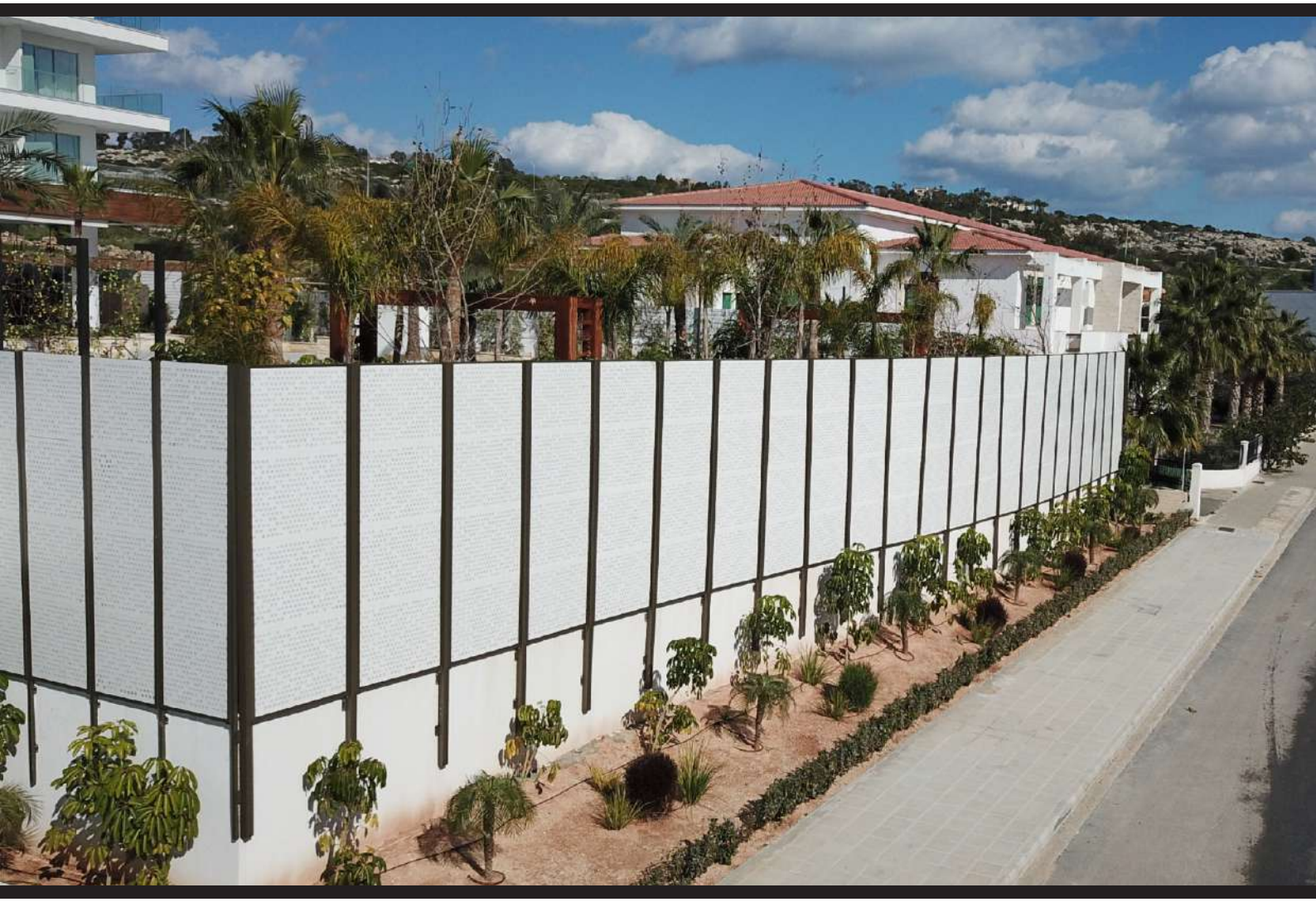
Metal mute



URBAN
NOISE
CONTROL

METAL MUTE is an advanced acoustic barrier system designed to deliver both effective sound attenuation and high-performance sound insulation in outdoor environments. It is ideally suited for residential and commercial applications, including terraces, rooftops with mechanical equipment, and other noise-sensitive areas.

