



# ACOUSTIC BARRIER SYSTEMS



**VENTÜER**  
Ventilation, Acoustic & Smoke Louvres



# OUR MISSION

**To become the most specified, most trusted, and easiest-to-work-with louvre company in every market we operate in.**

Modern buildings rely on systems that perform properly in real conditions. As projects become more complex and performance requirements increase, the need for well-engineered façade and ventilation systems continues to grow. Ventuer focuses on supplying systems that are designed to perform as expected once installed.

***Understanding what needs to be achieved is only part of the job. Designing systems that meet performance requirements, comply with codes and standards, and fit within real construction programmes requires careful coordination, technical knowledge, and clear documentation.***

Ventuer supports architects, engineers, contractors, and project teams by supplying ventilation, acoustic, and smoke louvre systems to projects that require accurate specification and reliable technical input. Our focus is on making complex requirements easier to deal with by providing clear drawings, practical details, and systems that install as intended.

When working with Ventuer, you get a team that moves quickly and takes responsibility for getting things right. By combining strong technical capability with practical project support, we help reduce risk, avoid rework, and deliver systems that perform as expected.

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***We take the responsibility, the risk and the care.***

***You take the credit for the successful end result.***

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# AB-Series Acoustic Screen Wall System

The AB Series is a modular acoustic screening system designed for fast, predictable installation and dependable noise control. Prefabricated aluminium panel modules reduce on-site labour and simplify installation, making the system ideal for rooftop plant screens, equipment enclosures, and boundary noise control applications where programme certainty matters.

Designed for high acoustic performance, the AB Series reduces airborne noise while providing durable, corrosion-resistant construction suited to demanding environments. A key advantage is the ability to integrate a wide range of architectural facing materials, including louvres, battens, grating, or flat panels, allowing the acoustic solution to blend seamlessly with the building's design intent. The result is predictable acoustic performance combined with faster installation compared to traditional built-up systems.

Effective acoustic barriers rely on two key properties: sound transmission loss and sound absorption. Understanding how these work together helps ensure noise is both contained and controlled within plant and equipment areas.

## Sound Transmission Loss

Sound Transmission Loss describes how effectively a barrier prevents sound from passing from one side to the other.

- Measured as STC (Sound Transmission Class)
- Higher STC means less sound passes through the barrier
- Essential when the goal is to contain noise within an area
- Critical for protecting neighbouring buildings and outdoor spaces from plant noise

