

**23213**

**Directive on construction supervisory requirements for the construction and operation  
of facilities with care and assistance services**

**Ministry for Construction and Transport circular dated .....**

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The Directive reproduced in the following on the construction supervisory requirements for the construction and operation of facilities with care and assistance services is being passed in accordance with Section 85 Paragraph 9 of the Building Code of the North Rhine-Westphalia (BauO NRW) as a special administrative regulation on BauO NRW Section 54.

The Hospital Construction Ordinance no longer applies to assistance facilities to be newly constructed (including assistance facilities in the field of care, among other things) upon the entry into legal effect of the Residence and Participation Act (Wohn- und Teilhabegesetzes) on 10 December 2008. In order to avoid legal uncertainties arising from this and in order to ensure uniform legal application, the Federal State Government has agreed in coordination on the Residence and Participation Act that the Ministry for Construction and Transport (Ministerium für Bauen und Verkehr - MBV), Ministry of the Interior (Innenministerium - IM) and the Ministry of Labour, Health and Social Affairs (Ministerium für Arbeit, Gesundheit Soziales - MAGS) will be compiling recommendations for construction supervisory requirements for facilities with care and assistance services.

This Directive describes several criteria for construction supervisory requirements in facilities beyond “normal residential space usage” in which there may be an increased risk of fire. Since the scope of application of the Residence and Participation Act (WTG) is independent of construction-related criteria, it is not possible to tie the scope of application of this Directive in with that of the WTG. However, this Directive should simplify the application of the doctrine of fair commensuration standardised in Section 15 Para. 1 of the WTG. In accordance therewith, statutory regulations which affect the living circumstances of elderly, disabled people of full age requiring care in assisted-living facilities and grant discretion should be applied so that the residents are able to participate in social life according to their own determination and their requirements for assistance and care. The application of the law should be oriented along the standards of the daily routine of domestic life. In administrative decisions, it must be demonstrated how the aspect of self-determined participation was taken into consideration. This rule is of practical significance to the residents of facilities with care and assistance services if the process of weighing quality of life and residence and preventative fire safety measures involves specific questions regarding the furnishings, decoration, the use of construction materials or design of walls. It is these very furnishing objects which increase the quality of life and living atmosphere for residents in a facility for which fire prevention could also pose an increased hazard potential.

Multiple variants are proposed for those buildings which fall within the Directive's scope of application as an offer to the operators allowing them to select a variant which suits them. For instance, the Director includes a variant for facilities with automatic fire extinguishing systems which permit savings on investments and operational expenses in comparison with other variants. Further variants which are not specified in the Directive may also be suitable to fulfil the construction code-related required protection objectives. The construction supervisory authority shall inspect these on an individual basis.

Facilities which have spaces for care and assistance services with fire safety requirements exceeding the standard requirements of the Federal State Building Code fall within the scope of application of the construction supervisory Directive. Conversely, no requirements exceeding the fire safety requirements of the BauO NRW are placed on facilities with spaces for care and assistance services which do not fall within the field of application of the Directive. Domiciles in which care and assistance services are rendered at the instigation of the domicile owner (for example) are not facilities in the sense of this Directive. The following criteria are decisive in assessing the question as to whether residential use is at hand:

- structural isolation
- a long-term established domesticity
- independent housekeeping
- possibility to retreat into the private sphere
- voluntariness of the housekeeping.

## **Directive on construction supervisory requirements for the construction and operation of facilities with care and assistance services\***

### **1**

#### **Scope of application**

Facilities with care and assistance services which are individually larger than 200m<sup>2</sup> or which are larger than 200m<sup>2</sup> in total fall within the scope of application of this Directive if said facilities rely on collective escape routes.

Such facilities are buildings or rooms of a special type or use (special buildings) pursuant to Section 54 of the BauO NRW. Any area specifications made in the Directive are in gross floor area (GFA), unless this Directive specifies otherwise.

This Directive does not apply to:

- hospitals,
- children's nurseries and children's day care facilities.

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\*) The obligations from European Parliament and Council Directive 98/34/EC dated 22 June 1998 on an information procedure in the fields of standards and technical regulations and the regulations for the services of the information society (OJ L 204 dated 21.7.1998, pg. 37), last amended by Directive 2006/96/EC dated 20 November 2006 (OJ L 363 dated 20.12.2006, pg. 81) have been observed.

## 2

### Terms

#### 2.1

In the sense of this Directive, facilities with care and assistance services are usable building units or portions thereof which are intended for accommodating persons who require or make use of both care and assistance services.

