



NSAI
Standards

Irish Standard
I.S. EN 60335-2-31:2014

Household and similar electrical appliances - Safety - Part 2-31: Particular requirements for range hoods and other cooking fume extractors

I.S. EN 60335-2-31:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

EN 60335-2-31

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2014

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Supersedes EN 60335-2-31:2003

English Version

**Household and similar electrical appliances - Safety - Part 2-31:
Particular requirements for range hoods and other cooking fume
extractors
(IEC 60335-2-31:2012, modified)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-31: Règles particulières pour les hottes de cuisine
et autres extracteurs de fumées de cuisson
(CEI 60335-2-31:2012, modifiée)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-31: Besondere Anforderungen für
Dunstabzugshauben und andere Wrasenabsaugungen
(IEC 60335-2-31:2012, modifiziert)

This European Standard was approved by CENELEC on 2014-04-28. CENELEC 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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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

Foreword

This document (EN 60335-2-31:2014) consists of the text of IEC 60335-2-31:2012 prepared by IEC/TC 61 "Safety of household and similar electrical appliances", together with the common modifications prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-06-12
implemented at national level
by publication of an identical
national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2017-04-28
with the document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

EN 60335-2-31:2014 supersedes EN 60335-2-31:2003.

EN 60335-2-31:2014 includes the following significant technical changes with respect to EN 60335-2-31:2003:

- added requirements to address range hood installation (7.12.1 and 22.103);
- added construction requirement to address risk of entrapment in rangehoods or down-draft system (20.101);
- deleted reference to ISO 13732-1 from Bibliography.

This Part 2 supplements or modifies the corresponding clauses of EN 60335-1:2012, so as to convert it into the European Standard: Safety requirements range hoods and other cooking fume extractors.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60335-2-31:2012 was approved by CENELEC as a European Standard with agreed common modifications.

The Bibliography of EN 60335-1:2012 is applicable, except that the following notes have to be **added** for the standard indicated:

IEC 60335-2-65	NOTE	Harmonized as EN 60335-2-65.
IEC 60335-2-99	NOTE	Harmonized as EN 60335-2-99.

COMMON MODIFICATIONS

Introduction

Add:

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 2006/95/EC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 2006/42/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

1 Scope

This clause of Part 2 is applicable except as follows:

Replace the fourth paragraph by the following:

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in household and similar environments.

However, in general, it does not take into account:

- **children** playing with the appliance,
- the use of the appliance by **very young** children and **young children**,
- **user maintenance** by **children**, including the necessary cleaning the appliance.

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this standard.

7 Markings**7.10** *Modification.*

In Part 1, replace the fourth paragraph with the following:

Devices used to stop operational functions of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position, etc.

7.12 *Addition:*

The instructions shall include details of the types of lamps that can be used, including pictures of the relevant types and indicating the ILCOS D code (standard version code) according to EN 61231.

20 Stability and mechanical hazards**20.2** *Addition*

The second indent in the compliance in 20.2 of Part 1 is not applicable, except for down draft systems.

Annex ZB
(informative)

A-deviations

Addition:

<u>Clause</u>	<u>Deviation</u>
7.1	<p>Germany (Muster-Feuerungsverordnung (MFeuV) vom September 2007 mit redaktioneller Änderung Februar 2010 und G 600 Arbeitsblatt 04/2008, Technische Regel für Gasinstallationen DVGW-TRGI 2008; mit Ergänzung vom Mai 2008 und Korrekturen vom März 2009)</p> <p>The instruction sheet of range hoods of the exhaust-air type shall include the substance of the following warning:</p> <p>Bei gleichzeitigem Betrieb der Dunstabzugshaube im Abluftbetrieb und Feuerstätten darf im Aufstellraum der Feuerstätte der Unterdruck nicht größer als 4 Pa (4×10^{-5} bar) sein.</p> <p>When the range hood and appliances supplied with energy other than electricity are simultaneously in operation, the negative pressure in the room must not exceed 4 Pa (4×10^{-5} bar).</p>