Engineered for durability and performance, this aesthetically refined metal barrier is available in a range of colours and is specifically designed to withstand ultraviolet radiation, water exposure, and demanding outdoor conditions.

The system features a modular design, primarily composed of acoustic sandwich panels supported by a robust galvanised steel frame. The panels are constructed from high-quality aluminium, rockwool insulation, and a breathable fabric layer, ensuring optimal acoustic performance and long-term reliability.

All components are painted with electrostatic powder coating for enhanced protection and longevity, to meet project requirements and environmental conditions.

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TECHNICAL SPECIFICATIONS

INSTALLATION
Installation is achieved through mechanical fixing to walls or ceilings, or by mounting as noise barriers within a steel frame structure.

SUPPORTING STRUCTURE
The barrier system is supported by a galvanised steel framework, constructed using structural hollow sections (SHS), steel plates, and high-grade fastening elements. The modular design allows each barrier panel to be securely installed by sliding it into position above the preceding panel, ensuring ease of installation, structural stability, and precise alignment.

FIRE RESISTANCE RATING
The system is designed for durability in outdoor environments and is suitable for use in demanding weather and coastal conditions.

MAINTENANCE
The system requires minimal maintenance and can be easily cleaned using a soft brush, vacuum cleaner, or a damp, well-wrung cloth.

WEATHER & COASTAL CONDITIONS
The system is designed for durability in outdoor environments and is suitable for use in demanding weather and coastal conditions.

STRUCTURAL DESIGN
Structural design and load calculations are carried out in accordance with applicable standards, including CYS and relevant international codes, as detailed in the project-specific engineering report.

TECHNICAL DOCUMENTATION
Comprehensive technical documentation is provided, including product brochures, material inspection reports, and certification of specifications for all system components.

ADDITIONAL PROPERTIES
- High resistance to ultraviolet (UV) radiation
- Recyclable materials
- Optimized weight-to-surface ratio for efficient structural performance

AVAILABLE SIZES

SANDWICH PANEL UNIT
180 cm × 60 cm (L × H)

PANEL THICKNESS
56 mm

OVERALL SYSTEM DIMENSIONS
Configurable according to project requirements, site constraints, and acoustic study outcomes.

