## U N I KASSEL V E R S I T 'A' T

Fachbereich 6 – Architektur, Stadtplanung, Landschaftsplanung Fachgebiet Bauphysik Univ.-Prof. Dr.-Ing. Anton Maas

## **Certificate**

Thermal - hygric aging of the adhesive
Knauf Insulation HOMESEAL LDS Solimur 310
bonded to the Vapor control layers
HOMESEAL LDS 100, HOMESEAL LDS 2 Silk and HOMESEAL LDS FlexPlus

Test certificate for: Knauf Insulation GmbH

Heraklithstrasse 8 84359 Simbach am Inn

Certification Authority: University of Kassel, Department of Building Physics

Subject of the test: The subject of the examination is the durability of the bonding of adhesives to

films and wood. The product marketed by Knauf Insulation GmbH, adhesive composition "HOMESEAL LDS Solimur 310" is adhered to the reference

substrates:

Beechwood plates according to DIN EN 204/205

boPET-film 50 μ highly transparent, biaxially stretched

as well as the vapor control layers:

HOMESEAL LDS 100

- HOMESEAL LDS 2 Silk

HOMESEAL LDS FlexPlus

and subjected to artificial aging to test the durability of the bond.

The bonding of the samples is horizontal with a contact pressure of 20 N. The sample width is 25 mm. The bonded area is 25 x 25 mm. The bonding with beech wood are subjected to the 180° peel test, the bonding with films to the T-peel test. The peel tests are implemented at a peeling rate of 10 mm /

minute and 100 mm / minute before and after artificial aging.

Artificial aging: The duration of conditioning is 120 days.

Artificial aging takes place acc. ASTM D 3611 in a climate of 65  $^{\circ}$ C air temperature and 80  $^{\circ}$  relative humidity. The test is carried out according to the draft DIN 4108-11 (October 2015) "Minimum requirements to the durability

of bond strength with adhesive tapes and adhesive masses for the

establishment of airtight layers".

## U N I KASSEL V E R S I T 'A' T

Fachbereich 6 – Architektur, Stadtplanung, Landschaftsplanung Fachgebiet Bauphysik Univ.-Prof. Dr.-Ing. Anton Maas

Test results: The stress caused by accelerated aging for 120 days did not lead to any

failure of any of the adhesives tested.

All tested combinations meet the requirements of DIN 4108-11 (Draft

10/2015).

Test report: 655005

Kassel, November 2017

Univ.-Prof. Dr.-Ing. Anton Maas (Head of the test center)

(Test Conductor)

Dipl.-Ing. Rolf Gross