

## सी एस आई आर - राष्ट्रीय भौतिक प्रयोगशाला CSIR-NATIONAL PHYSICAL LABORATORY

(वैज्ञानिक तथा औद्योगिक अनुसंघान परिषद)

(Council of Scientific and Industrial Research)

डॉ. के. एस. कृष्णन् मार्ग, नई दिल्ली-110012, भारत

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परीक्षण रिपोर्ट TEST REPORT

Sound Transmission Loss

ई–मेल/ E-mail: cfct@nplindia.org वेबसाईट / website: www.nplindia.org दिनांक/Date परीक्षण रिपोर्ट संख्या/Test Report No. पृथ्वों की संख्या / No. of Pages पृष्ठ/Page 05-09-2014 14080620/D5.07/A/T-032 2

1. Tested for

: M/s. Envirotech System Pvt. Ltd.

B-1A/19, Ist Floor.

Commercial Complex, Sector-51

Noida - 201 307 Customer Ref. No.: Nil

dated 28/08/2014

Description and Identification of Items : 100 mm thick Sliding Partition / Movable wall panel both faces laminated with 12 mm thick MDF board and Acoustic Insulation Material filled in between (sample size - 93 cm x 63 cm)

Environmental Conditions

: Field Temperature: 28.0 °C Relative Humidity: 70.0 %RH

: Working Standard Microphone,

 $\pm 0.2 dB$ 

Standards used and Associated Uncertainty

: The standards used for testing are traceable to National Standards

Principle/Methodology of Testing and Test Procedure No.

Traceability of Standard Used

: 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 in Building and of Building Elements

Sub-Div # 5.07/A/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 m3 and that of the receiver room was 271 m3. Adequate diffusion excited in both the chambers. जाँचकर्ताः प्रमारी वैज्ञानिकः

परीक्षणकर्ताः Tested by:

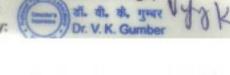
(Mr. Gurbir Singh)

Cheked by:

Scientist-in-charge: (Dr. Mahavir Singh)

(Dr. T. K. Saxena)

जारीकर्ताः





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(Council of Scientific and Industrial Research) डॉ. के. एस. कृष्णन् मार्ग, नई दिल्ली-110012, भारत Dr. K.S. Krishnan Marg, New Delhi-110012, INDIA

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TEST REPORT

परीक्षण रिपोर्ट

Sound Transmission Loss

परीक्षण रिपोर्ट संख्या/Test Report No. पृष्ठ / Page दिनांक/Date पृष्ठों की संख्या / No. of Pages 05-09-2014 14080620/D5.07/A/T-032 2 2

Using filtered noise in 1/3-octave band, the airborne 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: 1/3-Octave Band Center Frequency | Airborne Sound Insulation Index

14 17 20 28
17 20
20
29
34
37
41
41
44
43
48
47
47
48
50
51

The evaluated uncertainty in measurement is  $\pm$  1.0 dB which is at a coverage factor k = 2 and

which corresponds to a coverage probability of approximately 95% for normal distribution. 8. Date of Testing : 02-09-2014

Remarks

Using

: Nil

परीक्षणकर्ताः

Tested by:

जों वकर्ताः प्रमारी वैज्ञानिकः Scientist-in-charge: 1. K. Sayeus Cheked by: (Dr. T. K. Saxena)

(Mr. Gurbir Singh)

जारीकर्ताः issued by: