

23213

**Directive
on building regulations for the construction and operation of hospitals (Hospital
Construction Directive – KhBauR)***

Circular of the
Ministry for Home Affairs, Municipal Affairs, Construction and Digitalisation
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of 8 December 2025

1

Preliminary remarks

The Hospital Construction Directives are published in accordance with Section 87(1)(3) of the Federal Building Code 2018 of 21 July 2018 (Law and Ordinance Gazette NRW. p. 421), last amended by Article 1 of the Law of 31 October 2023 (Law and Ordinance Gazette NRW. p. 1172), hereinafter referred to as BauO NRW 2018, as a special administrative regulation to Section 50(1) BauO NRW 2018.

Hospitals are, according to Section 50(2)(9) of BauO NRW 2018, large special buildings to which, according to Section 50(1) of BauO NRW 2018, special requirements may be imposed in individual cases and exemptions may be granted.

The directive facilitates the planning process for building owners, designers and specialist planners, and the assessment and approval of hospitals for authorities or fire protection engineers. It relieves building owners of the burden of providing evidence for any intended exemptions from the otherwise applicable provisions of BauO NRW 2018. It enables a uniform assessment of similar risks in the building permit procedure and thus leads to the same results in similar cases.

The special requirements and exemptions provided for in the directive are intended for hospitals that in general have unhindered means of escape in the event of danger, or for hospitals in which the doors in the escape routes can generally be opened easily and to their full width from the inside (see point 5.5(4)). However, the directive takes into account that in hospitals there may be a need for doors that must be kept locked for the safe accommodation of persons and that therefore must be able to be opened by personnel in the event of danger (see point 5.5(5) to (8)). The directive is not designed for hospitals that cannot be easily exited, such as hospitals in penal or forensic psychiatric care. In such cases, special requirements beyond those stipulated in the directive may be necessary, which must be decided on a case-by-case basis.

In the case of alterations to existing buildings, it must be examined whether these are substantial and have an impact on the existing fire protection concept, and furthermore whether this directive can be applied to specific areas or whether a comprehensive assessment is necessary.

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Scope

* Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241 of 17/09/2015, p. 1).

This directive applies to the construction and operation of hospitals and other buildings with a corresponding purpose. This directive does not apply to

- a) hospitals with no more than six patient beds,
- b) general areas according to point 3.4 within hospitals or
- c) rooms with special use according to point 3.5 within hospitals.

Section 47(5) BauO NRW 2018 remains unaffected.

3

Definitions and general requirements

3.1

Hospitals

Hospitals within the meaning of this directive are those as defined in Section 2(1) of the Hospital Financing Act [Krankenhausfinanzierungsgesetz] as promulgated on 10 April 1991 (Federal Law Gazette I p. 886), as last amended by Article 8 of the Act of 28 October 2025 (Federal Law Gazette 2025 I No 259). Section 3 of the Hospital Financing Act applies accordingly.

3.2

Nursing care areas

Nursing care areas are structurally enclosed areas where patients are primarily accommodated, catered for, cared for and treated as inpatients. Nursing care areas may have necessary corridors or be designed as room groups without necessary corridors, provided they meet the general requirements of point 3.10(1) and (2) for room groups in nursing care areas.

3.3

Examination and treatment areas

Examination and treatment areas are structurally enclosed areas where diseases, ailments, or physical injuries are primarily examined or treated. Examination and treatment areas may have necessary corridors or be designed as room groups without necessary corridors, provided they meet the general requirements of point 3.10(3) and (4), for room groups in examination and treatment areas. Examination and treatment areas are differentiated into

- a) examination and treatment areas for patients who are generally able to rescue themselves without delay, and
- b) examination and treatment areas for patients who are generally dependent on external rescue and whose transfer requires preparation time with external assistance.

3.4

General areas

General areas are structurally enclosed areas in which neither are patients primarily accommodated, catered for, cared for and treated as inpatients, nor are illnesses, ailments or physical injuries primarily examined or treated. Examples of general areas include entrance halls, offices or administrative rooms, cafeterias, canteens, rooms for the supply of medicines, rooms for the supply of comestibles, bed preparation rooms, storage rooms, technical rooms and lecture theatres. This directive does not address the specific requirements and accommodations that may be necessary for general areas. Unless general areas are regulated by other special building regulations, such as lecture theatres with more than 200 visitor seats, which are governed by the provisions of Part 1 of the Special Building Ordinance of 2 December 2016 (Law and Ordinance Gazette NRW. 2017 p. 2, corr. p. 120 and 2020 p. 148), as amended by the Ordinance of 2 August 2019 (Law and Ordinance Gazette NRW. p. 488, corr. 2020 p. 148), these general areas are assessed on a case-by-case basis as unregulated special structures on the basis of Section 50(1) BauO NRW 2018.

3.5

Rooms with special use

Rooms with special use differ from nursing care areas, examination and treatment areas, and general areas due to particular hazards and risks. This includes, in particular, specific hazards and risks arising from the user group. Examples of rooms with special uses include rooms for radiotherapy and isolation areas. This directive does not address the specific requirements and accommodations that may be necessary for rooms with special uses. Unless rooms with special uses are regulated by other special building regulations, these rooms with special uses are to be assessed on a case-by-case basis as unregulated special buildings on the basis of Section 50(1) of BauO NRW 2018.

3.6

Room groups

Room groups are structurally enclosed areas that do not necessarily have corridors and in which communally used spaces can be created.

3.7

Patient rooms

Patient rooms are structurally enclosed spaces intended for the non-temporary stay of patients. Examples of patient rooms include single rooms, double rooms, and multi-bed rooms.

3.8

Examination and treatment rooms

Examination and treatment rooms are structurally enclosed spaces where diseases, ailments, or physical injuries are primarily examined or treated.

3.9

Evacuation sections

Evacuation sections are structurally enclosed areas of hospitals that in the event of danger allow patients to be moved from the evacuation section affected by the danger to another evacuation section (horizontal evacuation).

3.10

General requirements for room groups

In nursing care areas according to point 3.2, a room group may not have more than ten patient beds and no more than 500 m² net floor area, hereinafter referred to as NFA, if horizontal evacuation in beds is possible in one direction. In nursing care areas according to point 3.2, a room group may not have more than twelve patient beds and no more than 600 m² NFA if horizontal evacuation in beds is possible in two directions.

In examination and treatment areas according to point 3.3(3)(a) a room group may not have more than 800 m² NFA. In examination and treatment areas according to point 3.3(3)(b) a room group may either be intended for no more than six patients or have no more than 500 m² NFA. Each room group may only extend over one floor.

3.11

General requirements for evacuation sections

Each floor must have at least two evacuation sections. Evacuation sections can comprise several room groups and are independent of fire compartments. Each evacuation section must be dimensioned so that the required proportion of patients from the adjacent evacuation section can also be temporarily accommodated. The evacuation plan according to point 7.3.2 must demonstrate that in the event of danger horizontal evacuation is possible. Adjacent evacuation sections must be directly connected along the escape routes and be accessible at all times. Each evacuation section must have its own necessary stairwell or exit to the outside.

4

Requirements for components

4.1

Load-bearing and stiffening walls and columns

Unless otherwise stipulated in this directive, the requirements of BauO NRW 2018 for load-bearing and stiffening walls and columns in buildings of Building Class 5 shall apply. These components must be made of non-combustible building materials. In buildings with only one floor, load-bearing and stiffening walls and columns must be at least fire-resistant and be made of non-combustible building materials.

4.2

Exterior walls

Hospitals must have exterior walls made entirely of at least flame-resistant building materials, while buildings of Building Classes 4 and 5 must be made of non-combustible building materials. This does not apply to

a) doors and windows,

b) joint seals, and

c) combustible insulation materials in non-combustible, closed, linear, or rod-shaped profiles of the exterior wall constructions.

4.3

Partition walls, walls of patient, examination, treatment and operating rooms

Partition walls are required for separating

- a) nursing care areas,
- b) examination and treatment areas,
- c) general areas,
- d) evacuation sections,
- e) room groups,
- f) rooms with special use as well as
- g) storage rooms with more than 20 m² NFA.

Partition walls according to sentence 1 must have the fire resistance of the load-bearing and stiffening components of the floor and must be made of non-combustible building materials. Openings in partition walls according to sentence 1 must have fire-resistant, smoke-tight and self-closing closures.

Walls of

- a) patient rooms as well as
- b) examination and treatment rooms

must have the construction type of fire-resistant walls and consist of non-combustible building materials, unless further requirements arise from other regulations. Other interior walls must be made of non-combustible building materials. The requirements of sentence 4 do not apply to sanitary facilities within patient rooms.

Openings in walls according to sentence 4 must have at least tightly closing and self-closing closures in room groups. All other openings in walls within room groups must be at least tightly closing. Sentences 7 and 8 do not apply to sliding doors in room groups according to point 3.10(3) and (4).

4.4

Fire compartments

Contrary to Section 30(2)(1)(2) of BauO NRW 2018, hospitals may be subdivided by internal firewalls at intervals of no more than 50 m if the area of the fire compartment does not exceed 2 000 m².

