
Regulations on technical requirements for construction works

An unofficial English translation of the regulation “Forskrift om tekniske krav til byggverk (Byggteknisk forskrift - TEK17)” for information purposes. Any disputes shall be decided on the basis of the formal regulation in Norwegian.

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Regulations on technical requirements for construction works

Laid down by the Ministry of Local Government and Modernisation on June 19th 2017 pursuant to the Act of 27 June 2008 No. 71 relating to planning and the processing of building applications (Planning and Building Act) sections 11-1, 12-1, 21-2, 21-10, 23-8, 27-6, 28-1, 28-6, 28-7, 28-8, 29-3, 29-4, 29-5, 29-6, 29-7, 29-8, 29-9, 29-10, 30-1, 30-2, 30-3, 30-4, 30-5, 30-6, and 31-2; the Act of 16 June 1994 No. 20 relating to technical assessment bodies responsible for conducting conformity assessments, section 7; and the Act of 19 June 2009 No. 100 relating to the management of biological, geological and landscape diversity (Nature Diversity Act).

EEA references: The EEA Agreement, Annex II, chapter III, subsection 6 (Directive 2014/33/EU), Annex IV no. 17 (Directive 2002/91/EC), and Annex VII no. 1 (Directive 2005/36/EC, amended by Directive 2006/100/EC, Regulation (EC) 1430/2007, Regulation (EC) 755/2008, Regulation (EC) 279/2009, Regulation (EC) 213/2011 and Regulation (EC) 623/2012).

Chapter 1. Common provisions

Section 1-1 Purpose

The Regulation is intended to ensure that projects are planned, designed and executed on the basis of good visual aesthetics, universal design, and in a manner that ensures that the project complies with the technical standards for safety, the environment health and energy.

Section 1-2 The Regulation's application to special projects

(1) Agricultural buildings and equivalent non-agricultural buildings for domestic animals shall fulfil the requirements in:

chapters 1 to 7;

sections 8-1 and 8-4, first paragraph;

chapters 9 to 11;

sections 12-1, first paragraph, 12-4, first paragraph, 12-5, 12-6, first to fourth paragraphs, 12-7, first paragraph, 12-13, first paragraph and second paragraph (a) and (d), 12-14, first paragraph and fifth paragraph (b), 12-15, 12-16, first paragraph, 12-17 and 12-18, first and second paragraphs;

sections 13-1, first paragraph, 13-6, first paragraph (1), and third paragraph, 13-7 and 13-9 to 13-16;

chapter 14 with the exception of section 14-4; and

chapters 15 to 17.

(2) Leisure homes containing a single dwelling unit shall fulfil the requirements in:

chapters 1 to 7;

sections 8-1, 8-3 and 8-10;

chapters 9 to 11;

sections 12-1, first paragraph, 12-5, 12-7, first paragraph and second paragraph (c) and (d), 12-11, first and second paragraphs, 12-13, first paragraph and second paragraph (d), 12-14, first paragraph (a) to (d) and fifth paragraph (b), 12-15 and 12-17;

sections 13-1, first paragraph, 13-4, 13-5, 13-7 and 13-9 to 13-16;

chapter 14; and

chapters 15 to 17.

(3) The provisions in the second paragraph shall apply correspondingly to shelters for summer dairy farming, reindeer husbandry and forestry.

(4) The Regulation applies to permanent and temporary construction works and installations, with the exception of chapters 8, 12, 13 and 14, which apply insofar as they are appropriate.

(5) The Regulation applies to temporary buildings, with the exception of chapters 8, 12, and 13, which apply insofar as they are appropriate. In chapter 14, only section 14-3 applies.

(6) In buildings built as student accommodation by student welfare organisations and student housing associations that have been awarded grants for student accommodation pursuant to Regulation no. 424 of 28 January 2004 on grants for student accommodation:

it is sufficient that 20% of the dwelling units meet the requirements for accessible dwelling units in sections 12-7, fourth paragraph, 12-8, first paragraph, 12-11, third paragraph, and 12-18, third paragraph, and the requirements for the design of bathrooms and toilets in section 12-9, first paragraph;

the requirement for storage rooms pursuant to section 12-10, second paragraph, shall not apply; and all visitors shall have equitable access to a toilet in compliance with section 12-9, first paragraph, on each storey in buildings that are required to have a lift.

(7) The exceptions in the sixth paragraph also apply to other student accommodation if an encumbrance is registered on the property ensuring that the property must be used as rental accommodation for students for a period of at least 20 years from the issuance of a certificate of completion or provisional permission to use it. Verification that the encumbrance has been registered must be provided and the documentation must be approved by the municipality before project start-up permission can be given. The Ministry is the holder of the encumbrance.

(8) In the event of a change of use from an additional part to the main part or vice versa within a dwelling unit, the requirements in the Regulation apply with the exception of sections 12-2, 12-9, 12-10, second paragraph, 13-5, second and third paragraphs, 13-8 and 14-2 to 14-5. This provision only applies to changes of use of rooms that have a roof, wall or floor directly adjoining the main part of the dwelling unit. This provision only applies to changes of use in homes where construction of the home was applied for before 1 July 2011.

Section 1-3 Definitions

The following definitions apply in this Regulation:

- a) *dwelling unit*: housing unit with all the primary functions and which will be used for residential purposes
- b) *construction work*: building, structure or civil engineering works
- c) *functional requirement*: general purpose or task that will be fulfilled in the completed construction work
- d) *pedestrian access*: footpath from a drivable road and parking to the entrance of a construction work and outside amenity area, and between these
- e) *primary functions*: living room, kitchen, bedroom, bathroom and toilet. This term is only used in connection with dwellings and requirements relating to accessible dwelling units.
- f) *entrance*: the construction work's access area by the main entrance door
- g) *equivalent standards*: standards covering the same subject area, which are based on the same assumptions, have the same validity and that similar qualities
- h) *mezzanine*: a level located between two levels with an open connection to the underlying level. An entresol can also be a mezzanine.
- i) *developed outside area*: prepared access routes, parking areas, outside amenity areas next to construction works and outside amenity areas for public use

- j) *pre-accepted performance level*: performance level specified by the Norwegian Building Authority as deemed to satisfy or helping to ensure compliance with one or more functional requirements in the Technical Regulations
- k) *production documents*: blueprints, descriptive texts, specifications and other documents that provide a basis for execution
- l) *room for continuous occupancy*: rooms for continuous occupancy in work or public buildings are work rooms and public rooms. Storerooms, corridors, hallways, cloakrooms, toilets, shower rooms and similar are not rooms for continuous occupancy. Rooms for continuous occupancy in dwelling units are living rooms and equivalent rooms, kitchens and bedrooms.
- m) *step-free*: surfaces that can have a maximum threshold height or difference in levels of 25 mm. A threshold height or difference in levels of between 20 mm and 25 mm is considered step-free if it has a chamfered edge no steeper than 45°.
- n) *performance level*: technical, functional or environmental quality, capacity or property of a construction work, building component, installation or outside area. A performance level is an interpretation and specification of a functional requirement and may be specified quantitatively or qualitatively.

Chapter 2. Documentation of compliance with the requirements

Section 2-1 Documentation of compliance with the requirements. General requirements

(1) Verification that the finished construction work complies with the requirements stipulated in the Regulation shall be provided.

(2) The verification shall be in writing.

(3) Compliance with requirements and pre-accepted performance levels may be verified by using Standards Norway's standards or an equivalent standard.

Section 2-2 Verification of compliance with the requirements. Basis for detailed design and planning

(1) Compliance with performance levels stipulated in the Regulation is mandatory.

(2) Where performance levels are not stipulated in the Regulation, compliance with the functional requirements in the Regulation shall be verified either:

- a) by using pre-accepted performance levels; or
- b) by analyses that show that the performance levels comply with the functional requirements in the Regulation.

(3) If compliance with the Regulation's functional requirements is verified by analysis, it must be demonstrated that the method of analysis applied is suitable and valid for the purpose. The assumptions used shall be described and the reasons for using them given. The analysis shall state the necessary safety margins.

(4) The documentation shall describe how the construction work shall be designed and the performance levels that apply. The specified performance levels shall provide a sufficient basis for the detailed design and planning.

Section 2-3 Verification of compliance with the performance requirements. Production documents

(1) Verification shall be provided showing that the designed solutions and production specifications comply with the specified performance levels

(2) Production documents that are sufficient for execution of the project shall be prepared.

Section 2-4 Documentation of execution

Verification shall be provided showing that the execution and products chosen comply with the production documents.

Chapter 3. Documentation of products

Section 3-1 Documentation of construction products

(1) The rules for documentation of products derive from the Regulation on sales and documentation of construction products.

(2) Verification shall be provided, before products are incorporated into a construction work, showing that the products have the properties necessary to ensure the completed construction work will comply with the requirements in the Regulation.

Chapter 4. Documentation for management, operation and maintenance (MOM)

Section 4-1 Documentation for the operating phase

(1) The responsible designer and the responsible contractor shall, within their areas of responsibility, present the documentation required to the responsible applicant. The documentation shall provide the basis for the satisfactory commissioning, management, operation and maintenance of the construction work, technical installations and installations.

(2) In cases where such documentation is obviously superfluous, this requirement does not apply.

Section 4-2 Preservation of documentation for the operating phase

Documentation for the operating phase shall be handed over to and preserved by the owner of the construction work.

Chapter 5. Degree of utilisation

Section 5-1 Determination of degree of utilisation

(1) The purpose is to regulate the volume of buildings above ground level and the total area of buildings in relation to the required outside amenity area, the impact on infrastructure and the relationship to the surroundings. The degree of utilisation shall be stipulated in the provisions of the land-use element of the municipal master plan or in the zoning plan for a specific area.

(2) The degree of utilisation shall be determined using one or more of the following methods:

- a) built-up area (BYA);
- b) percentage of built-up area (% BYA);
- c) gross internal area (BRA); or
- d) percentage of gross internal area (% BRA).

For areas regulated for shopping centres or shops, the degree of utilisation shall always be stipulated in terms of gross internal area (BRA).

Section 5-2 Built-up area (BYA)

Built-up area is calculated on the basis of Norwegian Standard NS 3940:2012 Area and volume calculations for buildings, though such that parking areas are included in the basis for calculation in accordance with section 5-7. A building plot's built-up area shall be stated in m² BYA and given in whole numbers.

Section 5-3 Percentage of built-up area (% BYA)

Percentage of built-up area indicates the ratio between the built-up area in accordance with section 5-2 and the building plot's area. Percentage of built-up area shall be stated as % BYA and given in whole numbers.

Section 5-4 Gross internal area (BYA)

(1) The gross internal area for buildings on a building plot shall be stated in m² BRA and given in whole numbers.

(2) The gross internal area is calculated on the basis of Norwegian Standard NS 3940:2012 Area and volume calculations for buildings, though such that parking areas are included in the basis for calculation in accordance with section 5-7. The following also applies:

- a) For buildings with a storey height of more than 3 m, gross internal area is calculated as if a horizontal plane had been laid for every three metres. It may be stipulated in plans for land use that the gross internal area shall be calculated without the addition of hypothetical planes.
- b) Plan provisions shall stipulate how gross internal area that is fully or partly below ground level shall be included in degree of utilisation calculations. If the plan does not stipulate otherwise, the gross internal area below ground level shall be included in the gross internal area.

- c) When calculating gross internal area as a basis for energy calculations, the requirement to insert a hypothetical horizontal plane for every three metres for buildings with a storey height of more than 3 m shall not apply.

Section 5-5 Percentage of gross internal area (% BRA)

Percentage of gross internal area indicates the ratio between gross internal area in accordance with section 5-4 and the building plot area. Percentage of gross internal area shall be stated as % BRA and given in whole numbers.

Section 5-6 Minimum outside amenity area (MUA)

For dwellings, schools, kindergartens, etc. where the municipality has deemed it necessary to require a minimum outside amenity area, the planning provisions should indicate the minimum outside amenity area, inclusive of play areas. MUA is stated in whole m² per unit, dwelling, pupil, or child, etc. and is stated as m² MUA. Outside amenity areas are those parts of the building plot that are not built on or earmarked for driving or parking and that are suited to this purpose. The municipality may decide that all or parts of terraces and roof terraces that are covered may be counted as outside amenity areas.

Section 5-7 Parking areas

An application for a project shall show how parking is to be provided. Parking areas shall be included in the calculation basis for the degree of utilisation. The number of parking spaces and the intended parking solution shall be in accordance with the current zoning plan or the provisions of the municipal master plan.

Section 5-8 Building plots

In this chapter, a building plot means a space earmarked as an area for buildings and installations in the land-use element of a municipal master plan or in a zoning plan. Unless otherwise stipulated in the provisions for the individual plan, the stipulated degree of utilisation also applies to individual building plots.

