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## CERTIFICATE OF APPROVAL

### No CF 811B

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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 AG

**Bernstrasse 43, CH-3175 Flamatt, Switzerland**

**Tel: +41 313368181 Fax: +41 313368119**

**Website: [www.vetrotech.com](http://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:

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#### CERTIFIED PRODUCT

**Contraflam  
Structure Fire Resisting Glass**

#### TECHNICAL SCHEDULE

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

**Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited**

**Paul Duggan  
Certification Manager**



Issued: 22<sup>nd</sup> August 2011  
Revised: 22<sup>nd</sup> May 2023  
Valid to: 11<sup>th</sup> January 2027

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# CERTIFICATE No CF 811B

## VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

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

Glass	Application	Integrity - (mins)	Insulation - (mins)	Page No.
Contraflam Structure Lite30 (20 mm)	Steel Screens	30	0	5
	Timber Screens	30	0	6
Contraflam Structure Lite 30	Installation Instructions	-	-	7
Contraflam Structure Lite 60 (20 mm)	Steel Screens	60	0	8
	Timber Screens	60	0	9
Contraflam Structure Lite 60	Installation Instructions	-	-	10
Contraflam Structure 30 (23 mm)	Steel Screens	30	30	11
	Timber Screens	30	30	12
	Aluminium Screens	30	30	13
Contraflam Structure 30 (25 mm)	Steel Screens	60	30	14
	Timber Screens	60	30	15
Contraflam Structure 30 (28 mm)	Steel Screens	30	30	16
	Timber Screens	30	30	17
	Aluminium Screens	30	30	18
Contraflam Structure 30 (30 mm)	Steel Screens	30	30	19
	Timber Screens	30	30	20
	Aluminium Screens	30	30	21
Contraflam Structure 30	Installation Instructions	-	-	22-23
Contraflam Structure 30 (23 mm) Corner	Steel Screens	30	30	24
	Timber Screens	30	30	25
	Aluminium Screens	30	30	26
Contraflam Structure 30 (28 mm) Corner	Steel Screens	30	30	27
	Timber Screens	30	30	28
	Aluminium Screens	30	30	29
Contraflam Structure 30 Corner	Installation Instructions	-	-	30 - 31
Contraflam Structure 30 IGU	Steel Screens	30	30	32
	Timber Screens	30	30	33
	Aluminium Screens	30	30	34
Contraflam Structure 30 IGU	Installation Instructions	-	-	35 – 36
Contraflam Structure 30 Corner IGU	Steel Screens	30	30	37
Contraflam Structure 30 Corner IGU	Installation Instructions	-	-	38
Contraflam Structure 30 Point(23 mm)	Point Wise mounting	60	30	39 - 41



## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS (continued)

Contraflam Structure 60 (31 mm)	Steel Screens	60	60	42
	Timber Screens	60	60	43
	Aluminium Screens	60	60	44
Contraflam Structure 60 (33 mm)	Steel Screens	60	60	45
	Timber Screens	60	60	46
	Aluminium Screens	60	60	47
Contraflam Structure 60 (41 mm)	Steel Screens	60	60	48
	Timber Screens	60	60	49
	Aluminium Screens	60	60	50
Contraflam Structure 60	Installation Instructions	-	-	51
Contraflam Structure 60 (31 mm) Corner	Steel Screens	60	60	52
	Timber Screens	60	60	53
	Aluminium Screens	60	60	54
Contraflam Structure 60 (33 mm) Corner	Steel Screens	60	60	55
	Timber Screens	60	60	56
Contraflam Structure 60	Installation Instructions	-	-	57
Contraflam Structure 60 IGU	Steel Screens	60	60	58
	Timber Screens	60	60	59
	Aluminium Screens	60	60	60
Contraflam Structure 60 IGU	Installation Instructions	-	-	61 – 62
Contraflam Structure 90	Steel Screens	90	90	63 – 64
Contraflam Structure 90	Installation Instructions	-	-	65
Contraflam Structure 120	Steel Screens	120	120	66
Contraflam Structure 120	Installation Instructions	-	-	67
Contraflam Structure 120-5	Steel Screens	120	120	68
Contraflam Structure 120-5	Installation Instructions	-	-	69

This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

This product is approved on the basis of:

- Initial type testing
- A design appraisal against TS25.
- Certification of quality management system to ISO 9001.
- Inspection and surveillance of factory production control.
- Audit testing.

This Certificate of Approval must be read in conjunction with CERTIFIRE Technical Schedule TS25, Fire Resistant Glass, Glazing Systems and materials.



## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

##### 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.

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.

The edge cover to each pane of Contraflam Glass Structure shall be minimum 15 mm unless otherwise stated as detailed for each specific application on the following pages.

The Contraflam Structure glass family is approved in a nominal thickness from 20 to 79 mm (depending on application).

The following glass types may incorporate a minimum 9 mm SGG STADIP 44.2 laminated glass layer in substitution for the 6 mm SGG SECURIT glass layer, used on one face of the composition of the Contraflam glass:

Contraflam Structure Lite 30	Contraflam Structure 30	Contraflam Structure 60
Contraflam Structure 90	Contraflam Structure 120	Contraflam Structure 30 Corner
Contraflam Structure 60 Corner		

##### Applied Films

Adhesive/adherent polyester/polyethylene terephthalate (PET) or polyvinyl Chloride (PVC) films may be applied to the free vision area of a glazed element. They may have a thickness between 25 and 250  $\mu\text{m}$ .

##### Glazing Bars

Glazing bars, flashings, trims (timber, steel, alu) etc may be applied to the glass surface using 3M '4941' VHB double sided tape. The glazing bars must not be fixed to the perimeter beads.

##### Note:

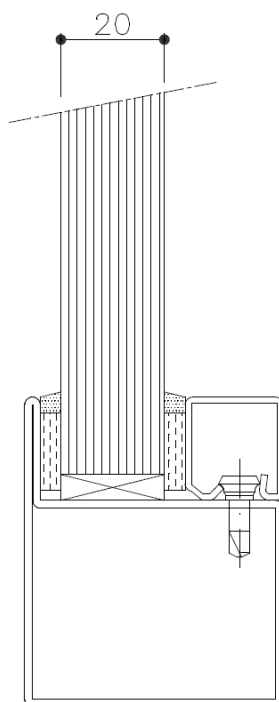
As indicated steel profiled door and screen framing systems shall have suitable test evidence (applicable systems from Jansen or Forster for example), or be CERTIFIRE approved for the inclusion of apertures of the proposed dimensions.

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure Lite 30 Glass (20mm) in butt jointed steel framed screens for periods of 30 minutes integrity

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 8 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

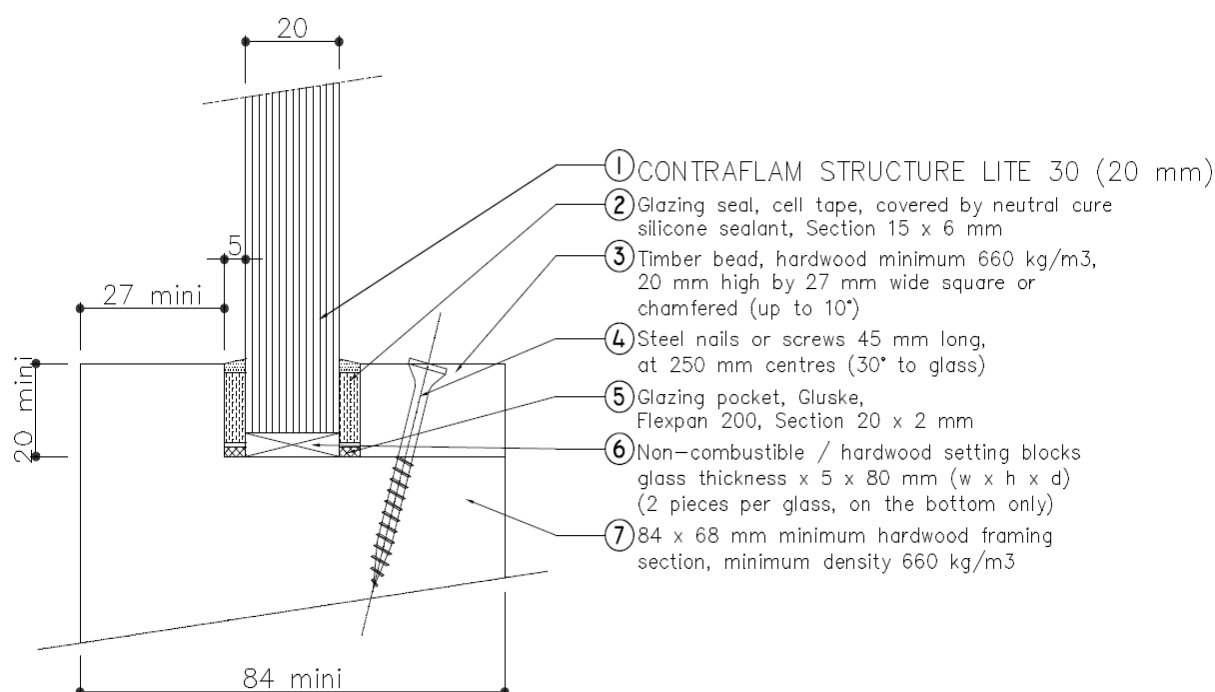
Table 1 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1400 (at 3000 high)	3000 (at 1400 wide)	4.20

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure Lite 30 Glass (20mm) in butt jointed timber framed screens for periods of 30 minutes integrity**

The glass shall be glazed utilising the following basic specification:

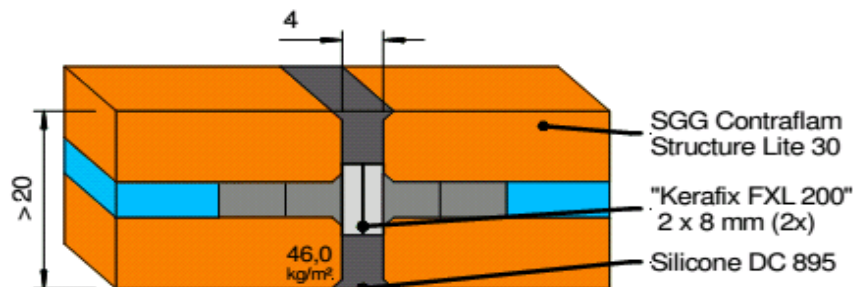


Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 8 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 2 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1400 (at 3000 high)	3000 (at 1400 wide)	4.20

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE Lite 30 FIRE RESISTING GLASS Installation Instruction



- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41  
(do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

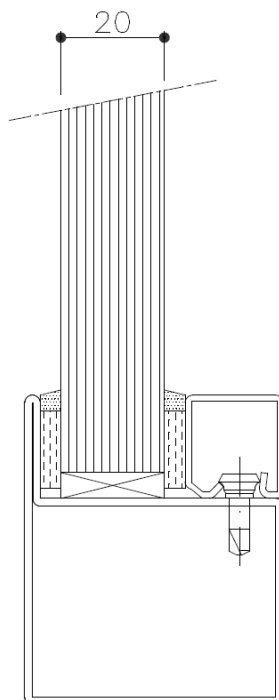
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure Lite 60 (20 mm) Glass in butt jointed steel framed screens for periods of 60 minutes integrity

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 8 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 5 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1375 (at 2500 high)	2500 (at 1375 wide)	3.44

Note: Use of the SGG STADIP laminated glass is prohibited i.e. 20mm thick only.



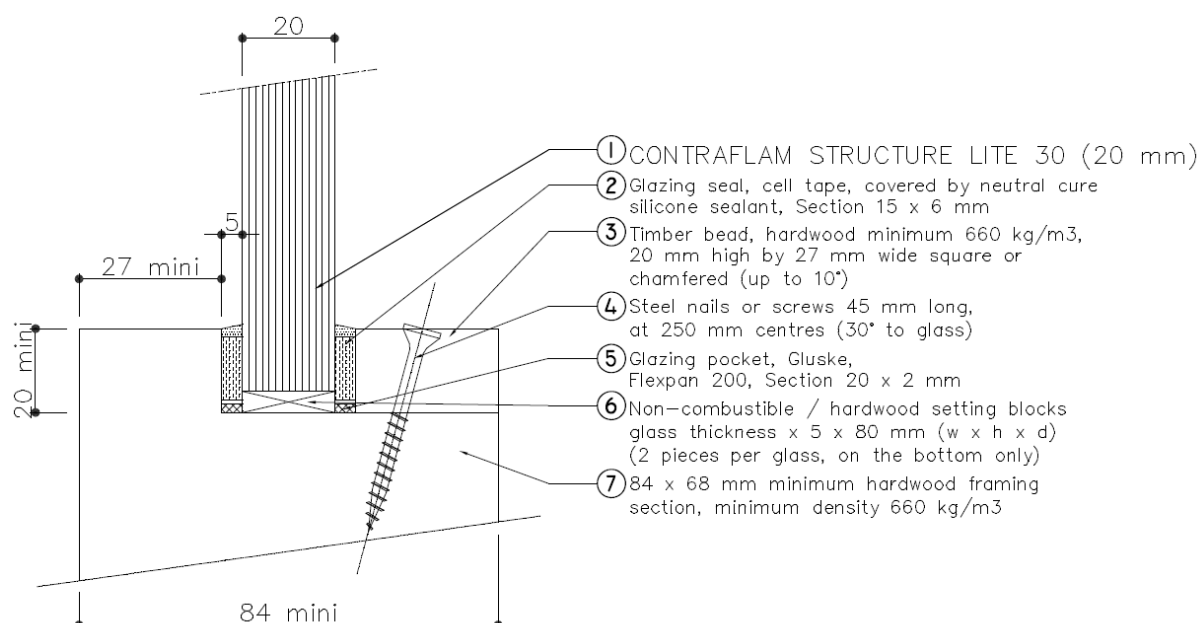
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure Lite 60 Glass (20 mm) in butt jointed timber framed screens for periods of 60 minutes integrity**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 8 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

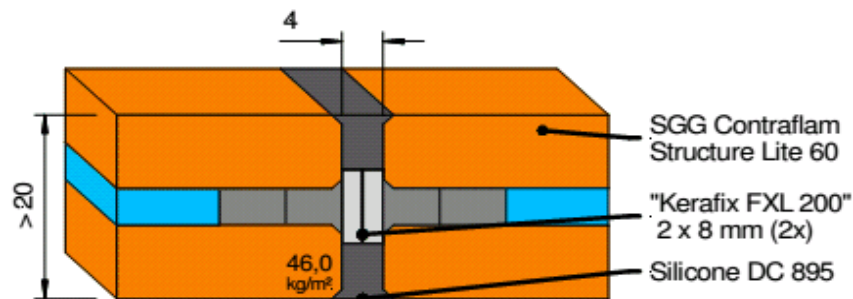
Table 6 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1375 (at 2500 high)	2500 (at 1375 wide)	3.44

Note: Use of the SGG STADIP laminated glass is prohibited i.e. 20mm thick only.

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE Lite 60 FIRE RESISTING GLASS

#### Installation Instruction



- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

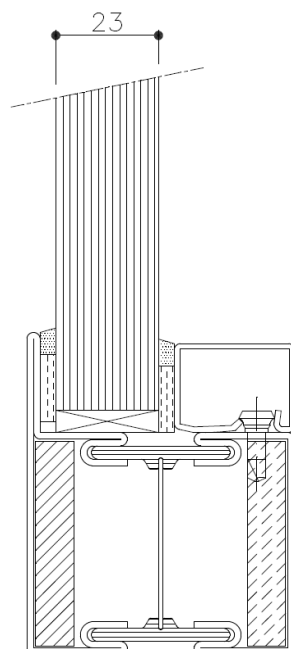
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

##### **Contraflam Structure 30 Glass (23 mm) in butt jointed steel framed screens for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 13 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 13mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 7 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

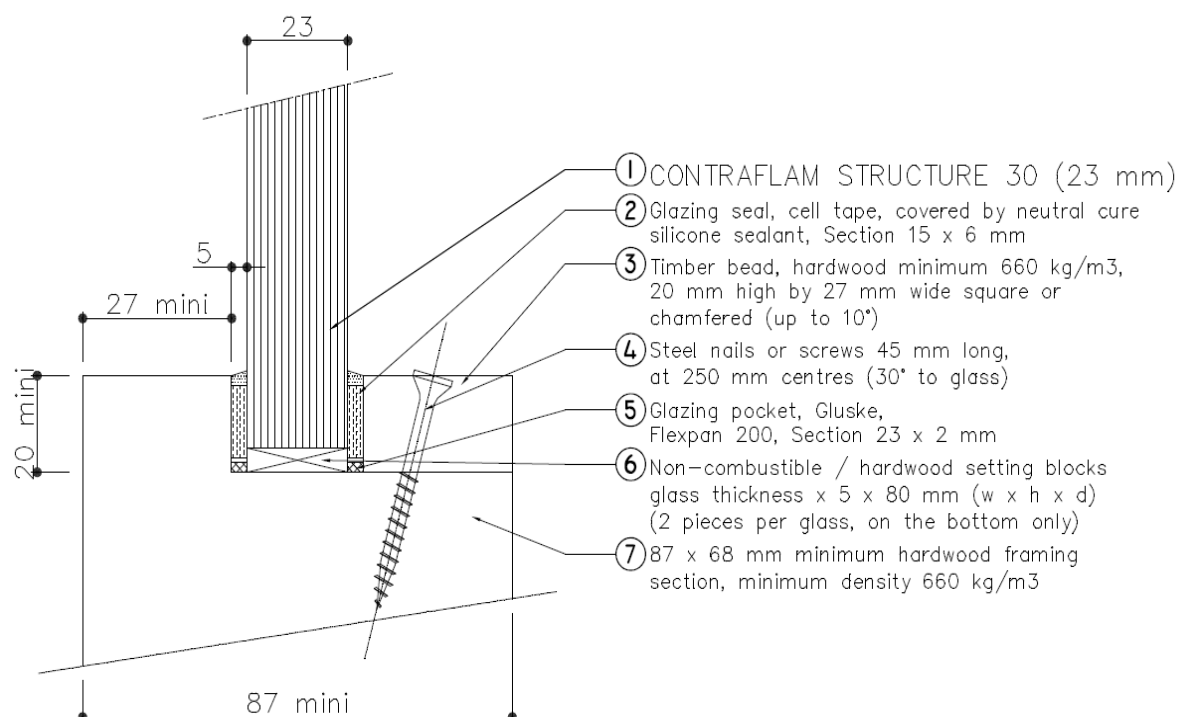
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (23 mm) in butt jointed timber framed screens for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 13 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 13 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

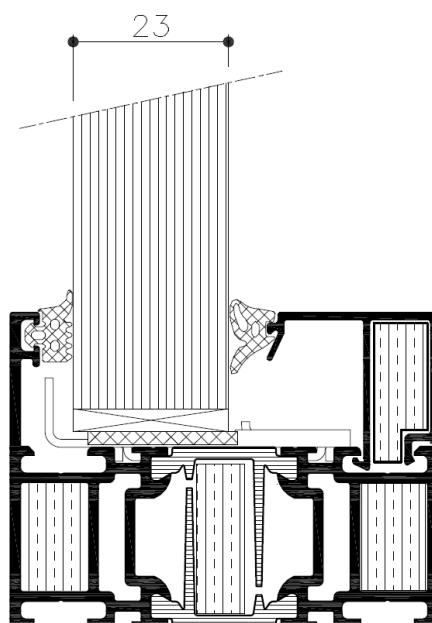
Table 8 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (23 mm) in butt jointed aluminium framed screens for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 13 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 13 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 9 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

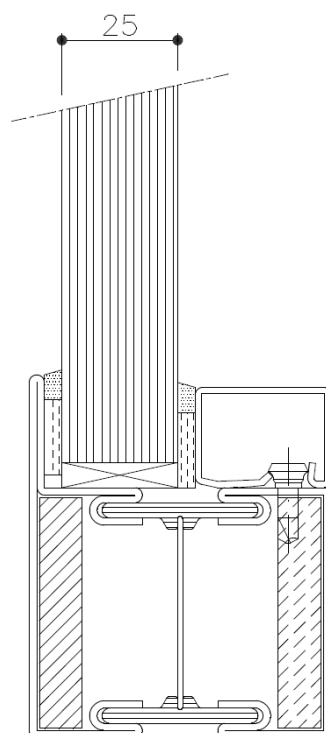
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (25 mm) in butt jointed steel framed screens for periods of 60 minutes integrity and 30 minutes insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 13 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

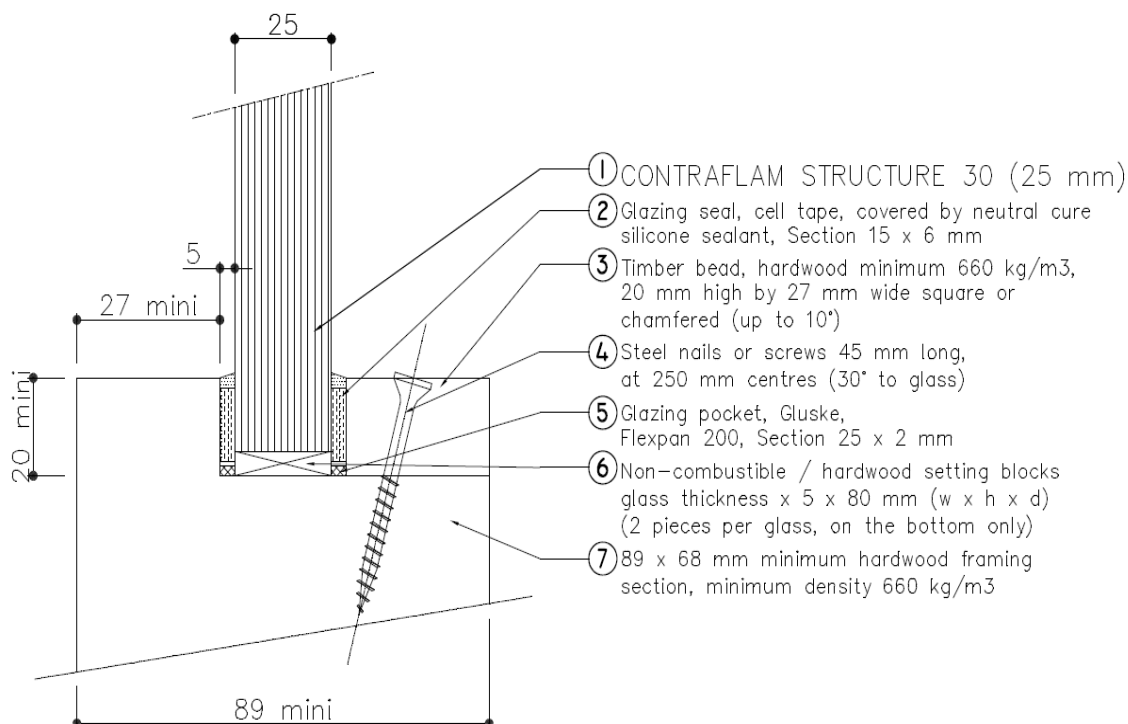
Table 10 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1033 (at 2362 high)	2362 (at 1033 wide)	2.44

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (25 mm) in butt jointed timber framed screens for periods of 60 minutes integrity and 30 minutes insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 13 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

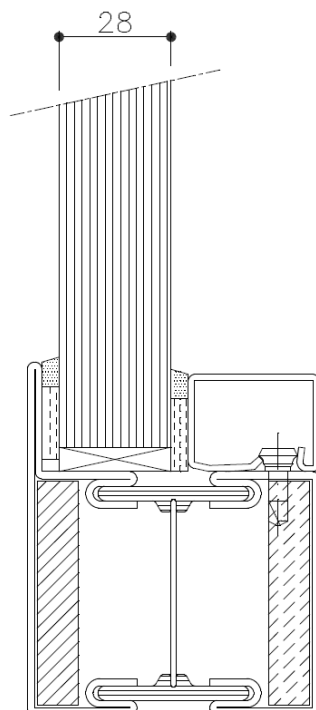
Table 11 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1033 (at 2362 high)	2362 (at 1033 wide)	2.44

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (28 mm) in butt jointed steel framed screens for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 18 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 18mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 12 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2160 (at 3500 high)	3800 (at 1989 wide)	7.56



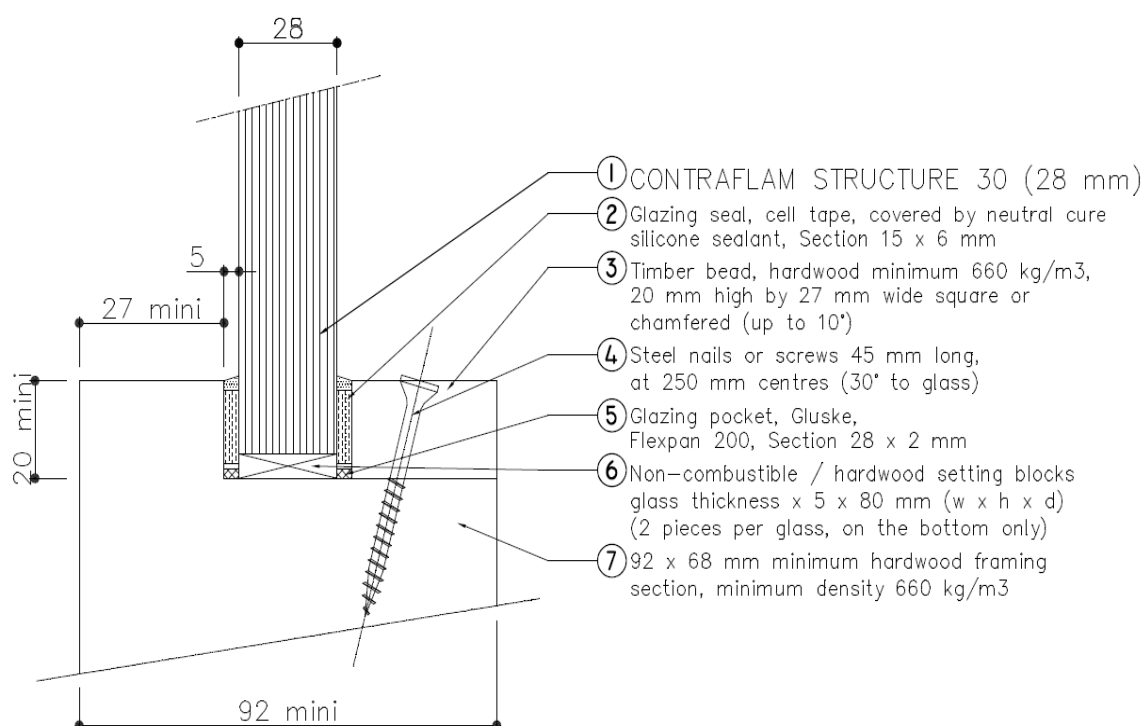
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (28 mm) in butt jointed timber framed screens for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 18 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 18 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

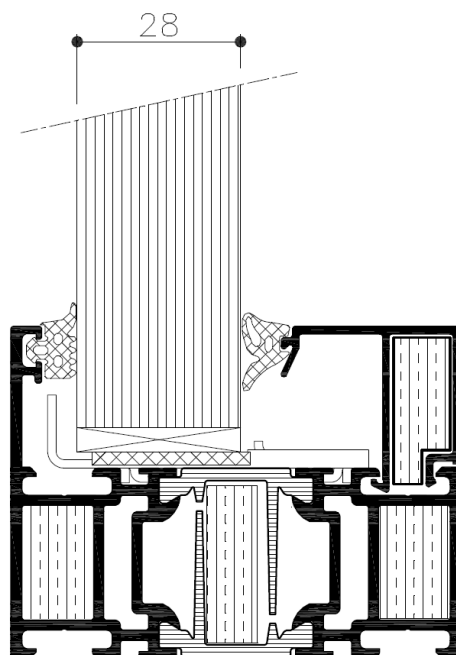
Table 13 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2160 (at 3500 high)	3800 (at 1989 wide)	7.56

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (28 mm) in butt jointed aluminium screens for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 18 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 18 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

