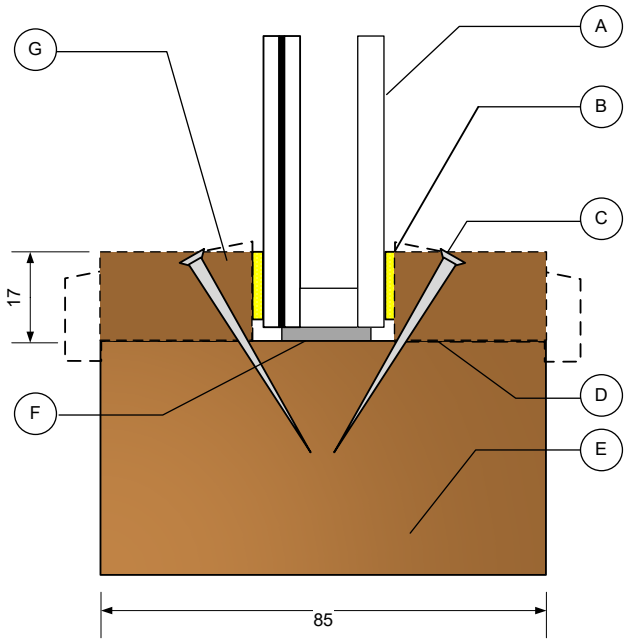
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Pyroguard Advance 2-EW30/7-1 VI IGU glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



A Pyroguard Advance 2-EW30/7-1 VI [IGU]

B Glazing tape: Kerafix FXL 13 mm x 2 mm [KUHN]. Den Braven Hybriseal 2PS or Bloem MSP-Oneseal optional capping seals

C Fixing: 50 mm long x 1 mm diameter steel pins at 50 mm from each corner and 150 mm centres

D Beads: Softwood ≥446 kg/m^3, ≥29 mm x ≥17 mm (w x h)

E Section: ≥85 mm x ≥40 mm (w x h) of softwood density ≥430 kg/m^3

F Setting blocks: 23mm wide x 80mm x 5mm hardwood or non-combustible

G Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

Glazing details as described in test report:
Warringtonfire WF505065

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 VI glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1240mm wide @ 2750mm high	2841mm high @ 1200mm wide	3.41m^2
1715mm wide @ 860mm high	888mm high @ 1660mm wide	1.47m^2

Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

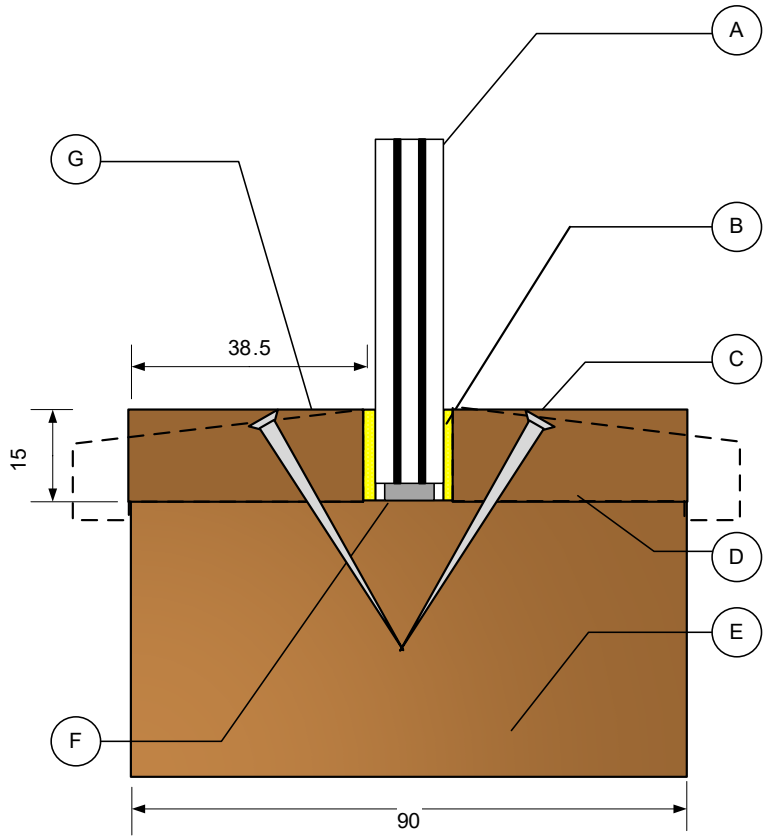
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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



A Pyroguard Advance 2-EW30/11-2 (11 mm thick)

B Glazing tape: Interdens 15x2 mm

C Fixing: 1 x 50 mm or screws 50 mm long at 35° to glass, at 150 mm centres, 50 mm from corners

D Softwood bead: ≥38.5 X ≥15 mm, ≥433 kg/m^3

E Softwood partition: ≥90x≥40mm, ≥433 kg/m^3

F Setting blocks: 5 x 11 x 52 mm Hardwood or non-combustible

G Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

Glazing details as described in test report:
Warringtonfire WF417133

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1875mm wide @ 2697mm high	3371mm high @ 1500mm wide	5.05m^2

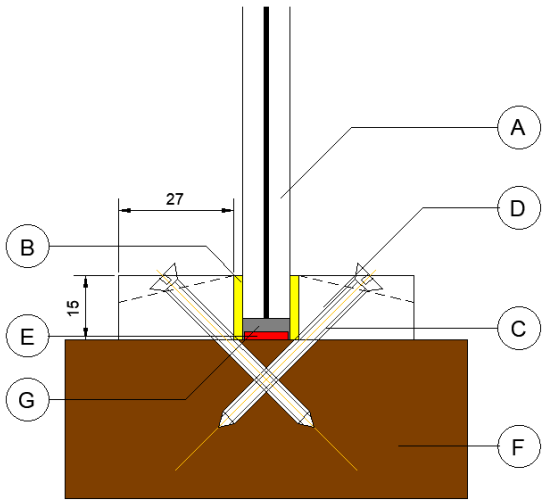
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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Pyroguard Advance 2-EW30/11-1 glass in timber framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/11-1 (11 mm thick).

Ⓑ Glazing tape: tape: Kerafix FXL 200, 15 mm x 2 mm. [Kuhn]

Ⓒ Fixing: Ø4 x 50 mm woodscrew. 50 mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hard wood glazing beads, ≥640 kg/m³. ≥27 mm wide x ≥15 mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Liner: Kerafix FXL 200, 10 mm x 2 mm. [Kuhn]

Ⓕ Section: Softwood ≥489 Kg/m³ ≥94 mm x ≥37 mm.

Ⓖ Setting Blocks: hardwood or non-combustible material.

Glazing details as described in test report: Warringtonfire WF539566

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

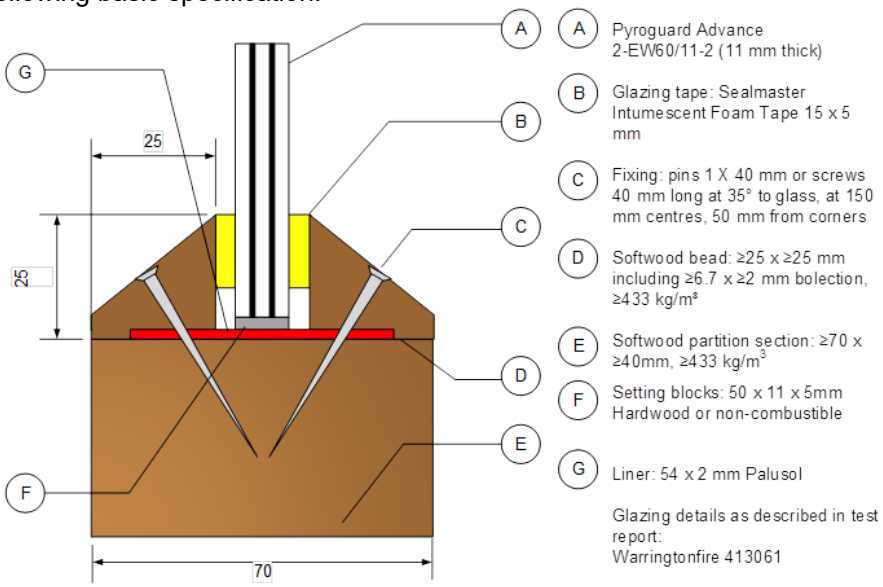
Maximum Width	Maximum Height	Maximum Area
1000mm wide @ 2530mm high	3156mm high @ 801mm wide	2.53m^2
2055mm wide @ 564mm high	707mm high @ 1642mm wide	1.16m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



A Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: Sealmaster Intumescent Foam Tape 15 x 5 mm

C Fixing: pins 1 X 40 mm or screws 40 mm long at 35° to glass, at 150 mm centres, 50 mm from corners

D Softwood bead: ≥25 x ≥25 mm including ≥6.7 x ≥2 mm bolection, ≥433 kg/m³

E Softwood partition section: ≥70 x ≥40mm, ≥433 kg/m^3

F Setting blocks: 50 x 11 x 5mm Hardwood or non-combustible

G Liner: 54 x 2 mm Palusol

Glazing details as described in test report:
Warringtonfire 413061

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
827mm wide @ 2743mm high	2834mm high @ 801mm wide	2.27m^2
1925mm wide @ 801mm high	934mm high @ 1650mm wide	1.54m^2
949mm wide @ 1033mm high	1222mm high @ 802mm wide	0.98m^2

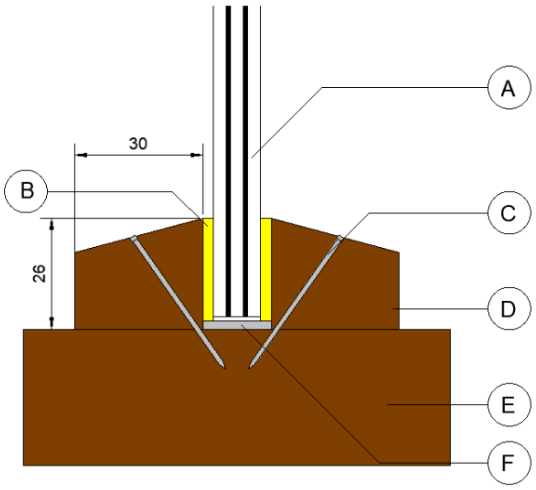
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick).

Ⓑ Glazing tape: Pyroglaze 60 24 mm x 2.5 mm. [Mann McGowan]

Ⓒ Fixings: 16 swg x 50 mm pins at 50 mm from corners, maximum 150 mm centres.

Ⓓ Beads: Hardwood ≥640 kg/m³ ≥30 mm wide x ≥26 mm deep, with 15º chamfer.

Ⓔ Section: Hardwood ≥640 kg/m³ ≥110 mm wide x ≥32 mm high.

Ⓕ Setting Blocks: 80 mmx 30 mm x 2 mm– hardwood or non-combustible material.

Glazing details as described in test report: Warringtonfire WF531980

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

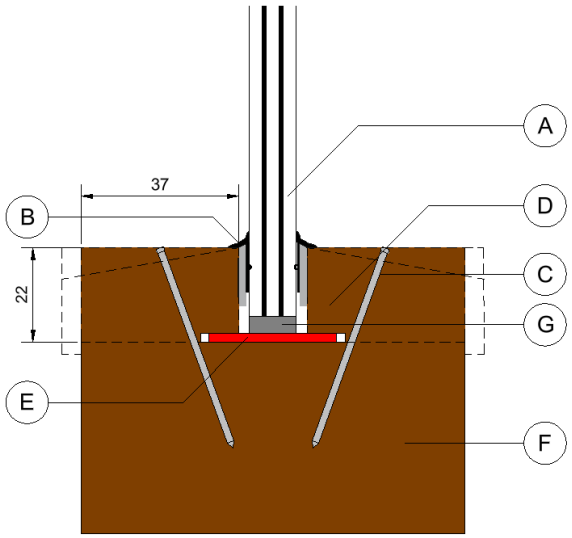
Maximum Width	Maximum Height	Maximum Area
1830mm wide @ 360mm high	363mm high @ 1812mm wide	0.66m^2

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick)

Ⓑ Glazing tape: ST 104 SG [STS] 15 mm x 5 mm

Ⓒ Fixing: Ø1.6 x 50 mm pins. 50 mm from corners, maximum 150 mm centres and 45° from the face of the glass

Ⓓ Bead: Sapele glazing beads, ≥650 kg/m³. ≥37 mm wide x ≥22 mm deep with a 9mm x 2 mm rebate.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Liner: ST 302 [STS] 30 mm x 2mm

Ⓕ Frame: Hardwood ≥650 kg/m³ ≥90 mm x ≥45 mm

Ⓖ Setting Blocks: hardwood or non-combustible material.

Glazing details as described in test report: EFR-22-V-000784

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in the table below, when used in conjunction with the above system.

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

Maximum Permitted Glass Dimensions

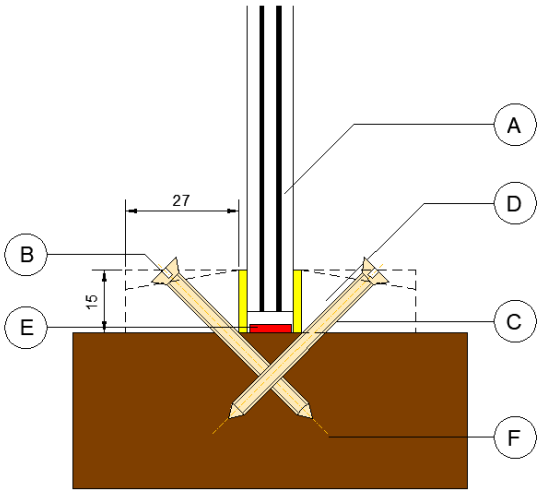
Maximum Width	Maximum Height	Maximum Area
990mm wide @ 2748mm high	3025mm high @ 899mm wide	2.72m²
1100mm wide @ 1691mm high	1862mm high @ 999mm wide	1.86m²
2080mm wide @ 1000mm high	1100mm high @ 1891mm wide	2.08m²

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick).

Ⓑ Glazing tape : Kerafix FXL 200 15 mm x 2mm. [Kuhn]

Ⓒ Fixing: Ø4 x 50 mm wood screws 50mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hardwood glazing beads, ≥580 kg/m³. ≥27mm wide x ≥15 mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Liner: Kerafix FXL 200 10 mm x 2 mm. [Kuhn]

Ⓕ Section: Softwood ≥469 kg/m³ ≥94 mm x ≥37mm.

