

ThermoTech™ TPS Insulating Glass Units

Technical Specification for Glazing

This document contains very important information on the correct glazing specifications for Thermotech TPS Insulating Glass. Failure to comply with these specifications will void the Viridian warranty and severely limit any liability Viridian may have for the product.

Insulating Glass Units shall be installed in accordance with the glazing requirements of AS/NZS 4666:2000 unless otherwise specified.

Depth of Rebate – minimum depth of rebate should be 20mm.

Minimum Glazing Dimensions – for conventional framing system:

- a) Edge Clearance not less than 6mm;
- b) Face Clearance not less than 5mm;
- c) Edge Cover not less than 14mm.

Glazing Blocks

Glazing blocks made of Polyethylene "PE" or Polypropylene "PP" is recommended. Blocks made of polyamide (reinforced with fiber glass) may also be used. Aromatic synthetic material is to be avoided, e.g. polystyrole "PS", acryle butadienstyrole copolymere "ABS" or any other polyblends or copolymers. The use of blocks made of PVC must also be avoided due to the risk of plasticizer migration. No plasticiser containing layers (no rubber, EPDM based glazing blocks or layer) may be used on glazing blocks.

The minimum width of each setting block shall be not less than 3mm greater than the unit and setting blocks shall be located to equally support all panes of glass and shall be fixed to prevent displacement during installation and service.

The size, number and location of setting / location blocks and distance pieces shall be in accordance with AS/NZS 4666:2000.

Structural Glazing

Structural sealant used as a secondary seal in IGU must be specified for structural glazing when placing the order.

Dow Corning[®] 982 two-part silicone sealant is used as a secondary seal in Thermotech[®] TPS[®] IGUs for structural glazing applications. The uses of the following one-part silicone sealants are recommended for weathersealing IGU glass butt joints and structural glazing. Any other types of sealants must be checked for compatibility with the components of IGUs and approved by an authorised representative of Viridian (see note 3 below on "Compatibility test").

Weather Sealants ¹: Dow Corning 991 Silicone High Performance Sealant Dow Corning 995 Silicone Structural Glazing Sealant



Structural Glazing ¹: Dow Corning 995 Silicone Structural Glazing Sealant

The structural joint shall be designed in relation to the required movement absorption and sealant properties as per recommendations of the sealant manufacturer. Closed-cell PE beads are recommended to be used as backing material (backer rod), as used for window / wall joints.

Edge Deflection of IGU

The edge deflection of the unit shall meet the requirements of AS 2047 as summarised below:

- a) Housing no greater than span/150
- b) Residential Building no greater than span/180
- c) Commercial Building no greater than span/250

Recommended Glazing Details - Refer to Drawing VIR-IGU-001 attached

Notes:

- Considerable research has been devoted to finding sealants which are compatible
 with ThermoTech TPS IGU's. The process has involved extensive testing to ensure
 the sealants do not compromise the integrity or aesthetics of the IGU. This process
 has identified a sealant which is locally available.
- 2. Viridian will not be responsible for any loss or damage of any kind that may arise as a result of a failure to comply with these specifications.
- 3. Compatibility Test: two cartridges of the proposed sealant must be submitted for testing. The test results will be available in 20 weeks from the date of submission.
- 4. Incompatible sealants and glazing blocks will void the warranty.