

## **PREPARATION OF TECHNICAL DOCUMENTATION FOR RESIDENTIAL BUILDINGS**

### **A. CONDITIONS FOR DESIGNING APARTMENTS**

#### **A.1. Groups of spaces in an apartment**

A.1.1. An apartment shall comprise:

- 1) living spaces;
- 2) ancillary space;
- 3) connection routes; and
- 4) open spaces.

A.1.1.1. The living space is an area of an apartment intended for dwelling, namely:

- living room;
- bedroom and study;
- multipurpose room;
- an area, i.e. room for dining (hereinafter referred to as “the dining room”); and
- a room for food preparation (hereinafter referred to as “the kitchen”).

A.1.1.2. The ancillary space is an area of an apartment intended for:

- storage of food (kitchen pantry and/or food storage cabinet);
- maintenance of personal hygiene (bathroom and toilet); and
- storage of items and/or maintenance of the apartment (wardrobe, space or a room for the household needs and/or a storage cabinet for the household needs).

A.1.1.3. The connection route is the space between the living and ancillary spaces in the apartment, namely: entrance area, landing, a hallway and interior staircase.

A.1.1.4. The open spaces that belong to the apartment are loggias, balconies, terraces, gardens, and the like.

#### **A.2. Apartment areas**

A.2.1. The living room is a part of the living area that is intended for dwelling of members of the household.

A.2.2. The multipurpose room is a part of the living area in studio apartments that is intended for dwelling, dining, sleeping and working.

A.2.3. The bedroom and study is a part of the living area that is intended for sleeping and working and can be intended for one or more persons to dwell and sleep in.

A.2.4. The entrance area of the apartment is designed in a way that includes space for movement and the storage space (wardrobe or storage cabinet).

A.2.5. The entrance area, which is accessed from the open space (gallery, courtyard or a public area), is designed in a way that it acts as a windscreen.

A.2.6. The storage cabinets referred to in A.1.1.2. (1) and (3) of this Annex are designed in the kitchen, dining room and/or the hallway.

### **A.3. Layout and orientation of the apartment**

A.3.1. An apartment is designed on the ground floor and on the floors above the ground floor of a residential building.

A.3.2. The design may create living space in the attic if this possibility is provided for in the planning document, but solely as an integral part of the apartment on the floor below the attic.

A.3.3. By way of exception from paragraph A.3.1. of this Annex, the apartment may also be designed in the basement of the residential building if this possibility is provided for in the planning document and at least one face wall of the apartment is above ground level along its entire length and if there are no obstacles (neighbouring building, track, retaining wall, fence, and the like) within a distance of less than 6.00 m in front of the façade openings located on the face wall that is above the ground level along its entire length at a distance of less than 6.00 m (neighbouring building, track, retaining wall, fence, and the like).

A.3.4. The living room in atrium residential buildings should be located on the outer façade of the building.

A.3.5. By way of exception from paragraph A.3.4 of this Annex, the living room may face the atrium if condition D (distance between structures) :  $H$  (height of structures)  $\geq 2$  is met.

A.3.6. In climate zones II and III, in accordance with the regulation governing the energy efficiency of buildings, single-sided apartments shall not be designed on the north side of the residential building.

A.3.7. By way of exception from point A.3.6 of this Annex, if the planning document provides for a north-facing orientation of apartments, the design should ensure solar gain by positioning the openings at an angle of  $\geq 45^\circ$  to the north-east or north-west.

### **A.4. Lighting in the apartment**

A.4.1. The living room, dining room and rooms shall be designed to have natural lighting.

A.4.2. If the dining room is not designed as a separate room, natural lighting can be provided via the living room or kitchen.

A.4.3. The minimum clear area of the opening is the glazed area of the opening (hereinafter referred to as “the clear area of the opening”) in the living room and amounts to at least 1/5 of its area.

A.4.4. The minimum clear area of the openings in the other rooms should be at least 1/6 of their area.

A.4.5. The minimum clear area of the skylight opening should be at least 1/10 of the room area.

A.4.6. Glass surfaces up to a height of 50 cm above the finished floor shall not be taken into account when calculating the clear areas of openings in bedrooms and studies.

A.4.7. The glazed surface of the window should be accessible for washing from both sides.

A.4.8. The installation of blinds or other forms of protection against sunlight and precipitation shall be planned on the outside of the façade openings.

A.4.9. By way of exception from points A.4.7 and A.4.8 of this Annex, protection shall be ensured by other technical solutions in residential buildings with large glass surfaces.