Glazing details as described in test report: Warringtonfire WF539567

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in the table below, when used in conjunction with the above system.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
2496mm wide @ 346mm high	346mm high @ 2496mm wide	0.86m²

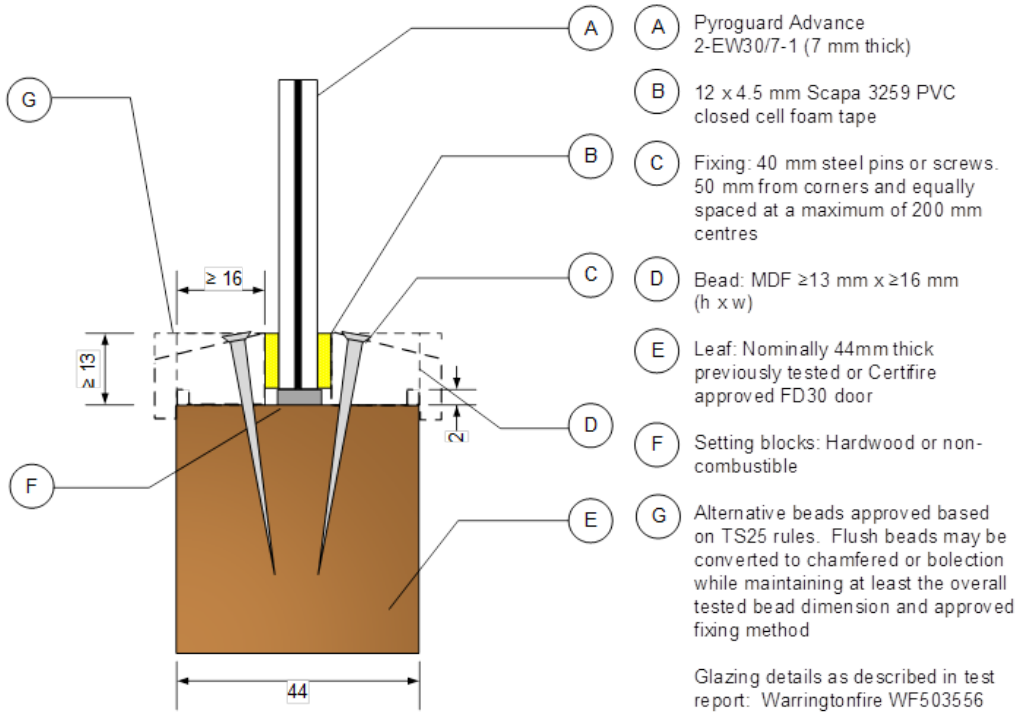
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
900mm wide @ 1294mm high	1617mm high @ 720mm wide	1.16m^2

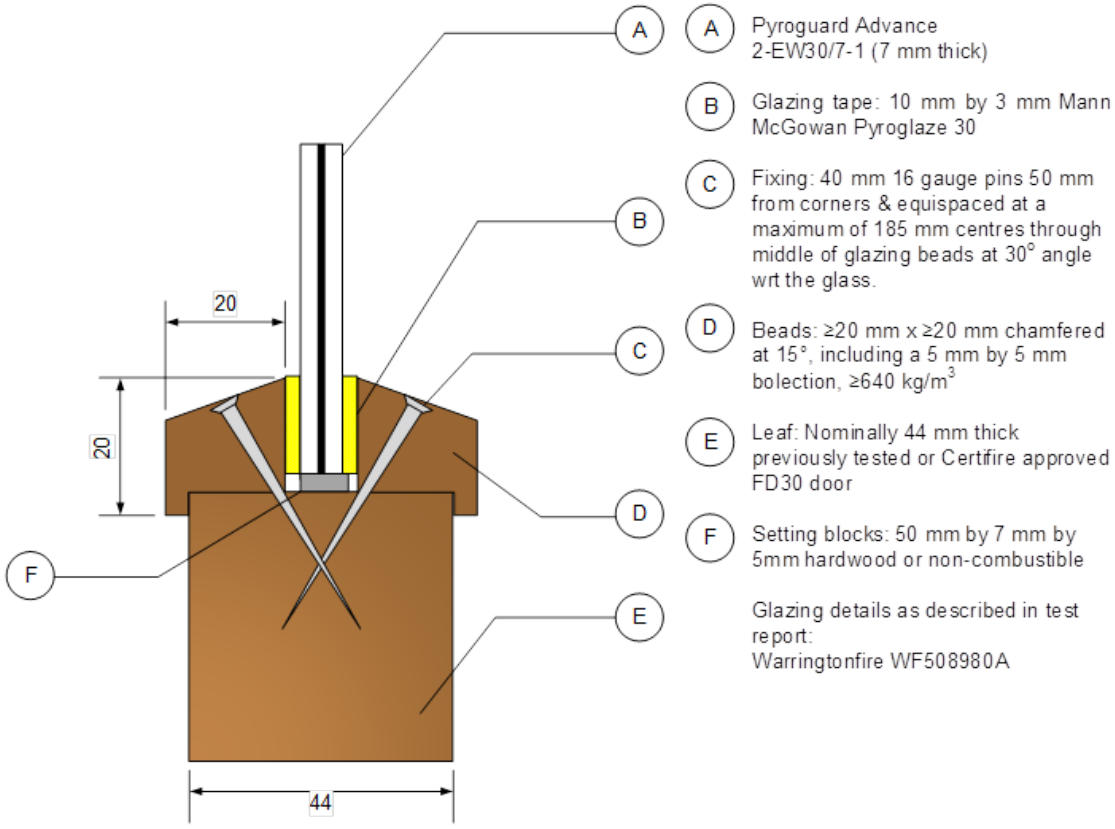
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Pyroguard Advance 2-EW30/7-1 (7 mm thick)

B Glazing tape: 10 mm by 3 mm Mann McGowan Pyroglaze 30

C Fixing: 40 mm 16 gauge pins 50 mm from corners & equispaced at a maximum of 185 mm centres through middle of glazing beads at 30° angle wrt the glass.

D Beads: ≥20 mm x ≥20 mm chamfered at 15°, including a 5 mm by 5 mm bolection, ≥640 kg/m^3

E Leaf: Nominally 44 mm thick previously tested or Certfire approved FD30 door

F Setting blocks: 50 mm by 7 mm by 5mm hardwood or non-combustible

Glazing details as described in test report:
Warringtonfire WF508980A

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
600mm wide @ 1600mm high	1920mm high @ 500mm wide	0.96m^2

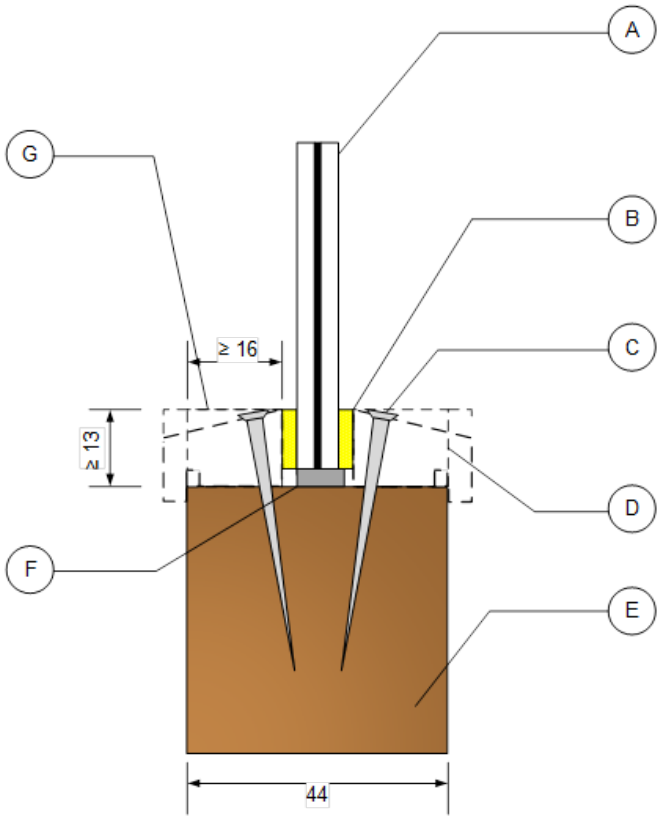
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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Pyroguard Advance 2-EW30/7-1 (7 mm thick)

B 10 x 2 mm Fire & Acoustic Seals Closed Cell Foam Tape

C Fixing: 40 mm steel pins at 90° (+/-10°) to the bead surface or screws. 50 mm from corners and equally spaced at a maximum of 150 mm centres

D Bead: MDF ≥13 mm x ≥16 mm (h x w)

E Section: Nominally 44mm thick previously tested or Certifire approved FD30 door

F Setting blocks: Hardwood or non-combustible

G Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

Glazing details as described in test report:
Warringtonfire WF510182

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
900mm wide @ 1294mm high	1617mm high @ 720mm wide	1.16m^2

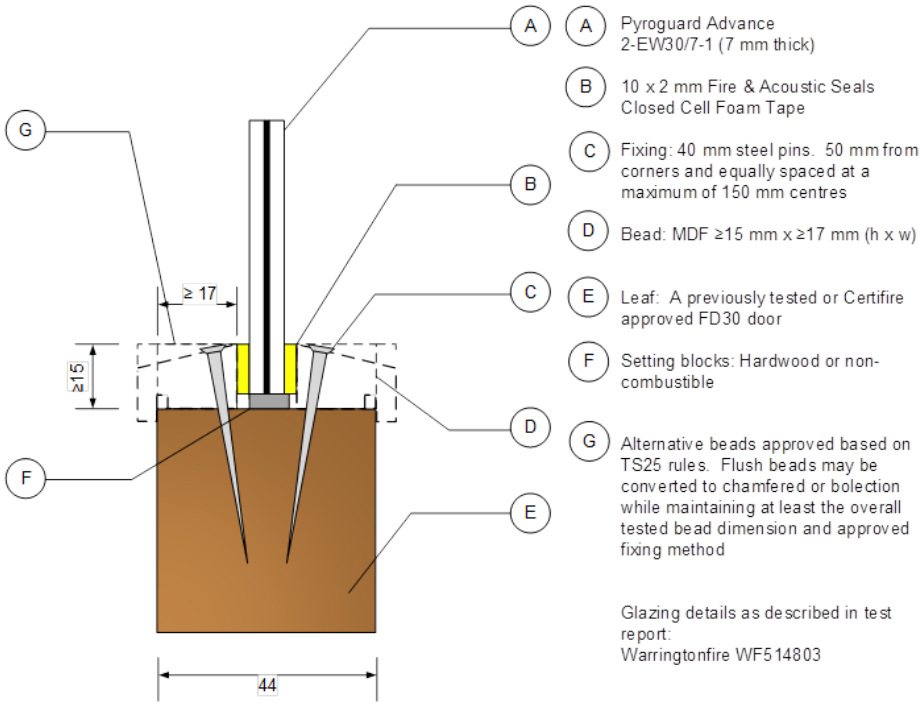
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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1013mm wide @ 2205mm high	2205mm high @ 1013mm wide	2.23m^2

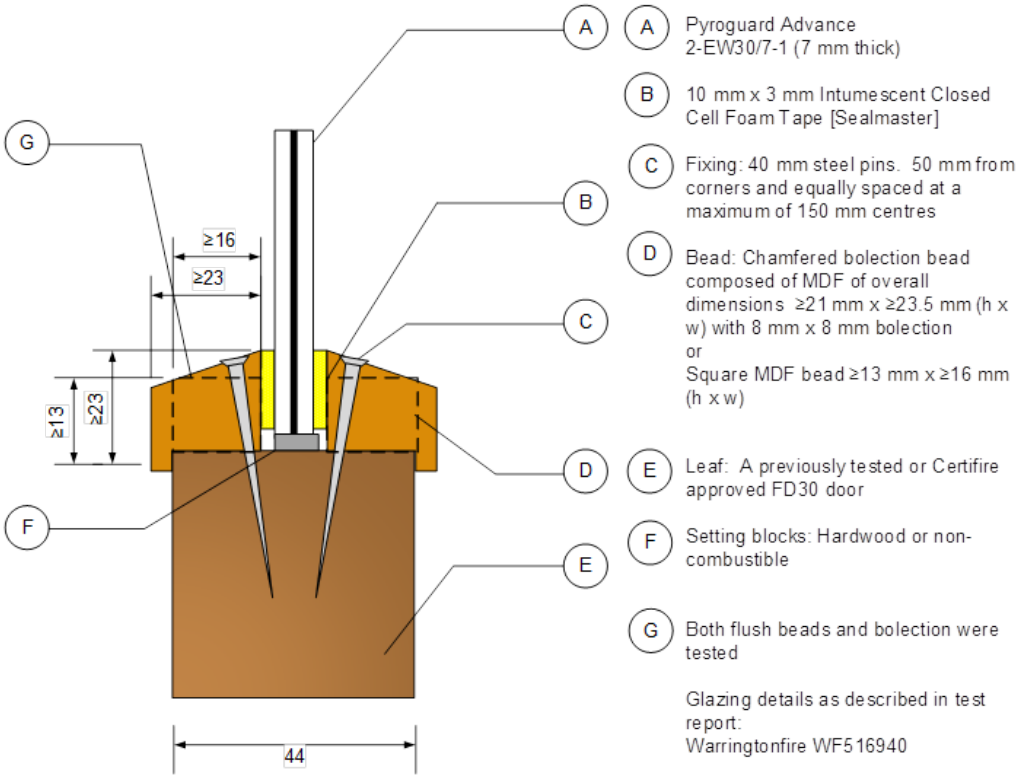
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Beading	Maximum Width	Maximum Height	Maximum Area
Square	786mm wide @ 351mm high	407mm high @ 678mm wide	0.28m^2
Chamfered	839mm wide @ 1714mm high	2108mm high @ 682mm wide	1.44 m^2

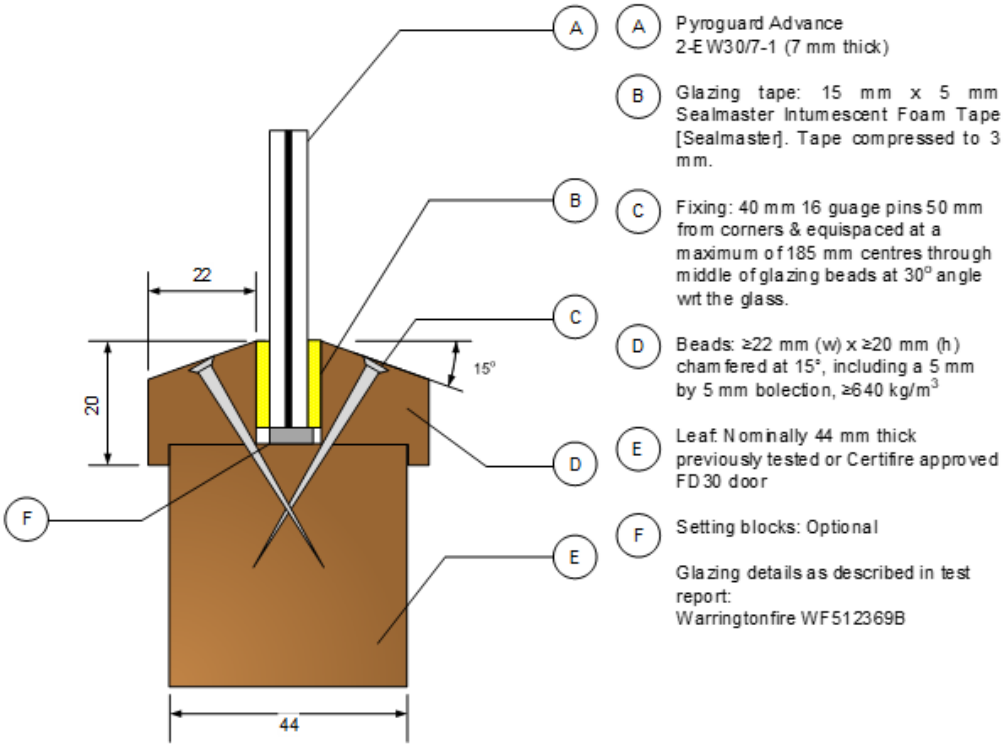
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1267mm wide @ 2026mm high	2532mm high @ 1014mm wide	2.57m^2

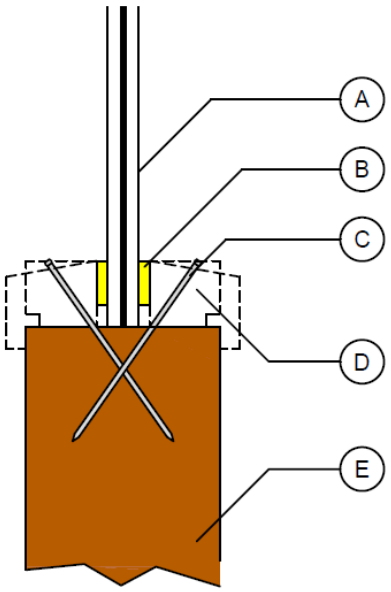
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Pyroguard 2-EW30/7-1

B Glazing tape: ST 105 GT (3) 9 x 3mm or ST 105 GT 10 x 5mm [STS]

C Fixing : 18 swg x 50mm pneumatic fired pins, 50mm from corners, maximum 150mm centres and 35-40° from the face of the glass.

D Bead : Hardwood ≥ 640kg-m³ ≥15mm wide x ≥16mm deep. Alternative bead may be approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimensions and approved fixing method.