Openings in internal firewalls must have fire-resistant, smoke-tight and self-closing closures. Contrary to sentence 2, at minimum fire-resistant, smoke-tight and self-closing closures are sufficient if

- a) the openings are located along necessary corridors and
- b) the adjacent walls of necessary corridors have no openings within a 2.5 m radius on both sides of the terminations.

The exemptions of Section 30(3)(2) and Section 36(1)(2)(2) of BauO NRW 2018 do not apply.

4.5 Ceilings

Unless otherwise specified in this directive, the requirements of BauO NRW 2018 for these building components in buildings of Building Class 5 shall apply to ceilings. These components must be made of non-combustible building materials. In single-story buildings, ceilings must be at least fire-resistant and made of non-combustible building materials.

Floors in nursing care areas must not be connected to each other via open stairwells. Openings in ceilings are not permitted in areas according to point 3.2 and point 3.3(3)(b).

4.6 Roofs

Roof structures must be fire-resistant; in the case of single-story buildings, they must be at least fire-retardant.

Roofs that form the upper boundary of hospital rooms and are not separated from them by room-enclosing components with the fire resistance according to sentence 1 must consist of non-combustible building materials.

4.7 Claddings, insulation materials

Insulation materials must be made of non-combustible building materials. Suspended ceilings and wall and ceiling claddings must be made of non-combustible building materials. Substructures, supports and fixings of suspended ceilings and claddings according to sentence 2 must be made of non-combustible building materials.

5 **Escape routes**

5.1 General requirements

From every habitable room, on every floor there must be at least two independent and, if possible, oppositely located structural escape routes to the outside leading to public circulation areas, possibly via areas accessible to rescue services. Both escape routes may lead through the same necessary corridor within the floor. Outside of areas according to point 3.2 and point 3.3(3)(b) one of the escape routes may also lead via externally arranged staircases and walkways (escape balconies), terraces and accessible roofs in conjunction with staircases, if this escape route is safe to walk on in the event of fire and all components of this escape route consist of non-combustible building materials.

For each room group, at least two independent and preferably oppositely located structural escape routes must be available on each floor. The two escape routes must not lead through the same necessary corridor within a single floor. Both escape routes can also lead via an adjacent room group. The escape route must not lead through adjacent intensive nursing care units, operating areas and other areas with restricted accessibility. This does not apply if constant accessibility is ensured and the adjacent areas have the same function.

5.2

Necessary staircases

Necessary staircases must be suitable for transporting persons on stretchers. The staircase must have a usable tread width of at least 1.25 m and handrails without free ends on both sides. The handrails must be sturdy and easy to grip, and must extend over stair landings. Stair landings must have a usable depth of at least 1.5 m.

Necessary staircases must not have spiral flights.

5.3

Necessary stairwells

The requirements of BauO NRW 2018 for these building components in buildings of Building Class 5 must be applied to the walls of necessary stairwells.

Openings in the walls of necessary stairwells must have at least fire-resistant, smoke-tight and self-closing closures. Smoke-tight and self-closing closures are sufficient for openings to necessary corridors.

5.4

Necessary corridors

Necessary corridors must be at least 1.5 m wide. Corridors in which patients are transported in beds must have a usable width of at least 2.25 m. The usable width of the corridors must not be reduced by built-in structures.

Necessary corridors with only one direction of escape (dead-end corridors) must not exceed 15 m in length.

The walls of necessary corridors must be fire-resistant and be made of non-combustible building materials as room-enclosing components.

For wall claddings in necessary corridors, which are no more than 40 cm wide in total on each side of the wall and that are located below handrails (impact protection), as well as for handrails in necessary corridors, normally flammable natural building materials are sufficient. Impact protectors and handrails made of normally flammable building materials must not fall off or drip while burning.

Doors in walls of necessary corridors must at least be tightly closing, unless other regulations stipulate further requirements.

5.5

Doors

Doors to communal rooms must have a clear width of at least 0.9 m. Doors through which patients are transported in beds must have a clear width of at least 1.25 m.

Doors along escape routes must open in the direction of escape; if there are two escape routes, they must open in the direction of the first escape route. They must be easy to open from the inside across their full width and must not have any thresholds.

Doors that are kept locked for the purpose of safely accommodating persons must, in the event of danger, be able to be opened by personnel without delay. Electric locking mechanisms for these doors must comply with the model directive on electric locking systems for doors in escape routes, version December 1997, published by the Commission for Construction Supervision of the Working Group of Building Ministers, which has been executed as a Technical Building Regulation (www.bauministerkonferenz.de).

