SLOVENSKI STANDARD
SIST EN ISO 9972:2015

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Nadomešča:
SIST EN 13829:2001

Toplotne značilnosti stavb - Ugotavljanje prepustnosti za zrak obodnih konstrukcij - Metoda tlačne razlike z uporabo ventilatorja (ISO 9972:2015)

Thermal performance of buildings - Determination of air permeability of buildings - Fan pressurization method (ISO 9972:2015)

Wärmetechnisches Verhalten von Gebäuden - Bestimmung der Luftdurchlässigkeit von Gebäuden - Differenzdruckverfahren (ISO 9972:2015)

Performance thermique des bâtiments - Détermination de la perméabilité à l'air des bâtiments - Méthode de pressurisation par ventilateur (ISO 9972:2015)

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Wärmetechnisches Verhalten von Gebäuden - Bestimmung der Luftdurchlässigkeit von Gebäuden - Differenzdruckverfahren (ISO 9972:2015)

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Contents

Page

European foreword **3**

European foreword

This document (EN ISO 9972:2015) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 89 “Thermal performance of buildings and building components” the secretariat of which is held by SIS.

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INTERNATIONAL STANDARD

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Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms, definitions, and symbols **1**
3.1 Terms and definitions 1
3.2 Symbols 3

4 Apparatus **4**
4.1 General 4
4.2 Equipment 4
4.2.1 Air-moving equipment 4
4.2.2 Pressure-measuring device 4
4.2.3 Air flow rate measuring system 4
4.2.4 Temperature-measuring device 4

5 Measurement procedure **4**
5.1 Measurement conditions 4
5.1.1 General 4
5.1.2 Measured extent 5
5.1.3 Time of measurement 5
5.2 Preparation 5
5.2.1 Building preparation methods 5
5.2.2 Heating, ventilation and air conditioning systems and other building equipment 5
5.2.3 Intentional openings in the envelope 6
5.2.4 Openings inside the measured extent 7
5.2.5 Air-moving equipment 7
5.2.6 Pressure measuring devices 7
5.3 Steps of the procedure 8
5.3.1 Preliminary check 8
5.3.2 Temperature and wind conditions 8
5.3.3 Zero-flow pressure difference 8
5.3.4 Pressure difference sequence 8

6 Expression of results **9**
6.1 Reference values 9
6.1.1 Internal volume 9
6.1.2 Envelope area 9
6.1.3 Net floor area 10
6.2 Calculation of the air leakage rate 10
6.3 Derived quantities 13
6.3.1 General 13
6.3.2 Air change rate at reference pressure difference 13
6.3.3 Specific leakage rate (envelope) 13
6.3.4 Specific leakage rate (floor) 14
6.3.5 Effective leakage area 14
6.3.6 Specific effective leakage area (envelope) 14
6.3.7 Specific effective leakage area (floor) 14

7 Test report **15**

8 Uncertainty **15**
8.1 General 15
8.2 Reference value 16
8.3 Overall uncertainty 16

Annex A (informative) **Description of equipment used to pressurize buildings** **17**

Annex B (informative) **Dependence of air density on temperature, dew point,and barometric pressure** **19**

Annex C (informative) **Recommended procedure for estimating uncertaintyin derived quantities** **20**

Annex D (informative) **Beaufort scale of wind (extract)** **23**

Annex E (informative) **Detection of the leakage location** **26**

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods*.

This third edition cancels and replaces the second edition (ISO 9972:2006), which has been technically revised.

Introduction

The fan-pressurization method is intended to characterize the air permeability of the building envelope or parts thereof. It can be used, for example,

a) to measure the air permeability of a building or part thereof for compliance with a design air-tightness specification,

b) to compare the relative air permeability of several similar buildings or parts of buildings, and

c) to determine the air-leakage reduction resulting from individual retrofit measures applied incrementally to an existing building or part of building.

The fan pressurization method does not measure the air infiltration rate of a building. The results of this method can be used to estimate the air infiltration rate and resulted heat load by means of calculation.

Other methods, like tracer gas, are applicable when it is desired to obtain a direct measurement of the air infiltration rate. A single tracer gas measurement, however, gives limited information on the performance of ventilation and infiltration of buildings.

The fan-pressurization method applies to measurements of air flow through the construction from outside to inside or vice versa. It does not apply to air flow measurements from outside through the construction and back to outside.

The proper use of this International Standard requires knowledge of the principles of air flow and pressure measurements. Ideal conditions for the test described in this International Standard are small temperature differences and low wind speeds. For tests conducted in the field, it needs to be recognized that field conditions can be less than ideal. Nevertheless, strong winds and large indoor-outdoor temperature differences are to be avoided.