



CERTIFICATE OF APPROVAL
No CF 699

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

GLAS TRÖSCH AG FIRESWISS

Stanserstrasse 97
CH-6374 Buochs
Switzerland

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

**'FIRESWISS COOL' Laminated
Fire Resisting Glass**

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: 21st August 2009
Valid to: 20th August 2014

Page 1 of 5



Only valid when authentic
Seal is in place
CERTIFIRE



CERTIFICATE No CF 699
GLAS TRÖSCH AG FIRESWISS

FIRESWISS COOL Fire Resisting Glass

This Certificate of Approval relates to the fire resistance of Glas Trosch AG FIRESWISS 'FIRESWISS COOL' 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 (mins)		Page No.
		Integrity	Insulation	
FIRESWISS COOL 30-7	Timber framed screens	30	0	4
FIRESWISS COOL 30-11 L	Timber framed screens	30	0	5

This product is approved on the basis of:

- a) Initial type testing
- b) A design appraisal against TS25
- c) Certification of quality management systems to ISO 9001::2008
- d) Audit testing
- e) Inspection and surveillance of Factory Production Control



CERTIFICATE No CF 699
GLAS TRÖSCH AG FIRESWISS

FIRESWISS COOL Fire Resisting Glass

The glass is approved in the following nominal thicknesses:

Glass Specification	Thickness	Fire Resistance Performance (mins)	
		Integrity	Insulation
FIRESWISS COOL 30-7	7 mm thick	30	0
FIRESWISS COOL 30-11 L	11 mm thick	30	0

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 $\pm 10^\circ$ from the vertical.

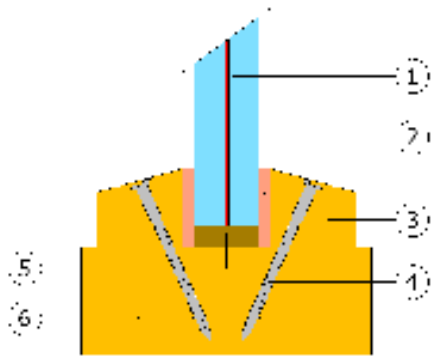
The edge cover to each pane shall be no less than 15 mm minimum.

**CERTIFICATE No CF 699
GLAS TRÖSCH AG FIRESWISS**

FIRESWISS COOL 30-7 glass in timber framed screens for periods of 30 minutes integrity

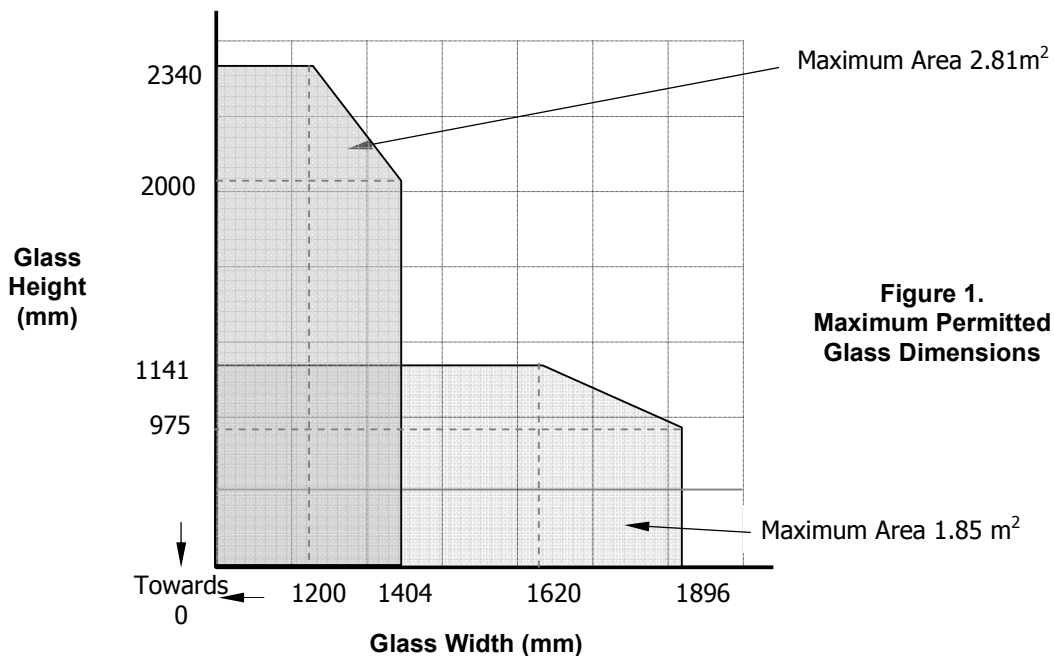
For this application the following conditions shall apply:

The glass shall be glazed utilising the following basic specification:



- 1 FIRESWISS COOL 30-7 glass
- 2 20 mm by 4 mm ceramic fibre based glazing tape
- 3 20 mm high by 30 mm wide square or chamfered softwood glazing beads, minimum density 420 kg/m³
- 4 60 mm long steel screws at 450 mm centres (30° to glass)
- 5 Non-combustible setting blocks
- 6 75 mm by 40 mm (minimum) softwood framing sections, minimum density 420 kg/m³

This Certificate of Approval relates to the sizes of FIRESWISS COOL 30-7 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.



**Figure 1.
Maximum Permitted
Glass Dimensions**

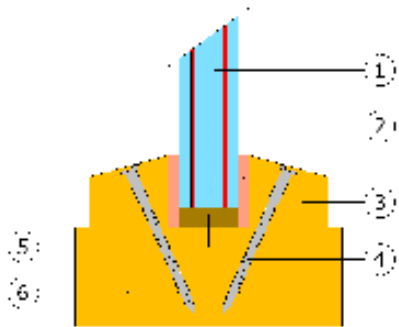


**CERTIFICATE No CF 699
GLAS TRÖSCH AG FIRESWISS**

FIRESWISS COOL 30-11L glass in timber framed screens for periods of 30 minutes integrity

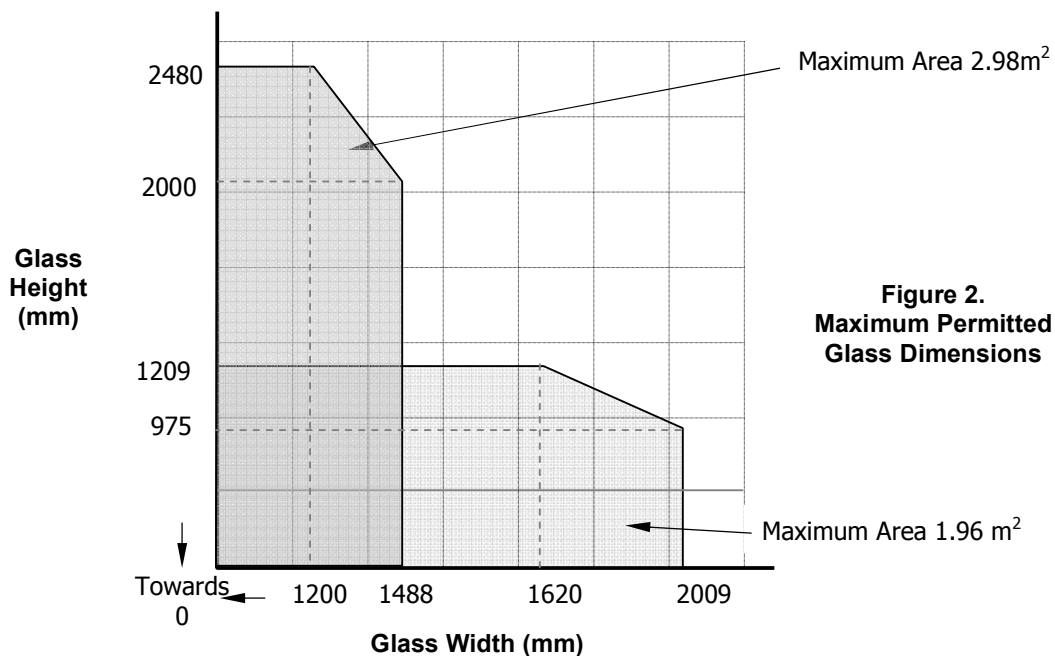
For this application the following conditions shall apply:

The glass shall be glazed utilising the following basic specification:



- 1 FIRESWISS COOL 30-11L glass
- 2 20 mm by 4 mm ceramic fibre based glazing tape
- 3 20 mm high by 30 mm wide square or chamfered softwood glazing beads, minimum density 420 kg/m³
- 4 60 mm long steel screws at 450 mm centres (30° to glass)
- 5 Non-combustible setting blocks
- 6 75 mm by 40 mm (minimum) softwood framing sections, minimum density 420 kg/m³

This Certificate of Approval relates to the sizes of FIRESWISS COOL 30-11L 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**