Introduction

The present Stand Construction Guidelines set out the basic rules to be observed when planning and implementing stand constructions and exhibition stands and similar in the halls and on the premises of MCH Swiss Exhibition (Basel) Ltd. (hereinafter referred to as MCH).

1 General provisions

1.1 Modifications to the Stand Construction Guidelines
MCH reserves the right to modify the Stand Construction Guidelines at any time for operational and technical reasons insofar as this is due to legal requirements or leads to an improvement in the overall situation.

1.2 Supervision
The Show Management for the show in question is responsible for supervising the individual stand constructions.

1.3 Deadlines
The deadlines for the assembly and dismantling of the stands are listed in m-manager (under "Organisation+Logistics"). These published assembly and dismantling deadlines are binding.

1.4 Safety of workmen by assembly / dismantling
The statutory requirements on occupational safety (EKAS Guidelines) must be observed.
Workmen on the stands must be required to wear the necessary personal protection equipment (PSA), including a helmet, safety shoes, safety glasses, ear protection and a reflective jacket, etc. at all times. Workmen and third parties on the stand structures must be equipped with fall-prevention devices (railings, barriers, etc.), or the persons must be secured by means of a rope.

1.5 Abrasive cutting work, all work with an open flame and dust-producing work
Welding, cutting, soldering, unfreezing, abrasive cutting and all other work that produces smoke or dust must be notified to MCH before work starts. This work may only be carried out after the work and welding permit has been approved. During the work, the surrounding area must be sufficiently screened off to ensure that there is no danger or emissions. MCH will pass on the cost of false alarms to those who have caused them.

1.6 Stand events
Stand events (parties and special events) during the show or after the show has closed require authorisation. Requests should be submitted to the Show Management.

1.7 Hall structure
The MCH's hall statics expert will examine the forces acting on the hall structure as a result of the stand constructions and exhibits. The instructions issued by the statics expert must be followed without delay at all times.

2 Basics of the hall infrastructure

The key details of the halls may be found on the hall plans and the official forms for the technical connections.

3 Authorisation

3.1 Duty to obtain authorisation
The following projects must be submitted to the Show Management for approval:
– over 100 m^2 of floor space
– island stands (with 4 open sides)
– head stands (with 3 open sides)
– multi-storey stands
– stands with closed roofs > 30 m^2
– stands with closed rooms
– stands holding a large number of people (as of 100 people, as per the Cantonal Fire Insurance Association -VKF)
– Vehicles and containers used as exhibition stands
– Alarm systems installed on stands
– Wireless-LAN networks
– Installation or erection of systems such as escalators, lifts, appliances, equipment, machinery, etc. which move or are motorised and/or which emit the following on the stand or in the hall: light, heat, cold, smoke, exhaust gases, sound, etc.
– Radio-controlled systems (e.g. remotely-controlled garage doors)
– Use of open fire and light, combustible fluids, and gas and oxygen bottles on the stand
– Items suspended from the hall ceilings

3.2 Documents to be submitted:
Single-storey stand constructions:
– Project plans with dimensions showing details on a scale of 1:50 (floor plans, views, cross-sections, perspectives, integrated in the hall structure)
– Details, drawn in on the plans, of the type of signage and advertising (facade advertising).
– Details of the materials used
– Details of protection and surveillance systems
– Details of systems and the like that are subject to authorisation
For multi-storey stands, the following are also required:
– Statics certificate from the civil engineer
– Implementation of the fire safety regulations drawn in on the plans
For stand constructions holding more than 200 people, the following is also required:
– Evidence of the statutory escape route lengths and escape route widths as per the Cantonal Fire Insurance Association, VKF

3.3. Submission deadline
The submission deadline may be found in the Stand Design Guidelines.

3.4 Submission address
The submission address, the contact data for advice and authorisations and additional information on the procedure for stand authorisation may be found in the Stand Design Guidelines.

3.5 Stand construction permit
The definitive stand construction permit will be issued by the Show Management within a reasonable period of time after receipt of all the documents set out above.
Together with the stand construction permit, the Show Management may issue general and/or specific conditions for the construction of the stand. The stand construction permit is conditional upon the punctual and correct implementation of these conditions.
The Show Management reserves the right to reject or return for revision any stand construction projects that do not satisfy the above requirements, guidelines and conditions.

3.6 Modification and removal of stand constructions that do not comply with the requirements
Stand constructions that have not been authorised or which do not comply with the stand permit, the conditions, the regulations or the state of the art, must be modified or removed within a short period of time. If the modification or removal is not performed promptly, MCH shall be entitled to make the modifications at the exhibitor's expense. In addition, the Show Management shall be entitled to impose a fine on the exhibitor for breach of contract. The Show Management declines all liability for damage caused in conjunction with the improvement of the stand.

4 Stand construction

4.1 Design
Further guidelines and regulations governing stand construction may be found in the Stand Design Guidelines.

4.2 Stand safety
Show stands, including furnishings and exhibits, and also advertising media must be sufficiently stable to ensure that public security and order and, in particular, health and safety, are not jeopardised.
The stand must be constructed so that it is free-standing and may not be hung off the hall. The maximum permitted point load and area load of the building structure (see hall plans) may not be exceeded at any point in time.

4.3 Stand boundary
Exhibition stands, including furnishings and exhibits and also advertising media, may not protrude beyond the stand boundary. Exceptions may be approved by agreement with the Show Management.

4.4 Stands in rows
On stands that are arranged in rows, the clear width of the stand between the side walls is 30 mm less than the rented stand front (i.e. 5.97 m instead of 6 m, for example). In addition, it is reduced by a further 40 mm at the height of the skirting board (up to 50 mm above floor level). The stand depth, by contrast, can be used in full.

4.5 Stand heights
The maximum stand heights may be found in the Stand Design Guidelines. Any additional restrictions on height are marked on the hall plans. In the case of stand constructions that exploit the maximum stand height, closed roofs must be configured in such a way that an inspection can be carried out of the media installations (media satellites) above them. The roof is to be designed for loads of 200 kg/m^2 at certain points.

4.6 Stairs
All stair units must be constructed
– in accordance with the guide to Ordinance 4 for the Labour Law (ArG), Art. 9 "Stair constructions" (Office for Economy and Labour, AWA)
– in accordance with the Cantonal Fire Insurance Association (VKF) standards and guidelines
– in accordance with the brochure issued by the bfu (Swiss Advisory Centre for Accident Prevention) on "Stairs in residential buildings and public buildings).

