



CERTIFICATE OF APPROVAL

No CF 811A

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

Contraflam 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: 22nd August 2011
Revised: 26th February 2019
Valid to: 30th November 2021

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CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

This Certificate of Approval relates to the fire resistance of Contraflam 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 Door Lite	Steel Screens	120	15	7
	Timber Screens	30	0	8
Contraflam Door Lite Climaplus	Steel Screens	30	0	9
	Timber Screens	30	0	10
Contraflam Lite 30	Steel Screens	30	0	11
	Timber Screens	30	0	12
	Aluminium Screens	30	0	13 - 15
Contraflam Lite 30 Climaplus	Steel Screens	30	0	16
	Timber Screens	30	0	17
	Timber Screens	30	15	18
	Aluminium Screens	30	0	19
	Aluminium Screens	30	15	20
Contraflam Lite 60	Steel Screens	60	0	21
	Steel Screens	60	15	22
	Timber Screens	60	15	23
Contraflam Lite 60 Climaplus	Steel Screens	60	0	24
	Steel Screens	60	15	25
	Timber Screens	60	0	26
	Timber Screens	60	15	27
	Aluminium Screens	60	15	28
Contraflam Lite 90	Steel Screens	90	0	29
	Timber Screens	90	15	30
Contraflam Lite 90 Climaplus	Steel Screens	90	0	31
	Steel Screens	90	15	32
	Timber Screens	90	15	33
Contraflam Lite 120	Steel Screens	120	0	34
Contraflam Lite 120 Climaplus	Steel Screens	120	0	35



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CONTRAFLAM FIRE RESISTING GLASS

Glass	Application	Integrity - (mins)	Insulation - (mins)	Page No.
Contraflam 30	Steel Screens	30	30	36
	Steel Screens	60	30	37
	Steel Screens	90	30	38
	Steel Screens	120	30	39
	Timber Screens	30	30	40 – 42
	Timber Screens	60	30	43
	Timber Screens	90	30	44
	Aluminium Screens	30	30	45 – 50
Contraflam 30 Climaplus	Steel Screens	30	30	51
	Steel Screens	60	30	52
	Timber Screens	30	30	53 – 55
	Aluminium Screens	30	30	56 - 59
Contraflam 30 Climatop	Steel Screens	30	30	60
	Timber Screens	30	30	61
Contraflam 30 Contour	Steel Screens	120	30	62
	Timber Screens	30	30	63
Contraflam 30-2	Steel Screens	60	30	64
	Steel Screens	120	30	65
Contraflam 30-2 Climaplus	Steel Screens	60	30	66
Contraflam 60	Horizontal Steel Walkable Floor	60	60	67 – 68
	Horizontal Glazing	60	60	69
Contraflam 60-3	Steel Screens	60	60	70
	Steel Screens	90	60	71
	Steel Screens	120	60	72
	Timber Screens	60	60	73
	Aluminium Screens	60	60	74 – 79
Contraflam 60-3 Climaplus	Steel Screens	60	60	80
	Steel Screens	90	60	81
	Steel Screens	120	60	82
	Timber Screens	60	60	83
	Aluminium Screens	60	60	84 - 88



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CONTRAFLAM FIRE RESISTING GLASS

Glass	Application	Integrity - (mins)	Insulation - (mins)	Page No.
Contraflam 90-4	Steel Screens	90	90	89
Contraflam 90-4 Climaplus	Steel Screens	90	90	90
Contraflam 120-5	Steel Screens	120	120	91
Contraflam 120-6	Steel Screens	120	120	92
Contraflam 120-6 Climaplus	Steel Screens	120	120	93

This product is approved on the basis of:

- i) Initial type testing.
- 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

In the case of glazed screens; all maximum height, width and area dimensions relate to the glass pane size.

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 shall be minimum 15 mm, unless stated otherwise, as detailed for each specific application on the following pages.

The Contraflam glass family is approved in a nominal thickness from 11 to 80 mm (depending on application).

For timber constructions; where beading is depicted (on the relevant page of this certificate) on both faces of the glass – this must be strictly adhered to. i.e. there shall be no substitution of one of the beads for a rebated timber profile. Where a rebated timber profile is shown, however, this may be substituted for a beaded profile. Furthermore; where square beading is depicted a chamfered bead may be used provided the minimum dimensions are still met (including height and edge cover requirements). Where pins are depicted, screws may be used instead. The opposite is not applicable.

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E/198, C/022 & R/006

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CONTRAFLAM FIRE RESISTING GLASS

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 µm.

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.

The following glass types may incorporate a minimum 9 mm STADIP 44.2 laminated glass layer in substitution for the 5 mm SECURIT glass layer, used on one face of the composition of the Contraflam glass. Furthermore; the outer face of this laminated glass may, optionally, be a patterned glass. The above is subject to restrictions as defined on the applicable page of this certificate, details are given on the applicable pages:

Contraflam Door Lite	Contraflam Lite 30	Contraflam Lite 60
Contraflam Lite 90	Contraflam Lite 120	Contraflam 30
Contraflam 30-2	Contraflam 60-3	Contraflam 90-4
Contraflam 120-5	Contraflam 120-6	

Where insulation performance is required for steel or aluminium framed applications, care must be taken to ensure the steel or aluminium frame has test data proving its insulation performance for the required duration using insulating glasses.

Glazing pocket (aperture) liner, Mann McGowan Pyrostrip 300 SA can be substituted for one of the following liners:

- Kuhn Flexpan 200
- Odice Flexilodice

Glazing pocket (aperture) liner tape shall be \geq the thickness of the glass.

Mann McGowan Pyrotape CF tape can be substituted for one of the following ceramic fibre tapes:

- Kuhn Kerafix 2000
- Hodgson Sealants Firetape Ceramic
- Fiberfrax Ceramic Tape
- Ceramic fibre glazing tape may be replaced with any CERTIFIRE approved glazing gasket system.

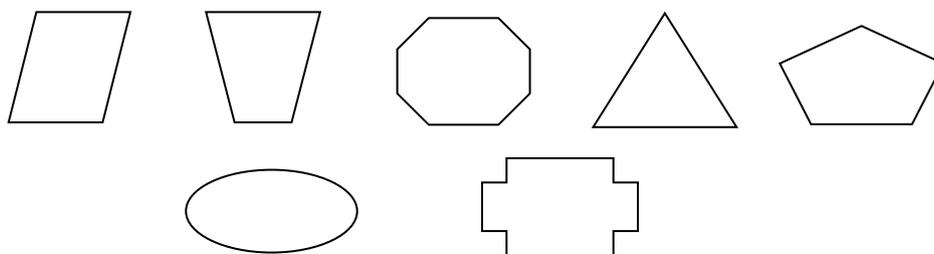
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VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Shapes:

It is also acceptable to include the Contraflam glasses in shaped apertures, i.e. circles, ovals, arches, quadrants, etc (examples detailed below) within timber, steel and aluminium screens (subject to limitations in the framing systems). For rectilinear apertures angles between adjoining perimeter beads should not be less than 45°. Where shaped apertures are included in timber framed screens, only finger jointed glazing beads are acceptable. Maximum linear dimensions or areas as approved should not be exceeded.



Insulating Glass Units (Climaplus)

Where Insulating Glass Units (Climaplus) are approved the non-fire, counter, pane may be a float glass, a toughened glass, patterned glass or a laminated glass (including laminated patterned glass) unless stated otherwise on the relevant page.

The fire resistant pane of an IGU construction can be used as a single glazed pane in any previously fire tested or CERTIFIRE approved system.

Subject to product availability, any single pane, fire resistant, glass listed in this certificate may be used as the fire resistant pane of a fire rated IGU. The IGU may be glazed in to any previously fire tested or CERTIFIRE approved system but is limited in size to those of the listed fire rated glass.

Contraflam Climaplus units may incorporate internal blind systems or Georgian bars where required.

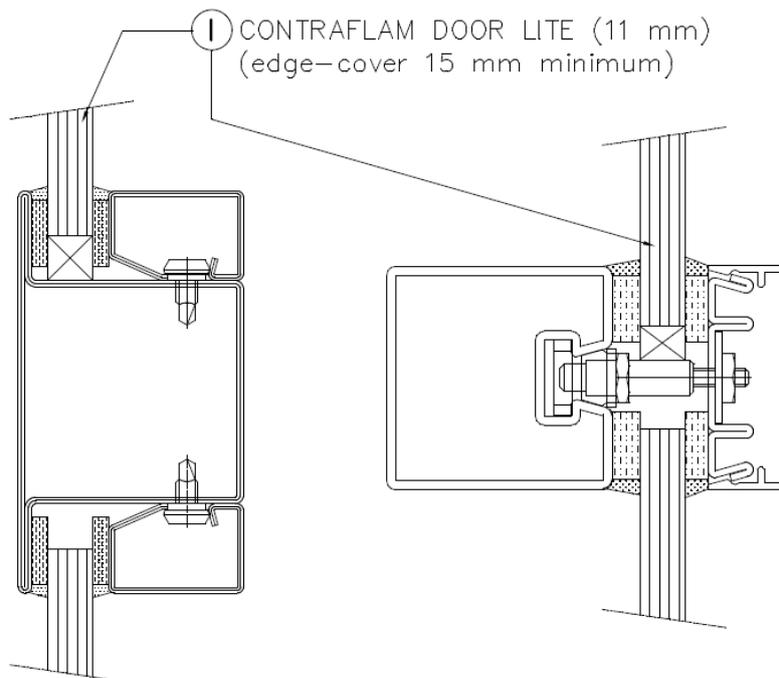
The screens shall be no greater than 4000 mm high unless suitable tie backs and/or fire protected structural supports are provided, unless glass height is ≥ 4000 mm, or unless there is suitable test evidence proving otherwise.

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Door Lite Glass in steel screens for periods of 120 minutes integrity and 15 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.



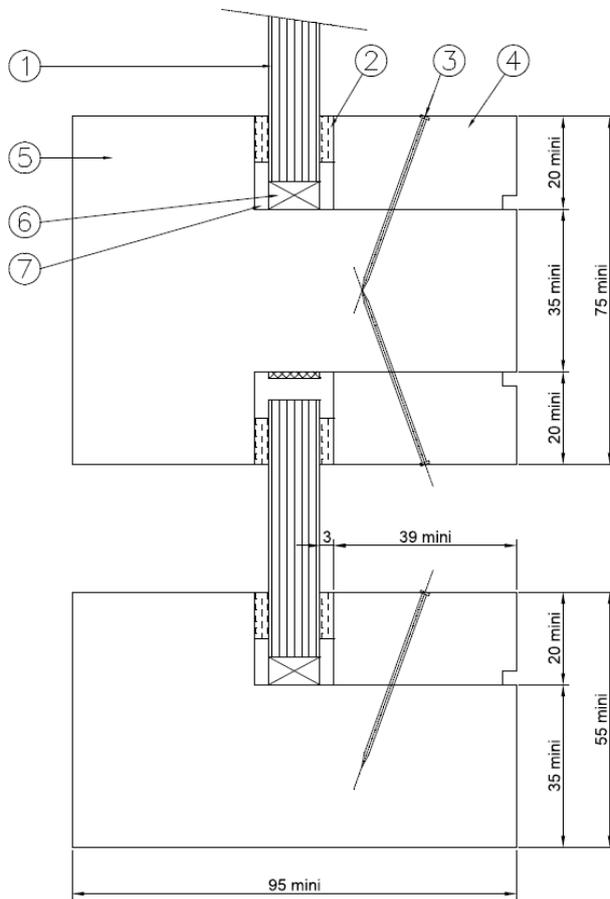
Max. Width (mm)	Max. Width (mm)	Max. Area (m ²)
1100 (at 2200 high)	1100 (at 2200 high)	2.42

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Door Lite Glass in timber framed screens for periods of 30 minutes integrity

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM DOOR LITE (11 mm thick) (edge-cover 15 mm)
- ② Mann McGowan Pyroglaze 30 glazing seal 3 x 10 mm
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 39 mm (h x w) timber glazing beads minimum density 510 kg/m³
- ⑤ Minimum 95 x 55 mm outer timber framing section & 95 x 75 mm intermediate timber framing section. Minimum density 510 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Mann McGowan Pyroglaze 300 SA, section 2 mm x glass thickness (mm)

Table 2 – Maximum Permitted Glass Dimensions

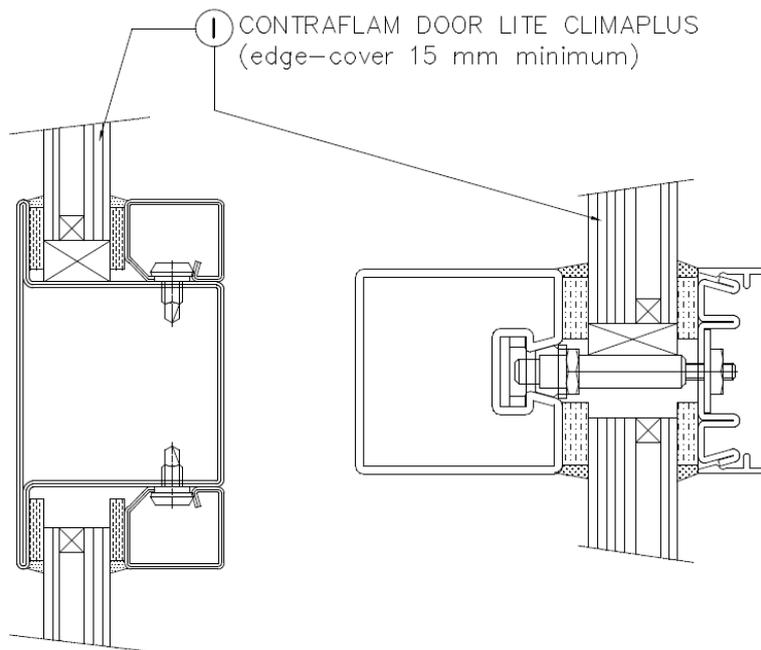
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1100 (at 2200 high)	2200 (at 1100 wide)	2.42

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Door Lite Climaplus Glass in steel 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1100 (at 2200 high)	2200 (at 1100 wide)	2.42

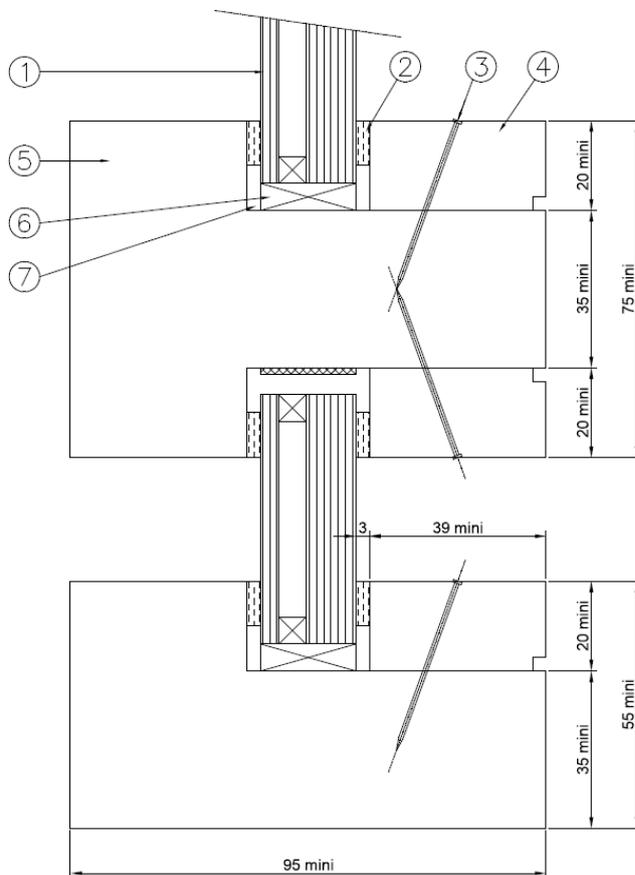
Note: If applicable, a STADIP laminated counterpane or STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Door Lite Climaplus Glass in timber framed screens for periods of 30 minutes integrity

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM DOOR LITE CLIMAPLUS (edge-cover 15 mm)
- ② Mann McGowan Pyroglaze 30 glazing seal 3 x 10 mm
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 39 mm (h x w) timber glazing beads minimum density 510 kg/m³
- ⑤ Minimum 95 x 55 mm outer timber framing section & 95 x 75 mm intermediate timber framing section. Minimum density 510 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Mann McGowan Pyroglaze 300 SA, section 2 mm x glass thickness (mm)

Table 4 – Maximum Permitted Glass Dimensions

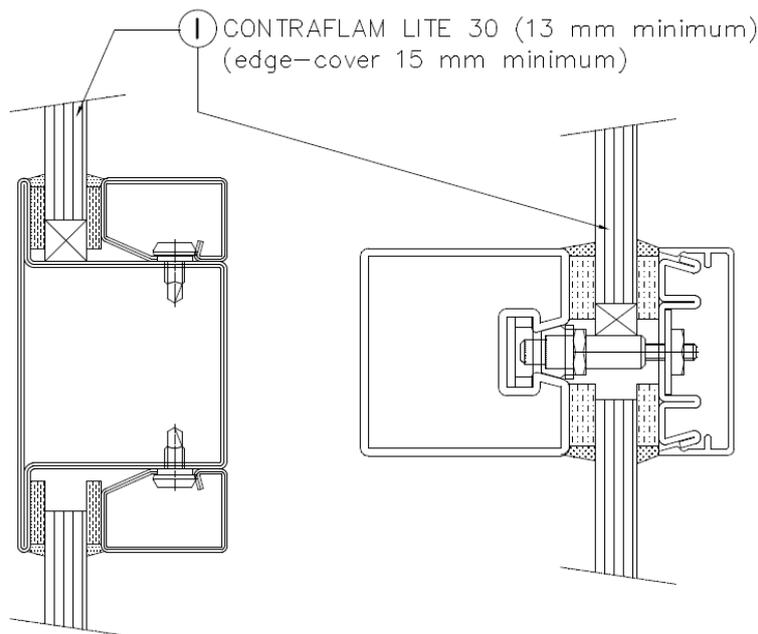
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1100 (at 2200 high)	2200 (at 1100 wide)	2.42

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Glass in 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.



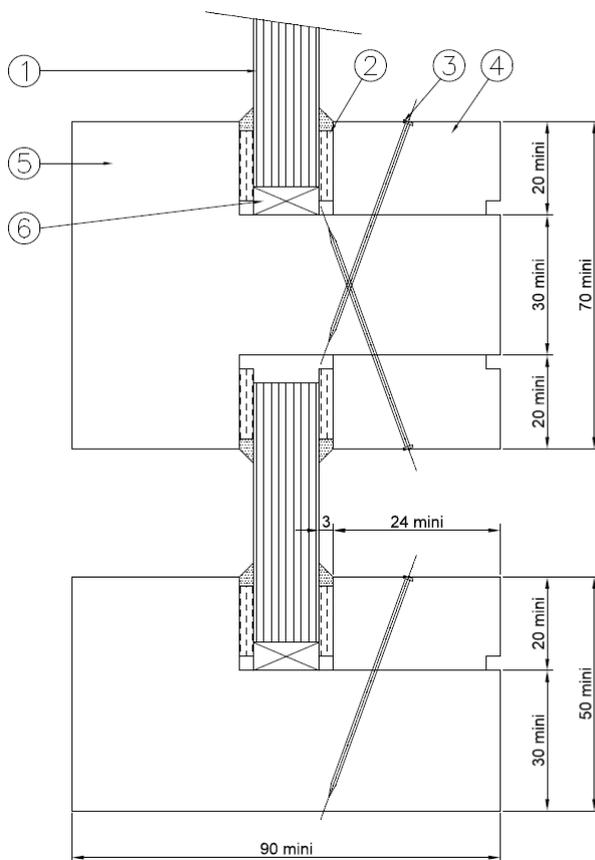
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Glass in timber framed screens for periods of 30 minutes integrity

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 30 (13 mm thick minimum) (edge-cover 15 mm)
- ② Kuhn Kerafix 2000 Tape 3 x 15 mm, topped with neutral curing silicone
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 24 mm (h x w) timber glazing beads minimum density 465 kg/m³
- ⑤ Minimum 90 x 50 mm outer timber framing section & 90 x 70 mm intermediate timber framing section. Minimum density 465 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 1826 high)	3000 (at 1400 wide)	4.2
1680 (at 2500 high)	3000 (at 1400 wide)	4.23
2400 (at 1400 high)	1680 (at 2000 wide)	3.38

Paul Dyer

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Glass in Aluprof MB-78EI aluminium framed screens for periods of 30 minutes integrity.

The glass shall be installed into the Aluprof MB-78EI aluminium framing system (which is covered appropriately by test or assessment evidence).

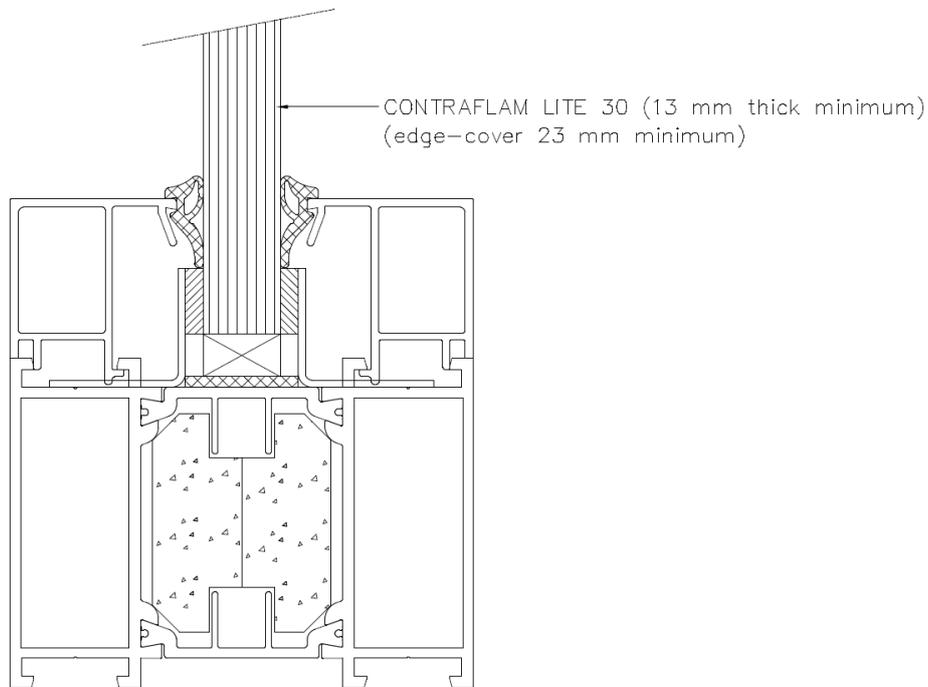


Table 7 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1749 (at 2008 high)	2329 (at 1508 wide)	3.51
1345 (at 2249 high)	2608 (at 1160 wide)	3.02

Paul Duggan

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Glass in Reynaers CS77-FP aluminium framed screens for periods of 30 minutes integrity

The glass shall be installed into the Reynaers CS77-FP aluminium framing system (which is covered appropriately by test or assessment evidence).

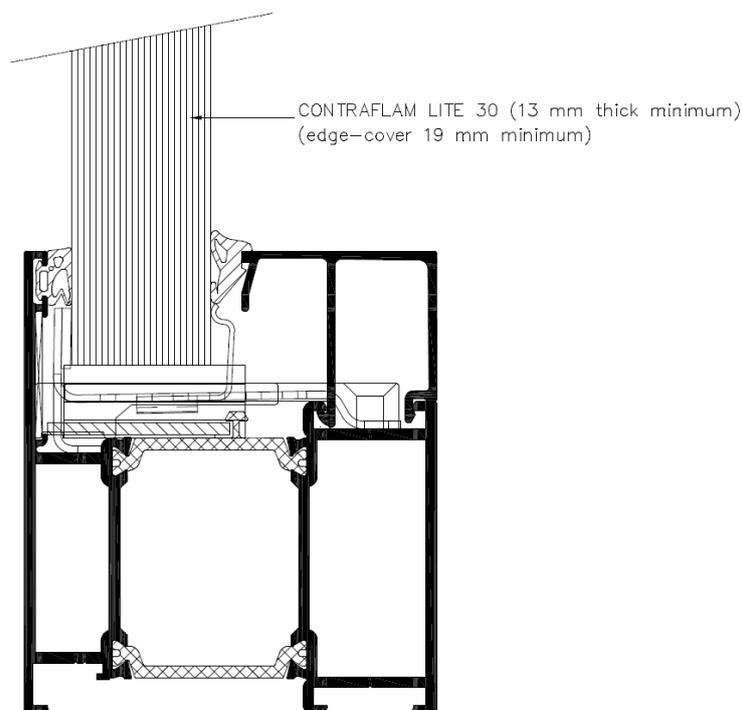


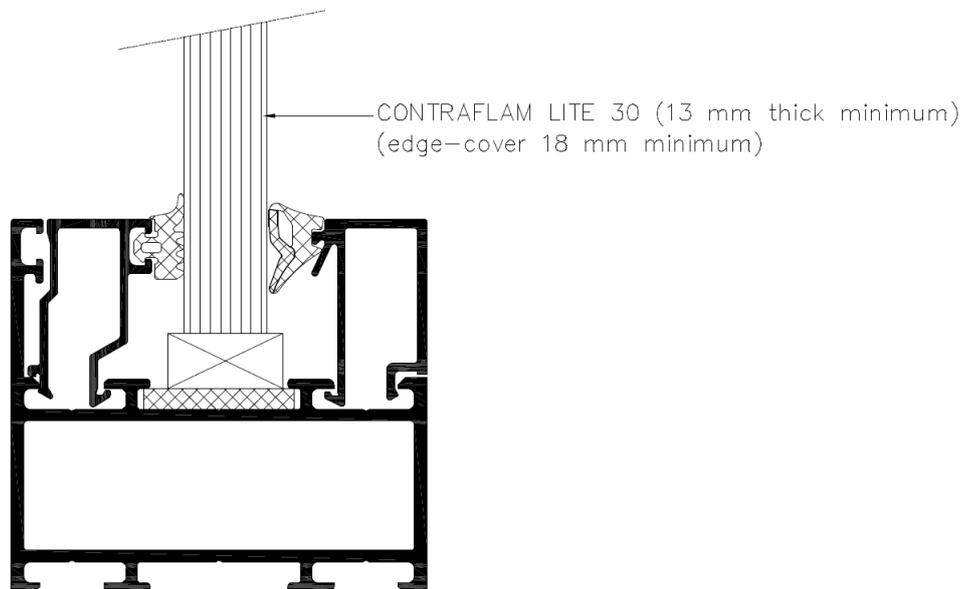
Table 8 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1740 (at 3000 high)	3480 (at 1500 wide)	5.22

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Glass in Schuco ADS65 Ni FR 30 aluminium framed screens for periods of 30 minutes integrity.

The glass shall be installed into the Schuco ADS65 Ni FR30 aluminium framing system (which is covered appropriately by test or assessment evidence).



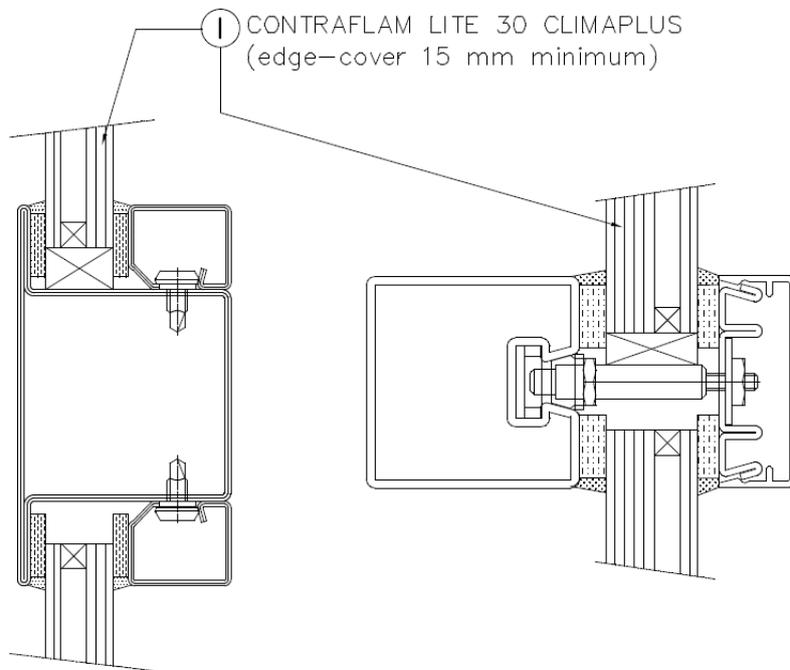
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2400 (at 1400 high)	1680 (at 2000 wide)	3.36
1730 (at 2898 high)	3622 (at 1384 wide)	5.01

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Climaplus Glass in 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.



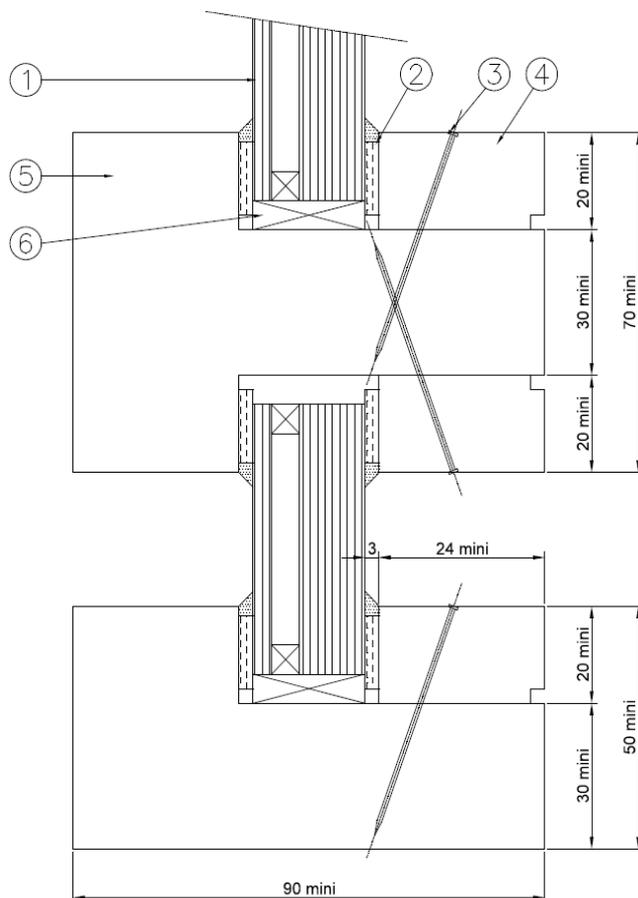
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Climaplus Glass in timber framed screens for periods of 30 minutes integrity

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 30 CLIMAPLUS (edge-cover 15 mm)
- ② Kuhn Kerafix 2000 Tape 3 x 15 mm, topped with neutral curing silicone
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 24 mm (h x w) timber glazing beads minimum density 465 kg/m³
- ⑤ Minimum 90 x 50 mm outer timber framing section & 90 x 70 mm intermediate timber framing section. Minimum density 465 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)

Table 11 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62

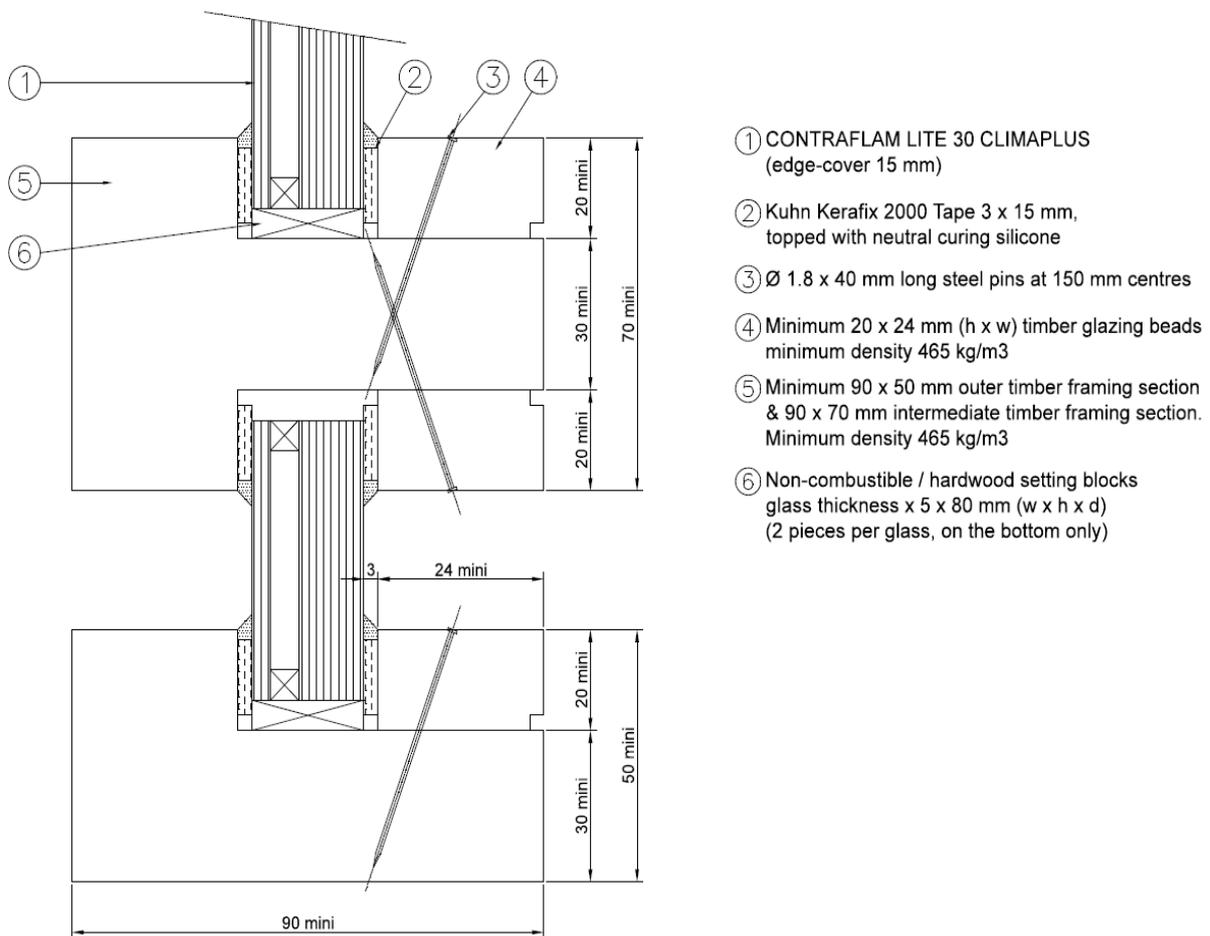
Paul Duggan

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Climaplus in timber framed screens for periods of 30 minutes integrity and 15 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 30 CLIMAPLUS (edge-cover 15 mm)
- ② Kuhn Kerafix 2000 Tape 3 x 15 mm, topped with neutral curing silicone
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 24 mm (h x w) timber glazing beads minimum density 465 kg/m³
- ⑤ Minimum 90 x 50 mm outer timber framing section & 90 x 70 mm intermediate timber framing section. Minimum density 465 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
3800 (at 2300 high)	2300 (at 3800 wide)	8.74

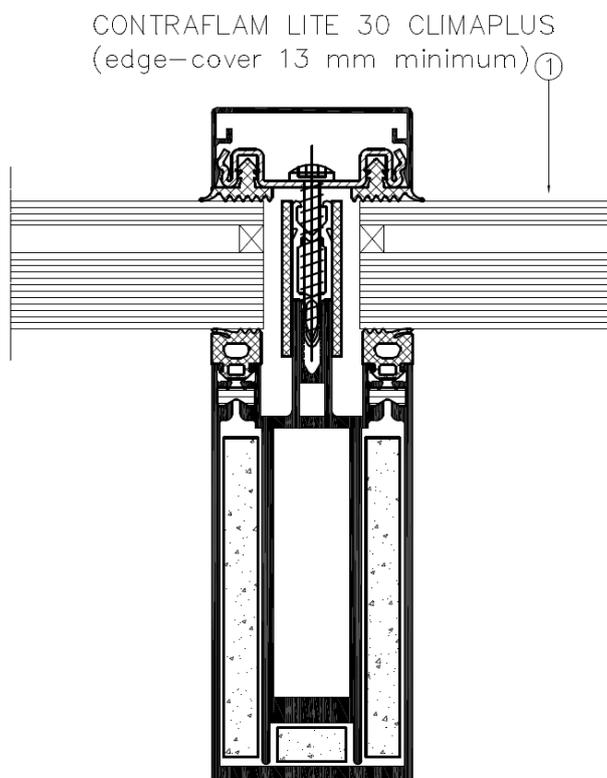
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Climaplus Glass in Schuco FW 50+ BF aluminium framed screens, in a horizontal orientation, for periods of 30 minutes integrity

The glass shall be installed into the Schuco FW 50+ BF aluminium framing system (which is covered appropriately by test or assessment evidence).



The construction may be installed between 0° and 80° (from the horizontal).

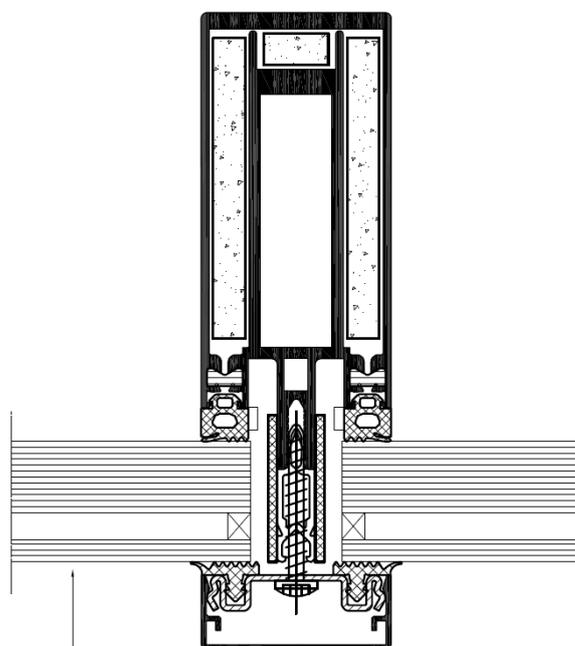
Table 13 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1236 (at 2400 high)	2472 (at 1200 wide)	2.97
2266 (at 1100 high)	1133 (at 2200 wide)	2.49

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 30 Climaplus Glass in Schüco FW 50+ BF aluminium framed screens for periods of 30 minutes integrity and 15 minutes insulation

The glass shall be installed into the Schuco FW 50+ BF aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM LITE 30 CLIMAPLUS
(edge-cover 13 mm minimum)

Table 14 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Glass in 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.

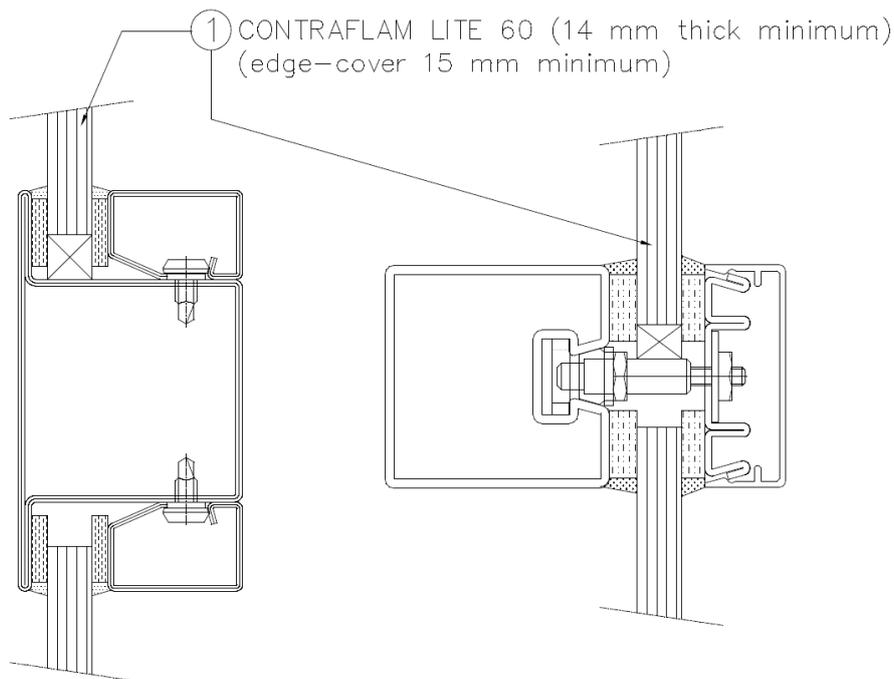


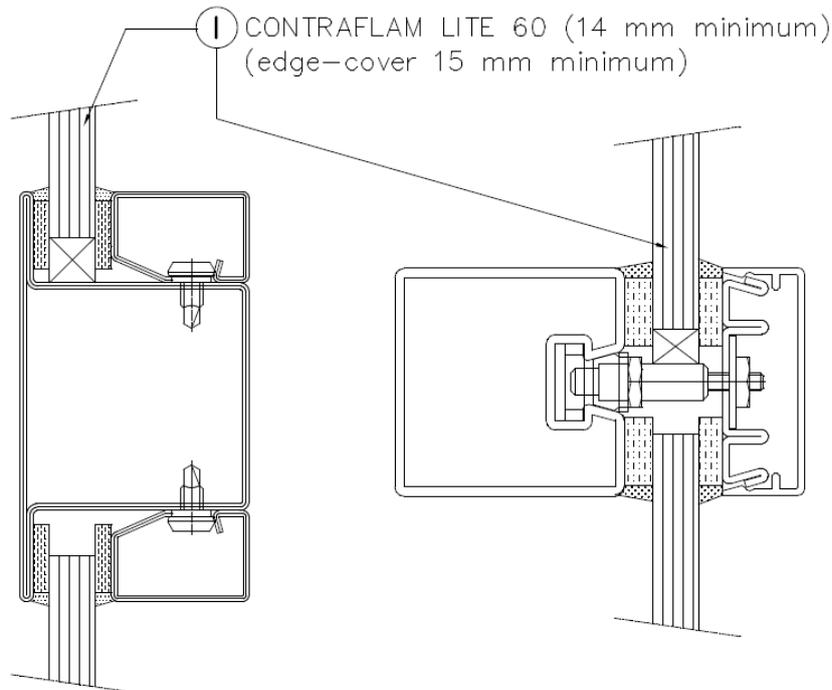
Table 15 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2500 (at 3000 high)	3750 (at 2000 wide)	7.5

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CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Glass in steel framed screens for periods of 60 minutes integrity and 15 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2037 (at 2940 high)	3675 (at 1630 wide)	5.99
2825 (at 1500 high)	1695 (at 2500 wide)	4.23

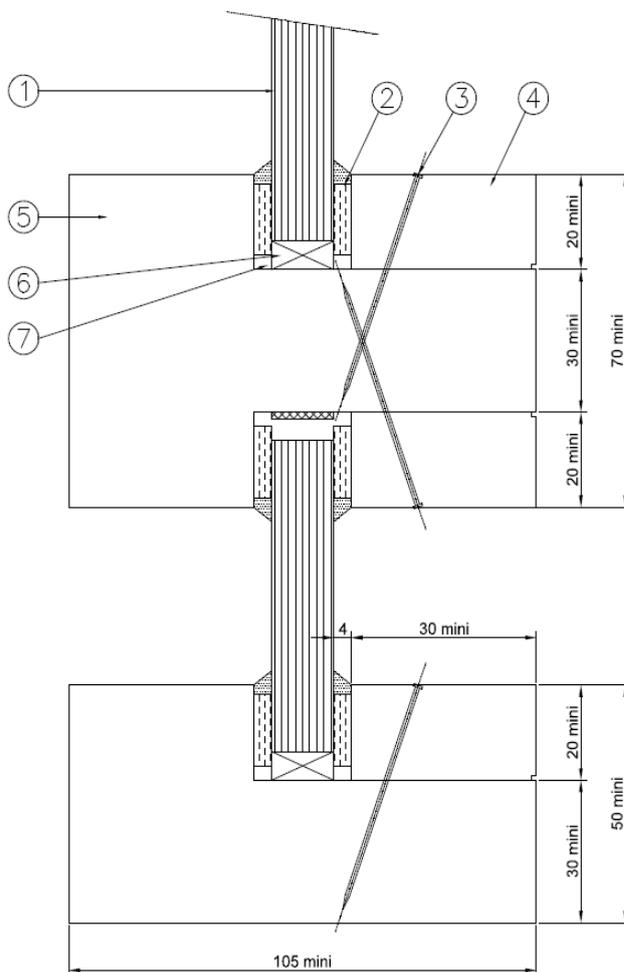
Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Glass in timber framed screens for periods of 60 minutes integrity and 15 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 60 (14 mm thick minimum) (edge-cover 16 mm)
- ② Kuhn Kerafix 2000 Tape 4 x 15 mm, topped with neutral curing silicone
- ③ Ø 2 x 50 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 596 kg/m³
- ⑤ Minimum 105 x 50 mm outer timber framing section & 105 x 70 mm intermediate timber framing section. Minimum density 596 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 6 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Kuhn Flexpan 200, section 1.5 mm x glass thickness (mm)

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
3800 (at 2300 high)	2300 (at 3800 wide)	8.74

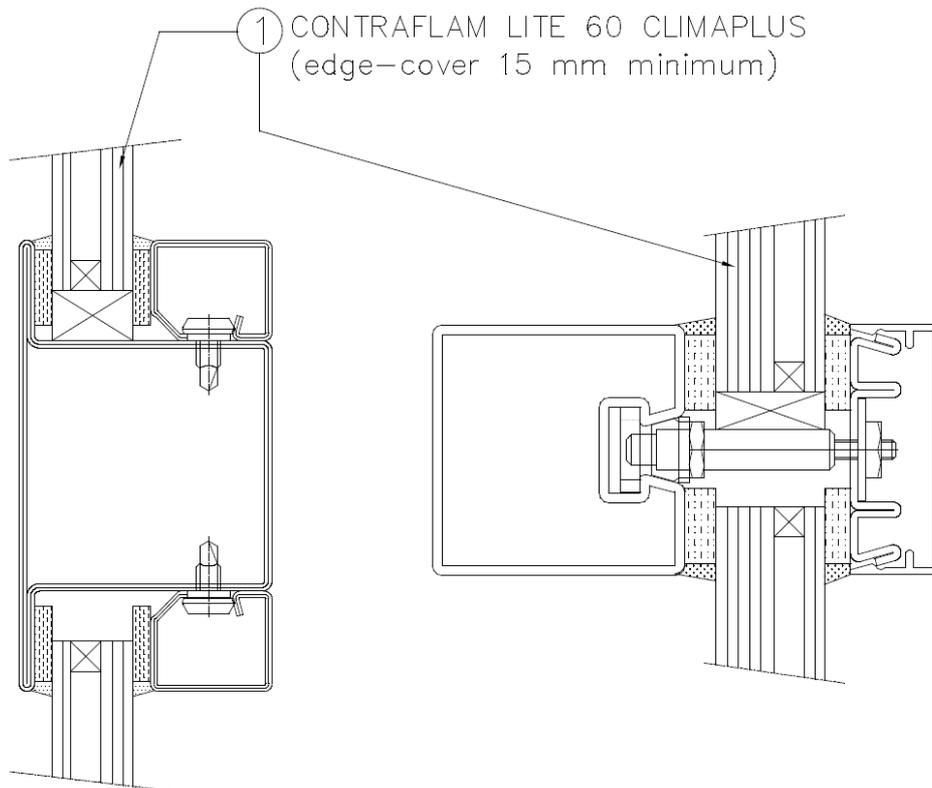
Paul Dwyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Climaplus Glass in 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.



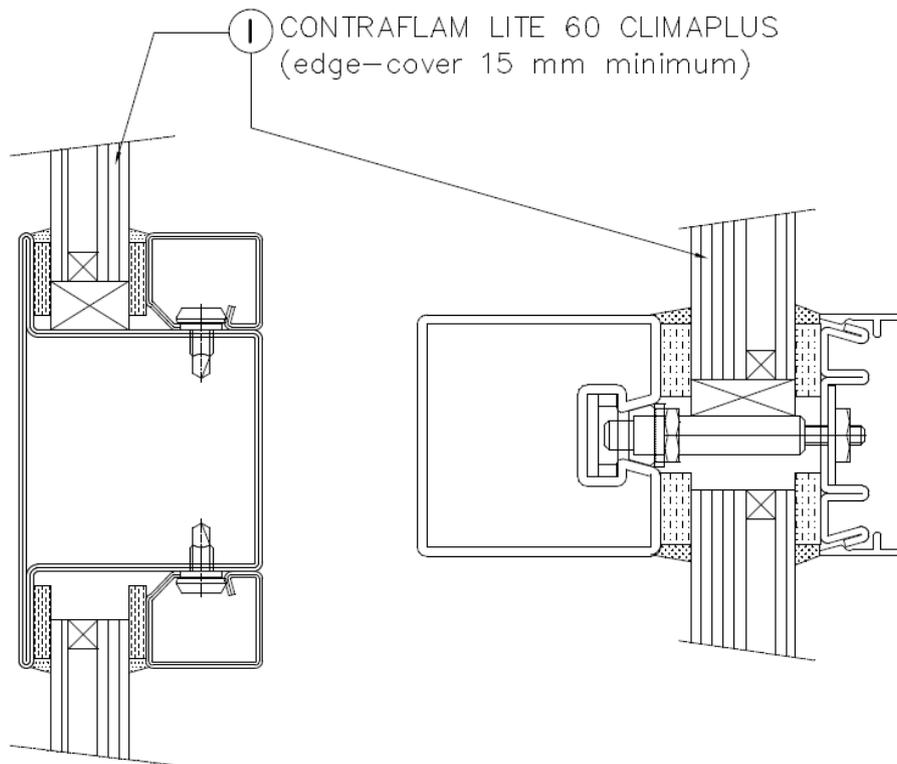
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Climaplus Glass in steel framed screens for periods of 60 minutes integrity and 15 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.



