

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

**Appareils électrodomestiques et analogues – Code d'essai pour la détermination
du bruit aérien –
Partie 1: Exigences générales**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: General requirements

FOREWORD

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International Standard IEC 60704-1 has been prepared by IEC technical committee 59: Performance of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 1997 and constitutes an update and an editorial revision. It also includes the description of an appropriate test enclosure for appliances to be built in.

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

FDIS	Report on voting
59/546/FDIS	59/549/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.

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 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- withdrawn,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.

Withdrawn

INTRODUCTION

Although the noise emitted by household appliances does not generally present a hazard to the hearing of the operator and other exposed persons, the need for standardization procedures for the determination of the noise emitted has been recognized for a long time. Such procedures should be specified, not only for special types of appliances, but also the principles should be applicable to the majority of appliances in general use.

Generally, the determination of noise levels is only part of a comprehensive testing procedure covering many aspects of the properties and performances of the appliance. It is therefore important that the requirements for noise measurements (such as test environment, instrumentation, and amount of labour involved) should be kept at a modest level.

The results of noise measurements will be used for many purposes, for example for noise declaration, as well as for comparing the noise emitted by a specific appliance to the noise emitted by other appliances of the same family. In other cases, the results will be taken as a basis for engineering action in the development stages of new pieces of equipment, or in deciding on means for sound insulation. For all purposes, it is important to specify procedures with known accuracy so that the results of measurements taken by different laboratories can be compared.

These conditions have, as far as possible, been taken into account in the preparation of this test code. The acoustic measuring methods are based on those described in ISO 3743-1, ISO 3743-2 and ISO 3744.

The adoption of these methods permits the use of semi-anechoic rooms, special reverberation test rooms and hard-walled test rooms. The result of the measurements is the sound power level of the appliance. Within the measuring uncertainty specific to these methods, the results from the determination under free field conditions over a reflecting plane are equal to those obtained in reverberant fields. The use of intensity methods as described in ISO 9614-1 and ISO 9614-2 is subject to a specific part 2.

It should be emphasized that this test code is concerned with airborne noise only. In some cases, structure-borne noise, for example transmitted to the adjoining room, may be of importance.