Fire safety requirements for stairs are set out in Chapter 5.
See on this:
www.seco.admin.ch/dokumentation/publikation/00009/00027/01625/index.html
http://www.bfu.ch/PDFLib/725_43.pdf

4.7 Platforms, ladders, stairs, narrow walkways, guard rails
Platforms must be adequately dimensioned and implemented for their intended use.
Generally accessible platforms which border directly on lower-level surfaces must be secured by means of a protective element as a function of the extent of the danger. If the fall height is in excess of 1 m, protective elements are compulsory.
Protective elements such as barriers, railings and balustrades must be at least 1 m high and must be adequately dimensioned and implemented in static terms for their intended purpose: platforms and galleries must be equipped with an edging strip of at least 10 cm by way of roll-off protection.
If small children are present, the balustrades must be designed in such a way as to make it difficult to climb over them.
See on this:
http://www.bfu.ch/PDFLib/1185_42.pdf
The way in which ladders, stairs, platforms, narrow walkways and balustrades are constructed must comply with the corresponding regulations/standards, such as the :
– Labour law (ArG)
– Guidelines of the Federal Commission on Occupational Safety EKAS
– Swiss Advisory Centre for Accident Prevention BFU
– Other Swiss standards (SIA, etc.)

4.8 Keeping the hall facilities accessible
The technical systems and connection points provided in the halls for high and low-voltage current, water, waste water, refrigerated water, compressed air, and sprinklers, etc., both in the hall floors (media satellites) and on the hall walls, pillars and ceilings must remain accessible to the MCH operating personnel at all times.

4.9 Hall construction
The MCH's hall statics expert will examine the forces acting on the hall structure as a result of the stand constructions and exhibits. The instructions issued by the statics expert must be followed without delay at all times.

4.10 Affixing and suspending parts of the stand
If items are to be suspended directly off the hall ceiling (beams, beam clamps, steel rope), this work must be ordered off MCH. Exhibitors may themselves hang up those parts of the stand that are to be attached to the suspension points connected directly to the hall ceiling. In so doing, they must observe the relevant safety regulations, and especially the guidelines issued by the EKAS and VPLT (Professional Lighting and Sound Technology Association), such as in the case of steel ropes, which must be secured with three steel rope clamps. The exhibitor is liable for any damage resulting from the non-observance of the safety regulations or non-compliance with the specified loads (SGRL SB 10, 2.7)
MCH reserves the right to have the loads that are introduced and the structures used checked by a structural engineer. This check is subject to a charge, which will be invoiced to the party ordering it/the exhibitor.

5 Fire safety and safety of persons

The following conditions have been issued by the building authorities in cooperation with MCH for all stand structures in respect of fire safety and the safety of persons. These are based on the valid VKF standards (Cantonal Fire Insurance Association). See on this:
http://www.praever.ch/de/bs/vs/norm/Seiten/default_norm.aspx

5.1 Fire safety matrix
The most important conditions governing fire safety are summarised in the fire safety matrix. What is set out below forms an integral part of this fire safety matrix.

5.2 Supporting structure / fire safety
The statics of the supporting structure are a function of the number of storeys. The minimum fire-safety requirements on the supporting structure are:
– REI 0 : for 1 and 2-storey stands
– REI 30 (bb) : for 3-storey stands

5.3. Fire compartments in stand construction
Within the stand structure, EI 30 fire compartments (nbb) are necessary for:
– single-storey stands with a closed roof > 600 m^2
– multi-storey stands with a closed roof > 600 m^2
In the case of stands set up directly adjacent to each other (e.g. stands in rows), the Show Management can demand divisions between the stands in order to create fire compartments as per EI 30 (nbb) (see diagram at end of brochure).

5.4 Roof areas / stand roofs
To ensure that the sprinkler protection provided in the halls can function with maximum efficiency, the stands should be open as a matter of principle.
Additional regulations governing the design of stand roofs may be found in the Design Guidelines for the event in question.
Roofs are regarded as open if more than 70% of the covered area is uniformly open and permeable to air.

5.5 Combustibility of materials used for the stand and fittings / decorations
The materials used on the stand must satisfy the following minimum fire-safety requirements:
– VKF BKZ 5.2 and/or EN B-s2,d0 (fire-retardant)
  For all parts subject to static loading, such as columns, supports, floors, walls, ceilings, stairs, balustrades, railings, etc.
– VKF BKZ 4.2 and/or EN D-s2,d0 (medium-combustibility)
  For all parts not subject to static loading, such as cladding on walls, floors and ceiling, plus furniture, etc.

Only fire-retardant materials or materials specially treated with a flame retardant may be used for free-standing and freely-hanging decorations inside or outside the stand structures.
It is not permitted to use plastic cable binders to fasten parts subject to static load.
Broad-leaved trees and conifers may only be used with moist root bales. It is not permitted to use bamboo, reeds, hay, straw, bark mulch, peat or similar materials.
None of the materials used may give rise to burning droplets or produce toxic gases in the event of a fire.
A test certificate on the material class and the requisite material properties can be demanded at any time. Authorisation is required for the use of materials which do not meet the above requirements.

