




---

## CERTIFICATE OF APPROVAL

### No CF 718

---

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

## PILKINGTON GROUP LIMITED

**Prescot Road, St. Helens WA10 3TT**  
**Tel: 01744 692000 Fax: 01744 692880**

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

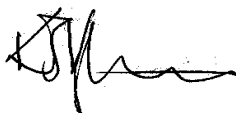
#### CERTIFIED PRODUCT

**Pilkington Pyroshield™ 2  
 Texture  
 Pilkington Pyroshield™ 2  
 Safety Clear**

#### TECHNICAL SCHEDULE

**TS 25 Fire Resistant Glass,  
 Glazing Systems and Materials**

**Signed and sealed for and on behalf of CERTIFIRE**



**Sir Ken Knight**  
 Chairman  
**WCL Impartiality Committee**



**Paul Duggan**  
 Certification Manager  
**Warrington Certification Ltd**



Issued: 18<sup>th</sup> May 2010  
 Reissued: 16<sup>th</sup> November 2015  
 Valid to: 15<sup>th</sup> November 2020



## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

This Certificate of Approval relates to the fire resistance of Pilkington Group Limited Pyroshield™ 2 glass products when used in the following applications, as defined in BS 476: Part 22: 1987.

**Table 1: Pilkington Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear  
Fire Resisting Glass for use in Timber Door Assemblies**

Glass Specification	Glazing Seal	Integrity (mins)	Page No.
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Hodgsons Firestrip 30	30	4 & 5
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Lorient System 36/7	30	4 & 5
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Lorient Flexible Figure 1	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Pyroplex 8193	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Pyroplex 30049	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Pyroplex 30054	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Pyroplex 8492	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	FireGlaze Compound	30	4 & 6
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	FireGlaze G30	30	4 & 7
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Therm-A-Glaze 30	30	4 & 7
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Therm-A-Glaze 45	30	4 & 7
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	Interdens	30	4 & 8

**Table 2: Pilkington Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear  
Fire Resisting Glass for use in Timber or Steel Framed Screens**

Glass Specification	Application	Glazing Seal	Integrity (mins)	Page No.
Pyroshield™ 2 Safety Clear	Timber Screen	Lorient System 36	30	9
Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear	Timber Screen	FireGlaze Compound	30	10
Pyroshield™ 2 Safety Clear	Timber Screen	Hodgsons Firestrip 30	30	11
Pyroshield™ 2 Safety Clear	Timber Screen	Interdens	30	12
Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear	Steel Screen	Ceramic Fibre Tape	30	13
Pyroshield™ 2 Safety Clear	Steel Screen (IGU)	Ceramic Fibre Tape	30	14
Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear	Steel Screen	Ceramic Fibre Tape	30	15
Pyroshield™ 2 Safety Clear	Horizontal Steel Screen	Ceramic Fibre Tape	30	16
Pyroshield™ 2 Safety Clear	Timber Screen	Ceramic Fibre Tape	30	17
Pyroshield™ 2 Safety Clear	Steel Screen	Ceramic Fibre Tape	30	18

Page 2 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

---

## CERTIFICATE No CF 718

### PILKINGTON GROUP LIMITED

---

**Pilkington Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear Fire Resisting Glass for use in Timber Door Assemblies and Timber or Steel Framed Screens**

This Certificate of Approval relates to the fire resistance performance, as defined in BS 476: Part 22: 1987, of Pilkington Pyroshield™ 2 Texture glass of 7 mm nominal thickness and Pilkington Pyroshield™ 2 Safety Clear glass of 6 mm nominal thickness, subject to the undermentioned conditions.

This product is approved on the basis of:

- i) Initial type testing.
- ii) A design appraisal against TS25.
- iii) Certification of quality management system to ISO 9001: 2008.
- iv) Inspection and surveillance of factory production control.
- v) 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 screen, the orientation of the screen shall be no more than  $\pm 10^\circ$  from the vertical.
- There is no restriction to the direction of exposure for the wired glass.
- The edge cover to the glass shall be a minimum of 10 mm.
- Unless otherwise stated, any species of timber, except Ash or Iroko, may be used for the construction of the glazing beads or frame (for screens only) providing the minimum specified density is achieved.
- Setting blocks shall be of hardwood.