### **A.5. Ventilation of the apartment**

A.5.1. The apartments shall be designed in such a way to allow direct natural ventilation of the living spaces through façade or roof openings.

A.5.2. Suitable vent shafts shall be designed for pantries, kitchens and sanitary facilities, regardless of whether they have façade or roof openings designed.

A.5.3. The vent shafts referred to in paragraph A.5.2 of this Annex shall be designed for each ventilated area individually or as a block system with a connection and a collector, thereby ensuring quality ventilation and preventing the backflow of gases into the rooms.

A.5.4. The vent shafts of apartments and business premises shall not be designed as common vent shafts.

A.5.5. The connection to the vent shaft in the room to be ventilated shall be designed at its highest point.

A.5.6. The vent shafts end above the roof or on the façade below the roof slab.

A.5.7. The vent shafts of business premises shall be designed so as to end above the roof.

A.5.8. In residential buildings with pitched roofs, the vent shafts can be designed so that they also end in the roof space and ventilate it.

### **A.6. Structure of the apartment**

A.6.1. The structure of the apartment is determined by the number and purpose of the rooms.

A.6.2. In accordance with the structure, the apartment shall be designed as follows:

- 1) studio apartment with entrance area, kitchen, multi-purpose room and bathroom;
- 2) one-bedroom apartment with entrance area, kitchen, living room, dining room, bedroom for two people and a bathroom;
- 3) one-and-a-half-bedroom apartment with entrance area, kitchen, living room, dining room, bedroom for two people, bedroom for one person and a bathroom;
- 4) two-bedroom apartment with entrance area, kitchen, living room, dining room, two bedrooms for two people each, landing, bathroom and toilet;
- 5) two-and-a-half-bedroom apartment with entrance area, kitchen, living room, dining room, two bedrooms for two people each, one bedroom for one person, landing, bathroom and toilet;
- 6) three-bedroom apartment with entrance area, kitchen, living room, dining room, three bedrooms for two people each, landing, two bathrooms and toilet; and

- 7) four-bedroom apartment with entrance area, kitchen, living room, dining room, four bedrooms for two people each, landing, two bathrooms and toilet.

A.6.3. Apart from studio apartments, the apartment referred to in paragraph A.6.2 of this Annex should have terraces, balconies or loggias.

A.6.4. An apartment that is larger than a four-bedroom apartment shall, in addition to the amenities referred to in paragraph A.6.2.(7) of this Annex, also include the corresponding number of rooms.

### A.7. Minimum floor area of the apartment

A.7.1. The apartment floor area shall be expressed by the net area measured in accordance with MEST EN 15221-6 (hereinafter referred to as “the floor area of the apartment”) and shall be designed in accordance with the minimum floor areas specified in Table 1.

**Table 1: MINIMUM FLOOR AREAS OF APARTMENTS AND ROOMS IN THE APARTMENTS**

APARTMENT TYPE	APARTMENT ROOM (m²)													TOTAL MINIMUM APARTMENT FLOOR AREA
	Living room	Dining room	Bedroom for one person	Bedroom for two persons	Bedroom queen bed	Entrance hallway	Kitchen	Bathroom	Toilet	Landing	Pantry cabinet	Open space balcony,	Open space balcony, loggia, terrace (next to bedroom)	
Studio	18.00					1.50	3.00	3.50						26.00
One-bed room	18.00	4.00			12.00	1.50	4.00	3.50			0.50	3.00		46.50
One-and-a-half bedroom	18.00	6.00	9.00		12.00	1.70	5.20	3.50		1.50	0.70	3.00		60.60
Two-bed room	20.00	6.00		12.00	12.00	1.70	5.20	4.00	1.20	1.50	0.70	3.00	2.50	69.80
Two-and-a-half bed room	20.00	6.00	9.00	12.00	12.00	1.70	5.20	4.00	1.20	1.50	0.70	3.50	2.50	79.30
Three-bed room	22.00	8.00		2x12.00	14.00	2.00	5.20	4.00	1.20	1.50	1.00	4.00	2.50	89.40
Four-bed room	24.00	8.00		3x12.00	14.00	2.50	6.50	4.50+3.50	1.20	1.50	1.50	4.50	2x2.50	112.70

A.7.2. By way of exception from the minimum floor areas specified in Table 1 of this Annex, in an apartment for which one bedroom for two persons is required, two bedrooms for one person each may be designed, thereby increasing the total floor area of the apartment specified in Table 1.

A.7.3. The floor areas of the individual rooms in Table 1 may deviate by up to 10% from the prescribed minimum floor areas, provided that all functional requirements are met, whereby the total minimum apartment floor area does not deviate.

