STOPLINE FIRE RATED GLAZED

Fire Resistant Glazing System Reinvented • Complete & Guaranteed

Q1 Queensland
Hyundai Head Office Sydney
Digital Life Labs Melbourne
ANZ Head Office Melbourne
“Stockhome”, Stocklands HQ Sydney
FIRE RATED GLAZING

With the demand for Green Buildings increasing there has never been more reason to use Smoke Control’s systems. Our systems assist designers, developers and building owners achieve the green building goals whilst maintaining a high level of life safety through the use of Alternative Solutions.

Once, fire resistant glazing was thought to be expensive and cumbersome. Smoke Control introduces a complete range of fire resistant glazing systems which provide cost effective solutions to all budgets and applications.

To do this we have partnered with Vetrotech Saint-Gobain. Saint-Gobain has been making glass since 1665, and today is Europe’s largest glass manufacturer, producing an unrivalled range of glass types used in building, transportation and specialty applications. Operating in more than 50 countries, Saint-Gobain is one of the world’s “Top 100” industrial corporations. As part of this group Vetrotech Saint-Gobain is the world’s leading manufacturer of fire resistant glass for the building and marine sectors. With over 25 years of specialised experience, they have built a solid reputation for delivering glass of exceptional quality and effectiveness.

Smoke Control’s commitment to provide complete solutions is reflected in the trust our clients place in us. This commitment is underlined by extensive system development, testing and approvals and supported by Vetrotech Saint-Gobain with quality-driven production processes.

Saint-Gobain’s glasses combine absolute form and function, accommodating life safety and property protection as well as multi-functionality and maximum transparency - and therefore able to integrate perfectly alongside non-fire glass types.

**KEY FEATURES**

- Cost effective framed glazing systems
- Fire ratings up to 2 hours
- Fire tested to AS1530 Part 4
- Maximum transparency to integrate perfectly alongside non-fire glass
- All systems incorporate safety rated glass
- Complete range to suit a myriad of applications including: (refer to specific data sheets)
  - Vertical frameless systems
  - Horizontal structural floors
  - Sliding glazed doors
  - Operable windows
  - Suspended smoke curtains (no sprinklers required !)
  - Curtain wall systems
- Local design support
FIRE RATED GLAZING

Description
The wide range of Vetrotech Saint-Gobain is based on various technologies and production processes, which have been developed with a high level of commitment and innovation.

The glass technology ranges from specialty glass and films to intumescent interlayer products.

In addition to the fire performance, these glasses have inherent light transmission, sound reduction and U values. This data is of course dependant on the glazing system and is available on request.

Our fire resistant glass systems are also available etched, printed and coloured.

Installation
In line with Smoke Control’s mission to provide customers with reliable solutions, our glazing systems are installed by our fully trained and approved national installer network.

Verification of performance
Simply, Smoke Control offers Deemed-to-Satisfy fire resistant glazing systems fire tested in accordance with AS1530.4. This includes 30 and 60 minute integrity only systems (-/30/- and -/60/-) and fully insulated systems (-/30/30, -/60/60, -/90/90 and -/120/120).

In addition, we offer significant cost savings through the use of full integrity and radiant heat shielding glazed systems. Akin to our fire and smoke curtain systems, the various available fire ratings of these systems are assessed by the fire engineer on a project specific basis. We refer to these as R-systems. It is therefore essential that Smoke Control is invited to provide design assistance from an early stage in the project's design to ensure the system will be accepted by both the Fire Engineer and Building Certifier.

An effective explanation of the various fire performance levels available is achieved using a corridor application as follows….
FIRE RATED GLAZING

Maintenance
Annual maintenance and verification of system operation should be conducted by trained personnel in strict accordance with our document procedures.

The glass requires no special maintenance procedures. Once installed the glass should be cleaned regularly using warm water and a liquid detergent, washed down with clean water. Damaged or broken panels should be replaced, as this could affect the fire performance capabilities of the product.

Contact us for details.

Technical Data
Safety Glass
All of Smoke Control's glass comply with AS2208 requirements for Safety Glass and are classified as Grade A.

Maximum fire tested size
St Gobain has conducted a myriad of fire tests on many different combinations of pane sizes and configurations. So much testing in fact that the Testing Laboratories have sufficient data on worse case scenarios to enable them to produce Field of Application Assessments for each system. This provides the Designer with flexibility of system design to suit their architectural requirements while also giving the Certifier confidence in the acceptance of the system at certification time.

