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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English version

Ventilation for buildings - Performance testing and installation checks of residential ventilation systems

Ventilation des bâtiments - Essai de performances et contrôles d'installation des systèmes de ventilation résidentiels Lüftung von Gebäuden - Leistungsprüfung und Einbaukontrollen von Lüftungsanlagen von Wohnungen

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

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Contents

		page	
Forewo	ord	3	
1	Scope	3	
2	Normative references	5	
3	Terms and definitions	5	
4	Test and check procedure	5	
5 5.1 5.2 5.3	Completeness checks General Documents to hand over to the customer Component checks	6 6 6	
6 6.1 6.2 6.3	Functional checks General Preliminary work Procedure	8 8	
7 7.1 7.2 7.3 7.4	Functional measurements General Extent of functional measurements Air flow rate and direction Controls and running time	10 10 11	
8 8.1 8.2 8.3 8.4	Special measurements General Leakage of the ductwork Sound pressure level Electric power	14 14 15	
Annex	A (informative) Air leakage measurements of the building envelope	17	
	B (informative) Influence of ventilation systems on indoor air velocity		
	C (informative) Determination of the extent of functional checks and measurements for commissioning of new systems (see EN 12599)		
Bibliog	Bibliography		

Foreword

This document (EN 14134:2004) has been prepared by Technical Committee CEN/TC 156 "Ventilation for building", 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of an identical text or by endorsement, at the latest by July 2004, and conflicting national standards shall be withdrawn at the latest by July 2004.

Annexes A, B and C are informative.

This document includes a bibliography.

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1 Scope

This European Standard specifies checks and test methods in order to verify the fitness for purpose of installed ventilation systems in dwellings. It can be applied to commissioning of new systems and performance testing of existing systems.

The standard enables the choice between simple test methods, when sufficient, and extensive measurements, when necessary.

The standard applies to mechanical and non-mechanical (natural) ventilation systems comprising any of the following:

- passive stack ventilation ducts;
- air terminal devices (supply, exhaust);
- air transfer devices (externally mounted, internally mounted);
- controls;
- ducts;
- fans;
- filters;
- heat recovery;
- heating/cooling of supply air;
- recirculation air;
- cooker hood;
- cowls;

EN 14134:2004 (E)

- dampers;
- sound reduction devices.

The standard is intended to define the procedure by which the system is checked and assessed before handing over (see Figure 1).

This standard does not apply to:

- heating systems and their control;
- refrigerating systems and their control;
- electric power supply systems.

This standard does not include consideration of the airtightness of building envelope is in. The whole dwelling and the individual room ventilation rate can be influenced by air infiltration through the building envelope (see informative annex A).

This standard does not include the effect of the ventilation system on indoor air velocity within the occupied zone although this can have an effect (see informative annex B).

This standard does not included any requirements concerning the installation contract.

This standard give example of a maintenance manual (see informative annex C).

Figure 1 illustrates the different stages of the design, installation and checking of a ventilation system. This standard deals only with items D, E, F, and G below. Items B and C are referred to as "preliminary work" in this standard.

Terms "designer", "installer" and "inspector" are defined by the task defined in Figure 1.

Α	Design and dimensioning of residential system	Carried out by "designer"	
в	Installation of system	Carried out by "installer"	
с	Balancing and adjustment of system	Carried out by "installer"	
D	Completeness check on system	Carried out by inspector	
Е	Functional checks on system	Carried out by "inspector"	
F	Functional measurements on system	Carried out by "inspector"	
G	Special measurements on system if required	Carried out by "inspector" by	
		agreement with installer and customer	
н	Handover of system to customer	Carried out by "installer"	

Figure 1 — Schematic illustration of the different stages of the design, installation, checking and handover of a ventilation system



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