A.7.4. If the apartment is designed as a duplex, the floor area in Table 1 shall be increased by the floor area of the vertical connection route – stairs.

A.7.5. Rooms in the apartment for which French balconies are designed (openings without parapets) shall be treated as rooms with open spaces (balcony, loggia and terrace).

A.7.6. In the case referred to in paragraph A.7.5 of this Annex, the floor area of the room shall be increased by the floor area of the open space specified in Table 1, depending on the structure of the apartment.

A.7.7. If the space for the dining room and/or kitchen is not designed as a separate room, the floor area of the living room shall be increased by the floor area of the dining room and/or kitchen specified in Table 1, depending on the structure of the apartment.

### **A.8. Designing the layout of the apartment**

A.8.1. When designing the layout of the apartment, no direct connection between the following rooms and areas in the apartment may be designed:

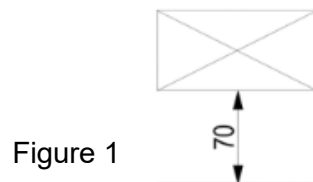
- 1) bathroom, toilet and the living room, except for the studio apartment;
- 2) bathroom, toilet and dining room; and
- 3) kitchen and rooms, as the only connection.

A.8.2. The room may be designed as the main entrance to a second bathroom or dressing room.

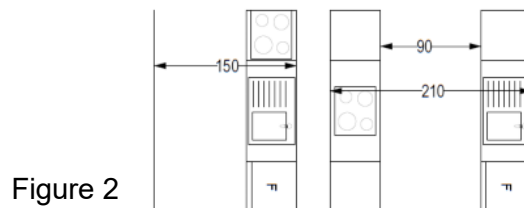
A.8.3. Entrance to at least one bathroom and one toilet shall be designed from the connection routes.

A.8.4. In particular, the design shall include a layout of furniture and appliances with standard dimensions, whereby the minimum distance between furniture and appliances, as well as between furniture or appliances and walls, shall be 60 cm.

A.8.5. Design at least 70 cm of clear space in front of the cabinet (Figure 1):



A.8.6. There should be a passageway at least 90 cm wide in front of a row of kitchen appliances and between two rows of kitchen appliances (Figure 2):



A.8.7. A minimum clearance of 70 cm on either side of the dining table, where the chairs are placed, shall be designed, while the minimum clear width of the dining room shall be 2.20 m (Figure 3), whereby the clear width represents the dimension measured at the narrowest point after completion of the finishing and installation work (hereinafter referred to as “the clear width”).

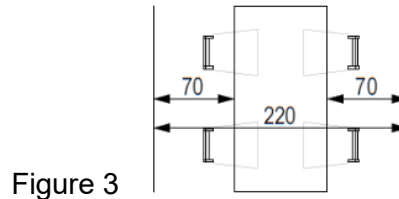


Figure 3

A.8.8. A space of at least 70 cm of width shall be designed in front of the access sides of the bed (Figure 4). The bed for two people shall be accessible from both longer sides:

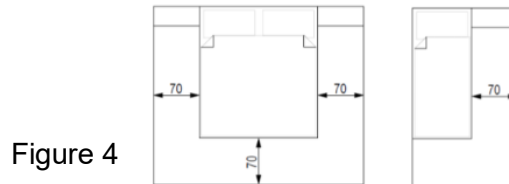


Figure 4

A.8.9. At least 60 cm of clear space shall be designed in front of the appliances in the bathroom (Figures 5 and 6):

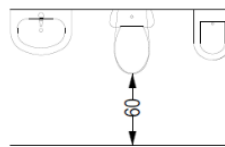


Figure 5



Figure 6

A.8.10. The clear width of the space for positioning the WC shall be the dimension measured at the narrowest point after completion of the finishing and installation work, with a minimum of 70 cm of clearance (Figure 7).



Figure 7

A.8.11. The minimum clear width of the internal staircase leg in the apartment shall be 100 cm (Figure 8):

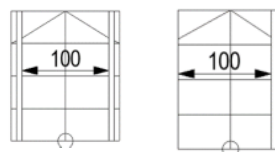


Figure 8

A.8.12. The arrangement of furniture and appliances should be designed in such a way that functionality and the unobstructed opening of doors and windows in relation to furniture and appliances are guaranteed.

## A.9. Dimensions of rooms and spaces in the apartment

A.9.1. The kitchen area shall be designed to provide space for a sink, cooker, refrigerator and dishwasher, as well as a work surface.