#### 2.2

Residential care areas are structurally isolated areas with the required corridor.

#### 2.3

Room groups are structurally isolated areas without the required corridor, in which collectively used zones (for the functions of preparing food, taking meals and common residence) are created, which the private rooms of the room group's residents are arranged around. Sub-areas with the required corridor may be present within a room group.

## 3

### Requirements for components:

#### 3.1

##### Supporting structural components

Supporting and reinforcing walls, supports and ceilings must have the fire resistance capacity required in the BauO NRW and be made of non-combustible materials.

Flammable materials may be used for buildings which are low in height if the supporting and reinforcing parts:

- are made of non-combustible materials; space-enclosing components must have an additional continuous layer at the component level made of non-combustible materials, or
- are made of flammable materials and have a sufficiently resistant layer made of non-combustible materials and insulation made of non-combustible materials.

#### 3.2

##### Fire sections

##### 3.2.1

In contrast to Section 32 Para. 1 Clause 1 of the BauO NRW, fire wall spacings of up to 50m are permissible if the area of the fire section does not exceed 2000m<sup>2</sup>.

##### 3.2.2

Residential care areas with more than 500m<sup>2</sup>, except that those on storeys at ground level must have two separate fire sections on each storey. The fire sections must be separated by fire-resistant fire walls made of non-combustible materials.

##### 3.2.3

The fire sections must be directly connected to the adjacent fire sections in the course of the escape routes. Each fire section must have its own required stairwell.

#### 3.3

## Partition walls of room groups

Partition walls are required between room groups as well as between room groups and residential care areas and room groups and spaces used for other purposes; as space-enclosing components, they must have the fire resistance of the storey's supporting and reinforcing components and must be made of non-combustible materials. Flammable materials may be used for buildings which are low in height if the supporting and reinforcing parts:

- are made of non-combustible materials; space-enclosing components must have an additional continuous layer at the component level made of non-combustible materials, or
- are made of combustible materials and have a sufficiently resistant layer made of non-combustible materials and insulation made of non-combustible materials arranged on both sides.

### 3.4

#### Walls within room groups

As space-enclosing components, walls within a room group must be fire-retardant and must be made of non-combustible materials. Combustible materials may be used for buildings which are low in height if the supporting and reinforcing parts:

- are made of non-combustible materials; space-enclosing components must have an additional continuous layer at the component level made of non-combustible materials, or
- are made of combustible materials and have a sufficiently resistant layer made of non-combustible materials and insulation made of non-combustible materials.

This also applies to the walls of service rooms such as utility rooms or storage rooms within a room group, but not to the sanitary modules of private rooms.

### 3.5

#### Exterior walls

The surfaces of exterior walls as well as exterior wall claddings, including insulation and substructures, must be at least of low flammability for buildings with more than one storey above ground surface level; they must be non-combustible for buildings of medium height. This does not apply to:

- window profiles,
- insulation materials in non-combustible enclosed profiles,
- sealants for sealing joints between glass and brace frames,
- small parts without supporting function which do not contribute to the spreading of fire.

## 4

### Escape routes

#### 4.1

##### General requirements

##### 4.1.1

At least two independent, preferably opposing, structural escape routes on each storey must lead from each common room of a facility to the outdoors to public thoroughfares, if necessary via spaces accessible to rescue workers. Both escape routes may lead along the same required corridor within the storey. The second escape route may lead to the property

via balconies, roof terraces and exterior stairs if it can be negotiated safely in the event of a fire and all components are made of non-combustible materials.

#### 4.1.2

Each room group must have at least two independent, preferably opposing, structural escape routes on each storey. The two escape routes may not lead along the same required corridor within one storey. The second escape route may also lead through an adjacent room group. In facilities which exclusively serve day care purposes, the second escape route may also lead through an adjacent room group.

#### 4.2

##### Required stairs

Required stairs must be suitable for transporting persons on stretchers. The stairs must have a usable solid centre width of at least 1.25m and have handrails without open ends on both sides; the handrails must be solid and slip-free and must continue over stair landings. Stair landings have a depth of at least 1.50m. Required stairs may not be spiral staircases.

#### 4.3

##### Required corridors

##### 4.3.1

Required corridors in buildings with more than one full-height storey must be separated from other rooms by components which are at least fire retardant and made of non-combustible materials. Linings including suspended ceilings and insulation in required corridors and open hallways must be made of non-combustible materials. This does not apply to wall linings of up to max. 30cm in height (impact protection). Handrails made of wood are permissible in required corridors. Side corridors may be no more than 10m long.

