

Information sheet

Two-storey stand construction

Scope

This information sheet provides an overview of the stand construction of two-storey structures in the trade fair halls. It does not cover two-storey trade fair stands in the outdoor area.

Other applicable regulations

The Technical Guidelines of Koelnmesse, Section 4.9
Information sheet regarding stand roofs (Ib01.03)

Summary

Two-storey structures may only be built in consultation with the respective trade fair sales unit and the event management and approvals department of Koelnmesse. A request for such a structure must be made immediately after the stand area has been approved, but no later than 6 weeks before start of construction. Koelnmesse reserves the right to prohibit the construction of two-storey exhibition stands in individual cases. If you plan to build such a structure, you should therefore notify Koelnmesse in good time.

Required documents for the construction request

The following documents must be submitted in advance (at least 6 weeks before the beginning of the event):

- Dimensioned design plans
- Cross-sections and views
- Verifiable information regarding the spaces of the upper storey (walk-in area) and of all the closed ceiling areas (e.g. including the stairs)
- Detailed drawings of the guardrails, steps, flights of stairs, handrails
- Ground plans (upper and lower floors)
- A certified static calculation
- Plan of the rescue routes, including proof of the length of the rescue routes
- Building specifications, including information about the materials and construction material classes

All documentation must be submitted in German or English. The documentation can be submitted via e-mail or in writing. The responsible department checks the documents to make sure they are correct and complete. Koelnmesse reserves the right to forbid the construction and operation for reasons of safety, missing or inadequate documentation or late submission of documentation.

Clearance

There should be at least 2.30 m of clearance on the lower floor and 2.30 m on the upper floor. The floor may not contain any anchoring. Two-storey stands must have an open-topped upper floor (see Information Sheet Ib 01.03 concerning stand roofs). At heights above 2.50 m, stands should have a neutral design at the stand limits that face neighbouring stand areas.

Fire protection

Fire detectors have to be installed on the underside of ceilings of two-storey exhibition stands that have a footprint of 50-100 sq. meters (including stairs and other extensions). A sprinkler system has to be installed if the stand footprint covers > 100 sq. meters. Fire detectors and sprinkler systems are installed by the service provider of Koelnmesse and connected to the Cologne Fire Brigade through Koelnmesse's fire alarm system. Fire extinguishers have to be placed at the top and bottom of every staircase, irrespective of the size of the stands.

Special features of the trade fair halls

Hall 1	Extinguishing water is supplied by the pipe in the hall floor
Halls 2-5	Extinguishing water is supplied by a pressure tank with a volume of 5 sq. meters – can supply water for up to 1000 sq. meters
Halls 6-9	Extinguishing water is supplied by the pipe in the hall floor
Halls 10, 11	Extinguishing water is supplied by a pressure tank with a volume of 5 sq. meters – can supply water for up to 1000 sq. meters

The installation is carried out by a contractor of Koelnmesse and is performed in accordance with the currently valid VdS guidelines. To this end, all of the required plans for the exhibitor's stand have to be submitted by the deadline. The exhibitor bears the costs of installation (fire alarm system, sprinkler system etc.). Please note that the stand areas for the compressed air tanks in Halls 2-5 and Halls 10 and 11 must be taken into account during the planning of the stand.

The sprinkler system is ordered using the corresponding forms of Koelnmesse GmbH.

Building material

Load-bearing components, ceilings and the floor have to be made of construction materials that are at least fire retardant (at least B1 according to DIN 4102 or at least Class C according to EN 13501-1). This means that the materials used in construction must be fire retardant and must not drip. Moreover, they must not be toxic or contribute to heavy smoke formation.

Only appropriate safety glass may be used – see the information sheet concerning the use of glass and acrylic glass in stand construction.

Railings

Railings must be at least 1.10 m high. They must have upper, middle and lower straps (at least one strap at each level). The distance between parts of guard rails and railings may not exceed 0.12 m in any direction (see NRW Special Construction Regulation (SBauVO NRW) Section 11 Subsection 2)

Guards at least 0.05 m high to prevent objects rolling off must be fitted where there are railings on the upper floor.

Imposed loads/design loads

Imposed loads are to be determined in accordance with EN 1991-1-1/NA Tab. 6.1

3.0 kN/m ²	Tables and chairs are arranged freely or in conference booths
5.0 kN/m ²	Unrestricted use as an exhibition area
1.0 kN/m ²	Railings and banisters at handrail height
5.0 kN/m ²	Stairs

Proof must be provided that the bearing pressure does not exceed the permissible load of the hall floors (see Technical Guidelines 3.1 f Technical Hall Information). The planned use of space must be clearly indicated in the submitted plans.

Escape and rescue routes/stairs

On the upper floor, the distance to the stairs may not exceed 20 m (walking line) from any accessible location. The stairs must be arranged so that the rescue routes to the outside are as short as possible (max. 50 m).

Escape and rescue routes are to be signposted in conformity with ASR A1.3 "health and safety signs" (see information sheet Ib 02.01 concerning the construction of emergency doors).

If the upper floor exceeds 100 sq. meters, two stairs are to be constructed opposite from each other and no more than 20 m apart. Fire extinguishers also have to be placed at the top and bottom of every staircase.

Stairs must be constructed according to DIN 18065 (see information sheet Ib 04.01 concerning stairs and pedestals). Spiral staircases and newel stairs are not permissible under any circumstances.