



# **WINDOW ASSOCIATION OF NEW ZEALAND**

## **WANZ INDUSTRY STANDARDS**

### **FOR**

## **GLAZING BLOCKS**

**Specification No 140307 R 3.0**

# **MATERIAL SPECIFICATION FOR GLAZING BLOCKS**

## **1.1: SCOPE**

This section relates specifically to Glazing Block materials. The resulting Glazing Blocks are used in the manufacture of Aluminium, Timber, uPVC, Composite, Steel, and Pultruded joinery. Glazing blocks may have specific names as noted below based on their end use.

## **1.2: DEFINITIONS**

### **Glazing Blocks:**

Blocks placed between a glass pane and the frame to position the glass in the frame and prevent direct contact between the two of them. Glazing Blocks include Setting Blocks, Location Blocks and Distance Pieces

### **Setting Block:**

A block of resilient non-absorbent material used to support the dead load of the glass on the rebate platform and prevent glass to frame contact.

Normally used in pairs, and located at quarter points of the glass width.

### **Location Block:**

A block of resilient non-absorbent material used between the edges of the glass and the frame, other than the bottom, to prevent movement of the glass within the frame by thermal expansion or when the window or door is opened or closed. They are sometimes required to prevent the weight of the glass causing the frame to become out of square.

### **Distance Pieces:**

A block of resilient non-absorbent material used to prevent displacement of glazing compounds or sealant caused by external loading, such as wind pressure. They are positioned opposite each other between the glass and rebate and glass and bead.

## 1.3: MATERIALS

Suitable materials for Glazing Blocks include:

PVC

Thermoplastic Elastomers

Vulcanised Rubbers (Includes Silicone)

Engineered plastics

## 1.4: MATERIAL HARDNESS REQUIREMENTS

	Thermoplastics, Rubbers and Silicones	PVC and Engineered Plastic (note 3)
Setting Blocks	80-90 Shore A (note 1)	60-80 Shore D
Location Blocks	55-90 Shore A (note 2)	60-80 Shore D
Distance Pieces	55-75 Shore A (note 2)	60-80 Shore D

### Notes

1 - NZS 4223 Part 1 and AS/NZS 4666 recommends 80-90 Shore A hardness

2 - NZS 4223 Part 1 recommends 55-75 Shore A hardness and AS/NZS 4666 recommend 55-65 Shore A hardness

3 - NZS 4223 Part 1 and AS/NZS 4666 do not cover non extruded blocking materials such as engineered plastics but they are widely used in Europe.

## 1.5: GENERAL INFORMATION

Glazing Block materials have been designed to withstand prolonged exposure to moisture and Ultra Violet light in average New Zealand conditions without appreciable breakdown in performance. This only applies to Glazing Blocks that are coloured black.

Thermoplastic Elastomers, Engineered Plastics and Vulcanised Rubbers, as recommended by the manufacturer, are the only materials that should be used for high-rise applications (above three stories), or for other installations in extreme or exposed conditions.

Glazing blocks shall be tested for compatibility with glass types, glazing tapes & sealants that they are likely to come in contact with.

### Single Glazing

PVC setting blocks are generally satisfactory for single monolithic glazing, but they should not be used with laminated glass, insulated glass units, nor in the presence of silicone.

Thermoplastic Elastomers, Vulcanised Rubber and silicones are satisfactory for single glazing

Engineered plastics are generally satisfactory for single monolithic glazing and can be engineered for compatibility with laminated glass

### **Insulating Glass Units**

The insulating glass manufacturer should be contacted for their specific recommendation of setting blocks to ensure compatibility with their insulating glass unit components (e.g. spacer type, primary and secondary seals, glass coatings, etc).

Thermoplastic Elastomers and silicones are generally satisfactory for IGUs

Engineered plastics that have been engineered for compatibility with IGUs are generally satisfactory.

Most 100% silicone setting blocks are compatible with silicone sealant – but should always be tested.

## **1.6: TEST PROCEDURES**

Use the following ASTM Test Method to demonstrate compliance with the requirements of this standard:

Shore Hardness      ASTM D-2240

## **1.7 QUALITY ASSURANCE**

Those claiming compliance with this part undertake that they will maintain a documented system of quality assurance that ensures:

1. That the product sold will perform the same as the tested sample.
2. That the materials of manufacture will be the same as those tested.
3. That the instructions for the use of the product will be available to the purchaser.

END