

PYROSWISS  
VETROFLAM  
CONTRAFLAM

Fire-resistant  
glass solutions

SYSTEMS

# PYROSWISS VETROFLAM CONTRAFLAM

## Description
























VETROTECH SAINT-GOBAIN specialises in the manufacture of high performance fire-resistant glass products; from single panes of modified toughened glass to fully insulating interlayered products. VETROTECH SAINT-GOBAIN offers the designer a range of glass products which are ideally adapted to all requirements in the field of fire resistance. In addition to offering protection against flames, smoke and radiated heat, these fire-resistant products can be combined with the Glassolutions product range offering an almost infinite range of applications: silk-screen printing, large dimensions, sound insulation and energy savings.

## Application

Due to their high transparency level and multi-purpose design, fire protective glass products offer potential for perfect incorporation into various designs, both from the viewpoint of glazed façades and the interior decor of buildings:

- glass roofs;
- façades;
- glass doors;
- glazed flooring;
- partitions.

## Range

Product range	Class	Fire resistance (in minutes)			
		30'	60'	90'	120'
	E				
E - Provides a physical barrier against flame, hot toxic gases and smoke.	E				
	EW				
	EW				
EW – Control of the transmission of radiated heat below a specified level.	EW				
	EI				
	EI				
EI – Highest performance limitation of surface temperature on the unexposed side.	EI				

# PYROSWISS VETROFLAM CONTRAFLAM

## Product overview

**Remains transparent  
in the event of a fire**

### PYROSWISS

Protection from fire, smoke and toxic gases. Multifunctional without having to compromise between safety and appearance.

### PYROSWISS EXTRA

Special substrate float glass for high duration fire ratings, a light and slim product with enhanced mechanical stability.

### VETROFLAM

Reduces radiated heat due to a neutral coating, and can easily be combined with other products in double glazed unit form.

### CONTRAFLAM LITE

Toughened glasses offer increased mechanical strength and reduce the risk of breakage during transport and installation. Designed for large pane sizes for internal and external use as well as being UV-stable.

### SWISSFLAM LITE

Excellent safety and UV properties. The product is made up of laminated glass, which can be double glazed if desired, making possible the combination of sound, Low E and safety functions.

**Forms an opaque  
layer in the  
event of fire**

### CONTRAFLAM

Satisfied the highest demands in fire protection. Robust in handling, with interlayers that turn opaque, UV stable and with numerous variations available, both decorative and multifunctional.

### SWISSFLAM

Transparent fire protection laminated safety glass with interlayers that turn opaque and expand in a fire situation. The product is made from STADIP laminated safety glass.

### CONTRAFLAM STRUCTURE

The all glass fire protection system, with vertical silicone joints for full height, frameless glazing. Thanks to the narrow joints new possibilities have been opened up with regard to design, aesthetics and transparency.



# PYROSWISS VETROFLAM CONTRAFLAM

## Advantages

All VETROTECH glass products offer the advantages of toughened safety glass in a working environment which is under stress at all stages of the procedure:

- special packaging developed to cope with the hazards and impacts of transportation;
- handling: toughened safety glass considerably reduces the risk of breakage during handling and storage;
- installation: greater resistance to breakage during installation prevents the risk of costly delays;

Operations: lower maintenance costs in building upkeep and reduced exposure to insurance problems.



# PYROSWISS 30

## Fire protective properties - classification

- E 30 and up to E 60 with VETROFLAM HARDCOAT;
- tested according to standards EN 1363 and EN 1364 and 1634-1;
- can be used in the form of single safety glass, laminated safety glass or as insulating glass;
- symmetrical fire protection;
- remains transparent in the case of fire;
- guarantees protection against impact from soft and hard bodies in the form of STADIP PROTECT PYROSWISS laminated safety glass;
- assembly within insulating glass for UV, sound and heat insulation;
- UV stable;
- available in large sizes;
- 1C1 classification as a single glazing and 1B1 as laminated glass under standard EN 12600.

• **Other technical characteristics** can be found on the product sheet.

### • In the case of fire

This glass is a building material which prevents the passage of flames, smoke and toxic gases caused by fire.

### • Multi-purpose basis

Thanks to its high mechanical strength and large number of combination possibilities, PYROSWISS can be used for a wide range of solutions.

PYROSWISS can be easily combined with SAINT-GOBAIN products.

