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# PRODUCT ACCEPTANCE STANDARD FOR CUSTOM LAMINATED GLASS

# **SCOPE**

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## 1. STANDARDS COMPLIANCE

Chevron Custom Laminated products are supplied in accordance with this Product Acceptance Standard and conform to the following Australian Standards.

AS/ NZS 2208 "Safety Glazing Materials in Buildings"

AS/ NZS 2080 "Safety Glass for Land Vehicles"

AS 1288 "Glass in Buildings-Selection & Installation"

AS/ NZS 4667 "Quality requirements for cut to size and processed glass"

A Certificate of Compliance can be supplied on request.

## 2. IDENTIFICATION LABEL

All Chevron Custom Laminated products will be supplied with an appropriate Chevron Glass label.

This label verifies manufacture by Chevron Glass, our licence number, glass thickness and conformity to AS/ NZS 2208 or AS/ NZS 2080 standards certification.

For example,



Individual panels of toughened glass incorporated into a custom laminated product are not stamped.

# 3. PRODUCT RANGE

Annealed Laminated Glass Heat Strengthened Laminated Glass Toughened Laminated Glass

All toughened substances must have a minimum of 1.52mm interlayer.

# 4. SIZE RANGE

- MINIMUM SIZE 100 X 350mm.
- MAXIMUM SIZE Length 4000mm (Refer to Production). Width depends on laminate size.
- MAXIMUM WEIGHT 350kg/m² per make-up.

# 5. MINIMUM CHARGE

A minimum area charge of 1m<sup>2</sup> per panel applies.

# 6. **DIMENSIONAL TOLERANCES**

# 6.1 SIZE:

	Glass Thickness < 10mm	Glass Thickness > 10mm
Length/width (tolerance) for glass < 1200mm	<u>+</u> 2mm	<u>+</u> 2mm
Length/width (tolerance) for glass ≥ 1200mm	<u>+</u> 2mm	<u>+</u> 3mm

# 6.2 SQUARENESS:

Maximum difference in diagonals is 5mm for panels with the largest dimension less than 1200mm, or 10mm maximum if the largest dimension is greater than 1200mm.

#### **6.3 MISALIGNMENT:**

Edge slip of up to 3mm between glass components is acceptable.

## 6.4 BOW:

Not to exceed 1:300 when glass in standing vertically. Total bow across panel is not to exceed 10mm in depth.

# 6.5 HOLES:

Misalignment of holes is acceptable, provided it does not exceed 4mm.

## 7. SURFACE QUALITY

The glass is to be inspected in transmission (looking through the glass) at a distance of 3 metres at a viewing angle of 90° (perpendicular) to the surface and as normally viewed using daylight without direct sunlight or with a background light suitable for observing imperfections. Scratches, scars, surface marks and imperfections are acceptable if not readily visible from the viewing distance.

#### 7.1 ROLLER WAVE DISTORTION

- An inherent consequence of the heat treatment process is roller wave which is caused by the heated, slightly softened glass being in continual contact with the oscillating ceramic rollers. This distortion is more noticeable in reflective or dark tinted glasses and if applicable, the direction of roller wave should be specified.
- Roller wave on heat strengthened and toughened laminated glass not to exceed 0.15mm over 300mm.
- Edge kink not to exceed 0.25mm in 300mm.

## 8. EDGE QUALITY

## 8.1 CLEAN CUT

Maximum shelling and flanging to be no more than 50% of the total substance thickness and to a maximum of 5mm in from the edge.

#### 8.2 ARRISSED EDGE

Chips and shells are acceptable provided they:

- Extend no greater than 5mm from the edge of the glass.
- Do not exceed half the glass thickness.
- Are not vented.

#### 8.3 FLAT SMOOTH / FLAT GROUND EDGE

No shells are permitted.

Grind marks are permitted but must be of light intensity (not visible at greater than 900mm).

Chips and shells are permitted provided they:

- Extend no greater than 2mm from the edge of the panel.
- Extend no greater than 2mm into the glass thickness.

#### 8.4 FLAT POLISHED EDGE

Finish and arris must be uniform.

Chips and shells are not permitted.

## 8.5 MITRED EDGES

As for flat smooth / flat ground (8.3).

Vented edges are not permitted.

## 9. INTERLAYER SNAP BACK / SHRINKAGE / EDGE DELAMINATION

Laminated glass within specification may exhibit a measure of delamination.

From any edge of the laminate interlayer, snap back, shrinkage or delamination is acceptable if no more than:

- 6mm for laminates containing 0.76mm interlayer.
- 10mm for laminates containing 1.14mm and 1.52mm interlayer.

# **10.INTERLAYER BUBBLES**

• Acceptable if not visible from a viewing distance of 3 metres.

<ul> <li>Bubble/Inclusion</li> </ul>	<u>Up to 2.5m2</u>	<u>Over 2.5m2</u>
<1.0mm	No limit	No limit
1.0mm – 5.0mm	2	4

Effective: 01/02/14 Replaces: 01/04/11