

PRESSURE EQUALIZATION OF ISICAM® INSULATING GLASS UNITS

Isicam® insulating glass units will be deformed as a result of pressure differences between the production and installation site. To avoid deformation, **Isicam®** units requiring pressure equalization are drilled at the production site and then the hole is sealed at the installation site. By pressure equalization, deformations and breakages due to pressure differences during transportation and installation site are prevented.

1. Conditions requiring pressure equalization

If the altitude difference between the production site, transportation route and installation site is more than 1200m or less than 500m, regardless of the glass thickness and the unit size, pressure equalization should be applied.

If the altitude of the installation site and the transportation route is 700-1200 m higher or 300-500 m lower than the production site, the width/height ratio of the unit should be considered and pressure equalization should be determined accordingly.

a. If one edge of the **Isicam®** unit is less than 700 mm, pressure equalization should be applied regardless of the width/height ratio. (For example, pressure equalization should be applied to a **Isicam®** unit with sizes of 1250x695 mm)

b. If the **Isicam®** unit has a width/height ratio equal or more than two, pressure equalization should be applied. (For example, pressure equalization is required for an **Isicam®** unit with sizes of 1500x720mm, and the ratio 2,1)

c. If the **Isicam®** unit has a width/height ratio less than 2, then pressure equalization is not required. (For example, pressure equalization should not be applied to an **Isicam®** unit with sizes of 1300x720mm, the ratio 1,8)

2. Pressure equalization

a. A hole is drilled on the short edge of the spacer (without desiccant) properly.

b. A balloon or pressure equalization valve is attached to the hole.

c. When applying balloon to **Isicam Sinerji** and **Isicam Konfor**, the balloon and the hole should be sealed completely with outer sealant (polisulphide, polyurethane) to prevent air penetration into the unit.

d. Along with the drilled **Isicam**[®] insulating glass units two components secondary seal paste (black and primary seal butyl of sufficient amounts are transferred in bags or jars.

Adequate amount of butyl and the outer sealant (black and white sealants separately) in bags or jars are delivered with the drilled **Isicam**[®] insulating glass units.

e. Balloon or valves are removed immediately installation site.

f. A small piece of butyl is picked up from the bag or jar, heated and softened on a screwdriver and the hole is sealed with it.

g. On a clean glass or ceramic plate 10 cups of white and 1 cup of black outer sealants (polysulphide, silicone, polyurethane) are mixed homogeneously and inner sealant butyl is covered with this mixture.

h. After the sealant is dried, **Isicam**[®] is applied to the window frame so that the sealed hole is the upper or vertical side edge.

After the sealant is dried, **Isicam**[®] is installed to the window frame with the sealed hole on the top or on the vertical edge.