



---

## CERTIFICATE OF APPROVAL

### No CF 5131

---

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

## HANSON AND BEARDS LTD

Spring Hall Works, Spring Hall Grove, Halifax, HX2 0BU  
Tel: 01422 306830 Fax: 01422 306831

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

Pyrobelite 7,  
Pyrobelite 7 EG,  
Pyrobelite 12,  
Pyrobel 16  
Pyrobel 16 EG,  
Pyrobel 25  
Pyrobel 25 EG,

In 'Anoscreen' timber screens

#### TECHNICAL SCHEDULE

TS 25 Fire Resistant Glass,  
Glazing Systems and  
Materials

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight  
Chairman - Management Council

Issued: 11<sup>th</sup> January 2013  
Revised: 22<sup>nd</sup> February 2013  
Valid to: 10<sup>th</sup> January 2018

Page 1 of 16



Only valid when authentic  
CERTIFIRE Seal is in place



## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD FIRE RESISTING GLASS

This Certificate of Approval relates to the fire resistance of Hanson and Beards Ltd Pyrobelite and Pyrobel Laminated glass products when used in the following applications, as defined in BS 476: Part 22: 1987 subject to the undermentioned conditions.

Glass Specification	Application	Fire Resistance Performance (minutes)		Page No.
		<i>Integrity</i>	<i>Insulation</i>	
Pyrobelite 7 & 7 EG	'Anoscreen' Timber screens	30	-	6
Pyrobelite 7 & 7 EG (IGU's)	'Anoscreen' Timber screens	30	-	7
Pyrobelite 12	'Anoscreen' Timber screens	60	-	8
Pyrobel 16 & 16 EG	'Anoscreen' Timber screens	60	30	9
Pyrobel 16 & 16 EG	'Anoscreen' Timber screens	30	30	10
Pyrobel 16 & 16 EG (IGU's)	'Anoscreen' Timber screens	30	30	11
Pyrobel 16 & 16 EG Visionline	<b>Butt Jointed in</b> 'Anoscreen' Timber screens	30	30	12
Pyrobel 25 & 25 EG	'Anoscreen' Timber screens (hardwood)	60	60	13
Pyrobel 25 & 25 EG	'Anoscreen' Timber screens (softwood)	60	60	14
Pyrobel 25 & 25 EG (IGU's)	'Anoscreen' Timber screens	60	60	15
Pyrobel 25 & 25 EG Visionline	<b>Butt Jointed in</b> 'Anoscreen' Timber screens	60	60	16

The 'Anoscreen' timber screens are manufactured and supplied by Hanson & Beards Ltd



---

## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

---

### HANSON & BEARDS LTD FIRE RESISTING GLASS

The Pyrobelite and Pyrobel glass is approved in the following nominal thicknesses:

Glass Specification	Application	Fire Resistance Performance (minutes)	
		Integrity	Insulation
Pyrobelite 7	7.9 mm $\pm$ 0.9mm	30	0
Pyrobelite 7EG	11.3 mm $\pm$ 1mm	30	0
Pyrobelite 12	12.3 mm $\pm$ 1mm	30/60	0
Pyrobel 16	17.3 mm $\pm$ 1mm	30/60	30
Pyrobel 16EG	21.1 mm $\pm$ 1.5 mm	30/60	30
Pyrobel 25	26.6 mm $\pm$ 2mm	60	60
Pyrobel 25EG	30.4 mm $\pm$ 2mm	60	60

A handwritten signature in black ink, appearing to be "K. M. ...".



---

## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

---

### HANSON & BEARDS LTD FIRE RESISTING GLASS

This product is approved on the basis of:

- a) Initial type testing
- b) A design appraisal against TS25
- c) Certification of quality management system to BS EN ISO 9001: 2008
- d) Inspection and surveillance of factory production control
- e) 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.

### General Requirements

- Where the glass is installed in an '**Anoscreen**' timber framed 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 glass. Orientation may, however, be restricted by the requirements of a non-symmetrical framing system.
- The edge cover to each pane shall be no less than 15 mm minimum.
- For external application, or in the case of direct solar radiation on the glazing, Pyrobel is available as external grade, with a UV filter.
- A minimum 6.8 mm laminated glass must be used as the external pane for IGU's incorporating internal grade Pyrobelite/Pyrobel.
- Surface of glass may be lightly sandblasted to a maximum depth of 1 mm.
- IGU's may include either aluminium or steel spacer bars and may utilise hot melt butyl edge sealant.
- IGU's comprising Pyrobel glass may incorporate blinds integrally fitted within the IGU. The fitment of such blinds should not necessitate the removal of any framing or beading material and should be operated via a remote system (i.e. operating system may be magnetic). AGC Flat Glass UK Limited should be consulted prior to specifying integral blinds to ensure acceptability.
- For '**Anoscreen**' timber framed glazing systems timber beads may be square.
- Pyrobelite and Pyrobel Antibacterial options are approved throughout the scope.
- Pyrobelite and Pyrobel Matelux options are approved throughout the scope.
- Note: timber species 'Ash' is specifically excluded within the scope of this approval due to its relatively high charring rate compared with other hardwoods.



---

## CERTIFICATE No CF 5131

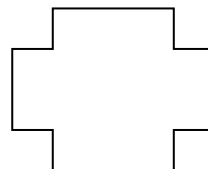
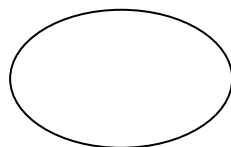
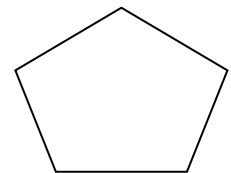
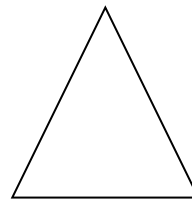
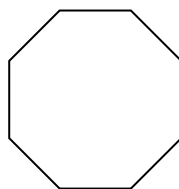
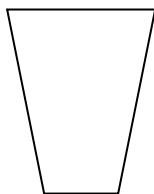
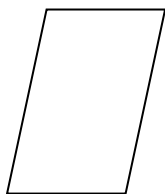
### HANSON AND BEARDS LTD

---

#### HANSON & BEARDS LTD FIRE RESISTING GLASS

##### Shapes

It is also acceptable to include Pyrobelite and Pyrobel in shaped apertures, i.e. circles, ovals, arches, quadrants, etc (examples detailed below). 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.



