

## HANDLING, STORAGE AND GLAZING OF INSULATING GLASS UNITS

Insulating Glass Units must be handled, stored and glazed in accordance with AS/NZS 4666/2000 and the data sheets provided by the Insulating Glass Unit Manufacturers Association (IGUMA).

A summary of the key issues is as follows;

### 1. HANDLING AND STORAGE.

- a) Units must be transported and stored so that both panes of glass are equally supported on a 90-degree angle rack set at 4-7 degrees from the horizontal.
- b) Units should not be stacked more than 6 deep without immediate support for each stack. For various sized units, stack the biggest units against the supports.
- c) Units must be stored in dry ventilated conditions out of direct sunlight.
- d) Units that are transported or installed at heights exceeding 1200 metres above sea level require special pressure equalizing valves and advice should be sought from Metro GlassTech.
- e) Extreme care must be taken in handling units with suckers as this can put extreme stress on edge seals and lead to failure.

### 2. DRAINED GLAZING METHOD with GASKET SECTIONS (Typically Dry Glazed Systems used for Aluminium Joinery)

- a) Always use approved setting blocks. Never install units directly onto a window frame.
- b) Setting blocks should be 80-90 Shore A Hardness, 6mm minimum in height and 25mm long per m<sup>2</sup> glass area. Position the two setting blocks at quarter points.
- c) Ensure both panes are evenly supported on the setting blocks, which should be 3mm (min) wider than the unit.
- d) Ensure the units have the correct edge clearance (min 3mm up to 2m unit length).
- e) Check that gasket and wedge rubber is of correct thickness.
- f) Do not force the wedge in, as this may result in glass fracture.
- g) Ensure the unit edge cover is 12mm minimum and the edge seal is protected from the sun's UV rays.
- h) Ensure rebates are drained with at least 3 drain holes, 6mm minimum diameter or 5mm x 10mm slots at maximum 800mm centres.

### 3. DRAINED GLAZING METHOD with GLAZING TAPES and/or SEALANTS (Typically used for Timber Joinery)

- a) Ensure the rebates are a suitable size, primed and sealed and the bottom platform is sloped 15 degrees.
- b) Use a suitable adhesive foam tape or butyl tape.
- c) Use special sloped setting blocks to support unit or a sloped packer and approved setting block. Refer 2(b) and 2(c) above for details.
- d) Always use beaded system and ensure the beads are of adequate size and are fixed not more than 50mm from the corner and not more than 150mm apart with pins or 75mm and 200mm apart for screws.
- e) Ensure sill beads are drained as described in 2(h) above.
- f) Apply adequate pressure to compress the tapes to the manufacturer's requirements and seal all corner joints in the tape.
- g) Ensure any capping sealant used is fit for the purpose and will adhere to the glass and beads.
- h) Ensure the unit edge cover is 12mm minimum and the edge seal is protected from the sun's UV rays.

### 4. NON DRAINED GLAZING METHODS

Glazing methods such as solid bedding and those with tapes and capping beads without drainage are subject to specific design and the glazing detail must be agreed in writing for the warranty to apply.

### 5. SKYLIGHTS & SLOPED GLAZING.

- a) Use a glazing system designed and engineered for sloped glazing.
- b) Support the unit dead weight with a setting block on a shoe or glazing bar to prevent unit from slipping down.
- c) Use safety glass for sloped overhead glazing.
- d) Ensure the unit edge cover, on all edges, is 12mm minimum and the edge seal is protected from the sun's UV rays with frames and/or flashings.
- e) Consider the possibility of thermal stress breakage unless heat-treated glass is used and use the solar control glass to the outside.
- f) The recommended minimum roof pitch is 5 degrees for water runoff.

### 6. GLAZING COMPOUNDS and SEALANTS.

When installing Insulating Glass Units the following have been tested and found to be compatible:

Butyl tape, butyl sealant and neutral cure silicone sealant. Other compounds and sealants such as linseed oil putty, acid cure silicone, polyurethane, polysulphide, MS sealant and small joint sealant may cause unit failure through sealant incompatibility and testing is advised.

