



Swedish Legislation

Removal of easily eliminated obstacles

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Regulations and general recommendations issued by the National Board of Housing, Building and Planning on the removal of easily eliminated obstacles to and in premises to which the public has access and in public spaces; adopted on 30 October 2003.

The National Board of Housing, Building and Planning prescribes (Cf. Govt Bill 2000/01:48, Report 2000/01: BoU, Committee on Housing, 5, Riksdag Comm. 2000/01:155.) the following under Section 5 of the Planning and Building Ordinance (Swedish Code of Statutes SFS 1987:383).

National Board of Housing, Building and Planning

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Introduction

Important information

The following translation is strictly for informative purpose. The legally binding text is found in the Code of Statutes of the Swedish Board of Housing, Building and Planning.

General provisions

Section 1

This statute contains regulations and general recommendations relating to Chapter 17, Section 21 a of the Planning and Building Act (1987:10), "the PBA", on requirements for the removal of easily eliminated obstacles to accessibility and usability for persons with limited mobility and orientation capacity in buildings that contain premises to which the public has access and in public spaces.

General recommendations

Additional provisions that are applicable to the removal of easily eliminated obstacles in public premises are set out in, inter alia, Chapter 3, Sections 10-13 of the PBA, Section 2 of the Act on Technical Requirements for Construction Works, etc. (1994:847), and in Sections 14–15 of the Ordinance on Technical Requirements for Construction Works, etc. (1994:1215). Requirements concerning alterations to buildings are also dealt with in the general recommendations issued by the National Board of Housing, Building and Planning on alterations to buildings, BÄR, (1996:4). Additional provisions that are applicable to the removal of easily eliminated obstacles in public spaces are set out in Chapter 3, Sections 15–18 of the PBA.

The regulations

Section 2

The regulations are applicable to

- existing premises to which the public has access (public premises),
- existing public spaces (public spaces).

The general recommendations

Section 3

The general recommendations contain general recommendations on the application of the regulations in this statute and in the principal statutes and specifies how someone can or should act in order to comply with the regulations. However, the individual is free to choose other solutions and methods, if these comply with the regulations.

The general recommendations can be rules that are intended to promote a uniform application of a particular statute or that are inten-

ded to contribute to the development of practice in a particular direction without being formally binding on anyone at whom the recommendations is directed.

The general recommendations may also contain certain explanatory or editorial information. The general recommendations is preceded by the text general recommendations and are printed in smaller, indented text.

Terminology

Section 4

Terms which are not specifically defined in the principal statutes or in the mandatory provisions in this statute have the meaning set out in Publication No TNC 95 Plan- och byggtermer 1994 (Glossary of Planning and Building 1994) of the Swedish Centre of Technical Terminology.

Easily eliminated obstacles

Section 5

The regulations in Sections 6–18 are only applicable if the obstacles that are to be removed are easily eliminated. The term easily eliminated obstacles refers to obstacles that can be deemed reasonable to remove in view of the benefit of the measure and the conditions at the place. The financial implications must not be unreasonably onerous for the property owner, the manager of the premises or the business operator.

General recommendations

In assessing whether an obstacle is to be deemed to be easily eliminated, consideration should be given to the fact that an obstacle can be eliminated easily in one situation but not in another. For instance, it can be easy to complement or replace 2–3 steps with a ramp if there is enough space, while it can be difficult to do so in a cramped environment with narrow pavements. Similarly in a specific situation, such as when an activity is important to many people and the installation of automatic door openers is crucial for accessibility, the investment can be deemed to be reasonable in relation to the benefit for visitors. In another situation the investment can be deemed to be too large in relation to the benefit.

Consideration should also be given to the benefit of a particular measure for visitors in relation to other important measures to provide access. In the event that priorities must be set in view, for example, of the financial conditions, obstacles whose removal has the largest overall effect should therefore be given priority in the first place.

The priorities should be based on a plan that sets out the reasons for not removing easily eliminated obstacles immediately. The plan should state when such an obstacle has to be removed.

In an assessment of what are to be deemed to be easily eliminated obstacles, consideration should also be given to the financial implications for small business operators so that their activities are not put at risk.

Public premises

Section 6

Physical obstacles in the form of small level differences, heavy doors and incorrectly placed or incorrectly designed operating devices shall be removed.

General recommendations

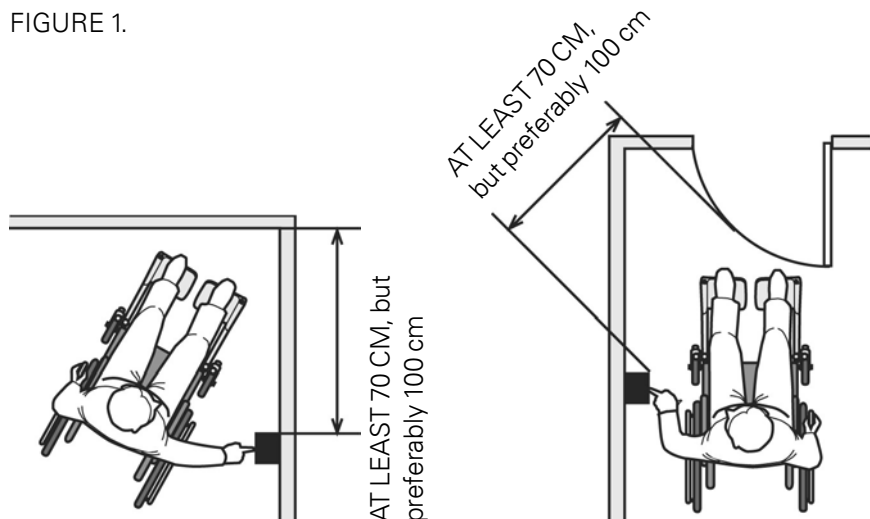
Thresholds should be taken away if this is technically possible, or dealt with in some other way so as to even out level differences to, for instance, enable a person using a wheelchair or rollator to pass.

Small differences in levels should be bridged, by ramping for example. Even if the ramp is short it is important that the gradient is not steeper than 1:12 on account of the risk of falling or tipping backwards. A 1:20 or flatter gradient should be sought. The ramp should have an even, non-slip surface, be at least 1.3 m wide and have safety side edges. If there is room, a stair should be provided to as a complement to the ramp.

Doormats and floor grills that are heavy to pass or pose a trip risk should be replaced or dealt with in some other way.

Inappropriately located entry phones and operating devices such as door openers and doorbells should be moved. Operating devices for door openers should be placed vertically and laterally so that even a person in a wheelchair or with a rollator can use them without being hit by the door leaf. Operating devices should be placed so that they are easy to reach from a wheelchair. A suitable location is with their centre 80 cm from the ground and at least 70 cm, but preferably 100 cm, from the corner or the front edge of the door leaf in its most unfavourable position (see figure 1).

FIGURE 1.



Doors with door closers should be fitted with automatic door openers. Other doors can sometimes also be too heavy for many people to open and should therefore be fitted with automatic door openers. When designing doors with automatic door openers it is important that the various compo-

nent functions are located correctly (see above), that operating buttons are contrast-marked, that areas where the door opens are marked or, alternatively, that the door is fitted with safety sensors, and that account is taken of similar considerations.

Inappropriately located operating panels in and outside lifts should be moved and inappropriately designed operating panels should be replaced. The location of the operating panel is of importance for whether wheelchair users can reach it. The design is important for people with impaired vision and for people with intellectual disabilities. The exit button should have a different form and lightness from its surroundings. See Swedish Standard SS-EN 81-70 for the appropriate design and location of operating panels. Inappropriately designed handles and locks should be replaced with handles and locks that can also be managed by people with limited strength and with impaired grip or precision.

Section 7

Obstacles in the form of deficient contrast marking and deficient warning marking shall be removed.

General recommendations

Strategic points, such as outer doors, operating panels for automatic door openers, lift doors, toilet doors, reception desks, information points, emergency exits and stairwells should be contrast-marked to make it easier for partially sighted people and people with intellectual disabilities to orient themselves. The contrast marking can be achieved by using different materials and lightness contrast, for instance. A lightness contrast of at least 0.40 according to the NCS (Natural Colour System) enables many partially sighted people to discern a marking.

Guide paths leading between selected strategic points should be provided to assist people with impaired orientation capacity. Contrast lines in floors can be provided with different materials for blind people and with lightness contrast for partially sighted people. The orientation of people with intellectual disabilities is assisted by logical colour systems.

Warning marking, such as different lightness from the background, should be applied to unprotected glass surfaces. The markings should be placed at eye level.

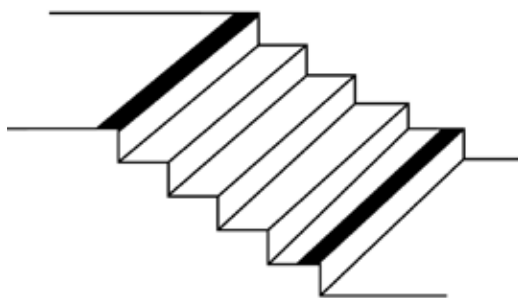


FIGURE 2. Example of contrast marking of stairs.

