

# ACCESSIBLE ENVIRONMENT 4

## ■ PUBLIC COURTYARDS

### Overview

The various functions in public courtyard areas should be analysed and placed clearly and logically. The routes from parking areas and pick-up/drop-off areas, and from the streets to the entrances, should be clearly identifiable and unobstructed. Unnecessary changes of direction in designated routes should be avoided, and the change of direction points should be marked distinctly. Changes of direction should take place at right angles. Maintenance requirements should be borne in mind during the planning phase in order to ensure the functionality of the courtyard areas under all conditions. For information on lighting for the special level of accessibility, see "Unobstructed Lighting and Clear Contrasts in Station Areas", a report by the Ministry of Transport and Communications.

### Pedestrian footpaths, cycle paths and walking surfaces

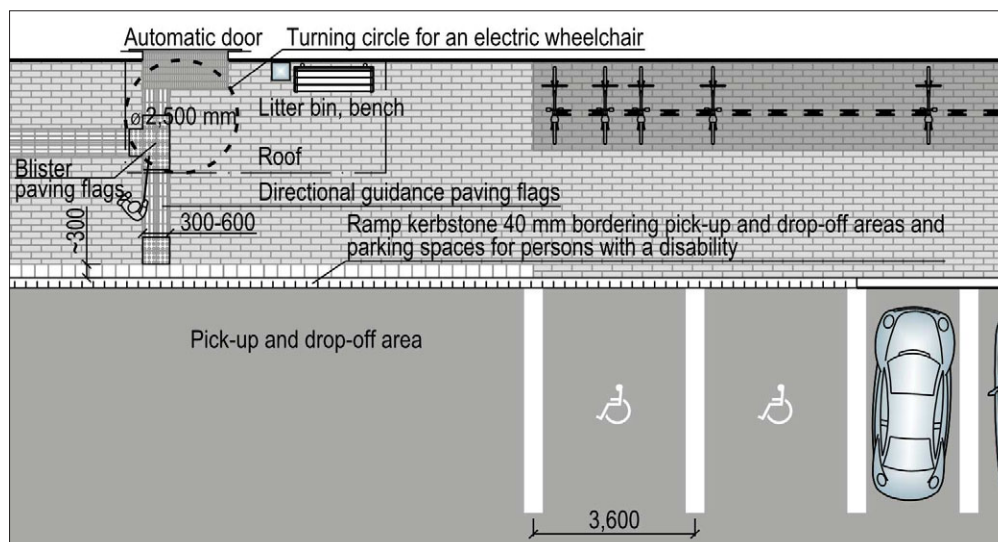
The minimum clear width of the routes should be 900 mm. However, the recommended minimum width is 1,500 mm, which is enough for persons needing an assistant or a guide dog. The minimum clear width for two wheelchairs meeting is 1,800 mm. The minimum diameter of the turning circle for a manual wheelchair is 1,500 mm; an electric wheelchair needs 2,500 mm. An ice and snow melting system or a roof is recommended. The minimum clear height should be 2,200 mm (3,000 mm is the recommended minimum clear height when the route passes under a building or a section of a building).

For the special level of accessibility, the surface should be hard; for the basic level of accessibility, hard or medium-hard and non-slippery. The maximum allowable deviation from level is 5 mm. The maximum allowable width of tile joints is also 5 mm.

For the special level of accessibility, the maximum allowable lateral inclination is 2% (3% for the basic level of accessibility). For the special level of accessibility, the maximum allowable longitudinal inclination is 5% (8% for the basic level of accessibility). The texture and colouring of level routes must not give the impression of differences in elevation.

### Parking areas

Parking spaces for persons with a disability should be designated as reserved for this purpose by the International Symbol of Access painted on the pave-



*SuRaKu Cards contain guidelines for planning, construction and maintenance of accessible, public outdoor areas.*

*The model designs outlined in the cards are examples of designs for an accessible environment. However, further advances in the quality of the environment and accessibility can be achieved by continued product and design development.*

*The instructions and specifications in the cards are based on the accessibility criteria established for the SuRaKu Project, and on the model designs.*

*Two levels of accessibility have been defined for the areas in question. The requirements for the basic level of accessibility apply to all areas. More stringent requirements for the special level of accessibility apply to the following areas:*

- Pedestrian street milieus
- City centre areas with public facilities and services
- Areas surrounding institutions providing health care and services for the elderly and persons with a disability
- Areas with a lot of housing targeted at the elderly and persons with a disability
- Public transport terminals and areas surrounding public bus stops
- Sports areas and playgrounds catering to all types of users
- Accessible routes in recreational areas, etc.

## Signs

Signs should be placed accessibly, with enough standing and wheelchair space in front of the signboards. The lower part of the signboards should be detectable with a cane.