##### 4.3.2

Glazing in fire resistance class G 30 in accordance with DIN 4102-5 and/or E 30 in accordance with DIN EN 13501-2 in corridor walls is permissible if:

- it is positioned at least 1.80m above the floor, or
- the intended purpose of the rooms (such as office) requires it.

##### 4.3.3

Required corridors must be at least 1.50m in width. If rescue in beds is planned in the fire safety concept, the corridors must be at least 2.25m wide. The usable width of the corridors may not be narrowed by fixtures.

##### 4.3.4

Individual fixtures, furnishing objects as well as care service workstations and seating groups in required corridors, and particularly in corridor extensions, are permissible if:

- escape is possible in two directions in the corridors,
- the person who operates the facility ensures that the areas of the fixtures, care service workstations or seating groups have a width of passage in the corridor of at least 1.50m, which is kept clear at all time,

- the fixtures have doors with circumferential gaskets and
- the fixtures, furniture or furnishing objects have a low fire load.

Furniture or furnishing objects which do not have a low fire load must be separated by space-enclosing components with a fire resistance class of at least G 30 in accordance with DIN 4102-5 and/or E 30 in accordance with DIN EN 13501-2

## **4.4**

### **Doors**

#### 4.4.1

Doors must be fire-retardant, smoke-tight and self-closing in the following situations:

- in openings for fire section doors if the adjoining corridor walls have no openings in an area of up to 2.50m on both sides of the doors,
- if the doors lead to required stair spaces,
- if the doors are between room groups or
- if the doors lead to rooms with increased risk of fire.

Doors must be fire-retardant, smoke-tight and self-closing in openings for required stair space doors

leading to required corridors. Doors in walls of required corridors must close to form a seal.

This does not apply to doors for sanitary modules.

#### 4.4.2

Doors of common rooms and doors in the course of escape routes must have a clear passage width of at least 0.90m. If rescue in beds is planned in the fire safety concept, the doors must have a clear passage width of at least 1.25m.

#### 4.4.3

Doors in the course for escape of escape routes must open in the direction of escape; if there are two directions of escape, they must open in the direction of the first escape route. They must be easy to open at full width and must not have any thresholds. If doors must be locked in the direction of escape due to their use, steps must be taken to ensure that it is not locked or is easy to open in the event of fire.

#### 4.5

Doors within a single room group must close to form a seal. This does not apply to doors for sanitary modules. The doors to private rooms must be self-closing and must have hold-open door closers. This does not apply if:

- the doors of private rooms within a room group are located on a required corridor and said corridor with a smoke-tight and self-closing door with a door arrester or hold-open door closer is separated by a collectively used zone, or
- it is demonstrated in the fire safety concept that persons may remain safely in or be rescued from the hazard area by a sufficient number of care and assistance personnel.

#### 4.6

Safety signs

Exits and escape routes must be permanently marked by easily visible safety signs. This does not apply to the exit of a private room in a room group.

## 5

### Technical systems

#### 5.1

##### Fire detectors and alarm systems

Facilities with care and assistance services must have an automatic fire alarm system covering the entire area. The fire alarm system must be rendered in an operation mode in which false alarms are avoided by means of technical measures. This must particularly be taken into consideration for common areas (group kitchen) in room groups. Fire alarms must be transmitted immediately and automatically to the competent fire department alarm office and must simultaneously trigger a silent alarm to the competent personnel pursuant to 7.2 (via pager, for example). The silent alarm must notify the personnel of the room number and storey.

#### 5.2 Emergency lighting

Emergency lighting which also illuminates safety signs must be present in:

- escape routes (required corridors, required stair spaces and spaces between required stair spaces and exits to the outdoors)
- common areas within room groups,
- in service rooms.

There are no objections against the use of network buffer battery lamps in accordance with VDE 0108.

#### 5.3

##### Emergency power supply systems

Facilities with care and assistance services must have an emergency power supply system which, in the event that the general power supply fails, will take over the operation of the building's safety technical equipment, in particular the:

- emergency lighting,
- fire alarm systems,
- alarm systems and public address systems.

#### 5.4

##### Lightning protection

Facilities with care and assistance services must have lightning protection systems (exterior lightning protection as well as interior lightning protection for the building's safety technical equipment).

#### 5.5

##### Fire extinguishing systems

Facilities with care and assistance services must be equipped with fire extinguishers in sufficient quantity. The fire extinguishers are to be mounted in an easily recognisable and easily accessible manner. Buildings of medium height must have dry riser pipes with tapping points for the fire department on each aboveground storey.

