POLISH CENTRE FOR TESTING AND CERTIFICATION
02-699 Warszawa, Kłobucka 23 A
Test and Certification Office in Gdańsk
Construction Products Laboratory
Jakuba Wejhera 18 a, 80-346 Gdańsk
tel. 663 130 721
e-mail: gdansk@pcbc.gov.pl

AB 011

NOTIFIED BODY No. 1434

ASSESSMENT OF THE PERFORMANCE REPORT No. 496/T/2019

the 1 edition of 21 February 2020

1. **Items tested:** samples of EPS thermal insulation in accordance with EN 13163:2012+A1:2015 Thermal insulation products for buildings – Factory made expanded polystyrene (EPS) products – Specification
   Assorment (type): Insulation panels
2. **Customer name and address**: Sia „G SYSTEMS" Raunas iela 44 k-1, Riga, LV-1039, Latvia
3. **Manufacturer name and address:** Individual Entrepreneur Pobedinskas Anatolii Bronislavovych, ZIP 49000, city Dnipro, Heroiv Boulevard 45/306
4. **Customer order:** of 4 November 2019
5. **Tested properties scope:** determination of thermal resistance and thermal conductivity at 10°C, compressive stress at 10% strain, thickness and reaction to fire
6. **Sampling date:** samples taken by Customer
7. **Applied sampling method:** samples taken by Customer
8. **Items tested receipt date:** 11 October 2019
9. **Deviations from the test methods:** not applied
10. **Test completion date:** 31 January 2020

1. The results relate only to items tested.
2. This test report shall not be reproduced except in full without written approval of the laboratory.
3. Any complaints about realization of the tests may be submitted within one month from the date of receipt of this report.

11. Test results:

11.1 Determination of thermal resistance and thermal conductivity at 10°C – test method in accordance with EN 12667:2000 *Thermal performance of building materials and products – Determination of thermal resistance by means of guarded hot plate and heat flow meter methods – products of high and medium thermal resistance*

- tests performed on samples according to EN 12939:2000 *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Thick products of high and medium thermal resistance*
- samples conditioned to constant mass according to EN 13163:2012+A1:2015 p. 5.2
- samples density determined in accordance with EN 12667:2001 p. 8.1.1
- date of testing: 16 December 2019 – 09 January 2020

sample number	thickness [mm]	thermal conductivity [W/mK]	thermal resistance [m^2K/W]
1	77,159	0,0351	2,20
2	56,397	0,0361	1,65
3	57,766	0,0361	1,60
4	97,378	0,0366	2,66
5	77,087	0,0356	2,16
6	57,751	0,0358	1,61
7	57,514	0,0363	1,58
8	96,392	0,0365	2,64
9	77,616	0,0354	2,19
10	97,364	0,0363	2,68
mean values		0,0360	2,09
standard deviation		0,0005	0,47
expanded uncertainty		0,0011	0,06
$\lambda_{90/90}$		0,0370	-
$R_{90/90}$ ($R_{90/90} = d_N / \lambda_{90/90}$)		-	1,62*
k		2,07	-
declared values		**0,037**	**1,60***

Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k= 1,96, which for a normal distribution provides a level of confidence of approximately 95 %.

Detailed test results are given in appendixes to the test report.
*Resistance for a nominal thickness of 60 mm.

11.2 Determination of compressive stress at 10% deformation – test method in accordance with EN 826:2013 *Thermal insulating products for building applications – Determination of compression behaviour*

- conditioning of test specimens: 6 h at (23±5)°C
- test conditions: 22,2 °C
- surface treatment: grinding
- date of testing: 17 January 2020

production date (nominal thickness)	sample number	compressive stress at 10 % strain [kPa]	mean value [kPa]	standard deviation [kPa]	expanded uncertainty [kPa]
18.10.2019 (thickness 60 mm)	1 2 3	117,1 109,2 117,0	114,4	4,6	12,0
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.					
22.10.2019 (thickness 60 mm)	1 2 3	117,9 119,0 111,7	116,2	3,9	11,0
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.					
14.10.2019 (thickness 80 mm)	1 2 3	115,7 120,4 121,5	119,2	3,1	6,4
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=3,20, which for a normal distribution provides a level of confidence of approximately 95 %.					
21.10.2019 (thickness 100 mm)	1 2 3	119,5 123,0 120,5	121,0	1,8	3,5
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=2,58, which for a normal distribution provides a level of confidence of approximately 95 %.					

