

Technical Guidelines

List of Contents

- 1. Preliminary remarks**
 - 1.1 Domiciliary rights
 - 1.2 Opening times
 - 1.2.1 Construction and dismantling periods
 - 1.2.2 Duration of the event
- 2. Traffic on the exhibition grounds, emergency exits, safety installations**
 - 2.1 Traffic regulations
 - 2.2 Emergency exits
 - 2.2.1 Manoeuvring areas for the fire service, hydrants
 - 2.2.2 Emergency exits, escape hatches, aisles in the halls
 - 2.3 Safety installations
 - 2.4 Stand numbering
 - 2.5 Security cover
 - 2.6 Emergency evacuation
- 3. Technical data about the halls and open air grounds, and their equipment**
 - 3.1 Hall data
 - 3.1.1 General lighting, types of electrical current, voltages
 - 3.1.2 Supplies of compressed air, electricity, natural gas and water
 - 3.1.3 Communication equipment
 - 3.1.4 Sprinkler system
 - 3.1.5 Heating/ventilation
 - 3.1.6 Faults and breakdowns
 - 3.2 Open air grounds
- 4. Stand construction regulations**
 - 4.1 Stand security
 - 4.2 Stand construction permit
 - 4.2.1 Examination and acceptance of structures requiring permits
 - 4.2.2 Vehicles and containers
 - 4.2.3 Alterations to non-regulation stand structures
 - 4.2.4 Extent of liability
 - 4.3 Construction heights
 - 4.4 Fire protection and safety regulations
 - 4.4.1 Fire protection
 - 4.4.1.1 Stand construction and decoration materials
 - 4.4.1.2 Display of motor vehicles
 - 4.4.1.3 Explosive substances/munitions
 - 4.4.1.4 Pyrotechnics
 - 4.4.1.5 Flying objects/Balloons
 - 4.4.1.6 Smoke machines
 - 4.4.1.7 Ashtrays
 - 4.4.1.8 Containers for refuse and for recyclable and residual materials
 - 4.4.1.9 Spray guns, cellulose paints
 - 4.4.1.10 Cutting using grinders, and all work using naked flame
 - 4.4.1.11 Empty packaging
 - 4.4.1.12 Fire extinguishers
 - 4.4.2 Stand coverings
 - 4.4.3 Glass and acrylic glass
 - 4.4.4 Enclosed lounges
 - 4.5 Exits, escape routes, doors
 - 4.5.1 Exits / escape routes
 - 4.5.2 Doors
 - 4.6 Platforms, balustrades, ladders, ramps, raised walkways, stairs
 - 4.7 Stand design
 - 4.7.1 Hot work
 - 4.7.2 Examination of rented areas
 - 4.7.3 Interference with the permanent building fabric
 - 4.7.4 Hall floors
 - 4.7.5 Suspended items
 - 4.7.5.1 Heavy suspended items
 - 4.7.6 Partitions marking stand boundaries
 - 4.7.7 Advertising materials / Presentations
 - 4.7.8 General appearance
 - 4.7.9 Air conditioning
 - 4.7.10 Kitchens
 - 4.7.11 Restoration of stand areas
 - 4.8 Open air grounds
 - 4.9 Two storey structures
 - 4.9.1 Construction application
 - 4.9.2 Conditions pertaining to constructions over the stand area, safe distances, interior height

- of stands
- 4.9.3 Live loads / Design loads
- 4.9.4 Escape routes / Stairways
- 4.9.5 Construction material
- 4.9.6 Upper floor
- 5. Operational safety, technical safety regulations, technical rules, technical supplies**
- 5.1 General rules
- 5.1.1 Damage
- 5.2 Use of operating equipment
- 5.3 Electrical installations
- 5.3.1 Electrical connections
- 5.3.2 Stand installations
- 5.3.3 Assembly and operating regulations
- 5.3.4 Safety measures
- 5.3.5 Safety lighting
- 5.4 Water and sewage installations
- 5.5 Compressed air/Gas installations
- 5.5.1 Compressed air installations
- 5.5.2 Gas installations (natural gas)
- 5.6 Mechanical installations, pressurised containers, exhaust gas installations
- 5.6.1 Machinery noise
- 5.6.2 Equipment Safety Law and Product Safety Law
- 5.6.2.1 Protective devices
- 5.6.2.2 Test procedures
- 5.6.2.3 Ban on the operation of equipment
- 5.6.3 Pressurised containers
- 5.6.3.1 Inspection certificate
- 5.6.3.2 Testing
- 5.6.3.3. Hired equipment
- 5.6.3.4 Monitoring
- 5.6.4 Exhaust gases and vapours
- 5.6.5 Exhaust gas extraction systems
- 5.6.5.1 Exhaust gas pipes
- 5.7 Use of pressurised gases and inflammable liquids
- 5.7.1 Pressurised gas installations
- 5.7.1.1 Application for use of pressurised gas bottles
- 5.7.2 Inflammable liquids
- 5.7.2.1 Storage and use
- 5.7.2.2 Storage of supplies
- 5.7.2.3 Supply tanks
- 5.7.2.4 Storage site
- 5.7.2.5 Operating regulations
- 5.7.2.6 Filling with liquids
- 5.7.2.7 Empty containers
- 5.8 Asbestos and other hazardous materials
- 5.9 Film, photography, televisual presentations, scenery areas and other forms of presentation
- 5.10 Protection against radiation
- 5.10.1 Radioactive materials
- 5.10.2 X-ray equipment and devices causing stray radiation
- 5.10.3 Laser installations
- 5.11 High frequency equipment, radio systems, electromagnetic compatibility, harmonics
- 5.12 Cranes, stacker trucks, working platforms, empty packaging
- 5.13 Reproduction of music
- 5.14 Drink dispensing facilities
- 5.15. Inspection of foodstuffs
- 6. Environmental protection**
- 6.1 Waste management
- 6.1.1 Waste disposal
- 6.1.2 Waste materials requiring special supervision
- 6.1.3 Waste materials brought on site
- 6.2 Water, sewage, soil protection
- 6.2.1 Oil, fat separators
- 6.2.2 Cleaning / Cleaning products
- 6.3 Environmental damage
- 6.4 Protection against noise

Technical Guidelines

as per: July 2011

1. Preliminary remarks

Messe Berlin has issued directives for trade fairs and other events with the aim of maximising the opportunities for all exhibitors / organisers to present their exhibits, and to address their visitors and other interested persons.

These directives must be complied with by all exhibitors and organisers.

For events taking place in the ICC Berlin the ICC Berlin's General Terms and Technical Conditions for Exhibitions apply (www.icc-berlin.com/ICCBerlin/exhibition areas - Download -General Terms and Technical Conditions for Exhibitions at ICC Berlin).

If any part of the event takes place in the halls on the Exhibition Grounds then the Technical Guidelines of Messe Berlin shall apply for this part of the event.

These directives also contain safety regulations intended to serve the interests of our exhibitors and visitors by ensuring that technical equipment and design elements at the event are made as safe as possible.

The building regulations, fire protection and other safety regulations have been drawn up in consultation with the relevant Building Supervisory Department of the City of Berlin.

Messe Berlin reserves the right to carry out checks to ensure compliance with these regulations.

Statutory regulations in their respective valid form must also be observed.

If any defects that have been detected have not been remedied before the start of the event, the right to stage an event and the use of an exhibition stand may be prohibited in the interests of all those participating in it.

We reserve the right to impose any other additional requirements regarding safety and the construction of stands which may arise.

As a rule the order forms for services are dispatched together with notification of acceptance. They should be filled in and returned within the specified time. If they are not received on time, Messe Berlin can provide no guarantees regarding correct and punctual fulfilment of such services.

Furthermore, if orders are submitted after the specified deadline, Messe Berlin reserves the right to impose a surcharge on the rates, in accordance with the details given in the service folder.

For their information exhibitors will, if necessary, receive additional circulars with details about the preparations for, and staging of the event.

These Technical Directives have been agreed and prepared, using a standardised layout, by the following trade fair companies:

- Deutsche Messe AG Hannover
- Köln Messe GmbH
- Leipziger Messe GmbH
- Messe Berlin GmbH
- Messe Düsseldorf GmbH
- Messe Frankfurt GmbH
- Messe München GmbH
- Nürnberg Messe GmbH

The building law forms part of the law of the respective Land.

As a result, and due to the different structural conditions at the individual exhibition grounds, there may be differences in the various implementing provisions. Messe Berlin also reserves the right to make alterations.

The German text is binding.

1.1 House regulations

Police	110 (external)
Fire service	112 (external)
Emergency calls	110 (internal)
DRK (Red Cross)	2222 (internal)

- 01 The Exhibition Grounds are private premises. They are owned by the Land Berlin. As the authorised user, Messe Berlin, together with the respective organisers, exercises domiciliary rights.
- 02 Visitors may only enter the grounds, including the buildings (with the exception of the administrative building) if they are in possession of a valid admission ticket. All other persons require a pass. The stay is limited to the times and to the building specified on the admission ticket or pass. The admission tickets must be retained while on the grounds and must be shown to the appointed supervisory personnel on request. Exhibition stands may only be entered under the supervision of the stand personnel.
- 03 Children under the age of 14 may only remain on the exhibition grounds if in the company of a parent or guardian. Exceptions will only apply if specific notification is displayed at the ticket offices.

