



CERTIFICATE OF APPROVAL

No CF 348

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

PYROPLEX LIMITED

The Furlong, Droitwich, Worcestershire, WR9 9BG
Tel: 01905 795432 Fax: 01905 795757
Web site: www.pyroplex.com

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

CERTIFIED PRODUCT

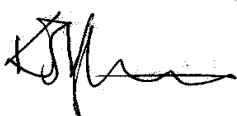
**Pyroplex 30 minute glazing
Systems:**

**Fire rated glazed apertures in
fire resistant timber doorsets
and timber screens**

TECHNICAL SCHEDULE

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

Signed and sealed for and on behalf of CERTIFIRE



Sir Ken Knight
Chairman - Management Council

Issued: 23rd March 2004
Reissued: 23rd January 2015
Valid to: 22nd January 2020

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CERTIFICATE No CF 348 PYROPLEX LIMITED

PYROPLEX '8193, 30049, 30054, 8492 and FS30' GLAZING SYSTEMS

This Certificate of Approval relates to the contribution to fire resistance of the Pyroplex '8193 30049, 30054 & 8492' Glazing Systems and when used in timber door leaves and 'FS30' Glazing System when used in timber screens, for periods of 30 minutes integrity, as defined in BS 476: Part 22: 1987 subject to the undermentioned conditions.

This product is approved on the basis of:

- Initial type testing
- A design appraisal against TS25
- Registration to ISO 9001: 2008
- Inspection and surveillance of factory production control.
- Audit Testing in accordance with TS25

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

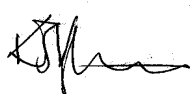
Pyroplex 30 minute glazing systems 8193, 30049, 30054 and 8492 glazing systems require the following essential elements;

- Pyroplex glazing system seal
- Beading system
- Retaining method
- Aperture lining system (not required for all variants)
- Fire resistant timber doorset

The systems are used at the perimeter of a pane of fire resisting glass to provide an effective seal between the glass and substrate within a door leaf.

The Pyroplex '30049 & 30054' seals are available in a range of colours listed below:

Black, Brown, Cream and White





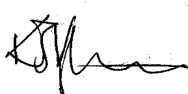
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PYROPLEX '8193, 30049, 30054, 8492 and FS30' GLAZING SYSTEMS

Pyroplex 'FS30' Glazing System consists of the following essential elements:

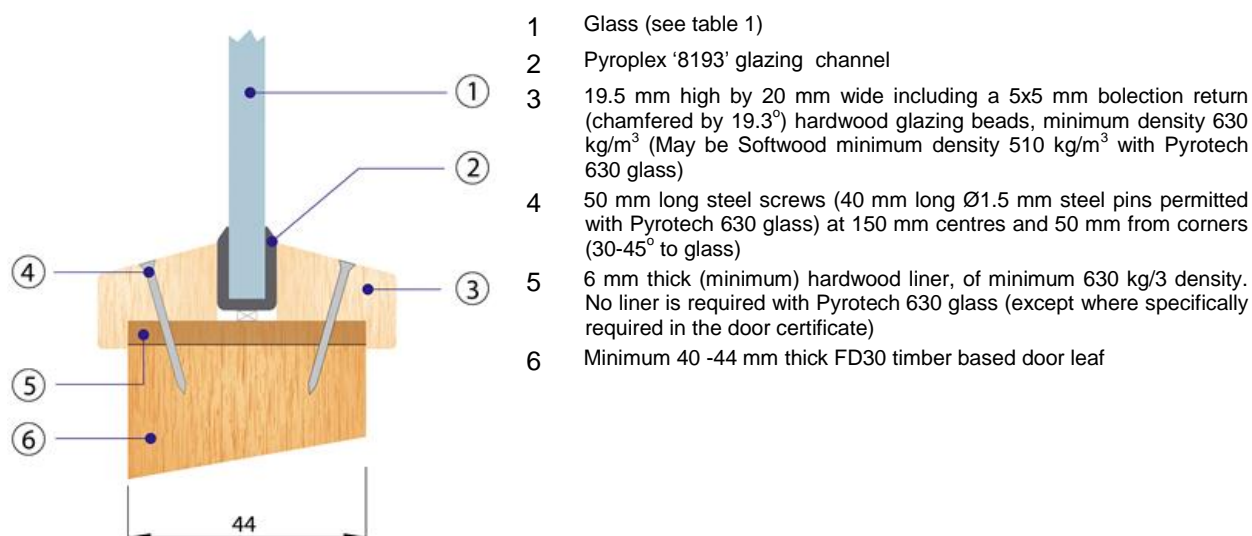
- a) Pyroplex glass edge seals – product reference '30049'
- b) Hardwood or softwood retaining beads (25 mm wide x 15 mm high with 5° chamfer) of a specific design and minimum density 520 kg/m³
- c) 40 mm long by 4 mm diameter steel screw fixings or 50 mm long by 1.8 mm diameter pin fixings via the retaining beads at 150 mm centres