Detailed test results are given in appendixes to the test report.

11.3 Determination of thickness – test method in accordance with EN 823:2013 *Thermal insulating products for building applications – Determination of length and width*

- conditioning of test specimens: 6 h at (23±2)°C
- test conditions: 22,3°C
- pressure plate: (250±5)Pa

production date	test results [mm]				mean value [mm]	expanded uncertainty [mm]
22.10.2019	59,23	59,53	59,64	59,37	59	1
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=1,97, which for a normal distribution provides a level of confidence of approximately 95 %.						
18.10.2019	58,77	59,21	59,66	58,42	59	1
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=2,14, which for a normal distribution provides a level of confidence of approximately 95 %.						
14.10.2019	80,05	80,27	79,66	79,13	80	1
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=2,12, which for a normal distribution provides a level of confidence of approximately 95 %.						
21.10.2019	99,61	99,70	99,56	99,20	100	1
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=1,97, which for a normal distribution provides a level of confidence of approximately 95 %.						

11.4 Determination of long term water absorption by immersion method - test procedure according to PN-EN 12087: 2013-07 Thermal insulation products for building applications - Determination of long term water absorption by immersion method 2A

- samples conditioned according to PN-EN 12087:2013-07 p.6.4
- date of testing: 03 – 31 January 2020

production date	sample number	nominal size of the sample [mm]	absorption [%(V/V)]	mean value [%(V/V)]	standard deviation [%(V/V)]	expanded uncertainty [%(V/V)]
14.10.2019	1	200x200x80	3,72	3,68	0,15	0,65
	2		3,51			
	3		3,80			
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.						
18.10.2019	1	200x200x60	3,24	3,33	0,08	0,34
	2		3,35			
	3		3,39			
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.						
21.10.2019	1	200x200x100	3,90	3,89	0,03	0,12
	2		3,91			
	3		3,86			
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.						
22.10.2019	1	200x200x60	3,92	3,90	0,03	0,15
	2		3,86			
	3		3,92			
Given expanded uncertainty comes from a standard uncertainty multiplied by a coverage factor k=4,30, which for a normal distribution provides a level of confidence of approximately 95 %.						

11.5 Determination of reaction to fire – test method in accordance with EN ISO 11925-2:2010/AC:2011and EN ISO 11925-2:2010/AC:2011 *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test*

- sample size: 250x90x60 mm
- samples conditioned to constant mass according to EN ISO 11925-2:2010/AC:2011 p. 6
- test conditions: 22,0 °C, 49 % relative humidity
- exposure conditions: surface and edge exposure; face and back side
- flame application time: 15 s
- date of testing: 20 January 2020

parameter	surface exposure; face side					
	lengthwise			crosswise		
	1	2	3	1	2	3
occurence of ignition, +/-	-	+	+	+	+	+
whether flame reaches 150 mm, +/-	-	-	-	-	-	-
time to reach 150 mm	-	-	-	-	-	-
presence of flaming droplets/particles, +/-	+	-	+	+	+	+
ignition of the filter paper, +/-	-	-	-	-	-	-

parameter	surface exposure; back side					
	lengthwise			crosswise		
	1	2	3	1	2	3
occurence of ignition, +/-	+	+	-	+	+	+
whether flame reaches 150 mm, +/-	-	-	-	-	-	-
time to reach 150 mm	-	-	-	-	-	-
presence of flaming droplets/particles, +/-	+	+	-	+	+	+
ignition of the filter paper, +/-	-	-	-	-	-	-

parameter	edge exposure; face side					
	lengthwise			crosswise		
	1	2	3	1	2	3
occurence of ignition, +/-	+	+	+	+	+	+
whether flame reaches 150 mm, +/-	-	-	-	-	-	-
time to reach 150 mm	-	-	-	-	-	-
presence of flaming droplets/particles, +/-	-	-	-	-	+	-
ignition of the filter paper, +/-	-	-	-	-	-	-

parameter	edge exposure; back side					
	lengthwise			crosswise		
	1	2	3	1	2	3
occurence of ignition, +/-	+	+	+	+	+	+
whether flame reaches 150 mm, +/-	-	-	-	-	-	-
time to reach 150 mm	-	-	-	-	-	-
presence of flaming droplets/particles, +/-	-	-	-	-	-	-
ignition of the filter paper, +/-	-	-	-	-	-	-

12. Notes

The estimated uncertainty of result refers only to the sample and may not cover any of the batch from which the sample could be taken.