- 04 The facilities made available to visitors should be treated with due care. Visitors are not allowed onto any other facilities or installations, and may not operate such installations.
- 05 Meetings or demonstrations are not permitted on the Exhibition Grounds.
- 06 Commercial photography or filming on the exhibition grounds or in the halls, especially of the items and objects being exhibited, is not permitted.
- 07 Visitors are not permitted to exhibit, sell or distribute printed matter or goods of any kind on the exhibition grounds, or to use sound media or sound amplifiers etc. on the grounds.
- 08 Vehicles may not be driven on the exhibition grounds unless a special permit has been granted.
- 09 Smoking is completely prohibited in enclosed rooms on the Exhibition Grounds, including in the ICC Berlin. Smoking is only permitted in specially designated areas. Exhibitors, lessees and other contractual partners of Messe Berlin shall be obliged to ensure that their third-party contractual partners observe the smoking ban. Messe Berlin shall not be held liable if either they or their vicarious agents fail to observe the smoking ban.
- 10 In accordance with the particular nature of the event, a prohibition on bringing bags and similar receptacles into the event may be imposed. For safety reasons the contents of bags and similar receptacles, and of items of clothing such as coats, jackets and capes, may be examined.
- 11 No weapons may be brought onto the grounds.
- 12 No dogs or other animals are allowed onto the grounds.
- 13 At closing time visitors to events must leave the event and the grounds by the nearest exit.
- 14 The instructions of supervisory personnel must be complied with.

1.2 Opening times

1.2.1 Construction and dismantling periods

During the general construction and dismantling periods work may be carried out in the halls and on the outdoor grounds between 7 a.m. and 10 p.m., unless, in the case of a specific trade fair, other times have been announced by means of a circular.

For reasons of general safety on the exhibition grounds, the halls and the entire exhibition grounds will be closed outside these times.

1.2.2 Duration of the event

For the duration of the event the halls will be opened one hour before the start of the fair and closed again one hour after the official closing time.

In individual cases, where valid reasons exist for exhibitors to be working on their stands, special written permission must be obtained from the fair management.

2. Traffic on the exhibition grounds, emergency exits, safety installations

2.1 Traffic regulations

To ensure that traffic flows smoothly during the construction and dismantling periods and during the event itself, the rules intended to regulate and direct traffic must be strictly observed, as must any instructions issued by persons in authority. The Road Traffic Regulations – StVO – apply throughout the exhibition grounds and on the parking areas belonging to the exhibition grounds.

The maximum permitted speed on the exhibition grounds is 5 kph.

Vehicles may only enter the halls for the purposes of unloading or loading. Access to the halls is only permitted for vehicles which do not exceed the maximum permitted floor load. Engines should be turned off while loading or unloading is taking place. Vehicles may not be left in the halls.

Restrictions on entry and rules regarding payment of a security during events and during the construction and dismantling periods will be announced for specific events in the information sent to exhibitors, or in the advice for drivers.

Illegally parked vehicles, semi-trailers, containers, receptacles and empty packaging of all kinds will be removed at the expense and risk of the owner.

The instructions of the persons appointed by Messe Berlin to direct and regulate traffic must be strictly complied with, and attention must be paid to any relevant information.

2.2 Emergency exits

2.2.1 Manoeuvring areas for the fire service, hydrants

The access routes and manoeuvring areas for the fire service are clearly marked, and must be kept clear at all times.

Vehicles and objects left on emergency exits and safety areas will be removed at the owner's risk and expense.

Hydrants in the halls and on the open-air grounds may not be obscured, obstructed, or built over.

2.2.2 Emergency exits, escape hatches, aisles in the halls

Emergency escape routes must be kept clear at all times.

The doors along the escape routes must easily open outwards across their entire width.

Emergency exit doors and hatches and the signs indicating them may not be built over, blocked, covered by suspended items or in any other way obscured.

Items may not be placed in the aisles in the halls, or placed so as to restrict the width of the aisles.

These aisles are needed as emergency exits!

2.3 Safety equipment

Sprinkler systems, fire alarms, fire extinguishing equipment, smoke detectors, smoke extraction devices, delayed discharge apertures, closure devices for the hall doors and other safety equipment, the signs indicating them, and the green signs for the emergency exits must be accessible and visible at all times, and may not be obscured or built over.

2.4 Stand numbering

The organiser will provide each stand with a number.

2.5 Security cover

The organiser will be responsible for providing general supervision of the halls and the open-air grounds for the duration of the fair. General supervision is only provided at certain times during construction and dismantling.

Messe Berlin is entitled to implement any measures needed for carrying out checks and providing security cover.

If security cover for the stand itself is required, this must be organised by the exhibitors themselves.

Security officers to guard the stands may only be obtained from the security company appointed by Messe Berlin.

2.6 Emergency evacuation

Messe Berlin GmbH may order rooms or buildings to be closed or evacuated for safety reasons. Any persons in such rooms or buildings must comply with instructions.

Exhibitors must inform their staff about this procedure and if necessary must prepare and publicise their own plans for evacuating rooms and buildings. It is your responsibility to ensure that your stand is cleared.

3 Technical data, and the equipment in the halls and on the open air grounds

3.1 Data pertaining to the halls

see "Technical equipment in the halls at a glance"

Hallentechnik, Ebene 1

Technical Equipment, level 1

EMS	Hallennummer Hall number	Länge m Length m	Breite m Width m	Brutto m ² Gross area m ²	Lichte Höhe m Clearance height m	Installationsboden auf Massivdecke Utility floor on a solid base	Massivogden mit Kabelkanälen Solid floor with cable ducts	Zulässige Bodenbelastung kN/m ² Maximum permissible surface load kN/m ²	Gabelstapler und LKW Radlast t Fork lift and truck with wheel load t	Vorhandene Zwischendeck Available intermediate ceiling	Hängepunkte 2 kN/Pkt. Suspension points max. load 2 kN/pt.	Fenster Tageslicht (1) einseitig, (2) zweiseitig, (3) dreiseitig, (4) allseitig Daylight from window, (1) one sided, (2) two sided, (3) three sided, (4) four sided	Anzahl Tore Number of gates	Toreinfahrtsgrößen (Breite x Höhe) m Entrance dimensions (width x height) m Durchfhrthöhen auf dem Messegelände 4 m Height of passageways across the exhibition grounds 4 m	Gasanschluss möglich Gas connection	Kühlung Cooling	Wasseranschluss bis 50 mm Water connection up to 50 mm	Wasserabfluss bis 100 mm Water drainage up to 100 mm	Vorhandener Brandschutz / Sprinkler Fire fighting system / sprinkler system	Stützen Supports	Lastenaufzüge Freigh elevators
	EMS	-	-	2.326/465	18,00	-	X	10	3,5	-	X	(4)	1	5,00x5,50	-	X	X	X	X	-	-
	1.1	98	62	6.058	6,00	X	-	10	3,5	-	X	(1)	4	4,85x5,30	X	X	X	X	X	-	-
	2.1	98	62	6.058	6,00	X	-	10	3,5	-	X	(1)	4	4,85x5,30	X	X	X	X	X	-	-
	3.1	98	62	6.058	6,00	X	-	10	3,5	-	X	(1)	4	4,85x5,30	X	X	X	X	X	-	-
	4.1	98	62	6.058	6,00	X	-	10	3,5	-	X	(1)	4	4,85x5,30	X	X	X	X	X	-	-
	5.1	98	26	2.606	6,00	X	-	10	3,5	-	X	(1)	2	4,85x5,30	X	X	X	X	X	-	-
	6.1	98	29	2.783	6,00	X	-	10	3,5	-	X	(1)	2	4,85x5,30	X	X	X	X	X	-	-
	a	41	28	1.218	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	-	-
	7.1 b	41	28	1.218	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	-	-
	c	38	28	1.130	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	-	-
	8.1	103	28	2.962	4,10	X	-	10	3,5	-	X	-	2	5,30x4,00	X	X	X	X	X	-	-
	a	84	29	2.461	8,90	-	X	50*	3,5	X	-	(1)	2	4,69x5,00	-	X	X	X	X	-	-
	b	58	48	2.760	8,90	-	X	50*	3,5	X	-	-	-	über/Via a+c	-	X	X	X	X	-	-
	c	84	29	2.451	8,90	-	X	50*	3,5	X	-	(1)	2	4,73x5,00	-	X	X	X	X	-	-
	10.1	58	28	1.677	4,10	X	-	10	3,5	-	X	-	2	5,30x3,95	X	X	X	X	X	-	-
	11.1	94	28	2.709	4,10	X	-	10	3,5	-	X	-	4	5,30x4,00	X	X	X	X	X	-	-
	12	84	32	2.705	10,89	X	-	10	3,5	X	X	(2)	1	7,60x4,85	X	X	X	X	X	-	-
	13	Ø27	-	583	19,17+6,40	-	X	10	3,5	-	X	(4)	-	über/Via 14,1	X	X	X	X	X	-	-
	14.1	34	24	765	4,43+6,46	X	-	10	1,5	X	X ⁰	(1)	1	4,50x4,15	X	X	X	X	X	-	-
	15.1	102	24	2.309	4,43+6,39	X	-	10	1,5	X	X ⁰	(1)	1	4,50x4,15	X	X	X	X	X	-	-
	16	Ø27	-	583	19,00+6,40	-	X	10	3,5	-	X	(4)	-	über/Via 15,1	X	X	X	X	X	-	-
	17	91	32	2.957	8,40	X	-	10	3,5	X	X	(2)	2	4,28x4,65	X	X	X	X	X	-	-

Die angegebenen Längen- und Breitenmaße sind auf volle Meter gerundet.

