glaströsch

Fire protection glass
FIRESWISS FOAM and FIRESWISS COOL

Fire protecting glass, readily integrated into buildings to allow maximum light

FIRESWISS FOAM

Protects against fire, radiated heat and smoke

An important feature of FIRESWISS FOAM, the EI classified fire protection glass manufactured by Glas Trösch, is the protection it offers against dangerous radiated heat. Thanks to a so-called protective heat shield, radiant heat is reduced allowing people and rescue services a safe passage along emergency and escape routes. Depending on the requirement and glass type used, fire resistance of up to 120 minutes can be achieved.

This property is achieved because of the superior thermal insulation offer by FIRESWISS FOAM:
With the heat source achieving temperatures of almost 1000°C, the glass surface on the public side away from the fire heats up by around 100K , well below the maximum of 140K required by European test standards thereby offering a safe level of protection to the public.

Glas Trösch AG FIRESWISS has developed a new range of fire protection glass based on its well established multilayer design in combination with special interlayers called Thermal Transformation Layers (TTL).

These Layers exhibit a much better energy absorbance compared to conventional multi-layer systems. As a result, the radiated heat developed by a fire is almost completely absorbed by the innovative TT Layers and virtually eliminated.

As the fire progresses, the layers expand and strong, rigid foam panels are formed to which the float glass pieces adhere. The result is a sandwich structure of foam and glass which forms a highly efficient heat shield and seals the escape route from smoke and flame.

FIRESWISS COOL

Protects against fire and smoke at reduced radiated heat

FIRESWISS COOL's performance characteristics are protection against smoke and flame as well as effective protection against the dangerous temperature increase on the side facing away from the flames, so that escape and rescue routes remain accessible even after the fire has been burning for some time.

The use of FIRESWISS COOL allows an EW rated glazing solution with remarkably thin laminated glasses. Depending on the requirement and glass type used, fire resistance times of up to 60 minutes are achievable.

In addition, the stabilising effect of the FIRESWISS COOL laminated glass offers an improvement in passive safety, offering an alternative to E classification glazing (E = protection against smoke without any thermal insulation).
FIRESWISS COOL not only satisfies the requirements of the stringent European test standards, it also provides functionality at excellent optical behaviour.

Product benefits FIRESWISS FOAM / COOL

- Outstanding visual quality with no distortion or discolouration
- TT Layers are based on silicate and thus produce virtually no dangerous gas or smoke in the event of a fire
- Outstanding ratio of efficiency and glass thickness
- Transparency and resistance from –40°C to +50°C ambient temperature
- Large, type-tested glass surfaces in many common frame systems made of wood, steel, aluminium and fiber-reinforced plastics
- Glas Trösch owned accredited test laboratory for developments and experiments on behalf of customers
- Short delivery times since all standard glass types are available on stock
- Delivery of stock sizes 2125 mm x 3100 mm or cut to size in accordance with customer wishes
- A wealth of combination possibilities for design, function and safety
- UV protection through optional PVB films, e.g. for outdoor use
- Increased passive safety because the laminated safety glass meets EN 12543-1, classified to EN 12600 requirements
- Certified CE product conformity

The transparent life-saver

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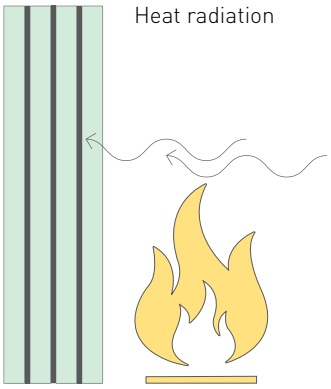
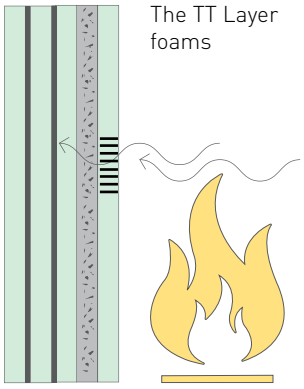
Fire protection glass
FIRESWISS FOAM

Protection against fire, smoke and heat radiation





Glass type (this data represents typical values)	Thickness in mm	Classification acc. to EN 13501-2	Weight in kg/m²	Integrated UV protection	Airborne sound-insulation (dB)	Impact resistance	Light transmittance (%)
FIRESWISS FOAM 15-11	11	EI 20	25	no	37	2B2	87
FIRESWISS FOAM 15-15	15	EI 20	37	yes	38	1B1	86
FIRESWISS FOAM 30-15	15	EI 30	35	no	38	1B1	85
FIRESWISS FOAM 30-19	19	EI 30	43	yes	39	1B1	84
FIRESWISS FOAM 45-19	19	EI 45	44	no	41	1B1	84
FIRESWISS FOAM 45-23	23	EI 45	52	yes	42	1B1	83
FIRESWISS FOAM 60-23	23	EI 60	53	no	43	1B1	82
FIRESWISS FOAM 60-27	27	EI 60	61	yes	44	1B1	81

Panes with classification EI 90 / EI 120 on request.
Pane size: 2125 mm x 3100 mm. Cutting by the processor.
Details of the tested glazing are available on request or on our Internet site www.fireswiss.ch

Marketing / 201407

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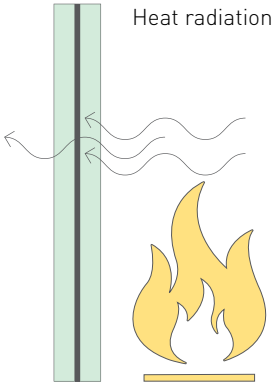
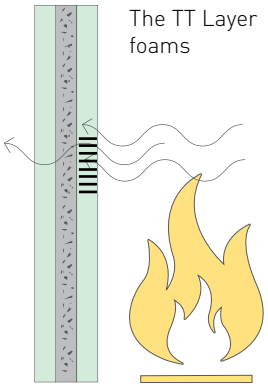
Protection against fire and smoke at reduced heat radiation





Glass type (this data represents typical values)	Thickness in mm	Classification acc. to EN 13501-2	Weight in kg/m²	Integrated UV protection	Airborne sound-insulation (dB)	Impact resistance	Light transmittance (%)
FIRESWISS COOL 30-7	7	EW 30	16	no	35	3B3	89
FIRESWISS COOL 30-7 2B2	9	EW 30	22	no	35	2B2	89
FIRESWISS COOL 30-11L	11	EW 30	24	yes	36	1B1	88
FIRESWISS COOL 30-11	11	EW 30	25	no	37	2B2	87
FIRESWISS COOL 30-15	15	EW 30	34	yes	38	1B1	87
FIRESWISS COOL 60-15	15	EW 60	34	no	38	1B1	85
FIRESWISS COOL 60-19	19	EW 60	42	yes	39	1B1	84

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