A.9.2. The bathroom shall be designed to include: a bathtub/shower cabin, a sink, a water heater, space for a washing machine and a WC.

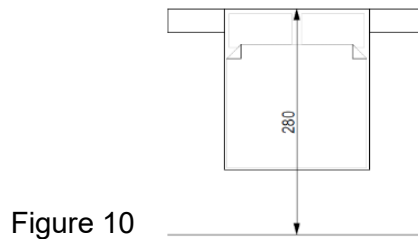
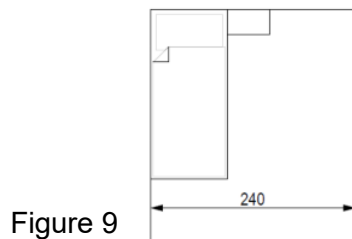
A.9.3. By way of exception from paragraph A.9.2 of this Annex, the bathroom does not need to include space for a washing machine and/or water heater if a separate laundry room is designed in the apartment or if a central water heater is designed in the residential building, the bathroom does not need to include space for a water heater.

A.9.4. The minimum clear width of the living room shall be:

- 1) 3.30 m for a studio, one-bedroom and one-and-a-half-bedroom apartment;
- 2) 3.60 m for two-bedroom, two-and-a-half bedroom and three-bedroom apartment; and
- 3) 4.20 m for four-bedroom apartment.

A.9.5. The minimum clear width of the bedroom shall be:

- 1) 2.40 m for a room for one person (Figure 9); and
- 2) 2.80 m for a room for two persons and a room with a queen bed (Figure 10).



A.9.6. The minimum clear width of other rooms and areas shall be:

- 1) 1.50 m for single-wall kitchens and 2.10 m for double-wall kitchens;
- 2) 2.40 m for dining rooms if designed as a separate room, or 2.20 m if designed as an integral part of the living room;
- 3) 1.60 m for bathrooms or 1.50 m if the elements are arranged in a linear fashion;
- 4) 1.00 m for WC;
- 5) 1.20 m for part of the entrance area or the entrance area intended for movement, 1.10 m for other hallways and landings; and
- 6) 1.00 m for staircase leg in the apartment, for staircases with one or more legs, and the minimum operational radius for spiral staircases shall be 1.20 m.

A.9.7. The minimum clear depth in the pantry/cabinet storage shall be 0.50 m and measured at the minimum depth after completion of the finishing and installation work.

A.9.8. The minimum clear height of living spaces shall be 2.60 m, and that of ancillary rooms shall be 2.40 m, measured at the lowest height after completion of the finishing and installation work (hereinafter referred to as “the clear height”).

A.9.9. In apartments designed in the attic, the minimum clear height of the wall/partition/cabinet where the sloping ceiling begins shall be 1.50 m.

A.9.10. If the clear wall height of at least 1.50 m is designed in the attic, the window in inclined plane shall be designed so that its lower edge is not higher than 1.50 m above the height of the finished floor.

#### **A.10. Dimensions of openings in the apartment**

A.10.1. The minimum clear width of entrance door of the apartment shall be 0.90m, in rooms 0.80 m, in the bathroom, WC and pantries 0.70 m.

A.10.2. The door, as a mandatory element, shall be designed between the bathroom, toilet and other rooms, unless the sanitary facilities are part of the bedroom.

A.10.3. The doors shall be designed to open into the rooms.

A.10.4. The minimum clear width of the doors leading to balconies, terraces and loggias shall be 0.80 m.

A.10.5. The minimum clear height of all doors in the apartment shall be 2.10 m.

A.10.6. Doors in rooms with forced ventilation shall be designed with an air flow grille.

### **B. CONDITIONS FOR DESIGNING COMMON PARTS OF THE RESIDENTIAL BUILDING**

#### **B.1. Access areas**

B.1.1. The access areas are part of the planned area, which ensures unhindered access for pedestrians and vehicles to the residential building.

B.1.2. The minimum width of the pedestrian access, entrance to the residential building, shall be 1.50 m.

B.1.3. The transport connection on the urban plot shall be designed straight at the elevation of the connection for a length of at least 5.00 m.

B.1.4. In the case referred to in paragraph B.1.3, the calculation of 5.00 m shall also include the dimensions of the public areas up to the road to which the urban plot is to be connected.

B.1.5. For business premises designed in a residential building, an entrance area separated from the entrance to the apartments shall be designed.

B.1.6. A horizontal surface at least as wide as the staircase and with a minimum length of 1.50 m shall be designed between the access staircase and the windscreen.

