SLOVENSKI STANDARD
SIST EN 13141-3:2017

01-oktober-2017

Nadomešča:
SIST EN 13141-3:2004

Prezračevanje stavb - Preskušanje lastnosti sestavnih delov/izdelkov za prezračevanje stanovanjskih stavb - 3. del: Kuhinjske nape za gospodinjstva brez ventilatorja

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 3: Range hoods for residential use without fan

Lüftung von Gebäuden - Leistungsprüfungen von Bauteilen/Produkten für die Lüftung von Wohnungen - Teil 3: Dunstabzughauben für den Hausgebrauch ohne Ventilator

Ventilation des bâtiments - Essais des performances des composants/produits pour la ventilation des logements - Partie 3 : Hottes de cuisine sans ventilateur pour utilisation domestique

Ta slovenski standard je istoveten z: **EN 13141-3:2017**

ICS:

91.140.30	Prezračevalni in klimatski sistemi	Ventilation and air-conditioning systems
97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances

SIST EN 13141-3:2017 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13141-3

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ICS 91.140.30; 97.040.20

Supersedes EN 13141-3:2004

English Version

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 3: Range hoods for residential use without fan

Ventilation des bâtiments - Essais de performance des composants/produits pour la ventilation des logements - Partie 3 : Hottes de cuisine sans ventilateur pour utilisation domestique

Lüftung von Gebäuden - Leistungsprüfungen von Bauteilen/Produkten für die Lüftung von Wohnungen - Teil 3: Dunstabzughauben für den Hausgebrauch ohne Ventilator

This European Standard was approved by CEN on 17 March 2017.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 13141-3:2017) 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 December 2017, and conflicting national standards shall be withdrawn at the latest by March 2019.

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

This document supersedes EN 13141-3:2004.

In comparison to EN 13141-3:2004 the following changes have been made:

— reduction of the scope to exclude air extraction range hoods with fan already taken into account in EN 61591 developed by IEC/TC 59 “Performance of household and similar electrical appliances”;

— adding of a specific clause concerning performance test of odour extraction (see Clause 7) instead of making reference to EN 61591.

EN 13141 consists of the following parts, under the general title Ventilation for buildings — Performance testing of components/products for residential ventilation:

— Part 1: Externally and internally mounted air transfer devices

— Part 2: Exhaust and supply air terminal devices

— Part 3: Range hoods for residential use without fan

— Part 4: Fans used in residential ventilation systems

— Part 5: Cowls and roof outlet terminal devices

— Part 6: Exhaust ventilation system packages used in a single dwelling

— Part 7: Performance testing of a mechanical supply and exhaust ventilation units (including heat recovery) for mechanical ventilation systems intended for single family dwellings

— Part 8: Performance testing of un-ducted mechanical supply and exhaust ventilation units (including heat recovery) for mechanical ventilation systems intended for a single room

— Part 9: Externally mounted humidity controlled air transfer device

— Part 10: Humidity controlled extract air terminal device

— Part 11: Supply ventilation units

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The position of this document in the field of documents for the mechanical building services is shown in Figure 1.

