

# INTERNATIONAL STANDARD

**ISO**  
**9568**

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## **Cinematography — Background acoustic noise levels in theatres, review rooms and dubbing rooms**

*Cinématographie — Niveaux de bruit de fond dans les salles de  
projection, de visionnement et les auditoriums de doublage*



Reference number  
ISO 9568:1993(E)

## 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.

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.

International Standard ISO 9568 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

Annex A of this International Standard is for information only.

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International Organization for Standardization

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# Cinematography — Background acoustic noise levels in theatres, review rooms and dubbing rooms

## 1 Scope

This International Standard specifies measurement methods and maximum ratings for indoor background sound pressure levels in theatres, review rooms and dubbing rooms.

It applies to noise emitted by heating, ventilating and air-conditioning systems, intrusive noise from the projector(s) associated with the theatre and noise emitted by any other mechanical or electrical equipment in the theatre building. It is intended for application when the background noise is essentially a steady-state sound, without strong time-varying components.

It does not apply to intrusive noise from other sources outside the theatre, such as aircraft, highway traffic, or adjacent theatres, or to noise resulting from the operation of the sound system in the theatre, or the vibration of the theatre, i.e. movement of the building below 20 Hz.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 266:1975, *Acoustics — Preferred frequencies for measurements*.

IEC 651:1979, *Sound level meters*.

## 3 Test conditions

**3.1** The air-handling system of the theatre shall be brought to the noisiest state in which it is used during screenings, generally "on", with cooling compressors operating. Any other mechanical or electrical equipment, such as projector exhaust fans, sump pumps, transformers, or the like, within the theatre building shall be brought to the noisiest state that will occur during screenings. The projector system shall be running normally, with film. Power to the theatre sound system shall be turned off.

**3.2** Measurement equipment shall conform to IEC 651, using a class II octave band filter or class III third-octave band filter in accordance with ISO 266.

**3.3** The measurement system shall be set to "slow" reading.

**3.4** The measurement system shall be calibrated immediately before use by means of an acoustic calibrator accurate to within  $\pm 0,5$  dB for sound pressure level. The calibration shall be checked after use, and if changes greater than 0,5 dB are found, the measurements shall be considered invalid. The acoustic calibrator shall be checked at least once per year against a known source.