

## PEDESTRIAN CROSSINGS AND PAVEMENTS

### Pedestrian crossing arrangements

The needs of all types of users must be borne in mind when planning pedestrian crossing arrangements and structures. It is recommended that cycle paths and pedestrian footpaths be separate and that the solutions in each case be uniform. Draining should be planned carefully, and the pedestrian crossings should be adequately lit. For the special level of accessibility the minimum lighting requirement for pavements is 10 lux, for pedestrian crossings 30 lux. Pedestrian crossing markings should be readily recognisable. To avoid misunderstanding, similar surface patterns should not be used close by. The colour contrast between the strips should be distinct (minimum requirement: difference between medium grey and black/white).

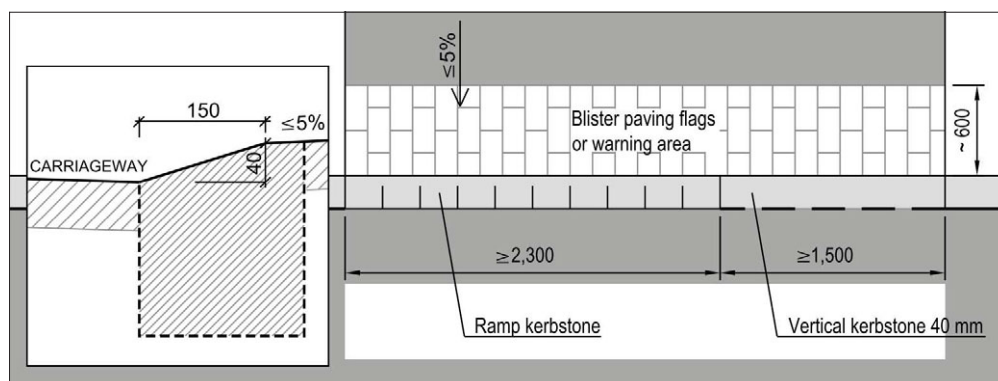
The vertical kerbstone at the pedestrian crossing should be perpendicular to the direction of crossing to enable persons with impaired vision to align themselves correctly in the direction of crossing. The pedestrian crossing should be equipped with a ramp kerbstone (min. width 900 mm; 2,500 mm, if maintained by machine). A ramp kerbstone rising 40 mm from carriageway level in a 150 mm space should be constructed with special care. The same type of ramp kerbstone should be used for cycle paths. The maximum allowable deviation in the elevation of kerbstones is  $\pm 10$  mm. The maximum allowable inclination in pavements at kerbside is 5%.

### Pedestrian footpaths, cycle paths and walking surfaces

To enable maintenance by machine, the minimum width of pedestrian footpaths and cycle paths is 2,300 mm. The minimum clear width should be 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 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).

It is recommended that pedestrian footpaths and cycle paths be paved with materials of differing textures. 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 joints is 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). For ramp requirements, see Instruction Card 3, "Differences in Elevation".



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

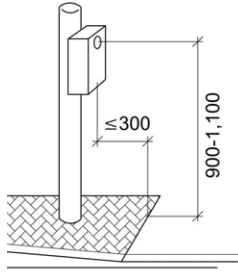
*The model designs outlined in the cards are examples of designs for an accessible environment. However, further advances in the quality of the environment and accessibility can be achieved by continued product and design development.*

*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.*

**Pedestrian crossing push-button pole.**



**Applicable rules and regulations**

RakMK F1 (Specifications for accessible building construction)  
 Resolution of the Ministry of Transport and Communications on Traffic Lights in Road Traffic; Resolution of the Ministry of Transport and Communications on Traffic Control Devices

**Other instructions**

RT Building Information Cards 09-10884, 98-10565  
 KT-02 (General Working Instructions for Municipal Engineering)  
 Instructions of the Finnish Association of People with Mobility Disabilities: [www.eesteeton.fi](http://www.eesteeton.fi)

**SuRaKu Instruction Cards**

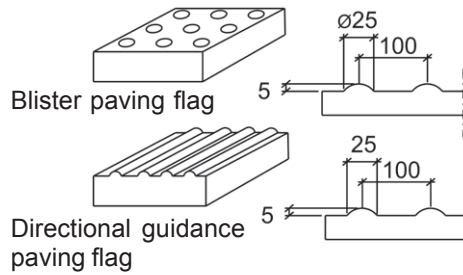
- 1 Pedestrian crossings and pavements
- 2 Pedestrian street milieus and squares
- 3 Differences in elevation
- 4 Public courtyards
- 5 Park paths and resting places
- 6 Public playgrounds
- 7 Public bus stop areas
- 8 Temporary traffic arrangements

**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/kaikeille/](http://www.hel.fi/helsinki/kaikeille/)

**Guidance paving flags.**



**Warning areas:**

- white natural stone paving flags (bush-hammered or fired)
- white sawn stone setts (bush-hammered or fired)
- white exposed-aggregate concrete paving flags
- white concrete paving flags
- white blister paving flags (snow melting system installed in the area)

**Guidance paving flags, warning areas and demarcation strips**

Guidance paving flags and warning areas are used for the special level of accessibility to guide persons with impaired vision, and to indicate pedestrian crossings, staircases, kerbs, ramps or other differences in elevation. Correspondingly, warning areas are used for the basic level of accessibility. Blister paving flags or warning areas are used to mark out the entrance to pedestrian crossings. 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).

Coarse-texture strips of, for example, stone setts or small stones are used to separate different types of pavement and to indicate differences in elevation. The width of the demarcation strip separating a pedestrian footpath from a cycle path should be 200–500 mm, and the maximum allowable deviation from level of the rest of the pavement is 5 mm. A demarcation strip (min. width 500 mm) is recommended at the kerbside when the pavement is directly next to the carriageway.

**Pedestrian crossing signs and push-button poles**

Pedestrian crossing signs should always be placed at the edge of the pedestrian crossing markings, at a maximum distance of 500 mm from the edge of the carriageway, to enable persons with impaired vision to align themselves correctly in relation to the pedestrian crossing. Motorists find it easy to discern signs that are placed close to the edge of the carriageway.

The push-button in a traffic-light pole should be placed at a height that is reachable from a wheelchair even in wintertime conditions. The push-button should be distinctly raised and equipped with a signal light. For the special level of accessibility they should always be equipped with a sound signal, and for the basic level of accessibility as well if considered necessary. Diagonal pedestrian crossings should be equipped with a direction indicator for the crossing (proper installation verified during construction).

