MOSCOW SYSTEM OF VOLUNTARY CERTIFICATION IN CONSTRUCTION

(THE "MOSSTROYSERTIFIKATSIYA" SYSTEM)

Registration number #POCC RU32036.04ЯЛ01 in the unified Register of Registered Voluntary Certification Systems of the Federal Agency on Technical Regulating and Metrology

Certification agency: "Stroyfizika-certification" #RU.MCC.0.197

21, Lokomotivny lane, Moscow, 127238, t. (495) 482-40-72, fax (495) 482-40-60

CERTIFICATE OF CONFORMITY

#RU.MCC.197.379.36246

Valid from January 15, 2021 to January 15, 2024.

Issued to: Fibroplit LLC

Pionerskaya str., building 2, apt.9, Cherepovets, Vologda Region, 162604

This is to certify that NE-450 25W, NE-570 25W, NE-570 20W wood wool cement boards (see Annex)

(serial production)

Russian Classification of Products by Economic Activities Code (OKPD-2) 23.65.11.000

Meet the requirements of: GOST 23499-2009 "Sound-proof and sound-absorbing construction materials and products. General technical specifications"

Grants the right to use the "Mosstroysertifikatsiya" System conformity mark Grounds for issue:

- -- report of certification tests #71/60480 dated December 14, 2020, conducted by the Test Centre "Stroyfizika-Test" (certificate of accreditation #RU.MCC.JI.105);
- -- decision on the issue of the certificate of conformity #103 dated December 23, 2020.

Additional information:

- -- the validity of the certificate of conformity has no territorial restrictions;
- -- the certificate of conformity is invalid without a mark confirming its validity.

Head of the certification body (Signature) I. L. Shubin

Expert (Signature) I. L. Shubin

LS

(Seal) Ministry of Construction, Housing and Utilities of the Russian Federation * Federal State Budgetary Institution "Research Institute of Construction Physics of the Russian Academy of Architecture and Construction Sciences" (NIISF RAASN) Registered in the Register of the "Mosstroysertifikatsiya" System on January 14, 2021.

Confirmation of the validity of the certificate of conformity:

November 15, 2021	September 15, 2022	July 15, 2023
Registration in the MSS Register #	Registration in the MSS Register #	Registration in the MSS Register #
(Signature)	(Signature)	(Signature)
LS	LS	LS

MOSCOW SYSTEM OF VOLUNTARY CERTIFICATION IN CONSTRUCTION

(THE ""MOSSTROYSERTIFIKATSIYA" SYSTEM)

Registration number #POCC RU32036.04ЯЛ01 in the unified Register of Registered Voluntary Certification Systems of the Federal Agency on Technical Regulating and Metrology

ANNEX TO THE CERTIFICATE OF CONFORMITY #RU.MCC. 197.379.36246

List of products, covered by the certificate of conformity

- 1. NE-450 25W wood wool cement board
- 2. NE-570 25W wood wool cement board
- 3. NE-570 20W wood wool cement board

Head of the certification body (Signature) I. L. Shubin Expert (Signature) I. L. Shubin

LS

(Seal) Ministry of Construction, Housing and Utilities of the Russian Federation * Federal State Budgetary Institution "Research Institute of Construction Physics of the Russian Academy of Architecture and Construction Sciences" (NIISF RAASN)

Moscow system of voluntary certification in construction (THE "MOSSTROYSERTIFIKATSIYA" SYSTEM)
Test Laboratory "Stroyfizika-test" affiliated with the Federal State Budgetary Institution "Research Institute of Construction Physics of the Russian Academy of Architecture and Construction Sciences" (NIISF RAASN)

Certificate of the participant of the "Mosstroysertifikatsiya" system

#RU.MCC.Л.105

Valid until December 17, 2022.

APPROVED

Director of the NIISF RAASN

(Signature) Shubin I. L.

(Seal) Ministry of Construction, Housing and Utilities of the Russian Federation * Research Institute of Construction Physics of the Russian Academy of Architecture and Construction Sciences (NIISF RAASN)

CERTIFICATION TEST REPORT # 71/60480

December 14, 2020

Grounds for testing <u>Decision on the application for certification #25 dated September 24, 2020</u>		
(number, date of the decision made on the application for certification,		
certification authority "Stroyfizika-test",		
name of the certification authority; number., date of the contract for conducting certification tests)		

Contract #60480 (2020) dated September 24, 2020

Product Name NE-450 25W, NE-570 25W, NE-570 20W wood wool cement boards (name, abbreviated name of the classifier, code according to the classifier) OKPD-2 23.65.11.000 Product code and classifier name Fibroplit LLC Product (object of certification) manufacturer Information about samples tested NE-450 25W wood wool cement boards with a density of 450 kg/m³ and a thickness of 25 mm. NE-570 25W wood wool cement boards with a density of 570 kg/m³ and a thickness of 25 mm. NE-570 20W wood wool cement boards with a density of 570 kg/m³ and a thickness of 20 mm. The samples were placed on a rigid floor base without a bearing.

