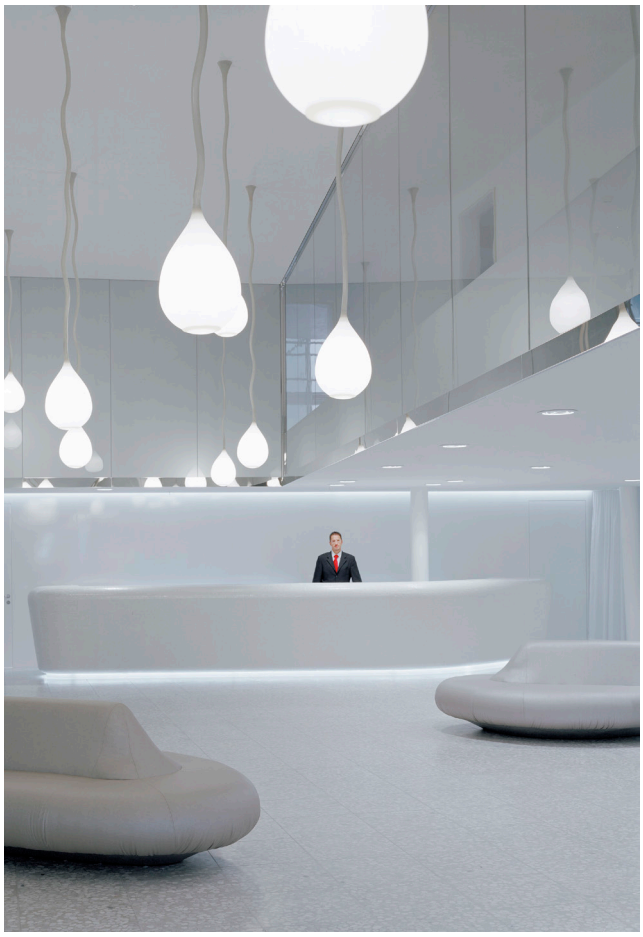
glaströsch

Fire-resistant glass
FIRESWISS FOAM and FIRESWISS COOL

Fire-resistant glass, harmoniously and brilliantly integrated

FIRESWISS FOAM

Protects against fire, smoke and thermal radiation



An important feature of FIRESWISS FOAM, the EI classification fire-resistant glass, is the additional protection it offers against dangerous thermal radiation. Thanks to a so-called heat shield, a fire compartment is created that allows the helpers and emergency service personnel a safe passage along the emergency and escape routes. Depending on the requirement and glass type used, fire resistance times of 30 to 240 minutes can be achieved.

This property is based on thermal insulation:
The side of the glass facing away from the seat of the fire with temperatures of almost 1,000°C in the burning area, heats up by only around 100 K. That is dependable protection, since the maximum value according to the standard is 180 K.

Glas Trösch AG FIRESWISS has developed a new fire protection layer based on the tried and tested multi-layer design.

These energy-absorbing thermal transformation layers (TT layers) exhibit a much increased absorbance compared to conventional multi-layer systems. As a result, the radiated heat developed by a fire is totally absorbed by the innovative TT layers and virtually eliminated.

As the fire progresses, the layers expand and a strong, tough foam panel forms to which the glass pieces of the float glass on the fire side adhere. The result is a sandwich structure which, in combination with the burst glass, forms a highly efficient heat shield and seals the space against smoke and flame.

FIRESWISS COOL

Protects against fire and smoke with reduced thermal radiation

FIRESWISS COOL's performance characteristics are compartmentalisation against smoke and flame as well as effective protection against the dangerous temperature increase on the side to be protected, 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 glazing solution with remarkably thin laminated glasses. Depending on the requirement and glass type used, fire resistance times of 30 to 60 minutes are achievable.

In addition, the stabilising effect of the FIRESWISS COOL laminated glass offers an improvement in passive safety, so that it also lends itself as a splendid alternative to E classification glazing (E = compartmentalisation without thermal insulation).
FIRESWISS COOL not only satisfies the requirements of the stringent European test standards, it also adds outstanding visual appeal to functionality.

Product benefits FIRESWISS FOAM / COOL

- Outstanding visual quality with no distortion or discolouration
- TT layers are based on silicate and thus produce virtually no waste 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 in wood and steel
- Own accredited test laboratory for developments and experiments on behalf of customers
- Short delivery times since all standard variants are available in 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
- CE product conformity attested by certificates

The life-saving function made transparent!

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