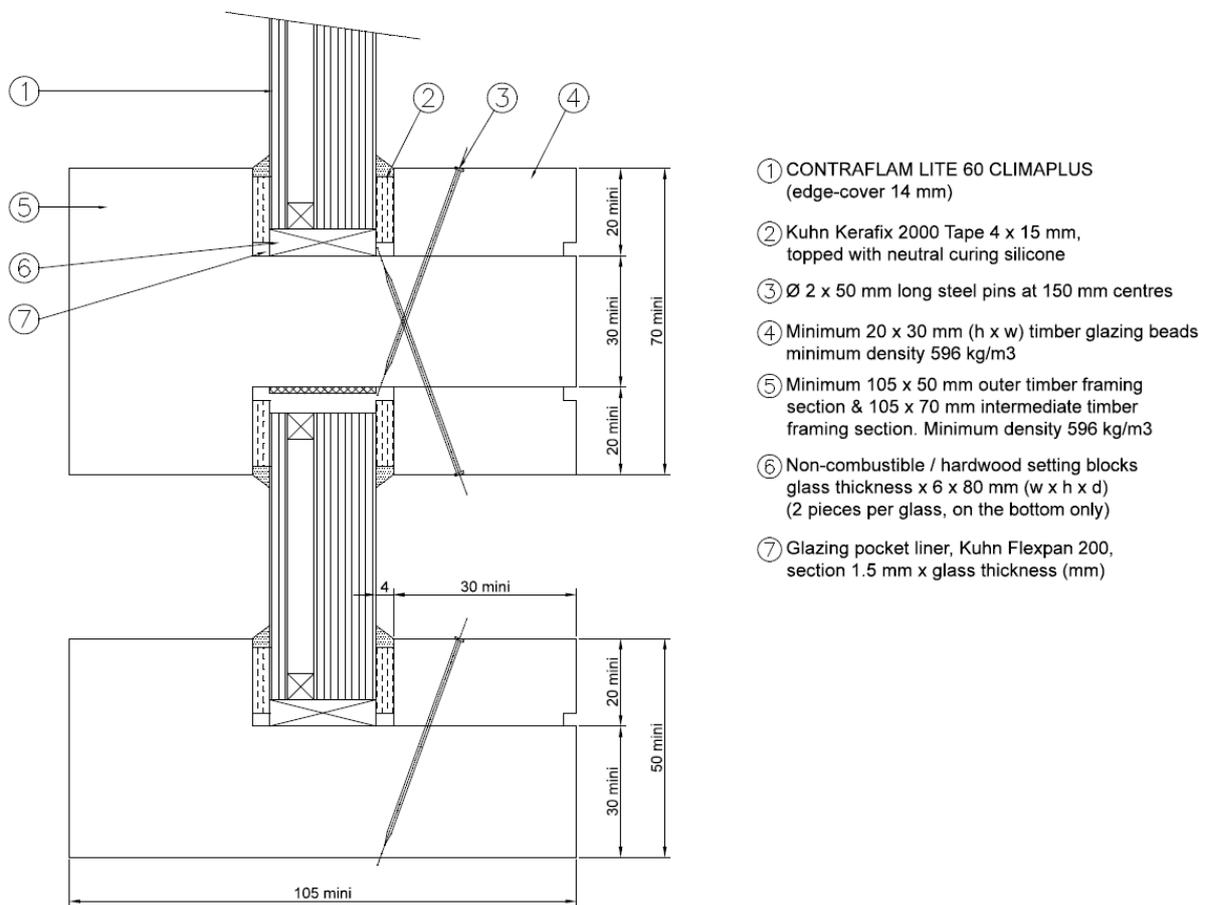
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2037 (at 2940 high)	3675 (at 1630 wide)	5.99

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Climaplus Glass in timber framed screens for periods of 60 minutes integrity

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 60 CLIMAPLUS (edge-cover 14 mm)
- ② Kuhn Kerafix 2000 Tape 4 x 15 mm, topped with neutral curing silicone
- ③ Ø 2 x 50 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 596 kg/m³
- ⑤ Minimum 105 x 50 mm outer timber framing section & 105 x 70 mm intermediate timber framing section. Minimum density 596 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 6 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Kuhn Flexpan 200, section 1.5 mm x glass thickness (mm)

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62
3800 (at 2300 high)	2300 (at 3800 wide)	8.74

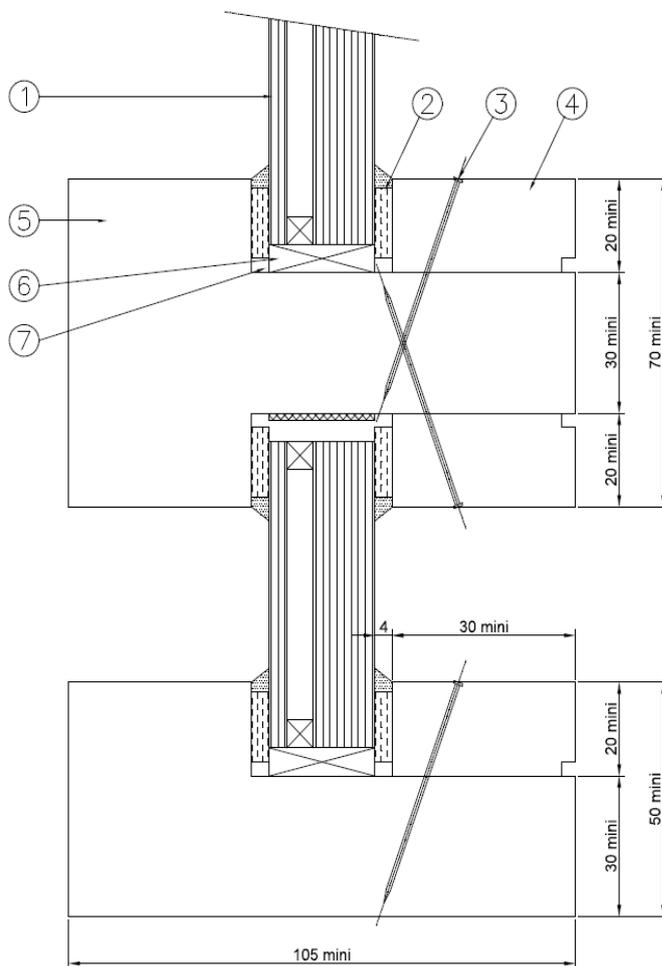
Paul Dwyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Climaplus Glass in timber framed screens for periods of 60 minutes integrity and 15 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 60 CLIMAPLUS (edge-cover 14 mm)
- ② Kuhn Kerafix 2000 Tape 4 x 15 mm, topped with neutral curing silicone
- ③ Ø 2 x 50 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 596 kg/m³
- ⑤ Minimum 105 x 50 mm outer timber framing section & 105 x 70 mm intermediate timber framing section. Minimum density 596 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 6 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Kuhn Flexpan 200, section 1.5 mm x glass thickness (mm)

Table 21 – Maximum Permitted Glass Dimensions

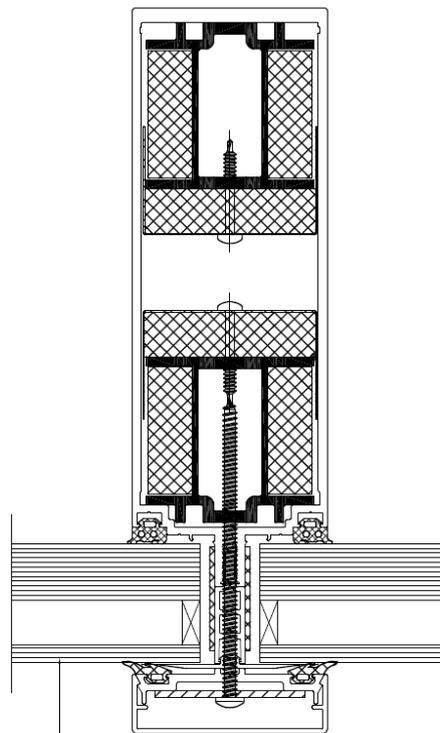
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2037 (at 2940 high)	3675 (at 1630 wide)	5.99

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 60 Climaplus Glass in Kawneer AA110 FR aluminium framed screens for periods of 60 minutes integrity and 15 minutes insulation

The glass shall be installed into the Kawneer AA110 FR aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM LITE 60 CLIMAPLUS
(edge-cover 22 mm minimum)

Table 22 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2301 (at 3000 high)	3630 (at 1902 wide)	6.90

Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 90 Glass in steel framed screens for periods of 90 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.

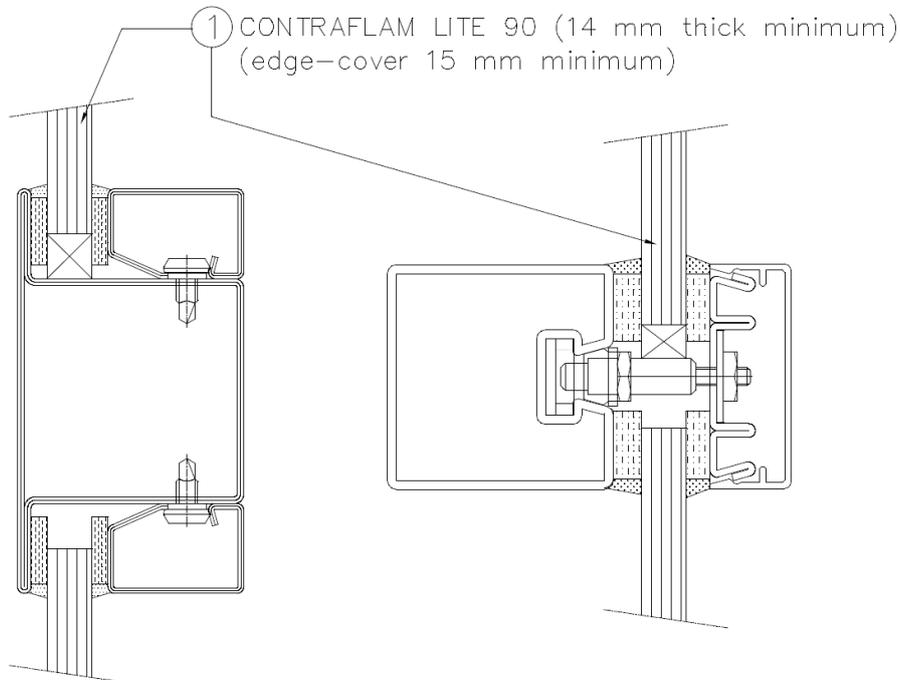


Table 23 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2500 (at 3000 high)	3750 (at 2000 wide)	7.5

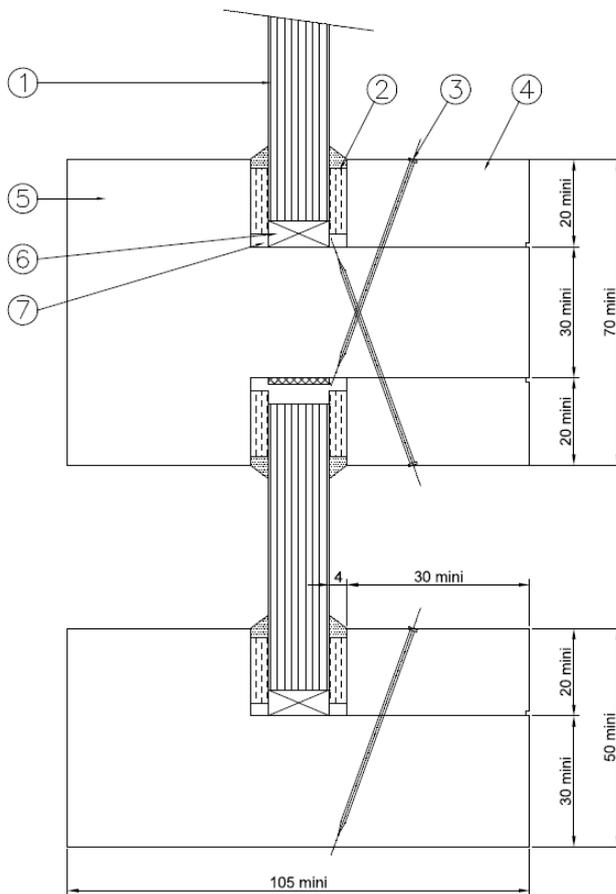
Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 90 Glass in timber framed screens for periods of 90 minutes integrity and 15 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 90 (14 mm thick minimum) (edge-cover 16 mm)
- ② Kuhn Kerafix 2000 Tape 4 x 15 mm, topped with neutral curing silicone
- ③ Ø 2 x 50 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 596 kg/m³
- ⑤ Minimum 105 x 50 mm outer timber framing section & 105 x 70 mm intermediate timber framing section. Minimum density 596 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 6 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Kuhn Flexpan 200, section 1.5 mm x glass thickness (mm)

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1400 (at 2230 high)	2230 (at 1400 wide)	3.12

Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 90 Climaplus Glass in steel framed screens for periods of 90 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.

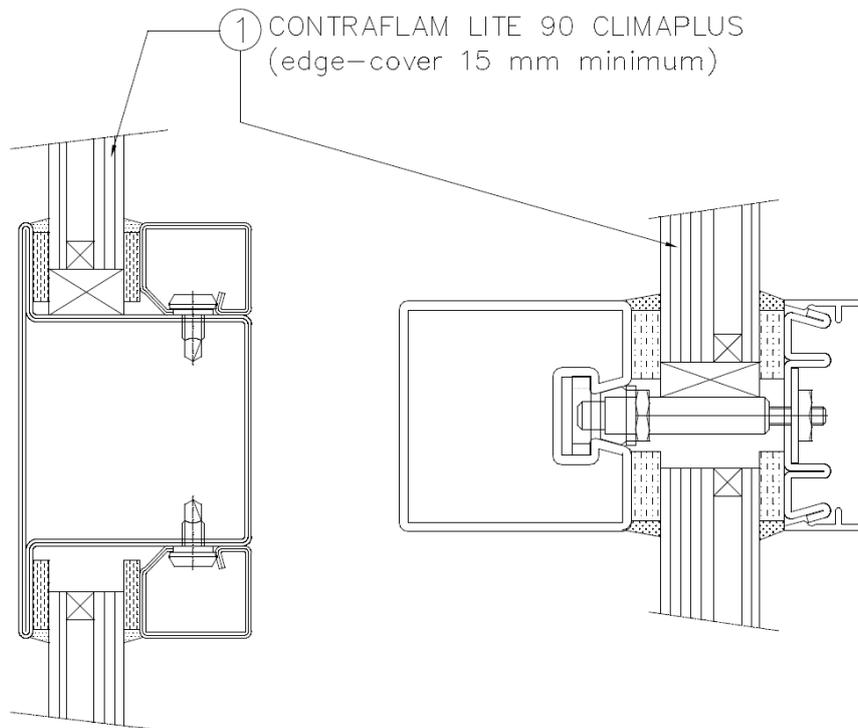


Table 25 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 3260 high)	3800 (at 1500 wide)	5.70

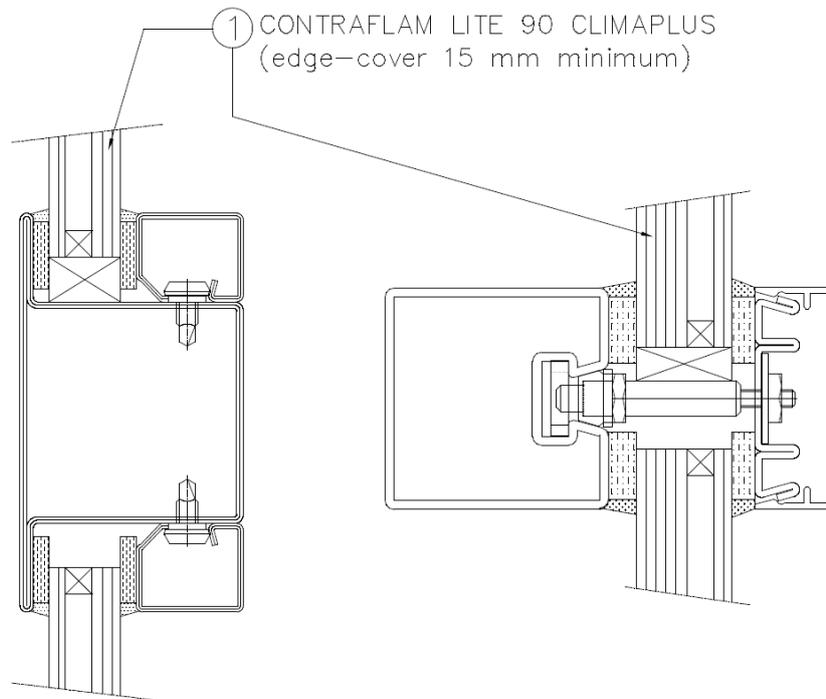
Note: If applicable, a STADIP laminated counterpane or STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 90 Climaplus Glass in steel framed screens for periods of 90 minutes integrity and 15 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1430 (at 1730 high)	1730 (at 1430 wide)	2.47

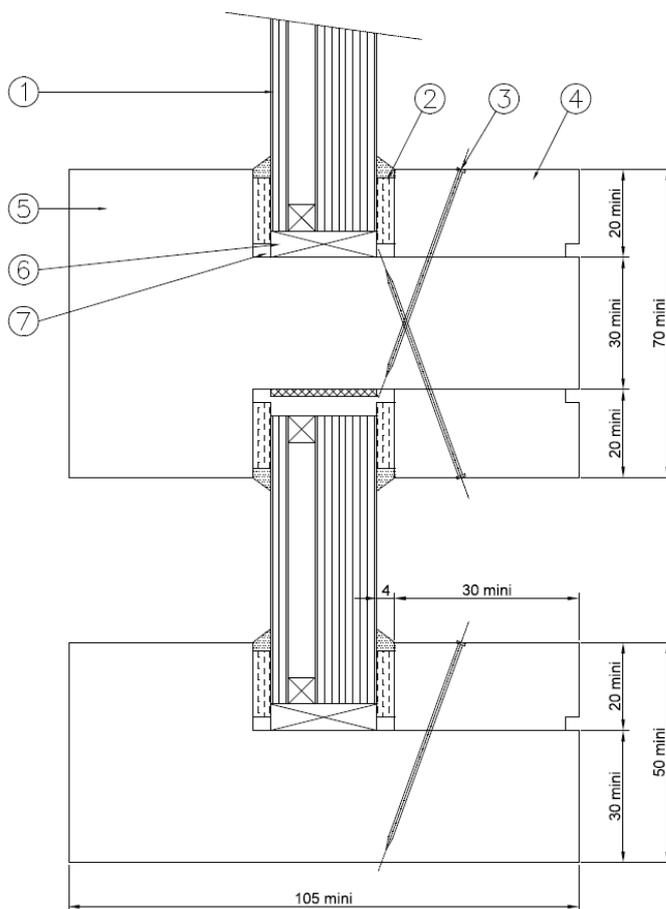
Note: If applicable, a STADIP laminated counterpane or STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 90 Climaplus Glass in timber framed screens for periods of 90 minutes integrity and 15 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM LITE 90 CLIMAPLUS (edge-cover 14 mm)
- ② Kuhn Kerafix 2000 Tape 4 x 15 mm, topped with neutral curing silicone
- ③ Ø 2 x 50 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 596 kg/m³
- ⑤ Minimum 105 x 50 mm outer timber framing section & 105 x 70 mm intermediate timber framing section. Minimum density 596 kg/m³
- ⑥ Non-combustible / hardwood setting blocks glass thickness x 6 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑦ Glazing pocket liner, Kuhn Flexpan 200, section 1.5 mm x glass thickness (mm)

Table 27 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1430 (at 1730 high)	1730 (at 1430 wide)	2.47

Note: If applicable, a STADIP laminated counterpane or STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

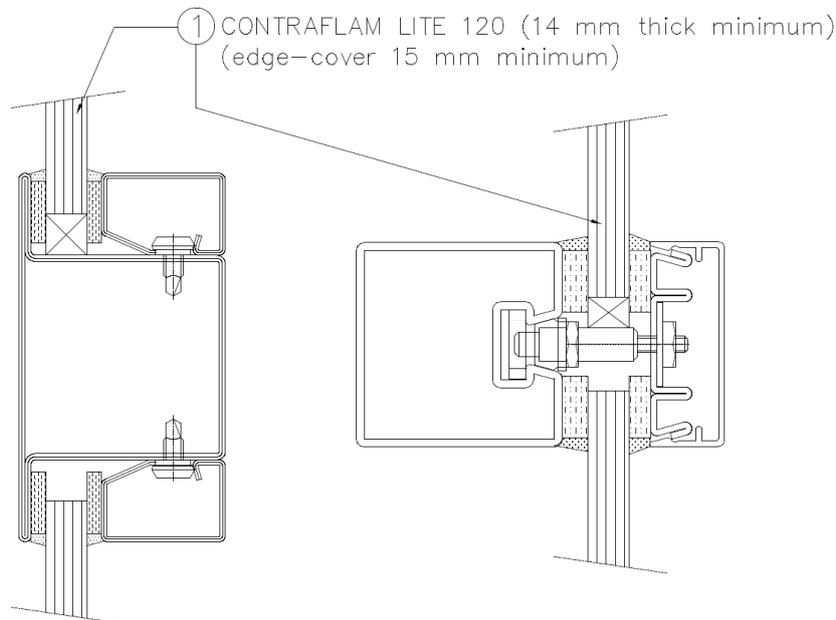
Paul Dwyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 120 Glass in steel framed screens for periods of 120 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1716 (at 2910 high)	3492 (at 1430 wide)	5.03
1426 (at 2896 high)	3616 (at 1142 wide)	4.13
2200 (at 3000 high)	3300 (at 2000 wide)	6.60

Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam Lite 120 Climaplus Glass in steel framed screens for periods of 120 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.