(quantity, weight, packaging units, manufacturer's label)

Registration data of the test center (laboratory)	<u>IL/71-1; IL/71-2; IL/71-3</u>	
Test procedure	GOST 31704-2011	
(name of the documents)		
Test date	November 02-11, 2020	
The results of the certification tests are given in the annexes attached		
Annex 1 (2 pages), Annex 2 (2 pages), Annex 3 (2 pages)		
4	1.1 1 0	

(annexes numbers and the number of pages)

Reference sound source type 4224 by "Bruel & Kjaer" (Denmark), Sound/noise level meter 2250 by "Bruel & Kjaer" (Denmark), #2590525. All measuring equipment has valid certificates of verification and calibration issued by Federal State Unitary Enterprise All-Russian Scientific Research Institute for Physical-Engineering and Radiotechnical Metrology and Federal Budgetary Institution ROSTEST-MOSCOW.

CONCLUSION: NE-450 25W, NE-570 25W, NE-570 20W wood wool cement boards

meet the requirements of: GOST 23499-2009 "Sound-proof and sound-absorbing construction materials and products. General technical specifications", belong to the D-class of sound absorption -- ordinary sound absorption. (specify whether the products meet or do not meet the requirements of the regulatory document for compliance with which the certification tests were conducted)

Head of the Testing Laboratory (Signature) I. V. Bessonov (Signature) (initials, surname)

Annex #1 to Protocol #71/60480 of December 14, 2020

Frequency characteristics of the reverberation coefficient of sound absorption α_s (f) in the samples of the NE-450 25W wood wool cement board

Test conditions:

Sample area -12 m^2

Reverberation chamber volume – 188 m³

Chamber surface area – 203 m²

Camera shape: trapezoidal with non-parallel walls

Air temperature 24 °C Relative humidity 40%

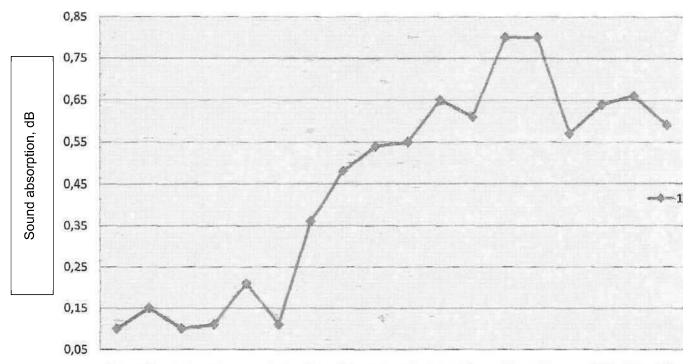
Reverberation time at 1000 Hz - 4.1 s Signal – "white noise" of 1/3 octave bands

Table 1

	1 4010 1
Average geometric frequencies of 1/3 octave bands, Hz	Sound absorption coefficients (f)
100	0.10
125	0.15
160	0.10
200	0.11
250	0.21
320	0.11
400	0.36
500	0.48
630	0.54
800	0.55
1000	0.65
1250	0.61
1600	0.80
2000	0.80
2500	0.57
3200	0.64
4000	0.66
5000	0.59

Person in charge (Signature)

Tikhomirov L. A.



100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150 4000 5000 Figure 1. Frequency characteristics of the reverberation coefficient of sound absorption $\alpha_s(f)$ in the samples of the NE-450 25W wood wool cement board.

Table 2
Reverberation coefficients of sound absorption of panels in frequencies octave bands

Average geometric frequencies of 1/3 octave bands, Hz	Acoustic absorption coefficient
125	0.12
250	0.14
500	0.46
1000	0.60
2000	0.72
4000	0.63

Acoustic absorption coefficient $\alpha_w = 0.46$ (MN) Person in charge (Signature) Shchurova N. E.