### 7. LABELS & ORIENTATION

Check all units have been glazed in the correct orientation, and then remove all labels after glazing. Tinted and high performance solar control glass should be glazed to the outside and Low E glass normally to the inside.

1: IF THE ABOVE INSTRUCTIONS ARE NOT ADHERED TO, BREAKAGE OR FAILURE OF THE UNITS MAY OCCUR AND THE WARRANTY WILL BE VOID.

2: Refer to Metro GlassTech Catalogue and Reference Guide for further information and details.

#### NORTH HARBOUR

Fax (09) 415 0480

Ph (09) 415 0470

#### CENTRAL AUCKLAND

Fax (09) 849 4569

Ph (09) 815 1199

#### SOUTH AUCKLAND

Fax (09) 274 1100

Ph (09) 274 1030

#### BAY OF PLENTY

Fax (07) 575 5290

Ph (07) 575 5503

#### WELLINGTON

Fax (04) 232 9930

Ph (04) 232 9920



## INSULATING GLASS UNIT WARRANTY

Metropolitan Glass and Glazing Limited and its subsidiaries (Metro GlassTech), warrant that all Insulating Glass Units manufactured by Metro GlassTech will comply with the requirements of the Consumer Guarantees Act 1993, and in particular that;

1. The units are fit for the purpose for which they are commonly supplied and
2. Are acceptable in appearance and finish and
3. Are safe and durable.

These warranties are given in terms of the Consumer Guarantees Act 1993 and are qualified by the appropriate qualifications and restrictions in that Act. In addition to the statutory guarantees, Metro GlassTech warrant that for a period of ten (10) years from the date of manufacture, units will not develop material obstruction of vision as a result of dust or film formation on the internal glass surface caused by failure of the hermetic seal arising from faulty manufacture. In the event that the units develop an obstruction of vision due to internal failure of the hermetic seal, Metro GlassTech will re-supply as supply only replacements the defective units, and the warranty period will extend to the re-supplied units for a further period of ten (10) years from delivery.

Metro GlassTech advises that in terms of the Consumer Guarantees Act 1993, all of its products carry a guarantee of acceptable quality and a guarantee that the goods correspond with Metro GlassTech's description of them, but in terms of the Act, Metro GlassTech will not be liable under the guarantee of acceptable quality for failure as a result of:

1. Any act of default or omission of, or any representation made by, any person other than Metro GlassTech or the employees or agents of Metro GlassTech.
2. Any cause independent of human control, occurring after the goods have left the control of Metro GlassTech.

This warranty shall not apply where any one or more of the following circumstances exist:

1. Failure of the hermetic seal is caused in whole or in part by the breaking or fracturing of any portion of the glass unit.
2. The units are installed contrary to our Handling, Storage and Glazing instructions.
3. The units are damaged by improper handling storage or glazing.
4. The units are altered in any way.
5. The units are subject to abnormal stresses from the load application of heat, excessive vibration, building or foundation movement or the failure to provide adequate expansion or contraction provisions in the framing members.
6. The units are treated /glazed with materials which do not remain resilient for the warranty period and/or are not compatible with the unit seal or glass type.
7. The units are installed in circumstances, which do not provide total water repellency or a suitable water drainage system for the warranty period.
8. The units are installed in watercraft, land vehicles, trailers, swimming pools, or commercial refrigeration products without written approval of the installation method.

Metro GlassTech reserves the right to inspect in the field any units which are alleged to be defective and which are the subject of a claim under this warranty or under the Consumer Guarantees Act 1993.

NOTE. Metro GlassTech Insulating Glass Units have been tested by BRANZ and comply with BS5713

### WARRANTY DETAILS

AFFIX  
COMPUTER PRINTED  
LABEL HERE

#### NORTH HARBOUR

Fax (09) 415 0480

Ph (09) 415 0470

#### CENTRAL AUCKLAND

Fax (09) 849 4569

Ph (09) 815 1199

#### SOUTH AUCKLAND

Fax (09) 274 1100

Ph (09) 274 1030

#### BAY OF PLENTY

Fax (07) 575 5290

Ph (07) 575 5503

#### WELLINGTON

Fax (04) 232 9930

Ph (04) 232 9920