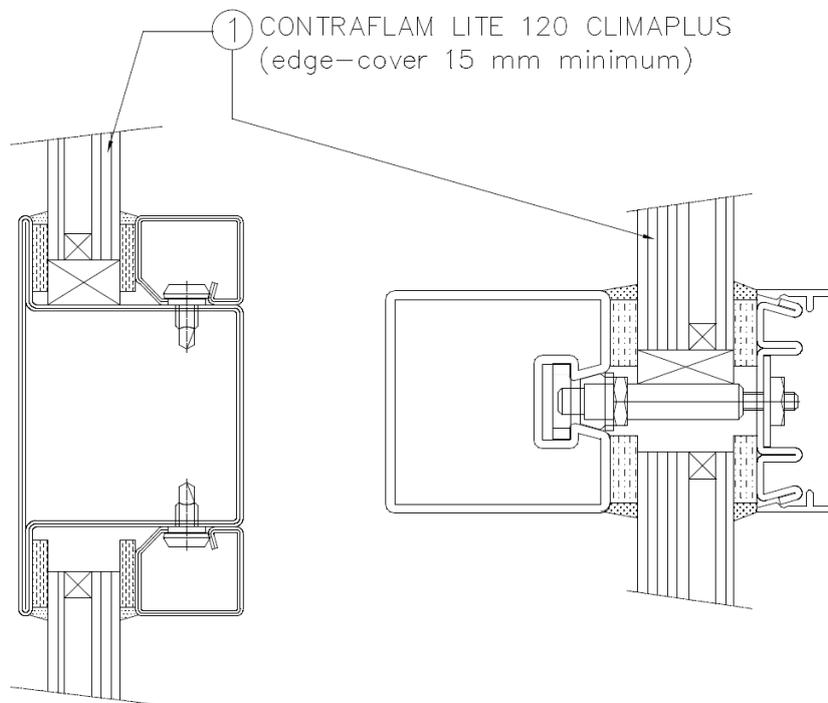


Table 29 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1296* (at 2200 high)	2376* (at 1200 wide)	2.85*

Note: If applicable, a STADIP laminated counterpane or STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

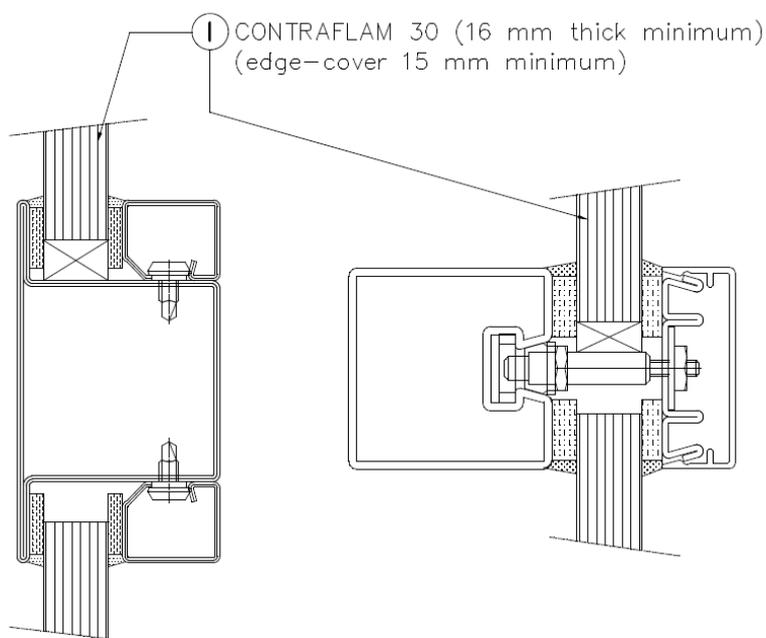
***Note:** Approved in single pane fixed lights only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in steel framed screens for periods of 30 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1750 (at 2400 high)	3000 (at 1400 wide)	4.2
3350 (at 1500 high)	3350 (at 1500 wide)	5.03
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

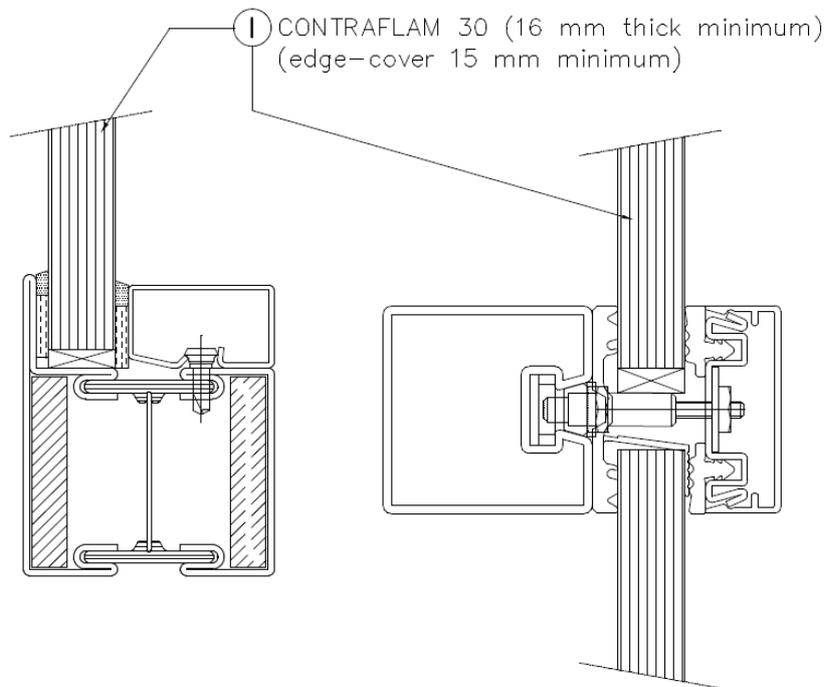
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.50
1800* (at 3000 high)	3600* (at 1500 wide)	5.40*

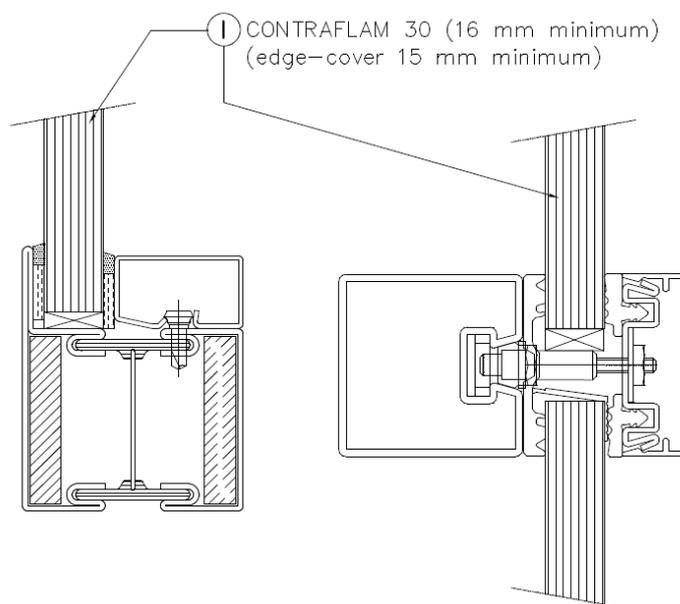
*Note: approved in single pane fixed lights only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in steel framed screens for periods of 90 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5
1800* (at 3000 high)	3600* (at 1500 wide)	5.4*

Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

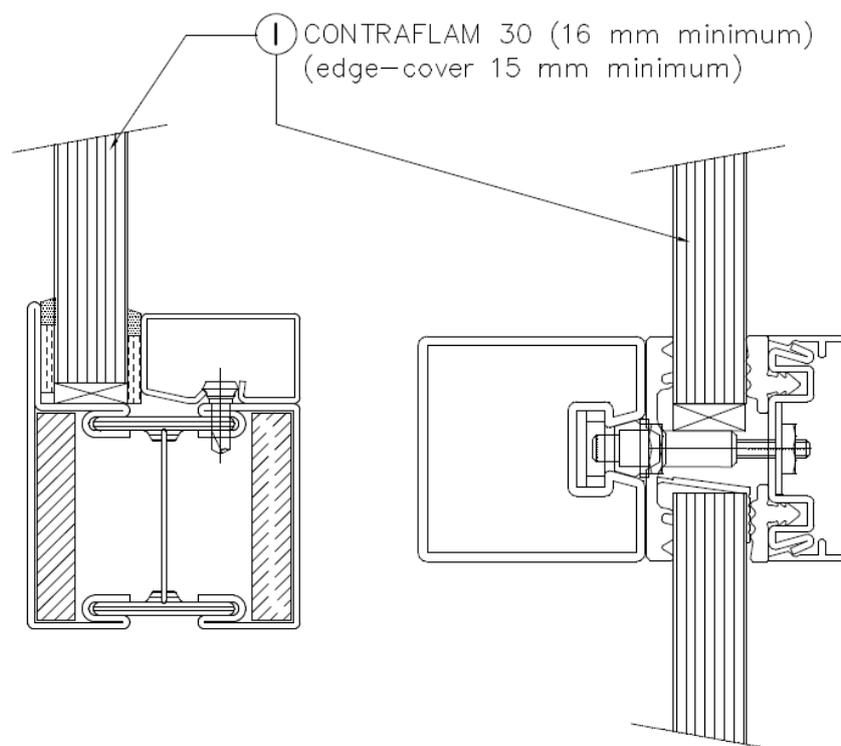
***Note:** Approved in single pane fixed lights only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in steel framed screens for periods of 120 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

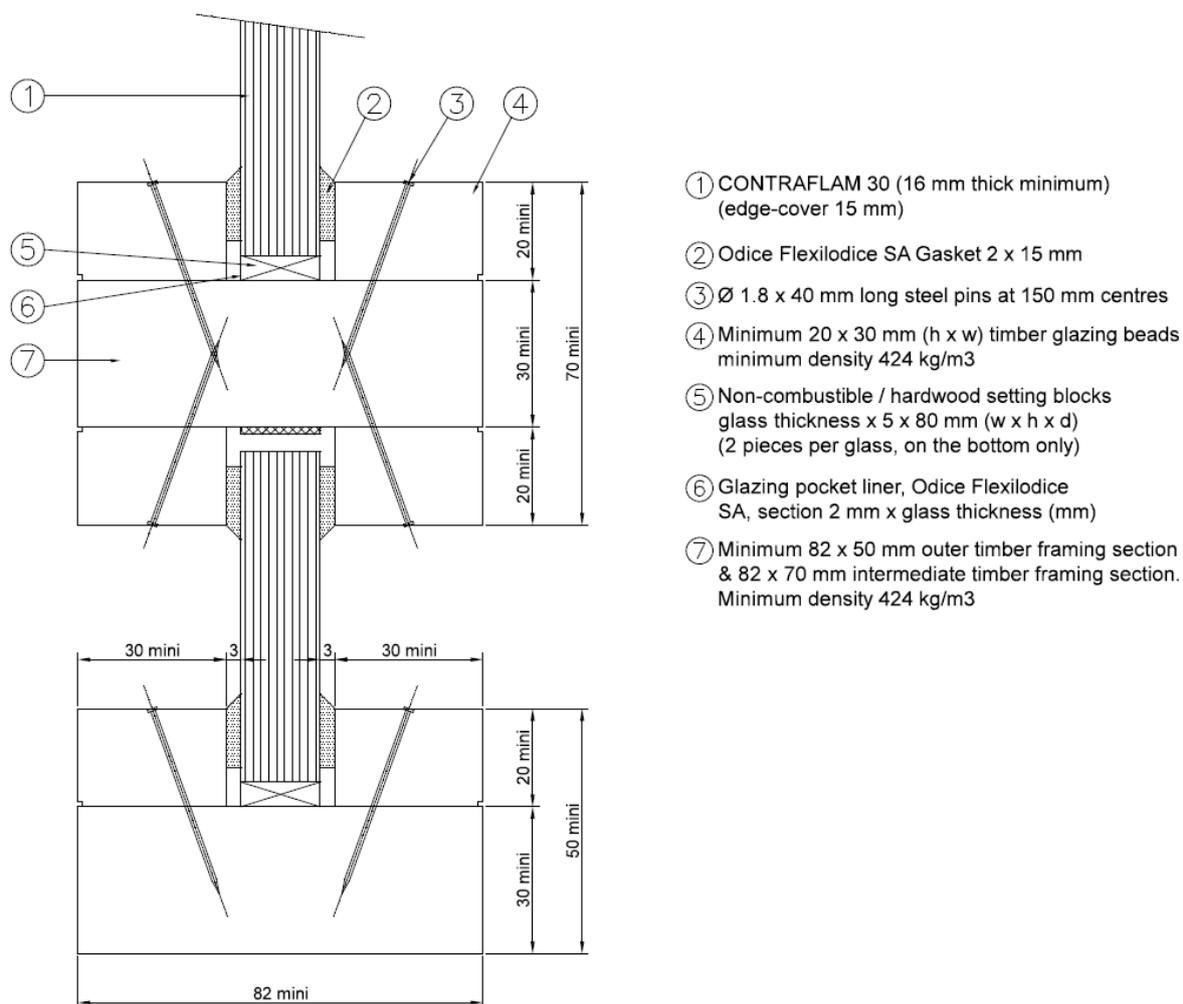
Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in timber framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 30 (16 mm thick minimum) (edge-cover 15 mm)
- ② Odice Flexilodice SA Gasket 2 x 15 mm
- ③ Ø 1.8 x 40 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 30 mm (h x w) timber glazing beads minimum density 424 kg/m³
- ⑤ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Odice Flexilodice SA, section 2 mm x glass thickness (mm)
- ⑦ Minimum 82 x 50 mm outer timber framing section & 82 x 70 mm intermediate timber framing section. Minimum density 424 kg/m³

Allowable glass sizes on next page.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in timber framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:

Table 34 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

Note: In the above table the Contraflam pane is limited to the 16mm thick product only.

Table 35 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1750 (at 2400 high)	3000 (at 1400 wide)	4.2
2750 (at 1500 high)	2750 (at 1500 wide)	4.125
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

Note: In the above table the Contraflam pane may be the 16mm, 18mm or 22mm thick product but may only be floor mounted. i.e. it may not be supported, from below, by a transom profile due to weight concerns.

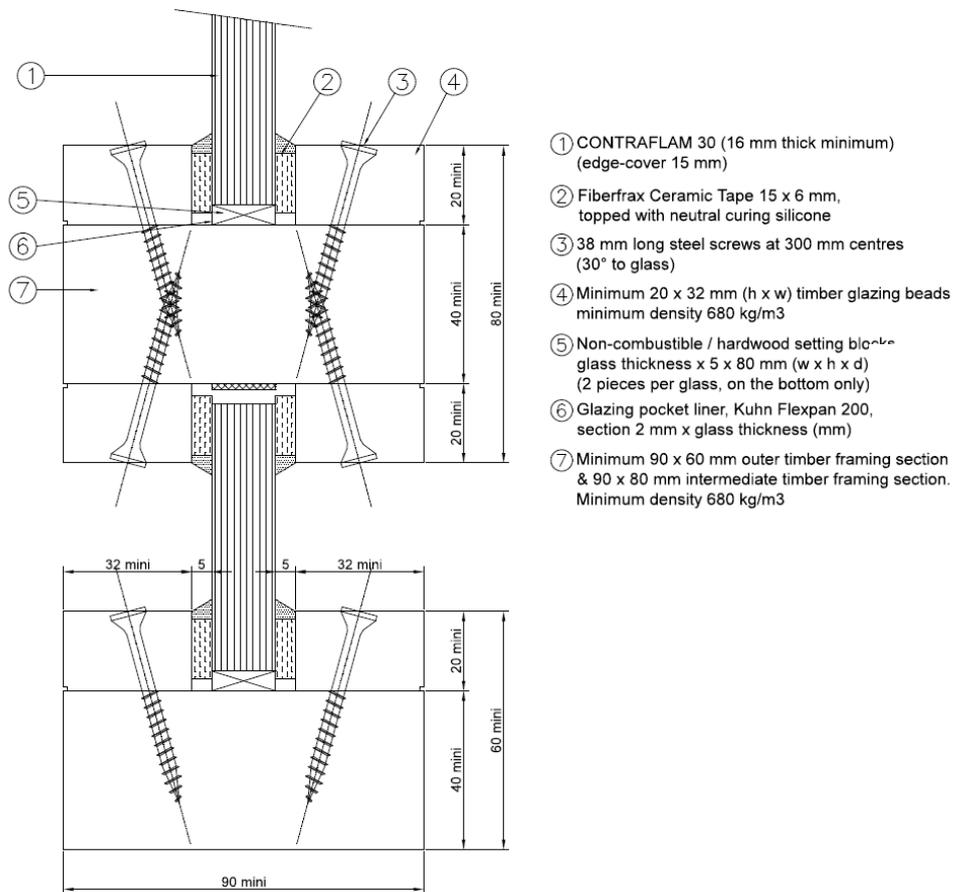
Frame drawing on previous page.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in timber framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 30 (16 mm thick minimum) (edge-cover 15 mm)
- ② Fiberfrax Ceramic Tape 15 x 6 mm, topped with neutral curing silicone
- ③ 38 mm long steel screws at 300 mm centres (30° to glass)
- ④ Minimum 20 x 32 mm (h x w) timber glazing beads minimum density 680 kg/m³
- ⑤ Non-combustible / hardwood setting block - glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Kuhn Flexpan 200, section 2 mm x glass thickness (mm)
- ⑦ Minimum 90 x 60 mm outer timber framing section & 90 x 80 mm intermediate timber framing section. Minimum density 680 kg/m³

Table 36 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1750 (at 2400 high)	3000 (at 1400 wide)	4.2
2750 (at 1500 high)	2750 (at 1500 wide)	4.125
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

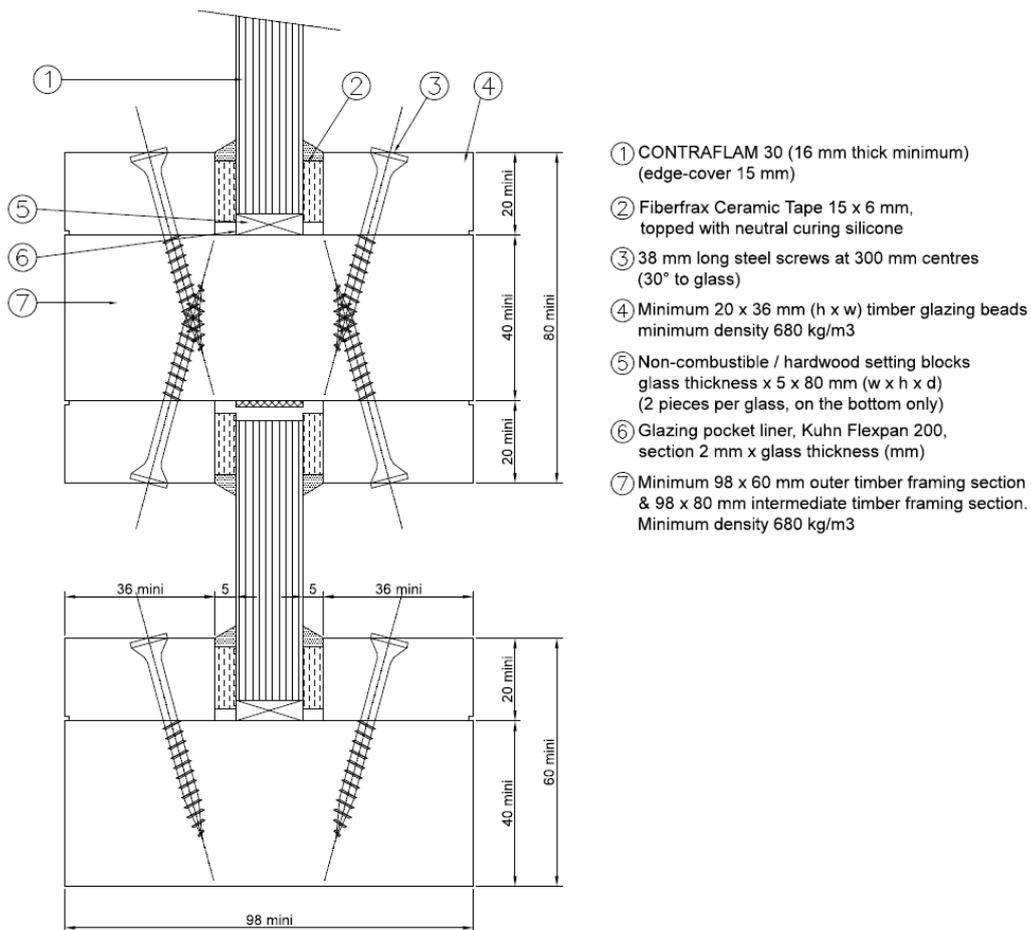
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in timber framed screens for periods of 60 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 30 (16 mm thick minimum) (edge-cover 15 mm)
- ② Fiberfrax Ceramic Tape 15 x 6 mm, topped with neutral curing silicone
- ③ 38 mm long steel screws at 300 mm centres (30° to glass)
- ④ Minimum 20 x 36 mm (h x w) timber glazing beads minimum density 680 kg/m³
- ⑤ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Kuhn Flexpan 200, section 2 mm x glass thickness (mm)
- ⑦ Minimum 98 x 60 mm outer timber framing section & 98 x 80 mm intermediate timber framing section. Minimum density 680 kg/m³

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.50
1800* (at 3000 high)	3600* (at 1500 wide)	5.4*

***Note: Approved in single pane fixed lights only**

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in timber framed screens for periods of 90 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:

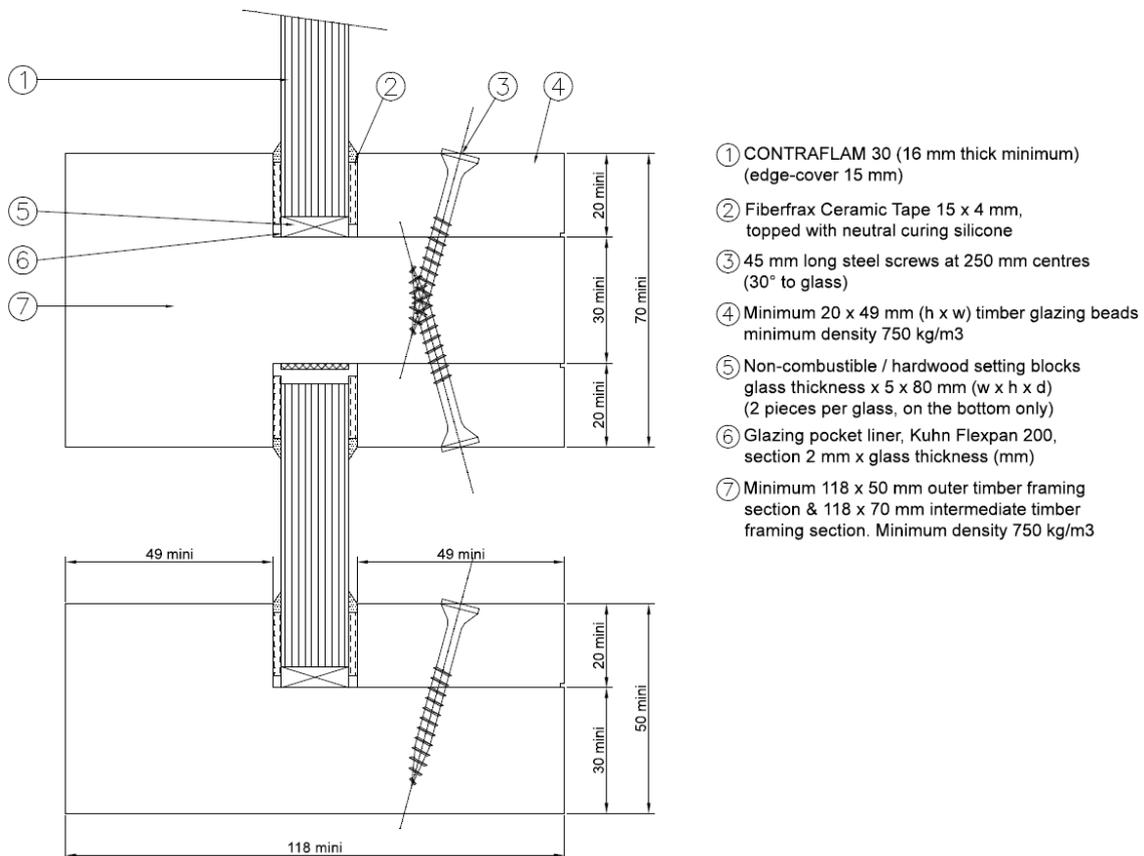


Table 38 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5
1800* (at 3000 high)	3600* (at 1500 wide)	5.4*

Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

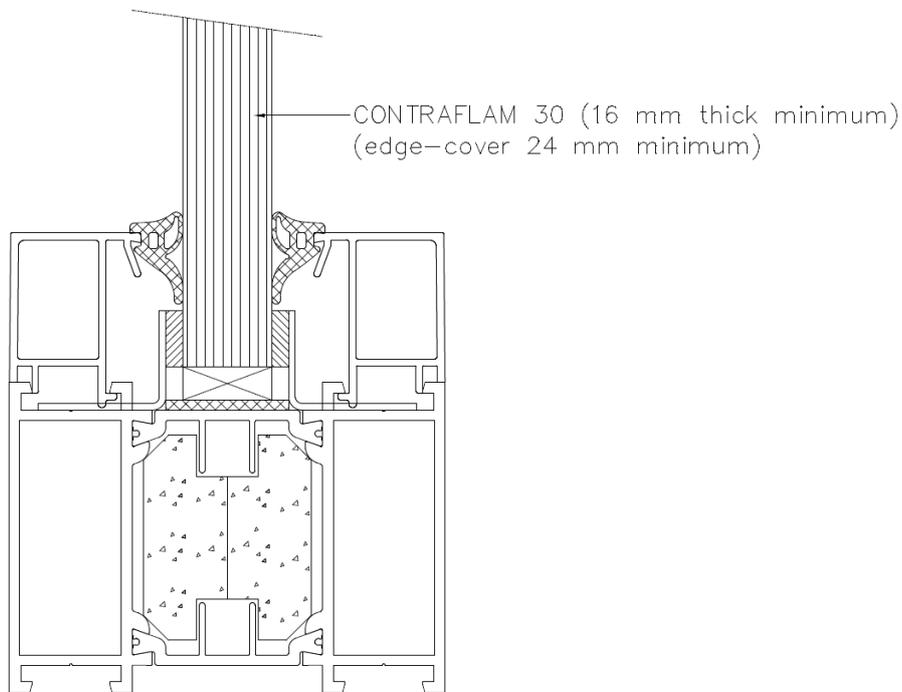
***Note: Approved in single pane fixed lights only.**

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Aluprof MB-78EI aluminium framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Aluprof MB-78EI aluminium framing system (which is covered appropriately by test or assessment evidence).



Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62
3125 (at 1500 high)	1875 (at 2500 wide)	4.69

Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Reynaers CS77-FP aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Reynaers CS77-FP aluminium framing system (which is covered appropriately by test or assessment evidence).

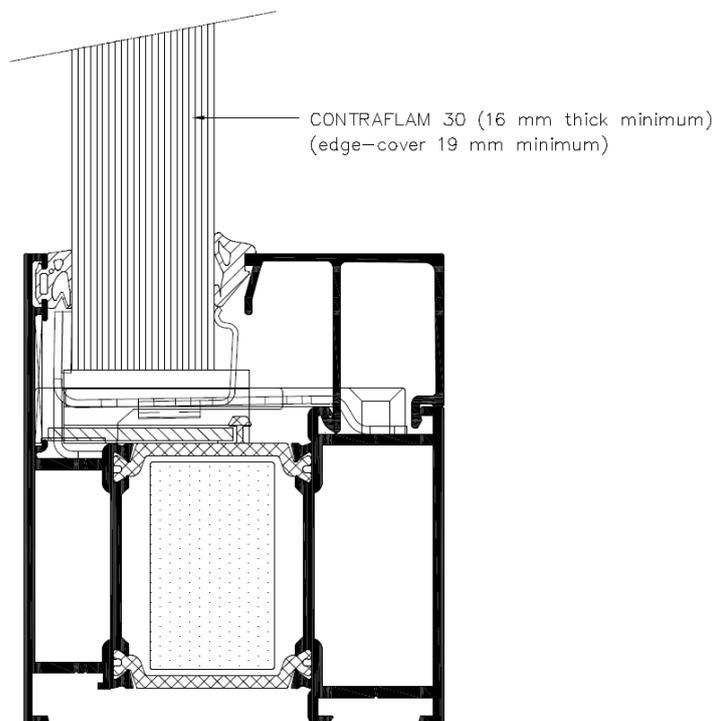


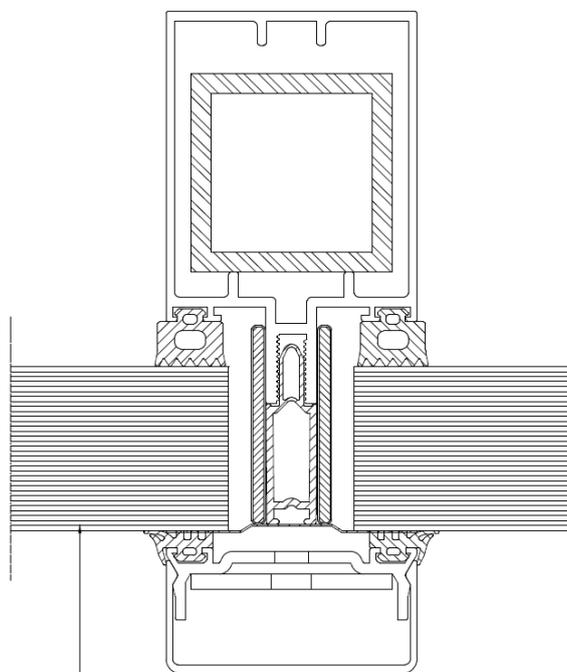
Table 40 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
2203 (at 3200 high)	3616 (at 1950 wide)	7.05

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Reynaers CW50-FP aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Reynaers CW50-FP aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 30 (16 mm thick minimum)
(edge-cover 14 mm minimum)

Table 41 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2398 (at 3200 high)	3936 (at 1950 wide)	7.68

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Schuco ADS80 FR30 aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Schuco ADS80 FR30 aluminium framing system (which is covered appropriately by test or assessment evidence).

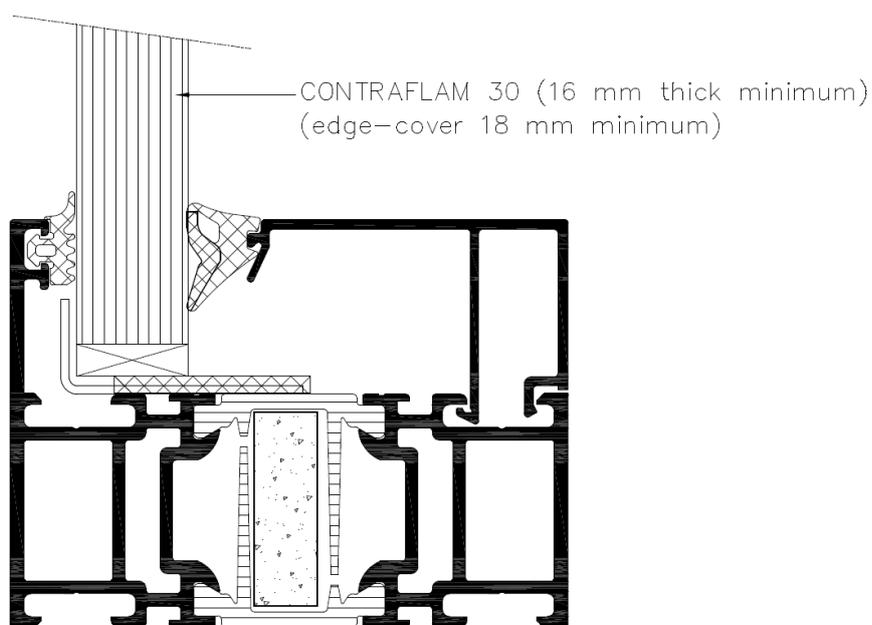


Table 42 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2502 (at 1400 high)	1442 (at 2430 wide)	3.50
1442 (at 3000 high)	3090 (at 1400 wide)	4.32

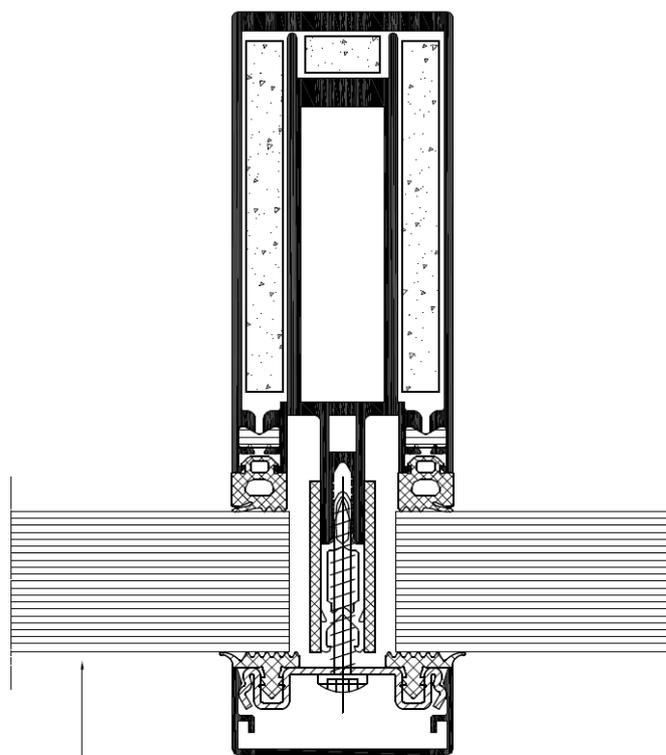
Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Schuco FW 50+ BF aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Schuco FW 50+ BF aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 30 (16 mm thick minimum)
(edge-cover 13 mm minimum)

Table 43 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2875 (at 3300 high)	4125 (at 2300 wide)	9.48

Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Glass in Wicona Wicstyle 77FP aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Wicona Wicstyle 77FP aluminium framing system (which is covered appropriately by test or assessment evidence).

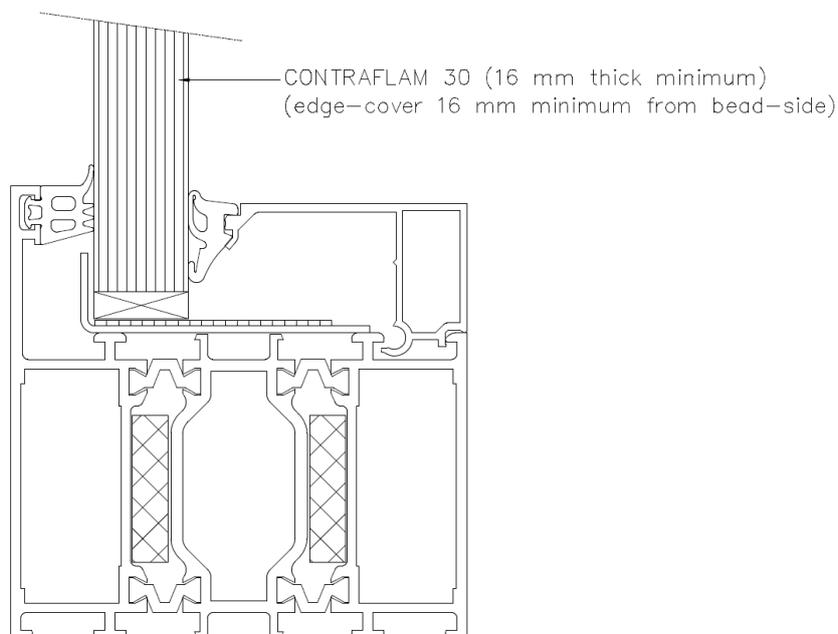


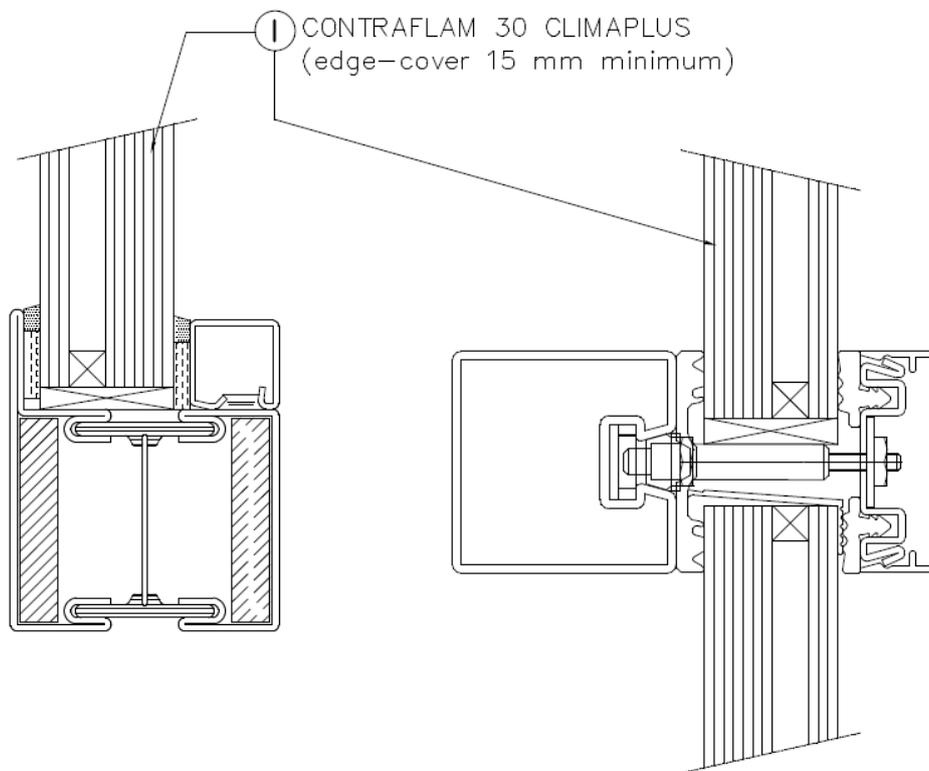
Table 44 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1802 (at 3000 high)	3600 (at 1502 wide)	5.40
2715 (at 1500 high)	1800 (at 2263 wide)	4.07

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in steel framed screens for periods of 30 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74
3350 (at 1500 high)	3350 (at 1500 wide)	5.03

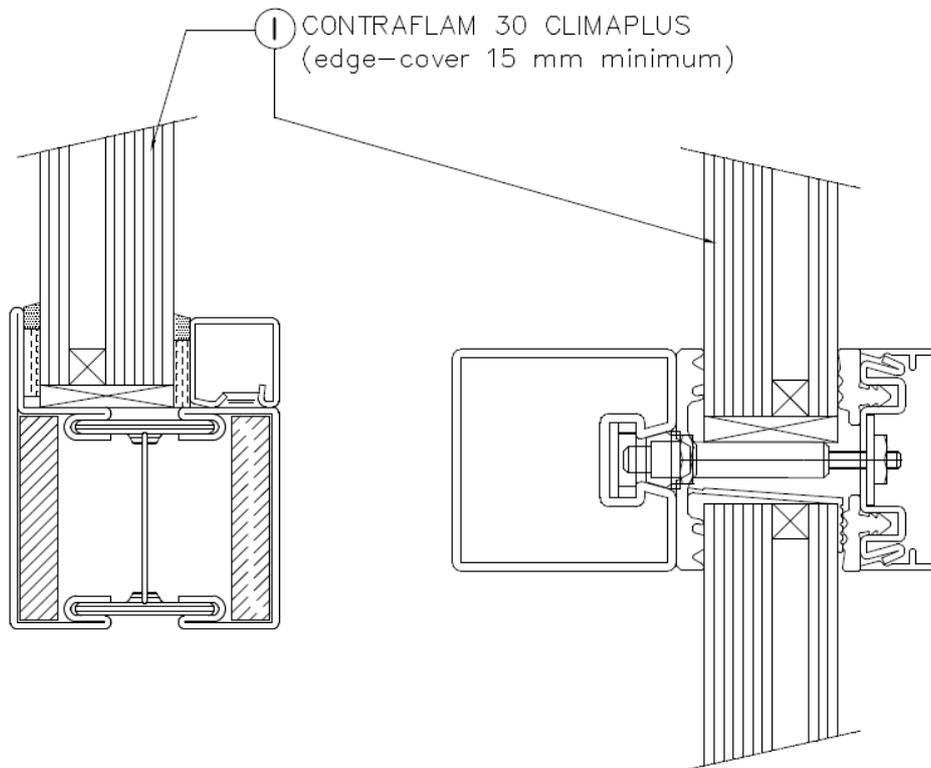
Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

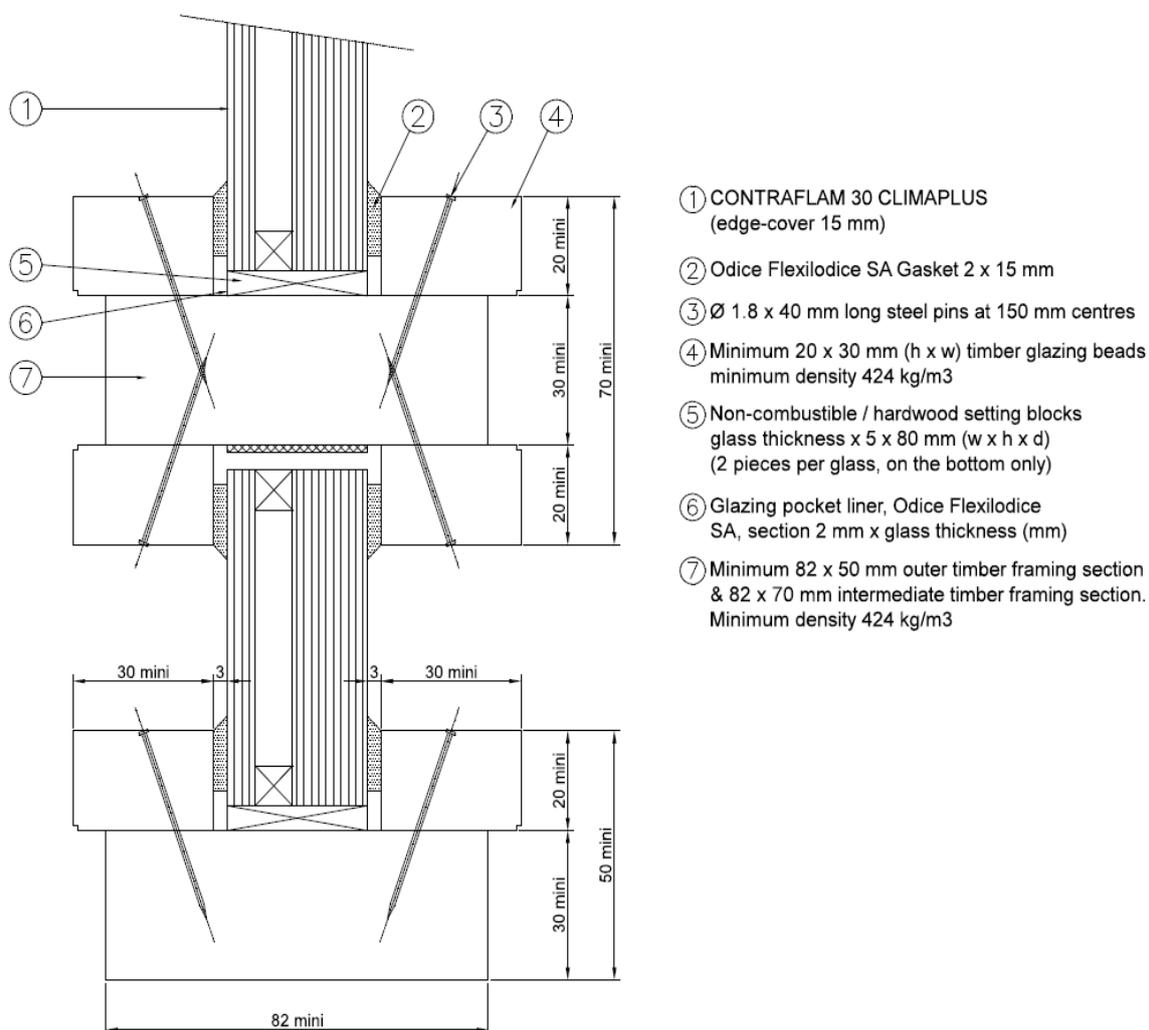
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in timber framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



Allowable glass sizes on next page.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in timber framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:

Table 47 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

Note: In the above table the Contraflam pane is limited to the 16mm thick product only.

Table 48 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74
2750 (at 1500 high)	2750 (at 1500 wide)	4.125

Note: In the above table the Contraflam pane may be the 16mm, 18mm or 22mm thick product but may only be floor mounted. i.e. it may not be supported, from below, by a transom profile due to weight concerns.

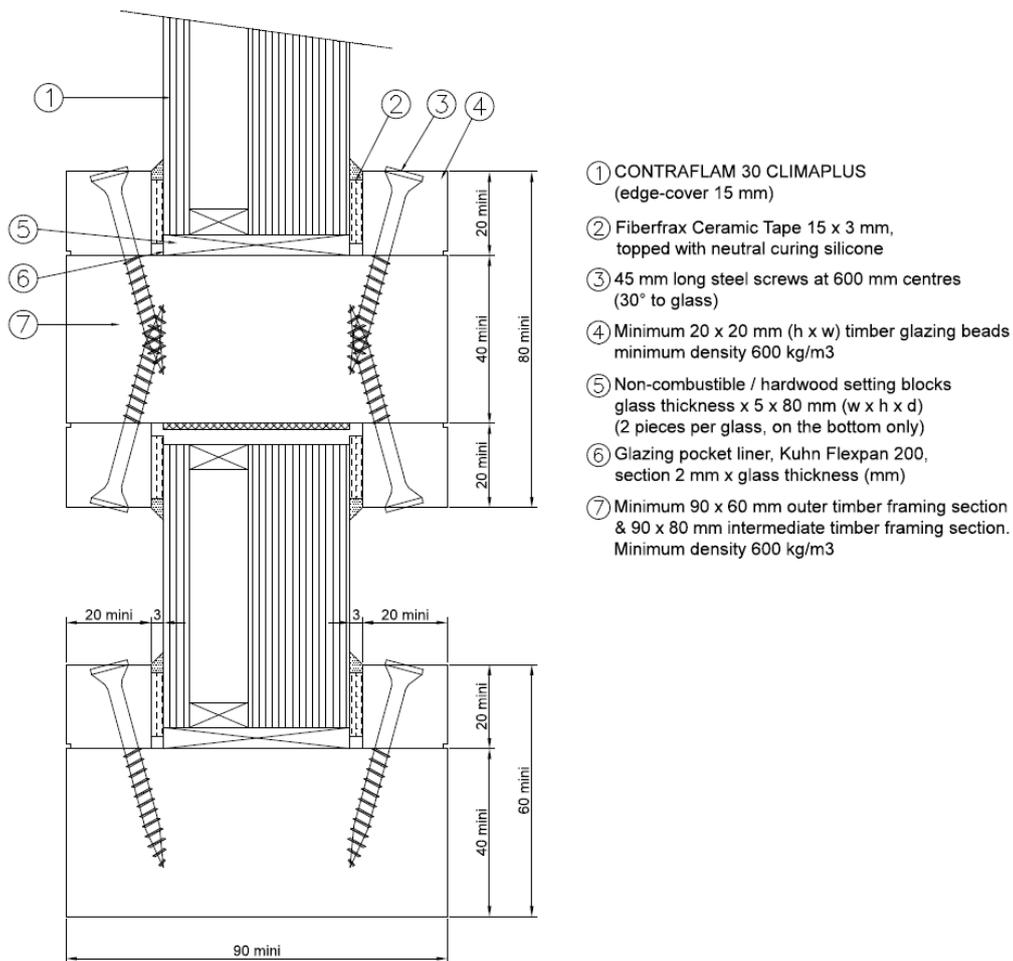
Frame drawing on previous page.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in timber framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 30 CLIMAPLUS (edge-cover 15 mm)
- ② Fiberfrax Ceramic Tape 15 x 3 mm, topped with neutral curing silicone
- ③ 45 mm long steel screws at 600 mm centres (30° to glass)
- ④ Minimum 20 x 20 mm (h x w) timber glazing beads minimum density 600 kg/m³
- ⑤ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Kuhn Flexpan 200, section 2 mm x glass thickness (mm)
- ⑦ Minimum 90 x 60 mm outer timber framing section & 90 x 80 mm intermediate timber framing section. Minimum density 600 kg/m³

Table 49 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 3800 high)	3800 (at 2300 wide)	8.74
2750 (at 1500 high)	2750 (at 1500 wide)	4.125

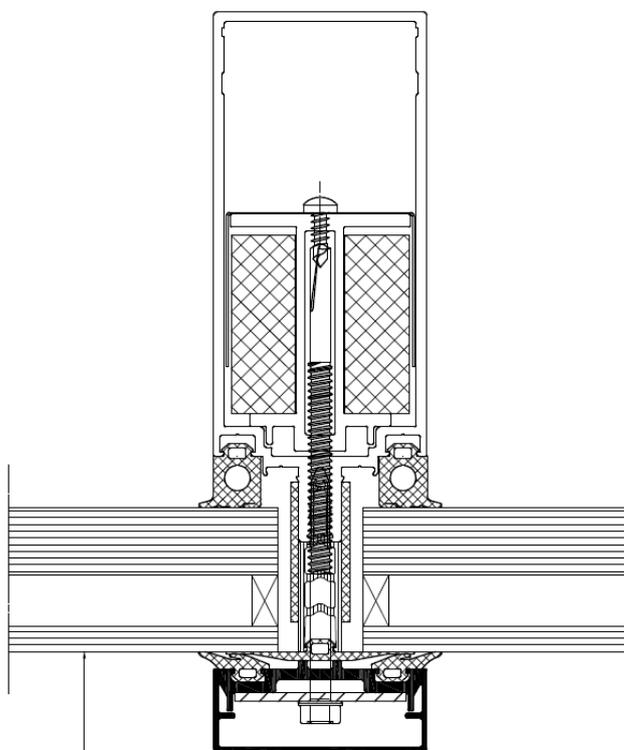
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in Kawneer AA100 FR aluminium framed screens for a period of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



① CONTRAFLAM 30 CLIMAPLUS
(minimum edge cover =
15 mm vertical edges
15 mm top edge
13 mm bottom edge)

Table 50 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2787 (at 1403 high)	1753 (at 2230 wide)	3.91
1787 (at 2503 high)	3128 (at 1430 wide)	4.47

Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in Reynaers CS77-FP aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Reynaers CS77-FP aluminium framing system (which is covered appropriately by test or assessment evidence).

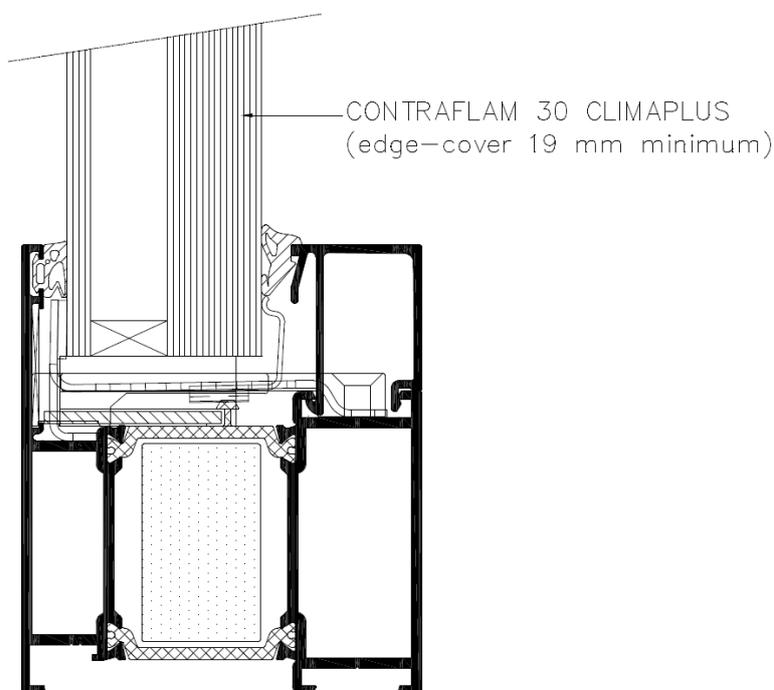


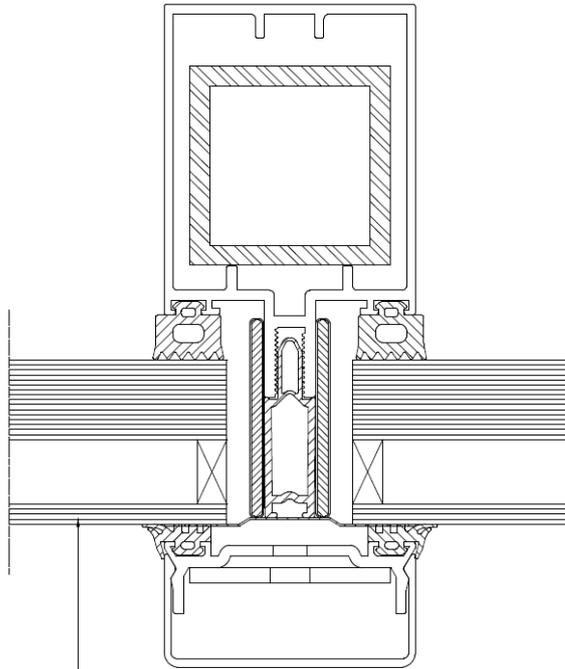
Table 51 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1017 (at 2500 high)	2825 (at 900 wide)	2.54

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in Reynaers CW50-FP aluminium framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Reynaers CW50-FP aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 30 CLIMAPLUS
(edge-cover 14 mm minimum)

Table 52 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2398 (at 3200 high)	3936 (at 1950 wide)	7.68

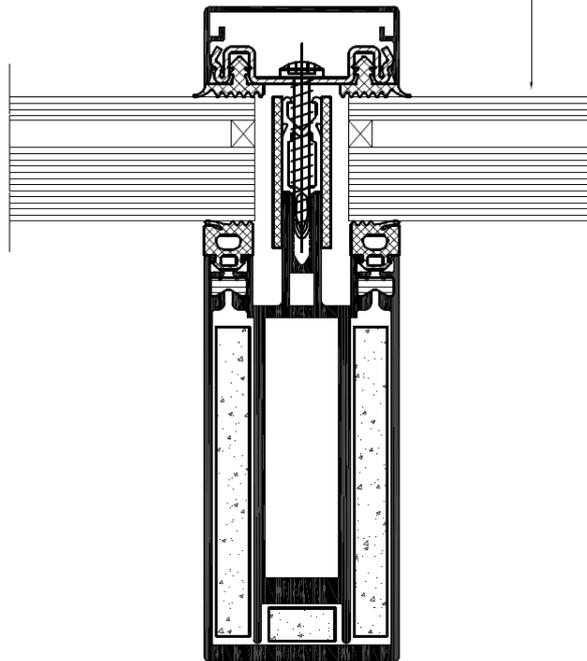
CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climaplus Glass in Schuco FW 50+ BF aluminium framed screens, in a horizontal orientation, for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be installed into the Schüco FW 50+ BF aluminium framing system (which is covered appropriately by test or assessment evidence).

