TechDirect™ Specifications

Insulating Glass Units (IGU) Glazing Specification

This document contains very important information on the correct glazing specifications for Insulating Glass Units (IGU). 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 TPS/4SG IGUs, the minimum edge cover is recommended to be minimum 14mm to avoid exposure of TPS/4SG spacer, as the exposed TPS/4SG 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.

Silicone glazing blocks free of plasticizers (silicone oil, mineral oil, etc.) which have been post cured (after post curing: content of extractable silicone oils below 3% and weight loss at 200°C/4h below 1%) may be used such as Tremco TR0512S silicone 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 IGU. This can be achieved by wrapping the glazing block with 3M™ Aluminium Foil Tape 425 to avoid the migration of incompatible chemicals.

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 IGUs manufacture for use in structural glazing applications. The following silicone sealants may be used 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 sealant manufacturers to be fit for purpose.

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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.

Recommended Glazing Details – Refer to Drawing VIR-IGU-002 for details.

Notes:

1. Considerable research has been devoted to finding sealants which are compatible with Viridian's IGUs. 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. Incompatible sealants and glazing blocks will void the warranty.