

Test center of Saint-Petersburg State University of Architecture and Civil Engineering (SPbGASU)
Center for Mechanical Testing of Building Structures (TsMISK)
 190005, Saint Petersburg, 2-ya krasnoarmeyskaya, h. 4, tel./fax (812) 575 05 45
Accreditation certificate No RA RU 21 CT 39
 is put in the register on May 20, 2015

TEST CERTIFICATE

No 49 (4-32-2/19/13) under date of July 15, 2019

1. Test object: Portland cement wood wool board (WWC boards).
2. Test objective: Measurement of physical and mechanical properties of WWC boards.
3. Customer: ООО "Fibrolit".
4. Manufacture: ООО "Fibrolit".
5. Reason for test performance: contract No 4-32-2/19/13 under date of June 05, 2019.
6. Date of test performance: 24.09.-19.07. 2019
7. Number of batch for test and sample date: batch No 30 under date of March 11, 2019.
8. Quantity of selected samples: 9 pieces.
9. Place of sample selection: Vologda region, city of Cherepovets, Proyezzhaya str., h.4.
10. Test environment

Air temperature 20,4-21,8⁰C
 Humidity 59-63%
 Atmospheric pressure 757-769 mm Mercury

11. Test procedure: GOST 31705-2011 Sound-absorbent material used in building. Sound absorption assessment. GOST 25898-2012 building materials and products. Methods of vapor permeability and resistance to vapor permeability measurement. GOST 7076-99 Building materials and products. Method for measurement of thermal conductivity and thermal resistance at steady temperature condition.

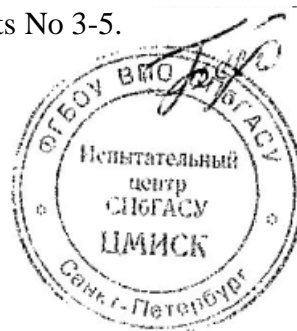
12. Measuring equipment and test facility in use

Items No	Name of measuring equipment, type, brand	Serial No	Information about verification (calibration test)
1	Device for measuring heat flow density and temperature ИТП-МГ4.03/5(I) «100/probe»	No 507	Certificate of Verification No 210-10092 from March 16, 2018 to March 15, 2020
2	Double-sided caliper with depth gauge	No 08012357	Certificate of Verification No 0007721 valid up to January 28, 2020
3	Spectral analyzer Larson Davis 2900	No 1091	Certificate No 210-10813 from June 03, 2018 to July 03, 2019

Results are shown in Appendixes No 1-4 on sheets No 2-5.

Graphical part is shown in Appendixes No 2-4 on sheets No 3-5.

Vice director of Test center SPbGASU
 Director TsMISK SPbGASU



Bezpalchuk S. N.

The results of the carried out tests relate only to the tested samples. Full or partial copying of the test certificate is not allowed without the permission of the test center director.

Test results

Table No1

Item No	Sample No	Parameters description	Product regulatory documentation name	Product regulatory documentation designation	Parameter value			
					Unit of physical quantity	According regulatory documentation	During tests	Average
1	2	3	4	5	6	7	8	9
1	F-69	Actual sound absorption coefficient	GOST 31705-2011	-	-	-	see Appendix 2,3,4	
2	F-70							
3	F-71							
4	F-72	Coefficient of vapor permeability for operational conditions B	GOST 25898-2012	-	mg / (m * h * pa)	-	0.13	0.13
5	F-73						0.10	
6	F-74						0.15	
7	F-75	Coefficient of thermal conductivity in dry condition	GOST 7076-99	-	W/mK	-	0.066	0.070
8	F-76						0.074	
9	F-77						0.071	

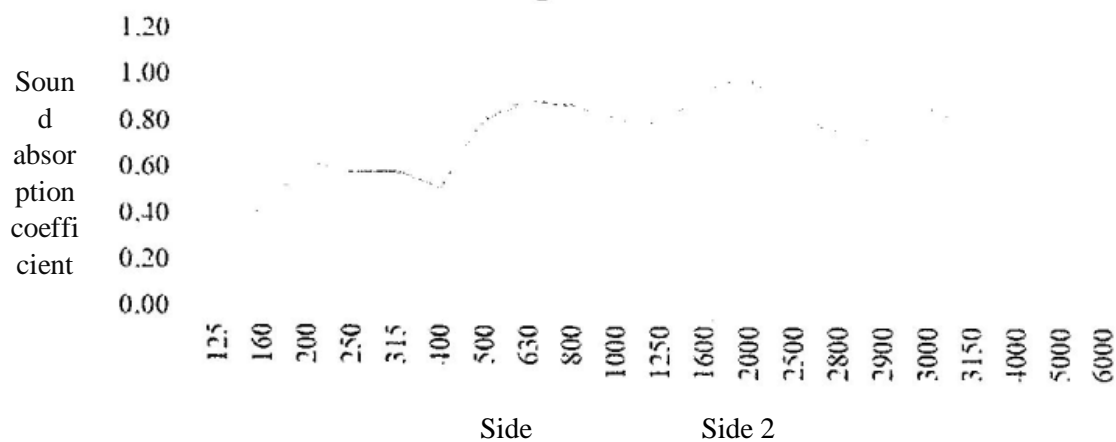
Head of laboratory
TsMISK SPbGASU



Tikhomirov A. V.

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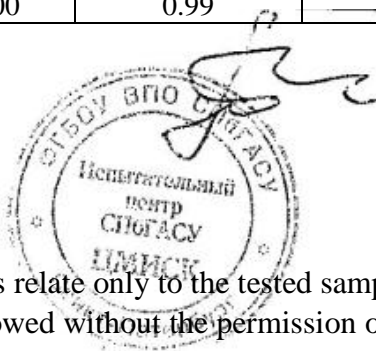
**The graphical part
Sample 1**



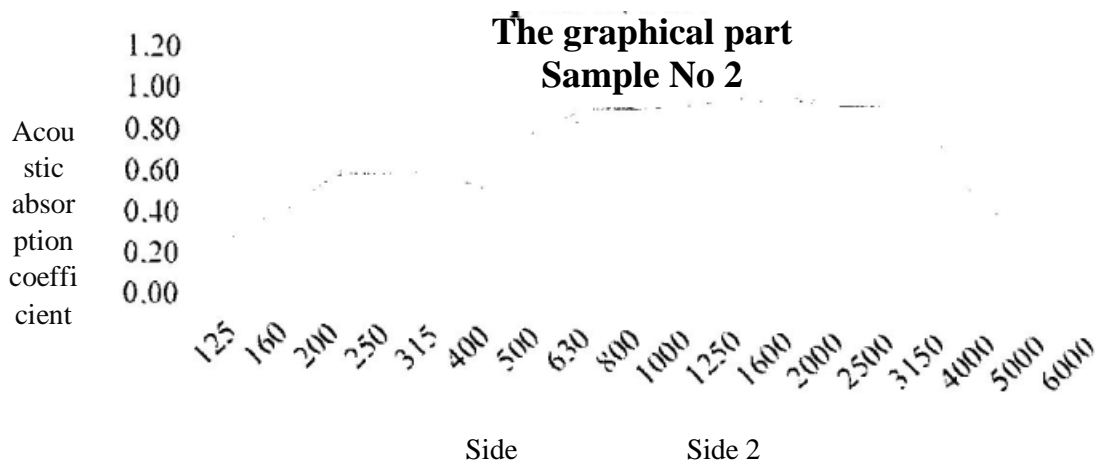
Frequency Hz	Sound absorption coefficient	
	Side 1	Side 2
125	0.28	0.27
160	0.42	0.42
200	0.61	0.60
250	0.59	0.59
315	0.59	0.63
400	0.52	0.53
500	0.81	0.78
630	0.90	0.84
800	0.87	0.81
1000	0.82	0.71
1250	0.79	0.98
1600	0.95	0.91
2000	0.99	0.99
2500	0.84	0.94
2800	0.76	0.94
2900	0.72	0.72
3000	0.88	0.88
3150	0.78	0.94
4000	0.89	0.93
5000	0.99	0.91
6000	0.99	0.64

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Frequency Hz	Sound absorption coefficient	
	Side 1	Side 2
125	0.29	0.25
160	0.42	0.45
200	0.60	0.62
250	0.61	0.63
315	0.63	0.63
400	0.55	0.56
500	0.85	0.80
630	0.94	0.89
800	0.94	0.89
1000	0.97	0.86
1250	1.00	1.00
1600	1.00	0.99
2000	0.97	0.85
2500	0.97	0.94
2800	0.79	0.82
2900	0.43	0.43
3000	0.73	0.73
3150	0.62	0.20
4000	0.29	0.25
5000	0.42	0.45
6000	0.60	0.62

