

POLFLAM® F glass for ceilings – a true bestseller

Ceilings are undoubtedly one of the most difficult challenges which the manufacturer of fire resistant glass faces. This is due to the fact that glass used in ceilings has, in an incident of fire, to endure in extreme conditions, while bearing loads. At the same time, the market demand for this product is huge.

The scale of this demand is not surprising. Glass ceilings fit perfectly well into the minimalist character of modern buildings, e.g., in revitalized buildings they allow the creation of a new functional division with no detriment to the original structure of the building. They are an invaluable solution wherever opaque elements would restrict the access of daylight. The possibility of designing light, transparent structures instead of steel or concrete ones, which until recently were the only solution meeting the requirements of fire regulations, is a dream-come-true for architects.

Fire resistant glass applied in the ceilings is a technological challenge. It is a load-bearing element, so it undergoes testing in fire laboratories of certifying institutions. The tests do not only reflect the conditions of fire, but also those of load-bearing.

In addition to the parameters typical for fire resistant glass, that is, fire-resistance (E) and insulation (I), they also define load-bearing capacity (R) which is required in this case.

POLFLAM F glass has a load-bearing capacity of up to $5 \text{ kN} / \text{m}^2$. It is available in three fire resistance classes: REI 30, 45 and 60. Therefore, in the event of fire, it ensures complete safety of evacuation within the time limit required by law - 30, 45 or 60 min.

The maximum dimension of POL-FLAM F glass reaches 2200 x 1650 mm. Panels can have any geometric shapes within the rectangle. These are important parameters because glazings of largest dimensions of individual panels are definitely most desirable for architects.

Depending on the size, POLFLAM F has a thickness of 46 to 62 mm.

POLFLAM F glass panels can be covered with a special non-slip screen printing, ensuring safety of our glass ceilings in everyday use.

It is also possible to put digital print on them or use decorative film. Thanks to that they will perfectly match the designer style of the interior. POLFLAM's R&D department is working on new products. The goal is to achieve both higher fire resistance classes and also larger sizes of the glass, including glass for ceilings.



POLFLAM F glass is completely safe also in ordinary, everyday use, as it can be covered with a non-slip screen

In the photo: the interior of the library in the Cultural Centre in Veseli nad Moravou (Czech

Republic)



Glass ceilings with fire resistance make it possible to saturate with natural light the interiors as difficult as staircases, internal courtyards or rooms below the ground level. In the photo:

POLFLAM F REI 60 glass in ceilings on two floors in the revitalized building of the Oskar Kolberg Music School in Szczecinek.



Fireproof glazings in ceilings and stairs were the solution that the visitors of the BAU 2019 exhibition: architects and designers from all over the world enquired about most frequently.

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