E Leaf : Nominally 44mm thick previously tested or Certifire approved FD30 door

Glazing details as described in test report:
Warringtonfire 523943

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
762mm wide @ 1732mm high	2136mm high @ 618mm wide	1.32m²

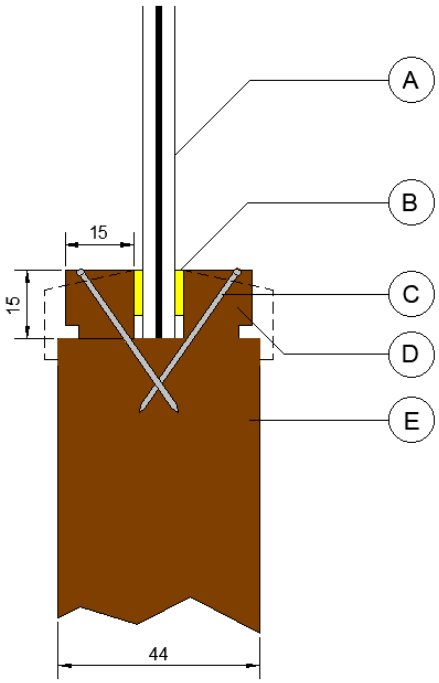
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape: Pyrostrip 500 FSA 10 mm x 2 mm. [Mann McGowan]

Ⓒ Fixings: 16 swg x 38 mm pins at 50 mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hardwood ≥640 kg/m³ ≥ 15 mm wide x ≥15 mm deep with optional 3 mm x 3 mm shadow gap.

Alternative bead may be approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Leaf: Nominally 44 mm thick previously tested or Certifire approved FD30 door.

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Glazing details as described in test report: Warringtonfire WF541872

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
872mm wide @ 1973mm high	2372mm high @ 725mm wide	1.72m^2

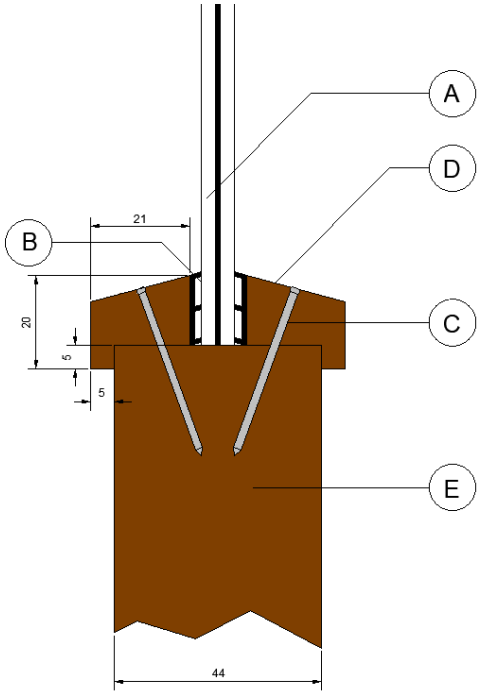
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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW30/7-1 (7 mm thick).

Ⓑ Glazing tape: Pyroglaze C30 15 mm x 3.5 mm - 1mm thick. [Mann McGowan]

Ⓒ Fixing:16g x 38 mm pins. 50 mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hardwood glazing beads, ≥600 kg/m³, ≥21 mm wide x ≥20 mm deep incl a ≥5 x ≥5 mm bolection and 15° chamfer.

Ⓔ Leaf: Nominally 44 mm thick previously tested or Certifire approved FD30 door.

Glazing details as described in test report: Warringtonfire WF548961

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
902mm wide @ 1297mm high	1617mm high @ 723mm wide	1.17m^2

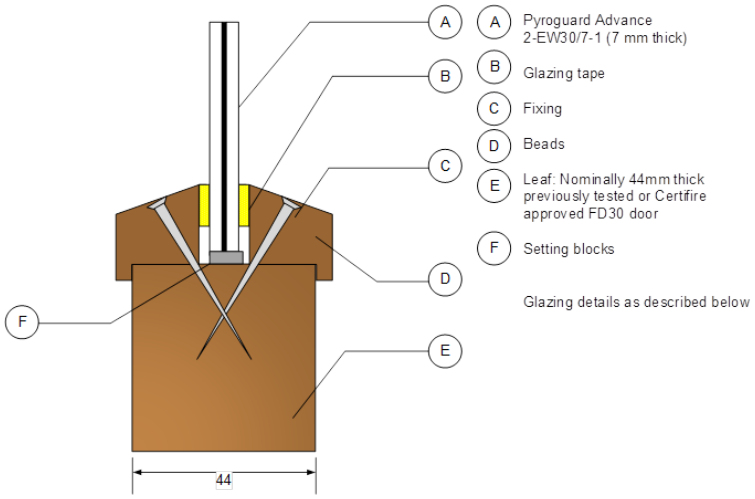
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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



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 Pyroguard Advance 2-EW30/7-1 glass shown in the Table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

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PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity (cont.)

Maximum Permitted Glass Dimensions

Glazing System	Maximum Pane dimension – height (mm)	Maximum Pane dimension – width (mm)	Maximum Pane Area (m^2)
Sealmaster Intumescent Foam Glazing Tape, 15x5mm[17]	2040 (at 700 w)	840 (at 1700 h)	1.42
Sealmaster Intumescent Foam Glazing Tape, 10x5mm[16]	1846	760	1.31
Interdens 10mm x 2mm glazing strip [10]	1846	760	1.31
Sealmaster Intumescent Foam Glazing Tape, 10x5mm[15]	1680	610	0.85
Technibond Closed cell foam tape 15mm x 3mm [13]	1680 (at 508 wide)	610 (at 1400 high)	0.85
IGU + Therm-A-Strip 10mm x 2mm [11]	1210	610	0.74
Lorient Flexible Figure 1 glazing system [2]	1236 (at 574 w)	750 (at 960 h)	0.72
IGU + 'K' tape 15mm x3mm [12]	952	749	0.68
Lorient System 36/7 [3]	875	750	0.66
Sealmaster Therm-A-Strip 10mm x 2mm [8]	2125 (at 300 w)	800 (at 800 h)	0.64
Sealmaster G30 glazing gasket between beads and glass [8]	2125 (at 300 w)	800 (at 800 h)	0.64
Sealmaster G30 glazing gasket in Pyroguard UK Ltd's bead system [9]	800	800	0.64
Moreland Quickfix FD30 Glazing Bead System[14]	1392	492	0.57
	1500	200	0.3
Pyroplex 30049 glazing system [5]	750	750	0.56
Pyroplex 30054 glazing system [6]	750	750	0.56
Hodgsons Sealants Firestrip 30 [1]	875 (at 500 wide)	875 (at 500 high)	0.44
Pyroplex 8193 glazing system [4]	600	610	0.36
Pyroplex 8492 glazing system [7]	403	626	0.25
Pyrostrip 500 FSA 10 mm x 2 mm	1977	727	1.44
Pyroglaze C30 15 mm x 3.5 mm - 1mm	1294	722	0.94
The aspect ratio of the glass may be unlimited within these pane dimensions or area			

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Glazing Arrangements

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity (cont.)

Glazing Arrangements

(1)	The glazing beads shall be of Sapele, or equivalent or higher density (610 kg/m³), sections, 22mm wide by 21mm high, chamfered by approximately 13º and fixed using 1.5mm diameter, 50mm long steel pins at a maximum of 100mm centres and angled to pass under the face of the glass.
(2)	The glazing beads shall be hardwood of minimum density 550 kg/m³ or MDF of minimum 750 kg/m^3 density, sections, 22mm wide by 15mm high with a 5mm by 5mm bolection return, chamfered by approximately 15º and fixed using 1.5mm diameter, 40mm long steel pins or screws at a maximum of 150mm centres and angled to pass under the face of the glass. A secondary hardwood liner (integral or separate) or an LX4402 intumescent liner shall be used to line apertures cut within flaxboard substrates.
(3)	The glazing beads shall be of minimum density 550 kg/m³, sections, 22mm wide by 13mm high, chamfered by approximately 15º and fixed using 1.5mm diameter, 40mm long steel pins or screws at a maximum of 200mm centres and angled to pass under the face of the glass. A secondary Palusol based intumescent material is required to be used as a lining around the perimeter of apertures cut within flaxboard substrates which have a density below 500 kg/m³.
(4)	The glazing beads shall be of minimum density 630 kg/m³, sections, 20mm wide by 14.5mm high with a 5mm by 5mm bolection return, chamfered by approximately 20º and fixed using, 50mm long steel screws at a maximum of 150mm centres and angled at 30-45°. A secondary 6mm thick hardwood liner (min. density 630 kg/m^3) shall be used to line apertures cut within all substrates.
(5)	The glazing beads shall be of minimum density 630 kg/m³, sections, 20mm wide by 14.5mm high with a 5mm by 5mm bolection return, chamfered by approximately 20º and fixed using, 50mm long steel screws at a maximum of 150mm centres and angled at 30-45°. A secondary 6mm thick hardwood liner (min. density 630 kg/m^3) shall be used to line apertures cut within all substrates.
(6)	The glazing beads shall be of minimum density 630 kg/m³, sections, 20mm wide by 14.5mm high with a 5mm by 5mm bolection return, chamfered by approximately 20º and fixed using, 45mm long steel screws at a maximum of 150mm centres and angled at 30-45°.
(7)	The glazing beads shall be hardwood of minimum density 500 kg/m³, sections, 25mm wide by 23mm high with a 5mm by 5mm bolection return, chamfered by approximately 15º and fixed using, 38mm long steel pins or screws at a maximum of 150mm vertical and 100mm horizontal centres and angled at 15°. A secondary 6mm thick hardwood liner (min. density 500 kg/m^3) shall be used to line apertures cut within all substrates.
(8)	Asymmetrical beading system as shown in Pyroguard UK Ltd Drawing no. G20011-01 (01/07/04)
(9)	The glazing beads shall be Sapele hardwood of minimum density 610 kg/m³, sections, 20mm wide by 21mm high with a 5mm by 5mm bolection return, chamfered by approximately 21º and fixed using, 50mm long steel pins or screws at nominally 70mm at corners and a maximum of 200mm centres and angled at 45° to glass.
(10)	The glazing beads shall be hardwood of minimum density 650 kg/m³, sections, 16.5mm wide by 25mm high with a 5mm by 5mm bolection return, chamfered by approximately 15º and fixed using, 40mm long steel pins or screws at a maximum of 150mm centres and angled at 30°. A secondary 6mm thick hardwood liner (min. density 500 kg/m^3) shall be used to line apertures cut within all substrates.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in timber based doorsets for periods of 30 minutes integrity (cont.)

Glazing Arrangements cont.

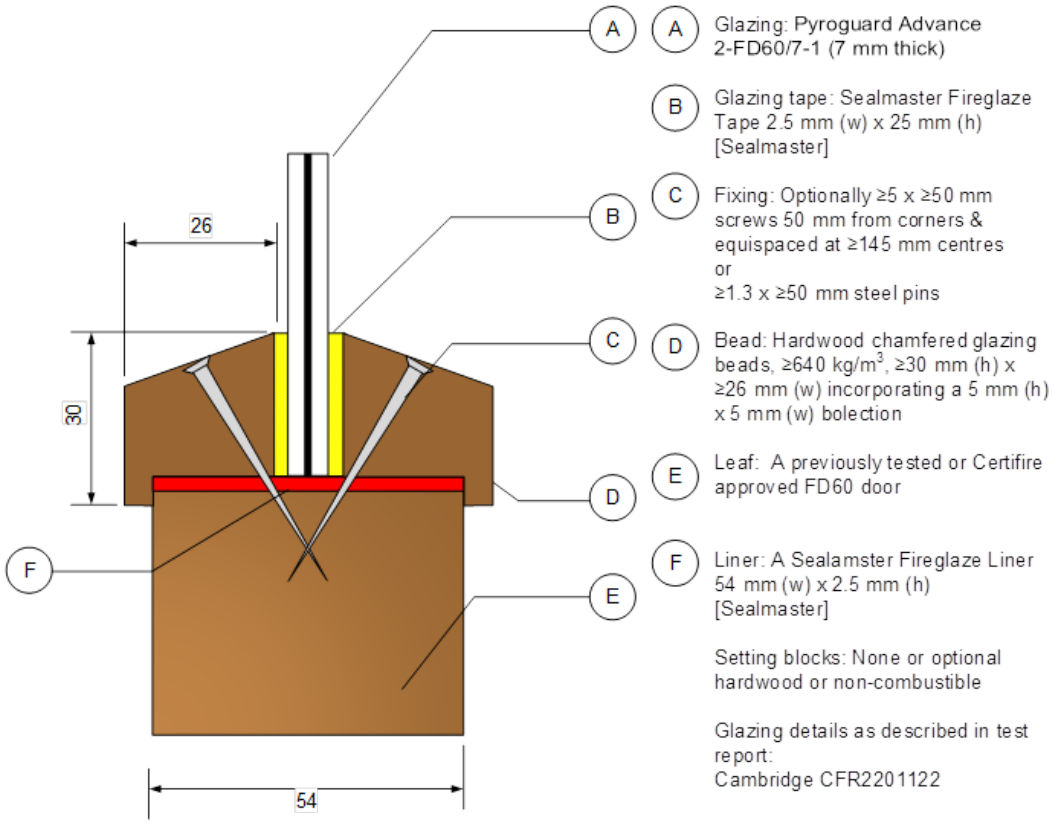
(11)	The glazing beads shall be Sapele hardwood, or equivalent or higher density (610 kg/m³) sections, 15.5mm wide by 20mm high with a 5mm by 5mm bolection return, chamfered by approximately 21º and fixed using, 50mm long steel pins or screws at nominally 70mm at corners and a maximum of 200mm centres and angled at 45° to glass.
(12)	The glazing beads shall be MDF, minimum density 700 kg/m^3, 20mm wide by 25mm high including a 4.5mm wide by 10mm high bolection return, chamfered at 15º to the glass. Beads were fixed using 2.0mm diameter, 50mm long steel pins equally spaced at a maximum of 150mm centres (vertical beads) and 230mm centres (horizontal beads) angled at 30 º to the MDF beads. A 15mm by 3mm closed cell foam tape (Technibond) was located between the glass and beads. An intumescent acrylic sealant can optionally be applied around the perimeter of the glass. An MDF or hardwood liner, minimum density 700 kg/m^3 shall be used to line apertures cut within all substrates.
(13)	Morland QuickFix FD30 Glazing Bead system (comprising bead and glazing gasket), 50mm long steel pins at 150mm max. centres (30o to vertical bead edge), Intumescent Acrylic Sealant under perimeter edge of glass. Core incorporating voids or hollow tubes should not be glazed using this system unless a 6mm hardwood aperture liner is fitted within the perimeter of the aperture (CF5241 must be consulted for full details of this system).
(14)	Sealmaster Intumescent Foam Glazing Tape, Ø1.6x40mm long steel pins or No.8x40mm long screws at 150max. centres and 50mm from corners (fixed at 45°), 15mm high beads, with a 5x5mm min. bolection, from softwood or hardwood (min. density 510kg/m3 with a 20° chamfer) or MDF (min. density 700kg/m3 with a 15° chamfer). System may be used with and without non-combustible setting blocks.
(15)	Sealmaster Intumescent Foam Glazing Tape, Ø1.6x40mm long steel pins or No.8x40mm long screws at 150max. centres and 50mm from corners (fixed at 45°), 15mm high beads, with a 5x5mm min. bolection, from hardwood (min. density 620kg/m^3 with a 20° chamfer). System may be used with and without non-combustible setting blocks.
(16)	Sealmaster Intumescent Foam Glazing Tape, beads 21mm by 20mm including a 5mm by 5.5mm bolection in 640kg/m^3 hardwood secured using 16 gauge by 40mm steel pins at 150mm max. centres, 50mm from corners, at 30° relative to the glass. System may be used with and without non-combustible setting blocks.
(17)	The glazing beads shall be hardwood ≥640 kg/m³ ≥ 15 mm wide x ≥15 mm deep with optional 3 mm x 3 mm shadow gap. Alternative bead may be approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimensions and approved fixing method.
(18)	The glazing beads shall be hardwood ≥600 kg/m³, ≥21 mm wide x ≥20 mm deep including a ≥5 x ≥5 mm bolection and 15° chamfer.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-FD60/7-1 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



This Certificate of Approval relates to the sizes of Pyroguard Advance 2-FD60/7-1 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Fixing method	Maximum Width	Maximum Height	Maximum Area
Pins or Screws	304mm wide @ 1593mm high	1991mm high @ 243mm wide	0.48m^2
Screws	449mm wide @ 1593mm high	1991mm high @ 359mm wide	0.71m^2

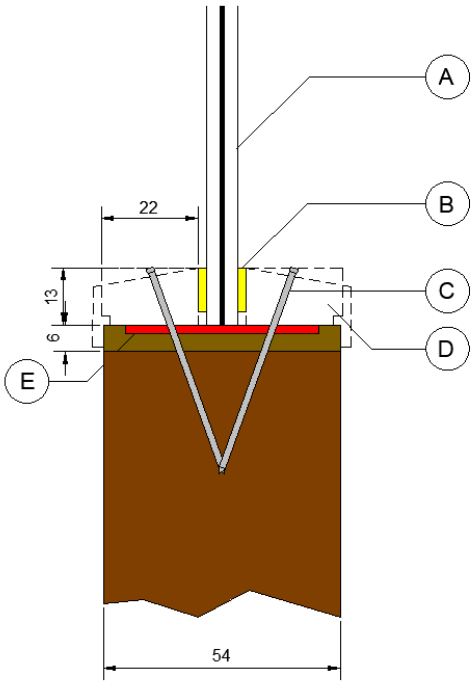
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-FD60/7-1 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-FD60//7-1 (7mm thick)

Ⓑ Glazing tape : Fire and acoustic closed cell foam tape 10 x 2.0mm.

