

Ventilation for buildings - Measurement of air flows on site - Methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Ventilation for buildings - Measurement of air flows on site - Methods

Systèmes de ventilation pour les bâtiments - Mesurages de
débit d'air dans les systèmes de ventilation - Méthodes

Lüftung von Gebäuden - Luftvolumenstrommessung in
Lüftungssystemen - Verfahren

This European Standard was approved by CEN on 5 March 2015.

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Foreword

This document (EN 16211:2015) has been prepared by Technical Committee CEN/TC 156 "Ventilation for buildings", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

Measurement methods which are both correct and easy to use are developed and standardized to enable the commissioning and operational monitoring of air processing installations. Interior climate and air quality can often be improved considerably if the heating and ventilation system is managed in a way that ensures good functioning in the long term. It is thus important that the system is designed and constructed to allow measurement and monitoring to be performed using established and approved methods.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies simplified methods for the measurement of air flows on site. It provides a description of the air flow methods and how measurements are performed within the margins of stipulated method uncertainties.

One measurement method is to take point velocity measurements across a cross-section of a duct to obtain the air flow. This simplified method is an alternative to the method described in ISO 3966 and EN 12599. This European Standard requests certain measurement conditions (length of straight duct and uniform velocity profile) to be met to achieve the stipulated measurement uncertainties for the simplified method.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12792, *Ventilation for buildings — Symbols, terminology and graphical symbols*

EN 14277, *Ventilation for buildings — Air terminal devices — Method for airflow measurement by calibrated sensors in or close to ATD/plenum boxes*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12792 apply.

3.2 Symbols

The following symbols are used.