Page 3 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

**Pilkington Pyroshield™ 2 Texture & Pyroshield™ 2 Safety Clear 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 FD30 timber based doorset utilising any of the following glazing systems:

**Table 3: Approved Glazing Systems and Maximum Permissible Pane Dimensions for 30 minutes Integrity Only**

Glazing System	Maximum Pane dimension* – height (mm)	Maximum Pane dimension* – width (mm)	Sizes Subject to Maximum Pane Area* (m <sup>2</sup> )
Hodgsons Sealants Firestrip 30	875	875	0.57
Lorient System 36/7	1100	700	0.65
Lorient Flexible Figure 1	875	750	0.66
Pyroplex 8193 glazing system	600	600	0.36
Pyroplex 30049 glazing system	1550	750	0.45
Pyroplex 30054 glazing system	750	750	0.56
Pyroplex 8492 glazing system	403	626	0.25
Sealmaster FireGlaze Compound	824	741	0.55
Sealmaster FireGlaze G30	824	741	0.55
Sealmaster Therm-A-Glaze 30, 10 mm x 2 mm strips	900	735	0.54
Sealmaster Therm-A-Glaze 45, 10 mm x 2 mm	Circular apertures up to 500 mm diameter		
Interdens, 10 mm x 2 mm	1770	650	1.15
The aspect ratio of the glass may be unlimited within these pane dimensions and area. A full specification for each glazing system is provided overleaf.			

\*The sizes stated relate to the permissible dimensions for fire resistance alone and do not take into account the suitability of the glass in terms of impact resistance or compliance with other regulations relating to the use of glass in doors and door surrounds. The installer should ensure that the glass is suitable for use in a location to meet all local and national requirements. The glass supplier will be able to provide details of any impact classification to EN 12600 relating to the grade of glass selected. For example a non impact rated annealed glass of 6 mm thickness and above including 7 mm Pilkington Pyroshield™ 2 Texture within the UK the maximum size in a door and within 300 mm of a door is restricted to 0.5m<sup>2</sup> in area and the small dimension not exceeding 250 mm when any part of the glazed panel is within 1500 mm measured from floor level.

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

Aperture dimensions shall not exceed the maximum specified within the CERTIFIRE approval relating to the doorset.

Page 4 of 18 Signed



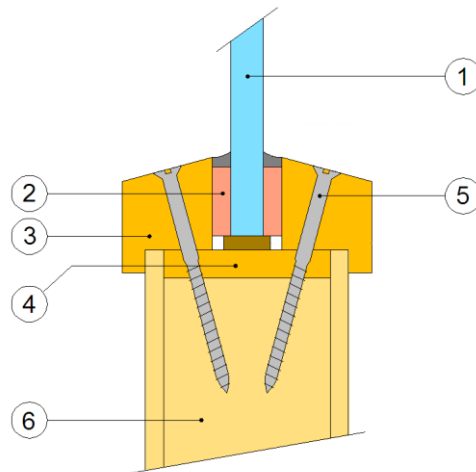
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718**  
**PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Timber Based Doorsets for Periods of 30 Minutes Integrity – Specification for Approved Glazing Systems**



<b>Hodgsons Sealants Firestrip 30</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Hodgsons Sealants Firestrip 30
3	Hardwood glazing beads (min. 610 kg/m <sup>3</sup> density), minimum 22mm wide by 21mm high, chamfered by approximately 13°
4	No liner required
5	Minimum 50mm long steel pins or screws at a maximum of 100mm centres, angled to pass under the face of the glass
6	Solid (high density) flaxboard or laminated timber door leaf core. The timber for rails and stiles of joinery type doors shall have a density of at least 400 kg/m <sup>3</sup>

