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Building hardware - Door fittings for use by children, elderly and disabled people in domestic and public buildings - A guide for specifiers

S.R. CEN/TR 15894:2009

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English Version

Building hardware - Door fittings for use by children, elderly and disabled people in domestic and public buildings - A guide for specifiers

Quincaillerie pour le bâtiment - Accessoires de portes pour enfants, personnes âgées ou personnes handicapées dans les habitations et bâtiments publics - Guide destiné aux prescripteurs

Schlösser und Baubeschläge - Türbeschläge zur Nutzung durch Kinder, ältere und behinderte Menschen in privaten und öffentlichen Gebäuden - Ein Leitfaden für Planer

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Foreword

This document (CEN/TR 15894:2009) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, the secretariat of which is held by AFNOR.

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.

Europe has a population of 800 million of whom over 100 million are children and elderly people and 50 million are declared as disabled (the latter figure includes many people who are also elderly). The European Union has 77 million elderly people and 43 million people registered as disabled. These consumers with special needs constitute a major (and growing) part of the population who daily come into contact with the numerous barriers that exist in and outside of buildings.

This European guidance document aims to help designers, specifiers and building managers or owners to identify and include the needs of children, elderly and disabled persons, by enabling people with low physical strength, dexterity and manipulative impairment, to be able to open, close and lock doors.

It includes general guidelines for selecting hardware products and guidelines for product specifications. It also includes the following annexes:

- Annex A - Guidelines for suitability assessment of hardware products;
- Annex B – Guidelines for hardware product specification.

Ultimately the intention of this guidance document is to make existing hardware products and standards more suitable with regard to their use by children, the elderly and disabled.

NOTE If needed, these guidelines may be included as informative annexes in future revisions of suitable hardware product standards.

Introduction

The essential function of building hardware is to provide easy access to all users regardless of their ability or disability. Doors should be of a minimum clear opening width to accommodate wheelchairs and should be easy to use. For example, this requires low friction hinges and carefully selected door controls, possibly using low energy door operators, powered or automatic operators or electromagnetic devices.

The correct choice of door furniture with easy-to-use locking systems and good signage all add up to an acceptable combination. Generally, this is no more than would be asked of any responsible specification. This guide is intended to enable installers to correctly follow building specifications and to make sure that buildings are correctly equipped for their intended use.

One of the main challenges to specifiers, architects, manufacturers and builders is to ensure that the specification, design and construction do not result in the environment of an elderly or disabled person appearing different from the rest of the community.

This European guidance document is people-based and it is essential that specifiers recognize that the individual needs of users can vary. Users should be consulted frequently in the specification and installation processes. The specification should recognize that buildings are often occupied by non-disabled and younger people, as well as elderly and disabled people. Similarly, these members of the community need to move freely and safely in the wider environment.

Where dimensions/measurements are given for guidance purposes, they are subject to the tolerances incorporated in any appropriate product or construction standard. National regulations, where applicable, should take precedence.

It is recognized that local regulations and certain types of door construction (such as aluminium) may prevent specifiers from achieving all the recommendations in this document. In these circumstances, the needs of the building occupants should be considered and the best possible compromise should be achieved.

This European guidance document refers to the following mandates: M/273-ICT, M/283-Elderly and Disabled, M/292-Product information, M/293-Child safety and CEN Guide 6.

This European guidance document does not refer to EN 12217 which contains selected maximum operating forces considered unsuitable for children, elderly and disabled people to use and does not take into consideration doors fitted with emergency and panic exit devices and systems, or door closing devices.

1 Scope

This European guidance document provides guidance on the selection of existing building hardware for manually and power operated pedestrian doors and associated products whose integration into the design of buildings will make them more safe, secure and convenient for the occupants inclusive of children, elderly and disabled people to use ("design for all"). Although it is intended for people with reduced physical and sensorial capabilities, it may not cover all specific individual needs. For example, it may not cover all needs of blind people or those not able to move unassisted.

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.

N/A

3 Terms and definitions

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

3.1

C.E.D.

abbreviation for Children, Elderly and Disabled people

3.2

clear opening width

horizontal distance, measured parallel to door frame, between nearest points on door frame and leaf, less the protrusion of any hardware mounted less than 1 800 mm above nominal floor height, with door at maximum opening position

NOTE National regulations may accept deviations or tolerances.

4 How to use this guidance document

The following steps should be undertaken by specifiers (architects, etc.) to select the suitable product to specify for the intended application, and by manufacturers to offer the appropriate product:

– **Step 1. Specifier: define users' environmental situation**

Refer to Clause 5, Annex A and Table A.1 to define needs.

– **Step 2. Specifier: define hardware product functions**

Refer to Table B.1 to determine relevant product category and hence appropriate Annex.

– **Step 3. Specifier: define users' needs**

Refer to appropriate part of Annex B for recommended suitable products.

– **Step 4. Manufacturer: define product offer**

Refer to appropriate part of Annex B to list for recommended product specifications.

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