Section 5-9 Height of buildings

Cornice and roof ridge heights shall be measured pursuant to section 6-2 and shall be specified with contour figures or in metres from graded ground. Deviations from the height provisions of section 29-4, first paragraph, of the Planning and Building Act shall be stipulated in the individual plan. The municipality may in the provisions of a plan, stipulate heights for various parts of a building.

Chapter 6. Calculation and measurement rules

Section 6-1 Number of storeys

The number of storeys in a building is the total number of measurable levels lying above one another and which constitute the main part and additional parts of the building. However, the following levels are not included in the number of storeys:

- a) basements that only contains an additional part that has a ceiling of less than 1.5 m above the average level of terrain around the building after grading;
- b) mezzanines with a gross internal area of less than 1/5 of the underlying full storey's gross internal area; and
- c) attics that only contain an additional part and with a gross internal area of less than 1/3 of the underlying storey's gross internal area.

Section 6-2 Height

(1) Cornice height is the height to the intersection between the exterior surface of the outer wall and the roof surface. If the roof has a built up extension or a parapet that protrudes more than 0.3 m above the roof surface, the height is taken as the height to the top of the extension or parapet. Cornice height is measured relative to the mean height of the terrain around the building after grading is completed.

(2) Roof ridge height is the height to the intersection between two sloping roof surfaces. Roof ridge height is measured relative to the mean height of the terrain around the building after grading is completed.

(3) Height as described in section 29-4, second paragraph, of the Planning and Building Act is the average cornice height of the façade facing the boundary of an adjoining property.

(4) Municipalities may stipulate in their planning provisions that heights shall be measured relative to graded terrain, existing terrain, street level or a specified contour height. For buildings that extend across a block, the municipality decides which heights are to be used for the various parts of the building. The same applies to corner buildings and to construction works covering a very large area or that have an unusual shape.

Section 6-3 Distance

Distance is measured as the shortest horizontal distance between the construction work's façade line and the neighbouring construction work's façade line or the boundary of an adjoining property. For construction works with protruding building elements, the distance is increased by an amount equivalent to the amount by which the building component protrudes in excess of 1.0 m from the façade line.

Section 6-4 Area

Small projects pursuant to section 29-4, third paragraph (b), of the Planning and Building Act are buildings that have neither a total gross internal area nor a built-up area of more than 50 m² and

other small projects that cannot be measured using Norwegian Standard NS 3940:-2012 Calculation of areas and volumes of buildings.

Chapter 7. Protection against acts of nature

Section 7-1 General requirements relating to protection against acts of nature

(1) Construction works shall be sited, designed and constructed to ensure satisfactory protection against damage or significant nuisance from acts of nature.

(2) Projects shall be designed and constructed to ensure that construction works, building land and adjoining terrain are not exposed to damage or significant nuisance as a consequence of the project.

Section 7-2 Protection against flooding and storm surges

(1) Construction works that would suffer particularly severe consequences due to flooding shall not be sited in areas prone to flooding.

(2) The flooding safety class of construction works in areas prone to flooding shall be stipulated pursuant to the table below. Construction works shall be sited, designed or protected against flooding such that the largest nominal annual probability in the table is not exceeded. If there is a risk to life, the same safety class as for landslides and avalanches shall apply, cf. section 7-3.

Table: Safety classes for construction works in areas prone to flooding

Flooding safety class	Impact	Greatest nominal annual probability
F1	slight	1/20
F2	moderate	1/200
F3	severe	1/1000

(3) The first and second paragraphs apply correspondingly to storm surges.

(4) Construction works shall be sited or protected such that damage due to erosion does not occur.

(5) Safety class F1 also includes the following projects where the project does not lead to reduced life safety and does not involve establishment of a new housing unit:

- a) one extension or one addition of up to 50 m² of gross internal area in the lifetime of the construction work; or
- b) change of use and conversion of up to 50 m² of gross internal area.

This provision does not apply to projects that result in the establishment of activities covered by section 7-2, first paragraph.

Section 7-3 Protection against landslides and avalanches

(1) Construction works that would suffer particularly severe consequences due to a landslide or avalanche, including the secondary effects of a landslide or avalanche, shall not be sited in areas prone to landslides or avalanches.

(2) The landslide or avalanche safety class of construction works in areas prone to landslides or avalanches shall be stipulated pursuant to the table below. Construction works and their related

outside areas shall be sited, designed or protected against landslides or avalanches such that the largest nominal annual probability in the table is not exceeded.

Table: Safety classes for siting construction works in areas prone to landslides or avalanches

Landslide/avalanche safety class	Impact	Greatest nominal annual probability
S1	slight	1/100
S2	moderate	1/1000
S3	severe	1/5000

An equivalent level of safety shall be established in areas with a risk of quick-clay slides.

(3) Safety class S1 also includes the following projects where the project has little consequence for life safety and does not involve establishment of a new housing unit:

- a) one extension, one addition or underpinning of up to 50 m² of gross internal area in the lifetime of the construction work; or
- b) change of use and conversion of up to 50 m² of gross internal area.

The third paragraph does not apply to projects that result in the establishment of activities covered by section 7-3, first paragraph. The third paragraph does not apply to projects in areas with a risk of quick-clay slides.

Section 7-4 Protection against landslides and avalanches. Exemption for tsunamis due to rock falls

(1) Permission may nevertheless be granted to build construction works not covered by section 7-3, first paragraph, in areas prone to tsunamis due to rock falls in cases where all the following conditions are met:

- a) the consequences of building restrictions are severe and the development is socially vital;
- b) life safety is addressed by a proper emergency system based on real-time monitoring, warnings and evacuation, and a special assessment has been carried out of whether or not there should be restrictions concerning the construction of construction works that are difficult to evacuate. The warning period shall not be shorter than 72 hours and the evacuation time shall be a maximum of 12 hours;
- c) there are no alternative, appropriate, and safe building plots;
- d) physical safety measures against the secondary effects of rock falls have been clarified; and
- e) the development has been clarified in the regional master plan, land-use element of the municipal master plan or zoning plan (area zoning plan), including through an environmental impact assessment.

(2) Small extensions, additions or building below existing construction works may be permitted without the requirement for a plan pursuant to the first paragraph (e) and dispensation pursuant to chapter 19 of the Planning and Building Act, as long as the extension does not result in an increased risk to life and health.

Chapter 8. Developed outside areas

Section 8-1 Developed outside areas

Developed outside areas shall be designed such that they are sufficiently suitable for their function.

Section 8-2 Developed outside areas subject to universal design requirements

(1) The following developed outside areas shall be universally designed pursuant to the provisions in the Regulation:

- a) outside areas for the general public;
- b) outside areas for residential buildings that require a lift;
- c) outside areas for construction works for the general public; and
- d) outside areas for work buildings.

(2) The first paragraph does not apply in cases where an outside area or parts of an outside area are, given their function, unsuitable for people with disabilities.

Section 8-3 Outside amenity areas

(1) Outside amenity areas shall pursuant to their function be suitable for recreation, play and activities for various age groups.

(2) Outside amenity areas shall be sited and designed such that good quality is achieved with regard to:

- a) light and sun conditions; and
- b) noise and other environmental impacts.

(3) Outside amenity areas shall be designed such that people are not exposed to risks. The following shall, as a minimum, be complied with:

- a) Play areas shall be shielded from traffic.
- b) Differences in level shall be secured to prevent fall injuries.

(4) Pools, wells or similar in outside amenity areas shall be secured by means of a fence, cover or a similar barrier to prevent people from falling into them.

(5) The following apply to outside amenity areas to universal design requirements:

- a) Developed areas designated for play and recreation shall also have a horizontal field with a solid surface of at least 1.6 m x 1.6 m, which enables participation and equitable use.
- b) Differences in level in outside developed areas shall be marked with visual and tactile means.
- c) Columns, balustrades and similar shall visually contrast with their surroundings.
- d) There shall be room for a wheelchair where seating is constructed.
- e) Developed swimming areas shall be equipped or designed so that it is easy to enter and exit the water.

Section 8-4 General requirements relating to pedestrian access and walking lines

- (1) Pedestrian access ways must be safe and designed for the expected traffic and transport.
- (2) Key walking lines that cross open areas in larger squares and squares subject to universal design requirements must have clearly demarcated walking zones or guide lines. Surface patterns shall not convey misleading directional information.

Section 8-5 Pedestrian access to buildings containing dwelling units

- (1) Pedestrian access ways to buildings containing dwelling units shall:
 - a) be step-free;
 - b) have a gradient that is not steeper than 1:15, except for sections up to 5.0 m long, which may have a gradient that is not steeper than 1:12; and
 - c) have a resting platform with a minimum length of 1.5 m for every 1.0 m difference in height.
- (2) The first paragraph does not apply to buildings containing dwelling units that are not required to have a lift if the terrain is too steep to allow compliance with the gradient requirements.
- (3) Pedestrian access ways to buildings subject to accessible dwelling unit requirements shall have a minimum clearance width of 1.6 m. A minimum clearance width of 1.4 m is permitted for sections up to 5.0 m long.
- (4) Pedestrian access ways to buildings containing dwelling units that are required to have a lift shall also:
 - a) have a minimum clearance width of 1.8 m, except for sections up to 5.0 m long, which may have a minimum clearance width of 1.4 m;
 - b) have a maximum cross fall of 1:50;
 - c) have a solid, non-slip surface;
 - d) have visual and tactile demarcation; and
 - e) have the necessary lighting.

Section 8-6 Pedestrian access to construction works subject to universal design requirements

- (1) Pedestrian access ways to construction works subject to universal design requirements shall:
 - a) be step-free;
 - b) have a gradient that is not steeper than 1:15, except for sections up to 5.0 m long, which may have a gradient that is not steeper than 1:12;
 - c) have a resting platform with minimum dimensions of 1.6 m x 1.6 m for every 1.0 m difference in height;
 - d) have a minimum clearance width of 1.8 m, except for sections up to 5.0 m long, which may have a minimum clearance width of 1.4 m;
 - e) have maximum cross fall of 1:50;
 - f) have a solid, non-slip surface;
 - g) have visual and tactile demarcation; and
 - h) have the necessary lighting.

(2) If the terrain is too steep to comply with the gradient requirements in the first paragraph (b), a maximum gradient of 1:10 is permitted.

Section 8-7 Pedestrian access to outside amenity areas subject to universal design requirements

(1) In addition, pedestrian access ways to outside amenity areas subject to universal design requirements shall:

- a) be step-free;
- b) have a gradient that is not steeper than 1:15, except for sections up to 5.0 m long, which may have a gradient that is not steeper than 1:12;
- c) have a resting platform with minimum dimensions of 1.6 m x 1.6 m for every 1.0 m difference in height;
- d) have a minimum clearance width of 1.8 m, except for sections up to 5.0 m long, which may have a minimum clearance width of 1.4 m;
- e) have maximum cross fall of 1:50;
- f) have a solid, non-slip surface; and
- g) have visual and tactile demarcation.

(2) If there are several outside amenity areas with the same function, it is sufficient for at least one of these to have pedestrian access that complies with the requirements in the first paragraph (b). Other pedestrian access ways shall have a maximum gradient of 1:10.

(3) If the terrain is too steep to comply with the gradient requirements in the first paragraph (b), a maximum gradient of 1:10 is permitted.

Section 8-8 Parking spaces, other standing spaces and vehicular access ways

(1) Buildings containing dwelling units that are required to have a lift, construction works subject to universal design requirements, and outside areas for use by the general public shall have a sufficient number of parking spaces for people with impaired mobility where parking requirements are stipulated in, or pursuant to, the Planning and Building Act. The following apply to these parking spaces:

- a) the parking spaces must be close to the main entrance;
- b) the parking spaces must have adequate lighting; and
- c) the parking spaces must be clearly signposted and marked.

(2) Buildings containing dwelling units that are required to have a lift, construction works subject to universal design requirements, and outside areas for use by the general public shall have a sufficient number of standing spaces for wheelchairs, prams and similar as is suitable for the size and function of the construction work and the outside area.

(3) Buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements, for which no requirements for parking are stipulated in, or pursuant to, the Planning and Building Act, shall have satisfactory vehicular access ways.

Section 8-9 Developed outside areas

(1) Steps in outside areas must be easy and safe to navigate.

(2) In addition, steps in outside area subject to universal design requirements shall also have:

- a) an even gradient, and each riser shall have the same height;
- b) handrails on both sides that follow the entire flight of stairs and are terminated with rounded off edges after the first and last step;
- c) tactile and visual warning areas before the uppermost step;
- d) an awareness area before and into the lowest step; and
- e) a visually marked contrast area on the front edge of the other treads.

Section 8-10 Siting of construction works

(1) Construction works shall be well-adapted to the terrain with regard to good architectural design, visual aesthetic quality, nature adaptable conditions, safety, health, the environment, accessibility, usability and energy requirements.

(2) Construction works shall be sited such that light and sun conditions, as well as sound and vibration factors, are taken into account.

Chapter 9. External environment

Section 9-1 General requirements for the external environment

Construction works shall be designed, constructed, operated and demolished in a manner that results in the least possible impact on natural resources and the external environment. Construction waste shall be handled accordingly.

