

PS003-FR-65

TACER ACOUSTIC R&D LABORATORY

Esenboğa Yolu 22 km. Saracalar Mh. Kümeevler Sk. No:46 Akyurt / ANKARA Telefon: +90 312 399 25 45 E-mail: info@tacer.com.tr

Test ID

TCR-SA-2025-003

Deney No:

Specimen Description

: Gentuğ Felt Panel

Numunenin Tanımı

Date of Test

28.08.2025

Test Tarihi

Test Method

20.00.2023

Deney Metodu

: TS EN ISO 354:2006 Acoustics - Measurement of sound absorption in the reverberation

room, α s

Specimen Details *Numune Detayları*

: Composition: 100 % polyester Material Thickness: 18 mm Material Density: 194,44 kg/m³

Material Size: 120cm x 240 cm

Test Result

: $\alpha_w = 0.80$ was found.

Deney Sonuçları

Seal

Mühür

Date *Tarih*

28.08.2025

Person in charge of test

Deneyi Yapan

Orhan Karabayır Mechanigal Engineer

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Measurement of sound absorption in the reverberation room according to ISO 354 Laboratory measurements of the sound absorption coefficient in a reverberation room

Manufacturer : GENTUĞ TEKSTİL A.Ş.

Test specimen mounted by : TACER INSAAT TICARET VE SANAYI A.S.

Description of test specimen : Gentuğ Felt Panel, 18mm thickness (20cm air gap)

Specimen Area (m²) : 10,8 Room Volume (m³) : 150 Total Room Surface Area (m²) : 237,8

f	ALFA (α _s)	ALFA (α _p)	ALFA (αs & αp)			
100	0,24		1,20			
125	0,48	0,45				
160	0,56		1,00			
200	0,70	0,85				
250	0,87		0,80			
315	0,99					
400	1,02	1,00	0,60			
500	1,03		0,60			
630	0,99					
800	0,85		0,40			
1000	0,85	0,85				
1250	0,91		0,20			
1600	0,87					
2000	0,76	0,75				
2500	0,64		0,00 100 200 400 800 1600 3200			
3150	0,67		.55 255 .55 555 .550 5250			
4000	0,72	0,70	→ALFA (αs)			
5000	0,77		, <u>, , , , , , , , , , , , , , , , , , </u>			

α_s: Sound absorption coefficient according to ISO 354

αP: Practical sound absorption coefficient according to ISO 11654

Rating according to the	150 11654			
Weighted sound absorption coefficient				
$lpha_w$:	0,80			
Sound absorption class:	В			

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Noise Reduction C	0,85	
Sound Absorptio	0,87	

Rating according to the ASTM C423

In order to prepare the sample for measurement, assembly operations were carried out by TACER INSAAT TICARET VE SANAYI A.S.

The measurement was taken by placing the sample parallel to the floor of the test room. The measurement was carried out within the scope of the ISO 354 standard. The area of sample which had been placed directly on the floor of the reverberation chamber (mounting according to ASTM C423) is 10,80 m2.

This test is valid only for the laboratory measurement of sound absorption and sound absorption coefficients in the reverberation room, conducted within the scope of ISO 354, under the specified conditions at Saracalar Mh. Kümeevler Sk. No:46 Akyurt Ankara Türkiye. This report, in whole or in part, cannot be copied or reproduced without the permission of TACER INSAAT TICARET VE SANAYI AS. Reports that are unsealed are considered invalid. The measurement results pertain solely to the conditions present during the measurement.

The sample was measured at 20 cm above from reverberation chamber floor.





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