



Noishield® Sound Barriers & Screen Systems

LAB-RATED ACOUSTIC PERFORMANCE & DURABLE CONSTRUCTION





Noishield®

SOUND BARRIERS & SCREEN SYSTEMS



IAC Acoustics is a trusted leader in manufacturing sound barriers since the 1960s. Our Noishield outdoor sound barrier systems protect communities and workers from noisy equipment by blocking line-of-sight sound transmission and absorbing sound energy radiating from the source.

Noishield panels are performance-rated for sound absorption, sound transmission loss, and structural wind-loads, simplifying screen wall designs and allowing for the most cost-effective and reliable sound barrier solutions available.

Typical Applications

- Rooftop or Ground-Mounted Mechanical Equipment Screens
- Chiller, Generator & Compressor Packages
- Transformer Yards & Utility Substations
- Light-Rail Systems

Standard Features

- Laboratory rated acoustic performance STC-30 to STC-33 / NRC 1.00 to 1.05
- Excellent weather and corrosion resistance
- Galvanized steel, galvanized steel, stainless steel and aluminum materials available with powder-coated finish applied post-assembly
- Fully non-welded construction to avoid damage to galvanized coating
- Freestanding, able to span supports of up to 16 feet depending on local codes & wind-speed requirements



Pictured | Noishield Contineline



Pictured | Noishield Rooftop Barrier Enclosure

Sound Barrier Solutions

IAC offers the following sound barrier solutions:



- Freestanding Barriers
- Noishield Continuline
- Noishield Slimline

Freestanding Barriers

Noishield Types FS and SFS Barriers — sound absorptive on one and two sides respectively — optimize sound transmission loss and sound absorption properties in a durable and attractive wall system in harmony with the community.

Main features include:

- Excellent low-frequency absorption for heavy equipment
- Laboratory-rated sound absorption on one or both sides
- 5" thick (127 mm) modular metal module system
- Abuse-resistant dual-coated, galvanized steel or aluminum construction
- Withstands wind velocities of 180 mph (289 km/hr) — designs for specific wind loads are available
- Readily relocated in the event of expansion or other projects

Configuration		Type FS	Type SFS
		 Thickness: 5" / 127 mm	 Thickness: 5" / 127 mm
Weight lb / ft² (kg / m²)	Steel	FS/S – 6.5 (31.7)	SFS/S – 9.9 (48.3)
	Aluminum	FSt/S* – 8.6 (42.0)	–
Application		FS/A – 4.5 (22.0)	SFS/A – 5.2 (25.4)
		Freestanding alongside noisy equipment	Freestanding between multiple noise sources



IAC’s high performance acoustic barriers offer an effective solution to reduce environmental noise pollution.





Learn more about IAC's
Noishield Continuline —
CHECK OUT THE VIDEO

Noishield Continuline

IAC's Continuline is more aesthetically pleasing than a traditional barrier wall — it allows architects and customers to conceal their structural members. The Continuline panels are the same construction as the standard FS panels.

The key difference is the endcap — the endcap wraps the column, leaving an architecturally pleasing reveal that mimics the horizontal reveal already prevalent in the system. Continuline's primary applications include rooftop systems, train/rail and ground-mounted.

Main features include:

- Superior aesthetic
- Special slotted end-caps
- Solid front face of panel conceals the column
- Acoustic and architectural screen in a single assembly and installation

Noishield Slimline

IAC's Noishield Slimline consists of face or structure-mounted panels that utilize existing support structures to allow installation from either the front or rear of the supporting elements. The reduced thickness (2.5") and face mounting capability allow the panels to be installed in a wider range of job environments, specifically when there is not enough room to lower the panels into the structural elements from above.

Main features include:

- Face or rear applied
- Secured with Z & Hat channel
- Hat channel edge trim between adjacent panel stacks
- Z channel edge trim at end of panel stack



Acoustical Performance

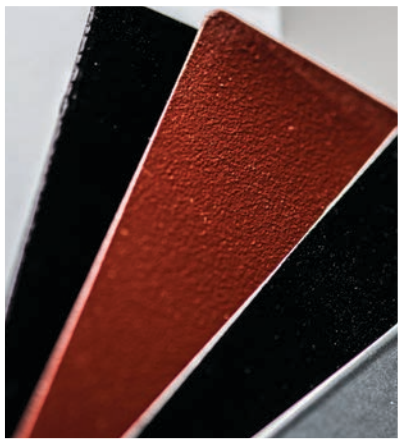
Noishield barrier panels, including Type C, FS, and SFS modules, meet acoustic screen performance standards by combining sound transmission loss with high sound absorption to prevent noise reflections.

Barrier Model	1/3 Octave Band Center Frequency, Hz							
	125	250	500	1k	2k	4k	8k	STC
	Sound Transmission Loss, dB							
FS/S and SFS/S	21	34	40	33	32	26	37	30
FSt/S	24	38	41	33	35	29	34	33
FS/A and SFS/A	21	32	37	30	37	28	30	31
FS/S (Non-Flanked)	23	34	40	44	50	46	47	42
	Sound Absorption Coefficients							NRC
FS/S, FS/A and FSt/S	1.12	1.12	1.10	1.01	0.89	0.76	0.57	1.05
SFS/S and SFS/A	0.49	1.04	1.14	1.05	0.96	0.95	0.87	1.05
C/S and C/A	0.30	1.05	1.07	1.01	0.96	0.88	0.78	1.00
C12/S and C12/A	0.48	1.08	1.10	0.99	0.92	0.83	0.78	1.00
C38/S and C38/A	0.68	1.19	1.10	1.03	0.90	0.81	0.76	1.05

- Sound Transmission Loss: All data in accordance with ASTM E90 and E413
- Sound Absorption Coefficients: All data in accordance with ISO Standard 354, ASTM C423 and E413 with 120ft² [11.15m²] test sample in 10,000ft³ [262m³] reverberation room. Type A mounting. Coefficients greater than 1.0 result from edge diffraction effects. Do not use sound absorption values greater than 0.95.
- STC values are measured with an air gap under the panel, which simulates real-world applications
- Freestanding Type FSt is used for applications requiring 125Hz insertion loss between 10 and 14 dB.

- **Durable Noishield Barrier Finishes:**
Tested for accelerated weathering per ASTM G 23 for 2,400 hours with chalking not less than No. 8 rating (ASTM D 659) and color changes less than 5 NBS units (ASTM D 2244)
- **Weather Shedding Construction:**
Constructed with solid top surfaces to minimize water infusion and perforated bottom surfaces to allow any entrapped water to escape
- **Ground Mount / Roof Mount / Structure Mount:**
Engineered from the foundation up for structural and acoustical integrity and economic installation

POWDER COAT
FINISHES AVAILABLE



Wide variety of standard and custom powder coat finishes

» Making the World a Quieter Place™



LEARN MORE

about IAC's Noishield
Sound Barrier Systems

www.iacacoustics.com



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