- CLIMALIT PYROSWISS and CLIMAPLUS PYROSWISS are equally suitable for façade or roofing applications;
- PYROSWISS also comes in the form of decorative frosted glass, SGG MASTERGLASS printed or structured glass.

Other combinations can be created for other applications.

## Applications

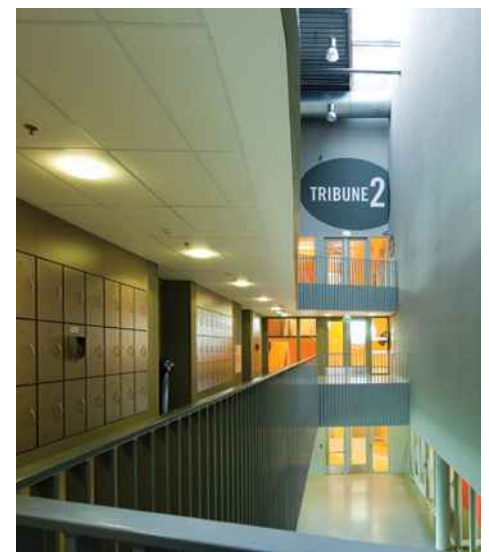
PYROSWISS is a multipurpose fire protective glass which can be used both inside and out.

It is suitable for the following applications:

- partitions;
- fixed glazing;
- doors;
- glass roofing;
- façade elements;
- multipoint glazing fixings;
- separation screens.

## Advantages

- Classification E symmetrical fire protection;
- remains transparent in the case of fire;
- guarantees protection against impacts in the form of STADIP PROTECT PYROSWISS laminated safety glass;
- assembly in insulating glass for UV, sound and heat insulation;
- UV stable;
- tested to large sizes.



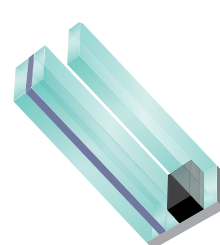
PYROSWISS



PYROSWISS STADIP



PYROSWISS CLIMALIT



PYROSWISS SKYLITE



# VETROFLAM 30/60

## Fire protective properties - classification

- E and EW 30 as well as E and EW 60;
- tested in compliance with standards EN 1363 and EN 1364 and 1634-1;
- energy radiation limitation  $\leq 15\text{kW/m}^2$  at 1 m distance;
- asymmetrical protection as a single sheet (fire direction to be defined) and symmetrical as an insulating pane or laminated sheet assembled with another VETROFLAM sheet;
- classification 1C1 as single glazing and 1B1 as laminated glass compliant with standard EN 12600;
- remains transparent in the case of fire;
- also usable as insulating glass for sound and heat protection;
- tested to large sizes.

### • Other properties

- UV stable;
- toughened safety glass.

Other technical characteristics can be found on the product sheet.

### • In case of fire

VETROFLAM glass prevents flames, smoke and toxic gases caused by a fire from spreading. Heat radiation is reduced for a limited time.

### • Safety

VETROFLAM is a toughened safety glass. It also comes in the form of laminated safety glass with a PVB (STADIP) interlayer built in. In this case, the fire protection functions are now complemented by other safety properties such as protection

from falling or against impacts. VETROFLAM is assembled as laminated or insulation glass products and guarantees a high degree of protection against sound emissions while providing a surprising level of comfort for users.

## Applications

VETROFLAM is suitable for use both inside and out. VETROFLAM can be used together with a range of structures made of steel, timber, etc.

VETROFLAM is installed in compliance with normal building standards and the work may only be carried out by a qualified company.

### • Multi-purpose basis

VETROFLAM can be easily combined with other products from the SAINT-GOBAIN GLASS range.

- CLIMALIT VETROFLAM and CLIMAPLUS VETROFLAM in combination with STADIP VETROFLAM can be used for glass roofing, within a tested system;

- STADIP VETROFLAM can also be combined with decorative and frosted glass;

A number of combinations can also be created for other architectural applications or requirements. The fire tests carried out in independent laboratories are a guarantee of compliance with safety standards.



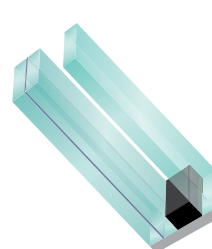
VETROFLAM



VETROFLAM  
STADIP



VETROFLAM CLIMAPLUS



VETROFLAM SKYLITE

# CONTRAFLAM LITE

## 30/60/90/120

### Fire protective properties - classification

- Fire protection classification E and EW for 30 to 120 minutes;
- safety, shockproof (toughened laminated glass);
- usable as insulating glass for sound and/or heat insulation;
- UV stable on both sides;
- ideal for large glazed surface areas;
- easy to fit and transport, thanks to the toughened safety glass.
- fire resistant on both sides;
- 1B1 classification in line with standard EN 12600;
- tested pursuant to standards EN 1363-1 and EN 1364-1 and 1634-1.

