IEC 60704-2-13

Edition 4.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Household and similar electrical appliances – Test code for the determination of airborne acoustical noise –
Part 2-13: Particular requirements for cooking fume extractors

Appareils électrodomestiques et analogues – Code d'essai pour la détermination du bruit aérien –
Partie 2-13: Exigences particulières pour extracteurs de fumée



IEC 60704-2-13:2023-10(en-fr)



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – TEST CODE FOR THE DETERMINATION OF AIRBORNE ACOUSTICAL NOISE –

Part 2-13: Particular requirements for cooking fume extractors

FOREWORD

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IEC 60704-2-13 has been prepared by subcommittee 59K: Performance of household and similar electrical cooking appliances, of IEC technical committee 59: Performance of household and similar electrical appliances. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) alignment with IEC 61591:2023;
b) change of title, scope and definitions 3.103 and 3.104: this document deals with cooking fume extractors (this covers range hoods and down-draft systems);

c) exhaust pipe of down-draft systems specified;

d) built-in range hoods in recirculation mode with an air outlet device specified;

e) alignment with IEC 60704-1:2021.

The text of this International Standard is based on the following documents:

Draft	Report on voting
59K/376/FDIS	59K/380/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This International Standard is to be used in conjunction with IEC 60704-1:2021.

This document supplements or modifies the corresponding clauses in IEC 60704-1:2021, so as to establish the test code for cooking fume extractors. When a particular subclause of IEC 60704-1:2021 is not mentioned in this document, that subclause is applicable as far as reasonable. Where this standard states "addition", "modification" or "replacement", the relevant requirements, test specifications or explanatory matter in IEC 60704-1:2021 are to be adapted accordingly.

Subclauses, tables and figures that are numbered starting from 101 are additional to those in IEC 60704-1:2021. Additional annexes are lettered AA, BB, etc.

Unless notes are in a new subclause or involve notes in IEC 60704-1:2021, they are numbered starting from 101, including those in a replaced clause or subclause.

A list of all parts in the IEC 60704 series, published under the general title *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise*, can be found on the IEC website.

In this standard, the following print types are used:

- terms defined in Clause 3: **bold type**.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

The measuring conditions specified in this document provide for sufficient accuracy in determining the noise emitted and comparing the results of measurements taken by different laboratories, whilst simulating as far as possible the practical use of cooking fume extractors mounted in household kitchens.

It is recommended to consider the determination of noise levels as part of a comprehensive testing procedure covering many aspects of the properties and performance of cooking fume extractors.

NOTE As stated in the introduction to IEC 60704-1:2021, this test code is concerned with airborne noise only.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – TEST CODE FOR THE DETERMINATION OF AIRBORNE ACOUSTICAL NOISE –

Part 2-13: Particular requirements for cooking fume extractors

1 Scope

Addition:

These particular requirements apply to **cooking fume extractors** for household and similar use intended for filtering the air of a room or for exhausting the air out of a room, including their accessories and their component parts. It also applies to **cooking fume extractors** where the fan is mounted separately from the appliance inside or outside of the room where the appliance is located, but controlled by the appliance when the fan is defined in the technical documentation. This document deals also with **down-draft systems** that are arranged beside, behind or under the cooking appliance.

Measurements carried out in accordance with this document determine the noise emission into the room, from which cooking fumes are extracted. Noise emission to the outside (e.g. through air ducts) are not considered.

2 Normative references

Addition:

IEC 60704-1:2021, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements*

IEC 61591:2023, *Cooking fume extractors – Methods for measuring performance*

ISO 7235:2003, *Acoustics – Laboratory measurement procedures for ducted silencers and air-terminal units – Insertion loss, flow noise and total pressure loss*

3 Terms and definitions

Addition:

3.101
cooking fume extractor
CFE
appliance with fan and filter intended to collect and treat cooking fumes, which can be operated in **recirculation mode** or **extraction mode**

[SOURCE: IEC 61591:2023, 3.2]

3.102
range hood
CFE installed over a cooking appliance

[SOURCE: IEC 61591:2023, 3.3]

3.103
wall range hood
range hood mounted to the wall

[SOURCE: IEC 61591:2023, 3.3.1]

3.104
island range hood
range hood mounted to the ceiling

[SOURCE: IEC 61591:2023, 3.3.2]

3.105
ceiling range hood
range hood integrated onto or into the ceiling

[SOURCE: IEC 61591:2023, 3.3.3]

3.106
built-in range hood
range hood mounted into or onto a cabinet

[SOURCE: IEC 61591:2023, 3.3.4]

3.107
microwave hood combination
CFE integrated in a microwave oven

[SOURCE: IEC 61591:2023, 3.4]

3.108
multiple combination hood
CFE where the fan is mounted separately of the appliance, but controlled by the appliance

[SOURCE: IEC 61591:2023, 3.5]

3.109
down-draft system
CFE intended for installation adjacent to a cooking appliance or integrated in a cooking appliance that draws vapour down into a duct

Note 1 to entry: A **down-draft system** can also be a system where the fan is mounted separately from the appliance but controlled by the appliance.

[SOURCE: IEC 61591:2023, 3.6]

3.110
recirculation mode
mode of a **CFE** that discharges air back into the room, which includes an **odour-reduction filter**

[SOURCE: IEC 61591:2023, 3.7]