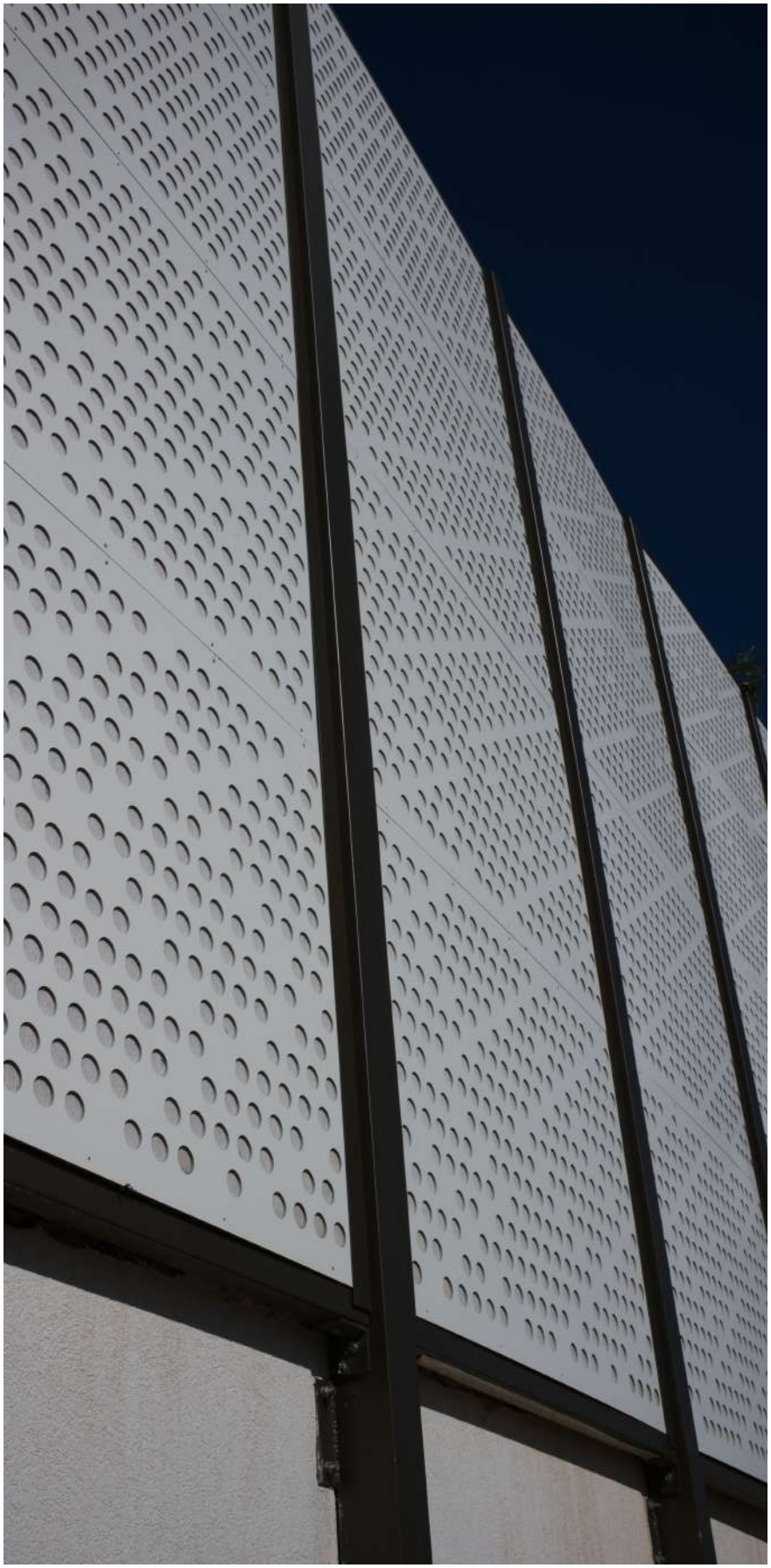
TYPICAL APPLICATIONS

- Residential and commercial outdoor areas.
- Entertainment venues and outdoor live music.
- Mechanical and plant rooms.
- Rooftops and terraces with MEP equipment.