Stairs should be fitted with contrast marking so that partially sighted people can discern level differences: for instance, the front edge of the lowest tread and the front edge of the landing at the top riser in every set of steps should be given a lightness contrast of at least 0.40 according to the NCS (see figure 2). The markings should be made in a consistent way throughout the building.

Protruding parts of a building such as stairs or coatracks should be marked clearly and be built in or dealt with in some other way so that they do not constitute a danger for blind and partially sighted people.

Section 8

Obstacles in the form of deficient signage and deficiencies in the sound environment shall be removed.

General recommendations

Signage should be easy to understand and to read, have lightness contrast and be placed at an appropriate height to be read and heard by both people in wheelchairs and people with impaired vision who are standing. It should be placed where it is expected and so that people can get right up to it. The text size should be adapted to the reading distance and the surface should not cause reflection. The sign should be supplemented with letters either in raised relief or in Braille or in both and also, in certain cases, with spoken information and clear, easy to understand and well-known symbols. Electronic signage should be adapted to function for people with various disabilities such as impaired vision or impaired hearing. Clear and well-lighted signage is of great importance in enabling people with impaired vision or hearing and people with intellectual disabilities, among others, to orient themselves.

Poor audibility should be improved, for example by supplementing the premises with sound absorbers adapted to the shape and materials of the room.

Section 9

Obstacles in the form of deficient or dazzling lighting shall be removed.

General recommendations

Large glass areas facing outdoors and windows at the end of corridors should be screened off to prevent dazzle. They can be screened off using curtains, awnings or Venetian blinds.

Fixed lighting should not be dazzling. For instance, it is important that the light source is concealed and that the lightness contrast between adjacent spaces or between outdoors and indoors is not too large. Lighting can be crucial for whether or not partially sighted persons can orient themselves. Partially sighted people need correctly designed light to see and read; people with hearing impairments or deaf people need it to be able to read sign language and lip-read.

Lighting where people move around should be even and arranged so that partially sighted people and people with limited mobility can see what the floor surface is like and so that people with impaired hearing and the deaf can discern sign language and lip-read.

Section 10

Obstacles in the form of a lack of and the deficient design of balance support shall be removed.

General recommendations

There should be handrails on both sides of stairs and ramps. The handrails should be continuous, pass the front edges of the top and bottom steps and the beginning and end of the ramp by at least 30 cm, be grip-friendly and have contrasting lightness in relation to surrounding surfaces. It should be possible to hold the handrail past its fastenings.

Section 11

Obstacles in the form of deficiencies in the design and placing of fittings and equipment shall be removed.

General recommendations

Fittings and equipment should be adapted to function for people with limited mobility or orientation capacity. Such adaptations can include lowering telephones and queue number dispensers placed in too high a position so that people in wheelchairs can reach them and equipping telephones with amplifiers and supplementing systems with voice connections and optical devices so that people with impaired hearing and deaf people can access the information. Examples of measures to enable people with impaired vision to use keypads for entering number combinations can be to supply the keypad with lightness contrast, to add a touch point to key number 5 and to have Braille on the keypad.

In hygiene rooms intended for people with limited mobility or orientation capacity inappropriately located or poorly functioning details of the fittings and equipment that make the hygiene room difficult to use should be moved or replaced.

Contrast markings should be provided in hygiene rooms to enable partially sighted people to orient themselves. Deficient alarm equipment should be supplemented so that people with impaired hearing and deaf people can also be reached by warning signals in the event of a fire or other danger.

Public spaces

Section 12

Physical obstacles such as small level differences, uneven ground surfacing and drainage channels and pavement edges that are hard to cross shall be removed.

General recommendations

Level differences at pedestrian crossings and other walkways, car parking spaces for vehicles for disabled people and transport stops should be bevelled to a zero edge so as to increase the possibilities for people in wheelchairs or with rollators to get up on to and down from the pavement edge. If there is space, the bevelling should not have a gradient of more than 1:12 and should be 90–100 cm wide. Alongside the bevelling, the kerbstone should remain in place so that people with visual impairments can identify

the direction for crossing the street. The bevelling should have an even and non-slip surface.

Uneven ground surfacing that is an obstacle to people in wheelchairs and with rollators moving about on walkways should be replaced by, for example, inserting a section with more even ground surfacing.

Small differences in levels in walkways should be bridged, by ramping for example. Even if the ramp is short it is important that the gradient is not greater than 1:12 on account of the risk of falling or tipping backwards. A 1:20 or flatter gradient should be sought. The ramp should have an even, non-slip surface, 1.3 m wide and have safety side edges. The crossfall should not be more than is required for the necessary water run-off and should not exceed 1:50, so that it does not present a danger for people with poor balance, so that people with visual impairments and blind people do not become disoriented and so that people in wheelchairs or with rollators are able to move around. If there is space, a stair should be provided to supplement the ramp.

