



Series Number: A18-074

TEST REPORT



Test Item: Noise Reduction Coefficient Test

Entrusting Unit: Suzhou Joyo Meihua Acoustic Material Technology Co.,Ltd

Test Type: Consignment Test

Center for Building Environment Test, Tsinghua University

清华大学建筑环境检测中心

17th April 2018



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清华大学建筑环境检测中心
Center for Building Environment Test, Tsinghua University

TEST REPORT

Sample Name	PET Acoustic Panels			Molde	Smooth Series
Report ID	A18-074	Sample ID	A18-074	Registered Trademark	JOYO MEIHUA
Customer	Suzhou Joyo Meihua Acoustic Material Technology Co.,Ltd				
Manufacturer	Suzhou Joyo Meihua Acoustic Material Technology Co.,Ltd				
Entrust Date	4th Apr 2018			Sample Sending Unit	\
Test Date	11st Apr 2018			Test Type	Consignment Test
Test Item	Noise Reduction Coefficient Test			Sample Quantity	10.08m²
Testing basis	GB/T 20247-2006/ISO 354:2003				
Test Add	Reverberation room of building environment testing center of Tsinghua University				
Test Result	NRC=0.75. According to GB/ t16731-1997 《 building sound absorption product sound absorption performance classification 》 , the sound absorption performance of its sound absorption structure is level 2				
Remark	According to GB/ t16731-1997 《Building Sound Absorption Product Sound Absorption Performance Classification 》 Sound absorption level is divided into 4 levels: level 1 NRC≥0.8, level 2 0.8 > NRC≥0.6, level3 0.6 > NRC≥0.4, level 4 0.4 > NRC≥0.2				
Test by: Yanxiao Li Audited by: Wenze Zhang Approved by: Hui Yan					

TEST REPORT

Report ID	A18-074										Test Equipment	RTA840									
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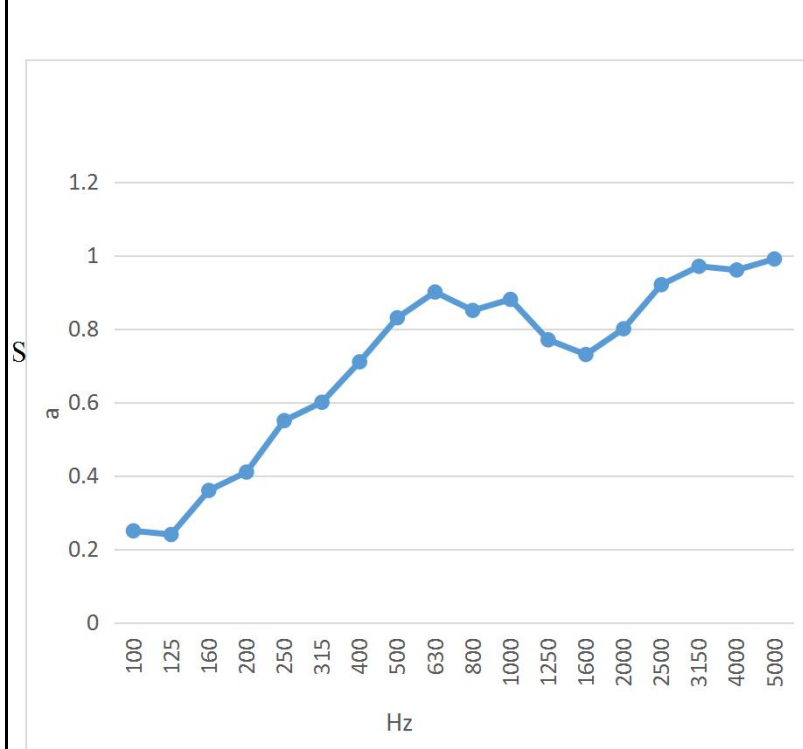
Test Result

HZ	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	$\bar{a}$	NRC
a	0.25	0.24	0.36	0.41	0.55	0.6	0.71	0.83	0.9	0.85	0.88	0.77	0.73	0.8	0.92	0.97	0.96	0.99	0.71	0.75

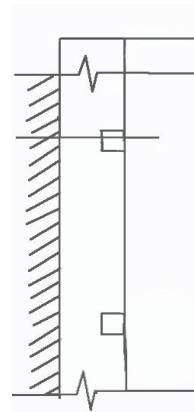
Remark 1. $\bar{a}$ is average sound absorption coefficient of 100-5000Hz

2. NRC is noise reduction coefficient, is 250, 500, 1000, 2000Hz the arithmetic average of the four octave band sound absorption coefficients (GB3947)

Test Structure



100 12



Wall
100mm thickness cavity
12mm pet acoustic panel



Remark:

1. Material size: 2400mm*1200mm*12mm, Density:1.7kg/m²
2. Size and install way: Polyester fiber sound absorbing panels are installed in the reverberation room using C50 light steel keel, 100mm rear cavity. Area: 4.2m*2.4m, total 10.08m². 40mm thick reinforced concrete slab perimeter.
3. The test structure is shown in the figure above.