These field of application approvals derive the maximum allowable pane sizes for the system. The system can then be expanded in a modular form in height and width. The following system data sheets summaries our approvals and illustrates this flexibility.

Freedom of design
Integration along side non-fire resistant glass systems can be easily achieved due to the glass' high transparency qualities. Systems are always being developed so if you don't see exactly what you need here, please contact us to discuss your requirements.

Information given in this publication is given to the best of our knowledge and in good faith. Smoke Control is not responsible if recipients of test reports, assessments or literature misinterpret the contents and wrongly use products based on those misinterpretations. No liability is accepted for error omissions in this document. Smoke Control reserves the right to change specification without notice.
FIRE RATED GLAZING

System options

Stopline integrity only glazing systems

Stopline - R low radiation systems

Stopline 120 fully insulated systems
FIRE RATED GLAZING

WE KNOW FIRE
Stopline Uninsulated Glazed Screens, Doors and Windows

System
Stopline

FRL's
Up to -/180/-

Approvals
WFRC166796
WFRC180305
WFRC103798

Elevation

For maximum clear opening dimensions, please refer to the tables in this section.
**STOPLINE UNINSULATED GLAZED SCREENS, DOORS AND WINDOWS**

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**Parts list**

1. 50 x 50mm galvanised steel stop bar
2. Galvanised steel snap-on glazing beads
3. SGG Pyroswiss glass – see table next page for specifications
4. Setting blocks 80 x 10 x 6mm
5. 50 x 50 mm galvanized steel mullion (or transom)
6. Glazing tape
7. Glazing bead studs
8. Expanding anchor bolts M8 x 100mm @ 460mm centres (nominal)
9. Hinges or Dorma top pivot – type 7421
10. Intumescent smoke seals to frame and door leaves
11. Dorma floor springs—Type BTS80, size 3 (for double acting doors only)

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Attention:

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**STOPLINE UNINSULATED GLAZED SCREENS, DOORS AND WINDOWS**

**WE KNOW FIRE**

### Glass Specifications - Screens and windows

<table>
<thead>
<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/ FRR</th>
<th>Max clear opening dimension* (mm)</th>
<th>Weight^ (kg/m²)</th>
<th>Light Transmission (EN410)</th>
<th>Sound Reduction Rw</th>
<th>UG Value (W/m²K) (EN673)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyroswiss</td>
<td>6mm</td>
<td>-/30/-</td>
<td>3000 x 1200</td>
<td>15</td>
<td>89%</td>
<td>32 dB</td>
<td>5.8</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/60/-</td>
<td>3000 x 1200</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/90/-</td>
<td>3000 x 1200</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
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</tr>
<tr>
<td>Pyroswiss Extra</td>
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<td>-/120/-</td>
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<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra (Laminated)</td>
<td>12.76mm</td>
<td>-/120/-</td>
<td>3000 x 1200</td>
<td>31</td>
<td>87%</td>
<td>38 dB</td>
<td>5.4</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/180/-</td>
<td>2340 x 965</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
</tbody>
</table>

* Max clear opening dimensions OR maximum m² apply based on the max dimensions for screens and windows only
^ Weight is dead weight of glass only. Weight for framing, hardware and any structural supports must be added

### Glass Specifications - Single leaf doors, single acting

<table>
<thead>
<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/ FRR</th>
<th>Max clear opening dimension (mm)</th>
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<tbody>
<tr>
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<td>-/30/-</td>
<td>2630 x 1315</td>
<td>15</td>
<td>89%</td>
<td>32 dB</td>
<td>5.8</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/60/-</td>
<td>2550 x 1200</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/90/-</td>
<td>2100 x 1100</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/120/-</td>
<td>2100 x 1000</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
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<td>Pyroswiss Extra (Laminated)</td>
<td>12.76mm</td>
<td>-/120/-</td>
<td>2100 x 1000</td>
<td>31</td>
<td>87%</td>
<td>38 dB</td>
<td>5.4</td>
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<tr>
<td>Pyroswiss Extra</td>
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<td>-/180/-</td>
<td>2100 x 950</td>
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<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
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</table>

