Measuring Indoor Air Flow Rates

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Keywords	Architectural environment and building equipment-related Air environment (23020)

Research Topics

- Air-tightness of building
- Property of local opening
- Air flow volume of openings

Research Seeds

This study is intended to develop a method for determining properties of a local opening (i.e. equivalent area, airflow rate and flow exponent) based on results of fan pressurization tests on local openings for field measurements.

Equations for combination-separation of opening properties parallel-series placement are presented. Experimental investigations of the equation are performed using a test house and scale model.

Results indicate that applicability of the field measurement method of air flow rate for ventilation systems using the K-factor method is widened and the predictive precision of numeral calculation of the ventilation rate and CFD is improved.

Related Technology

- Fan Pressurization Method
- Numerical Analyses
- Field Measurement