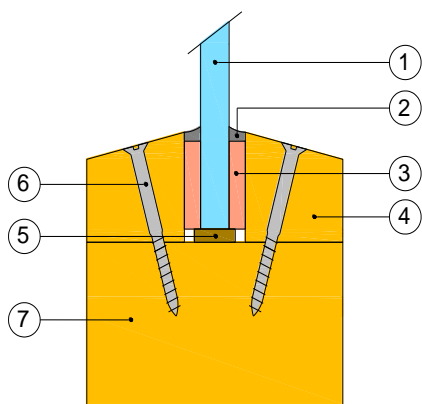
A handwritten signature in black ink, appearing to be "J. M. ...".

## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBELITE FIRE RESISTING GLASS

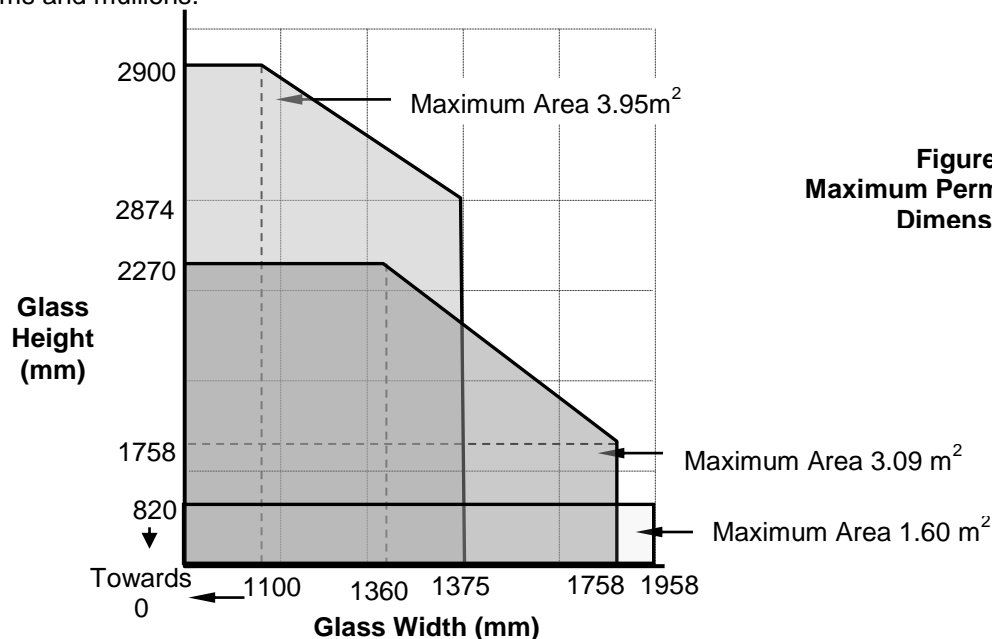
**Pyrobelite 7 Glass in Hanson and Beards 'Anoscreen' timber framed screens for 30 minutes integrity**

The glass shall be glazed utilising the following basic specification:



- 1 Pyrobelite 7 or 7 EG
- 2 Neutral silicone capping
- 3 15 mm wide by 5 mm thick ceramic fibre based glazing tape or 12 mm wide by 5 mm thick closed cell foam tape
- 4 25 mm wide by 23 mm high (with 15° chamfer or square) hardwood or softwood glazing beads, minimum density 471 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 38 mm long steel screws at 270 mm centres (30° to glass)
- 7 67 mm by 33 mm (minimum) hardwood or softwood perimeter frame, minimum density 471 kg/m<sup>3</sup>. 67 mm by 46 mm (minimum) hardwood or softwood transoms/mullions, minimum density 471 kg/m<sup>3</sup>.

This Certificate of Approval relates to the sizes of Pyrobelite 7 and 7 EG glass shown in Figure 1 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions. May be utilised in multipaned screen systems with shared transoms and mullions.



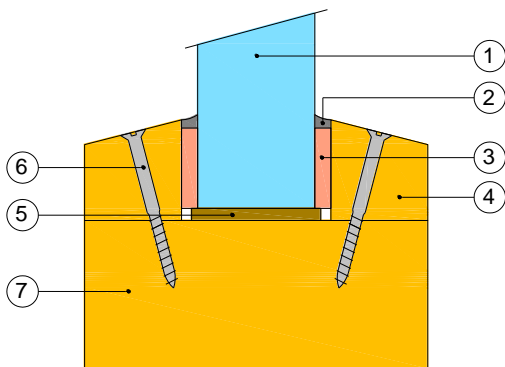
**Figure 1.  
Maximum Permitted Glass  
Dimensions**

## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBELITE FIRE RESISTING GLASS

**Insulating Glass Units (IGU's) including Pyrobelite 7 Glass in Hanson and Beards 'Anoscreen' timber framed screens for 30 minutes integrity**