#### **B.2. Parking spaces**

B.2.1. Parking spaces shall be designed on the associated urban plot.

B.2.2. The minimum size of one parking space shall be 5.00 x 2.50 m.



### **B.3. Spaces for municipal waste**

B.3.1. In residential buildings with ten or more apartments, the spaces for municipal waste shall be designed in accordance with the technical conditions issued by the authority responsible for the technical conditions.

### **B.4. Entrance area of the residential building**

B.4.1. The entrance area of the residential building shall consist of:

- horizontal connecting routes (windscreens, hallways and/or corridors); and
- vertical connecting routes (stairs, lifts, ramps and lifting platforms).

B.4.2. If the entrance area has an auxiliary entrance, it shall be designed in accordance with the regulation governing unimpeded access, movement, stay and work of persons with reduced mobility and persons with disabilities.

B.4.3. The entrance area of the residential building shall be designed to allow for the installation of video surveillance systems, anti-burglary system, intercoms, letterboxes and notice boards.

### **B.5. Windscreen**

B.5.1. The windscreen shall be designed at the main entrance of the residential building at the level of the access area.

B.5.2. The minimum dimensions of the windscreen shall be: depth 2.40 m and height 2.40 m.

B.5.3. The clear width of the windscreen shall be determined according to the number of apartments.

B.5.4. The minimum clear width of the windscreen shall be:

- 2.00 m in a residential building with up to 30 apartments;
- 2.40 m in a residential building with up to 40 apartments; and
- 3.00 m in a residential building with 40+ apartments.

B.5.5. Windscreens designed in accordance with the minimum dimensions specified in paragraphs 14 and 16 of this section may not include designed deleveling in the floor or any connections to other rooms, with the exception of other parts of the entrance area.

B.5.6. Setting up of installation equipment and letterboxes may not be designed in the windscreen area.

B.5.7. The minimum clear width of the entrance door to the residential building shall be 1.80 m.

B.5.8. The entrance doors referred to in section B.5.7 of this Annex shall be designed in accordance with the regulation governing unimpeded access, movement, stay and work of persons with reduced mobility and persons with disabilities.

## **B.6. Hallways and corridors**

B.6.1. In particular, a hallway/corridor shall be designed on the ground floor of the residential building, which shall accommodate staircase, platforms and/or ramps in such a way that they are visible from the entrance area of the hallway/corridor.

B.6.2. The corridor of a residential building is an internal horizontal connection route that connects vertical connection routes to apartments and/or a ramp with a gradient of up to 5%.

B.6.3. The minimum clear width of the hallway of the residential building shall be 1.50 m, and the minimum clear height shall be 2.60 m.

B.6.4. The maximum distance between the entrance door to an apartment and the vertical connection route shall be 25.00 m.

## **B.7. Staircases**

B.7.1. The minimum clear width of the staircase leg shall be 1.20 m.

B.7.2. When constructing a single-flight staircase that extends over the entire floor height, a landing shall be designed halfway up, the minimum clear length of which may not be less than the clear width of the staircase leg, measured at the shortest point after completion of the finishing and installation work (hereinafter referred to as “the clear length”).

B.7.3. The minimum clear length of the space in front of and at the end of the staircase leg shall be 1.50 m if this space leads to another room whose door opens onto this space, or 1.60 m if this space leads to another room whose door opens onto the front room or towards the end of the staircase.

B.7.4. The minimum clear height of the open space below the staircase leg that is used shall be 2.20 m.

B.7.5. All treads of a staircase should have the same width and height, and a staircase leg with a landing may have a maximum of 12 steps.

B.7.6. In residential buildings, spiral staircases (circular, elliptical, butterfly-shaped and ratified) shall not be designed as main staircases.

B.7.7. In particular, protective plinths with a height of 10 cm and edges along the walls shall be designed for stairs and landings to protect against moisture and water splashes.

B.7.8. In particular, protective fencing shall be designed along the staircase and landing.

B.7.9. The staircase shall be designed to provide natural lighting through openings in the façade or roof.

B.7.10. The staircase shall be designed to provide both natural and forced ventilation.

B.7.11. If a skylight is designed to illuminate the staircase, the distance between the staircase legs should be at least 1.00 m, with the position below the skylight.

B.7.12. The minimum clear width of the skylight shall be 2.00 m, and its size shall be determined so that each metre of the height of the residential building corresponds to 0.50 m<sup>2</sup> of skylight, whereby it may not be smaller than 6.00 m<sup>2</sup>.