Section 9-2 Substances hazardous to health and the environment

Products that contain no, or a low content of, substances hazardous to health or the environment shall be chosen.

Section 9-3 Soil contamination

Surveys shall be carried out to find out if there is any soil contamination when planning construction works.

Section 9-4 Selected habitats

The following provisions apply when laid down in Regulations pursuant to sections 52 and 53, fifth paragraph, of the Nature Diversity Act concerning specific habitats, when such habitats occur in the municipality and the conditions of the habitat have not been clarified in a legally binding plan:

- a) The construction, siting and designing of the project shall take particular account of occurrences of a selected habitat to avoid diminishing the habitat's distribution and the occurrence's ecological status.
- b) Where the impact on the selected habitat has not been clarified pursuant to the rules concerning impact assessments in chapter 4 of the Planning and Building Act, the developer shall prepare an environmental impact assessment of the project's effects on the habitat.

Section 9-5 Construction waste

(1) Construction works shall be ensured a satisfactory, intended lifetime such that the quantities of waste over a construction work's lifetime are kept to a minimum.

(2) Products suitable for reuse and material recovery shall be chosen.

Section 9-6 Waste management plans

(1) Waste management plans shall be prepared for the following types of projects, providing an account of the planned management of construction waste by type of waste and quantity:

- a) construction, additions, extension and underpinning of a building if the project exceeds 300 m² of gross internal area;
- b) substantial modification, including façade alteration, or substantial repair of the building if the project affects more than 100 m² of the building's gross internal area;
- c) demolition of a building or part of a building that exceeds 100 m² of gross internal area; or
- d) construction, additions, extension, building below, modification or demolition of construction works and installations if the project generates more than 10 tonnes of construction and demolition waste.

(2) Projects consisting of more than one building, construction work or other civil engineering works shall be considered a single project.

Section 9-7 Surveys of hazardous waste and specification on decontamination and treatment of hazardous waste

(1) Projects in existing construction works shall require a survey to be carried out on building elements, installations, etc. that may constitute hazardous waste.

(2) A separate specification on decontamination and treatment of hazardous waste shall be drawn up for the projects listed in section 9-6, first paragraph, (b) to (d).

(3) The specification on decontamination and treatment of hazardous waste shall as a minimum contain information about:

- a) who carried out the survey;
- b) the date of the survey;
- c) the year of construction and previous use if known;
- d) the results of representative material tests and analyses;
- e) the occurrence and quantity of hazardous waste by type;
- f) the location of hazardous waste in the building, indicated by a photograph or drawing in cases of doubt;
- g) how hazardous waste is identified by marking, signposting or other means;
- h) how it is planned to remove the hazardous waste;
- i) where it is planned to deliver the hazardous waste; and
- j) all findings of hazardous waste, compiled in a table.

Section 9-8 Waste separation

A minimum of 60% by weight of the waste generated by projects in section 9-6, first paragraph, shall be separated into different types of waste and delivered to an approved waste collection facility or directly to a resource recovery facility.

Section 9-9 Final report on actual disposal of waste

A final report describing the actual disposal of waste by type of waste and quantity shall be prepared for projects in section 9-6, first paragraph. Delivery to an approved waste collection facility or directly to a resource recovery facility shall be documented.

Section 9-10 Emissions requirements for wood-burning heaters

(1) Enclosed wood-burning heaters shall be adequately designed to satisfactorily prevent pollution. Emissions from such a heater shall not exceed the values stipulated in Norwegian Standard NS 3059:1994 Enclosed wood heaters - Smoke emission - Requirements.

(2) In those cases where old heaters worthy of preservation are necessary out of consideration to the interior of buildings of cultural-historical, antiquarian or preservation value, heaters worthy of preservation may nevertheless be used.

Chapter 10. Structural safety

Section 10-1 Life and material safety

Construction works shall be sited, designed and constructed to ensure the attainment of an adequate level of safety for people and domestic animals and to ensure that any collapse or accident does not result in unacceptably great material damage or loss to society.

Section 10-2 Structural safety

(1) The properties of materials and products in construction works shall ensure compliance with the fundamental requirements for the construction work's mechanical resistance and stability.

(2) Construction works shall be designed and constructed to ensure the attainment of an adequate level of safety against failure and sufficient rigidity and stability for loads that may occur during their intended use. This requirement applies to construction works under construction and completed construction works.

(3) The fundamental requirements relating to the construction works' mechanical resistance and stability, including ground conditions and safety measures during construction and upon completion, can be complied with by designing construction works in accordance with Norwegian Standard NS-EN 1990 Eurocode: Basis of structural design, and underlying standards in the series NS-EN 1991 to NS-EN 1999, with associated national additions.

Section 10-3 Falling objects from and collisions with construction works

(1) Roof and façade materials with affixed equipment and devices must be executed and fastened to ensure they do not fall down under expected climatic conditions and design loads.

(2) Construction works shall be secured so that ice and snow cannot fall onto places where people and domestic animals may be.

(3) Distances from underlying terrain to roof protrusions and other overhead fixed or movable elements of construction works shall be satisfactory to ensure collisions are avoided.

Chapter 11. Safety in case of fire

I. GENERAL REQUIREMENTS RELATING TO SAFETY IN CASE OF FIRE

Section 11-1 Safety in case of fire

- (1) Construction works shall be designed and constructed to ensure the attainment of an adequate level of safety in case of fire for people present in or on the construction works, for material assets, and for environmental and societal factors.
- (2) There must be adequate provisions to enable the rescue of people and domestic animals and for effective fire extinguishing.
- (3) Construction works shall be sited, designed and constructed to ensure that the probability of fire spreading to other construction works is minimal.
- (4) Construction works where fire may pose a serious environmental hazard or affect other material societal interests shall be designed and constructed to ensure that the probability of harm to the environment or other material societal interests is minimal.

Section 11-2 Hazard classes

Based on the threat a fire could entail in relation to danger to life and health, construction works, or different areas of use in construction works, shall be categorised into hazard classes pursuant to the table below. The hazard classes shall provide a basis for design and construction to ensure escape and rescue in case of fire.

Table: Hazard classes

Hazard classes	Construction works designed for only the sporadic presence of people	People in the construction work are familiar with the opportunities for escape, including escape routes, and can get to safety unassisted	Construction works designed for overnight stays	Intended use of the construction work does not represent a serious fire hazard
1	yes	yes	no	yes
2	yes/no	yes	no	no
3	no	yes	no	yes
4	no	yes	yes	yes
5	no	no	no	yes
6	no	no	yes	yes

Section 11-3 Fire classes

Based on the consequences a fire could entail in relation to danger to life and health, social interests and the environment, a construction work, or different areas of a construction work, shall

be categorised into fire classes pursuant to the table below. The fire classes shall provide a basis for design and construction to ensure the construction work's load bearing capacity in case of fire.

Table: Fire classes

Fire class	Impact
1	Slight
2	Moderate
3	Serious
4	Very serious

II. LOAD-BEARING CAPACITY AND STABILITY IN CASE OF FIRE AND EXPLOSION

Section 11-4 Load-bearing capacity and stability

(1) Construction works shall be designed and constructed to ensure that the construction works as a whole, as well as its individual parts, attain an adequate level of safety with regard to load-bearing capacity and stability.

(2) The thermal load from the energy of a fire and the expected progress of a fire in the construction work must be taken into account when designing for adequate load bearing capacity and stability in case of fire.

(3) Load-bearing systems in construction works in fire classes 1 and 2 shall be designed to maintain adequate load-bearing capacity and stability for a minimum of the time necessary to escape and rescue persons and domestic animals in or on the construction work.

(4) Main load-bearing systems in construction works in fire classes 3 and 4 shall be designed to maintain adequate load-bearing capacity and stability for the complete duration of a fire, insofar as this can be modelled.

(5) Secondary construction works and construction works that are only load-bearing for one storey or for the roof shall be designed to maintain adequate load-bearing capacity and stability for the time necessary to escape and rescue persons and domestic animals in or on the construction works.

Section 11-5 Safety in case of explosion

Construction works whose intended use may pose an explosion hazard shall be designed and constructed with relief surfaces to maintain life safety and load-bearing capacity at an adequate level.

III. MEASURES TO PREVENT IGNITION AND THE DEVELOPMENT AND SPREAD OF FIRE AND SMOKE

Section 11-6 Measures to prevent the spread of fire between construction works

(1) Fires shall be prevented from spreading between construction works:

- a) in order to maintain the safety of people and domestic animals; and
- b) so that a fire does not cause unreasonably large financial losses or societal consequences.

(2) The distance between low-rise construction works shall be at least 8.0 m, unless measures are taken to prevent fires spreading between the construction works during the time required for escape and rescue in the other construction works. This provision does not apply to low-rise construction works that together comprise only one housing unit.

(3) When low-rise construction works are constructed with a distance of less than 8.0 m between them, the construction works' total gross external area shall be limited so that a fire does not result in unreasonably large financial losses, unless other measures are implemented to prevent such losses.

(4) High-rise construction works shall be a minimum distance of 8.0 m from other construction works, unless the construction works are constructed to ensure that fire will be prevented from spreading throughout the full duration of a fire.

(5) Firewalls shall be designed and constructed so that they prevent fire spreading from one construction work to another, regardless of the fire service's extinguishing efforts.

(6) Construction works that, either due to their inherent properties or the activity taking place in them, entail a particularly high probability of fire spreading shall be designed, constructed and protected or sited to ensure that the particularly high probability of fire spreading to other construction works is reduced to an acceptable level.

Section 11-7 Fire sections

(1) Construction works shall be divided up into fire sections in order to:

- a) preserve life and health where escape and rescue may take a long time;
- b) prevent unreasonably large financial or material losses; and
- c) help ensure that a fire, given the anticipated extinguishing efforts, is limited to the fire section in which it started.

(2) Sectioning walls shall be designed and constructed so that a fire, given the anticipated extinguishing efforts, can be limited to the fire section in which it started.

(3) Within a fire section, the properties of the fire barrier between parts of the construction work with different fire classes shall be determined by the highest fire class. An underlying storey shall have a fire class at least equal to the storey above.

Section 11-8 Fire compartmentations

(1) Construction works shall be appropriately divided into fire compartments. Areas posing differing risks to life and health or in which the risk of fire occurring differs shall be separate fire compartments unless the same level of safety can be obtained by other means.

(2) Fire compartments shall be constructed in a manner that prevents the spread of fire and conflagration gases to other fire compartments during the time necessary for escape and rescue.

Section 11-9 The fire properties of products and materials

(1) Construction works shall be designed and constructed to ensure that the probability of fires occurring, developing and spreading is minimal. The use of the construction work and the time necessary for escape and rescue shall be taken into account.

(2) Products and materials shall not have properties that make an unacceptable contribution to the development of a fire. Particular consideration shall be given to the possibility of ignition, speed of heat transfer, smoke production, development of burning drops and time to flashover.

Section 11-10 Technical installations

(1) Technical installations shall be designed and installed to ensure an installation does not substantially increase the risk of a fire occurring or fire and smoke spreading.

(2) Installations intended to perform a function during a fire shall be designed and constructed to ensure their function is maintained for the necessary period of time. This also includes the supply of water, electricity or signals needed to maintain the installation's function.

IV. FACILITATING ESCAPE AND RESCUE

Section 11-11 General requirements relating to escape and rescue

(1) Construction works shall be designed and constructed to allow speedy and safe escape and rescue. Account shall be taken of people with disabilities.

(2) The time available for escape shall be greater than the time required to escape from the construction works. An adequate safety margin shall be included.

(3) Fire compartments shall be designed and furnished in a way that facilitates speedy and efficient warnings, escape and rescue.

(4) Escape routes from peoples' whereabouts to the exits from a fire compartment must be clear and facilitate speedy and efficient escape.

(5) During the period of time a fire compartment or escape route shall be used by people escaping, no temperatures, concentrations of smoke gases or other circumstances shall occur that hinder escape.

(6) Signs, symbols and text showing escape routes and safety equipment must be able to be read and understood while escaping when fire or smoke are developing.

Section 11-12 Measures that influence escape and rescue times

(1) In construction works that are designed for activities that could result in escape and rescue taking a long time, proactive measures shall be implemented that increase the available escape time. The following shall, as a minimum, be complied with:

- a) Construction works, or parts of construction works, in hazard class 4 and where a lift is required shall have an automatic fire extinguishing system. Parts of a construction work with and without automatic fire extinguishing system shall be different fire sections.
- b) Construction works in hazard class 6 shall have an automatic fire extinguishing system.

- c) In those cases where an automatic fire extinguishing system is required, other measures may nonetheless be used that provide the same level of safety by hindering, limiting or controlling a fire locally where it ignites.