EMS Eingang Messe Süd

KN Kilonewton

* im Kanalbereich nur 10 kN/m²

(1⁰) Kein durchgängiger Fensterverband

X⁰ Auhängung ca. 0,35 kN/m Kahrnenprofil

In senkrechter Richtung

The dimensions indicated have been rounded to the nearest metre.

EMS Entrance Messe south

KN Kilonewton

* in the vicinity of ducts only 10 kN/m²

(1⁰) no continuous windows

X⁰ suspension approx. 0,35 kN/m cross section

screwed connection, applied vertically

Hallentechnik, Ebene 2

Technical Equipment, level 2

Hallennummer Hall number	Länge m Length m	Breite m Width m	Brutto m ² Gross area m ²	Lichte Höhe m Clearance height m	Installationsboden auf Massivdecke Utility floor on a solid base	Massivogden mit Kabelkanälen Solid floor with cable ducts	Zulässige Bodenbelastung kN/m ² Maximum permissible surface load kN/m ²	Gabelstapler und LKW Radlast t Fork lift and truck with wheel load t	Vorhandene Zwischendeck Available intermediate ceiling	Hängepunkte 2 kN/Pkt. Suspension points max. load 2 kN/pt.	Fenster Tageslicht (1) einseitig, (2) zweiseitig, (3) dreiseitig, (4) allseitig Daylight from window, (1) one sided, (2) two sided, (3) three sided, (4) four sided	Anzahl Tore Number of gates	Toreinfahrtsgrößen (Breite x Höhe) m Entrance dimensions (width x height) m Durchfahrthöhen auf dem Messegelände 4 m Height of passageways across the exhibition grounds 4 m	Gasanschluss möglich Gas connection	Kühlung Cooling	Wasseranschluss bi 50 mm Water connection up to 50 mm	Wasserabfluss bis 100 mm Water drainage up to 100 mm	Vorhandener Brandschutz / Sprinkler Fire fighting system / sprinkler system	Stützen Supports	Lastenaufzüge Freigh elevators
1.2	98	62	6.058	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
2.2	98	62	6.058	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
3.2	98	62	6.058	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
4.2	98	62	6.058	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
5.2 a	98	29	2.904	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
b	98	29	3.517	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
6.2 a	98	29	2.904	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
b	98	29	3.369	9,00	X	-	10	3,5	-	X	(1 ⁰)	2	4,85x5,30	X	X	X	X	X	X	-
a	41	28	1.218	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	X	-
b	41	28	1.218	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	X	-
c	38	28	1.130	6,00	X	-	10	3,5	-	X	(1 ⁰)	1	4,85x5,30	X	X	X	X	X	X	-
8.2	103	28	2.960	7,20	X	-	10	3,5	X	X	(2)	2	5,30x5,30	X	X	X	X	X	X	-
10.2	58	28	1.688	7,20	X	-	10	3,5	X	X	(2)	2	5,30x5,30	X	X	X	X	X	X	-
11.2	94	28	2.706	7,20	X	-	10	3,5	X	X	(2)	2	5,30x5,30	X	X	X	X	X	X	-
14.2	18	20	369	4,35	X	-	5	-	X	-	(1)	-	-	X	X	X	X	X	X	X
15.2	60	20	1.228	4,35	X	-	5	-	X	-	(1)	-	-	X	X	X	X	X	X	X
18	96	39	3.821	14,35	X	-	10	3,5	X	X	(3)	1	4,40x4,85	X	X	X	X	X	X	X
19 Empfangshalle Nord	-	-	-	31,80	-	-	5	-	-	X	(4)	-	-	-	-	-	-	-	-	-
20	96	39	3.947	14,35	X	-	10	3,5	X	X	(3)	1	4,75x5,00	X	X	X	X	X	X	-
21 a	71	33	2.937	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
b	72	33	2.458	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
22 a	71	33	2.784	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
b	71	33	2.362	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
23 a	65	33	2.661	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
b	60	33	1.996	10,00+5,00	X	-	10	3,5	X	X	(1)	2	4,80x5,00	X	X	X	X	X	X	-
24	149	48	7.458	15,70	-	-	200*	3,5	-	X	(2)	4	11,20x10,50	X	X	X	X	X	X	-
25	74	67	4.259	7,00+4,64	-	X	50*	3,5	-	-	(2)	4	4,90x5,00	X	X	X	X	X	X	-
26 a	59	67	3.453	7,00	-	X	50*	3,5	-	-	(2)	4	4,90x5,00	X	X	X	X	X	X	-
b	74	44	3.189	7,00+4,64	-	X	50*	3,5	-	-	(2)	3	4,90x5,00	X	X	X	X	X	X	-
5.3	98	29	3.209	6,00	X	-	10	3,5	-	X	(1 ⁰)	-	-	X	X	X	X	X	X	-
6.3	98	29	3.257	6,00	X	-	10	3,5	-	X	(1 ⁰)	-	-	X	X	X	X	X	X	-

Die angegebenen Längen- und Breitenmaße sind auf volle Meter gerundet.

KN

(1⁰)

X⁰

Kein durchgehender Fensterverband
Abhängung ca. 0,35 kN/m Kahlneisprofil
In senkrechter Richtung

The dimensions indicated have been rounded to the nearest metre.

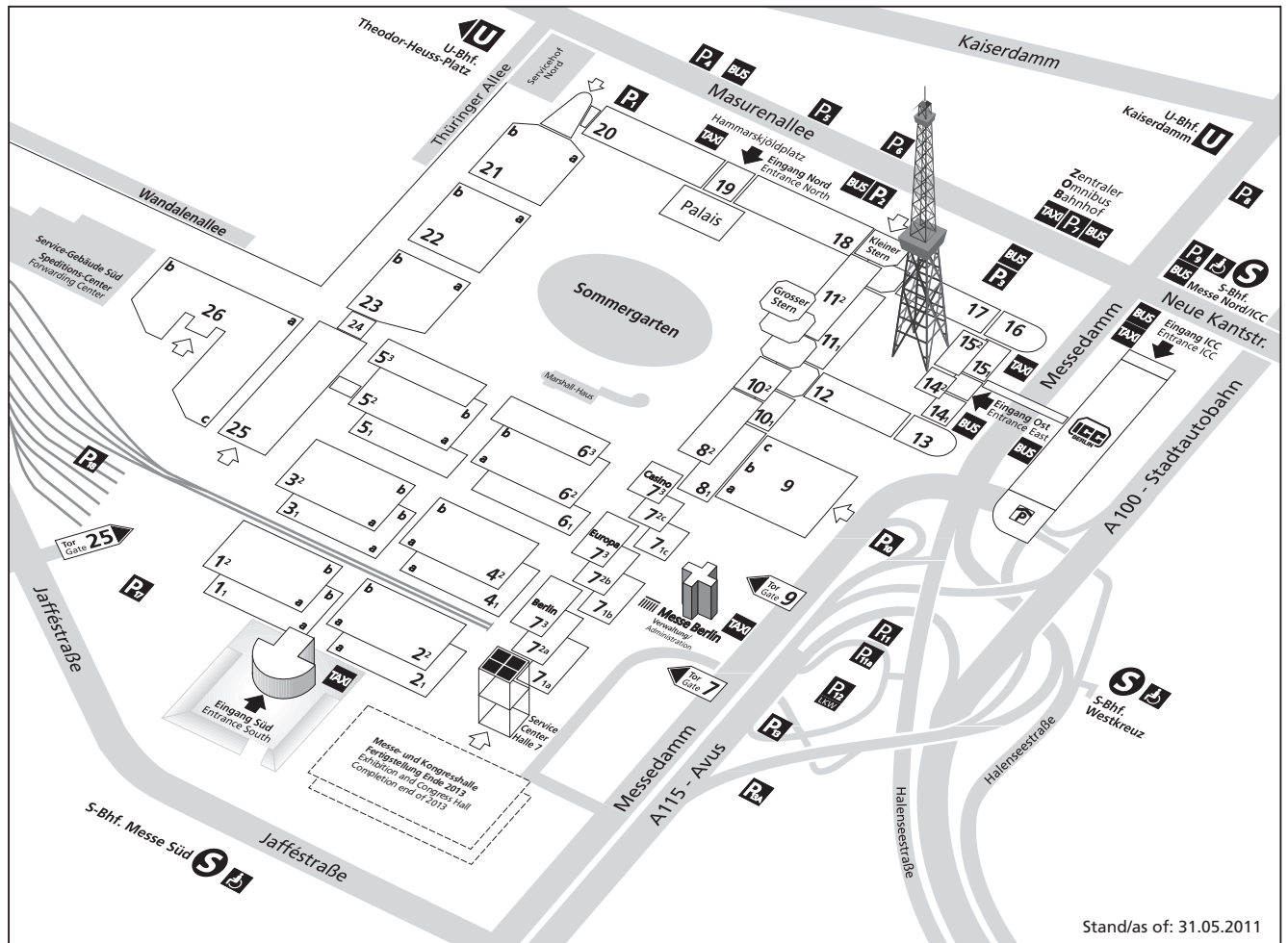
KN



(1⁰)

X⁰

In the vicinity of ducts only 10 kN/m²
no continuous windows
suspension approx. 0,35 kN/m cross section
screwed connection, applied vertically

Geländeplan Exhibition grounds



-  Haupteingänge / Main entrances
-  Bedarfseingänge / Reserve entrances

3.1.1 General lighting, types of current, voltages

The general hall lighting has an intensity of at least 100 lux, measured 1 m above the hall floor.

