

TEST REPORT No. **074 SF/18**

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Date: 26 of April 2018

1 (2)

**Determination of installed thermal resistance into a wall of TRISOBARDAGE
according to EN ISO 6946:2017**

(test name)

Test method: Determination of installed thermal resistance into a wall of TRISOBARDAGE according to EN ISO 6946:2007

(number of normative document or test method, description of test procedure, test uncertainty)

Product name: TRISOBARDAGE

(identification of the specimen)

Customer: SA Orion financement – Avenue de la Gare – FR-11230 CHALABRE, France

(name and address of enterprise)

Manufacturer: ACTIS SA Avenue de Catalogne, 11300 Limoux, France

(name and address of enterprise)

Calculation results:

Roof slope angle, α	Calculation method reference no.	Air cavity		Calculation result, R , ($m^2 \cdot K$)/W
		Inner	Outer	
Wall ($\alpha = 90^\circ$)	EN ISO 6946:2017	unventilated	unventilated	3,85
			slightly-ventilated	3,83

Calculation made by: Laboratory of Building Physics, Institute of Architecture and Construction of Kaunas University of Technology

(Name of the organization)

Products used**in calculation:** TRISOBARDAGE (according to the test report No. 141-1-1 SF/17 U)

Application, 2016-02-23

Additions information:

The emissivity of surfaces:

- ε_1 (metalized and perforated side -inside) = 0,08;- ε_2 (black side- outside) = 0,9 .**Annex:**

I. Calculations results

(the numbers of the annexes should be pointed out)

Head of Laboratory:

(approves the test results)

K. Banionis

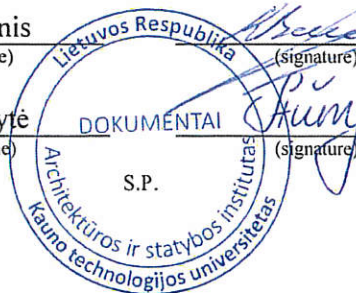
(n., surname)

Tested by

(calculation made by)

A. Levinskytė

(n., surname)



Validity – the named data and results refer exclusively to the tested and described specimens.
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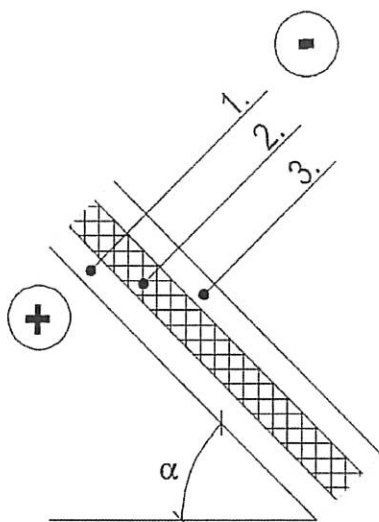
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Annex 1: Calculations results

Table 1: Products R-value according to LST EN 16012:2012+A1:2015

Product	"R-core thermal resistance, (m ² ·K)/W
TRISOBARDAGE (test report No. 141-1 SF/17 U)	3,08

Figure 1. Wall construction design



1.	Unventilated Air cavity #1
2.	TRISOBARDAGE, 95 mm
3.	Unventilated or slightly-ventilated Air cavity #2

Table 2: Wall construction calculation results for slope $\alpha = 90^\circ$ (EN ISO 6946)

TRISOBARDAGE installed on wall			
Angle: $\alpha = 90^\circ$	Layer	R value	Unit
Horizontal Heat Flux (Winter period)	Unventilated Air cavity # 1	0,5881	m ² ·K/W
	TRISOBARDAGE	3,08	m ² ·K/W
	Unventilated Air cavity # 2	0,1830	m ² ·K/W
	R_{Total}	3,8511	m²·K/W

TRISOBARDAGE installed on wall			
Angle: $\alpha = 90^\circ$	Layer	R value	Unit
Horizontal Heat Flux (Winter period)	Unventilated Air cavity # 1	0,5881	m ² ·K/W
	TRISOBARDAGE	3,08	m ² ·K/W
	Slightly-ventilated Air cavity # 2	0,1616	m ² ·K/W
	R_{Total}	3,8297	m²·K/W

Requirements for calculation validity:

- Calculations of R values are valid when TRISOBARDAGE is installed from the internal side of the wall or the external part of the wall.
- Calculations of R values are valid when TRISOBARDAGE is installed in agreement with the installation guidelines described into the manufacturer brochure.
- Calculations of R values are valid when unventilated air cavities are at least 20 mm thick.

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