
CERTIFICATE OF APPROVAL

No CF 5520

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

VETROTECH SAINT-GOBAIN INTERNATIONAL

Bernstrasse 43, CH-3175 Flamatt, Switzerland
Tel: +41 313368181 Fax: +41 313368119
Website: www.vetrotech.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:

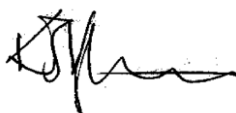
CERTIFIED PRODUCT

Keralite R Fire Resisting Glass

TECHNICAL SCHEDULE

TS 25 Fire Resistant Glass,
Glazing Systems and Materials

Signed and sealed for and on behalf of Exova (UK) Limited trading as
Warrington Certification



Sir Ken Knight
Chairman
Impartiality Committee



Paul Duggan
Certification Manager



Issued: 24th March 2017
Valid to: 23rd March 2022



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VETROTECH SAINT-GOBAIN INTERNATIONAL

KERALITE R FIRE RESISTING GLASS

This Certificate of Approval relates to the fire resistance of KERALITE R glass when used in the following applications, as defined in BS 476: Part 22: 1987 subject to the undermentioned conditions.

Glass	Application	Fire Resistance Performance Integrity - (mins)	Page No.
KERALITE R	Steel Screens	120	4
KERALITE R	Steel Doorsets	180	5
KERALITE R	Steel Doorsets	240	6

This product is approved on the basis of:

- i) Initial type testing on independently sampled product.
- 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 steel framed screen, the orientation of the screen shall be no more than $\pm 10^\circ$ from the vertical.

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There is no restriction to the direction of exposure for the glass i.e. the glass is symmetrical. Orientation may, however, be restricted by the requirements of a non-symmetrical framing system or certain double glazed unit specifications (where applicable).

The edge cover to each pane of KERALITE R Glass shall be as stated or identified on the relevant drawings contained within this scope approval .

The KERALITE R glass is approved in a nominal thickness of 5 mm.

As indicated steel door and screen framing systems shall have test evidence or be CERTIFIRE approved for the inclusion of apertures of the proposed dimensions.

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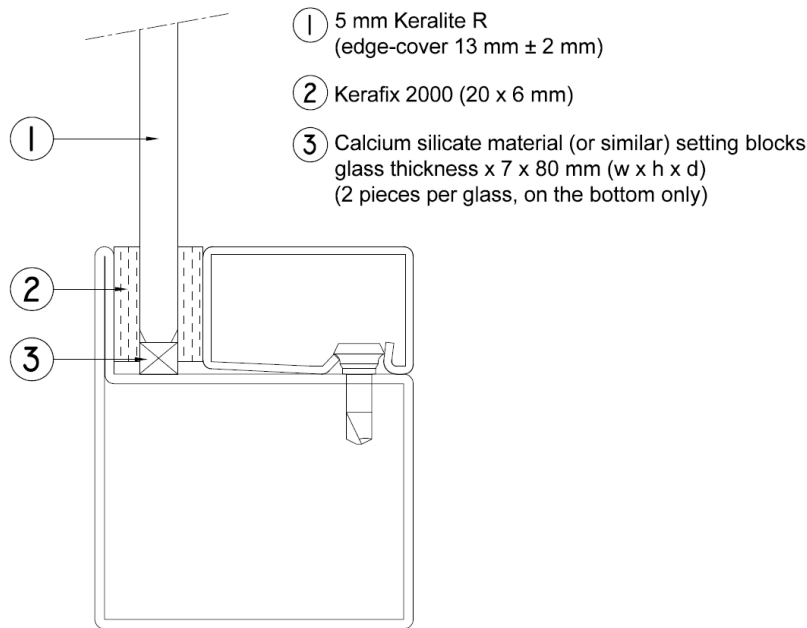
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KERALITE R FIRE RESISTING GLASS

KERALITE R Glass in steel framed screens for periods of 120 minutes integrity

The screens shall be no greater than 4000 mm high unless suitable tie backs and/or fire protected structural supports are provided.