<b>Lorient System 36/7</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Lorient System 36/7
3	Hardwood glazing beads of 550 kg/m <sup>3</sup> minimum density, minimum 22mm wide by 13mm high, chamfered by approximately 15°
4	Palusol based intumescent liner is required to be used as a lining around the perimeter of apertures cut within flaxboard substrates which have a density below 500 kg/m <sup>3</sup>
5	Minimum 40mm long steel pins or screws at a maximum of 200mm centres, angled to pass under the face of the glass
6	Door leaf core

Page 5 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718**  
**PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Timber Based Doorsets for Periods of 30 Minutes Integrity – Specification for Approved Glazing Systems**

<b>Lorient Flexible Figure 1</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Lorient Flexible Figure 1
3	Hardwood glazing beads of 550 kg/m <sup>3</sup> minimum density, minimum 22mm wide by 15mm high with a 5mm by 5mm bolection return, chamfered by approximately 15°
4	Hardwood or LX4402 intumescent liner is required to be used as a lining around the perimeter of apertures cut within flaxboard substrates
5	Minimum 40mm long steel pins or screws at a maximum of 150mm centres, angled to pass under the face of the glass
6	Door leaf core

<b>Pyroplex glazing systems</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Pyroplex glazing systems
3	Hardwood glazing beads of 630 kg/m <sup>3</sup> minimum density, minimum 20mm wide by 14.5mm high with a 5mm by 5mm bolection return, chamfered by approximately 20°
4	6 mm thick hardwood liner (minimum density 630 kg/m <sup>3</sup> ) shall be used to line apertures cut within all substrates
5	Minimum 50mm long steel screws at a maximum of 150mm centres, angled at 30-45°
6	Door leaf core

<b>FireGlaze Compound</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	FireGlaze Compound, 2 mm thick
3	Hardwood glazing beads of 600 kg/m <sup>3</sup> minimum density, minimum 25mm wide by 15mm high, chamfered by 20°
4	No liner required for solid core doors
5	Minimum 50mm long screws or 38mm steel pins at a maximum of 150mm centres
6	Door leaf core

Page 6 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718  
PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Glass Clear in Timber Based Doorsets for Periods of 30 Minutes Integrity – Specification for Approved Glazing Systems**

<b>FireGlaze G30</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	FireGlaze G30, 15mm by 2mm thick
3	Hardwood glazing beads of 600 kg/m <sup>3</sup> minimum density, minimum 25mm wide by 15mm high, chamfered by 20°
4	No liner required for solid core doors
5	Minimum 50mm long screws or 38mm steel pins at a maximum of 150mm centres
6	Door leaf core

<b>Sealmaster Therm-A-Glaze 30</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Sealmaster Therm-A-Glaze 30, 10mm by 2mm thick
3	Hardwood glazing beads of 660 kg/m <sup>3</sup> minimum density, minimum 25mm wide by 18 mm high, chamfered by 20°
4	No liner required for solid core doors
5	Minimum 50mm long screws or 38mm steel pins at a maximum of 150mm centres
6	Door leaf core

<b>Sealmaster Therm-A-Glaze 45</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Sealmaster Therm-A-Glaze 30, 10mm by 2mm thick
3	The glazing beads shall be hardwood of 460 kg/m <sup>3</sup> minimum density, minimum 23mm wide by 19mm high, chamfered by approximately 20°. The beads shall be in no more than 8 segments and must be tongue and groove jointed, stapled and glued
4	No liner required for solid core doors
5	Minimum 40mm long lost head nails, with at least one fixing per section
6	Installation directly into a solid (high density) flaxboard or laminated timber door leaf core. Minimum density for stiles and rails of joinery type doors shall be 400 kg/m <sup>3</sup>

Page 7 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

---

**CERTIFICATE No CF 718**  
**PILKINGTON GROUP LIMITED**

---

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Timber Based Doorsets for Periods of 30 Minutes Integrity – Specification for Approved Glazing Systems**

