

TECHNICAL GUIDELINES

1 About these regulations

1.1 General

The aim of the Technical Regulations is to keep the halls that are intended for trade fairs and events (the event rooms) in such a condition at all times that persons or property cannot be endangered by these rooms or by the operation thereof.

Compliance with the Technical Regulations is checked by the BOA (Bauordnungsamt Bremen, the Bremen Building Regulations Authority), by the Fire Brigade and by MESSE BREMEN's Technical Management during the acceptability inspection of the events concerned.

Permission to put an exhibition stand into operation may be refused in the interests of all event participants if any defects found have not been corrected by the time the event is due to commence. The right is reserved to impose further safety requirements which might result from the acceptability inspection.

A representative of the event organiser concerned must be present at the acceptability inspections in order to appropriately pass on information about defects or necessary changes or, as the case may be, to correct such defects or make such changes. The name of this person must be announced to MESSE BREMEN's Technical Management.

Before every event, an arrangement plan (seating plan) must be submitted in good time to MESSE BREMEN's Technical Management for the purpose of examination and approval.

1.2 Basic requirements

According to §§ 3 and 52 of the version dated 12th June 1990 of the Bremische Landesbauordnung BremLBO, the Building Regulations of the State of Bremen - in conjunction with the specimen draft version dated May 2002 for regulations concerning meeting places (VStättVO) and on the basis of the industrial regulations and inspections imposed by the BOA (Bauordnungsamt Bremen, the Bremen Building Regulations Authority) and by the Bremen Fire Brigade - the

following Technical Regulations must be complied with.

Obligations arising out of other laws, regulations & other legal requirements (e.g. accident prevention regulations) must be fulfilled irrespective of the Technical Regulations.

The Technical Regulations may be altered or added to at any time by the Bremen Building Regulations Authority and by MESSE BREMEN's Technical Management.

1.3 Heating and ventilation of the halls

Halls 1, 2 and 3 have warm air heating; halls 4, 4.1, 5, 6 & 7 additionally have partial air-conditioning. The systems are controlled automatically by sensors which measure temperature, humidity, atmospheric pressure and dust content. In addition, there are convectors in the halls and foyers to assist the heating process.

1.4 Hall lighting

All halls are equipped with general lighting (ceiling spotlights) and, to some extent, with fluorescent lamps or wall floodlights. The illuminance values are as follows:

| | |
|-------------|-----------|
| Hall 1 | 1.200 lux |
| Hall 2 | 300 lux |
| Hall 3 | 250 lux |
| Halls 4 - 6 | 310 lux |
| Hall 7 | 1200 lux |

For stand illumination and for the presentation of products, the installation of spotlights is recommended.

1.5 Fire safety equipment

The halls are equipped with automatic smoke detectors, which are activated by CO₂, smoke and dust. Fire extinguishing equipment and fire alarm devices in the hall area must not be obstructed by stand structures or stand material. Access must be assured at all times.

2 Set-up & dismantling

2.1 Safety areas & rescue routes

Safety areas consist of rescue routes which make it possible to exit from the halls quickly and safely in the event of an emergency. They also include fire brigade maneuvering areas in front of the halls. These areas must be kept clear at all times during an event, and

must not be obstructed by stand structures or by parked cars and lorries. Doors identified with the pictogram for "emergency exit" must likewise be kept clear at all times.

2.2 Maximum permissible number of persons

The maximum numbers of persons to be permitted for the individual halls depend on the hall arrangement and must be clarified before-hand by MESSE BREMEN's Technical Management.

3 Unloading and loading

3.1 Traffic regulations

- In the open air:

The German Road Traffic Regulations (StVO) shall apply throughout the entire grounds. The maximum speed limit is 10 km/h. The grounds provide space for short-term unloading and loading only. The driver of the motor vehicle must continuously remain in the vicinity of the vehicle. Locations for the outside broadcast vans of radio and television companies are specified by consultation and agreement with MESSE BREMEN's Technical Management.