The glass shall be installed into a previously tested framing system (which is covered appropriately by test or assessment evidence or is CERTIFIRE approved) using pressure plate glazing, screw-fixed or clip-on retaining beads, see examples below. The glass shall be glazed into the screen with 20x6 mm Kerafix 2000 gaskets on both faces and set on setting blocks which comprise of calcium silicate material (or similar) to determine the correct edge cover.



This Certificate of Approval relates to the sizes of KERALITE R glass shown in Table 1 below, when used in conjunction with above systems. The aspect ratio and shape (rectilinear only) of the glass may be unlimited within these aperture dimensions.

Table 1 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1296 (at 2007 high)	2224 (at 1170 wide)	2.6

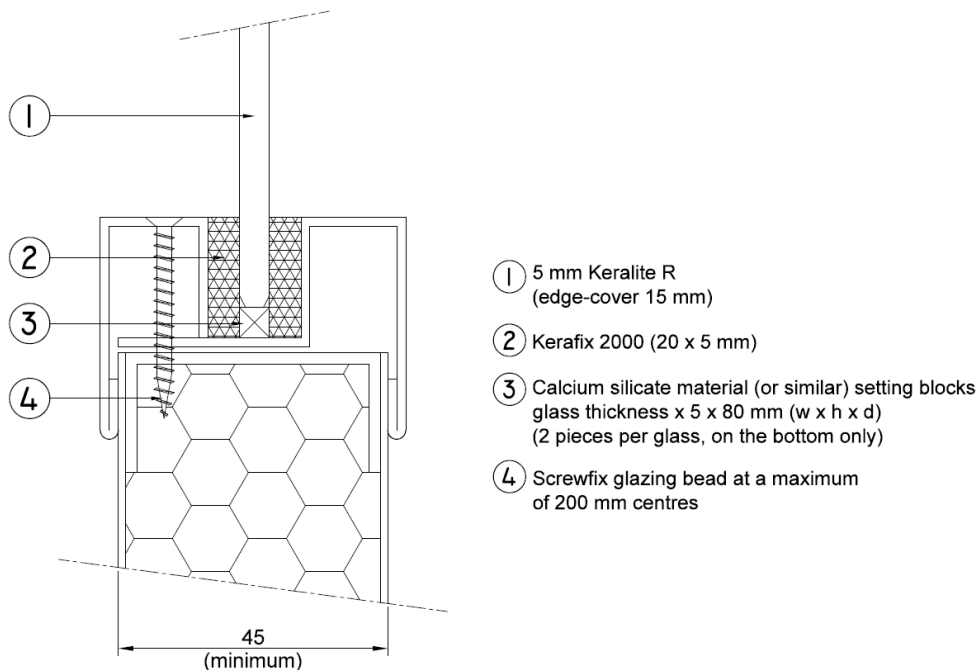
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VETROTECH SAINT-GOBAIN INTERNATIONAL

KERALITE R FIRE RESISTING GLASS

KERALITE R Glass in steel doorsets for periods of 180 minutes integrity

The glass shall be glazed within a previously fire tested (see example below) or a CERTIFIRE approved steel doorset.



The steel doorset shall have test evidence or be CERTIFIRE approved for the inclusion of apertures of the proposed dimensions. If the proposed doorset is to be used in double-leaf configuration, the test or assessment evidence should be applicable to double-leaf configurations. Likewise, if the proposed doorset is to be used in the unlatched configuration, the available evidence should be applicable to unlatched doorsets. 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.

This Certificate of Approval relates to the sizes of KERALITE R glass shown in Table 2 below, when used in conjunction with the above system. The aspect ratio and shape (rectilinear only) of the glass may be unlimited within these aperture dimensions.