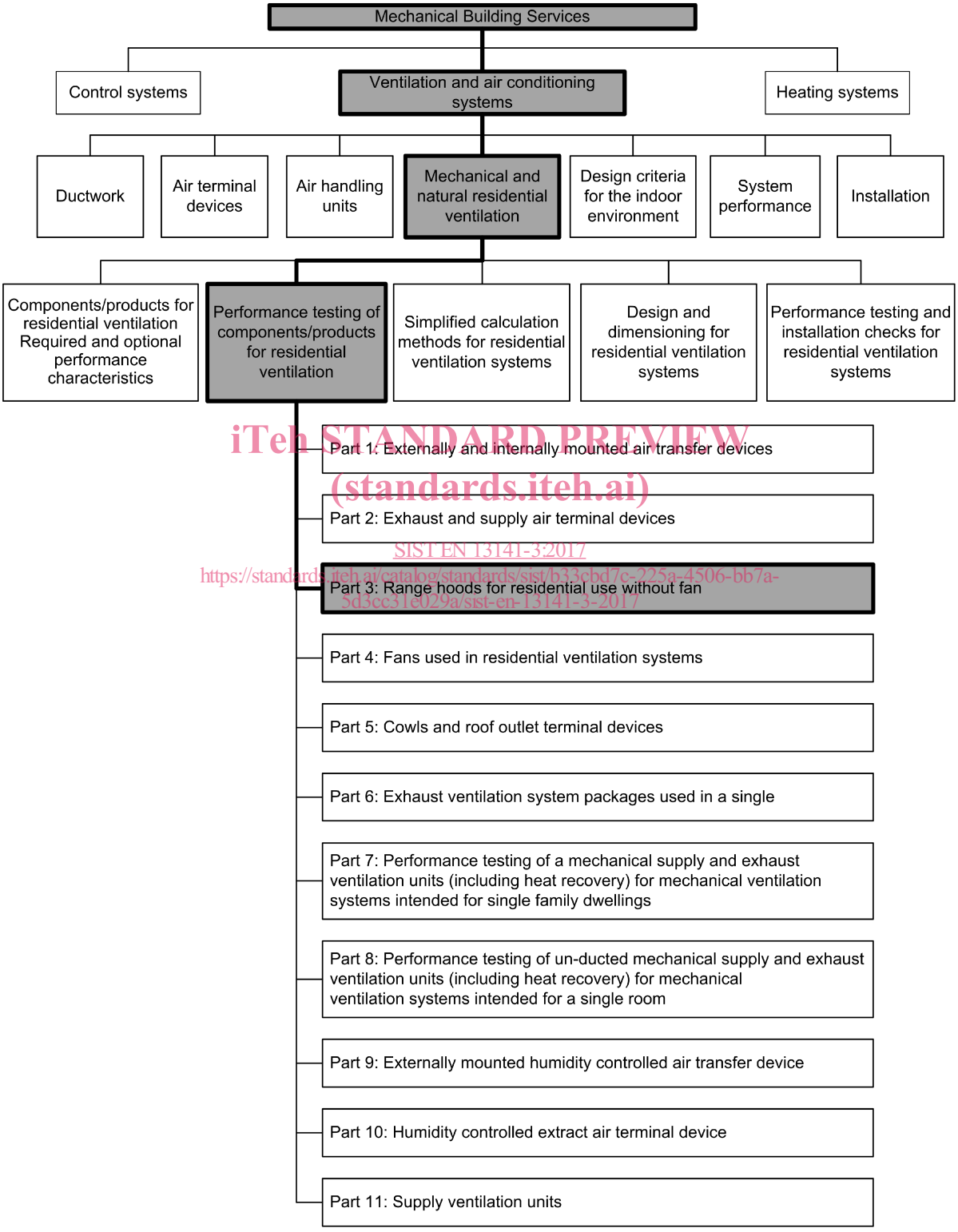

Figure 1 — Position of EN 13141-3 in the field of the mechanical building services

1 Scope

This European Standard specifies methods for measuring the main performance characteristics of range hoods for residential use. It applies to air extraction range hoods without fan.

This European Standard does not specify:

— values for performance characteristics;

— safety requirements in relation with the use of methyl-ethyl ketone (MEK).

For air extraction range hoods with fan see EN 61591.

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 12792:2003, *Ventilation for buildings - Symbols, terminology and graphical symbols*

EN 13141-2:2010, *Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 2: Exhaust and supply air terminal devices*

EN 61591:1997, *Household range hoods and other cooking fume extractors - Methods for measuring performance (IEC 61591:1997)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12792 and EN 13141-2 and the following apply.

3.1
range hood
device without fan intended to collect contaminated air from above a cooking appliance

Note 1 to entry: In this document, term “range hood” is used for special type of range hood designed for use in mechanical extract ventilation system with central or individual fan installed outside the range hood.

[SOURCE: EN 12792:2003, definition 85 modified to be in line with the scope]

3.2
grease absorption performance
measure of the percentage of grease retained within a filter

3.3
odour reduction factor
efficiency of the reduction of odours by a device

[SOURCE: EN 12792:2003, definition 276]

4 Performance testing of aerodynamic characteristics

4.1 Principle

Tests shall be carried out with new filters.

Range hoods shall be tested in accordance with the exhaust/supply air terminal device test method, described in EN 13141-2:2010, Clause 4.

Care shall be taken in the installation of the range hood because its dimensions could be much larger than those of other air terminal devices.

4.2 Test procedure

The test procedure shall be in accordance with EN 13141-2:2010, Clause 4.

4.3 Analysis of results

Analysis of the results shall be in accordance with EN 13141-2:2010, for the determination of the flow rate/pressure characteristic curves.

4.4 Presentation of results

The presentation of results shall be in accordance with EN 13141-2:2010.

5 Performance testing of acoustic characteristics

5.1 Noise production

5.1.1 Principle

When operating, air passing through the range hood generates the noise, some of which is radiated into the room. The method described in Clause 5 allows to determine the acoustic power level of the noise thus emitted.

Range hoods shall be tested in accordance with the exhaust air terminal device test method specified in EN 13141-2:2010, 5.1.

5.1.2 Test installation and conditions

Test installation and conditions shall be in accordance with EN 13141-2:2010, 5.1, with the following arrangement: due to the size of the range hood and its position in a room in normal use, the position of the range hood in/on the wall separating the 2 reverberant rooms:

— shall be at a minimum distance of 1 m from all other walls; and

— should be away from any symmetry axis of the room.

5.1.3 Test procedure

The test shall be carried out in accordance with EN 13141-2:2010, 5.1.

5.1.4 Presentation of test results

The test results shall be presented in accordance with EN 13141-2:2010, 5.1.

5.2 Insertion loss

5.2.1 Principle

The test describes in 5.2 quantifies the sound attenuation through a range hood. The objective is to allow the evaluation of sound transmission from the fan/unit through the ventilation duct and range hood into the room.

5.2.2 Test installation and conditions

The test shall be in accordance with EN 13141-2:2010, 5.2.

5.2.3 Test procedure

The test shall be carried out in accordance with EN 13141-2:2010, 5.2.

5.2.4 Analysis of test results

Analysis of the test results shall be in accordance with EN 13141-2:2010, 5.2.

5.2.5 Presentation of test results

The test results shall be presented in accordance with EN 13141-2:2010, 5.2.

5.3 Sound insulation characteristics of a pair of range hoods

5.3.1 Principle

The test describes in 5.3 quantifies the sound insulation characteristic through a pair of range hood. The objective is to allow the evaluation of sound insulation from one dwelling through the range hood, ventilation duct and range hood into another dwelling.

5.3.2 Test installation and conditions

The test shall be in accordance with EN 13141-2:2010, 5.3.

5.3.3 Test procedure

The test shall be carried out in accordance with EN 13141-2:2010, 5.3.

5.3.4 Analysis of test results

Analysis of the test results shall be in accordance with EN 13141-2:2010, 5.3.

5.3.5 Presentation of test results

The test results shall be presented in accordance with EN 13141-2:2010, 5.3.

6 Performance testing of grease absorption

The grease absorption performance shall be determined in accordance with EN 61591:1997, Clause 12.