

Model Guideline on building authority requirements for schools
(Model School Building Guideline – MSchulbauR)
Version 09/09/2025¹

1 Scope

This Guideline applies to general education and vocational schools, provided they are not high-rise buildings and are not used exclusively for adult education.

2 Definitions

2.1 Classrooms

Classrooms are spaces that are intended for use for teaching purposes and are located outside of learning areas.

2.2 Learning areas

Learning areas comprise several spaces and multifunctional zones used for learning purposes which can be connected or separated as desired and are accessible via access areas.

2.3 Access areas

Access areas open up expanses and spaces in the learning area and can also be used for learning and teaching purposes.

2.4 Halls

¹Halls are spaces that extend over several floors. ²Halls can have gallery-like passageways on each floor. ³They can serve as multi-purpose spaces for various uses such as dining rooms, lecture halls or theatre performances.

2.5 Rescue balconies

¹According to this Guideline, rescue balconies are balconies that, in conjunction with external staircases as per § 35(1)(3)(3) MBO [Model Building Code] or required stairwells, ensure a structural escape route. ²Exits to rescue balconies are not equivalent to an exit to the outside.

2.6 Spaces with an increased fire hazard

Spaces with an increased fire hazard are spaces that have a higher hazard of fire starting or spreading and an increased fire load density.

¹ 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, 17/09/2015, p. 1).

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3 Requirements for components

3.1 Load-bearing and bracing components

¹For load-bearing and bracing components,

- in buildings with a height of up to 7 m, the requirements of the MBO for these components in buildings of building class 3 shall apply,
 - and for buildings with a height of more than 7 m, the requirements of the MBO for these components in buildings of building class 5 shall apply,
- unless higher requirements are specified below.

²Notwithstanding Sentence 1, highly fire-resistant load-bearing and bracing components are permitted in accordance with § 26(2)(3)(2) MBO in above-ground floors of buildings,

- whose height does not exceed 13 m and
- whose floors are each no larger than 600 m² or are subdivided into sections of no more than 600 m² each by at minimum highly fire-resistant partition walls.

³Sentence 1 does not apply

- to detached buildings with a maximum of two above-ground floors and a total floor area of no more than 200 m²,
 - nor to detached single-story buildings with a floor area of no more than 400 m²,
- where effective fire fighting operations are possible from all sides.

3.2 Walls of learning areas

¹Walls between learning areas, as well as between learning areas and classrooms or other spaces, must, as partition walls, have the fire resistance of the load-bearing and bracing components. ²Closures of openings in partition walls must be minimum be fire-resistant, smoke-tight, and self-closing. ³Learning areas should be divided by partition walls into sections of no more than 900 m².

3.3 Walls of required stairwells in buildings of building classes 1 and 2

¹Notwithstanding § 35(1)(3)(1) MBO, required stairwells are necessary for required staircases in buildings of building classes 1 and 2, the walls of which are fire-resistant.

²Closures of openings in these walls must be at least smoke-tight and self-closing.

3.4 Walls of halls

¹The walls between halls and other spaces must, as space-enclosing components, have the same fire resistance as the ceilings. ²Closures of openings in walls between halls and required stairwells, required corridors and living spaces must be fire-resistant, smoke-tight and self-closing.

3.5 Walls of spaces with an increased fire hazard

¹Spaces with an increased fire hazard must not be located in learning areas. ²The walls of these spaces must have the same fire resistance as the load-bearing and bracing components.

3.6 Firewalls and fire compartments

¹Internal firewalls under § 30(2)(2) MBO must be arranged at intervals of no more than 60 m so that fire compartments do not exceed a floor area of 1 600 m². ²In buildings whose load-bearing and bracing components may be highly fire-resistant or fire-retardant, walls under § 30(3)(2)(1) MBO, which are also highly fire-resistant under additional mechanical stress, are also permitted in place of firewalls as per § 1. ³In walls according to Sentences 1 and 2,

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fire-resistant, smoke-tight and self-closing closures are permitted along the length of required corridors, provided that the adjacent corridor walls have no openings within an area of 2.50 m on either side of the closure.

3.7 Ceilings

Ceilings must have the same fire resistance as the load-bearing and bracing components.

3.8 Rescue balconies

Rescue balconies must be constructed to be space-enclosing and have the same fire resistance as the ceilings.

4 Escape routes

4.1 Escape routes from classrooms and living spaces for students outside of learning areas

¹For every classroom and interior living space for students outside of learning areas, at least two independent structural escape routes must be available on the same floor. ²These must lead to exits to the outside or to required stairwells and may run through a common required corridor within a floor. ³In place of one of these escape routes, an escape route on the premises may lead via a hall or external staircase, rescue balconies, terraces and accessible roofs, provided that this escape route is not endangered in the event of a fire.

4.2 Escape routes from learning areas

¹For each learning area, at least two independent structural escape routes leading to exits to the outside must be available on the same floor.