Table 2 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
645 (at 516 high)	645 (at 516 wide)	0.33

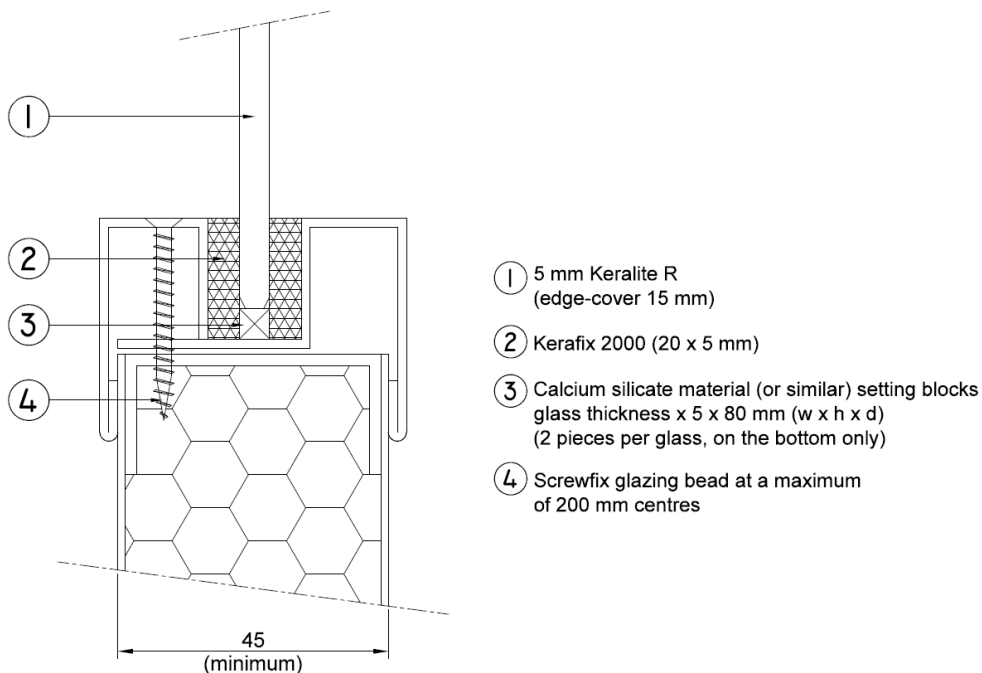
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VETROTECH SAINT-GOBAIN INTERNATIONAL

KERALITE R FIRE RESISTING GLASS

KERALITE R Glass in steel doorsets for periods of 240 minutes integrity

The glass shall be glazed within a previously fire tested (see example below) or a CERTIFIRE approved steel doorset.



The steel doorset shall have test evidence or be CERTIFIRE approved for the inclusion of apertures of the proposed dimensions. If the proposed doorset is to be used in double-leaf configuration, the test or assessment evidence should be applicable to double-leaf configurations. Likewise, if the proposed doorset is to be used in the unlatched configuration, the available evidence should be applicable to unlatched doorsets. 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.

This Certificate of Approval relates to the sizes of KERALITE R glass shown in Table 3 below, when used in conjunction with the above system. The aspect ratio and shape (rectilinear only) of the glass may be unlimited within these aperture dimensions.

Table 3 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
516	516	0.27

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VETROTECH SAINT-GOBAIN INTERNATIONAL

KERALITE R FIRE RESISTING GLASS

KERALITE R Glass in steel leaves for periods of 180/240 minutes integrity

For this application, the following conditions shall apply:

1. The doorset, including door frame and associated building hardware, should have achieved at least 180/240 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 or BS EN 1634-1.
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.
6. The door leaves shall consist of steel faces of minimum overall leaf thickness, 45 mm.
7. When an alternative CERTIFIRE approved glazing system is used, the system shall have been shown to be capable of including KERALITE R glass. The maximum permitted aperture dimensions shall be as detailed below or included within the relevant CERTIFIRE certificate for the glazing system, whichever is the lesser.
8. Other CERTIFIRE approved glazing seals may be acceptable subject to the limitations within the relevant certificate. This Certificate of Approval relates to the sizes of KERALITE R glass shown in Table 2 and 3 above, when used in conjunction with above systems. The aspect ratio of the glass may be unlimited within these aperture dimensions.