

Technical Guidelines

As of: 1 January 2022



Contents

→ The items that have been marked contain new changes.

	Page		Page		Page
1. Preliminary remarks	4	Fire extinguishers	18	and the heights of stand interiors	29
1.1 House Rules	5	Fire alarm system	18	4.9.3 Live loads/design loads	29
1.2 Opening hours	6	Acoustic/visual alarm	18	4.9.4 Escape routes / stairways	30
1.2.1 Set-up and dismantling periods	6	Smoke removal	19	4.9.5 Building materials	30
1.2.2 Opening hours during trade fairs/exhibitions	6	Sprinkler systems	19	4.9.6 Top floors	30
2. Traffic on the exhibition grounds, rescue routes, safety equipment	7	4.4.1.1 Construction and decorative materials	19	→ 4.10 Misuse / Violation and liability	31
2.1 Traffic regulations, parking permits	7	4.4.1.2 Exhibiting motor vehicles at stands	19	5. Operational safety, technical safety provisions, technical regulations and utilities	32
2.2 Rescue routes	7	4.4.1.3 Explosive materials	20	5.1 General regulations	32
2.2.1 Fire department manoeuvring areas, fire hydrants	7	4.4.1.4 Pyrotechnics	20	5.1.1 Damage	32
2.2.2 Emergency exits, emergency escape hatches, exhibition hall aisles	7	4.4.1.5 Balloons	20	→ 5.1.2 Coordinating work on the exhibition grounds	
2.3 Safety equipment	8	4.4.1.6 Flying objects		5.2 Employment of tools and other equipment	32
2.4 Stand numbering	8	4.4.1.7 Fog machines, hazers, Sparklers and laser systems	20	5.3 Electrical installations	32
2.5 Guard services	8	4.4.1.8 Ash containers, ashtrays	21	5.3.1 Electrical outlets	32
2.6 Evacuation in an emergency	9	4.4.1.9 Containers for trash, recyclable materials and residual waste	21	5.3.2 Electrical installations on stands	32
3. Technical data on, and equipment of, the exhibition halls and outdoor exhibition areas	10	4.4.1.10 Spray guns, nitrocellulose lacquers, cleaning agents, solvents	21	5.3.3 Installation and operating regulations	33
3.1 Hall data	10	4.4.1.11 Work that poses a fire hazard		5.3.4 Safety precautions	33
3.1.1 General lighting, types of electrical supplies, supply voltages	10	4.4.1.12 Empty packaging / storage of materials	21	5.3.5 Emergency lighting	33
3.1.2 Compressed air, electrical and water supplies	10	4.4.1.13 Fire extinguishers	22	5.3.6 Equipotential bonding (stand earthing) for metal constructions	33
3.1.3 Communications facilities	10	4.4.1.14 Water features/pools	22	5.4 Water and drain installations	33
3.1.4 Sprinkler systems	10	4.4.2 Stand ceilings	22	5.5 Compressed air/gas installation	34
3.1.5 Heating, ventilation and air-conditioning	10	4.4.3 Glass and acrylic glass	22	5.5.1 Compressed air installations	34
3.1.6 Outages	10	4.4.4 "Trapped rooms" / occupied rooms	22	5.5.2 Gas installations	34
3.1.7 Stand air-conditioning	11	4.5 Exits, escape routes, doors	22	5.6 Machinery, pressure vessels, exhaust systems	34
3.2 Outdoor exhibition areas	11	4.5.1 Exits, escape routes	23	5.6.1 Noise generated by machinery	34
3.3 Designation of clear gate heights	11	4.5.2 Doors	23	5.6.2 Product safety	34
4. Stand construction regulations	12	4.6 Platforms, ladders, stairs, landings	23	5.6.2.1 Safety equipment	35
4.1 Stand safety	12	4.7 Stand design	24	5.6.2.2 Inspection procedures	35
4.2 Stand construction permits, project approval	12	4.7.1 Stand appearance	24	5.6.2.3 Prohibition of operation	35
4.2.1 Inspection and approval of structures requiring a permits	12	4.7.2 Verification of rented areas	24	5.6.2.4 Additional protective measures	35
4.2.2 Vehicles and containers	13	4.7.3 Interventions in the structures and equipment of buildings	24	5.6.3 Pressure vessels	36
4.3 Construction heights	13	4.7.4 Exhibition hall floors	24	5.6.3.1 Certificates of approval	36
4.4 Fire protection and safety regulations	14	4.7.5 Suspension points/installation of trusses/fasteners	25	5.6.3.2 Testing	36
4.4.1 Fire protection regulations	14	→ 4.7.5.1 Electric chain hoists	25	5.6.3.3 Rental equipment	36
General remarks / Area data	17	→ 4.7.5.2 Manual chain hoists	25	5.6.3.4 Inspections by regulatory agencies	36
Closed ceilings	17	4.7.5.3 Fasteners	26	5.6.4 Exhaust gases and vapours	36
Stand construction materials, stairs	18	4.7.6 Stand bounding walls	26	5.6.5 Exhaust systems	36
Emergency escape routes	18	4.7.7 Advertising media/presentations	26	5.7 Employment of compressed gases, liquefied gases and combustible liquids	37
Emergency escape route signage	18	4.7.8 Barrier-free construction	27	5.7.1 Compressed gas and liquefied gas systems	37
Wall hydrants	18	4.7.9 Foundations, pits	27	5.7.1.1 Application for Approval of compressed gas bottles	37
		4.8 Outdoor areas	27	5.7.1.2 Employment of liquefied gases	37
		4.8.1 Stand construction permits/stand-structures requiring approval	28	5.7.1.3 Installation and maintenance of liquefied gas systems	37
		4.8.2 Ground anchors/excavations	28	5.7.2 Combustible liquids	37
		4.8.3 Weather-related loads	28	5.7.2.1 Operation requirements	37
		4.8.3.1 Wind loads	28	5.7.2.2 Filling systems with combustible liquids	37
		4.8.4 Severe weather warnings	28	5.7.2.3 Empty containers	37
		4.9 Two-storey structures	29		
		4.9.1 Requests for approval	29		
		4.9.2 Restrictions applying to stand superstructures, safety clearances			

Contents

→ The items that have been marked contain new changes.

	Page		Page		Page
5.7.3 Combustible pastes and other fuels	37	5.12 Cranes, forklifts, and empty packings	40	6.2.1 Oil/grease traps	44
5.8 Asbestos and other hazardous materials	38	5.13 Musical reproduction	41	6.2.2 Stand cleaning/cleaning agents	44
5.9 Movie and TV screenings, slide shows and other presentations, stages	38	5.14 Beverage dispensing systems	41	6.3 Environmental pollution	44
5.10 Radiation protection	38	5.15 Food inspections	41	6.3.1 Packaging materials	44
5.10.1 Radioactive materials	38	5.16 Vehicle and driving demonstrations	42	6.3.2 Kitchen waste	44
5.10.2 X-ray systems and sources of broadcast interference	39			6.3.3 Manufacturing wastes	44
5.10.3 Laser systems	39	6. Environmental protection	43	6.3.4 Stand components	44
5.10.4 LED	39	6.1 Waste	43	7. General information	46
5.11 High-frequency equipment, radio systems, electromagnetic compatibility and harmonics	40	→ 6.1.1 Waste disposal	43	7.1 Limitation of liability	46
		6.1.2 Hazardous waste	43		
		6.1.3 Waste brought onto the exhibition grounds	44		
		6.2 Water, waste water, soil protection	44		

1. Preliminary remarks

Messe Frankfurt has issued guidelines for trade fairs and other events in order that all exhibitors/ event organisers will have optimum opportunities to present their exhibits and attract attendees and interested parties to visit their stands.

These guidelines are binding upon all exhibitors and event organisers. They also incorporate safety regulations that are intended to provide high degrees of safety in relation to technical and stand equipment in the interest of protecting our exhibitors and visitors. The building provisions, fire protection regulations and other safety regulations involved have been coordinated with the responsible agencies of the City of Frankfurt am Main.

Messe Frankfurt reserves the right to verify compliance with these regulations. Furthermore, the applicable legal regulations, as amended from time to time, shall be observed at all times.

Insofar as the term “stand construction” is used in its conventional sense in the Technical Guidelines, it does not refer to a physical structure in the sense of the German Federal Building Code

(BauGB). In legal terms, trade fair stand constructions are considered to be “facilities” in the venue.