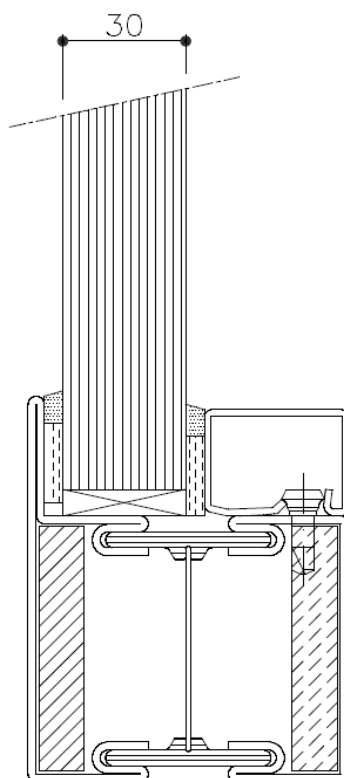
Table 14 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2160 (at 3500 high)	3800 (at 1989 wide)	7.56

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 30 Glass (30 mm) in butt jointed steel framed screens for periods of 30 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 20 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 20 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

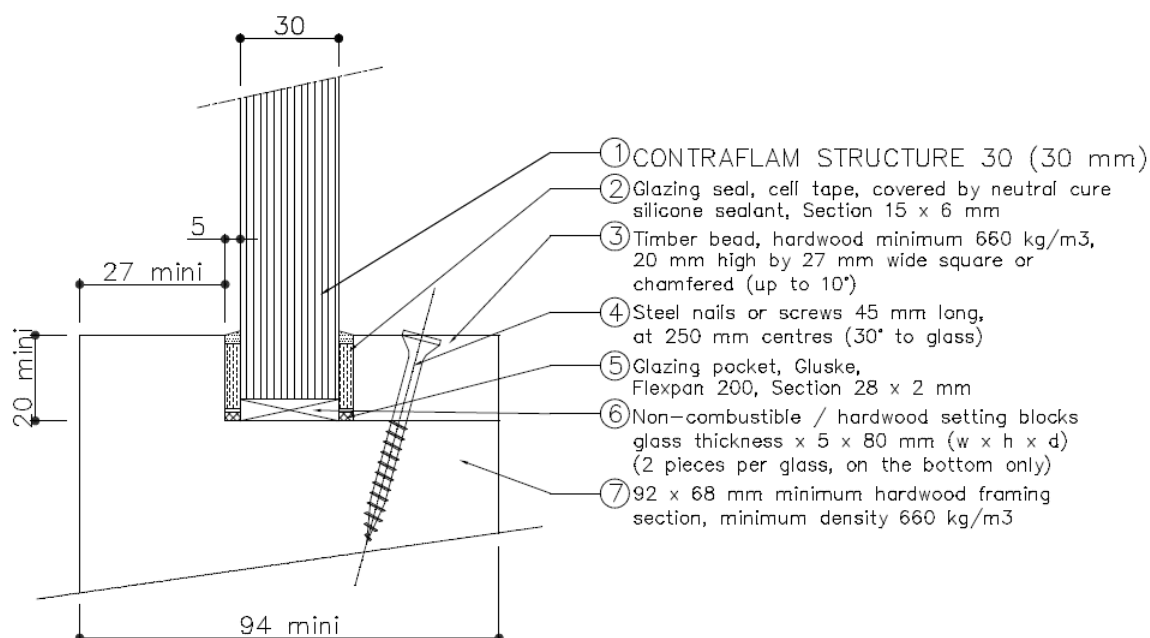
Table 12 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2160 (at 3500 high)	4200 (at 1800 wide)	7.56

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (30 mm) in butt jointed timber framed screens for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 20 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 20 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

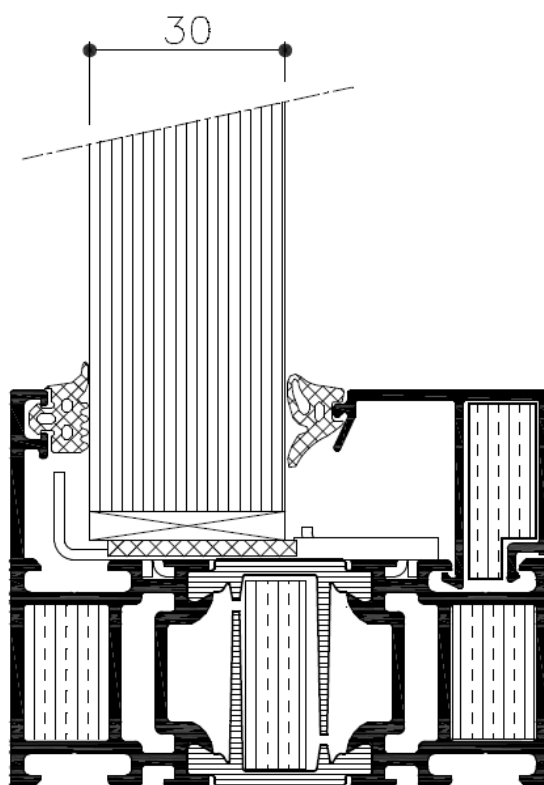
Table 13 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m²)
2160 (at 3500 high)	4200 (at 1800 wide)	7.56

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Glass (30 mm) in butt jointed aluminium screens for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



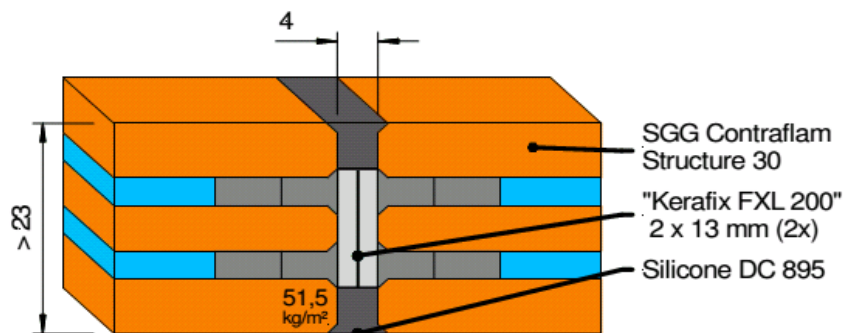
Joints between adjacent panes should be 3 mm wide and sealed with 1 piece of 2 x 20 mm wide 'Palusol T' intumescent strip or 4 mm wide with 2 pieces of 2 x 20 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 14 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2160 (at 3500 high)	4200 (at 1800 wide)	7.56

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 FIRE RESISTING GLASS

#### Installation Instruction

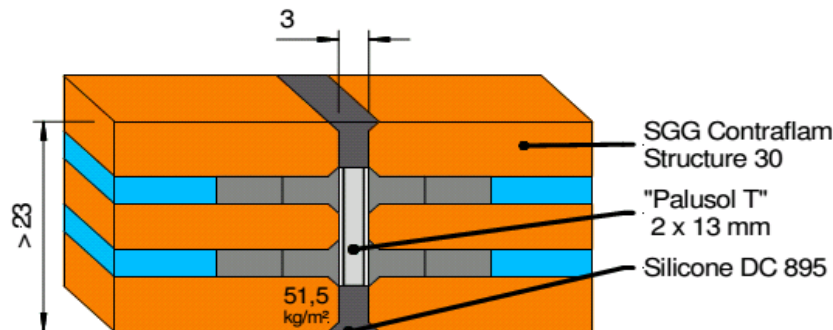


- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 FIRE RESISTING GLASS

#### Installation Instruction



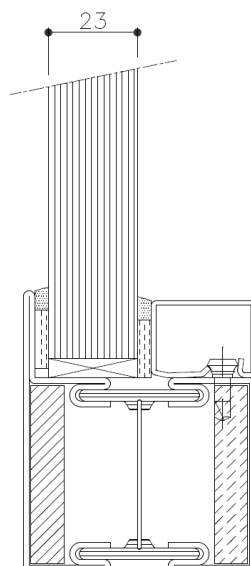
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Palusol T“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (23 mm) in butt jointed steel framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 13 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 13 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 23 mm Palusol T intumescent strip or 4 mm wide with 2 pieces of 2 x 23mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 15 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1200 (at 3000 high)	3000 (at 1200 wide)	3.6



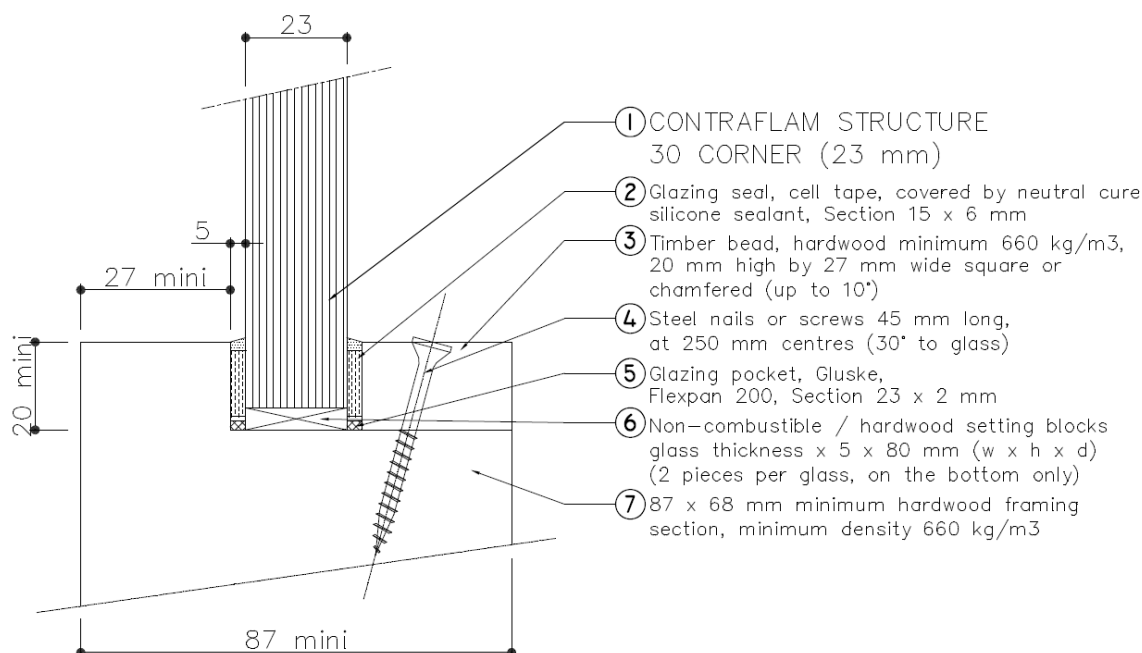
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (23 mm) in butt jointed timber framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 13 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 13 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 23 mm Palusol T intumescent strip or 4 mm wide with 2 pieces of 2 x 23 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

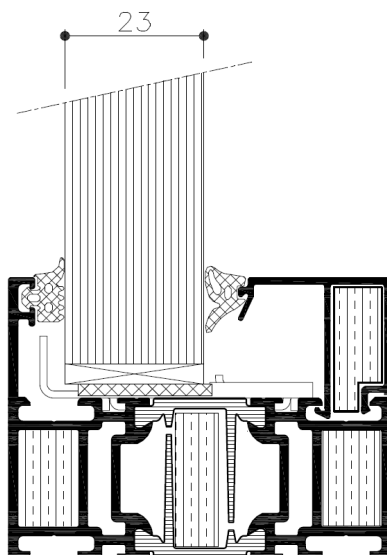
Table 16 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1200 (at 3000 high)	3000 (at 1200 wide)	3.6

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (23 mm) in butt jointed aluminium screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 13 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 13 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 23 mm Palusol T intumescent strip or 4 mm wide with 2 pieces of 2 x 23 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

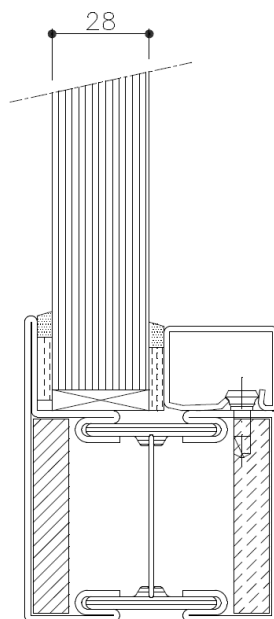
Table 17 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1200 (at 3000 high)	3000 (at 1200 wide)	3.6

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (28 mm) in butt jointed steel framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 18 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 18 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 28 mm Palusol T intumescent strip or 4 mm wide with 2 x 28mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

Table 18 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1320 (at 3000 high)	3300 (at 1237 wide)	3.98

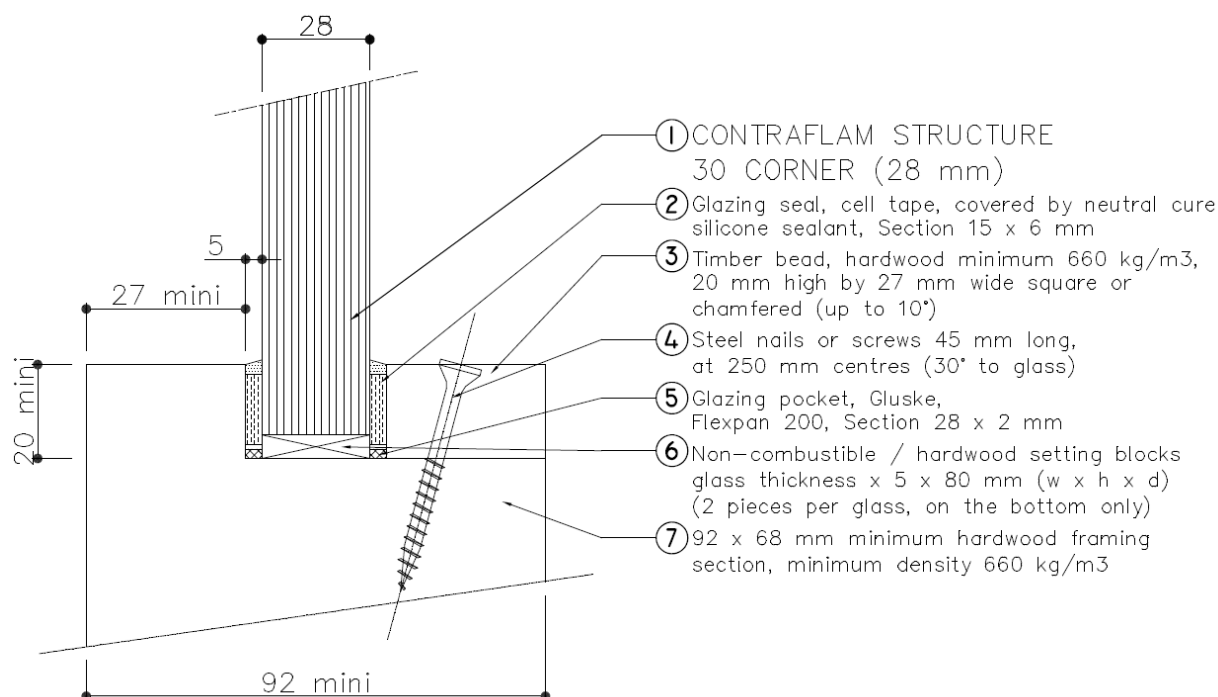
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (28 mm) in butt jointed timber framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 18 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 18 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 28 mm Palusol T intumescent strip or 4 mm wide with 2 pieces of 2 x 28 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

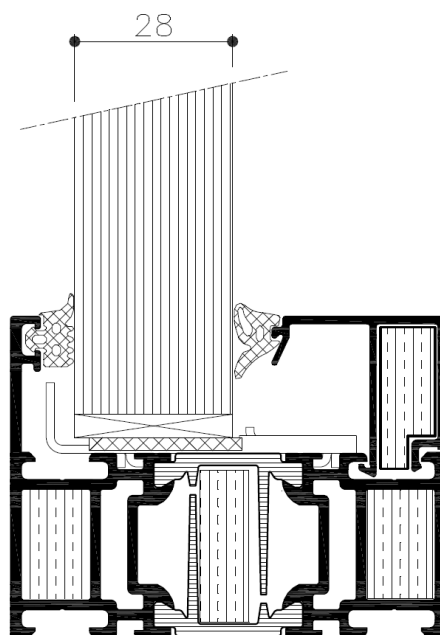
Table 19 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1320 (at 3000 high)	3300 (at 1237 wide)	3.98

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Corner Glass (28 mm) in butt jointed aluminium screens with 90° corner joints, for periods of 30 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 18 mm Kerafix FXL 200 intumescent strips or 3 mm wide with 1 piece of 2 x 18 mm Palusol T both top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90° joints should be 3 mm wide and sealed with 1 piece of 2 x 28 mm Palusol T intumescent strip or 4 mm wide with 2 pieces of 2 x 28 mm wide FXL 200 intumescent strips both options top sealed with 'DC895 sealant'.

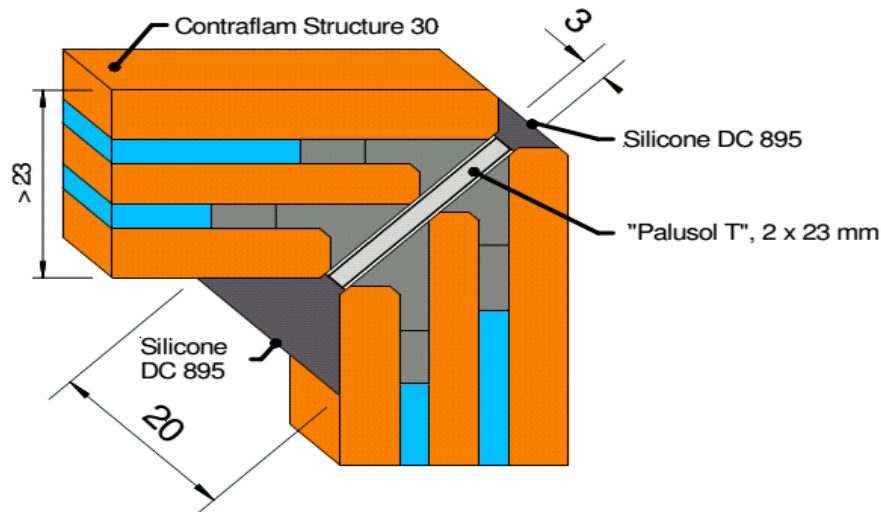
Table 20 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1320 (at 3000 high)	3300 (at 1237 wide)	3.98

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 CORNER FIRE RESISTING GLASS

Contraflam Structure 30 Corner Glass (23 mm) in butt jointed framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation

#### Installation Instruction



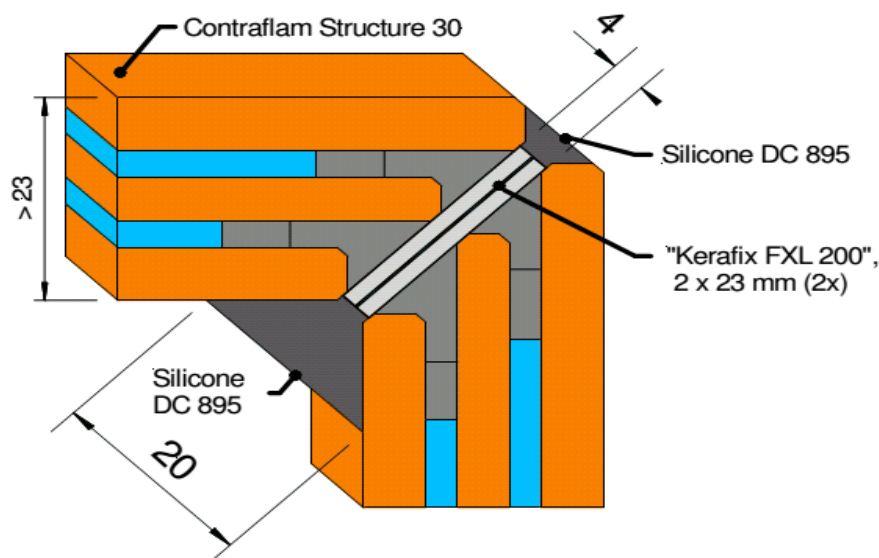
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Palusol T“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to correct position**  
glasses can be adjusted to correct position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 CORNER FIRE RESISTING GLASS

Contraflam Structure 30 Corner Glass (23 mm) in butt jointed framed screens with 90° corner joints, for periods of 30 minutes integrity and insulation

#### Installation Instruction



- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to correct position**  
glasses can be adjusted to correct position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**



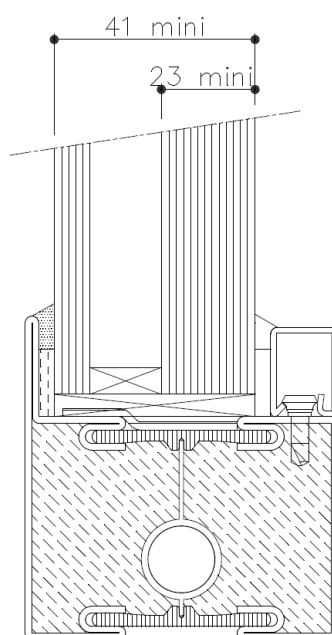
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

##### Contraflam Structure 30 IGU Glass in butt jointed steel framed screens for periods of 30 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips or for external application Flectrem 100 with 2 pieces of 2 x (xx\*) mm and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

Table 22 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1800 (at 3027 high)	3500 (at 1557 wide)	5.45



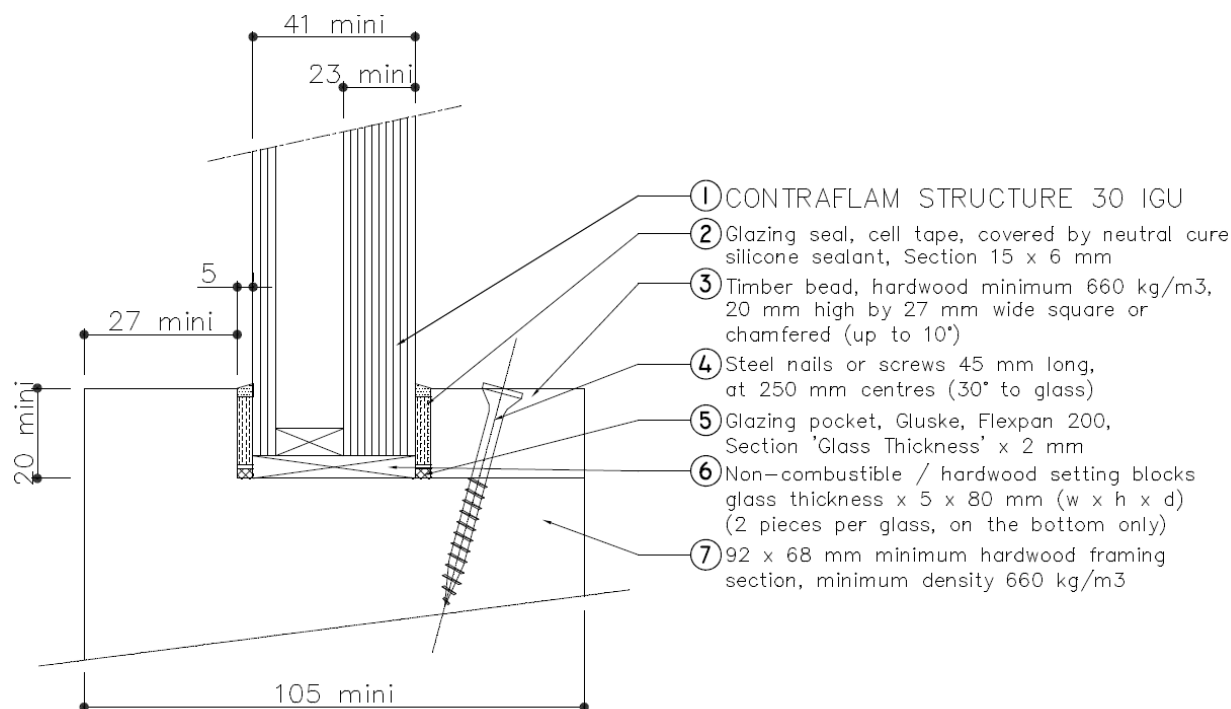
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 IGU Glass in butt jointed timber framed screens for periods of 30 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips or for external application Flextrem 100 with 2 pieces of 2 x (xx\*) mm and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

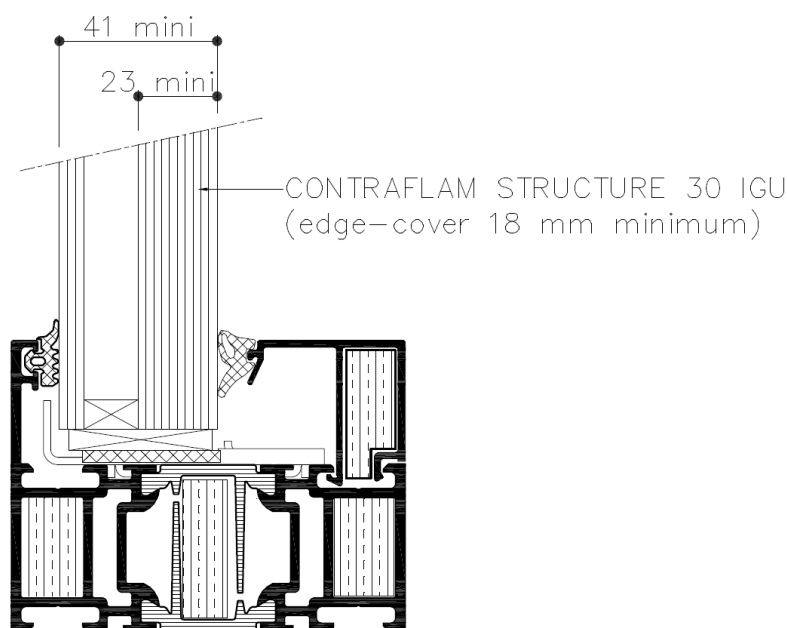
Table 23 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1800 (at 3027 high)	3500 (at 1557 wide)	5.45

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 30 IGU Glass in butt jointed aluminium framed screens for periods of 30 minutes integrity and insulation

The glass shall be installed into Schuco ADS80 FR30 insulated aluminium framing system (which is covered appropriately by test or assessment evidence) using clip-on retaining beads, see example below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips or for external application Flextrem 100 with 2 pieces of 2 x (xx\*) mm and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

Table 21 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3500 (at 1285 wide)	4.50

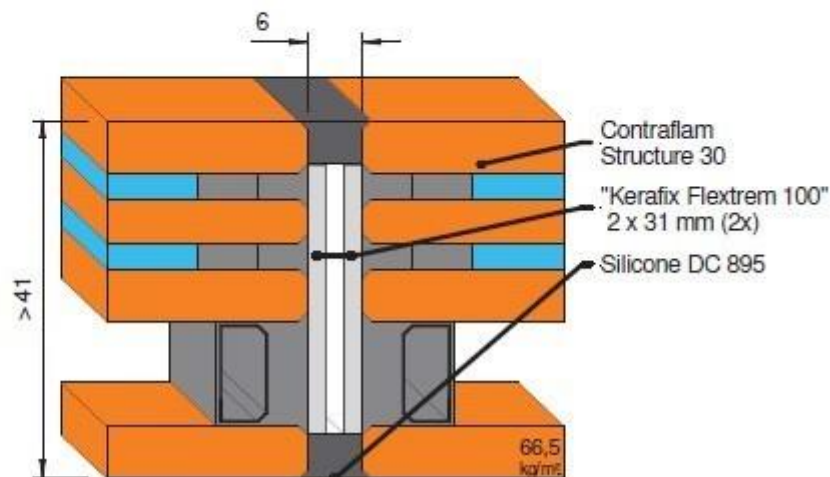


## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 IGU

#### Installation Instruction

For interior and exterior use



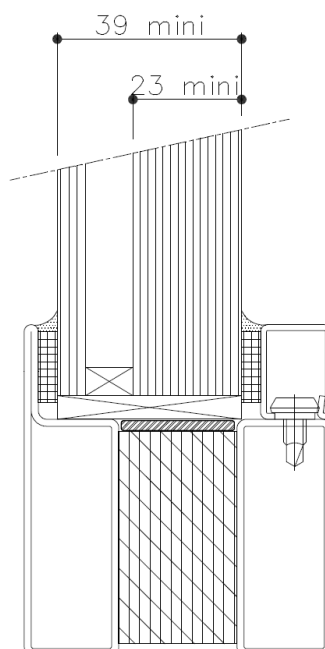
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix Flextrem 100“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 30 Corner IGU in steel framed screen with 90° to 180° corner joints for 30 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



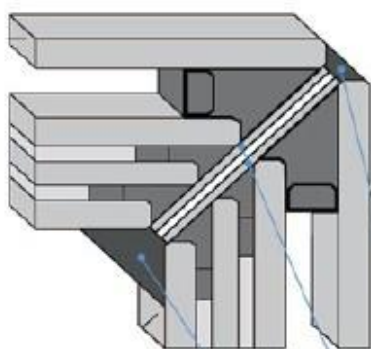
Joints between adjacent panes for external and internal applications should be 6 mm wide and sealed with 2 pieces of 2x25 mm wide 'Flexilodice SA' intumescent strips and top sealed with Dow Corning 'DC 895' sealant. Adjacent panes for 90°-180° joints should be 6 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide 'Flexilodice SA' intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

$$*xx = (\text{glass thickness (mm)} \times \sqrt{2}) - 8 \text{ mm}$$

Table 32 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1650 (at 3000 high)	3300 (at 1500 wide)	4.95

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 30 CORNER IGU FIRE RESISTING GLASS Installation Instruction



Silicone:  
"Dow Corning DC 895"

Doubled-up (2) "Flexilodice SA" expanding  
intumescent seals. Width (W) of the seal  
is dependent on the thickness of the glass.

