Technical Specification Manual

SilentVue®

GLASLENX

1.Product Overview

GLASLENX is a high-performance architectural noise barrier designed to minimize environmental noise while integrating seamlessly into modern infrastructure. Engineered for durability, minimal maintenance, and long-term performance, GLASLENX is ideal for highways, urban developments, commercial buildings, and industrial sites.

Key features:

- Effective noise attenuation for a wide range of environmental conditions
- Minimalist design to maintain architectural aesthetics
- Long-lasting durability with a 25-year warranty
- Low-maintenance material and surface finish
- Customizable dimensions, colours, and translucency

2. Materials and Construction

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2.1 Panel Materials

Premium acrylic or laminated composite panels
Anti-UV coating for long-term colour stability
Optional acoustic absorptive backing
Stainless steel or corrosion-resistant fixing systems

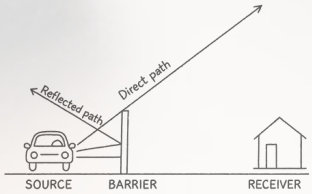
2.2 Panel Characteristics

Property	Specification
Thickness	15 – 25 mm
Acoustic Transmission loss	Up to 30 dB (project-specific)
Fire rating	AS/NZS compliant
Wind Load Capacity	Up to 2 kPa (project specific)

3.Acoustic Performance

GLASLENX is designed to provide high noise attenuation while preserving visibility and aesthetic quality.

- **Testing Standards:** AS/NZS ISO 717, ASTM E90
- **Typical Noise Reduction**: 20 – 30 dB (depending on configuration)
- **Sound Absorption Options:** Optional acoustic backing to enhance performance in high-noise areas



4. Design Consideration

- **Modularity**: Panels available in standard and custom sizes for integration with site-specific conditions
- **Transparency & Colour Options**: Multiple colour options with translucent or frosted finishes
- **Structural Integration:** Can be mounted on posts, walls, or other supports with minimal visual intrusion
- **Environmental Durability**: Resistant to UV, pollution, and impact damage

5. Installation guide

- Prepare and verify mounting structures
- Position panels according to layout plan
- Secure with specified clamping system
- Inspect alignment, level, and fixings
- Perform post-installation acoustic and visual inspection

6. Cleaning & Maintenance

Routine Cleaning: Use a soft microfiber cloth and mild detergent diluted in lukewarm water.

Stain Removal: For oil, grease, or tar stains, use high-quality hexane, aliphatic naphtha, or kerosene. Confirm solvent compatibility with the manufacturer before use.

Approved Cleaning Materials: Hexane, aliphatic naphtha, kerosene, isopropyl alcohol, pure petroleum ether, microfiber cloth, sponge cloth, chamois leather, cotton tea towel, soft damp viscose sponge.

Avoid using dry cloths alone, as they may cause surface scratching and static charge buildup. Use ionising air guns to neutralise static prior to cleaning.

7. Compliance and Testing

Property	Value	Test Standard
Density	1.20 g/cm3	ISO 1183
Tensile strength	70MPa	ISO 527-2/1B/5
Elongation at break	>3%	ISO 527-21B/5
Flexural strength	95%	ISO178
Modulus of elasticity	3100MPa	ISO 527-2?1B/5
Light transmittance	Mln. 90%	ASTM D1003-21
Impact test	Conform	EN 12600 Class A
Stone impact resistance	Confirm	EM 1794-1:2018 Annex C
Resistance against wind load and load from passing vehicle	c	EN 1794-1:2018 Annex A
Weight sound reduction index	29dB at 12mm 30dB at 15mm 34dB at 15mm 35dB at 15mm 32dB at 20mm	BS EN 1793-2:2018
Reaction to fire	Conform	EN 1794-3:2016 Clause 5.2- for Annex A Class 2
Smoke and toxic fumes	Conform	EN 1794-3:2016 Clause 5.2.3

8. Warranty

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**.