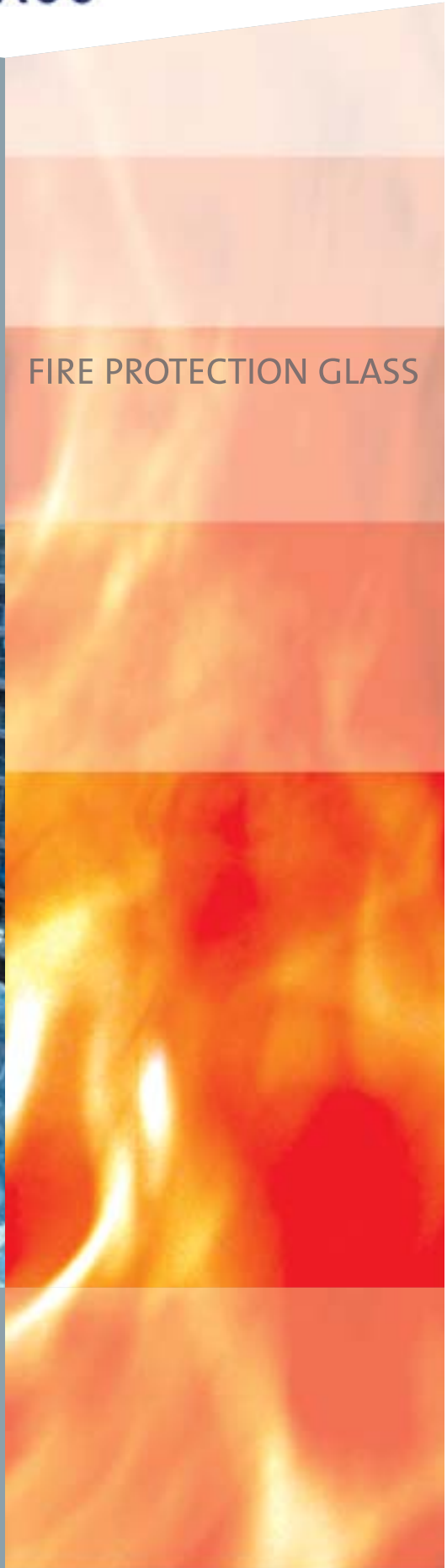


SGG PYROSWISS®
SGG PYROSWISS® EXTRA

FIRE PROTECTION GLASS



SGG PYROSWISS®

SGG PYROSWISS® EXTRA

Our innovation characterises the Fire Protection glass of the future

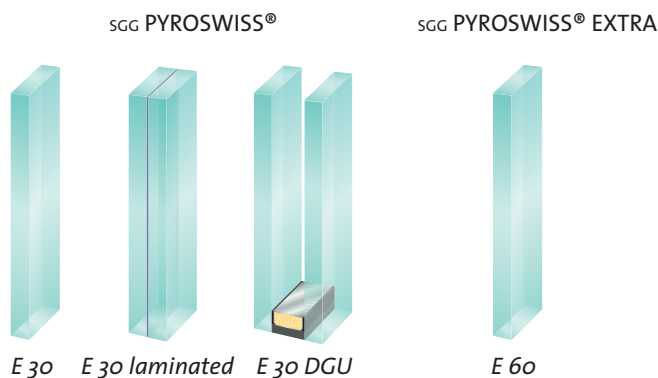
Vetrotech Saint-Gobain, as a leader in innovation for fire protection glass, belongs to the worldwide leading producers for fire protection glass. Multifunctionality is one of the brand qualities of our high value products: Low E qualities, UV protection and impact safety are just some of the additional possible uses as well as fire protection. Architects and Designers hold the clear vision and exceptional stability of our glasses in high esteem, which allows ambitious solutions to be easily achieved. Thermally toughened SGG PYROSWISS fulfils all of these points with simple and flexible application possibilities. SGG PYROSWISS EXTRA has a higher melting point and is best aimed at fire protective glazing requiring higher fire resistance.



Clear Advantages

- Symmetrical fire protection
- Remains clear in the event of a fire
- Can be used double glazed to provide thermal protection, UV stability or acoustic control
- UV stable and can be used within a wide temperature range
- Manufacturable to pane sizes of 2000 x 4000 mm
- Large pane sizes tested (assessed) of up to 4.63 m²

SGG PYROSWISS protects against fire, smoke and toxic gases.



SGG PYROSWISS – available for E 30 applications as monolithic panes, laminated or double glazed units.

SGG PYROSWISS EXTRA – available for E60 applications single glazed.