### • In case of fire

This glass is a building material which prevents the spread of flames, smoke and toxic gases caused by the fire. Heat radiation is reduced.

### • Multi-purpose basis

The CONTRAFLAM LITE fire protection properties can be combined with other functions, depending on the area of application.

- CONTRAFLAM LITE assembled as an insulating glass with a glass product from the **SGG COOL-LITE** range is particularly suited to external use because of its excellent heat insulation properties;
- CONTRAFLAM LITE can easily be combined with decorative glass from the Design or Screen-Line ranges to give it a feeling of privacy and for easy maintenance.

### • Other features

- Stability against direct and indirect UV;
- moisture resistant;

Other technical characteristics can be found on the product sheet.



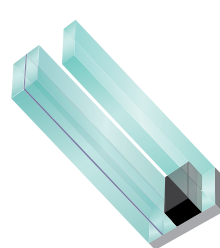
CONTRAFLAM LITE



CONTRAFLAM LITE STADIP



CONTRAFLAM LITE CLIMAPLUS



CONTRAFLAM LITE SKYLITE





# CONTRAFLAM 30/60/90/120

## Fire protective properties - classification

- Fire protection classification EI30 - EI120;
- easy to combine with designer glass or operational glazed surfaces;
- assembly in insulating glass for UV, sound and heat insulation;
- safety, shock resistant;
- UV stable on both sides;
- power radiation protection and fire resistance time of up to 120 minutes;
- glass sizes extending up to 2,300 x 3,800mm;
- ideal for emergency exits;
- easy to fit and transport, thanks to the toughened safety glass.

## Advantages

- Resistant to impact while handling;
- direct and indirect UV radiation stable, the risk of fading and loss of transparency over the long term is reduced;
- moisture resistant;
- CONTRAFLAM is manufactured as toughened safety glass;
- a high level of sound insulation can be achieved in combination with STADIP SILENCE which guarantees excellent

protection against noise pollution and offers a surprising level of comfort for users.

### • Multi-purpose basis

The CONTRAFLAM fire protection properties can be combined with other functions depending on the area of application.

- CLIMAPLUS CONTRAFLAM assembled as an insulating glass is suited to external use because of its excellent heat insulation properties;
- CONTRAFLAM PRIVA-LITE can be used to protect your privacy;
- CONTRAFLAM can easily be used in combination with decorative glass products from the Design range;
- in combination with LITE-FLOOR, CONTRAFLAM can be used for load-bearing glazed flooring.

### • Other features

Other technical characteristics can be found on the product sheet.



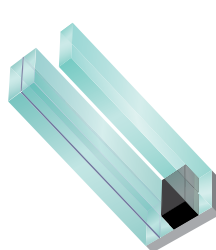
CONTRAFLAM



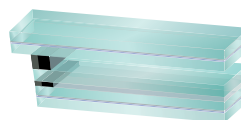
STADIP CONTRAFLAM



CLIMAPLUS CONTRAFLAM



CONTRAFLAM SKYLITE



CONTRAFLAM FLOOR



# CONTRAFLAM STRUCTURE LITE 30/60

## CONTRAFLAM STRUCTURE 30/60/90/120

### Description

CONTRAFLAM STRUCTURE is a continuous partition designed as a protection against fire. Thanks to the CONTRAFLAM STRUCTURE solution, the days of thick metal frames are now over. Using this glass, it is possible to create glazed partitions with maximum transparency by building aesthetics into the architectural requirements while still retaining a high level of safety.

### Fire protective properties - classification

- Fire protection classification EW – EI;
- easy to combine with designer glass or operational glazed surfaces;
- safety, shock resistant;
- UV stable on both sides;
- energy radiation protection and fire resistance time of up to 120 minutes;
- ideal for meeting rooms, and offices;
- easy to fit and transport, thanks to the toughened safety glass.

### Advantages

CONTRAFLAM STRUCTURE has been designed specifically as a safety glass for interior applications.