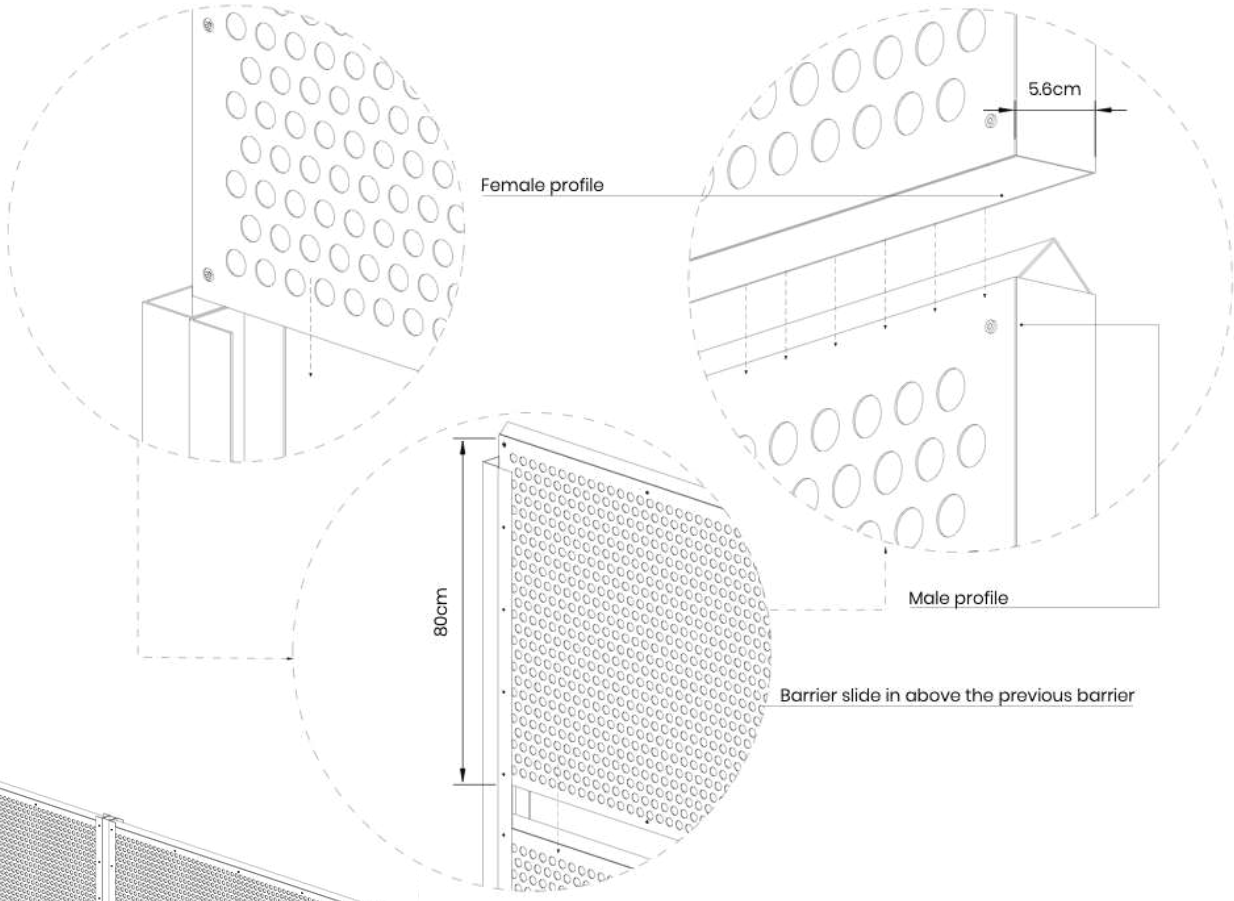
MATERIALS AND COLORS

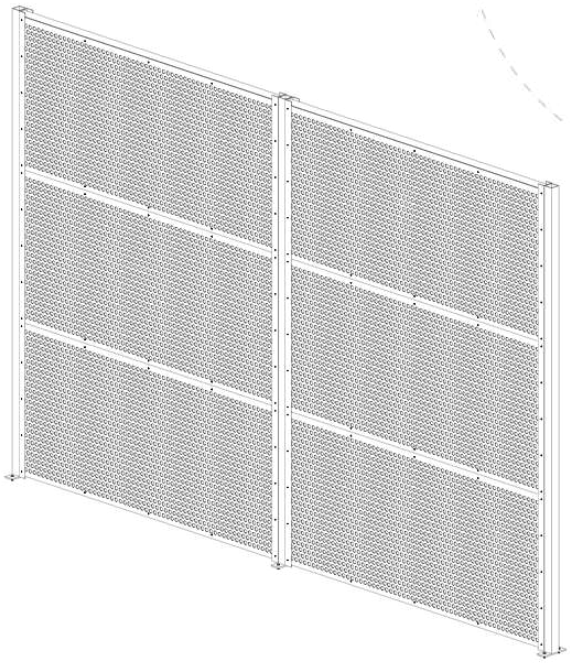
MATERIALS
Supporting structure – frame:
– Made from galvanised steel, painted accordingly.
– Design according to project needs and other consultants' specifications.
– Steel plate and anchor screws for base support.

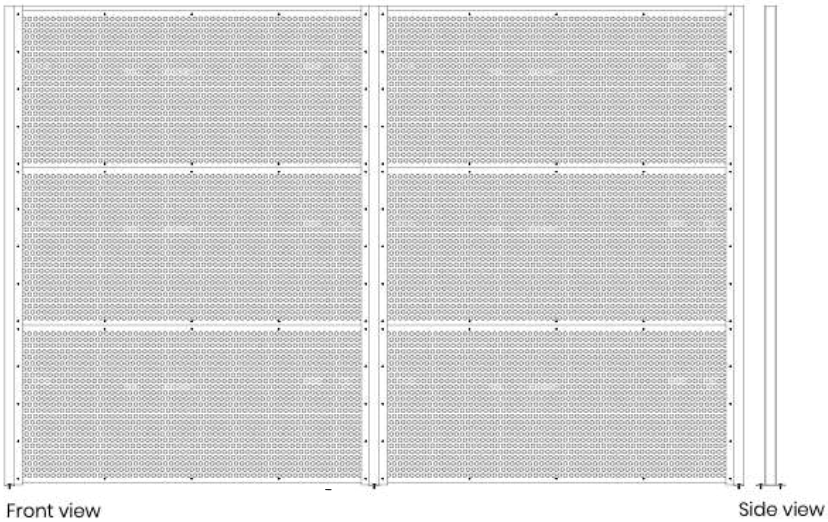
COLORS
The system is available in a wide range of colours to meet client preferences and project-specific design requirements.