In the interest of all participants, Messe Frankfurt can prohibit the holding of an event and/or the opening of an exhibition stand if defects previously found have not been remedied by the start of the fair.

Messe Frankfurt retains the right to issue further safety regulations and stand construction standards at any time. Messe Frankfurt also reserves the right to permit exceptions to these regulations in individual cases.

The documents required to order services will be sent in due time before the event.

These Technical Guidelines must be forwarded to all of the exhibitor’s contracting partners.

Further information on details of preparation and staging of the event will be sent to exhibitors if applicable.

The trade fair companies

- Deutsche Messe AG Hannover
- Leipziger Messe GmbH
- Messe Berlin GmbH
- Messe Düsseldorf GmbH
- Messe Frankfurt Venue GmbH

- Messe München GmbH
 - Kölnmesse GmbH
 - NürnbergMesse GmbH
 - Landesmesse Stuttgart GmbH
- have compiled these Technical Guidelines with a uniform classification system.

In the interests of simpler language and improved readability, generic masculine pronouns have been used throughout the Technical Guidelines. These should always be understood as referring to persons of all gender identities.

Building codes are issued by the governments of the respective German states.

The respective event regulations may therefore differ from exhibition site to exhibition site due to differing local building codes and differing construction conditions at the various exhibition sites.

Messe Frankfurt also reserves the right to modify these Technical Guidelines and other regulations at any time.

The German version alone shall be binding.

1.1 Site Regulations

These Site Rules and Regulations apply throughout the premises of Messe Frankfurt Venue GmbH (hereinafter referred to as “Messe Frankfurt”), including all buildings, the Rebstock multi-storey car park, Kap Europa convention centre and all outdoor areas in the Rebstock area that are used by Messe Frankfurt (hereinafter referred to as the “exhibition grounds”).

Messe Frankfurt and the event organiser each have the right to enforce the Site Rules and Regulations. Any additional agreements reached with exhibitors, service partners etc. remain unaffected.

1. Entrance to the exhibition grounds on foot or in vehicles is only permitted with proper and valid authorisation (employee IDs, service partner IDs, event-specific admission tickets, set-up and dismantling passes) at predefined times and in the predefined areas of the exhibition buildings and grounds. Messe Frankfurt reserves the right to conduct spot checks of individuals to ensure that they are authorised to be on the exhibition grounds, regardless of whether they are suspected of wrongdoing.
2. The provisions of the German Road Traffic Regulations (StVO) are applicable for everyone on the exhibition grounds. All signs regulating vehicular and pedestrian traffic on the exhibition grounds must be

observed. Vehicles are subject to a 30 km/h speed limit.

E-scooters, e-boards and other similar vehicles may not be used in buildings or in outdoor event areas during events.

3. Messe Frankfurt shall be entitled to search the boots and cargo areas of vehicles and bags or personal items of individuals at any time regardless of whether or not there is any suspicion of wrongdoing. Should anyone refuse permission, Messe Frankfurt reserves the right to expel them from the exhibition grounds.
4. Messe Frankfurt has the right to issue restrictions on the admission of visitors and to prohibit the transport of animals or items onto the exhibition grounds; it may either issue general provisions or make such restrictions dependent on the satisfaction of specific requirements in individual cases. Children and young people under the age of 14 may only enter the exhibition grounds in the company of an official guardian or suitable chaperone
5. Messe Frankfurt accepts no liability whatsoever for any personal injury, property damage or financial loss that might occur at the exhibition grounds
6. Unless Messe Frankfurt has given express permission, it does not allow advertising of any kind, neither does it permit the offer of goods or services of any kind, the acceptance of

orders or the conducting of surveys, if such activities take place outside exhibition stands.

7. No commercial activities are permitted on the exhibition grounds unless they are being conducted on behalf of Messe Frankfurt or an organiser, exhibitor, lessee, service provider or other contracting party that has entered into an agreement with Messe Frankfurt. Messe Frankfurt reserves the right to permit or prohibit the activities of third parties acting on behalf of contracting parties and to specify the type, scope and conditions of their activities.
8. Over-the-counter sales, cash sales, or the acceptance and removal of exhibited goods during trade fairs and exhibitions is prohibited. If goods are given away free as samples, the exhibitor must provide the third party with a corresponding declaration of transfer (receipt). Third parties must demand a receipt from the exhibitor and must produce this on request. Should any such third party be found without a receipt, Messe Frankfurt reserves the right to impound the goods without compensation and expel the third party from the exhibition grounds.
9. Devices that can be used to produce photos or film are prohibited throughout the exhibition grounds. Filming, taking pictures and making sketches

1.1 House Rules

of exhibited goods on the exhibition grounds and in the exhibition halls is only permissible in exceptional cases with the written consent of Messe Frankfurt. If there is reasonable suspicion, Messe Frankfurt is entitled to confiscate any sketches, photographs or other film materials that have been made and have these destroyed without providing compensation. This also applies if other film or photographic material will be destroyed as a result.

10. It should be noted that the exhibition grounds are under video surveillance for security

reasons.

11. There is a general smoking ban in all buildings and enclosed rooms within the exhibition grounds.
12. Instructions given by Messe Frankfurt security staff and stewards must be followed at all times.
13. In the event that the House Rules or other requirements and regulations are violated, access documentation is misused or forged, or there is other disruptive behaviour, Messe Frankfurt reserves the right to expel those responsible from the exhibition buildings and grounds and to issue a tempo-

rary or permanent ban on their return, as well as to confiscate their access documents without compensation, and to have any vehicles removed from the premises at the expense and risk of the owner or operator.

14. A limited road and walkway clearance service is provided during the winter months. This applies for both the restricted and the publicly accessible areas of the Messe Frankfurt exhibition grounds

As at: November 2020

1.2 Opening hours

1.2.1 Set-up and dismantling periods

In general, stand building and deliveries of exhibited goods may commence five (5) calendar days prior to the opening of the event involved.

During the general set-up and dismantling periods, work in the exhibition halls and on the outdoor exhibition areas may proceed around the clock, that is, 24 hours per day (normally no work may be performed after 3 p.m. on the final days of set-up periods, however), unless other hours and a schedule of working hours have been announced for a particular event. In general, dismantling of stand equipment and furnishings, including exhibitors' own stand struc-

tures and structures built into stands, shall have been concluded and the exhibition hall vacated no later than the second calendar day following the close of the event involved. The exhibitor and any stand construction companies they work with should report to the service office responsible for the hall both at the start of stand set-up and at the end of dismantling. Stand areas shall be swept and returned in a clean condition. In special cases, Messe Frankfurt Venue GmbH's Technical Project Management may grant extensions of set-up and/or dismantling periods. Exhibition halls are neither heated nor air-conditioned prior to the official commencement of set-up periods or following the official termination

of dismantling periods.

In the interest of general safety, all exhibition halls and the exhibition grounds shall remain closed outside official set-up and dismantling periods and event opening hours.

1.2.2 Opening hours during trade fairs/exhibitions

Exhibition halls shall be opened one hour prior to the official opening of the trade fair and shall be closed one hour after it closes, on every day the event involved is officially open.

Exhibitors who, in special cases, have valid grounds for working on their stands outside said opening hours shall require special written permits issued by Messe Frankfurt.

2. Traffic on the exhibition grounds, rescue routes, safety equipment

2.1 Traffic regulations, parking permits

All rules directing and regulating traffic, such as those described in the Traffic regulations, and all instructions given by the personnel deployed by Messe Frankfurt for this purpose, shall be observed at all times.

The exhibition grounds are the private property of Messe Frankfurt. The provisions of the StVO (German road traffic regulations) apply throughout the exhibition grounds and on/in Messe Frankfurt's parking facilities. The speed limit on the exhibition grounds is 30 km/h. If called for by traffic conditions, vehicles must not exceed walking

speed. Engines must be turned off during loading/unloading. Before entering/exiting exhibition halls, drivers must come to a full stop and ensure that gates offer sufficient overhead clearance. Parking vehicles in the exhibition halls is prohibited. Caravans/campers may not be used on the exhibition grounds.

Illegally parked vehicles, trailers, containers, and goods of any kind may be removed by authorised towing companies working under contract to Messe Frankfurt at their owners' or operators' expense and risk.