Available types of current and voltages on the exhibition grounds:

Type of supply: TN-C/S network

AC 230 volt ($\pm 10\%$) 50 Hz

Three-phase 3 x 400 volt ($\pm 10\%$) 50 Hz

3.1.2 Supplies of compressed air, electricity, natural gas and water

The supplies of compressed air, electricity, natural gas and water to the stands are obtained through the pipework and wiring in the false floors. In Halls 9 abc, 13, 16, 25 and 26 abc these supplies are obtained from the ducts in the hall floors.

3.1.3 Communication facilities

Telephone, telefax, data and aerial connections to the stand are laid in the false floor carrying in which the pipework and wiring are installed. In Halls 9 abc, 13, 16, 25 and 26 abc these services are supplied from the ducts in the hall floors.

3.1.4 Sprinkler system

The halls are fitted with sprinkler systems.

Any superstructure occupying more than 30 m² of the stand area (enclosed ceiling area) requires the installation of a sprinkler system that conforms to the VDS standard.

The sprinkler systems required for stands are supplied from the false floor. In Halls 9 abc, 13, 16, 25 and 26 abc the supply is obtained from the ducts in the hall floors or the hall ceilings.

3.1.5 Heating/ventilation

The halls are equipped with ventilation systems. If necessary, the halls will be heated during the event (+18 ° / 20 °C), or cooled (+26° / 30°C).

3.1.6 Interruptions to supplies or services

If interruptions occur to the technical supplies the fair management must be notified immediately. Messe Berlin accepts no liability for losses or damage caused by such interruptions.

3.2 Open-air grounds

The open-air grounds comprise uneven and non-compacted gravel and paved areas.

During the opening times of the event the grounds will be provided with general lighting for the roadways and paths.

The necessary connection points for services are provided at irregular distances.

There is a rail connection onto the Exhibition Grounds.

4 Stand construction regulations

4.1 Constructional safety of stands

Exhibition stands, together with their installations and exhibits, and any means of carrying advertising, must be structurally stable, so that they do not jeopardise public safety and order, and in particular, do not present a hazard to life and health. Exhibitors are responsible for the structural safety and may be required to furnish proof of same.

4.2 Stand construction approval

Provided the design and construction of the stand conform to the technical guidelines, it is not required to submit drawings for approval of single-tier stand constructions in the halls. If a stand area occupies the space of an entire hall section or hall(s) through which visitor aisles must pass, then approval must be obtained even in the case of single-tier constructions.

If requested by exhibitors, Messe Berlin can arrange for the stand construction plans (submitted in duplicate) to be checked. All other stand structures, temporary structures, mobile stands, outdoor structures, special structures and constructions require approval.

4.2.1 Examination and acceptance of structures requiring approval

Scaled plans of stands, to a scale of at least 1 : 100, showing the layout and elevations, must be submitted in duplicate to Messe Berlin at least 6 weeks prior to the start of the event for approval.

Following examination, one copy of the stand plans will be returned to the exhibitor / stand constructor, endorsed as approved. The stand structure shall only be considered to have been accepted when this approval has been issued.

For the approval of:

- stand structures with two or more storeys (see item 4.2.1)
- For special structures / special structural solutions, special components, temporary structures, components above areas frequented by visitors, grandstands, see Item 4.2.1
- Show trucks
- aisles, gangways, steps, railings, parapets (see item 4.6)
- outdoor structures (see item 4.8),

the following documents, in German (in duplicate) are required at least 6 weeks prior to the start of the event:

- a) **examined** structural calculation in accordance with German industrial standards and technical rules. Examined in the aforementioned sense applies to stress analysis documents (incl. test report), which have been examined exclusively by a **technical inspector or a structural stability expert approved in accordance with the respective state building regulations.**
- b) description of the building, location plan,
- c) stand construction drawings to a scale of 1 : 100 (layout, elevations, sections),
- d) item a) does not apply if a type certification suitable for examination or a valid inspect and test log in accordance with FIBauR (Directive on the Construction and Operation of Temporary Structures) is submitted. Submitted valid inspect and test logs will be shown by Messe Berlin on behalf of the exhibitor to the local Building Inspectorate responsible for the final acceptance.

The exhibitor / stand constructor will be invoiced for the costs of the construction approval process.

In addition to type testing/type certification for individual items of technical equipment, e.g. sports and games equipment with mechanical or electrical functions, the following documents, in German, must be submitted for inspection:

- Description of construction and operation
 - Design drawings,
 - Proofs of stability,
 - TÜV test certificates, approvals
- or
- Statement of EU conformity issued by a recognised certification authority or an equivalent manufacturer's in accordance with BauPG, §§ 9, 10. The above documents may also be required.

If none of the stress analysis documents examined a stated above are available, they may be drawn up with the assistance of Messe Berlin. The costs will be borne by the exhibitor/stand constructor.

Exhibitors / stand constructors may be charged with additional costs if documents are not submitted on time.

4.2.2 Vehicles and containers

Vehicles and containers placed in the halls require official approval if used as display stands.

4.2.3 Alterations to non-regulation stand structures

Stand constructions that have not been approved, or that do not conform to the Technical Directives or to legal requirements, may have to be altered or removed.

If work is not carried out within the specified time, Messe Berlin is entitled to undertake the alterations itself, at the exhibitor's expense.

4.2.4 Extent of liability

No claims can be entertained against Messe Berlin for loss or impairment of, or damage to the designs, models or other documents submitted.

4.3 Construction heights

Unless stated otherwise for the trade fair in question, the maximum height of stand structures is equal to the inside height of the hall minus 0.50 m.

The lessee is obliged to install a white partition separating his stand and the directly adjacent stand, which is structurally stable, has no gaps, and bears no advertising of any kind.

Advertising facing directly adjacent stands must be placed at a distance of at least 1 m from the boundary of the neighbouring stand. Exhibits are not subject to this regulation. Structural restrictions may apply.

The height restriction in Halls 8.1, 10.1 and 11.1 is 3.60 m.

4.4 Fire protection and safety regulations

4.4.1 Fire protection

4.4.1.1 Stand construction and decoration materials

The use of easily flammable materials, those which cause flaming droplets when burning, or which lead to the production of noxious gases, such as polystyrene foam (styrofoam) PVC or similar acrylic glass products, is prohibited. No materials may be used that create dense smoke when ignited.

In individual cases, and for safety reasons, special requirements may be imposed with regard to load-bearing structures (e.g. they should not be made of inflammable materials).

The use of plastic cable ties to secure any parts subject to structural stresses is not permitted.

Decoration materials must be at least flame-retardant in accordance with DIN 4102-1 B1, and should not form burning droplets, in conformity with EN 13501-1 C-s3, d0.

Test certificate for the categories of material used must be available. Trees and plants may only be used for decorative purposes if they have been recently cut (leaves and pine needles must be fresh and green.) If it becomes apparent that trees and plants have dried out during the exhibition, making them easily inflammable, they must be removed.

Bamboo, reeds, hay, straw, bark mulch, turf or similar materials do not as a rule satisfy the aforementioned requirements.

4.4.1.2 Displays of motor vehicles

Vehicles powered by combustion engines may only be exhibited in the halls if the fuel tank is virtually empty. Battery terminals must be disconnected and the fuel tank must be sealed off. In the case of gas-powered vehicles see item 5.7 concerning the pressurised container.

4.4.1.3 Explosive substances/Ammunition

Explosive substances are regulated by the Law on Explosives (Sprengstoffgesetz) in its current amendment and may not be displayed at trade fairs or exhibitions. This also applies to ammunition as defined by the Weapons Law (Waffengesetz).

4.4.1.4 Pyrotechnics

Pyrotechnic displays require official authorisation and the intended special pyrotechnical effects must be approved by Messe Berlin.

A copy of the application for such authorisation (Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, 10559 Berlin, tel.: 030/90254-5000) should be submitted to Messe Berlin at least two weeks prior to the start of the event.

4.4.1.5 Flying objects/Balloons

Approval must be obtained from Messe Berlin for the use of balloons filled with safety gas and for the distribution of balloons in the halls and on the open air grounds. Any cleaning costs that are incurred will be charge to the exhibitor.

4.4.1.6 Smoke machines

The agreement of Messe Berlin must be obtained before using smoke machines.

4.4.1.7 Ashtrays

Unless smoking has been expressly prohibited on the stand, arrangements must be made to provide a sufficient number of ashtrays or other containers for disposing of cigarettes, made of non-inflammable material, and for emptying them at regular intervals.

4.4.1.8 Containers for waste, recyclable and residual materials

Any containers placed on the stands for recyclable and residual materials may not be made of inflammable materials. Containers for recyclable and residual materials must be emptied regularly, and at least every evening after the close of the fair, using the recycling stations located at the entrances to the halls.

If larger quantities of inflammable materials accumulate, these must be removed several times daily.

4.4.1.9 Spray guns, cellulose spray paint

The use of spray guns and cellulose spray paint is not permitted.

4.4.1.10 Hot work

Welding, cutting, soldering, abrasive cutting and other work involving the use of naked flame or flying sparks are strictly prohibited on all operational and display areas belonging to Messe Berlin.