(2) Construction works shall have equipment that enables the early detection of fires such that the necessary escape time is reduced. The following shall, as a minimum, be complied with:

- a) Construction works designed for activities in hazard classes 2-6 shall have a fire alarm system.
- b) In construction works designed for few people and smaller construction works, smoke detectors can be used if the escape conditions are particularly simple and clear. Smoke detectors shall be connected to the mains and have a battery backup system. In fire compartments needing more than one smoke detector, the detectors shall be connected in series. In construction works without power supplied by the mains, battery-operated smoke detectors may be used.

(3) In construction works in which escape and evacuation routes may be long and involve changes of direction or that are going to be used by large numbers of people, the escape routes shall be well lit and marked such that escape can be effected in a speedy and efficient manner. Large construction works and construction works designed for a large number of people, as well as construction works designed for activities in hazard classes 5 and 6, shall have a satisfactory guide system.

(4) Construction works in hazard classes 5 and 6, other construction works for the general public and work buildings, shall have evacuation plans drawn up for them before they are occupied.

(5) The location of technical fire installations of importance for escape and rescue efforts shall be clearly identified by signs, unless the installations are intended for people in a single housing unit and the people must be expected to be well acquainted with its location.

Section 11-13 Exits from fire compartments

(1) Fire compartments shall have at least one exit to a safe location or exits to two independent escape routes or one exit to an escape route that has two alternative directions of escape that lead to independent escape routes or safe locations.

(2) Fire compartments in construction works in hazard class 4 with up to 8 storeys can have an exit to a stairwell designed as an escape route. This requires that each dwelling unit has at least one window or balcony that is accessible for rescue and fire extinguishing efforts, cf. section 11-17.

(3) Fire compartments consisting of more than one storey, or which have a mezzanine, shall have at least one exit from each storey. In construction works in hazard classes 1, 2, 3 and 4, the exits from these levels, besides the entrance level, may be windows that facilitate safe escape. In construction works in hazard class 4 that do not require a lift, the uppermost level may have its exit via the nearest underlying level, provided an automatic fire extinguishing system is installed in the fire compartment.

(4) In low-rise construction works intended for activities in hazard classes 1, 2, 3 and 4, the exit from a fire compartment may either lead to a safe location or to an escape route that has only one direction of escape, provided that each fire compartment has windows designed for and which can facilitate safe escape.

(5) Fire compartments for a large number of people shall have an adequate number of, and a minimum of two, exits leading to an escape route.

(6) The exit from fire compartments designed for only the sporadic presence of people can pass through another fire compartment.

(7) Doors to escape routes shall be designed and constructed to ensure speedy escape and avoid a risk of congestion. The following shall, as a minimum, be complied with:

- a) The door shall have adequate width and height, and must be easy to open without a key.
- b) The door shall open outwards in the direction of escape. Doors to escape routes may nevertheless open inwards against the direction of escape if there is no risk of congestion during an evacuation.

Section 11-14 Escape routes

(1) Escape routes shall, in a clear and easily understandable way, lead to a safe location. They shall be of adequate width and constructed as a separate fire compartment designed for speedy and efficient escape.

(2) Where an escape route extends to more than one storey, the stairs shall be separated from the rest of the escape route and other fire compartments, so that the stairs' function as a safe escape route is safeguarded during the stipulated available escape time.

(3) Escape routes that have two directions of escape shall be divided into appropriate units so that smoke and conflagration gases do not block both directions of escape.

(4) Main entrances to construction works, or a part of construction works, for large numbers of people shall facilitate safe escape.

(5) Doors in escape routes shall be designed and constructed to ensure speedy escape and avoid a risk of congestion. The following shall, as a minimum, be complied with:

- a) The door shall be adequately wide and high, and must be easy to open without a key.
- b) The door shall open outwards in the direction of escape. Doors in escape routes may nevertheless open inwards against the direction of escape if there is no risk of congestion during an evacuation.

(6) A roof-covered yard or street may be used as an escape route if it is designed for safe escape. There shall also be an alternative escape route besides the roof-covered space. Small fire compartments located at courtyard level may use the roof-covered area as an escape route from both exits, provided that the space is designed for safe escape.

(7) Lifts and escalators may not be included as parts of evacuation or escape routes. Such devices shall come to a stop in a safe manner in the event of a fire alarm. Moving pavements specially designed for safe use can be included as part of an evacuation or escape route.

Section 11-15 Facilitating rescues of domestic animals

Construction works designed for domestic animals shall be designed and constructed to ensure the speedy and safe rescue of domestic animals.

V. FACILITATING THE EXTINGUISHING OF FIRES

Section 11-16 Facilitating the manual extinguishing of fires

- (1) Construction works shall be designed for the effective manual extinguishing of fires.
- (2) In or on all construction works where a fire may occur, there shall be fire extinguishing equipment that facilitates effective firefighting efforts in the initial phase of a fire. This is in addition to any automatic fire extinguishing system.
- (3) The fire extinguishing equipment shall be sited to ensure effective extinguishing efforts. In the case of small construction works designed for activities in hazard class 1, the equipment may be located in neighbouring construction works.
- (4) The location of fire extinguishing equipment must be clearly marked unless it is intended for people in a single housing unit and the people must be expected to be well acquainted with its location.

Section 11-17 Facilitating the work of rescue and firefighting personnel

- (1) Construction works shall be sited and designed to ensure rescue and firefighting personnel, and their required equipment, are able to gain useful access to and inside the construction works for rescue and firefighting efforts.
- (2) Construction works shall be designed to ensure that fires can be easily located and fought.
- (3) Technical fire installations of importance for escape and firefighting efforts shall be clearly marked.

Chapter 12. Layouts of and building elements in construction works

I. INTRODUCTORY PROVISIONS RELATING TO LAYOUTS OF AND BUILDING ELEMENTS

Section 12-1 Requirements for layouts and universal design of construction works

(1) Construction works shall have a layout adapted to the construction works' function.

(2) Construction works for the general public and work buildings shall be universally designed pursuant to the provisions in the Regulation, unless the construction work or parts of the construction work is, given its function, unsuitable for people with disabilities.

Section 12-2 Requirements concerning accessible dwelling units

(1) Dwelling units in a building that is required to have a lift shall have all the primary functions on the entrance level of the dwelling unit. The entrance level shall be accessible to people with disabilities pursuant to the provisions in the Regulation.

(2) In a building subject that is required to have a lift, cf. section 12-3, it is nonetheless sufficient that at least 50% of the dwelling units with a gross internal area of up to 50 m² meet the requirement relating to accessible dwelling units and the requirement relating to the design of bathrooms and toilets in section 12-9, first paragraph. When applying for permit to build several buildings, the exemption applies to all the buildings together.

(3) Dwelling units in a building that does not require a lift and that have all the primary functions on the entrance level of the building, shall be accessible at the entrance level pursuant to the provisions in the Regulation, unless the pedestrian access meets the conditions for exemption in section 8-5, second paragraph.

Section 12-3 Requirements for lifts in construction works

(1) Construction works for the general public and work buildings with two or more storeys shall have lifts. Construction works with up to three storeys and little traffic by people may have a lifting platform instead of a lift. Lifts and lifting platforms shall be designed in accordance with the Lifts Directive and the Machinery Directive, respectively. The following requirements apply in relation to sizes:

- a) In construction works with at least three storeys or more, at least one lift car shall have minimum interior dimensions of 1.1 x 2.1 m.
- b) In construction works with two storeys, at least one lift car shall have minimum interior dimensions of 1.1 x 1.6 m.
- c) Lifting platforms shall have minimum interior dimensions of 1.1 m x 1.6 m.

(2) Buildings with three storeys or more containing dwelling units shall have lifts. Buildings with three storeys containing dwelling units may have a lifting platform instead of a lift. The lifting platform shall serve a maximum of six dwelling units. The following requirements apply in relation to sizes:

- a) At least one lift car shall have minimum interior dimensions of 1.1 m x 2.1 m.
 - b) Lifting platforms shall have minimum interior dimensions of 1.1 m x 1.4 m.
- (3) The requirement for a lift or lifting platform in the second paragraph does not apply to:
- a) small houses containing a single dwelling unit; and
 - b) where access from the entrance to the dwelling unit is not more than one storey.
- (4) When calculating the number of storeys in connection with the requirements relating to lifts, the exceptions in section 6-1 (a) to (c) do not apply.

II. ENTRANCES, SAFETY IN USE, COMMUNICATION ROUTES, ROOMS AND SIMILAR

Section 12-4 Entrances

(1) Entrances shall be clearly visible, centrally located and easily understood in relation to access. Entrances shall be safe and easy to use.

(2) Buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements shall comply with the following:

- a) The lighting installed in entrances shall ensure the entrance and main entrance doors are visible in relation to surrounding surfaces.
- b) There must be a visual and tactile awareness area in front of main entrance doors.
- c) Entrances shall be step-free.
- d) There shall be a horizontal area with minimum dimensions of 1.5 m x 1.5 m outside main entrance doors. If the door is side-hinged, the area shall lie outside the swing radius of the door.
- e) Automatic door opener buttons shall be located in a position accessible to people in wheelchairs and such that impact with doors are avoided.

Section 12-5 Safety in use

Construction works shall be designed to ensure any risk of harm to people and domestic animals through collisions or falls is avoided.

Section 12-6 Communication routes

(1) Communication routes shall be safe and usable for the expected traffic and transport.

(2) Communication routes shall be easy to find and orient oneself in.

(3) Level differences shall be clearly marked and have the necessary lighting.

(4) Openings in floors shall be secured to ensure that people and domestic animals are not exposed to risks.

(5) Buildings subject to accessible dwelling unit requirements shall, in addition to the first to fourth paragraphs, comply with the following:

- a) Communication routes to accessible dwelling units shall be step-free.
- b) Corridors and porticoes shall have a minimum clearance width of 1.5 m. Long corridors shall

have adequate space that allows two wheelchairs to pass each other. Sections shorter than 5.0 m, which have no doors, may have a minimum clearance width of 1.2 m.

(6) Construction works subject to universal design requirements shall, in addition to the first to fourth paragraphs, comply with the following:

- a) Communication routes shall be step-free. Gradients shall not be steeper than 1:15.
- b) Corridors and gallery access shall have a minimum clearance width of 1.5 m. Long corridors shall have adequate space that allows two wheelchairs to pass each other. Sections shorter than 5.0 m, which have no doors, may have a minimum clearance width of 1.2 m.
- c) There shall be signage and marking that provides the general public with necessary information. Signage and marking shall be easy to read and understand. There shall be a minimum visual luminance contrast of 0.8 between text and the background colour. Signage and marking shall be sited in an accessible location and be easily visible to seated people and pedestrians. The storey number shall be visually and tactilely readable on all storeys.
- d) Auditory information shall be supplemented with visual information.
- e) Dazzling lighting shall be avoided in communication routes.
- f) Columns and similar elements shall be sited to ensure they do not obstruct communication routes. Columns and similar elements shall have a minimum luminance contrast of 0.4 in relation to their surroundings or be marked at two heights with a minimum luminance contrast of 0.8 in relation to the background colour.
- g) Directional information shall be provided if necessary where the direction of travel changes. Repeated information shall be as identical as possible throughout the building.
- h) Large rooms, where the main walking lines cross open spaces, shall have defined walking zones or guide lines. Patterns in the floor that convey misleading directional information shall be avoided.

Section 12-7 Requirements for the design of rooms and other areas for people

(1) Rooms and other areas for people shall be designed and have a ceiling height and space adapted for their function.

(2) Ceiling heights in dwelling units shall comply with the following:

- a) Rooms for continuous occupancy shall have a minimum height of 2.4 m.
- b) Rooms not intended for continuous occupancy shall have a minimum height of 2.2 m.
- c) Leisure homes containing a single dwelling unit shall have a minimum height of 2.2 m.
- d) Parts of a room may have a lower ceiling height where this does not affect the room's intended function.

(3) In connection with change of use in a dwelling unit from an additional part to the main part or vice versa, ceiling height may be lower than 2.4 m.

(4) Accessible dwelling units shall be dimensioned for wheelchairs on the entrance level. The following shall be complied with:

- a) Rooms shall have step-free access and turning space for wheelchairs.
- b) Rooms shall be designed to ensure that people in wheelchairs can operate necessary functions in a satisfactory manner.

- c) Rooms for continuous occupancy shall have access ways with a clearance width of 0.9 m to doors and windows outside furnished zones.

(5) Rooms and other areas for people in construction works subject to universal design requirements shall have:

- a) a design and dimensions that enable equitable participation; and
- b) step-free access and wheelchair turning spaces. Spaces for wheelchairs shall be sited to ensure people in wheelchairs can operate necessary functions in a satisfactory manner.

(6) Construction works subject to universal design requirements shall have a reception or noticeboard where necessary. Receptions and noticeboards shall be easy to find and centrally sited in relation to the main access point.

(7) In construction works subject to design for universal accessibility requirements that have a large number of rooms with the same function, it is sufficient for 1/10 of the rooms to be designed for universal accessibility pursuant to the provisions in the Regulation. However, this does not apply in cases where the expected use indicates that more or all rooms should be universally designed.