## 5.6

Facilities with automatic fire extinguishing systems

### 5.6.1

The following requirements of the Directive may be dispensed with for facilities with area-wide automatic fire extinguishing systems (such as automatic extinguishing systems, water mist extinguishing systems):

- fire-retardant walls within room groups pursuant to 3.4
- requirements for supporting components exceeding those of BauO NRW
- fire-resistant glazings pursuant to 4.3.2
- spatial separation of facilities or furnishing objects with a low fire load pursuant to No. 4.3.4
- self-closing doors pursuant to No. 4.5 within room groups

### 5.6.2

Area-wide systems for early fire detection with mains power supply and a silent alarm to the competent personnel pursuant to 7.2 (via pager, for example) shall suffice in place of a fire alarm system pursuant to 5.1. The silent alarm must notify the personnel of the room number and storey.

### 5.6.3

Larger fire sections than those required in No. 3.2 may be permitted.

### 5.6.4

The triggering of the automatic fire extinguisher system must be transmitted immediately and automatically to the competent fire department alarm.

## 5.7

Lifts

Lifts for accessibility of facilities with care and assistance services must be equipped with fire control which is triggered by the automatic fire alarm system. If an automatic fire alarm system is not planned, other means must be used to ensure that the lifts' fire control is automatically triggered. The fire control must ensure that the lifts proceed to the ground floor or the next floor from it which is not affected by the fire alarm and go out of commission there with their doors open. If the lifts are intended to transport persons in a reclined position, they must have a minimum size suitable for this purpose.

## 5.8 Smoke extraction

It must be possible to remove the smoke from required halls and room groups after evacuation. This is deemed to have been fulfilled if at least cross-ventilation (indirect natural ventilation via openings such as windows or doors) is possible.

## 6

### **Special requirements and relaxation of requirements for room groups**

#### 6.1

A room group may not have a net floor area (NFA) exceeding 500m<sup>2</sup>. Each room group may only extend across one storey level.

#### 6.2

No. 3.4, 5.1 – 5.4 and 7.3 do not apply to room groups of up to 250m<sup>2</sup> NFA if:

- the floor height of the room group with the highest position amounts to no more than 7m above ground surface level on the average,
  
- a maximum of 8 room groups in one building have common escape routes and
  
- they have area-wide systems for early fire detection with mains power supply and a silent alarm to the competent personnel pursuant to 7.2 (via pager, for example). The silent alarm must notify the personnel of the room number and storey.

## 7

### **Operational requirements**

#### 7.1

##### Escape routes

Escape routes on the interior of buildings must be kept clear at all times. Sufficient access or transit routes and spaces for manoeuvring must be established for utility and rescue vehicles. These must be marked and kept clear at all times. The feed-in equipment for fire extinguishing water must be directly accessible.

#### 7.2

##### Fire safety regulations, personnel requirements

##### 7.2.1

Operators shall appoint a fire safety officer.

##### 7.2.2

Operators shall compile and announce a set of fire safety regulations in consultation with the fire safety authority. The fire safety regulations shall establish the following in particular:

- the tasks of the fire safety officer,
  
- the tasks for the personnel, focusing on safely remaining in protected rooms or rescuing persons from the hazard area,
  - rules on the furnishings of general use rooms, in particular the handling of decoration objects which are used in religious or customary festivals (for example),
  
  - rules on the use of common kitchens, such as those in the common areas of room groups.

### 7.2.3

The personnel shall be instructed on the following upon beginning employment and at least once per year thereafter:

- the location and operation of the fire extinguishing devices, systems for
  - smoke extraction and fire detectors and alarm systems,
- the fire safety regulations, in particular conduct in the event of a fire,
- the operational regulations.

### 7.3

#### Fire-fighting plans

Fire-fighting plans are to be created in consultation with the fire safety authority and must be provided to the local fire department.

## 8

### Fire-safety concept

In accordance with Section 9 Para. 1 No. 16 of the construction inspection regulation for persons requiring assistance, documentary evidence must be kept in the fire-safety concept on said persons' ability to safely remain in rooms not directly affected by the fire. The necessary measures to accomplish this, such as the closing of doors, are to be described individually. The fire-safety concept must contain specifications on rescuing persons from rooms directly affected by the fire. The rescue means necessary for this must be determined.

The specifications must contain:

- the number of care and assistance personnel,
- documentary evidence on the safe stay of persons requiring assistance and/or the necessary auxiliary measures to be taken until the fire department arrives,

If these specifications cannot be submitted by the time the building application is filed, the construction supervisory authority may allow it to be submitted by the time the building permit is issued at the latest.