

146

**DECREE
of 31 May 2024**

on construction requirements

Pursuant to § 333(1) of Act No 283/2021, the Building Act , as amended by Act No 152/2023 (hereinafter the ‘Act’), the Ministry of Regional Development lays down the following for the implementation of § 152(1) of the Act:

**PART ONE
INTRODUCTORY PROVISIONS**

§ 1

Subject matter

This Decree lays down detailed

- a) requirements for identification of land parcels;
- b) requirements for the siting of buildings; and
- c) technical requirements for buildings.

§ 2

- (1) The requirements contained in Parts Two to Four shall apply to all types of buildings and equipment, unless otherwise specified in Part Five.
- (2) If the parts of a building serve different purposes, these parts shall be considered separately.

Definitions

§ 3

For the purposes of this Decree, the following definitions apply:

- a) an apartment with a universal standard means an apartment, the layout of which takes into account the needs of persons using compensatory walking aids, in which all rooms meet the universal standard;
- b) occupancy area means an occupancy room or part of an occupancy room with a minimum area of 8 m² that meets residential requirements and where the predominant residence of persons is presumed;
- c) a common area means a common room or part of a common room that has a dispositions allowing for the presence of persons;
- d) accommodations unit means
 - 1. a single room or a set of rooms that meets the requirements for temporary accommodation through structural and technical arrangements and facilities and are intended for that purpose; or
 - 2. an accommodations unit in buildings for social services.
- e) building for nurture and education means a kindergarten building with the exception of the forest kindergarten support facilities and forest kindergarten meal service facilities, pre-school childcare facilities, with the exception of premises in which childcare service is provided in a children's group, elementary schools, elementary arts and language schools with the right to hold state language examinations, secondary schools, conservatories, higher vocational schools, educational establishments for interest non-formal learning, school education and accommodation facilities, school facilities for the exercise of institutional or protective education, including facilities for children requiring immediate assistance;
- f) sanitary facilities mean indoor areas and washrooms, showers, toilets and changing booths;
- g) parking means space for parking or leaving a vehicle;
- h) a walking area means an area intended for the presence or movement of people along a level surface, stairs or sloping ramp; each stairway step and levelling step shall also be considered as a walking area;
- i) a flue means a clear cavity for the passage of combustion gases to the outdoors;
- j) a standard means a standard set out in Annex 14 to this Decree;
- k) a building for social services means a home for persons with disabilities, a home for the elderly, a home with a special regime, sheltered housing, a shelter, a half-way house and after-care facilities.

§ 4

For the purposes of this Decree, for the area of water works, the following definitions shall apply:

- a) wastewater treatment plant means structures and equipment used for the treatment of waste water with mechanical, biological or, where appropriate, further treatment; facilities for coarse pre-treatment of waste water, septic tanks, cesspools and simple devices with mechanical function that are not regularly monitored and operated are not considered treatment plants;
- b) design flow rate is the flow rate used for the design of the waterwork and its parts with the required periodicity;

- c) design flood wave means the theoretical flood wave determined by water flow, volume and time course of the wave with a frequency corresponding to the periodicity of the design flow.

§ 5

For the purposes of this Decree, for the area of structures for fulfilling the functions of a forest, the following definitions apply:

- a) a structure fulfilling the functions of a forest means forest road structures, structures on other forest transport routes, dam structures for streams and ravines and structures for forest land water management;
- b) a forest road means a paved special-purpose road for transport accessibility of forests and their interconnection with other roads used for forest transport, for carrying out rescue and disposal works by the integrated rescue system and for ensuring national defence;
- c) stream and ravine dams mean structures for the prevention or reduction of flood damage or accelerated erosion in stream catchment areas, in streams and in ravines;
- d) a stream means a watercourse with a small catchment area, with sudden and significant changes in flow and steep flow waves deepening the bottom of the stream, eroding the bottoms of slopes, forming shore reservoirs and significantly and irregularly moving sediments, temporarily storing them in gravel bars and deposits on the bottom of the stream, in flooded areas or carrying them away into larger watercourses and water reservoirs;
- e) a ravine means a natural land formation, furrow or gully, formed by excessive concentrated erosion by concentrated surface run-off of water;
- f) other forest transport routes mean routes that are not roads, in particular forest tracks and technological lines;
- g) a structure for forest land water management means a waterwork pursuant to other legislation.

§ 6

For the purposes of this Decree, for the area of structures for agriculture, the following definitions apply:

- a) a building for livestock means a building or a set of buildings for animals for breeding, fattening, labour and other farming purposes;
- b) an auxiliary structure for livestock means a structure for drying and storing hay and straw, a structure for the storage of farm manure, a structure for the concentration of liquid waste and a structure for the preservation and storage of silage and silage effluent;
- c) a stockroom means a building, part of a building or a separate room intended for the storage of plant protection products and auxiliary products with a maximum permitted weight of up to 1000 kg.

PART TWO

REQUIREMENTS FOR IDENTIFICATION OF LAND PARCELS

§ 7

Parking spaces

- (1) For buildings or for the purpose of using land, with the exception of temporary structures for a maximum period of one year, parking spaces shall be designed and implemented in the quantity specified in Annex 1 to this Decree.
- (2) Parking spaces must be designed and implemented as part of the building, as an operationally inseparable part of the building or on the building lot, unless this is prevented by a restriction resulting from stipulated protective measures pursuant to other legislation¹⁾.
- (3) If parking cannot be designed as part of the building or building lot, it must be designed and implemented on the lot at a distance of up to 300 m. The distance shall be measured as the shortest line between the building and the lot on which the parking space will be designed and implemented.
- (4) On areas for short-term parking, dedicated parking spaces for vehicles marked with a parking card identifying a vehicle transporting a person with a severe disability and a reserved parking space for the vehicles of persons accompanying a child in the pram must be designed and implemented at least in the quantity stipulated in Annex 1 to this Decree. Reserved parking must meet accessibility requirements.
- (5) Depending on the type and purpose of civil amenity structures, parking spaces for bicycles are set up.

§ 8

Rainwater management

- (1) The structure must be designed and constructed in such a way as to meet the requirements for the management of rainwater and the detection of rainwater pollution in accordance with the standard.
- (2) The structure must be designed and constructed in such a way that rainwater drainage does not threaten the building lot and its vicinity.
- (3) Rainwater management must be designed and implemented with a view to conducting rainwater to vegetation where technically feasible

§ 9

Public spaces

- (1) The minimum width of a public space, which includes the road leading to an apartment building lot, must be 12 m; in one-way operation, the minimum width must be 10.5 m. The minimum width of a newly defined public space that includes the road leading to the lot of a family home, must be 8 m; in one-way operation, the minimum width must be 6.5 m.

- (2) A project in a public space must be designed and built to respect the natural and safe movement of pedestrians and refrain from interfering with walking space along a guide system line.
- (3) If a planting strip is demarcated in a street, it must have a width of at least 1 m.
- (4) The spatial parameters of technical infrastructure networks must be designed and built in such a way as to respect the protection of trees, bushes and vegetation areas. Planting strips must be designed and implemented to respect the spatial layout of technical infrastructure networks.

§ 10

Residential and family recreation building lots

- (1) On a residential and family recreation building lot, in addition to residential and family recreation buildings, structures and facilities related to or pre-requisite for residential and family recreation use may also be situated, and landscaping necessary for the proper and safe use of land and buildings and facilities thereon may be performed.
- (2) On the lot of a family home, one building for business activities with built-up area up to 40 m² and height up to 5 m with a maximum of one above-ground floor and one underground floor may be situated; this is without prejudice to paragraph (1).

PART THREE

REQUIREMENTS FOR THE SITING OF BUILDINGS

§ 11

Siting of buildings with respect to the building line and the property boundary

- (1) A building is situated in accordance with the building line stipulated according to the predominant character of the building and its relation to the public space.
- (2) The location of the building must not prevent future development of neighbouring lots or endanger the existing development of neighbouring lots. The building must be located at least 2 m from the boundary of the lot, excluding a lot that is a public area.
- (3) Paragraph (2) shall not apply
 - a) if the building is up to 2 m in height;
 - b) in the case of the construction of roads, railways, waterways and air structures, technical and green infrastructure networks; or
 - c) if such a method of development is customary there, corresponds to the character of the area or follows from the land subdivision method.
- (4) If a structure is being situated at the lot boundary, there must be no building openings in the wall facing the lot boundary; this does not apply to siting a structure at a boundary with a lot that is a public area. The structure must be located in such a way that rainwater and snow is prevented from running off or falling from the structure onto an adjacent lot.

- (5) The building line may, in accordance with the character of the development, be crossed by jutting parts of the building in such a way as to respect the character of the area and the quality of the built environment.
- (6) The jutting parts of the structure must not endanger the use of public spaces. Their height above the ground and the connecting part of a sidewalk 0.5 m in width must be at least 4.95 m.

§ 12

Technical infrastructure

- (1) Technical infrastructure networks shall be located underground in the buildable area and in the built-up area.
- (2) Paragraph (1) shall not apply to the siting of electric power lines with a voltage level of 110 kV or higher and for overhead masts and installations of the public communications network.
- (3) Technical infrastructure networks for the needs of temporary construction site equipment, substitute energy and public communication networks can be placed above the ground as temporary structures.
- (4) The spatial arrangement of technical infrastructure networks must be designed and built in such a way as to meet horizontal parallel distances, vertical crossing distances and coverage levels in such a way as to avoid safety or other risks.
- (5) Pipes and cables shall be placed in conduits where they cross unmodified stream beds and placed at least 1.4 m below the bottom of the stream bed; this does not apply if a statement by the watercourse manager allows another technical solution. If, at the point of crossing with an unmodified stream, a trough is designed and built for pipes or cables, it must be filled and, after compaction, reinforced on the bottom and banks of the stream bed.
- (6) Poles for overhead power lines and for overhead electronic communications networks shall be designed and installed at least 6 m from the stream bank line.

§ 13

Fencing or other enclosures

- (1) Fencing or another enclosure is required on a lot with a structure
 - a) that may have an adverse effect on the environment²⁾, in particular, a building for production with unclean operation, a sewage treatment plant or a sanitation plant;
 - b) where the free movement of persons or animals needs to be prevented;
 - c) that needs to be protected from ambient influences, in particular a building for the production of foodstuffs; or
 - d) that needs to be protected against the entry of unauthorised persons.
- (2) The parameters of fencing or other enclosures must not limit the view where the building's driveway connects to a road, including intersections, and endanger the safety of persons, road users and animals.

- (3) In flood plains, the type of fence or enclosure and the material used must not make flooding worse, the parts of the fencing must be easily dismantled, without solid foundations, and must allow for easy passage of flood flows.

§ 14

Construction site

- (1) A construction site shall be designed and implemented in such a way that its operation
 - a) does not endanger the life and health of persons or animals;
 - b) does not impact the vicinity above the limit values laid down by other legislation³);
 - c) does not endanger road safety;
 - d) does not pollute roads, air and water; and
 - e) allows access to adjacent buildings or land, technical infrastructure networks and fire equipment.
- (2) The construction site or separate work area, depending on the type of construction, must be appropriately separated from adjacent land and buildings. On the lot of a building that is a cultural monument, in conservation reserves or in conservation zones, in natural parks or in specially protected areas, including their protection zones, only construction site facilities without a fixed foundation may be situated.
- (3) Excavations adjacent to public areas and pedestrian pathways must be secured against the fall of persons with reduced mobility and orientation capabilities. Footbridges across these excavations and detours must meet accessibility requirements.

§ 15

Advertising equipment

Advertising equipment placed on

- a) buildings must correspond to their architectural character and must not interfere with the basic structure of the building and its significant details;
- b) the roofs of buildings must not exceed the highest roof level and its overall height must not exceed 2 m; and
- c) fencing, or at a distance from fencing equal to the height of the advertising equipment, must not exceed the height of fencing by more than 20 %.

PART FOUR

TECHNICAL REQUIREMENTS FOR BUILDINGS

TITLE I

Technical requirements for buildings

Part 1

Requirements for mechanical resistance and stability of buildings

§ 16

Mechanical resistance and stability

A building must be designed and constructed in such a way that its structures withstand foreseeable influences. Structures must be designed and implemented in accordance with the standard.

§ 17

Building foundations

- (1) Building foundations must be designed and built in a manner consistent with the foundation conditions established by the survey of foundation conditions at the construction site.
- (2) Building foundations are built in such a way that its stability is not endangered and the surrounding land and buildings are not endangered.
- (3) Underground structures separating the interior of the building from the surrounding environment or from the foundations, including pass-throughs, shall be protected against adverse effects of groundwater; moisture or other undesirable influences, taking into account the design parameters of the indoor environment.

§ 18

The floor level of the living room shall be at least 0.15 m above the highest level of adjacent landscaped terrain in a strip 5 m wide from the perimeter wall of the building with an illuminating opening and 1 m from the perimeter wall of the building without an illuminating hole and at least 0.5 m above the groundwater surface if the room is not protected from undesirable effects of water in another way.

Part 2

Health and environmental protection requirements

§ 19

Ventilation

- (1) Depending on its purpose, a building must have sufficient natural, forced or combined ventilation, unless otherwise provided for in Annex 2 to this Decree.
- (2) Depending on its purpose, a building must have indoor air quality ensured with the possibility of regulation, unless otherwise provided in Annex 2 to this Decree.
- (3) An occupation room in a building for nurture and education must be capable of being ventilated. Other ventilation requirements are laid down in other legislation. A central dressing room for children and pupils without natural ventilation must have forced ventilation with air exchange.

- (4) The amount of fresh air, using specific design values, is stipulated pursuant to Annex 2 to this Decree.

§ 20

Lighting, sunlight and shading

- (1) The interior of a building must be designed and built in such a way as to ensure daylight according to its purpose. Daylight requirements for occupancy rooms of buildings for nurture and education are laid down in other legislation.
- (2) Premises with beds in a medical facility, an occupancy room in a building for social services and a building for the purposes of the Prison Service of the Czech Republic must be designed and built in such a way as to ensure they have electrical lighting.
- (3) An occupancy room in a building for social services and a kindergarten playroom, with the exception of forest kindergarten support facilities and forest kindergarten meal service facilities, must be designed and built to ensure sunlight.
- (4) A building is designed and built with regard to the shading of residential and occupancy rooms of existing buildings affected by the proposed building, with the exception of the occupancy rooms in a residential building and apartments located in the basement.
- (5) The requirement laid down in paragraph (4) shall not apply to construction on vacant lots between buildings. For construction on a vacant lot between buildings, the proposed shading is compared with shading that would be caused by a building whose parameters would correspond to complete continuous development of the same height as surrounding development and, where appropriate, other criteria with regard to the building line.
- (6) When calculating daytime and combined lighting, sunlight and shading, shading shall be assessed according to the current state of the surrounding area and changes in the territory, in particular under the terms of decisions or other measures issued under the Building Act or other legislation, or a regulatory plan or zoning plan with elements of a regulatory plan, if issued for the territory in question.

§ 21

Protection against noise and vibration

- (1) A building must be designed and built in such a way as to comply with the hygienic limits for noise and vibration laid down by other legislation⁴⁾⁵⁾.
- (2) Built-in equipment and its distribution systems causing noise and vibration must be designed and built in such a way in a building with occupancy rooms and in a building for social services to limit the transmission of noise and vibrations to the building structure, in particular to the protected interior of the building. Occupancy rooms shall be designed and built to ensure their protection from noise.
- (3) The internal structure of buildings and the outer shell, including the opening fillings, shall be designed and built in such a way as to meet the requirements for sound insulation parameters to protect the interior of buildings from noise and vibration.

§ 22

Thermal protection of buildings

- (1) A building must be designed and built to ensure
 - a) its thermal protection;
 - b) the lowest internal surface temperature;
 - c) the total air permeability of the building envelope;
 - d) thermal stability of rooms in summer;
 - e) protection against
 1. the penetration of water into the building and its structures;
 2. propagation of moisture in structures and in the internal environment of the building.
- (2) The building must also be designed and built to avoid increasing radon activity concentration.

§ 23

Release of hazardous substances into water or soil

In a building where regular handling of substances threatening the quality of soil, surface or groundwater is assumed, floor structures and handling areas must be secured against the penetration of such substances into the subsoil.

§ 24

Restricting undesirable effects of outdoor lighting

Non-public special-purpose roads, outdoor workplaces, outdoor sports grounds and advertising equipment with a total area of more than 8 m² shall be designed and built to ensure the restriction of undesirable effects of outdoor lighting. The first sentence shall apply mutatis mutandis to lighting building facades.

§ 25

Municipal waste

- (1) Depending on its type and purpose, a building must be equipped with a room or a place to hold municipal waste situated on the building lot. In terms of capacity, a room or place for holding municipal waste must correspond to the purpose of the building.
- (2) In the case of a set of buildings, a common site for municipal waste may be established up to 300 m away.
- (3) The room or place for municipal waste must meet accessibility requirements. This does not apply to family homes and family recreation buildings.

Part 3

Safety and accessibility requirements

§ 26

Lightning protection

- (1) Protection of a building against lightning must be designed and implemented for
 - a) production and storage facilities for explosives and flammable substances, liquids, gases, explosives, for a munitions depot, including open stockpiles, shelters and handling areas⁶), and
 - b) above-ground structures or above-ground parts of specified gas technical equipment pursuant to the Act on further occupational safety and health requirements in connection with operations.
- (2) In cases not set out in paragraph (1), protection against lightning shall be designed and implemented where lightning could cause a threat to the life or health of persons or animals, in particular in the case of housing and civil amenity buildings, or where it could cause significant damage.
- (3) For the grounding of the lightning protection system, a foundation grounder is usually designed and installed in the building.
- (4) For the cases set out in paragraphs (1) and (2), appropriate protective measures must be designed and implemented, in particular protective areas must be designed and built only on the basis of the actual physical dimensions of the metal conduit system. When designing and installing lightning protection, it is necessary to assess and maintain sufficient distance or safe separation.

§ 27

Protection against falling ice and snow and water run-off

A building must be designed and built so it does not endanger adjacent roads and adjacent walking areas by falling ice and snow and water run-off.

§ 28

Protection against floods and heavy rainfall

- (1) In a floodplain, outside the active zone,
 - a) the structure of a building below water level with a flood recurrence period of 100 years (Q100) must be designed and built to withstand the effects of water and ice during flooding and allow for smooth flow around the building;
 - b) the building must be designed and built as resistant to the effects of water and ice during flooding;
 - c) equipment must be designed and built with increased resistance to the potential effects of water and ice during flooding; and
 - d) the technical and structural design of buildings must allow gravitational drainage of water from the lowest floor or a device for simple pumping of water from buildings must be designed and installed.
- (2) If technically feasible, in a floodplain, the following must be located at least 1 m above the flood design level with a flood recurrence period of 100 years (Q100):
 - a) the floor of residential rooms;

- b) the operating premises of a transformer and switching station;
 - c) the operating premises of an electronic communications network and telephone exchange access point;
 - d) the building's main switchgear;
 - e) a backup power source;
 - f) source and equipment for building heating, ventilation and lighting;
 - g) the engine room and power source of an evacuation lift; and
 - h) gas and water shut-off valves.
- (3) In a floodplain and where the territory or structures need to be protected against backflow in the sewer system during flooding or torrential rain, the sewer connection or, where appropriate, the internal sewage system must be equipped with an anti-backflow device or closure.
- (4) A tank for substances below the design level with a flood recurrence period of 100 years (Q100) that may endanger water quality or hygiene must be secured against leakage of substances and must be resistant to the effects of water.