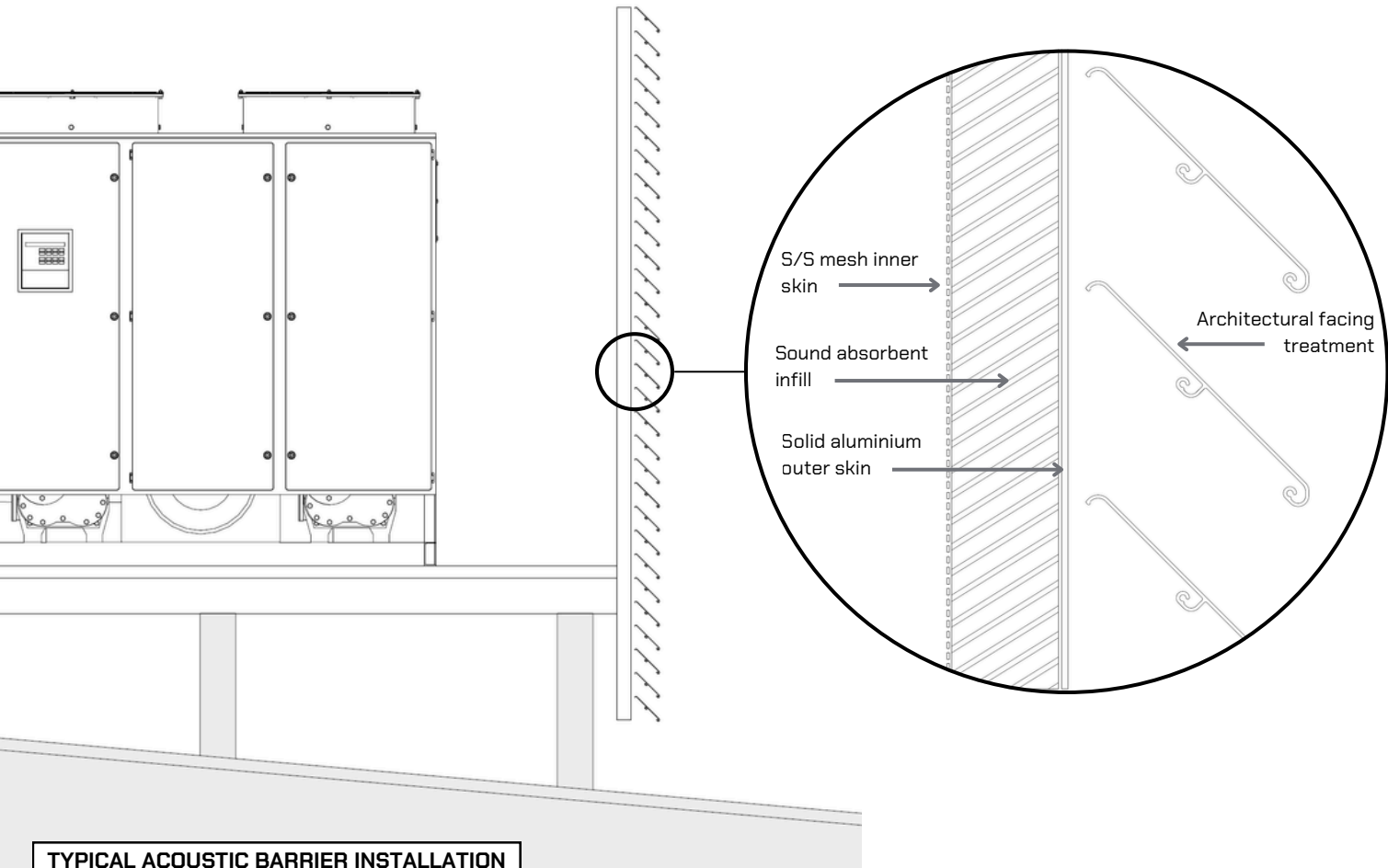
## Sound Absorption

Sound absorption describes how well a surface absorbs sound energy rather than reflecting it back into the surrounding space.

- Measured as NRC (Noise Reduction Coefficient)
- Higher NRC means more sound is absorbed and less is reflected
- Good sound absorption is essential for controlling reflected noise
- Helps reduce reverberation and improve the effectiveness of acoustic barriers

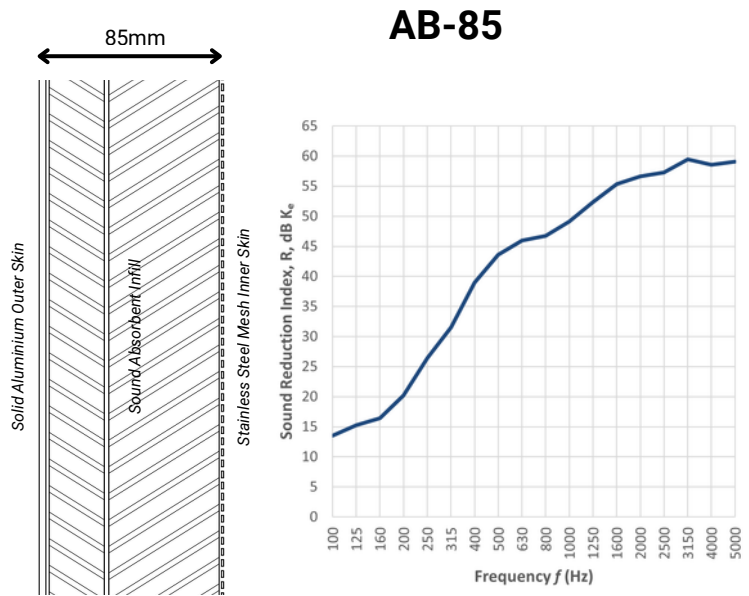
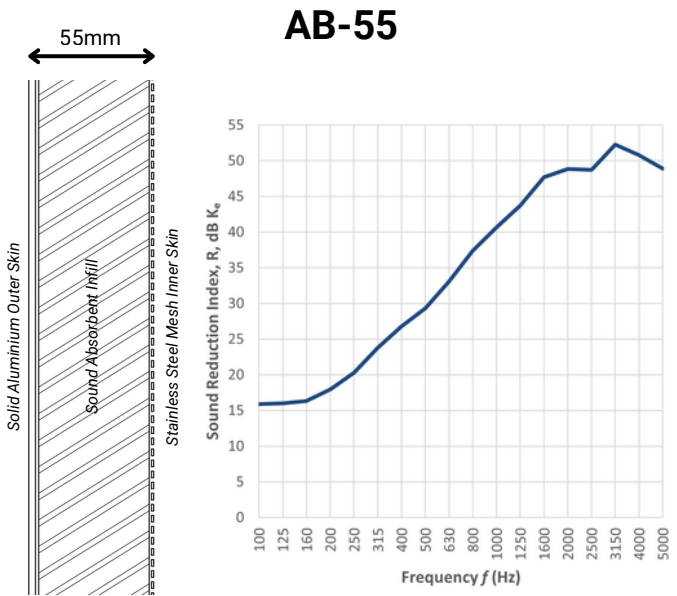
The AB Series addresses both sound blocking and sound absorption in a single integrated system. Solid aluminium skins limit sound transmission, while the sound-absorbing core reduces reflected noise. This balanced design helps control noise escaping to surrounding areas while improving acoustic conditions within the enclosure itself.