The test results relate to the behaviour of the test specimens of a product under the paricular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Prepared by:

Specjalist for Testing Construction Products

Patrycja Woźniak

Authorized by:

Laboratory Manager

Szymon Gładysz

================ Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_1A.rst
Date/Time: 1/9/20 09:04 AM
Operator: PW
Run ID: 496T2019_1A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_1A
Mat.Desc.: EPS
Thickness: 4.0406 cm
Density: 20.33 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	01:00:43	9.89	18.03	0.035476	1.138908	446.33

Woźniak

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_1B.rst
Date/Time: 12/31/19 09:49 AM
Operator: PW
Run ID: 496T2019_1B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_1B
Mat.Desc.: EPS
Thickness: 3.6753 cm
Density: 21.04 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:42:46	10.24	18.00	0.034640	1.060999	489.86

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_2.rst
Date/Time: 12/31/19 10:42 AM
Operator: PW
Run ID: 496T2019_2
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_2
Mat.Desc.: EPS
Thickness: 5.6397 cm
Density: 20.27 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:49:02	10.17	17.98	0.036128	1.561015	318.85

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_3.rst
Date/Time: 1/8/20 04:42 PM
Operator: PW
Run ID: 496T2019_3
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_3
Mat.Desc.: EPS
Thickness: 5.7766 cm
Density: 20.32 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	01:04:27	9.79	18.04	0.036096	1.600269	312.29

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_4A.rst
Date/Time: 12/31/19 12:38 PM
Operator: PW
Run ID: 496T2019_4A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_4A
Mat.Desc.: EPS
Thickness: 5.0295 cm
Density: 18.49 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:38:24	10.26	18.00	0.036750	1.368569	357.89

Ubiniek

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_4B.rst
Date/Time: 1/2/20 08:33 AM
Operator: PW
Run ID: 496T2019_4B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_4B
Mat.Desc.: EPS
Thickness: 4.7083 cm
Density: 19.03 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:43:31	10.29	18.01	0.036484	1.290488	382.47

Ubzinski

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_5A.rst
Date/Time: 1/8/20 02:34 PM
Operator: PW
Run ID: 496T2019_5A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_5A
Mat.Desc.: EPS
Thickness: 4.0377 cm
Density: 19.71 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:56:16	9.98	18.02	0.035982	1.122329	446.30

Woźniak

================ Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_5B.rst
Date/Time: 1/2/20 09:18 AM
Operator: PW
Run ID: 496T2019_5B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_5B
Mat.Desc.: EPS
Thickness: 3.6710 cm
Density: 20.58 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:36:58	10.25	18.01	0.035228	1.042051	490.50

Wiśniak

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_6.rst
Date/Time: 1/9/20 11:26 AM
Operator: PW
Run ID: 496T2019_6
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_6
Mat.Desc.: EPS
Thickness: 5.7751 cm
Density: 19.75 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:56:14	9.97	18.04	0.035776	1.614193	312.36

Woźniak

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_7.rst
Date/Time: 1/2/20 10:46 AM
Operator: PW
Run ID: 496T2019_7
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_7
Mat.Desc.: EPS
Thickness: 5.7514 cm
Density: 19.70 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:53:11	10.07	18.00	0.036317	1.583682	312.97

Wozniak

================ Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_8A.rst
Date/Time: 1/2/20 12:34 PM
Operator: PW
Run ID: 496T2019_8A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_8A
Mat.Desc.: EPS
Thickness: 4.9720 cm
Density: 18.49 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:48:40	10.15	18.01	0.036791	1.351411	362.17