5.6 Fire alarm system
The following stand constructions are to be equipped with automatic fire detectors on the stand:
– all single-storey stand constructions with closed roofs > 30 m^2
– all multi-storey stand constructions
In the stand constructions defined above, all the rooms with closed roofs must be equipped with automatic smoke detectors. The same applies for open platforms, balconies, galleries and bridges with an overhang depth or a width of more than 3 metres (see fire safety diagram).
In multi-storey stands, the fire alarm system inside the stand must be supplemented by a fire detector above the stand roof (min. 1 fire detector/200 m^2).
A telephone system must be ordered off MCH for all stands equipped with a fire alarm system.
Access must be guaranteed at all times to all the rooms equipped with fire detectors and to the central fire alarm unit in the stand. For this reason, only MCH locks may be used on the access doors. The appropriate cylinders must be ordered from MCH. Rooms that are not accessible will be broken open by the response crews. The exhibitor will not be able to claim compensation for this.
The fire alarm systems on the stand with a display panel must be connected up to the media satellites in the hall or to other points provided in the exhibition hall. The connection must be made with two potential-free contacts.
The fire alarm system must be installed by a licensed electrical installation company and tested and approved in respect of its serviceability by a specialist firm. The system is approved via a Form and the operators will be instructed.
– The stand personnel must receive instructions from the manufacturer of the fire alarm system or the person who has installed it. An information sheet must be made available on the operation of the fire alarm system. In addition, any necessary spare parts must be made available for the central stand unit and the smoke detectors.
– To prevent false alarms during operating hours, it is advisable for the fire alarm system that is fitted to be equipped with an automatic time delay. The costs incurred through false alarms will be charged to the exhibitor causing them.
– An acoustic and, where necessary, an optical signal must be installed at a central location.
– The electricity supply to the fire alarm system must be fed in via a non-switched set of fuses. This will ensure that power is still supplied to the fire alarm system even after the main switch has been switched off.
– The installed systems must be ready for operation prior to the opening of the show, at the time agreed on with the Show Management. After this, they will be connected up to MCH's central unit. If systems are not finished until it is too late to connect them up, a fire guard must be provided for the stand at the exhibitor's expense.

MCH will be pleased to provide you with information on systems that have been tested and approved for use in Switzerland. Only systems with a VKF licence and SES certification are permitted.
MCH will carry out the connection to the central fire safety unit in the hall, and connections will be invoiced to the exhibitor per piece.

Connection on hall side:	NC4MD-L-B-1 (Neutric)
Recommended plug: type:	NC4MRC angle plug
or type:	NC4FX straight plug

5.7 Issuing alarms to persons in closed rooms
The halls are equipped with an acoustic alarm system (LIAS).
It must be possible to issue alarms to persons in closed rooms.
– Persons in acoustically and visually closed rooms are issued with alarms via the MCH's telephone system. In an emergency (evacuation), such as in the event of fire or a bomb threat, an announcement is made via the stand telephone.

In closed rooms in which people are located, it is thus mandatory to order a landline telephone connection from MCH and to install the corresponding systems (see diagrams at end of these guidelines).

5.8 Escape routes from the exhibition stands
Escape and emergency routes in the stands must be configured in accordance with VKF BSR Escape and Emergency Routes (Flucht- und Rettungswege) / 16-03 (see diagrams at end of these guidelines).
See on this:
http://www.praever.ch/de/bs/vs/richtlinien/Seiten/16-03.pdf

5.8.1 Escape route lengths in the exhibition stands
The maximum escape route length between the exit on the hall floor (outside the stand area) and the point of the stand furthest away from this may not exceed the following values:
– 20 m for one exit or escape route.
– 35 m for two exits or escape routes arranged opposite each other

In calculating the escape route lengths, the length of any stairs must also be taken into account.
The maximum escape route length can be extended by 15 m if the additional escape corridor is designed as a separate fire compartment meeting the requirements of EI 30 (see diagrams at end of these guidelines).

5.8.2 Escape path widths inside the exhibition stands
The following regulations apply when observing an entire storey of a stand and/or a single room in a stand. All the dimensions set out below refer to the actual clearance.

Up to 50 persons per storey or room in a stand:
– Width of exit at least 90 cm[1]
– Width of escape route at least 90 cm[1]
– Width of stairs at least 90 cm[1]

Up to 100 persons per storey or room in a stand:
– Width of exit at least 2 x 90 cm[1]
– Width of escape route at least 120 cm[1]
– Width of stairs at least 120 cm[1]

[1] Number of escape routes or exits and stairs as a function of the escape route lengths as per 5.8.1.

Up to 200 persons per storey or room in a stand:
– Width of exit at least 3 x 90 cm or 1 x 120 cm + 1 x 90 cm
– Width of escape route at least 2 x 120 cm
– Width of stairs at least 2 x 120 cm

In the case of stands occupied by more than 200 persons per storey or room in a stand, the width of the escape route, exit and stairs and the number provided must be configured in accordance with the VKF (Cantonal Fire Insurance Association). Proof must be submitted in the context of the authorisation procedure.

5.8.3 Design of doors in exhibition stands
In escape routes, the use of swing doors, rotating doors, coded doors, sliding doors, rolling doors and other access barriers is only permitted if systems authorised by the VKF are employed.

5.9 Marking of escape and emergency routes
The escape and emergency routes in the stands must be marked in an adequate manner in accordance with standard SN EN 1838 and fitted with security lighting. This is to be installed in accordance with VKF Guideline BSR 17-03 "Marking of Escape Routes – Safety Lighting – Emergency Power Supply" (Kennzeichnung von Fluchtwegen – Sicherheitsbeleuchtung – Sicherheitsstromversorgung).
See on this:
http://www.praever.ch/de/bs/vs/richtlinien/Seiten/17-03.pdf

5.10 Seating for large numbers of persons in rooms or stands
As of 100 persons, seating must be arranged in accordance with VKF Guidelines 16-03.d Paragraph 5.2.6.
Allowance must be made for the following:
– free passage between the rows of seats
– number of seats per row
– anchoring of the seating

See on this:
http://www.praever.ch/de/bs/vs/richtlinien/Seiten/16-03.pdf

5.11 Fire extinguishers
Hand-held fire extinguishers must be provided on the stand for:
- multi-storey stands

The number and locations must be coordinated with MCH. The hand-held fire extinguishers can be rented from MCH.

In the case of single-storey stands, the Show Management can demand that hand-held fire extinguishers be available on the stand as a function of the stand size or its layout.

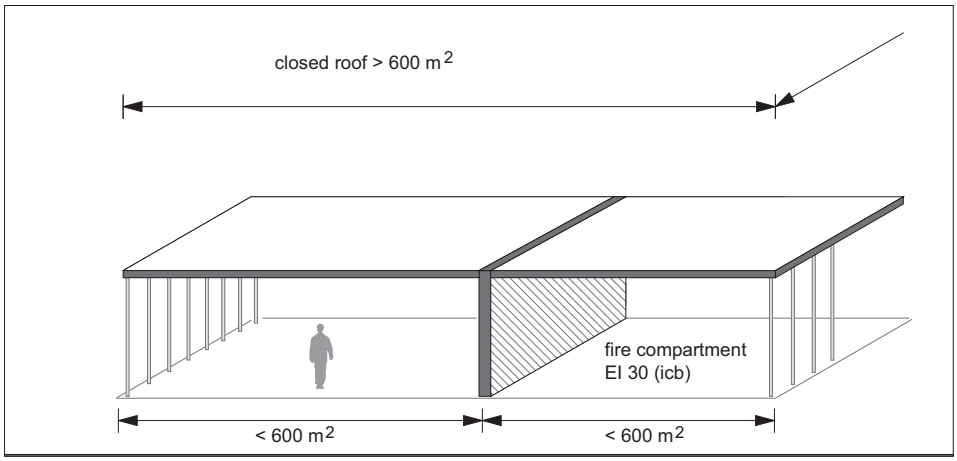
Foam fire extinguishers with a capacity of 9 litres are to be positioned at readily visible and readily accessible points.