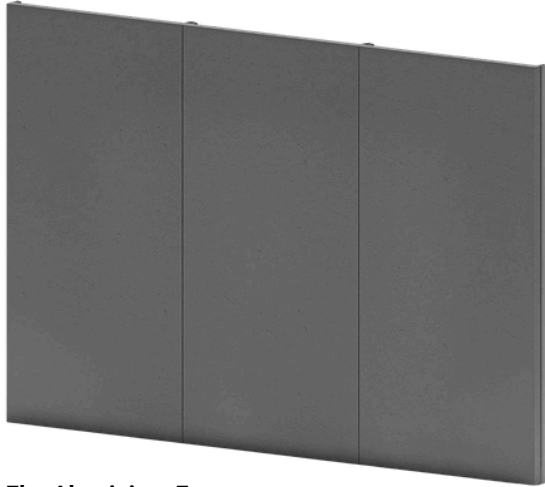
TYPICAL ACOUSTIC BARRIER INSTALLATION

The AB Series is available in two panel thicknesses to suit different acoustic performance requirements. The AB-55 provides an effective solution for general acoustic screening applications where space is limited, while the thicker AB-85 delivers increased sound transmission loss and achieves a higher STC rating for projects requiring greater noise containment. This allows designers to select the appropriate panel based on both available space and required acoustic performance.



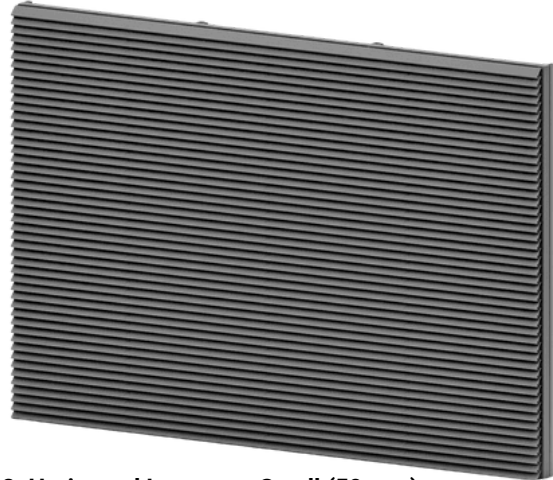
# Architectural Facing Options

The AB Series can be adapted to suit a wide range of architectural styles through the use of external facing materials. These elements allow acoustic enclosures and plant screens to move beyond purely functional structures, becoming considered components of the overall building design. From restrained and minimal finishes to bold architectural features, the facing material plays a key role in defining the visual character of the installation.



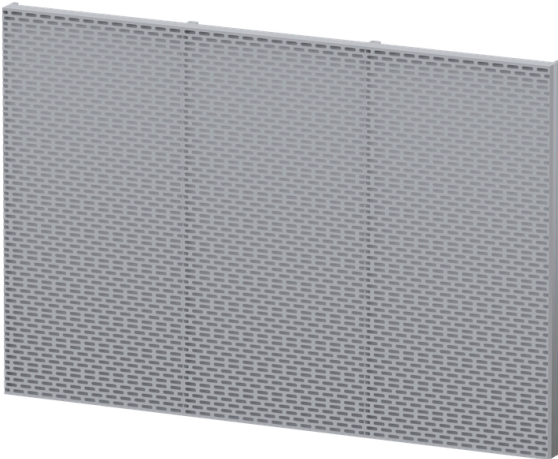
## 1. Flat Aluminium Face

The simplest and most cost-effective option, providing a clean, minimal, and corrosion-resistant finish. Ideal for installations where functional screening is required without additional architectural detailing.



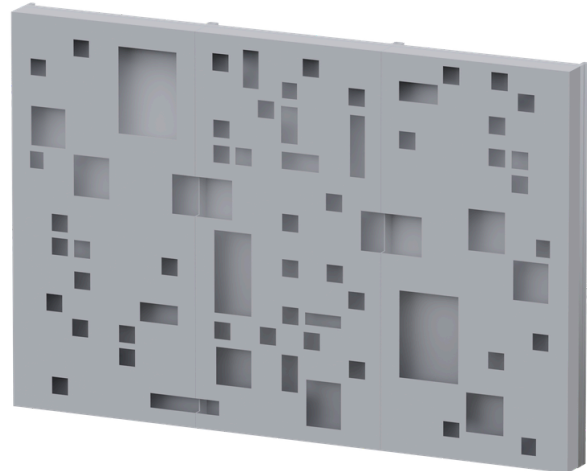
## 2. Horizontal Louvres – Small (50 mm)

A tightly spaced horizontal louvre format that creates a fine texture and subtle shadow lines. This option suits projects seeking discreet visual screening with a refined and understated architectural presence.