§ 29

Accessibility

- (1) Depending on its type and purpose, a building must be designed and built to meet accessibility requirements pursuant to a standard.
- (2) Depending on type and need, a building is equipped with tactile and acoustic elements for the visually impaired and communication elements for the hearing-impaired.
- (3) Pedestrian pathways in built-up and buildable areas must allow for the independent, safe, easy and smooth movement of persons with reduced mobility; this does not apply within industrial or storage sites, except for arrivals to premises used by persons with reduced mobility or orientation capabilities.
- (4) Access from a public area to a civic amenities structure in parts intended for use by the public, an apartment building and a building for the performance of work by more than 25 persons, if the nature of the operation in this building allows the employment of persons with disabilities, must be
- a) identified by natural or artificial guidance lines, and
 - b) designed and executed without stairs and levelling steps; the height difference can be addressed by a pathway for pedestrians, ramps intended for persons with reduced mobility or orientation, or by a lift.
- (5) Access to a building with specialised services for visually impaired persons, government buildings, hospitals, clinics, post offices, banks, health insurance companies, courts, buildings for nurture and education and universities, public parts of the passenger building, public transport terminal and metro stations must be secured by an acoustic element for visually impaired persons.
- (6) Premises used by persons with reduced mobility or orientation capabilities must be designed and built to meet accessibility requirements.

- (7) In a social and health services building, in a school accommodation facility and in a tourism accommodation facility for more than 20 persons, at least 5 % of accommodation units must meet the requirements of a special-purpose apartment for persons with severe mobility disabilities. In a nursing home, at least 5 % of the apartments must meet the requirements of a special-purpose apartment for people with severe mobility disabilities. The resulting number of accommodation units or apartments is rounded up to whole numbers.
- (8) Premises intended for persons with reduced mobility must be marked with an appropriate symbol and an information sign with directions to it must be placed in a visible location.
- (9) If a building contains basic information for public orientation, it must be visually perceptible and accompanied by tactile or acoustic elements pursuant to paragraph (2).

§ 30

Sanitary facilities and changing rooms

- (1) The requirements for sanitary facilities and changing rooms are laid down in Annex 3 to this Decree.
- (2) In a changing room intended for use by the public, a minimum of 5 % of the capacity must meet accessibility requirements. The resulting capacity is rounded up to whole numbers.
- (3) At least 5 % of changing or fitting rooms for use by the public must comply with accessibility requirements. The resulting number of changing or fitting rooms meeting accessibility requirements is rounded up to a whole number.
- (4) In premises with a shower intended for use by the public, there must be at least one shower meeting accessibility requirements that is accessible from the common area for both women and men; if this is not technically feasible, there must be at least one shower in the women's section and at least one shower in the men's section.
- (5) In premises with a tub intended for use by the public, there must be at least one tub with the possibility of using a lifting device accessible from the common area for women and men; if this is not technically feasible, there must be at least one tub in the women's section and one tub in the men's section.
- (6) In premises with a toilet intended for use by the public, there must be at least one toilet stall with the possibility of using assistance accessible from the common area for women and men; if this is not technically feasible, there must be at least one toilet in the women's section and one toilet in the men's section.
- (7) Civic amenity buildings, in parts intended for use by the public, or part thereof intended for children under 3 years of age, passenger areas at public transport terminals and retail buildings with a sales area greater than 5 000 m² must be fitted with a baby changing booth in the part intended for use by the public, to which access from the common space for women and men is allowed, or a changing table in a toilet booth intended for persons with reduced mobility; if this is not technically feasible, there must be at least one in the women's section and at least one in the men's section.
- (8) Every changing room and every sanitary facility specified in paragraphs (2) to (7) intended for use by the public must be marked with a tactile label for the blind.

- (9) The requirements specified in paragraphs (2) to (6) shall apply *mutatis mutandis* to a building for the performance of work by more than 25 persons, provided that the nature of the operation in that building allows persons with disabilities to be employed.

§ 31

Staircases and ramps

- (1) Each floor, with the exception of the entrance floor at ground level, be accessible by at least one main staircase. An auxiliary staircase must be designed and built to meet the spatial parameters of the design of escape or emergency access routes. A staircase may be replaced by a ramp that shall not have a grade of more than 12.5 % on the escape route.
- (2) The main staircase and the main ramp must comply with the parameters set out in Annex 4 to this Decree.
- (3) Staircases and ramps for persons with reduced mobility must be designed and built to meet accessibility requirements. This does not apply to family homes, family recreation buildings and in apartments.
- (4) All steps in one flight of stairs in the main staircase must have the same design height, in straight flights and the same design width.
- (5) Ladder staircases can be designed and executed only for occasional use. The minimum width of a flight of ladder stairs and the minimum step height must be designed and executed to meet the requirements for safe movement of persons.

§ 32

Lifts and platform lifts

- (1) Depending on type and need, a building is equipped with a
 - a) passenger lift;
 - b) freight lift;
 - c) passenger and freight lift;
 - d) fire lift; and
 - e) evacuation lift.
- (2) For a civic amenity building, in parts intended for use by the public, access to these areas must be provided by a lift.
- (3) A lift must be installed in an apartment building and an accommodation facility with entrances to apartments or accommodation units on the fourth and higher above-ground floor or attic at the same level.
- (4) A lift in an apartment building must provide access to all its common areas. In an apartment building without a lift, access to at least one floor used predominantly for living must be provided.
- (5) A lift or platform lift intended for persons with reduced mobility must be designed and executed to allow their safe movement and meet accessibility requirements. This does not apply to family homes and to buildings for family recreation.

- (6) Escalators and moving sidewalks intended for use by the public must be designed and executed so that their operation, position and direction of travel are signalled by an acoustic element for the visually impaired. The acoustic element and the comb at the entrance and exit of moving belts must meet accessibility requirements.

§ 33

Lift, ventilation shafts and chutes

- (1) A lift shaft must not contain any lines or other equipment not related to lift operation⁷⁾. The lift shaft must be sufficiently ventilated to the outside of the building and must not be used for ventilation of spaces not related to the lift.
- (2) A ventilation shaft or chute must not contain any lines or other equipment not related to shaft operation.
- (3) Waste chutes must enable the safe handling of waste. The chute, its throw-in and cleaning opening, or the disposal booth and the waste storage area, must be designed and executed so that fire, smoke, odour, dust and noise cannot enter the other parts of the building. Waste chutes must have effective ventilation. The bottom of the chute must also be suitable for the concentration of any liquid components of the waste.
- (4) Neither the chute opening nor other chute accessories may be in a residential or occupancy room. The lower edge of the opening must be at least 1.1 m above the floor or secured against the fall of persons. The chute outlet must be in a separate space outside the building.

§ 34

Fall protection

- (1) Railings or other barriers must be installed on the edge of a walking area where there is a risk of people falling at height, in order for their parameters to protect persons from falling.
- (2) Railings or other barriers need not be installed on a walking surface where their installation would prevent the main operation for which the area is intended or if the open space is covered by a structure corresponding to the load of the proposed operation and there are holes in the structure that are designed and executed so that there is no risk of falling.
- (3) If there is a risk of slipping on a walking surface, the railing or other barrier must be fitted with a railing stop at the floor.
- (4) Railings or other barriers in parts of the building accessible to persons with reduced mobility or orientation or in a public area must be designed and executed to meet accessibility requirements.
- (5) A window sill below which the open space from the level of the walking surface to the level of the landscaped terrain is deeper than 0.5 m to 12 m inclusive must be at least 0.85 m high and at least 0.2 m wide at the level of the upper edge of the sill. A window sill below which the open space from the level of the walking surface to the level of the landscaped terrain is deeper than 12 m must be at least 0.9 m high and at least 0.2 m wide at the level of the upper edge of the sill. A window sill that by its height and properties corresponds to the required height of a guardrail does not need to meet the requirement for minimum width. If it is not possible to meet these dimensional requirements for the sill, a guardrail must be

installed. The height of the sill is measured from the level of the walking surface to the upper edge of the sill.

§ 35

Anti-slip

- (1) Anti-slip surface treatment must be ensured on floors and walkways and must comply with the requirements set out in Annex 5 to this Decree.
- (2) Anti-slip surface treatment on floors and walking surfaces used by persons with reduced mobility orientation capability must be designed and executed to meet accessibility requirements.
- (3) Anti-slip treatment must be designed and executed to ensure its durability or the possibility of regular renewal.
- (4) Anti-slip treatment of outdoor walking surfaces, staircases and ramps must be designed and executed to prevent water from pooling on the surface, to enable their year-round operation and to facilitate their maintenance.

§ 36

Safety during building maintenance

For safety during building maintenance, structural and technical measures must be designed and implemented to enable work at heights and to ensure safe work.

TITLE II

Requirements for indoor and outdoor areas

§ 37

Areas

- (1) The minimum area of a room for accommodation in a social services building must be
 - a) 8 m² for a single room;
 - b) 14 m² for a double room, and
 - c) for multi-bed rooms, the area shall be determined proportionately.
- (2) The minimum area of a common room in a social services building must be 18 m².
- (3) The minimum area of a room in an accommodation unit must meet the spatial requirements according to the type of accommodation.
- (4) Auditoriums and lecture halls that are part of a building must have at least the following number of wheelchair spaces out of the total number of seats:
 - a) 4 to 25 seats, 1 space;
 - b) 26 to 50 seats, 2 spaces;
 - c) 51 to 75 seats, 3 spaces;
 - d) 76 to 100 seats, 4 spaces;

- e) 101 to 200 seats, 5 spaces;
 - f) 201 to 300 seats, 6 spaces;
 - g) 301 to 500 seats, 7 spaces; and
 - h) 501 or more seats, 7 and 1 space for each additional 500 seats.
- (5) Wheelchair spaces must be designed and executed to meet accessibility requirements.

§ 38

Heights

- (1) The ceiling height of a residential or occupancy room in a residential building must be at least 2.5 m. The ceiling height may be reduced to 2.2 m, or not more than half the floor area of a residential room. In the attic, the ceiling height of a residential room must be at least 2.2 m. In a residential room with an inclined ceiling, the minimum ceiling height must be achieved above at least half the floor area of the space; in spaces with inclined ceilings, an area with a clearance of less than 1.2 m is not included in the area of the residential room.
- (2) The ceiling height of a nursery school room, with the exception of forest kindergarten support facilities and forest kindergarten meal service facilities, must be at least 2.5 m. The ceiling height may be reduced if it complies with the limits in the decree regulating hygiene requirements.
- (3) The clearance height in a garage must be at least 2.2 m. The clearance at the points of transition between ramps with different longitudinal inclination or above ramps with a longitudinal inclination of more than 8 % must be at least 2.3 m.

§ 39

Widths, other dimensions and internal building hallways

- (1) The main entrance doors to apartments and occupancy rooms and to the internal hallways of buildings must have a clearance width of at least 0.8 m.
- (2) The main internal hallways in buildings with residential or occupancy rooms must allow the transport of objects measuring $1.95 \times 0.75 \times 0.8$ m; for buildings in which health and social care is provided, they must enable transport of objects measuring $1.95 \times 0.9 \times 0.9$ m. This does not apply to family homes and buildings for family recreation.
- (3) Minimum clearance width
 - a) internal hallways providing access to premises used by persons with reduced mobility or orientation must be designed and executed to meet the accessibility requirements;
 - b) the main hallways in retail buildings must be 2 m in retail rooms, 2.5 m on the first floor, and where these hallways meet there must be signs indicating exits, escape routes and the main staircase;
 - c) guest corridors in an accommodation facility must be 1.5 m, staff corridors 1.2 m; staff hallways must not intersect with guest hallways;
 - d) the vestibules in guest rooms in an accommodation facility must be 0.9 m; and

- e) corridors in primary school, secondary school and conservatory buildings must meet accessibility requirements and the requirements of the decree governing the technical specifications of fire protection of buildings; the smallest clearance width of a hallway in a kindergarten with the exception of forest kindergarten support facilities and forest kindergarten meal service facilities, must be 1.2 m.
- (4) A ceiling access hatch must have no dimension less than 0.7 m and, in the case of an access hatch to a shaft or duct, not less than 0.6 m. These dimensions of the entrance hatches must not be narrowed by ladders or steps.
- (5) The clearance width must be observed throughout the entire plan area profile of the corridor or other similar space.
- (6) The clearance width of other spaces relating to the given type of building must be designed and executed to meet accessibility requirements.

TITLE III

Requirements for building equipment

§ 40

Water connection and internal plumbing

- (1) The water connection from a public water main and indoor plumbing must not be connected to any other source of water.
- (2) The water connection, or part of the internal plumbing, must be placed below the frost line or protected against freezing.
- (3) The water connection must be equipped with a device against possible backflow of polluted water from indoor plumbing.
- (4) The main closure of the internal plumbing shall be fitted behind the water meter, must be accessible and its location must be visibly and permanently marked.
- (5) The water meter shaft must be secured against ingress of dirt, groundwater and surface water and must be accessible.
- (6) The water connection or part of indoor plumbing must be designed and executed to meet requirements for protection against drinking water pollution.

§ 41

Sewage connection and indoor sewer systems

- (1) If a building is connected to a separate sewer system, the internal sewer system must also be separate.
- (2) The sewer connection pipes must be placed below the frost line or protected against freezing.
- (3) The cleaning fitting must not be installed in a room in which the leakage of waste water could jeopardise the requirements for safe use of the building.

- (4) The ventilation ducts of the indoor sewer system must not open into chimneys, ventilation vents, skylights, utility shafts, chutes and lift shafts and attic spaces and must be vented at least 0.5 m above roof level. Above the walking surfaces, the ventilation ducts of the internal sewer system must be positioned in such a way that there is no obnoxious effect and danger to the surroundings and the ventilation duct must be terminated 0.5 m above the roof. The minimum horizontal distance of the outlet of the ventilation duct from terraces, windows or other openings of residential or occupancy rooms must be 3 m or the ventilation duct outlet must be at least 1 m above the highest part of this opening.
- (5) Areas with wet floor cleaning, wet operation, technology and equipment using water, provided that they are not connected to sewerage, shall be equipped with a system for capturing and discharging water from the operation of the building and equipment, or an accumulation sump of sufficient capacity equipped with a device to drain the collected water.
- (6) The sewer connection or the internal sewer system must be designed and executed so that the technical parameters of these structures are met, taking into account the requirements for safe drainage of sewage and rainwater.

§ 42

Cesspools

- (1) Cesspools must be watertight, with no drainage and with ventilation.
- (2) Cesspools must be designed and built in a way that allows them to be connected to a sewage system leading to a sewage treatment plant.
- (3) Cesspools must be designed and built so that their volume corresponds to the design number of connected inhabitants, the average daily water consumption and the design cycle for emptying the cesspool.
- (4) The minimum distance of cesspools as sources of potential pollution from wells is set out in Part 10 of Annex 8 to this Decree.

§ 43

Power and electronic communications wiring

- (1) For building that has power wiring, a main protective busbar, usually grounded to a foundation grounding system, shall be installed.
- (2) Power and electronic communications wiring must meet requirements for the safety of persons, animals and property, for operational reliability in the given environment in the specified mode of operation and ambient influences.
- (3) If power and electronic communications wiring intersects or runs in parallel, it must be designed and executed to avoid mutual interaction.
- (4) Power wiring must
 - a) be protected against the effects of short-circuit currents and overloads and must be dimensioned in such a way that dangerous heating of the conductor cannot occur where electricity is conducted;

- b) meet the requirements for the supply of electricity for equipment that must remain operational in the event of fire; and
 - c) be designed and executed so that it can be switched off as necessary.
- (5) A residential building must have an electronic communications connection or must be connected via physical infrastructure linking the residential building to the street.
- (6) A residential and civic amenities building must be equipped with physical infrastructure inside the building⁸⁾ ready for deployment of a high-speed electronic communications network up to the network end-point in the end user's premises and must be equipped with a building access point^{9),10)}.
- (7) The requirement pursuant to paragraph (6) does not apply to structures that are¹⁰⁾
 - a) cultural monuments and buildings located in a conservation area, a conservation zone or in a protection zone of immovable cultural monuments, immovable national cultural monuments, heritage reserves or conservation zones where the interests of national conservation in their protection may be affected by the fulfilment of such a requirement;
 - b) for housing with less than 2 apartments; or
 - c) important for national defence or security.

§ 44

Back-up power supply

- (1) A back-up power source must have a sufficient source of supply.
- (2) In the premises intended for handling fuel for the backup power source, the floor and roof must be resistant to the effect of that fuel, and the floor or roof must be designed and executed with an incline toward a retention sump with permanently in-service equipment for the retention of hazardous substances with bottom drainage into the sewer system.

§ 45

Gas connection

- (1) The material used for gas connections and gas lines must correspond to the purpose of use, the type of medium distributed and the given operating pressure.
- (2) The gas connection and gas lines must be designed and executed to provide the necessary operating pressure for all gas appliances.

§ 46

HVAC equipment

- (1) HVAC equipment must allow for the required regular cleaning and maintenance, including all ducts.
- (2) The exhaust air outlet must be designed and executed so that it does not disturb and endanger its surroundings. Outlets must be designed and executed at least 10 m away from the intake vents and outside air openings.

- (3) Intake vents and openings must be designed and executed to minimise the intake of pollutants from external sources, must be located at least 10 m from roads with motor vehicle traffic and from areas where smoke is expected to occur.
- (4) Air ducts must be designed and executed as watertight, on a grade and fitted with drainage if they conduct air with a high water vapour content and must be designed and executed so that there is no condensation of water vapour on their inner and outer surfaces.
- (5) HVAC equipment in operations with an air exchange rate exceeding 1.0 h^{-1} must recover heat from exhaust air by means of a sufficiently efficient device and a system for regulating the amount of fresh air intake.

§ 47

Hot water connection and heat distribution

If heat is being supplied by an external source, a main shut-off valve for the heating medium must be fitted at the intake and outlet of the building's heating system.

§ 48

Flue gas path

- (1) A flue gas path must be designed and executed so that, under all operating conditions of the connected fuel appliances, flue gases are safely conducted away and dissipated into ambient air and that they do not accumulate inside buildings, do not exceed the permissible concentrations of pollutants in the flue gas in relation to the appliances in question and surrounding buildings, and that there is no risk to the life and health of persons and animals or property.
- (2) Flue gas from fuel appliances shall be conducted away by the flue gas path above the roof of the building. For gas appliances with a maximum rated output of 24 kW, the flue gas outlet can lead to the outside air through a perimeter wall, provided it ensures safe dispersion of flue gas and maintains the dimensions of the protective zone and a safe distance in relation to other buildings and building openings.
- (3) A flue gas path must be designed and executed using materials ensuring the protection of human and animal life and health, the protection of property and the protection of the environment.
- (4) A flue gas path must be designed and executed to ensure the supply of sufficient combustion air to appliances and rooms through which the flue gas path passes in which a vacuum regulator or negative pressure limiter is located.
- (5) The outlet of the flue gas path above the roof must be designed and executed taking into account the height of the outlet from the roofing and adjacent buildings in such a way as to ensure safe exhaust and dissipation of the flue gas into the open air and to rule out that surrounding structures could interfere with the function of the flue gas path. Above a roof that includes dormer windows or roof windows, the outlet of the flue gas path must be designed and executed so that the height of the flue gas path outlet above the highest point of the dormer or roof window ensures that the flue gas does not enter the interior of the building.

- (6) Inspection and cleaning openings for checking and cleaning must be designed and executed as part of the flue gas path to ensure its safe operation.
- (7) A flue gas route that is inspected and cleaned through its opening must have permanent access through the building, through a roof opening, a chimney footbridge or platform or via an external access route.