Woźniak

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_8B.rst
Date/Time: 1/9/20 12:54 PM
Operator: PW
Run ID: 496T2019_8B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_8B
Mat.Desc.: EPS
Thickness: 4.6672 cm
Density: 19.20 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:54:15	9.95	18.04	0.036282	1.286364	386.45

Woźniak

========== Q LAB BY NETZSCH ==========

File Name: C:\ngbwin\ta\qlab\496T2019_9A.rst
Date/Time: 1/2/20 01:46 PM
Operator: PW
Run ID: 496T2019_9A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_9A
Mat.Desc.: EPS
Thickness: 4.0357 cm
Density: 19.37 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:40:41	10.26	18.00	0.035823	1.126532	446.08

Woźniak

================ Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_9B.rst
Date/Time: 1/9/20 02:43 PM
Operator: PW
Run ID: 496T2019_9B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_9B
Mat.Desc.: EPS
Thickness: 3.7259 cm
Density: 20.16 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:54:50	10.03	18.04	0.034906	1.067279	484.29

Woźniak

================ Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_10A.rst
Date/Time: 1/9/20 03:51 PM
Operator: PW
Run ID: 496T2019_10A
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_10A
Mat.Desc.: EPS
Thickness: 5.0579 cm
Density: 18.57 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:57:27	10.09	18.02	0.036507	1.385405	356.27

Woźniak

================= Q LAB BY NETZSCH ================

File Name: C:\ngbwin\ta\qlab\496T2019_10B.rst
Date/Time: 1/2/20 03:59 PM
Operator: PW
Run ID: 496T2019_10B
Run Type: Test
Instrument: 417A0111
Sample ID: 496T2019_10B
Mat.Desc.: EPS
Thickness: 4.6785 cm
Density: 19.66 kg/m^3

CALIBRATION TABLE

MeanT deg.C	N
10.13	0.00749

TEST RESULTS

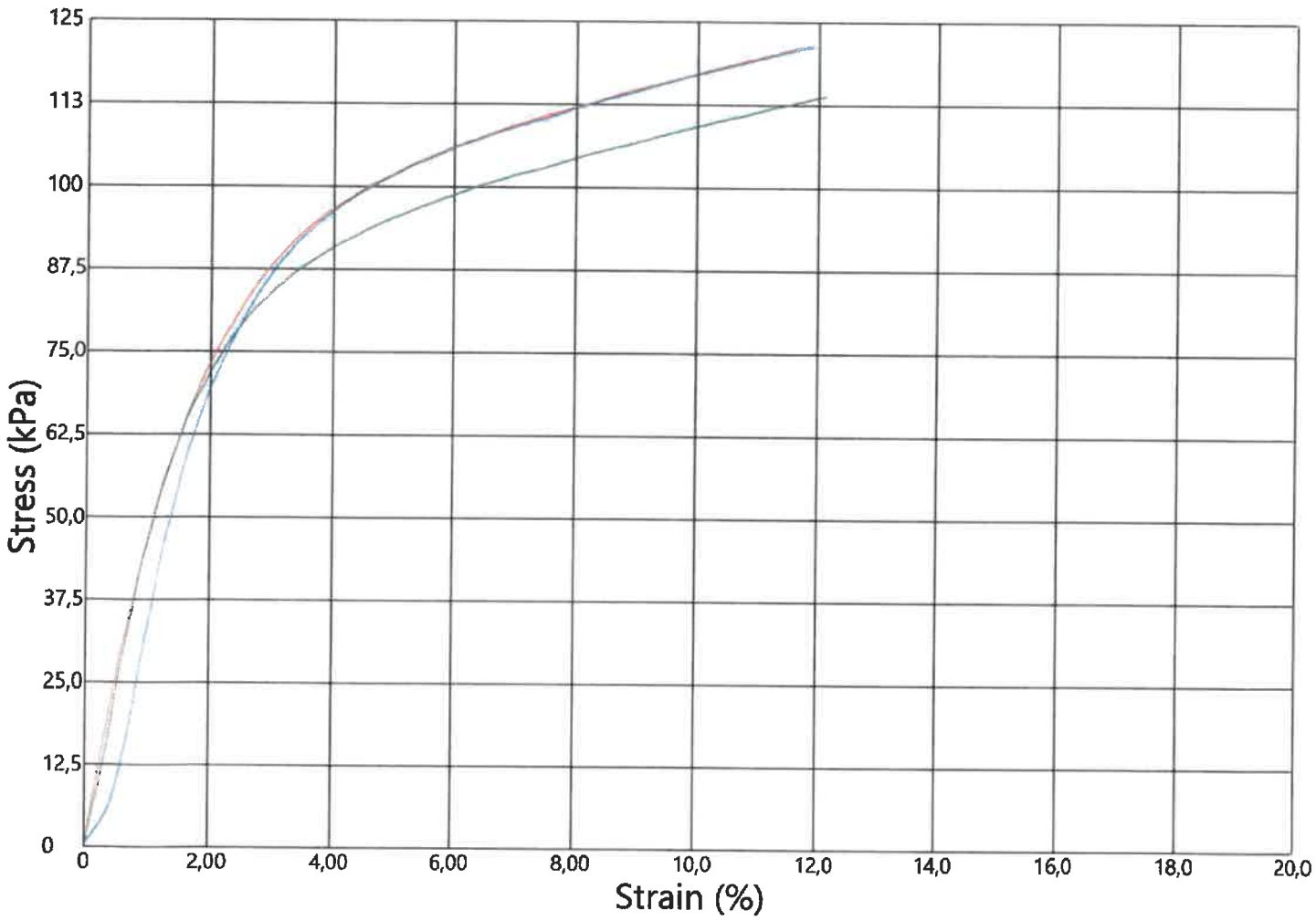
SP	Test Time	MeanT deg.C	DeltaT deg.C	Thermal Conductivity W/m-K	Thermal Resistance m^2*K/W	Temp. Gradient K/m
1	00:56:29	10.10	18.01	0.036146	1.294298	385.01