B.7.13. If a skylight is installed in a residential building for the purpose of ventilating and lighting ancillary rooms of the apartment and a common staircase, the living areas of the apartment shall not be designed in such a way that they face the skylight.

B.7.14. If natural ventilation of the staircase is not planned, forced ventilation installations should be designed for the staircase, as well as for all technical rooms, basement rooms and garages in accordance with the regulations or technical conditions issued by the technical conditions authority.

## B.8. Lifts and lifting platforms

B.8.1. Lifts and lifting platforms shall be designed in accordance with the technical regulations for lifts and lifting platforms.

B.8.2. Residential and business premises may not be designed beneath the lift shaft.

B.8.3. The lift shaft shall be designed from the lowest basement level.

B.8.4. The lift shaft shall not be designed next to bedrooms.

B.8.5. By way of exception from paragraph B.8.4 of this Annex, the lift shaft may be designed next to the bedroom if the expansion is designed next to the bedroom wall.

B.8.6. The number of lifts in residential buildings shall be designed relative to the number of floors and the number of occupants, in accordance with Table 2:

**Table 2:**

Lift speed (v)	Number of above-ground floors (P+n*)	Number of occupants per floor **			
≥ 1.0 m/s	n = 1-3	1x400kg	1x630kg	1x630kg	1x630kg
	n = 4-7	1x630kg	1x400kg	1x400kg	1x400kg
	n = 8-10	1x400 kg 1 x 1000 kg	1x630 kg 1x1000 kg	2x1000kg	2x1000kg
≥ 1.6 m/s	n = 11-16	1x400kg 1x1000kg	1x630kg 1x1000kg	2x1000kg	2x1000kg
	n = 17-20	1x630kg 1x1000kg	2x1000kg	2x630kg 1x1000kg	2x630kg 1x1000kg
	n > 20	2x1000kg	2x1000kg	2x630kg 1x1000kg	2x630kg 1x1000kg

\*n = number of floors

\*\* number of occupants: studio apartment = 1; one-bedroom apartment = 2; one-and-a-half-bedroom apartment = 3; two-bedroom apartment = 4; two-and-a-half-bedroom apartment = 5; three-bedroom apartment = 6; four-bedroom apartment = 8; for each additional, one occupant shall be added to a single room or two occupants shall be added to a double room.

B.8.7. In tall residential buildings, at least one lift shall be designed in accordance with the regulation that stipulates the conditions and methods for ensuring unimpeded access, movement, stay and work for persons with reduced mobility and persons with disabilities.

B.8.8. Lifts may be designed with intermediate stops if two lifts are designed to stop at different levels.

### **B.9. Gallery**

B.9.1. The gallery is an external horizontal connection between the floors of the residential building.

B.9.2. The minimum clear width of the gallery shall be 1.50 m, and the minimum clear height shall be 2.60 m.

B.9.3. Windows facing the gallery or common terrace shall be designed to be glazed with frosted glass and safety glass or to have a parapet with a minimum clear height of 1.80 m.

B.9.4. The provision in paragraph B.9.3 of this Annex shall not apply if the gallery is at least 4.00 m away from the apartments and is connected separately to each apartment.

### **B.10. Space for storing accessories for maintaining the hygiene in the building**

B.10.1. In the residential building, a room for storing accessories for maintaining the hygiene in the building shall be designed with a minimum floor area of 2.00 m<sup>2</sup> and a minimum clear height of 2.20 m.

B.10.2. A sink with a drain in the floor shall be designed in the room referred to in paragraph B.10.1 of this Annex.

B.10.3. A vent shaft shall also be designed for the room referred to in paragraph B.10.1 of this Annex, if there is no natural ventilation.

### **B.11. Tenant storage rooms**

B.11.1. If tenant storage rooms are designed in the residential building, then one tenant storage room shall be designed for each apartment.

B.11.2. The minimum floor area of the tenant storage room shall be 3.00 m<sup>2</sup>, and the minimum height shall be 2.20 m.

B.11.3. The tenant storage rooms shall be designed to be outside the apartments: in the basement, lower ground floor or ground floor in such a way to ensure natural ventilation or ventilation through openings in the façade or vent shafts.

B.11.4. The tenant storage rooms may not be designed in the attic area.

### **B.12. Storage room for bicycles and strollers**

B.12.1. A storage room for bicycles and strollers shall be designed in the residential building, one spot for a bicycle or strollers for each apartment.

B.12.2. The minimum floor area for the storage room referred to in paragraph B.12.1. of this Annex shall be 3.00 m<sup>2</sup> for two apartments, and this floor area shall increase for each next apartment by 0.40 m<sup>2</sup>.