Section 12-8 Entrance halls and cloakrooms

(1) Entrance halls or entrances to accessible dwelling units shall have:

- a) an access way with a clearance width of 0.9 m outside the furnished zone; and
- b) space for a wheelchair turning area beyond the door's swing radius.

(2) In the case of construction works subject to universal design requirements, at least 1/10 of the cloakrooms shall have facilities with a maximum operating height of 1.2 m.

Section 12-9 Bathrooms and toilets

(1) Dwelling units shall have at least one bathroom and toilet that comply with the following:

- a) The size and layout must be such that there is unobstructed floor space for a wheelchair turning area in front of the toilet, a minimum of 0.9 m unobstructed floor space on one side of the toilet and a minimum of 0.2 m on the other side. There shall be an access way with a minimum clearance width of 0.9 m to the unobstructed space at the side of the toilet.
- b) It shall be possible to install a step-free shower zone. There shall be an access way with a minimum clearance width of 0.9 m to the shower zone.
- c) Walls in the shower and toilet zone shall enable the subsequent mounting of the necessary equipment.

(2) On storeys with a bathroom or toilet in construction works subject to universal design requirements, 1/10, and a minimum of one of these bathrooms and toilets shall be designed in compliance with the following:

- a) The flooring and walls shall have a visible colour contrast. Fixed equipment shall have a visible contrast in relation to the flooring and walls.
- b) The size and layout shall ensure there is unobstructed floor space for a wheelchair turning area in front of the toilet and a minimum of 0.9 m free floor space on both sides of the toilet. There shall be an access way with a minimum clearance width of 0.9 m to the unobstructed space at the side of the toilet. Toilets shall have hand supports on both sides.
- c) There shall be adequate unobstructed space under the wash hand basin.

- d) Shower zones shall be step-free and minimum 1.6 m x 1.3 m. The heights of showerheads shall be adjustable, and shower zones shall enable the mounting of the necessary equipment.

Section 12-10 Storage rooms and storage spaces

- (1) Dwelling units shall have adequate, suitable space for storing clothing and food.
- (2) Dwelling units shall have a storage space or a storage room of a minimum of 5.0 m² of gross internal area for bicycles, sports equipment, prams and similar. Dwelling units with a gross internal area of up to 50 m² shall have storage space of at least 2.5 m² of gross internal area.
- (3) Dwelling units subject to accessibility requirements shall have step-free access to the storage space or storage room. The required storage space or storage room shall be accessible when using a wheelchair.

Section 12-11 Balconies, terraces and similar

- (1) Balconies, terraces and similar shall have adequate safety features and quality of use.
- (2) Level differences greater than 0.5 m shall be secured with balustrades, cf. section 12-15.
- (3) Buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements shall comply with the following:
 - a) Access ways to balconies, terraces, outside spaces and similar shall be step-free in work buildings and public buildings and on the entrance level of dwelling units.
 - b) Balconies, terraces and similar shall have unobstructed floor space for a wheelchair turning area.

Section 12-12 Waste system and separation of waste

- (1) There shall be facilities for separation of waste according to source . Semi-underground waste containers, pneumatic disposal units or other waste systems shall be designed and constructed to prevent bothersome noise, odours or other nuisances.
- (2) Common waste systems for residential buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements shall be easily accessible, have step-free access and have a maximum disposal height of 1.2 m.

III. BUILDING ELEMENTS

Section 12-13 Doors, gates and similar

(1) Doors, gates and similar elements shall be easy to see and use and shall be designed in a way that prevents harm to people, domestic animals or equipment.

(2) Their width and height shall be designed for the expected traffic and transport, including escape in case of fire and shall, as a minimum, comply with the following:

- a) Entrance doors and doors in communication routes shall have a minimum clearance width of 0.86 m. The minimum clearance width in construction works designed for large numbers of people shall be 1.16 m.
- b) Internal doors in dwelling units shall have a minimum clearance width of 0.76 m.
- c) Internal doors in construction works subject to universal design requirements shall have a minimum clearance width of 0.86 m. Doors to bathrooms in overnight rooms that are exempt from universal design requirements pursuant to section 12-7, seventh paragraph, shall have a minimum clearance width of 0.76 m.
- d) Doors in saunas, refrigerated storage rooms, and deep-freeze storage rooms shall open outwards and be able to be opened from the inside without a key.
- e) Doors shall have a minimum clear height of 2.0 m.

(3) Buildings subject to accessible dwelling unit requirements shall comply with the following:

- a) The maximum opening force required to open doors to, and in, access and escape routes that are designed to be opened manually shall be 30 N.
- b) Automatic door opener buttons shall be installed outside the swing radius of the door. Buttons shall be clearly visible and located at an operating height of between 0.8 m and 1.2 m above the floor. Door opener buttons shall be sited at a sufficient distance from inside corners.
- c) Doorsills shall be step-free.
- d) Sliding doors and side-hinged doors shall have enough side clearance to allow people in wheelchairs to open and close the door. This requirement does not apply to doors with an automatic door opener.

(4) In addition to the first to third paragraphs, the following apply to construction works subject to universal design requirements:

- a) The requirement relating to the opening force for doors in the third paragraph (a) only applies to doors to, and in, the main access way and the main escape route.
- b) Doors shall be visible relative to the surrounding walls. The minimum luminance contrast shall be 0.4.

Section 12-14 Stairs

(1) Stairs must be easy and safe to use. The width and height of stairs shall be designed for the expected traffic and transport, including escape in case of fire. The following shall, as a minimum, be complied with:

- a) Stairs shall have safe edges and handrails on both sides.

- b) The upper edge of at least one handrail shall be between 0.8 m and 0.9 m above the floor or steps.
- c) Flights of stairs shall have a regular gradient, and the risers shall be the same height for the entire length of the flight of stairs.
- d) Treads in the walking line shall be a minimum of 0.25 m. Treads in straight flights of stairs shall have the same tread depth.
- e) Landings shall be large enough to prevent and halt falls. Height differences of more than 3.3 m require a landing.
- f) Stairwells shall be well lit so that the steps are visible.
- g) Treads shall have a non-slip surface.
- h) Straight flight of stairs shall have a minimum clearance width of 0.90 m and minimum clearance height of 2.1 m. Straight, internal flights of stairs in dwelling units shall have a minimum clearance width of 0.80 m and minimum clearance height of 2.0 m.
- i) Flights of stairs that are not straight shall have a minimum clearance width that is 0.10 m wider than the requirement in (h).

(2) In addition to the first paragraph, the following apply to main flights of stairs that serve more than one dwelling unit:

- a) Straight flights of stairs shall have a minimum clearance width of 1.10 m and a minimum clearance height of 2.1 m.
- b) Handrails shall:
 1. be at the same height, with an upper edge height of 0.8 m, or at two heights, with upper edge heights of 0.9 m and 0.7 m respectively, measured from the tread's front edge;
 2. continue beyond the top and bottom steps and have rounded ends; and
 3. follow flights of stairs continuously, including around mid-level landings.
- c) Treads shall be marked such that a minimum luminance contrast of 0.8 is attained in relation to the colour of the steps. The marking on treads shall span the entire width of the step and be a maximum of 0.04 m deep.
- d) The depth of landings from the front edge of a step or from the bannister to the opposite wall shall be a minimum of 1.5 m.
- e) Treads in curved flights of stairs shall have a minimum width of 0.15 m along the inside walking line. In curved flights of stairs in escape routes for large numbers of people, the minimum tread width along the inside walking line shall be 0.20 m.

(3) In addition to the requirements in the first and second paragraphs, the following apply to construction works subject to universal design requirements:

- a) Main flights of stairs shall have a minimum clearance width of 1.20 m.
- b) Handrails shall have a minimum luminance contrast of 0.8 in relation to the background colour. At the beginning of each storey, the storey indicator shall be marked. Handrails shall continue 0.3 m beyond the top and bottom steps and have rounded ends.
- c) There shall be a warning area in front of the top step and an awareness area in front of and up to the bottom step spanning the entire width of the flight of stairs. The warning area and awareness area shall be tactilely and visually marked with a minimum luminance contrast of 0.8 in relation to the background colour.

(4) Handrails in buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements shall be designed to provide a good grip.

(5) The following exceptions apply to the requirements stipulated in the first to fourth paragraphs:

- a) Handrails are not required on both sides where they would obstruct access to seating and standing room in amphitheatres, sports arenas, etc.
- b) Stairs and ladders used exclusively in connection with the operation of the construction work shall be designed to be functional, based on their intended use, and such that user safety is maintained, but are otherwise exempt from the provisions in this section. This exception does not apply if stairs or ladders are part of an escape route.

Section 12-15 Balustrade design

(1) The design and height of balustrade shall prevent falls and collisions, and balustrades shall be designed to prevent climbing.

(2) Balustrades in flights of stairs and ramps shall have a minimum height of 0.9 m above the floor or steps. The height requirement also applies to balustrades and bannisters on landings and mid-level landings.

(3) Balustrades in or on balconies, terraces, stands in arenas, passageways and similar shall have a minimum height of:

- a) 1.2 m where the height difference between levels is more than 10.0 m; or
- b) 1.0 m where the height difference between levels is up to 10.0 m.

(4) If the difference in height to the terrain or underlying level is less than 3.0 m, other acceptable safety devices than balustrades can be used.

(5) Openings in balustrades shall be a maximum of 0.10 m up to a minimum height of 0.75 m. In balustrades over 1.0 m, openings in the balustrades shall be maximum 0.10 m up to a height of at least 0.25 m below the top of the balustrade. The maximum horizontal distance between a building component and the balustrades affixed to its outer surface shall be 0.05 m.

Section 12-16 Ramps

(1) The width of ramps shall be adapted to the expected transport. The minimum width shall be 0.9 m.

(2) Ramps shall have an even, non-slip surface and a maximum gradient of 1:15. A maximum gradient of 1:12 is permitted for sections of up to 3.0 m. For each 1.0 m of difference in elevation, there must be a horizontal resting level with a length of a minimum of 1.5 m.

(3) Ramps shall have handrails on both sides at one height, with the upper edge 0.8 m above the surface, or at two heights, with the respective upper edges 0.9 m and 0.7 m above the surface. Handrails shall visually contrast with the walls and balustrades. Handrails shall be designed to provide a good grip.

(4) In construction works subject to universal design requirements, the start of a ramp shall be marked across the entire span of the ramp with a minimum luminance contrast of 0.8 between the marking and the background.

Section 12-17 Windows and other glazed areas

(1) Windows and other glazed areas that if broken could cause harm to people or domestic animals shall be protected against collisions and falls up to a minimum height of 0.8 m above the floor. Such protection may take the form of a parapet, safety glass or some other acceptable method. In general the following apply:

- a) In buildings with dwelling units, glazed areas facing balconies, terraces and similar shall be protected. In addition, windows and other glazed areas in exterior walls more than 6.6 m above the terrain or an underlying surface shall be secured.
- b) In construction works subject to universal design requirements, windows and other glazed areas in exterior walls above the terrain shall be protected. In schools and kindergartens, all windows and other glazed areas shall be secured in places where children may be present.
- c) Glazed areas in entrances and communication routes shall be protected in the direction of traffic.

(2) Glazed areas in entrances and communication routes where there may be a risk of collision shall be contrast-marked with glass markings that are visible on both sides and at two levels, with their centres at 0.9 m and 1.5 m above the floor. Patterns in glass markings on doors shall be different from those in glass markings in nearby glazed areas.

(3) Windows in construction works where children may be present shall have a child-safety catch if the window is more than 3.3 m above the terrain or underlying surface.

(4) Windows and glazed areas shall be able to be cleaned and maintained without risk.

Section 12-18 Signage, control and operating panels, handles, fittings and similar

(1) Signage, control and operating panels, handles, fittings and similar shall be easy to understand and operate.

(2) Information shall be easy to read and understand. There shall be a visible contrast between text and its background, with a minimum luminance contrast of 0.8. Important information shall be accessible via text and sound. Sound may be replaced by tactile signs.

(3) Buildings subject to accessible dwelling unit requirements and construction works subject to universal design requirements shall also comply with the following:

- a) Operating panels shall be located at an operating height of between 0.8 m and 1.2 m above the completed floor.
- b) Handles shall be placed at an operating height of between 0.8 m and 1.2 m, be designed with a functional grip and require an operating force that makes them easy to use.
- c) Wash hand basin and shower fixtures shall be able to be operated using one hand. Shower fixtures shall have a thermostat. These requirements do not apply to buildings subject to accessible dwelling unit requirements.
- d) In those cases where, pursuant to the Regulation, there shall be openable windows, at least one window must be able to be operated using one hand. The handle shall require little operating force and be located where it can be reached from a sitting position. This does not apply to construction works for the general public.
- e) In rooms and other similar areas where, from a safety perspective, it is acceptable, a sufficient number of power sockets shall be installed such that they can be operated by people with disabilities.