Interdens	
Item	Description
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Interdens 10mm by 2mm
3	The glazing beads shall be hardwood of 650 kg/m <sup>3</sup> minimum density, minimum 20mm wide by 19mm high, chamfered by approximately 20°
4	6 mm hardwood liner required, unless installed within timber stiles and rails of 530 kg/m <sup>3</sup> minimum density.
5	Minimum 38mm long screws, at a maximum of 150mm centres
6	Door leaf core

Page 8 of 18 Signed

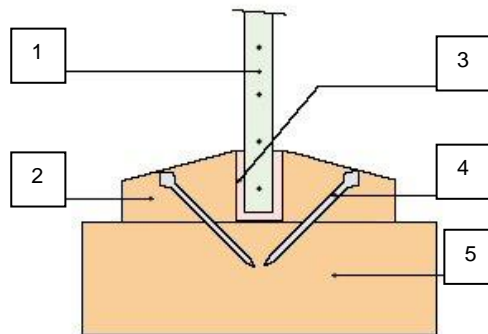


Issued: 18<sup>th</sup> May 2010  
Reissued: 16<sup>th</sup> November 2015  
Valid to: 15<sup>th</sup> November 2020



**CERTIFICATE No CF 718  
PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Safety Clear Glass in Timber Screens (30 Minutes)**



<b>Lorient System 36</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Safety Clear glass
2	Minimum 22 mm deep by 13 mm high softwood or hardwood beads (550 kg/m <sup>3</sup> min. density), with 15° chamfer
3	Lorient System 36 glazing gasket
4	Minimum 40 mm long steel pins at maximum 200 mm centres, approx 45° to vertical
5	Minimum 94 mm by 44 mm softwood frame (550 kg/m <sup>3</sup> min. density) fixed using minimum 90 mm long by 5 mm diameter screws at maximum 600 mm centres

<b>Maximum Pane Dimensions for Lorient System 36</b>		
<b>Maximum Height (mm)</b>	<b>Maximum Width (mm)</b>	<b>Subject to Maximum Area (m<sup>2</sup>)</b>
2320	1082	2.5

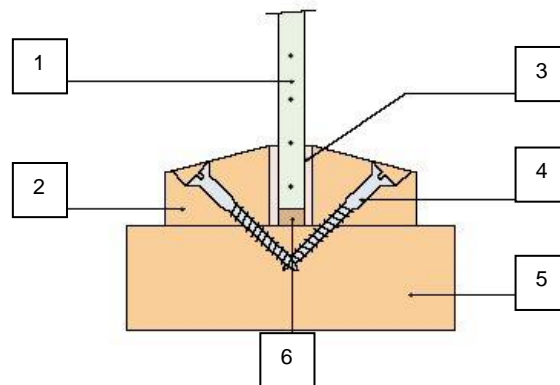
Page 9 of 18 Signed



Issued: 18<sup>th</sup> May 2010  
 Reissued: 16<sup>th</sup> November 2015  
 Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718**  
**PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Timber Screens (30 Minutes)**



<b>Sealmaster Fireglaze Compound</b>	
<b>Item</b>	<b>Description</b>
1	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Minimum 25 mm deep by 20 mm high hardwood beads (600 kg/m <sup>3</sup> min. density), with 15° chamfer
3	Sealmaster Fireglaze Compound, 15 mm by 2 mm thick
4	Minimum 38 mm long no. 8 steel wood screws at maximum 150 mm centres, approx 45° to vertical
5	Minimum 80 mm by 25 mm hardwood frame (600 kg/m <sup>3</sup> min. density)
6	5 mm hardwood setting block

<b>Maximum Pane Dimensions for Sealmaster Fireglaze Compound</b>			
<b>Glass Type</b>	<b>Maximum Height (mm)</b>	<b>Maximum Width (mm)</b>	<b>Subject to Maximum Area (m<sup>2</sup>)</b>
Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear	3500	3500	8.04