EN 60335-2-31:2014

- 6 -

Annex ZC
(normative)

**Normative references to international publications
with their corresponding European publications**

Addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61231	-	International lamp coding system (ILCOS)	EN 61231	-



IEC 60335-2-31

Edition 5.0 2012-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances – Safety –
Part 2-31: Particular requirements for range hoods and other cooking fume
extractors**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-31: Règles particulières pour les hottes de cuisine et autres extracteurs
de fumées de cuisson**



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IEC 60335-2-31

Edition 5.0 2012-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances – Safety –
Part 2-31: Particular requirements for range hoods and other cooking fume
extractors**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-31: Règles particulières pour les hottes de cuisine et autres extracteurs
de fumées de cuisson**

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
4 General requirement.....	8
5 General conditions for the tests	8
6 Classification	8
7 Marking and instructions.....	8
8 Protection against access to live parts.....	10
9 Starting of motor-operated appliances	10
10 Power input and current.....	10
11 Heating.....	10
12 Void.....	11
13 Leakage current and electric strength at operating temperature.....	11
14 Transient overvoltages	11
15 Moisture resistance	11
16 Leakage current and electric strength.....	11
17 Overload protection of transformers and associated circuits	12
18 Endurance.....	12
19 Abnormal operation	12
20 Stability and mechanical hazards.....	12
21 Mechanical strength	13
22 Construction	13
23 Internal wiring.....	14
24 Components	14
25 Supply connection and external flexible cords	14
26 Terminals for external conductors.....	14
27 Provision for earthing	15
28 Screws and connections.....	15
29 Clearances, creepage distances and solid insulation	15
30 Resistance to heat and fire	15
31 Resistance to rusting	16
32 Radiation, toxicity and similar hazards.....	16
Annexes	18
Bibliography.....	19
Figure 101 – Hob layout for the heating test.....	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-31: Particular requirements for range hoods and other cooking fume extractors

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This fifth edition cancels and replaces the fourth edition published in 2002, including its Amendment 1 (2006) and its Amendment 2 (2008). It constitutes a technical revision.

The principal changes in this edition as compared with the fourth edition of IEC 60335-2-31 are as follows (minor changes are not listed):

- added requirements to address range hood installation (7.12.1 and 22.103);
- added construction requirement to address risk of entrapment in rangehoods or down-draft system (20.101);
- deleted reference to ISO 13732-1 from Bibliography.

The text of this standard is based on the following documents:

FDIS	Report on voting
61/4453/FDIS	61/4506/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for range hoods and other cooking fume extractors.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

The following differences exist in the countries indicated below.

- 7.12: Warnings are required to be marked on the range hood (USA).

- 7.12.1: Additional requirements are specified for range hoods intended to be placed above gas hobs (Sweden).
- 8.2: The insulation of internal wiring need not be equivalent to IEC 60227 or IEC 60245 (USA).
- 11.2: The test method is different (USA).
- 19.101: The test method is different (USA).
- 20.2: The addition applies only to disposable filters (USA).
- 22.101: Additional fixing means are not required if screws can be tightened in keyhole slots (USA).
- 22.102: Parts located behind a filter are considered to be parts that have to be cleaned (Sweden).
- 30.101: The method of evaluating filters is different (USA).

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-31: Particular requirements for range hoods and other cooking fume extractors

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric **range hoods** and other cooking fume extractors intended for installing above, beside, behind or under household cooking ranges, hobs and similar cooking appliances, their **rated voltage** being not more than 250 V.

NOTE 101 The cooking appliance can be supplied by electricity or other fuels, such as gas.

Appliances not intended for normal household use but that nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

- persons (including children) whose
 - physical, sensory or mental capabilities; or
 - lack of experience and knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

NOTE 102 Attention is drawn to the fact that

- for appliances incorporating electrostatic air filters, IEC 60335-2-65 also applies;
- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements could be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national authorities responsible for buildings and similar authorities.

NOTE 103 This standard does not apply to

- appliances intended for commercial purposes (IEC 60335-2-99);
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

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