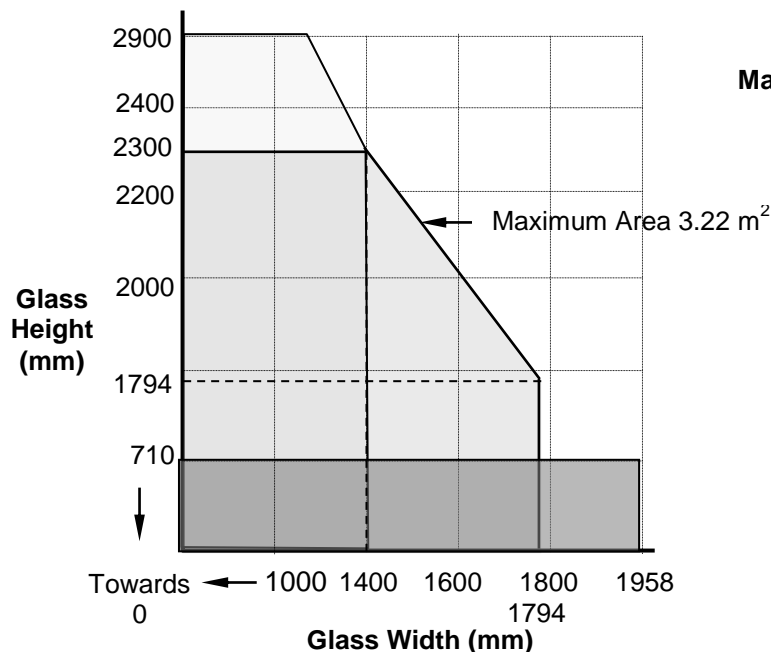
The IGU shall be glazed utilising one of the following specifications:



- 1 IGU comprising Pyrobelite 7 or Pyrobelite 7 EG glass, a minimum 12 mm wide air cavity and minimum 6 mm thick non-fire rated glass (toughened, float, laminated, coated, tinted)\*
- 2 Neutral silicone capping
- 3 15 mm wide by 5 mm thick ceramic fibre based glazing tape or 12 mm wide by 5 mm thick closed cell foam tape
- 4 25 mm wide by 23 mm high (with 15° chamfer or square) hardwood glazing beads, minimum density 471 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 40 mm long steel screws at 270 mm centres (30° to glass)
- 7 86 mm by 33 mm (minimum) hardwood frame, minimum density 471 kg/m<sup>3</sup>

\* A minimum 6.8 mm laminated glass must be used as the external pane for IGU's incorporating internal grade Pyrobelite 7.

This Certificate of Approval relates to the sizes of IGU's including Pyrobelite 7 or 7 EG glass shown in Figure 2 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



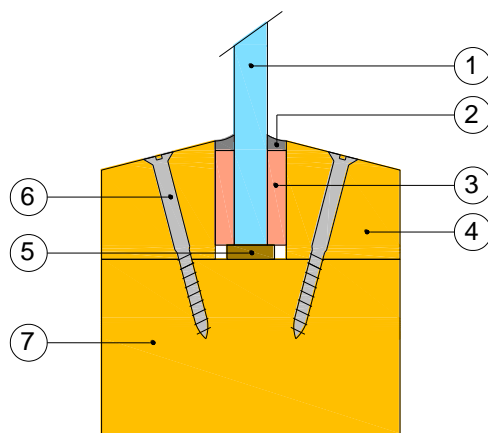
**Figure 2.  
Maximum Permitted Glass  
Dimensions**

**CERTIFICATE No CF 5131  
HANSON AND BEARDS LTD**

**HANSON & BEARDS LTD PYROBELITE FIRE RESISTING GLASS**

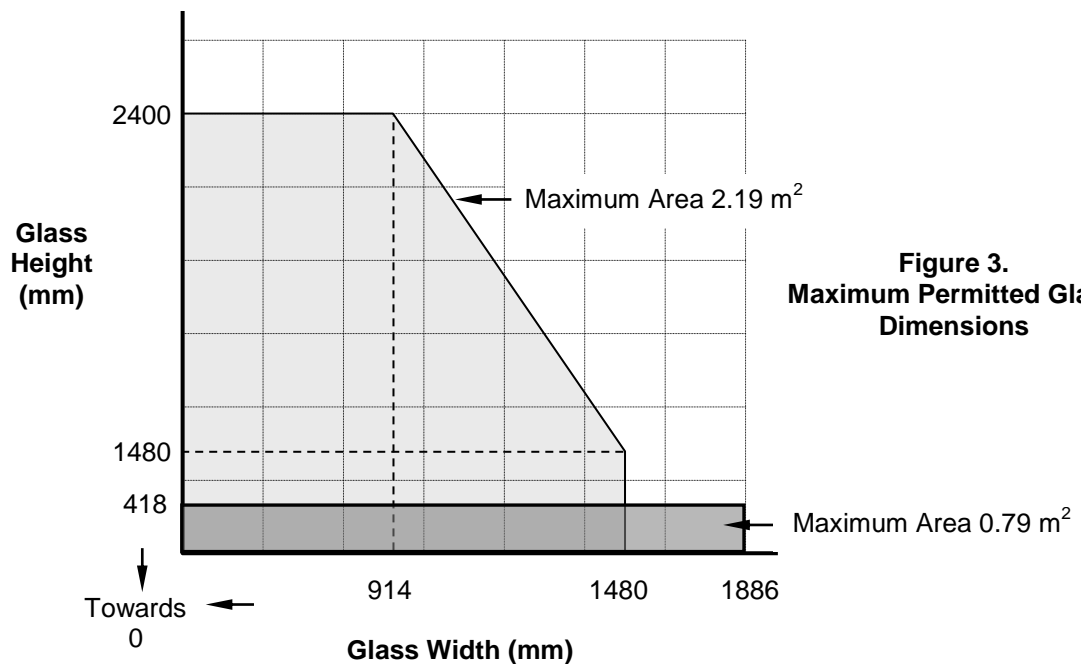
**Pyrobelite 12 Glass in Hanson and Beards 'Anoscreen' timber framed screens for 60 minutes integrity**

The glass shall be glazed utilising the following basic specification:

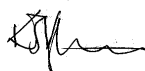


- 1 Pyrobelite 12
- 2 Neutral silicone capping
- 3 20 mm wide by 5 mm thick ceramic fibre based glazing tape or closed cell foam tape
- 4 25 mm wide by 27 mm high (with 10 - 15° chamfer or square) hardwood glazing beads, minimum density 550 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 60 mm long steel screws at 200 mm centres (30° to glass)
- 7 75 mm by 37 mm (minimum) hardwood perimeter framing sections, 75 mm by 54 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 550 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobelite 12 glass shown in Figure 3 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



**Figure 3.  
Maximum Permitted Glass  
Dimensions**



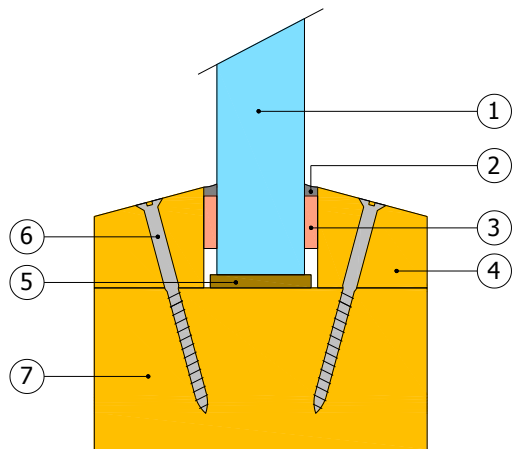


## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS

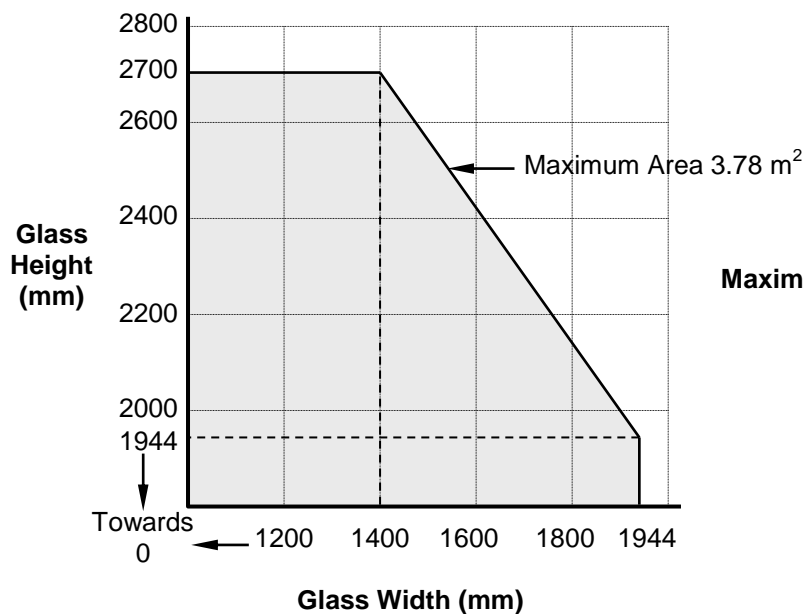
**Pyrobel 16 Glass in in Hanson and Beards 'Anoscreen' timber framed screens for 60 minutes integrity and 30 minutes insulation**

The glass shall be glazed utilising the following basic specification:



- 1 Pyrobel 16 and Pyrobel 16 EG
- 2 Neutral silicone capping
- 3 12 mm wide by 4 mm thick closed cell foam tape
- 4 23 mm high by 25 mm wide (with 15° chamfer) hardwood glazing beads, minimum density 640 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 50 mm long steel screws at 250 mm centres (30° to glass)
- 7 75 mm by 37 mm (minimum) hardwood perimeter framing sections, 75 mm by 54 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 640 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobel 16 and Pyrobel 16 EG glass shown in Figure 4 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



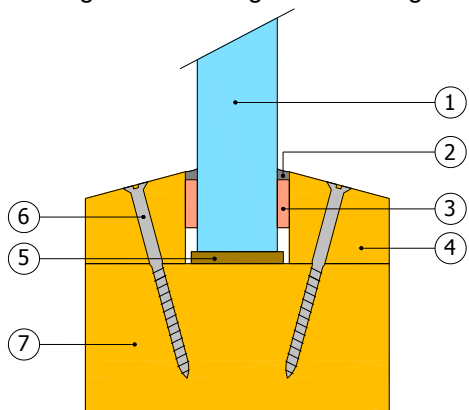
**Figure 4.  
Maximum Permitted Glass  
Dimensions**

**CERTIFICATE No CF 5131**  
**HANSON AND BEARDS LTD**

**HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS**

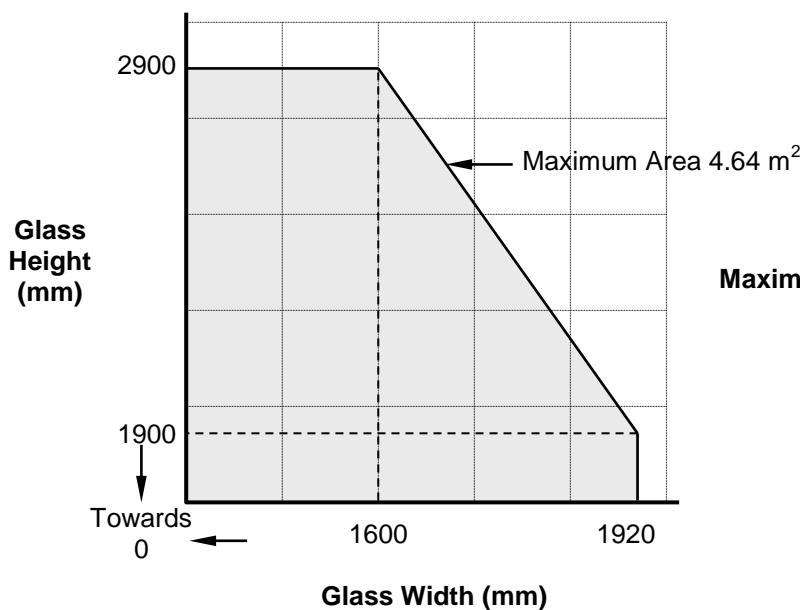
**Pyrobel 16 Glass in in Hanson and Beards ‘Anoscreen’ timber framed screens for 30 minutes integrity and 30 minutes insulation**