With regard to protected sections, there are no concerns if the unimpeded usability of the escape routes is ensured, in deviation from sentences 5 and 6, by temporarily disabling the safe release of the electrical door locks with an emergency release button from a central, constantly staffed location, for example by pressing and holding a switch (overriding the release). In the event of a fire and an unauthorised departure from the section occurring simultaneously, fire safety concerns must take precedence over the concerns of ensuring the safe accommodation of persons.

Self-closing doors to patient rooms as well as to examination and treatment rooms must have hold-open systems with electrically operated free-swing door closers. Instead of hold-open systems, free-swing door closers (hold-open devices) controlled by a fire alarm system may be permitted for the doors if the fire alarm system allows selective control of the free-swing door closers and a corresponding fire alarm control matrix is created.

5.6

Emergency signs

Exits and escape routes must be permanently and clearly marked by illuminated or backlit safety signs.

6

Technical building equipment

6.1

Lifts

The requirements of BauO NRW 2018 for these components in buildings of Building Class 5 must be applied to lift shaft walls. Excluded are lift shafts located within necessary stairwells and whose access is exclusively via the necessary stairwell. Lift shaft walls must be constructed of non-combustible materials. Lift shaft doors should not lead directly into a room group.

In buildings where nursing care areas or examination and treatment areas are located on upper floors, there must be a sufficient number of lifts suitable for transporting beds (bed lifts), and two at minimum. Exceptions may be granted if there are no concerns regarding the intended use and size of the buildings.

In accordance with the evacuation concept according to point 7.3.2, the requirement and specifications for evacuation lifts must be defined in the fire protection concept.

In high-rise buildings, at least one of the bed lifts must be designed as a fire service lift.

The lift cages of bed lifts and fire service lifts must be dimensioned so that there is at least space for one bed and two accompanying persons. However, they must have a usable floor area of at least 1.8 m x 2.5 m.

In hospitals, lifts must be equipped with a fire alarm control that is triggered by an automatic fire alarm system. The fire emergency control system must ensure that the lifts travel directly to a floor with an exit to the outside or, if this floor is affected by the fire call, to another suitable floor, so that persons can leave the building safely and as quickly as possible. After that, the lifts there must be shut down. Excluded are lifts that are located within necessary stairwells and whose access is exclusively via the necessary stairwell.

6.2

Piping systems

The supply of medical gases to rooms in evacuation sections must be ensured in such a way that the supply to each individual evacuation section can be centrally shut off. The supply of medical gases to rooms in examination and treatment areas must be ensured in such a way that shutting off the gases for the fire room does not lead to a failure in the gas supply to the entire examination and treatment area.

6.3

Ventilation systems

Ventilation systems must meet the requirements of Section 41 of BauO NRW 2018, which are specified in more detail by the Model Ventilation Systems Directive, version 29/09/2005, last amended by decision of the Commission for Construction Supervision 03/09/2020, Official Communications of the German Institute for Building Technology 2021/2 (issue 30 April 2021), published as a Technical Building Regulation. If ventilation ducts penetrate walls or ceilings that are subject to fire resistance requirements, fire dampers with the appropriate fire resistance and triggering devices that respond to smoke (smoke release devices) must be provided.

For ventilation ducts that penetrate the walls of rooms according to point 4.3(4) or walls constructed of fire-resistant materials, cold smoke barriers must be provided if the ventilation duct has supply or exhaust air openings to more than one room. Furthermore, the ventilation system must be designed and controlled in such a way as to minimise the spread of smoke between these rooms.

6.4

Lightning protection systems

Hospitals must have lightning protection systems.

6.5

Fire alarm systems and alerting systems

Hospitals must have comprehensive fire alarm systems with automatic and non-automatic fire detectors.

Fire calls must be forwarded directly and automatically by the fire call control panel to the unified control centre for fire protection, assistance, disaster control and rescue services, and at the same time trigger an alert to the personnel responsible according to point 7.3, for example via radio pagers. The alerting of the responsible personnel must be done in such a way that the room number and the floor are displayed to the personnel. The alerting system must be technically secured (priority switching, emergency power supply, independent function monitoring), station-specific and suitable for transmitting alerting levels. The alerting system must have a functional integrity in accordance with the Model Cable Systems Directive [Muster-Leitungsanlagen-Richtlinie], version 10/02/2015, published as a Technical Building Regulation, last amended by decision of the Commission for Construction Supervision of 03/09/2020, Official Communications of the German Institute for Building Technology 2021/3 (issue 30 April 2021). This can be omitted if two redundant alert systems are available.

The measures for triggering an alert and other measures for controlling the technical systems by the fire alarm systems must be determined in agreement with the fire protection authority.

The arrangement of operating devices for technical fire protection measures must be determined in agreement with the fire protection authority.