It is composed of toughened safety glass which now includes fire resistant properties:

- safety against everyday impacts;
- safety against blows in areas of movement;
- safety against falling items.

The excellent sound insulation qualities and the increase in natural lighting improves the general comfort of the solution.

- Resistant to shocks while handling;
- direct and indirect UV radiation-stable, the risk of fading and loss of transparency in the long term is reduced;
- moisture resistant;
- CONTRAFLAM STRUCTURE is manufactured according to the standards of toughened safety glass;
- good sound insulation can be obtained in combination with STADIP SILENCE which provides a high degree of protection against noise pollution and provides a surprising level of comfort for users.

### Specifications

- Symmetrical fire protection;
- recommended for extensively glazed applications to increase natural lighting;
- can be combined with different frame shapes and fire-retardant doors;
- UV resistant on both sides.

### Certifications

- 30 - 120 minute solutions according to standard EN 1363 and EN 1364;
- classified as 1B1 according to standard EN 12600.



CONTRAFLAM STRUCTURE



CONTRAFLAM CORNER STRUCTURE



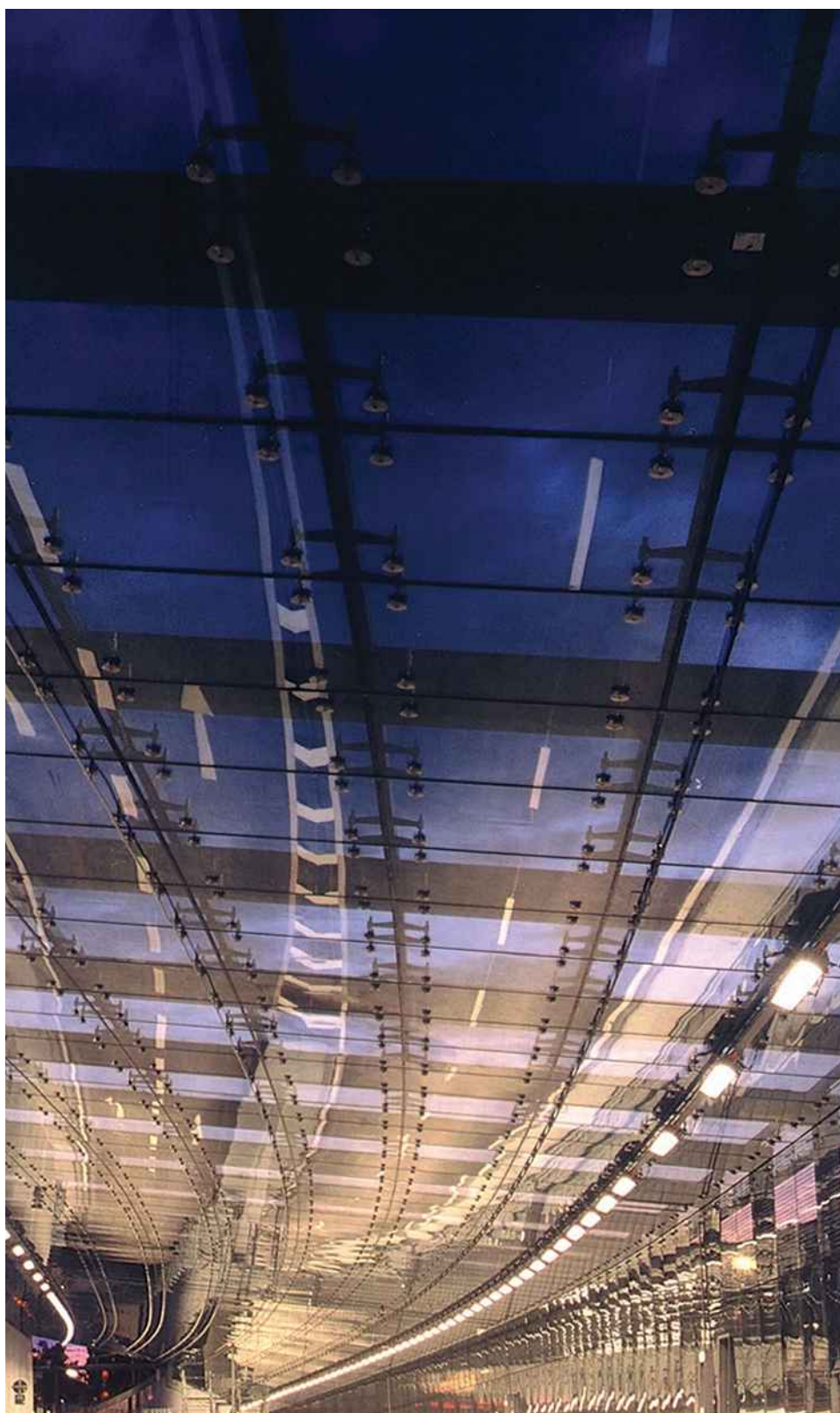
# PYROSWISS VETROFLAM CONTRAFLAM



Note: an order cannot be accepted unless it makes a specific reference to a classification report or a workshop note. These documents must be made available to VETROTECH.

