

SILENTIUM AL NOISE BARRIER SYSTEM PRODUCT GUIDE

AN ENGINEERED NOISE BARRIER SYSTEM



SILENTIUM
GROUP INC.

SILENTIUMGROUPCO.COM

A CUSTOMER FOCUSED, NOISE BARRIER SOLUTIONS PROVIDER

Silentium is a reliable source for convenient transportation and building noise barrier solutions. Our light-weight panels are adept at absorbing or reflecting noise, cost-effective, and can accommodate even the most demanding construction schedule.

ALUMINUM NOISE & SAFETY BARRIERS

From roadside safety to perimeter security, our customized aluminum wall system is a long-term solution for your project.



Easy Installation completed with limited crew & equipment.



Reduce unwanted noise caused by HVAC equipment, loading docks, traffic and more.

Custom colors to meet project requirements.

APPLICATIONS

-  Industrial, Commercial, Institutional Properties
-  Roads, Highways & Bridges
-  Rail & Transit
-  Building Rooftop Screens
-  Perimeter Walls & Enclosures



AN ENGINEERED SYSTEM AT THE SPEED YOU NEED

Our aluminum noise walls can be engineered by our in-house team to meet specific wind load requirements, supplying a turnkey wall system that is that is a safer, easily installed solution alongside roadways and on building properties.



FEATURES & BENEFITS

Light-weight panels

- Reduces 'dead' loading for structure mounted applications.

Acoustic properties

- Single-sided or dual-sided absorptive panels.
- Reflective panels.

Easy-installation

- Easy panel handling.
- Tongue & groove jointed panels for secure connection.
- Reduces need for heavy equipment at installation.

Colored finishes

- Powder or coil coated colors.

Durability

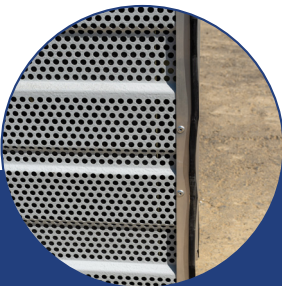
- Low Maintenance.

Safety & Engineering

- Engineered to meet design criteria.

LIGHT-WEIGHT & CUSTOMIZABLE

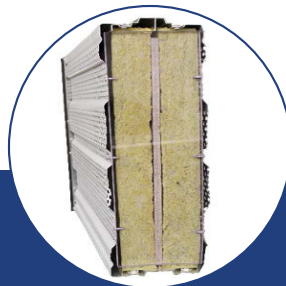
Prefabricated for a wide range of noise mitigation, the lightweight panels are easy to work with offering drop-in-place installation and tongue and groove assembly.



**ABSORPTIVE
PERFORATED PANEL**

SILENTIUM AL1S NOISE BARRIER PANEL

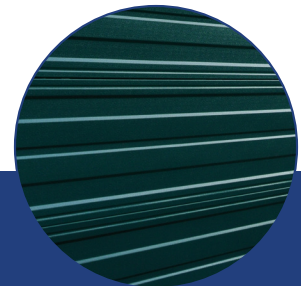
- Manufactured with perforations and acoustic mineral wool enclosed
- Proven and tested properties to reduce noise.



**DUAL ABSORPTIVE
PERFORATED PANEL**

SILENTIUM AL2S NOISE BARRIER PANEL

- Perforated on both sides of panel with a double layer of acoustic mineral wool enclosed.
- Ideal for projects with multiple noise sources.



**SMOOTH REFLECTIVE
CUSTOM COLOR PANEL**

SILENTIUM AL3S NOISE BARRIER PANEL

- Reflects noise source back.
- Reflective panels can be used in combination with absorptive panels in walls designed to mitigate noise in specific areas.

PROACTIVE NOISE REDUCTION & PROPERTY PROTECTION

Shelter noise-emitting mechanical equipment or busy loading docks and achieve an enhanced level of privacy and security for the premises.

DESIGN DETAILS

Panels:

- 5 inches thick.
- 6 lbs / sq ft density.
- Panel height 1.64 ft.

Post:

- Design for W6 posts or larger.
- Structure-mounted hot dipped galvanized steel posts connected with steel cable option for improved safety.
- Retention cables designed for structure mounted walls.
- Panel lengths available in a range of sizes from 3 ft to 16 ft long.