In exceptional cases and subject to submission of a written request approval may be granted for hot work during the setting up and dismantling of events. For this purpose Messe Berlin will deploy a fire officer, for whom a charge will be made, who will be present to supervise the work from its commencement to its completion. Hot work during the event is prohibited.

4.4.1.11 Empty packaging

Empty packaging of all kinds (e.g. boxes and packing materials) may not be stored in the hall, either inside or outside the stand. Any such empty packaging must be removed immediately.

4.4.1.12 Fire extinguishers

On stands of > 100 m² a suitable fire extinguisher with at least 10 extinguishing units must be available during construction and dismantling and throughout the duration of the event. The location of the extinguisher must be marked on the stand in compliance with the accident prevention regulations BGV A8 (VBG 125). If necessary several fire extinguishers may be required. On two-storey stands one fire extinguisher must be provided at the top of each stairway.

4.4.2 Covering over the stands

In order not to adversely affect the use of sprinklers, in those halls equipped with such installations no stands may be covered.

Ceilings shall be considered as open if not more than 50% of the area, based on the square metre measurement of each individual stand, is enclosed.

Ceilings capable of incorporating a sprinkler system and with a grid size of at least 2 x 4 mm or 3 x 3 mm for areas of up to 30 m² are permitted, to which individual areas may be added. The fabric covering should be tensioned horizontally, and should consist of a single layer only. Penetration of the fabric sheets should be avoided. (For two-storey structures see also Item 4.9.2)

Open grid ceilings are permitted.

Approval must be obtained for horizontal decorations and for ceiling areas over single and collective stands.

The materials used for these areas must be at least flame retardant, in accordance with DIN 4102/B1 or EN 13501-1 C-s3, d0 and proof must be furnished in the form of a test certificate.

Under the preliminary remarks, the following regulations apply to all stands:

- a) Contiguous areas may not constitute a single area of more than 30.00 m² (floor plan projection).
- b) If there are a number of such individual areas they must be separated from one another (floor plan projection).

The spacing shall be determined in each individual case.

- c) If the stated maximum area is exceeded, a sprinkler system must be provided.

4.4.3 Glass and acrylic glass

Only safety glass which is suitable for the purpose may be used.

Please ask for a copy of our code of practice for the use of glass/acrylic glass in trade fair construction ("Merkblatt zum Einsatz von Glas/Acrylglas im Messebau"). see also www.messe-berlin.de (Exhibition Centers – Guidelines and Conditions – Download).

Any exposed edges of the glass should be worked in such a way or protected as to prevent the risk of injury.

4.4.4 Enclosed recreation rooms

All recreation rooms which are enclosed on all sides (enclosed spaces) must be equipped with a visual or acoustic system to relay alarms to the stand at all times. Substitute measures may be approved in exceptional cases.

Auditoriums must have at least two exits leading directly to the aisles of the halls.

These exits should be placed as far as possible from one another.

Special approval must be obtained for auditoriums with a capacity of more than 200 persons..

4.5 Exits/ Escape routes, Doors

4.5.1 Exits. Escape routes

The distance between any point on a display area and a hall exit may not exceed 20 m in a straight line.

Recreation rooms with a floor area in excess of 100 m² must be provided with at least two exits to emergency escape routes, which must be as far apart as possible from one another and leading in opposite directions.

The escape routes must be marked as such, in accordance with BGV A8 (formerly VBG 125).

The minimum number and clear width of escape routes (exits, stairways, corridors) that must be provided are listed below:

- up to 100 m²: 1 escape route, 0.90 m wide
- over 100 m² and up to 200 m²: 2 escape routes, each 0.90 m wide
- over 200 m² and less than 400 m²: 2 escape routes, each 1.20 m wide

4.5.2 Doors

Swinging, revolving, code-operated, sliding doors and other restrictions on access may not be installed along rescue routes.

4.6 Platforms, parapets, ladders, ramps, raised walkways, stairs

Generally accessible walkways and other such areas which are immediately adjacent to areas that are more than 0.20 m lower must be surrounded by parapets.

These must be at least 1.10 m in height.

Parapets on areas accessible to the public attending trade fairs must be provided with a firm, non-slip handrail. To make it more difficult for anyone to climb over the parapets, only enclosed infilling or vertical bars with a max. gap or aperture of 0.12 m are permitted.

Parapets in areas with restricted access to trade visitors must be made safe with at least one non-slip handrail together with a centre and lower brace.

Swinging, revolving, code-operated, sliding doors and other restrictions on access may not be installed along rescue routes. Ladders, ramps, raised walkways and stairs must comply with accident prevention regulations.

4.7 Stand design

4.7.1 Barrier-free construction

When constructing the stands every effort should be made to ensure that they are barrier-free. Stands and their installations should also be accessible and usable by disabled people.

4.7.2 Checking the rented area

The organiser will mark out the rented area. All exhibitors are required, when on site, to inform themselves about the location, dimensions and any fittings, safety installations etc.

The boundaries of the stand must be strictly observed.

4.7.3 Interference with the permanent building structure

No parts of the hall or technical installations may be damaged, contaminated or altered in any other way (e.g. through drilling, or the insertion of screws or nails), they may not be painted or papered, nor may anything be pasted onto them.

No parts of the hall or technical installations may be used to support stand fittings or exhibits.

However, provided that no damage is caused to them, the columns/supports in the halls may be enclosed within the rented area, up to the permitted construction height

No third parties are allowed onto any accessible part of the intermediate floor.

4.7.4 Hall floors

When laying carpets and other floor coverings measures must be taken to prevent accidents. These carpets and floor coverings may not extend beyond the boundaries of the stand.

Only adhesive tape may be used to attach the floor coverings, and when this is removed no residues should be left behind. All materials used must be removed without leaving residues.

Oil, fat, paints and similar substances must be removed immediately from the surfaces.

The hall floors may not be painted, nor may anything be stuck to them.

Anchor points and attachments in the hall floor are only possible under certain conditions in Halls 9abc, 25 and 26 abc, and approval can be granted in response to an application.

The floor will be restored to its original state by Messe Berlin GmbH or its contractors. A charge will be made for this work.

4.7.5 Suspended items

Items may be suspended from the hall ceilings using the technical facilities provided. The provision of these facilities is dependent on Messe Berlin or its contractual partners.

Approval must be obtained for suspended items.

An outline sketch must be included with the order form "Suspended Decoration", showing the suspended weights and required positions of the suspension points.

The installation of all suspended items, whether from the hall ceiling or the elevated system of traverses (ground support), and other structures must comply with BGV C1. (*venues for theatrical performances*) and the current standards for event engineering (VPLT or similar regulations).

4.7.5.1 Suspension of heavy loads

In all cases tests are required for heavy suspended loads (> 2,0 kN/Point) and these are subject to stability monitoring by Messe Berlin.

The necessary documents must be submitted and Messe Berlin will arrange for their examination, for which a fee is payable, and for the monitoring of the construction. Orders, using form "Suspended Decoration", must also be accompanied by assembly instructions, a dimensioned site plan showing the crosspieces together with the planned suspension points, including the loads at these points and installation details. These must be submitted in German no later than 6 weeks prior to the start of construction.

On behalf of and at the expense of the lessee, Messe Berlin will pass these documents on to its stress analysis engineers who will, in all cases, undertake or approve of an inspection of the suspended loads / assemblies for the transmitted loads or direct loads imposed on the hall trusses, for which a charge will be made.

Lessees will be obliged to undertake any ensuing corrections and/or alterations ordered by the stress analysis engineers.

4.7.6 Partitions marking stand boundaries

The organiser will rope or cordon off the rented stand area, and mark it accordingly.

Partitions for marking the boundaries of the stand are not available on the exhibition grounds.

The backs of the partitions belonging to neighbouring stands may not be used unless prior approval has been obtained.

If required, partitions and the walls of booths in the halls can be ordered from Messe Berlin, for which a charge will be made. An outline sketch must be included with the order form, showing the arrangement of the partitions.

The partitioning elements are made of perforated wall elements, white, plastic coated, thickness approx. 25 mm, height approx. 2.47 m.

The stand partitioning elements are re-usable and may be papered. Paint may only be applied to the paper, and dispersion paint must be used.

A tolerance of up to 80 mm must be allowed when calculating the dimensions of the rented area, to allow for the partitions on both sides.

4.7.7 Advertising materials / Presentations

Lettering referring to the stand or exhibits, and company or brand logos, must not exceed the prescribed construction height.

They should contribute towards a harmonious overall impression

Presentations, optical, slowly moving or acoustic forms of advertising are permitted, as is the reproduction of music, provided that they do not cause annoyance to adjoining stands, or congestion in the aisles, or drown out announcements by the fair authorities in the halls. The volume may not exceed 70 dB(A) at the stand boundaries.

Exhibitors are only permitted to distribute printed matter and to conduct advertising on their own stands.

4.7.8 General appearance

Exhibitors are responsible for designing their stands, taking into account criteria that typify the event in question.

Partitions adjoining aisles used by visitors should create a more varied effect by the installation of showcases, niches, display and similar items.

Where the rear of a stand adjoins that of a neighbouring exhibitor, its appearance must be kept neutral, so as not to adversely affect the appearance of the other stand.

The lessee is obliged to install a white partition separating his stand and the directly adjacent stand, which is structurally stable, has no gaps, and bears no advertising of any kind.