### Glass Specifications - Double leaf doors, single acting

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<tr>
<th>Glass</th>
<th>Thickness</th>
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<th>Max clear opening dimension (mm)</th>
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<tbody>
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<td>89%</td>
<td>32 dB</td>
<td>5.8</td>
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<tr>
<td>Pyroswiss Extra</td>
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<td>-/60/-</td>
<td>2400 x 2400</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
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<td>6mm</td>
<td>-/90/-</td>
<td>2450 x 2025</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/120/-</td>
<td>2450 x 2025</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
<tr>
<td>Pyroswiss Extra (Laminated)</td>
<td>12.76mm</td>
<td>-/120/-</td>
<td>2450 x 2025</td>
<td>31</td>
<td>87%</td>
<td>38 dB</td>
<td>5.4</td>
</tr>
<tr>
<td>Pyroswiss Extra</td>
<td>12mm</td>
<td>-/180/-</td>
<td>2340 x 1930</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
</tr>
</tbody>
</table>
**STOPLINE UNINSULATED GLAZED SCREENS, DOORS AND WINDOWS**

**WE KNOW FIRE**

**Glass Specifications - Single leaf doors, double acting**

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<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/FRR</th>
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<tbody>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/30/-</td>
<td>2100 x 900</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
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**Glass Specifications - Double leaf doors, double acting**

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</thead>
<tbody>
<tr>
<td>Pyroswiss Extra</td>
<td>6mm</td>
<td>-/30/-</td>
<td>2185 x 1187</td>
<td>16</td>
<td>89%</td>
<td>32 dB</td>
<td>5.7</td>
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<tr>
<td>Pyroswiss Extra</td>
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<td>31</td>
<td>87%</td>
<td>38 dB</td>
<td>5.7</td>
</tr>
</tbody>
</table>

**Notes:**
- Pyroswiss glazing systems are suitable for internal and external use.
- Specific data for laminated safety glass, UV stability and double glazed unit make-ups on request.
- Available etched, printed and coloured.

Pyroswiss Extra (Laminated) is UV Stable in accordance with ENISO12543-4 Pt6.
STOPLINE - R LOW RADIATION GLAZED SCREENS, DOORS AND WINDOWS

Low Radiation Glazing Systems

Elevation

For maximum clear opening dimensions, please refer to the tables in this section.

SYSTEM
Stopline - R

FRL
Up to -/120/- with low radiation properties

Approvals
IFCI537A
WFRC109918
IBS04120208
# Fire Rated Glazing

**Parts list**

1. 50 x 50mm galvanised steel stop bar
2. Galvanised steel snap-on glazing beads
3. SGG Contraflam Lite glass –see table next page for specifications
4. Setting blocks 80 x 10 x 6mm
5. 50 x 50 mm galvanized steel mullion (or transom)
6. Glazing tape
7. Glazing bead studs
8. Expanding anchor bolts M8 x 100mm @ 460mm centres (nominal)
9. Hinges or Dorma top pivot – type 7421
10. Intumescent smoke seals to frame and door leaves
11. Dorma floor springs—Type BTS80, size 3 (for double acting doors only)

**Attention:**

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<th>Light Transmission (EN410)</th>
<th>Sound Reduction Rw</th>
<th>UG Value (W/m²K) (EN673)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraflam Lite</td>
<td>13mm/ 20mm</td>
<td>-/120/-</td>
<td>3000 x 1800</td>
<td>33</td>
<td>87%</td>
<td>37 dB</td>
<td>5.1</td>
</tr>
</tbody>
</table>

* Max clear opening dimensions OR maximum m² apply based on the max dimensions for screens and windows only

^ Weight is dead weight of glass only. Weight for framing, hardware and any structural supports must be added

# Glass Specifications - Single leaf doors, single acting

<table>
<thead>
<tr>
<th>Glass</th>
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<th>Max clear opening dimension (mm)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contraflam Lite</td>
<td>13mm</td>
<td>-/120/-</td>
<td>2630 x 1315</td>
<td>33</td>
<td>87%</td>
<td>37 dB</td>
<td>5.1</td>
</tr>
</tbody>
</table>

# Glass Specifications - Double leaf doors, single acting

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<tr>
<th>Glass</th>
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<th>Max clear opening dimension (mm)</th>
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</thead>
<tbody>
<tr>
<td>Contraflam Lite</td>
<td>13mm</td>
<td>-/120/-</td>
<td>2630 x 2700</td>
<td>33</td>
<td>87%</td>
<td>37 dB</td>
<td>5.8</td>
</tr>
</tbody>
</table>
## STOPLINE - R LOW RADIATION GLAZED SCREENS, DOORS AND WINDOWS