PART FIVE

SPECIAL REQUIREMENTS FOR SOME STRUCTURES

TITLE I

Residential buildings and apartments

§ 49

- (1) An apartment must be an enclosed structure.
- (2) Apartment buildings must have a room or space with a sink for cleaning the common areas of the building.
- (3) Special-purpose apartments are divided into apartments for people with severe
 - a) physical disability in a barrier-free standard, the layout and layout of which takes into account the needs of people in a wheelchair, where all rooms meet the barrier-free standard;
 - b) physical disability in a specific standard, the layout and arrangement of which takes into account the needs of persons on bed or wheelchair using a lifting device and all-day care by an assistant, where at least one living room and bathroom meet the specific standard; or
 - c) visual impairment, the layout and arrangement of which takes into account the needs of the blind.
- (4) If a building contains a special-purpose apartment, the common areas and house furnishings in relation to the type of special-purpose apartment must be designed and executed to meet accessibility requirements.
- (5) An apartment with a universal standard must have a handling area the size of a circle with a diameter of at least 1.2 m in all rooms.
- (6) An apartment for people with severe physical disability in a barrier-free standard must have a handling area the size of a circle with a diameter of at least 1.5 m in all rooms
- (7) An apartment for people with severe physical disability in a specific standard must have a handling area the size of a circle with a diameter of at least 1.8 m in all rooms
- (8) An apartment for people with severe visual impairment must have a right-angled layout.
- (9) If a residential building contains accommodation units for temporary accommodation, access to these accommodation units must comply with the accessibility requirements of § 32(3) and § 39(3)(a).

TITLE II

Accommodation facilities

§ 50

An accommodation facility building providing accommodation as a tourist service is categorised and classed by type¹¹).

TITLE III

Social services buildings

§ 51

- (1) An accommodation unit in a social services building and an apartment in a nursing home must meet the requirements for an apartment with a universal standard or the requirements for a special-purpose apartment pursuant to § 49.
- (2) A social services building must have a common room.

TITLE IV

School buildings and sports buildings

Part 1

School buildings

§ 52

- (1) School and university buildings must meet the accessibility requirements in parts intended for use by the public and in parts intended for use by children, pupils and students.
- (2) For kindergartens, primary schools, secondary schools and conservatories sufficient outdoor space must be designed to allow free movement of children and pupils. This outdoor space can be replaced by ensuring the use of a similar area.
- (3) A school building must be designed and built so that the surface temperature of the inner parts of the perimeter walls is the same throughout the year as the air temperature in the room.
- (4) In a school building the requirements pursuant to § 34(5) shall apply mutatis mutandis to the height of the window sill.
- (5) School education and accommodation facilities must have a study room, a storage room for laundry, a drying area for clothing, for storing and cleaning footwear, and a storage room for seasonal needs.
- (6) An occupancy room in a primary school, secondary school and conservatory must be designed and built so that it contains at least 5.3 m³ of air per person present. An occupancy room in a kindergarten with the exception of the forest kindergarten support facilities and forest kindergarten meal service facilities, pre-school childcare facilities, with the exception

of premises in which childcare service is provided in a children's group, must be designed and built so that it contains at least 12 m³ per person present.

- (7) For an occupancy room in which a child care service is provided in a children's group, unless provided in a residential building, the requirements pursuant to paragraphs (1) to (4) shall apply mutatis mutandis and it must be designed and built so that it contains at least 5.3 m³ per person present.

Part 2

Sports buildings

§ 53

- (1) Sports buildings must meet accessibility requirements in parts intended for use by the public. Locker rooms, sanitary facilities for athletes and access to sports grounds or race grounds, while respecting increased demands on handling areas for the use of wheelchairs must meet accessibility requirements.
- (2) In a sports building, an area is set up for charging batteries of power wheelchairs for sports.

§ 54

Covered buildings for winter sports

Structures, materials, products, equipment and technical facilities of covered buildings for winter sports must be designed and executed to withstand increased stress caused their environment and building operation, in particular high internal humidity parameters, low temperatures, aggressive substances, high risk of condensation on and inside structures, cooling of surfaces by radiating for design time, and to enable maintenance and repairs to be carried out according to maintenance and repair design cycles.

Part 3

Artificial swimming pools and saunas

§ 55

General requirements

- (1) Structures, materials, products, equipment and technical facilities of an artificial swimming pool must be designed and executed to withstand increased stress caused their environment and building operation, in particular high internal humidity parameters, aggressive substances, high risk of condensation on and inside structures, for their entire design life in the event of regular maintenance, and to enable maintenance and repairs to be carried out according to maintenance and repair design cycles.
- (2) The requirements for artificial swimming pools and saunas are laid down in Annex 6 to this Decree.
- (3) Access to artificial swimming pools and saunas intended for persons with reduced mobility or orientation capabilities must be designed and executed to meet accessibility requirements.

§ 56

Special requirements

- (1) Requirements for pools for infants and toddlers are set out in Part 2 of Annex 6 to this Decree.
- (2) Requirements for wading pools are set out in Part 3 of Annex 6 to this Decree.
- (3) Requirements for locker rooms of artificial swimming pools and saunas are set out in Part 4 of Annex 6 to this Decree.
- (4) Requirements for saunas, relaxation areas and cool-down areas are set out in Parts 5 and 6 of Annex 6 to this Decree.

TITLE V

Retail buildings

§ 57

Retail buildings with a sales area over 2 000 m² must have separate customer and service entrances.

TITLE VI

Motor vehicle garages, service and repair stations, petrol stations, alternative fuels infrastructure

§ 58

Garages

- (1) Individual, row-type and mass-parking garages must be designed and built to ensure the functionality of parking stalls, taking into account the space requirements for parking stalls, in particular the size of the parking stall, safety distances, clear heights, depending on the type of structure and the type of vehicles proposed.
- (2) Individual, row-type and mass-parking garages must be designed and built to ensure sufficient ventilation capacities and the necessary structural safety features. For a mass-parking garage intended for use by the public, the requirements for reserved parking pursuant to § 7(4) shall apply mutatis mutandis.

§ 59

Motor vehicle service and repair stations, petrol stations

- (1) The building of a motor vehicle service and repair station must be designed and built to ensure spatial parameters, safety distances, lighting of workstations and communication areas according to the type of vehicle that will be serviced in the motor vehicle service and repair station.
- (2) The outdoor area of a petrol station or motor vehicle service and repair station where petroleum products are stored and handled must be impermeable to petroleum products and

must be sloped towards a retention sump with permanently in-service equipment for the retention of hazardous substances with a bottom drain into the sewer system.

- (3) Petrol stations and motor vehicle service and repair stations must be designed and built to meet ventilation requirements for not exceeding air pollutant concentrations.

§ 60

Alternative fuels infrastructure

The requirements for a standard AC charging point, high-power AC charging point, high-power DC charging point, public AC charging point, electric bus charging point, shore-side electricity supply for inland waterway vessels, hydrogen refuelling station, vehicle connection, except motorcycle, hydrogen refuelling station and natural gas refuelling point are set out in Annex 7 to this Decree¹²).

§ 61

Equipping buildings with a recharging point

- (1) New buildings and changes to completed buildings with more than 10 parking spaces, excluding residential buildings and changes to completed residential buildings, must be equipped with at least one recharging point and cable conduits for later installation of a recharging point for an electric vehicle for every fifth parking space if the parking area¹³) of such buildings
 - a) is located inside the building and in the case of a change to a completed building, the change also applies to the parking area or electrical wiring of the building; or
 - b) is physically adjacent to the building and in the case of a change to a completed building, this change also applies to the parking area or electrical wiring of the parking area.
- (2) New buildings and changes to completed buildings with more than 10 parking spaces must be equipped with cable conduits for each parking space for later installation of a recharging point for an electric vehicle if the parking area¹⁴) of such buildings
 - a) is located inside the building and in the case of a change to a completed building, the change also applies to the parking area or electrical wiring of the building; or
 - b) the building is physically adjacent to the building and, in the case of a change in the completed construction, this change also applies to the parking lot or electrical wiring of the car park.
- (3) The requirements for buildings pursuant to paragraphs (1) and (2) shall not apply to changes to completed buildings where the cost of installing a recharging point and power wiring exceeds 7 % of the total cost of changes to the completed building¹⁵).

§ 62

Accessibility of petrol stations and public recharging points

- (1) Petrol stations must allow the refuelling by persons with reduced mobility and orientation capabilities.

- (2) A public recharging point pursuant to the Fuel Act must comply with accessibility requirements. In the case of a recharging area consisting of two or more recharging points this requirement shall be deemed to be met if at least 5 % of the recharging points meet accessibility requirements. The resulting number of recharging points is rounded up to a whole number.

TITLE VII

Waterworks

Part 1

Requirements for waterworks

§ 63

Basic requirements for waterworks

- (1) Waterworks must meet the requirements of protection against the effects of frost, ice and sediment and adequate resistance to misuse by violent activities.
- (2) The technical requirements for waterworks are determined by their purpose and by their connection to a watercourse, water reservoir, basin or other body of water. Waterworks must be designed and executed with regard to the location of technical infrastructure networks pursuant to § 12 and the ability to transfer water during construction of the waterworks.
- (3) Waterworks must be designed and built with regard to
 - a) stabilisation of the downstream section of the watercourse; and
 - b) morphological conditions of the territory.

§ 64

Technical requirements for waterworks

- (1) The requirements for the establishment of waterworks are laid down in Part 1 of Annex 8 to this Decree.
- (2) The requirements for the construction of waterworks are laid down in Part 2 of Annex 8 to this Decree.

§ 65

- (1) The technical specifications for a waste pond are determined by the type and category of waste deposited according to the Waste Act and, as applicable, other properties of the stored material.
- (2) A waste pond must not be designed and built on land situated in a protected area under other legislation or on which protection zones are demarcated, in the active zone of a floodplain and in areas where slope movements occur.
- (3) A waste pond for the disposal of hazardous waste under the Waste Act must not be designed and built on land that cannot be secured against breach due to excess load capacity or

excessive deformation of the subsoil against flooding and where tourism or recreation is an essential factor in the use of the territory.

§ 66

- (1) A structure used to observe the status of surface water is designed and carried out in such a place where the watercourse is not split into side branches and where the water level is not affected by a natural or artificial barrier in the watercourse. A structure pursuant to the first sentence must perform its function and must be accessible even during flooding, unless minimum residual water flow is being measured.
- (2) A protective embankment, wall and other flood protection measures along a watercourse must be designed and built to create a sufficient flow profile for the safe transfer of the design flow rate pursuant to § 73.
- (3) If technically feasible and the waterwork includes a pumping station, the floor of its engine room must be situated above the water level corresponding to at least the water flow that occurs during natural flooding with a repetition period of 20 years (Q20). Related electrical equipment and other equipment likely to be damaged by water must be placed above the water level corresponding to at least the water flow rate occurring in natural flooding with a repetition period of 100 years (Q100).

Part 2

Water supply

§ 67

- (1) Water supply pipes must not be connected to service and process water pipes, nor to water pipes from another water source that could jeopardise water quality and the operation of the water system.
- (2) Water pipes must be protected against freezing, damage by external influences, external and internal corrosion and the ingress of harmful micro-organisms, chemicals and other substances, taking into account the properties of the pipe material, the quality of the transported water and the environment in which the pipes will be situated.
- (3) A water pipe shaft must be designed and built so that the fittings located therein are sufficiently protected from frost.
- (4) Detailed requirements for the water supply network and parts thereof are set out in Part 3 of Annex 8 to this Decree.

Part 3

Sewage networks and sewage treatment plants

§ 68

- (1) Wastewater collection pursuant to the Water Act is designed and executed according to the design quantity of waste water, the calculation of the amount of rainwater collected and the combined or separate sewer system.
- (2) Sewer networks are designed and built so that their spatial, capacity and technical parameters correspond to its type and purpose classification. Detailed requirements for sewer networks are set out in Part 4 of Annex 8 to this Decree.
- (3) Sewer networks are designed and built with regard to the long-term service life of the sewer network, the difficulty of remediation work and the outlook status of the sewerage area.
- (4) Sewer networks are designed and built as gravity, pressure or vacuum types or a combination thereof.
- (5) Sewers and wastewater collection facilities and their joins are designed and executed as watertight structures. Watertightness is not required for rainwater drainage.
- (6) Detailed requirements for wastewater treatment plants are set out in Part 5 of Annex 8 to this Decree¹⁶⁾.

Part 4

Waterwork structures

§ 69

Dams and embankments

- (1) The determination of the height level of the embankment crown is based on the requirement for the safety of the structure against water overflow, considering the reliability of the determination of the maximum water level, the nature of the area at risk of special floods, the conditions for the formation of wind waves, the type of embankment structure, the modification of its crown and the operational needs of the embankment.
- (2) The side of an earthen embankment is fortified against the effect of waves, ice, weather and other influences in a way that ensures the stability of the embankment and its fortifications in all load cases, against slope slippage and in a way that prevents damage to the fortifications by the pressure of water flowing from the body of the embankment when the water level drops.
- (3) The requirements for dams and embankments are set out in Part 6 of Annex 8 to this Decree.

§ 70

Water reservoirs and basins

- (1) Water reservoir structures must be designed and built taking into account
 - a) the permeability of the bottom and slopes of the water reservoir and the expected loss of water through seepage;
 - b) the stability of shores against abrasion, their resistance to displacement and prognosis of their reshaping in new conditions;

- c) the expected change in hydrogeological conditions;
 - d) the possibility of leaching substances that may compromise the quality of water in the water reservoir and their possible aggressive effect on concrete structures;
 - e) the sedimentation regime for forecasting the silting of the water reservoir and, where appropriate, a proposal for the dredging and management of sediment, in particular for larger and gravel-bearing watercourses; and
 - f) establishment of other structures and the location of existing sewer or drainage outlets.
- (2) The influence of water reservoirs and basins on ice formation and movement, the possibility of creating ice phenomena when the water reservoir reaches its new water level and the influence of the temperature regime in the watercourse under the water reservoir must be evaluated using the forecast of ice phenomena.
 - (3) When establishing a water reservoir or basin, sources of possible contamination are removed from the area to be flooded.
 - (4) Woody plants are removed from the area to be flooded by a water reservoir up to the height level determined by the highest expected water effect at storage volume level and from a basin at the constant water level increase line.
 - (5) In the area to be flooded by water reservoir, buildings are removed, except for difficult to remove structures that do not affect water quality and do not restrict the operation and use of the water reservoir.

§ 71

Weirs

- (1) The structure of a weir must be designed and built taking into account the possible use of the potential energy of surface water. If utilisation of potential energy is proven to be appropriate, the design of the weir must take into account the current or future possibility of installing equipment for its use.
- (2) The requirements for weir structures are set out in Part 7 of Annex 8 to this Decree.

§ 72

Structures that establish, modify or change the beds of watercourses

- (1) The directional modification of a structure by which the watercourse is established, modified or modified shall be designed and executed according to the nature of the watercourse and local conditions and must not prevent maintenance in the related section of the watercourse. When designing the relocation of a watercourse route, the method of utilisation of the original watercourse bed is addressed at the same time.
- (2) The route of the watercourse through a closed profile shall be designed and executed only exceptionally in a built-up area or in connection with engineering objects, if this solution is necessary for spatial or operational reasons.

- (3) The requirements for the design flow rate and the parameters of the watercourse are set out in Part 8 of Annex 8 to this Decree.

§ 73

Flood protection structures

- (1) The structure of a protective embankment is designed and built so that it does not prevent the concentration of a design flood into the upper part of the watercourse. If the design flow is less than the specified design flow of water, a protective barrier shall be provided against breach during its overflow. Water drainage is provided from the area protected by the protective embankment. Instead of or as part of a protective embankment, a mobile barrier connected to the ground by a solid foundation can be designed and executed.
- (2) The value of the design flow rate for the construction of a protective embankment or mobile barrier referred to in paragraph 1 shall correspond to the method of use or, where applicable, the importance of protected land and buildings. When designing the parameters of the embankment or mobile barrier pursuant to paragraph 1, the impact on the flow ratios of the upper part of the watercourse shall be assessed.
- (3) The route of the protective embankment along an unstable watercourse bed must be designed and built at such a distance from the concave bank of the watercourse that, in the event of its erosion, the stability and safety of the protective embankment is not be compromised. Technical measures must be designed and implemented to ensure deformation and filtration stability with regard to the subsoil load capacity in case of the need to cross blind branches of the watercourse.
- (4) A dry reservoir also serves as a flood protection structure. A dry reservoir is designed and built so that it captures the flood wave or part of thereof and its flooding can otherwise be used in the usual way.
- (5) The height requirements and parameters of a protective embankment are set out in Part 9 of Annex 8 to this Decree.

§ 74

Structure for water management meliorations

- (1) A structure for drainage of land is usually designed and executed as surface drainage by drainage ditches and structures on them. In justified cases, underground drainage via collection and drainage drains shall be selected. Drainage of excess water is designed and executed preferably in a gravitational manner, pumping is designed and implemented only if required by the elevation of the land being drained.
- (2) Drainage pump stations are designed and built taking into account the variability of the pumped amount of water and the transport elevation over time, so that pumping is provided by a larger number of pumps of the same power and type.

§ 75

Structure established for navigational purposes in or on the banks of a watercourse

- (1) Locks must be designed and built taking into account the amount of water required during the locking process.
- (2) A canal or navigation channel, the level of which is permanently or temporarily above groundwater, needs to have its bottom and slopes sealed appropriately.

§ 76

Structures for utilising hydropower and potential energy

- (1) The lower edge of the inlet of a structure for hydropower and potential energy in the water reservoir is located higher than the lower edge of the lower outlet, above the expected silting level of the water reservoir. An inlet structure on the gravel-bearing bed of a watercourse or in the bed of a watercourse with a large amount of sediment is equipped with a settlement tank.
- (2) A building for the use of hydropower and energy potential shall include a surge chamber or other equipment, if necessary to attenuate the hydraulic shocks of water caused by sudden changes in water flow in the water supply or water outflow.

§ 77

Waste ponds

- (1) Waste ponds are designed and built to meet the requirements of the expected operating time of the installation producing the stored waste. Waste ponds and their structures are designed and executed for the highest possible use of the site. The design includes calculation of the expected amount of discharged waste water and its pollution and proof of the efficiency of the drainage system.
- (2) The stability of the embankment system is designed and executed to meet the requirements for the highest proposed height for all stages of construction and for the operation of the waste pond, taking into account the possibility of an accident occurring given the natural seismicity of an area with an intensity of 5 degrees Richter scale and higher, or at intensive technical seismicity. The elevation of the lowest point of the crown of the embankment above the maximum water level for the design flood wave shall be at least 0.6 m.

§ 78

Structures used to observe the status of surface water

- (1) A structure used to observe the status of surface water or groundwater is a hydrometric profile fitted with a water metering station or a specific overflow to monitor the quantity of surface water, equipment for monitoring surface water quality or a well or borehole for monitoring the water level and, where appropriate, the quality of springs and shallow aquifers or deep aquifers.
- (2) A water metering station must be equipped with instruments and devices and must allow water level measurements to be measured to within ± 10 mm.
- (3) A hydrometric profile as a fixed measuring profile must have a regular shape and even distribution of water velocities and must allow measurement throughout the entire flow range for which it is intended.

- (4) The cable of a cableway for measuring water flow must not be less than 0.5 m above the water level at the point of maximum deflection at the design flow rate that corresponds to design values and occurs with a flood repetition time of 100 years (Q100).

§ 79

Wells

- (1) Wells must be designed and built in an environment that is not a source of possible contamination or a threat to water quality in the well and in such a position that the yield of adjacent wells is not affected.
- (2) The minimum distance of a well from sources of potential pollution is set out in Part 10 of Annex 8 to this Decree.
- (3) Wells must be designed and built from building materials and products ensuring compliance with all technical requirements for the well. A well used for abstracting groundwater for drinking water supply shall be built with materials pursuant to requirements of other legislation.
- (4) Wells are designed and built to prevent rainwater and pollutants from entering the well.

