

STN	Vetrание budov. Skúšanie vlastností súčastí alebo výrobkov na vetranie obytných priestorov. Časť 11: Vetracie systémy na prívod vzduchu.	STN EN 13141-11 12 7005
------------	---	---

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 11: Supply ventilation units

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/15

Obsahuje: EN 13141-11:2015

121469

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2015
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

ICS 91.140.30

English Version

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 11: Supply ventilation units

Ventilation des bâtiments - Essais de performance des composants/produits pour la ventilation des logements -
Partie 11 : Unités de ventilation par insufflation

Lüftung von Gebäuden - Leistungsprüfung von Bauteilen/Produkten für die Lüftung von Wohnungen - Teil 11: Zuluftsysteme

This European Standard was approved by CEN on 16 April 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents		Page
Foreword.....		3
Introduction		4
1 Scope		6
2 Normative references		6
3 Terms and definitions		7
4 Symbols and abbreviations		9
5 Declaration of intended use.....		9
6 Performance testing of aerodynamic characteristics.....		9
6.1 General.....		9
6.2 External leakage.....		10
6.3 Airflow.....		11
6.3.1 Un-ducted room unit.....		11
6.3.2 Ducted unit		11
6.4 Acoustic characteristic		11
6.4.1 General.....		11
6.4.2 Un-ducted unit.....		12
6.4.3 Ducted unit		14
6.5 Electrical power input		17
7 Test report		18
7.1 Presentation of results.....		18
7.2 General information.....		18
7.3 Product specifications		18
7.4 External leakage.....		19
7.5 Airflow.....		19
7.6 Acoustic characteristics		20
7.7 Electrical power input		20
Annex A (informative) Typical applications		21
Annex B (informative) Sound insulating box.....		24
Annex C (informative) Acoustic box.....		25
Annex D (normative) Pressure leakage test method		26
Bibliography		27

Foreword

This document (EN 13141-11:2015) 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 November 2015, and conflicting national standards shall be withdrawn at the latest by November 2015.

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.

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*
- *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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