²From every point in a learning area, at least one exit must be directly accessible within 35 m to the outside or to a required stairwell. ³The escape route can lead via a required corridor.

⁴The second escape route may also lead via adjacent learning areas, to rescue balconies, to external staircases, to terraces or accessible roofs that are not endangered in case of fire, if these can be reached within 25 m, measured in the walking line.

4.3 Sufficient line-of-sight in learning areas

¹In learning areas, early fire detection must be enabled through sufficient line-of-sight.

²Sufficient line-of-sight is considered to be fulfilled if, in particular, the access area can be seen from a usual learning or working position and a fire hazard in the learning area can thus be detected early.

4.4 Escape routes through halls

Halls must not serve as a space between a required stairwell and the exit to the outside.

4.5 Required corridors

¹Required corridors with only one escape route (dead-end corridors) must not exceed 15 m in length.

²In required corridors, fixtures, fittings and technical systems are permitted to the extent necessary for operational purposes, provided that there are no fire protection concerns and the usable escape route width according to Point 4.7 is not thereby reduced. ³Access areas in learning spaces do not necessarily have to be designed as corridors.

4.6 Escape routes for single-story, ground-floor spaces

A second escape route is not required for single-story, ground-floor spaces if, in the event of a fire, rescue via a direct exit to the outside is possible.

4.7 Width of escape routes

¹The usable width of escape routes must along their entire length be at least 1.20 m per 200 persons reliant on them. ²Intermediate values are permitted. ³However, the following minimum usable widths must be provided:

- a) exits from classrooms and other living spaces 0.90 m,
- b) required corridors 1.50 m,
- c) required staircases 1.20 m,
- d) escape routes via an access area in the learning area 1.20 m, and
- e) rescue balconies 1.20 m.

⁴The required usable width of the escape routes must not be restricted by the opening radius of doors or by fixtures or fittings. ⁵Exits to required corridors must not be wider than the required corridor.

⁶Exits to required stairwells must not be wider than the required staircase. ⁷Exits from required stairwells must be at least as wide as the required staircase.

5 Staircases, railings and barriers

¹The usable width of required staircases must not exceed 2.40 m. ²Staircases must have treads and risers. ³Required staircases must not have spiral flights. ⁴Railings and barriers must be at least 1.10 m high.

6 Doors

¹Doors along escape routes, except for doors of classrooms and spaces in learning areas, must open in the direction of escape of the first escape route. ²They must be easy to open from the inside across their full width.

7 Smoke extraction

7.1 Living spaces and access areas

¹Any living spaces with a floor area of more than 50 m² must have windows that can be opened for smoke extraction.

²For interior living spaces and access areas exceeding 200 m², suitable measures for smoke extraction must be taken to support fire fighting efforts.

7.2 Halls

¹Halls must be able to be cleared of smoke to support fire fighting efforts. ²This is considered fulfilled if they have openings for smoke extraction at the top with a total free cross-section of one percent of the floor area, or windows or doors in the upper third of the exterior walls with

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a total free cross-section of two percent of the floor area. ³Windows, doors and other openings with closures for smoke extraction must have opening devices that can be easily operated by hand from locations that are accessible at all times. ⁴They can be brought together in a location that is accessible at any time.

8 Lightning protection systems

Schools must have lightning protection systems that also protect the security technology systems and equipment (external and internal lightning protection).

9 Emergency lighting

¹Emergency lighting must be provided:

- in areas via the escape routes,
- in windowless living spaces, and
- in spaces with an increased risk of fire.

²Emergency lighting is not required for ground-floor spaces that each have direct access to the outside.

10 Alarm systems, internal fire alarm systems

10.1 Alarm systems

¹Schools must have alarm systems that can be used to initiate the evacuation of the school or individual school buildings in case of danger. ²The alarm signal must be distinct from the break signal and other danger signals and must be audible in every space of the school. ³The alarm signal must be able to be triggered at least at a location within the school that is constantly staffed during the school's operating hours or at a location that is accessible at all times (alarm point).

10.2 Internal fire alarm system

¹Learning areas with a floor area of more than 600 m² must, in addition to the sufficient line-of-sight according to Point 4.3, have a fire alarm system that is not connected to the fire department's control centre with automatic fire detectors and at least non-automatic fire detectors at the exits of the learning areas. ²The automatic fire detectors must respond to the smoke parameter and monitor the entire learning area. ³The fire alarm system must activate the alarm and trigger the alarm signal.

11 Emergency power supply

Security technology systems in schools must have an emergency power supply that takes over the operation of the security technology systems in the event of a general power failure, in particular:

- a) the emergency lighting,
- b) the alarm system, and
- c) the internal fire alarm system.

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12 Fire department plans

Fire department plans for schools must be drawn up in coordination with the fire protection authority and made available to the local fire department.