CONTRAFLAM 30 CLIMAPLUS
(edge-cover 13 mm minimum) ①



The construction may be installed between 0° and 80° (from the horizontal).

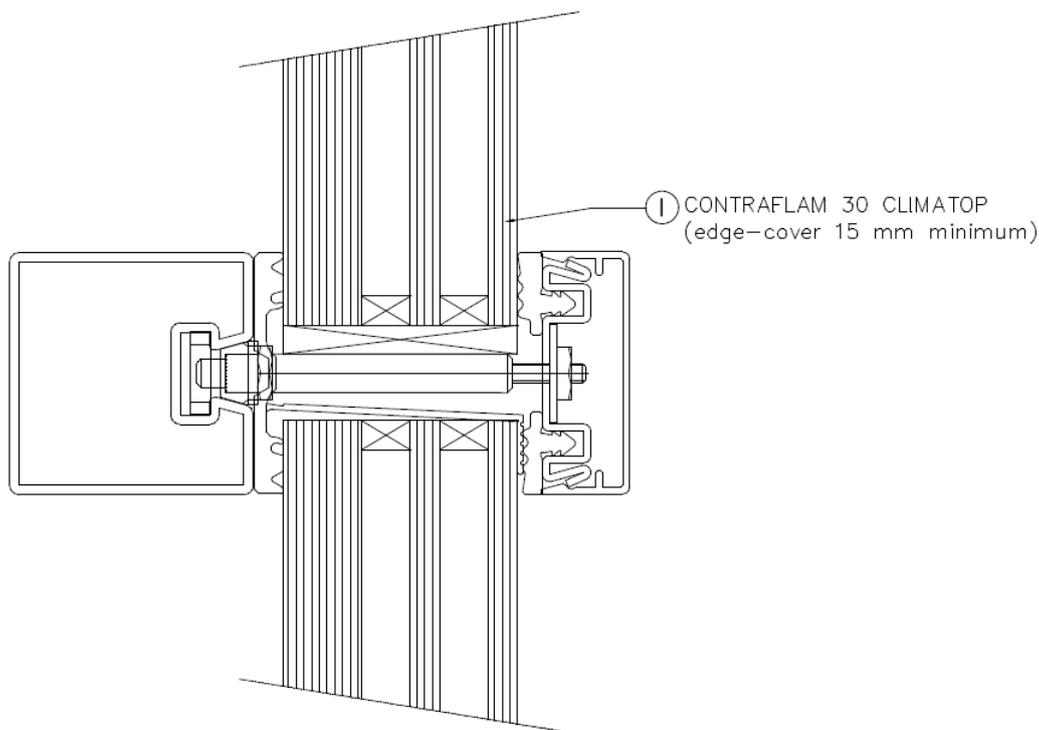
Table 53 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1500 (at 2400 high)	3000 (at 1200 wide)	3.60
2750 (at 1100 high)	1375 (at 2200 wide)	3.02

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climatop Glass in steel framed screens for periods of 30 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 3000 high)	3600 (at 1500 wide)	5.40

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Climatop Glass in timber framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:

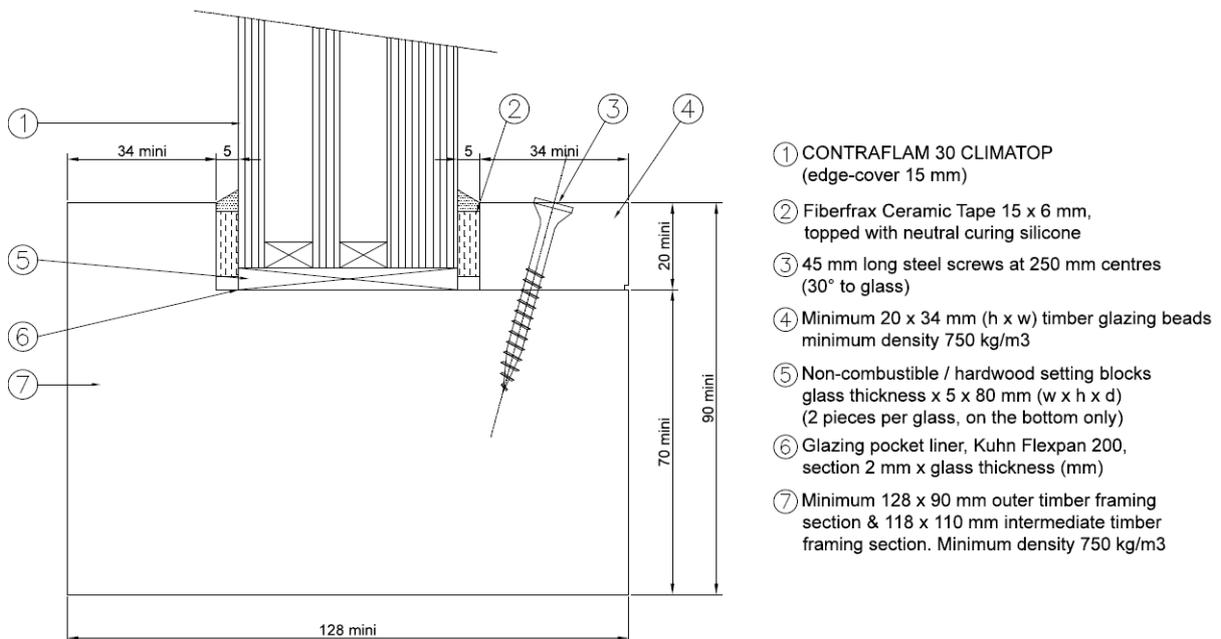


Table 55 – Maximum Permitted Glass Dimensions

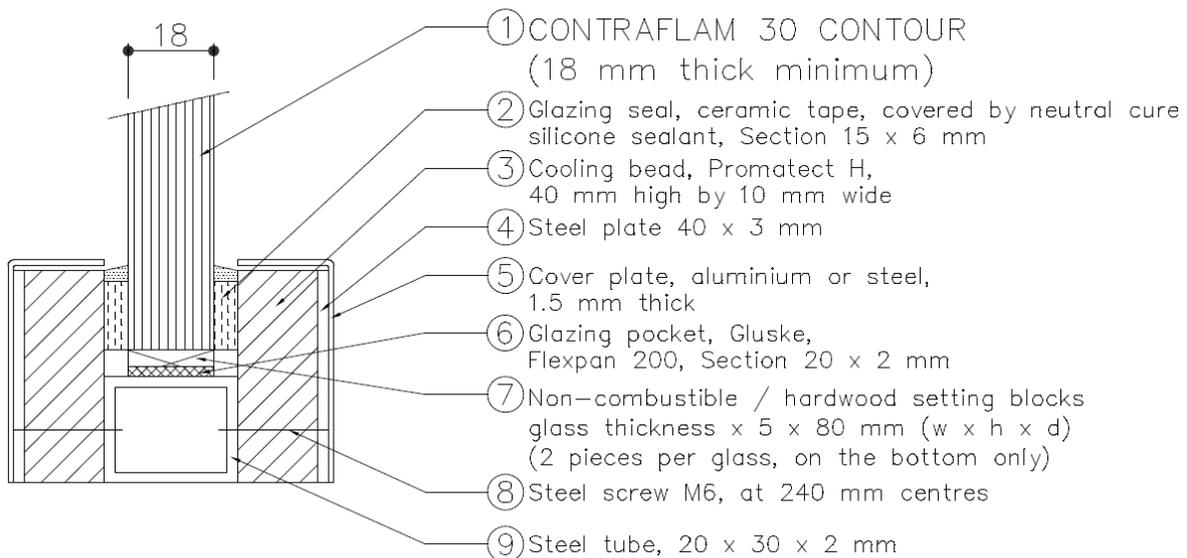
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 3000 high)	3600 (at 1500 wide)	5.40

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Contour Glass in steel framed screens for periods of 120 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
922 (at 1890 high)	1890 (at 922 wide)	1.74

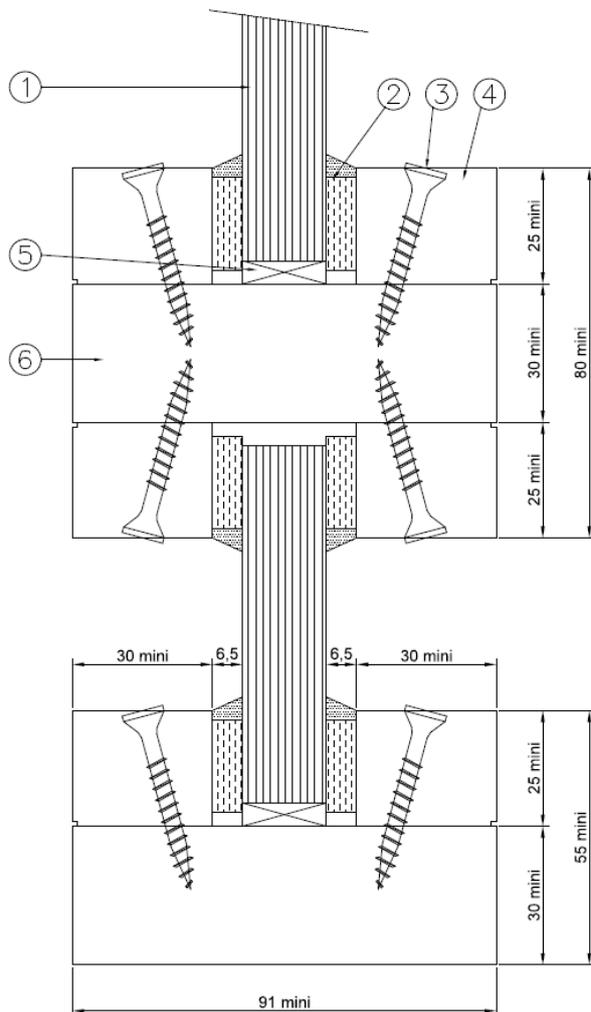
Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30 Contour Glass in timber framed screens for periods of 30 minutes integrity and 30 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 30 CONTOUR (18 mm thick minimum)
(minimum edge-cover =
15 mm vertical edges
20 mm top edge
20 mm bottom edge)
- ② Fiberfrax Ceramic Tape 20 x 8 mm,
topped with neutral curing silicone
- ③ 40 mm long steel screws at 200 mm centres
(30° to glass)
- ④ Minimum 25 x 30 mm (h x w) timber glazing beads
minimum density 600 kg/m³
- ⑤ Non-combustible / hardwood setting blocks
glass thickness x 5 x 80 mm (w x h x d)
(2 pieces per glass, on the bottom only)
- ⑥ Minimum 91 x 55 mm outer timber framing section
& 91 x 55 mm intermediate timber framing section.
Minimum density 600 kg/m³

Table 57 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
992 (at 1830 high)	1830 (at 992 wide)	1.81

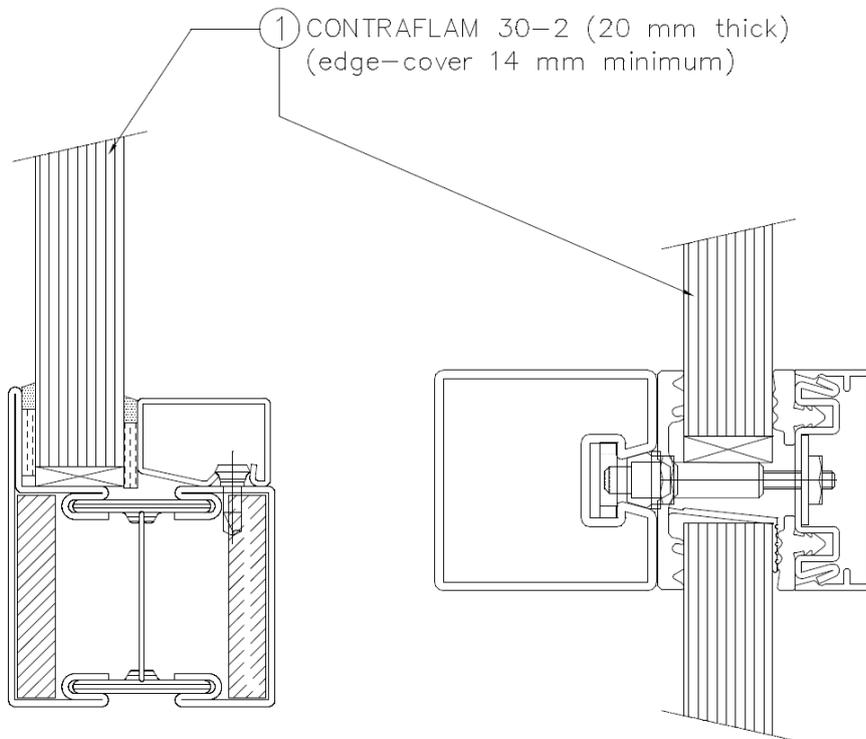
Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30-2 Glass in 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.



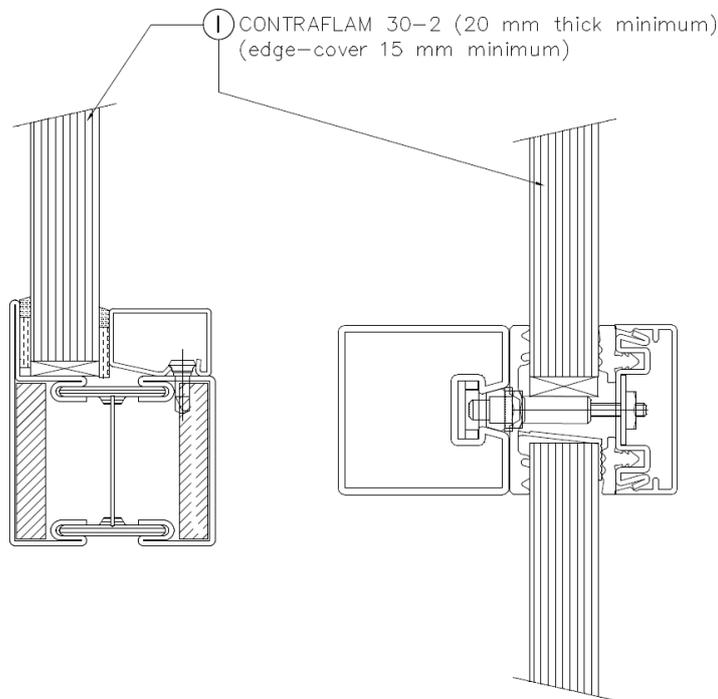
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 4600 high)	4600 (at 2300 wide)	10.58
2438 (at 2300 high)	2300 (at 2438 wide)	5.6

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30-2 Glass in steel framed screens for periods of 120 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500* (at 3000 high)	3000* (at 1500 wide)	4.5*

Note: If applicable, a STADIP laminated glass used in the composition of the Contraflam unit is allowable, but on the fire side only.

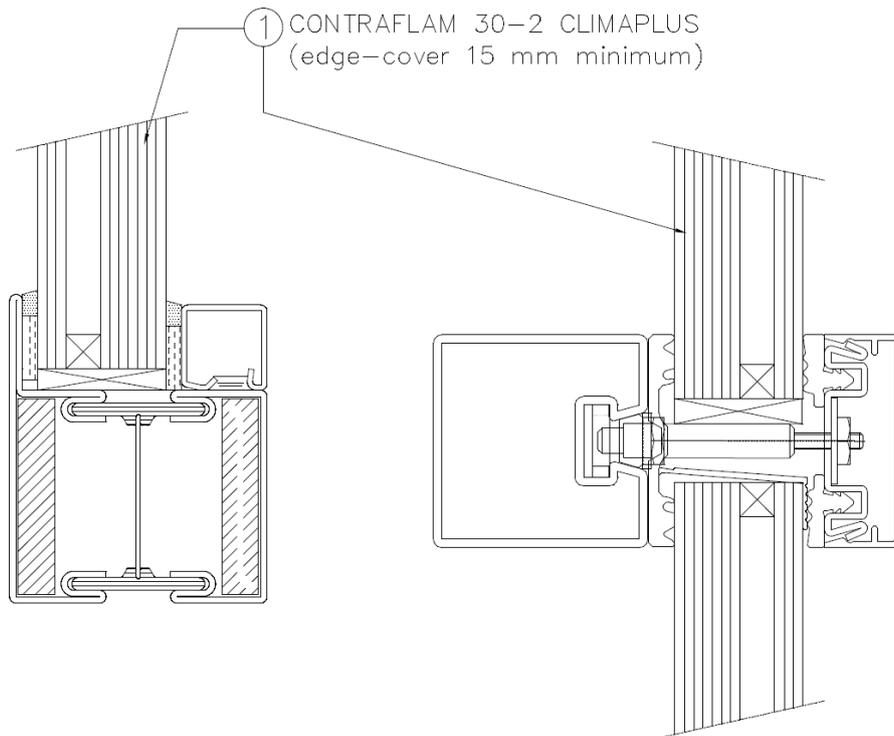
***Note:** Approved in single pane fixed lights only.

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 30-2 Climaplus Glass in 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800* (at 3000 high)	3600* (at 1500 wide)	5.4*

***Note: Approved in single pane fixed lights only.**

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60 Glass in loadbearing horizontal steel frames for periods of 60 minutes integrity and 60 minutes insulation

The glass comprising 10 panes made of 34 mm thick Lite-Floor on the top level and a 32 mm thick Contraflam 60 on the bottom level, shall be installed into a previously tested or CERTIFIRE approved horizontal loadbearing framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing. The maximum permitted load is 400 kg/m² and minimum edge bearing is 25 mm to all edges and the glass must be clamped in place.

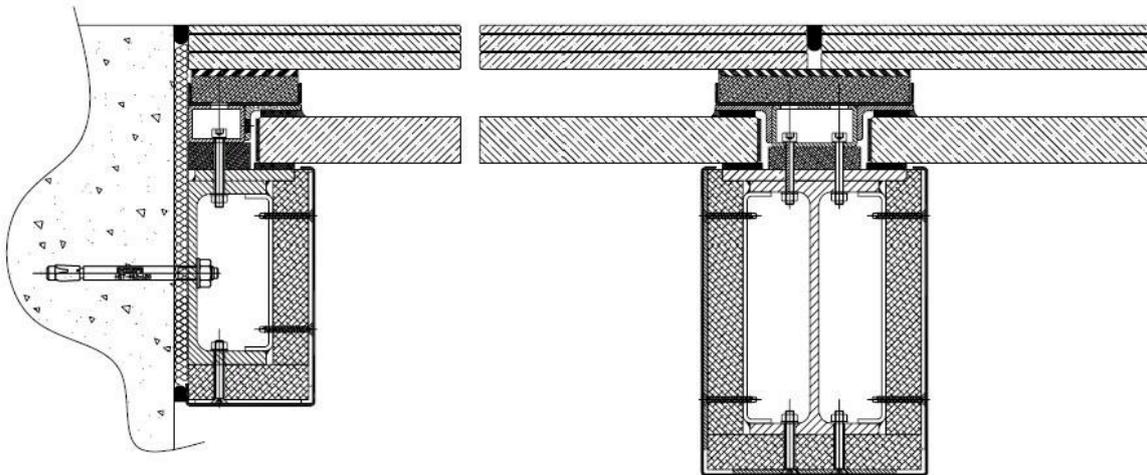


Table 61 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Length (mm)	Max. Area (m ²)
910 (at 1893 high)	1893 (at 910 wide)	1.72

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60 Glass in loadbearing horizontal steel frames for periods of 60 minutes integrity and 60 minutes insulation

Glass floor comprising of 10 panes made of:

- Top pane = 41 mm thick Lite-Floor RTF41/3-45 or 34 mm thick Lite-Floor RTF34/3-45
- Bottom pane = 30 mm thick Contraflam 60 (edge-cover minimum 15 mm)
- Contraflam 60 installed into Forster Fuego Light 60" system, or a previously tested or CERTIFIRE approved horizontal loadbearing framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing.
- Gluske Kerafix 20 x 5 mm either side of Contraflam glass (glazing pocket lined with Gluske Kerafix FXL 200) 30 mm wide)
- Lite-Floor glass supported on steel tubing welded to the fire rated framing system
- The maximum permitted load is 600 kg/m² to an individual pane but restricted to 300 kg/m² for the entire system, and minimum edge bearing to be maintained to all edges and the glass must be bonded in place.

