

Determination of water vapor transmission

(designation of the test)

Test performed in accordance with: LST EN 12086:2000 Thermal insulating products for building applications. Determination of water vapour transmission properties.

(number of normative document or description of a test method, test procedures, test error)

Products: Pressed straw in a wooden frame with a density of 100kg/m^3 , humidity of 12%. The wooden frame is impregnated. Frame dimensions: width 370 mm, length 320 mm, thickness 145 mm. Straw block dimensions: width 230 mm, length 280 mm, thickness 145 mm.

(name, mark of the normative document or description, means of identification)

Client: "ECOCOCON" Ltd, Dievogalos Village, Dievogalos str. 69, Kaunas Dist.

(name and address)

Producer: "ECOCOCON" Ltd, Dievogalos Village, Dievogalos str. 69, Kaunas Dist.

(name and address)

Test results:

Specimen mark	Individual values of μ	The average value of water vapour resistance factor μ
1	1.5	1.4
2	1.4	
3	1.4	

Conditions of the test: C 23-50/93: $\Delta p=1210\text{Pa}$

Test equipment: Dish (370 x 320, mm), analytical scales (accuracy ± 1 mg), test chamber, in which the required relative humidity with the accuracy of $\pm 3\%$ and the temperature with the accuracy of $\pm 1^\circ\text{C}$ can be maintained.

Place of the test: Laboratory of Building Thermal Physics, IAC KUT

(name of the test laboratory)

Specimens delivered: 14-12-2012 Date of testing: 14-12-2012 – 08-02-2013

Specimens selected: by the client. Sampling report No. 108/12, 14-12-2012

Annexes: 1 – Preparation of Specimens. 2 – Schematical View of the Test Rig.
(any deviations, additional tests, exceptions and any information related to the test)

Technical Manager:
(technically responsible for the test)

(signature)

J.Ramanauskas
(name, surname)

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TEST REPORT No. 108 SŠF/12
08 February 2013

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Test performed by: _____

(technically responsible for the test)

(signature)

J.Šadauskienė

(name, surname)

L.S.

Annex 1

Preparation of Specimens

Specimens – straw blocks pressed in a wooden impregnated frame (width 320 mm, length 370 mm, thickness 145 mm). Straw block dimensions: width 230 mm, length 280 mm, thickness 145 mm. The area of straw measured is 660 cm². Three specimens were tested.

Water-vapour-tight container with the following dimensions: width 320 mm, length 370 mm, height 180 mm, filled with KNO₃ (94%) salt solution. Thickness of layer poured – 20 mm.

Pressed straw block with the wooden frame is placed on the test dish; point of contact is sealed. Air gap between the surface of salt solution and the specimen – about 160 mm.

The test device is placed in a test chamber, in which the following ambient conditions are maintained: temperature (23 ± 0,5)°C, relative air humidity (50 ± 3)%.

Test

Water vapour transmission across the straw is measured without taking into account the wooden frame. During the test, water vapour flow was moving along the straw stem.

Annex 2

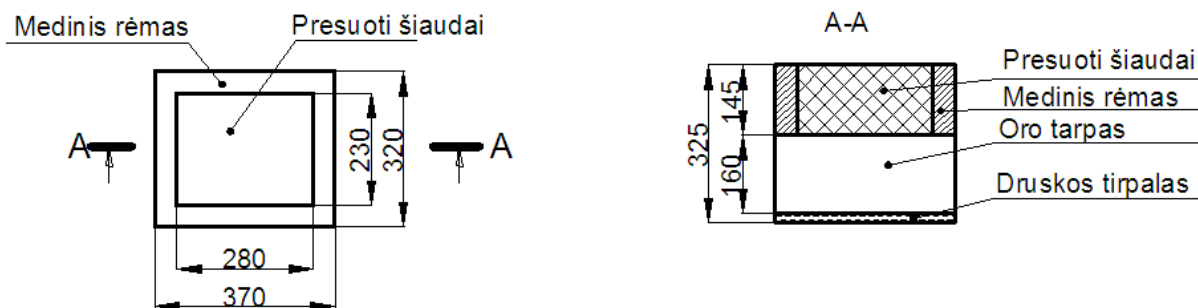


Figure 1. Schematical View of the Test Rig

Medinis rėmas	Wooden frame
Presuoti šiaudai	Pressed straw
Oro tarpas	Air gap
Druskos tirpalas	Salt solution

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