4.7.9 Air conditioning

Evenly distributed air conditioning from the central system in the hall cannot be guaranteed where there are enclosed ceilings or on the upper floors of stands.

If a separate air conditioning unit is to be installed on a stand the use of air-cooled condensers is not permitted in the hall.

Fresh water may only be used in air conditioning units for cooling the refrigerating compressors. The water consumption of such air conditioning units must be recorded by means of a water meter.

4.7.10 Kitchens

For reasons of safety no kitchen appliances using inflammable gases from pressurised bottles are allowed in the halls (see Item 5.5.2).

Kitchen vapours must be conducted out of the hall in order to eliminate offensive odours.

In order to help protect the environment cooking oils, fat from deep fat fryers and similar substances should be disposed of separately. The appropriate containers should be kept in readiness on the stand.

The pollutants in any waste water intended for release into the sewage system should not exceed the amounts normally produced in domestic situations. Fat separators must be used if waste water containing large amounts of fat or grease is to be disposed off.

4.7.11 Restoration of stand areas

Exhibitors must ensure that stand areas are handed over in a clean and original condition by the end of dismantling at the latest. All the necessary restoration work, including the removal of adhesive strips, paint residues etc., must be completed by this time.

4.8 Open air grounds

Without exception, and even if only installed for only a short time, official approval is required for all structures with areas which can be walked on, and/or for covered structures, such as tents, pavilions etc. and advertising areas with a surface area exceeding 2.5 m².

See Items 4.1 and 4.2 ff on the testing and acceptance of structures requiring approval.

In this respect see our "Notice concerning structures on the outdoor grounds"

4.9 Two-storey structures

4.9.1 Construction applications

The erection of two-storey structures is possible subject to the agreement of the relevant project management at Messe Berlin. The application must be submitted as soon as approval has been granted for the stand.

Two-storey structures are not possible in Halls 8.1, 10.1 and 11.1, and only at certain points in Halls 14.1 and 15.1.

4.9.2 Conditions pertaining to construction over the stand area, safe distances, height of interiors on the stand

The maximum height of additional structures is 6.00 m, unless stated otherwise for specific trade fairs.

In the case of two-storey structures, interior rooms must have a headroom of at least 2.30 m.

A sprinkler installation must be provided if an area of more than 30 m² is to be built over.

Above a height of 2.50 m, stand structures adjoining neighbouring stands must be painted in neutral white.

4.9.3 Live loads / Design loads

In accordance with DIN 1055-3, Table 1 [Cat. C] the following working loads apply, as perpendicular live loads, to the upper floor of a two-storey stand within a hall:

In the case of **limited use by trade visitors**, or by stand personnel engaged in discussions or assisting customers, i.e. furnishing with tables and chairs arranged freely or in discussion booths, the following live load [Cat. C1] applies: $q_k = 3,0 \text{ kN/m}^2$.

The following live load [Cat. C3 and upwards] is required for **unrestricted use** as a freely accessible area for exhibitions and assemblies, either with or without closely placed seating: $q_k = 5,0 \text{ kN/m}^2$.

Stairs and rostrums with stairs must always be designed for a live load [Cat. T2] of $q_k = 5,0 \text{ kN/m}^2$.

A **horizontal load of 1/20 q_k** (q_k = perpendicular live load) applies on the upper floor of two-storey trade fair stands or viewing platforms in order to achieve sufficient lateral and longitudinal stability .

In accordance with DIN 1055-3, table 7, a horizontal live load [Cat. C] of **$q_k = 1,0 \text{ kN/m}$** at the capping level applies to balustrades and railings. The same load conditions must also be applied to external cladding that also acts as a safety wall element, if no separate, supporting balustrade is provided on the inside.

For other free-standing wall/stand construction elements with a height of more than 4 metres, proof must be provided for a horizontal load of $0,125 \text{ kN/m}^2$ (hall wind) or 1/100 of the deadweight at half the hall height, in order to ensure sufficient stability and tilt resistance for the base load mounting.

Proof must be provided that the permitted loads on the hall floor ($\leq 35 \text{ kN kN/m}^2$) have not been exceeded ($\leq 35 \text{ kN}$, see Item 3.1. Hall data).

Increased individual supporting loads (\geq approx. 35 kN) as a result of stand construction by the lessees or the introduction

of exhibits (transport loads) must be indicated separately and noted in a dimensioned, scaled plan showing the positioning of the supports in relation to the boundaries of the stand. This information must be provided in German and submitted to Messe Berlin for examination.

An examination must be carried out by Messe Berlin stress analysis engineers, for which a charge will be made, into the increased load distribution in the elevated modular floor of the hall (which may be achieved by using stronger packing). Messe Berlin will pass the examination documents and plan showing the positioning of the supports on to the stress analysis engineer on behalf of and at the expense of the exhibitor/stand constructor. Any corrections made by the stress analysis engineers are binding on the exhibitor/stand constructor.

4.9.4 Emergency exits / Stairways

On the upper floor of a two-storey exhibition stand the walking distance from any accessible point to the stairs may not exceed 20 m. The stairs should be arranged in such a way as to ensure the minimum distance along the escape routes to the outside of the building.

If the upper floor area exceeds 100 m², at least two sets of stairs are required, separated from one another and running in opposite directions.

All stairways must be constructed in conformity with DIN 18065. The risers may not exceed 0.19 m. in height and the tread width should not be less than 0.26 m.

The stairs must have a minimum width of 1.0 m. On upper floor areas in excess of 100 m² and with fewer than 200 persons, two stairways with a minimum width of 1.0 m are sufficient. If the upper floor area exceeds 200 m² and/or there are more than 200 persons, two stairways each with a minimum useable stair width of 1.20 m are required.

If stairways are required, spiral or solid newel staircases may not be used.

Stairs with a width exceeding 2.40 m must be provided with two external handrails and a central handrail.

The handrails must be firmly attached, non-slip and endless, i.e. turned in on themselves. A gap of at least 0.05 m must be provided between the handrails and adjacent structures. Handrails must be provided on both sides.

4.9.5 Construction materials

For two-storey stands the load-bearing components, the ground floor ceiling and the floor on the upper storey must be made of materials that are at least flame-retardant, and do not form burning droplets, and/or comply with EN 13501-1 C-s3, d0.

4.9.6 Upper floors

If necessary, on the upper floor, in the area around the parapets or railings, skirting with a height of at least 0.05 m must be provided to prevent items from rolling off.

Parapets and railings must be constructed in accordance with Items 4.6 and 4.9.3.

In halls provided with a sprinkler system, under no circumstances should the upper floor be covered over, unless this area is also protected by a sprinkler system

In addition to the fire extinguishers provided on the ground floor, at least one fire extinguisher must be placed in a conspicuous place at the top of the stairs, where it is easily accessible (see item 4.4.1.12).

5. Operational safety, technical safety regulations, technical rules, technical services

5.1 General rules

Exhibitors are responsible for ensuring operating safety and compliance with industrial safety and accident prevention regulations on their stands.

Construction and dismantling work may only be carried out subject to the current valid working and trade law regulations.

5.1.1 Damage

At the conclusion of the event, any damage caused by the exhibitor or his employees on the exhibition grounds, in buildings, or to installations will be made good by Messe Berlin at the exhibitor's expense.

5.2 Use of operating equipment

The use of devices that fire bolts is not permitted in the exhibition halls.

Woodworking equipment that is not fitted with sawdust extractors may not be used in the halls.

The use of cranes, forklift trucks and working platforms is restricted exclusively to the forwarding companies under contract to Messe Berlin. The use of a company's own cranes, forklift trucks and working platforms is not permitted for safety reasons (see Item 5.12).

5.3 Electrical installations

5.3.1 Electrical connections

One or more connection points with fuse boxes and master switches will be provided for each stand where electrical power is required.

These connections (main connections) will be installed by Messe Berlin GmbH or its contractors and a charge will be made for this work.

An outline sketch must be included with the order form, showing the required location of the connections.

The sum total of the power required by all consumer units (electric lights, motors, appliances etc.) should be shown, to enable a sufficient cross-section for the power supply lines to be calculated.

For safety reasons the power supply may be cut off on the final day after the close of the fair.

5.3.2 Stand installations

After orders have been placed, electrical installation work on the stand will be carried out by Messe Berlin or its appointed contractors, for which a charge will be made.

Earth leakage circuit breakers (RCDs) rated at 30 mA are compulsory for all circuits.

The exhibitor may use his own electrical contractors or an approved specialist firm to carry out installation work within the stand, in accordance with VDE regulations, valid European regulations and current available technology.

5.3.3 Assembly and operating regulations

All electrical equipment must be installed and operated in accordance with the current, valid safety regulations of the German Electrical Engineering Association VDE or the current, valid EU standards (EN). Particular attention must be paid to VDE 0100, 0108, 0128 and ICE standard 60364-7-711.

Compensation must be provided for installations using fluorescent tubes (single compensation or dual circuit). The high or low frequency interference to the mains must not exceed the figures stated in VDE 0160 and VDE 0838 (EN 50 006).

The measures intended to provide protection in the event of indirect contact must include conductive structural components (earthing of the stand).

Only cable with a minimum cross section of 1.5 mm² Cu of the types NYM, H05VV-F, H05RR-F may be used.

The only exceptions are in the case of wiring supplying consumer units which are used at different locations (appliances etc.) with a length of up to 1.5 m.

