TECHNICAL REPORT

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Building construction — Needs of disabled people in buildings — Design guidelines

Construction immobilière — Besoins des handicapés dans les bâtiments — Lignes directrices pour la conception

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Contents

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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 main task of technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

— type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;

— type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 9527, which is a Technical Report of type 3, was prepared by Technical Committee ISO/TC 59, *Building construction*, Subcommittee SC 1, *Dimensional coordination*.

It must be emphasised that the provisions of this Technical Report are guidelines and not standardized requirements. A number of sources of information have been drawn on in setting out the guidance contained in the publication, and it is recognized that further work is necessary to validate some of the criteria that it contains. The material is based on research carried out up till the mid-1980s. New research and national regulations or laws (such as the ANSI standard, regulations in response to the Americans with Disabilities Act, Canadian and Japanese standards) may provide for sizes which differ from those given in this Technical Report. Nevertheless, it is substantially correct.

Introduction

The problems of the handicapped, in as far as they present practical challenges to designers and architects, are the particular concern of a working group of the International Organization for Standardization. This group, set up by ISO's technical committee on building construction, has felt it appropriate - particularly in view of the prominence given this subject in 1981 - to draw up some guidance for planners and for the formulation of local regulation, standards, recommendations, etc.

This document provides that information; not in the form of a standard, though it may be drawn upon by anyone concerned with describing the functional needs of the handicapped, but in the form of a general account of basic and particular needs.

Building construction — Needs of disabled people in buildings — Design guidelines

Background

In planning the environment, disabled people should not be treated as a group requiring special treatment. Special measures should be avoided in favour of a more general approach. Any action should be based on the concept that disabled people are to be given opportunities to participate in normal social life. This means, among other things, that people should be able to find employment, to go to ordinary schools, go shopping, visit friends, enjoy holidays and take advantage of neighbourhood facilities. For many people, this participation is impossible because of environmental barriers such as steps, narrow doors, high kerbs and the absence of lifts.

Today a very large proportion of the population in industrialized countries is handicapped as a result of age, illness or accident. It has been estimated that at least 10 % of the population has some kind of functional disability affecting movement, vision or hearing, or suffers allergic reactions.

Approach

Basic accessibility in the environment would ensure that there are no barriers between handicapped people and participation in ordinary activities. Its advantages are felt not only by the disabled but also by elderly people and by children.

Accessibility will be influenced by requirements mainly from wheelchair users and people with impaired vision, but also to some extent by the needs of those with impaired hearing or allergy.

Even though basic accessibility may be achieved, a particular dwelling or workplace may need some further adaptation to specific individual requirements.

It is realistic to assume that provision for handicapped people in new buildings will be easier to implement than in the adaptation of existing and older buildings. It can also be expected that a higher standard of provision may be needed in buildings specially designed for handicapped people.

It is important that the intended accessibility really can be applied in planning and construction. The scale of provision for the handicapped in a building should be realistic and economic, and seen in relation to other demands and to the type of population it will serve. Consequently it may be better to comply with some reasonable requirements on a short term basis and aim, in the long run, at a gradual development towards better accessibility. Too high a requirement can mean in practice that nothing is implemented.

To summarize, the aim should be to meet some basic needs in the entire ordinary environment and to match more specific individual requirements by flexible and adaptable solutions.