Ⓒ Fixing: 50 mm pins. 50 mm from corners, maximum 200 mm centres.

Ⓓ Bead: Hardwood glazing beads, ≥640 kg/m³. ≥22mm wide x ≥13 mm deep including an optional a 2 mm x 2mm shadow gap.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Liner: Thermaline liner [ISL] 44 mm x 2 mm rebated into a 54mm x 6 mm hardwood liner.

Ⓕ Leaf: Nominally 54 mm thick previously tested or Certifire approved FD60 door.

Glazing details as described in test report: Warringtonfire WF515598

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-FD60/7-1 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

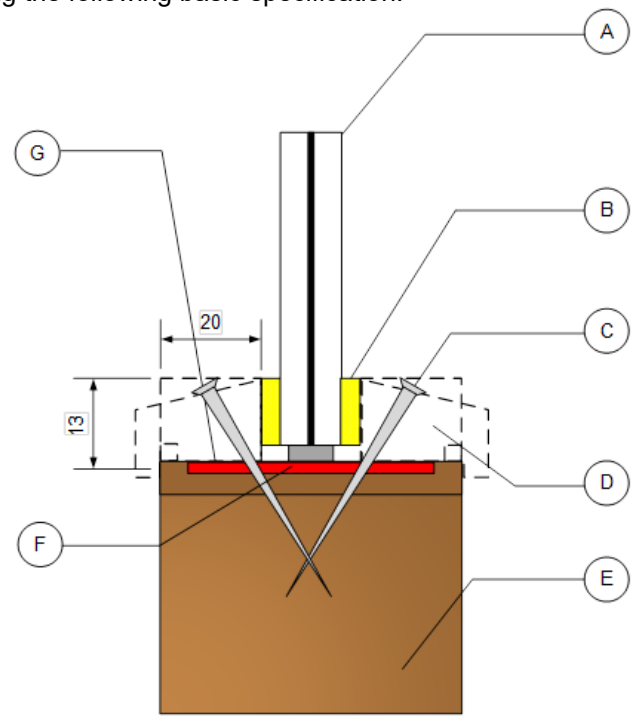
Maximum Width	Maximum Height	Maximum Area
648mm wide @ 1290mm high	1393mm high @ 600mm wide	0.84m²

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-FD60/11-1 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Glazing: Pyroguard Advance 2-FD60/11-1 (11 mm thick)

B Glazing tape: 10 x 2 mm Fire & Acoustic Seals closed cell foam tape

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 200 mm centres

D Bead: Hardwood glazing beads, ≥640 kg/m^3, ≥13 mm (h) x ≥20 mm (w) having a 2 mm x 2mm shadow relief. Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

E Leaf: A previously tested or Certifire approved FD60 door

F Setting blocks:Hardwood to centre the glazing and give approx. 3.5 mm expansion gap

G Liner: 2 mm x 44 mm ISL Thermaline [Sealmaster] embedded in a 2 mm rebate in a hardwood liner of dimension 6 mm x 54 mm

Glazing details as described in test report:
Warringtonfire 517609

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-FD60/11-1 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
895mm wide @ 1290mm high	1612mm high @ 716mm wide	1.15m^2

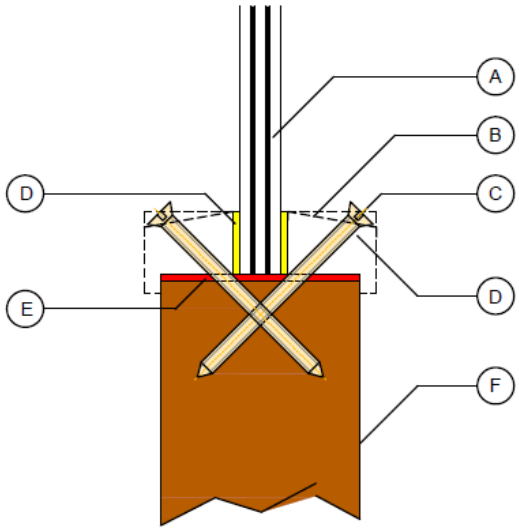
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in timber based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



(A) Pyroguard 2-EW30/11-2

(B) Bead: Hardwood Glazing beads, ≥640 kg/m³. ≥27mm wide x ≥15mm deep. Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

(C) Fixing: No8 x 50mm wood screws 45°. 50mm from corners, maximum 200mm centres and 45° from the face of the glass.

(D) Glazing tape : Pyrostrip White Interdens SA [Mann McGowan] 17 x 2mm

(E) Liner: Pyrostrip White Interdens SA [Mann McGowan] 53 x 2mm

(F) Leaf: Nominally 54mm thick Hardwood ≥640 kg/m³ previously tested or Certifire approved FD60 Door

Glazing details as described in test report:
Warringtonfire 530578

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
925mm wide @ 2044mm high	2557mm high @ 739mm wide	1.89m²

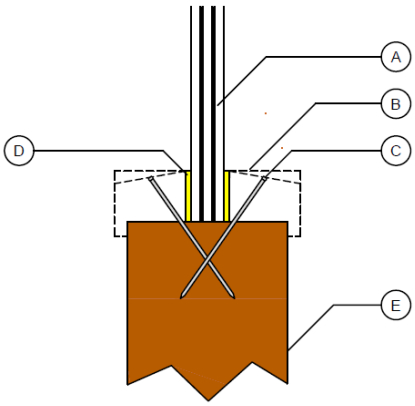
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in timber joinery based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Pyroguard 2-EW30/11-2

B Bead: Hardwood ≥640 kg/m³ ≥5mm wide x ≥24mm deep. Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

C Fixing: 16 swg x 50 pins 45°. 50mm from corners, maximum 200mm centres and 45° from the face of the glass.

D Glazing tape: Kerafix FXL 200 [KHUN]

E Leaf: Nominally 54mm thick Softwood ≥484 kg/m³ previously tested or Certifire approved Joinery Door

Glazing details as described in test report:
Warringtonfire 524383

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
925mm wide @ 2044mm high	2557mm high @ 739mm wide	1.89m^2

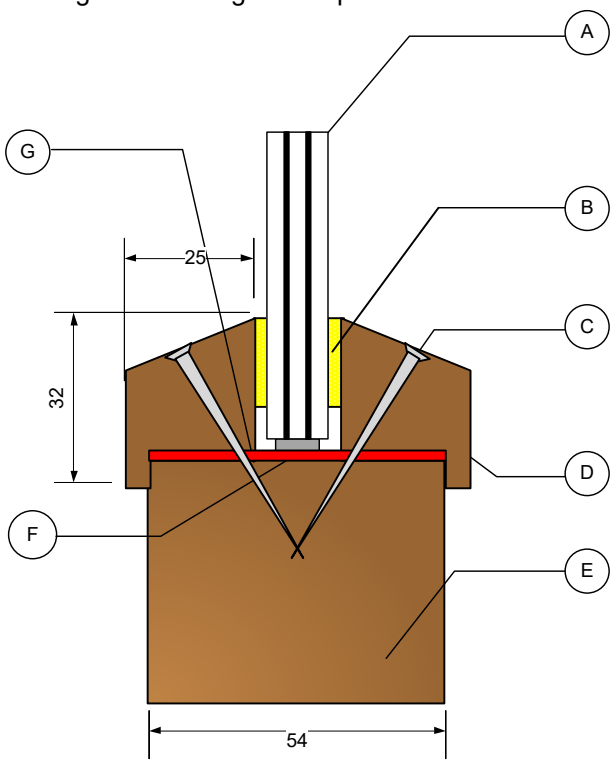
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11mm thick)

B Glazing tape: 15mm x 5mm Sealmaster Intumescent Foam Tape

C Fixing: 40mm long "brad" nails 50mm from corners & equispaced at a maximum of 250mm centres through middle of glazing beads

D Bead: Hardwood glazing beads, ≥640kg/m^3, ≥25mmx≥32mm including ≥6mmx≥6mm bolection

E Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks: Hardwood or non-combustible

G Liner: Mann McGowan Pyrostrip 54mmx2mm 100ECSA and Hardwood liner 54mm x 6.5mm

Glazing details as described in test report:
Warringtonfire WF420487 Issue 3

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 Pyroguard Advance 2-EW60/11-2 glass shown in the table below when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
723mm wide @ 1500mm high	1550mm high @ 700mm wide	1.08m^2

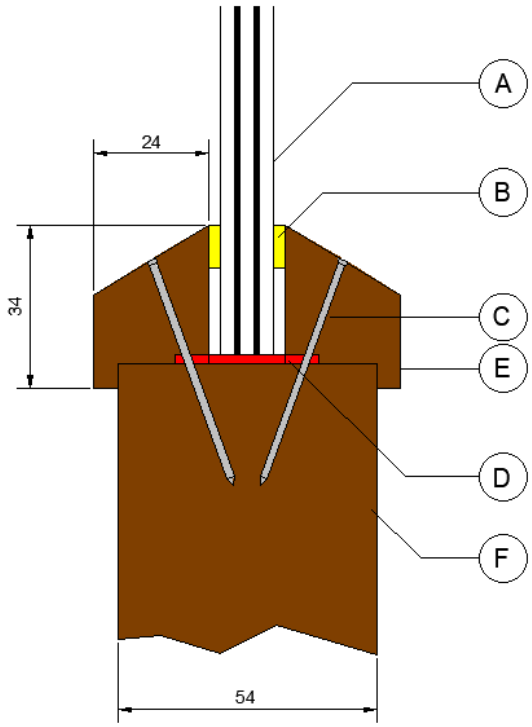
These systems may also be included in previously tested doorset fan and side-lights.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11mm thick)

Ⓑ Glazing tape : ST 105 GT [STS] 9 mm x 3 mm or 10 mm x 5 mm.

Ⓒ Fixing: SWG 1.6 x 60 mm pins. 45 mm from corners, maximum 150 mm centres.

Ⓓ Bead: Sapele glazing beads, ≥640 kg/m³. ≥24 mm wide x ≥34 mm deep including a ≥5 mm x ≥5 mm bolection and a 32° chamfer.

Ⓔ Liner: ST302 Glazing liner [STS] 30mm x 2 mm.

Ⓕ Leaf: Nominally 54 mm thick previously tested or Certifire approved FD60 door.

Glazing details as described in test report: Warringtonfire WF414634

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 Pyroguard Advance 2-EW60/11-2 glass shown in the table below when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
397mm wide @ 1600mm high	1813mm high @ 351mm wide	0.63m²

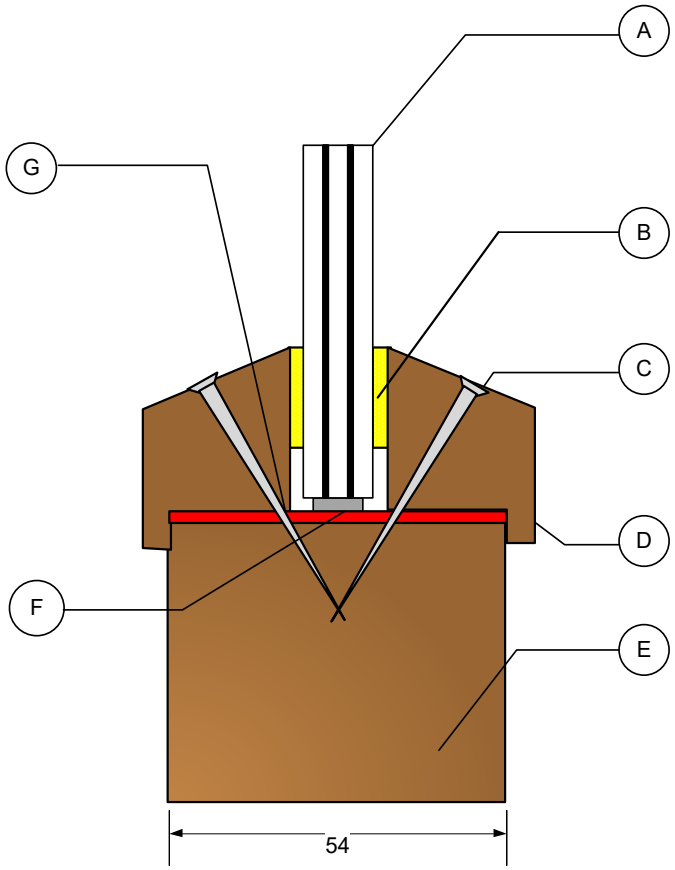
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Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11mm thick)

B Glazing tape: Sealmaster FireGlaze approx. 4mm thick *or* Technibond closed cell foam tape 15mm by 3mm.

C Fixing: 60mm SWG16 long steel pins 45mm from corners & equispaced at a maximum of 150mm centres at 35° to the face of the glass

D Bead: With Sealmaster Fireglaze, hardwood glazing beads (≥650 kg/m^3 density), ≥28mm wide by ≥27.5mm high including a ≥5mm by ≥5mm bolection return chamfered at 30° *or alternatively* with Technibond closed cell foam tape, MDF glazing beads (minimum 700 kg/m^3 density), 20mm by 25mm including a 4.5mm by 10mm bolection return, chamfered at 15° to glass

E Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks: Setting blocks: Non-combustible *or* hardwood setting blocks. In the case of Technibond closed cell foam tape also with intumescent acrylic sealant around Perimeter

G Liner: Sealmaster GL60 Liner or Sodium Silicate Liner, 44mm by 2mm thick

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

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity (continued)

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in the diagram below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Glazing Tape	Maximum Width	Maximum Height	Maximum Area
Sealmaster Fireglaze	460mm wide @ 1250mm high	1437mm high @ 400mm wide	0.58m^2
Technibond Closed Cell Foam Tape	508mm wide @ 1200mm high	1200mm high @ 508mm wide	0.58m^2
Technibond Closed Cell Foam Tape	200mm wide @ 1400mm high	1400mm high @ 200mm wide	0.28m^2

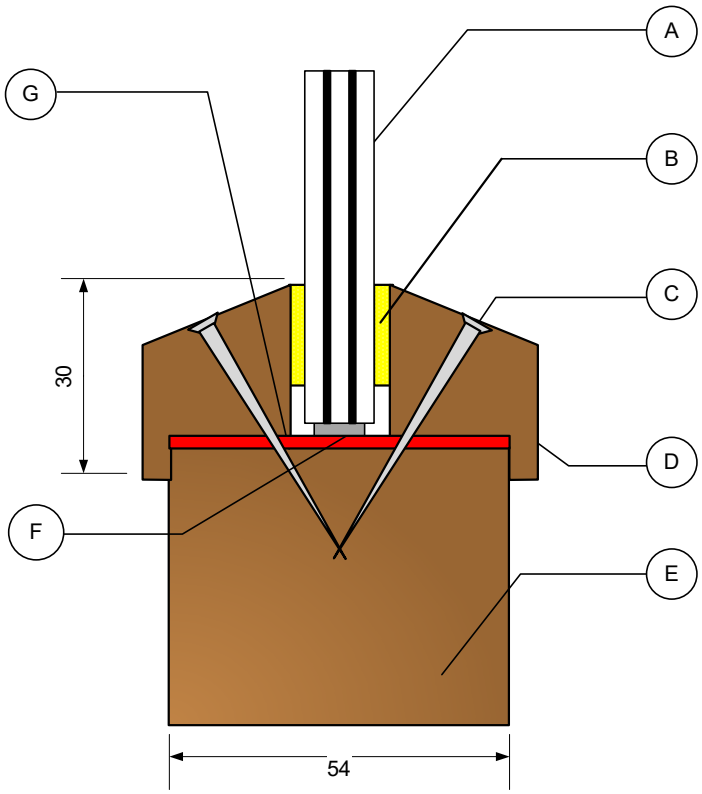
These systems may also be included in previously tested doorset fan and side-lights.

