

POLFLAM[®] glass – perfect for facades

POLFLAM[®] brand is firmly positioning itself within the exclusive group of facade glass producers. And this is due to POLFLAM's long years' experience in the production of fire-resistant glass of record-large dimensions and to the product's unique features. What are the decisive parameters in this case and why is the size so important for facade glazing?

Large size of glass units is crucial for facades. The larger the glass surface, the less of frames and joinery elements, which means better separation from the outside world. The latter being not only an architectural value; limitation of framework helps increase light transmission for the whole facade. It also improves the U_w index which measures the loss of heat due to lower insulation ratios for frames (compared with glass). Therefore, more glass means better U_w index.

Designers of glazed facades want large-sized glass for it. Yet, apart from dimensions, the glass must also feature some other essential parameters which are not at all simple to achieve. The requirements being strict, POLFLAM[®] glass more than meets them.

What is important is the highest light transmittance, as this is the very reason why people use glass. For POLFLAM[®] glass the L_t index is nearly as high as 90%! What also counts is proper adjustment of glass hues – when joining the non-fire-resistant parts with those where fire-resistance is required. The production technology of POLFLAM[®] glass guarantees neutral colour rendering. The gel layer which determines fire-resistance is perfectly transparent; it allows for no reflections or any other adverse optical effects, while thanks to the wide range of colours and hues offered for the selective glass, consistency can be easily achieved for the entire facade to give it uniform hue and surface.

Another key issue is the glass's insulation features, i.e., the heat control factors. POLFLAM[®] glass can be sealed with most of float glass panes avail-

able on the market that have excellent thermal performance features. For selective double-glazed units sealed with POLFLAM[®] glass the U_g index is as low as 0.5 [W/m²K]. The solar factor SF, i.e., total solar penetration rate (g), is as important; the low SF factor for POLFLAM[®] glass prevents overheating of spaces in summer.

The factors of reflection, solar and thermal control make up ideal thermal properties of glazed facade walls made of POLFLAM[®] glass, which, in turn, determines the building's energy balance.

The preferred properties and features of POLFLAM[®] glass also include good sound control, possibility to seal different special-function types of glass, and low thickness and weight for the EI 60 class which is most popular for facades. These parameters will

certainly be appreciated by architects to design load-bearing structures.

The proprietary production technology of POLFLAM[®] fire-resistant glass is fully safe both for humans and the environment, with energy consumption being minimised in the production process. These being further arguments important most of all for European investors who implement the ideas of sustainable development.

POLFLAM[®] glass is definitely one of the most interesting options when creating glass facades with mandatory fire-resistant glass. Together with many producers of joinery and facade systems, we are pleased to recommend this European product which is subject to regular testing by renowned institutes all over the continent and certified in compliance with European standards. ■



Pomorski Science and Technology Park in Gdynia, design: AEC Krymow & Partnerzy. A surface of 1200 m² of POLFLAM[®] glass was applied in its buildings.