



100
YEARS

CONFIRMED BY TESTS

**Permanent airtightness with pro clima!
Tested for the entire usage period**

- Reliable functioning tested for 100 years
- Independently confirmed
- Minimum requirements significantly exceeded

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

Adhesive joints for the creation of airtightness in accordance with DIN 4108-7, SIA 180 or RT 2012 should have a durability of 50 to 100 years – after all, this is the expected service life of the thermal insulation structures that they have to reliably protect against damage due to the convective entry of moisture. This period corresponds with reality, as airtightness is currently being optimised and thermal insulation is being replaced or adapted for today's legal requirements on structures dating from the 1950s, 1960s and 1970s.

→ As little as 17 years can be regarded as permanent

Processes for accelerated ageing of joints with adhesive tapes and adhesive masses have been developed at the University of Kassel as part of two research projects on quality assurance for adhesive-based joint technology in airtightness layers. These new processes are now included in the DIN 4108-11 standard, which demands that adhesive joints 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). The joint can then already be regarded as permanent.

→ pro clima adhesive tapes and adhesives have been successfully tested for 100 years

As part of tests on the permanence of airtight joints, pro clima's TESCON VANA, UNI TAPE and TESCON No.1 adhesive tapes and the ORCON F joint adhesive have also been subjected to accelerated ageing at the University of Kassel under the conditions described above. The test period was also increased from 120 days to 700 days here. Accelerated ageing for 700 days corresponds to 100 years in reality. The test results for the four adhesive materials from pro clima were also positive for this increased period of accelerated ageing.

You are on the safe side with pro clima!



TESCON® **VANA**



UNI TAPE



TESCON® **No.1**



ORCON® **F**

These demanding tests with increased test periods have confirmed the suitability of the TESCON VANA, UNI TAPE and TESCON No.1 adhesive tapes and of the ORCON F joint adhesive for the creation of permanent airtightness in accordance with the requirements of DIN 4108-7, SIA 180 and RT 2012. This confirms that vapour retarders, airtight membranes and airtight wood-based panels can be reliably and verifiably stuck and bonded using pro clima products!