Wall Height:

- Wall heights are achieved by stacking panels to the project requirements.

Panel Type	Dimensions	System Weight
Silentium AL1S	Aluminum individual panels available: 19.7" H x 5" W Panel lengths up to 20'	13.5 kg/ m ² or 2.8 lbs/ ft ²
Silentium AL2S		25.2 kg/ m ² or 5.2 lbs/ ft ²
Silentium AL3S		9 kg/ m ² or 1.8 lbs/ft ²

TEST NO.	RESULTS
ASTM E84	FLAME SPREAD = 0 SMOKE DEVELOPED INDEX ≤15
ASTM C423	0.90 NRC RATED (AL2S) 0.95 NRC RATED (AL1S)
ASTM E90	33 STC RATED (AL2S) 26 STC RATED (AL1S) & (AL3S)



SILENTIUM MASH TL-4 NOISE BARRIER SYSTEM

CRASH-TESTED PEACE-OF-MIND.

The Silentium MASH TL-4 Noise Barrier System has been tested to MASH (Manual for Assessing Safety Hardware) TL-4 crash-testing criteria. As dictated by AASHTO (the American Association of State Highway and Transportation Officials), the impact speed and angle of the crash represents the worst practical condition so that transportation professionals can design with safety assurance.

AASHTO MASH TL-4 CRITERIA	
VEHICLE	10,206 kg Box Truck
SPEED	58 mph
IMPACT ANGLE	15°
TEST NO.	4-12



Despite the severity of the impact, the MASH TL-4 Aluminum Noise Barrier provided excellent vehicle stability. The wall panels remained intact, and minimal damage was recorded. Tested at heights of 17' with a maximum post width of 10'.



A 10,206 KG TRUCK IMPACTS THE MASH TL-4 SYSTEM AT 58MPH ON A 15° ANGLE

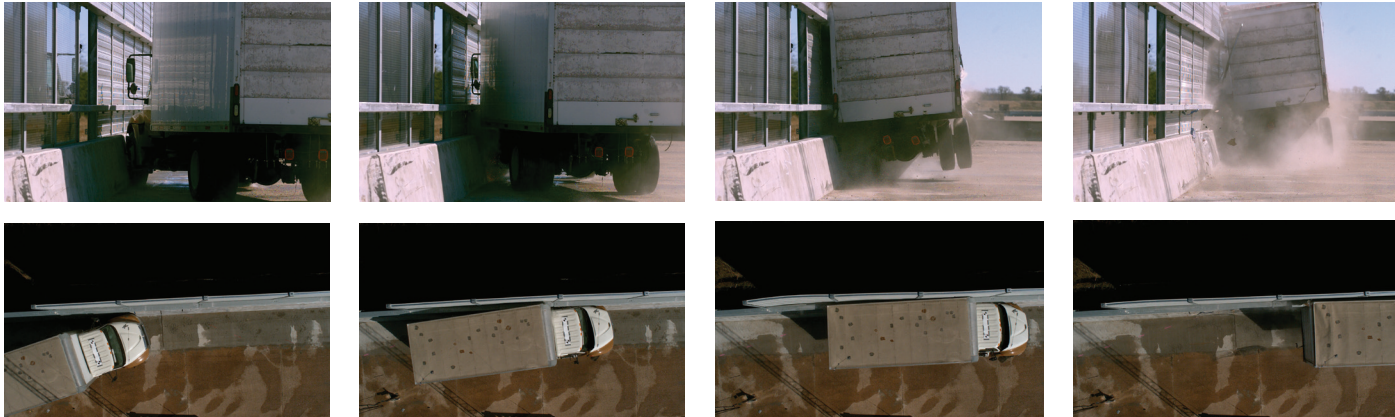


THE ALUMINUM MASH TL-4 SYSTEM STABILIZES THE VEHICLE



DAMAGED AREAS SHOW HOW THE SYSTEM REDUCES THE SEVERITY OF THE CRASH

MASH 4-12 Sequentials





SILENTIUM
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With a focus on customer satisfaction, we provide engineered wall systems that make noise reduction simple and accessible.

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Part of the Vision Noise Barrier Group