CONDITIONS OF STORAGE, BONDING INTO IGUS, AND INSTALLATION OF BOHFLAM FIRE-RESISTANT GLASS

1. INSTALLATION

Fire-rated glazing is an element of fire protection structures and it is the window/door manufacturer's responsibility to ensure compliance of the fire protection assembly as a whole with currently applicable regulations, Technical Approval, National Technical Assessment, or other applicable regulations.

The glass manufacturer rejects any liability in case of installing the glass in an unsuitable or defective structure.

Bohamet shall not assume any liability for glass damage that may be caused in the course of bonding the BOHFLAM glass to glazing from other manufacturers.

The panes should be bonded into IGUs in accordance with PN-EN 1279-1 through 6:2018.

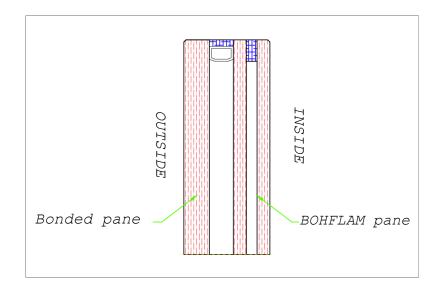
The installing company should be adequately certified for installation of fire-resistant windows/doors.

Avoid direct sunlight during glass installation.

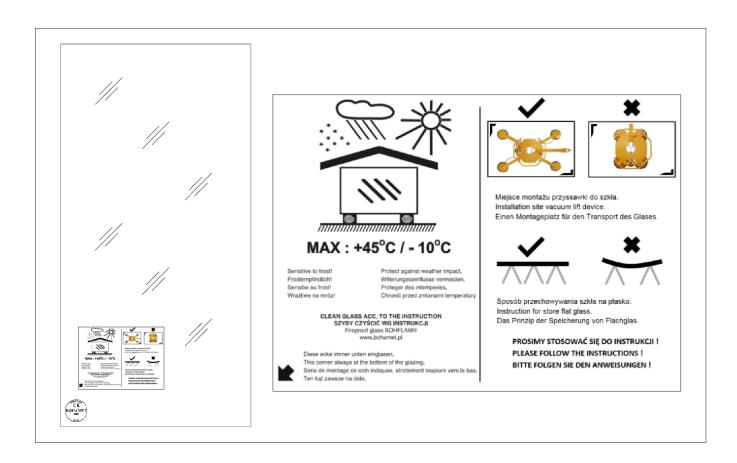
2. GENERAL RULES

Fire-rated glazing must not be installed, stored, or transported in areas where the temperature has exceeded +45°C or dropped below -10°C.

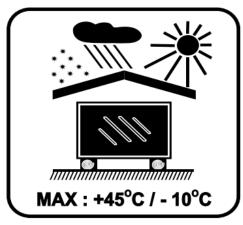
In case of external panes, always install the glazing so that the fire protection part (Bohflam El30, El60, EW60, etc.) is facing the interior of the building and the bonded pane is facing the outside.



See to it that the glazing is always installed with the pane feature (permanent marking, e.g. the CE mark) down. This is additionally marked by an arrow on the pane label. If a pane is installed with the feature up, it may lose its integrity, leaking the fire protection gel. If a pane has been installed with the feature up, customer claims for loss of integrity shall not be accepted.



This label should always be on the bottom of the glass:



STORAGE AND TRANSPORT CONDITIONS

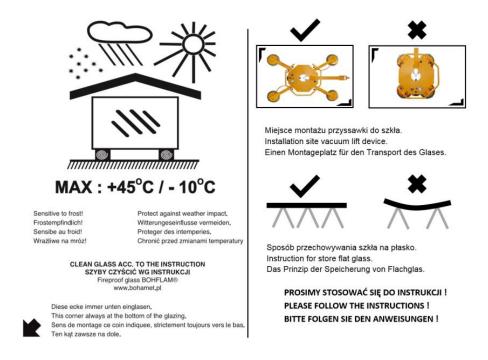
- Sensitve to frost!
- Protect against weather impact
- Frostempfindlich!
- Witterungeseinflüsse vermeiden
- Sensibe au froid!
- Proteger des intemperies
- Чувствителен на мороз Предохранять от изменения температуры
- Wrażliwe na mróz
- Chronić przed zmianami temperatury
- Diese ecke immer unten einglasen
 This corner always at the bottom of the glazing
 Ce coin indique est toujours ici
- Ten kat zawsze na dole

CLEAN GLASS ACC. TO THE INSTRUCTION SZYBY CZYŚCIĆ WG INSTRUKCJI



Fire proofglass BOHFLAM www.bohamet.pl

Storage and installation:



Do not handle or install the BOHFLAM glass by means of a vacuum lifter in a horizontal position. The glass may be handled in a vertical position, tilted up to 30 degrees.

If the glazing is to be laid on trestles in a horizontal position, arrange the trestles so that the panes do not bend, as such bending could lead to damage or deformation. Do not leave the panes in a horizontal position any longer than needed to perform the necessary operations and then proceed to installation in a frame forthwith.

Ensure there is sufficient clearance between the glass and the frame; the clearance should be equal on both sides. The minimum clearance at the place of setting between glazing edge and the frame is 4 mm; the clearance is to be defined by the frame system supplier.

Ensure adequate clearance between the front and rear plane of the glass so that the seal, when installed, does not press on and strain the glass, which could lead to glass breakage or crushing.