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Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: Sealmaster intumescent foam glazing tape – 20mm x5mm thick

C Fixing: No. 8 mm x 63 mm long screws at 150mm maximum centres and 50 mm from corners (fixed at 45° to glass)

D Bead: Bead dimensions ≥30 mmx≥26 mm wide (dimension includes a ≥5mmx≥5mm bolection) from hardwood with a minimum density 640 kg/m^3, 20º chamfer

E Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks: System may be used with and without non-combustible setting blocks

G Liner: Sealmaster Fireglaze tape 54 mm x 2.5 mm thick

This Certificate of Approval relates to the sizes of Pyroguard Advance 2 EW60/11-2 glass shown in diagram below, when used in conjunction with the glazing system detailed previously

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
460mm wide @ 1437mm high	1437mm high @ 460mm wide	0.66m^2
508mm wide @ 1200mm high	1200mm high @ 508mm wide	0.61m^2

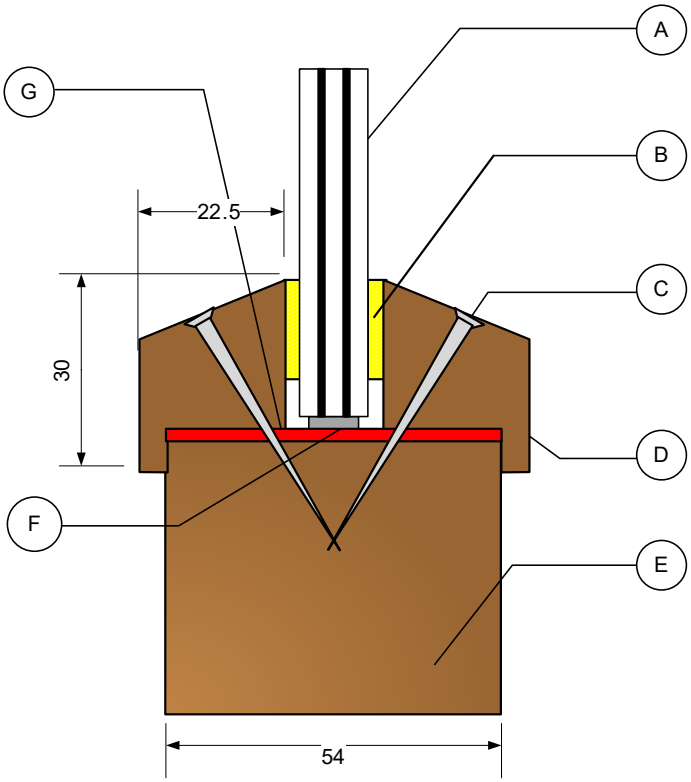
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Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: Sealmaster intumescent foam glazing tape – 20mm x5mm thick

Fixing: No. 8 x 63mm long screws at 150mm maximum centres (fixed at 35° to glass)

D Bead: from hardwood with a minimum density ≥640kg/m^3, 20º chamfer. Bead dimensions; ≥30mm high by ≥22.5mm wide (dimension includes a ≥5mm≥ x ≥5mm bolection)

E Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks: System may be used with and without non-combustible setting blocks

G Liner: Therma-A-Sol intumescent aperture liner –52mm x 2mm thick

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
414mm wide (at 1650mm high)	1925mm high (at 350mm) wide	0.68m^2

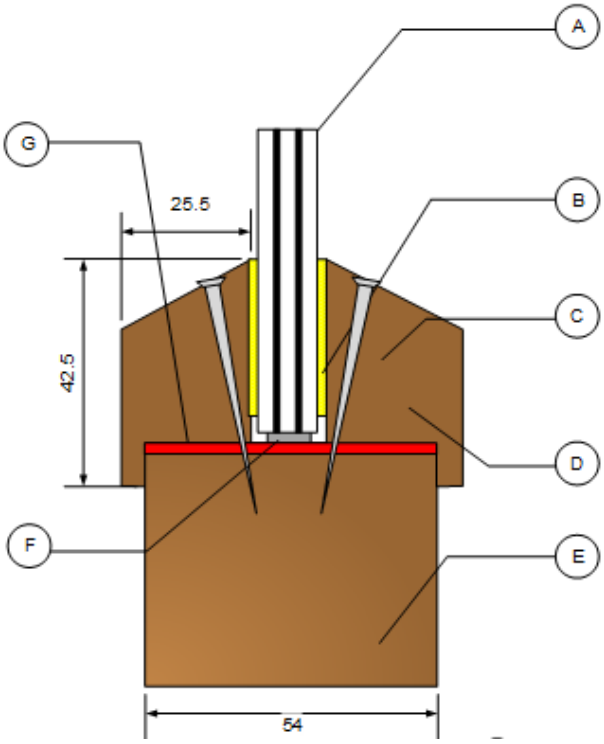
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11mm thick)

B Glazing tape: RF1 29 mm x 6 mm [Lorient]

C Fixing: 50 mm pins 50 mm from corners & equis paced at a maximum of 150mm centres through middle of glazing beads at 90° angle w.r.t. the chamfer.

D Bead: Hardwood glazing beads, ≥610 kg/m^3, ≥42.5 mm x ≥25.5 mm including including a 18.5 mm by 14 mm bolection

E Section: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks: 10 mm x 20 mm x 5 mm hardwood or non-combustible

G Liner: Interdens 54 x 2 mm [Lorient]

Glazing details as described in test report:
Warringtonfire WF425040

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
420mm wide @ 1200mm high	1440mm high @ 350mm wide	0.50m^2

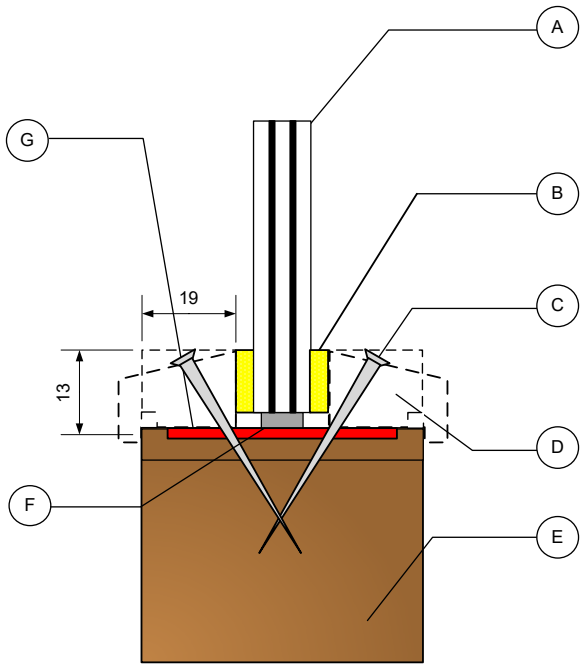
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: 12 x 4.5 mm Scapa 3259 closed cell foam tape

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 200 mm centres

D Bead: Hardwood glazing beads, ≥640 kg/m^3, ≥13 mm (h) x ≥19.5 mm (w). With optional 2 mm x 2 mm shadow relief cut out. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

E Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

F Setting blocks:Hardwood to centre the glazing and give approx. 3.5 mm expansion gap

G Liner: 2 mm x 44 mm ISL Thermaline [Sealmaster] embedded in a 2 mm rebate in a hardwood liner of dimension 6 mm x 54 mm

Glazing details as described in test report:
Warringtonfire 512028

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
898mm wide @ 1290mm high	1612mm high @ 719mm wide	1.15m^2

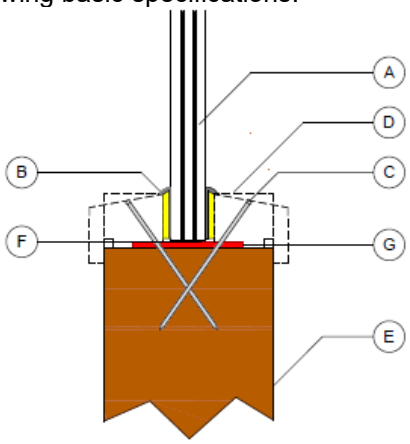
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



(A) Glazing: Pyroguard 2-EW60/11-2 (11mm thick)

(B) Glazing Tape: ST104SG adhesive backed graphite in a rubber carrier [Sealed Tight Solutions]

(C) Fixing: 1.6 x 50mm pins 50mm from the corners & equispaced at a maximum of 150mm

(D) Bead: Hardwood ≥640 kg/m³ ≥17mm (h) x ≥18mm (w) with optional 2mm x 2mm shadow relief. The beads have an 8mm x 2mm rebate to house the liner. Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method

(E) Leaf: Nominally 54mm thick previously tested or Certifire approved FD60 door

(F) Setting blocks: Hardwood to centre the glazing and give approx 3.5mm expansion gap

(G) Liner: STS 302 30 x 2mm [Sealed Tight Solutions]

Glazing details as described in test report:
Efectis EFR-21-V-0047 12

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
532mm wide @ 1600mm high	1653mm high @ 515mm wide	0.85m^2
345mm wide @ 1600mm high	1840mm high @ 515mm wide	0.55m^2

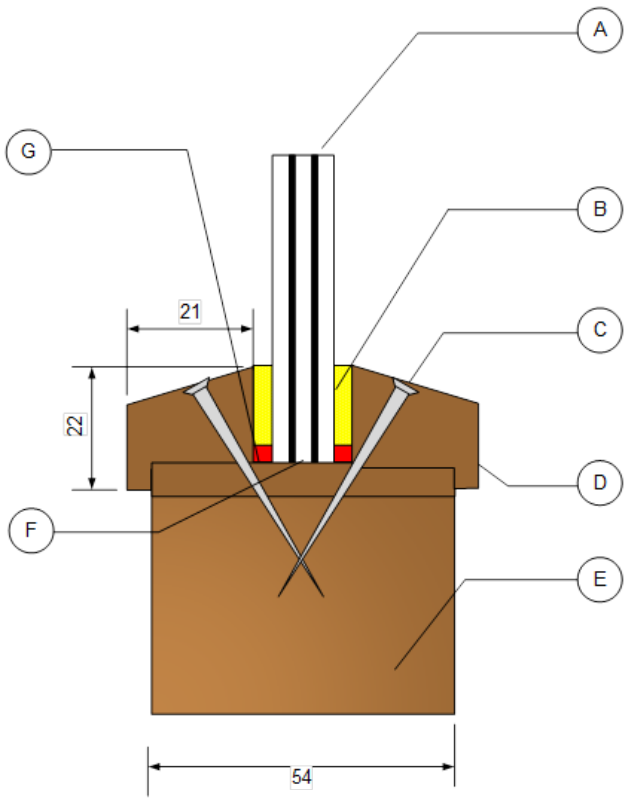
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: Fire & Acoustic Seals closed cell foam tape

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 200 mm centres

D Bead: Hardwood chamfered glazing beads, ≥640 kg/m^3, ≥22 mm (h) x ≥21 mm (w) incorporating a 7 mm (h) x 5 mm (w) bolection

E Leaf: A previously tested or Certifire approved FD60 door

F Setting blocks: none

G Liner: A hardwood liner of dimension 6 mm x 54 mm was fitted and a bead of Fire & Acoustic Seals Intumescent Acrylic Mastic was ran around the full circumference of the pane in the glazing rebate.

Glazing details as described in test report:
Warringtonfire 515592

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Width	Maximum Height	Maximum Area
788mm wide @ 1290mm high	1419mm high @ 716mm wide	1.02m^2

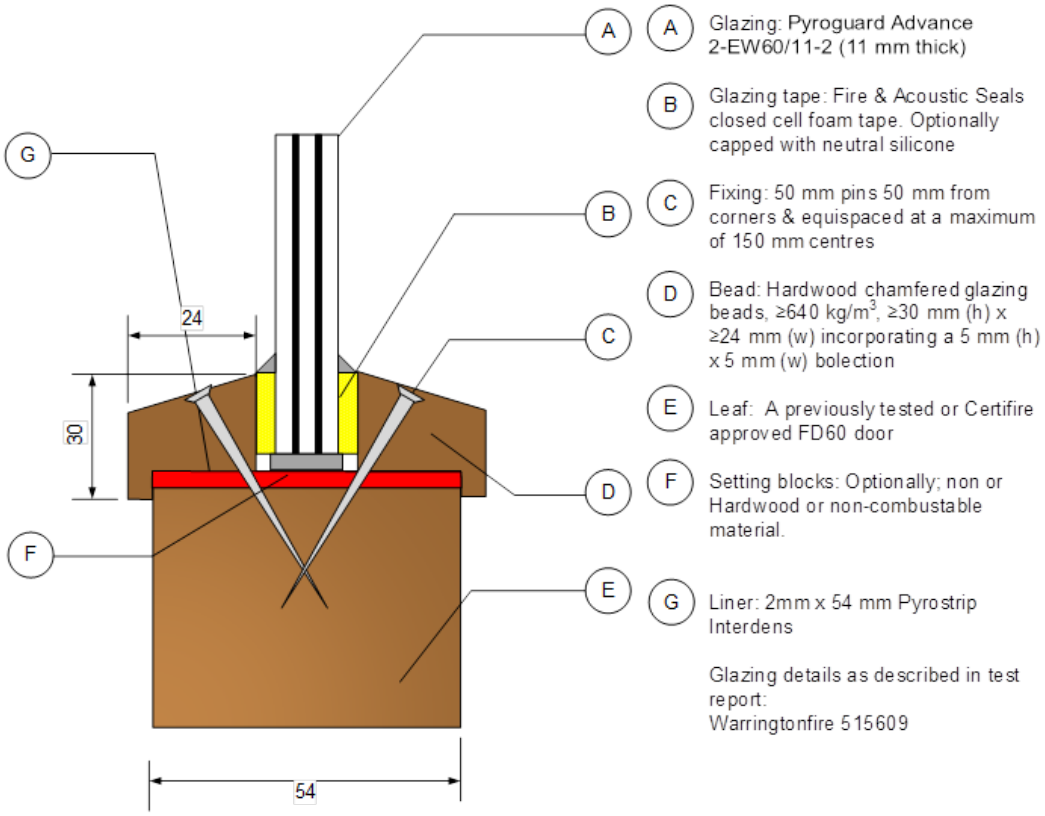
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW60/11-2 (11 mm thick)

B Glazing tape: Fire & Acoustic Seals closed cell foam tape. Optionally capped with neutral silicone

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 150 mm centres

D Bead: Hardwood chamfered glazing beads, ≥640 kg/m^3, ≥30 mm (h) x ≥24 mm (w) incorporating a 5 mm (h) x 5 mm (w) bolection

E Leaf: A previously tested or Certifire approved FD60 door

F Setting blocks: Optionally; non or Hardwood or non-combustable material.

G Liner: 2mm x 54 mm Pyrostrip Interdens

Glazing details as described in test report:
Warringtonfire 515609

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Width	Maximum Height	Maximum Area
637mm wide @ 1200mm high	1500mm high @ 510mm wide	0.77m^2

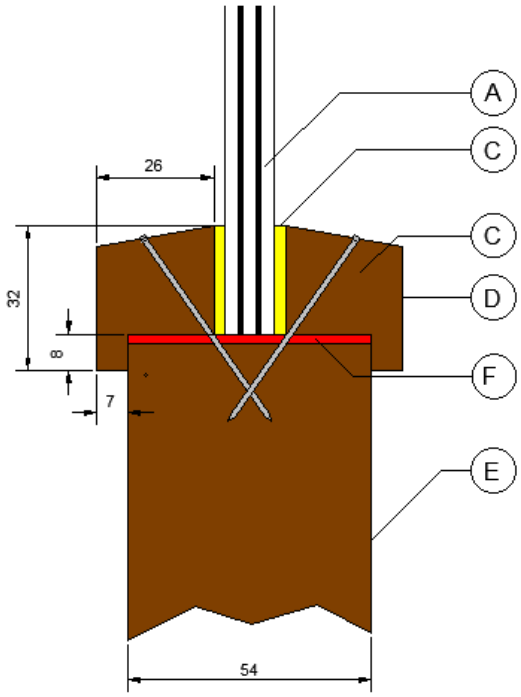
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick).

Ⓑ Glazing tape: Pyroglaze 60 24 mm x 2.5 mm
[Mann McGowan]

Ⓒ Fixings: 16 swg x 50 mm pins at 50 mm from corners, maximum 150 mm centres.

Ⓓ Bead: Hardwood ≥640 kg/m³ ≥26 mm wide x ≥32 mm deep with bolection ≥7 mm x ≥8 mm.

Ⓔ Leaf: Nominally 54 mm thick previously tested or Certifire approved FD60 door.

Ⓕ Liner: GL60
54mm x 2 mm
[Sealmaster]

Glazing details as described in test report:
Warringtonfire WF531980

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

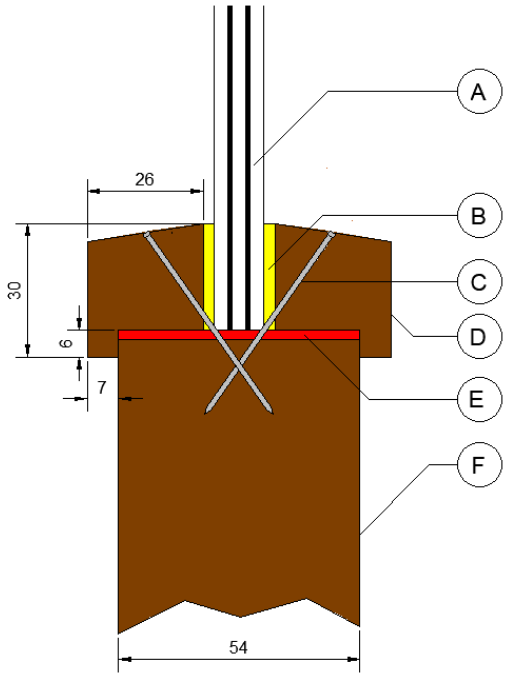
Maximum Width	Maximum Height	Maximum Area
622mm wide @ 1590mm high	1605mm high @ 616mm wide	0.99m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick).

Ⓑ Glazing tape: Intumescent foam glazing tape - GTR 24 mm x 5 mm. [Sealmaster]

Ⓒ Fixings: 16 swg x 50 mm pins at 50 mm from corners, maximum 150 mm centres.

Ⓓ Beads: FD60 Veneered MDF ≥ 26 mm wide x ≥30 mm deep Bolection ≥6 mm x ≥7 mm, 8° chamfer.

Ⓔ Liner: Therm-A-Sol liner 54 mm x 2 mm [Norseal]

Ⓕ Leaf: Nominally 54 mm thick previously tested or Certifire approved FD60 door.

Glazing details as described in test report:
Warringtonfire WF543094

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

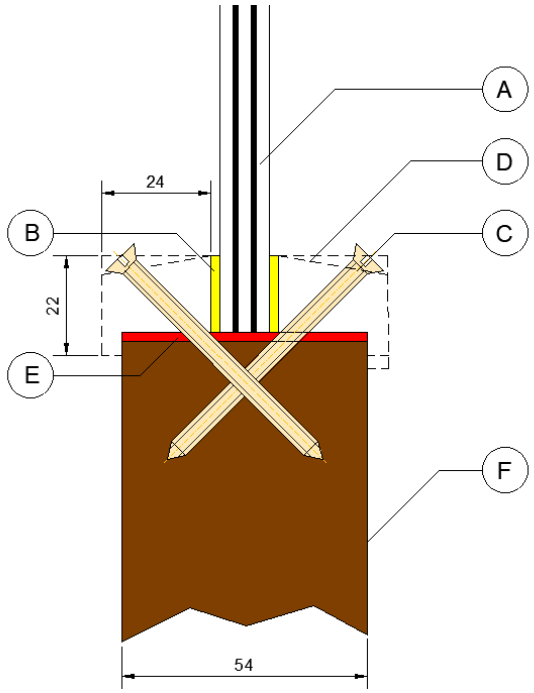
Maximum Width	Maximum Height	Maximum Area
372mm wide @ 1290mm high	1548mm high @ 310mm wide	0.48m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick).

Ⓑ Glazing tape: Kerafix FXL 200 17 mm x 2 mm. [Kuhn]

Ⓒ Fixing: Ø4 x 50 mm wood screws 50mm from corners, maximum 200 mm centres.

Ⓓ Beads: Hardwood glazing beads, ≥580 kg/m³. ≥24 mm wide x ≥22mm deep.

Alternative bead may be approved based on TS25 rules. Square beads may be converted to chamfered while maintaining at least the overall tested bead dimensions and approved fixing method.

Ⓔ Liner: Kerafix FXL 200 53 mm x 2 mm .[Kuhn]

Ⓕ Leaf: Nominally 54 mm thick hardwood ≥573 kg/m³ or previously tested or Certifire approved FD60 door.

Glazing details as described in test report: Warringtonfire WF539567

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

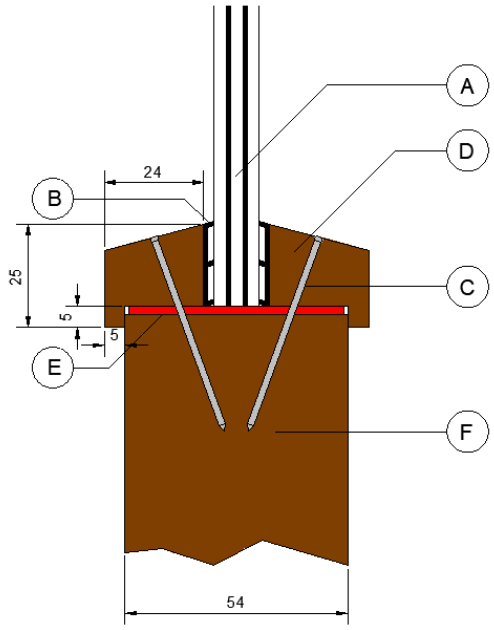
Maximum Width	Maximum Height	Maximum Area
740mm wide @ 2046mm high	2046mm high @ 310mm wide	1.51m²

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in timber based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



Ⓐ Glazing: Pyroguard 2-EW60/11-2 (11 mm thick)

Ⓑ Glazing tape: Pyroglaze C60 20 mm x 3.5 mm - 1 mm thick. [Mann McGowan]

Ⓒ Fixing: 16g x 50 mm pins. 50 mm from corners, maximum 200 mm centres..

Ⓓ Beads: Hardwood glazing beads, ≥600 kg/m³, ≥24mm wide x ≥25mm deep incl a ≥5 mm x ≥5mm bolection and 15° chamfer.

Ⓔ Liner: Pyrostrip 100ECSA (Palusol) 52 mm x 2 mm. [Mann McGowan]

Ⓕ Leaf: Nominally 54 mm thick previously tested or Certifire approved FD60 door.

Glazing details as described in test report:
Warringtonfire WF548958

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.
The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Width	Maximum Height	Maximum Area
902mm wide @ 1297mm high	1617mm high @ 723mm wide	1.17m^2

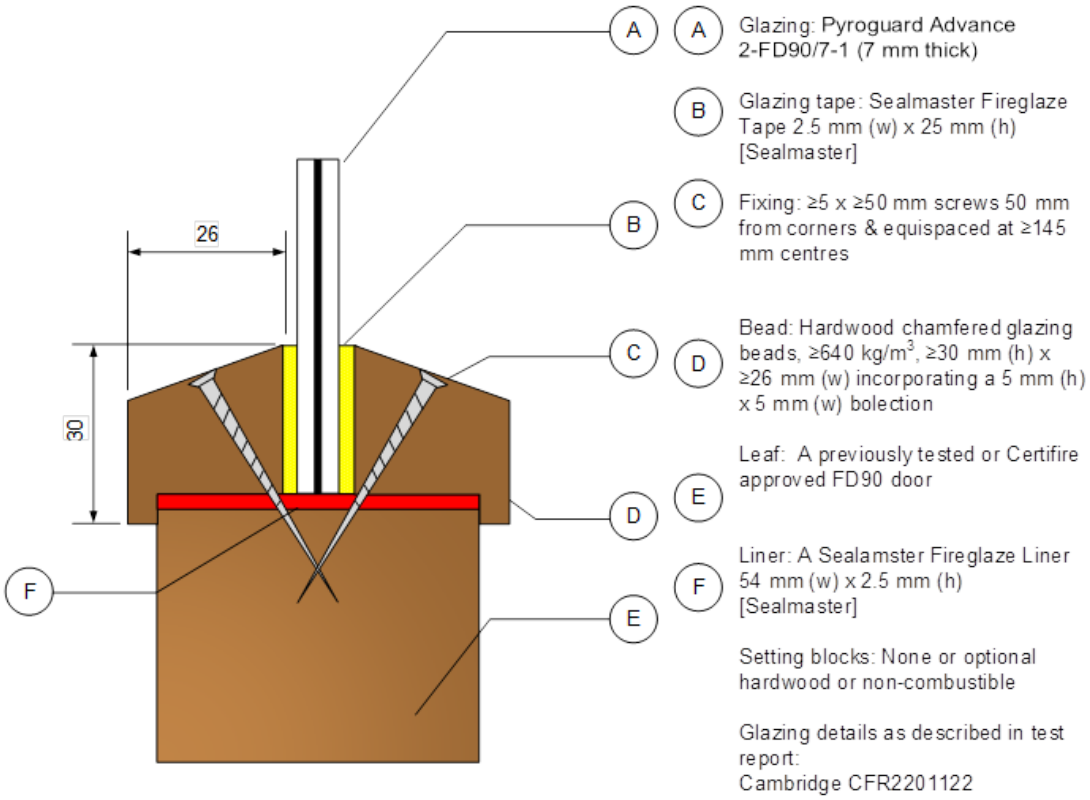
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-FD90/7-1 glass in timber based doorsets for periods of 90 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-FD90/7-1 (7 mm thick)

B Glazing tape: Sealmaster Fireglaze Tape 2.5 mm (w) x 25 mm (h) [Sealmaster]

C Fixing: ≥5 x ≥50 mm screws 50 mm from corners & equispaced at ≥145 mm centres

D Bead: Hardwood chamfered glazing beads, ≥640 kg/m^3, ≥30 mm (h) x ≥26 mm (w) incorporating a 5 mm (h) x 5 mm (w) bolection

E Leaf: A previously tested or Certifire approved FD90 door

F Liner: A Sealamster Fireglaze Liner 54 mm (w) x 2.5 mm (h) [Sealmaster]

Setting blocks: None or optional hardwood or non-combustible

Glazing details as described in test report:
Cambridge CFR2201122

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-FD90/7-1 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

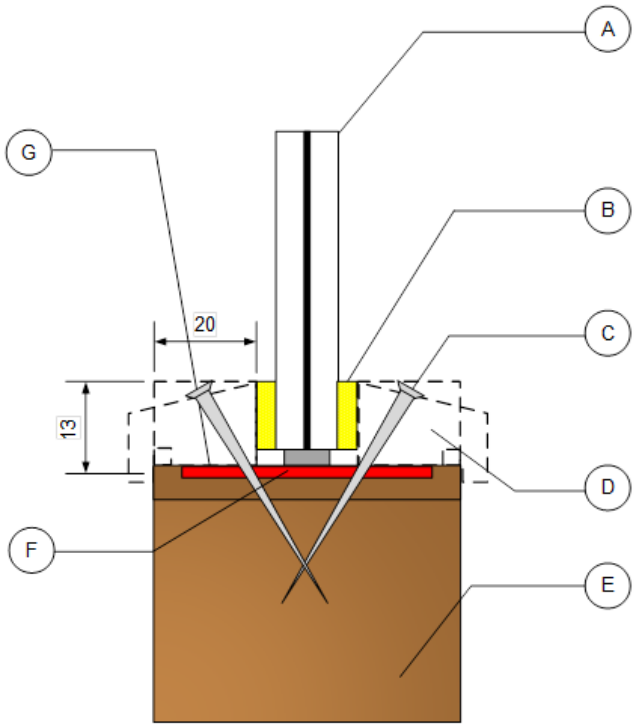
Maximum Width	Maximum Height	Maximum Area
377mm wide @ 1593mm high	1673mm high @ 359mm wide	0.60m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-FD90/11-1 glass in timber based doorsets for periods of 90 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specification:



A Glazing: Pyroguard Advance 2-FD90/11-1 (11 mm thick)

B Glazing tape: 10 x 2 mm Fire & Acoustic Seals closed cell foam tape

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 200 mm centres

D Bead: Hardwood glazing beads, ≥640 kg/m^3, ≥13 mm (h) x ≥20 mm (w) having a 2 mm x 2mm notch cut out. Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

E Leaf: A previously tested or Certifire approved FD90 door

F Setting blocks:Hardwood to centre the glazing and give approx. 3.5 mm expansion gap

G Liner: 2 mm x 44 mm ISL Thermaline [Sealmaster] embedded in a 2 mm rebate in a hardwood liner of dimension 6 mm x 54 mm

Glazing details as described in test report:
Warringtonfire 517609

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-FD60/11-1 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
716mm wide @ 1290mm high	1290mm high @ 716mm wide	0.92m^2

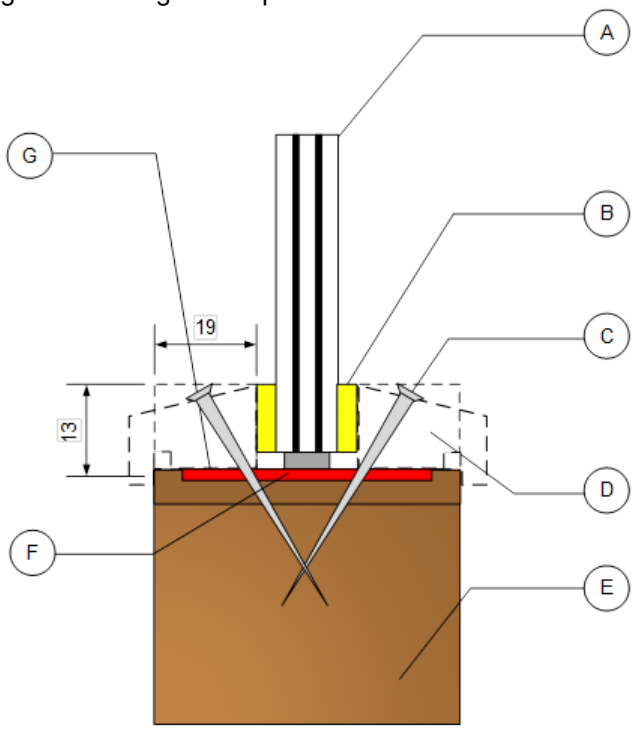
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW90/11-2 glass in timber based doorsets for periods of 90 minutes integrity

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved timber based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW90/11-2 (11 mm thick)

B Glazing tape: 12 x 4.5 mm Scapa 3259 closed cell foam tape

C Fixing: 50 mm pins 50 mm from corners & equispaced at a maximum of 200 mm centres

D Bead: Hardwood glazing beads, ≥640 kg/m^3, ≥13 mm (h) x ≥19.5 mm (w) with optional 2 mm x 2 mm shadow relief. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

E Leaf: A previously tested or Certifire approved FD90 door

F Setting blocks:Hardwood to centre the glazing and give approx. 3.5 mm expansion gap

G Liner: 2 mm x 44 mm ISL Thermaline [Sealmaster] embedded in a 2 mm rebate in a hardwood liner of dimension 6 mm x 54 mm

Glazing details as described in test report:
Warringtonfire 512028

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW90/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Permitted Glass Dimensions

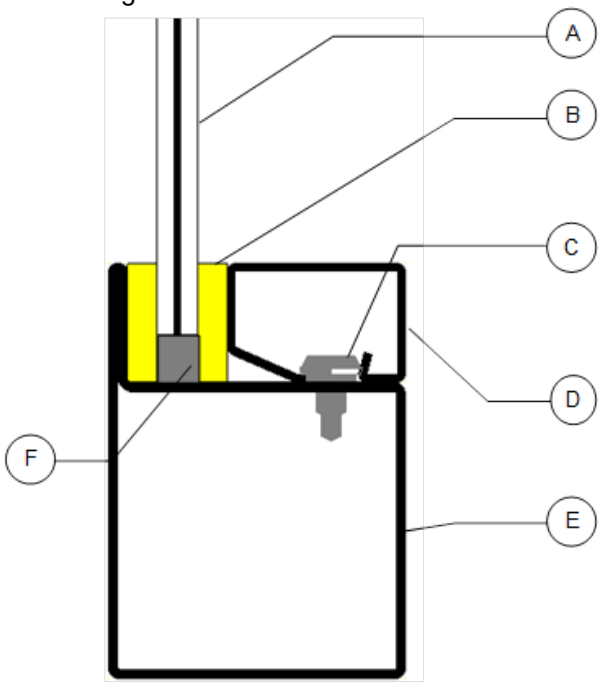
Maximum Width	Maximum Height	Maximum Area
719mm wide @ 1290mm high	1290mm high @ 719mm wide	0.92m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 glass in steel framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Glazing: Pyroguard Advance 2-EW30/7-1