Chapter 13. Indoor climate and health

I. AIR QUALITY

Section 13-1 General requirements for ventilation

(1) Buildings shall have ventilation that ensures satisfactory air quality through:

- a) ventilation adapted to the rooms' design, intended use, pollution and humidity loads;
- b) satisfactory air quality in the building with regard to odour; and
- c) indoor air that does not contain harmful concentrations of pollutants that pose health hazards or cause irritation.

(2) Buildings and buildings' ventilation systems shall be sited and designed to ensure the quality of supply air. If the quality of the outside air is unsatisfactory it shall be purified before being piped into the building to prevent health risks or the risk of fouling ventilation equipment.

(3) Ventilation shall be adapted to the pollution loads from people.

(4) Air shall not be piped from rooms with lower air quality requirements to rooms with higher air quality requirements.

(5) Air inlets and outlets shall be designed and sited to ensure that pollution from outlets does not re-enter inlets and such that the air entering the inlet is as unpolluted as possible.

(6) Circulating air shall not be used if this results in the transfer of pollutants between rooms where people are present.

(7) Products for construction works shall emit low levels of or no pollution into the indoor air.

Section 13-2 Ventilation in residential buildings

(1) Dwelling units shall have ventilation that ensures an average supply of fresh air at a minimum rate of 1.2 m³ per hour per m² of floor space when the dwelling unit is occupied.

(2) Bedrooms shall be supplied with a minimum of 26 m³ of fresh air per hour per planned bed space when the room is in use.

(3) Rooms not intended for continuous occupancy shall have ventilation that ensures at least 0.7 m³ of fresh air per hour per m² of floor space.

(4) Kitchens, toilets and wet rooms shall have satisfactorily effective vents.

Section 13-3 Ventilation in construction works for the general public and work buildings

(1) An average supply of fresh air at a minimum rate of 26 m³ per hour per person shall be supplied due to the pollution caused by people performing light activities. If activities other than light activities are to be performed, the supply of fresh air shall be adapted such that the air quality is satisfactory.

(2) The minimum supply rate of fresh air due to pollution from materials, products and systems shall be:

- a) 2.5 m³ per hour per m² of floor space when the housing unit or rooms are in use

- b) 0.7 m³ per hour per m² of floor space when the housing unit or rooms are not in use.
- (3) Rooms with polluting activities and processes shall have adequate extraction to maintain satisfactory air quality.

II. THERMAL INDOOR CLIMATE

Section 13-4 Thermal indoor climate

(1) The thermal indoor climate in rooms intended for continuous occupancy shall be regulated in a manner that promotes health and satisfactory comfort when the rooms are used as intended.

(2) In rooms for continuous occupancy it must be possible to open at least one external window or door.

(3) The second paragraph does not apply to rooms in work buildings and public buildings where openable windows are undesirable in light of their use.

III. RADIATION ENVIRONMENT

Section 13-5 Radon

(1) The annual average radon concentration in buildings with rooms for continuous occupancy shall not exceed 200 Bq/m³.

(2) Buildings with rooms for continuous occupancy shall:

- a) have a radon barrier against the ground; and
- b) be designed for pressure reducing measures in the ground below the building that can be activated when the concentration of radon in the indoor air exceeds 100 Bq/m³.

(3) The second paragraph does not apply if it can be documented that the measures are unnecessary to satisfy the requirements in the first paragraph.

IV. SOUND AND VIBRATIONS

Section 13-6 Sound and vibrations

(1) Acoustic conditions shall be satisfactory for people inside construction works and in outside amenity areas designated for recreation and play. Requirements relating to acoustic conditions apply on the basis of their intended use and can be met by ensuring compliance with sound class C in Norwegian Standard NS 8175: 2012 Acoustic conditions in buildings - Sound classification of various types of buildings.

(2) For student accommodation covered by section 1-2, sixth and seventh paragraphs, there is adequate airborne sound insulation between rooms for continuous occupancy in dwelling units and communal areas or communication routes if the minimum weighted, field-measured sound reduction rating (R_w) is 45 decibels.

(3) Vibration conditions shall be satisfactory for people inside construction works and in outside amenity areas designated for recreation and play.

(4) Construction works for the general public and work buildings shall have sound and voice transmission equipment, unless it can be documented that this is unnecessary to achieve good speech intelligibility. Entrances to rooms with amplified audio and speech transmission shall be clearly marked.

V. LIGHT AND VIEWS

Section 13-7 Light

- (1) Construction works shall have adequate access to light.
- (2) Rooms for continuous occupancy shall have adequate access to daylight.
- (3) The second paragraph does not apply to rooms in work buildings and construction works for the general public where the intended use indicates otherwise.

Section 13-8 Views

- (1) Rooms for continuous occupancy shall have a window that provides a satisfactory view.
- (2) The first paragraph does not apply to rooms in work buildings and construction works for the general public where the intended use indicates otherwise.

VI. DAMPNESS, WET ROOMS AND ROOMS WITH WATER INSTALLATIONS

Section 13-9 General requirements relating to damp

Groundwater, surface water, precipitation, service water and humidity shall not penetrate and lead to damp damage, mould and fungi growth or other hygiene problems.

Section 13-10 Moisture from the ground

Necessary measures shall be put in place around building elements below ground level and under floors on the ground to divert seeping water and prevent moisture from penetrating into the construction works.

Section 13-11 Surface water

The terrain around construction works shall have an adequate slope away from the construction work, unless other measures have been taken to divert surface water, including roof water.

Section 13-12 Precipitation

- (1) Façade cladding, windows, doors, and installations that penetrate walls shall be designed to allow precipitation that penetrates them to be drained away and moisture to dry out without damage occurring.
- (2) Roofs shall be designed and constructed with sufficient pitch and drainage so that rain and melt water drain away. Rain, melting snow and ice shall not result in damage to the construction works.
- (3) In ventilated roof construction works where condensation can occur on the underside of the roofing material or where the roofing material is not sufficiently impermeable to prevent the penetration of water, the underlying construction work shall be protected by a watertight sheathing.

Section 13-13 Moisture from indoor air

Building elements and construction works shall be designed and constructed to ensure that moisture damage does not arise as a result of condensed water vapour from indoor air.

Section 13-14 Construction moisture

Products and construction works shall be so dry at the time they are built in or sealed that problems from mould and fungi growth, decaying organic materials or increased degassing do not arise.

Section 13-15 Wet rooms and rooms with water installations

(1) Wet rooms shall be designed and constructed to ensure damage does not occur to construction works or products because of service water, water spills, leaking water and condensation.

(2) The following shall, as a minimum, be complied with in wet rooms:

- a) The room shall have a gully.
- b) Floors shall be sufficiently sloped towards the gully so that service water is led away.
- c) Leaking water shall be made visible and led to the gully.
- d) Underlying construction works that may be adversely affected by moisture shall be protected by a suitable watertight layer. Ducts and similar shall not compromise the tightness.

(3) Other rooms with water installations shall comply with the following:

- a) Floors and walls that may be subjected to water spills, leaking water or condensation shall be made from moisture-resistant materials.
- b) Rooms shall be designed so that any leaks are made visible.
- c) Building elements with built-in cisterns or similar installations shall be protected against moisture penetration from leaks from the installation.

VII. CLEANING BEFORE THE BUILDING IS OCCUPIED

Section 13-16 Cleaning before a building is occupied

Surfaces in rooms, ducts and similar shall be cleaned before a building is occupied. Surfaces shall be free of visible dust and grease.

Chapter 14. Energy

Section 14-1 General requirements

- (1) Buildings shall be designed and constructed such that satisfactory energy performance is facilitated.
- (2) The energy requirements apply to the building's heated gross internal area (BRA).
- (3) U-values shall be calculated as the mean for the various elements of the building.
- (4) The energy requirements do not apply to buildings or parts of buildings that are going to maintain a low indoor temperature, provided its energy needs are kept at a reasonable level.
- (5) In the case of projects where compliance with the requirements in this chapter is incompatible with the preservation of monuments of cultural and/or antiquarian value, the requirements apply insofar as they are appropriate.

Section 14-2 Energy efficiency requirements

- (1) The building's total net energy requirement shall not exceed the energy requirement levels in the table in (a) and shall at the same time satisfy the requirements stipulated in section 14-3.

a)

Table: Energy budgets

Building category	Total net energy requirement [kWh/m² heated gross internal area per year]
Small houses and leisure homes with more than 150 m ² of heated gross internal area	100 + 1,600/m ² heated gross internal area
Block of flats	95
Kindergarten	135
Office building	115
School building	110
University/university college	125
Hospital	225 (265)
Nursing home	195 (230)
Hotel building	170
Sports building	145
Commercial building	180
Cultural building	130
Light industry/workshop	140 (160)

- b) The requirements stated in parentheses apply to floor spaces in which heat recovery and ventilation air pose a risk of spreading pollutants or contagions.

(2) For residential buildings, the requirement for energy efficiency as an alternative to the first paragraph may be met by following the steps 1-9 in the table. The energy-saving measures may be departed from, provided that the building's thermal loss figures do not increase and the requirements in section 14-3 are met.

Table: Energy-saving measures

	Energy-saving measures	Small house	Block of flats
1.	U-value outer walls [W/(m ² K)]	≤ 0.18	≤ 0.18
2.	U-value roof [W/(m ² K)]	≤ 0.13	≤ 0.13
3.	U-value floors [W/(m ² K)]	≤ 0.10	≤ 0.10
4.	U-value windows and doors [W/(m ² K)]	≤ 0.80	≤ 0.80
5.	Proportion of window and door areas of heated gross internal area	≤ 25%	≤ 25%
6.	Annual mean temperature efficiency ratio for heat recovery systems in ventilation systems (%)	≥ 80%	≥ 80%
7.	Specific fan power (SFP) in ventilation systems [kW/(m ³ /s)]	≤ 1.5	≤ 1.5
8.	Air leakage rate per hour at 50 Pa pressure difference	≤ 0.6	≤ 0.6
9.	Normalised thermal bridge value, where m ² is stated as heated gross internal area [W/(m ² K)]	≤ 0.05	≤ 0.07

(3) Multifunctional buildings shall be divided up into zones based on building category, and the respective energy budgets shall be complied with within each zone.

(4) Buildings' energy requirement and heat loss figures shall be calculated in accordance with Norwegian Standard NS 3031:2014 Calculation of energy performance of buildings – Method and data.

(5) An energy budget must be calculated for non-residential buildings using the actual figures for the specific building. These calculations are in addition to control calculations made using standardised values.

(6) Blocks of flats with a central heating system and non-residential buildings shall have dedicated energy meters for heating and hot water.

Section 14-3 Minimum requirements for energy efficiency

(1) The following requirements must be met:

Table: Minimum requirements

U-value outer walls [W/(m ² K)]	U-value roof [W/(m ² K)]	U-value floors on ground and facing open air [W/(m ² K)]	U-value windows and doors, including frames [W/(m ² K)]	Leakage figures at 50 Pa pressure differential [air change per hour]:
≤ 0.22	≤ 0.18	≤ 0.18	≤ 1.2	≤ 1.5

(2) Pipes, equipment and ducts connected to the building's heating system shall be insulated. The thickness of the insulation shall be economically optimal, calculated in accordance with a Norwegian standard or an equivalent European standard.

Section 14-4 Requirements for energy supply solutions

(1) The installation of fossil fuel heating installations is not permitted.

(2) Buildings with a heated gross internal area of more than 1,000 m² shall:

- a) have multi-source heating systems; and
- b) be adapted for use of low-temperature heating solutions.

(3) The requirements in the second paragraph do not apply to small houses.

(4) Dwelling units in small houses must have a chimney. This requirement does not apply if:

- a) the dwelling unit has a water-borne heating system; or
- b) the annual net energy requirement for heating does not exceed the requirements for passive houses, calculated as specified in Norwegian Standard NS 3700:2013 Criteria for passive houses and low energy buildings – Residential buildings.

Section 14-5 Exceptions and requirements for special projects

(1) For freestanding buildings with a heated gross internal area of up to 70 m² only sections 14-1, 14-3 and 14-4, first paragraph, of this chapter apply.

(2) Leisure homes with a heated gross internal area of up to 70 m² are exempt from the requirements in chapter 14.

(3) For leisure homes with a heated gross internal area of between 70 m² and 150 m², only the requirements in sections 14-1, 14-3 and 14-4, first paragraph, of this chapter apply.

