
Noise Control Solutions
with Noiseblock Barrier Wall Systems
for Utilities, Highways/Transportation,
Rooftop Equipment
and Residential Noise Compliance



CONTROL OF NOISE AND VIBRATION

is essential for Health, Safety, Environment, and Quality. Kinetics Noise Control has the expertise to provide cost effective, practical solutions - standard or custom engineered.

The control of noise in every day life is very important. Unwanted noise can cause stress related illness and severe noise can cause hearing damage. To meet these requirements and to help solve many noise problems, Kinetics manufactures a complete line of acoustical panels called *Noiseblock Barrier Panels*. These panels can be quickly and easily assembled to provide complete or partial walls for utilities, transportation/highways, cooling towers, chillers, condensers, rooftop equipment and residential noise barriers. These panels are designed to be easily erected in the field and are also designed to provide optimum noise control through sound absorption and sound transmission loss and structural stability.

UTILITIES

Electrical sub-stations which contain transformers, generators, etc. cause unwanted noise and at times can be unpleasant to view. They can be treated with our barrier panel systems which reduce the unwanted noise to acceptable levels. The panels are more aesthetically pleasing when treated with a coating system to match the surrounding areas.

TRANSPORTATION/HIGHWAYS

Noise from traveling motorists on major highways/interstates, airport areas, and railways are effectively reduced using our reflective or absorptive barrier panel systems.

ROOFTOP EQUIPMENT

Chillers, Condensers, Cooling Towers, etc. are equipment which can cause unwanted noise for surrounding residential and business communities. Our barrier panel systems can be constructed to reduce the noise to acceptable levels in these working or living environments.

RESIDENTIAL COMPLIANCE

Most neighborhoods have a strict compliance that should be maintained for hearing protection as well as comfort levels. Our barrier panels can be used for shopping malls, schools, recreational facilities, parks and many other outdoor applications that may need noise control.



VIBRON PRODUCTS GROUP

Making your world quieter and more productive through engineered solutions and quality manufacturing.

Noiseblock Barrier Panel System

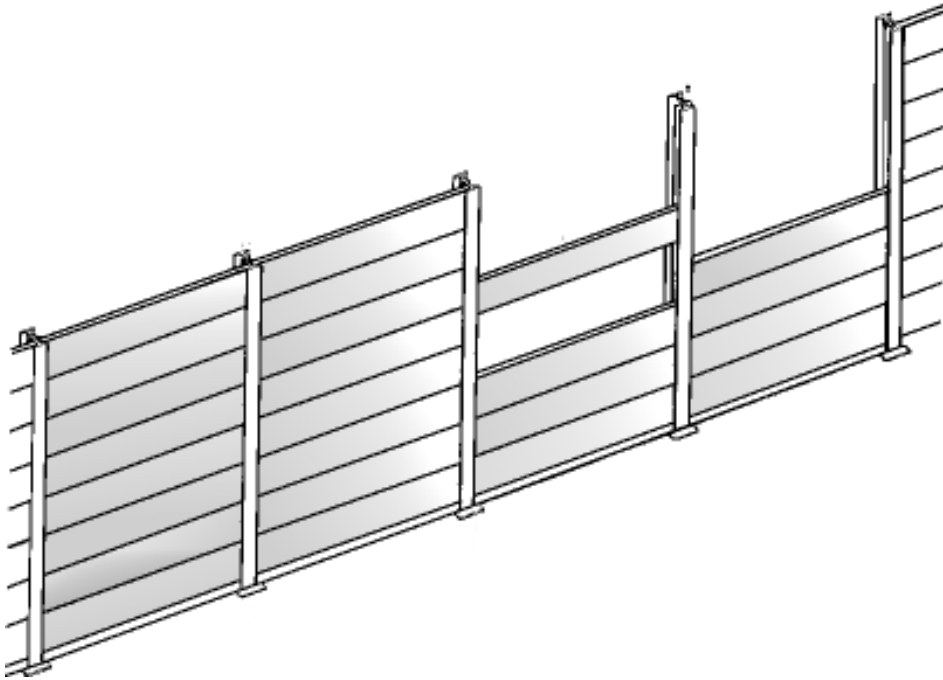


TABLE 1							
SOUND ABSORPTION COEFFICIENTS PER ASTM C-423-66							
Octave Band Number	2	3	4	5	6	7	NRC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-----
ABSORPTION COEFFICIENTS							
NOISEBLOCK* (BP) - 2"	0.15	0.66	1.07	1.06	0.97	0.86	0.95
NOISEBLOCK* (BP) - 4"	0.60	1.13	1.12	1.09	1.03	0.91	1.00

