Polycarbonate Noise Barriers ....

Polycarbonate Noise Barrier
protecting neighboring commercial units from a 24 hour secures operation.

The construction consisted of MS/Galvanized steel beam as horizontal and vertical posts specially designed aluminum pressure pad with rubber gas kit use to grip polycarbonate sheet tightly.

On this project the vertical boarding runs the full height of the barrier, on other similar barriers a horizontal mid chamfered trim is add as a feature.

The standard Polycarbonate Noise Barriers designed to achieve 22 STC rating and the same has been confirmed during laboratory test.

Applications:

1. Highways ,Flyovers & Railway track.
2. To cover Industrial premises.
3. Construction sites
4 Stadium & Clubs.
5. Residential premises.

Noise Barriers

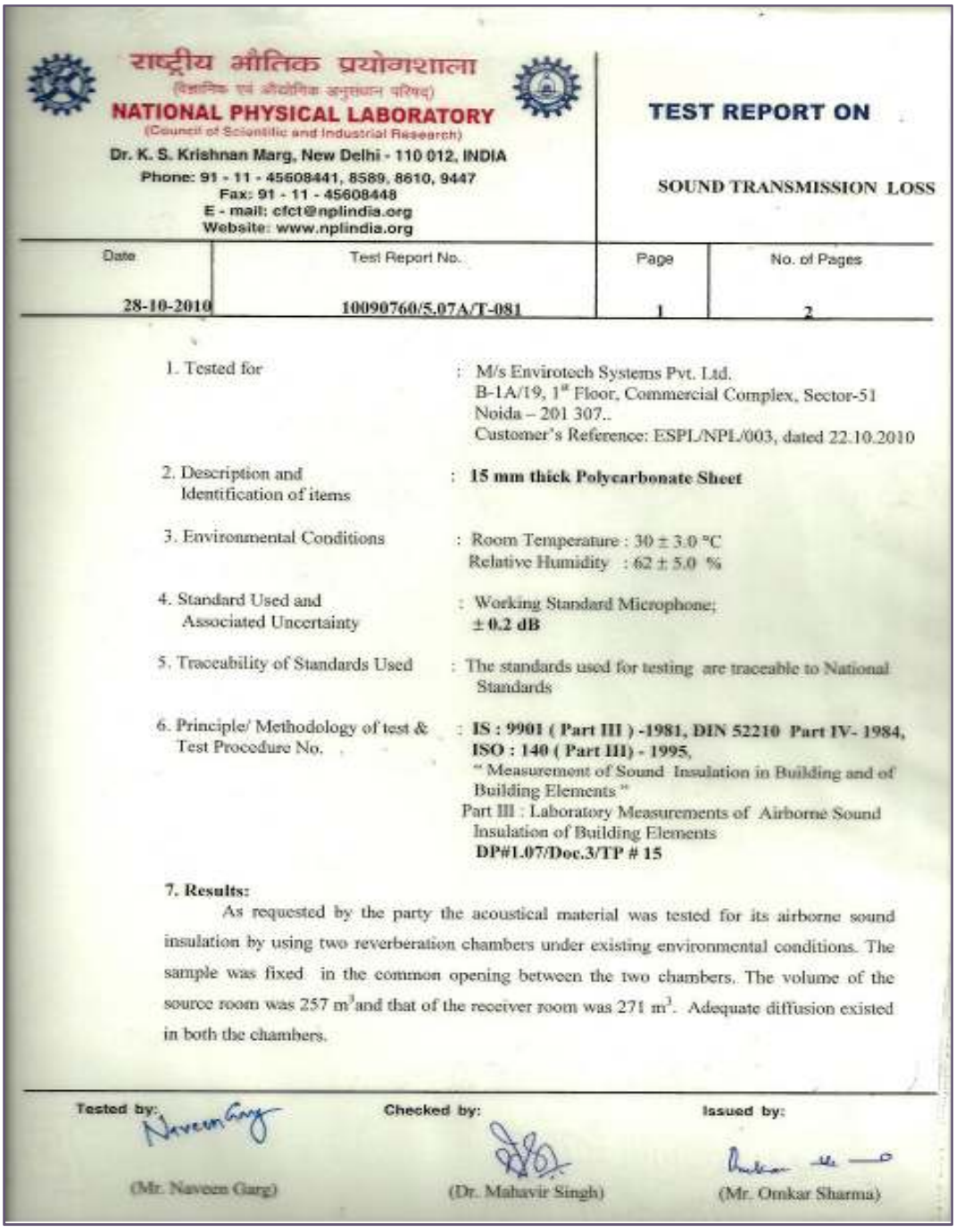
Installation & Maintenance ....

We offer a full design, delivery and installation service, which can also include all necessary structural steelwork. Barriers can be erected by our own, trained personnel. Alternatively, they can be installed by others (contractors, end users etc), preferably under the supervision of an ESPL engineer.

All polycarbonate sheets are UV coated and having warrantee up to 10 years

Noise Barriers

Quality Test of Polycarbonate 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
Phone: 91 - 11 - 45608441, 8589, 8610, 9447
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Website: www.nplindia.org

TEST REPORT ON

SOUND TRANSMISSION LOSS

Date	Test Report No.	Page	No. of Pages
28-10-2010	10090760/5.07A/T-081	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/NPL/003, dated 22.10.2010

2. Description and Identification of items : **15 mm thick Polycarbonate Sheet**

3. Environmental Conditions : Room Temperature : 30 ± 3.0 °C
Relative Humidity : 62 ± 5.0 %

4. Standard Used and Associated Uncertainty : Working Standard Microphone;
± 0.2 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	01
125	03
160	07
200	12
250	12
315	15
400	13
500	17
630	19
800	21
1000	23
1250	24
1600	25
2000	26
2500	27
3150	27
4000	25

Using the standard reference curve the **sound transmission class , STC,** was found to be **21** .
The evaluated uncertainty in measurement is **± 1 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 : 25-10-2010

9. Remarks : Nil

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