

Warranty Document

SilentVue®





SilentVue®

Certificate of Warranty & Conformance

SilentVue® Pty Ltd hereby certifies and warrants that all acrylic panel products manufactured and supplied by SilentVue® have been designed, engineered, and tested to meet or exceed the requirements of the governing specifications for transport infrastructure noise walls in Australia.

1. Quality Assurance & Manufacturing Controls

All products are manufactured under a Quality Management System certified to ISO 9001, ensuring consistent compliance with applicable statutory, regulatory, and customer requirements.

2. Standards & Specifications Compliance

SilentVue acrylic panels fully comply with the following standards and technical specifications:

Transport for NSW (TfNSW)

- Specification **R271 – Design and Construction of Noise Walls**
- Including requirements from TS 03247.1, Edition 2, Revision 7, June 2020

Queensland Department of Transport and Main Roads (TMR)

- Specification **MRTS15 – Noise Fences and Barriers**

Main Roads Western Australia (MRWA)

- Specification TS 03247 – Noise Walls

Acoustic & Structural Performance Standards

- **EN 1793-2** – Airborne sound insulation performance
- **EN 1794-1** – Mechanical requirements for stability and safety
- **EN 1794-2** – General safety requirements including impact resistance

Optical & Weathering Performance Standards

- ISO 4892-2 – UV weathering resistance of plastics
- DIN 5036 Part 3 – Light transmittance measurement
- Long-term optical performance testing to confirm no more than 5% reduction in light transmission over service life

3. Material & Structural Properties

- Manufactured in either **tinted** or **patterned transparent acrylic**, incorporating **thin opaque stripes** where required to minimise avian strike risk in accordance with:
 - **TfNSW R271 Clause 6.3.7(i)**
 - Equivalent provisions in QLD MRTS15 and WA TS 03247
- Minimum Modulus of Elasticity:
 - Flexural: ≥ 3100 MPa
 - Tensile: ≥ 3000 MPa
 - Impact resistance: Tested in accordance with EN 1794-1/2 and meets Class C impact performance at 6.0 kJ (falling debris).
- Optical Performance:
 - Initial light transmittance $\geq 90\%$ at delivery
 - Light transmittance after long-term UV/weather exposure $\geq 85\%$

4. Conformance & Durability

- Panels are free from manufacturing defects, inclusions, delamination, or warping.
- Structural and optical performance is maintained throughout the declared service life under normal operational and environmental conditions.
- All edges and fixing points are finished to ensure compliance with noise wall safety, durability, and aesthetics requirements under TfNSW, QLD TMR, and WA MRWA specifications.

5. Warranty Statement

SilentVue **warrants** that the above-described acrylic panels will:

1. Maintain their **structural integrity**, rigidity, tensile strength, and optical clarity for a period of **twenty-five (25) years** from the date of supply.
2. Remain compliant with the requirements of **TfNSW R271**, **MRTS15**, and **TS 03247**, provided that the panels are installed and maintained in accordance with SilentVue's installation guidelines.
3. Resist UV degradation, yellowing, and loss of transparency beyond the permissible limits defined in **DIN 5036** and **ISO 4892-2**.

Warranty Conditions:

- This warranty applies only to products installed according to SilentVue's published installation and maintenance instructions.
- Damage caused by improper installation, impact beyond specified limits, or exposure to chemical agents not compatible with acrylic is excluded.
- Warranty claims must be accompanied by documented proof of purchase, installation details, and inspection records.