Frequency characteristics of the reverberation coefficient of sound absorption α_s (f) in the samples of the NE-570 25W wood wool cement board

Test conditions:

Sample area $-12m^2$

Reverberation chamber volume – 188 m³

Chamber surface area – 203 m²

Camera shape: trapezoidal with non-parallel walls

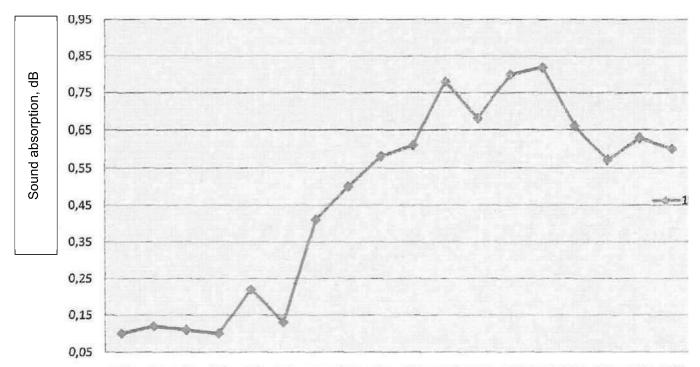
Air temperature 24 °C Relative humidity 40%

Reverberation time at 1000 Hz - 4.1 sSignal – "white noise" of 1/3 octave bands

Table 1

	Tuoie
Average geometric frequencies of 1/3 octave bands, Hz	Sound absorption coefficients (f)
100	0.10
125	0.12
160	0.11
200	0.10
250	0.22
320	0.13
400	0.41
500	0.50
630	0.58
800	0.61
1000	0.78
1250	0.68
1600	0.80
2000	0.82
2500	0.66
3200	0.57
4000	0.63
5000	0.60

Person in charge (Signature) Tikhomirov L. A.



100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150 4000 5000 Figure 1. Frequency characteristics of the reverberation coefficient of sound absorption α_s (f) in the samples of the NE-570 25W wood wool cement board.

Table 2 Reverberation coefficients of sound absorption of panels in frequencies octave bands

Average geometric frequencies of 1/3 octave bands, Hz	Acoustic absorption coefficient
125	0.11
250	0.15
500	0.50
1000	0.69
2000	0.76
4000	0.60

Acoustic absorption coefficient $\alpha_w = 0.50$ (MN) Person in charge (Signature) Shchurova N. E.

Frequency characteristics of the reverberation coefficient of sound absorption α_s (f) in the samples of the NE-570 20W wood wool cement board

Test conditions:

Sample area -12 m^2

Reverberation chamber volume – 188 m³

Chamber surface area -203 m^2

Camera shape: trapezoidal with non-parallel walls

Air temperature 24 °C Relative humidity 40%

Reverberation time at 1000 Hz – 4.1 s Signal – "white noise" of 1/3 octave bands

Table 1

	Table 1
Average geometric frequencies of 1/3 octave bands, Hz	Sound absorption coefficients (f)
100	0.10
125	0.14
160	0.10
200	0.10
250	0.18
320	0.12
400	0.38
500	0.50
630	0.57
800	0.55
1000	0.70
1250	0.47
1600	0.80
2000	0.82
2500	0.59
3200	0.55
4000	0.55
5000	0.59

Person in charge (Signature)

Tikhomirov L. A.

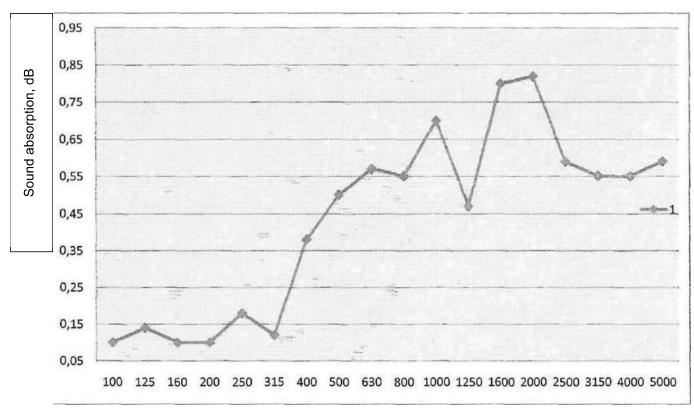


Figure 1. Frequency characteristics of the reverberation coefficient of sound absorption $\alpha_s(f)$ in the samples of the NE-570 20W wood wool cement board.

Table 2
Reverberation coefficients of sound absorption of panels in frequencies octave bands

Average geometric frequencies of 1/3 octave bands, Hz	Acoustic absorption coefficient
125	0.11
250	0.13
500	0.48
1000	0.57
2000	0.74
4000	0.56

Acoustic absorption coefficient $\alpha_w = 0.48$ (MN) Person in charge (Signature) Shchurova N. E.