### **B.13. Technical rooms**

B.13.1. Technical rooms shall be planned for the accommodation of lift systems, heating substations, boiler rooms, diesel generators, devices for increasing water pressure, rooms for sprinkler systems, etc.

B.13.2. Technical rooms shall be positioned and dimensioned in accordance with the characteristics and dimensions of the equipment and the room for unhindered access and servicing.

B.13.3. The premises referred to in paragraph B.13.1 of this Annex shall be designed to ensure natural or forced ventilation in accordance with technical regulations and standards.

### **B.14. Garages and basements**

B.14.1. A garage is a space for parking vehicles, which is mostly located within the dimensions of the residential building or on the associated urban plot of land belonging to the residential building.

B.14.2. Common garages for several vehicles, or individual garage boxes, may be designed in residential buildings.

B.14.3. The minimum dimensions of a parking space shall be 2.50 x 5.00 m, and those of the garage box shall be 3.10 x 5.00 m.

B.14.4. The minimum clear height of the garage shall be 2.20 m.

B.14.5. The maximum gradient of the access ramp for vehicles shall be 12% or 15% if the ramp is covered.

B.14.6. The minimum clear height of basement rooms shall be 2.20 m.

### **B.15. Roof**

B.15.1. A service exit onto the deck roof or into the attic with slanted roofs shall be designed from the common area on the last floor.

B.15.2. Attics should have a designed natural ventilation system that ensures air circulation in all weather conditions, as well as a service exit to the roof for the purpose of its maintenance.

### **B.16. Open common areas**

B.16.1. Open common areas shall be the areas on the ground floor, on individual floors or on a deck roof that are intended for common use by two or more apartments in a residential building.

B.16.2. For better maintenance, floor drains shall be designed for open spaces referred to in paragraph B.16.1 of this Annex.

B.16.3. Openings to open common areas shall be designed with frosted and safety glass or a parapet with a clear height of at least 1.80 m.

B.16.4. Window facing the open common area may not be designed in the bedroom, and the living area may only be additionally lit and ventilated via the open common area.

## **C. CONDITIONS FOR THE DESIGN OF THE ROOM FOR INSTALLATIONS**

### **C.1. Water supply installations**

C.1.1. The residential building shall be connected to the water supply system in accordance with the technical conditions issued by the authority responsible for the technical conditions.

C.1.2. The space for water gauges shall be designed, positioned and dimensioned in accordance with the characteristics and dimensions of the equipment and the space required for unhindered access and servicing.

### **C.2. Sewerage installations**

C.2.1. The drainage of sanitary and faecal wastewater from the apartment or the residential building, as well as the drainage of rainwater from roof areas, terraces, loggias, balconies of residential buildings and courtyard areas in the immediate vicinity of the residential building shall be designed in accordance with the technical conditions issued by the authority responsible for the technical conditions.

C.2.2. For ventilation reasons, the main sewer verticals shall be designed to end above the roof, the roof terrace or on the façade below the roof slab.

C.2.3. If the design involves the construction of a gable roof, the main sewage vertical pipes may also end below the roof, whereby adequate ventilation of the attic shall be designed.

C.2.4. It is not permissible to connect the air ducts for ventilating wastewater vertical pipes to chimneys or vent shafts in the residential building.

### **C.3. Heating and cooling installations**

C.3.1. A residential building and its apartments should have a defined basic heating system.

C.3.2. At least one connection to the chimney flue in the living room, kitchen and/or dining room shall be designed for each apartment.

C.3.3. The chimney shall be designed at an adequate height above the roof plane, with a mandatory flaunching, in accordance with the local wind rose.

C.3.4. Chimney flues shall be designed on the lowest floor of the residential building and may not be designed in apartments, unless the apartment has its own chimney.

C.3.5. If the residential building is to be connected to a district heating system or an energy supply (gas), the heating system and the rooms required for installation and equipment shall be defined

by technical documentation in accordance with the technical conditions issued by the authority responsible for the technical conditions.

C.3.6. If a boiler room is designed in the residential building, a room for fuel storage shall also be designed in accordance with the technical regulations and standards, depending on the type of fuel.

C.3.7. The design shall provide for suitable positioning of the air conditioning system, and the outdoor units should be positioned so that they are not visible on the façade of the residential building, with separate drainage of the water from the air conditioning system into the rainwater drainage system.

