
Acoustics — Guidelines for noise control in offices and workrooms by means of acoustical screens

*Acoustique — Lignes directrices pour la réduction du bruit dans les
bureaux et locaux de travail au moyen d'écrans acoustiques*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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Introduction

Besides silencers and enclosures (see ISO 14163 and ISO 15667, respectively), indoor screens are used as secondary means of noise control in workrooms and offices. For workplaces containing machinery, some information on such elements is given in ISO 11690-2:1996, Annexes E and F. More detailed information can be found in the bibliographic references.

Acoustics — Guidelines for noise control in offices and workrooms by means of acoustical screens

1 Scope

This International Standard deals with the effectiveness of acoustical screens. It specifies the acoustical and operational requirements to be agreed upon between the supplier or manufacturer and the user of acoustical screens. This International Standard is applicable to the following types of acoustical screens:

- a) free-standing acoustical screens for offices, service areas, exhibition areas, and similar rooms;
- b) acoustical screens integrated in the furniture of such rooms;
- c) portable and removable acoustical screens for workshops;
- d) fixed room partitions with more than 10 % of the connecting area open and acoustically untreated.

Walls of partial acoustic enclosures and cabins which, together with the room boundary surfaces, also partition a room and provide more than 10 % open and acoustically untreated area, are also treated as acoustical screens.

NOTE Guidance on complete acoustic enclosures is given in ISO 15667.

This International Standard is not applicable to cabinet walls and similar multi-layer walls whose thickness exceeds 0,2 m, nor to banners and other types of suspended baffles.

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.

ISO 140-3, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements*

ISO 354, *Acoustics — Measurement of sound absorption in a reverberation room*

ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation*

ISO 9053, *Acoustics — Materials for acoustical applications — Determination of airflow resistance*

ISO 10534-1, *Acoustics — Determination of sound absorption coefficient and impedance in impedance tubes — Part 1: Method using standing wave ratio*

ISO 10534-2, *Acoustics — Determination of sound absorption coefficient and impedance in impedance tubes — Part 2: Transfer-function method*

ISO 11654, *Acoustics — Sound absorbers for use in buildings — Rating of sound absorption*

ISO 11821:1997, *Acoustics — Measurement of the in situ sound attenuation of a removable screen*