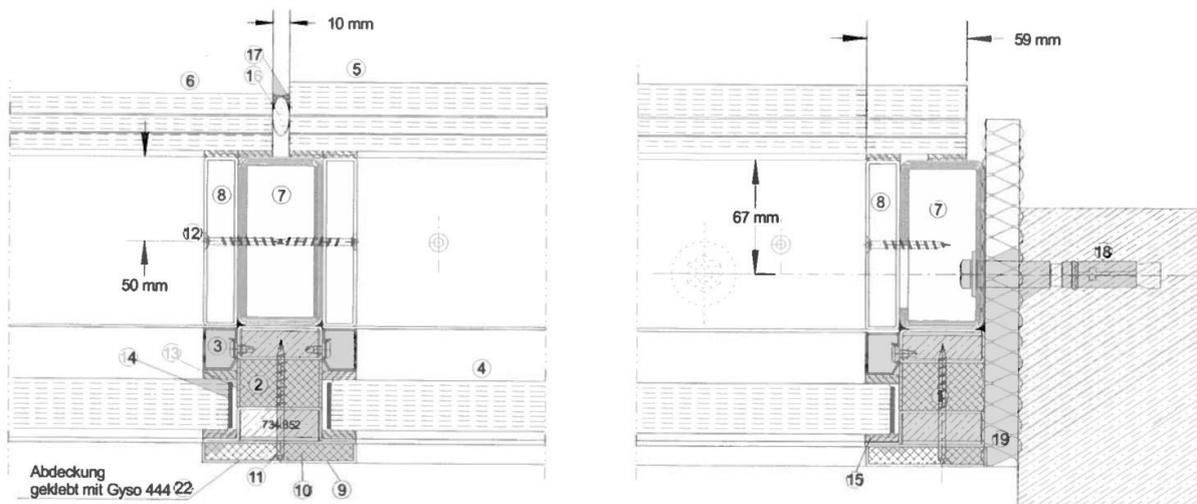


Table 62 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Length (mm)	Max. Area (m ²)
998 (at 998 high)	1998 (at 998 wide)	1.99

Paul Dwyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60 Glass in Horizontal steel frames for periods of 60 minutes integrity and 60 minutes insulation

- 30 mm thick Contraflam 60 (edge-cover minimum 15 mm)
- Contraflam 60 installed into Forster Fuego Light 60" system, or a previously tested or CERTIFIRE approved horizontal loadbearing framing system (which is covered appropriately by test or assessment evidence) using pressure plate glazing.
- Gluske Kerafix 20 x 5 mm either side of Contraflam glass (glazing pocket lined with Gluske Kerafix FXL 200) 30 mm wide)

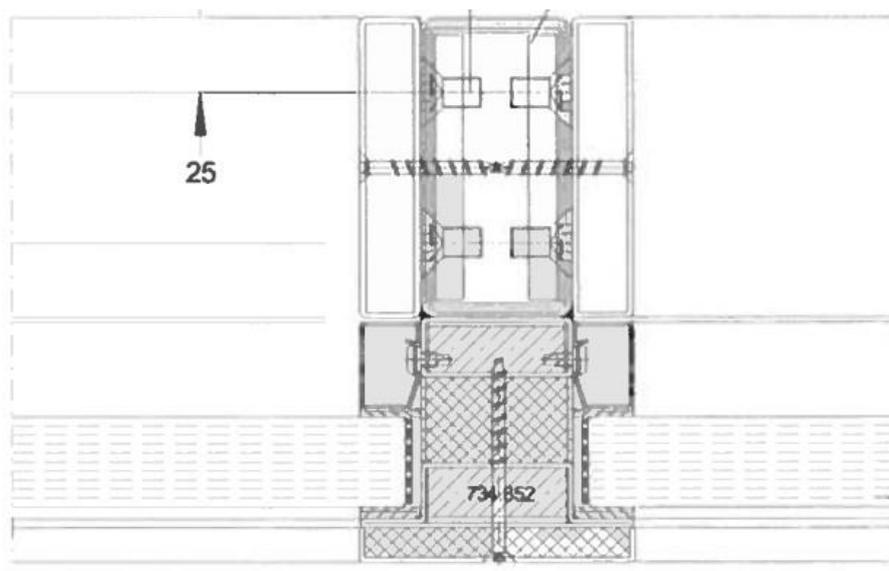


Table 63 – Maximum Permitted Glass Dimensions

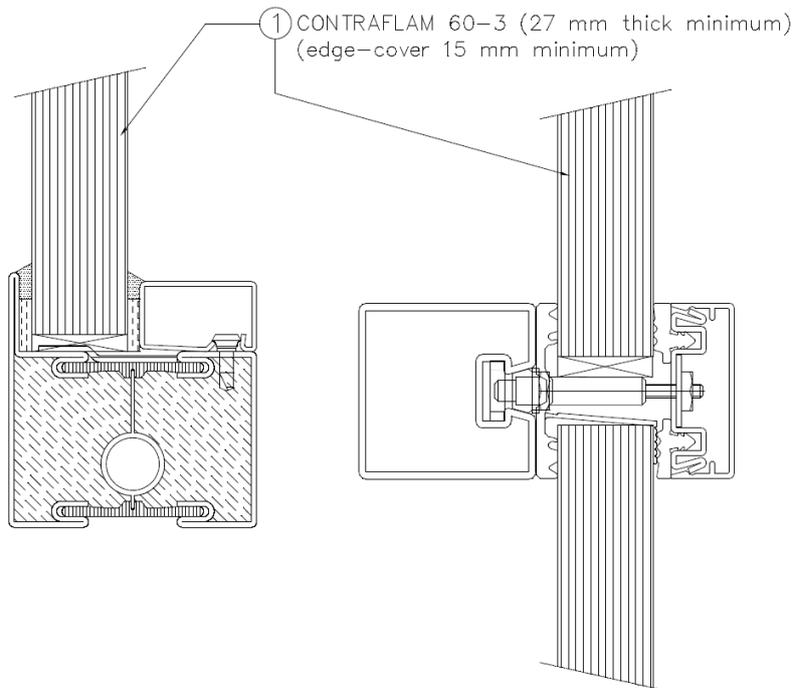
Max. Width (mm)	Max. Length (mm)	Max. Area (m2)
998 (at 1998 high)	1998 (at 998 wide)	1.99

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in steel framed screens for periods of 60 minutes integrity and 60 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.



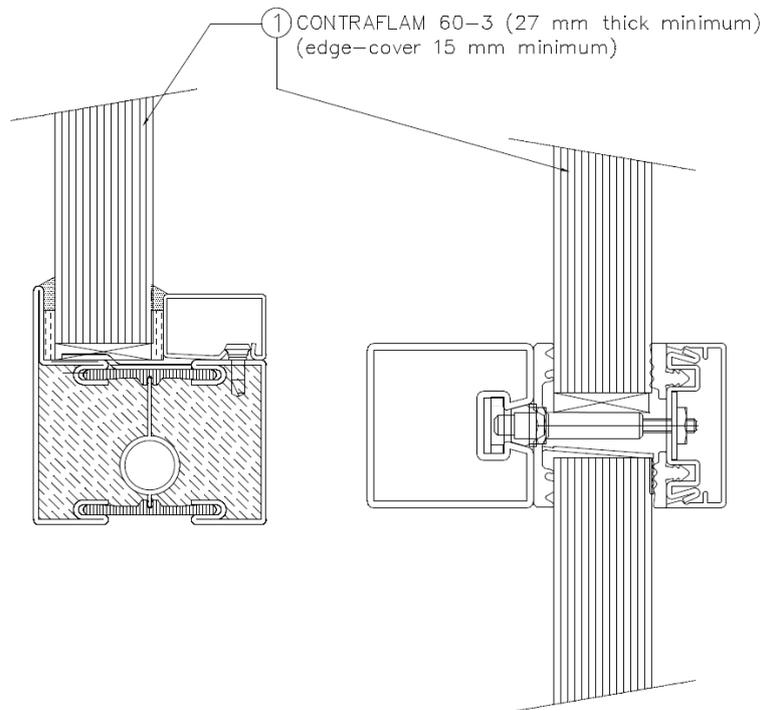
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2300 (at 4600 high)	4600 (at 2300 wide)	10.58
2875 (at 2300 high)	2300 (at 2875 wide)	6.61

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in steel framed screens for periods of 90 minutes integrity and 60 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.63
1908 (at 2600 high)	2756 (at 1800 wide)	4.96

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in steel framed screens for periods of 120 minutes integrity and 60 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.

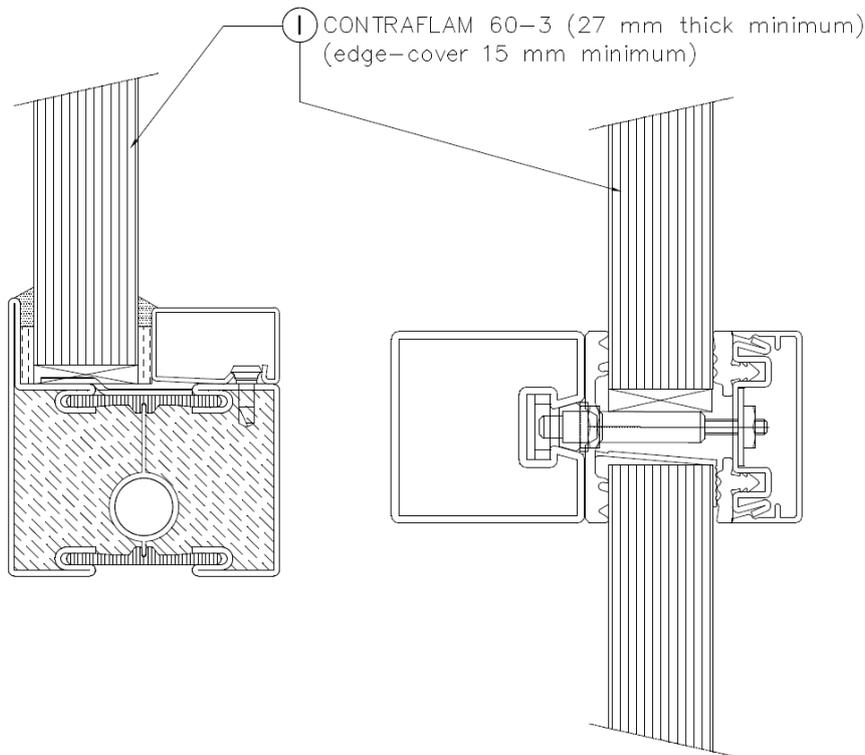


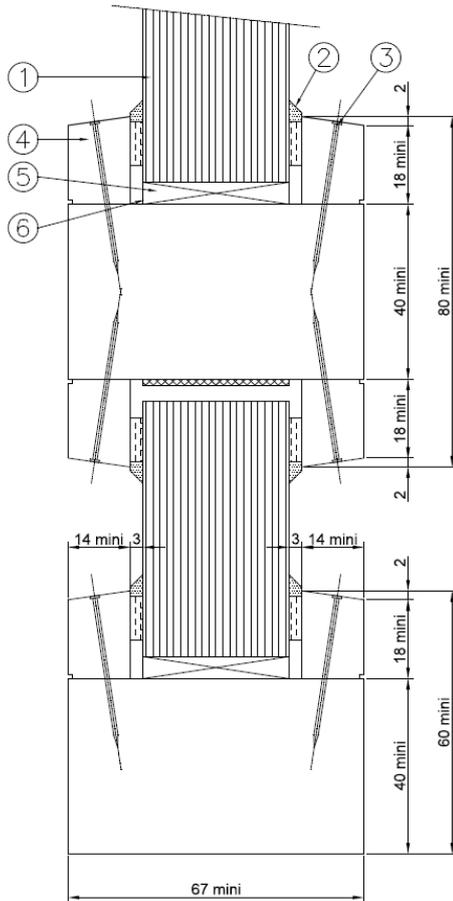
Table 66 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1650 (at 3000 high)	3300 (at 1500 wide)	4.97

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in timber framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 60-3 (27 mm thick minimum) (edge-cover 15 mm)
- ② Kuhn Kerafix 2000 Tape 3 x 15 mm, topped with neutral curing silicone
- ③ Ø 1.5 x 35 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 14 mm (h x w) timber glazing beads minimum density 600 kg/m³
- ⑤ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Kuhn Flexpan 200, section 2 mm x glass thickness (mm)
- ⑦ Minimum 67 x 60 mm outer timber framing section & 67 x 80 mm intermediate timber framing section. Minimum density 600 kg/m³

Table 67 – Maximum Permitted Glass Dimensions

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
2700 (at 1400 high)	1400 (at 2700 wide)	3.78
2153 (at 3499 high)	3884 (at 1940 wide)	7.53
2300 (at 3800 high)	3800 (at 2300 wide)	8.74

Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Aluprof MB-78EI aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Aluprof MB-78EI aluminium framing system (which is covered appropriately by test or assessment evidence).

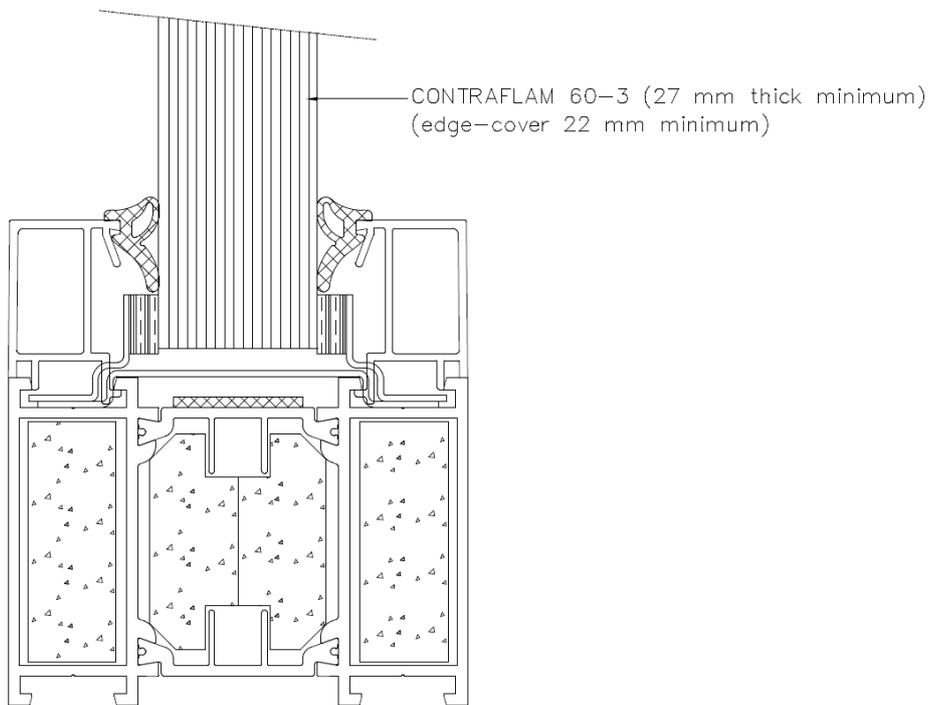


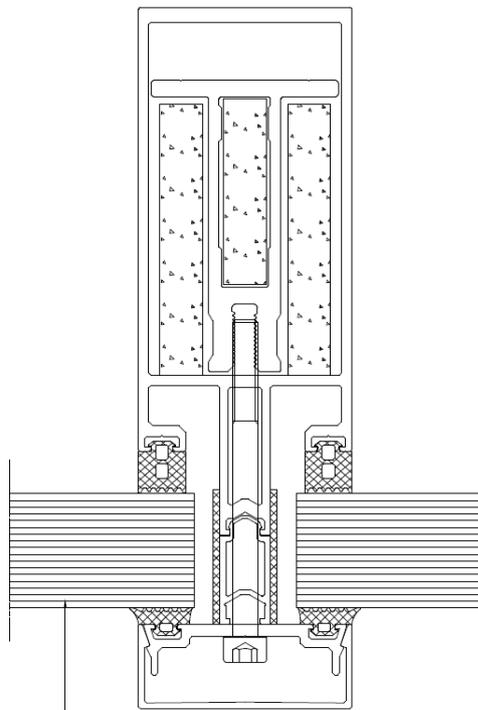
Table 68 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1260 (at 2300 high)	2300 (at 1260 wide)	2.90

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Aluprof MB-SR50EI aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Aluprof MB-SR50EI aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 (27 mm thick minimum)
(edge-cover 13 mm minimum)

Table 69 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1665 (at 3000 high)	3330 (at 1500 wide)	4.99
2489 (at 1310 high)	1519 (at 2146 wide)	3.26

Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Reynaers CS77-FP aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Reynaers CS77-FP aluminium framing system (which is covered appropriately by test or assessment evidence).

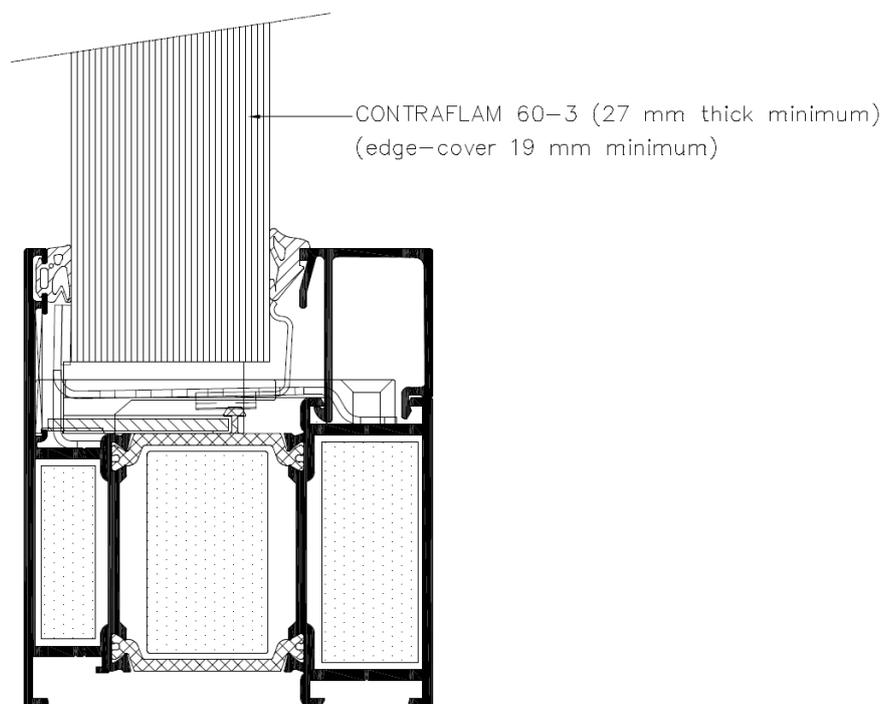


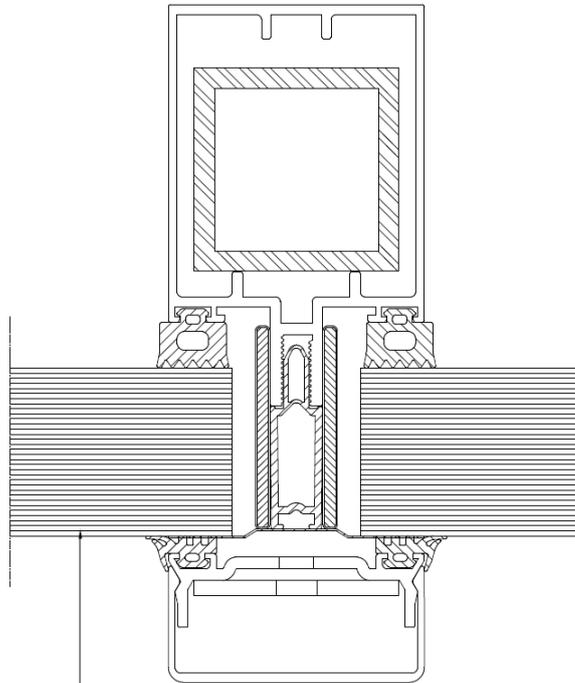
Table 70 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1620 (at 3000 high)	3240 (at 1500 wide)	4.86

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Reynaers CW50-FP aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Reynaers CW50-FP aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 (27 mm thick minimum)
(edge-cover 14 mm minimum)

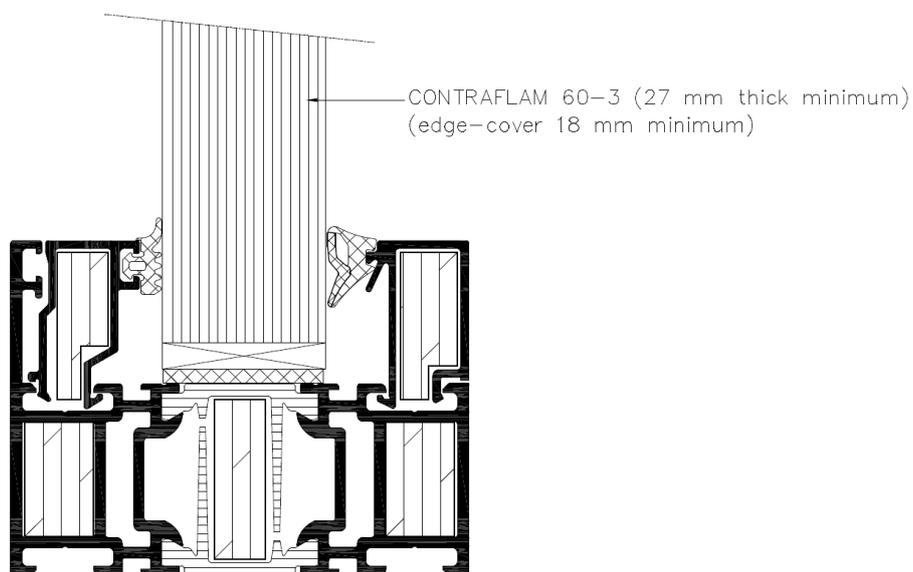
Table 71 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1590 (at 3200 high)	3392 (at 1500 wide)	5.09

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Schuco ADS80 FR60 aluminium framed screen for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Schuco ADS80 FR60 aluminium framing system (which is covered appropriately by test or assessment evidence).



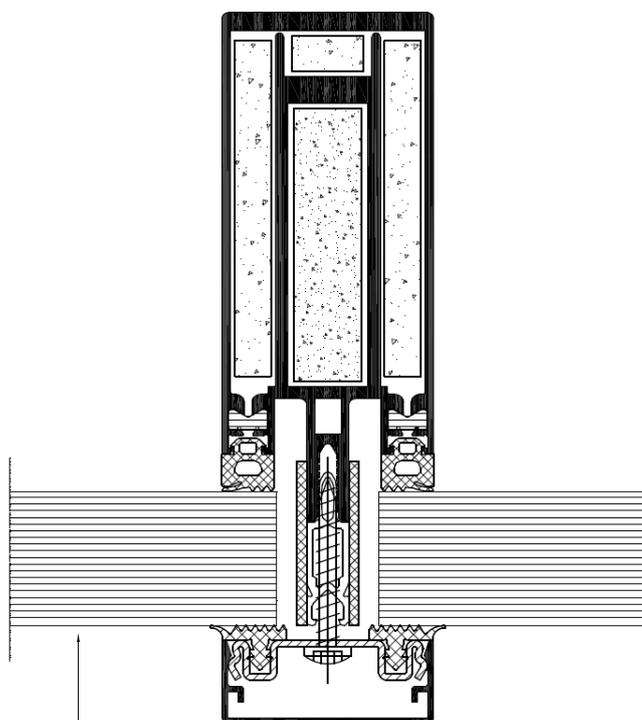
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1436 (at 2500 high)	2700 (at 1330 wide)	3.59
2700 (at 1400 high)	1512 (at 2500 wide)	3.78

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Glass in Schuco FW50+ FR60 aluminium framed screen for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Schuco FW 50+ FR60 aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 (27 mm thick minimum)
(edge-cover 15 mm minimum)

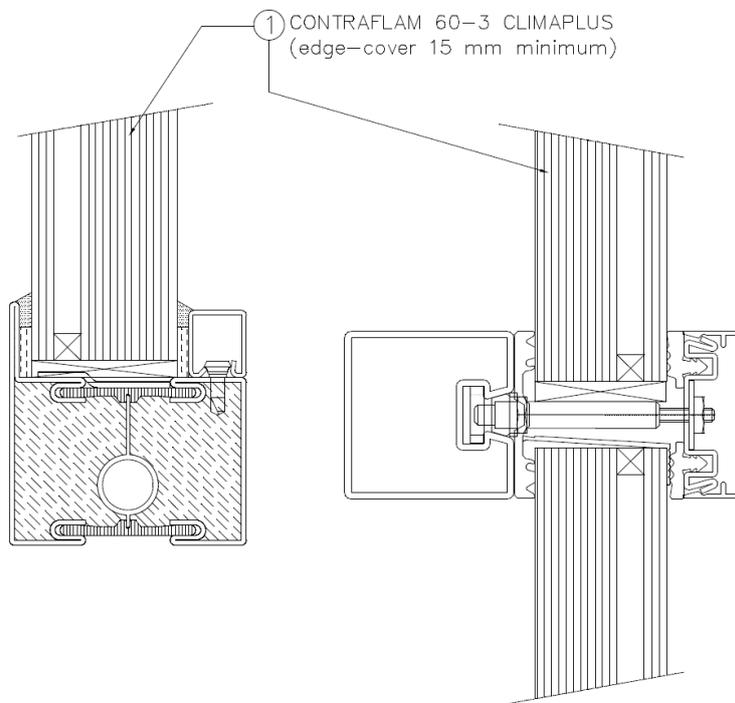
Table 73 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1625 (at 2600 high)	3250 (at 1300 wide)	4.22

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in steel framed screens for periods of 60 minutes integrity and 60 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62
2500 (at 1400 high)	1400 (at 2500 wide)	3.5
2250 (at 2600 high)	3250 (at 1800 wide)	5.85

Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in steel framed screens for periods of 90 minutes integrity and 60 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.

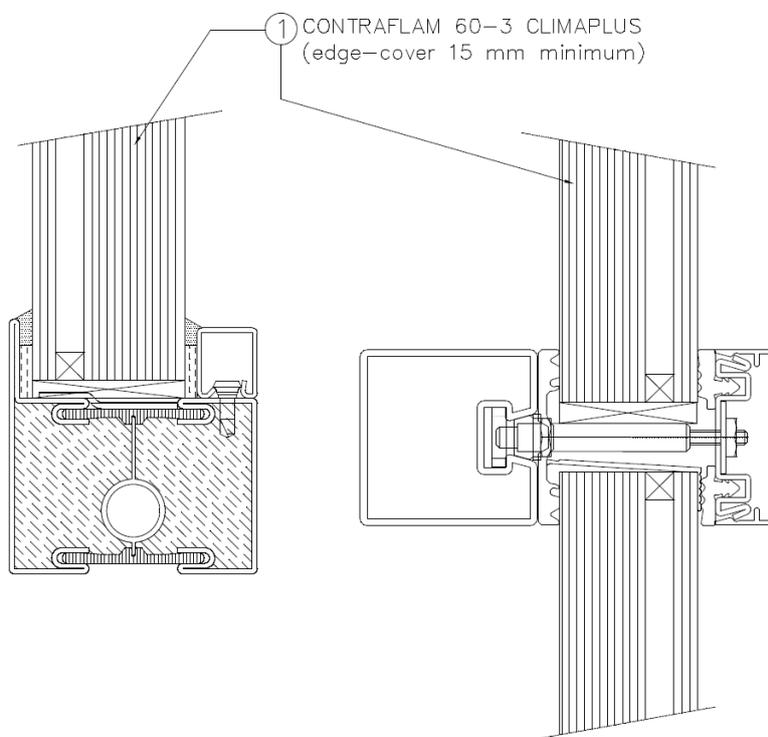


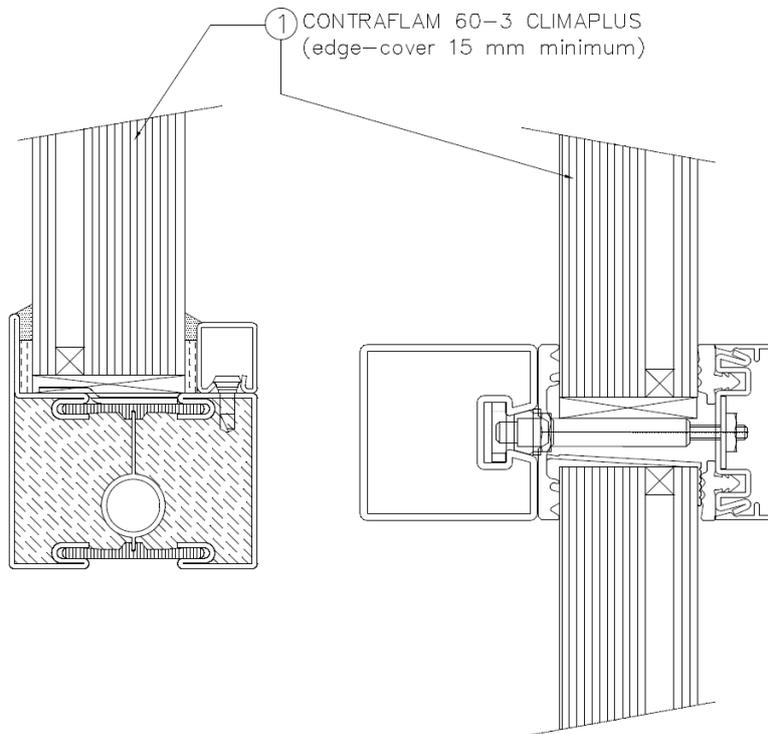
Table 75 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 2600 high)	2600 (at 1800 wide)	4.68
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in steel framed screens for periods of 120 minutes integrity and 60 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.