The glass shall be glazed utilising the following basic specification:



- 1 Pyrobel 16 and Pyrobel 16 EG
- 2 Neutral silicone capping
- 3 10 mm wide by 5 mm ceramic fibre based glazing tape
- 4 27 mm high by 25 mm wide (with 15° chamfer) hardwood glazing beads, minimum density 640 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 50 mm long steel screws at 250 mm centres (30° to glass)
- 7 75 mm by 33 mm (minimum) hardwood perimeter framing sections, 75 mm by 46 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 640 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobel 16 and Pyrobel 16 EG glass shown in Figure 5 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



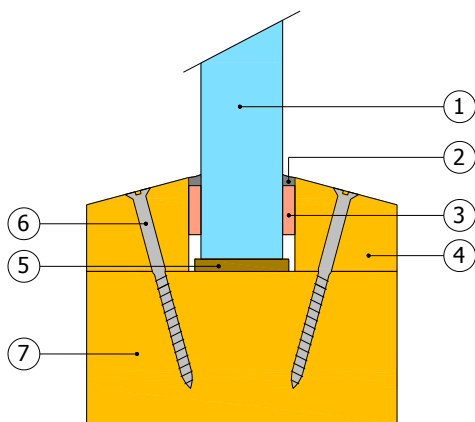
**Figure 5.**  
**Maximum Permitted Glass Dimensions**

**CERTIFICATE No CF 5131**  
**HANSON AND BEARDS LTD**

**HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS**

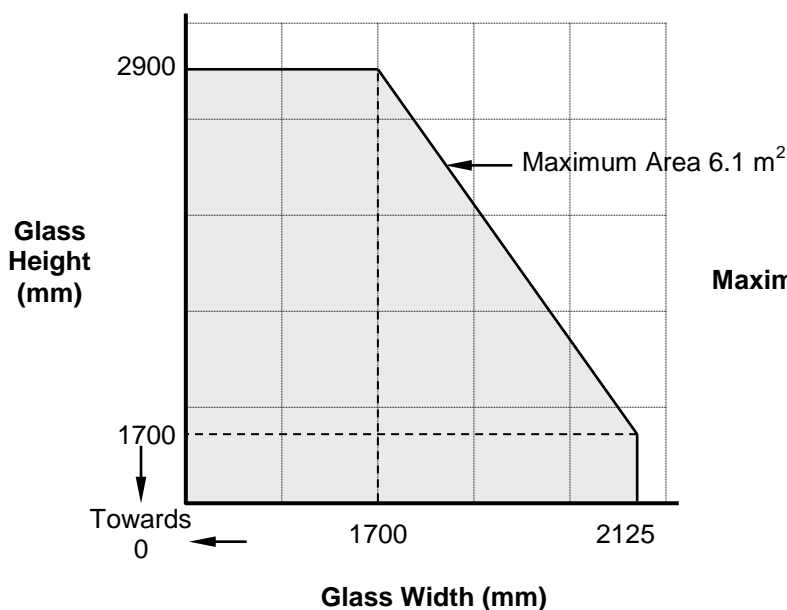
**Pyrobel 16 IGU Glass in Hanson and Beards 'Anoscreen' timber framed screens for 30 minutes integrity and 30 minutes insulation**

The glass shall be glazed utilising the following basic specification:



- 1 IGU comprising Pyrobel 16 or Pyrobel 16 EG glass, a minimum 8 mm wide air cavity and minimum 6 mm thick non-fire rated glass (toughened, float, laminated, coated, tinted)\*
- 2 Neutral silicone capping
- 3 20 mm wide by 5 mm ceramic fibre based glazing tape
- 4 27 mm high by 25 mm wide (with 15° chamfer) hardwood glazing beads, minimum density 520 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 60 mm long steel screws at 250 mm centres (30° to glass)
- 7 33 mm by 97 mm (minimum) hardwood perimeter framing sections, 66 mm by 97 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 520 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobel 16 and Pyrobel 16 EG glass shown in Figure 6 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



**Figure 6.**  
**Maximum Permitted Glass Dimensions**

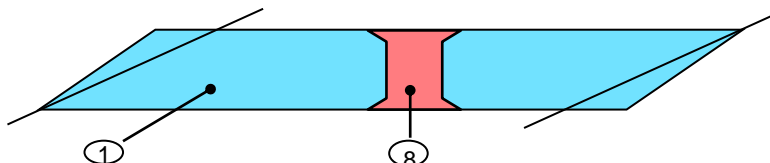
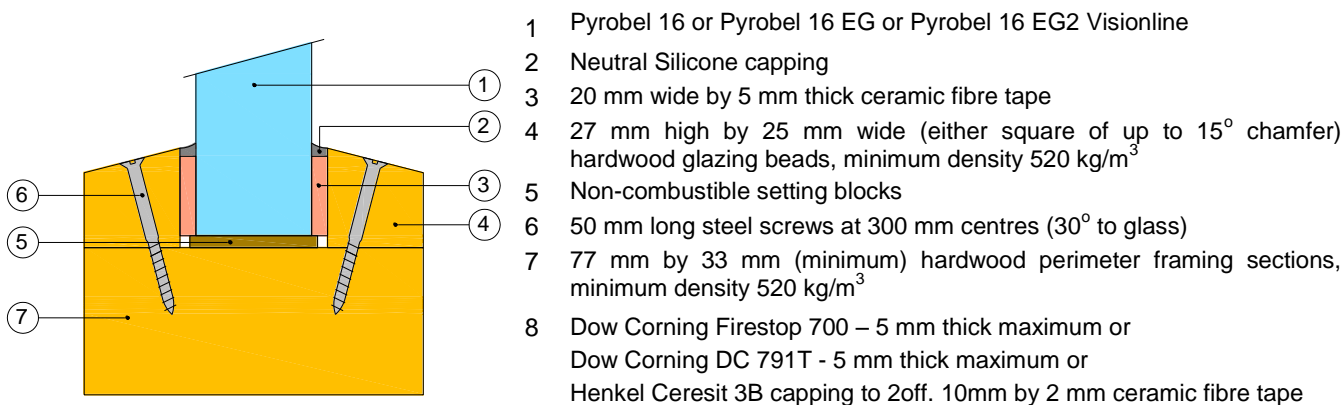
## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS

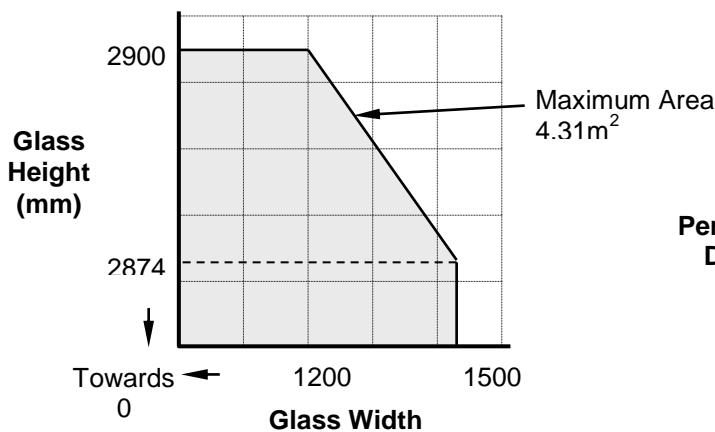
**Pyrobel 16 Visionline Glass in Hanson and Beards 'Anoscreen' butt jointed timber framed screens for 30 minutes integrity and insulation**

**Note: Pyrobel 16 Visionline butt jointed glass requires special edge processing and should be ordered as such. Please contact an approved Pyrobel stockist for further details.**

The glass shall be glazed utilising the following specifications:



This Certificate of Approval relates to the sizes of Pyrobel 16 Visionline glass shown in Figure 7 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.

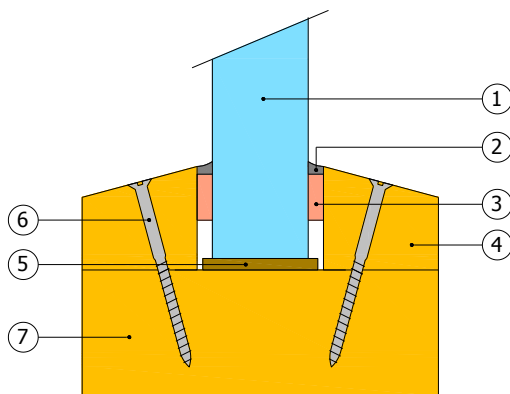


## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS

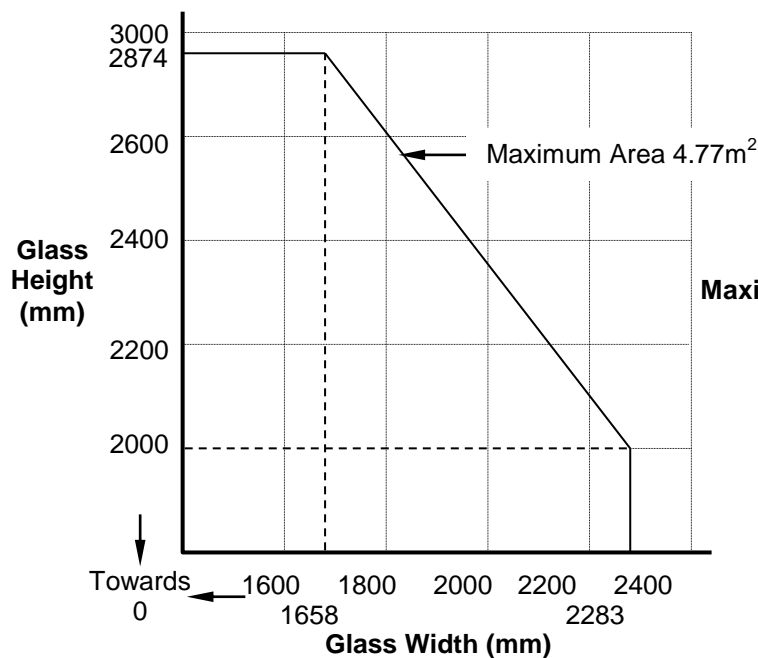
**Pyrobel 25 Glass in Hanson and Beards 'Anoscreen' hardwood timber framed screens for 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



- 1 Pyrobel 25 and Pyrobel 25 EG
- 2 Neutral Silicone capping
- 3 15 mm wide by 4 mm thick closed cell foam tape
- 4 27 mm high by 30 mm wide (with 15° chamfer) hardwood glazing beads, minimum density 640 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 50 mm long steel screws at 250 mm centres (30° to glass)
- 7 95 mm by 33 mm (minimum) hardwood perimeter framing sections, 95 mm by 46 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 640 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobel 25 and Pyrobel 25 EG glass shown in Figure 8 below, when used in conjunction with the above systems. The aspect ratio of the glass may be unlimited within these aperture dimensions.



