

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances – Test code for the determination of airborne acoustical noise –
Part 2-4: Particular requirements for washing machines and spin extractors**

**Appareils électrodomestiques et analogues – Code d'essai pour la détermination du bruit aérien –
Partie 2-4: Exigences particulières pour les machines à laver le linge et lesessoreuses centrifuges**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
TEST CODE FOR THE DETERMINATION
OF AIRBORNE ACOUSTICAL NOISE –****Part 2-4: Particular requirements for washing machines
and spin extractors**

FOREWORD

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IEC 60704-2-4 has been prepared by subcommittee 59D: Performance of household and similar electrical laundry 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 2011. This edition constitutes a technical revision.

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

- a) alignment to IEC 60704-1:2021;
- b) alignment to Edition 6 of IEC 60456:2024, especially regarding test programme and detergent;
- c) considering multi-compartment washing machines;
- d) considering wall-mounted washing machines;
- e) definition of the drum speed measurement;
- f) adapting parts for standard test load and test programme.

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

Draft	Report on voting
59D/526/FDIS	59D/528/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 document is intended to be used in conjunction with the fourth edition of IEC 60704-1:2021, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements*.

The relevant text of IEC 60704-1:2021 as amended by this document establishes the test code for washing machines and spin extractors.

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

Subclauses, tables and figures that are additional to those in IEC 60704-1:2021 are numbered starting from 101. 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.

Words in **bold** in the text are defined in Clause 3.

A list of all the parts in the IEC 60704 series, 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.

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.

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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 household **washing machines** and **spin extractors**.

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 household **washing machines** and **spin 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 2-4: Particular requirements for washing machines and spin extractors

1 Scope

Addition:

These particular requirements apply to single unit electrical **washing machine**, and the washing and spinning function of combined appliances for household and similar use and to **spin extractors** for household and similar use.

NOTE 101 For washer-dryers, see IEC 60704-2-16:2019.

Requirements for the declaration of noise emission values are not within the scope of this standard.

NOTE 102 For determining and verifying noise emission values declared in product specifications, see IEC 60704-3:2019.

2 Normative references

Addition:

IEC 60456:2024, *Washing machines for household use – Methods for measuring the performance*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.101

washing machine

appliance for cleaning and rinsing of textiles using water, which can also have a means of extracting excess water from the textiles

[SOURCE: IEC 60456:2024, 3.1.1]

3.102

multi-compartment washing machine

washing machine equipped with more than one drum, whether in separate units or in the same casing

[SOURCE: IEC 60456:2024, 3.1.11]