



VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO

TERMOIZOLIACIJOS MOKSLO INSTITUTAS

(SCIENTIFIC INSTITUTE OF THERMAL INSULATION
OF VILNIUS GEDIMINAS TECHNICAL UNIVERSITY)

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LIETUVOS
NACIONALINIS
AKREDITACIJOS
BIURAS

BANDYMAI
ISO/IEC 17025 Nr. LA. 01.028

TEST REPORT

No AL - A - 001/18

26 January 2018

Valid for the tested object only

Page 1 (3)

1. CUSTOMER: JSC "Narbutas Furniture Company", Bieliūnų str. 1, LT-12110, Vilnius, Lithuania.
2. MANUFACTURER: JSC "Narbutas Furniture Company", Bieliūnų str. 1, LT-1210, Vilnius, Lithuania.
3. PRODUCT: Furniture sound absorbing screen, 36 mm thickness.
4. SAMPLES SELECTED: 22 January 2018. Full information about samples was presented in sampling letter issued by customer.
5. RECEIVING DATE: 23 January 2018. Furniture screen (12 screens of 1600x595x36 mm size) were selected by the client and supply to arrange full specimen with 11,42 m² surface.
6. TEST SPECIMEN MOUNTED: Type "E-200" with airspace above room floor
7. TESTING DATE: From 24 January 2018 to 26 January 2018.
8. TESTING LOCATION: 210 m³ volume reverberation room, Linkmenu 28, Vilnius.
9. TESTS WERE CARRIED OUT IN ACCORDANCE WITH:
LST EN ISO 354:2004 "Measurement of sound absorption in a reverberation room (ISO 354:2003)";
LST EN ISO 11654:1998 "Acoustics - Sound absorbers for use in buildings - Rating of sound absorption (ISO 11654:1997)".

10. TESTS RESULTS:

Summary of Test Results for Furniture sound absorbing screen

Characteristics	Applied Testing Method	Obtained values
Sound absorption coefficients measured in 1/3 octave band from 100 to 5000 Hz, α_s	LST EN ISO 354:2004	In Annex 1 table
Practical sound absorption coefficient calculated in 1/1 octave band from 125 to 4000 Hz, α_p	LST EN ISO 11654:1998	In Annex 2 table
Weighted sound absorption coefficient, α_w	LST EN ISO 11654:1998	0,60 (H)
Class of the sound absorption	LST EN ISO 11654:1998	C

11. OTHER INFORMATION:

10.1. Expanded uncertainty with coverage factor 2 and the confidence level 95 % for a single number rating α_w is $\pm 0,05$;

10.2. Deviations from EN standards: there are no;

11. ANNEX: Complete test results according to LST EN ISO 354:2004 and rating calculated according to LST EN ISO 11645:1998 on 2 pages.

Head of Acoustics Laboratory



Dr. A.Jagniatinskis

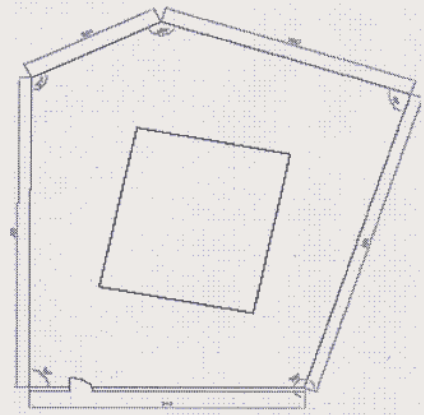
Technically responsible for the tests

Dr. B. Fiks

Sound absorption coefficient according to LST EN ISO 354:2004

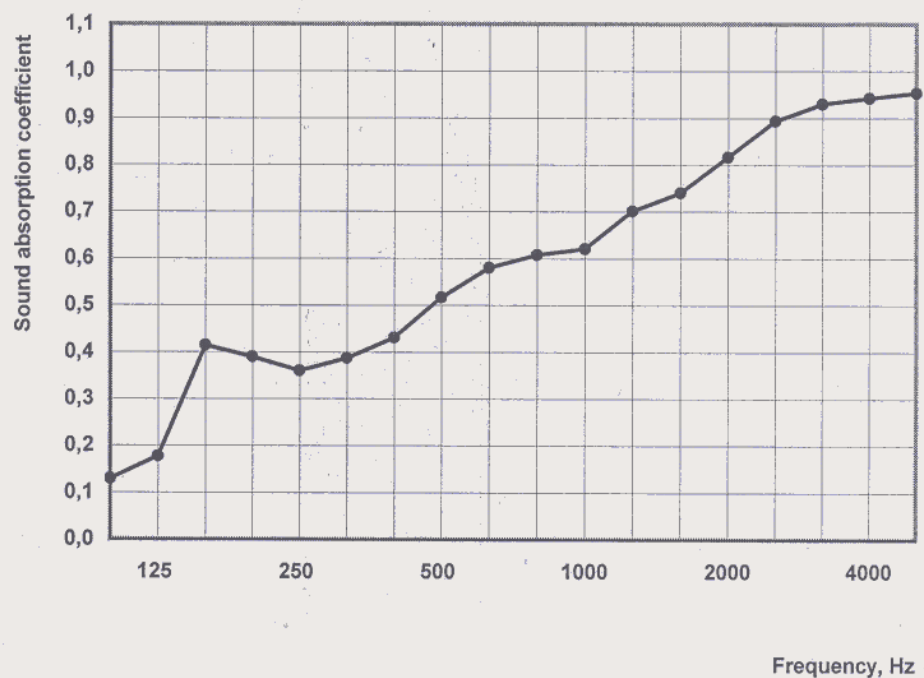
Sound absorption measured in the reverberation room

Manufacturer: UAB "Narbutas Furniture Company"
 Client: UAB "Narbutas Furniture Company"
 Date of test: 2018-01-24
 Sample identification: Furniture screen
 Specimen description: Furniture screen with laminated foam 36 mm thick
 Specimen area: 11,42 m²
 Specimen mounting: "E-200 type"- with 200 mm airspace behind sample
 Test room volume: 210 m³
 Area of room boundaries: 215 m²
 Temperature of test room: Empty 16 °C / with specimen 15,9 °C
 Relative humidity: Empty 73 °C / with specimen 74 °C
 Sound signals: MLS in accordance to p. 7.3;
 Decay evaluation range: 20 dB in accordance to p. 7.4.1;



Measured sound absorption coefficient in 1/3 octave bands

Frequency, Hz	α_s
100	0,13
125	0,18
160	0,41
200	0,39
250	0,36
315	0,39
400	0,43
500	0,52
630	0,58
800	0,61
1000	0,62
1250	0,70
1600	0,74
2000	0,82
2500	0,89
3150	0,93
4000	0,94
5000	0,95



Report file ID:	AL-A-001_18_EN.xls
Report No:	AL-A-001/18 Annex 1
Date:	2018 01 26
Person in charge to perform the test	B. Fiks

Vilnius Gediminas Technical University
 Scientific Institute of Thermal Insulation
 Laboratory of Acoustics

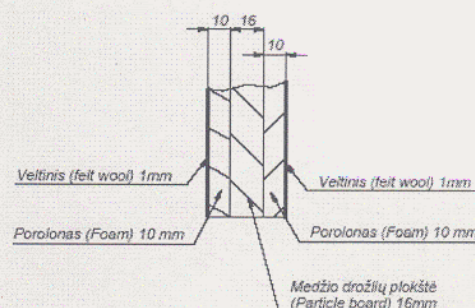
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Sound absorption rating by LST EN ISO 11654:1998

Laboratory measurements of the sound absorption in the reverberation room

Manufacturer:	UAB "Narbutas Furniture Company"	Measurements started:
Client	UAB "Narbutas Furniture Company"	2018-01-24
Sample erected by:	laboratory staff	
Sample identification:	Furniture screen	Specimen description: Furniture sound absorbing screen, 36 mm thickness specification presented on picture
Specimen area:	11,42 m ²	
Test specimen mounted:	type "E-200" with airspace above floor	
Facility:	5-angle 210 m ³ volume reverberation room	
Test room surface area	215 m ²	
Temperature in the test room:	Empty room 16 °C	with the sample 15,9 °C
Relative humidity in the test room:	73 %	74 %
Measurement method:	applying MLS as specified in the 7.3;	
Reverberation time evaluation interval:	20 dB as specified in the 7.4.1;	



Rating of sound absorption, calculated in accordance with LST EN ISO 11654:1998

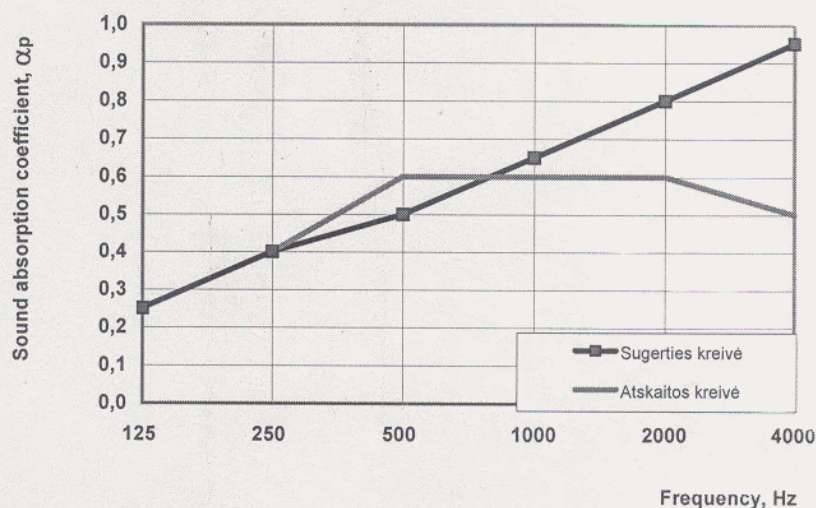
weighted sound absorption coefficient: $\alpha_w = 0,60$ (H)

It is strongly recommended to use this single-number rating in combination with the complete sound absorption coefficient curve that can be obtained on request

Practical sound absorption coefficient in the 1/1 octave bands

table 2

Frequency, Hz	α_p
125	0,25
250	0,40
500	0,50
1000	0,65
2000	0,80
4000	0,95



Sound absorption class: **C**

The results reported in this document relate only to the sample delivered and having been tested under the conditions described.

Report fail ID: AL-A-001_18_EN.xls	Vilniaus Gedimino Technikos Universitetas Scientific institute of Thermal Insulation Acoustics Laboratory Linkmenų 28, LT-08217 Vilnius, Lithuania ph: + 370 (5) 2751145 akustika@vgtu.lt
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Data: 2018 01 26	
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