Forschungsinstitut für Wärmeschutz e.V. München



Determination of the behavior at high temperatures according to EN14707

Test report No: M-100a/17

Applicant:

K-FLEX POLSKA Sp. z.o.o., 99 210 Uniejów, Polen

Material:

K-Flex Solar HT; Code: 0647022071P

Material identification:

Tube made of flexible elastomeric foam (FEF) according to EN 14304:2009+A1:2013

(as given)

Sampling:

By staff of FIW München on 21.06.2017 in the plant Uniejow / Poland

Goods Receipt:

No. 3319

Preparation

of the material:

Tested thickness: 14.6 mm

Mass: Density: 56.5 g 76.2 kg/m³

Testing load: 0.05 kN/m2

(related to the surface: Diameter of test pipe x length)

Test equipment: Test conditions:

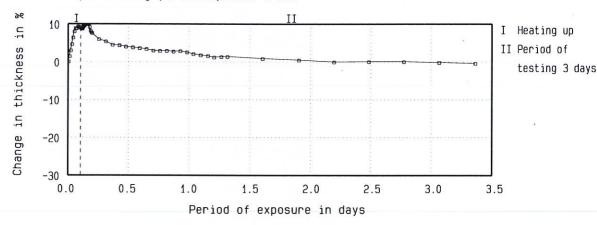
test pipe according to EN14707:2012, Diameter of test pipe: 28 mm, Length: 320 mm

according to EN14707:2012, annex B, one-sided heating

Experimental data:

Change in thickness versus time at 150 °C warm side temperature

Speed of heating up to test temperature 1 K/min



Properties of the material after measurement up to 150 °C warm side:

Self heating:

Mass:

56.3 g

Decrease in mass:

0.4 %

Remarks:

Test period: 29.08.2017 to 01.09.2017

Result:

Change in thickness after a period of 3 days and a warm side of 150 °C is -0.3%.

Hint:

For the hot-surface performance in practice, other longtime static and/or dynamic loading conditions will influence the dimensional stability of elastic, non rigid insulants accordingly.

Final remarks:

The requirement of the given maximum service temperature of 150 °C is fulfilled, because there is no decrease of thickness greater than 7 % according to EN14304:2009+A1:2013.

stitut für Wär

A declaration according to EN 14304:2009+A1:2013 of ST(+)150 is possible.

Gräfelfing, 28.09.2017

Technical supervisor:

Dipl.-Ing. Karin Wiesemeye

Tester:

The only valid document is the one in German and not this translation. Test results only refer to less objects.

The prior written consent of our Institute is required for any publication or reference concerning parts of this report.

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S. Tana