AcoustiGuard®

AG160-WC

Sound Barrier / Absorption Wall

Acoustically Absorbent, High Transmission Loss Barrier Wall System

Sound Barrier Absorption Walls (SBAW) are solid obstructions built between noise sources, be it highway noise or air conditioning equipment, that are designed to be “line of sight” interruptions between the noise source and the receiver. SBAW are typically made from concrete, steel, vinyl, wood or earth mounds called ‘berms’. Berms are effective but in order to get them high enough to be effective sound barriers, they have to be so wide they take up huge amounts of valuable land. Steel barriers are expensive, subject to corrosion and dent badly especially if they are going to have snow thrown up against them by snow plows. Concrete sound barriers are incredibly heavy, very expensive and are subject to needing replacement in as little as 10-20 years. Properly engineered vinyl extruded components, are the best choice for lower in place costs, greater acoustic performance and appearance combined with a life span many times that of all other extruded componets systems.

SILENT PROTECTOR (ABSORPTIVE)

- PVC absorptive sound barrier wall system with acoustical mineral wool.
- Noise reduction coefficient (NRC) rating of 1.0 the highest achievable rating.

TUF-BARRIER (REFLECTIVE)

- PVC reflective sound barrier wall system.
- Blocks and reflects unwanted noise
- Graffiti and tagging can be easily removed.

Lightweight and easy-to-install, Sound Barrier / Absorption Walls are engineered for maximum sound reflection of environmental or ambient noise such as traffic, manufacturing, industrial or commerical noise.

- Meets accelerated test requirements for durability
- Impervious to rain, snow, ice and sleet
- Will not rust, rot, or stain
- Maintenance-free
- Designed to meet AASHTO, CSA and EN noise wall guidelines
- Wind load tested up to +140 mph (+225 kph)

RECOMMENDED USES

- Commercial
- Industrial
- Institutional
- Military
- Utilities
- Transformers
- HVAC
- Highways
- Railways
- Bridges
- Oil & Gas
- Roof Top Mechanical Systems

AcoustiGuard — WILREP LTD. 1515 Matheson Blvd. East, Unit C-10, Mississauga, Ontario L4W 2P5
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TRANSPORTATION, INDUSTRIAL, COMMERCIAL & UTILITIES

Noise from large commercial or industrial developments and their associated traffic is one of the most contentious environmental problems for surrounding communities.

Residents are demanding better noise abatement solutions from facilities like shopping centers, manufacturing plants, distribution hubs and utility stations.

Sound Barrier / Absorption Walls provide superior noise abatement solutions for all noise sensitive projects.

Managing airport noise is a key part of the Toronto Port Authority's commitment to the environment and naturally AIL Sound Walls were a good fit on this project.

- Shopping Centers
- Big Box Stores
- Drive-Thru Lanes
- Loading Docks
- Mine / Quarries
- Industrial Sites
- Commercial Development

ROOF TOP ENCLOSURES

Most of today's urban buildings have their utility and HVAC systems mounted on ther roofs. However, sound barrier protection is still needed for best results and to deal with unwanted noise between buildings at upper levels.

The light weight of the Sound Barrier Walls make them ideal for roof top applications. The enclosure support system, integrates easily with roof structures of both existing and new buildings to deliver effective sound mitigation.

- HVAC Units
- Utilities
- Generators

Lightweight Sound Barrier Walls are prefect for roof top applications. Man-doors and access ports are easily integrated.

EQUIPMENT OR MACHINERY ENCLOSURES

- Oil / Gas / Hydro / Compressors
- Petro Chemical / Utility Stations
- Mining Quarry / Crushers

With a limited footprint, Sound Barrier Walls provide an efficient land use solution for urban areas.

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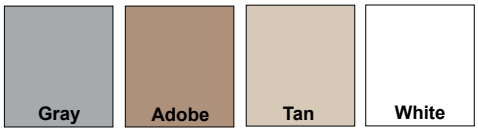
PRODUCT SPECIFICATIONS

	Silent Protector (Absorptive)	Tuf Barrier (Reflective)
Panel Length	8 ft - 12 ft	8 ft. - 14 ft. (2.44 m - 4.27 m)
Panel Width	2.70 in (68.58 mm)	2.70 In (68.58 mm)
Panel Height	5.96 in ± .10 (151.38 mm ± 0.25 mm)	5.96 In ± .10 (151.38 mm ± 0.25 mm)
Weight	4.30 lbs/ft² (21 kg/m²)	Min. 4.10 lbs/ft² (20 kg/m²)
Absorptive	yes	n/a
Reflective	n/a	yes
STC Rating	up to 36	up to 32
NRC Rating	1.0	n/a
Plain Finish	yes	yes
Embossed Finish	n/a	yes

Color Choices



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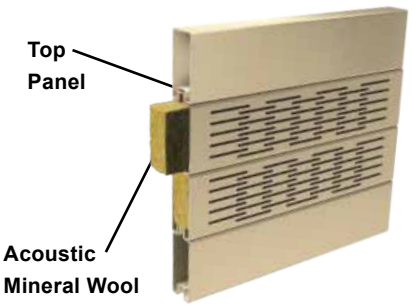
INSTALLATION

Easy to install with local crews and reduced need for lifting equipment.



SOUND TRANSMISSION LOSS ASTM E90 / E413

Octive Band Number	2	3	4	5	6	7	STC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-
Silent Protector	20	21	26	40	40	44	
Tuf-Barrier	16	22	31	39	41	49	-

RATINGS UP TO STC 36 ASK FOR DETAILS

SOUND ABSORPTION COEFFICIENTS ASTM C423/E795

Octive Band Number	2	3	4	5	6	7	NRC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-
Silent Protector	0.41	0.84	1.19	1.06	1	0.81	1.0

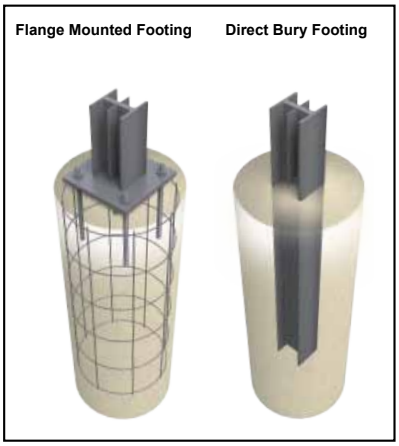
STC - Sound Transmission Class

STC is a single-number index used to rate the material's ability to reflect noise and to reduce the decibel level.

NRC - Noise Reduction Coefficient

NRC is a single number index rating used to determine how absorptive the material is. Industrial standard ranges from zero to 1. An absorptive sound barrier wall reduces the sound energy that would typically reflect back toward the sound source and has a higher decibel reduction.

NRC	Qualitative
0.4 or less	Poor
0.5 to 0.6	Mediocre
0.6 to 0.7	Good
0.7 to 0.85	Very Good
> 0.85	Excellent
1.0	**Silent Protector**



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