Silicone:  
"Dow Corning DC 895"

- Clean the glass edges to be sealed
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41  
(do not use other cleaning agents or solvents!)
- Stick "Flexilodice SA" on vertical glass edges
  - make sure it is centred!
- Install glass panes and adjust to parallel position
  - Glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual.

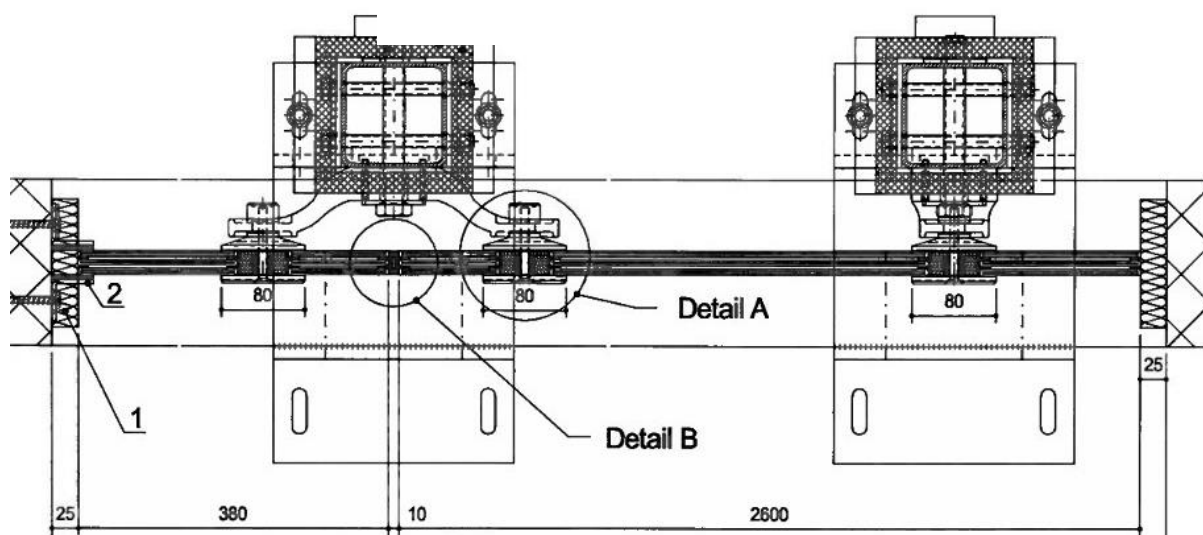


## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Point Glass (23 mm) in 'Point-Wise' mounting for periods of 60 minutes integrity and 30 minutes insulation**

Glazed wall constructions with silicone glass joints and point-wise mounting of Contraflam Structure 30 Point glass as follows:



Joints between panes should be 10 mm wide (+/- 2 mm) and sealed with 2 pieces of 14 x 4 mm (8 mm total thickness) Tenmat Firefly 107 self-adhesive intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 24 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
2600 (at 1325 high)	1325 (at 2600 wide)	3.45

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

## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

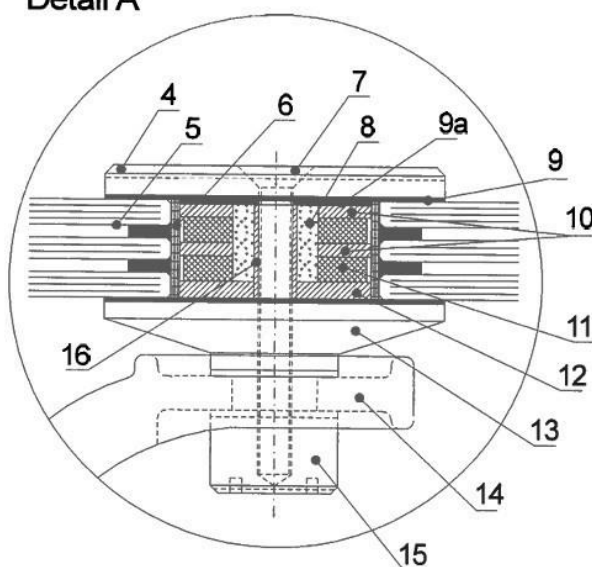
#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 30 Point Glass (23 mm) in 'Point-Wise' mounting for periods of 60 minutes integrity and 30 minutes insulation**

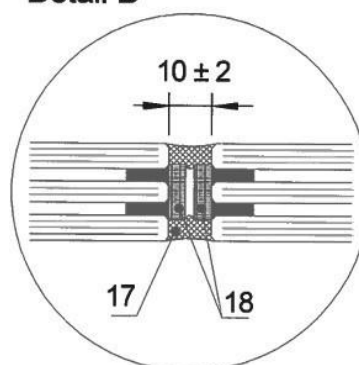
##### Point fixing requirements

- The glass shall be installed into a previously tested 'Spider-arm' framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing to the required performance.
- Elongated holes 9 x 20 mm (allowing expansion) serve as point support on the bottom edge of the glass and 20 mm dia. drilled holes as point-support in the upper edge of the glass (minimum 4 fixings per pane (see below).
- Maximum location from the glass edge will be 120 mm, and maximum distance between fixing points will be 2360 mm.
- Where the pane  $\leq 380$  mm wide only one fixing top and bottom is required
- Where 'spider joint' is fixed through the glass pane, the installation specification will be as Detail A below.
- Joints between panes will be as Detail B below.

**Detail A**



**Detail B**







## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

Contraflam Structure 30 Point Glass (23 mm) in 'Point-Wise' mounting for periods of 60 minutes integrity and 30 minutes insulation

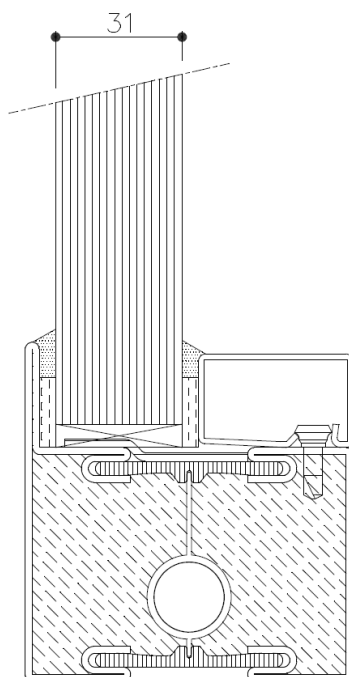
- 1) Mineral wool
- 2) Steel angle 40 x 40 x 5 mm, 30 mm long
- 3) Steel beam, 1000 x 1000 x 4 x 3940 mm
- 4) Stainless steel plate, Ø 80 mm, 7 mm thick
- 5) "Contraflam Structure 30", 23 mm thick
  - Tempered glass 6 mm
  - Interlayer 3 mm
  - Tempered glass 5 mm
  - Interlayer 3 mm
  - Tempered glass 6 mm
- 6) Non-compressible gasket, 22 x 2, 147 mm long
- 7) Machine screw, stainless, M8 x 75 mm
- 8) Hilti Hit-HY 150 Max 330/2
- 9) Non-compressible gasket, Ø 80 mm, 1 mm thick
- 9a) Tolerance gasket, non-compressible, Ø 45 mm, 1 mm thick,
- 10) Washer, stainless, Ø 45 x 3 mm, inner Ø 20 mm
- 11) Washer, Promatect H, Ø 43 x 6 mm, inner Ø 20 mm
- 12) Washer, stainless, Ø 45 x 4 mm, inner Ø 10 mm
- 13) Stainless steel plate, Ø 80 mm, 4-12 mm thick
- 14) Spider, cast steel
- 15) Nut, stainless, M8, outer Ø 30 mm
- 16) Tube, stainless, Ø 10 mm, inner Ø 8 mm, 22 mm long
- 17) Silicone, Dow Corning DC 895
- 18) Tenmat, Firefly 107 self adhesive, 14 x 4 mm
- 19) Boards, Rigips, Glasroc F, 20 mm
- 20) Cramp, 63 mm
- 21) Machine screw, steel, M20 x 160 mm

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 Glass (31 mm) in butt jointed steel framed screens for periods of 60 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 21 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 25 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

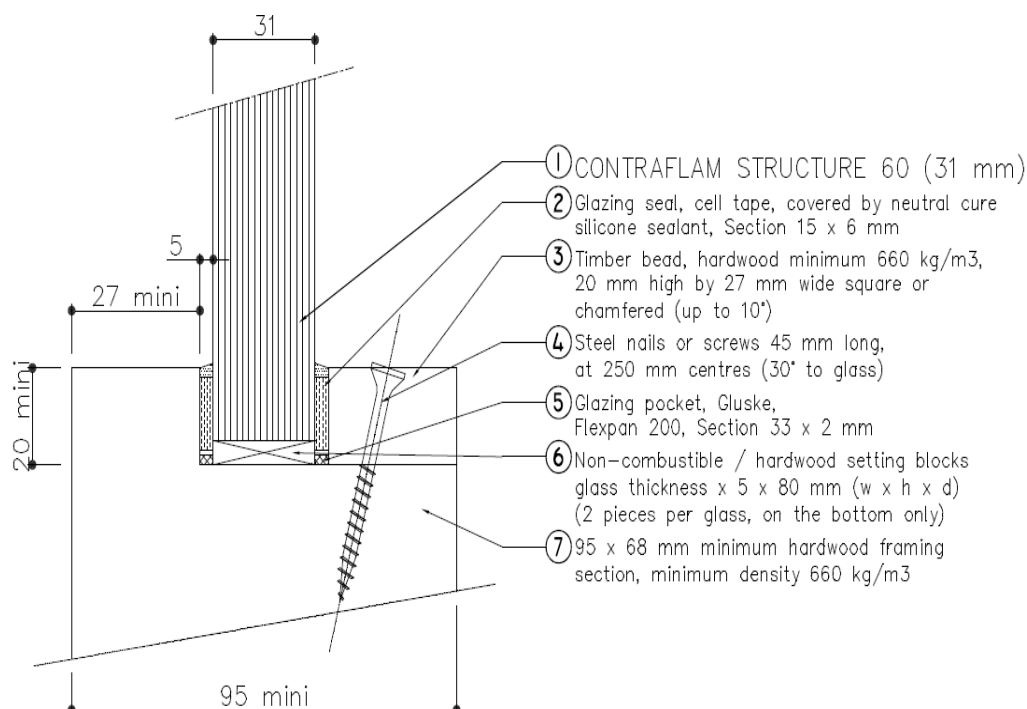
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Glass (31 mm) in butt jointed timber framed screens for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 21 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

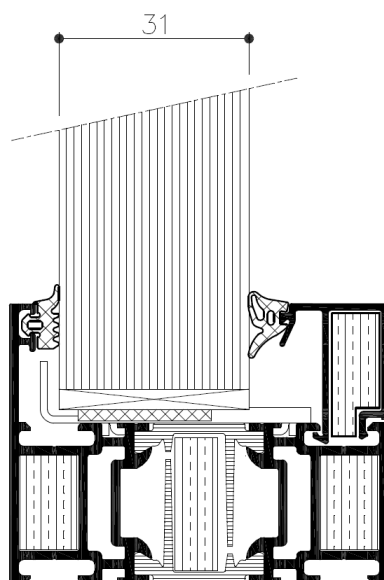
Table 26 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 Glass (31 mm) in butt jointed aluminium framed screens for periods of 60 minutes integrity and insulation

The glass shall be installed into a Schüco ADS 80 FR60 insulated aluminium framing system with aluminium glazing bead fastened by glazing clips 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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 21 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

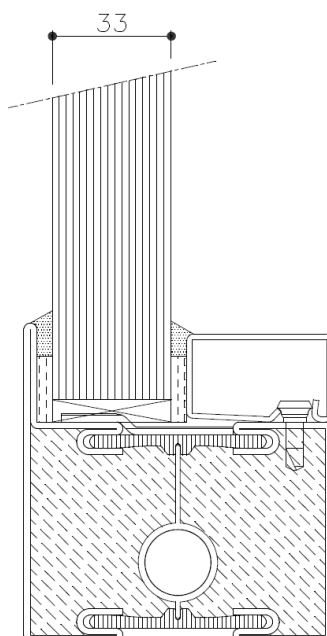
Table 27 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 Glass (33 mm) in butt jointed steel framed screens for periods of 60 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 23 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 28 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1680 (at 2690 high)	3480 (at 1300 wide)	4.52

