Title:

Classification of Fire Resistance Performance In Accordance With EN 13501-2: 2003

Notified Body No:

0833

Product Name:

Pyrobelite 12

Report No:

WF 157797

Issue No:

1

Prepared for:

Glaverbel S. A. BU Industrial Products, Parc Industriel-Zone C, Rue Jules Bordet, B-7180 Seneffe, Belgium.

Date:

25th September 2006

This classification report consists of five pages and may only be used or reproduced in its entirety.



1. Introduction

This classification report defines the classification assigned to the element 12 mm thick, 'Pyrobelite 12' in accordance with the procedures given in BS EN 13501-2:2003.

2. Details of classified product

2.1 General

The element 12 mm thick, 'Pyrobelite 12' is defined as a fire resisting glass to be used in non-loadbearing internal partition assemblies.

2.2 Product description

The element, 12 mm thick, 'Pyrobelite 12', is fully described in the test report provided in support of classification listed in Clause 3.1.

3. Test reports in support of classification

3.1 Summary of test reports

Name of laboratory	Name of sponsor	Test report no.	Test method		
Warrington Fire Research Centre Notified Body No. 0833	Glaverbel S. A.	WF Test Report No. 147219	EN 1364-1: 1999		



Summary of WF Test Report No. 147219

Description of tested specimen

Key to drawing:

1. Perimeter Frame Section

Hardwood 550kg/m³, 82mm by 60mm with 52mm by 27mm deep rebate, fixed to wall using 112mm long by 10mm diameter steel sleeve anchors

2. Vertical Joint Spline

Hardwood 550kg/m³, 20mm by 20mm

3. Transom & Mullion Frame Section

Hardwood 550kg/m³, 82mm by 100mm with 2 off 52mm by 27mm deep rebates.

4. Glass

12 mm thick Glaverbel Pyrobelite 12 Pane A - 913mm wide x 1172mm high

Pane B - 913mm wide x 1172mm high

Pane C - 913mm wide x 1172mm high

Pane D - 915mm wide x 1172mm high

Pane E - 1886mm wide x 418mm high

Pane F - 914mm wide x 2400mm high

Pane G - 914mm wide x 418mm high

5. Glass Edge Seal

Thermal Ceramics 'X607 Superwool' ceramic fibre based glazing tape, nominally 20mm by 5mm thick

6. Glazing Beads

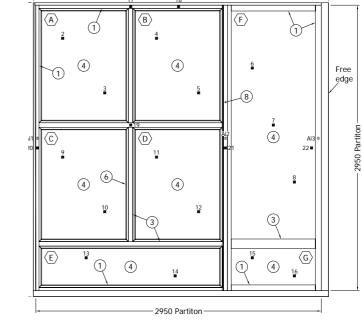
Hardwood 550kg/m³, 30mm wide by 25mm high, fixed via 60mm long by 4mm diameter steel screws at 200mm centres

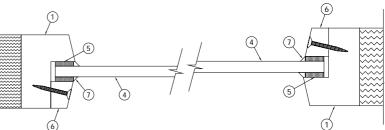
7. Glass Edge Seal

Dow Corning Firestop 700 sealant

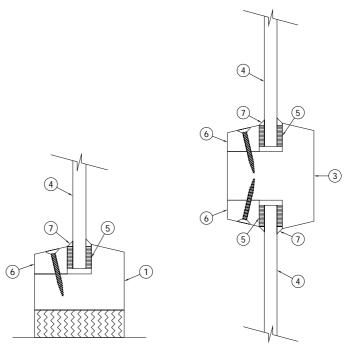
8. Frame Joint Architrave

Hardwood 550kg/m³, 40mm wide by 12mm high





Typical Sections Through Left And Right Hand Vertical Edges



Typical Section Through Head and Base

Typical Section Through Transoms And Mullions



Field of Direct Application:

The results of this fire test are directly applicable to similar constructions where one or more of the changes listed below are made and the construction continues to comply with that appropriate design code for its stiffness and stability. Other changes are not permitted.

- Decrease in the linear dimensions of panes.
- Change in the aspect ratio of panes provided that the largest dimension of the pane and its area are not increased.
- Decrease in the distance between fixing centres.
- Increase in the dimensions of framing members.
- Changes in the angle of installation by up to 10° from the vertical.
- No extension of height is allowed above that tested.
- The width of an identical construction may be increased.

The result of a test of fire resistant glazing tested in one of the standard supporting constructions given in EN 1363-1, or the test frame, is applicable to any other supporting construction within the same type (high density rigid, low density rigid or flexible) that has a greater fire resistance.

Test results:						
	Sustained flaming	62 minutes				
Integrity	Gap gauge	62 minutes				
	Cotton Pad	58 minutes				
Insulation		26 minutes				
Radiation	Time to exceed 15 kW/m ²	63 minutes*				

^{*} The test was discontinued after 63 minutes after which time the maximum recorded radiation intensity was 8.14 kW/m².

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 7 of EN 13501-2:2003

4.2 Classification

The product, 12 mm thick Pyrobelite 12 may be classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	-	М	С	S	IncSlow	sn	ef	r	
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Considering the test submitted for classification, 12 mm thick Pyrobelite 12 thick provides the following classification:

Fire resistance classification: EW 60/EI 20



4.3 Field of application

The results of the tests are directly applicable to similar constructions where one or more of the changes listed under the Field of Direct Application are made and the construction continues to comply with that appropriate design code for its stiffness and stability. Other changes are not permitted by this document.

5. Limitations

S. Harkey

This classification document does not represent type approval or certification of the product.

SIGNED APPROVED

S. Hankey C.W. Miles

Technical Consultant Technical Manager

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