Wzimek

PN-EN 826
Wyroby do izolacji cieplenj w budownictwie
Określenie zachowania przy ściskaniu

Kod próbki:	496/T/2019	Temperatura:	22.2
Data produkcji:	18-10-2019	Wilgotność:	39
Data badania:	17-01-2020	Naprężenie wstępne:	250 Pa
Operator:	Patrycja Woźniak		

	Długość mm	Szerokość mm	Grubość mm	Powierzchnia mm²	Siła przy 10 % odkształceniu N	Naprężenia ściskające przy 10 % odkształceniu kPa
	60,0	60,0	58,0	3600	421,7	117,1
	60,0	60,0	57,0	3600	393,0	109,2
	60,0	60,0	58,0	3600	421,3	117,0
Average						114,4
SD						4,571

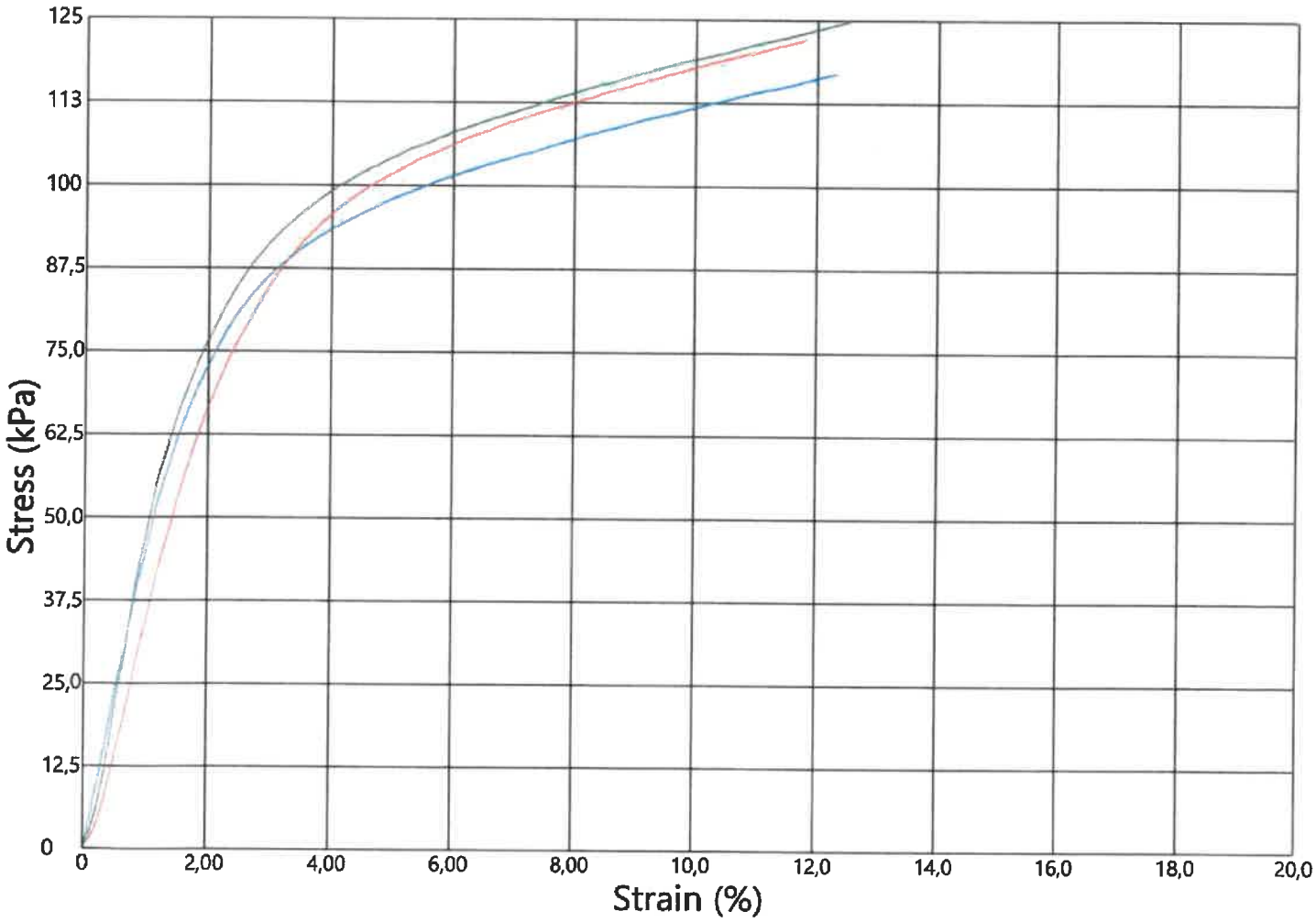


Woźniak

PN-EN 826
Wyroby do izolacji cieplenj w budownictwie
Określenie zachowania przy ściskaniu

Kod próbki:	496/T/2019 (60)	Temperatura:	22.2
Data produkcji:	22-10-2019	Wilgotność:	39
Data badania:	17-01-2020	Naprężenie wstępne:	250 Pa
Operator:	Patrycja Woźniak		

	Długość mm	Szerokość mm	Grubość mm	Powierzchnia mm²	Siła przy 10 % odkształceniu N	Naprężenia ściskające przy 10 % odkształceniu kPa
	60,0	60,0	58,0	3600	424,3	117,9
	60,0	60,0	58,0	3600	428,3	119,0
	60,0	60,0	57,5	3600	402,0	111,7
Average						116,2
SD						3,942

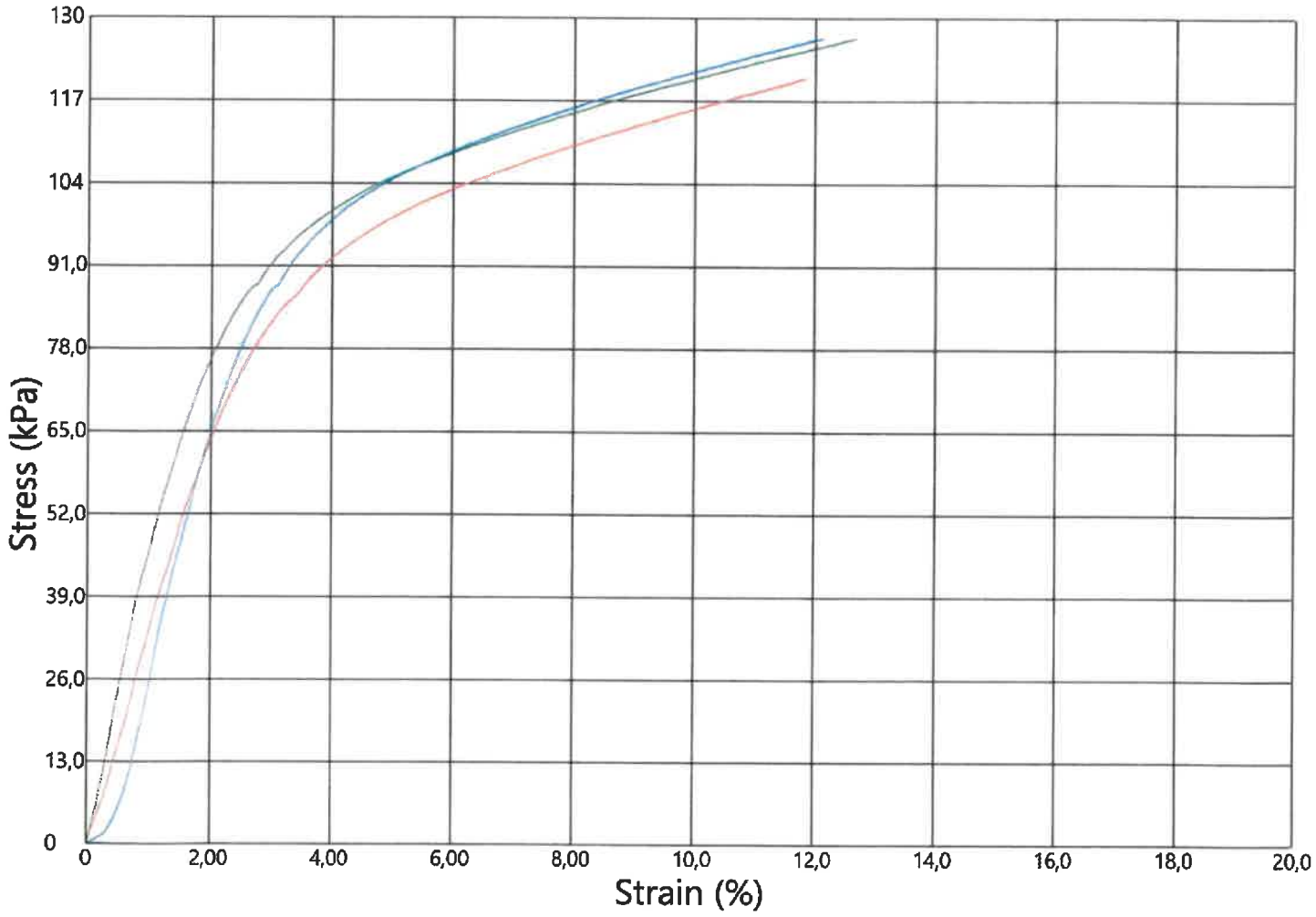


Woźniak

PN-EN 826
Wyroby do izolacji cieplenj w budownictwie
Określenie zachowania przy ściskaniu

Kod próbki:	496/T/2019 (80)	Temperatura:	22.2
Data produkcji:	14-10-2019	Wilgotność:	39
Data badania:	17-01-2020	Naprężenie wstępne:	250 Pa
Operator:	Patrycja Woźniak		

	Długość mm	Szerokość mm	Grubość mm	Powierzchnia mm²	Siła przy 10 % odkształceniu N	Naprężenia ściskające przy 10 % odkształceniu kPa
	80,0	81,0	79,0	6480	750,0	115,7
	80,0	80,0	78,0	6400	770,5	120,4
	80,0	81,0	78,0	6480	787,3	121,5
Average						119,2
SD						3,057

