

## POLFLAM<sup>®</sup> EI 180 – fire-resistant glass for special purposes

The portfolio of the POLFLAM<sup>®</sup> brand has expanded, as another product was added on the list: the fire-resistant glass EI 180 is now available on the market. This is a true revolution. A European-scale revolution. Why? POLFLAM has been first to launch the pioneering light EI 180 fire-resistant glass .

The technology is revolutionary too. One look at the new product's parameters is sufficient to prove this. Lighter weight in comparison with the fire-resistant glass made in other technologies; high light transmittance; excellent resistance to UV radiation; impressive range of operating temperatures... The features, typical to POLFLAM<sup>®</sup> fire-resistant glass

of the classes on offer hitherto, had seemed hardly feasible in the case of the EI 180. And yet... The unique technology, the persistence of the company's R&D experts, the countless tests in the company's lab have brought a spectacular result.

Design engineers can now apply the perfectly transparent partitions also to those places which had been dis-

qualified due to fire-protection requirements. What's more, they do not need to sacrifice investors' aesthetic expectations or expose their budgets.

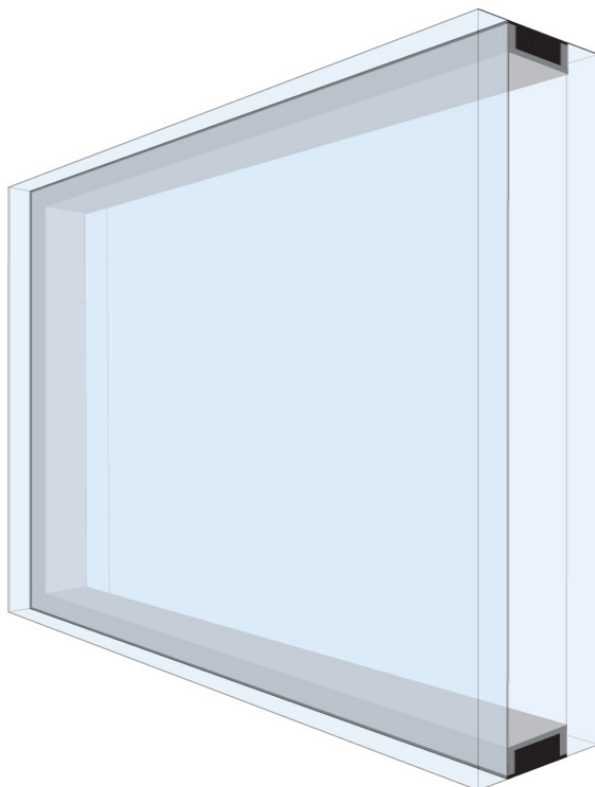
### Lighter – that's what it is all about!

A full range of fire-resistant glass class EI 30, EI 60, EI 90, EI 120 and EI 180 has now been available to customers. Particular variants differ, most of all, in thickness and weight. The latter parameter is of utmost importance – especially for high class glass. As compared with other technologies, POLFLAM<sup>®</sup> glass is lighter by a two-digit percentage point! 83 kg per square meter of the EI 180 glass may seem surprisingly high for a layman, however, an expert will ask in astonishment: as light as that? Correct, as light as that.

True, other manufacturers offer glass of similar weight but... this is in class EI 90. The feature will equally be valued by designers and architects as well as investors. This is because significantly lighter glass means lower linear and concentrated load to be applied on the building's structure. A partition of this kind does not require particularly reinforced structure, therefore, it does not make the design or construction work more complex. The manufacturing cost of the partition itself is lower, just like the cost of the lighter structure which means satisfactory savings vis a vis the investment's total cost.

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The glass is also an effective sound-proof barrier; its noise control factor  $R_w$  is as high as 45dB for the EI 180 glass.

The afore-mentioned parameters did not compromise light transmittance which is essential for glass (the  $L_t$  for POLFLAM® EI 180 is as high as 85.3%, i.e., just under that for EI 30). The latter is a crucial parameter for indoor applications where effective provision of light to the designed space is a priority.

To this end, the POLFLAM® EI 180 glass can offer even more: large dimensions.

#### **Glass arches – gaining space**

POLFLAM has on offer glass sheets at the maximum size of 4200 x 2200 mm, which makes it possible to build a glass wall at the full height of the room and practically unlimited length. Such glass walls are even more spectacular when using frameless system partitions. And if you apply to it POLFLAM's bent glass?

An impressive arch will open up a completely new perspective as compared to the good old corner with the two parts seamed together. POLFLAM® fire-resistant bent glass is available in any class, while the bent glass EI 180 is a unique offer on the European market.

#### **Perfectly universal**

Just like any of POLFLAM® glass, POLFLAM® EI 180 is suitable for both indoor and outdoor application. It is ideal for facades, skylights, partitions, doors, windows, staircases and ceilings. A designer's imagination is the only limit. POLFLAM® glass is resistant to UV radiation with no need of using the film. Its resistance to mechanical damage is extraordinary.

The glass does not require any specific orientation of the pane (inside-outside; upwards-downwards) or any complicated installation method.

All POLFLAM® products meet the fire-resistance criteria in compliance with the technical standard PN-EN 1363-1. Therefore, they will hold up to any most restrictive fire protection requirements binding in the EU member states. POLFLAM is the only fire-resistant glass producer to

own a fire-resistance testing furnace. The EI 180 glass passed extremely strict testing procedure in the company's lab. The results surely proved those carried out by the Institute for Construction Technology and other certified testing bodies.

#### **Safety at a reasonable price**

POLFLAM's mission has always read along these lines: the safety of our product can never be a luxury. Therefore, the company's price policy follows its mission statement.

The financial aspect can thus be added to the advantages of POLFLAM® glass, including the EI 180 one. It is definitely an investor's bonus.