(4) Residential buildings and leisure homes with log outer walls are exempt from the requirements in sections 14-2 and 14-3. Leisure homes with a heated gross internal area of between 70 m² and 150 m² and log outer walls are also exempt from the requirements in section 14-4, fourth paragraph. The following requirements apply regarding energy efficiency:

- a) Leisure homes with a heated gross internal area of more than 150 m² and residential buildings with log outer walls

Table: Residential buildings and leisure homes

Dimension external walls:	U-value roof [W/(m²K)]	U-value floors on ground and above open air [W/(m²K)]	U-value windows and doors, including frames [W/(m²K)]	Leakage figures at 50 Pa pressure differential (air change per hour)
≥ 8" logs	≤ 0.13	≤ 0.10	≤ 0.80	≤ 4.0

- b) Leisure homes with a heated gross internal area of between 70 m² and 150 m² and log outer walls

Table: Leisure homes

Dimension external walls:	U-value roof [W/(m²K)]	U-value floors on ground and above open air [W/(m²K)]	U-value windows and doors, including frames [W/(m²K)]	Leakage figures at 50 Pa pressure differential (air change per hour)
≥ 8" logs	≤ 0.13	≤ 0.15	≤ 1.2	≤ 4.5

For applications for leisure homes of more than 70 m² and up 150 m² that the municipality receives before 1 January 2018, the developer can choose to comply with the provisions in section 14-6 of the Regulation of 26 March 2010 No. 489 on technical requirements for construction works (TEK10), which applied before 1 January 2016.

(5) The general requirement relating to energy efficiency in section 14-2, first paragraph, may be increased by up to 10 kWh/m² of heated gross internal area per year. This requires that renewable electricity for the building is produced on the property, at least 20 kWh/m² heated gross internal area per year.

Chapter 15. Installations and plants

I. HEATING AND COOLING INSTALLATIONS

Section 15-1 General requirements for heating and cooling installations

(1) Heating and cooling installations shall be designed and constructed such that:

- a) they comply with safety and indoor environment requirements;
- b) they perform as intended;
- c) they can be regulated and are adapted for energy-efficient operation;
- d) they do not increase the risk of fire and explosions;
- e) heat loads on building elements do not pose a risk of fire or impair the performance of building elements;
- f) they are protected against leaks; and
- g) they have safe, facilitated access for easy and efficient cleaning and maintenance of the installation, including safe sweeping.

(2) Closed systems for heating and cooling installations shall be pressure tested before delivery to the end user.

(3) Heating installations shall:

- a) be installed on a base that can withstand the expected weight of the installation;
- b) have sufficient distance between the installation and flammable materials to prevent ignition; and
- c) be constructed to ensure protection against damage or injury due to high surface temperature.

(4) Heating installations that are documented for use without a flue shall only be sited in rooms with adequate ventilation.

(5) Heating installations based on combustion shall:

- a) be energy-efficient under normal operating conditions;
- b) be connected to a flue unless it can be documented that such connection is not necessary;
- c) have an acceptable flue-gas temperature;
- d) be adapted to the temperature class of the flue or chimney; and
- e) be installed in a furnace room, unless they are designed for installation in another room.

(6) Fireplaces shall not be sited in rooms where combustible gases or dust particles can occur that could result in dust explosions, unless the fireplace is designed for this.

(7) Open fireplaces without doors shall have a tight fitting flue gas damper.

Section 15-2 Central heating installations

(1) Central heating installations shall:

- a) be leak-tight at the maximum pressure that can occur;
- b) have the necessary safeguards against excessively high pressures and temperatures; and
- c) have satisfactory sectioning and shut-off capabilities.

(2) Connection to the water supply system shall be effected in a manner that prevents backflow from the central heating installation.

(3) Supply air for hot air units located in furnace rooms shall be taken from outside through an airtight duct.

Section 15-3 Flues and chimneys shall

(1) Flues and chimneys shall be designed and constructed to ensure heating installations can function satisfactorily.

(2) Flue gases shall be conducted out from construction works in a manner that does not pose a risk of igniting the construction works or neighbouring construction works.

(3) Chimney flues shall have a constant cross-section from base to top.

(4) Moulded or brick-lined chimneys shall be constructed on a load-bearing structure of incombustible materials.

(5) Flues and chimneys shall:

- a) be sufficiently leak-tight;
- b) have outer surfaces that are sufficiently accessible for cracking to be detected;
- c) be able to move freely in relation to adjoining building elements; and
- d) have satisfactory opportunities for sweeping and clearing out soot.

Section 15-4 Heat pumps and cooling installations

(1) Heat pumps and cooling installations shall be designed and constructed to prevent harm occurring to people, the environment, installations or construction works.

(2) Installations shall:

- a) be leak-tight and have the necessary safeguards against abnormal operating conditions;
- b) be able to be regulated automatically and be adapted for energy-efficient operation; and
- c) have a sectioning system with a stop valve for gas and fluid.

(3) Machinery, refrigerated storage rooms and deep-freeze storage rooms with large quantities of refrigerants, as well as other rooms that may be exposed to leaks of refrigerants, shall have:

- a) gas detectors; and
- b) an emergency ventilation system.

II. INDOOR WATER AND DRAINAGE INSTALLATIONS

Section 15-5 Indoor water installations

- (1) Installations shall be designed and constructed to ensure good health is safeguarded through:
 - a) choosing products that do not release substances that may degrade the quality of drinking water or pose a risk to health;
 - b) prevention of bacterial growth;
 - c) water temperatures that cannot cause scalding injuries; and
 - d) the installation being protected against backflow and penetration by impure fluids, substances or gases and against back-suction and penetration by water from other water sources.
- (2) Equipment and pipes shall perform as intended at normal operating pressure.
- (3) Installations shall:
 - a) be designed for future maintenance and be easy to replace;
 - b) withstand internal and external loads and chemical impacts;
 - c) be protected against frost; and
 - d) be sufficiently leak-tight.
- (4) Leaks shall be easy to detect and not result in damage to other installations and building elements.
- (5) There shall be a satisfactory means of shutting the installation off with stopcocks that are readily accessible and marked.

Section 15-6 Indoor drainage installations

- (1) Installations shall:
 - a) be designed and constructed to ensure waste water is drained at the same rate as the water is supplied;
 - b) be designed for a high level of operational reliability and for efficient operation and maintenance;
 - c) withstand internal and external loads and chemical impacts;
 - d) be protected against frost; and
 - e) be sufficiently leak-tight.
- (2) All equipment connected to the waste water mains shall have water traps or an equivalent function.
- (3) The water level in the lowermost trap shall be at the height above the inside top of the common main at the branching point necessary to prevent backflow.
- (4) Drainage installations shall have a minimum of one air duct leading out to the open air without a water trap, unless it can be documented that the drain can function satisfactorily when another solution is used.

(5) Installations shall have the necessary cleaning points for cleaning. Waste water pipes shall be self-cleaning.

III. OUTSIDE WATER SUPPLY AND SEWERAGE INSTALLATIONS

Section 15-7 Outside water supply systems with mains network

(1) Installations shall be designed and constructed to ensure good health is safeguarded through:

- a) choosing products that do not release substances that may degrade the quality of drinking water or pose a risk to health;
- b) the water mains being protected against backflow and penetration by impure fluids, substances or gases.

This also applies to back-suction and penetration by water from another water source or installation.

(2) Installations shall be dimensioned to ensure sufficient volumes and sufficient pressure to meet water requirements, including for firefighting.

(3) Water-supply installations shall:

- a) be designed for a high level of operational reliability and for efficient operation and maintenance;
- b) withstand internal and external loads and chemical impacts;
- c) be protected against frost; and
- d) be sufficiently leak-tight at the maximum operating pressure.

(4) Connecting pipes for water-supply installations that are no longer in use shall be disconnected.

Section 15-8 Outside sewerage installations with mains network. Surface water and drainage water

(1) Surface water and drainage water shall, as far as possible, be infiltrated or managed locally in some other manner to ensure water balance in the area and avoid overburdening sewerage installations.

(2) Surface water and drainage water shall be drained in a manner that ensures overflowing or other nuisances do not occur at design rain loads.

(3) Construction works shall be protected against overflows due to high water levels or overpressure in sewerage pipes. Bothersome odours shall not arise.

(4) Sewerage installations shall:

- a) be designed and constructed to ensure that waste water is drained at the same rate as the water is supplied and in a manner that safeguards good hygiene and health;
- b) be designed for a high level of operational reliability and for efficient operation and maintenance;
- c) be self-cleaning and have the necessary points for inspection and cleaning;
- d) withstand internal and external loads and chemical impacts;
- e) be protected against frost; and

f) be sufficiently leak-tight.

(5) Connecting pipes for sewerage installations that are no longer in use shall be disconnected.

IV. LIFTING EQUIPMENT

Section 15-9 Lifts

(1) The safety features designed into lifts, including accessibility requirements, shall comply with the Regulation on the sale and documentation of lifts and safety components for lifts.

(2) Where a lift is required pursuant to section 12-3, the lift shall be adapted for people with disabilities. The size of the lift car shall be dimensioned for its intended use. The clearance width in a lift's door opening shall be a minimum of 0.9 m. The surrounding walls shall be sufficiently visible in relation to the lift.

(3) Lift installers and the enterprises responsible for construction, shall ensure that they provide each other with the necessary information of relevance for the design and dimensioning of the lift systems and structural engineering factors. The exchange of information shall ensure the proper operation and safe use of lifts.

(4) Installations, rooms and shafts for lifts shall not be exposed to temperatures and environments that could create operating problems or make maintenance difficult.

(5) Lifts shall be fitted with an alarm connected to a 24-hour monitoring system.

(6) Lifts shall be designed and constructed such that:

- a) they do not expose users and personnel performing overhauls, repairs and safety inspections to risks; and
- b) do not damage building elements.

Section 15-10 Rooms and shafts for lifts

(1) Lift shafts, machinery rooms and rooms that are used for other equipment shall:

- a) shall be easily accessible for operation, maintenance and safety inspections;
- b) be kept locked;
- c) have surfaces that are light and easy to keep clean; and
- d) have a ventilation system, which is also satisfactory in the event of shutdowns.

The ventilation systems shall not be used to ventilate smoke from rooms that do not form part of the lift installation.

(2) Lift shafts shall also:

- a) not contain pipe installations, cable installations or equipment other than what is necessary to ensure the proper operation and safe use of lifts; and
- b) have satisfactory ventilation.

(3) Machinery rooms and rooms that are used for other equipment shall also:

- a) have clearly marked access points;
- b) be dimensioned to allow the replacement of lift equipment;
- c) have satisfactory room height;
- d) have outwards opening doors; and
- e) have hatches in the floor that are secured.

Machinery rooms and machinery cabinets for hydraulic lifts shall be ventilated to the open air through separate ducts and shall be constructed to ensure any oil leaks are discovered and collected.

Section 15-11 Unobstructed safety spaces for lifts

(1) There shall be an unobstructed safety space above and below the lift's upper and lower positions.

(2) In existing buildings where it is not possible to achieve satisfactory safety spaces, other appropriate means for avoiding the risk of injury to personnel shall comply with the Regulation on the sale and documentation of lifts and safety components for lifts. When new lifts are installed in existing buildings, existing safety spaces shall not be reduced.

Section 15-12 Lifting platforms

(1) The safety features designed into lifting platforms shall comply with Directive 2006/42/EC (Machinery Directive).

(2) Lifting platforms shall:

- a) have an alarm connected to a 24-hour monitoring system; and
- b) have a ventilation system, which is also satisfactory in the event of shutdowns.

(3) The size of the load carrier shall be dimensioned for its intended use. The clearance width in a lifting platform's door opening shall be a minimum of 0.9 m. The surrounding walls shall be sufficiently visible in relation to the lifting platform.

(4) Installations, rooms and shafts for lifting equipment shall not be exposed to temperatures and environments that could create operating problems or make maintenance difficult.

Section 15-13 Escalators and moving pavements

(1) The safety features designed into escalators and moving pavements shall comply with Directive 2006/42/EC (Machinery Directive).

(2) On the floor in front of the start of moving pavements and escalators there shall be a tactile warning area that is sufficiently visible. On the floor after the end of moving pavements and escalators there shall be a tactile awareness area that is sufficiently visible.

(3) If escalators and moving pavements are located in open spaces such that the fall height from the facility's balustrade exceeds 3.0 m, suitable safeguards against falls shall be installed.

(4) Escalators and moving pavements shall not be exposed to temperatures and environments that could create operating problems or make maintenance difficult.

Section 15-14 Stair lifts

(1) The safety-related design of stair lifts shall comply with Directive 2006/42/EC (Machinery Directive).

(2) Stair lifts shall not be subjected to temperatures and environments that may create operating problems or make maintenance difficult.

Section 15-15 Connection between lifting equipment and harmonised standards

(1) The provision applies to lifts and other lifting equipment that are defined in the Regulation of 13 April 2016 No. 373 on marketing and documentation of lifts and safety components for lifts and section 16 of the Regulation of 17 December 2013 No. 1579 on documentation of construction products.

(2) Lifts and other lifting equipment that comply with a harmonised standard are also assumed to satisfy the basic health, safety and usability requirements covered by this standard. For lifts, the basic health, safety and usability requirements are stipulated in Appendix 1 of the Regulation of 13 April 2016 No. 373 on the marketing and documentation of lifts and safety components for lifts. For other lifting equipment, the basic health, safety and usability requirements are stipulated in Annex 1 of Directive 2006/42/EC (Machinery Directive).