STANDARD DIMENSIONS AND TYPES







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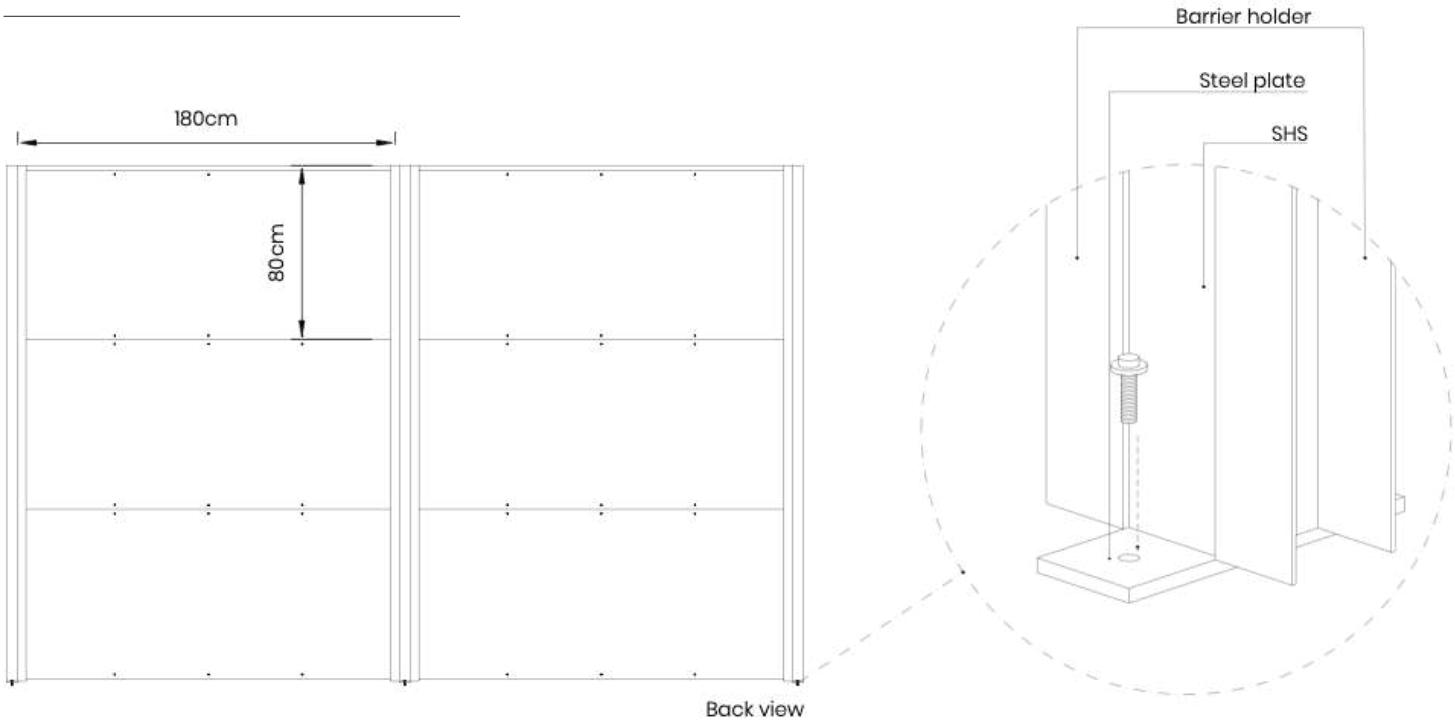
STANDARD DIMENSIONS AND TYPES

