Materialprüfanstalt für das Bauwesen

MPA BAU HANNOVER

Test Report No. 124239

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Client	HESS AAC Systems B.V. Aluminiumsteden 10 7547 TN ENSCHEDE THE NETHERLANDS On behalf of PARIN BETON AMOOD No 29 – 16 SAMANIEH MASHAD, IRAN 91786539 IRAN ISLAMIC REP. OF
Order	29.10.2012 - 12002530
Content of Order	Determination of thermal conductivity according to DIN EN 12664 of aerated concrete masonry units

The test report contains 2 pages.

The test material is used up.

Materialprüfanstalt für das Bauwesen Hannover MPA BAU HANNOVER

Bearbeiter Dipl.-Phys. Hurling
Durchwahl +49 511 762 8707
E-Mail h.hurling@mpa-bau.de

Nienburger Straße 3
D-30167 Hannover

Telefon +49 511 762 8708
Telefax +49 511 762 4001

DAkkS Deutsche Akkreditierungsstelle D-PL-11220-01-00

Niedersachsen

Notifizierte Stelle 0764

1 Test material

Delivered on 31.10.2012 by shipping agency:

2 aerated concrete masonry units, Dimensions 495 mm x 250 mm x 100 mm

2 Thermal conductivity

Four plates with dimensions 495 mm x 250 mm x 50 mm were sawn from the delivered masonry units. Each two plates were merged to one specimen. The test was carried out according to EN 12664:2001 with a guarded hot plate apparatus (standard apparatus) according to clause 5.2.2 between 19.12.20129 and 20.12.2012. The results are given in tables 1 and 2.

Table 1: Details of the specimens

Specimen		1	2
Width	mm	488	489
Length	mm	499	499
Thickness	mm	46.7	46.6
Mass	kg	5.848	6.048
Area related mass	kg/m^2	24.0	24.8
Density	kg/m^3	513	532

Table 2: Test results

Mean temperature of the hot surfaces ϑ_{wm}	Mean temperature of the cold surfaces ϑ_{km}	Mean temperature of the specimens ϑ_m	Surface temperature difference ΔT	Density of heat flow rate q	Thermal conductivity λ	Thermal resistance R
°C	°C	°C	K	W/m^2	W/(m·K)	$m^2 \cdot K/W$
15.0	4.7	9.8	10.3	26.8	0.121	0.385

Hannover, 29 January 2013
Head of laboratory
By proxy

(ORR Dipl.-Phys. Hurling)

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