§ 80

Other structures requiring a permit for water management

- (1) Other structures requiring a permit to manage surface or groundwater are fish crossings, canals, millraces, sewage canals or tunnels.
- (2) Fish crossings must be designed and built to protect them from unwanted manipulation and unauthorised fishing. The design for a fish crossing must take into account
 - a) ichthyological assessment and data on fish species, sizes, characteristics and migration capacities of each species, taking into account seasons and lighting;
 - b) the hydrological regime of the watercourse, including flooding and sedimentation;
 - c) the ability to control water flow rates; and
 - d) the expected reliability of its operation and the complexity of its maintenance.
- (3) A canal and millrace, on the part of the route with the water level above the level of the surrounding terrain, must have a sealed bottom and slopes. Relief overflows must be established at appropriate locations, e.g. when crossing with a watercourse bed, to carry water in excess of the capacity of the canal or millrace.
- (4) A waste canal is designed and executed in a similar way to an artificial riverbed, taking into account the specific conditions of its operation.
- (5) A tunnel is designed and built if the surrounding terrain does not allow an open channel.

TITLE VIII

Structures for forestry purposes

§ 81

The requirements under this Decree apply regardless of whether a structure for forestry purposes is located in a forest.

§ 82

Requirements for forest roads and structures on other forest transport routes

- (1) A forest road is designed to
 - a) make the largest possible area of the forest available to transport;
 - b) effectively provide access to nearby water sources for fire-fighting and staging areas for fire-fighting equipment;
 - c) comply with the requirements of proper forest management and forest protection;
 - d) disturb the spatial layout and stability of forest stands as little as possible; and
 - e) through mutual balance of directional and height parameters ensures uniform, smooth and safe driving at the given design speed.
- (2) The requirements for forest roads and structures on other forest transport routes are set out in Part 1 of Annex 9 to this Decree.

§ 83

Structures for forest land water management

- (1) Structures for forest land water management are designed and built taking into account
 - a) local terrain, in particular its slope characteristics;
 - b) the pedological character of forest soil;
 - c) the causes of unfavourable water conditions in forest soil;
 - d) the state forest functions, in particular damage to forest stands;
 - e) impacts on fire-fighting water sources; and
 - f) the extent to which forest management is restricted, in particular the restoration, protection and growth of forest stands.
- (2) The routes of drainage and irrigation ditches shall be designed and implemented according to the local terrain, in particular its slope characteristics and with regard to the distribution of forest stands, in particular their stability vis-à-vis damaging winds.
- (3) Requirements for forest land water management are set out in Part 2 of Annex 9 to this Decree.

§ 84

Stream and ravine dams

- (1) The basic elements of the original route of streams and ravines are preserved as far as possible. The dam must not prevent the use of adjacent land and must allow for maintenance work on the dammed sections, as well as the care of undammed sections.

- (2) If water significantly or permanently undermines or deepens the beds of streams or ravines, their reinforcement is designed and executed
 - a) by reducing the longitudinal slope of the bottom and its stabilisation by means of transverse structures, in particular strips, thresholds, steps, slides or baffles;
 - b) by reinforcements, in particular of the bed or foots of slopes; or
 - c) by adjusting the dimensions of the stream or ravine bed, reducing the forces to which it is subjected.
- (3) The design flow rate must correspond to the design level of protection and must always be evaluated as to where historically the highest documented flood level has reached.
- (4) A closed flow profile shall be designed and implemented only in justified cases. Pressurised flow through a closed flow profile is inadmissible; above the water level at the design flow rate, which corresponds to the design values and occurs at flood repetition time of 100 years (Q100), free space at least 0.5 m high is required. The inlet into a closed flow profile is designed and executed with suitable protective measures against the silting of the closed flow profile by sediment and material. A closed flow profile is designed and implemented in such a way that it can be cleaned.

TITLE IX

Warehouses for pyrotechnic products

§ 85

Structural and technical requirements for warehouses

Warehouses for pyrotechnic articles shall be designed and built in such a way that

- a) the materials used for the construction of the warehouse protect the pyrotechnic articles in storage from hazardous reactions to shocks due to contact or friction with floors, walls, ceilings or structures in these facilities;
- b) materials susceptible to breakage by internal or external pressure forming the roof structure, walls, partitions and window and door infill elements do not produce sharp shards when broken;
- c) the entrance doors to the warehouse open outwards and can be opened by simply pushing on them from the inside and simple manipulation from the outside;
- d) the floors have a solid, integral and flat surface;
- e) the glazing of openings exposed to sunlight does not exhibit any defect or surface unevenness that would cause the sun's rays to converge and are glazed with matte glass or clear glass with anti-sun foil; and
- f) the edges of structures demarcating areas with a risk of dust explosion are smooth and easy to clean.

§ 86

Safety distance and protection against external influences

- (1) The location of a warehouse with pyrotechnic articles classified in subclass 1.1 of the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)¹⁷) must be consistent with safety distances. The method for calculating the safety distance is set out in Annex 10 to this Decree.
- (2) The method of calculation referred to in Annex 10 to this Decree shall not apply where no more than 100 kg net weight of explosive substances contained in pyrotechnic articles classified in subclass 1.1 of the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)¹⁷) is stored in the warehouse.
- (3) Safety distances shall not apply to access roads and facilities and structures used for operation of the warehouse.
- (4) Warehouses for pyrotechnic articles must be designed and constructed in such a way as to avoid theft or damage of pyrotechnic articles.

TITLE X

Storage spaces for weapons and ammunition and munitions depots

§ 87

- (1) The requirements for the storage of weapons and ammunition covered by the Arms Act are set out in Part 1 of Annex 11 to this Decree.
- (2) Requirements for munitions depots intended for munitions covered by the Arms Act are set out in Part 2 of Annex 11 to this Decree.
- (3) By way of derogation from the requirements of this chapter, the technical requirements for munitions depots may also be met in a manner consistent with the international munitions storage standard or similar standard used by the armed forces of the Czech Republic based on such international standards (hereinafter the 'international standard'). If the international standard stipulates specific measures for the storage of munitions from a certain quantity of loaded explosives, such measures shall also be used for munitions loaded with any smaller quantity of explosives.

§ 88

Protective embankments and protective walls

The requirements for protective embankments and protective walls of a munitions depot are set out in Part 3 of Annex 11 to this Decree.

§ 89

Structures for handling explosives

The requirements for structures for the handling of explosives are set out in Annex 12 to this Decree.

TITLE XI

Agricultural buildings

§ 90

Agricultural buildings are designed and built to meet the requirements laid down for

- a) buildings for livestock in Part 1 of Annex 13 to this Decree;
- b) auxiliary buildings for livestock in Part 2 of Annex 13 to this Decree;
- c) buildings for post-harvest treatment and storage of crops in Part 3 of Annex 13 to this Decree;
- d) buildings for the storage of mineral fertilisers in Part 4 of Annex 13 to this Decree;
- e) buildings for the storage of plant protection products and auxiliary products in Part 5 of Annex 13 to this Decree¹⁸).

PART SIX LARGE CITIES

§ 91

Requirements for buildings in large cities

- (1) A large city means the Capital city of Prague and regional capitals pursuant to the Constitutional Act on the creation of higher territorial self-governing units.
- (2) Within the built-up area, the requirements of Parts Two and Three of this Decree shall not apply to buildings in large cities in vacant lots in the case of a building with parameters that correspond to a complete contiguous line of buildings of the same height level and the same floor area, taking into account the building line; if at the same time there is no threat to the safety, protection of life and health of persons or animals and to the environment, and in accordance with the conditions of zoning documentation.

PART SEVEN COMMON AND FINAL PROVISIONS

§ 92

This Decree was notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

§ 93

Derogation and other technical solutions

The derogation of geometric parameters from the requirements set out in this Decree shall be determined in accordance with the standard.

§ 94

The requirements set out in § 9(4), § 12(4), § 19(1) and (2), § 20(1) to (6), § 21(2) and (3), § 22(1) and (2), § 24, § 26(3) and (4), § 31(1) and (5), § 32(1) and (5), § 34(1), (2) and (5), § 37(3), § 40(3) and (6), § 41(6), § 42(3), § 43(1) to (3) and (4)(a) and (b), § 45(1) and (2), § 46(2), § 48(2) to (7), § 58(1) and (2), § 59(1) and (3), § 66(3), § 68(2), (3) and (5), § 73(1), (3) and (4), § 78(4), § 79(1) and (3), § 82(1)(e), § 84(2) and (3), Annex 3, Annex 4, Annex 7, Annex 8, Annex 9, Annex 11 and Annex 13 shall be deemed to be fulfilled if the requirements of a standard or a part thereof specified in the Bulletin of the Office for Standards, Metrology and Testing are fulfilled. These requirements can also be met by another technical solution if it is proven that the proposed solution guarantees at least the basic requirements for construction according to the Building Act.

§ 95

Exemptions

- (1) Under the conditions laid down in § 138(1) of the Building Act, an exception may be granted from § 7(1), (2) and (5), § 9(1) and (3), § 11(2) and (4), § 12(1) and (6), § 20(1) and (4), § 38(3), § 53(1), § 79(2), Annex 8, Part 10, Annex 9, Part 1, points 1.3. and 1.10. and Annex 9, Part 2, point 2.4.
- (2) In large cities referred to in § 91(1), under the conditions laid down in § 138(1) of the Building Act, an exception may also be granted from § 7(3), § 11(1) and (5), and § 15.
- (3) Under the conditions laid down in § 138(2) of the Building Act, the requirements specified in Parts Two and Three of this Decree may be stipulated differently in the regulatory plan or a zoning plan that contains elements of a regulatory plan.

PART EIGHT

EFFECTIVE DATE

§ 96

This Decree shall take effect on 1 July 2024.

Minister of Regional Development:
PhDr. Bartoš, Ph.D., m.p.

Annex 1

PARKING AND RESERVED PARKING SPACES

PART 1

Parking spaces

- 1.1. The total number of parking spaces is based on the basic number of parking spaces after percentage correction. The percentage correction provided for in the zoning plan, in the zoning plan with elements of a regulatory plan or in the regulatory plan may define the minimum required and maximum number of parking spaces for individual purposes of buildings. In the absence of a percentage correction, the total number of spaces shall be equal to the basic number of spaces.
- 1.2. The basic number of spaces is the sum of the number of spaces corresponding to the individual purposes of the building or set of buildings. The total number of basic spaces for special-purpose units of a building shall be determined by the product of their number and number of spaces for each special-purpose unit according to their type according to Table 1. The number of spaces for types of buildings not listed in Table 1 shall be determined using indicators for buildings with similar functional uses.
- 1.3. The resulting total number of spaces for the whole building shall be rounded to whole spaces by rounding up a number of spaces equal to or greater than 0.5 to a whole number of spaces and rounding a number of spaces less than 0.5 down to a whole number of spaces. Rounding is done only at the end of the calculation.
- 1.4. Two types of spaces are considered for the needs of the space design
 - a) short-term parking spaces – used to park vehicles belonging to visitors, especially while shopping, visiting, loading or unloading cargo;
 - b) long-term parking spaces – used for parking cars belonging to employees or residents.

Table 1 – Indicators for calculating the basic number of parking spaces

group	code	building purpose	special-purpose unit	number of special-purpose units per space	of the number of spaces	
					short-term	long-term
					(%)	(%)
residential	1	residential	floor area ^{a)} m ²	120	10	90
accommodation	2a	accommodation – social services	bed	5	20	80
	2b	temporary accommodation (hotel, hostel etc.)	bed	3	10	90
retail and services	3a	small establishments and services, large shops and services (supermarkets, department stores, shopping centres, hypermarkets)	sales area or area for service ^{b)} m ²	50	90	10
	3b	auto repair	working space	0.25	50	50
	3c	petrol station	fuel dispenser	4	90	10
	3d	car wash	washing equipment	0.3	90	10
	3e	restaurant	guest area ^{c)} m ²	9	70	30
administration	5a	administration with many visitors, public institutions, offices, banks	office space ^{d)} m ²	30	80	20

	5b	administration with few visitors, company headquarters	office space ^{d)} m ²	40	20	80
education	6a	kindergarten with the exception of forest kindergarten support facilities and forest kindergarten meal service facilities	child	20	20	80
	6b	elementary, secondary, post-secondary school	pupil and student	30	20	80
	6c	other educational establishments (art schools, etc.)	attendee	10	20	80
premises with assembly areas	7a	theatre, concert hall, cinema, ceremonial hall, crematorium, church	seats	5	90	10
	7b	gallery, museum	public area m ²	50	50	50
	7c	dance hall	area of the hall m ²	8	50	50
	7d	cemetery	area m ²	1 000	90	10
	7e	exhibition grounds	exhibition area m ²	100	90	10
healthcare	8a	hospital	employees	3	-	100

			beds	3	100	-
	8b	clinic, doctor's office	employees	3	-	100
			medical practice	0.5	100	-
sport and recreation	9	hall, gym, outdoor sports field, stadium	places for spectators	15	100	-
			visitors	4	-	100
production and warehouses	10	production plant and warehouse	employee	4	-	100

a) Floor area pursuant to § 13(n) Of Act No 283/2021, the Building Act.

b) The sales area does not include passages, hallways, corridors, warehouses, staircases, escalators, moving sidewalks, sanitary facilities and the like.

c) Only dining rooms and halls are included in the guest area and do not include vestibules, dressing rooms, corridors, toilets and the like.

d) Office space does not include corridors, archives, kitchenettes, sanitary facilities, photocopy rooms and the like. Meeting rooms are counted as ½ their area.

PART 2

Reserved parking

- 2.1. Minimum number of reserved parking spaces for vehicles marked with a parking card identifying a vehicle carrying a severely disabled person:

Number of spaces in the individual area:	Number of reserved spaces:
2 to 20 spaces	1 reserved space
21 to 40 spaces	2 reserved spaces
41 to 60 spaces	3 reserved spaces
61 to 80 spaces	4 reserved spaces
81 to 100 spaces	5 reserved spaces
101 to 150 spaces	6 reserved spaces
151 to 200 spaces	7 reserved spaces
201 to 300 spaces	8 reserved spaces
301 to 400 spaces	9 reserved spaces
401 to 500 spaces	10 reserved spaces
501 or more spaces	2 % of the number of spaces in the individual area

The resulting total number of reserved spaces shall be rounded to whole spaces by rounding up a number of spaces equal to or greater than 0.5 to a whole number of spaces and rounding a number of spaces less than 0.5 down to a whole number of spaces.

- 2.2. For a retail building with a sales area greater than 5 000 m² and a hospital building in addition to the number of reserved parking spaces mentioned above in point 2.1, dedicated parking spaces shall be set up for the vehicles of persons accompanying a child in a pram with a minimum of 1 % of the total number of spaces. The resulting total number of reserved spaces shall be rounded to whole spaces by rounding up a number of spaces equal to or greater than 0.5 to a whole number of spaces and rounding a number of spaces less than 0.5 down to a whole number of spaces.

Annex 2

VENTILATION

1. The interior of buildings must be capable of at least 0.5 times the intensity of air exchange by installed air handling equipment, by natural ventilation or by a combination thereof. The exchange of air by means of the installed air handling equipment in the given premises does not need to be permanent, then the ventilation equipment must be controlled on the basis of selected physical quantities, chemicals or time programs.
2. The air exchange by natural ventilation shall be verified on the basis of the window's flow-through section, without the influence of the wind, for outdoor temperatures of 0 °C and 13 °C with the supply element opened automatically according to a time schedule or by a window opened in a period of 15 minutes every hour.
3. The amount of outdoor air supplied in an occupancy room shall be determined taking into account the number of persons and the activity carried out and shall be designed and designed by calculation in such a way that a concentration of carbon dioxide in the indoor environment of 1 200 ppm is not exceeded during the presence of persons.
4. Infiltration via window joints, including microventilation, cannot be considered part of the ventilation concept for buildings with tight windows preventing ventilation.
5. When designing vacuum ventilation, it is necessary to demonstrate in the design sufficient capacity of elements directly intended for the supply of air to the indoor environment. The elements for the supply of outdoor air must at the same time comply with the requirements of technical thermal and acoustic properties and take into account airflow where persons are present.
6. Residential and occupancy rooms must be designed and built to ensure a minimum amount of 25 m³.h⁻¹ per person outside air supply during the presence of persons, unless otherwise specified in Table 1 or there is no creation of heat and pollutants in the workplace according to the limit values laid down by other legislation.

Table 1 – Proposed need for fresh air supply according to the type of building and its purpose

purpose of the occupancy area	corresponds to the activities of persons with physical activity	minimum proposed need for fresh air supply ²⁾
assembly rooms, teaching rooms, spaces without sources of pollutants, excessive heat and odours (administration)	up to 1.2 Met (120 W/person)	25 m ³ .h ⁻¹ per person
retail and services, canteens ¹⁾	up to 1.8 Met (up to 180 W/person)	30 m ³ .h ⁻¹ per person
indoor sports facilities, gyms	up to 6 Met (up to 600 W/person)	36 m ³ .h ⁻¹ per person

- 1) Premises with increased formation of odours.
- 2) Government Regulation No 361/2007 laying down the requirements for the protection of health at work.

**Table 2 – Minimum air extraction from areas with
sanitary facilities and kitchens of residential units intended
for family housing and commercial accommodation units
(e.g. hotels)**

purpose of the premises	minimum air exhaust (occasional ventilation)
toilet	25 m ³ .h ⁻¹ per urinal 50 m ³ .h ⁻¹ per bowl
washroom	50 m ³ .h ⁻¹
separate shower	100 m ³ .h ⁻¹
kitchen	100 m ³ .h ⁻¹

In the event that these fittings or only some of the fittings are located in the same space, it is possible to reduce the amount of exhaust air by $10 \text{ m}^3.\text{h}^{-1}$.

**Table 3 – Requirements for minimum air exchange
intensity for artificial swimming pools and saunas**

purpose of the premises	minimum air exchange rate
pools	
indoor pool area	2x per hour
changing rooms for indoor pool users and showers	8x per hour
other spaces adjacent to the indoor swimming pool area	5x per hour
indoor swimming pool entrance area	1x per hour
sauna	
corridor	2x per hour
changing rooms	2x per hour
indoor cool-down area	2x per hour
relaxation area	2x per hour
toilet	50 m ³ .h ⁻¹ per toilet bowl

For the exchange of air in other areas of artificial swimming pools, the minimum requirements for the indoor swimming pool area shall apply *mutatis mutandis*, while respecting the requirement for the maximum permissible relative humidity of the environment under other legislation.

Annex 3

SANITARY FACILITIES AND CHANGING ROOMS

1. Residential buildings

Apartments must be equipped with at least 1 toilet bowl and 1 bathroom.

2. Buildings for cultural, sporting or similar purposes, in which there are premises for use by the public

2.1. Buildings for cultural, sporting or similar purposes in which there are spaces for use by the public must be equipped with a separate room with a toilet bowl with an entrance hall and a washbasin, for every 50 women or 100 men, and for 50 men each with one urinal space or shell, separately for men and women. In the case of a building intended for use by a maximum of 6 visitors, a common sanitary facility may be provided.

2.2. Sanitary facilities for employees are usually established as separate from those for the public.

3. Accommodation facilities

3.1. Accommodation units are usually equipped with sanitary facilities. If an accommodation unit has no sanitary facility, there must be at least a washbasin with running water in the room. In these cases, it is necessary to place a bathroom with bath or shower and washbasin on each floor, but at least for every 10 rooms, and a toilet with an foyer and a washbasin arranged separately for men and women.