B Glazing tape: Kerafix 2000 ceramic tape 3x15mm & 6x15mm

C Fixing

D Bead

E Section: Steel partition Forster Presto 50 or another previously tested or Certifire approved non-insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15 mm edge cover

Glazing details as described in test report:
Warringtonfire 422508

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 glass shown in the table below, when used in conjunction with the above system. The maximum permitted overall screen dimensions are 3000mm high by unlimited width. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

Maximum Width	Maximum Height	Maximum Area
1137mm wide @ 2750mm high	3437mm high @ 910mm wide	3.12m^2
2400mm wide @ 900mm high	1125mm high @ 1920mm wide	2.16m^2
1162mm wide @ 935mm high	1168mm high @ 930mm wide	1.08m^2

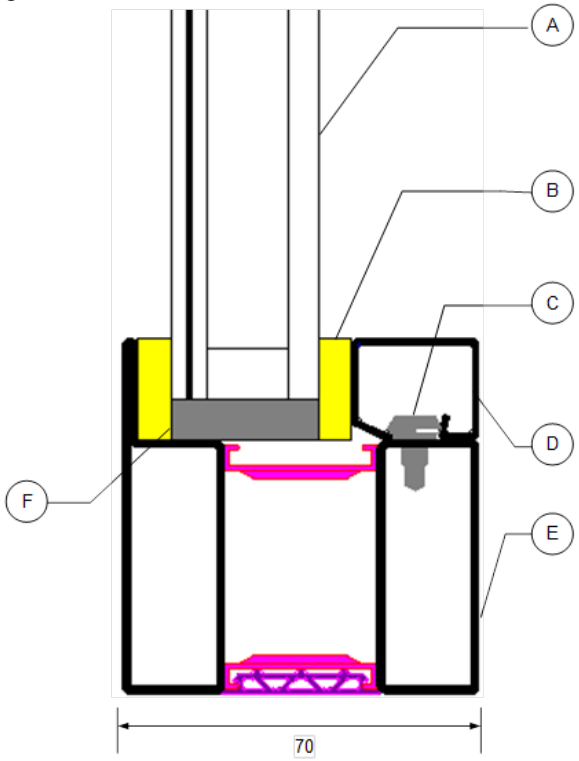
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 VI IGU glass in steel framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Glazing: Pyroguard Advance 2-EW30/7-1 VI (IGU)

B Glazing tape: 20mm x 5mm ceramic tape

C Fixing

D Bead

E Section: Steel partition Forster Unico or other previously tested or Certifire approved steel system

F Setting blocks: Hardwood or non-combustible 80mm x 23mm x 5mm

Glazing details as described in test report EFR-21-V-000377

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 VI glass shown in table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

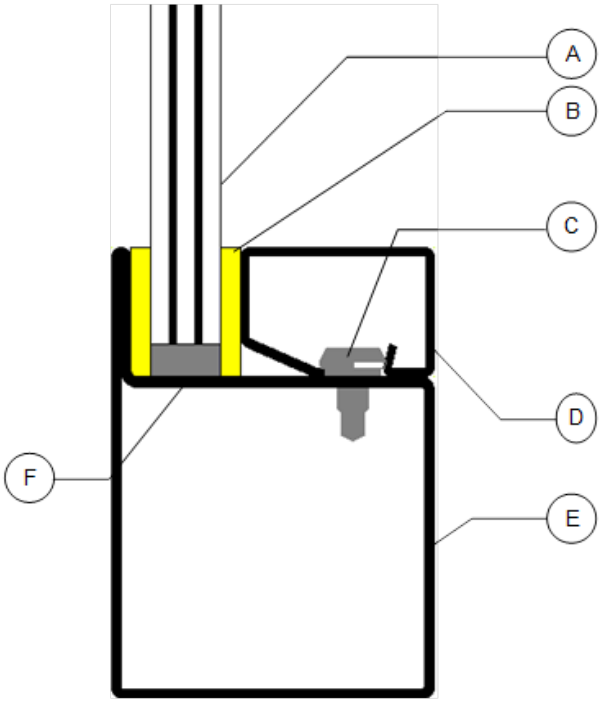
Orientation of the IGU	Maximum Width	Maximum Height	Maximum Area
Pyroguard on either side	1250mm wide @ 2750mm high	3437mm high @ 1000mm wide	3.43m^2
Pyroguard to Fire Risk	3125mm wide @ 430mm high	537mm high @ 2500mm wide	1.34m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in steel framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Glazing: Pyroguard Advance 2-EW30/11-2

B Glazing tape: Kerafix 2000 ceramic tape

C Fixing

D Bead

E Section: Steel partition Forster Presto 50 or another previously tested or Certifire approved non-insulated system

F Setting blocks: Hardwood Or non-combustible to suit 10-15 mm edge cover

Glazing details as described in test report:
Warringtonfire 421225

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

Maximum Width	Maximum Height	Maximum Area
1007mm wide @ 2705mm high	3381mm high @ 806mm wide	2.72m^2
1681mm wide @ 1090mm high	1362mm high @ 1345mm wide	1.83m^2
2558mm wide @ 610mm high	762mm high @ 2047mm wide	1.56m^2

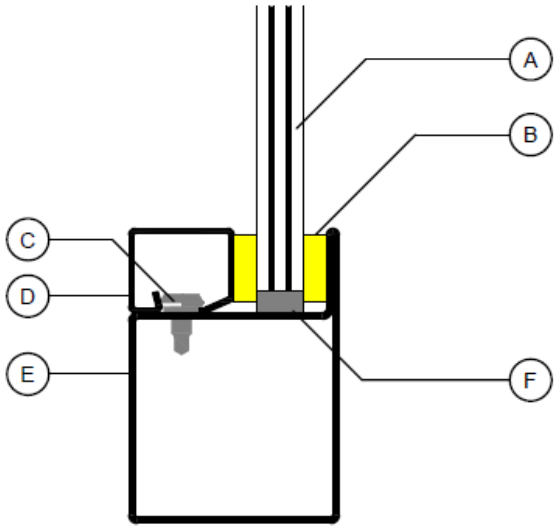
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in steel framed screens for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Pyroguard 2-EW30/11-2

B Glazing tape: Kerafix 2000 ceramic tape [KUHN]

C Fixing: Mild steel stud 70mm from corners, maximum 210mm centres.

D Bead

E Section: Steel partition Forster Presto 50 or another previously tested or Certifire approved non insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 533818

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

Maximum Width	Maximum Height	Maximum Area
1943mm wide @ 2743mm high	3431mm high @ 1553mm wide	5.33m^2

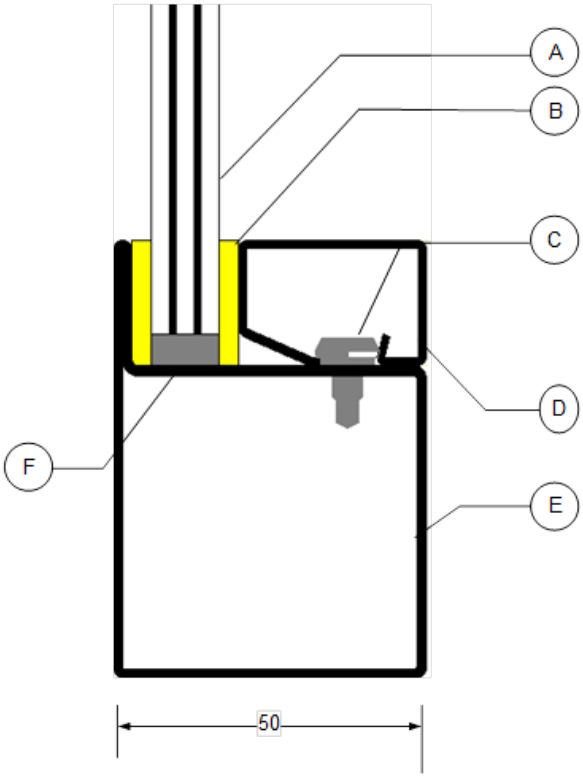
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in steel framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Glazing: Pyroguard Advance 2-EW60/11-2

B Glazing tape: Kerafix 2000 ceramic tape

C Fixing

D Bead

E Section: Steel partition Forster Presto 50 or another previously tested or Certifire approved non-insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15 mm edge cover

Glazing details as described in test report:
Warringtonfire 421225

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

Maximum Width	Maximum Height	Maximum Area
927mm wide @ 2705mm high	3110mm high @ 806mm wide	2.50m^2
2354mm wide @ 610mm high	701mm high @ 2047mm wide	1.43m^2

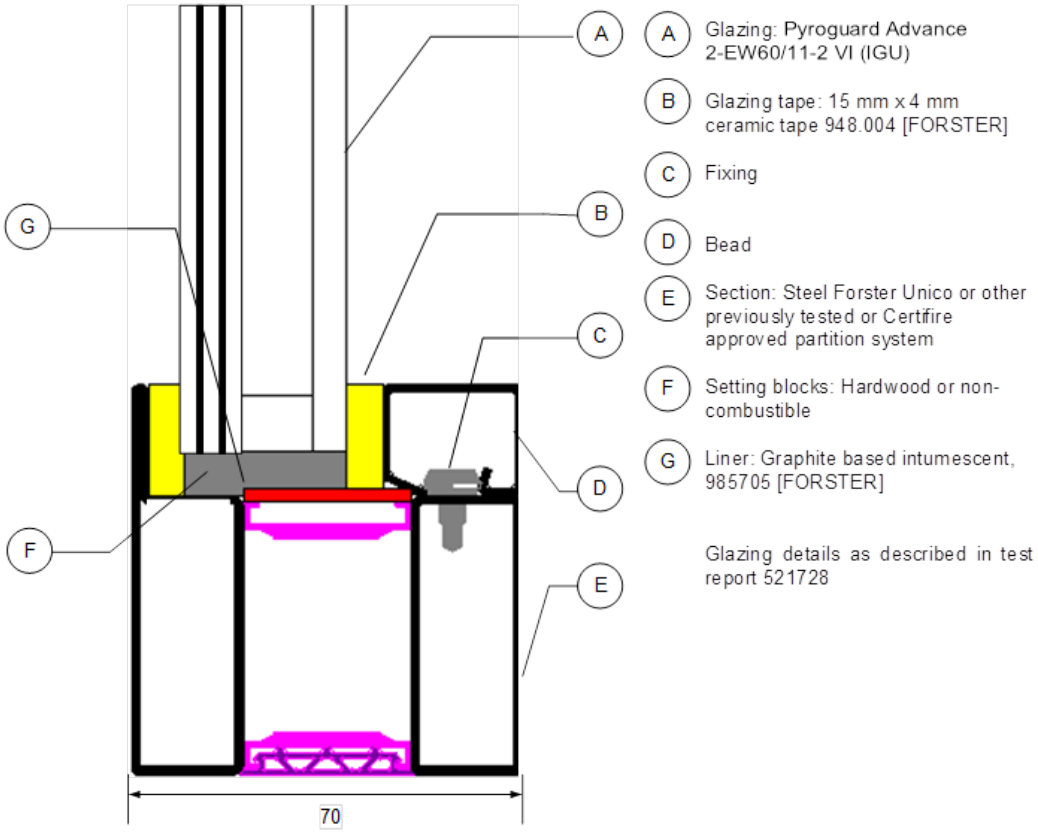
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 VI [IGU] glass in steel framed screens for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



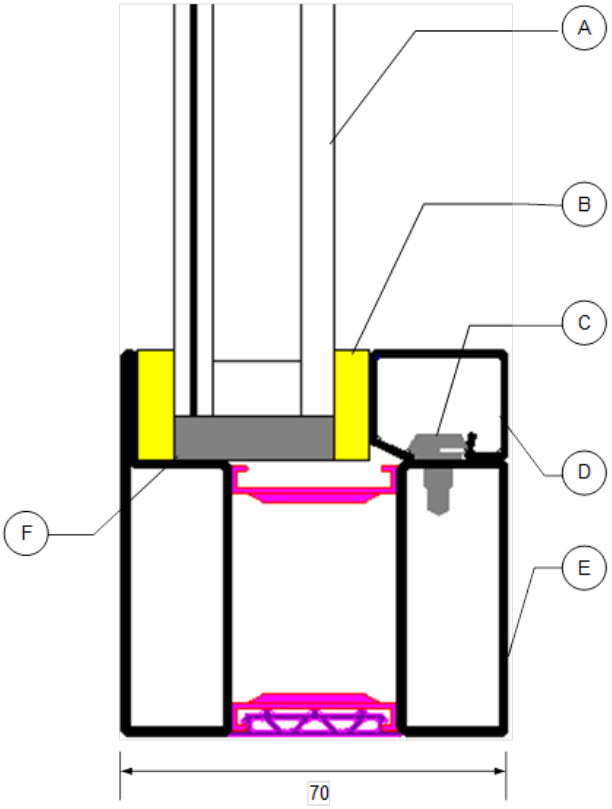
Glass Type	Maximum Width	Maximum Height	Maximum Area
Laminated Glass Counterpane	921mm wide @ 2734mm high	3089mm high @ 815mm wide	2.52m^2
Non-laminated Glass Counterpane	1147mm wide @ 2734mm high	3089mm high @ 1015mm wide	3.14m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/7-1 VI [IGU] glass in steel based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Glazing: Pyroguard Advance 2-EW30/7-1 VI (IGU)

B Glazing tape: 15 mm x 4 mm ceramic tape 948.004 [FORSTER]

C Fixing

D Bead

E Section: Steel door Forster Unico or other previously tested or Certifire approved Steel door system

F Setting blocks: Hardwood or non-combustible

Glazing details as described in test report 512568

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/7-1 VI [IGU] glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Width	Maximum Height	Maximum Area
1211mm wide @ 2500mm high	3125mm high @ 969mm wide	3.03m^2

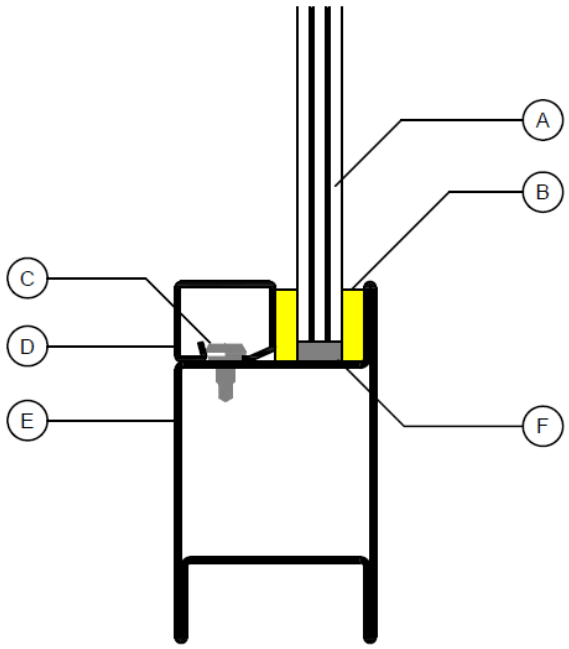
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in steel based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW30/11-2

B Glazing tape: Kerafix 2000 ceramic tape15x5mm [KUHN]

C Fixing: Mild steel stud 70mm from corners, maximum 210mm centres.

