

POLFLAM[®] fire-resistant curved glass: form, cutting edge solutions, safety

Woodwork manufacturers face increasingly demanding customers and architects. They are expected to deliver both stylish and highest quality products and new technological solutions, thanks to which, structures erected will be more attractive for purchasers and tenants in terms of architectural features.

This is especially important with respect to commercial real properties and public utility facilities, since the solutions applied there must meet several strict safety-related requirements.

POLFLAM[®] fire-resistant glass offered on the Polish market by Glass-Team is an excellent example of combining innovativeness and care for human safety.

The requirements related to the technology applied in public utility buildings are precise and complex, and adherence to them consistently enforced. It is no wonder, since it is all about the safety of hundreds or even thousands of users. In many cases these requirements considerably affect the form of a facility, its functionality and aesthetic value. Fortunately, the development of technology allows applying materials which combine attractiveness with safety requirements. And as a result, they give more room for designers and investors.

The manner of separating rooms inside buildings, where people work or occasionally many people stay, perfectly depicts this process of „making a building structure more attractive in accordance with safety rules“. One of the design principles is to divide a facility into parts, and separate these parts from each other with partitions that delay the spreading of fire and smoke. This time is needed to evacuate people successfully from particular rooms.

POLFLAM[®] glass in KNAUF gypsum and cardboard installation functions perfectly both in representative public buildings and industrial building structures.

A rounded, glass corner of an office room widens the field of vision, which increases the functionality of a manufacturing hall. Owing to Polflam fire-resistant glass features, requirements related to employees' safety are fulfilled.



Until the technology of manufacturing fireproof glass was developed, designers had divided building into zones by partition walls made of non-transparent materials. The emergence of glass that can be used to build a whole wall in compliance with fire protection rules has made it possible to arrange usable space of public utility buildings in a more attractive way. POLFLAM® glass is one of the best solutions here, a fact confirmed by numerous prestigious projects where the materials have been used. Partitions, carpentry and façades made of POLFLAM® glass can be found in representative office blocks, public offices, higher education schools, hospitals and sports halls.

Glass-Team produces also flexible fire-resistant glass. The material, meeting strict fire-resistance requirements, may be shaped in accordance with a designer's wishes. And that means even more attractive interior design and better functionality: better lighting with natural daylight, lightness of a structure, and smooth passages in the space. It is no exaggeration to say that Polflam glass equals other building materials in terms of its universal use.

It is possible to plan to use it where aesthetic requirements are as equally important as fire-protection require-

ments, this is e.g. for separating evacuation routes in representative facilities or in heritage building, where it is necessary to preserve the original architecture in accordance with current strict regulations.

The technology is gradually being improved. Partitions made of fire-resistant glass not only meet fire insulation criteria under PE-EN 1363-1, they are also characterised by other advantageous features: high acoustic insulation, resistance to UV radiation and high mechanical resistance (owing to the use of pre-stressed glass). Polflam glass is available in four variants consistent with the following classes of fire resistance: EI 30, EI 60, EI 90 and EI 120.

Particular variants differ in parameters (thickness, weight, permeability and light reflection, solar radiation, energy radiation permeability and reflection, total energy transmission, acoustic insulation) and they are used in compliance with requirements for particular parts of a building. In the manufacturing process the highest standards apply, and the quality of the products is objectively testified by certificates awarded by Instytut Ceramiki i Materiałów Budowlanych [The Institute of Ceramics and Building Materials].

POLFLAM® products present immense care for aesthetic values and adjustment of products to current trends in architecture and the modern commercial real property market. Particular attention should be paid to a frameless system allowing the installation of Polflam glass wall partitions without massive structural elements. A wall made in this way is optically lighter and permeates light better.

The BR and FR frameless system is a product of the close cooperation between Glass Team and FR Solutions (www.frsolutions.pl).

This is the first time such an advanced solution has been offered on the Polish market.

However, the most important fact is that flexible fire-resistant glass has created completely new possibilities: designers have been given the freedom to execute new ideas in accordance with safety rules, and investors an opportunity to gain competitive advantage on the commercial market.

The company representatives experience a very large interest in this product; today it is a product widely sought after by architects.