Driving any type of vehicle on the exhibition grounds requires a permit from Messe Frankfurt, is at drivers' own risk, and is prohibited at all times during events.

There is a limited number of car parking spaces available for exhibitors on the exhibition grounds. In accordance with the number of spaces available, parking permits can only be ordered for the entire duration of the event using the corresponding form (please also see the Transport Guidelines).

2.2 Rescue routes

2.2.1 Fire department manoeuvring areas, fire hydrants

The necessary fire-department entry routes and manoeuvring areas designated by "no-parking" signs must be kept clear at all times. Vehicles or objects parked/deposited in rescue routes or on safety areas shall be removed at their owners' expense and risk.

Fire hydrants in the exhibition halls and on outdoor exhibition areas shall not be obstructed or rendered unrecognisable or inaccessible.

2.2.2 Emergency exits, emergency escape hatches, exhibition hall aisles

Escape and rescue routes shall be kept clear at all times. It must be

possible to easily open the doors along escape and rescue routes from the inside to their fully open position. Escape and rescue routes, exit doors, emergency exits and their identifying signs or markings must not be obstructed, obscured, have anything built over them, be blocked, have anything hung on them or otherwise be rendered unrecognisable. Escape and rescue routes in exhibition halls shall not be constricted by objects deposited therein or extending into them at any time. In the event that these rules are not complied with, Messe Frankfurt shall be entitled to remedy the situation at the expense and risk of the responsible party. Materials required for con-

structing stands or exhibits delivered for immediate installation at the stand area may be deposited in the escape and rescue routes for a short period of time during the set-up and dismantling phases as long as the aisle widths required for safety reasons are maintained and logistical concerns are sufficiently taken into consideration. This will be considered to be fulfilled if a strip of no more than 0.9 m in width between the stand border and the hall aisle is used to deposit items. Regardless of the width of the hall aisle and the items deposited there, it is mandatory to maintain an unblocked passageway of no less than 1.2 m in width. Areas in front of emergency exits and ar-

2.2 Rescue routes

areas where hall aisles intersect are the exception: their entire width must be kept clear at all times. Hall aisles may not be used for assem-

bly or to set up machines (e.g. woodworking equipment, workbenches etc.). Messe Frankfurt may (also) request the immediate

clearing of all hall aisles for logistical reasons.

2.3. Safety equipment

Sprinkler systems, fire alarms, fire extinguishers, smoke detectors, mechanisms for closing exhibition

hall doors and other items of safety equipment, their signs or markings, and green emergency exit signs

shall remain visible and accessible at all times, and shall not be obstructed or enclosed.

2.4. Stand numbering and aisle designations

Stand numbering and corresponding aisle designations are obligatory. All stands will be marked with stand numbers by the organiser if technically possible with the given stand

construction. We recommend that organisers adopt the existing aisle designations with letters that are normally used in Frankfurt. If the organiser wishes to use different des-

ignations, for safety reasons they must first present an alternative aisle signage concept to Technical Project Management for approval.

2.5. Guard services

Messe Frankfurt and Messe Frankfurt's external service partners monitor the exhibition halls and outside areas during the set-up and dismantling phases, as well as while events are underway. However, Messe Frankfurt accepts no responsibility for property and objects brought or delivered by exhibitors and third parties acting under Messe Frankfurt's instructions.

Exhibitors are expressly informed that exhibited materials and other objects brought by the exhibitors are subject to greater risk during set-up and dismantling periods. Valuable and easily moveable objects should always be locked away at night.

Security for the stand and the objects brought by the exhibitor must

be arranged by the exhibitor where necessary.

As a general rule, stand guards may only be posted between 6:00 p.m. and 8:00 a.m. by Messe Frankfurt or its contractual service partner(s). Exhibitors may order stand guards no later than six weeks before the start of the event with the corresponding order form

2.5. Guard services

(please refer to the service folder or go to Shop for Exhibitor Services online). Ordering stand guards involves submitting a fully completed, preprinted order form for the event involved. Oral or telephone orders for stand guarding must be confirmed in writing by applicants. All orders for stand guarding must be signed by applicants. Messe Frankfurt service personnel is not authorised to assume responsibility for monitoring for third-party property. Exhibitors' own stand security staff who are to remain on duty in exhibition halls between 6 p.m. and 8 a.m. require special permits for which a fee is charged. Exhibitors have no legal rights to demand issuance of such permits.

Exhibitors' own stand security staff who are present in exhibition halls

prior to, during and after events shall also observe the following regulations: Guards shall sign in at the hall inspector's office prior to going on duty. Their presence on site shall be confirmed by entering their name, the name of the exhibitor, the stand number, the number of their personal identification card or passport number, and the date and time of their arrival on a list provided for that purpose and maintained by the hall inspector's office. Upon concluding their period of duty, and before leaving the exhibition hall, stand security staff shall sign out at the hall inspector's office and note the termination of their period of duty on the aforementioned list. Stand security staff shall remain on that stand for which they have a guarding order, and shall enter and leave stands by

the shortest route passing by the hall inspector's office. In the event that they fail to observe these regulations, Messe Frankfurt shall assume that the presence of that person on the stand or in the exhibition hall is unauthorised and reserves the right to institute special measures, to expel that person from the exhibition grounds, and/or to file other claims or claim damages. Bringing guard dogs onto the exhibition grounds requires a permit issued by Messe Frankfurt that may be revoked by same at any time. Dogs shall be kept on a leash at all times. Weapons may not be brought onto the exhibition grounds, even for guarding purposes.

2.6. Evacuation in an emergency

For safety or security reasons, Messe Frankfurt may order the closure and evacuation of rooms, buildings or outdoor areas.

3. Technical data on, and equipment of, the exhibition halls and outdoor exhibition areas

3.1 Hall data

Since the technical data on the various exhibition halls differ from hall to hall, they have been listed in a separate document (cf. the document entitled “Technical Data on the Exhibition Halls of Messe Frankfurt”).

3.1.1 General lighting, types of electrical supplies, supply voltages

The general lighting in the exhibition halls differs from hall to hall, and ranges from around 300 lux to around 400 lux, measured one meter above floor level. The electrical supplies and supply voltages available on the exhibition grounds are as follows:

Network type: TN-C-S

Supply voltage: 230 V / 400 V

Tolerances as per DIN EN 50160

3.1.2 Compressed air, electrical and water supplies

The compressed air, electrical and water supplies on stands located in exhibition halls are routed through existing installation channels to connection points in hall floors. On exhibition hall floors having supporting columns, electrical supplies are also available at terminal boxes mounted on these supporting columns.

3.1.3 Communications facilities

Stands located in exhibition halls are supplied with telephone, fax, data and antenna lines via existing

installation channels and connection points in hall floors.

On exhibition hall floors having supporting columns, connection points are also available at terminal boxes mounted on these supporting columns.

Guidelines for the operation of exhibitors' own WiFi networks at Messe Frankfurt: Exhibitors' own WiFi transmitters may only transmit in the 2.4 GHz band in accordance with currently applicable standards (802.11 b/g/n); transmission in the 5 GHz band is prohibited! The 5 GHz band is reserved exclusively for Messe Frankfurt in order to allow for the provision of exhibitor-specific solutions. As a result, WiFi transmitters may only transmit on channels 1, 6 or 11, and cannot be configured for automatic channel search. Channel bonding is not permitted, and the maximum channel bandwidth is 20 MHz. The maximum transmission power of the exhibitor's transmitter may not exceed -80 dBm at the edge of the stand. The SSID, i.e. your access point ID, must begin with your stand number (e.g. H4.0 B42). All of the aforementioned settings can be made using the access point configuration menu. Any transmitters other than WiFi transmitters are prohibited, as they can cause massive disruption to signals. In the event that exhibits require different transmitters, please contact us in advance. Naturally the afore-

mentioned rules and regulations are also applicable for WiFi transmitters in exhibits. The operation of WiFi networks that cause interference or disruption is prohibited. Messe Frankfurt reserves the right to shut down these networks. Forms for registering your own access point are available at www.messefrankfurt.com. Exhibitors' own WiFi transmitters must be registered in good time before a trade fair in order to ensure that these rules are complied with by all exhibitors.

3.1.4 Sprinkler systems

Exhibition halls are equipped with sprinkler systems.