D Bead

E Section: Steel Door Forster Presto 50 or another previously tested or Certifire approved non insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report: Warringtonfire 525855

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

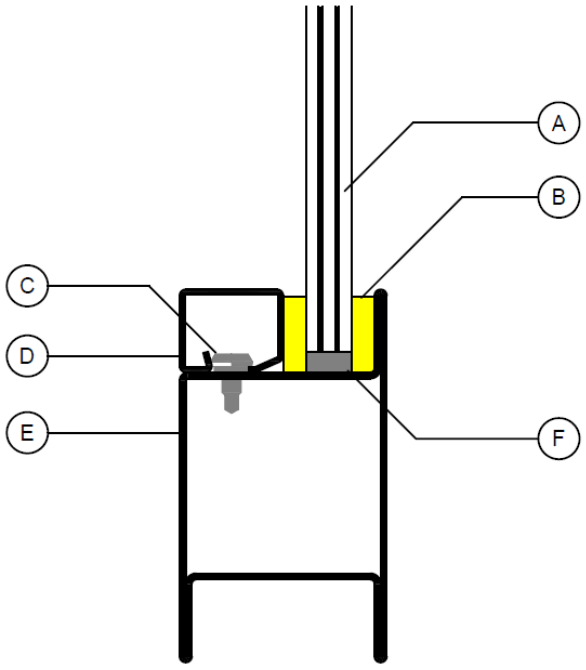
Maximum Width	Maximum Height	Maximum Area
1120mm wide @ 2081mm high	2601mm high @ 896mm wide	2.33m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in steel based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW60/11-2

B Glazing tape: Kerafix 2000 ceramic tape15x5mm [KUHN]

C Fixing: Mild steel stud 70mm from corners, maximum 210mm centres.

D Bead

E Section: Steel door Forster Presto 50 or another previously tested or Certifire approved non insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 525855

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

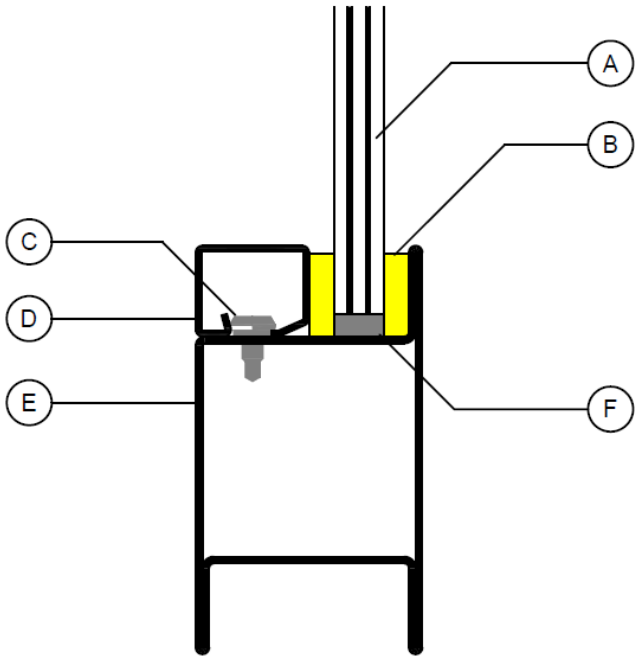
Maximum Width	Maximum Height	Maximum Area
1120mm wide @ 2081mm high	2601mm high @ 896mm wide	2.33m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW90/11-2 glass in steel based doorsets for periods of 90 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW90/11-2

B Glazing tape: Kerafix 2000 ceramic tape15x5mm [KUHN]

C Fixing: Mild steel stud 70mm from corners, maximum 210mm centres.

D Bead

E Section: Steel door Forster Presto 50 or another previously tested or Certifire approved non insulated system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 525855

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW90/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

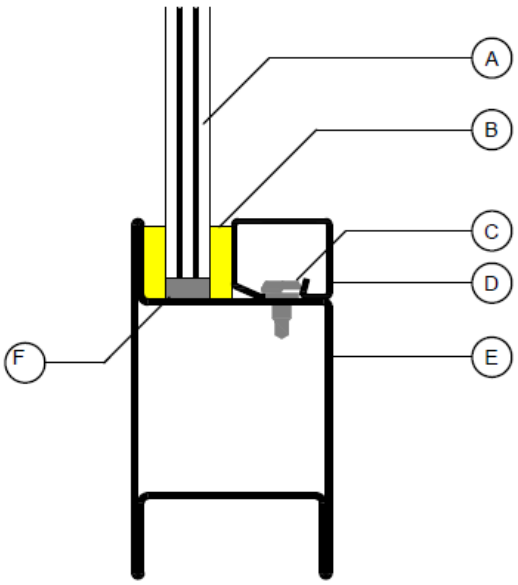
Maximum Width	Maximum Height	Maximum Area
896mm wide @ 2081mm high	2081mm high @ 896mm wide	1.86m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 glass in steel based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



(A) Pyroguard 2-EW30/11-2

(B) Glazing tape: Kerafix 2000 ceramic tape15x5mm [KUHN]

(C) Fixing: Mild steel stud 60mm from corners, maximum 250mm centres.

(D) Bead

(E) Section: Jansen Economy 50 or other previously tested or Certifire approved steel system

(F) Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report: Warringtonfire 530577

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

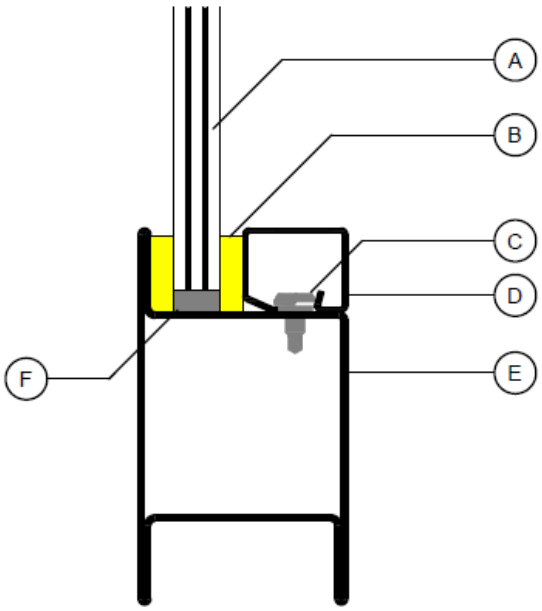
Maximum Width	Maximum Height	Maximum Area
1125mm wide @ 2085mm high	2608mm high @ 899mm wide	2.34m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 glass in steel based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW60/11-2

B Glazing tape: Kerafix 2000 ceramic tape15x5mm [KUHN]

C Fixing: Mild steel stud 60mm from corners, maximum 250mm centres.

D Bead

E Section: Jansen Economy 50 or other previously tested or Certifire approved steel system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 530577

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

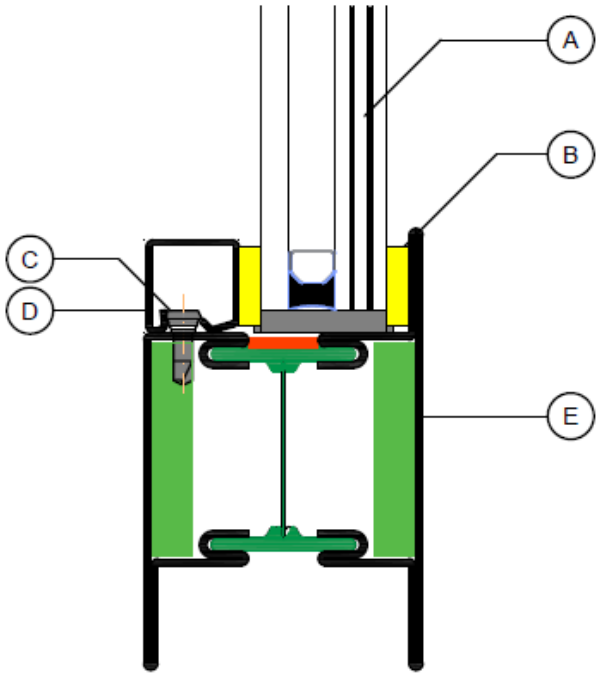
Maximum Width	Maximum Height	Maximum Area
1089mm wide @ 2085mm high	2525mm high @ 899mm wide	2.27m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW30/11-2 VI [IGU] glass in steel based doorsets for periods of 30 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW30/11-2 VI

B Glazing tape: Kerafix 2000 ceramic tape [KUHN]

C Fixing: Mild steel stud 60mm from corners, maximum 250mm centres.

D Bead

E Section: Jansen Steel Systems Janisol 2 or other previously tested or Certifire approved steel system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 530577

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/11-2 [IGU] glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

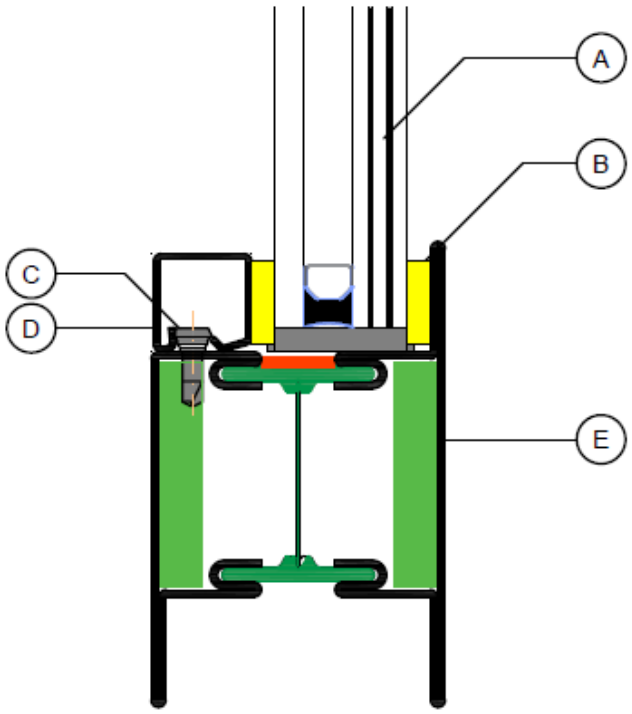
Maximum Width	Maximum Height	Maximum Area
1125mm wide @ 2085mm high	2606mm high @ 900mm wide	2.34m^2

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EW60/11-2 VI [IGU] glass in steel based doorsets for periods of 60 minutes integrity

For this application the following conditions shall apply:
The glass shall be glazed within a previously fire tested or CERTIFIRE approved steel based doorset utilising the following basic specifications:



A Pyroguard 2-EW60/11-2 VI

B Glazing tape: Kerafix 2000 ceramic tape [KUHN]

C Fixing: Mild steel stud 60mm from corners, maximum 250mm centres.

D Bead

E Section: Jansen Steel Systems Janisol 2 or other previously tested or Certifire approved steel system

F Setting blocks: Hardwood or non-combustible to suit 10-15mm edge cover.

Glazing details as described in test report:
Warringtonfire 530577

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW60/11-2 [IGU] glass shown in Table below, when used in conjunction with the glazing system detailed previously.

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

Maximum Width	Maximum Height	Maximum Area
1089mm wide @ 2085mm high	2522mm high @ 900mm wide	2.27m^2

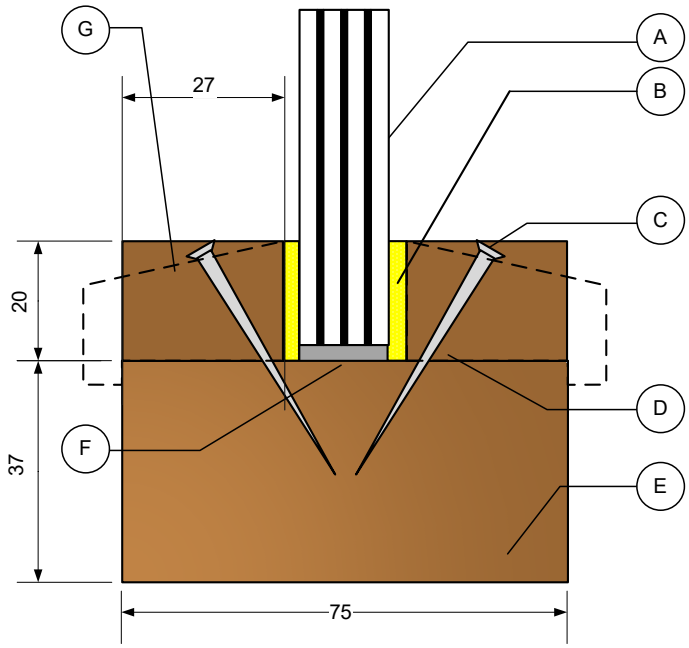
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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EI30/16-3 glass in timber framed screens for periods of 30 minutes integrity and insulation

For this application the following conditions shall apply:

The glass shall be glazed within a previously fire tested or CERTIFIRE approved framing system utilising the following basic specification:



A Glazing: Pyroguard Advance 2-EI30/16-3 [16 mm thick]

B Glazing tape: Kerafix 2000 [KUHN]

C Fixing: Pins 1 mm x 50 mm or screws 50mm long at 35° to glass, at 150 mm centres, 50 mm from corners

D Bead: Softwood bead: ≥27x≥20 mm, ≥500 kg/m^3

E Softwood partition section: ≥75x≥37 mm, ≥500 kg/m^3

F Setting blocks: 3 x 14 x 58 mm, hardwood

G Alternative beads approved based on TS25 rules. Flush beads may be converted to chamfered or bolection while maintaining at least the overall tested bead dimension and approved fixing method

Glazing details as described in report: 421206

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EI30/16-3 glass shown in the table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Glass Dimensions

Maximum Width	Maximum Height	Maximum Area
1375mm wide @ 2505mm high	3131mm high @ 1100mm wide	3.44m^2
2063mm wide @ 901mm high	1051mm high @ 1769mm wide	1.86m^2

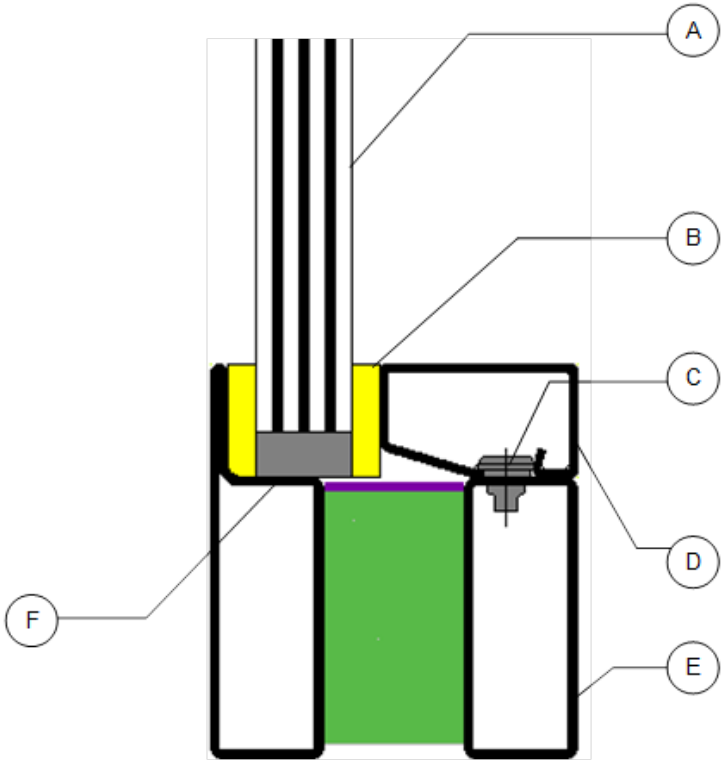
Note: Maximum glass stock size is currently limited to 1580mm by 2780mm.

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CERTIFICATE No CF 5818
PYROGUARD UK LIMITED

Pyroguard Advance 2-EI30/16-3 glass in steel framed screens for periods of 30 minutes integrity and insulation

For this application the following conditions shall apply:
The glass shall be installed into a previously tested or CERTIFIRE approved framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing, screw-fixed or clip-on retaining beads.



A Glazing: Pyroguard Advance 2-EI30/16-3 (16 mm thick)

B Glazing tape: 20 mm x 3 mm Kerafix 2000

C Fixing

D Bead

E Section: Forster Fuego Light EI30 or a previously tested or Certifire approved steel insulating framing system

F Setting blocks: Hardwood or non-combustible 80mm x 21mm x 5mm

Glazing details as described in test report:
Efectis EFR-21-V-003377

This Certificate of Approval relates to the sizes of Pyroguard Advance 2-EW30/16-3 glass shown in table below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

Maximum Permitted Pane Dimensions

Maximum Width	Maximum Height	Maximum Area
1200mm wide	2750mm high	3.30m^2
2500mm wide	430mm high	1.07m^2

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