#### **C.4. Electrical installations**

C.4.1. A residential building shall be designed to be equipped with electrical installations that enable normal living and the use of all rooms in the residential building without daylight, as well as the use of electrical appliances in accordance with the regulations or technical conditions issued by the authority responsible for the technical conditions.

C.4.2. The residential building shall be designed so that it is equipped with an electronic communications network in accordance with the regulations governing the electronic communications sector.

#### **C.5. Protection from precipitation**

C.5.1. To protect against rain, drains (vertical and horizontal), downpipes and gutters (vertical and horizontal) shall be designed, which should be adequately dimensioned according to the drainage areas and climate zones.

C.5.2. The drainage areas on deck roofs and open terraces shall be designed with a minimum gradient of 0.5%.

C.5.3. Drains with connections to vertical gutters shall be designed on balconies, loggias and terraces.

C.5.4. Drains on deck roofs, balconies, loggias and terraces shall be designed with a removable security grille.

C.5.5. Deck roof surfaces shall be designed with drainage via internal vertical drains, external gutters or a combination of the two.

C.5.6. Internal vertical drains should be soundproofed and must not run through apartments.

C.5.7. External gutters, unless concealed, shall be designed to be at least 5 cm away from the finishing façade.

C.5.8. For residential buildings in climate zone III, an electric defrosting system shall be designed in horizontal and vertical gutters.

C.5.9. Vertical drains and vertical gutters shall be designed with accessible inspection fittings at the junction with horizontal drains connected to the rainwater drainage system.

C.5.10. To protect against snowfall, snow guards shall be designed on all sides of slanted roofs of the residential buildings in climate zones II and III, calculated in accordance with the regulations for structural design.

C.5.11. To protect against precipitation, a roof overhang with a depth of at least 1.5 times the width of the larger door leaf shall be designed in front of the windscreen.

## **D. REQUIREMENTS FOR THE DESIGN OF THE RESIDENTIAL BUILDING, TAKING INTO ACCOUNT ASPECTS OF PRIVACY, SAFETY AND ACCESSIBILITY**

### **D.1. Protection of privacy**

D.1.1. Every apartment in the residential building shall be designed in such a way to ensure privacy from view from a neighbouring apartment.

D.1.2. If habitation is planned on the ground floor of a residential building, the floor level of the apartment shall be designed to a minimum height of 80 cm above the level of the landscaped area adjacent to the building and with a minimum parapet height of 100 cm, provided that the distance from the face wall is 4.00 m, measured at an angle of 90° from the ground sloping towards the building.

D.1.3. By way of exception from paragraph C.1.2 of this Annex, the floor level of an apartment on the ground may be designed to be at a lower level if the design includes a garden belonging to the apartment that is at least 4 m long from the face wall, measured at an angle of 90°.

D.1.4. Façade openings on the wall of an apartment that is shared with the wall of the loggia or balcony of the neighbouring apartment may not be provided/designed.

D.1.5. Facade openings, loggias, balconies and terraces facing the opposite apartments may not be provided in apartments that are less than 6.00 metres apart.

D.1.6. Façade openings in sanitary facilities, pantries in the apartment and kitchens with a parapet of at least 180 cm in height shall be excluded from paragraph C.1.5. of this Annex.

D.1.7. The partitions on the loggias separating two apartments shall be designed of materials that prevent seeing into the second apartment.

D.1.8. The entrance doors to the apartments shall be designed to meet burglary and fire safety requirements.

### **D.2. Protective fencing**

D.2.1. The height of protective fencing on staircases, loggias, balconies, terraces and galleries in the apartment and/or the residential building that are erected by more than 45 cm in relation to the landscaped terrain, measured from the finished floor to the seventh floor above ground level, shall be 110 cm and 120 cm above the seventh floor above ground level.

D.2.2. Facade openings whose parapet or fixed glazing is less than 100 cm above the finished floor, with the exception of facade openings facing loggias, terraces, balconies, gardens or



galleries, should be fitted with an additional protective fencing in accordance with paragraph C.2.1. of this Annex.

D.2.3. The openings in the fencing shall be designed in such a way to prevent items with a diameter of more than 10 cm fitting through and prevent children from climbing over it.

D.2.4. The minimum clear height of the window parapet shall be 100 cm, unless the opening leads to a terrace, balcony or loggia.

D.2.5. By way of exception from paragraph C.2.4 of this Annex, if a window parapet with a height of less than 0.90 m is designed on the façade, a protective fencing with a height of up to 100 cm shall be designed.

D.2.6. The French balcony should be equipped with a protective fencing with the minimum clear height of 1.10 m, measured from the side of the adjoining room.”