

Application	Roadway width, main arterial road	Roadway width, connecting road
<b>Single-lane carriageway/one-way street</b>		
Typical case (with cyclists using the roadway)	4.25 m (where available space is limited: 3 m)	3.5 m (where available space is limited: 3 m)*
Bicyclist traffic on roadway in opposed direction	Not applicable	3.5 m (3 m with sufficient turnout opportunities)
Roadway with advisory bike lane	3.75 m (2.25–1.5 m) with minor truck traffic	Does not generally occur
<b>Two-lane roadway</b>		
Typical case	6.5 m**	4.5–5.5 m
With public transit bus service	6.5 m**	6.5 m
Limited public transit bus service and minor use requirements***	6 m	6 m
Low frequency of encounters with truck traffic	5.5 m (at reduced speed)	–
High frequency of encounters with bus and truck traffic	7 m	–
With advisory bike lanes for cyclists	7.5 m with 1.5 m advisory bike lanes on both sides 7.5 m with 1.25 m advisory bike lanes on both sides in confined conditions****	–
<b>Two-lane cartway</b>		
Typical case	6.5 m	–
Low frequency of bus or truck traffic	6 m (with limited available space: 5.5 m)	–
Bus or truck traffic dominates	7 m (only in cases where continuous side-by-side travel should be ensured)	–
<b>Local residential streets and alleys</b>		
Local residential street (Separation principle)	4.75 m (delivery vehicles permitted)	–
Local residential alley (Mixed principle)	3 m (delivery vehicles and parking in adjacent area permitted)	–

Table 3.3.11 Dimensions for one- and two-lane roadways as well as divided cartways, local residential streets and local residential alleys, as per RAS 06

\* Requirements stemming from winter maintenance shall be checked individually \*\* With this dimension, obligatory mandatory cycling facilities are ordinarily to be provided \*\*\* For example, safety provides access \*\*\*\* Not adjacent to frequently used parking lanes



Abb. 3.3.10 Sidewalk with wheelchair-accessible curb ramp (1:10 slope, minimum surface, and direction field as a hand-casting point for wheelchair users as well as blind and visually impaired persons

**Curbs and Edging**

Within municipal limits, the separation between roadway and sidewalk is usually made by a clearly recognizable curb, which can take the form of a high, half-height, or low curb. In accordance with the RAS 06 guidelines for urban road design, each of these configurations has different applications according to the particular road use. — Table 3.3.10 To ensure accessibility, curbs are lowered accordingly in the vicinity of driveways and bicycle crossings. At bike-ways and for wheelchair users, a curb that drops down to the road level is desirable. For barrier-free accessibility in the interests of an environment designed to also be experienced through touch, a curb height of 6 cm is considered optimal because it is indisputably tactile for visually impaired and blind persons using canes. Curb heights of less than 3 cm should be safeguarded with a tactile warning surface to assist blind and visually impaired persons. (— Figures 3.3.7 and 3.3.8)

Configuration	Height	Function	Area of application
High curb	10–14 cm (maximum 20 cm)	Separation of roadway/sidewalk (roadside bikeway)	Non built-up main arterial roads, built-up four- and multi-lane main arterial roads
	8–12 cm	Division of roadway/parking lane from roadway (roadside bikeway)	Two-lane main arterial roads, connecting roads
Half-height curb	4–8 cm	Division of roadway from roadway (roadside bikeway) or roadway from parking lane	Two-lane main arterial roads, connecting roads
Low curb	0–4 cm	Division of roadway from roadway (roadside bikeway) or from parking lane	Two-lane main arterial roads with low traffic volume, connecting roads, built-up curb crossings (points for pedestrians, wheelchair users (≥ 30 cm), cyclists*)

Table 3.3.14 Areas of application of various curb heights

\* For cyclists, a flush curb represents the optimal alternative. Deviations are only permitted in exceptional cases. Along one-way bikeways, a flush curb is always to be provided.

