

Protocol

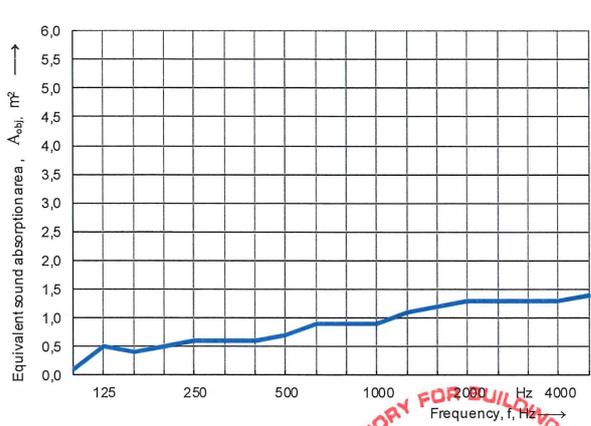
| Equivalent sound absorption area according to ISO 354 | |
|---|--|
| Measurement of sound absorption area per object in a reverberation room | |
| Client: | XAL GmbH, Auer-Welsbach- Gasse 36, AT- 8055 Graz |
| Date of test: | 23.05.2023 |
| Description: | Product name: MOVEIT 25 ACOUSTIC triangle inlay Test according to EN ISO 354. Test performed with reduced number of speaker-microphone-combinations. |
| Object: | Structure of the test specimen according to EN ISO 354, point 6.2.2. Configuration consisting of a total of 3 pieces of MOVEIT 25 ACOUSTIC triangle inlay (Side length each: 1195 mm, d = 25 mm) randomly distributed at a distance of at least d = 200 cm from each other. Element consisting of PET felt. Distance to the floor created with 3 adjustable feet each, consisting of threaded rods and wooden base. <ul style="list-style-type: none"> • Test specimen surface per element (front side): $3 \times \sim 0,618 \text{ m}^2 = 1,85 \text{ m}^2$ • Distance from the floor to the lower edge of the test specimen: $\sim 40 \text{ cm}$ • Construction height: $\sim 425 \text{ mm}$ • Weight per element: $\sim 2,28 \text{ kg}$ Due to customer request, the graphical representation of the result deviates with regard to the y-axis distance according to EN ISO 354, point 8.3. |
| Empty reverberation room: | Reverberation room with object |
| Relative humidity: | 55,9 % |
| Relative humidity: | 58,6 % |
| Temperature: | 20,3 °C |
| Temperature: | 20,5 °C |
| Barometric pressure: | 97,3 kPa |
| Barometric pressure: | 97,2 kPa |
| Surface area: | 1,85 m ² |
| Room volume: | 244,3 m ³ |
| Total room area S_1 : | 240,1 m ² |
| Frequency | Aobj |
| f | 1/3 octave |
| [Hz] | [m ²] |
| 100 | 0,1 |
| 125 | 0,5 |
| 160 | 0,4 |
| 200 | 0,5 |
| 250 | 0,6 |
| 315 | 0,6 |
| 400 | 0,6 |
| 500 | 0,7 |
| 630 | 0,9 |
| 800 | 0,9 |
| 1000 | 0,9 |
| 1250 | 1,1 |
| 1600 | 1,2 |
| 2000 | 1,3 |
| 2500 | 1,3 |
| 3150 | 1,3 |
| 4000 | 1,3 |
| 5000 | 1,4 |
|  <p>The graph shows the equivalent sound absorption area (A_{obj}) in m² on the y-axis (ranging from 0.0 to 6.0) against frequency (f) in Hz on the x-axis (ranging from 125 to 4000). The curve starts at approximately 0.1 m² at 100 Hz and generally increases, reaching about 1.4 m² at 5000 Hz. There are minor fluctuations, notably a dip around 160 Hz and a slight peak around 2000 Hz.</p> | |
| Name of test institute: | Laboratory for Building Science |
| No. of test report: | B23-047-A17005-354a_kaso_Aobj |
| Date: | 23.05.2023 |
| Signature: | DJ.J. Kasim |



Figure 1: Exemplary representation of the test specimen (does not correspond to the actual installation situation)