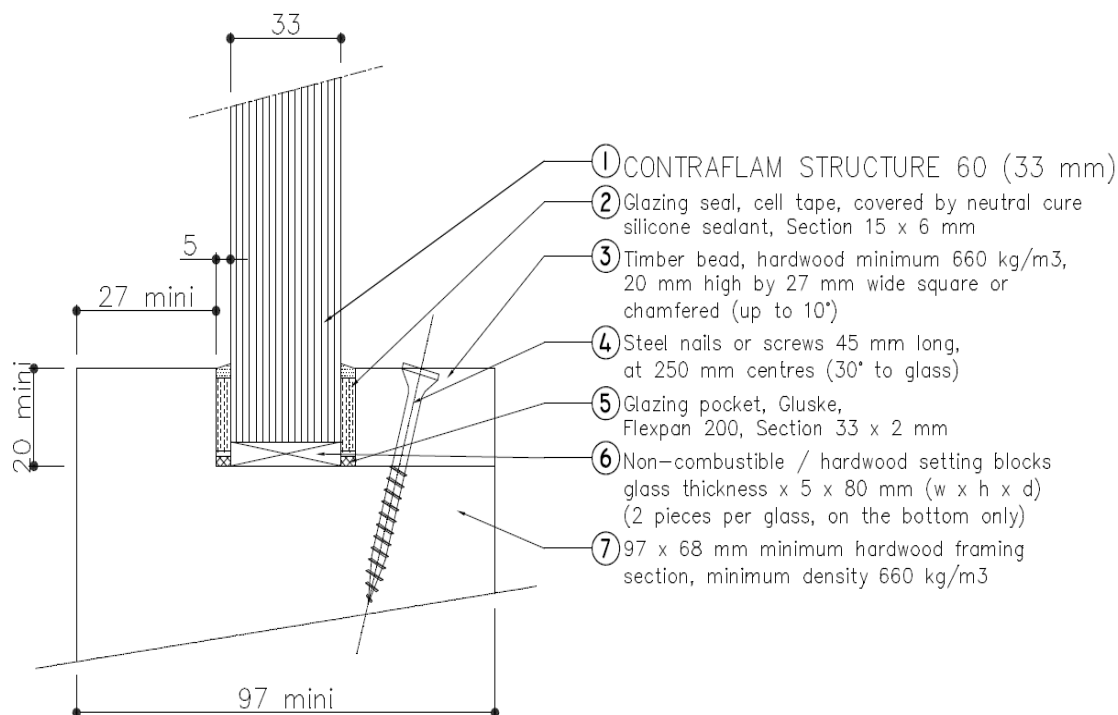
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Glass (33 mm) in butt jointed timber framed screens for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 23 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

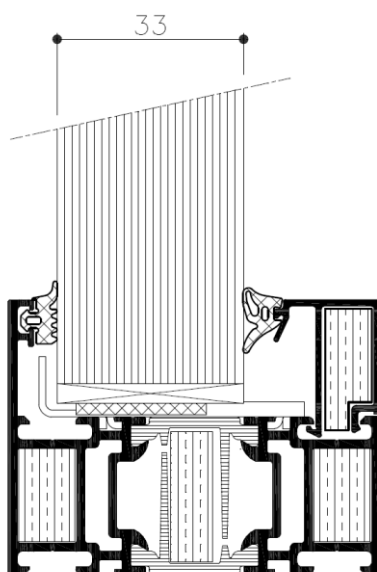
Table 29 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1680 (at 2690 high)	3480 (at 1300 wide)	4.52

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 Glass (33 mm) in butt jointed aluminium framed screens for periods of 60 minutes integrity and insulation

The glass shall be installed into a Schüco ADS 80 FR60 insulated aluminium framing system with aluminium glazing bead fastened by glazing clips 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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 23 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 27 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1680 (at 2690 high)	3480 (at 1300 wide)	4.52

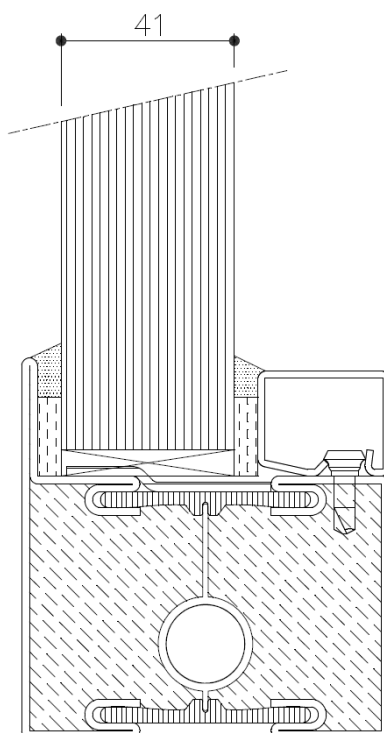


## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Glass (41 mm) in butt jointed steel framed screens for periods of 60 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 31 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 30 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1534 (at 3750 high)	3900 (at 1474 wide)	5.75



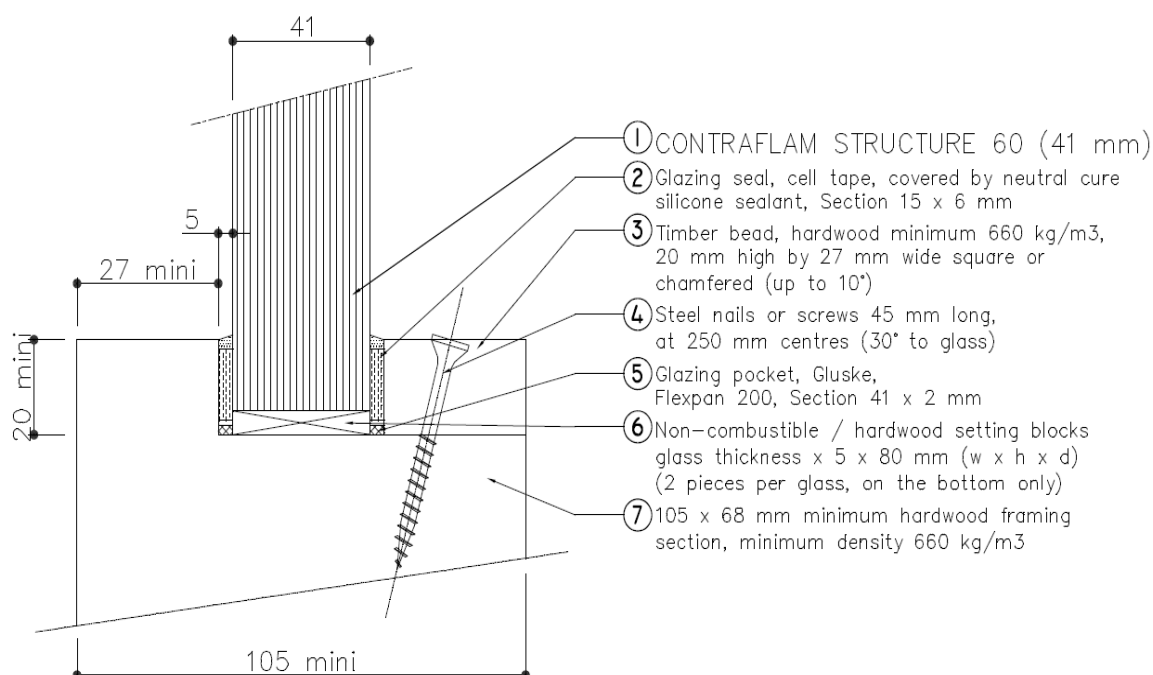
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Glass (41 mm) in butt jointed timber framed screens for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 31 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

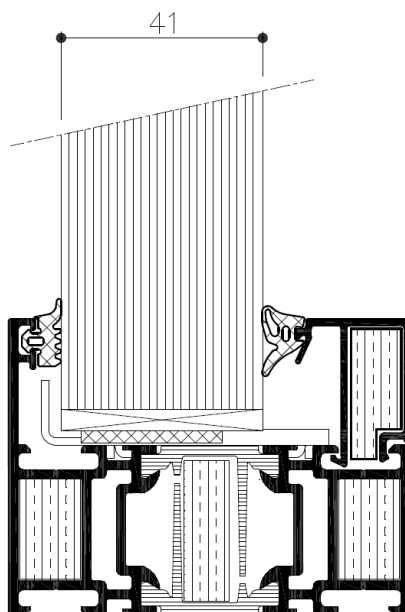
Table 31 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1534 (at 3750 high)	3900 (at 1474 wide)	5.75

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 Glass (41 mm) in butt jointed aluminium framed screens for periods of 60 minutes integrity and insulation

The glass shall be installed into a Schüco ADS 80 FR60 insulated aluminium framing system with aluminium glazing bead fastened by glazing clips 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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.

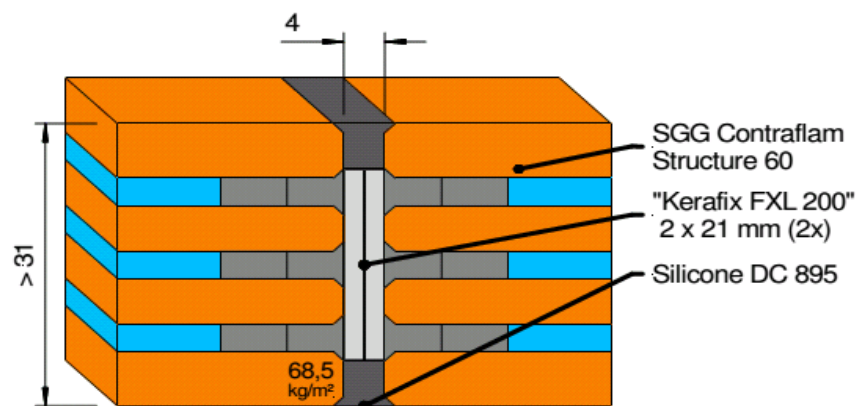


Joints between adjacent panes should be 4 mm wide and sealed with 2 pieces of 2 x 31 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 27 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1534 (at 3750 high)	3900 (at 1474 wide)	5.75

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 60 FIRE RESISTING GLASS Installation Instruction



- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41  
(do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

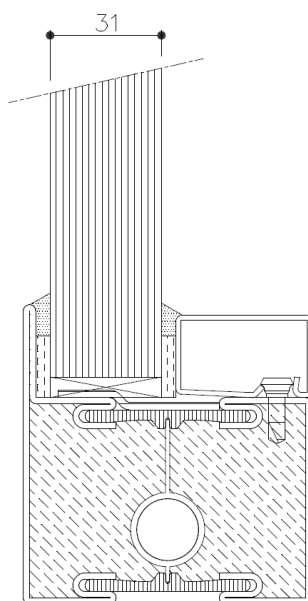
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Corner Glass (31 mm) in butt jointed steel framed screens with 90° corner joints for periods of 60 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for 90° joints should be 4 mm wide and sealed with 2 pieces of 2 x 40 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 32 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 2865 high)	3000 (at 1250 wide)	4.3

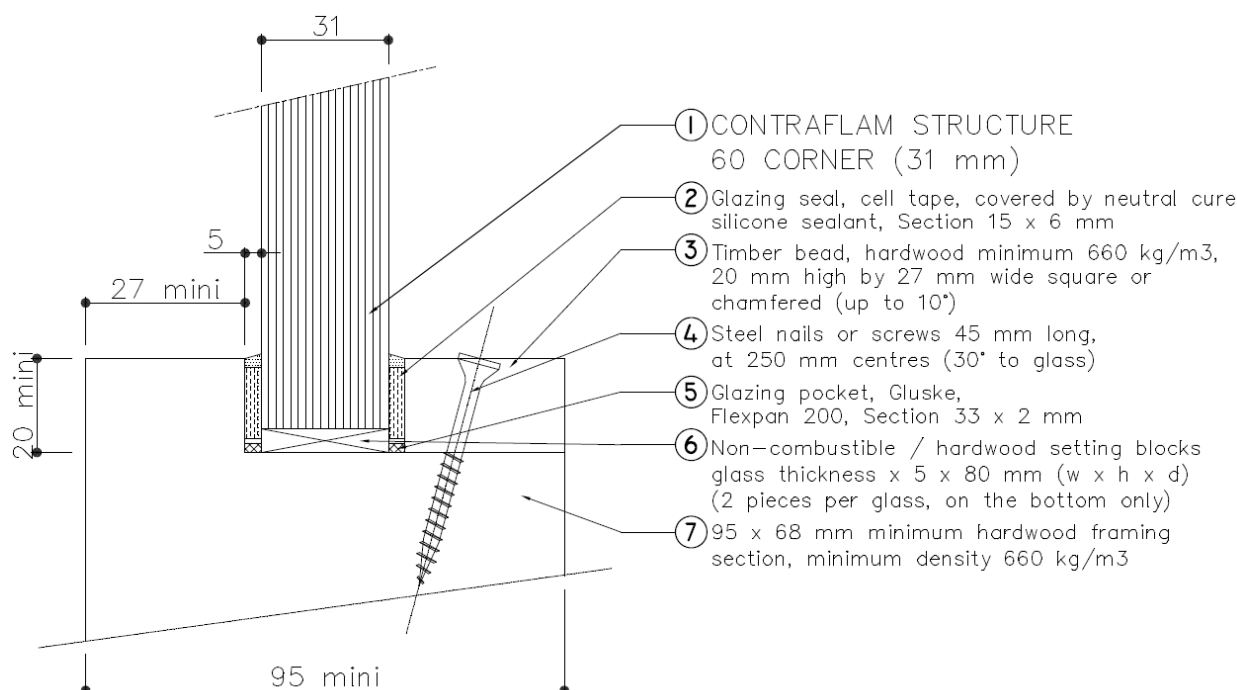
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Corner Glass (31 mm) in butt jointed timber framed screen with 90° corner joints for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes for 90° joints should be 4 mm wide and sealed with 2 pieces of 2 x 40 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

