

## Public playgrounds

### Overview

One of the guiding principles of playground design is that children playing, adults keeping an eye on them, and those otherwise coming to the playground for rest and relaxation, may possess disabilities in terms of mobility and function. The primary groups to consider are persons with reduced mobility, persons with impaired vision, and allergic persons.

The overall playground layout should be clear and logical. The paving materials and colours used in the various zones (paths, playground equipment, sitting areas) should be clearly distinguishable. Play areas must be fenced. Public footpaths must not run through play areas.

The paths should be surfaced mainly with crushed stone fines, paving stones or asphalt. Synthetic safety tiles should be used where the distance of a free fall from a play structure exceeds 600 mm. Impediments to wheelchair users such as soft sand underneath playground equipment should be avoided.

It is recommended that playgrounds be equipped with a shelter and a heated space. Seating of varying heights should be available, including around tables (in that case, low seats on suitably high platforms). The tables should be high enough to be wheelchair-accessible.

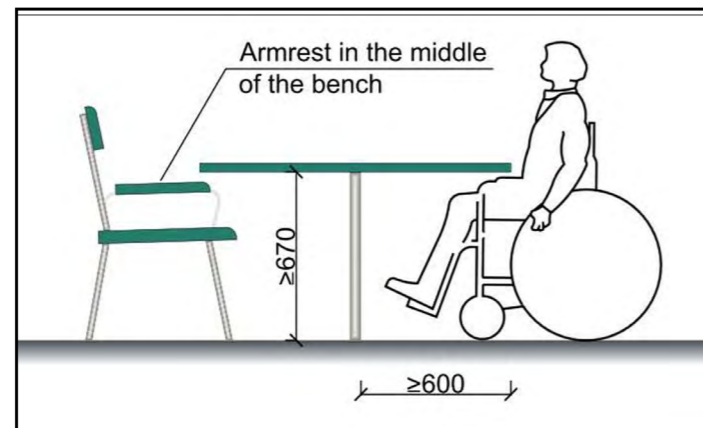
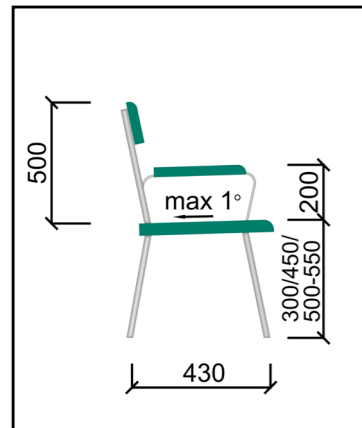
The lighting should be sufficient and glare-free, including at children's eye level.

### Dimensioning

The minimum clear diameter of the level spaces for wheelchairs to stop and turn around in should be 1,500 x 1,500 mm. The minimum clear width of the paths is 1,500 mm; main access routes must be at least 1,800 mm to allow two wheelchairs to pass each other. Where maintenance by machine is required, the minimum width of the paths is 2,300 mm.

The clear width of the gate to a fenced playground should be 900 mm, with the locking mechanism at a maximum height of 850 mm. The gate lever should resemble a door handle.

For further information on ramps, staircases, railings and handrails, see Instruction Card 3, "Differences in Elevation". For further information on the requirements for paths, benches and tables, see Instruction Card 5, "Park Paths and Resting Places".



### Playground equipment

It is absolutely necessary to ensure the safety of the playground equipment, especially swings and other moving equipment, and to protect children from collisions or falls. Swings should be located towards the edge of the area. Swings and roundabouts should be equipped with safety seats, for adults as well as children. With proper guidance, children with impaired vision will be able to use most ordinary play units and structures.

The slides should be 1,000 mm wide to enable the child's assistant to slide down with the child. The end of the chute should be long enough to stop the child's forward motion before the child steps off. Railings and different surface materials should be used to guide the child back to the access ladder, stairway or ramp. Guide railings should not be placed in the safety zone around the play unit/structure.

The wheelchair footspace underneath a raised sand box should be c. 550 mm. One side of the sand box should be at a height of 400 mm to enable small wheelchair users to get into the sand box. For the benefit of those who are partially sighted, the edge of the sand box is painted in visual contrast colour.

Rocking animals should have backrests and possibly footrests. Children's playhouses should be wheelchair-accessible. Different colours should be used in the various parts and components of playground equipment to help in identifying them as parts making up a whole.

The requirements for the safety of playground equipment can be found in the SFS-EN standards. Playgrounds must have a maintenance programme that complies with the SFS-EN 1176-7 standard.

### Signs

The signs in play areas should be clear and easy to understand. Information can be provided by means of maps, symbols, tactile maps and scale models, name plates, charts, light and sound signalling devices, and public announcements. Each map should be orientated towards the direction from which the play area is approached.

It is recommended that the middle point of the text on the signs be placed at a height of 1,200–1,400 mm. For example, Braille characters or tactile symbols in railings can be used to signal to children who are partially sighted that they have reached a certain item of playground equipment. The design of signs and information should be integrated into the overall design of the playground.

Placing playgrounds in quiet neighbourhoods is beneficial for persons who have a hearing impairment or are partially sighted. Stationary sources of various sounds or signals can be used to aid playground users in orientating themselves. Protection from outside noise can be provided by using vegetation to divide the playground into smaller play areas.

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. The instructions have been updated to comply with the regulations and guidelines related to accessibility that have entered into force by 2022.