Non-insulated electrical wires and terminals may not be used in low voltage installations (low voltage lighting systems), and stranded systems must be fully insulated too.

Secondary circuits must be protected against short-circuiting and overloading.

Transformers and converters should be protected by primary and secondary fuses.

Electronic protection systems do not qualify as automatic cut-out devices as defined in the VDE regulations. Measures should be undertaken to prevent lamps from dropping out.

Only lamps fitted with a protective disc may be used with halogen lights.

Busbars must be provided with protective covers. Connections using plastic cable ties are not permitted.

Lamps should be placed at a suitable distance from inflammable materials, based on the amount of heat generated.

The electrical installations on the exhibition stand may only be used for the event after they have been inspected and approved by the Technical Supervisory Authority (TÜV) or some other independent expert. Messe Berlin will arrange for the inspection to be carried out.

Non-insulated electrical wires and terminals may not be used for voltages in excess of 25 V AC or 60 V DC.

(Protection against direct contact must be provided).

Users may not carry out their own extensions or alterations after approval has been granted.

No power may be obtained from neighbouring stands.

Stands are not permitted to use their own power supply systems.

5.3.4 Safety measures

As a means of protection, all heat-generating and heat-producing electrical appliances (hotplates, spotlights, transformers etc.) must be installed on non-inflammable, heat-resistant and asbestos-free bases

Lamps should be placed at a suitable distance from inflammable materials, based on the amount of heat generated.

Lighting units may not be attached to inflammable decorations or similar items.

The manufacturer's instructions must be complied with.

5.3.5 Safety lighting

Stands on which, by the special nature of their construction, the existing general safety lighting is not fully effective, require their own, additional safety lighting, in conformity with VDE 0108.

It should be installed to enable persons to safely find their way to the general escape routes.

5.4 Water and sewage installations

Each stand to which water and sewage connections are to be made will be provided with one or more such connections. Supply lines on their own are only permitted for permanent consumer units. Outflow pipes with a nominal diameter of less than 50 mm will not be installed.

Water supply pipes and sewage pipes will be installed by Messe Berlin or its contractors to floor level, for which a charge will be made. No one is permitted to carry out their own assembly work within the false floor. Independently executed assembly work above the false floor that is not of a suitably professional standard will be dismantled or made good by Messe Berlin, for which a charge will be made.

If exhibitors are using industrial dishwashers they must apply for separate basic water supply and drainage lines, as specified by order form D4, item no. 94920.

If exhibitors carry out their own installation work connecting to the basic water supply/drainage lines (these being subject to a charge) this must comply with recognised technical guidelines and official drinking water regulations.

An outline sketch must be included with the order form, showing the required location of the connections.

For safety reasons the water supply may be cut off on the final day after the close of the fair.

5.5 Compressed air/Gas installations

5.5.1 Compressed air installations

Each stand to which compressed air connections are to be made will be provided with one or more such connections.

The connections will be installed by Messe Berlin GmbH or its contractors. A charge will be made for this work.

An outline sketch must be included with the order form, showing the required location of the connections.

For safety reasons the compressed air supply is disconnected each day after the fair has closed.

5.5.2 Gas installations (natural gas)

Each stand to be supplied with gas will be provided with one or more such connections.

For installations the latest version of the TRGI installation regulations is binding. Exhaust gases from large items of equipment must be led outside the building into the open air.

Natural gas connections will be installed by contractors appointed by Messe Berlin, for which a charge will be made.

An outline sketch must be included with the order form, showing the required location of the connections.

5.6 Mechanical installations, pressurised containers, exhaust gas installations

5.6.1 Machinery noise

In the interests of other exhibitors, the operation of loud machinery and appliances should be kept to a minimum.

Noise levels at the boundaries of the stand must not exceed 70 dB(A).

5.6.2 Equipment Safety Law and Product Safety Law

All technical working equipment and consumer products exhibited must satisfy the current and valid terms of the Equipment and Product Safety Law (GPSG).

Technical working equipment and consumer products that do not conform to these requirements must be provided with a clearly visible sign stating that these items do not comply with the aforementioned law and may only be purchased after they conform to statutory requirements.

The relevant declaration of conformity by the manufacturer must be available on the stand for all technical working equipment and consumer products bearing the CE symbol.

When demonstrations take place the stand personnel must take the necessary precautions to protect the public.

The stand personnel are also responsible for ensuring that no unauthorized persons are allowed to operate the equipment.

5.6.2.1 Protective devices

All protective devices must be in place when machinery and apparatus are being operated,

Normal protective devices may be replaced by a secure cover made of organic glass or some other similar, transparent material

The protective devices may be removed if equipment is not being operated, in order to show visitors the type of construction and design of the parts that would normally be covered. Such protective devices must be placed next to the machine, where they can be clearly seen.

5.6.2.2 Test methods

To ensure that safety requirements are being complied with, the technical working equipment on display may be inspected with regard to its accident prevention and technical safety features by the relevant supervisory authority (Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. :030/90254-5000), if necessary acting in association with the relevant technical commissions of the professional associations.

To enable the authorities to examine the equipment in order to ensure its conformity to the requirements of the CE symbol, the EC declaration of conformity must be kept available for inspection on the stand. Any doubts in this respect should be clarified with the relevant authority before the start of the fair.

5.6.2.3 Ban on the operation of equipment

Messe Berlin is also entitled at any time to prohibit the use of machinery, apparatus and appliances if, in its opinion, grounds exist for believing that such operation might present a material or personal risk.

5.6.3 Pressurised containers

5.6.3.1 Inspection certificate

Pressurised containers may only be operated on the stand if the tests stipulated in § 9-11 of the Pressurised Container Regulations (Druckbehälterverordnung) in their current amendment (BGBL I, p. 843) have been carried out.

The test certificates issued in this respect must be kept at the exhibition venue together with the pressurised container and presented to the relevant supervisory authority on demand

Further details may be obtained from the relevant supervisory authority, Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. : 030/90254-5000).

5.6.3.2 Testing

The certificate for construction and water pressure tests is not sufficient. This requirement also applies for foreign containers or those on hire.

If applications are received up to 4 weeks prior to the start of the fair, pressurised containers requiring testing may be inspected and tested by the Technical Supervisory Authority (TÜV). The certificate for construction and water pressure testing should be made available, and an appointed mechanic should be present on the stand.

Further details may be obtained from the relevant supervisory authority, Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. : 030/90254-5000).

5.6.3.3 Hired equipment

Since the relative short period of the fair does not allow time for the testing of foreign pressurised containers, exhibitors are advised to hire pressurised containers that have already been tested.

5.6.3.4 Monitoring

During the event the necessary approval documentation should be available for inspection by the supervisory authority.

Further details may be obtained from the relevant supervisory authority, Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. : 030/90254-5000).

5.6.4 Exhaust gases and vapours

Inflammable gases and vapours, or those which are harmful or hazardous to health, or cause a general nuisance, which are produced by exhibits and equipment may not be conducted into the halls.

They must be conducted into the open air by means of suitable pipes as specified by the Federal Pollution Law (Bundesimmissionsschutzgesetz) in its current amendment.

5.6.5 Waste gas installations

Inflammable gases and vapours, or those which are harmful or hazardous to health, or cause a general nuisance, require the installation of a waste gas pipe. Official approval must be obtained for the installation, including the pipes and an outlet venting outside the building.

5.6.5.1 Waste gas pipes

The pipes carrying smoke and waste gases must be of non-inflammable materials. The pipes carrying smoke must be at least 0.50 m from any inflammable material, and surrounded if necessary by a protective tube or sleeve.

The extraction units, from the lower edge of the supporting structure of the room or hall to the outside of the building, are installed exclusively by Messe Berlin or its contractors, and a charge will be made for this work.

The pipes from the exhibit to the lower edge of the supporting structure of the room or hall may be installed by Messe Berlin or its contractors, and a charge will be made for this work.

Connections to the exhibits must be arranged by the exhibitors themselves.

An outline sketch must be included with the order form, showing the required location of the outlets.

5.7 The use of pressurised gases and inflammable liquids

5.7.1 Pressurised gas installations

The storage and use of pressurised gas in the halls and on the grounds is not permitted, except with the written permission of Messe Berlin.

5.7.1.1 Application for use of pressurised gas bottles

Written permission must be obtained from Messe Berlin, using the form provided, if inflammable gases in pressurised bottles are to be used for presenting exhibits.

In accordance with the relevant accident prevention regulations, pressurised gas bottles must be secured against impact, falling, against access by unauthorized persons and against heat.

5.7.2 Inflammable liquids

5.7.2.1 Storage and use

The storage and use of inflammable liquids (see Regulation on Inflammable Liquids [Verordnung über brennbare Flüssigkeiten], BGBl 1, in the current amendment) in the exhibition halls and on the grounds is not permitted without written approval.

Approval for the storage and use of inflammable liquids can only be issued for the operation or demonstration of exhibits. The appropriate application/form should be submitted to Messe Berlin together with the safety data sheet.

5.7.2.2 Storage of supplies

For operational and storage purposes, no more than one day's supply of inflammable liquid should be kept on the stand. The amount in question should be stated on the application.

5.7.2.3 Containers for the storage of supplies

The day's supply should be kept in a clearly visible place in closed, fracture-resistant containers. It must be inaccessible to unauthorised persons. These containers must be stored in non-inflammable collecting vessels.

5.7.2.4 Storage site

Smoking must be strictly prohibited at the storage site. The appropriate signs must be displayed there. Suitable extinguishers must be kept in readiness.