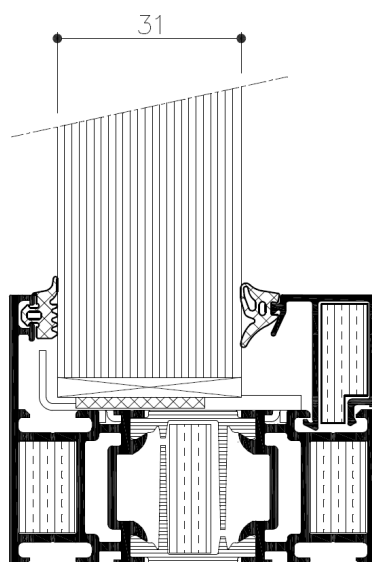
Table 33 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 2865 high)	3000 (at 1250 wide)	4.3

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Corner Glass (31 mm) in butt jointed aluminium framed screens with 90° corner joints for periods of 60 minutes integrity and insulation**

The glass shall be installed into a Schüco ADS 80 FR60 Insulated aluminium framing system with aluminium glazing bead fastened by glazing clips 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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for 90° joints should be 4 mm wide and sealed with 2 pieces of 2 x 40 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 32 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 2865 high)	3000 (at 1250 wide)	4.3

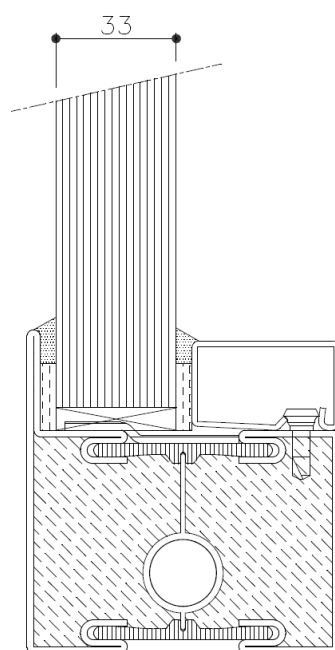
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Corner Glass (33 mm) in butt jointed steel framed screens with 90° corner joints for periods of 60 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for 90° joints should be 4 mm wide and sealed with 2 pieces of 2 x 40 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

Table 34 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 2886 high)	3438 (at 1259 wide)	4.33

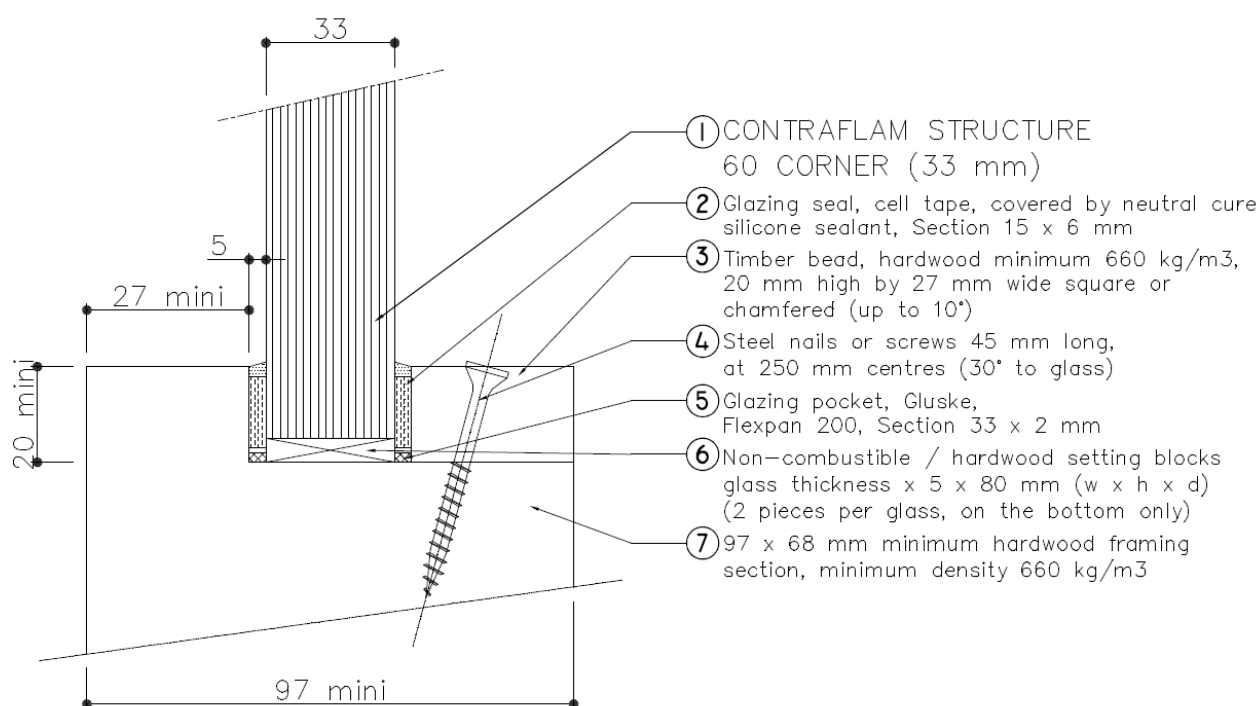
## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 Corner Glass (33 mm) in butt jointed timber framed screens with 90° corner joints for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes for 90° joints should be 4 mm wide and sealed with 2 pieces of 2 x 40 mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

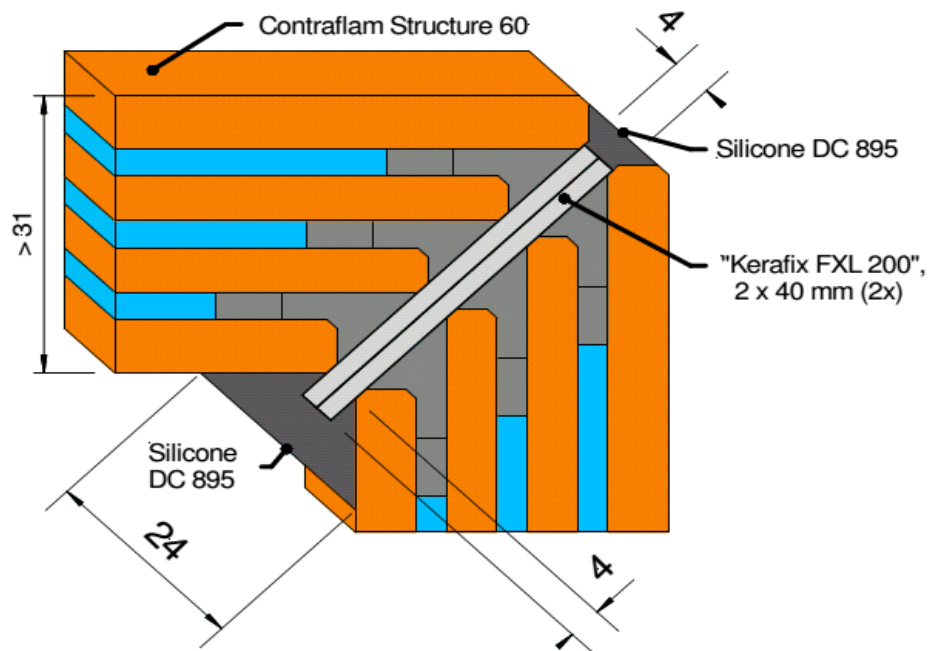
Table 35 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 2886 high)	3438 (at 1259 wide)	4.33



## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 60 CORNER FIRE RESISTING GLASS

#### Installation Instruction



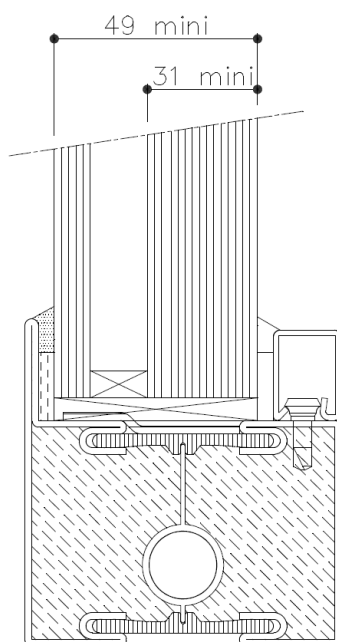
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure to have 4 mm projecting
- **Install glass panes and adjust to correct position**  
glasses can be adjusted to correct position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 IGU Glass in butt jointed steel framed screens for periods of 60 minutes integrity and insulation

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips or for external application Flexrem 100 with 2 pieces of 2 x (xx\*) mm and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

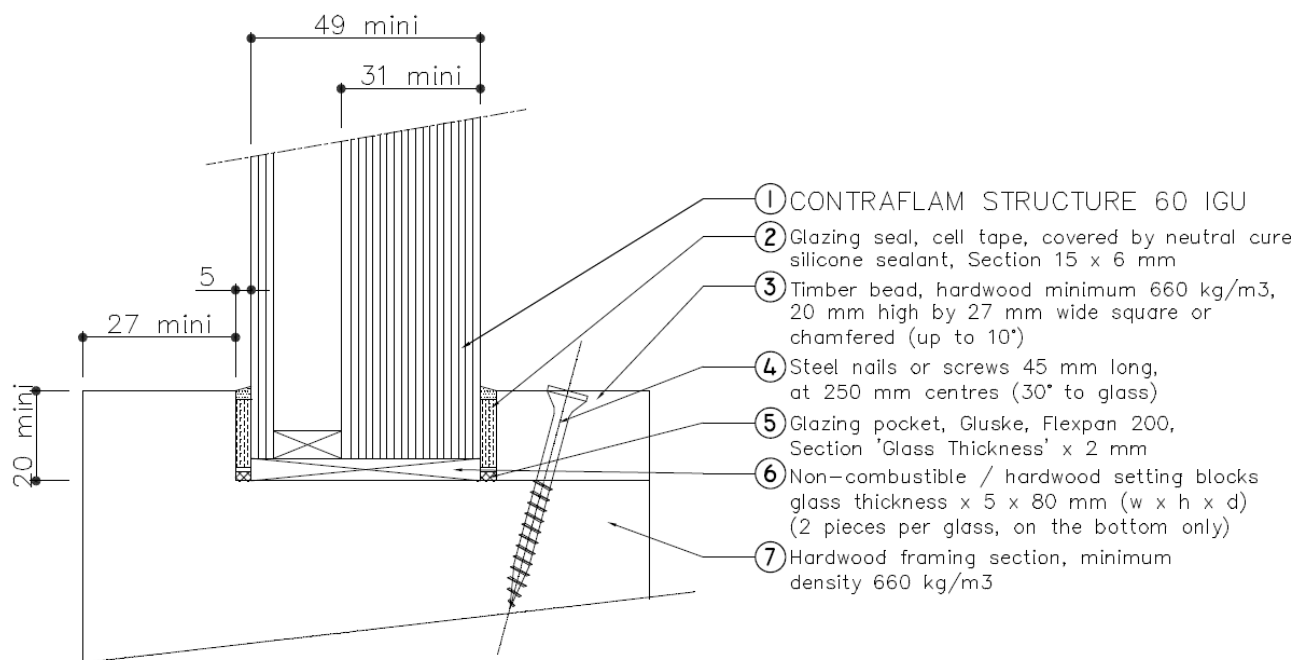
Table 36 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1800 (at 3000 high)	3600 (at 1500 wide)	5.4

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 60 IGU Glass in butt jointed timber framed screens for periods of 60 minutes integrity and insulation**

The glass shall be glazed utilising the following basic specification:



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips or for external application Flextrem 100 with 2 pieces of 2 x (xx\*) mm and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

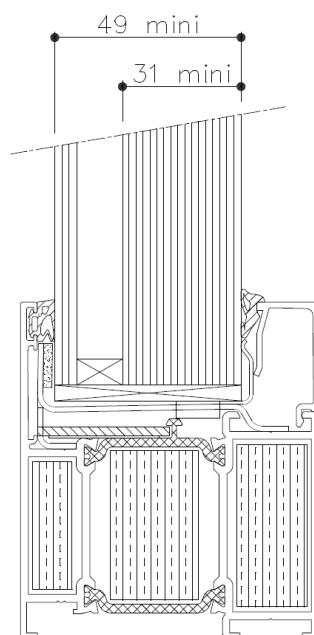
Table 37 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1800 (at 3000 high)	3600 (at 1500 wide)	5.4

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### Contraflam Structure 60 IGU Glass in butt jointed aluminium framed screens for periods of 60 minutes integrity and insulation

The glass shall be installed into a Reynaers CS 77-FP insulated aluminium framing system with aluminium glazing bead fastened by glazing clips 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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal and external applications should be 6 mm ( $\pm 1$  mm) wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix Flextrem 100 and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm

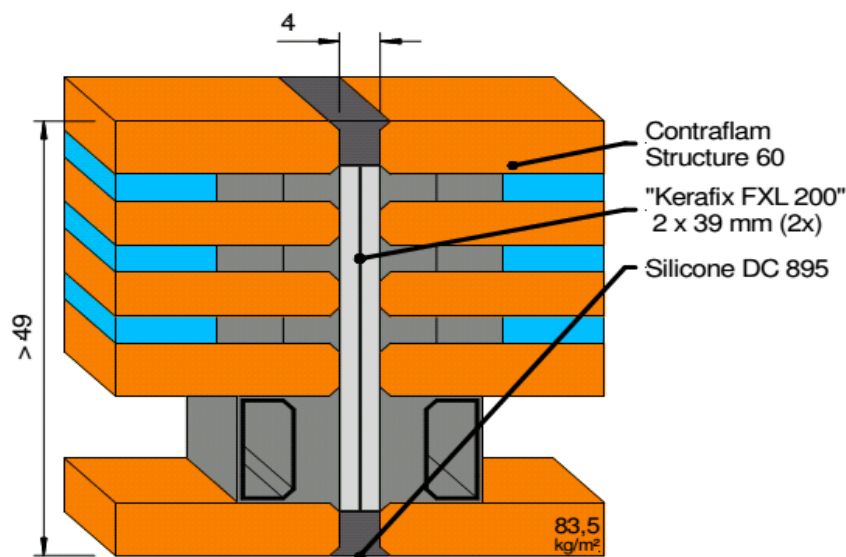
Table 27 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1800 (at 3000 high)	3600 (at 1500 wide)	5.4

