ThermoTech™ Insulating Glass Units
(Metal & TPS Spacers)

Technical Specification for Glazing

This document contains very important information on the correct glazing specifications for ThermoTech™ 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 unless otherwise specified.

For conventional frame glazing of ThermoTech™ TPS IGUs, the minimum edge cover is recommended to be not less than 14mm to avoid exposure of TPS spacer, as the exposed TPS may not be acceptable due to aesthetic reasons.

Glazing Blocks

Glazing blocks made of Polyethylene "PE" or Polypropylene "PP" are 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.

Glazing blocks other than those covered by our recommendation may be used by ensuring that they are "insulated" from contacting the secondary sealant of the ThermoTech IGU. This can be achieved by wrapping the glazing block with 3M™ Aluminum Foil Tape 425 to avoid the migration of incompatible chemicals.

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.

Structural Glazing

Silicone secondary seal in IGU manufacture must be specified for structural glazing when placing the order. Polysulphide secondary seal is not suitable for use in structural glazing applications due to exposure to UV that will lead to a quicker unit breakdown.

Dow Corning® 982 two-part silicone sealant is used as a secondary seal in ThermoTech IGUs manufacture for use in structural glazing applications. The uses of the following one-part silicone sealants are recommended for weather sealing 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 Tremco Spectrem 2 Structural
Silicone Sealant

Structural Glazing [1]:   Dow Corning 995 Silicone Structural Glazing Sealant
Tremco Spectrem 2 Structural Silicone 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.

Recommended Glazing Details – Refer to Drawing VIR-IGU-001 & VIR-IGU-002 Notes:

1. Considerable research has been devoted to finding sealants which are compatible with ThermoTech 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.