3.2. In the part of the accommodation facility where food services are provided and where social or cultural activities are carried out, there must be a separate room with a toilet bowl for the public, separate for men and for women, both with a foyer and a washbasin. The following are required:

- a) for women 1 toilet bowl per 10 women, for every additional 20 women 1 additional toilet bowl;
- b) for men 1 toilet bowl and 1 urinal space or shell for 10 men, for every additional 40 men 1 additional toilet bowl and 1 urinal space or shell.

The same applies to separate food service establishments.

4. School buildings

4.1. A kindergarten with the exception of forest kindergarten support facilities and forest kindergarten food service facilities, pre-school childcare facilities, with the exception of an area where childcare services are provided in a children's group, toilets and washrooms for children must have an entrance from the children's dressing room and dayroom and shall not be segregated by gender. This does not

apply if the dressing room and the dayroom are equipped with separate sanitary facilities. One toilet must have free manipulation space corresponding to a circle at least 1.2 m in diameter. The sanitary facility must also contain showers, depending on the purpose of use.

4.2. In a school building, with the exception of kindergartens and preschool childcare facilities, separate lockable toilet booths with toilet and washbasin must be designed and built. This does not apply if toilets and washrooms are installed separately for women and men. Furthermore, depending on the purpose of use, the sanitary facility must contain showers and a hygiene booth for female pupils over 12 years of age.

4.3. In the interior premises of elementary schools, elementary art and language schools with the right of state language examination, secondary schools, conservatories, higher vocational schools intended for pupils, there must be washbasins with running water.

5. Artificial swimming pools and saunas

5.1. For covered artificial pools, a minimum of 1 shower must be provided for 15 visitors, for outdoor artificial pools at least 1 shower for 100 visitors and in the warming room at least 1 shower for 4 places in the warming room. In artificial pools, showers for men and women must be separate. In the case of a building intended for use by a maximum of 6 visitors, it is possible to have shared showers.

5.2. The walls of the shower compartment must be fitted with an easily washable surface up to a height of at least 2 m. The ceilings and shower walls must be plastered above the washable part with anti-fungal plaster.

5.3. Toilets are placed in such a way that the visitor walks through the shower area when returning to the pool area. If the toilets are also located right next to the pool, they must be equipped with a shower. Their number is determined in the same way as for buildings referred to in point 2 of this Annex. In the case of a building intended for use by a maximum of 6 visitors, it is possible to have shared toilets.

5.4. The floors of the shower and toilet compartments shall be of easily washable and easy to disinfect material with anti-slip treatment, and, in the case of shower areas, they must slope in the direction of the drainage system, the position of which must ensure good maintenance conditions. Outer and inner corners where walls and the floor meet must be rounded.

6. Retail buildings

Retail buildings with a sales area greater than 5 000 m² must be equipped with sanitary facilities for the public.

Annex 4

STAIRCASES AND RAMPS

1. The smallest underpass and passage height of a staircase must be designed and built in such a way as to ensure the safe movement of persons. The number of steps in a staircase must be designed and built according to its length.

2. The minimum width of the steps on main and emergency staircases must be 0.3 m. The width of the steps on the main staircase in family houses and family recreation buildings may be reduced to 0.275 m. The relationship between the height and width of the staircase must be designed and executed to ensure safe movement of persons.
3. The minimum width of step pursuant to point 2 in the case of a curved staircase with a width up to 1.1 m must be complied with at a distance of 0.4 m from the outer edge of the staircase. In the case of a curved staircase with a width greater than 1.1 m, at a distance of 0.3 m from the inner edge of the staircase, the minimum step width shall be 0.23 m in cases where the staircase is used for the evacuation of more than 10 persons, in other cases it may be reduced to 0.18 m.
4. The shape and finish of steps, treads and risers must be designed and built to ensure the safe movement of persons.
5. The slope of the staircase for each type of structure and the type of staircase must be designed and built in such a way as to ensure safe movement of persons.
6. The minimum permissible passage width of the staircase, the dimensions of landings and mezzanines, the location of the doors in the landing area and other safety requirements for each type of building must be designed and built to ensure the safe movement of persons.
7. A staircase must have a handrail
 - a) at least on one side for straight and curved flights with a passable width of up to and including 1.65 m;
 - b) on both sides, for straight and curved flights with a passable width greater than 1.65 m, in the case of spiral and mixed flights with a passable width greater than 1.1 m.
8. The requirements for the offset of the handrail from the fixed structure, the grip shape and the coefficient of thermal conductivity shall be designed and executed to ensure the safe movement of persons.

Annex 5

ANTI-SLIP

1. Flooring and walking surfaces not intended for use by the public must have an anti-slip surface complying with the following requirements:
 - a) a coefficient of friction of at least 0.3;
 - b) a pendulum swing value of at least 30; or
 - c) a slip angle of at least 6° (class R9).
2. An inclined floor, an inclined walking surface and a ramp with an incline higher than 3° (5 %) that are not intended for use by the public, must have an anti-slip surface that meets the following requirements:
 - a) a coefficient of friction of at least $0.3 + \tan \alpha$;

- b) a pendulum swing value of at least $30 \times (1 + \tan \alpha)$; or
 - c) a slip angle of at least $6^\circ \times (1 + \tan \alpha)$, where α is the angle of inclination in the direction of walking.
3. Staircases, including landings and connecting steps of buildings, must have an anti-slip surface that meets the following requirements:
- a) a coefficient of friction of at least 0.5;
 - b) a pendulum swing value of at least 50; or
 - c) a slip angle of at least 10° (class R10).
4. At the front edge of the staircase or connecting step and the landing up to a distance of 40 mm from the edge, there must be an anti-slip finish complying with the following requirements:
- a) a coefficient of friction of at least 0.6;
 - b) a pendulum swing value of at least 60; or
 - c) a slip angle of at least 12° (class R10).

The non-slip treatment of steps shall not be more than 3 mm above the surface of the step.

5. Flooring and walking surfaces in a building with a workplace must have an anti-slip surface complying with the following requirements:
- a) a slip angle 10 to 19° (class R10) in warehouses, small kitchens, sanitary facilities, coffee rooms and tearooms;
 - b) a slip angle from 19 to 27° (class R11) in production premises, kitchens up to 100 lunches per day, shops, airport halls and car repair shops;
 - c) a slip angle from 27 to 35° (class R12) in dairies, smokehouses, kitchens over 100 lunches per day, large kitchens, sewage treatment plants, vehicle lots, refrigeration plants and firehouses;
 - d) a slip angle from 35° (class R13) in refineries, slaughterhouses, processed meat plants and delicacy production facilities.
6. If the above surfaces are not protected from rain or where standing water may be present, the anti-slip requirements must also be met on wet surfaces.

Annex 6

ARTIFICIAL SWIMMING POOLS AND SAUNAS

PART 1

General requirements for buildings intended for use by the public

- 1.1. There must be an easy-to-clean deck around the pool with anti-slip treatment as provided for in Annex 5 to this Decree and with such a gradient that all water at the time of cleaning is drained into a drainage system that is operationally set up to drain all the water into the sewerage system. A gradient of 2 % is considered to be the minimum gradient. Similarly, drainage of all other walking areas that connect directly to this deck and all walking areas where the pool water is expected to be carried by users must be ensured. The edge of the pool must be designed and built so that, when cleaning the deck, the impurities are not flushed into the pool water or the recirculation system, where the pool's overflow gutter is also considered to be a recirculating system. The length of the overflow gutter, which must be at surface level, must be at least two-thirds of the wetted circumference of the pool. In the case of a pool deeper than 1.6 m, a safety step at least 0.1 m wide must be built for users at a depth of 1.2 m by the perimeter walls.
- 1.2. In the case of an uncovered pool or between the outdoor area and the enclosure of the indoor pool, users pass to the pool deck through foot baths. The foot bath must be at least 2 m long in the direction of passage, with reinforcement in front and behind the foot bath, with an initial water height of 0.1 m to 0.15 m and a constant flow intensity corresponding to change of water in the foot bath at least once per hour. Water for the foot bath can be taken from the recirculation system after the addition of disinfectant or the water draining from the pool by overflow may be used. The foot bath must have a shower into which recirculation water is carried after the addition of disinfectant, or tap water.
- 1.3. A pool building must have a ventilated cleaning room. The walls of the cleaning room must have an easily washable surface up to a minimum of 1.8 m from the floor.
- 1.4. The requirements for ventilation of indoor swimming pool are set out in Annex 2 to this Decree and the requirements for lighting an indoor swimming pool are set out in Table 1 of this Annex.
- 1.5. Sufficient artificial lighting must be provided for the organisation of swimming competitions or other organised pool events.
- 1.6. The rooms and premises of indoor and outdoor artificial swimming pool buildings must be ventilated; if the natural air exchange through the window is not sufficient, air exchange must be ensured by forced ventilation. Toilet ventilation must be vacuum type. Ventilation capacities are laid down in Annex 2 to this Decree.
- 1.7. Uncovered artificial swimming pools with year-round and seasonal operation and covered artificial swimming pools shall be equipped with a recirculation system which includes a recirculation water treatment plant or, in the case of an uncovered swimming pool, at least a system of continuous disinfection, while meeting the requirement of continuous water replacement proportionate to the current number of users. The method of inflow and outflow of each pool must ensure that in each pool there is a thorough mixing of water brought into the pool from the water treatment plant with the water in the pool. Compliance with this requirement is ensured by a sufficient number of inlet and drain elements corresponding to hydraulic parameters appropriately placed so that during water flow, short-circuit currents and places with slow water exchange are not generated in the pool, and that water exchange and mixing take place over a short distance, sufficiently intensively and throughout the entire pool. Pools must ensure drainage of water to the recirculating water treatment plant both from the surface and from the bottom.
- 1.8. A set of pools is configured so that water is not transferred directly from pool to pool. Water attractions where the water in the pool system falls from pool to pool and the system

of pools is connected to one treatment plant shall not be considered transfer if each pool has a separate supply of treated water. The water supply from the recirculating treatment plant must be separate for each pool.

- 1.9. Both the pool and the accumulation sump must be provided at the deepest point with a drainage device in order to discharge water from the pool (sump) into the sewer system, watercourse or the relevant drainage system according to their connection conditions.
- 1.10. Water from the pool at the exit from the recirculation and after disinfection pursuant to other legislation can be used for the showers.
- 1.11. For pools, the ventilation of the area above the surface is also provided, inter alia, also by a defined surface level, which shall not be less than 0.3 m below the level of the deck.
- 1.12. An artificial swimming pool that is used as a swimming stadium must have an area designated for viewers separate from the area reserved for users of the pool; access to this area must be ensured by a separate entrance and a separate corridor. According to the planned number of viewers, locker rooms and the necessary number of toilets with washbasins according to Annex 3 to this Decree must be available. The floor of the tribune for the spectators must be graded into the sewerage system.

Table 1 – Requirements for lighting of indoor pools and adjacent areas

purpose of the pool	pool area ¹⁾	adjacent areas for users (locker rooms, toilets, showers, corridors, etc.)	entrance hall
recreational	200 1x	200 1x	100 1x
for the organisation of swimming training	300 1x		
for the organisation of swimming competitions and organised events	500 1x		

¹⁾ The minimum required illumination level shall be met at 0.2 m above the still water level.

1.13. Water distribution must be provided on the grounds of the artificial swimming pool.

PART 2

General requirements for pools for infants and toddlers

- 2.1. Pools for infants and toddlers must have a related covered area, in particular for strollers, children's dressing room, a separate area for breastfeeding, resting and for the acclimatisation of children to the outdoor environment prior to departure, facilities for escorts (locker room, shower, toilet, etc.), dry room with ventilation (stockroom) for storing dried aids and materials.
- 2.2. Bathing areas for infants and toddlers must be structurally or operationally separated from the rest of the premises
- 2.3. The requirements for ventilation of the pool area and adjacent areas are laid down in Annex 2 to this Decree.
- 2.4. Unless otherwise specified, the requirements for a pool for infants and toddlers shall be governed by the general requirements set out in Part 1 of this Annex.

PART 3

Requirements for wading pools

- 3.1. When determining the capacity of a wading pool for children, an area of 1 m² per child is used. The requirements set out in Part 1, point 1.2 shall apply mutatis mutandis to wading pools.
- 3.2. The water in wading pools must not be deeper than 0.4 m.
- 3.3. Wading pools shall be with or without recirculation. The method of water supply and drainage must ensure intensive water mixing in the wading pool and the water from another pool into the wading pool.

PART 4

Artificial swimming pool and sauna changing rooms

- 4.1. Changing room capacity must correspond to the capacity of the artificial swimming pool. The capacity of a changing room for a sauna must correspond to twice the number of places in the sauna.
- 4.2. A changing cabin can be built instead of a changing room for an uncovered artificial swimming pool. The floor area of one changing cabin for both uncovered and covered swimming pools must be at least 1.5 m².
- 4.3. The changing room at a covered artificial swimming pool must be operationally separated from other users for users who are going to swim.

- 4.4. The number of showers depends on the expected capacity of the swimming pool. In the case of an indoor artificial swimming pool, the following order must be followed upon arrival: changing room, shower area, pool, and upon departure: shower area, drying room, changing room; these sections must be structurally separated.
- 4.5. The floor and walls of changing rooms must be of easy to clean material. Floors must have an anti-slip finish pursuant to Annex 5 to this Decree and must have a gradient of at least 2 % towards the drainage system. A partition that is not firmly connected to the floor along the entire length of the lower face of the partition must be terminated at least 0.15 m above the floor, and inner and outer corners of perimeter walls must be rounded.
- 4.6. Furniture and fixtures in changing rooms and changing booths must be easily washable.
- 4.7. The ventilation capacity of changing rooms is set out in Annex 2 to this Decree.

PART 5

Sauna

- 5.1. A sauna must have at least 2 m³ of space per person. All materials used in the sauna must be resistant to and harmless when exposed to design levels of heat and humidity.
- 5.2. The wall and ceiling of the sauna are covered with a material that insulates heat well and absorbs moisture well. The door must be of transparent material or with a glazed window, with a wooden handrail on both sides and must open outwards, without the use of a locking latch. The door must reliably allow the exit from the sauna.
- 5.3. The floor must be made of easily washable materials with an anti-slip finish in accordance with Annex 5 to this Decree and slope toward the floor drain. If a floor drain is installed in the sauna, its design must prevent odours from the sewer system entering the sauna.
- 5.4. In the case of solid fuel or gas heating apparatus, only the heat exchanger shall be placed in the sauna compartment, or the design of the heating apparatus may only allow operation from outside the sauna. The flue and associated equipment must be located outside the sauna.
- 5.5. The sauna must be sufficiently ventilated, with the possibility of regulation. It must be adequately illuminated and equipped with emergency lighting. The requirements for sauna lighting are set out in Table 2.
- 5.6. A sauna facility must have a ventilated cleaning room.
- 5.7. The requirements for sauna ventilation are laid down in Annex 2 to this Decree.

Table 2 –Sauna lighting

place	minimum illumination intensity (lx)	emergency lighting
corridor	100	yes
changing room	200	yes
sauna room	50	yes
indoor cool-down area	75	yes
outdoor cooling room	75	no
relaxation area	75	yes
toilet	100	no

PART 6

Sauna cool-down area and relaxation area

- 6.1. The pool and shower facilities must be located inside the building, close to the sauna. The wall and bottom of the pool must have an easily washable surface. The bottom surface must be non-slip in accordance with Annex 5 to this Decree. The pool must be equipped with an overflow gully at water level, with discharge into the pool water treatment plant or via a siphon trap if it leads to the sewerage system. There must be steps with handrails or a ladder with handrails for entering the pool. The floor around the pool must have an anti-slip finish pursuant to Annex 5 to this Decree, with a minimum 2 % grade to the floor drain.
- 6.2. If there is a pool in the outdoor cool-down area, the pool must comply with the requirements of this Decree.
- 6.3. The size of the sauna relaxation area must be at least 2 m² per place in the sauna. The relaxation area must have a washable and easy to clean surface. Ventilation requirements are laid down in Annex 2 to this Decree.

Annex 7

ALTERNATIVE FUELS INFRASTRUCTURE

1. The normal AC recharging point for electric vehicles must be equipped with at least a plug or a type 2 vehicle socket outlet.
2. A high-performance AC recharging point for electric vehicles must be equipped with at least a type 2 outlet.
3. A high-performance DC recharging point for electric vehicles must be equipped with at least a Combo 2 charging system socket.
4. A publicly accessible AC recharging point with an apparent power of not more than 3.7 kVA reserved for electric vehicles of category L must be equipped with at least
 - a) a socket or vehicle outlet of type 3A for charging mode 3; and
 - b) socket for charging mode 1 or 2.
5. A publicly accessible AC recharging point with an apparent power greater than 3.7 kVA reserved for electric vehicles of category L must be equipped with at least a type 2 socket or vehicle outlet.
6. The recharging point for an electric bus must be equipped with the following for interoperability purposes:
 - a) at a normal and high-performance AC charging point for an electric bus, at least a type 2 outlet;
 - b) at a normal and high-performance DC charging point for an electric bus, at least a Combo 2 charging system socket;

- c) an automated device with a contact interface for an electric bus with mode 4 conductive charging;
 - d) an automatic connection device (ACD) mounted on the infrastructure (reverse pantograph), mounted on the roof of the vehicle, mounted under the vehicle and mounted on the infrastructure and connecting to the side or roof of the vehicle, which must be fitted with mechanical and electrical interfaces.
- 7. Shore-side electricity supply must be ensured for inland waterway vessels.
 - 8. Outdoor hydrogen refuelling stations dispensing gaseous hydrogen used as fuel in motor vehicles must comply with the technical specifications for the supply of gaseous hydrogen as a fuel.
 - 9. Hydrogen refuelling stations dispensing gaseous hydrogen used as fuel in motor vehicles must use fuel filling algorithms and equipment that meet the relevant specifications for the supply of gaseous hydrogen as a fuel.
 - 10. Connections for motor vehicles, other than motorcycles, for the purpose of dispensing gaseous hydrogen must comply with the technical specifications for connectors for dispensing gaseous hydrogen to motor vehicles.
 - 11. Natural gas refuelling stations dispensing compressed natural gas (CNG) used as fuel in motor vehicles must comply with the relevant technical specifications set out for filling pressure.
 - 12. Natural gas refuelling stations dispensing liquefied natural gas (LNG) used as fuel in motor vehicles must comply with the relevant technical specifications set out for filling pressure.
 - 13. The profile of the connector for motor vehicles, other than motorcycles, for the purposes of dispensing liquefied natural gas must comply with technical specifications.
 - 14. Natural gas refuelling stations dispensing liquefied natural gas (LNG) used as fuel for inland waterway vessels must comply with the relevant technical specifications solely for interoperability purposes.

Annex 8

WATERWORKS

For the purpose of this Annex, the following definitions apply:

- a) intake structure – a waterwork or part thereof used for the abstraction of water from a watercourse or from a water reservoir;
- b) discharge structure – a waterwork or part thereof used for discharging water from a water reservoir;
- c) control flood wave – a flood wave defined by its peak discharge, selected exceedance probability, volume and time course;
- d) sag pipe – a waterwork or part thereof used to conduct water under an obstacle;
- e) inflatable weir – a weir with a plastic or rubber bag attached to a solid weir foundation and filled with water or air;

- f) safety overflow equipment – equipment serving to protect an embankment from overflow;
- g) water treatment structure – a set of structures and equipment with water treatment technology (water treatment plant); water intake structures, with any equipment for ensuring water sanitation without water treatment technology, are also considered water treatment structures.

