



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

*Deney No:*

: TCR-SA-2025-005

### Specimen Description

*Numunenin Tanımı*

: Gentuğ Felt Panel

### Date of Test

*Test Tarihi*

: 28.08.2025

### Test Method

*Deney Metodu*

: TS EN ISO 354:2006 Acoustics - Measurement of sound absorption in the reverberation room,  $\alpha_s$

### Specimen Details

*Numune Detayları*

: Composition: 100 % polyester  
Material Thickness: 12 mm  
Material Density: 200 kg/m<sup>3</sup>  
Material Size: 120cm x 240 cm

### Test Result

*Deney Sonuçları*

:  $\alpha_w = 0,75$  was found.

Seal  
Mühür



Date  
Tarih

28.08.2025

Person in charge of test  
Deneyi Yapan

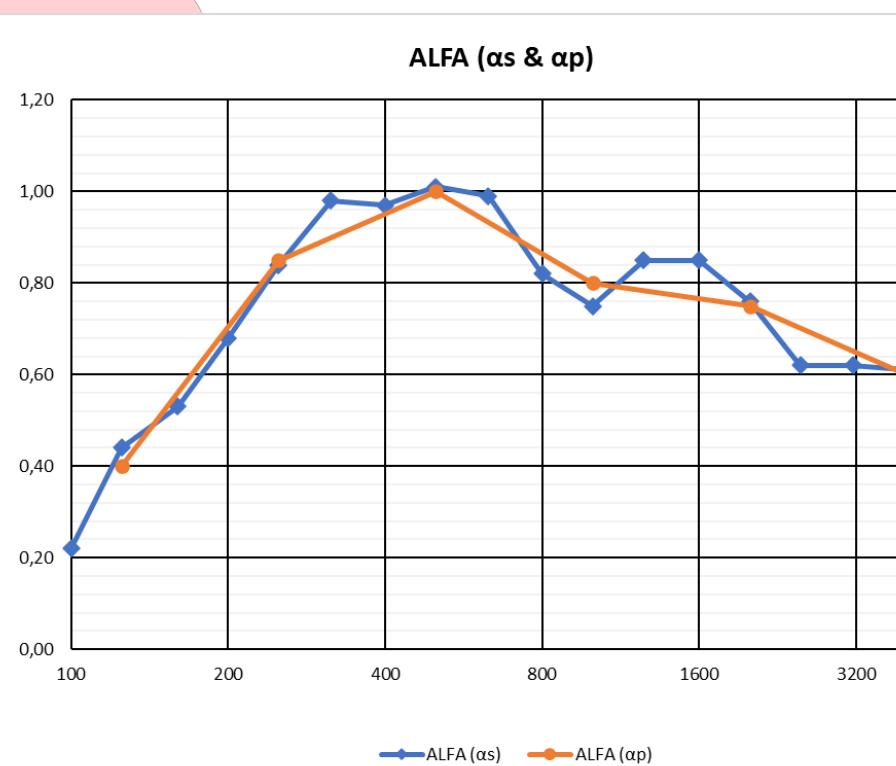
Orhan Karabayır  
Mechanical Engineer

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, 12mm thickness (20 cm air gap)  
**Specimen Area (m<sup>2</sup>)** : 10,8  
**Room Volume (m<sup>3</sup>)** : 150  
**Total Room Surface Area (m<sup>2</sup>)** : 237,8

| f    | ALFA ( $\alpha_s$ ) | ALFA ( $\alpha_p$ ) |
|------|---------------------|---------------------|
| 100  | 0,22                | 0,40                |
| 125  | 0,44                |                     |
| 160  | 0,53                |                     |
| 200  | 0,68                | 0,85                |
| 250  | 0,84                |                     |
| 315  | 0,98                |                     |
| 400  | 0,97                | 1,00                |
| 500  | 1,01                |                     |
| 630  | 0,99                |                     |
| 800  | 0,82                | 0,80                |
| 1000 | 0,75                |                     |
| 1250 | 0,85                |                     |
| 1600 | 0,85                | 0,75                |
| 2000 | 0,76                |                     |
| 2500 | 0,62                |                     |
| 3150 | 0,62                | 0,60                |
| 4000 | 0,61                |                     |
| 5000 | 0,62                |                     |



$\alpha_s$  : Sound absorption coefficient according to ISO 354

$\alpha_p$  : Practical sound absorption coefficient according to ISO 11654

**Rating according to the ISO 11654**

Weighted sound absorption coefficient

Sound absorption class: **0,75**  
 Sound absorption class: **C**

**Rating according to the ASTM C423**

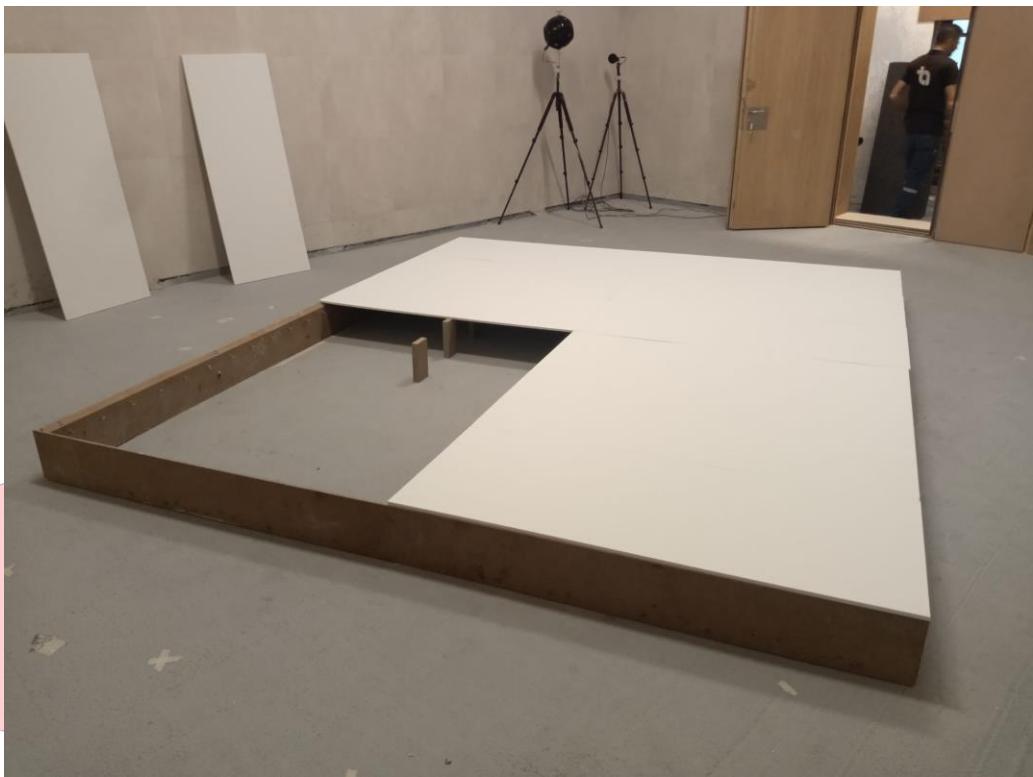
Noise Reduction Coefficient NRC: **0,85**  
 Sound Absorption Average SAA: **0,84**

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 m<sup>2</sup>.

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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