TABLE 2							
SOUND TRANSMISSION LOSS PER ASTM E90-70							
Octave Band Number	2	3	4	5	6	7	STC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-----
TRANSMISSION LOSS							
NOISEBLOCK* (BP) - 2"	17	23	34	47	55	57	37
NOISEBLOCK* (BP) - 4"	21	28	39	48	56	58	40

* (BP) = Barrier Panel

Contact your local Kinetics representative for your next BARRIER PANEL SYSTEM project.

SPECIFICATIONS

1.0 General

Acoustical Barrier Panels shall be insulated double wall construction and shall be provided as indicated on drawings by a recognized manufacturer with published standards of construction and technical performance. The manufacturer shall have produced a standard factory fabricated panel system and components for at least 10 years. Performance of the fabricated and installed system shall conform to all specifications listed herein.

2.0 Materials

2.1 Acoustical Metal Panels

- A.** All barrier panels and their components shall be pre-fabricated, sectional, all metal-clad, modular and designed for easy and accurate field assembly. The panels and components shall not be susceptible to damage due to extended exposure to vibration, air temperature or humidity with the passage of time.

B. Panel Construction

1. All panels shall be (2)/(4) inches thick, as noted on drawings, with a solid galvanized steel type G90 exterior shell and a perforated/solid galvanized steel interior shell. The panels shall be connected together by means of a tongue and groove connection and held together rigidly by the use of self-drilling sheet metal screws.
2. The panel shells, framing members, and internal reinforcements shall be welded, screwed and/or riveted together to form a metal-sheathed panel of sufficient strength for maximum operating loads specified in the structural performance section of these specifications.
3. The outer galvanized steel shell thickness shall be 18 ga. minimum and the inner galvanized steel shell shall be 22-gauge minimum thick.
4. Where perforated materials are indicated, all perforations shall be 3/32" dia. holes on 3/16" staggered centers and shall result in an open area of no less than 23 percent.
5. All panel internal and external reinforcing members shall be minimum 18 ga. galvanized steel.
6. Each panel shall be filled with sound absorbing materials that are inert, mildew-resistant, verminproof, and incombustible.

C. Panel Components

1. All accessory trim items shall be of 18 ga. minimum galvanized steel and shall be furnished in factory standard lengths to be field cut to specified dimensions. Location and quantity of sheet metal screws and trim requirements shall be in accordance with the manufacturers installation details.
2. Base channel shall be installed on a level and structurally sound surface.
3. All external panel connectors, trim items, accessories, base channel/panel interfaces/base channel/floor interfaces, and other sections as noted on the drawings shall be sealed with an acoustical sealant that shall not harden and prevent disassembly in the future.

D. Structural Performance

1. Any special external panel loading conditions including wind, snow, and equipment shall be provided for as per specifications.
2. Under the indicated loading conditions, the entire barrier panel system shall be self-supporting and/or will be supported as per the specifications. The installer shall furnish and assemble all structural members in strict accordance with drawings and manufacturers installation details.
3. Under the above loading conditions, the assembled acoustical structure shall not exhibit any panel joint deflection in excess of $L/360$, where L is the unsupported span length of any panel section in the erected structure.

E. Acoustical Performance

1. The manufacturer shall provide certified independent test data indicating sound absorption and transmission loss characteristics of the panel assembly.

F. Accessory Items

Doors, windows, electrical systems, ventilating systems, accessory components, etc., shall be provided in accordance with drawings.

G. Manufacturer

All materials shall be provided by Kinetics Noise Control, Inc. - Vibron Products Group

United States: 6300 Irelan Place • Dublin, Ohio 43017 • Phone: 614-889-0480 • Fax: 614-889-0540
Canada: 1720 Meyerside Drive • Mississauga • Ontario L5T 1A3 • Phone: 905-670-4922 • Fax: 905-670-1698
Vibron is a subsidiary of Kinetics Noise Control, Inc.



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