

Transparent Fire Protection



vetrotech
SAINT-GOBAIN



Saint-Gobain

The Reference for Sustainable Habitat

World leader in the construction market

Saint-Gobain, one of the world's top one hundred industrial corporations, is the world leader in the habitat and construction market. Operating in 64 countries with nearly 190,000 employees, Saint-Gobain designs, manufactures and distributes building materials, providing innovative solutions to today's critical challenges of growth, energy efficiency and environmental protection. For more information, visit: www.saint-gobain.com

The future of glass since 1665

Following the establishment of the "Manufacture Royale des Glaces de Miroirs" in Paris in October 1665, the Royal Glass Works built 357 mirrors for the Hall of Mirrors in the Palace of Versailles in the 17th century. The invention of the process of pouring glass onto a table (glassware casting, see picture) replaced blown glass and opened up the European market for Saint-Gobain in the 18th century.

Today, Saint-Gobain Glass is the number one glass manufacturer in Europe and ranks second in the world. Our unrivalled knowledge and our pioneering spirit enable us to deliver virtually every type of glass. The Glass Business Unit manufactures, processes and sells glass products to the building, transportation and solar industries.



Title Page: Contraflam Lite used in the interior of The Copenhagen Opera House, Denmark

Left: Saint-Gobain Group Headquarters in Paris / 18th century glass processing at Saint-Gobain in Paris / Modern float line for flat glass at Saint-Gobain Glass Division

Right: Facade with Diamant Extra-Clear at the National Grand Theatre in Beijing, China





Vetrotech

Dedicated to Fire Resistant Glass

More than 30 years of experience with fire

Vetrotech Saint-Gobain is a leading producer of fire resistant glass products. With innovative research and development as well as state-of-the-art production technologies, Vetrotech creates solutions of the highest quality and complexity. Vetrotech products comply with the strictest impact safety requirements. All solutions are suitable for multi-comfort applications and meet the aesthetic demands of modern architecture.

Global resources, local support

Vetrotech fire resistant glass is manufactured and fabricated under license by authorised Saint-Gobain facilities located throughout Europe, Asia and North America. As a global organisation, Vetrotech understands the unique needs of the markets by serving customers through local sales and technical support offices.



Left: Partition wall with Contraflam at the exit of the City Tunnel train station in Malmö, Sweden

Right: Partition wall with fire door using Contraflam at Le Forum in Luik, Belgium / Interior facade with Contraflam Lite at Tsaar Peter Building in Amsterdam, Netherlands / Vetrolam Stadip Multipoint at the Cologne-Bonn Airport train station, Germany



Protecting People and Premises

Hundreds of fire tests conducted every year

Our products are tested and certified to meet a wide range of international standards and national market requirements. We operate our own ISO 17025 accredited test laboratory with two furnaces. Our international team of fire testing technicians also stands by to support our customers locally.

Tried and tested

We continually test and certify our glass within all leading fire-rated framing systems, including steel, aluminium and timber. As a result, our solutions span a range of classifications from "integrity only (E)", "reduced radiation (EW)" and "fully insulating (EI)" performance, through to "3 hours fire resistance". Our products offer the "toughened glass advantage", made from break resistant tempered glass that stands up to all rigours.

Left: Test laboratory with two furnaces in Berne /
Fire test with an interlayer product, creating
a foam reaction / Pendulum drop test, measuring
impact resistance

Right: Fire test with Pyroswiss remaining fully
transparent and intact

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Beyond Protection From Fire

A diverse range of applications

Working in cooperation with leading system partners, our glass can be combined with the industry's most popular fire resistant framing systems and glazed building elements. These systems cover a wide range of applications, including doors, partitions, curtain walls, roof glazing, floor systems and marine applications, and in all of these, our glass integrates harmoniously with glass that is not fire resistant.

Safety combined with “multi-comforts”

Protecting people and property from the hazards of fire is the key objective for our fire resistant glass solutions. However, our glass goes further, combining form and function by providing impact safety and acoustic and visual comfort as well as decorative features – what we call “multi-comforts”.

Daylighting for energy efficiency

Using Vetrotech fire-rated glass is an excellent way to harness natural daylight in open plan building designs – while ensuring fire safety, reducing the need for artificial light and cutting heating and cooling costs. In exterior applications, our products may be combined into double and triple glazing with solar control and low emissivity features, which maximise the energy performance of a building.