5.7.2.5 Operating regulations

Equipment that is operated or demonstrated using inflammable liquids must be provided with non-inflammable collecting receptacles placed at the filling tube and at any places where the liquid could escape.

Because of the danger of explosion or fire, any inflammable liquid that has escaped must be removed immediately from the catchment receptacles and disposed of safely.

5.7.2.6 Filling with liquids

When filling with the liquid, the utmost care should be taken because of the hazards involved.

5.7.2.7 Empty containers

Empty containers which have been used to store inflammable liquids may not be left or stored on the stand or in the halls.

5.8 Asbestos and other hazardous materials

The deployment and use of construction materials or products containing asbestos or other hazardous materials is prohibited.

The basis for this prohibition is provided by the Law for Protection against Hazardous Materials (Chem. Gesetz), BGBl. 1, Part 1, in conjunction with the Prohibited Chemicals Regulation (ChemVerbotsV) and the Regulation on Hazardous Materials (GefStoffV), in their current amendments.

5.9 Film, photography, televisual presentations, scenic displays and other forms of presentation

See item 4.4.4. The provisions of § 34 of BetrVO apply to scenic displays > 50 m².

5.10 Protection against radiation

5.10.1 Radioactive materials

Official approval and the agreement of Messe Berlin must be obtained when dealing with radioactive materials.

In accordance with the Regulations on Protection against Radiation (Strahlenschutzverordnung) in the current amendment, applications must be made to the relevant authority and the approval must be submitted to Messe Berlin no later than 6 weeks prior to the start of the fair.

If approval has been granted, proof must be demonstrated that sufficient legal cover is provided for any planned use of radioactive materials on the Messe Berlin exhibition grounds.

5.10.2 X-ray equipment and devices causing stray radiation

Approval must be obtained, together with the agreement of Messe Berlin, in order to operate X-ray equipment and devices producing stray radiation.

The regulation concerning protection against damage caused by X-rays (RöV, BGBl I) in its current amendment must be observed.

Notification of the operation of X-ray equipment and devices creating stray radiation must be provided and is mandatory §§ 3,4,5,8 RöV.

The relevant supervisory authority is Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. : 030/90254-5000, to which applications or notifications must be submitted at least 4 weeks prior to the start of the event.

5.10.3 Laser installations

Approval must be obtained, together with the agreement of Messe Berlin, in order to operate laser installations.

In accordance with § 6 of the accident prevention regulations regarding laser beams (Unfallverhütungsvorschriften "Laserstrahlung") BGV B2, the relevant authority must be notified about the intention to operate laser installations.

The announcement must be accompanied by a written authorisation from the Laser Protection Officer for the operation of laser equipment.

The relevant supervisory authority is Landesamt für Arbeitsschutz, Gesundheitsschutz und technische Sicherheit Berlin – LAGetSi – Turmstrasse 21, D-10559 Berlin, tel. : 030/90254-5000, to which applications or notifications must be submitted at least 4 weeks prior to the start of the event, using the appropriate form.

5.11 High frequency equipment, radio systems, electromagnetic compatibility, harmonics

To ensure uniform frequencies and to eliminate mutual interference between the various systems wherever possible, the approval of the relevant regulatory authority, Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Außenstelle Berlin, Seidelstr. 49, 13405 Berlin, tel. 49(0)30-4374-0, and the agreement of Messe Berlin GmbH must be obtained by operators of high frequency equipment, radio installations and other transmitters for telecommunications purposes, as well as of pager systems, microport systems, two-way intercom and telecontrol systems. No special form is required when applying to Messe Berlin for this permit. The application should be accompanied by the relevant technical data (see order form E7) No special form is required when applying to Messe Berlin for this permit. .

High frequency equipment and radio systems may only be operated if they conform to the terms of the Telecommunications Equipment Law BGBl and of the Law on the Electromagnetic Compatibility of Equipment (EMVG), in their current valid versions.

The stipulations of the 26th Regulation on the Implementation of the German Anti-Pollution Law must be complied with if exhibits or stand decorations are used that produce electrical, magnetic or electromagnetic fields.

The electrical installations used in exhibits should be designed in such a way as to prevent excessive phase effects on the power supply to the Exhibition Grounds resulting from harmonics (see also Item 5.3.3).

5.12 Cranes, stacker trucks, working platforms, empty packaging

The use of cranes and forklift trucks is restricted exclusively to the forwarding companies under contract to Messe Berlin.

Any exceptions require a permit and payment of a fee, and must be approved by Messe Berlin.

Within the exhibition grounds all forwarding rights are held by the forwarding companies appointed by Messe Berlin.

Orders issued to these forwarding companies are subject to the latest version of the General German Forwarders' Conditions (ADSp), and to the list of forwarding charges for trade fairs and exhibitions in Berlin.

Messe Berlin accepts no liability for any risks arising out of the activities of the forwarding companies. No empty packaging of any kind may be stored on the stands.

5.13 Reproduction of music

Under the terms of the Copyright Law, § 15 Urheberrechtsgesetz (BGBI 1) in its current amendment, the reproduction of music of all kinds requires the approval of Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte (GEMA), Bezirksdirektion Berlin, Keithstrasse 7, 10787 Berlin, tel. +49(0)30 / 212 92-0, Messesachbearbeitung.

Failure to register the reproduction of music may result in claims by GEMA for damages (§ 97 Urheberrechtsgesetz).

5.14 Facilities for dispensing drinks

The guideline data regarding the intervals between cleaning, as stipulated by DIN 6650-6, applies to all installations used for dispensing drinks.

The operator must provide proof that he has met his duties of supervision and care, and must show how he has fulfilled these obligations.

Reference source for DIN standards:

Beuth Verlag GmbH, Burggrafenstrasse 6, 10787 Berlin, <http://www.beuth.de>

5.15. Inspection of foodstuffs

If samples of foodstuffs are to be offered for consumption on site, or if food and drinks are to be sold on site, statutory provisions, in particular those of the Food Hygiene Regulation GVB1 and the Food and Utensils Law LMBG in their current amendments (BGBI), must be observed.

Any queries should be addressed to the Bezirksamt Charlottenburg-Wilmersdorf von Berlin, Veterinär- und Lebensmittelaufsichtsamt, Hohenzollerndamm 177, 10713 Berlin, tel. 030 / 9029-29 106/107.

6. Environmental protection

Messe Berlin is fundamentally committed to protecting the environment.

As the contractual partners of Messe Berlin, exhibitors are required to ensure that all provisions and rules are strictly adhered to by their contractors too.

6.1 Waste management

The basis for all following regulations is provided by the conditions of the recycling and waste management legislation (KrW-AbfG, in its current amendment), the associated implementing provisions and rules, as well as the law for the avoidance and disposal of waste and refuse in Berlin.

Exhibitors are responsible for correct and environmentally responsible waste disposal during construction, throughout the duration of the event, and during dismantling of their stands.

Technical arrangements for the disposal for recycling purposes and removal are the sole responsibility of Messe Berlin and its appointed contractual partners

6.1.1 Disposal of waste

In accordance with the principles of recycling, every effort should firstly be made to avoid the production of waste materials on exhibition grounds.

Caterers should avoid using disposable plates and cups.

Exhibitors and their contractual partners are required to make an effective contribution to such efforts at each stage of the event.

This objective must be pursued even at the planning stage and in coordinating the efforts of all those involved. In general re-usable materials should be used in constructing and operating the stand, and should have the minimum environmental impact.

Any materials left behind will be disposed of without ascertaining their value, at the exhibitor's expense, and this will incur a higher charge.

6.1.2 Waste materials requiring special supervision

Exhibitors are required to report to Messe Berlin with details about any waste materials which, by their nature, condition or quantity, represent a health hazard (in particular food waste), are hazardous to the air or water, or are explosive or inflammable (e.g. batteries, paints, solvents, lubricants, dyes etc.), and to arrange for their correct disposal by the relevant contractual partners of Messe Berlin.

6.1.3 Waste materials brought in

Materials and waste that are not produced during the event and are not the result of the construction and dismantling work may not be brought onto the exhibition grounds.

6.2 Water, sewage, soil protection

6.2.1 Oil, fat separators

Water introduced into the mains may not contain higher levels of harmful materials than those allowed in normal domestic use.

Oil/grease extractors must be used if water containing oils or grease at higher levels than those specified is introduced into the sewage system.

Mobile caterers must ensure that grease and oils are retained and disposed of separately.

6.2.2 Cleaning / Cleaning products

All cleaning work must be carried out using biodegradable products.

In accordance with the regulations, cleaning products that contain hazardous solvents may only be used in exceptional cases.

Cleaning work during the event and during the construction and dismantling periods may only be carried out by the cleaning company appointed by Messe Berlin GmbH.

6.3 Environmental damage

Environmental damage/contamination (e.g. by petrol, oil, solvents, dyes) must be reported to Messe Berlin immediately.

6.4 Protection against noise

Every effort must be made to avoid unnecessary noise during construction and dismantling.

Noisy activities must be avoided on weekdays before 7 a.m. and after 6 p.m., on Saturdays after 4 p.m. and on Sundays and public holidays. This applies in particular to the halls 21b-23b, 25 and 26ab, which are adjacent to a residential area. In these halls the main doors must be kept closed.

Failure to observe these rules may result in construction and dismantling work being prohibited during the periods referred to above.