Hand-held extinguishers which can impair vision when used (powder, dust) are not permitted.

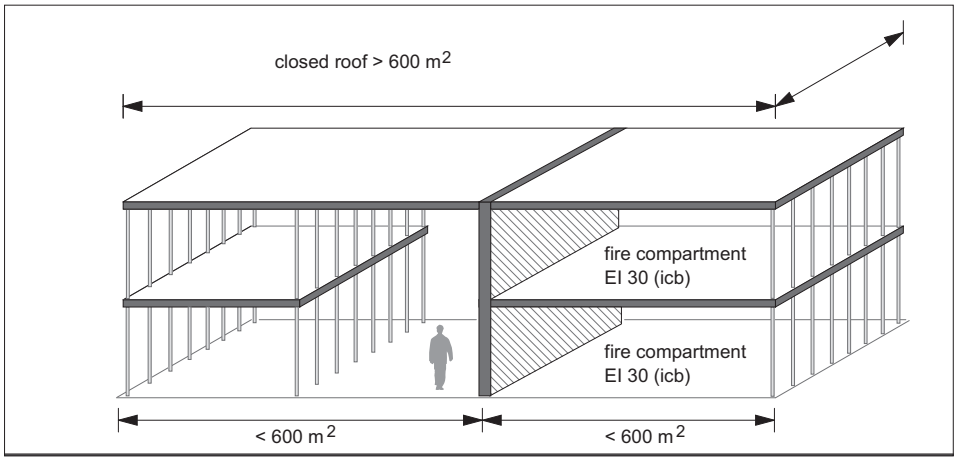
Ref. to 5.3 Diagrams of fire compartements in stand construction

Fire compartements complying with the specifications for EI 30 (icb) must be created if the closed roof area is > 600 m².

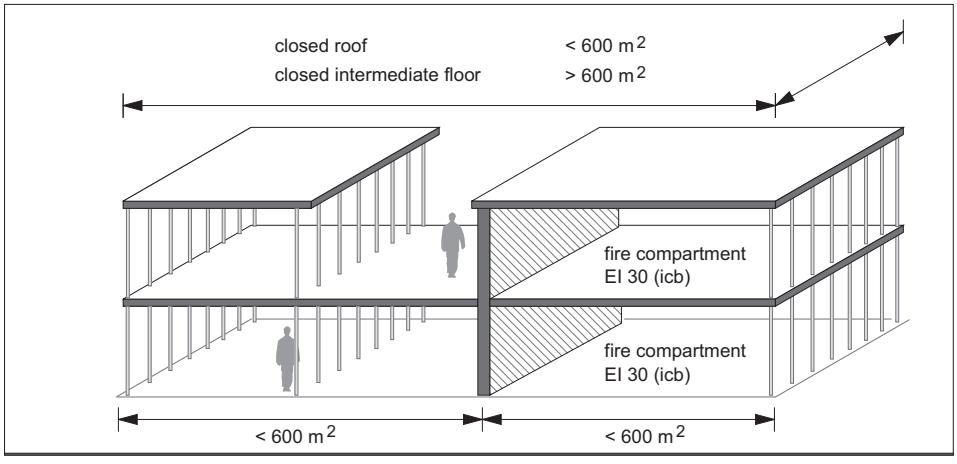
The fire compartements should be designed in accordance with the following schematic diagrams.



Hall cross-section



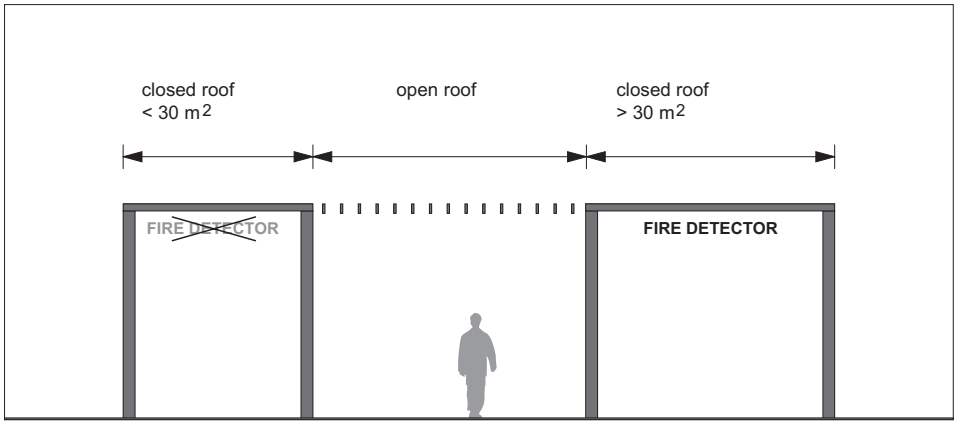
Hall cross-section



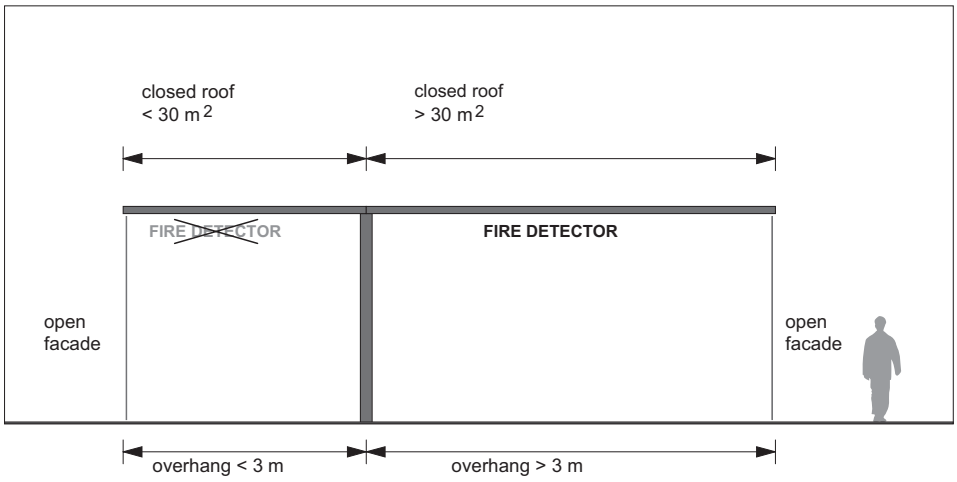
Hall cross-section

Stands with a closed roof > 30 m² and multi-storey stands must be connected up to the fire alarm system in the exhibition halls.