- The hall area

It is possible to drive motor vehicles in the halls. However, this must take place by consultation and agreement with the MESSE BREMEN hall foreman who is present on site, in order not to interfere with the stand construction process. The drivers must select the shortest approach route to the unloading and loading site. While the truck is stationary, the engine must be switched off. This also applies to the stand-by heaters of the trucks. Diesel vehicles, e.g. wheeled loaders, bobcars and industrial trucks, e.g. forklift trucks, must be fitted with soot filters, or else they must be electrically powered. Platforms for lifting persons are given introductory instruction by a hall foreman (whether loaned equipment or stacker trucks belonging to MESSE BREMEN). The drivers of industrial trucks must possess a certificate of competence.

Industrial trucks are not allowed in hall 4.1, which is on the upper floor.

Material and exhibits for the halls are brought in via the gates at the north and south sides. To avoid damage to the building, passing through the gates is permitted only if the gates are fully open. The gates must be opened only by stewards or hall personnel. The driving of vehicles through the foyers in halls 4 to 7 is permitted only along the direct route between the gates. Steering manoeuvres must be avoided, since the floor surface is particularly sensitive. Crosstraffic in the foyer is not permitted (please pay attention to the markings).

The entrances and exits for visitors, including emergency exits, must not be used for bringing goods in or taking them out.

Keeping doors open by means of wedges is prohibited.

Any instructions issued by the stewards and by the hall foremen must be obeyed.

3.2 Hall entrance dimensions

The maximum sizes of the entrances are as follows:

Halls 1-2: h= 4,20 m w= 4,00 m

Hall 3: h= 2,45 m w= 4,00 m

Hall 4.1: h= 2,40 m w= 2,40 m
l= 4,30 m (lift)

Halls 4-6: h=5.20 m w=5.50 m

Hall 7: h=4.50 m w=4.80 m

3.3 Goods lift

Materials and exhibits for hall 4.1 are brought in via a goods lift. This goods lift is approached either through hall 4.0 or through hall 2 (by consultation and agreement with MESSE BREMEN's Technical Management). The maximum entrance dimensions for the goods lift are: h = 2.40 m, w = 2.40 m, l = 4.30 m

The maximum load is 3,000 kg.

4 Delivery

In the case of delivery of the exhibition goods by a freight carrier or by the German Post Office, the address should not be stated as only "MESSE BREMEN" or similar, since this could cause delays. In the papers accompanying the delivery, it is necessary to specify the event, the exhibiting company, the hall and the stand number. Delivery of the exhibition goods before the date of commencement of stand construction are possible only

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by consultation and agreement with the MESSE BREMEN's Technical Management.

4.1 Storage of empty packaging

There is no right of storage of empty packaging in the halls or on the open-air site. If possible, a storage space will be allocated by consultation and agreement with the Technical Management.

5 Exhibitors' parking space

The parking of vehicles on safety areas of the halls, and in front of entrances and exits, is not permitted during the trade fair, exhibition or other event. On the dates of construction and dismantling, vehicles may stop only for the purposes of loading and unloading. Parking space is available on the Bürgerweide (a car park near the exhibition centre) and in the multi-storey car park. We expressly wish to point out that vehicles parked on the site during the event will be towed away at the owner's expense.

5.1 Caravans/mobile homes

Throughout the entire grounds, premises and the adjacent parking spaces, it is prohibited to set up caravans or mobile homes and to stay overnight in such vehicles. It is recommended to use the ADAC awarded campsite (ADAC = German Automobile Association) in the immediate vicinity:

"Camping am Stadtwaldsee"
Hochschulring 1
28359 Bremen, Germany
phone:
+49 (0) 421.8410748
facsimile:
+49 (0) 421.8410749

6 Stand construction

Stand construction may take place only on the space indicated on the construction plan. The dimensions of the stand area rented must be checked on site, since no guarantee is given by MESSE BREMEN for the correctness of dimensions or any other information. Structures must not project beyond the markings on the ground or floor. Stand construction material must be stored neither in the passageways nor on the site of the adjacent stand.

6.2 Ground loads

The maximum ground load (working load) is 150 kN (=

15,000 kilogram weight = 15 t) per square metre, except foyers. Permissible point loading = max. 70 kN acting on an area of 10 x 10 cm.

The permissible load on the foyer floors is 5 kN/m². In the area of direct access to the halls, a maximum ground load of 120 kN/m² is permitted. The permissible ground load in hall 4.1 is 5 kN/m².