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 60 IGU FIRE RESISTING GLASS

#### Installation Instruction

**For interior use only!**



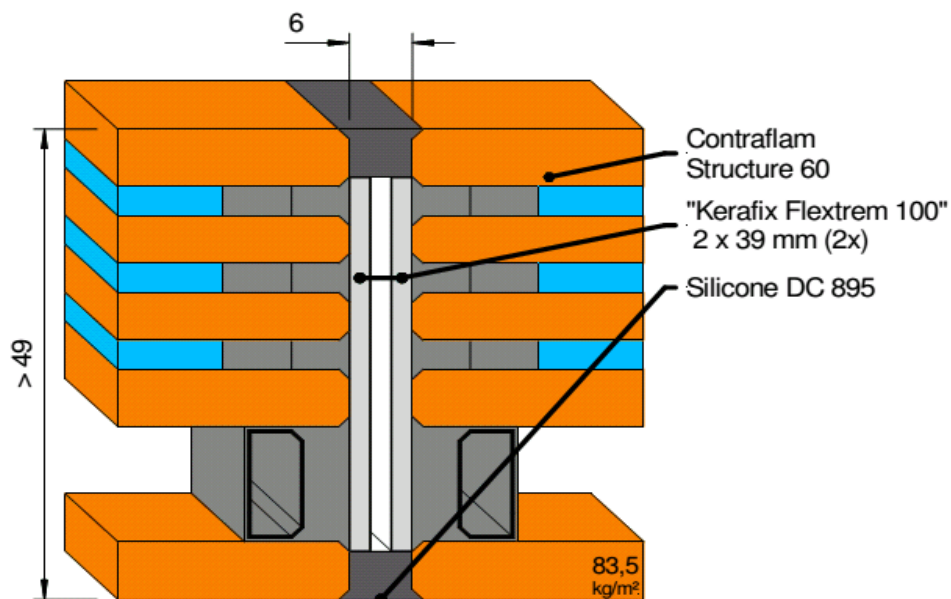
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41  
(do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 60 IGU FIRE RESISTING GLASS

#### Installation Instruction

#### For interior and exterior use



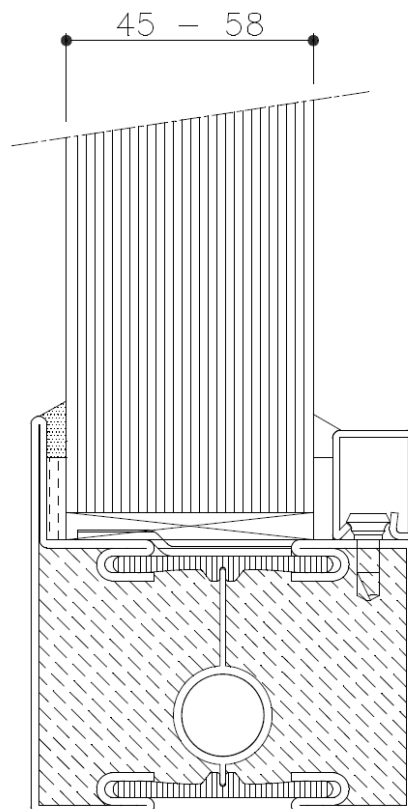
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix Flextrem 100“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

#### **Contraflam Structure 90 Glass (45 mm minimum) in butt jointed steel framed screens for periods of 90 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

xx\* = Overall glass thickness – 10 mm





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## CERTIFICATE No CF 811B

### VETROTECH SAINT-GOBAIN INTERNATIONAL AG

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#### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

Contraflam Structure 90 Glass (45 mm minimum) in butt jointed steel framed screens for periods of 90 minutes integrity and insulation (cont)

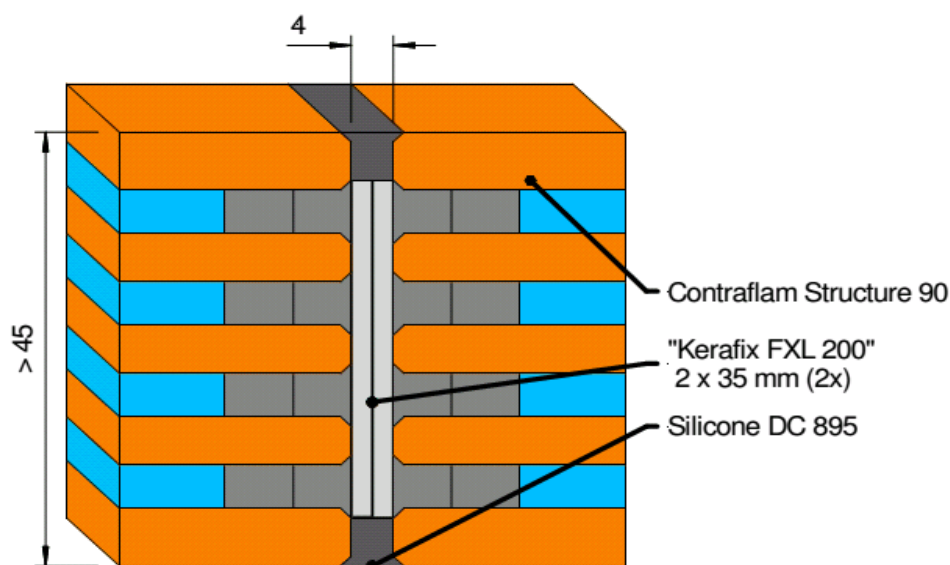
Table 38 – Maximum Permitted Glass Dimensions CFS 90 (45 mm minimum)		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.5



## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 90 FIRE RESISTING GLASS

#### Installation Instruction



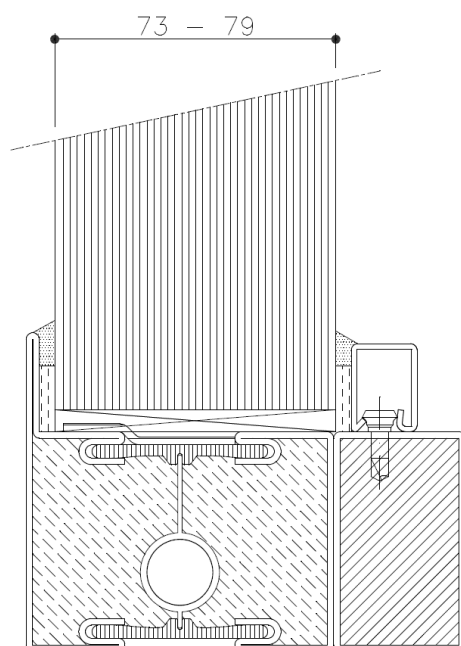
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 120 Glass (73 mm – 79 mm) in butt jointed steel framed screens for periods of 120 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' sealant.

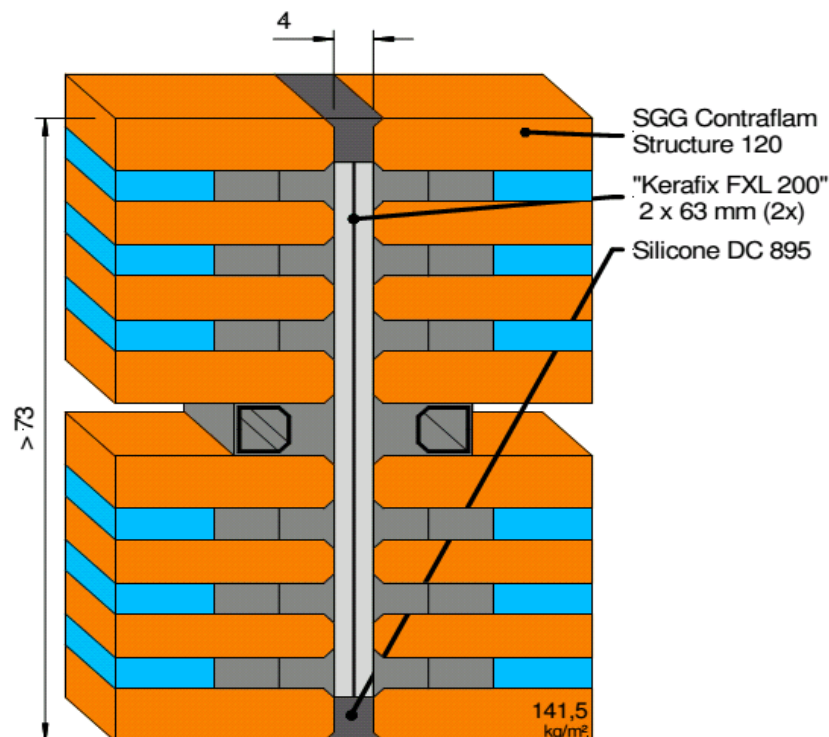
xx\* = Overall glass thickness – 10 mm

Table 39 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1300 (at 2646 high)	2750 (at 1250 wide)	3.44

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 120 FIRE RESISTING GLASS

#### Installation Instruction



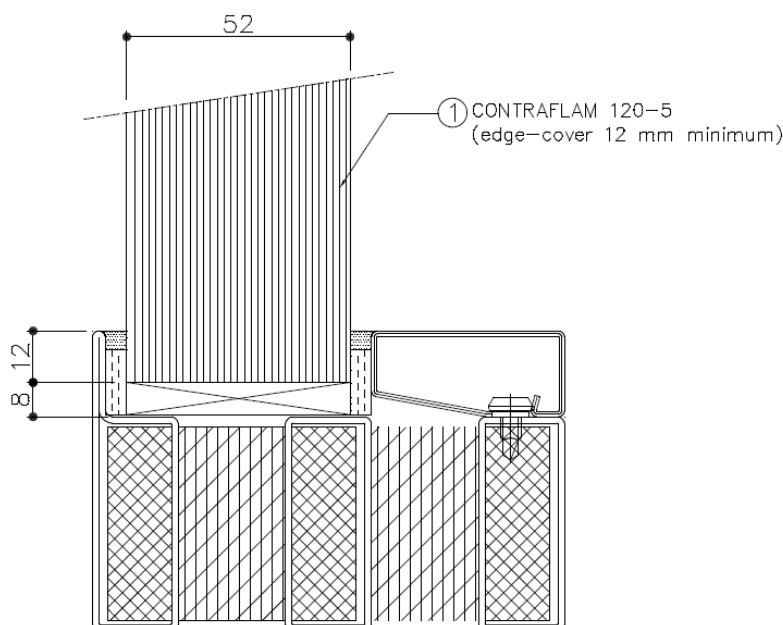
- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with: white spiritus or Dow Corning R41 (do not use other cleaning agents or solvents!)
- **Stick „Kerafix FXL 200“ on vertical glass edges**  
make sure it is centered!
- **Install glass panes and adjust to parallel position**  
glasses can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dow Corning 895" into the joint, remove excessive material and smooth the joint as usual**

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE FIRE RESISTING GLASS

**Contraflam Structure 120-5 Glass (52 mm minimum) in butt jointed steel framed screens for periods of 120 minutes integrity and insulation**

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 examples below. The glass shall be glazed into the screen as described in the table below and set on non-combustible setting blocks to determine the correct edge cover.



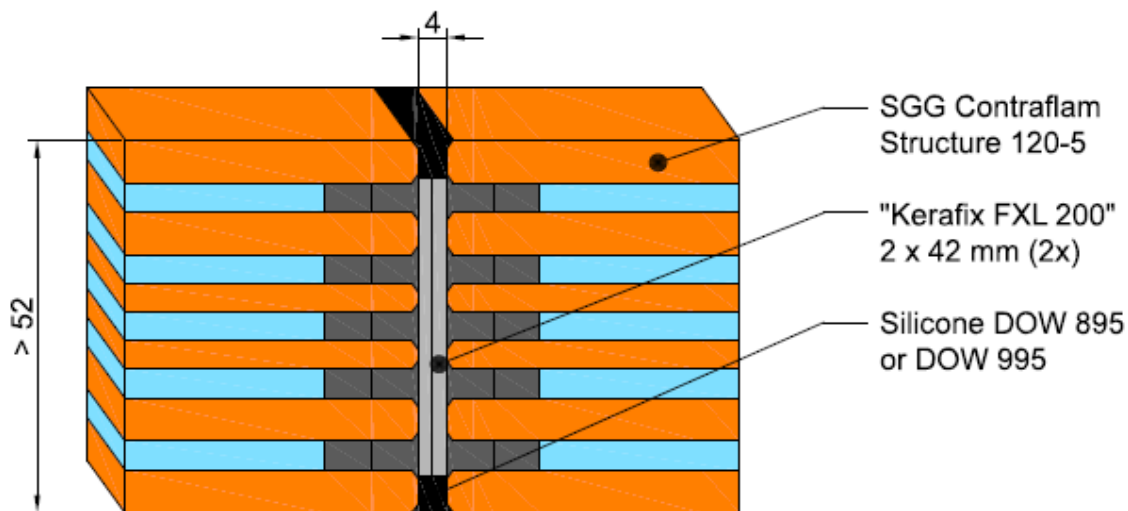
Joints between adjacent panes for internal application should be 4 mm wide and sealed with 2 pieces of 2 x (xx\*) mm wide Kerafix FXL 200 intumescent strips and top sealed with Dow Corning 'DC 895' or 'DC 995' sealant.

xx\* = Overall glass thickness – 10 mm

Table 40 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m <sup>2</sup> )
1500 (at 3000 high)	3000 (at 1500 wide)	4.50

## CERTIFICATE No CF 811B VETROTECH SAINT-GOBAIN INTERNATIONAL AG

### CONTRAFLAM STRUCTURE 120-5 FIRE RESISTING GLASS Installation Instruction



- **Clean the glass edges to be sealed**
  - remove excess polysulphide by razor blade / steel wool "00"
  - clean glass edge with white spirit or Dow Corning R41
  - (do not use other cleaning agents or solvents!)
- **Stick "Kerafix FXL 200" on vertical glass edges**
  - make sure it is centered!
- **Install glass panes and adjust to parallel position**
  - glass can be adjusted to parallel position by some continuous pressure in direction of the glass surfaces
- **Inject silicone "Dowsil (DOW) 895 or 995" into the joint, remove excessive material and smooth the joint as usual**