PART 1

Waterwork foundations

- 1.1. The foundations of a waterwork located in the watercourse bed or in a site where the effects of water may affect it must meet stability and resistance requirements for extreme stress caused by water and the effects of possible random loads.
- 1.2. When establishing waterwork foundations, the possible change in flow rates, in particular the passage of floods and possible change in groundwater regime is also assessed.
- 1.3. The foundations of a dam, embankment or weir must meet requirements to ensure the drainage stability of the subsoil and to limit the seepage of water.
- 1.4. The foundation method for a dam or embankment or part thereof, for example a combined structure, an intake structure or discharge structure, must be based on the geotechnical conditions found at the foundation site. No part of the structure in the subsoil under the dam may be founded on piles, sills or seats.
- 1.5. Underground structures separating the inner areas of the waterwork from the surrounding rock environment are isolated from groundwater according to their nature and purpose and are further protected from its negative effects as needed.
- 1.6. A waterwork that is being designed and built in an area within reach of the effects of underground mining or within reach of seismic effects must also be designed and built with regard to the foreseeable deformation of the foundation ground caused by the mining or seismic activity.

PART 2

Technical structural requirements for waterworks

- 2.1. The design of structure or a structural element of a waterwork must meet the requirements specified for the purpose of the waterwork and the requirements for resistance to all foreseeable loads and other influences that may occur during the implementation and use of the waterwork (e.g. harmful environmental effects, floods, ice, mechanical action of floating objects, corrosion, tremors, temperature changes).
- 2.2. Foreseeable loads and harmful effects must not cause
 - a) the impermissible transformation of a building structure (e.g. deformation or cracking) that could impair the mechanical resistance, stability, safety and use of the waterwork or part thereof; and

- b) damage or threat to the operability of connected equipment due to structural deformation or changes in groundwater level adversely affecting the foundations of other structures around the waterwork.
- 2.3. Concrete designed and used for the construction of a waterwork and parts thereof that come into contact with water must meet the requirements for impermeable structural concrete for watertight structures in terms of resistance, frost resistance, impermeability, seepage, volume stability, strength and toughness.
 - 2.4. The design of a waterwork that allows the management of water requiring the measurement of its quantity and quality, or the measurement of the increase in water level or water accumulated by a waterwork pursuant to § 10 of the Water Act, must enable the installation of measuring equipment.
 - 2.5. A waterwork intended for raising water level must be equipped with a water depth stick installed at the top of the embankment or a limnigraph for measuring water levels.
 - 2.6. The safety of a dam or embankment during floods shall be assessed in a graduated manner according to its importance in terms of potential damage in the event of its breach. The significance of a dam or embankment in terms of potential damage is derived from the classification of the dam or embankment in a category under other legislation. The required level of safety is expressed by the probability of exceeding the peak flow rate of the control flood wave that needs to be safely transferred across the waterwork.

PART 3

Requirements for the water supply network

- 3.1. The water supply network and water mains are designed and implemented for the maximum hourly water demand. Pipes of other water supply lines are designed and executed for the maximum daily water requirement.
- 3.2. Water pipes are designed and made from building materials and products ensuring compliance with all technical requirements for water pipes.
- 3.3. The maximum pressure at the lowest points of the water supply network of each pressure zone must not exceed 0.6 MPa, or 0.7 MPa if necessary due to circumstances.
- 3.4. In the case of buildings with two above-ground floors, the hydrodynamic pressure in the supply network must be at least 0.15 MPa at the point of connection to the water main. In the case of three or more above-ground floors it must be at least 0.25 MPa.
- 3.5. Water pipes up to an internal diameter of 200 mm shall be designed and installed with a gradient of at least 3 ‰, from an inner diameter of 250 mm to an inner diameter of 500 mm with a gradient of at least 1 ‰ and for an internal diameter of 600 mm or more with a gradient of at least 0.5 ‰.
- 3.6. The watertightness of water supply pipes shall be demonstrated by a pressure test.
- 3.7. The watertightness of water supply tanks shall be demonstrated by a watertightness test.
- 3.8. The requirements for materials, chemicals used and products coming into direct contact with drinking water are laid down in the decree regulating the hygiene requirements for products that come into direct contact with water and for water treatment.

- 3.9. Water treatment structures are designed and built according to technical requirements based on raw water quality indicators and the compliance of their category with the type of water treatment pursuant to other legislation.
- 3.10. The connection of a new part of the water supply to an existing water supply must be designed and executed with a view to affecting the ability to supply drinking water to existing or new customers, in particular from the point of view of whether the supply of drinking water in the required quantity will not adversely affect drinking water supply, including pressure conditions for existing or new customers. The assessment shall be carried out by a competent person on the basis of a mandate from the owner or operator of the existing water supply at the expense of the investor. The assessment shall only be carried out if the owner or operator of the existing water supply reasonably assumes that, as a result of the connection of a new part of the water supply, the drinking water supply or pressure conditions of existing or new customers may be adversely affected.

PART 4

Sewer network

- 4.1. In the case of a combined sewer network, the relief chambers must reliably separate the design inflow of waste water in proportion to a hydrotechnical calculation and safely transfer the design flow to the sewage treatment plant.
- 4.2. For newly established relief chambers, design flow values shall be determined; a similar procedure is followed for the assessment of existing relief chambers.
- 4.3. For a pipe gradient of up to 10 ‰, the height deviation in sewer installation may be not more than ± 10 mm, for a gradient greater than 10 ‰, ± 30 mm in relation to the level of the bottom. Pipes must not have a positive or zero gradient.
- 4.4. Straight sections a sewer between two shafts may have a directional deviation from the straight direction for an inner diameter up to and including DN 500 of at most 50 mm, and in the case of larger diameters at most 80 mm.
- 4.5. The distance between inspection and entry shafts on a straight stretch of impassable sewers shall be no more than 50 m in built-up areas, in non-built areas due to the possibility of using high-pressure cleaning, this is a maximum of 80 m for an inner sewer diameter of less than DN 500, 60 m for an inner diameter of DN 500 to DN 600, and a distance of not more than 50 m for an inner diameter of DN 800 and greater, for passable sewers not more than 200 m. Inspection, entry and angle shafts and sinks may not be located outside the sewer route.
- 4.6. The connection of a new section of separate or combined sewerage to an existing combined sewer system must also be designed and implemented with a view to affecting the ability of the sewer to drain an increased amount of waste water, including an assessment of existing relief chambers that will be affected by the new sewerage construction. The assessment shall be carried out by a competent person on the basis of a mandate from the owner or operator of the existing sewerage system at the expense of the investor. If the assessment demonstrates that an increased amount of water cannot be drained by sewerage or shows a deterioration in dilution ratios beyond the applicable sewer system, the sewerage system in question shall not be connected to the existing sewerage system. Any design of new relief objects shall be carried out in accordance with point 4.1.

PART 5

Wastewater treatment plants

- 5.1. The amount of rain-free waste water entering a wastewater treatment plant shall be determined primarily on the basis of a direct measurement taking into account the future evolution of water consumption.
- 5.2. For a combined sewer system, the volume of diluted wastewater entering the wastewater treatment plant shall be used as the maximum inflow to the wastewater treatment plant after the relief after the last relief chamber in front of the wastewater treatment plant.
- 5.3. The inflow of wastewater channelled during rain to the biological part of the wastewater treatment plant is designed and executed so that it does not exceed $1.2 Q_h$ for treatment plants up to 5 000 population equivalent and $2 Q_d - Q_B$ for waste water treatment plants for more than 5 000 population equivalent, unless the biological part is designed differently, including the stocking tank. If the maximum inflow can cause overloading of mechanical cleaning structures (screen, sand trap, settlement tank), a buffer tank shall be designed and installed to capture the inflow wave during rain. If this buffer tank does not protect the biological part of the waste water treatment plant, it shall be designed and executed before the technological stage of biological treatment to relieve waste water so that the maximum inflow does not cause overloading of biological treatment facilities and thus does not reduce the efficiency of wastewater treatment.
- 5.4. The pollution of wastewater entering the wastewater treatment plant shall be determined on the basis of a survey with a well-defined sampling methodology, the results of chemical analyses of wastewater and other data, in particular the number of connected inhabitants, the nature and capacity of industrial production.
- 5.5. The average rainless daily inflow Q_{24} is the default value to determine the average values of pollution arriving in the wastewater, according to which technological structures of a waste water treatment plant are designed and built, in which design parameters contain data relating to a day, age of sludge, sludge production, sand production, biogas production and the like.
- 5.6. Daily inflow Q_v is the default value for the design of technological structures of a wastewater treatment plant for which the design parameters are hydraulic load, delay time, contact time, recirculation ratio, etc.
- 5.7. Technological structures of a wastewater treatment plant, according to their function, must be designed and executed in such a way as to withstand maximum hydraulic and substance loads.
- 5.8. The design and execution of the layout of a wastewater treatment plant must include a bypass of the entire wastewater treatment plant, and, if possible, a bypass and substitute interconnection also for individual technological structures of the wastewater treatment plant. Bypasses must be secured against abuse.
- 5.9. Wastewater treatment plants are designed and built with regard to gas management.
- 5.10. Drinking water must be available for the operation of sanitation facilities in a wastewater treatment plant.

PART 6

Dams and embankments

- 6.1. An earthen embankment is built such a way as to ensure compliance with design criteria for soil compaction.
- 6.2. The excavation pit for the embankment of a waterwork that is used to raise the level of water or accumulate it, shall preferably be designed and carried out in the flood zone of the future water reservoir. After the end of excavation, the stability of the slopes of the pit shall be assessed and their modification and recultivation shall be designed and executed.
- 6.3. The level of protection of the embankment construction site against flooding is designed taking into account the possible impacts of water overflow or a breach of the embankment under construction.
- 6.4. Protection of the building pit for the embankment foundations is designed and executed proportionately to the possible damage caused by the flooding of the pit.
- 6.5. The dam must have a minimum of two separately usable, functionally independent bottom outlets with three closures, other abstraction equipment can also be considered as one of the bottom outlets, for example water supply abstraction equipment, with a capacity satisfying the purpose of the waterwork. In the case of newly built dams, another abstraction facility, such as a water supply facility, cannot be considered as one of the lower outlets. A dam may be equipped with one lower discharge only in the exceptional case of a waterwork with a controllable volume of not more than 1 million m³ of water, depth of water at a maximum water level of not more than 9 m above the bottom of the inlet into the bottom discharge and the undammed overflow, or if only an overflow through closed gates was foreseen for the transfer of the design flood and there is no requirement to maintain a continuous flow of water in the watercourse bed.
- 6.6. The capacity of the lower discharges must enable the water level to be reduced to the required level at the required time and the prescribed procedure for the first filling of the water reservoir with adequate security, for all possible water levels in the water reservoir. It must be possible to release the required flow rates using only one bottom discharge.
- 6.7. A water reservoir dam or embankment must be equipped with a safety overflow device to safely transfer water during a flood. The design and capacity of the safety overflow equipment is determined by the level of safety corresponding to the category of waterwork in terms of technical security supervision under other legislation.
- 6.8. A pipe or corridor passing through the body of an earthen embankment is designed and executed with water flow at the surface to prevent water seepage. In the case of a design implementing pipes with pressure flow, the pipes are placed freely in the corridor.

PART 7

Weirs

- 7.1. For the beds of watercourses carrying sediments, the structural design of a weir includes the ability to transport sediment across the weir, including its dredging and haulage.
- 7.2. When designing an inflatable weir, the risk of damage to the weir by floating objects and shifted objects and the risk of intentional damage in the given area are assessed.

- 7.3. On a waterway of transport significance pursuant to the Inland Navigation Act, the design of the weir includes a layout design for locks or other structures for navigational purposes, corresponding to the classification of the waterway.
- 7.4. When designing the structure of a weir under which there is a river current in the riverbed, it is necessary to ensure that the energy of the overflowing water is dampened, as a rule, by a dissipation basin or by the effective roughness of the overflow surface and the surface under the weir. In the design of the dissipation basin, the influence of the watercourse bed condition on the water flow ratios under the object must be considered, the expected use of weir closures, manipulation during the movement of ice, manipulation during temporary closure of a weir section and manipulation during the construction of the weir.
- 7.5. The structure of a movable weir shall allow the barrier structure to be raised prior to the peaking of the design flood wave and to prevent a drop in the water level in the reservoir below the permanent water level.
- 7.6. The design of a weir shall involve assessment of the influence of the flow capacity of the existing watercourse, including the protective embankments above the weir, and, if necessary, measures are proposed to maintain this flow capacity.
- 7.7. The design of a weir shall involve assessment of the stability of the banks of the existing watercourse within the reach of the weir water level and its influence on the level of groundwater in the surroundings, or other negative impacts.
- 7.8. A weir must be designed and built to comply with the limits of noise and vibration resulting from water overflow laid down by the Public Health Protection Act.

PART 8

Structures that establish, modify or change the beds of watercourses

- 8.1. For the design of the modification of a watercourse, the value of the design flow is chosen considering the risks of potential loss of human life and possible damage caused by a flood.
- 8.2. The design of the gradient, width, depth and reinforcement of a watercourse bed must be designed in relation to sediment movement and must ensure the stability of the watercourse bed, which means a condition where deposits and eroded areas do not endanger the stability of its banks.
- 8.3. The design of the depth of the watercourse must take into account the operation of waterworks and installations in the watercourse bed, such as the location of discharges and abstractions for industry and energy, buildings for water management melioration of land or sewer openings. The design of the water level corresponding to the water flow that occurs with a repetition period of 210 days is chosen taking into account the level of groundwater in the adjacent area.
- 8.4. Closed profiles or sag pipes are designed and installed based on a design flow that occurs in a natural flood with a flood repetition time of 100 years (Q100); in the case of water flow in a closed profile with an open surface, a free space above the water level of at least 0.5 m is designed. When designing a closed profile or a sag pipe, the risk of clogging, silting, conditions of winter operation and the ability to carry out maintenance and repairs on the waterwork are taken into account.

- 8.5. Reinforcement of the watercourse bed, except in justified cases, must not make it impossible to connect groundwater with water in the watercourse. Outside of built-up areas, priority shall be given to reinforcement consisting of vegetation or, where appropriate, reinforcement combining vegetation and non-vegetation elements.
- 8.6. The design flow rate for a bridge when a watercourse crosses a railway or road must not be less than the design flow of the modified watercourse section above the bridge profile. The free space between the water level at the design flow rate and the upper edge of the flow opening may not be less than 0.5 m.
- 8.7. The crossing and confluence of a watercourse with a railway, road and line must be designed and implemented as safe and without mutual influence.
- 8.8. The modification and enclosure of a watercourse trough bed must be designed and executed with regard to the construction of a device that relieves a higher than the design flow rate in such a way that the safety of the protective embankment is not compromised. This device shall be provided with embankment sluices with a blocking device or reinforcement.

PART 9

Flood protection structures

- 9.1. The height of a protective embankment is designed and built taking into account the flow ratios of the watercourse and the amount of possible damage in the event of flooding. A flood protection structure is designed and executed taking into account the height above the design flow level.
- 9.2. The width of a protective embankment at its crown is based on the technical design, the height of the embankment and any other requirements for the use of the embankment crown. The slopes and crown of a protective embankment should be protected by suitable reinforcement, at least planted with grass. Reinforcement of protective embankments is designed and executed on the basis of a calculation of drag forces at the design flow rate.

PART 10

Wells

- 10.1. The minimum distance between a well and sources of potential pollution is determined according to the type of potential pollution source for low-permeable environments as follows:
 - a) a cesspool, wastewater treatment plant up to 50 PE, sewer connection: 12 m;
 - b) liquid fuel tanks for individual heating located in a residential building or a separate auxiliary building: 7 m;
 - c) barns, liquid manure pits and manure piles in the case of small facilities for individual livestock: 10 m;
 - d) public roads: 12 m;
 - e) individual washing areas for motor vehicles and its drainage pipes and channels: 15 m.

10.2. The minimum distance between a well and sources of potential pollution is determined according to the type of potential pollution source for a permeable environment as follows:

- a) a cesspool, wastewater treatment plant up to 50 PE, sewer connection: 30 m;
- b) liquid fuel tanks for individual heating located in a residential building or a separate auxiliary building: 20 m;
- c) barns, liquid manure pits and manure piles in the case of small facilities for individual livestock: 25 m;
- d) public roads: 30 m;
- e) individual washing areas for motor vehicles and its drainage pipes and channels: 40 m.

Annex 9

STRUCTURES FOR FORESTRY PURPOSES

For the purpose of this Annex, the following definitions apply:

- a) a forest road for year-round operation – a forest road allowing year-round operation by its spatial layout and technical facilities;
- b) a forest road for seasonal operation – a forest road allowing seasonal operation during periods of lower amounts of precipitation or icing by its spatial layout and technical facilities;
- c) the pavement of a forest road – reinforcement of a forest road that by its width and load capacity allows the operation of a vehicle combination for the transport of wood; a forest road with pavement is a paved forest road; a forest road without pavement is an unpaved forest road;
- d) pavement with a bound covering – pavement with a concrete, asphalt, paved, bonded aggregate, or pavement consisting of panels;
- e) forest road drainage – a set of products, structures or landscaping for the harmless transfer and drainage of surface water from the forest road and surrounding land and for their protection against harmful effects of groundwater;
- f) passing place – a section of a single-lane forest road widened by one lane to allow vehicles to pass each other safely or to drive around a stopped vehicle;
- g) drainage trough – an open trough in the crown of a forest road;
- h) culvert – a structure with a perpendicular opening height up to and including 2 m, used to transfer the flow of surface water across a forest road;
- i) service culvert – a structure with a perpendicular opening height up to and including 2 m, used to transfer the flow of surface water under the connection of other forest transport routes or adjacent properties to the forest road;
- j) forest storage area – a modified area for the treatment, storage or loading of wood, harvesting residues or wood chips, and for the storage of forestry materials or equipment;
- k) turning point – a structure or landscaping for turning around vehicles;

- l) wetting of forest soils – excessive moisture of forest soil not corresponding to natural habitat conditions and at the same time damaging forest stands or making it difficult to restore or establish forest stands, caused by water flowing through surface or underground tributaries or water retained on forest land.

PART 1

Requirements for construction of forest roads and construction on other forest transport routes

- 1.1. A forest road for year-round operation must have pavement, efficient and technically effective dewatering of the forest road and must be equipped with passing places. Fords are not used to cross small watercourses on forest roads for year-round operation.
- 1.2. A forest road for seasonal operation must have pavement if the subsoil has insufficient load-bearing capacity and drainage, and efficient and technically effective dewatering of the forest road and must be equipped with passing places.
- 1.3. The maximum gradient of a forest road in the case of construction of a new forest road with a design speed of 30 km/h is 12 % and 14 % for a design speed of 20 km/h.
- 1.4. The camber of a forest road is either parabolic or straight. The smallest value of the camber of a forest road is 3.0 % for paved forest roads with a bonded pavement surface and 3.5 % on other forest roads.
- 1.5. Forest roads with a longitudinal inclination of more than 6 %, unless they have pavement with a bonded cover, must have drainage troughs installed at an angle to their axis.
- 1.6. The minimum perpendicular clear opening of a culvert in a forest road must be 0.51 m. The minimum perpendicular clear opening of a service culvert up to 8 m in length shall be 0.4 m, otherwise 0.51 m. The minimum gradient of both the bottom of the culvert and a service culvert must be 0.5 %.
- 1.7. The connection of a forest road to a road or local road must be designed and built with an exit at least 6 m wide at the connection point, at least 25 m long and covered with pavement. The connection of a forest road to a special-purpose road must be designed and built with an exit at least 6 m wide at the connection point, at least 25 m long and covered with similar reinforcement as the connecting special-purpose road. The connection of other forest transport routes or adjacent land to a forest road must be designed and executed by a separate exit at least 6 m wide at the connection point, at least 6 m long and covered with at least a layer of crushed rock.
- 1.8. In favourable terrain conditions, a passing place must be designed and built in a quantity of at least one passing place per km of forest road in places with a good view of the forest road ahead.
- 1.9. A passing place must be designed and built with a minimum length of 25 m and shall have the same structure as the forest road. The intersection of forest roads, a separate exit to another forest transport route or to an adjacent property, forest storage or another wider area along the forest road are also used as a passing place if they meet the technical requirements for a passing place.