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

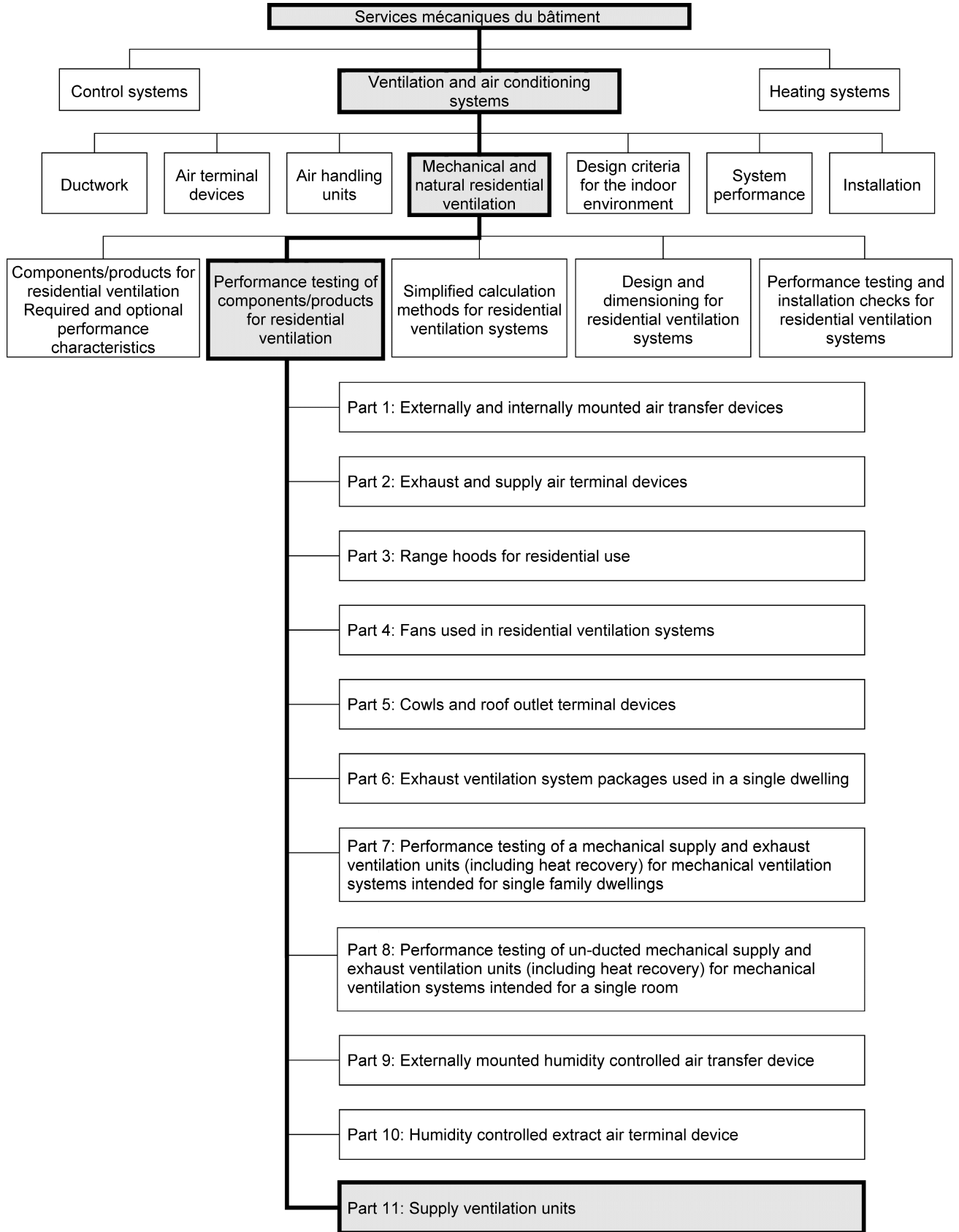


Figure 1 — Position of EN 13141-11 in the field of the mechanical building services

1 Scope

1.1 This European Standard specifies aerodynamic, acoustic and electrical power performance test measurements for

- un-ducted continuous supply ventilation units in a single room;
- ducted continuous supply ventilation units in a single room;
- un-ducted supply air ventilation units in a single room;
- ducted supply air ventilation units in a single room;
- centralised unit for whole dwelling;

used in residential ventilation.

In general such units contain the following elements:

- fan;
- air filter;
- control system.

1.2 This European Standard does not cover the following:

- grilles, air delivery or air supply devices when the unit is ducted;
- sound attenuation;
- any heating devices or pre-heaters.

1.3 Safety requirements are given in EN 60335-2-80:2003 and its A2:2009 [2].

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 306, *Heat exchangers - Methods of measuring the parameters necessary for establishing the performance*

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

EN 13141-4:2011, *Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 4: Fans used in residential ventilation systems*

EN ISO 717-1, *Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation (ISO 717-1)*

EN ISO 3741, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms (ISO 3741)*

EN ISO 3743-1, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for small movable sources in reverberant fields - Part 1: Comparison method for a hard-walled test room (ISO 3743-1)*

EN ISO 3743-2, *Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering methods for small, movable sources in reverberant fields - Part 2: Methods for special reverberation test rooms (ISO 3743-2)*

EN ISO 3744, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane (ISO 3744)*

EN ISO 3745, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for anechoic rooms and hemi-anechoic rooms (ISO 3745)*

EN ISO 5135, *Acoustics - Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation room (ISO 5135)*

EN ISO 5136, *Acoustics - Determination of sound power radiated into a duct by fans and other air-moving devices - In-duct method (ISO 5136)*

EN ISO 9614-1, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 1: Measurement at discrete points (ISO 9614-1)*

EN ISO 9614-2, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 2: Measurement by scanning (ISO 9614-2)*

EN ISO 9614-3, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 3: Precision method for measurement by scanning (ISO 9614-3)*

EN ISO 10140-2, *Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation (ISO 10140-2)*

EN ISO 5801, *Industrial fans - Performance testing using standardized airways (ISO 5801)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN