



NSAI
Standards

Irish Standard
I.S. EN 13053:2006+A1:2011

Ventilation for buildings - Air handling units - Rating and performance for units, components and sections

I.S. EN 13053:2006+A1:2011

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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English Version

Ventilation for buildings - Air handling units - Rating and performance for units, components and sections

Ventilation des bâtiments - Caissons de traitement d'air -
Classification et performance des unités, composants et
sections

Lüftung von Gebäuden - Zentrale raumluftechnische
Geräte - Leistungskenndaten für Geräte, Komponenten und
Baueinheiten

This European Standard was approved by CEN on 26 June 2006 and includes Amendment 1 approved by CEN on 19 May 2011.

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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.

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Contents

Page

Foreword	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions.....	8
4 Symbols and abbreviations	10
5 Ratings and performance of the entire air handling unit.....	13
5.1 General	13
5.2 Testing of aerodynamic performance.....	13
5.2.1 Characteristics and quantities.....	13
5.2.2 Test method.....	15
5.2.3 Measurement procedure	15
5.2.4 Evaluation of results.....	17
5.3 Testing of acoustic performance	17
5.3.1 General.....	17
5.3.2 Specific requirements concerning the set-up of acoustic tests	18
5.4 Tolerances	22
5.5 Test report	23
6 Ratings and performance of the entire air handling unit.....	26
6.1 General	26
6.2 Casing	26
6.3 Fan section	28
6.3.1 General.....	28
6.3.2 A_1 Power input of fans A_1	29
6.4 Coils.....	30
6.4.1 General.....	30
6.4.2 Testing.....	30
6.4.3 Construction.....	30
6.4.4 Cooler/Droplet Eliminator.....	30
6.5 Heat recovery sections.....	31
6.5.1 General	31
6.5.2 Classifications and requirements	31
6.5.3 Testing.....	34
6.6 Damper sections	34
6.6.1 General.....	34
6.6.2 Requirements and testing	34
6.7 Mixing sections	34
6.7.1 General.....	34
6.7.2 Categories and characteristics.....	35
6.7.3 Requirements	35
6.7.4 Measurements	37
6.7.5 Field testing of mixing efficiency	38
6.8 Humidifiers	38
6.8.1 General.....	38
6.8.2 Categories.....	39
6.8.3 Requirements	39
6.9 Filter sections.....	41
6.9.1 General requirements.....	41
6.9.2 Filters installed in air handling units	42
6.10 Passive sound attenuation sections.....	43
7 Extended hygiene requirements for special applications	43

7.1	General	43
7.2	Accessibility	43
7.3	Smoothness	43
7.4	Inspection windows and lights	44
7.5	Drainage/prevention of condensation, humidifiers	44
7.6	Air leakage	44
8	Instructions for installation, operation and maintenance.....	44
8.1	Installation	44
8.2	Operation and maintenance.....	44
8.3	Documentation and labelling	45
Annex A (informative) Air handling units - Heat recovery – Defrosting - Requirements and testing.....		
		46
A.1	General	46
A.2	Defrosting	46
A.2.1	Defrosting heat factor.....	46
A.2.2	Non-cyclic defrosting	46
A.2.3	Cyclic defrosting	46
A.3	Testing.....	47
A.3.1	Test rig	47
A.3.2	Duty points	48
A.3.3	Test procedures	48
A.3.4	Testing of defrosting heat factor.....	48
A.3.5	Total measuring time	48
A.4	Test report	49
A.4.1	The heat recovery device	49
A.4.2	The defrosting heat factor.....	49
Annex B (informative)  Air handling units – Heat recovery – Characteristics 		
		50
B.1	Efficiency of the heat recovery	50
B.2	Evaluation	52
B.3	Evaluation of auxiliary energies	52
B.4	Further characteristics	52
B.5	Efficiency	53
B.6	View of yearly energy	53
Bibliography		54

Foreword

This document (EN 13053:2006+A1:2011) 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 January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

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.

This document supersedes $\boxed{A_1}$ EN 13053:2006 $\langle A_1 \rangle$.

This document includes Amendment 1, approved by CEN on 2011-05-19.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\langle A_1 \rangle$.

This European Standard is a part of a series of standards for air handling units used for ventilation and air conditioning of buildings for human occupancy. It considers the ratings and the performance of air handling units as a whole, the requirements and performance of specific components and sections of air handling units including hygiene requirements. The position of this standard in the field of mechanical building services is shown in Figure 1.

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

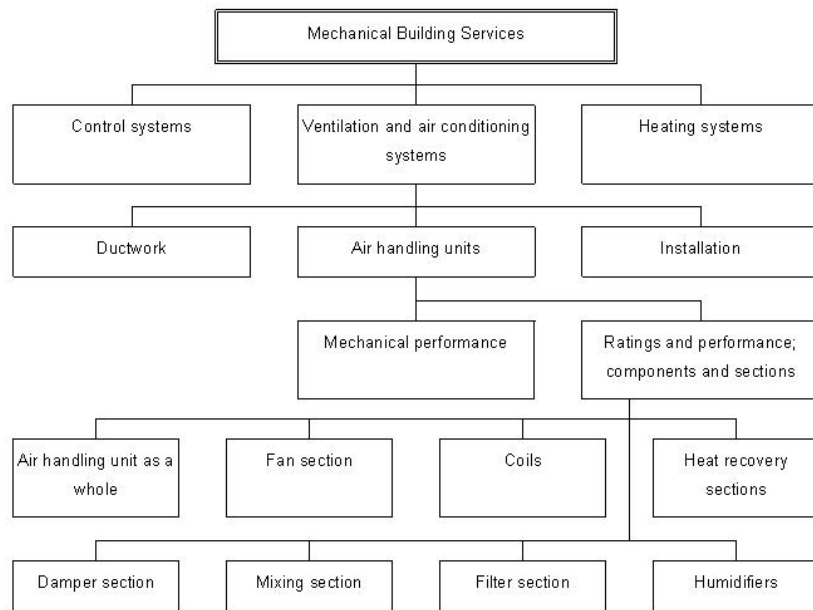


Figure 1 — Position of this standard in the field of mechanical building services

1 Scope

This European Standard specifies requirements and testing for ratings and performance of air handling units as a whole. It also specifies requirements, recommendations, classification, and testing of specific components and sections of air handling units. For many components and sections it refers to component standards, but it also specifies restrictions or applications of standards developed for stand alone components.

This standard is applicable both to standardised designs, which may be in a range of sizes having common construction concepts, and also to custom-design units. It also applies both to air handling units, which are completely prefabricated, and to units which are built up on site. Generally the units within the scope of this standard include at least a fan, a heat exchanger and an air filter.

This standard is not applicable to the following:

- a) air conditioning units serving a limited area in a building, such as fan coil units;
- b) units for residential buildings;
- c) units producing ventilation air mainly for a manufacturing process.

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 308, *Heat exchangers — Test procedures for establishing performance of air to air and flue gases heat recovery devices*

EN 779, *Particulate air filters for general ventilation — Determination of the filtration performance*

EN 1216, *Heat exchangers — Forced circulation air-cooling and air-heating coils — Test procedures for establishing the performance*

EN 1751, *Ventilation for buildings — Air terminal devices — Aerodynamic testing of dampers and valves*

EN 1886:1998, *Ventilation for buildings — Air handling units — Mechanical performance*

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

EN 13779, *Ventilation for non-residential buildings — Performance requirements for ventilation and room-conditioning systems*

EN ISO 3741, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Precision methods for reverberation rooms (ISO 3741:1999)*

EN ISO 3744, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)*

EN ISO 3746, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995)*

EN ISO 5136, *Acoustics — Determination of sound power radiated into a duct by fans and other air-moving devices — In-duct method (ISO 5136:2003)*

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