POLFLAM®
FIRE RESISTANT GLASS

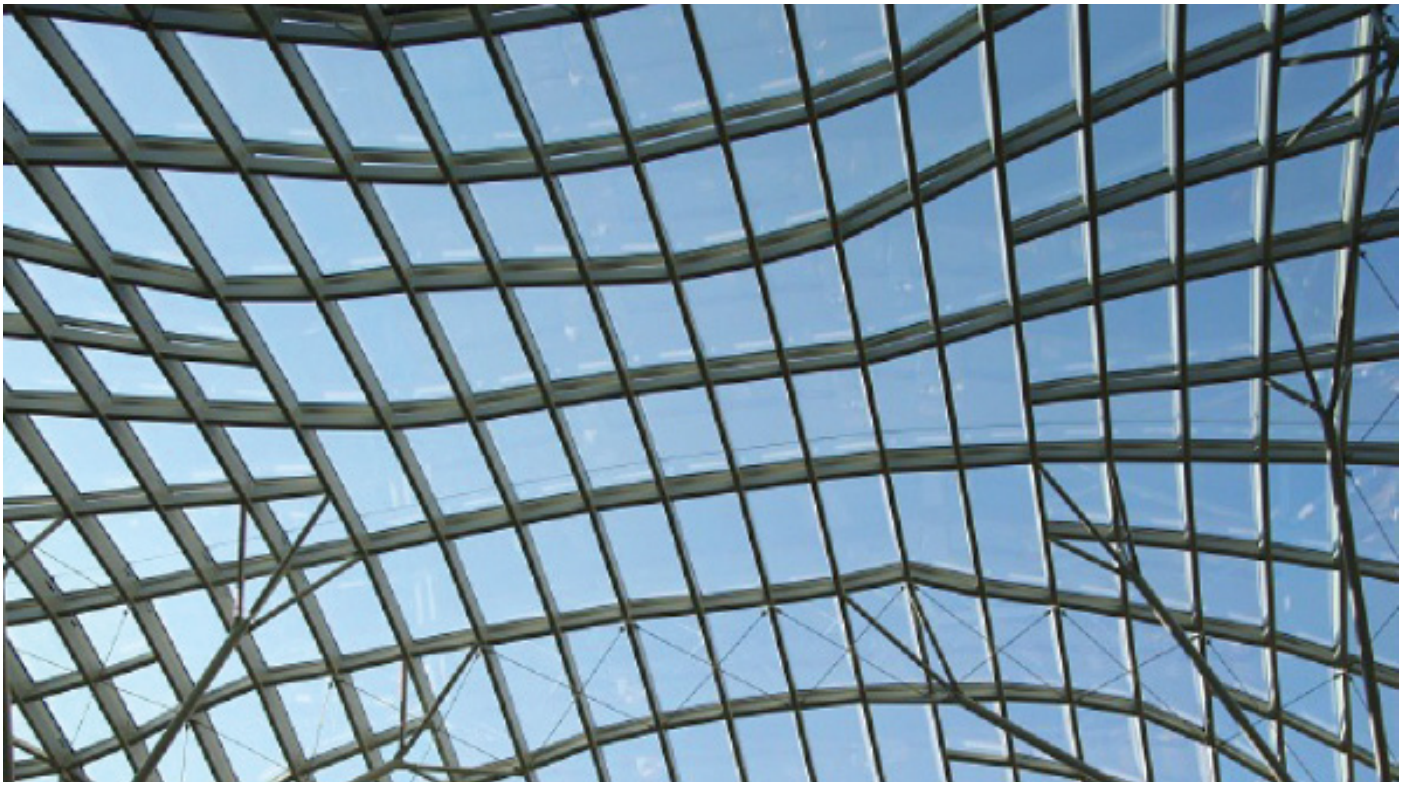
# POLFLAM® GLASS SKYLIGHTS – AN UNBEATABLE SOLUTION

**Skylights are one of those solutions that make the interior get much more light and spread it evenly all over the place. Quite frequently, however, they need to be used in public buildings where fire-safety regulations are strict.**

Nevertheless, the regulations are far from being any restriction as we can glaze the frames with fire-resistant glass. POLFLAM® glass skylights framed in the steel profiles RP-tec55-1 are a most interesting entire solution available on the market. It combines aesthetic values with functionality and safety – class REI 30.
The skylights have added yet another item to the range of applications of POLFLAM® glass and also solved particular problems encountered by builders and designers. Investors will certainly note the very attractive value for money the product ensures.
When analysing the properties of POLFLAM® glass one will be impressed with the high light-transmittance factor Lt (up to 87.6%), high acoustic insulation Rw (40 dB) and UV radiation resistance without the need of double glazing using the PVB film, and, what is of extreme importance to construction engineers – the exceptional lightness as compared to competitive products.

**POLFLAM® skylights – the fruit of co-operation**

The steel-framed fire-resistant skylights are the fruit of co-operation between POLFLAM, fire-resistant glass



*The POLFLAM® glass panels inside the frames can be as large as 2654 x 1174 mm.*

producer and ESCO, Polish distributor of renowned German RP products. The solution applies steel profiles RP-tec 55-1 and offers extraordinary advantages.
One of those is the exceptional size of the skylight. The POLFLAM® glass panels inside the frames can be as large as 2654 x 1174 mm. Therefore, the whole glazing can hold less structural framework elements. When in flames, the POLFLAM® special gel that fills the space between the toughened glass layers becomes a rigid, opaque curtain which stays in place and will not fall down by itself. That feature creates safe areas for both the evacuation of people trapped in the facility and the rescue teams.
The framework system holding the fire-resistant glazing is made of multiple layers which provides for high flexibility of the solution. The skylight's structure can be joined to any supporting structure compliant with class R30, at the tilt angle between 0 to 80°.

Plaster panels have been used inside the supporting profile which secures the structure's load bearing capacity in fire incidents. Therefore, there is no need of applying phermacell powerpanels or fire-resistant paint. Furthermore, the system does not require for the skylight to have any extra reinforcing structure. The supporting function is carried out by the steel framework that holds the fire-resistant glass sheets. The latter translates directly into aesthetics of the entire solution and its considerably lower price.
There is still another substantial quality of the POLFLAM® fire-resistant glass skylights with the RP-tec 55-1 steel profiles. The supporting substructure can well be made in a workshop and the glazing itself takes little time.

**REI 30 and more**

A POLFLAM® fire-resistant glass skylight with the RP system steel framework is a ready-made and entire solution that has been tested and authorised for use in building industry. The structures have been tested in POLFLAM's lab for resistance to fire and they were, subsequently, thoroughly verified by the notified research institute ITB. The testing and the certificates have proved compliance with the fire-resistance requirements EI30 for the glass and REI30 for the entire structure of the skylight.

Importantly, during the fire-resistance testing it turned out that the skylight of the assumed resistance class REI30 has obtained official confirmation from the certifying body not only for class REI30 but also for REI45. The result of the test is the best proof of the product's top quality and safety.