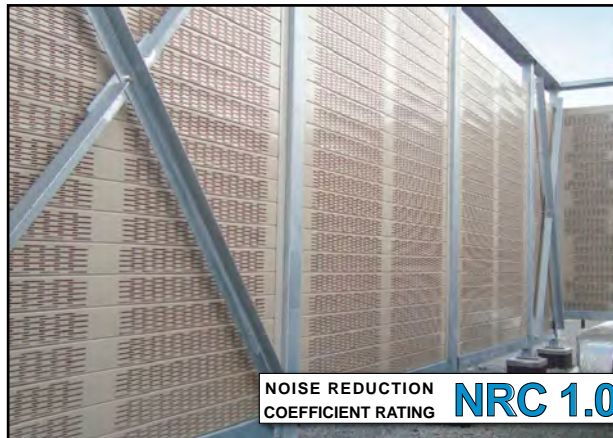


Sound Barrier Absorption Wall

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 pretty good 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 barrier Like Silent Protector Sound Barrier Absorption Wall, is the best choice for lower in place costs, great acoustic performance and appearance combined with a life span many times that of all other acoustic barrier noise wall 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 Walls are engineered for maximum sound reflection of environmental or ambient noise such as traffic, manufacturing, industrial or commercial 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 | • HVAC |
| • Industrial | • Highways |
| • Institutional | • Railways |
| • Military | • Bridges |
| • Utilities | • Oil & Gas |
| • Transformers | • Roof Top Mechanical Systems |

TRANSPORTATION, INDUSTRIAL, COMMERCIAL AND UTILITIES

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

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 Walls provide superior noise abatement solutions for all noise sensitive projects.

ROOF TOP ENCLOSURES

- ▶ HVAC Units ▶ Utilities ▶ Generators

Most of today's urban buildings have their utility and HVAC systems mounted to their 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.

EQUIPMENT OR MACHINERY ENCLOSURES

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

Excessive noise is one of the most common occupational health hazards in today's heavy industrial or manufacturing environments, and permanent hearing loss is a serious health concern.

Sound Barrier Walls are often used to mitigate unwanted noise in these types of applications. Transparent panels, utility ports and man-doors can be intergrated to allow access for routine maintenance or emergency repairs with reduced exposure to noise.



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



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



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

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

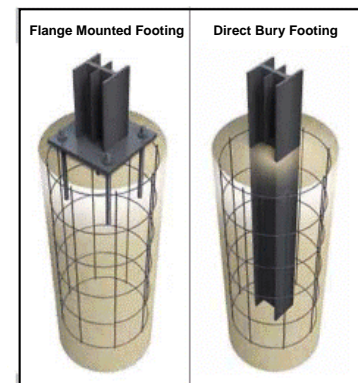
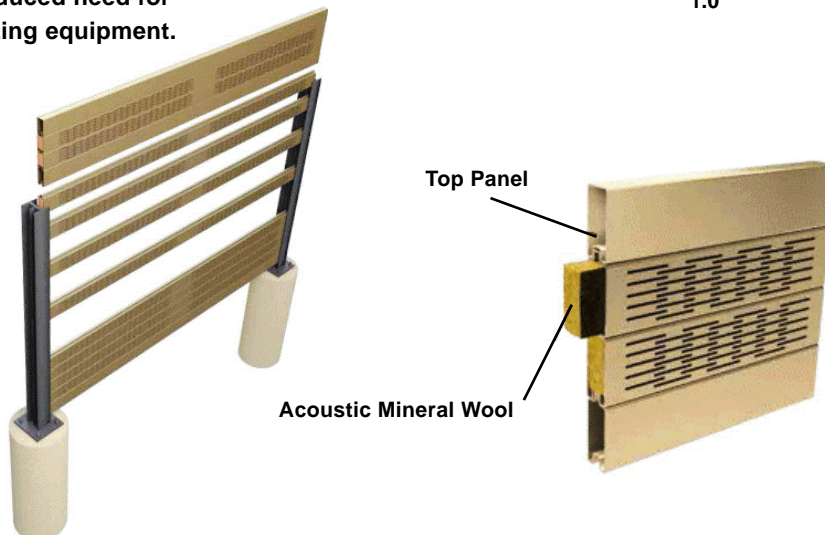
PRODUCT SPECIFICATIONS CONTINUED



Color reproductions in this brochure is subject to limitations and the printing process. Please consult AcoustiGuard for actual PVC color samples.

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	RATINGS UP TO STC 36 ASK FOR DETAILS
Tuf-Barrier	16	22	31	39	41	49	

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	AIL Silent Protector

COMPANY HISTORY

Since 1977, WILREP Ltd. has been providing sound and vibration control products and solutions for a wide variety of commercial, industrial architectural and residential applications. The company specializes in acoustical and impact isolation subfloor systems for buildings.

The AcoustiGuard[™] trademark was introduced to represent the growing list of floating floor and foundation isolation systems being offered by WILREP Ltd. They include modular subfloor panels for mechanical rooms, sound studios, home theatres and exercise, gym and dance floors. Floating floor materials are also available for wood, carpet, ceramic and gypsum or concrete pour over systems.

Working closely with acoustic, structural & mechanical engineers, architects and other construction professionals, WILREP Ltd. is able to develop and manufacture custom sound and vibration isolated floors for building conversions and new construction applications alike.

Innovation and turnkey manufacturing provides WILREP Ltd. with the ability to develop an expanding line of sound control products for floors, walls and ceilings.

OTHER WILREP PRODUCTS

- Products and Systems for High Transmission Loss Wall & Floor/Ceiling Assemblies.
- Sound Control Underlays.
- Acoustical and Impact Subfloor Panels for Gymnasiums, and Dance Floors.
- Mechanical Equipment Isolators.
- Acoustic Composites - Sheet & Roll Goods.
- Interior Acoustic Treatments.

AcoustiGuard[™] - WILREP LTD. is continually upgrading the quality of our products.
We reserve the right to make changes to this and all products without notice.

Technical data for the Sound Barrier Fence[™] last updated: June 2014.