6.3 Loading of walls & ceilings

It is not permissible to secure stand structures to parts of the hall ceilings or walls. This also applies to attachments to prevent stand structures from toppling. Stand construction material may not be leaned against outside walls and doors, because these partially consist of glass or acoustic material.

Exceptional permission for the suspension of items from ceilings should be applied for through MESSE BREMEN's Technical Management, who will then arrange for preparation of the suspension, if appropriate. The attaching of decorations or suchlike to sprinkler pipes, water pipes, ventilation pipes or other installations or objects that form part of the halls is prohibited.

6.4 Stand and exhibit safety

The exhibitor is responsible for the stability and safety of all stand structures and exhibits; proof of this may be required.

For the construction of stands, only approved materials may be used. Load-carrying parts must have been checked, and such checks must be certified (structural calculations). This applies especially to two-storey exhibition stands. These must in all cases be approved by the Bremen Building Regulations Authority (the BOA). Construction materials and components for the construction of stands must be non-flammable or flame resistant. DIN 4102 B1 shall apply as a basis.

Construction materials which are highly flammable or which drip when burning are not permissible. Decorative materials must be flame resistant. On request, appropriate evidence must be provided by the stand operator.

Flower arrangements with leafy or pine twigs, trees or similar may not be used.

Materials which burn explosively (such as bamboo, hay, straw or peat) are not permissible.

6.4.1 Stand ceilings

Sprinkler systems are installed in hall 4.01, 4.1 and in the foyers of hall 4 to 6. In these halls, every single square metre of every stand ceiling must be open to an extent of at least 75 %, in order to allow sprinkler water to pass vertically through the ceiling. Otherwise, a stand sprinkler system must be installed for surfaces situated underneath; such cases must be coordinated with MESSE BREMEN's Technical Management.

Textile ceilings (mesh size of at least 2 x 4 mm) suitable for use with sprinklers are permitted, provided that the span does not exceed 5.00 m.

No heat source of any kind is permitted in the vicinity of the sprinkler nozzles, as these are activated at a temperature of about 68 °C, i.e. they then automatically spray water into the hall.

The exhibitor will be held liable for any damage that occurs.

Construction material for stand ceilings must be flame retardant.

6.4.2 Access to technical facilities of the halls

Hand-held fire extinguishers, fire detectors, pushbutton alarms, wallmounted hydrants, smoke flap actuators and the associated warning notices must at all times be accessible and visible. The functioning of fire protection gates and fire doors must not be restricted by installations of any kind, such as electric cables. It must also be ensured that connection points for the stand's electrical supply, as well as distribution cabinets and telephone distributors, remain accessible. Access to the safety equipment and technical facilities must be granted at any time to the persons appointed by MESSE BREMEN's Technical Management.

6.4.3 Hall floors

It is not permissible to put anchors into the hall floors and foyers, or to drill holes for pegs. The same applies to other kinds of attachment, such as screws or nails. The

company renting the stand is liable for any damage done. Double-sided adhesive tape can be used to secure carpeting. It must be completely removed after the stand has been dismantled. Covering the entire floor with adhesive floor covering (including self-adhesive tiles) is not permitted.

6.4.4 Safety lighting

Additional safety lighting must be fitted in those stands in which the generally available safety lighting is ineffective because of the stand design. This additional safety lighting must be installed in such a way as to ensure that persons will easily find their way to the main rescue routes in the hall (refer also to VDE 0108).

If an exhibitor requires continuous voltage for battery-powered illuminated pictograms, MESSE BREMEN's Technical Management must be consulted beforehand.

6.4.5 Electrical safety measures

Regulation VDE 0100, Part 410, must be adhered to as a protection against the dangers of indirect electrical contact. Excess current protection (earthing) must be provided in stand installations.

Fault-current protective devices must be installed (as of 1st January 1993). Electrical sockets up to 16 A must be protected by devices with a nominal fault current of 30 mA, and other sockets by devices with a maximum fault current of 500 mA. The conductor cores for power and lighting circuits must each have a minimum cross-sectional area of 1.5 mm² (see also VDE 0108).

6.4.6 VDE and EU low-voltage regulations

All electrical equipment must conform to the VDE regulations or the EU low-voltage regulations and must display an EU-recognized safety symbol.