Left: Partition wall with Contraflam, blending harmoniously with architectural glass, at Le Centorial in Paris, France

Right: window with Contraflam Structure in timber frames at a nursing home in Basel, Switzerland / Partition wall with Pyroswiss featuring Privalite (electrically operated vision control) at an office building in Zeist, Netherlands / Partition wall with Contraflam Structure butt-joint solution at an office building in Amsterdam, Netherlands




A Broad Range of Solutions

Comprehensive production technologies

Supported by the Saint-Gobain Group global network of R&D centres, Vetrotech Saint-Gobain brings innovations and improvements to its product range continually, ensuring the highest standards of quality, durability and performance. A diverse range of product technologies and manufacturing processes make our approach unique.

The flexibility to meet any challenge

We offer a full spectrum of fire resistance classifications, which means we can always propose the most appropriate solution. Our glass is compatible with the complete range of SAINT-GOBAIN GLASS and GLASSOLUTIONS products, so we are able to fulfil your functional and decorative requirements, and provide solutions to virtually any design or application challenge.

-  **E** = Integrity
-  **EW** = Integrity & radiation reduction
-  **EI** = Integrity & insulation

Tempered glass products for E/EW class performance



Pyroswiss

Clear, fire resistant, safety glass for both internal and external use, which offers class E fire resistance. This thin, elegant, glass has improved mechanical integrity and anti-break properties compared with ordinary toughened glass. In the event of a fire, Pyroswiss provides an effective barrier against smoke, flames and hot, toxic gases. As it remains transparent and fully intact, Pyroswiss glazing helps people to make their escape and it gives rescue services a clear view of any impending danger.



Vetroflam

Clear, fire resistant, safety glass with a special coating developed to reduce heat radiation. Vetroflam is highly suitable for large surface areas and for both internal and external applications. In the event of fire, Vetroflam forms an effective barrier against smoke, flames and toxic gases for up to 60 minutes, with reduced radiant heat, and the glass also remains transparent and completely intact.

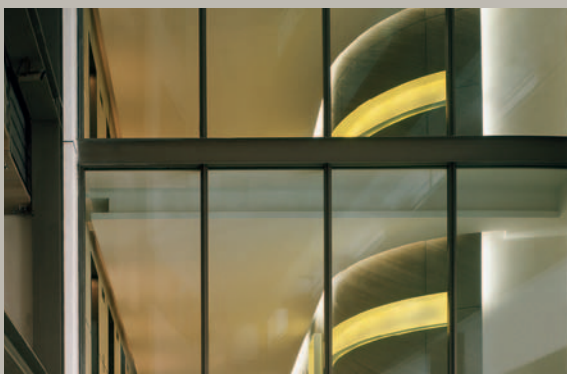


Interlayer glass products for EW/EI class performance



Contraflam Lite

Contraflam Lite is a highly flexible product that may be combined with many multi-comfort functions such as sound reduction, solar & thermal control and impact safety as well as decorative features. Large pane sizes are available. Contraflam Lite is fire resistant with reduced radiation for up to 120 minutes.



Contraflam

Contraflam is a fire resistant glass comprising two or more sheets of toughened safety glass. The cavity between the sheets of glass is filled with a transparent intumescent gel interlayer that reacts when exposed to fire. The number of sheets of toughened safety glass and interlayers is determined by the level of required fire resistance. This product satisfies the highest demands of fire protection. It is robust in handling and UV-stable. In the event of fire, the special intumescent interlayers turn opaque and expand to form a fully insulating heat shield. This is effective in reducing the transmission of radiated and conducted heat for up to 120 minutes.



Contraflam Structure

Contraflam Structure is an all-glass solution for use in partition systems that require reduced radiation or fully insulating, fire resistant, safety glass. Discreet joint intersections, free of vertical framing elements, blend harmoniously to form a flush and uninterrupted surface, and can even go round corners.

Worldwide presence

Wherever you need us, we'll be there

Vetrotech Saint-Gobain is a global organisation that understands the unique needs of local markets. Our products are manufactured and fabricated under license by authorised Saint-Gobain facilities located throughout Europe, Asia and North America. We have more than fifteen of our own sales offices, in addition to countless representatives, who span the continents, making sure that you receive commercial as well as technical support wherever you need it in the world.

For detailed, up-to-date contact information please consult our Group web site.

About us

Vetrotech Saint-Gobain is a dedicated specialist in fire resistant glass solutions. Vetrotech fire resistant glass offers the ultimate protection for people and property, while providing the aesthetic and multi-comfort qualities you expect from architectural glass. More than 30 years of experience means we are able to deliver solutions for virtually any application, worldwide.

Vetrotech Saint-Gobain International AG

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October 2011. 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 notice.

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We Know Fire