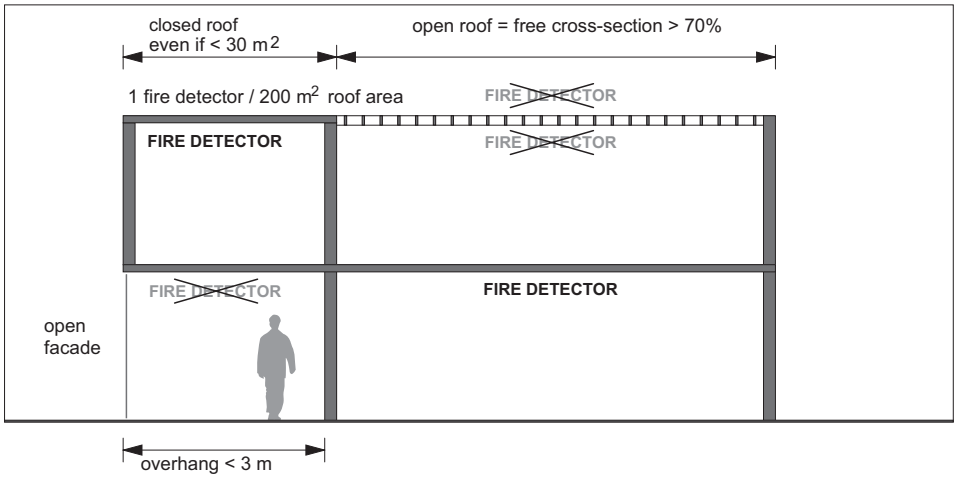
The configuration for closed rooms is shown on the following schematic diagrams.



Hall cross-section



Hall cross-section

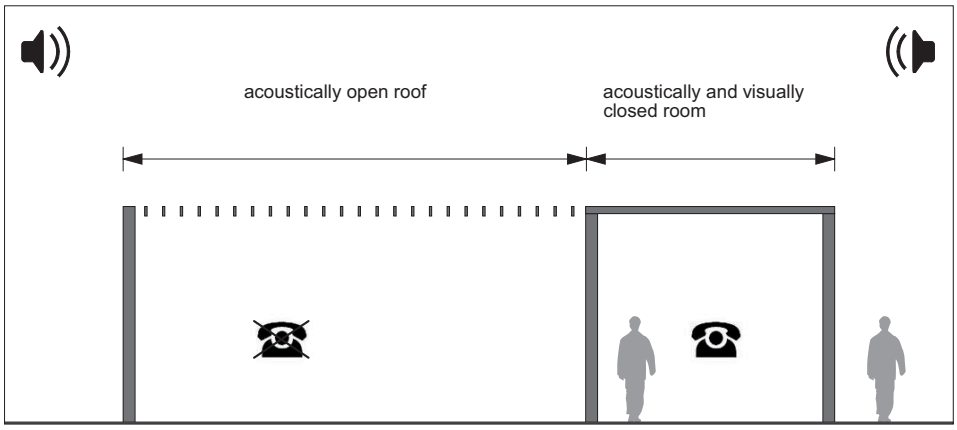


Hall cross-section

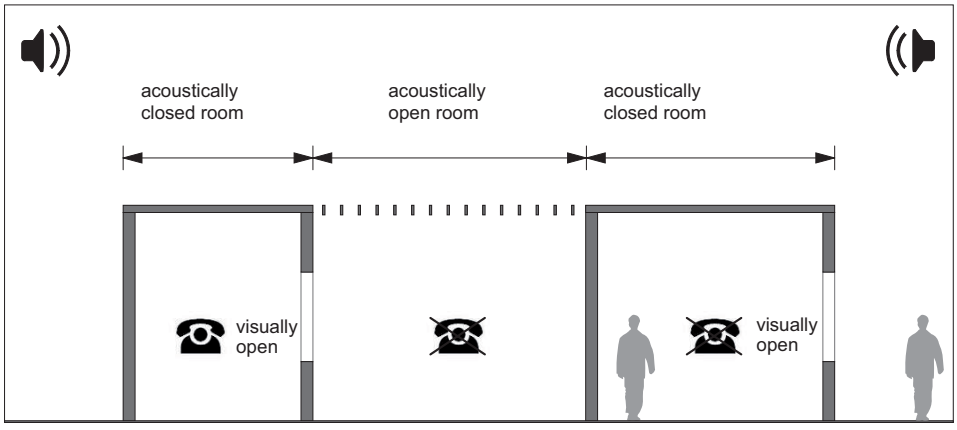
Ref. to 5.7 Diagrams for issuing alarms to persons in closed rooms

It must always be possible to issue an alarm to persons in all closed rooms. A landline telephone connection must therefore be ordered from MCH and installed.