Multifunctional

Because of its high mechanical strength and the wide variety of combinations that are possible, SGG PYROSWISS is suitable for a wide variety of solutions.

- SGG PYROSWISS CLIMALIT and SGG PYROSWISS CLIMAPLUS are both suitable for roof and bolted applications
- SGG PYROSWISS is also available obscure, silk printed or manufactured from our patterned glass SGG MASTERCARRE

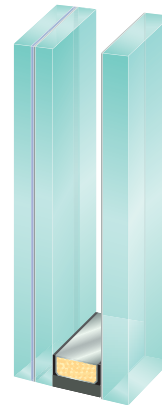
For a higher fire resistance, SGG PYROSWISS EXTRA can be used.

Saint-Gobain's unique «Alkaline Earth Silicate» float glass provides for a higher temperature resistance compared to conventional float glass based toughened products.

Further combinations are possible by means of individual application development. Fire tests in independent test institutes guarantee that all safety requirements are fulfilled.

Optimal Low-E Values from 1.2 W/m²K (according to EN 674/673)

SGG PYROSWISS STADIP CLIMAPLUS in use as a double glazed unit with argon filled spacer. For product make-up see datasheets.



Unique variety of combinations

Depending on the application, SGG PYROSWISS can be installed monolithic, laminated or as a double glazed unit. Combinations to provide impact safety, anti-bandit resistance or with decorative glasses from the SGG DESIGN product range are possible with a project specific fire-test.

Individual application development makes further special applications possible. Our fire test assure that all safety requirements are met.

Please note – the respective performance and combination possibilities with SGG PYROSWISS are dependent on the country specific fire tests and assessments.

Areas of Application

SGG PYROSWISS is a versatile fire protection glass that can be universally used for both internal and external applications, for example:

- Partitions
- Fixed Glazing
- Vision panels
- Skylights
- Roof Glazing
- Facades
- Sloped Glazing
- Smoke curtains

SGG PYROSWISS® was developed specifically for integrity only applications

SGG PYROSWISS can be used in various frame and profile systems including steel, aluminium and hardwood. The installation of Pyroswiss takes place according to current fire testing and may only be carried out by an approved installer.



SGG PYROSWISS was developed specifically for integrity only applications.



Product Description

Product Name

SGG PYROSWISS fire protection glass for classification E30
SGG PYROSWISS EXTRA fire protection glass for classification \geq E 60

Fire Protection Properties – Classification

E30 – E60
Tested according to EN 1363 and EN 1364
A choice of single, double glazed or laminated glass
Symmetrical Fire Protection
Remains clear during a fire

Further Properties

UV stable
Class A for impact safety

Further technical information can be found on the data sheets.

Behaviour in a fire

The glass prevents the passage of flames, smoke and gases in the case of a fire.

In the case of a fire a high temperature difference occurs between the glass and the frame.



This difference in temperature leads to varying expansion, causing tension of the glass. Normal glass would break immediately from this kind of pressure.



Cross section of SGG PYROSWISS fire protection glazing with frame and glazing components. The definition and names of the system components can be found in the corresponding fire test.

Due to special treatment SGG PYROSWISS and SGG PYROSWISS EXTRA can withstand this pressure and therefore provide efficient protection from fire.



VETROTECH SAINT-GOBAIN GLASS PROTECT

SGG PYROSWISS® SGG PYROSWISS® EXTRA

Fire protection and Safety

Safety

As a toughened product SGG PYROSWISS is already a safety glass. It can also be made into laminated safety glass with a PVB interlayer (SGG STADIP). In this case the glass has increased safety properties as well as fire protection.

The excellent sound reduction properties achieved with double glazed units and laminated glass ensure a higher user comfort by protection from noise pollution.

Tested Decorative Applications with SGG PYROSWISS®

SGG PYROSWISS SATINOVO and SGG PYROSWISS MASTERCARRE are solutions that have been developed and successfully tested according to EN 1363 for E30 classification by Vetrotech Saint-Gobain, with a current tested size of 1200 x 2000.