Valley gutters that are obstacles to people in wheelchairs and with rollators should be covered so that the surface is even or be replaced with runoff gratings or drainage channels that can be passed without difficulty by people in wheelchairs or with rollators.

Section 13

Obstacles in the form of deficient contrast marking and deficient warning marking shall be removed.

General recommendations

Strategic points, such as bus stops, platforms, pedestrian crossings and raised walkways across streets, entrances, etc. should be contrast-marked to make it easier for partially sighted people, blind people and people with intellectual disabilities to move about. Contrast-marking can, for instance, be provided by inserting material with a different structure and lightness in the ground surfacing, such as clearly perceptible paving stones in an asphalt surface or smooth paving stones in a cobbled surface. The ground surfacing should be designed so that it does not present a trip risk. A lightness contrast of at least 0.40 according to the NCS enables many partially sighted people to perceive the marking. The orientation of people with intellectual disabilities is assisted by logical colour systems.

Stairs should be fitted with contrast markings so that partially sighted people can discern level differences: for instance, the front edge of the lowest tread and the front edge of the landing at the top riser in every set of steps should be given a lightness contrast of at least 0.40 according to the NCS. The markings should be made in a consistent way throughout the area.

Protruding parts of buildings, kerbstones on pavements, posts in walkways, dropping edges and other details should be contrast-marked to help partially sighted people and people with intellectual disabilities to identify details.

A lightness contrast of at least 0.40 according to the NCS enables many partially sighted people to discern the marking.

Warning markings, such as different lightness from the background, should be applied to unprotected glass surfaces. The markings should be placed at eye-level. Protruding parts of buildings, such as stairs, signs and balconies lower than 2.20 m above the ground should be clearly marked and built in or dealt with in some other way so that they do not present a danger to blind and partially sighted people. Fixed obstacles in walking areas should be marked clearly visually and designed so that they can be identified using a white cane stick, if it is not possible to move them from the walkway.

Section 14

Obstacles in the form of deficient signage shall be removed.

General recommendations

Signage should be easy to understand and to read, have lightness contrast and be placed at an appropriate height to be read and heard both by people in wheelchairs and by people with impaired vision who are standing. It should be placed where it is expected and so that people can get right up to it. The text size should be adapted to the reading distance and the surface should not cause reflection. The sign should be supplemented with letters either in raised relief or in Braille or in both and also, in certain cases, with spoken information and clear, easy to understand and well-known symbols. Electronic signage should be adapted to function for people with various disabilities such as impaired vision or impaired hearing.

Clear and well-lit signage is of great importance in enabling people with impaired vision or hearing and people with intellectual disabilities, among others, to orient themselves.

Section 15

Obstacles in the form of deficient or dazzling lighting shall be removed.

General recommendations

Fixed lighting should not be dazzling. For instance, it is important that the light source is screened off. Lighting can be crucial for whether or not partially sighted persons can orient themselves. Partially sighted people need correctly designed light to see and read, people with hearing impairments or deaf people need it to be able to read sign language and lip-read.

Lighting where people move around should be even and arranged so that partially sighted people and people with limited mobility can see what the floor surface looks like and so that people with impaired hearing and the deaf can discern sign language and lip-read.

Section 16

Obstacles in the form of a lack of, and the deficient design of, balance support shall be removed.

General recommendations

There should be handrails on both sides of stairs and ramps. The handrails should be continuous, pass the front edges of the top and bottom steps as

well as the beginning and end of the ramp by at least 30 cm, be grip-friendly and have lightness contrast in relation to surrounding surfaces. It should also be possible to hold the handrail past its fastenings.

Section 17

Obstacles in the form of deficient design of car parking spaces for vehicles for disabled people shall be removed.

General recommendations

Certain car parking spaces in a car park should be altered so that they also function for wheelchair users who drive a car where the wheelchair is loaded and unloaded from the side. Such a space should have a width of 5.0 m, when the space is not located alongside a free surface. The lengthwise and lateral gradient should not be more than is required for the necessary water runoff and should not exceed 1:50. The ground surfacing should be firm, even and non-slip.

Section 18

Obstacles in the form of deficiencies in the design or equipment of play areas shall be removed.

General recommendations

Deficiencies that make it difficult for children with limited mobility or orientation capacity to use the play area at all as well as deficiencies that make it difficult for parents with limited mobility or orientation capacity to be in the play area together with their children should be dealt with.

This statute enters into force on 1 December 2003

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