

In metal coated glasses, pinholes in the coating area larger than 1.5mm diameter should not be allowed. Large clusters or close spacing of smaller pinholes should not be allowed in any area which a person would normally look through.

When spandrel glazing is viewed from a distance of 3 metres against a dark uniform background under lighting conditions as described in “scratches and blemishes” and pinholes or scratches are not obvious, these are considered acceptable.

GLASS DISTORTION/COLOUR VARIATIONS

There will always be some degree of distortion in glass.

Toughened glass will exhibit more distortion than annealed glass. Some gasket systems such as roll-in or wedge gaskets also trend to create more distortion than other gasket systems.

Sealed insulated glass units will distort due to changes in temperature and atmospheric pressure.

Sealed insulated glass units feature a spacer between the two sheets of glass around the perimeter of the unit. This spacer is set in from the edge to allow for the inclusion of a secondary seal. The spacer is often visible in the rebate and the primary seal, being soft mastic; it is not always perfectly flush with the spacer inner surface. In addition both the spacer and the sealant may protrude beyond the sight line and, provided the requirements of section 10.4.4 are met, this is considered acceptable.

Colour, reflectance and transmission in functional glasses may vary slightly and is considered acceptable.

10.4.5 GLAZING

The installed glazing materials must in all respects comply with SANS 10400, SANS 10137 and chapters III, IV and V of the AAAMSA Selection Guide for Glazed Architectural Products: June 2008.

There should be **no glass to metal contact**.

The bite on the glazing material in the rebate should be sufficient to meet the requirements of the application, and no edges of the glazing material should be visible.

No excess sealant or spillage should be visible when viewed from a distance **of 3 metres under** the lighting conditions described in “scratches and blemishes”.

Sealants used should have **no gaps or air pockets** and should **be visible on both sides of the glass when bead glazed**. Where translucent structural silicone sealant is used without glazing beads, small air bubbles are acceptable provided these are not at the exposed surfaces.

Gaskets should **be continuous and should not be loose** or unsightly at corners. A maximum **of 2 butt joints per pane** is permissible. If mitered corners are used, only corner joints are permissible. **Gaps in mitered corners and butt joints must be sealed with an approved sealant** and not be visible from a distance **of 3 metres** under the lighting conditions described under “scratches and blemishes”.

10.4.6 FITTINGS AND HARDWARE

All hardware and fittings to be of a material generally resistant to atmospheric corrosion and should be of adequate strength and design to serve the purpose of which they are intended and can easily be replaced.

Hardware should be neatly and securely attached to the window/door with screws or pop rivets which are compatible with aluminium and which will generally be silver in appearance.

NOTE: Any variations to the above should be clearly specified at the tender stage.

10.4.7 FUNCTIONAL TEST

All opening sashes and doors should be capable of operating and sealing properly, in accordance with starting and operating forces described in the AAAMSA test performance certificate/s and relevant AAAMSA Selection Guides.

All locks, catches and any other fittings should work properly.

NOTE: When finishes around the frame are applied by trades other than the architectural aluminium sub-contractor, extreme care should be taken to avoid distorting the frame in any way.

CONFIGURATIONS

The configuration of the product should be in accordance with the contract drawings.

IN-SITU POSITIONS

Products should be installed in accordance with the positions shown on the contract drawings. All in accordance with the AAAMSA Guide for Accuracy of Installed Architectural Aluminium Products. (Section 10.1 & 10.2)

SECURING

Products should be securely anchored into the openings provided by the Contractor, all in accordance with AAAMSA installation standards.

SQUARENESS

Products should be both plumb and square.

CORNERS, JOINTS AND GLAZING BEADS

Corners, joints and glazing beads should be accurately mitered or notched and there must be no sharp edges or unsightly gaps when viewed from a distance of 3 metres under formal lighting conditions (refer "scratches and blemishes"). All corners and intersections vulnerable to water penetration should have adequate sealant applied to ensure functional performance.

SCRATCHES AND BLEMISHES

The scratch and blemish inspection should be viewed at a distance of 3 metres under normal lighting conditions. Normal lighting conditions shall mean "reasonable lighting conditions under which the product is normally viewed".

Scratches in aluminium are defined as being a mark on the aluminium surface which penetrates the anodised or painted surface thereby exposing the natural metal. If visible when viewed from a distance of 3 metres under the lighting conditions described, the product/s may be rejected.

Blemishes in aluminium are defined as flaws/stains or runs, or any other indication that mars the aesthetic appearance of the aluminium. If visible when viewed from a distance of 3 metres under the lighting conditions described, the product/s may be rejected.

SEALING

The external perimeter of the frame should be continuously sealed against the surrounding structure.

10.4.4 GLASS

CLEANING

All glass should be cleaned prior to inspection.

CORRECT GLASS

All glass should be installed in accordance with:-

- Specification.
- Current National Building Regulation requirements.
- AAAMSA Selection Guide for Safety Glazing Materials.

GLASS INSPECTION

Scratches in glass which are acceptable, are those which are under 75mm long in any area, and those which are longer than 75mm which do not encroach more than 75mm from the edge.

In laminated glass, interlayer bubbles larger than 1.5mm diameter should not be allowed. Large clusters or close spacing of smaller bubbles should also not be allowed.

NOTE: Some bubbles or edge delamination may be expected along exposed edges particularly where these are in contact with structural silicone sealants. Bubbles and edge delamination should not penetrate "lost" in the joint when viewed from a distance of 3 metres under the lighting conditions described under "scratches and blemishes".