

Attachment 1 to GTS, dated 18.11.2019

# GENERAL CONDITIONS FOR THE USE OF POLFLAM GLASS

## 1. Delivery of POLFLAM glass

POLFLAM Sp. z o.o., being the Supplier undertakes to deliver the ordered glass to the Customer according to the conditions specified in the offer and the General Terms of Sale (GTS). The Supplier shall deliver the ordered glass to the Customer's premises or to another agreed place. The unloading and the related risk shall be borne by the Customer.

#### 2. POLFLAM glass storage

Due to the specificity of fireproof glass structure, it is recommended that POLFLAM glass be stored in covered, dry and airy rooms and be stored on rigid racks, ensuring linear stability of the entire surface and the edges of the glass. The rack's base should be made of wood, hard rubber or plastic. Too soft base causes that thiocide gets pressed into the space between glass panes, which can lead to unsealing. The glass must be stored in a position inclined up to 5° from the vertical and must be interlaced with cork spacers (do not rest the glass edge against another glass!). When storing glass, in any case, remember to protect the glass from direct sunlight due to the possibility of overheating above 50°C resulting in changes in the glass structure. The glass supplied on racks is secured with transport straps. If glass is stored in a place where large temperature fluctuations can occur, the straps should be loosened to avoid possible damage to the glass.

#### 3. Installation of POLFLAM glass – general conditions

Only use fire retardant or neutral silicones for glazing POLFLAM glass. Do not use silicones based on acetic acid, which react with thiokol and butyl, used in the sealing of POLFLAM glass. When mounted, POLFLAM firestop safety glass should be protected against temperatures lower than -40°C and higher than + 50°C. Do not install the glass near radiators or spotlights, as the temperature between the layers can reach a constant temperature higher than + 50°C. The glass should be placed on an even surface and free from any elements that could damage the sealing layer.

#### 4. Installation of POLFLAM glass – curtain wall and façade system

In the preliminary stage of glazing, it is recommended to fasten the glass with system (mounting) pressure strips using system gaskets. The lengths of the mounting strips and the seals used should correspond to the catalogue number of the system supplier, which the designer used for the particular joinery and the thickness of the glass package. The lengths of the mounting strips of 300 mm should be fastened in two points and the space between the strips should be 400 mm. All mounting accessories, the use of tightening torque in Nm, are determined in the installation catalogues of the system used. Any deviations and use of substitute materials may cause cracks in the added panes of the unit installed. In order to avoid any unsealing of the glass under installation, the glass should be pressed directly to the internal gasket of the joinery, and only after that rest the bottom edge of the glass on the system glass washers. Other mounting details are described in the documents provided by the system provider.

# 5. Installation of POLFLAM glass – a window and door system

To avoid any unsealing or cracking of the added glass, it is absolutely necessary to use system glass washers (e.g. hardwood in the widths of the fire-resistant glass). While displacing, make sure that the material sealing the unit is not damaged when inserting the washers. It is absolutely necessary to observe the principle that the washer is placed under the entire fire-

resistant glass. Do not allow the added glass to be displaced. If glass is used in walls separating spaces of high humidity (e.g. swimming pools), it is absolutely necessary to apply drainage of the structure. Also, it is strictly prohibited to use any silicone or sealants around the perimeter of the built-in glass. Other mounting details are described in the documents provided by the system provider.

# 6. Installation of POLFLAM glass – frameless system

The fire-resistant glass should be placed on blocks made of hard wood placed in both lower corners. Do not allow supporting the added glass pane. Glass clamps or other fasteners for the structure should be mounted so that the heads of the screws, bolts or dowels are not in the axis of the glass or in its immediate vicinity. In order to avoid possible stresses, clamps or other glass fastening elements (e.g. decorative profiles) should enable its displacement in a horizontal and vertical plane. Other mounting details are described in the documents provided by the system provider.

## 7. Applying decorative elements to glass

POLFLAM glass can be covered with film and does not lose its fire-resistant properties when it is covered with PVC or PET film in whole or in part, on one or both sides, regardless of the surface of the covering provided that the thickness of the film does not exceed 2 mm.

The films used do not adversely affect the declared properties of fire-resistant glass, but its temporary use may cause a difference in the shade of the glass. Changing the shade of fire-resistant glass due to the use of film is not covered by the quality guarantee or warranty.

Due to the increased absorption of thermal energy of the film, the glass covered with the film can only be used inside the building and it must not be exposed to overheating (e.g. by using colored films on the sunny side or near the source of heat).

## 8. Glass cleaning

Cleaning of the glass and removing residues from stickers and dividers should be done with mild cleaning agents. Difficult to remove dirt that cannot be removed with common agents should be pre-removed using special cleaning agents. Dirt caused by the action of mortars and other building materials requires immediate removal; otherwise there is a risk of permanent damage to the glass surface.