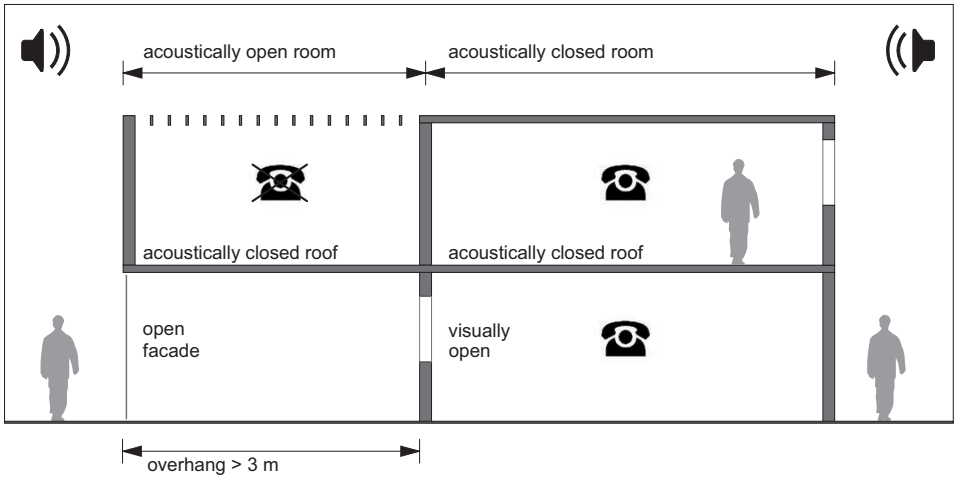
The configuration for closed rooms is shown on the following schematic diagrams.



Hall cross-section



Hall cross-section

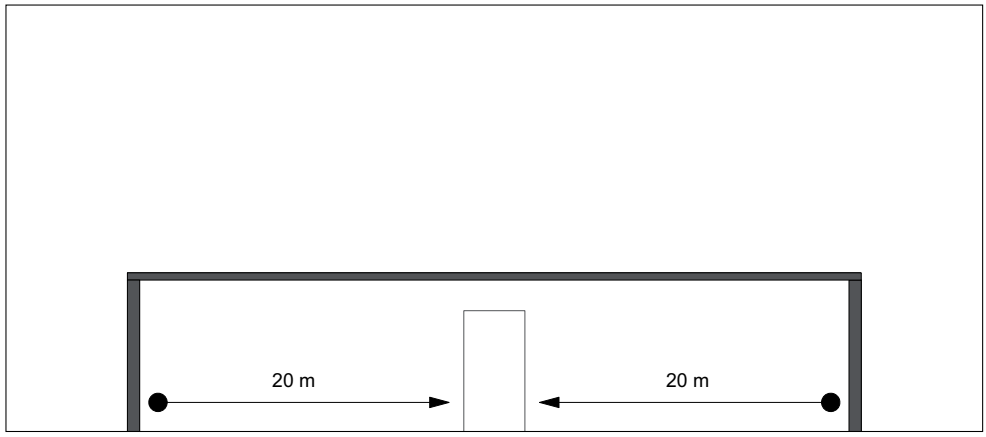


Hall cross-section

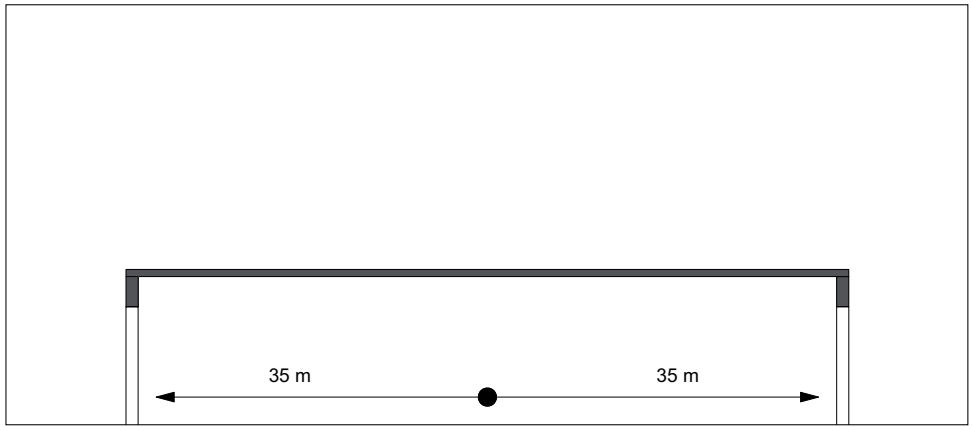
Ref. to 5.8 Diagrams of escape routes from the exhibition stands

Escape and emergency routes in the stands must be configured in accordance with VKF BSR Escape and Emergency Routes / 16-03.

The maximum escape route length between the exit on the hall floor (outside the stand area) and the point of the stand furthest away from this may not exceed the following values:
– 20 m for one exit or escape route
– 35 m for two exits or escape routes arranged opposite each other