- 1.10. At the end of a forest road longer than 100 m that ends with a dead end, a turning point must be designed and built if a separate exit to another forest transport route or adjacent land, forest storage site or other wider area cannot be used to turn around a combination vehicle for wood transport. The turning point must be designed and built as either circular or for a three-point turn.
- 1.11. Safety barriers must be designed and installed for a forest road in the case of a bridge, a retaining wall and a culvert with a vertical frontal wall if the height of the crown of the adjacent forest road is greater than 2 m above the ground, the riverbed or the surface of the bridged road or obstacle.
- 1.12. The provisions of point 1.6 shall apply *mutatis mutandis* to culverts and service culverts on other routes for forest transport.

PART 2

Structures for forest land water management

- 2.1. Drainage and irrigation ditches must be designed and built with a depth of at least 0.6 m and a spacing of at least 30 m, unless otherwise specified by calculation. In doing so, the site requirement of trees and the species and age composition of forest stands is taken into account.
- 2.2. Drainage ditches must be designed and built with a gradient that prevents water to achieve undermining velocity.
- 2.3. Irrigation ditches are designed and built according to the position and abundance of the source of irrigation water.
- 2.4. Where they cross drainage and irrigation ditches, pipes and cables must be placed in conduits and placed at least 0.7 m below the surface of the trench bottom in the case of pipes and communication cables, or at least 1 m below the surface of the trench bottom in the case of power cables. If at the point of crossing with a drainage or irrigation ditch a trench is excavated for pipes or cables, it must be filled with soil and after compaction it must be reinforced on the bottom and on the slopes of the ditch.

Annex 10

SAFETY DISTANCES FOR STORAGE OF PYROTECHNIC ARTICLES CLASSIFIED IN SUBCLASS 1.1 UNDER THE AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR) ¹⁷⁾

The safety distance of a warehouse, which is the minimum permissible distance between the warehouse and surrounding buildings, roads and railways, shall be calculated

- for the surrounding built-up area, using the formula

$$E = 22 \times NEC^{1/3}$$

- for roads and railways according to the formula

$$E = 15 \times \text{NEC}^{1/3}$$

where

E is the safety distance in metres;

NEC is the net explosive content in kilograms.

Annex 11

STORAGE SPACES FOR WEAPONS AND AMMUNITION AND MUNITIONS DEPOTS

PART 1

Storage spaces for weapons and ammunition

- 1.1. Storage spaces for weapons and ammunition must be equipped with a safe door that must meet the requirements for the qualification of Class I safe doors and chamber safes or with all-steel doors that meet the requirements of Class 5.
- 1.2. The wall, ceiling and floor of storage spaces for weapons and ammunition must have a minimum thickness of
 - a) 300 mm if they are made of bricks, of calcium-cement blocks or of aerated concrete blocks; or
 - b) 150 mm if made of concrete panels or similar building material.
- 1.3. Windows including part of the wall of the storage space for weapons and ammunition made of hollow glass bricks, skylights, chimneys, fans, shafts and other openings of dimensions greater than 150 mm x 150 mm located in the outer sheath must be designed and built with permanent steel bars with minimum bar diameter of 10 mm, where the spacing of the bar axes is no more than 130 mm. The joints of the bars must be welded or riveted. The anchoring of the bars shall be designed and executed by means of anchors with a spacing of not more than 750 mm and inserted in masonry to a minimum depth of 150 mm. Other means, such as a bars or a roller blind, meeting the requirements of security Class 4, may also be used to secure windows, skylights, chimneys, fan, shafts or other openings pursuant to the first sentence.
- 1.4. If the storage space for weapons and ammunition is on the second and higher aboveground floor and it is impossible to access the floor from the roof of the building or from the outer shell of the building by means of a lightning conductor, gutter, window sill, other building elements, terrain unevenness, tree or other structure, a lockable window with a steel window frame firmly built into the wall of the building with glass, which must be fitted with a safety film with a resistance of at least 250 J or glass similarly resistant to penetration and removal from the frame or other security complying with the requirements of security Class 3, may be used instead of bars.

- 1.5. The surface of the structure of the storage space for weapons and ammunition must be smooth with an easy-to-clean finish.

Glass display window of a storage space for weapons and ammunition

- 1.6. A glass display window must have a steel frame firmly anchored to the wall of the building and must be equipped with
- a) display window glass fitted with a safety film against penetration with a resistance of at least 250 J or similarly resistant to penetration or removal from the frame;
 - b) rigidly anchored steel bars meeting similar requirements to the steel bars of a special structure for securing weapons and ammunition; and
 - c) sliding, folding or folding steel bars or roller shutter complying with the requirements of security Class 3.
- 1.7. The sliding, folding or folding steel bars or roller blinds pursuant to paragraph (1)(c) must be equipped with Class A high-security locks.

PART 2

Munitions depots

Principles for the construction of munitions depots

- 2.1. Munitions depots must
- a) take into account risk of scattering of munitions and shrapnel during a risk event and local conditions, especially the profile of the terrain around the munitions depot, the manner in which munitions are stored and storage and handling equipment and technology; and
 - b) be designed and built, including the determination of the maximum permitted amount of munitions stored, depending on the distances to surrounding structures that could be at risk from shrapnel.
- 2.2. Munitions depot must be designed and built so that, in the event of a fire,
- a) the load-bearing capacity of its structure is maintained for at least 180 minutes;
 - b) the formation and spread of fire and smoke is limited inside the building;
 - c) users can leave the building or can be rescued by other means; and
 - d) the safety of fire protection units has been taken into account.
- 2.3. The design of a munitions depot structure, including external security features, such as a protective embankment or a protective wall, must limit the risk posed by shrapnel to buildings containing residential and occupancy rooms, other munitions depots, transport and technical infrastructure networks (hereinafter 'structures at risk') and, in the event of an explosion or fire at a munitions depot, limit to the greatest extent possible any scattering of unexploded munitions into the surrounding area.
- 2.4. A munitions depot must be designed and executed as a single-storey structure.

- 2.5. For a munitions depot, another exit must be designed and built in addition to the main exit if the length of the escape route from any point of the munitions depot to the nearest exit is greater than 20 m.
- 2.6. The main exit (entrance) of a munitions depot surrounded by an embankment must be designed and built closest to the passage through the embankment.
- 2.7. A strip of non-combustible material, at least 1 m wide, must be designed and built around the munitions depot, which must be drained and followed by a fire strip of at least 5 m wide. The surface of the fire strip must be designed and executed as non-flammable or with grass. For a buried munitions depot, a fire strip at least 3 m wide from the entrance to the munitions depot and the outlet of the ventilation shafts shall be designed and built.
- 2.8. A munitions depot must be surrounded by a fence of at least 2.2 m high. If a fence mesh is used, the mesh size may be at most 50 mm, topped with three rows of barbed wire. This provision shall not apply to a munitions depot situated inside a similarly fenced area, provided that measures preventing unauthorised persons from entering are implemented.

Structural requirements for individual parts of munitions depots

- 2.9. The structural design of walls, bulkheads, door frames, exhaust surfaces and roof structures must only use construction products of reaction to fire class A1, A2 or B classified pursuant to the legislation governing the technical conditions of fire protection of buildings pursuant to other legislation. Construction products made of wood can only be used with treatment providing reaction to fire class B classified pursuant to other legislation regulating the technical specifications of fire protection of buildings. The use of building materials and coatings that form explosive or incendiary mixtures and compounds with explosives is ruled out
- 2.10. The roof of a munitions depot must be designed and built as
 - a) blow-off, made of light, easy to shatter material that in the event of an explosion inside the building does not endanger the surrounding area by scattering heavy fragments; or
 - b) resistant to the effects of an explosion of munitions or reducing the effect of a pressure wave, firmly anchored in the surrounding walls and designed to withstand or limit the pressure wave and other explosion effects.
- 2.11. The floor must be designed and executed as level and must be rounded where it meets the walls without joints to a height of at least 100 mm above the floor. The surface of the floor must be designed and made of non-sharp material as impermeable, without cracks and easy to clean. A floor in a munitions depot in which munitions at risk of initiation as a result of static electricity discharge are stored must be designed and made with protection against its accumulation.
- 2.12. Doors and door frames must be designed and built only as opening outward, without thresholds and tight along their perimeter.
- 2.13. Windows including part of the wall made of hollow glass bricks, skylights, chimneys, fans, shafts and other openings of dimensions greater than 150 mm x 150 mm located in the outer sheath must be designed and built with permanent steel bars with minimum bar diameter of 10 mm, where the spacing of the bar axes is no more than 130 mm. The joints

of the bars must be welded or riveted. The anchoring of the bars must be designed and executed by means of anchors with a spacing of not more than 750 mm and inserted in masonry to a minimum depth of 150 mm. Other means, such as a bars or a roller blind, meeting the requirements of security Class 3, may also be used to secure windows, skylights, chimneys, fan, shafts or other openings pursuant to the first sentence.

- 2.14. The bars pursuant to point 2.13. must be designed and made with a light-coloured coating. Windows through which the sun's rays may pass must be designed and made with matte or clear glass without bubbles and defects and supplemented with anti-sun foil.

Safety distance

- 2.15. Safety distance means the minimum permissible distance between a munitions depot and a structure at risk. The safety distance is determined both between individual buildings and workplaces in the area where the munitions depot is located (internal safety distances), as well as between the munitions depot and other structures at risk outside the area (external safety distances).
- 2.16. The safety distance is determined in accordance with other legislation, for the total amount of explosives loaded in munitions at the maximum permissible content of the ammunition depot.
- 2.17. In the case of a risk of shrapnel effect, safe distances determined pursuant to other legislation pursuant to other legislation shall be increased commensurately taking into account local conditions to the maximum distance at risk from the shrapnel effect of stored munitions. The definition of the maximum distance at risk of shrapnel effect is based on the documentation of the stored munition or shall be determined on the basis of a technical test on which a report attached to the design documentation shall be drawn up.

Heating and ventilation of munitions depots

- 2.18. In order to control temperature and humidity, equipment for ventilation or heating must be designed and installed in a munitions depot. Ventilation also includes a device that monitors temperature and humidity values and changes in these values over time.
- 2.19. Ventilation equipment must be designed and executed as easy to clean and must prevent the spread of fire.

Electrical equipment and protection against the effects of electricity

- 2.20. Electrical equipment and electrical wiring must be designed and executed to ensure the protection of equipment in environments with a risk of fire or explosion of explosives.
- 2.21. A munitions depot must be designed and built as protected from the effects of lightning.

Transport routes on the grounds of the operating premises

- 2.22. A railway to a munitions depot must be designed and executed as transit type for the transport of other material.
- 2.23. The shunting area where loads of munitions are sorted, must be designed and built at least 300 m from the munitions depot.
- 2.24. A railway route and a road for the transport of munitions to the munitions depot must be designed and built at a distance from a building

- a) in which fire is used, of at least 50 m;
- b) that poses an explosion hazard, of at least 10 m.

2.25. A munitions depot must have a safe arrival route designed and built.

Technical requirements for securing a munitions depot

2.26. A munitions depot must be secured against the entry of unauthorised persons by designing

- a) the security of each entry gate or ammunition storage door, which must be equipped with a lock and safety fittings or barrier complying with the requirements of security Class 3;
- b) the installation of electronic security equipment pursuant to point 2.30;
- c) installation for future equipment of a munitions depot with a TV system and a video system for use in security applications for security level 2.

2.27. Electronic security equipment to ensure the protection of a munitions depot must be designed and executed to meet the requirements for spatial protection, building sheath protection, perimeter protection and emergency system and, including the method of its installation, must meet the general requirements for alarm transmission systems and the requirements for security level 2. Perimeter protection for a munitions depot must be designed and implemented through the installation of an electronic security system that can detect unauthorised entry to the outside perimeter of the munitions depot at least as far away as the fence of the munitions depot. If the depot is not separately fenced, protection of the external perimeter of the premises must be designed and implemented.

2.28. The ceiling or wall of a munitions depot must be designed and built along its entire surface as blow-off and protected by electronic security devices to ensure the protection of the munitions depot.

Prevention of the risk of incidence or spread of fire or detonation of stored munitions

2.29. A munitions depot must be equipped with an electronic fire alarm.

PART 3

Protective embankment

3.1. A protective embankment must be designed and built as closed, open on one side or open on one side with a separate embankment.

3.2. A protective embankment must be designed and built only from non-combustible and compacted materials. In the case of a protective embankment made with rocky fill, a layer of sorted material with a thickness of at least 1 m with a grain diameter of up to 16 mm must be designed and executed on its inner side. The surface of the protective embankment must be resistant to erosion.

3.3. The inner slope of the protective embankment may have a slope of not more than 40° with a crown width of at least 0.5 m. The profile of the protective embankment must be

- documented in the design by a stability calculation including settling and sinking of the embankment into the subsoil. A protective embankment must not be planted with trees.
- 3.4. The lower part of the inner slope of a protective embankment may be replaced in the design by a retaining wall, which, however, must not exceed half the height of the protective embankment.
 - 3.5. The crown of the protective embankment must not be lower than the level of the roof cornice of the munitions depot; for a depot with a slanted roof, this applies to the roof cornice of the lower side of the roof. The crown of the protective embankment must exceed by at least 0.5 m the upper level of stored munitions, including its packaging.
 - 3.6. The lateral edge of the crown of a single open or separate embankment must extend beyond the elevation outline of the warehouse by at least 0.5 m.
 - 3.7. The distance between the foot of the protective embankment and the perimeter wall of the depot may be no more than 2 m in the case of a closed and one-sided protective embankment and no more than 5 m in the case of a separate embankment.
 - 3.8. The area between the foot of the protective embankment and the depot must be designed and executed as a fire strip pursuant to point 2.8. and must be drained.
 - 3.9. A passage in the protective embankment must be designed and built as close as possible to the escape route from the depot by interrupting the protective embankment or as a tunnel. The passage in the protective embankment must be at least 1.5 m wide, with a grade not exceeding 8 °.
 - 3.10. The passage must be designed and made as arced or angled in such a way that any line through it intersects its wall protected by the protective embankment. If it is not technically feasible to meet this requirement, another protective embankment or protective wall must be designed and built at a distance of 1 to 4 m from the outer foot of the protective embankment facing the opening of the passage, overlapping the mouth of the tunnel in all directions by at least 1.5 m or at the same height as the interrupted embankment and with a crown exceeding the edge of the crown of the interrupted embankment by at least 0.5 m.
 - 3.11. A tunnel passage must be at least 2.1 m high, with illumination, without any projections. Its walls and ceiling must be designed and made of statically resistant materials.
 - 3.12. A common embankment between 2 depots must not have any passage. Holes for the purposes of utility lines are not considered passages if they are secured against the transmission of detonation.
 - 3.13. An uneven landscape with similar technical parameters may be considered as protection equivalent to a protective embankment.

Protective wall

- 3.14. A protective wall, which may also be in the form of palisade, may be designed and executed instead of a protective embankment.
- 3.15. The protective wall must be designed and built as securely anchored in the ground, and its stability and resistance to explosion of munitions must be documented by calculation.
- 3.16. The distance between the protective wall and the wall of the munitions depot must be at least 2 m and at most 5 m.
- 3.17. For stipulating the height and length of a protective wall, the provisions for a protective embankment shall apply *mutatis mutandis*.

- 3.18. The protective wall in front of a blow-off surface must be designed and built in such a way that, in the event of explosion, the pressure wave is not deflected in a dangerous direction or shrapnel does not ricochet, for example to an adjacent area.

Annex 12

TECHNICAL REQUIREMENTS FOR BUILDINGS FOR HANDLING EXPLOSIVES

PART 1

Protection of surroundings

- 1.1. A building intended for the handling of explosives must be designed and built in such a way as to ensure protection of the surrounding environment against the effects of the handling of explosives, as well as the protection of structures intended for the handling of explosives against the dangerous effects of surrounding structures, taking into account the type and maximum amount of explosives that may be present in the building.
- 1.2. If a protective embankment is built for building intended for the handling of explosives of hazard class A, it must comply with the following requirements:
- a) the protective embankment must be stable and secured against erosion. Only non-combustible and compacted material can be used to build protective embankment. If a protective embankment is made with rocky fill, a layer of sorted material with a thickness of at least 1 m with a grain diameter of up to 16 mm must be used on its inner side;
 - b) the roof cornice of a building intended for the handling of explosives must not exceed the crown of the protective embankment, in the case of a building with a slanted roof, this applies to the roof cornice of the lower side of the roof. The inner slope of the protective embankment may have an inclination of at most 40° and a width in the crown of at least 0.5 m; the inner slope of the protective embankment does not need to comply with a slope of 40° over its entire length if it includes a vertical retaining wall; however, it must not exceed half the height of the protective embankment. In the case of use of separate protective embankments, one of these embankment must extend beyond the lateral edges of the other embankments by at least 0.5 m;
 - c) the distance between the foot of the embankment and the outer wall of the building must be at least 1 m and not more than 5 m. The gap between the foot of the protective embankment and the wall of the building must be drained, designed and built from a fine non-flammable material, if necessary paved with pavers or concrete;
 - d) no facilities or premises intended for the handling of explosives may be placed on the inner slope of the protective embankment. No facilities and premises not related to the operation of the building within the protective embankment, nor equipment

for remote control of the technology in that building, may be located on the outer slope of the protective embankment;

- e) if a passage is established in the protective embankment, it must be established as a stable tunnel with a minimum height of 2.1 m, without any projections into its profile; and
- f) instead of a protective embankment, a protective wall or other protective building element may be established providing protection equivalent to the protective embankment pursuant to points (a) to (e).

1.3. In the case of the installation of protective embankments, protective walls or other protective building elements around structures intended for the handling of explosives of hazard class ¹⁹⁾ lower than hazard class A, Part 1.2 is followed mutatis mutandis.

PART 2

Principles for construction and structural requirements

- 2.1. An explosives storage facility must be designed and built as single-storey.
- 2.2. Taking into account the nature of the explosives, the wall or part thereof or the roof of an individual space of the building must be designed and built as blow-off. An explosives storage facility or a building for the manufacture and processing of explosives, or a relevant room thereof must have a blow-off area if it is used to handle Class C explosives; the aggregate total of the blow-off area must be greater than $3 \cdot 10^{-3} \text{ m}^2$ per kg of such explosives. The blow-off area must be designed to be directed toward a protected area.
- 2.3. If the building is not fitted with a protective embankment or other protective building elements, a drained strip of non-flammable materials must be located around it at least 5 m wide.
- 2.4. The exit from the building intended for the handling of explosives fitted with a protective embankment must be designed and built closest to the passage through the embankment. If a passage is established in the protective embankment, it must be established as a stable tunnel with a minimum height of 2.1 m, without any projections into its profile/ With the exception of an explosives storage facility, a building intended for the handling of explosives must have at least two exits. The number of exits from a building intended for the handling of explosives shall be such that the longest escape route from any point in the building does not exceed 20 m.

