



# SILENTBARRIER™

## Acoustical Barrier Systems



**Silentbarrier™ Acoustical Barrier Systems are an effective solution anywhere noise is emitted from sources, such as:**

- || Transformers & Electrical Substations || Gas Compressor Stations || Power Generation Equipment || Pumps ||
- || Engines || Fans || HVAC – Combined Heat and Power Equipment || Transportation – Highway, Rail, Airport ||
- || Manufacturing Facilities || Salvage Yards ||

Be it a rural or urban setting, noisy equipment is an issue. You may need to meet a noise ordinance, regulation or just want to be a good neighbor. The use of an acoustical barrier is an effective solution to reduce the noise level at the receiver without interfering with equipment operation. Here at **The Aeroacoustic Corporation** we have an engineered solution to meet your requirements.

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**The Aeroacoustic Corp.**  
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## Freestanding Exterior or Interior Barrier Systems

The Aeroacoustic Silentbarrier™ Engineered Acoustical Barrier System incorporates a modular tongue-and-groove panel system with a quick install panel retainer. System includes:

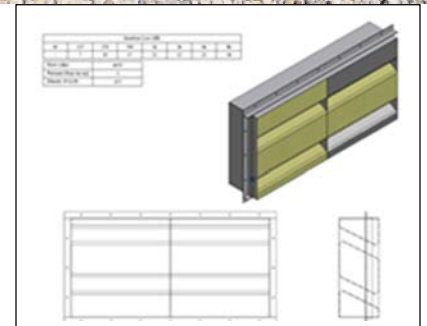
- Acoustical evaluation and appropriate panel selection based on client provided noise data and project criteria.
- Design services including layout, structural steel support systems, panel material selection and certification by an independent licensed professional engineer when required.
- Fabrication of structural support steel with hot dipped galvanized or painted finish.
- Galvanized/galvannealed steel panel construction with options for stainless steel and aluminum.
- Flashing materials and hardware necessary for system installation.
- Installation drawings and instructions.
- Quick install panel retainer for panel removal and reinstallation for equipment maintenance.


### Features:

- Flexible panel construction that allows system to be configured to meet project specific wind, seismic and snow loading as applicable.
- Durable baked-on polyester finish, in a variety of colors, that resist tough cleaners, everyday chemicals and salt exposure.
- Suitable for grade level or elevated installations, exterior or interior.
- Integral panel lifting points for ease of installation.
- Non-hydroscopic acoustical fill.
- Self-draining.
- Horizontal or vertical panel installation.
- Available in two, three, four and six-inch panel thickness.

### Options:

- Option for permanent installation in lieu of quick install panel retainer.
- Acoustic louvers
- Access doors with panic hardware
- Large hinged or sliding doors for equipment access and maintenance.
- Absorptive surfaces on one or both sides. Two-sided reflective surfaces.



Available Configurations	Absorptive One Side or Reflective Both Sides	Absorptive Both Sides
		



## Absorptive Cladding Panels

Aeroacoustic Silentbarrier™ Cladding Panels provide an absorptive surface to hard reflective facades and are useful in reducing noise in varying spaces.

### Features:

- Galvanized/galvannealed steel panel construction with options for stainless steel and aluminum.
- Optional baked-on polyester finish available in a variety of colors.
- Suitable for exterior or interior installations.
- Integral panel lifting points for ease of installation.
- Non-hydroscopic acoustical fill.
- Self-draining.
- Horizontal or vertical panel installation.
- Available in two, three, four and six-inch panel thickness.



## Acoustic Performance Data

### Sound Transmission Loss Data dB

Barrier Panel		1/1 Octave Band Frequency, Hz							
		63+	125	250	500	1000	2000	4000	8000+
Model	STC	Sound Transmission Loss, dB							
3P	40	21	23	27	38	46	55	61	61
4P	44	22	24	31	42	52	61	66	66
4PHS	53	22	29	40	53	50	61	66	66
6P	55	22	31	44	57	62	6	71	71

Performance certified by two independent Nationally Recognized Testing Laboratories in accordance with ASTM Designations E90-90 and E413-87.

† Estimated values provided for acoustic calculations.

### Sound Absorption Coefficients

Barrier Panel		1/1 Octave Band Frequency, Hz							
		63+	125	250	500	1000	2000	4000	8000+
Model	NRC	Sound Absorption Coefficient in Sabin/ Sq. Ft.							
3P	1.10	0.32	0.46	0.96	1.25	1.06	1.07	1.03	0.82
4P	1.15	0.47	0.67	1.27	1.20	1.08	1.04	1.04	0.83
4PHS•	-	-	-	-	-	-	-	-	-
6P	0.95	0.26	0.37	0.80	1.06	1.00	0.99	0.97	0.76

Performance certified by two independent Nationally Recognized Testing Laboratories in accordance with ASTM Designations C423-90a and E95-91.

† Estimated values provided for acoustic calculations.

• Absorption coefficient are not applicable for panel with solid sheets on both sides.