Page 10 of 18 Signed



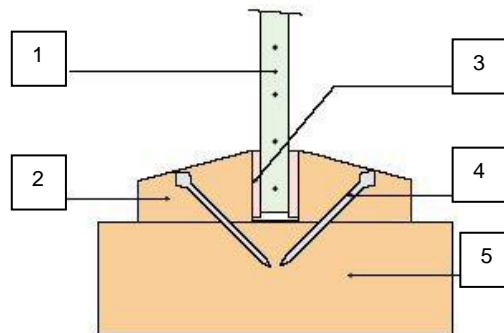
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

### Pilkington Pyroshield™ 2 Safety Clear in Timber Screens (30 Minutes)



Hodgson's Firestrip 30	
Item	Description
1	Pyroshield™ 2 Safety Clear glass
2	Minimum 21 mm deep by 13 mm high hardwood beads (610 kg/m <sup>3</sup> min. density), with 20° chamfer
3	Hodgson's Firestrip 30, 12 mm by 3 mm
4	Minimum 32 mm long by 1.5 mm diameter panel pins at maximum 150 mm centres, approx 45° to vertical
5	Minimum 80 mm by 45 mm softwood frame (560 kg/m <sup>3</sup> min. density) fixed using minimum 100 mm long by 4 mm diameter screws at maximum 450 mm centres

Maximum Pane Dimensions for Hodgson's Firestrip 30		
Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
2632	2632	3.6

Page 11 of 18 Signed



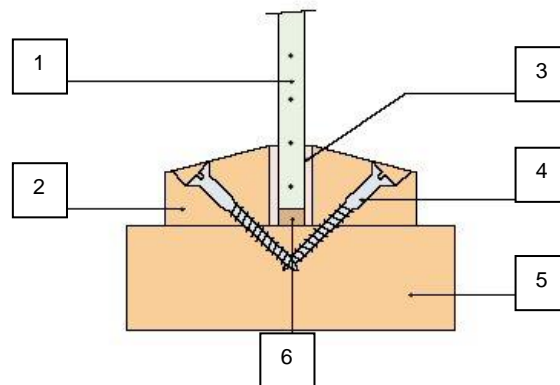
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

### Pilkington Pyroshield™ 2 Safety Clear Glass in Timber Screens (30 Minutes)



Interdens	
Item	Description
1	Pyroshield™ 2 Safety Clear glass
2	Minimum 25 mm deep by 15 mm high hardwood beads (681 kg/m <sup>3</sup> min. density), with 15° chamfer
3	Interdens 10 mm by 2 mm intumescent seal
4	Minimum 38 mm long no. 7 steel wood screws at maximum 150 mm centres, approx 45° to vertical
5	Minimum 80 mm by 25 mm hardwood frame (681 kg/m <sup>3</sup> min. density) fixed using minimum 38 mm long by 5 mm diameter screws at maximum 600 mm centres
6	5 mm hardwood setting block

Maximum Pane Dimensions for Interdens		
Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
1088	2463	2.14

Page 12 of 18 Signed



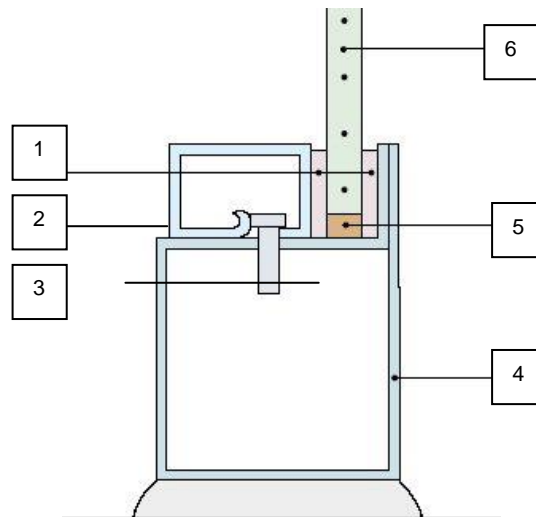
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718  
PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Steel Screens (30 Minutes)**



