Forschungsinstitut für Wärmeschutz e.V. München

Determination of water vapour permeability acc. to DIN EN 12086

Test report no.: R-46/16

Applicant: **Evocell S.r.l., 61022 Talacchio di Colbordolo (PU) Italy**

Product name: **IT-Flex C1**

Material designation: 19 mm

Material description: (acc. to indication) Sheet for thermal insulation made of flexible rubberfoam with closed cells and skins on both sides; Colour: black; Nominal thickness: 19 mm

Origin of the material: Samples were sent by applicant to the FIW München in March 2016.
Sampling by CSI in the plant Evocell, Bellusco on 19.02.2016.
Goods receipt no.: E1862

Test procedure: Determination of water vapour permeability in accordance with DIN EN 12086.
Test conditions according to clause 7.1.A: (23°C, 0/50% r. h.)
Specimen: cylindrical. Diameter: 140 mm.

Conditioning: ---

Period of testing: March - June 2016

Results: The water vapour diffusion resistance index μ has been tested at five specimens with an average density of 46 kg/m³:

Specimen no.	thickness d mm	density kg/m³	water vapour resistance index μ	water vapour permeability δ kg/(m·s·Pa)
1	19.7	47.6	22180	$1.06 \cdot 10^{-14}$
2	19.7	47.5	19210	$1.22 \cdot 10^{-14}$
3	19.5	47.3	23290	$1.01 \cdot 10^{-14}$
4	19.6	47.1	17160	$1.37 \cdot 10^{-14}$
5	19.7	48.5	20880	$1.13 \cdot 10^{-14}$
average	**20**	**46**	20500	$\mathbf{1.2 \cdot 10^{-14}}$

Remarks: The measured values are applicable only for the tested specimens with the thickness d, and the chosen test conditions 23°C, 0/50% r. h..

Gräfelfing, 14.07.2016

Department specialist

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