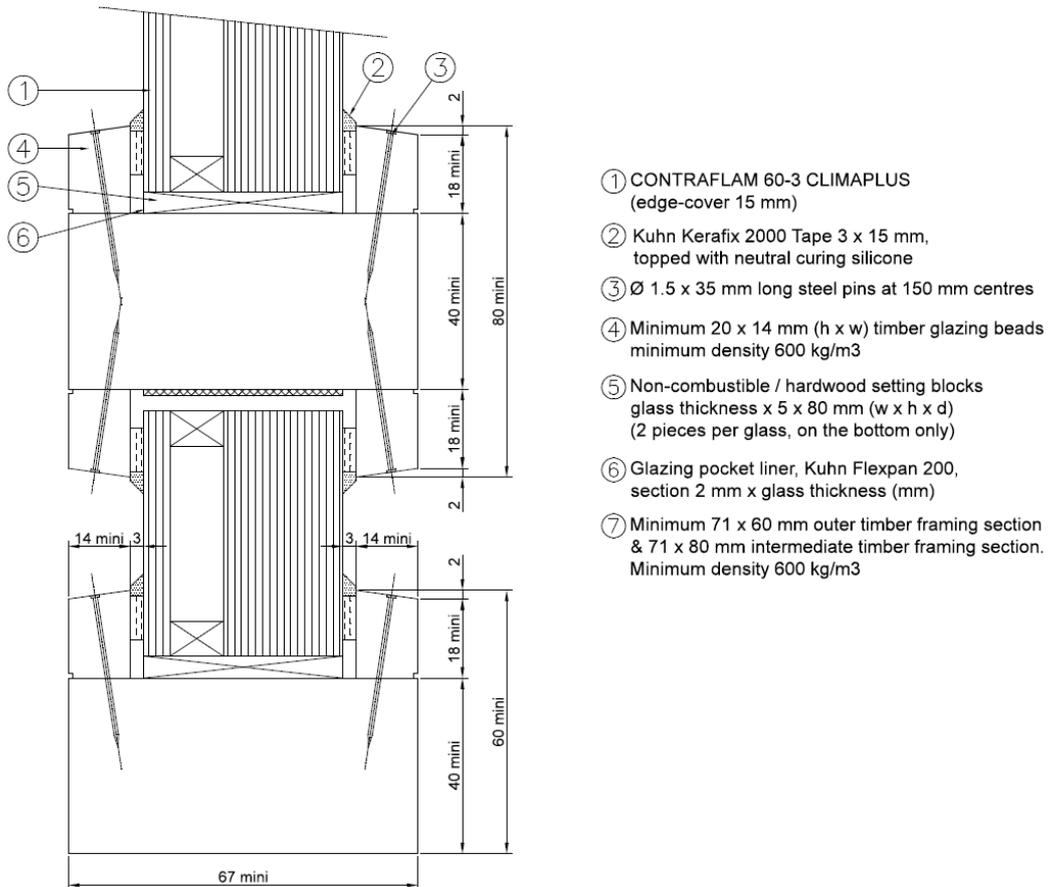
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in timber framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be glazed utilising the following basic specification:



- ① CONTRAFLAM 60-3 CLIMAPLUS (edge-cover 15 mm)
- ② Kuhn Kerafix 2000 Tape 3 x 15 mm, topped with neutral curing silicone
- ③ Ø 1.5 x 35 mm long steel pins at 150 mm centres
- ④ Minimum 20 x 14 mm (h x w) timber glazing beads minimum density 600 kg/m³
- ⑤ Non-combustible / hardwood setting blocks glass thickness x 5 x 80 mm (w x h x d) (2 pieces per glass, on the bottom only)
- ⑥ Glazing pocket liner, Kuhn Flexpan 200, section 2 mm x glass thickness (mm)
- ⑦ Minimum 71 x 60 mm outer timber framing section & 71 x 80 mm intermediate timber framing section. Minimum density 600 kg/m³

Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1875 (at 3000 high)	3750 (at 1500 wide)	5.62
2500 (at 1400 high)	1400 (at 2500 wide)	3.5
2153 (at 3499 high)	3884 (at 1940 wide)	7.53

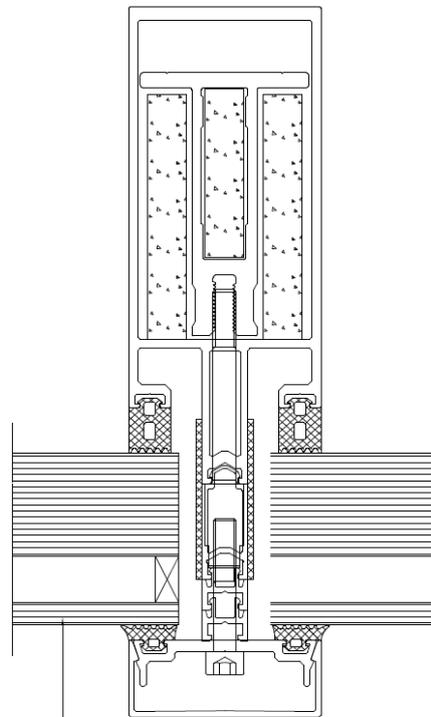
Paul Dyer

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in Aluprof MB-SR50EI aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Aluprof MB-SR50EI aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 CLIMAPLUS
(edge-cover 13 mm minimum)

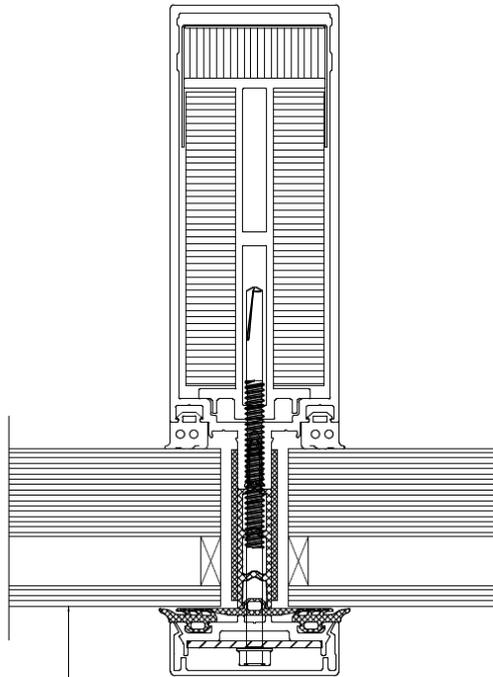
Table 78 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1665 (at 3000 high)	3330 (at 1500 wide)	4.99
1887 (at 1200 high)	1332 (at 1700 wide)	2.26

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in Kawneer AA100FR aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Kawneer AA100 FR aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 CLIMAPLUS
(minimum edge cover =
15 mm vertical edges
15 mm top edge
13 mm bottom edge)

Table 79 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1480 (at 2978 high)	2978 (at 1480 wide)	4.40

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in Reynaers CS77-FP aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Reynaers CS77-FP aluminium framing system (which is covered appropriately by test or assessment evidence).

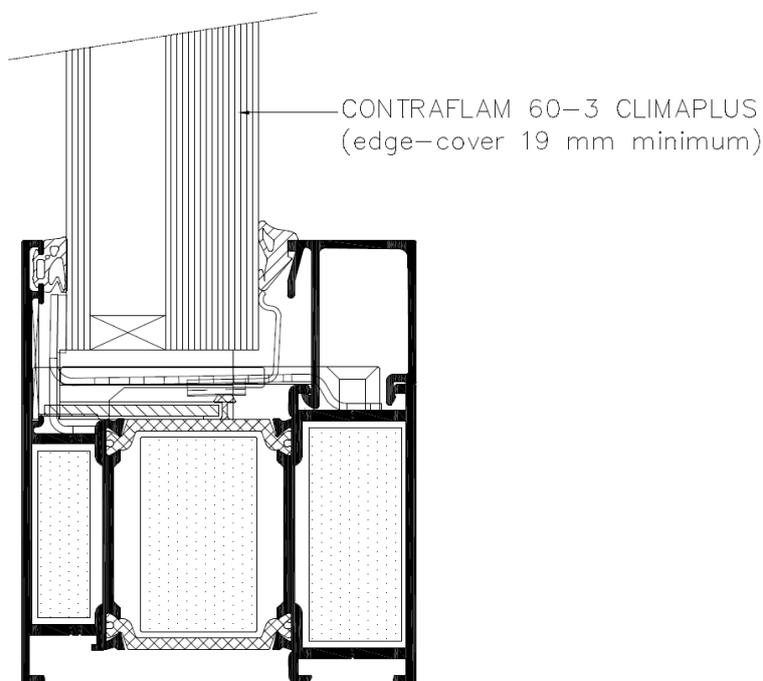


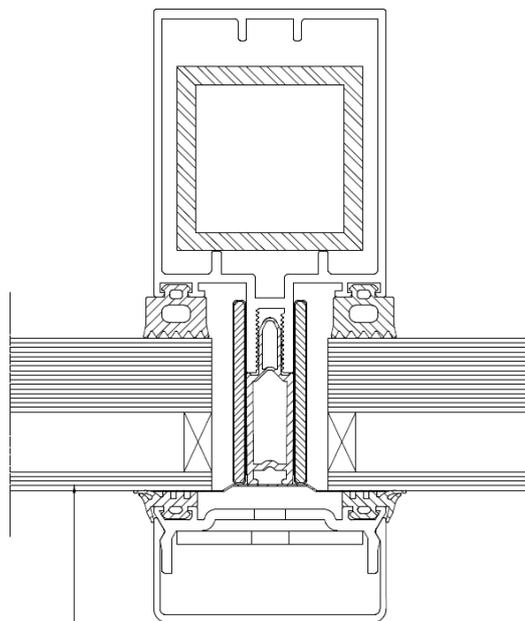
Table 80 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1620 (at 2500 high)	2700 (at 1500 wide)	4.05

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in Reynaers CW50-FP aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Reynaers CW50-FP aluminium framing system (which is covered appropriately by test or assessment evidence).



① CONTRAFLAM 60-3 CLIMAPLUS
(edge-cover 14 mm minimum)

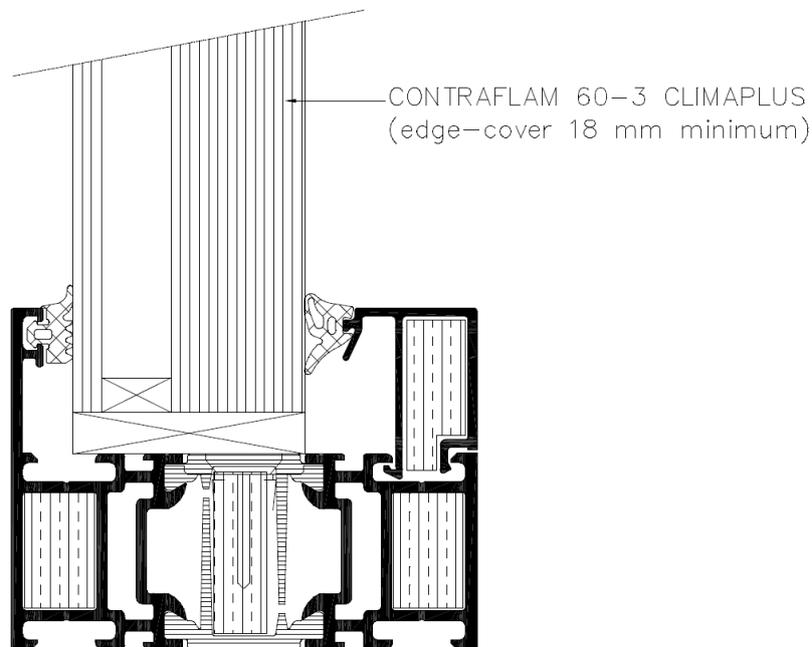
Table 81 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1590 (at 3200 high)	3392 (at 1500 wide)	5.09

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 60-3 Climaplus Glass in Schuco ADS80 FR60 aluminium framed screens for periods of 60 minutes integrity and 60 minutes insulation

The glass shall be installed into the Schuco ADS80 FR60 aluminium framing system (which is covered appropriately by test or assessment evidence).



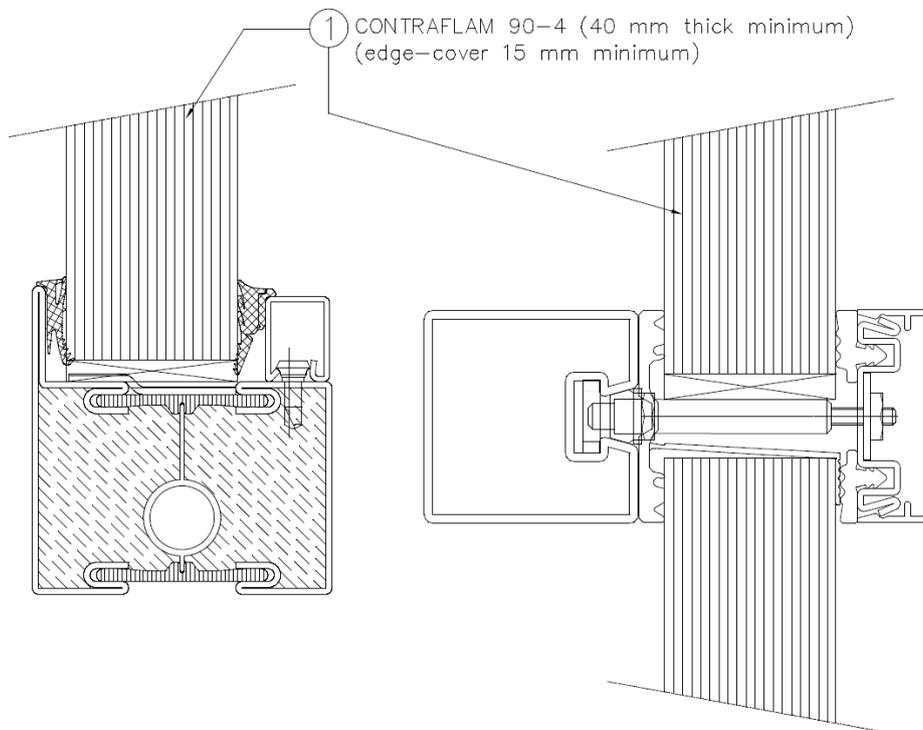
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1330 (at 2500 high)	2500 (at 1330 wide)	3.33
2500 (at 1400 high)	1400 (at 2500 wide)	3.5

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 90-4 Glass in steel framed screens for periods of 90 minutes integrity and 90 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 3000 high)	3600 (at 1500 wide)	5.4
2744 (at 1500 high)	1800 (at 2286 wide)	4.12

Paul Duggan

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 90-4 Climaplus Glass in steel framed screens for periods of 90 minutes integrity and 90 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.

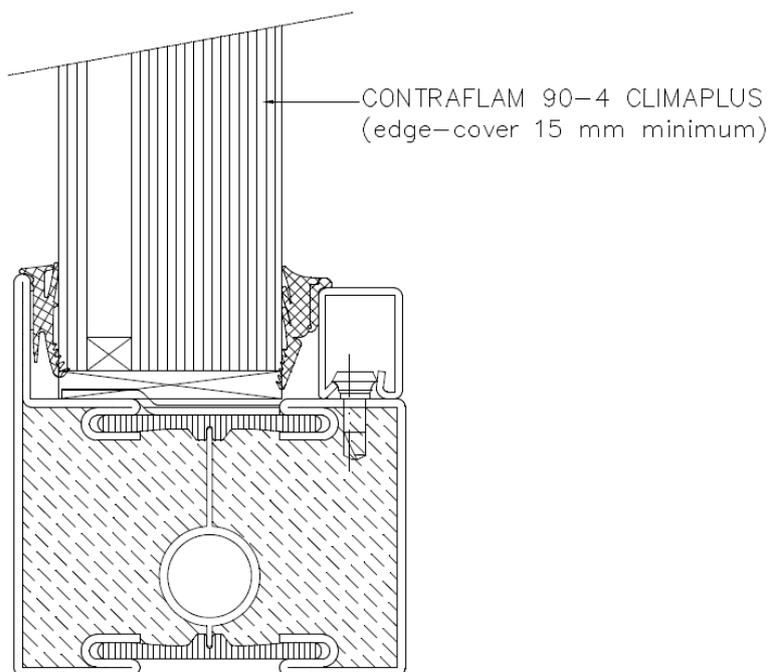


Table 84 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1800 (at 3000 high)	3600 (at 1500 wide)	5.4

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 120-5 Glass in steel framed screens for periods of 120 minutes integrity and 120 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.

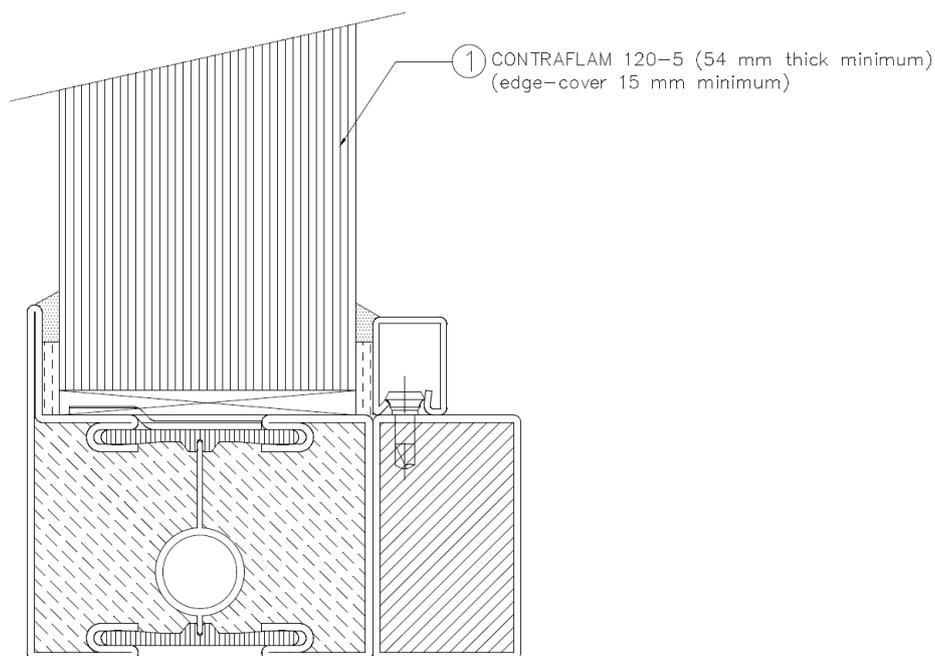


Table 85 – Maximum Permitted Glass Dimensions		
Max. Width (mm)	Max. Height (mm)	Max. Area (m2)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 120-6 Glass in steel framed screens for periods of 120 minutes integrity and 120 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.

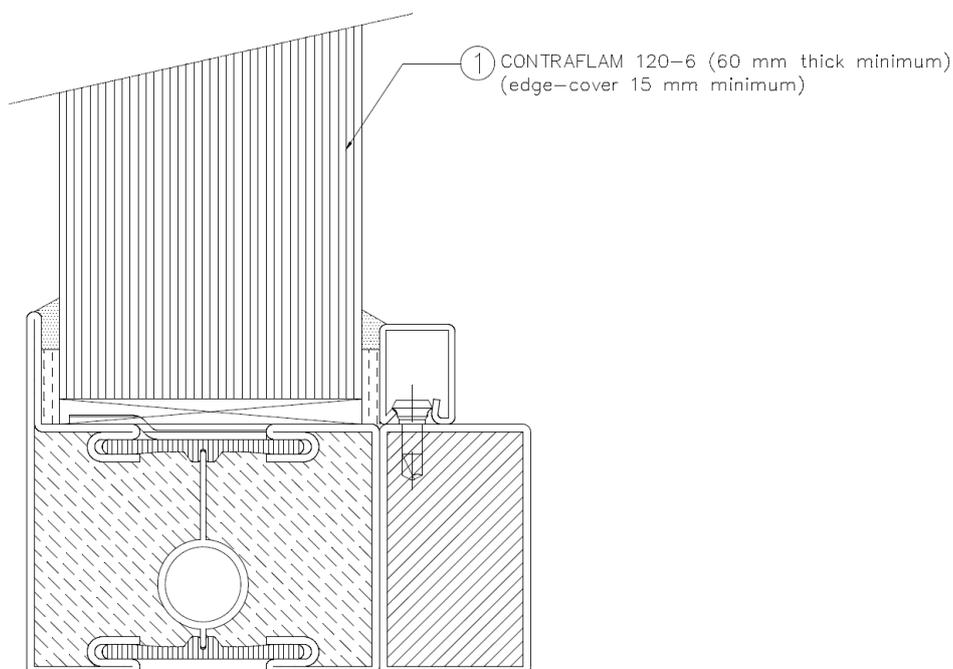


Table 86 – Maximum Permitted Glass Dimensions

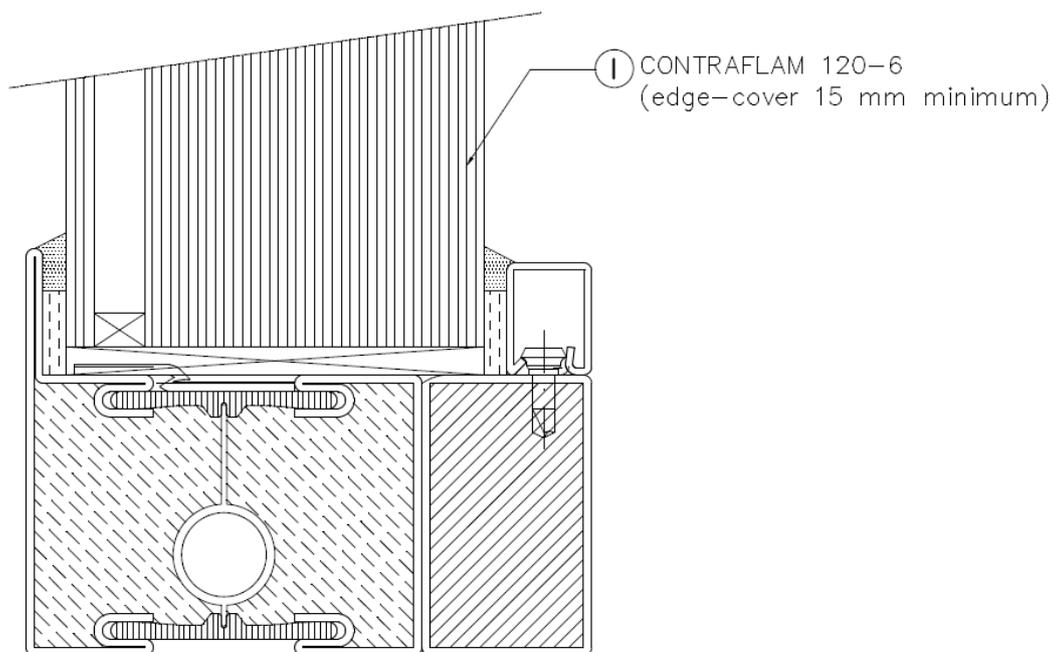
Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1650 (at 3000 high)	3300 (at 1500 wide)	4.97
2975 (at 1500 high)	1500 (at 2975 wide)	4.46

CERTIFICATE No CF 811A VETROTECH SAINT-GOBAIN INTERNATIONAL

CONTRAFLAM FIRE RESISTING GLASS

Contraflam 120-6 Climaplus Glass in steel framed screens for periods of 120 minutes integrity and 120 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.



Max. Width (mm)	Max. Height (mm)	Max. Area (m ²)
1500 (at 3000 high)	3000 (at 1500 wide)	4.5