Test method for leakage detection according to the Czech technical standard ČSN 73 1901:2011

Viktor Zwiener¹; Daniela Hrossova²

¹,² Dekprojekt s.r.o., Tiskarska 10/257, 110 00 Prague, Czech Republic
+420 234 054 285, viktor.zwiener@dek-cz.com, daniela.hrossova@dek-cz.com

Purpose of the work
At present, a lot of test methods for leakage detection exist. Most of them have a limited application mainly due to possibility of recording, repeatability or reproducibility of the measured results. The aim of the research was creation of a test method to be incorporated into Czech technical standard.

Method of approach
Information on leakage detection in the Czech Republic and other European lands was collected. Obtained information was confronted with own experience.

Content of the contribution
A test method for leakage detection was created upon the analysis. The essence of the method lies in air stream speed measurement close to a leakage by a thermic anemometer at a given underpressure. The method specifies precisely technical parameters of used equipment and test procedure.

Results and assessment of their significance
The proposed test method was approved by a technical committee and was incorporated into an informative annex J of the Czech technical standard ČSN 73 1901:2011 Designing of roofs – Basic provisions.

Conclusions
The test method is suitable primarily for leakage detection during construction and shall reduce conflicts between contractors and investors about the extent of tightness of the executed measures.