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PYROPLEX '8193' GLAZING SYSTEM

The figures below show the relevant dimensions of the '8193' Glazing channel and basic glazing details:



This Certificate of Approval relates to the following glasses when used in conjunction with a '8193' Glazing System at the maximum sizes shown in Table 1 below:

Table 1. Acceptable Glass Dimensions

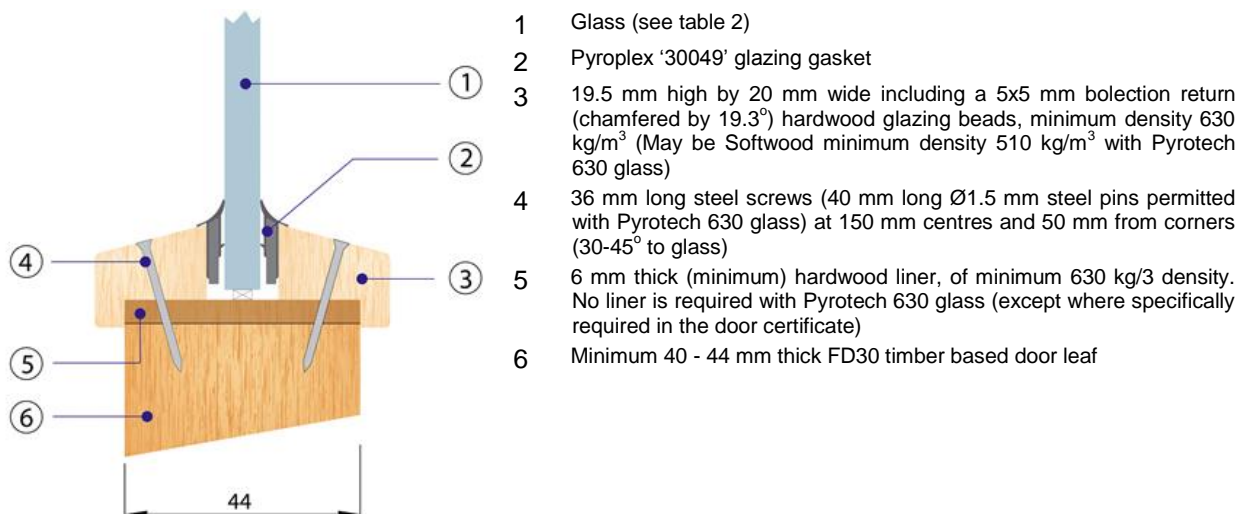
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pyroshield Safety	600 mm (at 600 mm wide)	600 mm (at 600 mm high)	0.36 m ²
Pyrostem	600 mm (at 600 mm wide)	600 mm (at 600 mm high)	0.36 m ²
Pyrodur Plus	600 mm (at 600 mm wide)	600 mm (at 600 mm high)	0.36 m ²
Pyroguard C/W	600 mm (at 600 mm wide)	600 mm (at 600 mm high)	0.36 m ²
Pyrotech 630*	1680 mm (at 450 mm wide)	540 mm (at 1400 mm high)	0.76 m ²

* This glass requires that the expansion allowance shall be a minimum of 1 mm per 150 mm glass length (both vertical and horizontal) or if in doubt, minimum 5 mm to all edges (10 mm to head if expansion is not possible at the bottom edge). The edge cover to each pane shall be 10 mm

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PYROPLEX '30049' GLAZING SYSTEM

The figures below show the relevant dimensions of the '30049' Glazing gasket and basic glazing details:



This Certificate of Approval relates to the following glasses when used in conjunction with a '30049' Glazing System at the maximum sizes shown in Table 2 below:

