## TECHNICAL REPORT



Third edition 2022-04

# Comparison of worldwide escalator and moving walk safety standards —

## Part 1: Clause by clause comparison

Comparaison des normes mondiales de sécurité des escaliers mécaniques et trottoirs roulants —

Partie 1: Comparaison paragraphe par paragraphe



Reference number ISO/TR 14799-1:2022(E)



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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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 178, *Lifts, escalators and moving walks*.

This third edition cancels and replaces the second edition (ISO/TR 14799-1:2015), which has been technically revised.

The main changes are as follows:

- Updated the content according to the latest revisions of EN 115-1, ASME A17.1/CSA B44 and Japanese Codes 2016;
- Added an explanation of the difference between this revision and the previous edition;
- Removed ASME A17.1/CSA B44 content, which is not included due to copyright issues (only the clause numbers are indicated).

A list of all parts in the ISO 14799 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

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### Introduction

This document is a result of work by ISO/TC 178 on a comparison of worldwide standards on escalators and moving walk safety including standards from Australia, Europe, Japan, Russia and the US. In 1995, ISO/TC 178 was tasked with preparing a cross-reference document with the relevant sections of each standard and an analysis of the differences. The goal at that time was to prepare a Technical Report which would provide reference information to assist national committees when reviewing and revising individual standards which can initiate a gradual convergence of the technical requirements. In 1996, the study was expanded to include the Korean safety standard.

This document is intended to aid standards writers in developing their safety requirements and to help standards users understand the basis for the requirements as they are applied throughout the world.

EN 115-1 is used as a reference document and its clauses are shown in their normal sequence. The other reference documents (ASME A.17/B.44.1 and Japanese Codes) are not in their normal sequence and logical order. They are structured differently to EN 115-1. The result is that can appear in <u>Table 1</u> that these standards are incomplete. These standards in their original structure inclusive of their references to other standards and requirements are, however, complete.

This comparison no longer includes the Australian, Korean, and Russian safety codes as there are intentions on the national level to bring theses codes in line with one of the remaining three codes.

Due to copyright restrictions, the content of ASME A.17/B.44.1 is not included in the comparison table (<u>Table 1</u>). Only reference to the clauses in ASME A.17/B.44.1 are included.

The graphical symbols shown in the following figures from EN 115-1:2017 are not included in this document, as they are not registered as official ISO graphical symbols:

- Figure 1.2
- Figure G.1
- Figure G.2
- Figure G.3
- Figure G.4

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# Comparison of worldwide escalator and moving walk safety standards —

### Part 1: Clause by clause comparison

### 1 Scope

This document compares the requirements of selected clauses of the following standards (excluding local deviations):

- a) EN 115-1:2017 <sup>[12]</sup>;
- b) ASME A17.1/CSA B44-2016 [11];
- c) Japanese Codes 2016<sup>[13]</sup>.

NOTE The original Japanese codes were written in Japanese and no official English versions have been released. Listed Japanese codes were carefully translated, but English correspondence to the original document is not guaranteed.

#### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

### 4 Clause by clause comparison

#### 4.1 General

<u>Table 1</u> compares the content of EN 115 1 (European), ASME A17.1/B44 (North American) and the Japanese codes, clause by clause. There are other standards in the countries concerned that have requirements not shown in the escalator/moving walk standards compared, but which address some of the same requirements as EN 115-1.

The principal dimensions (e.g. L1, b8, h6) in EN 115-1 can be seen in the figures shown in EN 115-1:2017, 2.2, ASME A17.1/B44-2016, 2.3 and Japanese Codes 2016, 2.4.