

HANDLING, STORAGE AND GLAZING OF INSULATING GLASS UNITS

Insulating Glass Units must be handled, stored and glazed in accordance with AS/NZS 4666:2012 and the data sheets provided by the Insulating Glass Unit Manufacturers Association (IGUMA)

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) Additional consideration should be given to the clamping of the units when being loaded onto vehicles.
- c) Units should not be stacked more than six deep without immediate support for each stack. For various sized units, stack the biggest units against the supports
- d) Units must be stored in dry ventilated conditions out of direct sunlight, and should not be covered in plastic.
- e) Units that are transported or installed at heights exceeding 650 metres above sea level may require special pressure capillary/breather tubes and advice should be sought from Metro Performance Glass.
- f) Extreme care must be taken in lifting/handling units with suckers as this can put undue stress on edge seals that may 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 m² 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 correct for the gap thickness.
- f) Do not force wedge in, as this may result in glass breakage.
- 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, 10mm 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.
- g) Ensure any capping sealant used is fit for the purpose and will adhere to the glass and beads, and is compatible with the tape.
- 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 structural silicone glazing, 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. The sealant types, adhesive properties and compatibility with the unit seals and glass type are critical to the performance of the unit. Special silicone secondary seal units are often used for these methods

5. SKYLIGHTS & SLOPED OVERHEAD GLAZING.

- a) Using a glazing system designed and engineered for sloped and overhead glazing.
- b) Support the unit dead weight with setting blocks on a shoe or glazing bar to prevent unit from slipping down.
- c) Use safety glass for sloped overhead glazing as required by NZS 4223.
- 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, unless special silicone secondary seal units are used.
- e) Consider the possibility of thermal stress fracture for all solar control glass unless heat-treated glass is used.
- 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 can be outside or inside to suit the design.

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

Refer to Metro Performance Glass for further information and details. (WWW.METROGLASS.CO.NZ)

INSULATING GLASS UNIT WARRANTY

Metropolitan Glass and Glazing Limited (trading as Metro Performance Glass) warrant that all Insulating Glass Units manufactured by Metro Performance Glass will comply with the requirements of the Consumer Guarantees Act 1993 in particular that:

1. The units are fit for all purposes for which they are commonly supplied and
2. Are acceptable in appearance and finish (refer AS/NZS 4666) and
3. Are free from minor defects (refer AS/NZS 4667) and
4. Are safe and durable (refer NZS 4223)
5. Argon units will be filled initially with no less than 90 % argon, and have a gas loss of not more than 1% per year for 10 years

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 Performance Glass 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 any failure of the hermetic seal. In the event that the units develop an obstruction of vision due to internal failure of the hermetic seal, Metro Performance Glass 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 Performance Glass 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 the company description of them but in terms of the Act Metro Performance Glass will not be liable under the guarantee of acceptable quality as a result of:

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

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

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 (Note this includes thermal stress fracture of the glass panes)
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.
9. The units incorporate internal lead lights, copper lights or any form of artwork.

Metro Performance Glass 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.

Metro Performance Glass's membership of IGUMA requires product testing as set in EN1279 by BRANZ Ltd, as an independent body.

WARRANTY DETAILS

Company:

Customer Name:

Date:

Metro Invoice Number: