# SLOVENSKI PREDSTANDARD

# OSIST prEN 13141-8:2004

april 2004

Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 8: Performance testing of unducted mechanical supply and exhaust ventilation units [including heat recovery] for mechanical ventilation systems intended for a single room



ICS 91.140.30

Referenčna številka
OSIST prEN 13141-8:2004(en)

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# DRAFT
# prEN 13141-8

February 2004

ICS

English version

# Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 8: Performance testing of unducted mechanical supply and exhaust ventilation units [including heat recovery] for mechanical ventilation systems intended for a single room

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 156.

If this draft becomes a European Standard, 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.

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Ref. No. prEN 13141-8:2004: E

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# Foreword

This document (prEN 13141-8:2004) has been prepared by Technical Committee CEN/TC 156 “Ventilation for buildings”, the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

The standard is one of a series of standards on residential ventilation. The performance characteristics of the components/products for residential ventilation are given in prEN 13142.

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

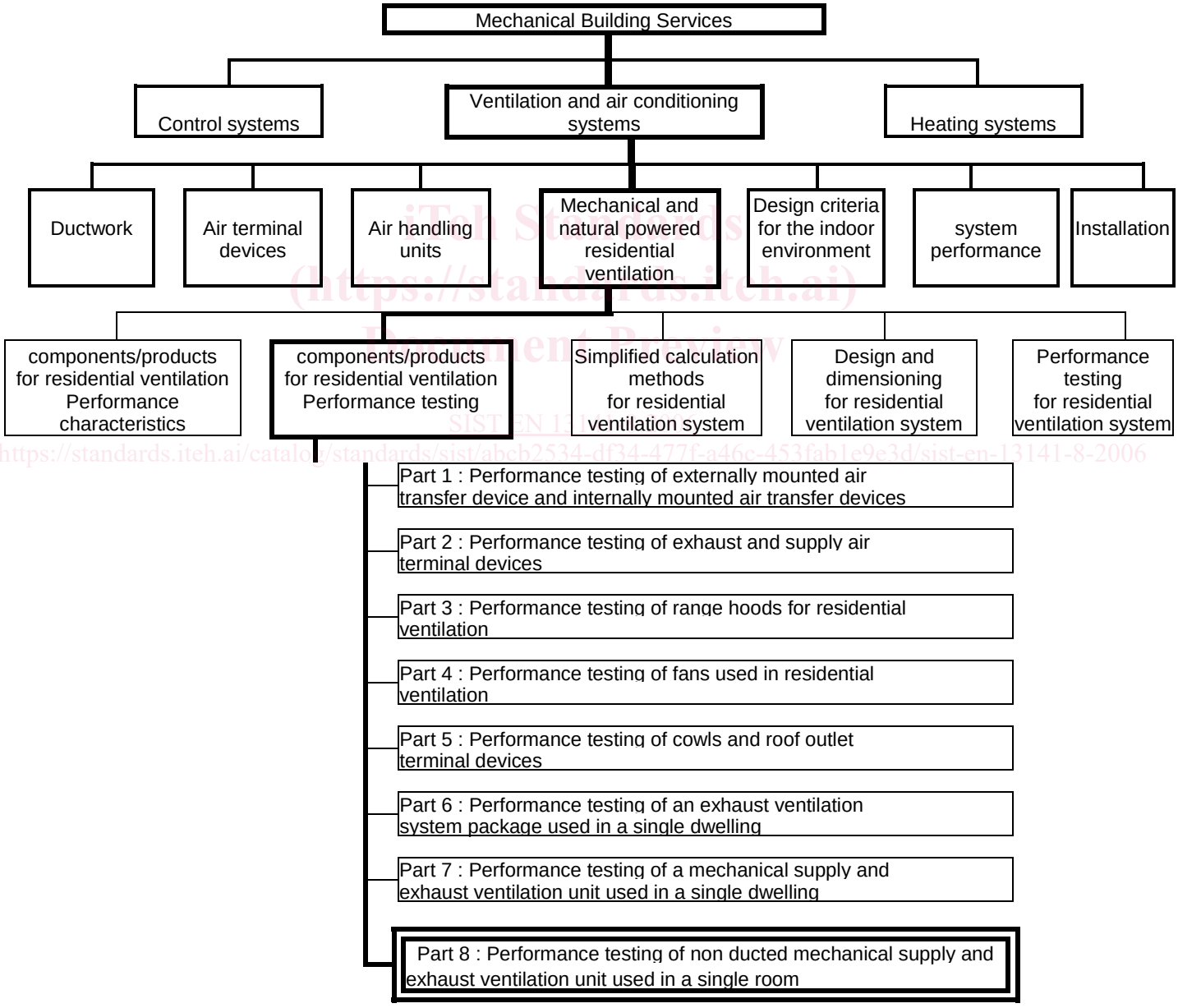


**Figure 1 — Position of prEN 13141-8 in the field of the mechanical building services**

# Introduction

This European Standard specifies methods for the performance testing of components used in residential ventilation systems to establish the main characteristics as identified in prEN 13142

Part 1 and Part 2 relate respectively to the externally/internally mounted air transfer devices and the exhaust/supply air terminal devices, which are used in the residential ventilation.

Part 3 considers performance testing of range hoods for residential use, and is based on an IEC standard.

Part 4 consists in some special measurement conditions for fans to be used in the residential systems, when applying the general ISO methods (as ISO 5801).

Part 5 gives test methods for cowls and other roof outlets.

Part 6 gives test methods for exhaust ventilation system packages used in a single dwelling.

Part 7 gives test methods for supply and exhaust ventilation unit used in a single dwelling.

Part 8 gives test methods for unducted supply and exhaust ventilation unit used in a single room.

The standard incorporates many references to other European and International standards, especially on characteristics other than the aerodynamic characteristics, for instance on acoustic characteristics.

In most cases some additional tests or some additional conditions are given for the specific use in residential ventilation systems.



The standard can be used for the following applications:

- laboratory testing
- attestation purposes.



## 1 Scope

This part of prEN 13141 specifies the laboratory test methods and test requirements for the testing of aerodynamic, thermal and acoustic performance, and the electrical power of a unducted mechanical supply and exhaust ventilation unit used in a single room.

In general, such a unit contains:

- supply and exhaust air fans,
- air filters,
- air to air heat exchanger for exhaust air heat recovery,
- control system.

Such equipment can be provided in more than one assembly, the separate assemblies of which are designed to be used together.

This standard does not deal with ducted units or units with heat pumps.

Safety requirements are given in EN 60335-2-80.