## Applicable rules and regulations

RakMK F1 (Specifications for accessible building construction), RakMK F2 (Safety specifications for buildings)

## Other instructions

RT Building Information Cards 09-10884, 98-10565

KT-02 (General Working Instructions for Municipal Engineering)

Resolution of the Ministry of Transport and Communications on Traffic Control Devices

Instructions of the Finnish Association of People with Mobility Disabilities: [www.esteeton.fi](http://www.esteeton.fi)

## SuRaKu Instruction Cards

- 1 Pedestrian crossings and pavements
- 2 Pedestrian street milieus and squares
- 3 Differences in elevation
- 4 Public courtyards
- 5 Park paths and resting places
- 6 Public playgrounds
- 7 Public bus stop areas
- 8 Temporary traffic arrangements

## SuRaKu Accessibility Criteria Tables

Kerbstones at pedestrian crossings, Outdoor staircases, Ramps, Guidance paving flags, Demarcation strips, Loading islands, Gutters and gullies, Walking surfaces, Pedestrian crossing markings, Handrails, Railings, Push-button poles, Pedestrian crossing signs, Seating, Bollards, Pedestrian refuge islands, Tactile maps and information signboards, Warning areas.

For SuRaKu Instruction Cards and Accessibility Criteria in PDF format, see [www.hel.fi/helsinki/kaikille/](http://www.hel.fi/helsinki/kaikille/)

ment, and by an access sign for persons with a disability, attached to a post or wall. The minimum width of the parking space should be 3,600 mm, and the minimum length 5,000 mm. The maximum allowable inclination is 2% in both directions.

## Ramps, staircases and railings

The recommended inclination for ramps is 5% or less; the maximum is 8%. Long ramps with an inclination of over 5% should have a straight intermediate landing (min. length 2 m) every 6 metres. In the absence of a wall or other solid barrier at the edge of the ramp, the ramp should have a protective edge (min. height 50 mm), unless it is level with the surrounding terrain. Ramps should always be accompanied by staircases.

The recommended sizing for outdoor staircases is  $2 \times \text{rise} + \text{tread} = 660 \text{ mm}$ . In covered and heated staircases, measurements for indoor staircases apply ( $2 \times \text{rise} + \text{tread} = 630 \text{ mm}$ ). It is recommended that intermediate landings be built at intervals of 10–15 steps. For added safety, the edge of steps should have a 30–40 mm colour/contrast strip. An alternative stairless access must be provided. An ice and snow melting system or roof is recommended.

For the special level of accessibility, the requirements for staircases and ramps call for full-length handrails at two heights on both sides, intermediate landings included. For the basic level of accessibility with limited traffic, handrails at one height only are permissible. A safety railing is required when the difference in elevation exceeds 500 mm. If it is under 500 mm, an open railing is permissible. An open railing is also permissible in the middle of the staircase.

## Guidance paving flags and warning areas

For the special level of accessibility, guidance paving flags and warning areas are used to mark the route, and to indicate pedestrian crossings, staircases, ramps or other differences in elevation. (For information on guidance paving flags, see Instruction Card 1, “Pedestrian Crossings and Pavements”.) Correspondingly, warning areas are used for the basic level of accessibility to indicate pedestrian crossings, staircases or other differences in elevation. Rough surfaces should be used in warning areas. (For further information, see the accessibility criteria table for “Warning Areas”.) A colour or contrast that is readily distinguishable from the pavement surface should be used in guidance paving flags and warning areas (contrast requirement: difference between medium grey and black/white).

## Entrances

All main entrances should have a landing of 2,500 x 2,500 mm (turning circle diameter needed by an electric wheelchair). The minimum requirement for this space is 1,500 x 1,500 mm, enough for turning around in a wheelchair and opening the door(s). The maximum allowable inclination at the landing entrance is 2%. The grating in front of the entrance should be flush with the pavement, and no other thresholds are permissible nearby. It is recommended that the entrance area be covered with a roof or furnished with an ice and snow melting system. A distinctly marked area should be reserved for bicycles, etc.

The roof should be at least 2,500 mm deep (minimum 1,500 mm). Routes should be free of posts, pegs for holding doors open, and other structures. The roofed area should be furnished with a bench and a litter bin. A separate space, further away from the entrance, should be reserved for smokers. Lighting in the area should be adequate, and sufficient drainage of surface waters should be provided.

## Rainwater gutters and gullies

Where possible, rainwater gutters should point in the direction of the street, and in public courtyards in the direction of traffic on the main roads in order that persons who are partially sighted may align themselves correctly. The maximum allowable deviation of gutter and gully structures from the paving level is 5 mm, and the maximum width of any cracks is 10 mm.