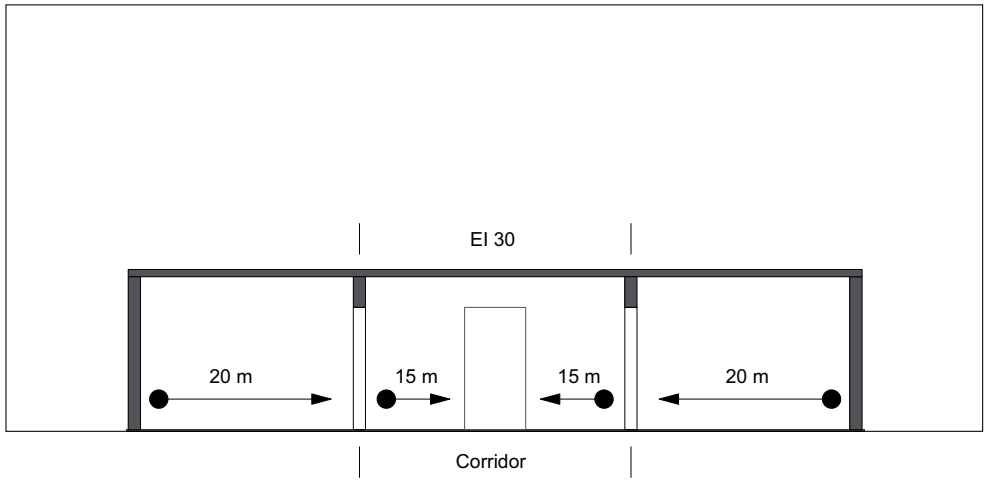


Escape route length with one exit: 20 m



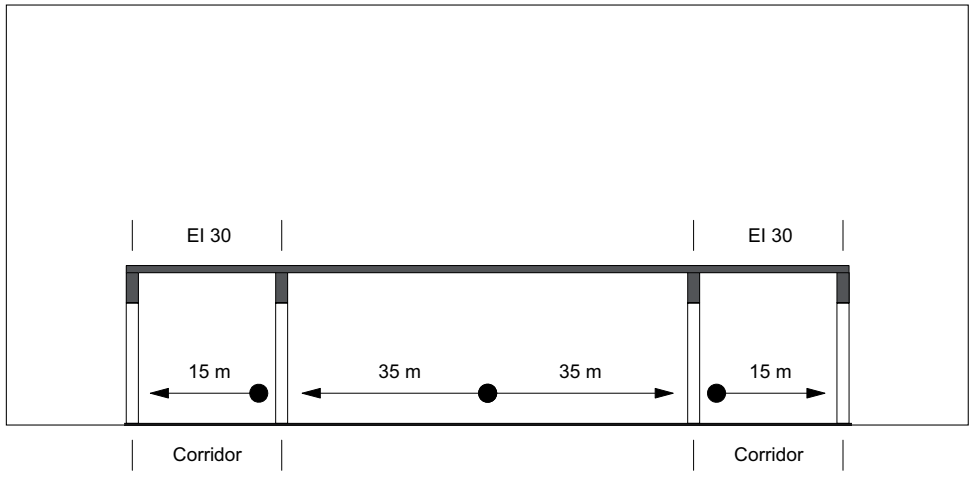
Escape route length with two or more exits: 35 m

The maximum escape route length can be extended by 15 m if the additional escape corridor is designed as a separate fire compartment meeting the requirements of EI 30.



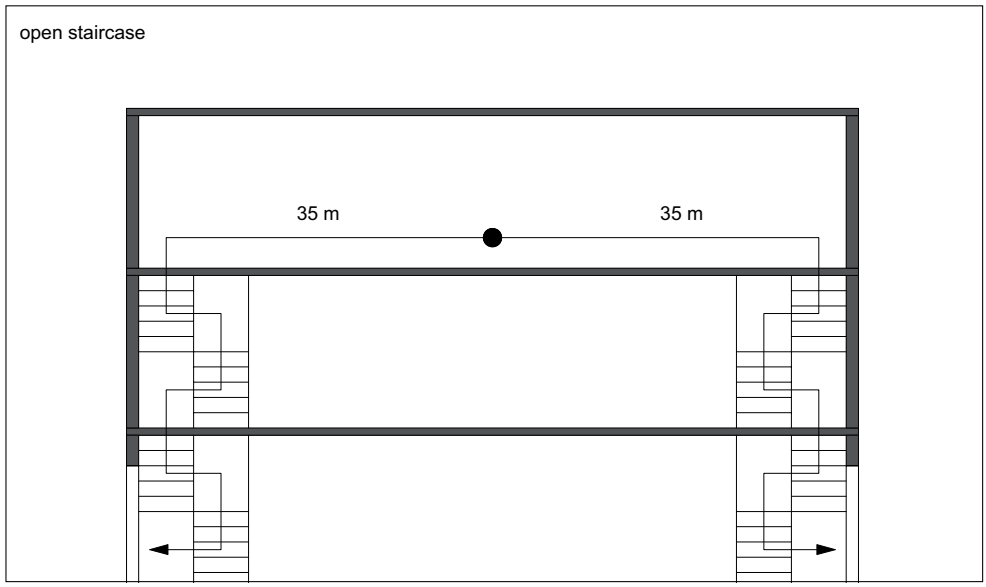
Escape route length with one exit and an additionally protected corridor (EI 30)

20 m + 15 m = 35 m



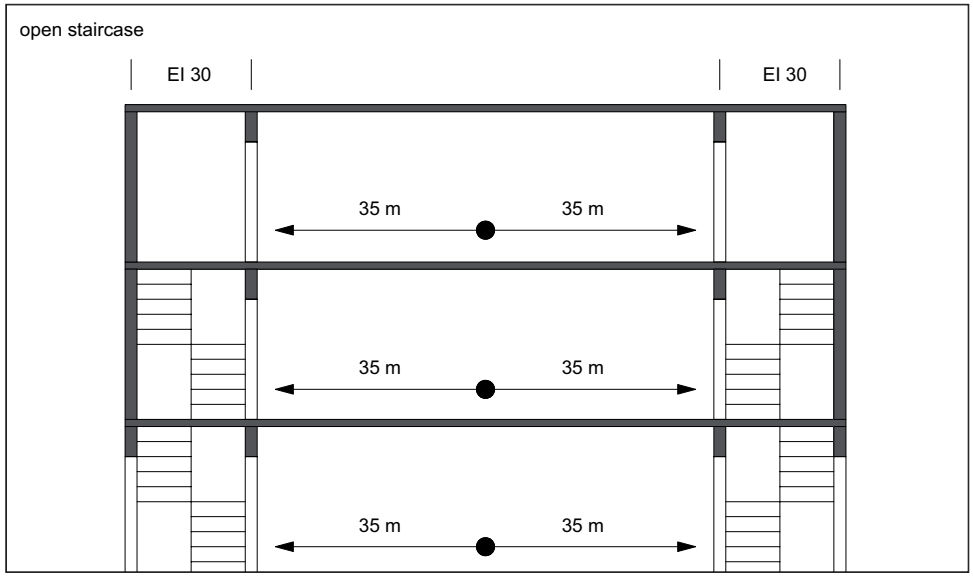
Escape route length with two or more exits with additionally protected corridors (EI 30)