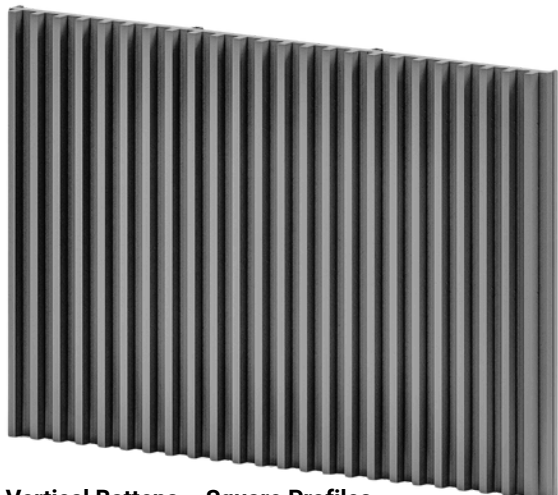
## 5. Perforated Facing Panel – Uniform Pattern

Uniform perforated panels provide a consistent, patterned surface that introduces texture without overwhelming the façade. This option offers a modern and orderly appearance suited to contemporary architectural designs.



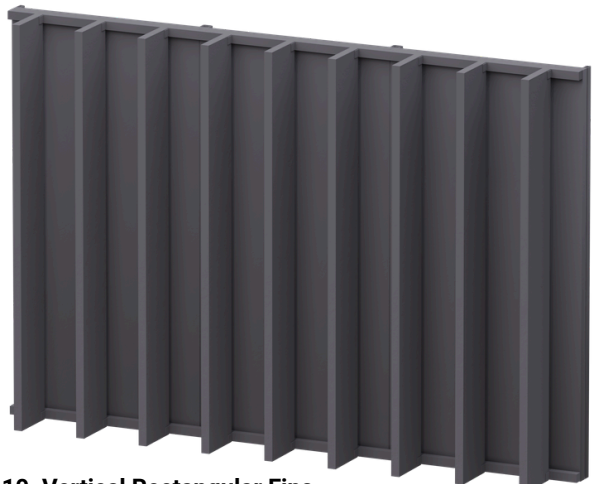
## 6. Perforated Facing Panel – Feature Patterns

Feature perforated panels allow custom patterns to be incorporated into the façade, enabling unique visual identity and architectural storytelling. This option is well suited where the screen becomes a defining design element.



## 9. Vertical Battens – Square Profiles

Square vertical battens create strong vertical lines and a consistent architectural rhythm. This format suits façades that emphasise height and clean, disciplined visual order.



## 10. Vertical Rectangular Fins

Rectangular fins introduce deeper shadow lines and a greater sense of visual depth. This option creates a more expressive façade treatment with pronounced vertical definition.

A wide selection of standard and custom facing options is available, allowing designers to select forms, textures, and patterns that align with the architectural intent of the project. Whether the goal is to create a subtle backdrop, introduce strong shadow lines, or incorporate distinctive visual elements, the AB Series provides the flexibility to achieve a cohesive and well-integrated façade outcome.



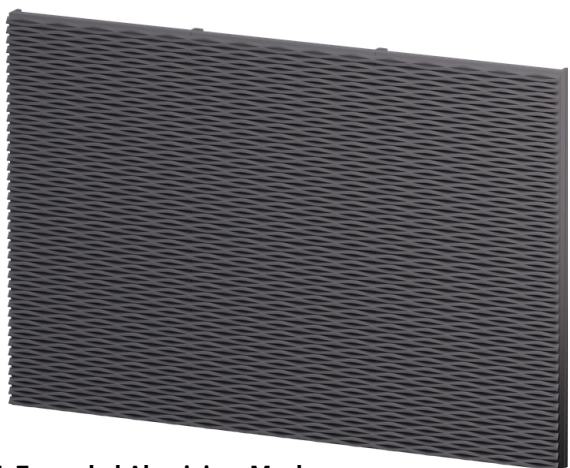
### 3. Horizontal Louvres – Medium (100mm)

A balanced horizontal louvre profile that provides a clean and contemporary appearance. This widely used spacing creates a clear architectural rhythm that integrates comfortably across a broad range of building styles.



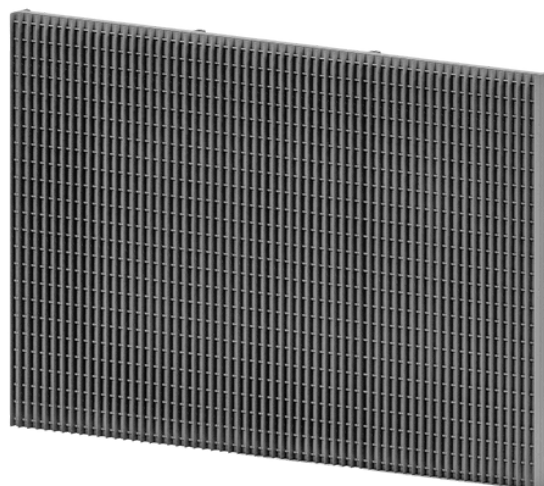
### 4. Horizontal Louvres – Large (150 mm)

A bold horizontal louvre format that produces strong shadow lines and a more pronounced visual expression. Well suited to larger façades where the screen becomes a visible architectural feature.



### 7. Expanded Aluminium Mesh

Expanded aluminium mesh creates a light, layered appearance with visible depth and texture. Its open pattern introduces visual interest while maintaining a contemporary industrial aesthetic.



### 8. Swaged Aluminium Grating

Swaged aluminium grating produces a strong geometric appearance with a clear structural pattern. This option suits projects seeking a bold, utilitarian architectural character.



### 11. Living Walls

Living wall systems introduce natural greenery to the façade, softening the visual impact of plant enclosures and helping integrate structures into landscaped or urban environments. This option supports visually rich and environmentally expressive designs.



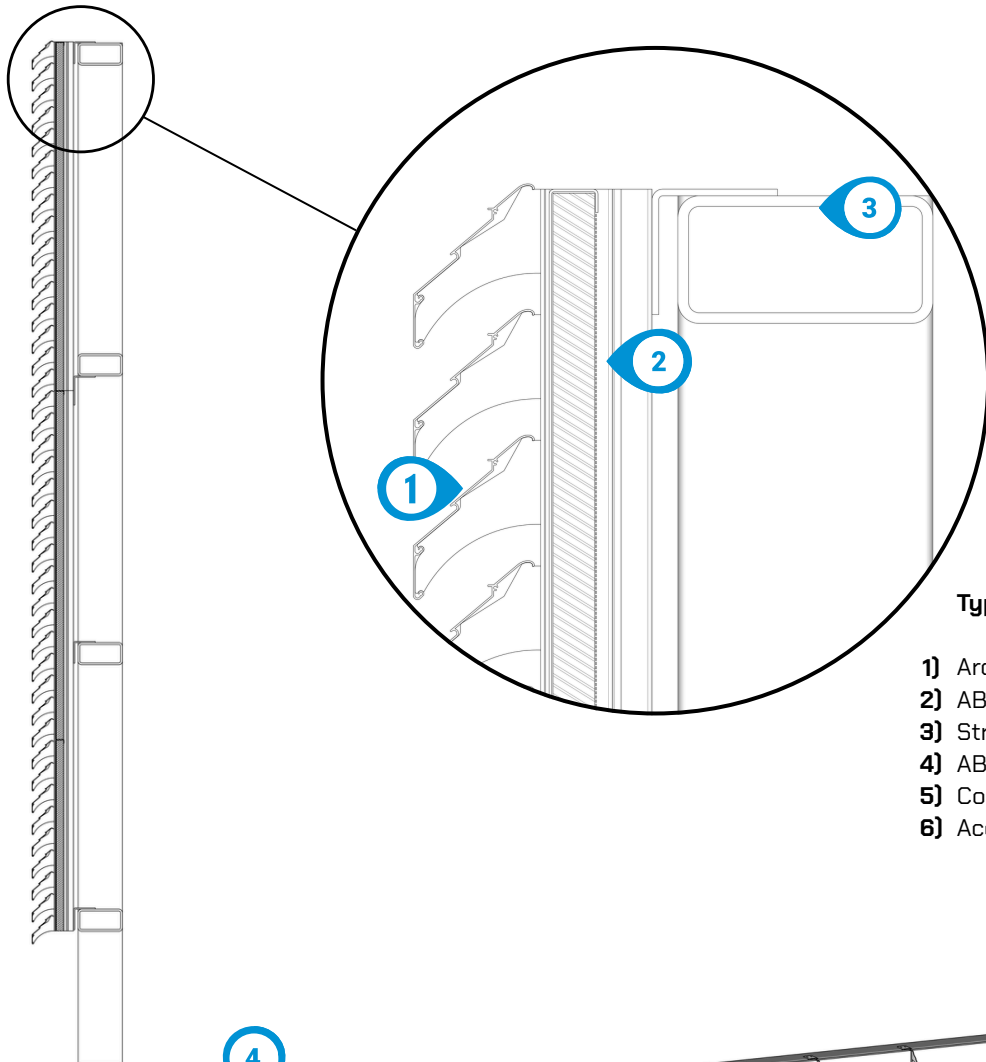
### 12. Signage

Integrated signage panels allow graphic elements, branding, or wayfinding to become part of the façade. This option transforms the screen into a visible identity feature within the overall architectural composition.