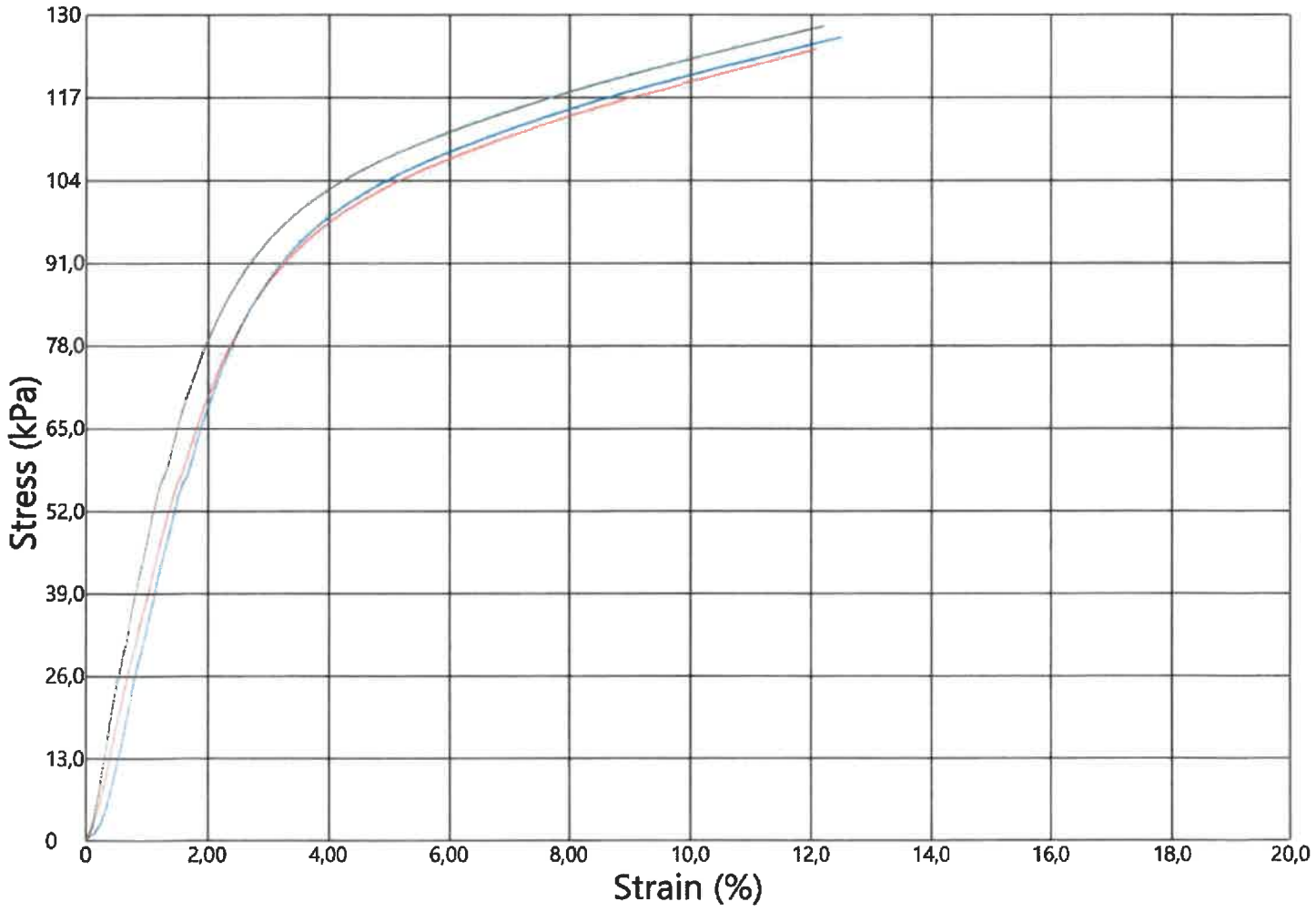


Woźniak

PN-EN 826
Wyroby do izolacji cieplenj w budownictwie
Określenie zachowania przy ściskaniu

Kod próbki:	496/T/2019 (100)	Temperatura:	22.2
Data produkcji:	21-10-2019	Wilgotność:	39
Data badania:	17-01-2020	Naprężenie wstępne:	250 Pa
Operator:	Patrycja Woźniak		

	Długość mm	Szerokość mm	Grubość mm	Powierzchnia mm²	Siła przy 10 % odkształceniu N	Naprężenia ściskające przy 10 % odkształceniu kPa
	99,0	100	98,0	9900	1183	119,5
	99,0	101	98,0	10000	1230	123,0
	100	100	97,0	10000	1205	120,5
Average						121,0
SD						1,816



Wiśniak