BUILDING AIRTIGHTNESS IN GERMANY - WHAT ARE THE DRIVING FORCES?

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1 SUMMARY

Building airtightness in Germany is on a good way. The latest survey amongst FLiB members shows the n50-values are much better than the benchmarks given in EnEV 2014 (German EPBD). For airtightness tests in 2014 the average n50-value of single-family houses is 1.1 ACH for new buildings and 1.6 ACH for refurbishments. In multi-family houses the average n50-value for new buildings is 0.9 ACH and 1.5 ACH for refurbishments.

One major driving force seems to be the EnEV in combination with funding programs. EnEV gives certain benchmarks to achieve, in order to have a benefit in energy performance calculation. EnEV prescribes a durable airtight building envelope but the test itself is not mandatory. Funding programs of the KfW (Kreditanstalt für Wiederaufbau) give out subsidies or credits with low interest rates only if an airtightness test is done and the n50-value complies with the benchmarks.

In the survey 2/3 of the airtightness tests in 2014 were done to proove that EnEV benchmarks were achieved.

The test itself does not improve airtightness. To achieve a certain level of air tightness the building envelope must be planned considering an airtightness concept. To match the KfW-requirements an airtightness concept is mandatory as well. In cooperation with KfW FLiB worked out an internet platform where planners, craftsmen and building owners get the information necessary to make an airtightness concept.