



TEST REPORT

No. : GZCCM141201483

Date : Jan. 16, 2015

Page: 1 of 5

CLIENT NAME: ZHEJIANG TERASUN AIR DUCT CO., LTD.

ADDRESS: MAREN VILLAGE, CHONGREN INDUSTRIAL ZONE, CHONGREN TOWN, SHENGZHOU CITY, ZHEJIANG PROVINCE, P.R.C

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name : Terasun Magnesium board/TSM
Manufacturer : 1200×2400×12mm
SGS Ref. No. : HZMLM141100015
Test Performed : Selected test(s) as requested by applicant
Date of Receipt : Dec. 01, 2014
Test Period : Dec. 01, 2014 to Jan. 14, 2014

Test result(s) : Please refer to the following page(s)

*****To be continued*****

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co.,Ltd
Guangzhou Branch

Chandler Wu
Technical Engineer



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Test Information:

Sample description: See photo

I Test reference

According to ASTM E90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements and ASTM E413-10: Classification for Rating Sound Insulation.

II Test condition

Ambient temperature	24°C	Relative humidity	48%
The source room Volume	300m ³	The receiving room Volume	145m ³
Description of test arrangement	<p>1. Installation description: Light weight partition wall (Terasun Magnesium board) was setup in the cavity of acoustic laboratory, with total area of 10.5m². The wall was composed of 12mm light clapboard + 75mm cavity embedded with 50mm glass wool + 12mm light clapboard.</p> <p>2. Testing machine as below: Denmark architectural acoustics analyzer B&K 2270, Power amplifier B&K 2716, 12-sides nondirectional speakers B&K 4296, B&K4189 microphone and others.</p>		

***** To be continued*****



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III Calculation

Calculate the sound transmission loss at each frequency f from:

$$TL(f) = L_S(f) - L_R(f) + 10 \log S / A_R(f)$$

where:

$T_L(f)$ = transmission loss, dB,

$L_S(f)$ = average sound pressure level in the source room, dB,

$L_R(f)$ = average sound pressure level in the receiving room, dB,

S = area of test specimen that is exposed in the receiving room, m^2 , and

$A_R(f)$ = sound absorption of the receiving room with the test specimen in place, m^2

***** To be continued*****



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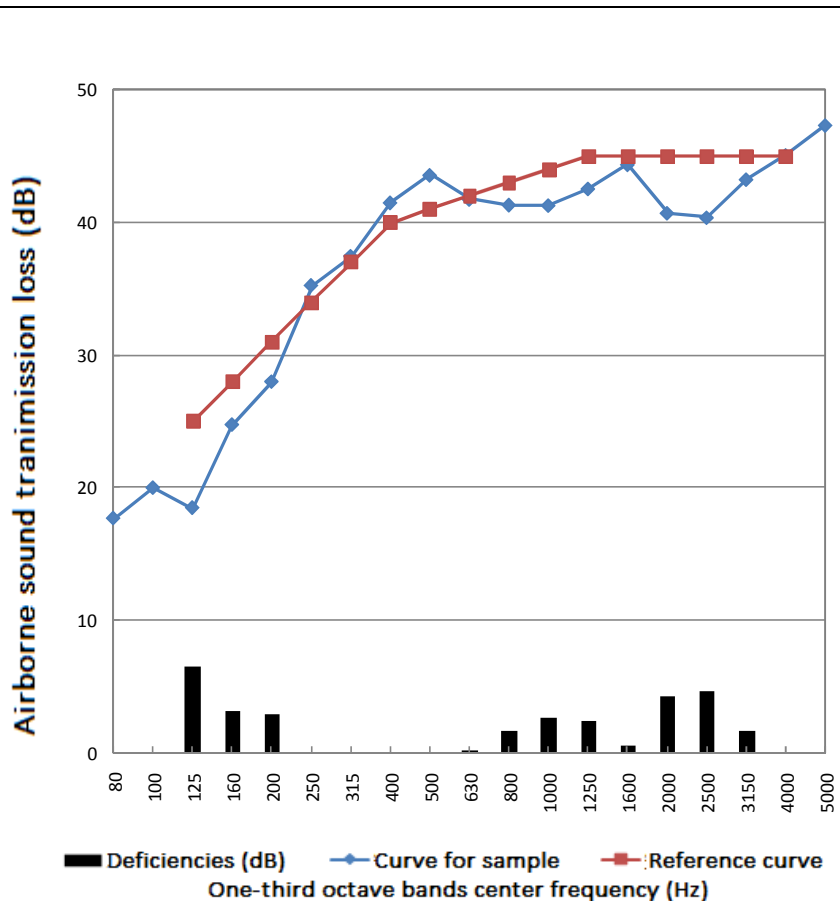
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IV Test result

Frequency f (Hz)	Airborne sound transmission loss (dB)
80	17.7
100	20.0
125	18.4
160	24.7
200	28.0
250	35.2
315	37.4
400	41.5
500	43.5
630	41.7
800	41.3
1000	41.3
1250	42.5
1600	44.3
2000	40.7
2500	40.3
3150	43.2
4000	45.1
5000	47.3
STC	41



***** To be continued*****



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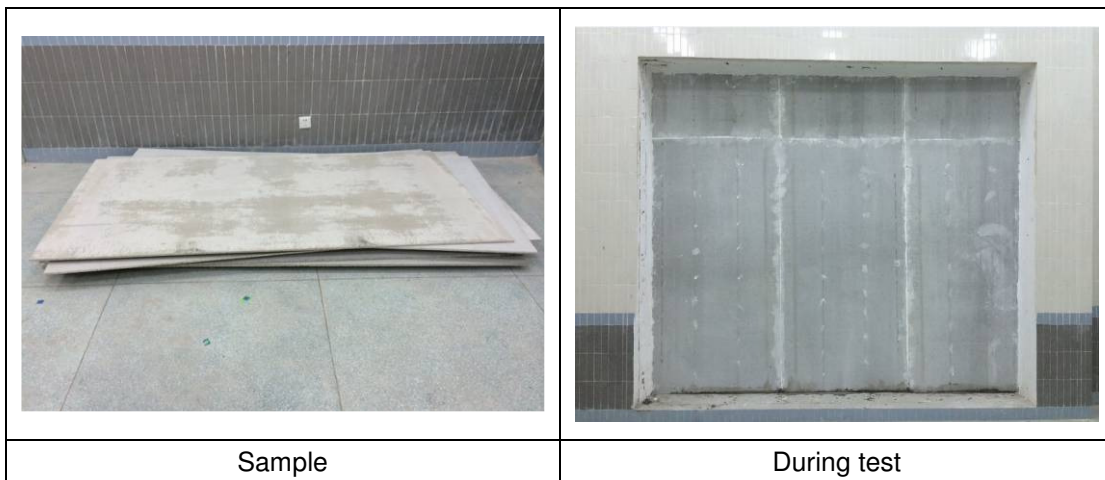
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Note: The above test was carried out by an external laboratory assessed as competent.

Statement: Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.

Photo:



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



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