

Visual Specification Quality Plan

PaneLux® A1 Solid Aluminium Cladding System

Version Details: 10072025

Version: V1 – 072025

Version Date: 10/07/2025



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This Visual Specification – Panel Quality Plan may only be reproduced in its entirety. Uncontrolled in printed format

Visual Specification Quality Plan

1. Purpose:

To ensure that the PaneLux® A1 Solid Aluminum Panels meet the quality standards for visual appearance and structural integrity as per AAMA 2605.

2. Scope:

The attributes contained in this document are applicable for PaneLux® A1 Solid Aluminum Panels that are used in exterior architectural applications that are either manufactured or supplied by Mulford New Zealand and Australia.

3. Responsibilities:

- Quality Control Inspector: Conduct visual inspection of panels.
- Production Team: Ensure panels are properly prepared for inspection.

4. Equipment and Materials:

- Inspection Area: Well lit, clean, and a flat surface is recommended.
- Visual Inspection Checklist: AAMA 2605 standard.

5. Visual Inspection and acceptable criterion for surface quality:

For visual inspection of PaneLux® A1 Solid Aluminum Panels, acceptance criteria typically involve assessing the depth and visibility of visual defects e.g., flake, blister, dent, crack, dents, waviness, etc. in the coated surface of the panels. Solid aluminum and aluminium composite panels often are deemed acceptable if they don't affect the panel's structural integrity or appearance.

- **Normal Lighting** - Inspections should be performed under normal lighting conditions, avoiding direct sunlight or harsh shadow.
- **Viewing Distance** - Inspections should be conducted from a 3m distance or more at a 90-degree angle under natural exterior lighting to avoid exaggerating surface variation.
- **Focus on Function and Aesthetics** - The primary goal is to ensure the panel's structural integrity and maintain an acceptable aesthetic appearance.

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6. Surface Quality:

a) Smoothness and Uniformity

Panels should have a smooth and even surface without any noticeable bumps, scratches or colour variations.

The visual appearance of colours can vary for a variety of reasons, including batch to batch colour variations, grain directionality of metallic or mica-based coatings.

b) Defect Check

Look for any irregularities, such as roughness, buckling or other imperfections.

c) Dents

For visual inspection of dents in PaneLux® A1 Solid Aluminum Panels, acceptance criteria typically involve assessing the depth and visibility of dents, with minor dents panels often deemed acceptable if they don't affect the panels structural integrity or appearance.

d) Waviness & continuous mechanical Impression

No longitudinal or/and Transverse waviness or any mechanical impressions allowed when inspected as per 'Visual Inspection and acceptable criterion for surface quality.

e) Edge Waviness

Maximum 25mm edge wave up to unnoticeable extent are allowable from both sides of panels.

f) Colour Consistency

Ensure the colour of the panels is consistent across the entire surface and matches the project specifications.

g) Finish Performance

Assess the quality of the surface coating or finish, ensuring it's free from peeling, blistering, cracking, or chalking under normal weather conditions.