

Weather-tightness – solar energy systems



Determination of the wather-tightness of solar energy systems in roofs.

Scope

Solar energy systems (thermal and PV) integrated in pitched roofs

Standards

- NVN 7250 – Solar energy systems - Integration in roofs and facades - Building aspects
- MCS 012 - Product Certification Scheme Requirements: Pitched Roof Installation Kits
- CEN/TR 15601 - Hygrothermal performance of buildings - Resistance to wind - driven rain of roof coverings with discontinuously laid small elements - Test methods

Principle

A test specimen is fitted into the wind-driven rain apparatus, the external surface of the test specimen is exposed to wind and continuously sprayed with water, and run-off water is continuously applied at the top of the specimen. At the same time an air pressure difference between the upper and lower surfaces of the test specimen is increased or decreased in specific steps. Water leakage through the test specimen, which can occur at certain air pressure differences, is observed and measured. The pressure differences at which a specific leakage rate occurs determines the resistance to rainfall and wind driven rain and with that the geographical applicability of the system in the various climate zones.

Kiwa N.V.
info@kiwa.nl
+31 (0)88 998 44 00