6.4.7 Balloons

It is permissible to use balloons filled with non-flammable gas. In closed rooms or exhibition stands, the ratio relative to the volume of air in the room must be sufficiently low (otherwise there is a danger of suffocation).

6.4.8 Glass

Only safety glass may be used. Edges of panes of glass must be finished or protected so as to

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pre-vent any risk of injury. Structures made completely of glass must be marked at eye level.

Plexiglas must be fitted in a metal frame (for fire safety).

6.4.9 Stand heaters

The operation of mobile heating systems fuelled by gas or liquid is not permitted. Electrically powered heaters are permissible, provided that they conform to the general standards and safety regulations. Units with exposed heating wires are not permissible. The units must be installed in such a way that an adequate distance from objects is ensured. The unit must be switched off when the exhibition stand is vacated.

6.4.10 Laser systems

Laser systems exhibited and those operated for demonstration purposes must fulfil the requirements of the accident prevention regulation relating to laser radiation (VBG 93). The operation of laser systems of classes 3 B or 4 must be reported to the Gewerbeaufsichtsamt Bremen (the Trade Supervisory Board of Bremen).

6.4.11 Welding work

Welding work on the exhibitor's own materials is permissible only by consultation and agreement with MESSE BREMEN's Technical Management. If the parts to be welded can be moved into the open air, welding inside the hall is not permissible. In all cases, it must be ensured that no danger can occur as a result of flying sparks. A fire guard (fire safety officer) and fire extinguishers must be provided. In the case of welding work, particular attention must be paid to the regulations of GUV 26.21.

6.4.12 Catering in the Exhibition Halls

Where roasting, grilling or deep-frying equipment is used, the regulations may require the installation of a vapor extractor if excessive odour nuisance or activation of a fire alarm can be expected to occur.

6.4.13 Gas equipment in the Exhibition Halls

The introduction of liquefied gas - such as propane, butane or such-like - and its installation and utilization are

prohibited (see also Section 10.2). If this rule is contravened, MESSE BREMEN's Technical Management is entitled to remove the units at the expense of the exhibitor and, if applicable, to have the stand closed for safety reasons.

If the presentation of goods on the stand is dependent upon the use of liquefied gas, the use of gas may be permissible after consultation with MESSE BREMEN's Technical Management, possibly subject to compliance with particular safety regulations and by agreement with the Bauordnungsamt Bremen (the Bremen Building Regulations Authority) and the Bremen Fire Brigade.

7 Sand, soil, gravel

If highly dirt-producing materials such as sand, soil or gravel are used, it must be ensured that damage to the floor and walls is avoided. If necessary, the floor must be protected by an underlay made of suitable materials (e.g. plastic sheeting). In all cases, contamination of the supply ducts must be prevented. The introduction and removal of these materials must be performed by means of suitable equipment designed such that damage to the floor cannot occur. Agricultural machinery may be used only if permission is obtained from MESSE BREMEN's Technical Management. Tracklaying vehicles are impermissible in all cases.

8 Animals

If animals are kept in the halls, it must be ensured that damage - especially to the floor, walls and pillars - does not occur. The pens must be set up at a sufficient distance from the walls and pillars. In the case of large animals, the floor must be protected by means of suitable materials. The event organiser or the exhibitor is responsible for keeping the animals in a manner appropriate to the type of animal concerned, and for keeping the pens (halls) clean. Animal excrement must not be allowed to pass directly onto the hall floor or into the supply ducts.

9 Supply of services to the stands

9.1 General

The supply of services to the

stands takes place via supply ducts. Depending on the position of the stand, the supply can be selected within the stand if the duct is routed within the stand. In all other cases, the supply is taken from the nearest duct. Pipes or cables routed above the ground must be covered over to prevent people from tripping over them. The work of connecting cables and pipes (for electricity and water) is done by licensed specialist companies (contractual partners of MESSE BREMEN).

