Metallic Noise Barriers

Noise Barriers

A complete range of certified, high performance Noise barriers to solve a wide variety of environmental noise pollution issues.

- Guaranteed, proven, sound reduction
- Sound absorptive surfaces minimize reflected noise
- Rugged, abuse-resistant, long-lasting steel construction
- Weather resistant and almost maintenance-free
- Wide choice of finishes to blend with individual landscapes

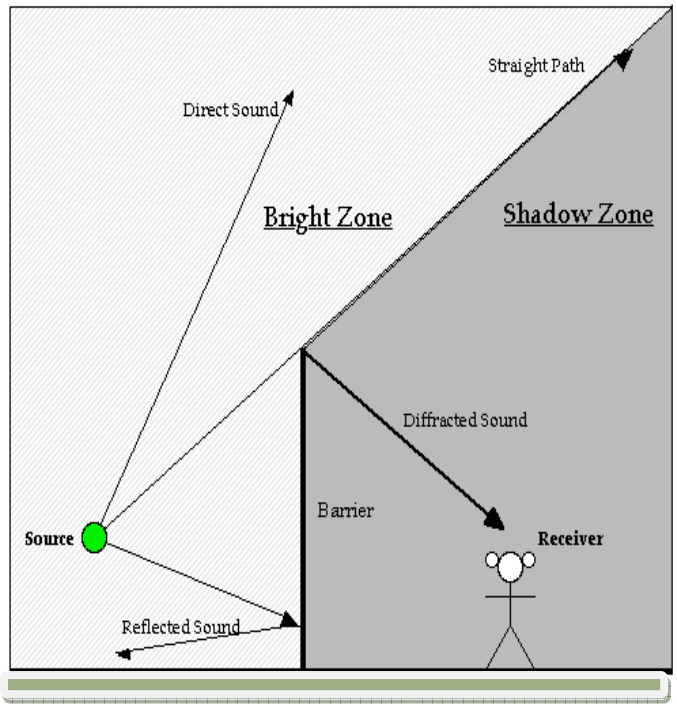
Suitable for an extensive range of applications including:

- Screening Mechanical Plant
- Roads and Railways
- Aircraft Pens and Airport Boundaries
- Such as Generators, Compressors and Chillers

Complete Range Of Noise Barriers ...

Reflective Barriers

Which comprise the great majority of noise barriers, are generally located at the edge of the road to reflect traffic noise. Some noise is transmitted through the barrier, but is generally low in relation to the noise level on the other side of the barrier. The height of these barriers is usually greater than other types. Often, traffic noise levels increase for vehicle occupants.

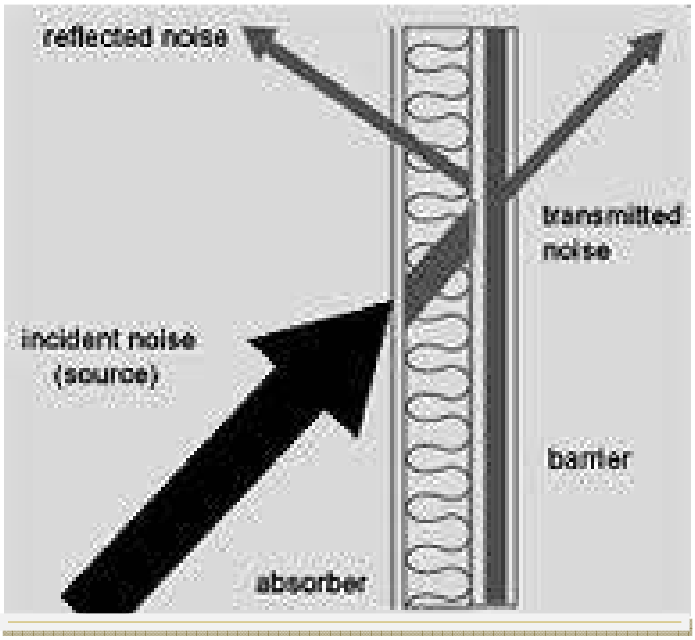


Dispersive Barriers

reflect the majority of the traffic noise upwards or downwards by their inclination or by their surface pattern of inclined planes. Some designers regard this type as a variation of a reflective barrier with little effective cost benefit.