Exhibits and decorations must be situated at least 1.0 m from sprinkler heads. Distances between lamps/spotlights and sprinkler heads should be chosen so as to preclude false triggerings of fire extinguishing devices through the heat generated by the lighting.

3.1.5 Heating, ventilation and air-conditioning

All halls are equipped with heating, ventilation and air-conditioning systems. These systems will be operational as required throughout events.

3.1.6 Outages

Messe Frankfurt should be notified immediately in the event of any outages of utilities, such as elec-

3.1 Hall data

tricity, water, compressed air, heating, ventilation or telecommunications systems, etc. Messe Frankfurt assumes no liability for any losses or damage due to such outages.

3.1.7 Stand air-conditioning

It is possible to individually air-condition stand areas. Messe Frankfurt's Exhibitor Service would be happy to provide you with an indi-

vidual offer. It is not permitted to use drinking water to flow-cool stands.

3.2. Outdoor areas

Outdoor areas are paved with asphalt or stones. The grounds have general road and walkway lighting systems that will be activated at

the onset of darkness during event opening hours. Necessary utilities connections are spaced at irregular intervals.

Please also be sure to note Item 4.8 "Outdoor areas" when conducting your planning.

3.3. Designation of clear gate heights

Gates having clear heights less than 4.00 m are designated by signs.

4. Stand construction regulations

4.1 Stand safety

Exhibition stands – including furnishings, exhibits and advertising media – must be structurally stable to ensure that there is no threat to public safety and order, and in particular that there is no danger to life or health. The exhibitor is responsible for the structural safety of their stands, and may be required to submit proof of same. Standing constructional elements or special constructions (e.g. free-standing walls, high exhibits, high

decorative elements) which might tip over must be designed to withstand the following equivalent distributed lateral loads q_h :

$q_{h1} = 0.125 \text{ kN/m}^2$ up to 4 m in height measured from the top of the floor

$q_{h2} = 0.063 \text{ kN/m}^2$ for all areas more than 4 m high measured from the top of the floor

The reference area is the respective surface area.

Verifiable/verified proof of compli-

ance is to be compiled in advance and presented to Messe Frankfurt on request (see Item 4.2.1). Deviations are possible in justified exceptional cases and require detailed documentation.

Bracing stands against neighbouring stands or existing building structures is prohibited.

In justified cases, Messe Frankfurt reserves the right to engage a structural engineer to conduct a chargeable verification of stand stability on site.

4.2 Stand construction permits, project permission

Permits are not required for the following:

For single-storey stands

- that are not considered to be special constructions
- whose stand area is less than 100 m^2
- whose height does not exceed 4.00 m

it is not necessary to submit planning documents.

Permits are required for the following:

Exhibition stands larger than 100 m^2 in area, stands located in outdoor areas, temporary structures, mobile stands, two-storey stands, special structures and special constructions require consent and inspection, and are subject to additional cost. Any costs incurred will

be invoiced to the exhibitor / stand constructor.

Special constructions include:

- Stand structures and exhibits that are more than 4 metres in height
- Closed ceilings
- Platforms and stages higher than 0.20 m
- Glass constructions
- Moving components
- Floor/ceiling connections

4.2.1 Inspection and permission for structures requiring a permit

Dimensioned stand plans drawn to a suitable scale (e.g. 1:100), labelled in English or German, accompanied by floor plans (as well as sectioned views and perspective views if appropriate), shall be submitted in digi-

tal form (PDF) for approval by no later than six weeks before the start of set-up to standapproval@messe-frankfurt.com.

After the stand plans have been inspected, one copy will be stamped as having received permission and returned to the exhibitor / stand constructor if accepted. Stand construction may not commence until the plans have been stamped as having received permission. In order to receive permission for the following:

- Special constructions
- Two-storey structures
- Stands in outdoor areas
- Temporary structures
- Cinemas and auditoriums
- Stages and platforms

the following documentation must be submitted in digital form (PDF) in German or English by no later

4.2 Stand construction permits, project permission

than six weeks before the start of set-up:

- a) Structural calculations complying with German building standards that are checkable or have been checked by a second independent structural engineer
- b) A building description specifying the materials used (including certificates in German or English where applicable)
- c) Stand construction drawings to a suitable scale, e.g. 1:100 (floor plans, perspective views, sectioned views) as well as a ceiling plan with dimensions of the closed ceiling(s)
- d) Escape route plan including lengths and widths of emergency escape route(s)
- e) Submission of a type certification / certification book renders item a) superfluous

In the event that structural calculations examined by a second, independent structural engineer are not submitted, Messe Frankfurt will commission a firm of engineering consultants to check the plans and separately invoice the exhibitor / stand constructor for their services. The firm of engineering consultants will contact the stand construction manager at a specified time / after consultation to provide assistance and examine structural characteristics, and to inspect the structure for a fee.

Due to the additional work entailed, the absence of structural calculations results in additional costs for the exhibitor / stand constructor.

4.2.2 Vehicles and containers

Vehicles and containers that are to be employed as exhibition stands in exhibition halls or outdoor areas require permission.

concluded by the appointed time, Messe Frankfurt shall be entitled to make the required alterations at exhibitors' expense.

4.3 Construction heights

The maximum construction heights for stands, rigging and advertising can be found at www.messefrankfurt.com. Advertising media, logos, etc., must be positioned at least 1 metre from the border with the

neighbouring stand. There may be special restrictions in particular halls. All measurements must be checked on site and Messe Frankfurt assumes no liability for figures being correct. The clear height of inside ar-

eas must be at least 2.30 m. The rear sides of stands adjacent to neighbouring stands must be kept smooth and be white in colour from a height of 2.50 m. Deviations are only possible with the agreement of neighbouring stands.

4.4 Fire protection and safety regulations

4.4.1 Fire protection regulations

The use of open fires and flames is prohibited. Exhibition halls are equipped with fire alarms and fire extinguishing systems. Should the operation of these fire protection

systems be impaired by stand constructions (e.g. closed ceilings), exhibitors must undertake additional measures in agreement with Messe Frankfurt Venue GmbH's Technical Project Management. Please

consult the following Tables 1 and 2 for the necessary measures. Closed ceilings are not permitted in foyers.

4.4 Fire protection and safety regulations

Table 1: Fire protection programme for one-storey exhibition stands with closed GF ceilings and two-storey exhibition stands with open TF ceilings (GF = ground floor, TF = top floor)

Ceiling area above the ground floor	0 - 30 m ²	31 - 100 m ²	101 - 200 m ²	201 - 400 m ²	401 - 1000 m ²
Fire protection measures					
Stand construction- materials incl. ceilings	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant
Stairs	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant
Emergency escape route length	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle
Exits from exhibition stands or from rooms located on stands (minimum width)	GF: one; 0.9 m TF: one flight of stairs; 0.9 m	GF: one; 0.9 m TF: one flight of stairs; 0.9 m	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.
Emergency escape route signage	Yes	Yes Escape sign lights	Yes Emergency lighting	Yes Emergency lighting	Yes Emergency lighting
Fire extinguishers	GF: Yes TF: Yes 1+1 p. stairs	GF: Yes TF: Yes 1+1 p. stairs	GF: Yes TF: Yes 1 + 1 per stairs	GF: Yes TF: Yes 1 + 1 per stairs	GF: Yes TF: Yes 1 + 1 per stairs
Fire alarm system	GF: No TF: No	GF: Yes TF: No	GF: Yes TF: No	GF: Yes TF: No	GF: Yes TF: No
Acoustic/visual alarm	GF: No TF: No	GF: No TF: Yes	GF: No TF: Yes	GF: No TF: Yes	GF: Yes TF: Yes
Wall hydrant "S" at stand	GF: No TF: No	GF: No TF: No	GF: Yes, one TF: No	GF: Yes, two TF: No	GF: Yes, three OG: Yes, three
Smoke removal	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: Yes TF: No	GF: Yes TF: No
Sprinkling	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: Yes TF: No

Please note: If there is no top storey used by people, the corresponding requirements for the top storey do not apply.