<b>Ceramic Tape Adhesive</b>	
Item	Description
1	Ceramic tape 15 mm by 3 mm
2	Mild steel snap-on beads, 35 mm by 20 mm by 1.3 mm
3	Self tapping studs at maximum 185 mm centres
4	Mild steel tubular frame section, 70 mm by 50 mm by 2 mm thick
5	Calcium silicate setting block 100 mm by 5 mm thick
6	Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass

<b>Maximum Pane Dimensions for Ceramic Tape Adhesive</b>			
Glass Type	Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
Pyroshield™ 2 Texture	1000	1750	1.4
Pyroshield™ 2 Safety Clear	2500	1750	3.5

Page 13 of 18 Signed



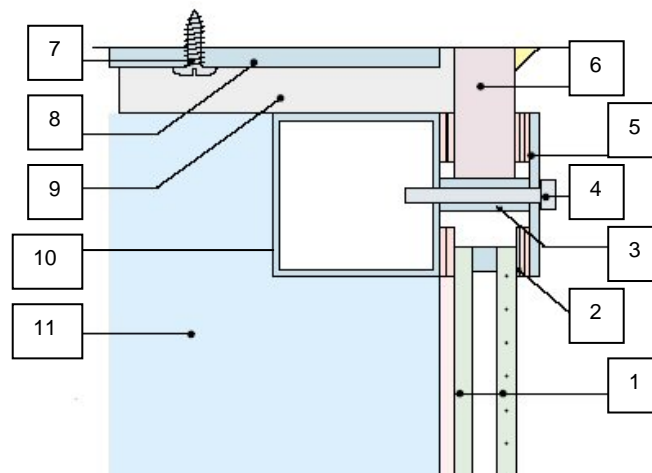
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

### Pilkington Pyroshield™ 2 Safety Clear Glass in Steel Screen (30 Minutes)



Insulating Glass Units (IGUs)	
Item	Description
1	Pyroshield™ 2 Safety Clear glass and non-fire rated glass, separated by 8 mm aluminium or steel spacer. Pyroshield™ 2 may be on fire or non-fire side
2	Ceramic fibre tape, 15 mm by 4 mm
3	Mild steel spacers 50 mm wide by 10 mm thick
4	50 mm long by 4 mm diameter steel bolts
5	50 mm by 3 mm thick mild steel clamping plate
6	20 mm thick Promatect insulation board
7	6 mm diameter steel screws
8	6 mm thick mild steel fixing shoe
9	Rockwool insulation
10	50 mm by 50 mm by 2 mm thick horizontal mild steel hollow sections
11	100 mm by 50 mm by 2 mm thick vertical mild steel hollow sections

Maximum Pane Dimensions for Insulating Glass Units (IGUs)		
Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
1800	1825	2.63

Page 14 of 18 Signed



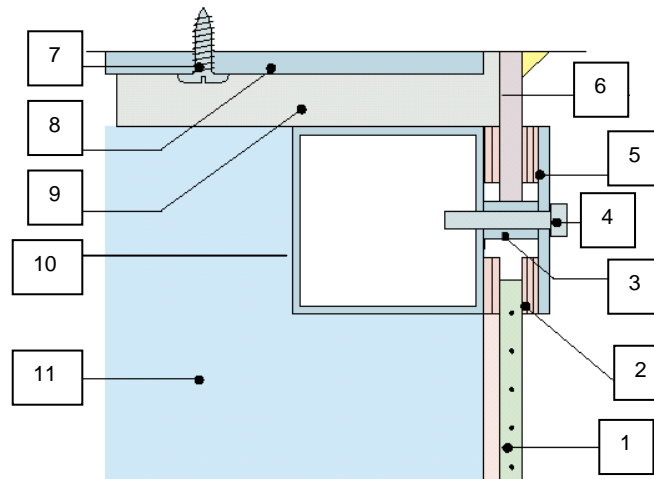
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

**Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear Glass in Steel Screen (30 Minutes)**



Steel Frame/Ceramic Fibre Tape	
Item	Description
1	Pilkington Pyroshield™ 2 Texture or Pyroshield™ 2 Safety Clear glass
2	Ceramic fibre tape, 15 mm by 4 mm
3	Mild steel spacers 10 mm thick
4	4 mm diameter steel bolts
5	50 mm by 3 mm thick mild steel clamping plate
6	Promatect insulation board
7	6 mm diameter steel screws
8	6 mm thick mild steel fixing shoe
9	Rockwool insulation
10	50 mm by 50 mm by 2 mm thick horizontal mild steel hollow sections
11	100 mm by 50 mm by 2 mm thick vertical mild steel hollow sections

Maximum Pane Dimensions for Steel Frame/Ceramic Tape			
Glass Type	Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
Pyroshield™ 2 Texture	1000	1750	1.4
Pyroshield™ 2 Safety Clear	1800	1825	2.63

Page 15 of 18 Signed



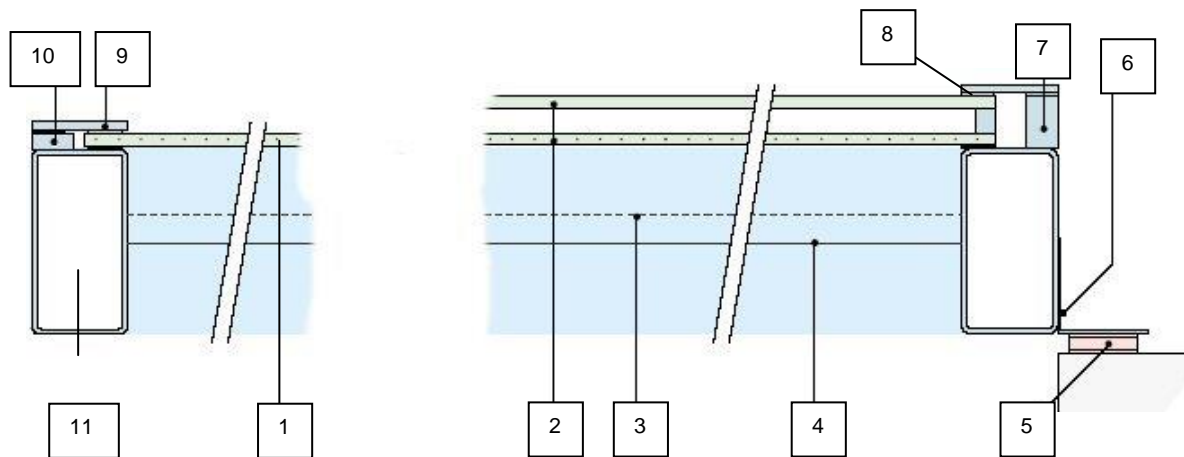
Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

## CERTIFICATE No CF 718 PILKINGTON GROUP LIMITED

### Pilkington Pyroshield™ 2 Safety Clear Glass in Horizontal Steel Screen (30 Minutes)



Horizontal Single or Insulating Glass Units (IGUs)	
Item	Description
1	Pyroshield™ 2 Safety Clear glass
2	Pyroshield™ 2 Safety Clear glass and non-fire rated glass, separated by 10 mm air space
3	50 mm by 35 mm by 2 mm thick mild steel hollow perimeter sections
4	50 mm by 50 mm by 2 mm thick mild steel hollow mullion sections
5	Dufaylite 'Type C' linear seal
6	50 mm by 50 mm by 1.8 mm thick flashing angle fixed to main frame sections at 300 mm centres with 6 mm diameter steel screws
7	15 mm wide by 25 mm high mild steel packer
8	15 mm by 3 mm ceramic glazing tape
9	50 mm by 3 mm thick mild steel bars fixed with 6 mm diameter steel screws at 150 mm centres
10	15 mm wide by 10 mm high mild steel packer
11	50 mm by 50 mm by 2 mm thick mild steel frame sections