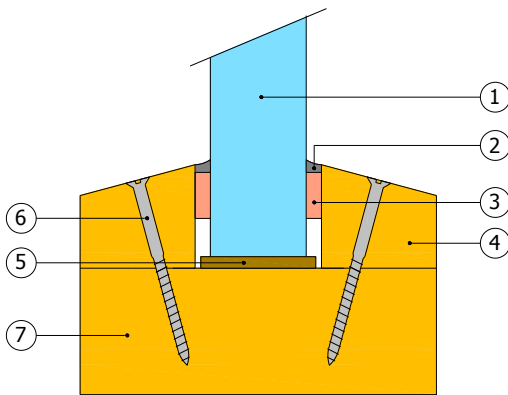
**Figure 8.  
Maximum Permitted Glass  
Dimensions**

**CERTIFICATE No CF 5131**  
**HANSON AND BEARDS LTD**

**HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS**

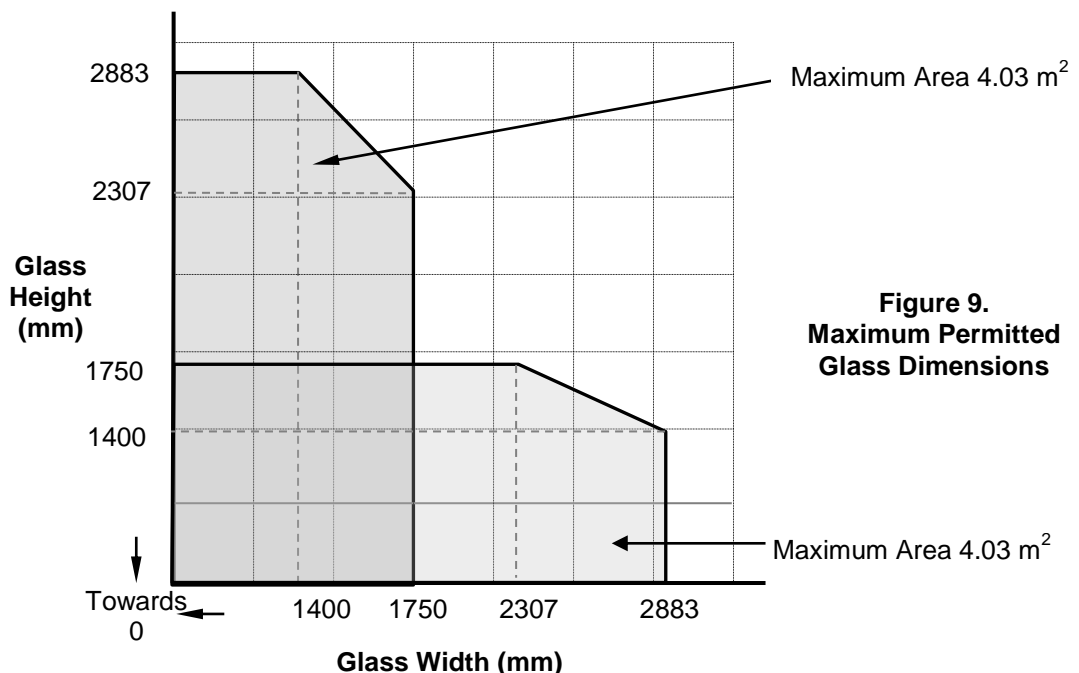
**Pyrobel 25 Glass in Hanson and Beards 'Anoscreen' softwood timber framed screens for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



- 1 Pyrobel 25 and Pyrobel 25 EG
- 2 Neutral Silicone capping
- 3 15 mm wide by 4 mm thick closed cell foam tape
- 4 25 mm high by 31 mm wide (with 15° chamfer) softwood glazing beads, minimum density 590 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 50 mm long steel screws at 250 mm centres (30° to glass)
- 7 98 mm by 32 mm (minimum) hardwood perimeter framing sections, 98 mm by 57 mm (minimum) softwood internal transom/mullion framing sections, minimum density 590 kg/m<sup>3</sup>

This Certificate of Approval relates to the sizes of Pyrobel 25 and Pyrobel 25 EG glass shown in Figure 9 below, when used in conjunction with the above systems. The aspect ratio of the glass may be unlimited within these aperture dimensions.



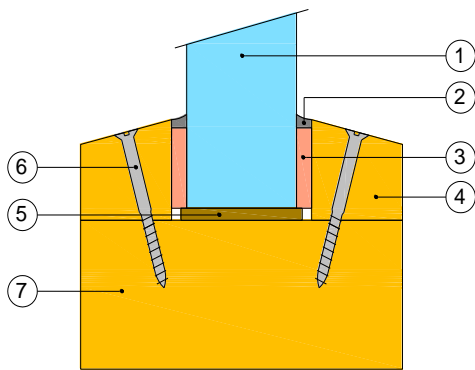
**Figure 9.**  
**Maximum Permitted**  
**Glass Dimensions**

## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS

#### Pyrobel 25 IGU Glass in Hanson and Beards 'Anoscreen' timber framed screens for 60 minutes integrity and insulation

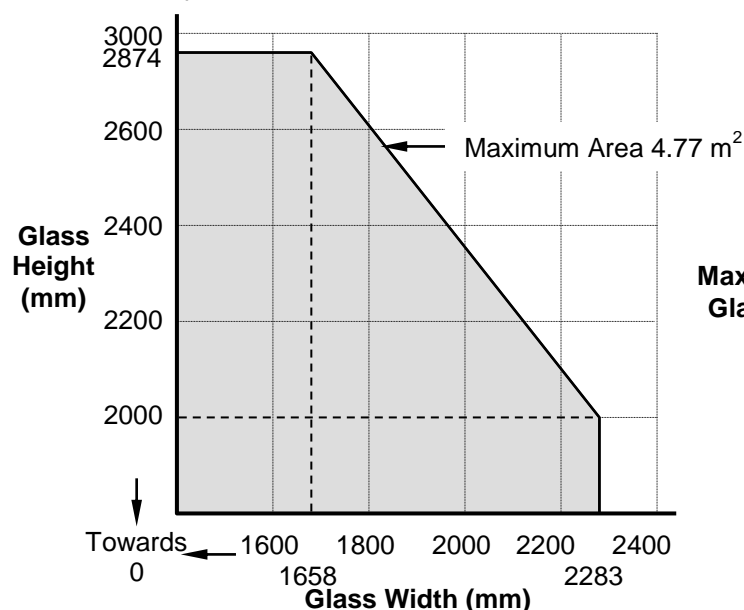
The IGU shall be glazed utilising one of the following specifications:



- 1 IGU comprising Pyrobel 25 or Pyrobel 25 External Grade, a minimum 12 mm wide air cavity and minimum 6 mm thick non-fire rated glass (toughened, float, laminated, coated, tinted)\*. IGU's may be triple glazed to a similar specification with the Pyrobel 25 forming the central pane and a pane of non-fire rated glass positioned each side of the Pyrobel 25
- 2 Neutral Silicone capping
- 3 15 mm wide by 4 mm thick closed cell foam tape
- 4 20 mm high by 40 mm wide (either square or up to 15° chamfer) hardwood glazing beads, minimum density 640 kg/m<sup>3</sup>
- 5 Non-combustible setting blocks
- 6 50 mm long steel screws at 300 mm centres (30° to glass)
- 7 95 mm by 33 mm (minimum) hardwood perimeter framing sections, 95 mm by 46 mm (minimum) hardwood internal transom/mullion framing sections, minimum density 640 kg/m<sup>3</sup>

**\* A minimum 6.8 mm laminated glass must be used as the secondary pane for IGU's incorporating internal grade Pyrobel 25.**

This Certificate of Approval relates to the sizes of IGU's including Pyrobel 25 and Pyrobel 25 EG glass shown in Figure 10 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



**Figure 10.  
Maximum Permitted  
Glass Dimensions**

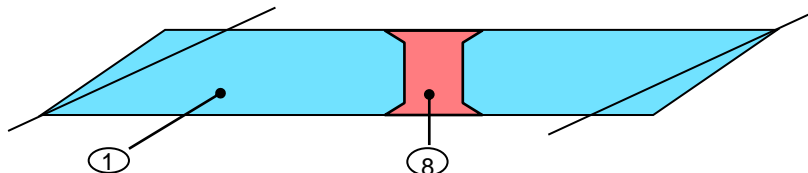
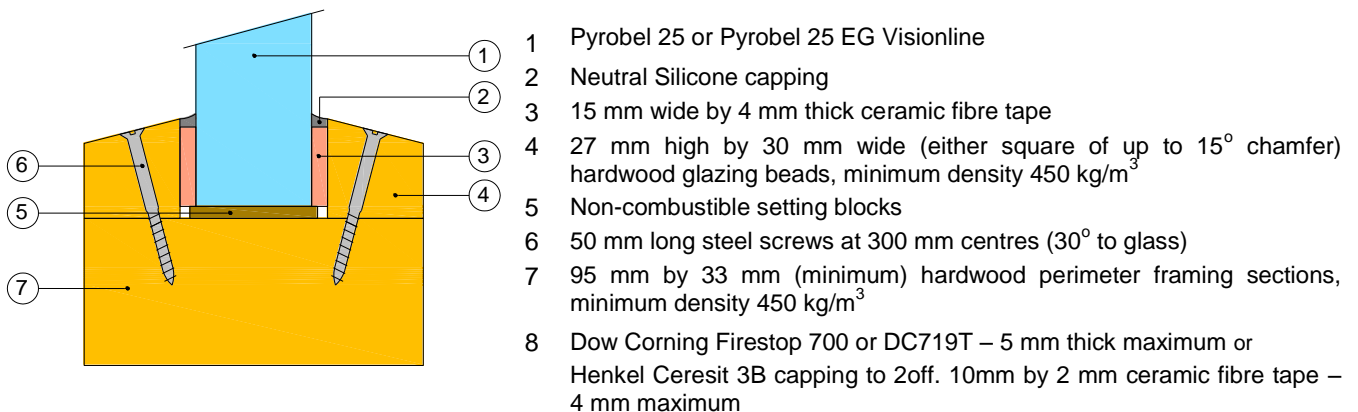
## CERTIFICATE No CF 5131 HANSON AND BEARDS LTD

### HANSON & BEARDS LTD PYROBEL FIRE RESISTING GLASS

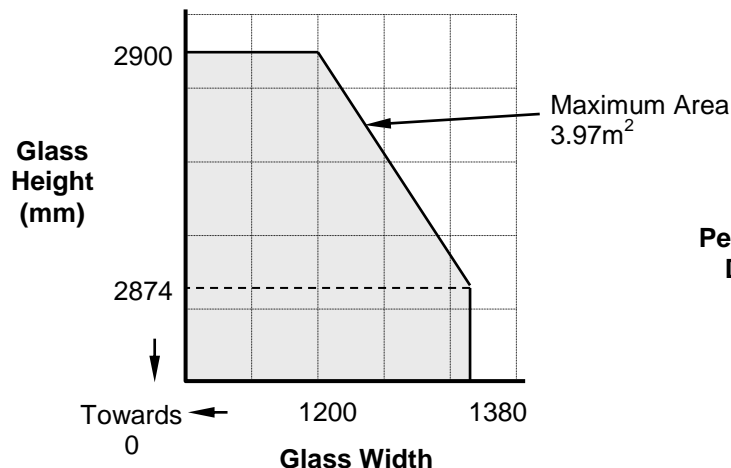
**Pyrobel 25 Visionline Glass in Hanson and Beards 'Anoscreen' butt jointed timber framed screens for 60 minutes integrity and insulation**

**Note: Pyrobel 25 Visionline butt jointed glass requires special edge processing and should be ordered as such. Please contact an approved Pyrobel stockist for further details.**

The glass shall be glazed utilising the following specifications:



This Certificate of Approval relates to the sizes of Pyrobel 25 Visionline glass shown in Figure 11 below, when used in conjunction with the above system. The aspect ratio of the glass may be unlimited within these aperture dimensions.



**Figure 11.  
Maximum  
Permitted Glass  
Dimensions**