PART 3

Requirements for components

- 3.1. Walls, partitions, door frames, exhaust surfaces, roof structures, roof coverings and other building elements must be designed and made of non-flammable or fire-retardant materials. The requirement pursuant to the first sentence shall be deemed to be fulfilled if construction products of reaction to fire classes A1, A2 or B are used and, in the case of wood construction products, products treated to ensure reaction to fire class B, classified pursuant to the legislation governing the technical specifications of fire protection of

buildings. At the same time, materials must be inert to explosives and must not form dangerous mixtures with them and other substances and mixtures present in the building.

- 3.2. The roof of a building intended for the handling of explosives must be designed and built
- a) as blow-off, with a specific weight of the roof covering without its frame of not more than 150 kg m^{-2} ; or
 - b) as resistant to the effects of explosion, firmly anchored in the surrounding walls and dimensioned to withstand a pressure wave and other effects of any explosive transformation; or
 - c) as a roof reducing the effect of a pressure wave, which reduces the effects of a possible explosion as much as possible.
- 3.3. The interior floor surfaces of a building intended for the handling of explosives must be designed and built with a surface that is easy to clean, impermeable and free of cracks. The flooring material must correspond to the nature of the explosives present in the building; the floor of the building or the room where impact-sensitive explosives are located must be covered with flexible material. The floor in the building or its rooms, where explosives susceptible to electrostatic discharge are located, must be designed and built with protection against the accumulation of electric charge. The interior wall of the building, including the ceiling where appropriate, must be smooth; in a building intended for the manufacture or processing of explosives, the joints between the walls and the floor must also be rounded.
- 3.4. Doors in a building for the handling of explosives must be designed and built opening outwards in the direction of escape and must not have a threshold; if a door is intended to prevent an explosion from being transmitted from a room, it can be designed and built as opening inwards.
- 3.5. In an explosives storage facility, windows shall be equipped with metal bars or grilles with a mesh size not exceeding 0.02 m.

PART 4

Heating, ventilation, water supply, wastewater and sewers

- 4.1. The building must be designed and built, taking into account the formation of gases and dusts that are a fire or explosion hazard, with ventilation equipment or equipment rendering such substances and mixtures harmless. The design and type of equipment must correspond to their volume and physical and chemical properties, including sensitivity to external stimuli. Dust and vapours whose mixtures a fire or explosion hazard must not be exhausted together. Ventilation equipment and ducts must be designed and built to allow easy cleaning and prevent the transfer of fire. Ventilation equipment or equipment rendering the given substances and mixtures harmless must be equipped with an emergency power source.
- 4.2. Heating elements, fittings and other similar equipment must be designed and executed as smooth-walled. Control fittings and equipment must not be designed and installed in rooms where explosives are handled. The distance of heating elements from the wall and

technology pipes must not be less than 0.1 m. A chimney up to a height of 20 m must be equipped with a device to prevent the escape of sparks; this does not apply to the chimney of a gas-fired boiler room.

- 4.3. A building designed for the handling of explosives in which interruption of the water supply could cause explosion or fire must be connected by two lines from a circular network or from two independent sources. Hydrants must not be placed inside the protective embankment and against open blow-off areas.
- 4.4. All wastewater contaminated by explosives must pass through a cleaning, neutralisation and disposal station where explosives are intercepted and, where possible, disposed of, prior to discharge into the exterior network.
- 4.5. The sewerage, including under-floor pipes, must be designed and built in such a way as to prevent explosives from entering; its outlet must be connected to a trap. This measure does not apply to sewerage used to transport explosive residues to a disposal station.

PART 5

Electrical equipment

- 5.1. A building intended for the handling of explosives in which the interruption of the supply of electricity could cause danger to persons or interruption of production must have electricity supply from two separate substations or from two separate sections, at least one of which must be equipped with automatic switching with an independent source of power.

PART 6

Technical requirements for the security of explosives

- 6.1. A building intended for the handling of explosives in which the interruption of the supply of electricity could cause danger to persons or interruption of production must have electricity supply from two separate substations or from two separate sections, at least one of which must be equipped with automatic switching with an independent source of power. Fencing must be at least 2.2 m high. If a mesh is used, the mesh size may be at most 0.05 m, topped with two rows of barbed wire.
- 6.2. The building elements of an explosives storage facility must be sufficiently resistant to violent intrusion.

PART 7

Explosives destruction area and test facility

- 7.1. An explosives destruction area or testing facility must be assessed with regard to the nature and quantity of explosives being destroyed or tested, in particular the potential effects of explosion or burning of the destroyed or tested explosives on their surroundings, which must not endanger the life and health of persons and property. Parts 1 to 5 and Part 6.1 shall apply mutatis mutandis in the assessment of the destruction and testing area.

- 7.2. An area for the destruction or testing of explosives must be equipped with a shelter for the operator and a special place for storing material intended for destruction or testing. The operator's shelter must provide protection against the effects of the explosives being destroyed or tested. A special storage site for material intended for destruction or testing must be protected from the effects of the explosives being destroyed or tested and from other ambient influences so as not to change the characteristics of the stored explosives until the time of their destruction or testing. An operator's shelter is not required if the technology for the destruction or testing of explosives has equipment that eliminates any risk of exposure to the effects of explosion or burning outside this equipment.

PART 8

Laboratories

- 8.1. Parts 1 to 5 and Part 6.1 shall apply mutatis mutandis when designing laboratories. A laboratory may be placed in a building not intended for the handling of explosives, provided that the quantity of explosives in the laboratory is minimised in such a way as not to endanger the life and health of persons or property outside the laboratory.

Annex 13

AGRICULTURAL BUILDINGS

PART 1

Buildings for livestock

- 1.1. Cold water pipes do not need to be thermally insulated except to prevent freezing.
- 1.2. Floor and wall surfaces must be easy to wash and disinfect in areas that require enhanced cleanliness, in particular in milking houses, dairy rooms, cheese dairies and separate rooms for veterinary assistance.
- 1.3. A livestock building without the possibility of natural air exchange and natural lighting must have a secure, continuous supply of electricity accompanied by an emergency power supply. The emergency power supply output is set individually for every proposed system and equipment in order to maintain the most important vital functions.
- 1.4. With regard to the production of harmful substances, buildings must prevent the spontaneous leakage of substances that jeopardise the water quality from buildings and parts thereof into the surrounding terrain and subsoil, and subsequently into surface water and ground water through
- a) impermeability of surfaces and structures in contact with harmful substances;
 - b) sewerage, or by building or technological modifications, preventing the leakage of substances from the building by spilling, overflowing or flushing.

PART 2

Auxiliary building for livestock

- 2.1. The perimeter wall and roofing of a building for drying and storing hay and straw must prevent rainwater from entering the stored material. The floors of these buildings must prevent the penetration of moisture into the stored material. The ventilation opening for the drying and storage of hay and straw must be of the size and location appropriate to the ventilation technology, must comply with occupational safety requirements with regard to equipment and must be designed in such a way as to prevent birds from entering the building.
- 2.2. The bottom of the manure storage area must slope toward a pit for manure liquid. The slope and camber of the bottom of the handling area must be designed and executed so that the manure liquid and contaminated rainwater flow into a collection groove or channel and into the pit.
- 2.3. The dispensing area of a tank and pit for slurry and liquid manure must have a reinforced impermeable surface in the width of the driveway and the length of the vehicle being used. It is protected on the sides by a raised curb and by a front ramp higher than the driveway as protection against torrential rainwater.
- 2.4. Buildings for the storage of manure, buildings for the concentration of liquid waste, buildings for the preservation and storage of silage and buildings for the storage of silage juices must meet the conditions of basic safety of buildings with regard to the production of defective substances.
- 2.5. The storage and handling area of the silage trough, with the exception of the ramp, shall be protected by a curb or ditch so that torrential rainwater cannot enter or flow from it to an area without water management.

PART 3

Buildings for post-harvest treatment and storage of crops

- 3.1. Buildings for post-harvest treatment and storage of grains and their technical design must
 - a) be dry, covered, ventilated and clean, with smooth interior walls and a floor protected from ground moisture;
 - b) allow sampling to evaluate the quality of stored grain;
 - c) allow corrective action in the event of an increase in temperature or an increase in the moisture content of stored grains by pouring, aerating, drying or refrigerating;
 - d) enable effective protection of stored products against harmful insects, birds and rodents;
 - e) ensure the active ventilation of the storage area, possibly with temperature and relative air humidity regulation;
 - f) enable remote measurement of stored grain temperatures and remote control of the filling of storage silos;

- g) restrict dust levels using a system for extraction, separation and collection of waste from technical lines.
- 3.2. Buildings for post-harvest processing and storing of potatoes must maintain the conditions for the long-term storage of potatoes and suppress undesirable biological processes in the tubers in storage areas
- a) using thermal insulation;
 - b) ventilation, equipment for regulating temperature and relative humidity, where applicable; and
 - c) by regulating light conditions.
- 3.3. Buildings for post-harvest treatment and storage of fruit and vegetables must meet the requirements for maintaining or improving the quality of their individual types in appropriate micro-climatic conditions.
- 3.4. In refrigerated areas for storing fruit and vegetables, the floor is insulated against moisture, in a controlled atmosphere the floor must be gas-tight; in the case of a ventilated storage space for fruit and vegetables except for onions, insulation against ground moisture is not required.

PART 4

Buildings for storage of mineral fertilisers

- 4.1 Buildings for the storage of fertilisers ensure their unloading from railway wagons or trucks, separate storage of different types of fertilisers in storage sections, boxes or tanks according to the required capacity, while respecting the physical and chemical properties of the stored substances.
- 4.2. The structure, exterior walls and roofing of a fertiliser storage building must meet the requirements of
- a) its protection from climatic effects and excessive warming of building components, for thermal insulating properties and for the creation of an area with the required climatic conditions according to the type of fertiliser stored;
 - b) resistance to chemical action of fertilisers and corrosion;
 - c) avoiding the possibility of pyrolytic decomposition of solid fertilisers;
 - d) the transfer of the static load of the stored fertilisers and equipment according to the methods used to store and handle them when filling and emptying;
 - e) the ability to enclose them from all sides and prevent water and moisture from entering solid fertiliser storage areas;
 - f) limitation of technological openings for minimum air exchange and limitation of dust, solid fertilisers; and
 - g) resistance of floors to ground moisture, water, chemical influences, the weight of solid fertilisers and mobile equipment.

- 4.3. The structure of floors and parts of the building for the storage of solid fertilisers must meet the conditions of basic protection of buildings with regard to the production of harmful substances.
- 4.4. A structure for the storage of solid, bulk fertilisers must meet the requirements of technology and transfer of the weight of containers and handling equipment, including the stored fertilisers.
- 4.5. Buildings for the storage of ammonium nitrate, compound fertilisers containing ammonium nitrate and compound fertilisers of type NP, NPK or NK containing nitrogen partly or wholly in the form of ammonium nitrate must be designed and so that they are dry and without cellars. The walls, ceiling and floor of the storage area must have an easy-to-clean finish. The doors must open outwards. The floor must not have channels or openings and must be insulated against ground moisture without the use of asphalt or other organic matter.

PART 5

Buildings for the storage of plant protection products

- 5.1. Buildings must be designed and built so that there is no spontaneous penetration of substances threatening the quality of water from the building into the surrounding terrain and subsoil, and subsequently into surface and groundwater by impermeability of surfaces and structures that come into contact with harmful substances.
- 5.2. Buildings must be divided into
 - a) a section for receiving and unloading plant protection products and auxiliary products with a roofed handling area with ramp and emergency catchment area;
 - b) a section for storage of plant protection products and auxiliary products for separate storage of individual types and empty contaminated packaging for return; the section must be individually ventilated with the ability to regulate and monitor air temperature;
 - c) a section for auxiliary and hygienic operations with separate ventilation and temperature control, especially washrooms, toilets and dressing rooms.
- 5.3. The floor must be impermeable to liquids, resistant to the chemical effects of stored plant protection products and auxiliary products, with a surface allowing easy cleaning and sloped towards a separate emergency containment sump pursuant to other legislation.
- 5.4. The sewerage system must be designed as being separate for rainwater, sewage and waste water contaminated by products.
- 5.5. Buildings for the storage of plant protection products and auxiliary products must be equipped with an emergency containment sump pursuant to other legislation, which must have a surface resistant to the chemical effects of the stored products and must be secured against the inflow of rainwater from the surrounding areas and against the penetration of groundwater. They must be dimensioned to a minimum of 10 % of the total volume of liquids stored, but at least to the full volume of the largest transport package or container being stored.

- 5.6. The floor of a stockroom must be impermeable to liquids, resistant to the chemical effects of stored plant protection products and auxiliary products, with a raised ledge around the wall perimeter including a door threshold as a substitute for an emergency containment sump. The stockroom must have separate ventilation, with the ability to regulate and monitor air temperature, its technical design and layout must allow the storage of plant protection products and auxiliary products in a clear and separate manner according to hazard type transport packaging and containers, separate storage of contaminated packaging, personal protective equipment and clothing, while respecting hygienic, occupational safety and health conditions. Points 5.1 to 5.5 shall not apply to stockrooms.

Annex 14

LIST OF ČSN STANDARDS RELATING TO INDIVIDUAL PROVISIONS OF THE DECREE

1. **Re § 8(1)**
 - 1.1. ČSN 75 9010 Rainwater management
2. **Re § 16**
 - 2.1. ČSN EN 1990 ed.2 Eurocode 1: Basis of structural design
 - 2.2. Czech National Annex containing nationally stipulated parameters ČSN EN 1990 ed.2 Eurocode 1: Basis of structural design
 - 2.3. ČSN EN 1991-1-1 Eurocode 1: Actions on structures – Part 1-1: General actions - Densities, self-weight, imposed loads for buildings
 - 2.4. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-1-1 Eurocode 1: Actions on structures – Part 1-1: General actions - Densities, self-weight, imposed loads for buildings
 - 2.5. ČSN EN 1991-1-2 Eurocode 1: Actions on structures – Part 1-2: General actions – Actions on structures exposed to fire
 - 2.6. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-1-2 Eurocode 1: Actions on structures – Part 1-2: General actions – Actions on structures exposed to fire
 - 2.7. ČSN EN 1991-1-3 ed.2 Eurocode 1: Actions on structures – Part 1-3: General actions – Snow loads
 - 2.8. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-1-3 ed.2 Eurocode 1: Actions on structures – Part 1-3: General actions – Snow loads
 - 2.9. ČSN EN 1991-1-4 ed. 2 Eurocode 1: Actions on Structures – Part 1-4: General actions – Wind actions
 - 2.10. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-1-4 ed. 2 Eurocode 1: Actions on Structures – Part 1-4: General actions – Wind actions

- 2.11. ČSN EN 1991-1-5 Eurocode 1: Actions on Structures – Part 1-5: General actions – Thermal actions
- 2.12. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-15 Eurocode 1: Actions on Structures – Part 1-5: General actions – Thermal actions
- 2.13. ČSN EN 1991-1-6 Eurocode 1: Actions on Structures – Part 1-6: General actions – Actions during execution
- 2.14. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-16 Eurocode 1: Actions on Structures – Part 1-6: General actions – Actions during execution
- 2.15. ČSN EN 1991-1-7 Eurocode 1: Actions on Structures – Part 1-7: General actions – Accidental actions
- 2.16. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-17 Eurocode 1: Actions on Structures – Part 1-7: General actions – Accidental actions
- 2.17. ČSN EN 1991-3, Eurocode 1: Actions on structures – Part 3: Actions induced by cranes and machinery
- 2.18. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-3 Eurocode 1: Actions on structures – Part 3: Actions induced by cranes and machinery
- 2.19. ČSN EN 1991-4, Eurocode 1: Actions on structures – Part 4: Silos and tanks
- 2.20. Czech National Annex containing nationally stipulated parameters ČSN EN 1991-4 Eurocode 1: Actions on structures – Part 4: Silos and tanks
- 2.21. ČSN EN 1998-1 Eurocode 8: Design of structures for earthquake resistance – Part 1: General rules, seismic actions and rules for buildings
- 2.22. Czech National Annex containing nationally stipulated parameters ČSN EN 1998-1 Eurocode 8: Design of structures for earthquake resistance – Part 1: General rules, seismic actions and rules for buildings
- 2.23. ČSN 73 0040 Loads on structures by technical seismicity and their response
- 2.24. Czech National Annex containing nationally stipulated parameters ČSN 73 0040 Loads on structures by technical seismicity and their response
- 3. **Re § 29(1)**
 - 3.1. ČSN 73 4001 Accessibility and barrier-free use
- 4. **Re § 93**
 - 4.1. ČSN 73 0205 Geometric accuracy in building. Designing geometric accuracy

¹⁾ For example, Act No 164/2001 on natural medicinal sources, sources of natural mineral waters, natural curative spas and spa facilities and amending certain related acts (the Spas Act).

²⁾ Act No 114/1992 on nature and landscape protection, as amended.
Act No 541/2020 on waste, as amended.

³⁾ Government Regulation No 272/2011 on the protection of health against the adverse effects of noise and vibration, as amended.

Act No 201/2012 on air protection, as amended.

Act No 254/2001 on water and amending other acts (the Water Act), as amended.

- 4) Act No 258/2000 on the protection of public health and on amendments to certain related act, as amended.
Decree No 380/2002 on the preparation and implementation of the tasks of protecting the population, as amended.
Government Regulation No 272/2011 on the protection of health against the adverse effects of noise and vibration.
Article 5(1) of Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).
- 5) Article 5(1) of Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).
- 6) For example. Government Regulation No 217/2017 concerning the requirements for securing weapons, ammunition, black hunting powder, smokeless powder and matches, and on munition depots, Decree No 99/1995 on the storage of explosives, as amended.
- 7) Article 6(2) of Directive 2014/33/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to lifts and safety components for lifts (recast).
- 8) § 2(b) of Act No 194/2017 on the coordination of infrastructure buildings and measures to reduce the costs of deploying high-speed electronic communications networks and amending certain related acts, as amended.
- 9) § 2(f) of Act No 194/2017 on the coordination of infrastructure buildings and measures to reduce the costs of deploying high-speed electronic communications networks and amending certain related acts, as amended.
- 10) Article 8 of Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks.
- 11) Act No 159/1999 on certain business conditions and on the pursuit of certain activities in the field of tourism, as amended.
§ 17(8) of Act No 455/1991 on trade licensing (Trade Licensing Act), as amended.
- 12) Article 4(4) and (5) and Article 5(2) of Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure. Commission Delegated Regulation (EU) 2019/1745 of 13 August 2019 supplementing and amending Directive 2014/94/EU of the European Parliament and of the Council as regards charging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels, hydrogen supply for road transport and natural gas supply for road and waterborne transport and repealing Commission Delegated Regulation (EU) 2018/674. Commission Delegated Regulation (EU) 2021/1444 of 17 June 2021 supplementing Directive 2014/94/EU of the European Parliament and of the Council with regard to standards for recharging points for electric buses.

- ¹³⁾ Article 8(2) of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, as amended by Directive (EU) 2018/844 of the European Parliament and of the Council.
- ¹⁴⁾ Article 8(5) of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, as amended by Directive (EU) 2018/844 of the European Parliament and of the Council.
- ¹⁵⁾ Article 8(6) of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, as amended by Directive (EU) 2018/844 of the European Parliament and of the Council.
- ¹⁶⁾ Article 4(3), Article 10 and Annex I(B) of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment, as amended by Regulation (EC) No 1137/2008 of the European Parliament and of the Council.
- ¹⁷⁾ Decree No 64/1987 on the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).
- ¹⁸⁾ Article 13(3) of Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides.
- ¹⁹⁾ Annex 1 to Decree No 99/1995 on the storage of explosives.