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First edition
2011-12-15

Building construction — Accessibility and usability of the built environment

*Construction immobilière — Accessibilité et facilité d'utilisation de
l'environnement bâti*



Reference number
ISO 21542:2011(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 21542 was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 16, *Accessibility and usability of the built environment*.

This first edition cancels and replaces ISO/TR 9527:1994.

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Introduction

This International Standard provides building users, architects, designers, engineers, builders, building owners and managers, manufacturers, policy makers and legislators with requirements and recommendations to create a sustainable built environment which is accessible.

The purpose of this International Standard is to define how the built environment should be designed, constructed and managed to enable people to approach, enter, use, egress from and evacuate a building independently, in an equitable and dignified manner and to the greatest extent possible.

The intention of this International Standard is to meet the needs of the majority of people. This goal is achieved by agreement on minimum standards of provision which are generally accepted to accommodate the diversities of age and of human condition. This agreement has been reached by consensus between different countries all over the world.

In some countries a higher level of technical specifications has been achieved due to their long history in developing accessible building standards and regulations. The requirements of this International Standard are not intended to replace more demanding requirements defined in those national standards or national regulations.

These principles are supported by Preamble (g) and Articles 9, 10 and 11 of the United Nations Convention on the Rights of Persons with Disabilities.

NOTE 1 The Convention on the Rights of Persons with Disabilities, with its Optional Protocol, was adopted by the General Assembly of the United Nations on 13 December 2006. It came into force, i.e. became an international legal instrument, on 3 May 2008. Furthermore, information about the Convention and its text can be found on the United Nations website: <http://www.un.org/disabilities/>. The Convention is serviced by a joint secretariat, consisting of staff from both the United Nations Department of Economic and Social Affairs (DESA), based in New York, and the Office of the High Commissioner for Human Rights (OHCHR) in Geneva.

This International Standard sets out the objectives, design considerations, requirements and recommendations that ISO expects to result in accessible and usable buildings when fully implemented.

This International Standard should be applied to new and existing buildings.

If these design requirements are taken into consideration in the early stages of building design, the costs of providing accessibility and usability measures are minimal and raise the value of the property in terms of sustainability. Where alterations and refurbishment occur, the additional cost depends on the size and complexity of the particular building and its adaptations.

NOTE 2 For further information on costs of accessible buildings see ETH-Study from Switzerland: http://www.hindernisfrei-bauen.ch/kosten_f.php.

This International Standard contains a combination of essential requirements, i.e. provisions which are essential for accessibility and usability of the built environment, and recommendations for an improved environment. The essential requirements are preceded by the word "shall". For recommendations which are desirable, the provisions are preceded by the word "should".

This International Standard may be applied in accordance with the National Regulations of the Member Bodies who have adopted this International Standard and stated in their National Foreword the terms under which it is to be applied.

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This International Standard may be used by

- a) national authorities to determine a specific programme of implementation, and
- b) building owners to fulfil their responsibilities according to anti-discrimination and equity legislation, or on a voluntary basis.

As most buildings are subject to refurbishment, upgrade or change of use at some stage during their life cycle, national regulations can require all or part of this International Standard to be applied.

National building regulations may include considerations of legislation on equality, particular building and site constraints, different types of buildings, and the costs and benefits to society generally. It is also important to ensure that existing buildings of historical, architectural and cultural importance are accessible. In such cases it might be necessary for national authorities to allow some exceptions to this International Standard, as well as recommending appropriate alternative accessibility measures.

This International Standard should lead to continuous improvement in the built environment. Whilst the objectives always remain unchanged, the means of achieving them is part of a continuing process of change, i.e. as human knowledge and building technology improve and as the relationship between generally accepted building practice and technology alters.

ISO/IEC Guide 71 and its guidance document ISO/TR 22411 should be used to augment and assist in understanding the requirements of this International Standard.

Within the figures all dimensions are given in millimetres and measured from finished surfaces, unless otherwise stated. All figures are provided as examples.