Table 2. Acceptable Glass Dimensions

Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pyroshield Safety	1887 mm (at 355 mm wide)	750 mm (at 893 mm high)	0.67 m ²
Pyrostem	1550 mm (at 290 mm wide)	750 mm (at 600 mm high)	0.45 m ²
Pilkingtons Pyroclear	1473 mm (at 343 mm wide)	398 mm (at 893 mm high)	0.50 m ²
Pyrodur Plus	1550 mm (at 290 mm wide)	750 mm (at 600 mm high)	0.45 m ²
Pyrobelite 7 or 7EG	1550 mm (at 290 mm wide)	750 mm (at 600 mm high)	0.45 m ²
Pyroguard C/W	750 mm (at 750 mm wide)	750 mm (at 750 mm high)	0.56 m ²
Pyrotech 630*	1680 mm (at 450 mm wide)	540 mm (at 1400 mm high)	0.76 m ²

* This glass requires that the expansion allowance shall be a minimum of 1 mm per 150 mm glass length (both vertical and horizontal) or if in doubt, minimum 5 mm to all edges (10 mm to head if expansion is not possible at the bottom edge). The edge cover to each pane shall be 10 mm.

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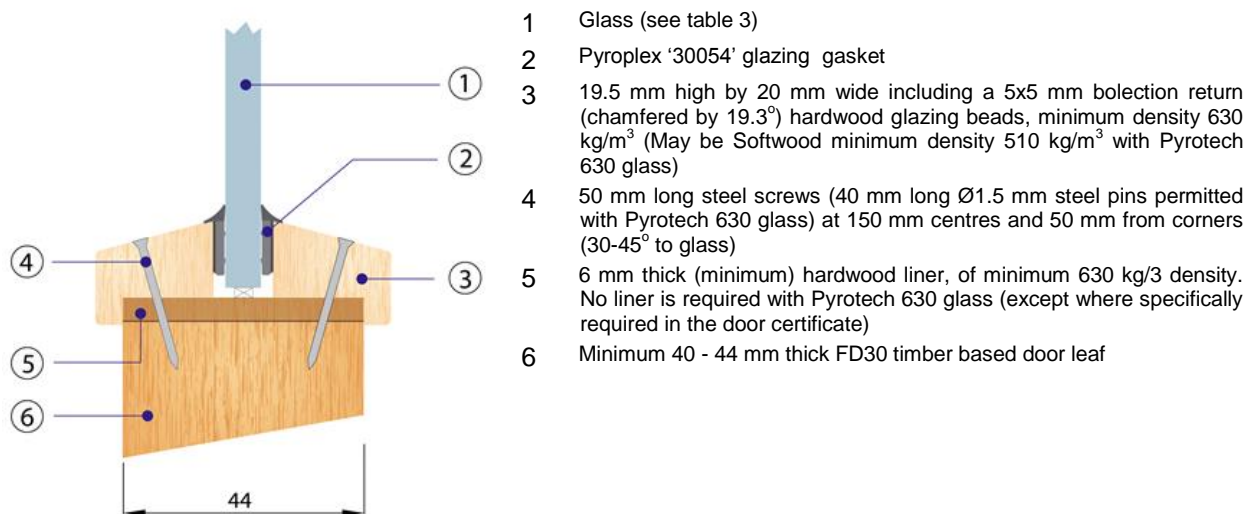
Issued: 23rd March 2004
Reissued: 23rd January 2015
Valid to: 22nd January 2020

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PYROPLEX '30054' GLAZING SYSTEM

The figures below show the relevant dimensions of the '30054' Glazing Gasket and basic glazing details:



This Certificate of Approval relates to the following glasses when used in conjunction with a '30054' Glazing System at the maximum sizes shown in Table 3 below.

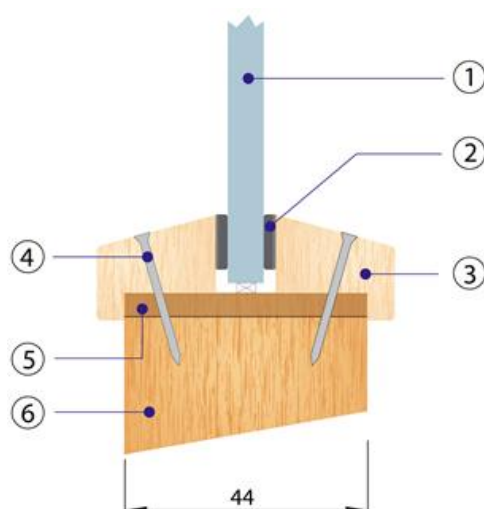
Table 3. Acceptable Glass Dimensions			
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pyrodur Plus	750 mm (at 750 mm wide)	750 mm (at 750 mm high)	0.56 m ²
Pyroguard C/W	750 mm (at 750 mm wide)	750 mm (at 750 mm high)	0.56 m ²
Pyrotech 630*	1680 mm (at 450 mm wide)	540 mm (at 1400 mm high)	0.76 m ²