Maximum Pane Dimensions		
	Maximum Length/Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
Single Glazed	3600	2.86
IGUs	1819	1.68

Page 16 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020

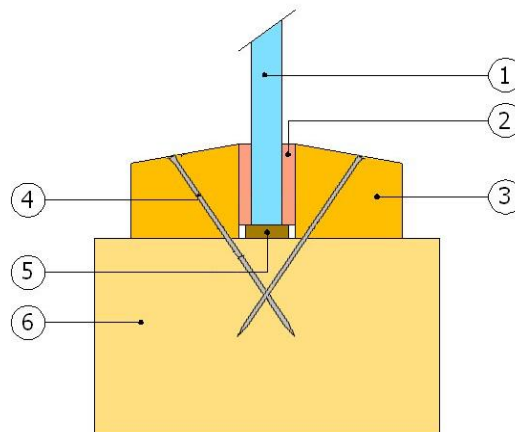


**CERTIFICATE No CF 718  
PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Safety Clear Glass in Single Pane Timber Screen (30 Minutes)**

For this application the following conditions shall apply:

The glass shall be glazed utilising the following basic specification:



Timber Frame/Ceramic Fibre Tape	
Item	Description
1	Pyroshield™ 2 Safety Clear glass
2	15 mm by 3 mm ceramic fibre based glazing tape
3	20 mm high by 34 mm wide chamfered (approx. 20°) hardwood glazing beads, minimum density 650 kg/m <sup>3</sup> .
4	38 mm long No. 8 steel screws at 200 mm centres (30° to glass)
5	Hardwood or Non-combustible setting blocks
6	80 mm by 40 mm (minimum) hardwood framing sections, minimum density 650 kg/m <sup>3</sup>

This Certificate of Approval relates to the sizes of Pyroshield™ 2 Safety Clear glass shown below, when used in conjunction with the above system. Multi-pane screens are not permitted.

Maximum Pane Dimensions for Timber Frame/Ceramic Tape			
Glass Type	Maximum Height (mm)	Maximum Width (mm)	Subject to Maximum Area (m <sup>2</sup> )
Pyroshield™ 2 Safety Clear	2600	1537	3.2

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

Page 17 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

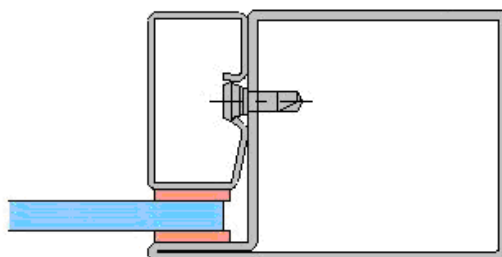
Valid to: 15<sup>th</sup> November 2020

**CERTIFICATE No CF 718**  
**PILKINGTON GROUP LIMITED**

**Pilkington Pyroshield™ 2 Safety Clear Glass in Single Pane Steel Screen (30 Minutes)**

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, see example below. The glass shall be glazed into the screen with ceramic fibre gasket on both faces and set on non-combustible setting blocks to determine the correct edge cover of 15 mm (minimum).



**Maximum Permitted Pane Dimensions**

This Certificate of Approval relates to the sizes of Pyroshield™ 2 Safety Clear glass shown below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions. Multi-pane screens are not permitted.

<b>Maximum Pane Dimensions for Timber Frame/Ceramic Tape</b>			
<b>Glass Type</b>	<b>Maximum Height (mm)</b>	<b>Maximum Width (mm)</b>	<b>Subject to Maximum Area (m<sup>2</sup>)</b>
Pyroshield™ 2 Safety Clear	2600	1537	3.20

Page 18 of 18 Signed



Issued: 18<sup>th</sup> May 2010

Reissued: 16<sup>th</sup> November 2015

Valid to: 15<sup>th</sup> November 2020