4.4 Fire protection and safety regulations

Table 2: Fire protection programme for two-storey exhibition stands with closed GF ceilings and closed TF ceilings (GF = ground floor, TF = top floor)

Ceiling area above the top floor	0 - 30 m ²	31 - 100 m ²	101 - 200 m ²	201 - 400 m ²	401 - 1000 m ²
Fire protection measures					
Stand construction- materials incl. ceilings	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant
Stairs	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant	Minimum B1, flame retardant
Emergency escape route length	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle	GF: max 20 m to aisle TF: max 20 m to aisle
Exits from exhibition stands or from rooms located on stands (minimum width)	GF: one; 0.9 m TF: one flight of stairs; 0.9 m	GF: one; 0.9 m TF: one flight of stairs; 0.9 m	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.	GF: Two, opposite one an- other, < 200 m ² : 0.9 m > 200 pers: min. 1.2 m + 0.6 m for each additional 100 pers. TF: Two flights of stairs oppo- site one another, each < 200 m ² : 0.9 m > 200 pers: min 1.2 m + 0.6 m for each additional 100 pers.
Emergency escape route signage	Yes	Yes Escape sign lights	Yes Emergency lighting	Yes Emergency lighting	Yes Emergency lighting
Fire extinguishers	GF: Yes TF: Yes 1+1 p. stairs	GF: Yes TF: Yes 1+1 p. stairs	GF: Yes TF: Yes 1 + 1 per stairs	GF: Yes TF: Yes 1 + 1 per stairs	GF: Yes TF: Yes 1 + 1 per stairs
Fire alarm system	GF: No TF: No	GF: Yes TF: Yes	GF: Yes TF: Yes	GF: Yes TF: Yes	GF: Yes TF: Yes
Acoustic/visual alarm	GF: No TF: No	GF: No TF: Yes	GF: No TF: Yes	GF: No TF: Yes	GF: Yes TF: Yes
Wall hydrant "S" at stand	GF: No TF: No	GF: No TF: No	GF: Yes, one TF: Yes, one	GF: Yes, two TF: Yes, two	GF: Yes, three TF: Yes, three
Smoke removal	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: Yes TF: Yes	GF: Yes TF: Yes
Sprinkling	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: No TF: No	GF: Yes TF: Yes

4.4 Fire protection and safety regulations

Explanations for Table 1 and 2

General remarks / Area data

Two-storey structures and the installation of closed ceilings are only possible with the consent of Messe Frankfurt Venue GmbH's Technical Project Management.

Area data in m^2 refers in each case to the closed ceiling area per storey; a rating in sections may be necessary. For stands with closed ceilings measuring $1,000 m^2$ or over, an individual fire protection concept based on the Messe Frankfurt Technical Guidelines must be prepared and submitted to Messe Frankfurt for its consent.

Closed ceilings

The effectiveness of the sprinkler system (in the exhibition hall) must not be reduced by covered or multi-storey exhibition stands.

Ceilings are considered to be open:

- if no more than 50% per each m^2 of the roofed area is covered
- if sprinkler-compatible fabrics with a minimum mesh width of $2 mm \times 4 mm$ or $3 mm \times 3 mm$ are used (no Smoke Out). Tarpaulins are to be hung horizontally and only in one layer.

Fire protection measures:

- Up to $30 m^2$ of ceiling area of each stand may be covered without any additional measures being necessary as long as this does not exceed 50% of the stand area, because this does not reduce the effectiveness of the sprinkler system in the exhibition hall. It is also possible to have multiple ceiling areas of up to $30 m^2$ within a single exhibition stand, as long as a minimum distance of 3.00 m is maintained between each ceiling area. In order to ensure that multiple ceiling areas taken together do not exceed the maximum size of $30 m^2$, a distance of at least 1.50 m from the edge of the stand is to be maintained at all times.
- Closed ceiling areas up to $100 m^2$ in size require an automatic fire alarm system.
- Closed ceiling areas that are larger than $100 m^2$ in size also require the installation of wall hydrants for immediate fire-fighting measures
- Closed ceiling areas that are $401 m^2$ or larger require a sprinkler system for the area beneath the closed ceiling. It is not permissible to place multiple ceiling areas of up to $400 m^2$

next to one another without a sprinkler system. A minimum distance of 5 m (straight line) must be maintained between the ceiling areas.

Should a larger ceiling area result from not observing the minimum distance, including across multiple stands, the expenses incurred for compensatory measures according to Table 1 or 2 will be billed to those who caused them, including expenses for the affected neighbouring stand.

The top storey must always be left open to ensure that the effectiveness of sprinkler systems is not impaired. If the ceilings of top storeys are closed, additional requirements set out in Table 2 shall apply. Please also see Item 4.4.2. Closed ceilings are not permitted in foyers.

4.4 Fire protection and safety regulations

Further general explanations:

Stand construction materials, stairs

All stand construction and decorative materials must at least be classified as flame-retardant class B1 in accordance with DIN 4102 and/or class C s2 d2 in accordance with EN 13501-1. Stricter requirements apply in particular for materials that are used for ceiling structures or overhead: they must not only be flame-retardant, but also must not drip while burning. This corresponds to class C s2 d0 in accordance with EN 13501-1. For floor coverings, class C fl s1 is required. For safety reasons, special requirements may be imposed for load-bearing structural components in individual cases. All stairways must comply with DIN 18065.

Emergency escape routes

The routing and dimensioning of emergency escape routes are governed by the requirements of H-VStättR (Hessian guidelines on public meeting places). Distances within exhibition stands shall be measured according to walking distance.

Emergency escape route signage

Escape routes, emergency exits, emergency escape hatches and doors along emergency escape routes must be identified in accordance with the provisions of ASR A1.3 "Health and Safety Signage". In the event that stands are enclosed or darkened and the general emergency lighting for the exhibition hall is not sufficient,

emergency lighting and safety signage must be provided for exits and emergency escape routes (cf. Section 15 H-VStättR). For stands with an enclosed area of 30-100 m², illuminated emergency exit signs are sufficient.

Wall hydrants

Additional wall hydrants at exhibition stands are to be provided primarily for self-help, but also for use by instructed persons. Wall hydrants for self-help comply with DIN 14461 Part 1 Type "S" and are to be marked with an "S" accordingly, in addition to safety marking. The capacity of the wall hydrants for self-help is 24 l/min with simultaneous operation of two wall hydrants with non-distorting hoses of 19 mm in diameter and a jet pipe with mouthpiece of 4 mm in diameter. Wall hydrants at exhibition stands are to be installed in the direct vicinity of stand entrances or, respectively, at the top or bottom of stairs. Wall hydrants are to be located such that every covered part of an exhibition stand can be reached with at least one wall hydrant. Stand personnel will be instructed in use of the wall hydrants by Messe Frankfurt.

Fire extinguishers

Every level of an exhibition stand must be equipped with at least one fire extinguisher appropriate to the existing fire risk. One additional fire extinguisher must be provided for each further 200 m². An additional fire extinguisher must be provided at the top of each flight of stairs

within a stand. For stands without closed ceilings measuring up to 30 m², a can of fire extinguishing spray with an extinguishing capacity of at least 8 A (2 extinguishing units pursuant to the extinguishing agent table ASR A2.2) can serve as an alternative to a fire extinguisher. The fire extinguishers must have an extinguishing capacity of at least 27 A for fire classification A or 144 B for fire classification B and should not weigh more than 12 kg. Suitable fire extinguishers must be provided if stands have kitchens. Exhibitors must label fire extinguishers with their stand number and exhibitor name to ensure that they can be properly assigned to the correct stand areas.

Fire alarm system

The automatic fire alarm systems on exhibition stands with closed ceilings are designed to detect a fire at an early stage and to warn both stand visitors, especially those on the top floor of a stand, and the fire service. In this way, the conditions for escape are significantly improved and fire service intervention times minimised. As well as warning facilities, systems for smoke removal can be activated by an automatic fire alarm system.

Acoustic/visual alarm

An acoustic/visual warning system must be installed on the top floor of two-storey exhibition stands if there is no visual contact with the exhibition hall. In this way, people on the top storey can be warned at an early stage if there is a fire alarm on the ground floor. The

4.4 Fire protection and safety regulations

warning system is activated/triggered by the automatic fire alarm system on the ground floor of a two-storey stand. For exhibition stands with closed ceilings larger than 400 m², a warning system of this type must be provided on the ground floor too. Soundproof booths must additionally – irrespective of their size – either allow visual contact to the outside or feature an acoustic/visual signal system combined with an alarm button or an emergency switch outside the booth.