* This glass requires that the expansion allowance shall be a minimum of 1 mm per 150 mm glass length (both vertical and horizontal) or if in doubt, minimum 5 mm to all edges (10 mm to head if expansion is not possible at the bottom edge). The edge cover to each pane shall be 10 mm.

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PYROPLEX '8492' GLAZING SYSTEM

The figures below show the relevant dimensions of the '8492' Glazing Seal and basic glazing details:



- 1 Glass (see table 4)
- 2 Pyroplex '8492' glazing seal
- 3 19.5 mm high by 20 mm wide including a 5x5 mm bolection return (chamfered by 19.3°) hardwood glazing beads, minimum density 630 kg/m³ (May be Softwood minimum density 510 kg/m³ with Pyrotech 630 glass)
- 4 45 mm long steel screws (40 mm long Ø1.5 mm steel pins permitted with Pyrotech 630 glass) at 150 mm centres and 50 mm from corners (30-45° to glass)
- 5 6 mm thick (minimum) hardwood liner, of minimum 630 kg/3 density. No liner is required with Pyrotech 630 glass (except where specifically required in the door certificate)
- 6 Minimum 40mm – 44 mm thick FD30 timber based door leaf

This Certificate of Approval relates to the following glasses when used in conjunction with a '8492' Glazing System at the maximum sizes shown in Table 4 below:

Table 4. Acceptable Glass Dimensions

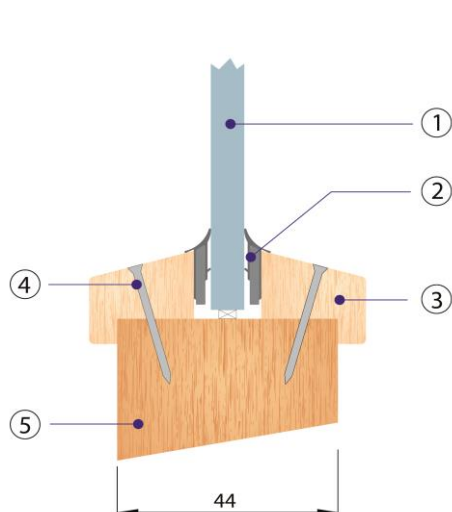
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pyroshield Safety	403 mm (at 626 mm wide)	626 mm (at 403 mm high)	0.25 m ²
Pyrostem	403 mm (at 626 mm wide)	626 mm (at 403 mm high)	0.25 m ²
Pyrodur Plus	403 mm (at 626 mm wide)	626 mm (at 403 mm high)	0.25 m ²
Pyroguard C/W	403 mm (at 626 mm wide)	626 mm (at 403 mm high)	0.25 m ²
Pyrotech 630*	1680 mm (at 450 mm wide)	540 mm (at 1400 mm high)	0.76 m ²

* This glass requires that the expansion allowance shall be a minimum of 1 mm per 150 mm glass length (both vertical and horizontal) or if in doubt, minimum 5 mm to all edges (10 mm to head if expansion is not possible at the bottom edge). The edge cover to each pane shall be 10 mm.

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PYROPLEX '30049' GLAZING SYSTEM (UNLINED OPTION)

The figure below shows the relevant dimensions of the '30049' Glazing gasket and basic glazing details when used in unlined door leaf apertures:



- 1 Glass (see table 5)
- 2 Pyroplex '30049' glazing gasket
- 3 25 mm high by 22 mm wide including a 5x5 mm bolecion return (chamfered by 15°) hardwood glazing beads, minimum density 640 kg/m³
- 4 40 mm long Ø1.5 mm steel pins at 150 mm centres and 50 mm from corners (30-45° to glass)
- 5 Minimum 40 mm – 44mm thick FD30 timber based door leaf (solid core doors only)

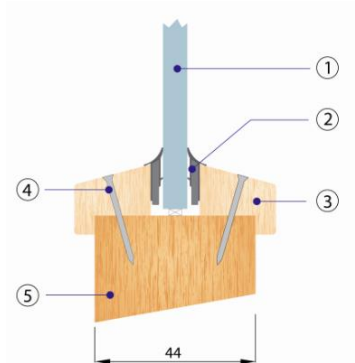
This Certificate of Approval relates to the following glasses when used in conjunction with a '30049' Glazing System at the maximum sizes shown in Table 5 below:

Table 5. Acceptable Glass Dimensions			
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pilkingtons Pyroclear	1473 mm (at 343 mm wide)	398 mm (at 893 mm high)	0.50 m ²

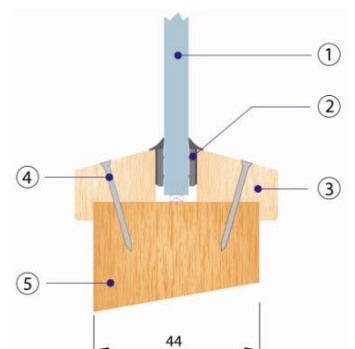
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PYROPLEX '30049, 30054 & 8492' GLAZING SYSTEMS (UNLINED APERTURE OPTION)

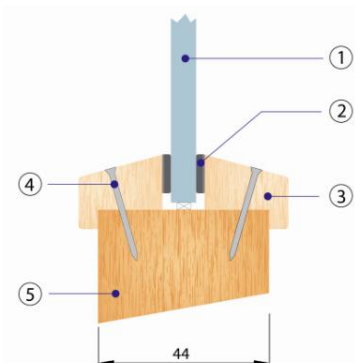
The figures below show the relevant dimensions of the '30049, 30054 & 8492' Glazing gasket and basic glazing details when used in unlined door leaf apertures:



- 1 Glass (see table 6)
- 2 Pyroplex 30049 glazing gasket
- 3 18 mm high by 18 mm wide including a 5x5 mm bolection return (chamfered by 11°) hardwood glazing beads, minimum density 640 kg/m³
- 4 50 mm long Ø1.5 mm steel pins at 140 mm centres and 50 mm from corners (45° to glass)
- 5 Minimum 40 mm - 44mm thick FD30 timber based door leaf (solid core doors only)



- 1 Glass (see table 6)
- 2 Pyroplex 30054 glazing gasket
- 3 18 mm high by 18 mm wide including a 5x5 mm bolection return (chamfered by 11°) hardwood glazing beads, minimum density 640 kg/m³
- 4 50 mm long Ø1.5 mm steel pins at 140 mm centres and 50 mm from corners (45° to glass)
- 5 Minimum 40 mm - 44mm thick FD30 timber based door leaf (solid core doors only)



- 1 Glass (see table 6)
- 2 Pyroplex 8492 glazing seal
- 3 18 mm high by 18 mm wide including a 5x5 mm bolection return (chamfered by 11°) hardwood glazing beads, minimum density 640 kg/m³
- 4 50 mm long Ø1.5 mm steel pins at 140 mm centres and 50 mm from corners (45° to glass)
- 5 Minimum 40 mm - 44mm thick FD30 timber based door leaf (solid core doors only)

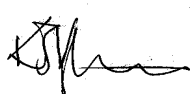


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This Certificate of Approval relates to the following glasses when used in conjunction with a '30049 & 30054 or 8492' Glazing System at the maximum sizes shown in Table 6 below:

Table 6. Acceptable Glass Dimensions			
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
CERTIFIRE Approved 15 mm Fully Insulated Glass*	880 mm (at 550 mm wide)	605 mm (at 800 mm high)	0.48 m ²

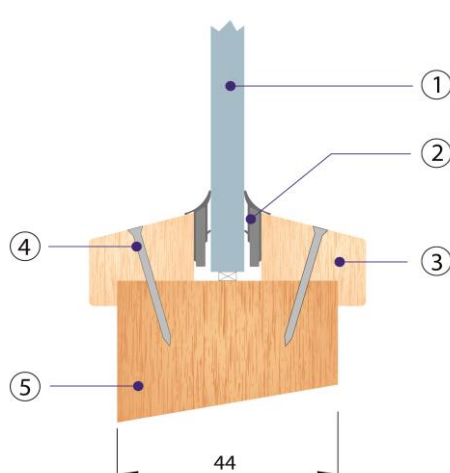
*Note: Care must be taken to ensure glass is CERTIFIRE approved for use in timber doorsets at the dimensions required.