**Glass Specifications - Single leaf doors, double acting**

<table>
<thead>
<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/ FRR</th>
<th>Max clear opening dimension (mm)</th>
<th>Weight (kg/m²)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contraflam Lite</td>
<td>13mm</td>
<td>-/30/-</td>
<td>2100 x 900</td>
<td>33</td>
<td>87%</td>
<td>37 dB</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**Glass Specifications - Double leaf doors, double acting**

<table>
<thead>
<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/ FRR</th>
<th>Max clear opening dimension (mm)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contraflam Lite</td>
<td>13mm</td>
<td>-/60/-</td>
<td>2185 x 1187</td>
<td>33</td>
<td>87%</td>
<td>37 dB</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**Notes:**
- This system significantly restricts the radiation that penetrates the glass, providing a cost effective Alternative Solution for a myriad of applications.
- No sprinklers are required
- Vetroflam glazing systems are suitable for internal and external use
- Contraflam Lite glazing systems are suitable for internal use only
- Specific data for laminated safety glass, UV stability and double glazed unit make-ups on request
- Available etched, printed and coloured

Contraflam Lite uses intumescent interlayer technology to reduce radiation and is UV Stable in accordance with EN ISO12543-4 Pt6.
STOPLINE 120 FULLY INSULATED
GLAZED SCREENS, DOORS AND WINDOWS

Full integrity and insulation glass fully contains the heat in addition to fire and smoke.

For maximum clear opening dimensions, please refer to the tables in this section.

SYSTEM
Stopline 120
FRL
Up to -120/120
Approvals
WFRC 119930

Elevation

For maximum clear opening dimensions, please refer to the tables in this section.
Parts list
1. 50 x 50mm galvanised steel stop bar
2. Galvanised steel snap-on glazing beads
3. SGG Contraflam glass – see table next page for specifications
4. Setting blocks 80 x 10 x 6mm
5. 50 x 50 mm galvanized steel mullion (or transom)
6. Glazing tape
7. Glazing bead studs
8. Expanding anchor bolts M8 x 100mm @ 460mm centres (nominal)
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11. Dorma floor springs—Type BTS80, size 3 (for double acting doors only)

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<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/FRR</th>
<th>Max clear opening dimension* HxW (m²)</th>
<th>Weight^</th>
<th>Light Transmission (EN410)</th>
<th>Sound Reduction Rw</th>
<th>UG Value (W/m²K) (EN673)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraflam</td>
<td>16mm</td>
<td>-/30/30</td>
<td>3350 x 1500</td>
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<td>Contraflam</td>
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<td>-/90/90</td>
<td>2220 x 1666 1666 x 1666</td>
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<tr>
<td>Contraflam</td>
<td>40mm min.</td>
<td>-/120/120</td>
<td>2220 x 1666 1666 x 1666</td>
<td>108 nom.</td>
<td>70%</td>
<td></td>
<td>2.3</td>
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</table>

* Max clear opening dimensions OR maximum m² apply based on the max dimensions for screens and windows only
^ Weight is dead weight of glass only. Weight for framing, hardware and any structural supports must be added
^= Framing system is different to that depicted for 90 minute and 2 hour systems

### Glass Specifications - Single leaf doors, single acting

<table>
<thead>
<tr>
<th>Glass</th>
<th>Thickness</th>
<th>FRL/FRR</th>
<th>Max clear opening dimension (mm)</th>
<th>Weight^</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contraflam</td>
<td></td>
<td>pending</td>
<td></td>
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### Glass Specifications - Double leaf doors, single acting

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<thead>
<tr>
<th>Glass</th>
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<tr>
<td>Contraflam</td>
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<td>pending</td>
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**STOPLINE 120 FULLY INSULATED GLAZED SCREENS, DOORS AND WINDOWS**

**Notes:**
- Deemed-to-satisfy solution
- Fully insulated glazing system can be double glazed for UV, sound and thermal protection and external use
- Suitable for use on inclines up to 10° from the vertical
- Specific data for laminated safety glass, UV stability and double glazed unit make-ups on request
- Available etched, printed and coloured
- Framing system for 90 and 120 minute systems shown below.

-/-30/30 system 16mm thick
-/-30/30 double glazed system
-/-60/60 system 23mm thick
-/-60/60 double glazed system
-/-90/90 system 36mm thick
-/-120/120 system 40mm thick, min