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**Date** 4/15/2026

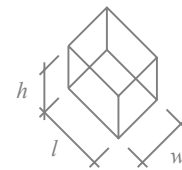
**Project** Room 01

**Editor** Rahel Büchi

**Notes**

<b>Project</b>	Room 01
<b>Standard</b>	DIN 18041 (March 2016)
<b>Usage</b>	Music school: exercise, rehearsal room for percussion and playing loud
<b>Design</b>	Without measurement of Reverb. Time
<b>Room group</b>	A3 - Education/communication
<b>Occupation</b>	80% according to standard

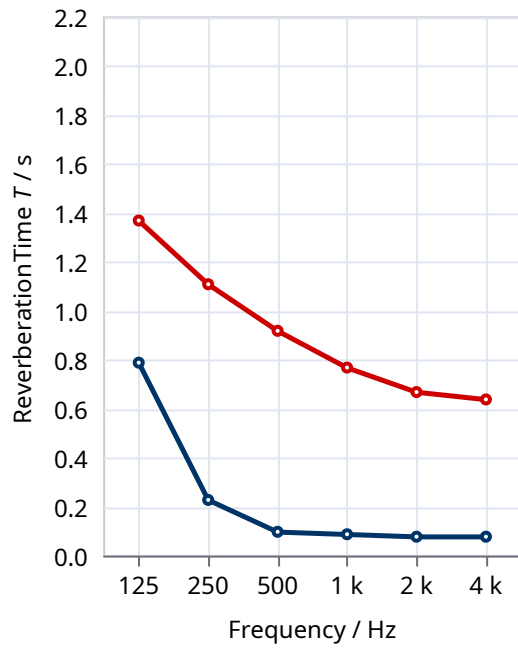
<b>Room shape</b>	Rectangular
<b>Length l</b>	4.0 m
<b>Width b</b>	3.0 m
<b>Height h</b>	2.4 m
<b>Volume</b>	28.8 m <sup>3</sup>



<b>Bare ceiling</b>	12.00 m <sup>2</sup>	Massive construction
<b>Bare floor</b>	12.00 m <sup>2</sup>	Floating composite floor
<b>Floor coverings</b>	12.00 m <sup>2</sup>	Carpet
<b>Walls</b>	30.30 m <sup>2</sup>	Massive construction
<b>Windows/Doors</b>	3.30 m <sup>2</sup>	No curtains or blinds

<b>Furniture for</b>	1	Musicians
	2	Spectators (fabric upholstery)

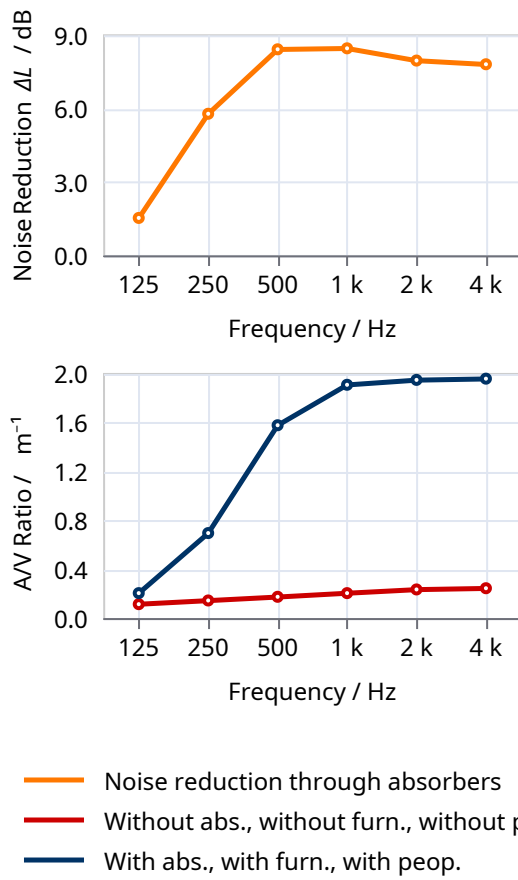
<b>Absorbers</b>	18.0 pc.	Ceiling Absorber 800 x 800 x 30 mm
	41.0 pc.	Ceiling Absorber 800 x 800 x 30 mm



- Without abs., without furn., without p
- With abs., with furn., with peop.

For chosen usage the volume as defined by standard is too small!

Octave band center frequency	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz
Without abs., without furn., without peop. ( $T / s$ )	1.37	1.11	0.92	0.77	0.67	0.64
With abs., with furn., with peop. ( $T / s$ )	0.79	0.23	0.10	0.09	0.08	0.08



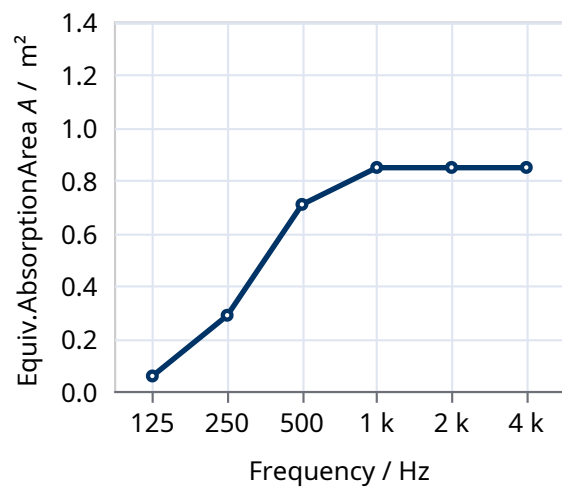
For chosen usage the volume as defined by standard is too small!

Octave band center frequency	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz
Noise reduction through absorbers ( $\Delta L$ / dB)	1.54	5.79	8.42	8.46	7.96	7.81
Without abs., without furn., without peop. ( $A/V$ / $m^{-1}$ )	0.12	0.15	0.18	0.21	0.24	0.25
With abs., with furn., with peop. ( $A/V$ / $m^{-1}$ )	0.21	0.70	1.58	1.91	1.95	1.96

<b>Product</b>	Ceiling Absorber 800 x 800 x 30 mm
<b>Material</b>	Polyester fiberboards
<b>Dimensions</b>	800 mm x 800 mm x 30 mm
<b>Mounting</b>	Equiv. abs. area applies for installation with a sus. height of h = 100 mm
<b>Fire protection</b>	A2 - s1, d0
<b>Notes</b>	Available in different colors, mounting material included



f	A / m <sup>2</sup>
<b>125 Hz</b>	0.1
<b>250 Hz</b>	0.3
<b>500 Hz</b>	0.7
<b>1 kHz</b>	0.9
<b>2 kHz</b>	0.9
<b>4 kHz</b>	0.9



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