

Test Report

Requisition:

ISOCAN ApS
Attn.: Johnny Larsen
Industrivej 15 A, 3000 Helsingør

Conditioning:
None

Manufacturer:

ISOCAN ApS, Helsingør

Dates:

Test sample: 2006.07.13
Test sample received: 2006.07.14
Testing: 2006.07.19

Samplet from:

-

Procedure:

Determination of the thermal conductivity, λ expressed in W/(m·K). Standard used: EN 12667 and ISO 8302.

Invoice to:

ISOCAN ApS
Attn.: Johnny Larsen
Industrivej 15 A, 3000 Helsingør

Results:

$\lambda = 0.0383 + 0.000182 * t$

Test sample:

Test sample as received: 1 slab
Material: Vindmåtte Isocan
Dimensions [mm] ca. 1.8 x 1.6
Label: -
Id. no.: - Requisition no. -

See table 2.

Measurement uncertainty: $\pm 2\%$

Table 1: Test specimens after preparation

		1	2
Length	mm	610	605
Width	mm	565	557
Thickness, EN 823: 50 Pa	mm	18.23	18.57
Weight at arrival	kg	56.26	56.30
Weight before test	kg	0.340	0.343
Weight after test	kg	0.340	0.343
Change of mass during test	kg	0.000	0.000
Density during test	kg/m ³	17.5	18.1
Thickness during test	mm	56.3	56.3
Thickness before test	mm	56.3	56.3
Thickness after test	mm	56.3	56.3
Change of thickness	mm	0.0	0.0
Moisture during test	weight%	-	-

Conditions

The test has been carried out in accordance with the conditions given by Danak as printed on the reverse of this report. The test results in this report are only valid for the tested specimens. Excerpts from the report may only be published, if the laboratory has approved the excerpt.

Test specimen: No drying before test

Operator:

AXS

Used measuring equipment:

Horizontal GHP 270-T-2050, encapsulated in a well insulated box. Thermometer for box temperature thermometer 270-T-2093. Shunt resistor 270-T-2082. Data logger 270-T-2126". Pressure plate for thickness after EN 823: 270-T-2061/20687. Slide calliper 270-T-2052 and telescoping gauge. Balance 270-T-2054 for weight of the sample. Laboratory temperature 270-T-2070 and Laboratory air humidity 270-T-2088.

Remarks:

Deviations from the standard: None



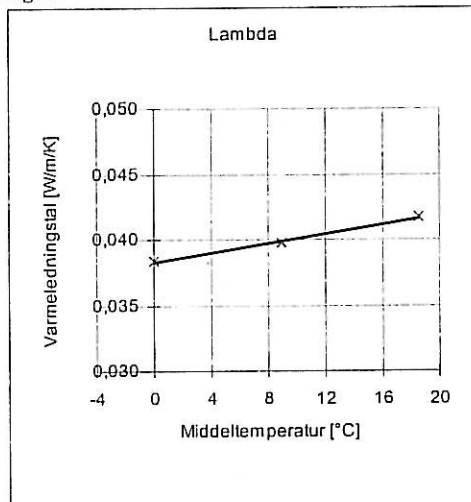
Otto Paulsen
Head of Laboratory
Thermal Laboratory. TELA
DTI Industry and Energy, Taastrup

Table 2: Test results

Test no.		1	2	3
Mean surface temperature of specimen	Hot side °C	11.90	19.87	28.84
	Cold side °C	-8.19	-1.96	8.32
Mean temperature difference	K	20.09	21.83	20.52
Mean temperature	°C	1.86	8.95	18.58
Temperature in cabinet	°C	4.00	11.30	20.80
Room temperature	°C	12.0	12.0	12.2
Mean thermal conductivity	W/(m·K)	0.0384	0.0397	0.0417
Heat flow $q_{m,ca}$	W/m ²	13.69	15.42	15.21
Thermal resistance $R_{m,ca}$	m ² ·K/W	1.416		

q and R at 56.28 mm

Figure 1



Thickness:

Thickness (mm) measured at 50 Pa			
1	18.72	17.39	
2	19.39	19.66	
3	18.64	17.66	
4	17.25	17.2	
5	17.64	19.62	
6	18.62	18.95	
7	18.33	18.64	
8	18.04	19.63	
9	18.32	19.56	
10	17.34	17.37	
Mean			18.79