User group	Type of edging	Ramp (across entire width of crossing)	3 cm curb height (across entire width of crossing)	Pre-cast flush transitional curb (height 0–4 cm curb height) (edge-regulated crossing)	Narrow ramp with central crossing (with lateral transitional curb)	Narrow ramp with perpendicular curb
Suitable for pedestrians						
Conditionally suitable for pedestrians						
Suitable for wheelchair users						
Conditionally suitable for wheelchair users						
Suitable for persons with impaired mobility						
Conditionally suitable for persons with impaired mobility						
Suitable for blind and visually impaired persons						
Not suitable for blind and visually impaired persons						
Ensures safety						
Accessible in terms of "design for all"						

Table 3.3.15 Suitability criteria of edging for various types of users of sidewalks — the symbol with a diagonal crossing over a flush transitional curb unit "Rollbord" means to a 6 cm high curb represents the optimal crossing solution in terms of "design for all"

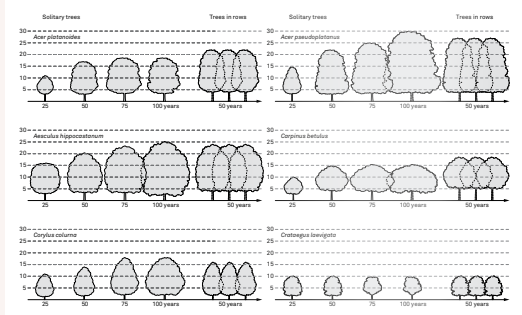


Figure 3.10.10 Typical development of various tree species from juvenile to mature form as solitary trees and in rows

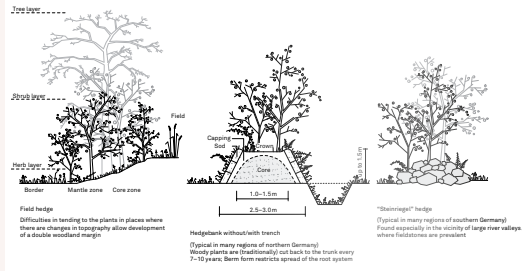


Figure 3.10.11 Various types of ornamental hedges

**Free-Growing Hedges**

Free-growing hedges provide decorative or functional enclosure of a property or they structure an open space as linear elements. They can be planted as flowering hedges, evergreen hedges, as mixed plantings, or as homogeneous hedges. Depending on the species selected, they also offer sources of nourishment and nesting opportunities for various birds, bees, and other animals. Since these hedges only receive occasional maintenance pruning, their growth is more consistent with natural conditions, generally making their space requirements relatively large. A zone 2 m wide plus swaths for future growth on both sides (1 m each) should be planned as a minimum. — Figure 3.10.12 However, small species that are less than 1 m wide without pruning can also be used. But these species will not grow any taller than 0.5–1 m.

**Trimmed Hedges**

Trimmed hedges are given shape through regular and repeated pruning, so the plants which are used must be accordingly tolerant of pruning. They are more laborious to care for than free-growing hedges. Since the growth in many woody plants is strongest at the top, the lower part can quickly grow bare. A tapered cut that gets narrower toward the top is therefore recommended. With evergreen woody plants, the edges can be trimmed more vertically than with deciduous woody plants. Due to the trimming, which is done one to two times each year, most woody plants do not bloom or do so only to a limited degree. Some varieties, such as *Buxus sempervirens* 'Blauer Heinz', only grow to be 0.4 m high and wide. These woody plants are well suited for low borders, and pruning back is not required.

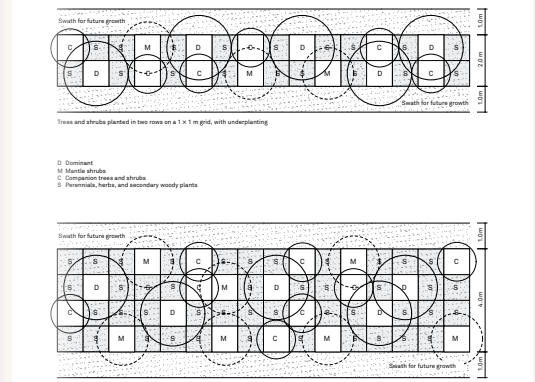


Figure 3.10.12 Planting scheme for free-growing hedges

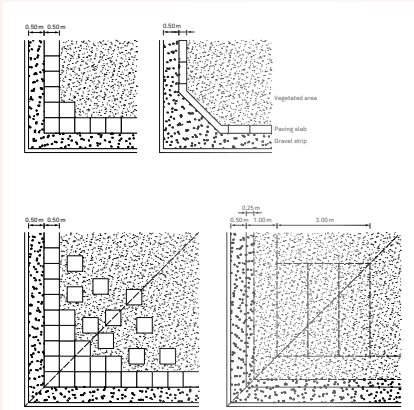


Figure 3.11.3 Measures for securing corner areas

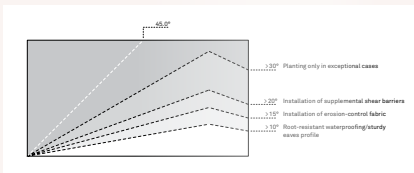


Figure 3.11.4 Safeguards needed as roof slope increases

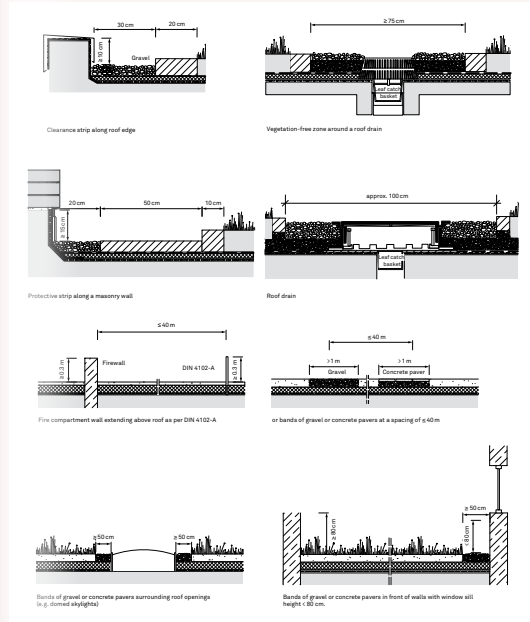


Figure 3.11.5 Minimum clearances to vertical building components and edge conditions

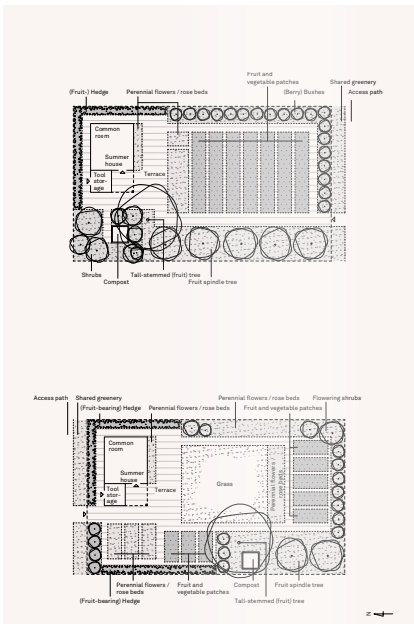


Figure 4.1.1 Exemplary layouts of allotment garden plots with summer houses (max. 24m<sup>2</sup> floor area)

Spatial Configuration of Allotment Garden Sites

Allotment gardens and community gardens are primarily reserved for noncommercial horticultural use and for recreation. Accordingly, many laws and regulations governing allotment gardens limit other uses, the degree of impermeable surfaces, etc.

Allotment gardens are always part of a larger allotment garden site with collective infrastructure and shared open spaces and possibly a clubhouse. A publicly accessible route through the site is not always available, but should be provided. Especially with larger sites, doing so averts the creation of a barrier and better integrates the allotment gardens into their surroundings.

Allotment gardens fulfill important social, climatic, and ecological functions. In inner-city locations, they serve to

significantly improve the microclimatic conditions, have a positive effect on the water balance, provide habitats for flora and fauna, and contribute to a healthy air exchange and to linking habitats.

The following communal facilities should be provided for an allotment garden site:

- Circulation paths
- Clubhouse
- Waste container area
- Storage shed and/or yard
- Bicycle parking
- Automobile parking, capacity dependent on the site's accessibility via public transport
- Play area for children (if needed)
- Boundary planting (if needed)
- Public route through the site / small green corridor

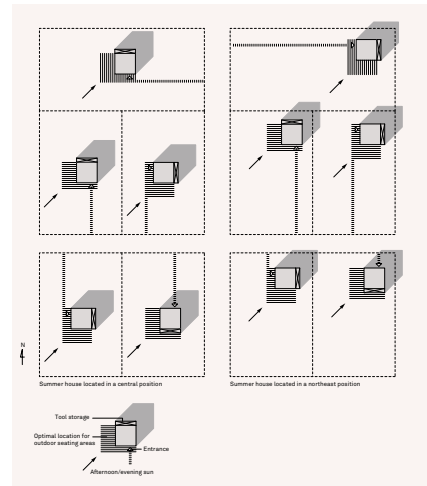


Figure 4.1.2 Location of summer house and outdoor seating on the plot