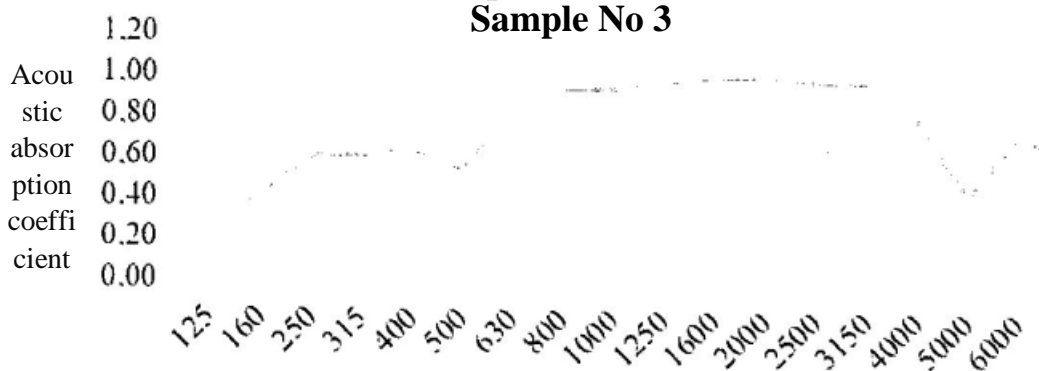
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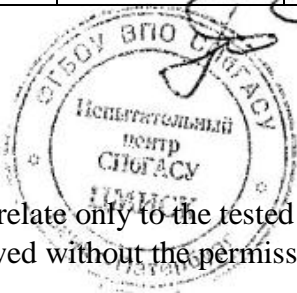
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**The graphical part
Sample No 3**



Frequency Hz	Side	Side 2
	Sound absorption coefficient	
	Side 1	Side 2
125	0.29	0.29
160	0.45	0.43
200	0.63	0.65
250	0.63	0.63
315	0.53	0.53
400	0.73	0.79
500	0.86	0.85
630	0.85	0.84
800	0.80	0.80
1000	0.99	0.99
1250	0.97	0.95
1600	0.99	0.98
2000	0.73	0.61
2500	0.82	0.82
2800	0.61	0.65
2900	0.78	0.29
3000	0.51	0.43
3150	0.29	0.65
4000	0.45	0.63
5000	0.63	-
6000	0.63	-

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TEST CERTIFICATE

No 56 (4-32-2/19/13) under date of August 1, 2019

1. Test object: Portland cement wood wool board (WWC boards).
2. Test objective: Measurement of physical and mechanical properties of WWC boards.
3. Customer: ООО "Fibrolit".
4. Manufacture: ООО "Fibrolit".
5. Reason for test performance: contract No 4-32-2/19/13 under date of June 05, 2019.
6. Date of test performance: June 31, 2019.
7. Number of batch for test and sample date: batch No 30 under date of March 11, 2019.
8. Quantity of selected samples: 3 pieces.
9. Place of sample selection: Vologda region, city of Cherepovets, Proyezzhaya str., h.4.
10. Test environment

Air temperature 22,0⁰C
Humidity 64%
Atmospheric pressure 761 mm Mercury

11. Test procedure: GOST 7076-99 Building materials and products. Method for measurement of thermal conductivity and thermal resistance at steady temperature condition.

12. Measuring equipment and test facility in use

Items No	Name of measuring equipment, type, brand	Serial No	Information about verification (calibration test)
1	Device for measuring heat flow density and temperature ИТП-МГ4.03/5(І) «100/probe»	No 507	Certificate of Verification No 210-10092 from March 16, 2018 to March 15, 2020
2	Double-sided caliper with depth gauge	No 08012357	Certificate of Verification No 0007721 valid up to January 28, 2020
3	Electronic laboratory scales GF-200	No T0332054	Certificate of Verification No 0006270 from January 28, 2019 to January 27, 2020

Results are shown in Appendix No 1 on sheet No 2.

Vice director of Test center SPbGASU
Director TsMISK SPbGASU



Bezpalchuk S. N.

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Test results

Table No1

Item No	Sample No	Parameters description	Product regulatory documentation name	Product regulatory documentation designation	Parameter value			
					Unit of physical quantity	According regulatory documentation	During tests	Average
1	2	3	4	5	6	7	8	9
1	F-78	Coefficient of thermal conductivity in operational conditions B	GOST 7076-99	-	W/mK	-	0.093	0.090
2	F-79						0.086	
3	F-80						0.090	

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