Smoke removal

Smoke removal from exhibition stands is by natural means or mechanically into the exhibition hall and from there by natural means or mechanically to the outside. No smoke extraction system is required for exhibition stands with a ceiling area of less than 200 m². For stands with a ceiling area of up to 1,000 m², smoke removal openings with clear opening space totalling 1 percent of the stand area, windows or doors with clear opening space totalling 2 percent of the stand area or a mechanical smoke extraction system with an air volume flow rate of 36 m³/h per square metre of stand area are considered adequate. No requirements relating to maintenance of thermal and electrical functions apply to systems for mechanical smoke removal from exhibition stands, since such smoke removal is only relevant in the self-help phase and possibly for giving help to third parties and no requirements are prescribed for exhibition stand

elements either. A mechanical smoke removal system is triggered/activated via the automatic fire alarm system.

Sprinkler systems

Closed ceiling areas that are larger than 400 m² require a sprinkler system for the area beneath the closed ceiling.

It is not permissible to place multiple ceiling areas of up to 400 m² next to one another without a sprinkler system. A minimum distance of 5 m (straight line) must be maintained between the ceiling areas.

Should a larger ceiling area result from not observing the minimum distance, including across multiple stands, the expenses incurred for compensatory measures according to Table 1 or 2 will be billed to those who caused them, including expenses for the affected neighbouring stand.

4.4.1.1 Stand construction and decorative materials

Materials that are flammable, drip while burning or generate toxic gases or large amounts of smoke, such as most thermoplastics (including polystyrene (styrofoam)), cannot be used for stand construction. For safety reasons, special requirements may be imposed for load-bearing structural components in individual cases (e.g. non-flammable). Attachments that are structurally necessary or load-bearing can only be made using non-flammable fasteners and materials. All stand construction and decorative materials must at least be classified as flame-retardant class B1 in ac-

cordance with DIN 4102 and/or class C s2 d2 in accordance with EN 13501-1. Stricter requirements apply in particular for materials that are used for ceiling structures or overhead: they must not only be flame-retardant, but also must not drip while burning. This corresponds to class C s2 d0 in accordance with EN 13501-1. For floor coverings, class C fl s1 is required. Test certificates stating the classifications of the building materials employed shall be kept available at the stand at all times.

All materials brought on site must be kept at a sufficient distance from ignition sources, spotlights and heat sources to ensure that they cannot be ignited. Decorations must be mounted directly on walls, ceilings or furnishings. Decorations suspended (freely) within the room are only permissible if they are at least 2.5 metres above the floor and do not impede the effectiveness of automatic fire extinguishing systems. The rear of backlit areas/walls and LED walls must remain accessible to the fire brigade without the use of tools.

Bamboo, reed, hay, straw, bark mulch, peat or similar materials do not generally satisfy the aforementioned requirements, and should generally be afforded special protection or treated to render them non-flammable. Deciduous and coniferous trees may only be used if their roots are kept moist at all times. Attachments that are structurally necessary can only be made using fasteners approved for this purpose (e.g. plastic cable ties are prohibited!).

4.4 Fire protection and safety regulations

The use of candles and similar sources of light as table decorations is permissible with the consent of Messe Frankfurt Venue GmbH's Technical Project Management department.

4.4.1.2 Exhibiting motor vehicles at stands

Messe Frankfurt Venue GmbH's Technical Project Management must be notified if motor vehicles are to be exhibited. This notification must include the number of vehicles, as well as the specification of the type(s) of vehicle(s) to be shown.

Vehicles with combustion engines

- The fuel tank must be locked and nearly empty.
- Vehicles being exhibited may be powered by the starter battery as long as it is ensured that no hazardous gases are produced (e.g. by using gel batteries), the battery contacts are configured such that they are safe to touch, and the starter remains disconnected from the battery.
- The battery is to be disconnected or removed in all other cases.

Vehicles with natural gas propulsion systems

- The gas tanks must have been emptied and depressurised (see also Item 5.7).

Vehicles with alternative drive technologies, e.g. electrically-powered vehicles or hybrid vehicles

- The fuel tank must be locked and nearly empty.
- The drive motor must be disconnected

from the battery, e.g. by means of a battery disconnect switch.

- It must be ensured that there is no voltage at the high-voltage battery / the high-voltage battery must be in a typical, non-critical state for a battery.
- Batteries may only be charged in the exhibition halls with the prior agreement of Messe Frankfurt Venue GmbH's Technical Project Management
- The positions of the vehicles within the stand area must be shown on a plan.
- The relevant rescue sheets must be kept at the stand, and are also to be submitted to Messe Frankfurt in advance.

- Vehicles with fuel cells or other drive units are considered separately.

A sufficient quantity of suitable extinguishing units/agents for all vehicles is to be kept available at the stand at all times.

Messe Frankfurt Venue GmbH reserves the right to require additional measures.

4.4.1.3 Explosive materials

Explosive materials are subject to the German Explosives Act (Sprengstoffgesetz), and may not be exhibited at trade fairs or exhibitions. The same applies to ammunition in the sense of the German Firearms Act (Waffengesetz).

4.4.1.4 Pyrotechnics

Pyrotechnic shows must be registered with Messe Frankfurt. Furthermore, approval must also be obtained from local authorities.

Pyrotechnic articles lacking a certificate of conformity and fireworks of categories II, III and IV are prohibited.

4.4.1.5 Balloons

The use of balloons filled with a combustible gas in the exhibition halls or outdoor areas is prohibited. It is possible to apply to Messe Frankfurt Venue GmbH's Technical Project Management for its permission for balloons filled with safety gas that are firmly anchored to a stationary structure, are located within the stand and do not exceed the maximum height. The distribution of gas-filled balloons is prohibited.

4.4.1.6 Flying objects

The use of flying objects such as UAS, drones etc. in the exhibition halls or outdoor areas is only permitted with the prior agreement of Messe Frankfurt Venue GmbH's Technical Project Management. Exceptions to this rule require the prior written consent of Messe Frankfurt Venue GmbH.

4.4.1.7 Fog machines, hazers, Sparkulars and laser systems

Due to the fact that the use of fog, Sparkulars and haze may trigger the automatic fire alarms installed in the exhibition halls, Messe Frankfurt Venue GmbH's Technical Project Management must be notified in writing of the use of such devices at least six weeks before the start of the set-up period. This notification must include the number of such devices, their model(s), and information on the type of fog

4.4 Fire protection and safety regulations

generation being employed. No specific form is necessary for this notification. A copy of the operating instructions for the device(s) and safety data sheet for the fog fluid(s) must also be provided. The cost of any measures necessary to deactivate fire alarm systems may be charged to the exhibitor or organiser by Messe Frankfurt. If the utilisation of fog machines is not coordinated with Messe Frankfurt and the fire alarm system issues a false alarm as a result, we will be forced to pass on the costs resulting from the deployment of the fire brigade to the party responsible. Fog machines may not be utilised if they result in the disruption of operations at neighbouring stands. For this reason, it is also necessary to specify the times during which the machines will be used and how often they will be used. Suitable measures must be devised to ensure that the volume of fog is kept to a minimum in areas where it is not required. It may be necessary for you to obtain the consent of your neighbouring stands. Only those fog machines which satisfy the fundamental requirements of the German Product Safety Act (ProdSG) may be used. If fog machines are to be used as vaporisers, it is recommended that the declarations of conformity for the devices used confirm their compliance with DIN VDE 0700-245. The type of use and specific conditions of use must be taken into account when selecting fog machines. The fog machine operator must have access to the corre-

sponding operating instructions. The only fog fluids which can be used inside the exhibition halls are those which do not contain any flammable, highly flammable or extremely flammable substances pursuant to Section 3 of the German Hazardous Substances Ordinance (GefStoffV) and which are not classified as hazardous substances under EU guidelines. Fog machine fluids can only be stored in the manufacturer's original packaging. During operation it is important to ensure that there is no heat accumulation and that the housing is able to dissipate heat without hindrance. In order to avoid the danger of fire from overheating in the event of a malfunction, the power supply to any fog machines not being used must be disconnected. Messe Frankfurt must be notified if laser systems are to be used, and their operation must be in accordance with the provisions of Item 5.10.3.

4.4.1.8 Ash containers, ashtrays

If smoking has not been expressly prohibited on stands or parts of stands, exhibitors must ensure that an adequate number of ash containers or ashtrays made from non-combustible material are provided and that they are emptied regularly.

4.4.1.9 Containers for trash, recyclable materials and residual waste

No containers for trash, recyclable materials or residual waste that have been fabricated from combustible materials shall be set up on stands. All containers on stands

shall be regularly emptied, no later than every evening following the close of the event, and their contents deposited in the containers for recyclable materials or residual waste at the stations at exhibition hall exits. In the event that large quantities of combustible waste are generated, same shall be safely disposed of several times a day. Trash bags may be deposited in aisles daily for pick-up following the close of the event.

4.4.1.10 Spray guns, nitrocellulose lacquers, cleaning agents, solvents

The use of spray guns is prohibited in all exhibition halls. There is also a ban on the use of all substances, paints, lacquers and varnishes containing solvents. The use of flammable liquids and construction and working materials that release toxic fumes is forbidden.

4.4.1.11 Work that poses a fire hazard

Messe Frankfurt Venue GmbH's Technical Project Management must be notified in advance of any work that poses a fire hazard, including welding, cutting, soldering, separating and grinding. Work cannot begin until permission has been granted and the permit has been received. The surrounding area must be adequately protected against hazards during such work. Suitable extinguishing units/agents are to be kept in the direct vicinity and ready to use at all times.

4.4.1.12 Empty packaging / storage of materials

4.4 Fire protection and safety regulations

The storage of empty packaging/flammable materials of any type (e.g. packaging and packaging materials) either inside or outside the stand in the exhibition hall is prohibited. All empty packaging is to be removed without delay. It can be placed into storage by Messe Frankfurt's Logistics Services department:

Logistics Services

Cargo Center Messe Frankfurt

Ludwig-Erhard-Anlage 1

60327 Frankfurt am Main

Germany

Phone +49 69 75 75-60 75

Fax +49 69 75 75-9 60 75

logistics@messefrankfurt.com

In the event that the exhibitor does not comply with a request to remove items that are improperly stored, or with a request to immediately remove any empty packaging, Messe Frankfurt shall be authorised to have the items removed at the expense and risk of the exhibitor.

4.4.1.13 Fire extinguishers

Every stand shall be equipped with at least one fire extinguisher. See also Section 4.4.1.

4.4.1.14 Water features/pools

In the event that water is used in pools, fountains, water wall and air humidification systems or other spray systems at stands, proper hygienic conditions must be maintained at all times. Proof of compliance is to be presented to Messe Frankfurt on request.

4.4.2 Stand ceilings

In order to ensure that sprinkler protection is not impaired, stands in halls with sprinklers must always be open at the top. Ceilings are to be considered open when no more than 50% per each m² of the roofed area is covered.

Sprinkler-compatible ceilings with a mesh size of at least 2 x 4 mm or 3 x 3 mm are permissible (no smoke out). Tarpaulins are to be hung horizontally and only in one layer. Tarpaulins should not be allowed to sag. Up to 30 m² of contiguous ceiling space may be covered for one stand without any additional measures being necessary, as long as this does not exceed 50% of the stand area. In order to ensure that multiple ceiling areas taken together do not exceed the maximum size of 30 m², a distance of at least 1.50 m from the edge of the stand is to be maintained at all times.

Should a larger ceiling area result from not observing the minimum distance from stand edges, including across multiple stands, the expenses incurred for compensatory measures according to Table 1 or 2 will be billed to those who caused them, including expenses for affected neighbouring stand(s).

It is also possible to have multiple ceiling areas of up to 30 m² within a single exhibition stand, as long as a minimum distance of 3.00 m is maintained between each ceiling area. If the contiguous placement of multiple ceiling areas (including across multiple stands) results in a total area of greater than 30 m², suitable compensatory measures

are required (please see Item 4.4.1, Table 1 "Fire protection programme for one-storey exhibition stands with closed ground floor ceilings and two-storey exhibition stands with open top floor ceilings").

Closed ceilings are not permitted in foyers. A permit is required for closed ceilings larger than 30 m². Plans are to be submitted to Messe Frankfurt Venue GmbH's Technical Project Management for its consent by no later than six weeks before the start of set-up.

The installation of corresponding compensatory facilities (wall hydrant, fire alarm system, visual/acoustic alarm, automated smoke extraction system, sprinkler system) is to be performed by companies authorised by Messe Frankfurt and entails a fee. Soundproof booths that are 30 m² or larger must be equipped with a fire alarm system. All soundproof booths – regardless of size – must have either a visual link with the outside or a visual signalling system combined with an alarm button or emergency-off button outside the booth.

All requirements relating to the installation of closed ceilings can be found under Item 4.4.1, Tables 1 and 2.

4.4.3 Glass and acrylic glass

Only glass suitable for the intended use shall be employed. All glass employed on glass structures shall be safety glass. You will find further information on the use of glass and acrylic glass in stand construction inside the exhibition halls from Technical Project Management.

The edges of glass panes shall be ground or protected such that personal injuries are precluded. Structural elements fabricated entirely from glass shall be marked at eye level.

4.4.4 "Trapped rooms" / occupied rooms

"Trapped rooms" (rooms which can only be exited via other occupied rooms) are only permissible under the following conditions:

- In the rooms through which trapped rooms exit, there must be a suitably wide escape route (dimensions according to H-VStättR [Hessian guidelines on public meeting places], but at least 90 cm) which at no point in time may be blocked or otherwise made unusable.
- If there is no direct line of sight to the exhibition hall, it is required to install an optical and acoustic warning system to ensure that alarms can be triggered at any

time. This system will be installed exclusively by companies under contract to Messe Frankfurt, at the exhibitor's expense.

4.5.1 Exits, escape routes

The distance between any point on an exhibition area and an exhibition hall aisle shall not exceed 20 m walking distance.

Lounges, workrooms, and exhibition areas that are intended for fewer than 100 visitors, as well as exhibition areas having floor areas of 100 m² or less, shall have at least one exit having a minimum width of 0.90 m.

Every stand with a floor area larger than 100 m² and/or that is intended for more than 100 visitors must have at least two exits, as far apart as possible and at opposite ends of the stand. The widths of said exits and escape routes shall depend upon the maximum number of persons and shall be as follows (see also Section 4.4.1):

- fewer than 200 persons, at least 0.90 m;
- more than 200 persons, at least 1.20 m.

Larger exit widths shall be graduated in 0.60 m increments per 100 persons only. Escape routes shall be marked in accordance with the German accident prevention regulations and ASR A 1.3 "Health and Safety Signage".

4.5.2 Doors

Employment of swinging doors, curtains, revolving doors, doors that require entry of a code in order to open them, sliding doors, or other means for restricting access along escape routes is prohibited. Doors in escape and rescue routes must open in the direction of escape; they must not obstruct hall aisles when open, must not be lockable, and must be easily opened to their full width from the inside at all times.

4.6 Platforms, ladders, stairs, landings

Publicly accessible areas that directly border on areas more than 0.20 m below them shall be bordered by railings unless they are connected to the lower levels by steps or ramps. The maximum slope of ramps on rescue and escape routes is 6%. The railing must be at least 1.10 m high. In areas where small children can be expected, railings and banisters should be designed such that they are difficult to climb over. There must not be more than 0.12 m space between railing/banister components in any direction. Handrails shall be rigid, provide a secure grip and have no exposed ends. A verifiable structural certifi-

cation must be submitted for the platform; the inspection and approval of this special construction entails costs for which the exhibitor / stand constructor will be billed

The load-bearing capacity of floors shall, in accordance with its usage, conform to DIN EN 1991-1-1/NA:2010-12 Table 6.1 DE (Cat. C1), and shall be at least 3,0 kN/m². In accordance with DIN EN 1991-1-1/NA:2010-12 Table 6.12 DE, railings and banisters must be designed to withstand a horizontal live load (for areas of Cat. C1 – C4) of $q_k = 1.0$ kN/m at handrail height. Accessible single-level platforms cannot be more than 0.20 m above floor

level. The substructure of the platform floor must at least be classified as flame-retardant class B1 in accordance with DIN 4102 and/or class C s2 d2 in accordance with EN 13501-1. For floor coverings, class C fl s1 is required. Nothing may be stored beneath platforms or podiums. They shall have zero fire load. Hollow spaces in platforms whose height is less than 0.20 m do not have to be monitored using automatic fire alarms. Hollow spaces in platforms with automatically operated turntables or with concentrations of cable fire loads are, insofar as they are higher than 0.20 m, to be monitored using automatic fire alarms located

within the hollow spaces. If platforms with electrically-operated turntables are adjacent to other hollow spaces, these are to be separated structurally in order to prevent the spread of smoke to adjacent areas. Ladders, stairs, and landings must comply with current German accident prevention regulations.