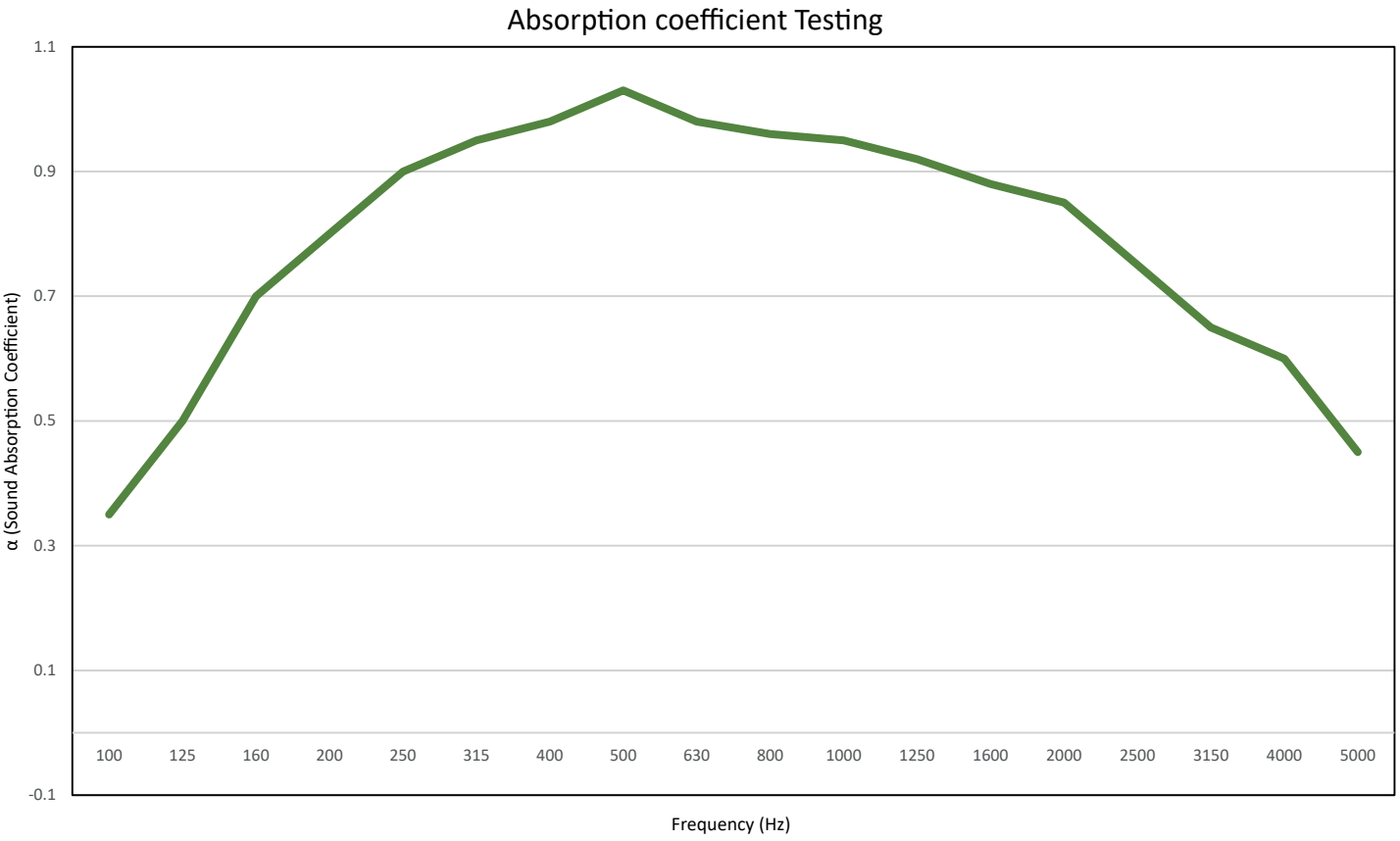


ACOUSTICS

SOUND REDUCTION (PERFORMANCE)
Rw = 31dB [According to ISO 10140-2, ISO717.1]

SOUND ABSORPTION (PERFORMANCE)
Sound Class A (aw=0.9) [According to ISO 11654:1997]

SOUND ATTENUATION (OF THE SYSTEM)
The acoustic performance of the system depends on barrier height, length, and configuration, as well as the relative positions of the noise source and receiver. Expected sound attenuation levels are determined through project-specific acoustic studies and simulations to ensure optimal performance for each application.



Frequency (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
aw	0.35	0.5	0.7	0.8	0.9	0.95	0.98	1.03	0.98	0.96	0.95	0.92	0.88	0.85	0.75	0.65	0.6	0.45
	0.52			0.88			1.00			0.94			0.83			0.57		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