6.6

Emergency lighting

Emergency lighting must be provided:

- a) in necessary stairwells and spaces between necessary stairwells and exits to the outside, and in necessary corridors,
- b) in communal areas within room groups,
- c) in personnel rooms, and
- d) for emergency exit signs.

6.7

Emergency power supply systems

Hospitals must have emergency power supply systems that take over the operation of the building's safety equipment in the event of a general power failure, in particular of

- a) evacuation and fire service lifts,
- b) fire alarm systems,
- c) alerting systems and call systems,
- d) emergency lighting,

- e) smoke extraction systems,
- f) automatic fire extinguishing systems,
- g) pressure boosting systems for fire water supply as well as
- h) and radio communication systems for the fire brigade.

Further requirements from other legal regulations regarding the electricity supply for maintaining hospital operations, in particular for the medical technical equipment required for direct patient care, remain unaffected.

6.8

Smoke extraction

For smoke extraction from necessary stairwells, the requirements of Section 35(8) of BauO NRW 2018 apply to buildings of Building Class 5.

Necessary corridors and room groups must be able to be cleared of smoke after evacuation. In the event of a fire in examination and treatment areas, examination and treatment rooms must be able to be ventilated without affecting other examination and treatment rooms. This is considered fulfilled in both cases if at least cross ventilation is possible, meaning natural ventilation indirectly through openings such as windows or doors.

6.9

Fire extinguishing equipment

Hospitals must be equipped with a sufficient number of suitable fire extinguishers. The fire extinguishers must be easily visible and readily accessible.

Hospitals must have the following:

- a) Fire hydrants (type F) in sufficient numbers, clearly visible and easily accessible at suitable locations,
- b) in agreement with the fire protection authority, dry fire extinguishing water pipes or,
- c) in agreement with the fire protection authority, no fire extinguishing systems and equipment.

6.10

Automatic fire extinguishing systems

Automatic fire extinguishing systems must be connected to a fire alarm control panel. A triggering of the automatic fire extinguishing system must be transmitted immediately and automatically to the responsible fire brigade alert centre.

For facilities with comprehensive automatic fire extinguishing systems, for example sprinkler systems, the following requirements can be waived:

- a) Walls constructed like fire-resistant walls within room groups,

b) Requirements for load-bearing and space-enclosing building components that go beyond the requirements of BauO NRW 2018 and

c) self-closing doors within room groups.

Fire compartments larger than those specified in point 4.4 and room groups larger than those specified in point 3.10 may be permitted.

Easing of restrictions regarding the flammability of load-bearing components may be permitted.

6.11

In-building radio systems

If the radio communication of the fire brigade's emergency services within a hospital is disrupted by the building structure, the hospital must be equipped with technical systems to support radio communication.

7

Operating instructions

7.1

Escape routes

Escape routes inside buildings must be kept clear at all times.

7.2

Fire safety officer

The operator must appoint a fire safety officer.

7.3

Fire safety regulations, evacuation plan

7.3.1

Fire safety regulations

The operator must draw up and publish fire safety regulations in agreement with the fire protection authority. The specific tasks of the personnel during an evacuation are specified in detail in the evacuation plan according to point 7.3.2.

7.3.2

Evacuation plan

The operator must draw up and publish an evacuation plan in agreement with the fire protection authority. The evacuation plan must provide proof that persons in need of assistance can have safe refuge in rooms that are not directly affected by the fire. The necessary measures, such as the closing of doors, must be described in detail. Furthermore, the evacuation plan must include information on how to rescue persons from rooms that are directly affected by the fire. The required rescue equipment must be determined.

The following information must be included:

a) the number of personnel required and

b) proof of the safe whereabouts of persons in need of assistance or of the necessary assistance measures until the arrival of the fire brigade.

The fire protection authority's approval of the evacuation plan must be obtained no later than the commissioning date.

7.3.3

Instruction

At the start of their employment and at least once a year thereafter, the operating personnel must be instructed on

a) the location and operation of the fire extinguishing equipment and systems, smoke extraction systems, fire alarm and alerting systems and the fire call control centre, as well as how alerting is organised,

b) the fire safety regulations, possibly in conjunction with the evacuation plan, and

c) the operating regulations.

Fire protection authorities should be given the opportunity to participate in the training. A written record of the instruction must be drawn up, which must be submitted to the building authority upon request.

7.4

Fire brigade plans

In agreement with the fire protection authority, fire brigade plans must be drawn up and made available to the local fire brigade.

8

Entry into force

This circular will enter into force on the day following its publication in the Ministerial Gazette for the state of North Rhine-Westphalia.