

# Simplified report

## Measurement of sound absorption according to ISO 354

Test report no.	<b>H231016P1/3b_rev00</b>
Test specimen	Baffle ceiling, MUTE+ board S40-B Dimensions (LxWxH): 3000 mm x 40 mm x 300 mm Centre distance: 300 mm Total construction height h = 300 mm
	<b><math>\alpha_w</math> = 0,70 (H)</b>
	<b>NRC = 0,75</b>
	<b>SAA = 0,76</b>
Test type	Sound absorption in a reverberation room according to ISO 354 Typ J
Client	Mr. Tobias Münich Lindner SE Bahnhofstraße 29 94424 Arnstorf
Date of test	19/10/2023
Date of report	30/01/2024
Place of test	Testing laboratory of GiB mbH Reverberation Room
Person in charge	Regina Portje, M.Eng., Test engineer
Scope	2 total pages, with 1 page cover 1 page curve sheet

Accredited testing laboratory according to ISO/IEC 17025

The accreditation is valid for all testing methods listed in the accreditation certificate

# Sound absorption coefficient acc. to ISO 354

Measurement of sound absorption in reverberation rooms

**Client:** Lindner SE, Mr. Tobias Münich  
**Producer :** Lindner SE  
**Date of test :** 19.10.2023  
**Report No. :** H231016P1/3b\_rev00  
**Specimen :** Baffle ceiling polyester, MUTE+ board S40-B  
 Mounting according to DIN EN ISO 354, Type J

**Build-up of specimen :**

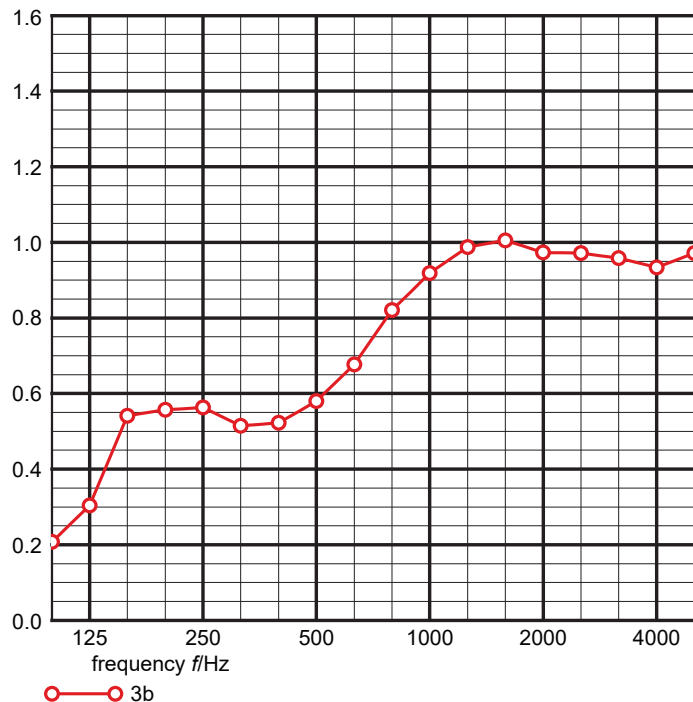
- Baffle ceiling polyester, Lindner MUTE+ board S40-B
- Baffle 12 pc., h = 300 mm, w = 40 mm , l = 3000 mm
- Center distance a = 300 mm
- Total construction height 300 mm

Test area 3000 mm x 3600 mm, height of frame 300 mm made from 28 mm wooden multilayer board. Frame sealed to the floor.

Room: Hallraum GiB  
 Volume: 208.5 m³  
 Specimen size: 10.80 m²

	$\theta/^\circ\text{C}$	$\phi/\%$	$B/\text{kPa}$
Without specimen	20.5	56.7	98.1
With specimen	20.2	57.8	95.7

frequency f/Hz	$\alpha_s$ 1/3 octave	$\alpha_p$ 1/1 octave
100	0.21	0.35
125	0.30	
160	0.54	
200	0.56	0.55
250	0.56	
315	0.51	
400	0.52	0.60
500	0.58	
630	0.68	
800	0.82	0.90
1000	0.92	
1250	0.99	
1600	1.01	1.00
2000	0.97	
2500	0.97	
3150	0.96	0.95
4000	0.93	
5000	0.97	



$\alpha_s$ : Sound absorption coefficient acc. to ISO 354  
 $\alpha_p$ : Practical sound absorption coefficient acc. to ISO 11654

Rating acc. to ISO 11654:  
**Weighted sound absorption coefficient**  
 $\alpha_w = 0.70 (H)$   
 Sound absorption class: C

Rating acc. to ASTM C423:  
**Noise Reduction Coefficient NRC = 0.75**  
**Sound absorption average SAA = 0.76**

Person in charge: Regina Portje  
 Laboratory: GiB mbH  
 Date: 2024-01-30