(3) A supplier may also choose to comply with only parts of a harmonised standard, although in these circumstances the assumption concerning compliance with the basic health, safety and usability requirements shall only apply to those parts of the standard that are complied with.

(4) If lifts or other lifting equipment do not comply with a harmonised standard, the supplier must verify in some other manner that the products meet the basic health, safety and usability requirements in the relevant Directive.

Chapter 16. Lift safety inspections

Section 16-1 Lifting equipment. Administrative provisions

(1) In addition to the requirements pursuant to section 29-9 of the Planning and Building Act, the following apply to lifts, escalators, moving walkways, lifting platforms and stair lifts:

- a) The municipality shall issue permission for operation before lifting equipment is used.
- b) Lifting equipment shall not be used after an accident, remodelling or being moved until a safety inspection body has performed a safety inspection and the municipality has issued an operating permit.
- c) When faults in an installation may pose an immediate danger to user safety, the lifting equipment shall be taken out of service and the matter reported to the municipality and owner.
- d) Owners shall immediately report accidents to the municipality and safety inspection body. The safety inspection body shall report accidents and incidents to the national installation register.
- e) Completed repair work shall be logged in a logbook kept for each piece of lifting equipment. The logbook shall be available during safety inspections.
- f) Owners shall ensure safety inspections are carried out at least every second year when the lifting equipment is in operation. Safety inspections may also be carried out as spot checks of lifting equipment in operation.
- g) In the event of a change of owner and when an installation is permanently taken out of service, the owner shall report this to the municipality and national installation register.

(2) The following apply to lifting platforms and stair lifts inside a dwelling unit:

- a) Owners may install lifting platforms or stair lifts inside dwelling units themselves, cf. section 4-1, first paragraph, point (b) (4), of the Regulation of 26 March 2010 No. 488 relating to building applications.
- b) Owners of lifting equipment are responsible for ensuring lifting equipment in use is in safe working order and that it is maintained and inspected.
- c) Owners shall immediately report accidents/incidents to the municipality and national installation register.

(3) When a fault in the installation may pose a danger to user safety, the lifting equipment shall be taken out of service.

Section 16-2 Requirements for inspectors who perform periodic safety inspections

(1) Periodic safety inspections may be performed by:

- a) safety inspectors employed by municipal lift inspection schemes;
- b) national lift inspection schemes with authorisation from the Ministry;
- c) national lift inspection schemes that carry out safety inspections on a temporary basis; and
- d) the Norwegian Building Authority.

(2) Safety inspectors shall be approved by the Norwegian Building Authority.

(3) Safety inspectors shall as a minimum have training and practical experience pursuant to the following table:

Table: Qualification requirements for safety inspectors

Alternative	Training	Practical experience
1	Diploma from a 3-year college of engineering, machinist or electrician course or equivalent	A minimum of 5 years' relevant experience in installing, maintaining and repairing lift installations
2	Diploma from a 2-year technical vocational school, relevant course or equivalent	A minimum of 5 years' relevant experience in installing, maintaining and repairing lift installations
3	Lift installer craft certificate	A minimum of 5 years' all-round, relevant professional experience after passing the examination

(4) Approval of the safety inspectors is given for 2 years and upon renewal is assessed i.a as follows

- a) if the applicant has worked as a safety inspector
- b) if the applicant can document updated knowledge of lifting equipment and related regulations.

Section 16-3 Conditions for recognition as a lift safety inspector for lifts for people with professional qualifications from another EEA member state

(1) The purpose of this provision is to implement the rights and obligations pursuant to Directive 2005/36/EC on the recognition of professional qualifications. The provision concerns approval to carry out periodic lift safety inspections for applicants who have acquired their professional qualifications in another EEA member state. This provision also pertains to the right to the temporary and incidental provision of services in Norway.

(2) The following definitions apply in this provision:

- a) *regulated profession*: A professional activity, access to which or the pursuit of which is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications.
- b) *professional qualifications*: Qualifications attested by evidence of formal qualifications, an attestation of competence referred to in article 11, point (a) (i) of the directive and/or professional experience.
- c) *evidence of formal qualifications*: Diplomas, certificates and other documentation issued by an authority in a member state designated pursuant to legislative, regulatory or administrative provisions of that member state. The evidence of qualifications shall document successful completion of professional training that is mainly acquired in the EEA. Evidence of formal qualifications issued by a third country shall also be regarded as evidence of formal qualifications if the holder has 3 years' professional experience in the profession concerned on the territory of the member state that recognised the evidence.

- d) *professional experience*: The actual and lawful pursuit of the profession concerned in a member state.
- e) *probationary period*: The pursuit of a regulated profession in the host member state under the supervision of a qualified member of that profession.
- f) *aptitude test*: A test limited to the professional knowledge of the applicant, conducted by the competent authorities of the host member state with the aim of assessing the ability of the applicant to pursue a regulated profession in that member state.

(3) Nationals of an EEA member state have the right to recognition as a periodic lift safety inspector if this derives from the rules of Directive 2005/36/EC, even if they do not have qualifications equivalent to the requirements in section 16-2, third paragraph. Recognition as a safety inspector shall be granted if the activity concerned has previously been pursued:

- a) for 6 consecutive years on a self-employed basis or as a manager of an undertaking, or
- b) for 3 consecutive years on a self-employed basis or as a manager of an undertaking, where the beneficiary proves that he has received previous training of at least 3 years for the activity in question, evidenced by a certificate recognised by the Member State or judged by a competent professional body to be fully valid, or
- c) for 4 consecutive years on a self-employed basis or as manager of an undertaking, where the beneficiary can prove that he has received, for the activity in question, previous training of at least at 2 years' duration, attested by a certificate recognised by the Member State judged by a competent professional body to be fully valid, or
- d) for 3 consecutive years on a self-employed basis, if the beneficiary can prove that he has pursued the activity in question on an employed basis for at least 5 years, or
- e) for 5 consecutive years in an executive position, of which 3 years involved technical duties and responsibility for at least one department in the company, of the beneficiary can prove that he has received, for the activity in question, previous training of at least 3 years' duration, as attested by a certificate recognised by the Member State or judged by a competent professional body to be fully valid.

(4) In cases (a) to (d) in the third paragraph, the activity must not have ended more than 10 years before the date on which the complete application was submitted.

(5) Applicants who do not satisfy the requirements in section 16-2, third paragraph, can apply for alternative approval as a periodic lift safety inspector. The applicant shall submit evidence of qualifications that are as a minimum equivalent to the level of qualifications immediately below the qualification requirements pursuant to section 16-2, third paragraph. In addition, equalisation measures such as those described in the seventh paragraph can be required in such cases. The following five levels of qualifications apply when comparing levels of training:

A – evidence of formal qualifications

B – certificate of completion of upper secondary education

C – examination certificate from education of at least 1 year after upper secondary education

D – examination certificate from education of at least 3 years and at most 4 years at university or other institution of higher education

E – examination certificate from education of at least 4 years at university or other institution of higher education

(6) The qualification requirements pursuant to section 16-2, third paragraph, alternative 1 correspond to level D, alternative 2 corresponds to level C, and alternative 3 corresponds to level B. Applicants who have worked as a lift safety inspector in an EEA member state where this profession is not regulated are entitled to recognition if the applicant has pursued the profession on a full-time basis for at least 2 years, or for an equivalent period on a part-time basis, during the past 10 years. Applicants must submit evidence of professional qualifications that document that the applicant can work as a periodic lift safety inspector.

(7) For approval pursuant to the fifth and sixth paragraphs, the applicant may be required to complete a probationary period of at most 3 years or pass an aptitude test, if:

- a) the duration of the training of which the applicant provides evidence under the terms of section 16-2, third paragraph, of the Regulation is at least 1 year shorter than that required by the host member state, or
- b) the training that he has received covers substantially different matters than those covered by the evidence of formal qualifications required in the host Member State, or
- c) the regulated profession in the host member state includes one or more regulated professional activities which do not exist in the equivalent profession in the applicant's home state, cf. Directive 2005/36/EC, article 4 no. 2, and that difference consists of specific training which is required in the host member state and which covers substantially different matters than those covered by the applicant's attestation of competence or evidence of formal qualifications.

(8) If the host member state makes use of the option for equalisation measures, it must offer the applicant the choice between a probationary period and an aptitude test.

(9) The approving authority shall require an applicant to submit the following in order to approve professional qualifications:

- a) proof of the person concerned's nationality
- b) copies of certificates of qualifications or of the evidence of formal qualifications that entitle the person concerned to pursue the regulated profession, as well as certification of the person concerned's professional experience.

(10) The Norwegian Building Authority shall process applications as quickly as possible. Reception of the application shall be confirmed within 1 month after receipt of the application and the applicant informed of any missing documents. A decision shall be taken no later than within 4 months after all the necessary documentation has been presented. Even if a person satisfies the qualification requirements stipulated for approval as a periodic lift safety inspector, the Norwegian Building

Authority can reject an application for approval on the basis of inadequate documentation. Rejections of applications can be appealed by parties or others with a legal appeal interest.

Section 16-4 Temporary practice of safety inspections

(1) Periodic lift safety inspections can be carried out on a temporary and incidental basis by people legally established in another EEA member state with a view to carrying out such activities there, cf. article 5. The service provision's temporary nature shall be assessed from case to case based on the service's duration, frequency, regularity and continuity. Service providers shall inform the Norwegian Building Authority the first time they provide the service or if a material change occurs to the situation substantiated by the documents, by submitting a written provisional report accompanied by the following documents:

- a) proof of the service provider's nationality
- b) attestation certifying that the person concerned is legally established in another EEA member state for the purpose of pursuing the activities concerned, and that the person concerned is not at the time of submission prohibited from practising, even temporarily
- c) professional qualifications
- d) if the profession is not regulated in the state in which the service provider has established his activities, any means of proof that the service provider has pursued the activity concerned for at least 2 years during the previous 10 years.

(2) The Norwegian Building Authority shall be notified each year the service provider wishes to pursue the profession. The Norwegian Building Authority may verify the service provider's professional qualifications before the service is provided for the first time to prevent serious harm to the health or safety of the service recipient due to deficient professional qualifications. This verification shall not exceed what is necessary for the purpose. The Norwegian Building Authority shall inform the service provider of whether or not his professional qualifications will be verified within 1 month after receiving the necessary documentation or of the results of such verification. In those cases where difficulties exist that will result in delays, the service provider shall be informed of the reasons for them and the schedule for a decision. The decision does not need to be taken within 2 months of receipt of complete documentation. A service provider who has not received a decision regarding verification of professional qualifications by this deadline is entitled to pursue the profession.

Section 16-5 Language requirements

The Norwegian Building Authority may require a person granted approval as a lift safety inspector pursuant to section 16-3 or who will practise temporary service provision pursuant to section 16-4 to document that he or she has adequate knowledge of Norwegian to practise the profession.

Section 16-6 Installation register

A register shall be kept of installed lifting equipment and accidents involving lifting equipment. Owners of lifting equipment shall report installations to the municipality and the body that maintains the register. The register-keeping body shall be nominated by the Norwegian Building Authority.

Section 16-7 Administrative cooperation

(1) The Norwegian Building Authority shall, insofar as it is feasible, inform the competent authority of another EEA member state where the applicant performs tasks as defined in the Regulation should the professional be subject to administrative reactions, penal sanctions or any other serious circumstances that may have consequences for the performance of their profession. If a competent authority in another EEA member state has requested information, such information shall be given as soon as possible and not later than 2 months following the receipt of the request.

(2) The relevant authorities in the host country and the country of origin shall ensure close co-operation and the exchange of all information necessary in order to facilitate the application of directive 2005/36/EC. The exchange of information shall be treated confidentially.

Section 16-8 Price adjustments

The Ministry may in Regulations set a maximum price for safety inspections of lifts if this is deemed necessary to avoid disproportionate regional price differences and provided this may be considered by the Ministry to have consequences for user safety.

Chapter 17. Entry into force and transitional provisions

Section 17-1 Entry into force

(1) The Regulation shall enter into force on 1 July 2017.

(2) From the same date, the Regulation of 26 March 2010 No. 489 on technical requirements for construction works shall be repealed.

(3) From 1 July 2021, section 8-10 Siting of construction works shall be repealed.

Section 17-2 Transitional provisions

(1) For applications that the municipality receives before 1 January 2019, the developer may choose whether the entire project shall comply with this Regulation or with the provisions of the Regulation of 26 March 2010 No. 489 on technical requirements for construction works. Developers who choose Technical Regulations (TEK10) shall indicate this in the application for permission for a project.

(2) On application, the municipality may also permit compliance to be based on the provisions of the Regulation of 26 March 2010 No. 489 on technical requirements for construction works for applications received after 1 January 2019. This only applies to projects where planning has commenced before 1 July 2017 and where the application of this Regulation will result in extensive and expensive alterations.