35 m + 15 m = 50 m



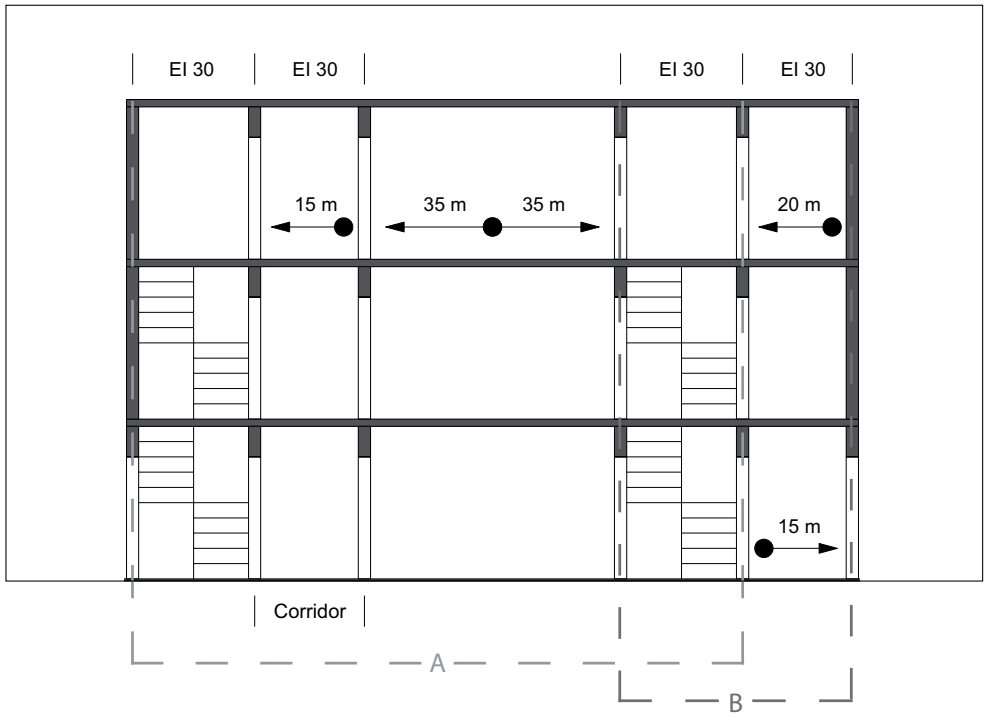
Escape route length with
two or more open staircases

35 m incl. run length of stairs



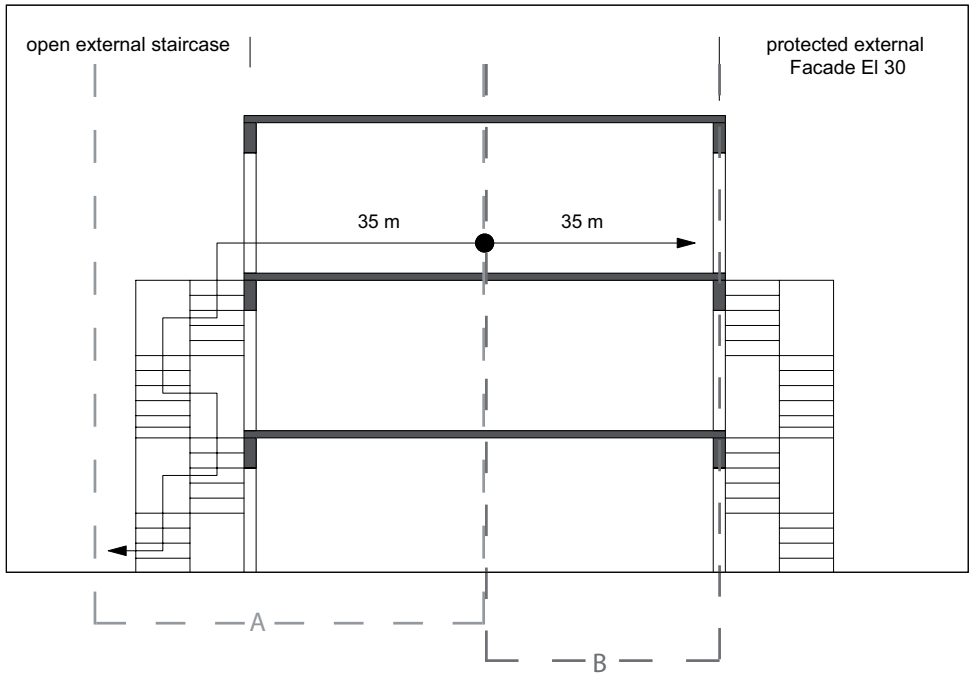
Escape route length with two or more closed
staircases (EI 30)

35 m excl. run length of stairs



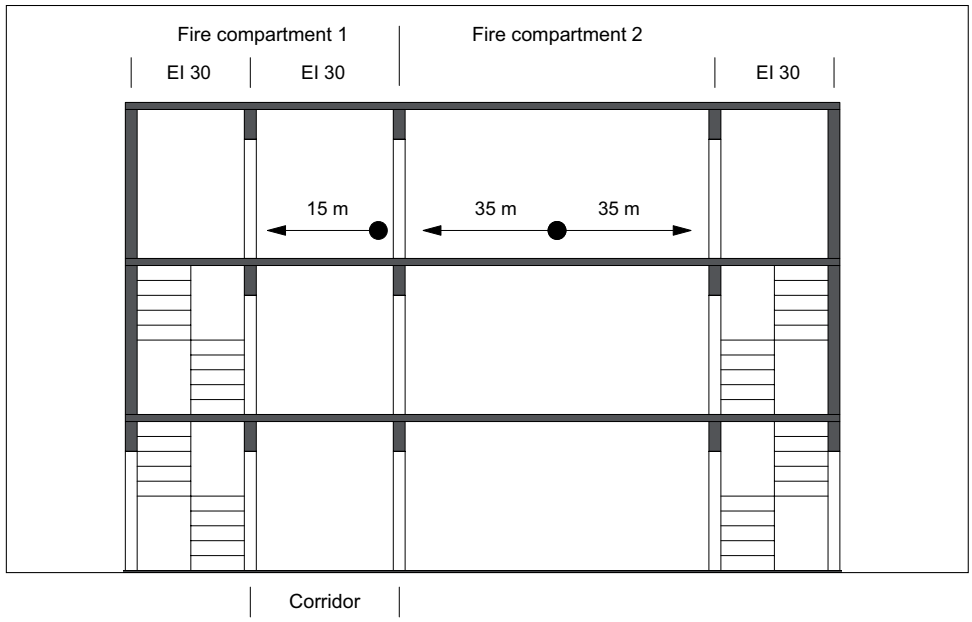
A Escape route length with two or more, closed staircases (EI 30) and additionally protected corridors (EI 30) — 35 m + 15 m = 50 m, excl. run length of stairs

B Escape route length with one closed staircase (EI 30) — 20 m + 15 m = 35 m, excl. run length of stairs



Escape route length with two or more open external staircases with an additionally protected facade (EI 30)

A 35 m incl. run length of stairs
B 35 m excl. run length of stairs



Escape route length with two or more closed staircases (EI 30) and two or more fire compartments.

35 m + 15 m = 50 m