Instructions for installation of ROBAX® fireplace viewing panels

General information

1. Even under thermal load, ROBAX® glass-ceramic panels show near-zero thermal expansion. For this reason the different thermal expansion of the various framing materials in proportion to the ROBAX® panel must be taken into account in the design of the entire heating device.

2. Additionally, the limitations of manufacturing tolerances of the frame and glass-ceramic panel should be considered.

3. Contact pressure that leads to bending stress on the panel must be eliminated. This can be achieved, for example, by limiting torque, or with an arrester which limits screw-in depth.

4. Since slight twisting of the frame construction cannot be controlled, a thermally stable, permanently elastic seal (e.g. fiberglass reinforced or mineral-fiber reinforced) should be used to prevent the frame coming in contact with the ROBAX® panel.

5. If the frame is required to touch the glass ceramic panel due to design reasons, then the contact pressure must be evenly distributed (never at single points) over the circumference of the panel.

6. The panel must not come into direct contact with metal frame parts. It is recommended to use a thermally stable, permanently elastic seal.

7. Seal manufacturer instructions must also be followed, in particular with regard to contact pressure of materials.

8. During installation, it is essential to protect the glass-ceramic panel, specifically the edges from potential damage (blows, bumps and scratches).

9. If a high-temperature-resistant silicone is applied to the circumference of the panel, the elastic limit of the silicone must be considered. Due to the excellent bonding properties of glass-silicone, exceeding the limit can lead to cracked or broken windows.
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Frameless installation

The main hazards that could arise when installing ROBAX® glass ceramic doors without a frame are mechanical stresses (bending stress, blows, bumps etc.). Other essential general instructions that remain applicable and must be taken into account in the design of a frameless door can be found under the “General information” section.

1. The weight of the panel should be supported by a sufficiently dimensioned frame. The pressing forces transmitted from the frame to the glass ceramic must be absorbed by a suitable and temperature-stable material that is also flexible (e.g. glass-fiber cord between hinge/handle and window).

2. Pressure points, caused for example by the weight of the window „resting“ on the screws/lead-throughs, should be kept to a minimum; e.g. with threaded sleeves which at the same time prevent unacceptable glass-metal contact.

3. Bore diameter in the ROBAX® panel must allow for thermally-induced expansion of metal components (lead-throughs, mounting rails etc.). Additionally, bore edges must be of sufficient quality and be beveled on both sides. Panel edges should be ground.

4. Closing the door must not generate any additional forces (lever) on the hinged side.

5. Hinges must not jam when closing, since the resisting force produced by closing or opening the door could transmit excessively high stress to the glass ceramic.

6. Bending forces, which are exerted when the panel is latched, depend largely on the position of the bore holes for the latching mechanism and the pressing-on force needed for latching, and which is exerted by the user. Rigidity is not an issue, provided that the required pressing-on force exerted on the panel does not exceed 40 N.

7. Instructions for the location of bore holes can only be provided when the specific panel and design are known.