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

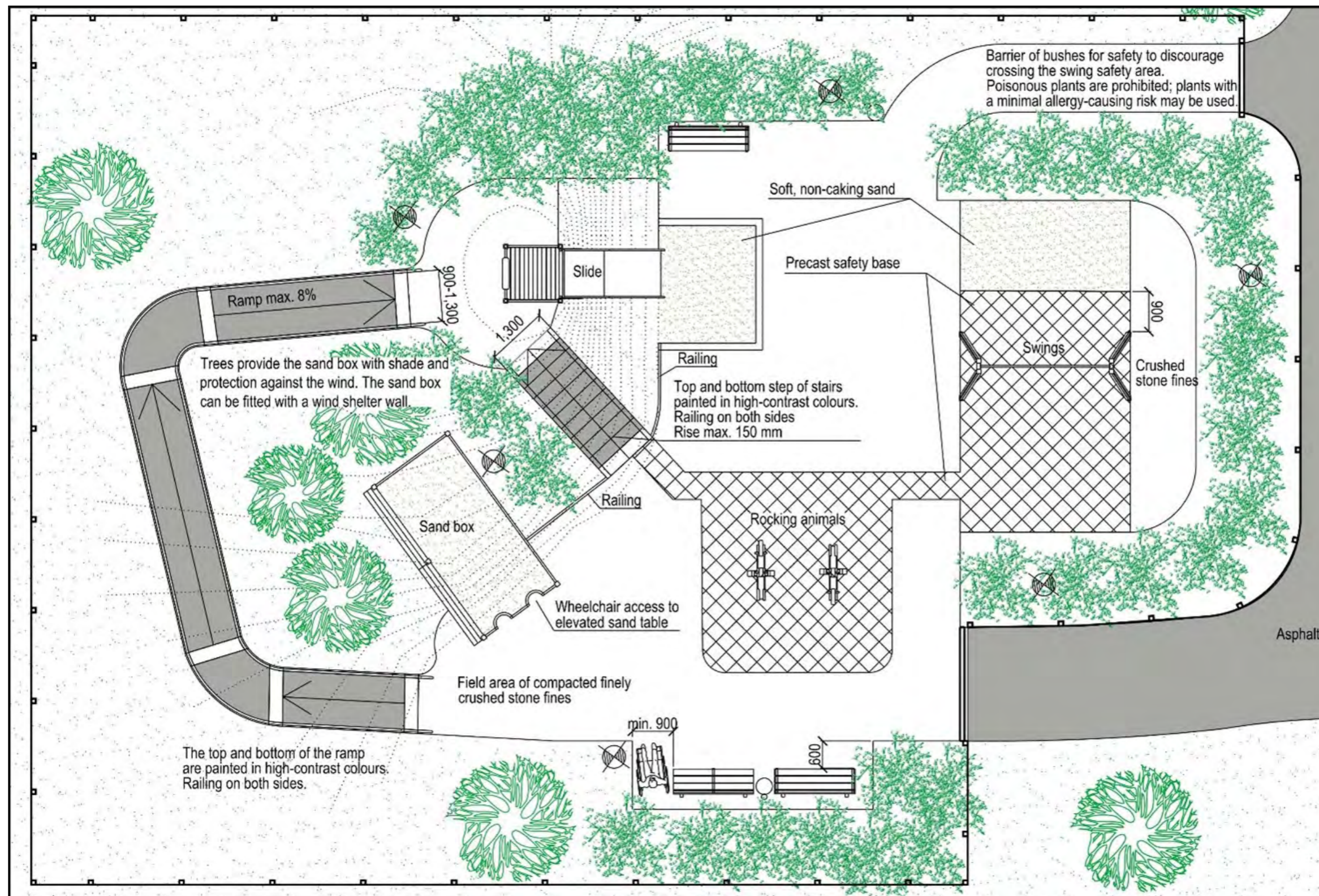
## Vegetation

Trees, bushes and other plants can bring a wealth of wonderful experiences and stimuli to the life of children. Vegetation can also provide shelter from the wind, shade and protection from dust, and a degree of privacy. Fragrant plants can be a help for autistic people and people who are partially sighted in terms of spatial perception and recognition as well as in ascertaining their bearings. Flowers and plants that attract butterflies can be sources of great joy as well.

Poisonous or thorny plants, or plants that can cause acute allergic reactions, should not be used in playground areas. For information on poisonous plants, contact the Poison

Information Centre (see below). For information on allergy-causing properties of plants, consult the website of the Allergy and Asthma Federation at [www.allergia.com](http://www.allergia.com).

Strongly smelling plants should be avoided as well. However, some people, including autistic persons, enjoy smells (herbs, berry bushes, strawberries, etc.), but strongly smelling plants should be placed in separate patches. A planter box raised to a height of 600 mm is suitable for wheelchair users, but for those who find it hard to bend, the height should be 800 mm.



The illustration is just an example of how a playground could be equipped.

## Applicable rules and regulations

241/2017 Government decree on accessibility of buildings

1007/2017 Ministry of the Environment decree on safety of use of buildings

SFS-EN-1176 Playground equipment and surfacing

SFS-EN-1177 Impact attenuating playground surfacing

## Other instructions

[Kaupunkitilaohje.hel.fi](http://Kaupunkitilaohje.hel.fi)

<https://wtwww.hel.fi/static/hki4all/kirjasto/opas-esteetomyys-kouluissa-paivako-deissa.pdf>

[www.hus.fi/myrkytystietokeskus](http://www.hus.fi/myrkytystietokeskus)

[www.allergia.fi](http://www.allergia.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 and materials, Demarcation strips, Loading islands, Gutters and gullies, Walking surfaces, Pedestrian crossing markings, Handrails, Railings, Push-button poles, Pedestrian crossing signs, Seating, Bollards and crash guards on pavements, Pedestrian refuge island, Tactile map and Warning areas.

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