Approval must be validated and must cover the whole area of the planned application, including the maximum permitted dimensions. Check with the VETROTECH technical teams.

For more information, visit:  
[www.vetrotech.com](http://www.vetrotech.com)



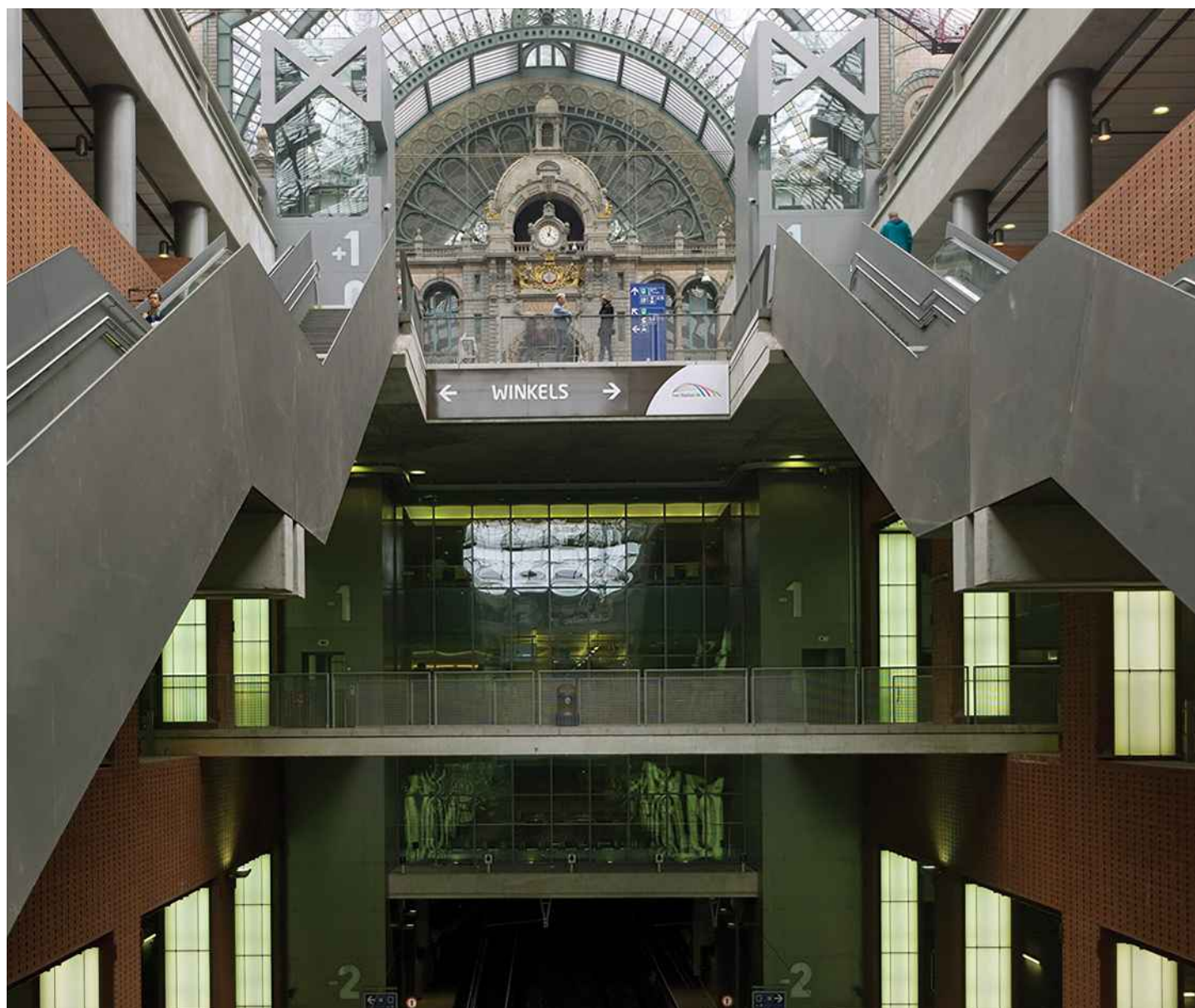


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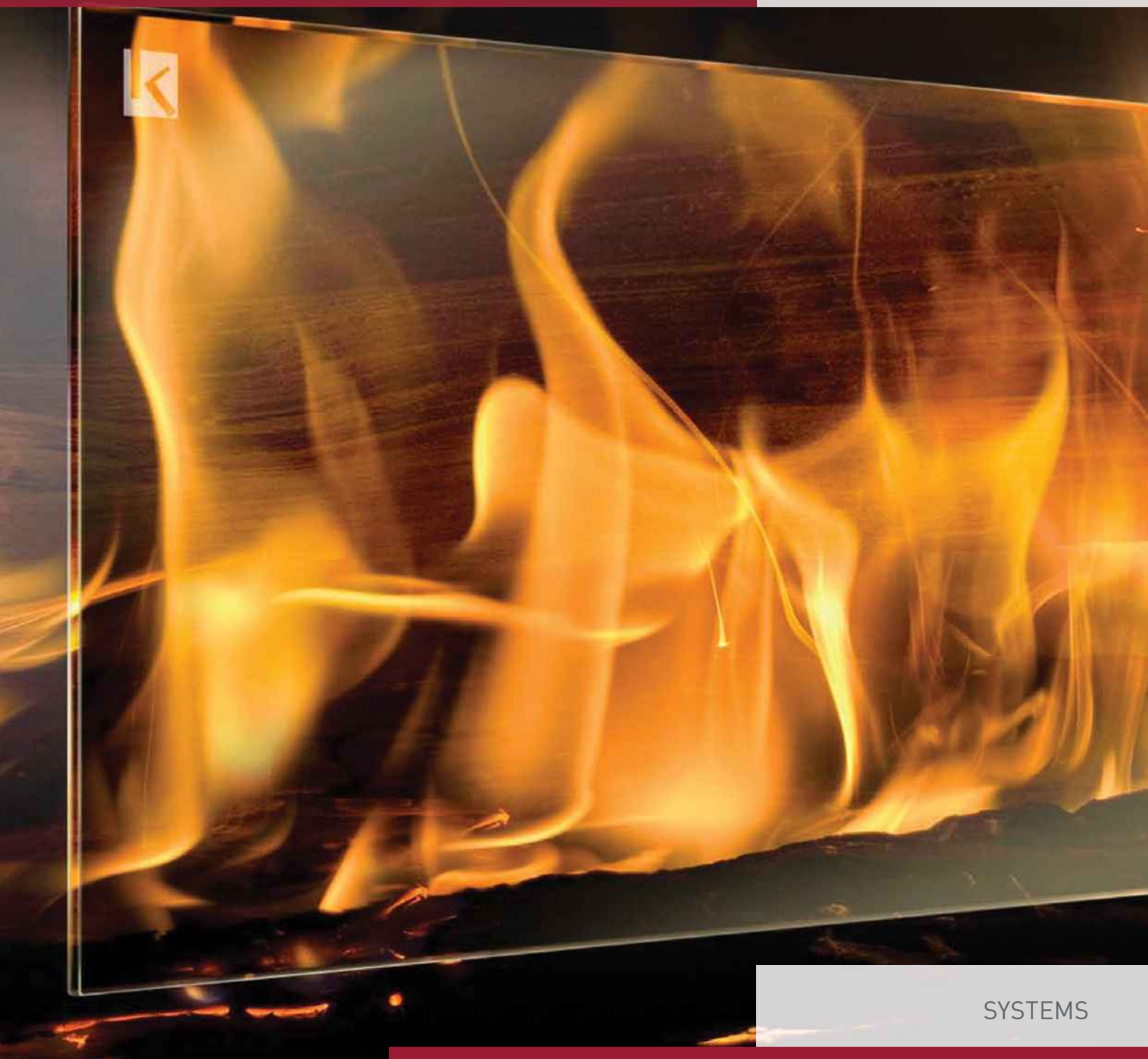
Distributor

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# KERALITE

The vision of fire



SYSTEMS



**GLASSOLUTIONS**  
SAINT-GOBAIN