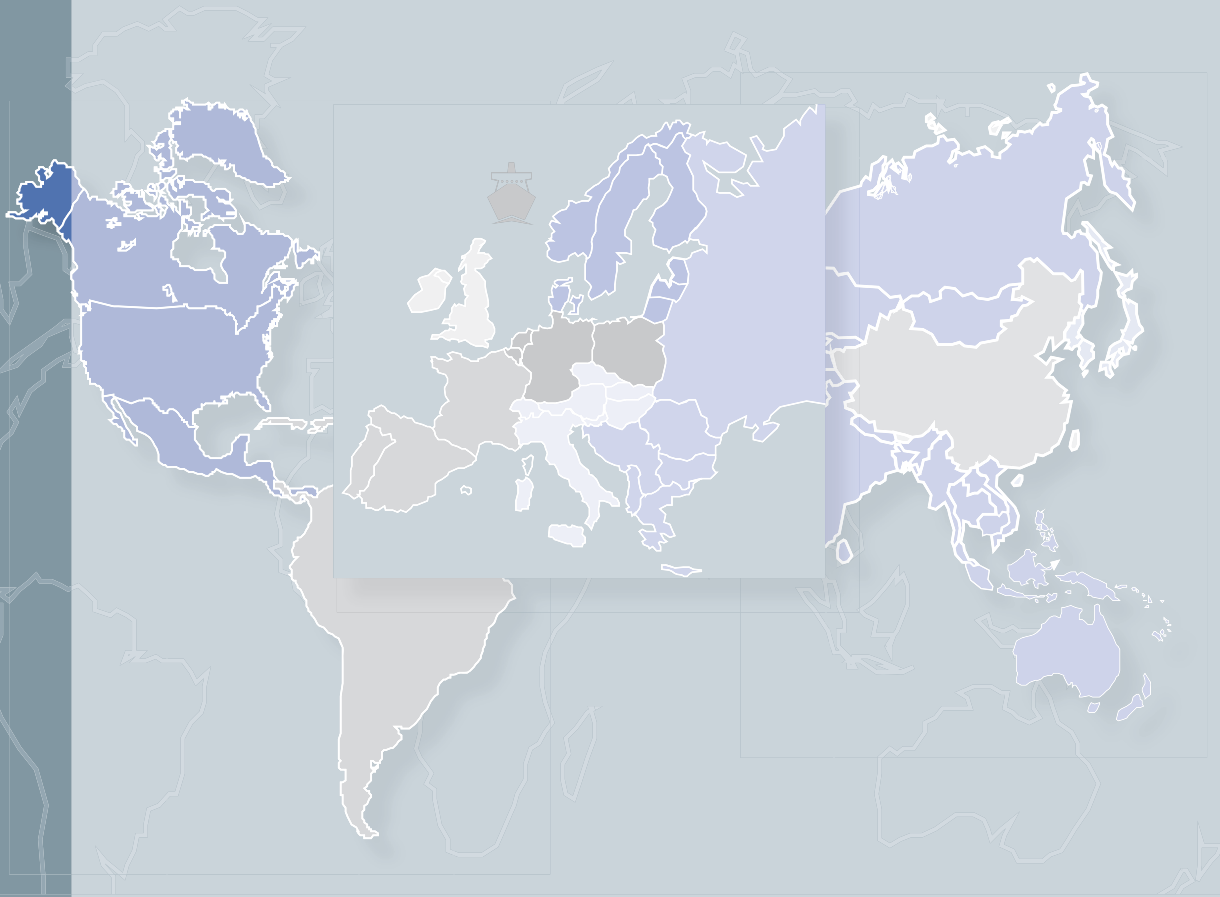
With both of these solutions, fire protection applications can be realised with integrated privacy and decorative options.





VETROTECH SAINT-GOBAIN

Worldwide Service



For further information:
www.vetrotech.com

■ **VETROTECH SAINT-GOBAIN
INTERNATIONAL AG**

Stauffacherstrasse 128
CH-3000 Bern 22
Tel. +41 31 336 81 81
Fax +41 31 336 81 19
infoVSGI.vetrotech@saint-gobain.com
www.vetrotech.com


SAINT-GOBAIN
GLASS

 **VETROTECH**
FIRE RESISTANCE
 **Saint-Gobain**
Glass Solutions

**VETROTECH SAINT-GOBAIN
INTERNATIONAL AG**

Stauffacherstrasse 128
CH-3000 Bern 22
Tel. +41 31 336 81 81
Fax +41 31 336 81 19
infoVSGI.vetrotech@saint-gobain.com
www.vetrotech.com

Vetrotech Saint-Gobain International AG, sgg PYROSWISS®, sgg VETROFLAM®, sgg SWISSFLAM®, sgg CONTRAFLAM®, and all devices and logos are registered trademarks of Saint-Gobain.

Avril 2006. The information contained in this publication is correct at the time of going to print. Such information may be subject to change and products may be modified, supplemented or withdrawn by Vetrotech Saint-Gobain without prior knowledge.