

TEST REPORT

No. : GZIN2001000014SC

Date : Jan 20, 2020

Page: 1 of 4



CUSTOMER NAME: FOSHAN NANHAI BANGLITONG WATERPROOF FABRIC FACTORY
ADDRESS: WEST ROUTE OF GANGLIAN INDUSTRIAL ZONE, LISHUI TOWN,
NANHAI DISTRICT, FOSHAN CITY

Sample Name : PVC SOUND BARRIER THICKNESS 2CM

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Date of Receipt : Jan 02, 2020
Testing Start Date : Jan 02, 2020
Testing End Date : Jan 20, 2020
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co., Ltd. GZ Branch Testing
Center

Quincey lee
Authorized signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Materials Laboratory

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TEST REPORT

No. : GZIN2001000014SC

Date : Jan 20, 2020

Page: 2 of 4

I. Condition

- 1) Volume of source room:88.6m³, Volume of receive room :67.9m³;
- 2) Temperature: 21°C; Relative humidity: 71%.

II. Accordance

According to GB/T 19889.3-2005/ISO 140-3:1995 'Acoustics-Measurement of sound insulation in buildings and of building elements-Part 3: Laboratory measurements of airborne sound insulation of building elements' and GB/T50121-2005 ' Rating standard of sound insulation in buildings' and GB 50118-2010 ' Code for design of sound insulation of civil buildings'.

The sound reduction index R is calculated by the following equation:

$$R = L_{p1} - L_{p2} + 10 \lg \frac{S}{A} (dB) \quad (1)$$

Where

L_{p1} is the average sound pressure level in the source room, in decibels;

L_{p2} is the average sound pressure level in the receiving room, in decibels;

S is the area of the test specimen, in square meters, which is equal to the free test opening (10.3m²);

A is the equivalent sound absorption area in the receiving room, in square meters.

III. Instruments

B&K 2270 Investigation

Power amplifier B&K 2716

Omni directional speaker B&K 4292

Microphone B&K 4189 and accessories.



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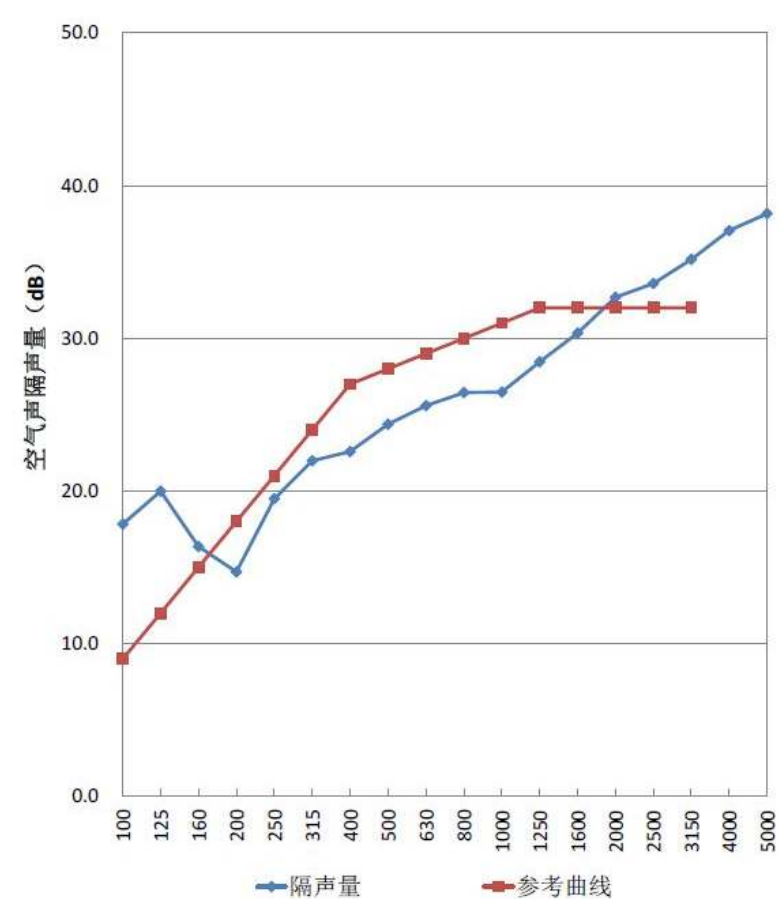
TEST REPORT

No. : GZIN2001000014SC

Date : Jan 20, 2020

Page: 3 of 4

IV. Test Results

Specifications	PVC SOUND BARRIER, with an area of 6.2m ² , is installed in the opening of sound insulation laboratory and is sealed with 500mm thick composite sound insulation wall around it. (Composite wall sound insulation Rw = 65dB).																																																										
Test project	Airborne Sound Insulation																																																										
Test results																																																											
f (Hz)	R (dB)	Frequency Characteristic Curve of Air Acoustic Insulation  <table><thead><tr><th>Frequency (Hz)</th><th>隔声量 (dB)</th><th>参考曲线 (dB)</th></tr></thead><tbody><tr><td>100</td><td>17.8</td><td>9.0</td></tr><tr><td>125</td><td>20.0</td><td>12.0</td></tr><tr><td>160</td><td>16.4</td><td>15.0</td></tr><tr><td>200</td><td>14.7</td><td>18.0</td></tr><tr><td>250</td><td>19.5</td><td>21.0</td></tr><tr><td>315</td><td>22.0</td><td>24.0</td></tr><tr><td>400</td><td>22.6</td><td>27.0</td></tr><tr><td>500</td><td>24.4</td><td>28.0</td></tr><tr><td>630</td><td>25.6</td><td>29.0</td></tr><tr><td>800</td><td>26.4</td><td>30.0</td></tr><tr><td>1000</td><td>26.5</td><td>31.0</td></tr><tr><td>1250</td><td>28.5</td><td>32.0</td></tr><tr><td>1600</td><td>30.3</td><td>32.0</td></tr><tr><td>2000</td><td>32.7</td><td>32.0</td></tr><tr><td>2500</td><td>33.6</td><td>32.0</td></tr><tr><td>3150</td><td>35.2</td><td>32.0</td></tr><tr><td>4000</td><td>37.1</td><td></td></tr><tr><td>5000</td><td>38.2</td><td></td></tr></tbody></table>	Frequency (Hz)	隔声量 (dB)	参考曲线 (dB)	100	17.8	9.0	125	20.0	12.0	160	16.4	15.0	200	14.7	18.0	250	19.5	21.0	315	22.0	24.0	400	22.6	27.0	500	24.4	28.0	630	25.6	29.0	800	26.4	30.0	1000	26.5	31.0	1250	28.5	32.0	1600	30.3	32.0	2000	32.7	32.0	2500	33.6	32.0	3150	35.2	32.0	4000	37.1		5000	38.2	
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TEST REPORT

No. : GZIN2001000014SC

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Page: 4 of 4

V. Sample photo



Note:

1. The above test was carried out by Subtropical Architecture Institute South China University of Technology.
2. The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc., and just for internal reference.

***** End of report*****



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