9.2 Supply of electricity

For the supply of electricity, a TN-C-S power network at 3x400/230 V, 50 Hz (halls 1 to 7) are available in the halls. The fluctuation range is +6 % to -10 %. It is expressly pointed out that an "uninterrupted" power supply is not available. In all cables feeding to the stands, the protective earth (PE) conductor and the neutral (N) cores are provided as separate conductors. In halls 1 to 7, protective earth conductors and neutral conductors must not be connected to each other (refer also to VDE 0108). Motors having a power rating of 20 kW or more may be operated only with a current limiting starting device.

9.3 Supply of water

A supply of water exists in the supply ducts of halls 1 and 4.0 to 7 (but not hall 2, 3 and 4.1), with various inlets and discharge points. Any other water supply sources have to be approved by MESSE BREMEN's Technical Management. When the stand is vacated, the main stop valve in the stand must be closed. The exhibitor is responsible for any water damage that occurs. For stands on the open-air site, a continuous supply of water cannot be guaranteed in the event of frost.

9.4 Supply of compressed air

A supply of compressed air does not exist, but it can be provided if requested from MESSE BREMEN's Technical Management.

9.5 Telephone & other communication connections

Telephone and other communication connections are possible, employing analog, digital or

ISDN technology. Operation of the exhibitor's own terminal equipment is permissible. Requirements should be announced to MESSE BREMEN's Technical Management.

10 Accident prevention regulations

10.1 General

The exhibitor itself is responsible for safety at the stand and for ensuring that the relevant industrial safety and accident prevention regulations are complied with. It is also liable for all injuries to persons and damage to property resulting from the construction and running of its stand or from the exhibits displayed in it.

Throughout the periods of construction and dismantling, conditions inside and outside the halls are similar to those on a building site.

The personnel working in this environment must be made aware of the particular dangers that exist. Access to the stands for the purpose of checking safety must be granted to the Gewerbeaufsichtsamt Bremen (the Trade Supervisory Board of Bremen), the Bauordnungsamt Bremen (the Bremen Building Regulations Authority), the berufsgenossenschaftliche Kommissionen (the pertinent commissions of the employers' liability insurance associations), the fire brigade, and the persons appointed by MESSE BREMEN's Technical Management.

If safety-relevant deficiencies are found, the instructions issued by the above-mentioned bodies must be obeyed immediately.

10.2 The use of industrial trucks, cranes, and platforms for lifting persons

Only authorized persons may operate such machines. The driver of an industrial truck must have a certificate of competence, and must be able to produce it upon request. The regulations of VBG 4 must be complied with. In particular, it must be noted that fork-lift trucks may be driven only with the fork lowered. Diesel-powered fork-lift trucks may be used only in conjunction with a permanently installed soot filter. Gas-powered industrial trucks are prohibited.

10.3 Fire protection equipment in the exhibition stands

The exhibitor is responsible for the installation of the necessary

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fire protection equipment, such as fire extinguishers and sprinklers.

10.4 Exhibition of motor vehicles

The fuel tank of exhibited vehicles must be to a large extent empty that of exhibited motorcycles completely empty. It must not be possible for unauthorized persons to open the tank filler cap. (So use separate lockable fuel tank caps, for example.) Any unexpected fuel leaks must be cleaned up immediately using an appropriate binding agent or dry cloths. Binding agent or cloths must be removed from the halls immediately afterwards and correctly disposed of. In special cases, and only by arrangement with MESSE BREMEN's Technical Management, used binding agents or cloths can be stored temporarily outside of the halls on the premises until correct disposal. The vehicle battery (batteries) may be left connected if their construction type means that there is no risk of gas emissions (gel batteries). The contacts of the batteries must be safe to touch. This applies particularly in the case of a battery (batteries) that is (are) located in the engine compartment of if the engine bonnet is open. Batteries from which gas emissions are possible must be removed. For the purpose of demonstrating vehicle functions an external electricity supply can be connected using a network device.

A technical device must render it impossible to start the internal combustion engine in spite of a connected (gel) battery or external energy supply.

The vehicle keys are to be kept in readiness at the stand. They must not be handed out to members of the public.

At least one 6 kg powder fire extinguisher suitable for Class A, B and C fires must be kept in readiness per stand. Anyone acting in violation of this will be required to leave the hall. The exhibitor shall be liable for any resulting damages or accidents. MESSE BREMEN can limit or prohibit the display of vehicles at their own discretion. In the exhibition hall(s) concerned, a fire safety watch (BSW) will be present throughout the whole duration

of the event. The display of gas powered vehicles in the halls is only permitted if the compressed gas tank is empty and without pressure. The drive batteries of electric or hybrid vehicles must be disconnected from the traction network via main switch (service-disconnect). Hydrogen tanks must be pressureless.

