

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 5: Cowls and roof outlet terminal devices

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13141-5:2004 sisaldab Euroopa standardi EN 13141-5:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13141-5:2004 consists of the English text of the European standard EN 13141-5:2004.</p> <p>This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European standard specifies methods for measuring the aerodynamic and acoustic characteristics of cowls and roof outlets used in both natural and mechanical ventilation. Only those cowls and roof outlets fitted onto ducts which project above the roof surface are covered by the present standard.</p>	<p>Scope: This European standard specifies methods for measuring the aerodynamic and acoustic characteristics of cowls and roof outlets used in both natural and mechanical ventilation. Only those cowls and roof outlets fitted onto ducts which project above the roof surface are covered by the present standard.</p>
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Võtmesõnad:

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English version

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 5: Cowl and roof outlet terminal devices

Ventilation des bâtiments - Essais des performances des composants/produits pour la ventilation des logements - Partie 5 : Extracteurs statiques et dispositifs de sortie en toiture

Lüftung von Gebäuden - Leistungsprüfung von Bauteilen/Produkten für die Lüftung von Wohnungen - Teil 5: Hauben und Dach-Fortluftdurchlässe

This European Standard was approved by CEN on 9 July 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 13141-5:2004) 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 April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

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

Introduction

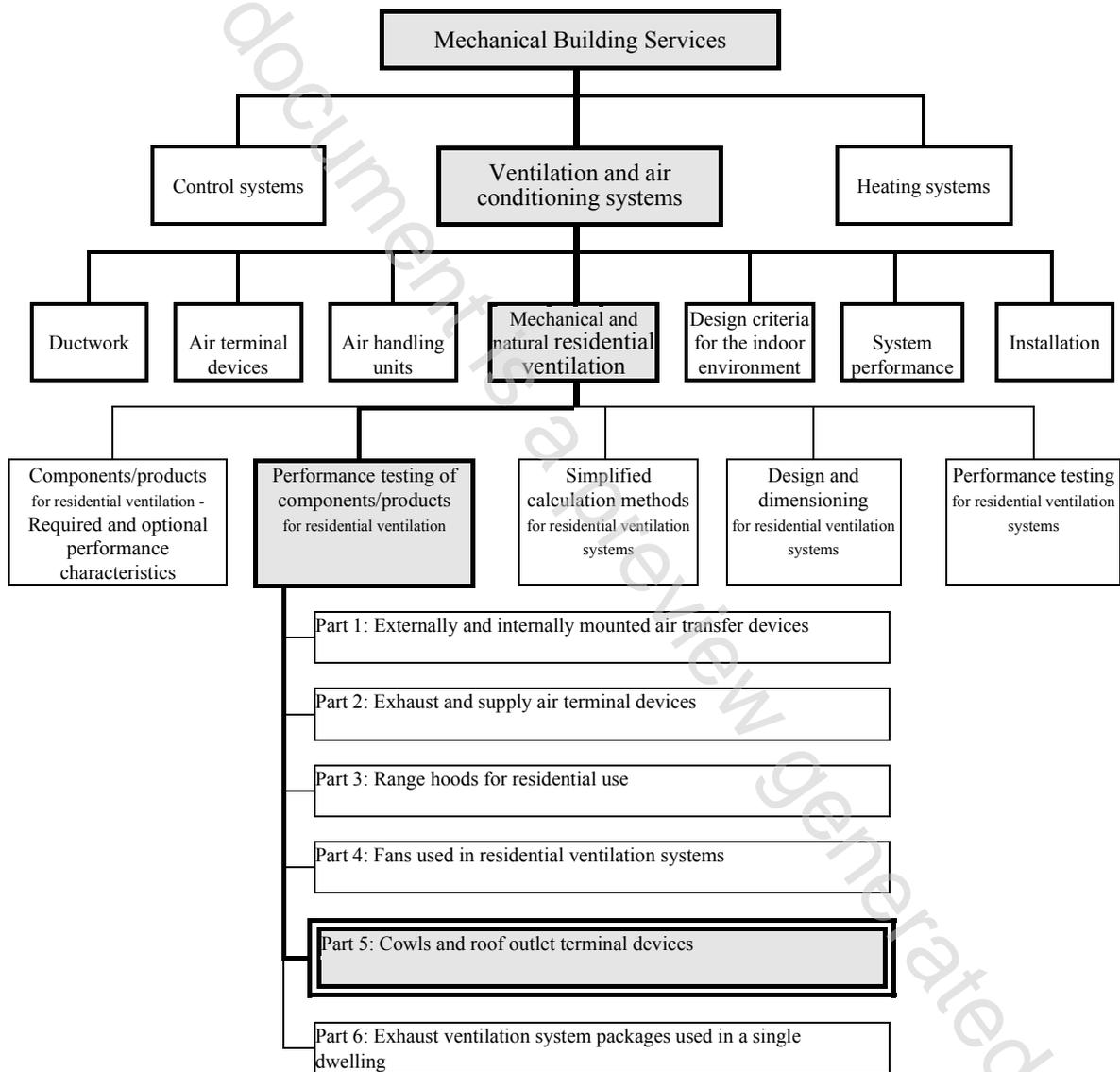


Figure 1 - Position of EN 13141-5 in the field of the mechanical building services

1 Scope

This document specifies methods for measuring the aerodynamic and acoustic characteristics of cowls and roof outlets used in both natural and mechanical ventilation. Only those cowls and roof outlets fitted onto ducts which project above the roof surface are covered by the present standard.

Regarding the assisted cowls, only the fan assisted cowls are covered by the present standard, other types (such as injection assisted cowls) being too recent to be adequately considered for the time being.

The performance testing of the "assistance" provided by the auxiliary fan of an assisted cowl is excluded for the scope of this standard.

2 Normative references

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

EN 1506:1997, *Ventilation for buildings - Sheet metal air ducts and fittings with circular cross-section – Dimensions*.

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

EN 13141-4:2004, *Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 4: Fans used in residential ventilation systems*.

ISO 5801, *Industrial Fans - Performance testing using standardized airways*.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12792:2003 and the following apply.

3.1

cowl

air terminal device with or without moving component, intended to be fitted on top of an exhaust duct, with aim, by creating negative pressure depending of the wind speed, to avoid reverse flow and to increase the extracted flow rate in presence of wind

3.2

assisted cowl

cowl fitted with an auxiliary device using other energy source than wind to compensate for lack of suction effect

3.3

fan assisted cowl

assisted cowl where the auxiliary device is a fan

3.4

roof outlet

air terminal device used for mechanical ventilation systems

3.5

pressure factor

measure of the suction effect due to the wind. Ratio of the measured pressure difference to the dynamic pressure of the wind at a given vertical wind approach angle

3.6

test-voltage

voltage to be used for supplying the motorised cowl during the testing