

Glazing Recommendations

Double Glazed SIG Units

National Glass Distribution's double glazed SIG units carry a 10 year warranty against failure of the hermetic seal provided that the glazing procedures and recommendations are followed.

Clearance and Rebate:

A minimum clearance of 4mm all round should be applied, including the front and back of the glass surfaces. Due to the dual seal a minimum rebate depth of 20mm is required to accommodate the edge cover. In flush and pressure glazed systems, the project wind load and maximum panel sizes are required to calculate the Silicone Contact Depth (SCD). This needs to be taken into account as it could affect the total edge coverage.

Weep Holes:

Drainage or weep-holes are required to remove condensation or rain water that accumulates in the glazing cavity, as this could lead to unit failure. These should drain externally.

Setting Blocks:

Setting blocks should be a minimum of 100mm long x 4mm thick and support both the entire inner and outer panes of the unit. In the case of flush-glazed systems the entire inner and 75% of the outer pane should be supported to allow for the weather seal to continue past the setting block.

Setting blocks should have a shore hardness of 50-80 durometer Shore A hardness, positioned at ¼ points on the bottom edge of the unit. This allows for the units weight to be evenly distributed, reducing the stress on the bottom edges of the unit. For any opening or moving sashes, please refer to SANS 10137 for the correct position of the setting blocks.

Breather Tube:

All National Glass double glazed SIG units are manufactured with breather tubes as they could be installed at different altitudes. These pressure-equalizing breather tubes need to be crimped when the unit is in a vertical position at the installation site to ensure that the ambient atmospheric pressure is equal to the pressure within the dehydrated airspace of the unit. Once crimped it should point downwards in the vertical jamb.

Material Compatibility:

All sealants, primers and surface finishes should receive an compatibility assurance from the manufacturer. We only recommend neutral cure silicones as when silicone comes into contact with polyurethane, the urethane disintegrates within a few months, which could cause the glass panes to separate from the spacer, resulting in a safety risk.

Thermal Stress:

A thermal stress evaluation must be done on all units comprising of tinted or solar control panes of glass.