

**Ergonoomika. Üldkasutatavates tsoonides ja
töökohal kasutatavad ohusignaalid. Helisignaalid**

Ergonomics - Danger signals for public and work areas
- Auditory danger signals

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 7731:2008 sisaldab Euroopa standardi EN ISO 7731:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.09.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 7731:2008 consists of the English text of the European standard EN ISO 7731:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 24.09.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 13.180, 13.320

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English Version

Ergonomics - Danger signals for public and work areas - Auditory danger signals (ISO 7731:2003)

Ergonomie - Signaux de danger pour lieux publics et lieux
de travail - Signaux de danger auditifs (ISO 7731:2003)

This European Standard was approved by CEN on 25 August 2008.

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Foreword

The text of ISO 7731:2003 has been prepared by Technical Committee ISO/TC 159 "Ergonomics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 7731:2008 by Technical Committee CEN/TC 122 "Ergonomics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7731:2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.

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Endorsement notice

The text of ISO 7731:2003 has been approved by CEN as a EN ISO 7731:2008 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 98/37/EC on machinery, amended by 98/79/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 98/37/EC,
amended by 98/79/EC**

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of Directive 98/37/EC, amended by 98/79/EC	Qualifying remarks/Notes
All clauses	Annex I: 1.2.2, 1.7.0, 3.6.1	-

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Annex ZB (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZB.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

Table ZB.1 — Correspondence between this European Standard and Directive 2006/42/EC

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of Directive 2006/42/EC	Qualifying remarks/Notes
All clauses	Annex I: 1.1.6, 1.2.2, 1.7.1, 1.7.1.2, 1.7.2, 3.6.1	-

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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Introduction

This International Standard specifies criteria applicable to the recognition of auditory danger signals, especially in cases where there is a high level of ambient noise. It covers auditory danger signals, designated in the text of this standard by the use of the phrase “danger signals”, which apply to emergency signals and warning signals (see Table 1).

Auditory danger signals can also be found in the following International Standards:

- ISO 8201 dealing with emergency evacuation signals;
- ISO 11429 dealing with auditory and visual danger signals.

Various types of danger signals and their responses are described in Table 1.

It should be noted that ISO 11429 covers this subject in greater detail.

Table 1 — Various types of danger signals

Type of danger signal	Response
Auditory emergency evacuation signal	Leave the danger zone immediately
Auditory emergency signal	Take urgent action for rescue or protection
Auditory warning signal	Take preventative or preparatory action

Correctly designed signals can reliably call attention to a hazard or a dangerous situation, even when hearing protection is worn, without causing fright.

Ergonomics — Danger signals for public and work areas — Auditory danger signals

1 Scope

This International Standard specifies the physical principles of design, ergonomic requirements and the corresponding test methods for danger signals for public and work areas in the signal reception area and gives guidelines for the design of the signals. It may also be applied to other appropriate situations.

The relevance given in the definitions as to the difference between an auditory emergency signal, auditory emergency evacuation signal and an auditory warning signal should be noted. The emergency evacuation signal is covered in ISO 8201.

This International Standard does not apply to verbal danger warnings (e.g. shouts, loudspeaker announcements). ISO 9921 covers verbal danger signals.

Special regulations such as those for a public disaster and public transport are not affected by this International Standard.

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.

IEC 61260, *Electroacoustics — Octave-band and fractional-octave-band filters*

3 Terms, definitions and symbols

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

NOTE Definitions of symbols referred to in this International Standard are given in Annex A.

3.1

ambient noise

all sounds in the signal reception area not produced by the danger-signal transmitter

3.2

danger signals

depending on the degree of urgency and the possible effect of the danger on people, a distinction is made between three types of auditory danger signals: an auditory emergency signal, an auditory emergency evacuation signal and an auditory warning signal

3.2.1

auditory emergency signal

signal marking the onset and, if necessary, the duration and the end of a dangerous situation