The place where the glass is to be set in a frame must be clean, dry, and free from dirt and aggressive materials (e.g. solvents, acids, bases, and other materials which could react with the glass material).

The glazing must not come into contact with any metal elements.

Glass edges must not contact water or other fluids or materials during storage, installation, and after installation. The frame structure should provide water drainage and venting of the glass setting space.

For glazing, use only system shims made of e.g. hardwood.

3. WAREHOUSING AND TRANSPORT

BOHFLAM glass must not be warehoused or transported in temperatures beyond the range of -10°C to +45°C or under conditions of exposure to direct precipitation, direct sunlight, heating elements, low temperatures, or rapid temperature changes.

Avoid transit in vehicles without an enclosed cargo area or a tarpaulin.

In case of high temperatures in transit, it is recommended that the glass be transported in airconditioned containers.

In transit, belts securing glass racks must not press against the glazing as this could cause glass cracking or deformation.

Following delivery, remove or loosen belts holding the glass to prevent the glass from deformation under belt pressure.

Transport and store the glass in dry, well-ventilated places.

Do not let the glass get bedewed.

The glass should always be in a vertical position or slightly tilted at a 6 to 10° angle off the vertical.

The angle between rack support and rack wall should be 90°.

The place of support must be lined with a material securing the glass against damage; the glass has to be supported along its entire height.

Place cork spacers between the panes to ensure effective ventilation.

In the event of a risk of misting over during warehousing, remove the stretch wrap protecting the glass in transit from the racks. Remember to protect the glass so uncovered from dirt or damage.

4. CONDITIONS OF APPLICATION AND USE OF THE BOHFLAM GLASS

The basic function of the BOHFLAM range is fire protection.

During transit, storage, installation, and use of fire-resistant multiple glazing products, physical and chemical effects may cause visible changes to occur in glass, and these are not covered by terms and conditions of warranty. Results of such changes may be minimised or avoided under standard conditions by following the instructions below:

5. TRANSPORT, STORAGE, AND INSTALLATION OF THE BOHFLAM GLASS

Standard conditions mean that temperature between individual glass layers must not be lower than -10°C or higher than +45°C. This applies to transit, storage as well as installation of the glass panes on site.

The customer should become familiar with specific requirements for transport and application of the products. In case of any doubt regarding such requirements and negligence in reaching out to the supplier for information and instructions, all warranties shall be voided. This also applies in the event of failure to follow generally recognised technological rules provided in standards as well as installation, transport, and cleaning instructions (see below), on labels, in product sheets, etc.

Protect glass edges to ensure adequate sealing quality.

The edge area and glass pane edge protection must remain intact also following delivery – they must not be damaged or processed. This covers thermal impacts (welding, radiators located too close, etc.), mechanical impacts (such as cutting, grinding, modifying edges and corners, etc.), or chemical impacts (contact with inappropriate sealing materials, solvents, etc.) that could affect the BOHFLAM glass units.

Each sheet of fire-resistant glass has to be stored in a dry place protected against direct sunlight or other sources of heat. Likewise, each sheet has to be protected against low temperatures below -10°C. Before installation, each sheet of fire-resistant glass is to be inspected for visible defects or damage. Defective or damaged sheets must not be installed.

The warranty is voided if the glazing has been modified or processed by the customer or a third party following delivery without prior written consent of the manufacturer. Welding in places where the fire-resistant glass is being kept requires protection of the glass surfaces against welding spatter or sparks.

6. CLEANING OF / SURFACE EFFECTS ON THE BOHFLAM FIRE-RESISTANT GLASS UNITS

In general, the BOHFLAM glass has to be cleaned without any operations that would scratch or rub off the surface. Sponges or cloths used for cleaning may not be contaminated in any way that would cause scratching or rub-off, e.g. with grains of sand. Do not use basic or acidic fluoride cleaning agents. Use of cleaning equipment with materials that would scratch, rub off, or grind off the surface, such as sandpaper, razors, or steel wool, is also prohibited. Due to the technology used and the finishing treatment of the fire-resistant glass, certain effects might occur, such as caused by suction cups, rollers, guides, or labels, and manifest, for instance, due to water surface condensation. These may not constitute grounds for warranty claims.

Concrete, cement, or mortar residues must not be removed dry. Avoid any contact of the glass surface with water containing concrete or cement. However, if such contamination occurs, immediately rinse the glass with plenty of clean water. If the substance sets on the glass surface, the surface may be irreversibly damaged.

7. LOCAL / ENVIRONMENTAL CONDITIONS FOR INDOOR INSTALLATION

When installed, the BOHFLAM fire-resistant glass must be protected against temperatures lower than -10°C and higher than +45°C. Therefore, BOHFLAM glass units must not be installed in the vicinity of radiators or spotlights where the fire-resistant interlayer could reach a temperature exceeding +45°C. In addition, avoid heat accumulation behind the glass due to installed roller shutters or curtains.

When the BOHFLAM glass units are to be applied indoors, maintain a temperature higher than -10°C at all times.

In the event that the glass is to be used in rooms with high humidity, expected wind load exceeding 1.5 kN/m², tilted or horizontal window frames, or where the glass is to be applied at heights above 500 (please verify this value) m above the sea level, the supplier must be notified beforehand of the conditions in which the glass is to be applied and must accept them in writing.