Absorptive Barriers

absorb sound by forcing the sound pressure waves to move in and around many tiny fibers or passages



Noise Barriers

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FEATURES AND BENEFITS

- Proven, certified, sound transmission loss (noise reduction)
- Sound absorption to minimize reflected sound
- Tough, abuse-resistant steel / aluminum construction
- Weather-resistant, rust-proof, durable finishes which blend Sympathetically with the surrounding landscape
- Very low maintenance and easy to clean
- Assembled from prefabricated components for fast on-site installation
- Structural steelwork included on request

Quality Test of Metallic Noise Barriers

राष्ट्रीय भौतिक प्रयोगशाला
(वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद)
NATIONAL PHYSICAL LABORATORY
(Council of Scientific and Industrial Research)
Dr. K. S. Krishnan Marg, New Delhi - 110 012, INDIA
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TEST REPORT ON

SOUND TRANSMISSION LOSS

Date	Test Report No.	Page	No. of Pages
24-11-2010	10111043/5.07A/T-089	1	2

1. Tested for : M/s Envirotech Systems Pvt. Ltd.
B-1A/19, 1st Floor, Commercial Complex
Sector-51, Noida- 201 307.
Customer's Reference : ESPL/1208, dated : 18.11.2010.

2. Description and Identification of items : **65 mm thick panel consisting of 1.6 mm thick perforated metal sheet of <10 kg/m^2 surface density on front side and plain sheet at the back with air cavity filled with 2000 kg/m^3 density Envirotech sound dampening material.**

3. Environmental Conditions : Room Temperature : 20.0 ± 3.0 °C
Relative Humidity : 54.0 ± 5.0 %

4. Standard Used and Associated Uncertainty : Working Standard Microphone;
± 0.5 dB

5. Traceability of Standards Used : The standards used for testing are traceable to National Standards

6. Principle/ Methodology of test & Test Procedure No. : **IS : 9901 (Part III) -1981, DIN 52210 Part IV- 1984, ISO : 140 (Part III) - 1995,**
" Measurement of Sound Insulation in Building and of Building Elements "
Part III : Laboratory Measurements of Airborne Sound Insulation of Building Elements
DP#1.07/Doc.3/TP# 15

7. Results :

As requested by the party the acoustical material was tested for its airborne sound insulation by using two reverberation chambers under existing environmental conditions. The sample was fixed in the common opening between the two chambers. The volume of the source room was 257 m^3 and that of the receiver room was 271 m^3. Adequate diffusion existed in both the chambers.

Tested by: (Mr. Naveen Garg)
Checked by: (Dr. Mahavir Singh)
Issued by: (Mr. Omkar Sharma)

Noise Barriers

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Using filtered noise in one-third octave band the air- borne sound insulation index was evaluated by measuring the average sound pressure levels generated in the source room and the receiver room and by measuring the equivalent absorption in the receiver room. The results are given below :

One-third Octave Band Centre Frequency Hz	Airborne Sound Insulation Index dB
100	12
125	10
160	13
200	18
250	21
315	29
400	34
500	39
630	44
800	46
1000	48
1250	49
1600	51
2000	53
2500	55
3150	59
4000	61

Using the standard reference curve the **sound transmission class , STC,** was found to be **34.**

The evaluated uncertainty in measurement is **± 1.0 dB** which is at a coverage factor **k=2** which corresponds to a coverage probability of approximately **95%** for a normal distribution.

8. Date of Testing : 23-11-2010

9. Remarks : Nil

Tested by: (Mr. Naveen Garg)

Checked by: (Dr. Mahavir Singh)

Issued by: (Mr. Omkar Sharma)