In the foyers of halls 1 to 7, the exhibiting of vehicles with internal combustion engines is prohibited.

10.5 Open fire or naked lights

The use of open fire or naked lights, the burning of packing material, wastes etc. in the halls are prohibited.

The use of open fire or naked lights on the open-air site is only allowed after the application and permission by MESSE BREMEN's Technical Management. The legally regulation of fire protection and the restrictions of the Fire Department Bremen must be observed.

10.6 Ethyl alcohol, mineral oils

The use of petrol, paraffin or any other flammable liquids for cooking, heating or operating machinery etc. is prohibited.

10.7 Cotton waste, oily & greasy cleaning cloths

Used cotton waste as well as oily and greasy cleaning cloths must be kept in tightly closed and non-flammable containers with self-sealing lids.

10.8 Celluloid, inflammable synthetic materials

Unpacked celluloid and highly inflammable synthetic goods within reach of visitors may be exhibited only under glass.

10.9 Noise level

When exhibition goods that create noise are demonstrated, the noise level at the stand boundary must not exceed 60 dBA.

10.10 Flammable materials

Flammable materials that are no longer needed and flammable wastes must be transported immediately to the waste containers or to the places specified for that purpose. The keeping of these materials on the stands or at other places in a hall is not permitted; this also applies to

packing materials and other empty packaging. Work clothes must be kept in cupboards made of non-flammable material.

10.11 Compressed gas cylinders, industrial gases

When compressed gas cylinders are being used or handled, the accident prevention regulations must be complied with. Toxic gases must not be used. Before any system involving compressed gas cylinders is put into operation, it must be checked beforehand by an expert in accordance with the technical regulations, in order to ensure that the system is in a satisfactory condition. When such systems are used, MESSE BREMEN's Technical Management must be informed in advance. Compressed-air tanks may be operated only in accordance with the Druckbehälterverordnung (Ordinance on Pressure Vessels) and the Technische Regeln Druckgase (TRG, Technical Rules for Compressed Gases). MESSE BREMEN's Technical Management must be informed when such tanks are to be used.

10.12 Beverage dispensing systems

When beverage dispensing systems are operated, the regulations of the Schankanlagenverordnung (Ordinance on Beverage Dispensers) and the relevant technical rules SK 400, 500, 501, 60 must be observed.

10.13 Pyrotechnics

If pyrotechnics are used, the rules of GUV 6.15 and of GUV 26.22 must be observed. Their intended use must be announced in advance in writing to the Gewerbeaufsichtsamt Bremen (the Trade Supervisory Board of Bremen) and to MESSE BREMEN's Technical Management; the announcement must be accompanied by a list of the effects used. If machines for the production of simulated mist are to be used, MESSE BREMEN's Technical Management must be informed in advance.

11 Advertising activities

Advertising activities and presentations may be carried out only on the exhibitor's own stand. They

must not cause obstruction of or interference with, neighbouring stands. The noise level caused by advertising and exhibits must not exceed 60 dB(A) at the stand boundary.

12 Waste disposal, cleaning

The exhibitor is responsible for disposal of all accumulated waste, both during the event and during construction and dismantling. Waste disposal must be performed by the exhibitor or his appointed representative themselves in accordance with the Abfallbeseitigungsgesetz (the German Waste Disposal Act). The appropriate measures for the separation of recyclable materials must be carried out. Substances which could cause a health risk or contamination of water, such as oils, paints or emulsions, must not be discharged into the sewage system. For cleaning, the MESSE BREMEN's contractor is responsible.

13 Handing back the exhibition area

The exhibition area must be handed back in a clean condition by the exhibitor not later than the time at which dismantling finishes. Adhesive tape and paint residues must have been completely removed. An acceptability inspection of the exhibition area is performed by MESSE BREMEN's Technical Management.

Bremen, December 2018

Based on the original German text. The German text shall be legally binding for any and all legal claims.