# Installation Configurations

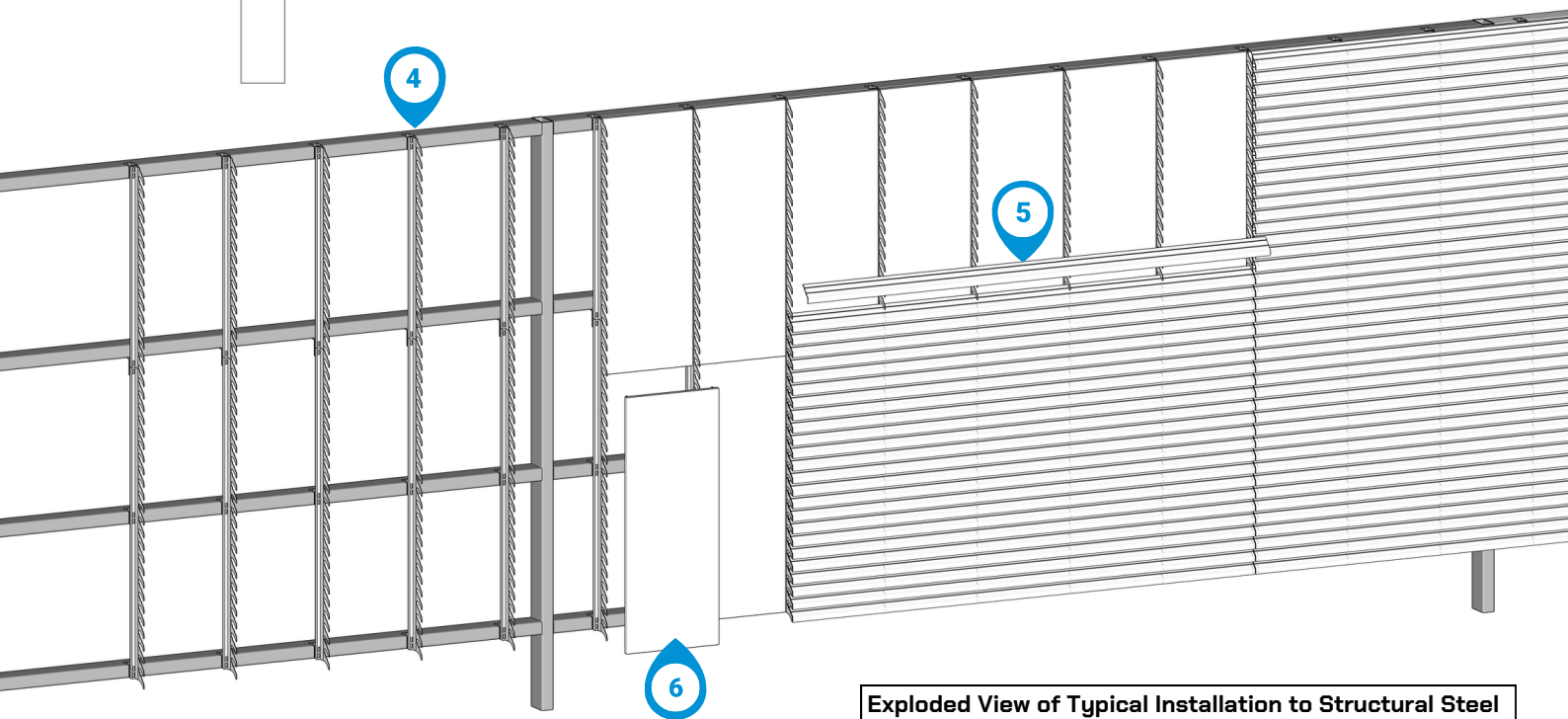
## Installed to Structural Steel by Others

In this configuration, the AB Series system is installed onto structural steel provided by others. Secondary vertical mullions, AB acoustic panels, and selected architectural facing materials are supplied as part of the system and fixed to the primary steel framework on site. This approach is commonly used where suitable structural steel already exists, allowing the acoustic system to integrate efficiently with the building structure while maintaining consistent alignment and appearance.



