Second edition
2017-11

Corrected version
2018-03

Alarm systems — Audible emergency evacuation signal — Requirements

Systèmes d'alarme — Signal sonore d'évacuation d'urgence — Exigences

Reference number
ISO 8201:2017(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 3, *Fire detection and alarm systems*.

This second edition cancels and replaces the first edition (ISO 8201:1987), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the evacuation signal temporal pattern has been modified to allow for the use of signals from voice alarm evacuation systems.

This corrected version of ISO 8201:2017 incorporates the following corrections:

— the title of the document has been corrected from *Acoustics — Audible and other emergency evacuation signals* to *Alarm systems — Audible emergency evacuation signal — Requirements*.

Introduction

There has been a growing interest in the past decade in the development of an international audible signal which, when heard, would unequivocally mean “evacuate the building immediately”.

In searching for an appropriate audible signal, it was considered that levels of background noise and frequency patterns are so variable, particularly in the industry, that no signalling device would be able to “penetrate” all background noises and frequency patterns. For this reason, it seemed prudent to select the kind of sound best able to audibly “penetrate” a particular background noise in a given building and then make that sound unique and understandable by imposing on it a standard recognizable pattern of “on” and “off” times.

It is frequently found that, whatever sounding device is already in place in a building, it is there because it has been shown to be successful. Consequently, all that is needed in many cases is to impose a standardized temporal pattern on the existing sounding devices. For new buildings, a signal that can “penetrate” the background noise inside that building should be selected and then the standardized temporal pattern is imposed on that signal.

An additional advantage of using a standardized temporal pattern as the distinguishing characteristic of the audible emergency evacuation signal is that the temporal pattern can be applied to visual and tactile signals to aid those who have impaired hearing. Visual and tactile signals incorporating the temporal pattern can also be applied in areas where the background noise is so intense that no signal is capable of “penetrating” audibly.

This document is one of a series of standards covering danger signals. Other standards include ISO 7731, ISO 11428 and ISO 11429.