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PYROPLEX '30049' GLAZING SYSTEM (UNLINED OPTION)

The figure below shows the relevant dimensions of the '30049' Glazing Gasket and basic glazing details when used in unlined door leaf apertures:



- 1 Glass (see table 7)
- 2 Pyroplex '30049' glazing gasket
- 3 20 mm high by 20 mm wide including a 5x5 mm bolection return (chamfered by 11°) hardwood glazing beads, minimum density 650 kg/m³
- 4 50 mm long Ø1.5 mm steel pins at 150 mm centres and 50 mm from corners (30-45° to glass)
- 5 Minimum 40 mm thick FD30 timber based door leaf (solid core doors only)

This Certificate of Approval relates to the following glasses when used in conjunction with a '30049' Glazing System at the maximum sizes shown in Table 7 below:

Table 7. Acceptable Glass Dimensions

Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
CERTIFIRE Approved 7-12 mm Partially Insulated Glass*	876 mm (at 526 mm wide)	658 mm (at 701 mm high)	0.46 m ²

*Note: Care must be taken to ensure glass is CERTIFIRE approved for use in timber doorsets at the dimensions required.



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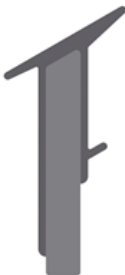
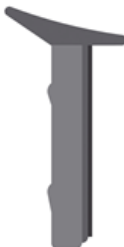

PYROPLEX '8193, 30049, 30054 & 8492' GLAZING SYSTEMS

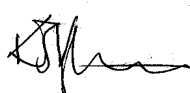
This Certificate of Approval relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40 mm overall leaf thickness.

The '8193, 30049, 30054 & 8492' Glazing Systems may be fitted in the manner described in this Certificate of Approval, to previously tested door leaves provided that the particular aspects of the door assembly are maintained. These are described below but are not exhaustive:

1. The doorset, including door frame and associated building hardware, should have achieved at least 30 minutes integrity when tested or subsequently assessed by one of the laboratories approved by CERTIFIRE as acceptable for this purpose to BS 476: Part 22: 1987.
2. If the proposed doorset is to be used in double-leaf configuration, the test or assessment evidence should be applicable to double-leaf configurations.
3. Likewise, if the proposed doorset is to be used in the unlatched configuration the available evidence should be applicable to unlatched doorsets.
4. The proposed doorset should also have included a glazed aperture or apertures of the intended size, shape, area and number.
5. When used to glaze CERTIFIRE approved doorsets which have smaller apertures than allowed in this certificate, the aperture sizes specified in the doorset certificate shall take precedence.

If glazed in this way the proposed installation of the PYROPLEX '8193, 30049, 30054, 8492 & FS30' GLAZING SYSTEMS are not expected to affect the fire resistance performance of the leaf.

Pyroplex 30 Minute Glazing Systems			
			
8193	30049	30054	8492



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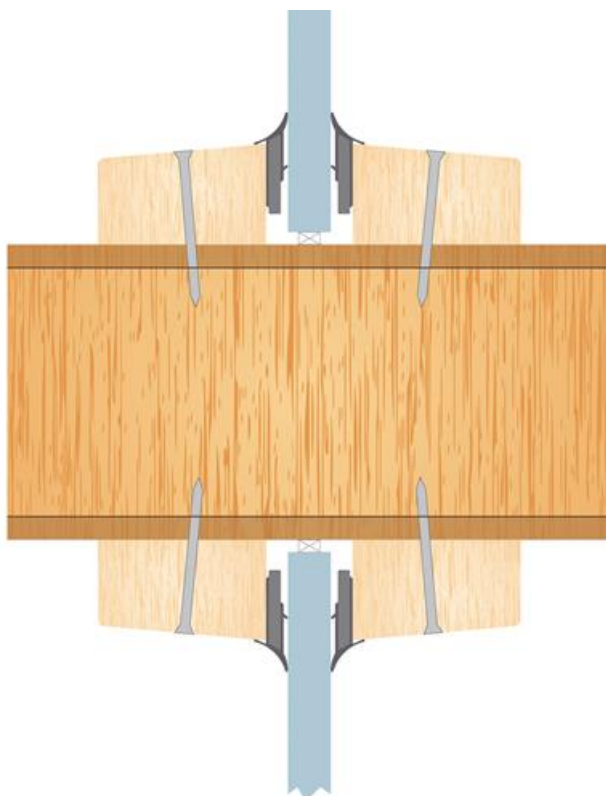
PYROPLEX LIMITED

'PYROPLEX FS30' 30 MINUTE GLAZED SCREEN SYSTEM

The diagram below shows the relevant dimensions of the frame with '30049' Glazing Gasket installed and basic glazing details:

The glass shall be glazed within a timber framed screen (the framing members of which should be a minimum section size of 90 mm by 44 mm) utilising the following basic specification:

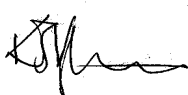
Figure 1. Cross-Section through Glazing System



Pyroplex 'FS30' Glazing System consists of the following essential elements:

- Pyroplex glass edge seals – product reference '30049'
- Hardwood or softwood retaining beads (25 mm wide x 15 mm high with 5° chamfer) of a specific design and minimum density 520 kg/m³
- 40 mm long by 4 mm diameter steel screw fixings or 50 mm long by 1.8 mm diameter pin fixings via the retaining beads at 150 mm centres

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Issued: 23rd March 2004
Reissued: 23rd January 2015
Valid to: 22nd January 2020

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‘PYROPLEX FS30’ 30 MINUTE GLAZED SCREEN SYSTEM

This Certificate of Approval relates to the following glasses when used in conjunction with the ‘30049’ Glazing System for a fire resistance performance of 30 minutes integrity at the maximum sizes shown in Table 8 and Figure 1 below:

Table 8. Acceptable Glass Dimensions			
Glass	Maximum Aperture Height	Maximum Aperture Width	Maximum Aperture Area
Pyroshield or Pyran S	1125 mm (at 1924 mm wide)	2405 mm (at 900 mm high)	2.16 m ²
	or		
	2455 mm (at 940 mm wide)	1175 mm (at 1964 mm high)	2.30 m ²
Pyrobelite, Pyrodur, Pyroguard, Pyrostem,	Maximum approved glass height, width and area will be as specified above or as specified by the relevant CERTIFIRE approval relating to the glass. Note that the approval relating to glass dimensions for the various glass types may be smaller than those given above.		

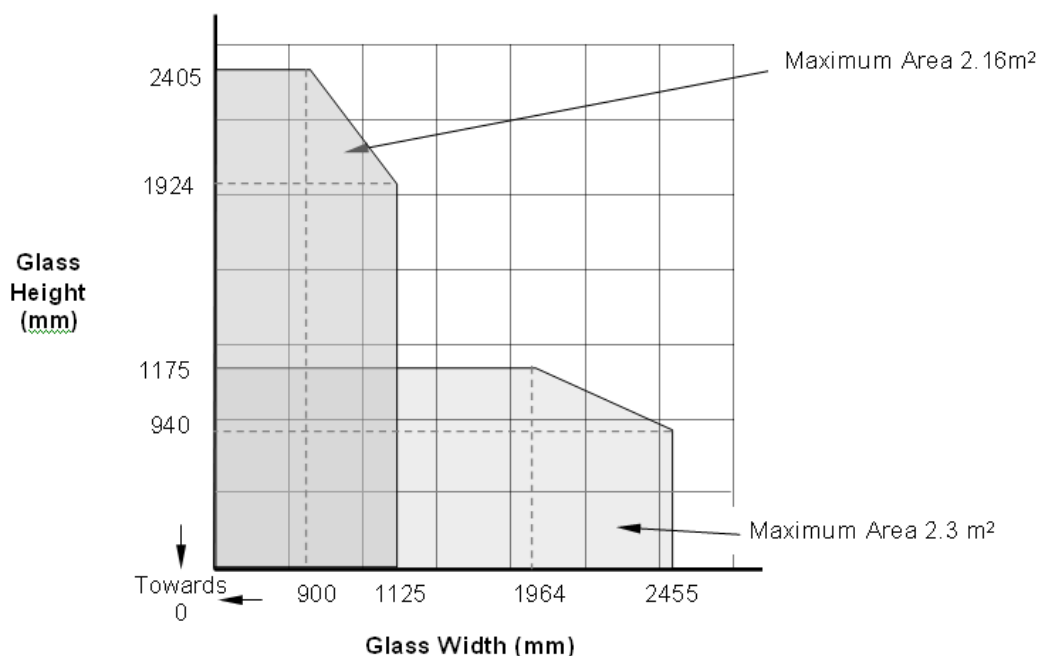


Figure 1. Acceptable Glass Dimensions

* Aperture dimensions shall fall within shaded area as detailed above.

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