### Typical Components

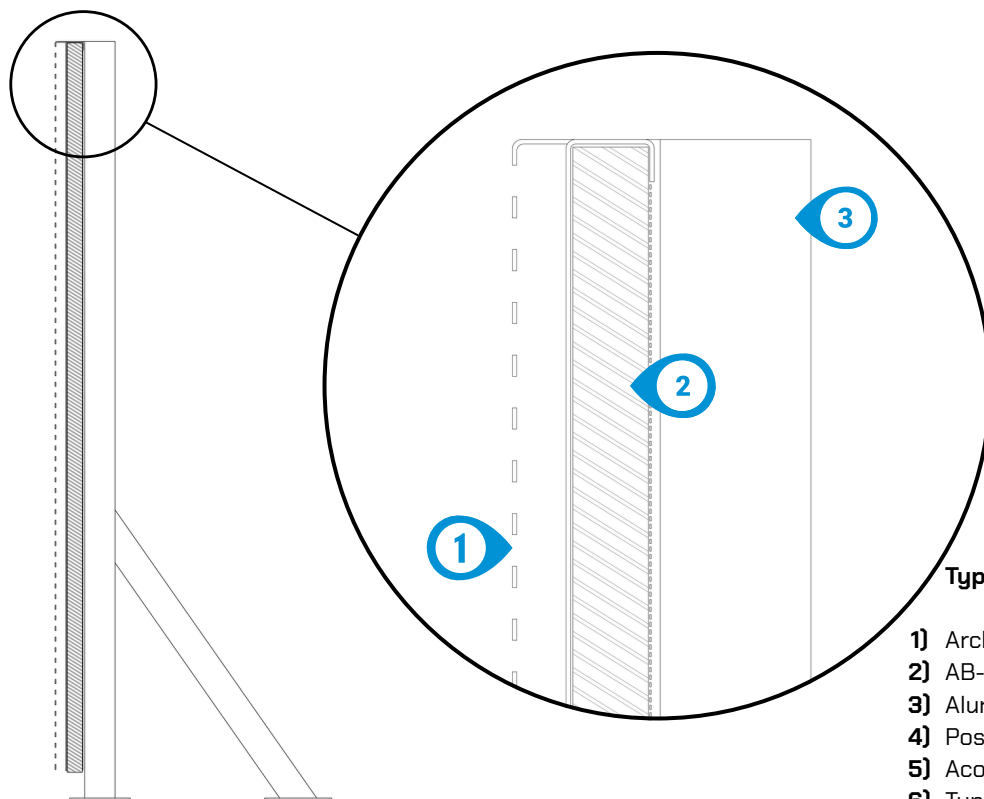
- 1) Architectural facing (large blade shown)
- 2) AB-Series acoustic panel
- 3) Structural steel by others
- 4) AB-Series vertical mullion
- 5) Continuous louvre blades fixed to face
- 6) Acoustic panel clips in between mullions



