

# **100 YEAR DURABILITY**

## Permanent airtightness with pro clima!

### Reliable adhesion, tested for 100 years

Independently confirmed

Minimum requirements significantly exceeded

#### Thermal insulation and airtightness should perform for more than 50 years

Adhesive tapes which are applied to attain airtightness in accordance with DIN 4108-7, SIA 180 or OENORM B 8110-2 should have a durability of 50 to 100 years – after all, this is the expected service life of thermal insulation layers, to ensure that they protect against damage due to convection and moisture vapour ingress.

#### However just 17 years can be regarded as permanent!

A process for accelerated aging of adhesive tape joints has been developed at the University of Kassel as part of a research project on "Quality assurance for adhesive-based joint technology in airtightness layers". With this process, adhesive tapes have to demonstrate certain specified minimum tensile strengths after being stored at increased air temperature and humidity (65 °C and 80% relative humidity) for a period of 120 days (this corresponds to around 17 years in reality). On successful completion of this test an adhesive tape can be regarded as permanent, however.

#### pro clima adhesive tapes have been successfully tested for 100 years

As part of tests to ascertain the durability of airtight joints, pro clima's TESCON VANA, UNI TAPE and TESCON No.1 adhesive tapes have also been subjected to accelerated aging at the University of Kassel under the conditions described above. At the request of pro clima, the test period was increased from 120 days to 700 days. Accelerated aging for 700 days corresponds to 100 years in reality. The test results for the three adhesive tapes from pro clima were also positive for this increased period of accelerated aging.

## You are on the safe side with pro clima!

These demanding tests with increased test periods have confirmed the suitability of TESCON VANA, UNI TAPE and TESCON No.1 adhesive tapes for the creation of permanent airtightness which surpass the requirements of DIN 4108–7, SIA 180 and OENORM B 8110–2. This confirms that vapour check and airtightness membranes and airtight wood-based panels can be reliably bonded using pro clima products!

