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Guidelines for the use of Georgian bars in Insulating Glass Units

In order to avoid the risk of dissatisfying customers as to the quality of our products, do not accept orders for IGUs (double or triple) with Georgian bars, if the IGU's spacer width is not, at the minimum, 4 mm bigger than the bar thicknesses.

Practically speaking, it means that:

- for the golden, silver or white bar (8 x 1.5 mm), the spacer width should be ≥ 12 mm;
- for the normal or milled bar (1808, 2608, 4508), the spacer width should be ≥ 12 mm;
- for the "Wiener sprossen" 9.5 mm thick, the spacer width should be ≥ 12 mm
- for the "Wiener sprossen" 11.5 mm thick, the spacer width should be ≥ 15 mm.

The above restrictions arise from the need to avoid potential complaints due to the reduction of thermal insulating of a IGU in the Georgian bar area. It may display itself as the frost penetration of panels in the bar area or moisture condensation on the panel surface along the bars. In extreme cases, you run the risk of cracking panels or "bumpons," which is caused by the direct pressure of the glass on the bar.

The maximum spacing between the bar anchor points or between the anchoring and cross, alternatively – between two crosses – should not exceed 0.7 m. For spacing above 0.7 m, inform the customer of the risk that the Georgian bars could bend and vibrate, further – inform the customer of PILKINGTON IGP guidelines.

The standard procedure for PILKINGTON IGP plants is to stick transparent "bumpons" where bar cross. The function of "bumpons" is to reduce the so-called effect of muntin "ringing," which occurs in certain situations. The thickness of self-adhesive silicone "bumpons" manufactured by 3M™ is so adjusted that they are as big as possible but do not touch the glazing. "Bumpons" are not glued to bars covered with "Renolit" foils.

It means that for bars with the thickness of 8 mm, that is the milled (1808, 2608, 4508), golden, silver and white ones, the thicknesses of bumpon should be:

- ≤ 2 mm for the spacer 12 mm, (recommended SJ-5382, thickness – 1.8 mm, diameter – 6.4 mm)
- ≤ 2.5 mm for the spacer 14 mm, (recommended SJ-5302A, thickness 2.2 mm, diameter – 6.4 mm)
- ≤ 3.5 mm for the spacer ≥ 16 mm, (recommended SJ-5378, thickness – 3.2 mm, diameter – 7.9 mm)

Orders for panels in which the difference of the spacer and bar thicknesses does not exceed 4 mm may be accepted only on the customer's own responsibility, having informed them of negative effects inherent to such a solution, with the observance of the aforementioned principles for the selection of bumpon thicknesses.

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