Exploded View of Typical Installation to Structural Steel

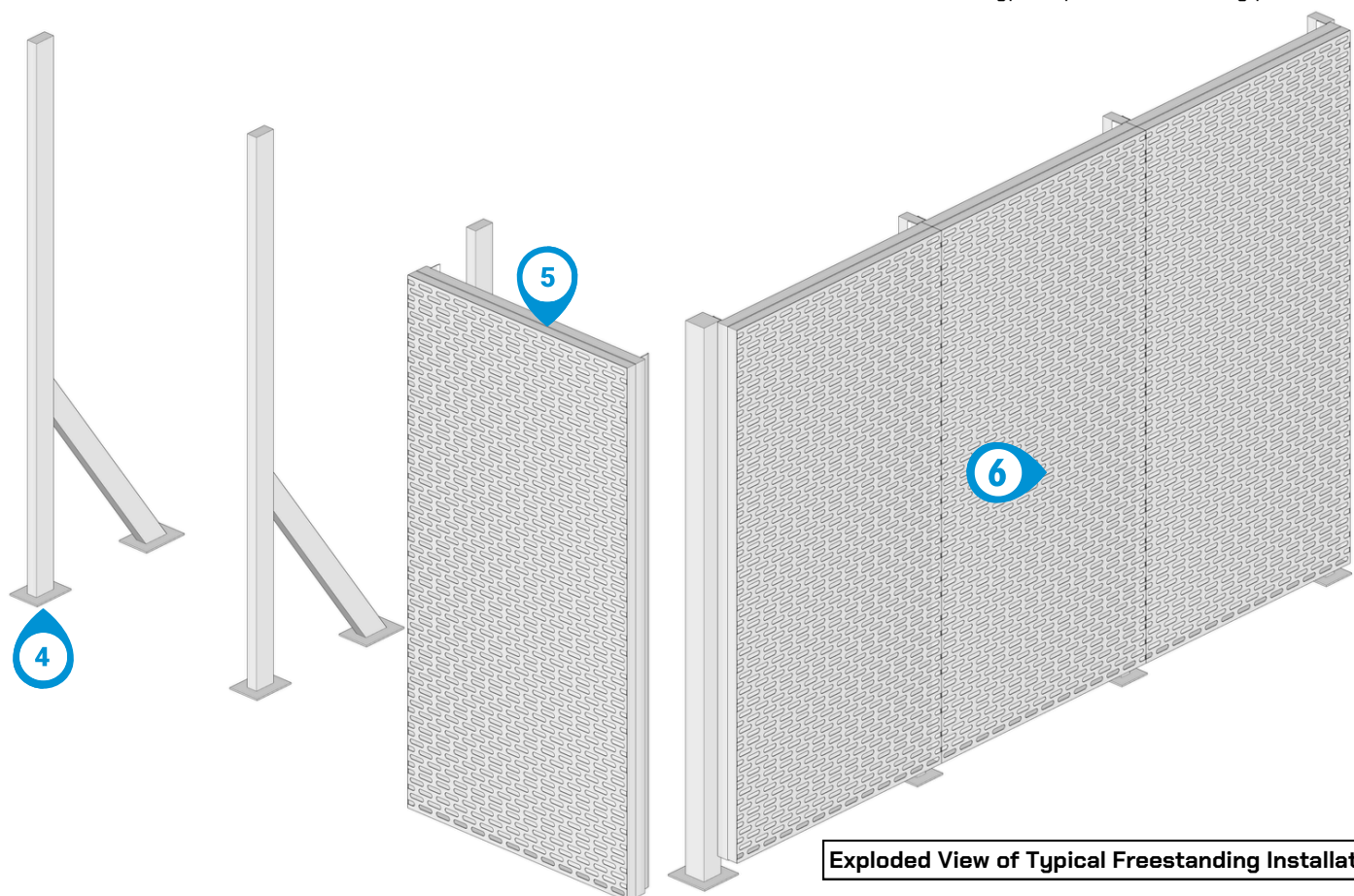
## Freestanding Support System with Posts

Where no suitable supporting structure exists, the AB Series can be supplied as a complete freestanding system. Support posts, vertical mullions, AB acoustic panels, and selected architectural facing materials are provided as part of an integrated assembly that can be fixed directly to roof structures or concrete pads. This configuration provides a standalone solution that simplifies coordination and supports consistent installation across a wide range of site conditions.



### Typical Components

- 1) Architectural facing material
- 2) AB-Series acoustic panel
- 3) Aluminium support post
- 4) Posts base fixed to roof or pad
- 5) Acoustic panel clips in between posts
- 6) Typical perforated facing panel



Exploded View of Typical Freestanding Installation

# System Comparisons

Architectural and acoustic screen walls can be constructed from a range of materials, each with different acoustic, structural, and installation characteristics. Many traditional barrier walls reflect sound rather than absorb it, which can increase noise levels within plant areas. The following comparison highlights key differences between the AB Series and commonly used alternative construction methods, helping designers and contractors select the most appropriate solution while recognising the importance of controlling both transmitted and reflected noise.

Acoustic Performance						
Property	AB Series	Concrete Wall	Framed & Clad Wall	Timber Screen	Metal Panel Screen	Storm Louvre
Sound Blocking (STC)	High	High	High	Moderate	Moderate	Low
Sound Absorption (NRC)	High	None	None	Low	None	None
Controls Reflected Noise	Yes	No	No	Limited	No	No
Suitable for Plant Noise	Yes	Yes	Yes	Limited	Limited	No

Construction & Installation						
Property	AB Series	Concrete Wall	Framed & Clad Wall	Timber Screen	Metal Panel Screen	Storm Louvre
Installation Method	Modular panels	Precast	Built on site	Built on site	Fabricated panels	Fabricated panels
Installation Speed	Fast	Slow	Slow	Moderate	Moderate	Moderate
Requires Heavy Equipment	Moderate	High	Moderate	Low	Moderate	Moderate
Suitable for Rooftops	Yes	No	Limited	Limited	Yes	Yes
Can Be Installed Freestanding	Yes	Yes	Yes	Yes	Yes	Yes

Design & Practical Considerations						
Property	AB Series	Concrete Wall	Framed & Clad Wall	Timber Screen	Metal Panel Screen	Storm Louvre
Architectural Flexibility	High	Low	Moderate	Moderate	Moderate	Moderate
Visual Finish Options	Wide Range	Limited	Wide Range	Limited	Moderate	Moderate
Typical Weight	Low	Very High	Moderate	Low	Moderate	Low
Suitable for Retrofit	Yes	Difficult	Difficult	Moderate	Moderate	Yes
Maintenance Requirements	Low	Low	Low	High	Low	Low





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