All stairways must comply with DIN 18065. The distance between any point in the stand and an exhibition hall aisle shall not exceed 20 m walking distance. The number and clear width of stairs shall depend on the area of the top floor and the number of persons on

the top floor (see also Section 4.4.1):

- Top floor area up to 100 m², fewer than 200 people: 1 flight of stairs, minimum width 0.90 m
- Top floor area between 100 m² and 200 m², fewer than 200 people: 2 flight of stairs, minimum width 0.90 m each, arranged oppositely
- Top floor area between 100 m² and 200 m², more than 200 people: 2 flight of stairs, minimum width 1.20 m each, arranged oppositely
- Top floor area more than 200 m²: 2 flight of stairs, minimum width 1.20 m each, arranged oppositely

- For each additional 100 people: an additional 0.60 m is added to the clear width of each flight of stairs for each additional 100 people

Spiral and circular staircases are approved for use as auxiliary stairways. Moving components, such as escalators or rotating stages (special constructions), require the prior consent of Messe Frankfurt Venue GmbH's Technical Project Management. Stairways that are at least 1.20 m wide must have handrails on both sides. Steps that are wider than 2.40 m must have central handrails.

4.7 Stand design

4.7.1 Stand appearance

Exhibitors are responsible for designing their stands, where typical exhibition criteria applicable to the event in question shall apply. Stand construction shall be such that their edges bordering on aisles shall be as transparent as practicable. The target should be a frontage that is 70% open. Lengthy, enclosed stand structures bordering on aisles are not permitted and must be interrupted by display cases, niches, displays or similar. The rear sides of stands adjacent to neighbouring stands must be kept smooth and be white in colour from a height of 2.50 m, or must be positioned at least 1.00 m from the border of the neighbouring stand, so as not to impair the design of the neighbouring stand.

Insofar as trade fair visitors are able to look down onto stand roofing, same shall be incorporated into stand designs (Forum 0, Hall 3.0, Galleria 0, Hall 5.0 West and

East, Hall 6.0 East).

4.7.2 Verification of rented areas

Rented areas shall be marked as such by Messe Frankfurt. Following stand allocation, each exhibitor undertakes to inform themselves on site of the position and dimensions of any structures or facilities on their stand, particularly hall supports, fire alarms, the routing of supply ducts, ventilation systems and uneven floors etc., and to inform the stand constructor accordingly.

Messe Frankfurt assumes no liability for the accuracy of the dimensions given in hall and stand plans. Assigned stand areas shall be observed at all times. Even lighting fixtures and signs should not be allowed to protrude beyond the boundaries of stand areas.

4.7.3 Interventions in the structures and equipment of buildings

Components of exhibition hall structures and their technical facilities shall not be damaged, dirtied or otherwise altered by, e.g. drilling into same or driving nails or screws into same. Painting, wallpapering, or affixing posters or other items is also prohibited.

Components of exhibition halls and their technical facilities shall not be subjected to static loadings by stand structures or exhibits. The supporting columns of exhibition halls located within stands may be enclosed up to the level of the maximum stand height allowed, provided that they shall not be damaged thereby.

Installations on hall supports, walls and technical facilities must be freely accessible. If necessary, appropriate servicing hatches must be provided.

4.7.4 Exhibition hall floors

Carpets and other floor coverings shall be laid such that accidents will be prevented, and shall not

4.7 Stand design

extend beyond stand boundaries. Only PE/PP double-sided tape that may be removed without leaving any residues shall be employed for holding carpets and floor coverings in place.

All materials employed shall be completely removed by exhibitors without leaving any residues. Any substances such as oil, grease, paint, and similar must be removed from the floor immediately.

Exhibition hall floors shall not be painted or have anything glued onto them. Stand utilities, lines laid out on stands, servicing access hatches etc., shall not be obstructed. Driving or setting anchorings or other mounting hardware into the floors is prohibited.

Carpets and other floor coverings in exhibition areas must be at least flame-retardant according to class B1 of DIN 4102 and/or class C fl s1 of EN 13501-1.

Test certificates stating the classifications of the building materials employed shall be kept available at the stand at all times.

4.7.5 Suspension points/chain hoists/installation of trusses/fasteners

Elements may only be suspended from the technical facilities provided for this purpose.

All suspensions are subject to approval and the necessary work must be carried out in accordance with the applicable DGUV-17/18 regulation. This also applies to suspensions with pre-rigging and suspensions with ground support systems. All spring-loaded carabiners

are prohibited, included when used as a secondary securing apparatus (safety) for lights. All spring-loaded carabiners are prohibited. All ropes, cables and chain slings used must also be in compliance with DGUV-17/18 and must be dimensioned for the load to be borne. The fitters must be in possession of the relevant certification in accordance with DGUV-17/18, "Specialist for load-securing devices".

Suspensions from the hall ceiling may only be handled by Messe Frankfurt and companies working under contract to Messe Frankfurt. Order forms must be accompanied by a floor plan showing the suspended loads and requested suspension point positions. For complex systems (constructions with more than one cable), it is necessary to submit a load plan with the order that shows not only the overall load, but also all of the individual loads and cable loads.

A separate structural calculation may be needed under certain circumstances and must be submitted to Messe Frankfurt on request. Messe Frankfurt reserves the right to engage a structural engineer to verify the applied loads and the structures used. Furthermore, Messe Frankfurt reserves the right to engage a structural engineer to verify the applied loads and the structures used. This verification procedure incurs costs, which will be charged to the ordering party/exhibitor. The maximum height restrictions also apply to the truss system and must be observed accordingly.

Please also be sure to note Item

5.3.6 "Equipotential bonding (stand earthing) for metal constructions" when conducting your planning.

4.7.5.1 Electric chain hoists

Electric chain hoists may only be used in conjunction with suspensions for heavy loads. Electric chain hoists may not be used with suspensions for light loads (Halben cast-in channels). Use of such electric motors is subject to the requirements for electric chain hoists in the event technology industry (Igvw SQ P2).

Available for download at: <http://www.igvw.org/igvwsqp2web.pdf>

The weight of the electric chain hoists must be taken into consideration on the loading diagram to ensure that the load-bearing points are not overloaded.

The contractor must ensure that the chain hoists are tested every year. The seal of approval must be attached to each motor in such a way as to be easily visible. The test records must accompany the motors at all times and must be kept ready for inspection at the operating location. These tests do not replace the mandatory inspection by an official expert every 4 years.

4.7.5.2 Manual chain hoists

It is absolutely essential that the intention to use manual chain hoists be specified when an order is placed! For line loads and distributed loads, no more than four manual chain hoists may be used in a single construction/system. Manual chain hoists may only be used in conjunction with cables that are at

4.7 Stand design

least 8 mm thick, and only with suspensions for heavy loads. When using manual chain hoists in Halls 1.1, 4.0, 4.1, 4.2, 6.0, 6.1, 6.2, 9.0, 9.1, 9.2, 9.3, 10.1, 10.2 and 10.3 may only accommodate point loads up to a maximum of 50 kg may be lifted. In Halls 1.2, 2.0 (Festhalle), 3.0, 3.1, 8.0, 11.0, 11.1, 12.0, 12.1 and Forum, the maximum possible point load that can be raised is 100 kg. Once stand construction and set-up activities have been completed, the load is to be removed from the manual chain hoists. The load-bearing hook of the chain hoist must be suspended perpendicularly above the load's centre of gravity. The load chain cannot be used for securing loads. A chain bag that has been approved for use with the chain hoist must be present. When loads are lifted, all manual chain hoists must be manned simultaneously, and the load must be raised as synchronously as possible. It is forbidden to move loads above people using manual chain hoists. The weight of the manual chain hoists must be accounted for in the load plan to ensure that the load-bearing points are not overloaded.

4.7.5.3 Fasteners

Plastic cable ties must not be used to secure components that are subjected to static loads. Only approved fastening means (including high-strength shackles, screw-lock carabiners) may be used as fasteners and safeties. Attachments that are structurally necessary can only be made using fasteners approved for this purpose (e.g. plastic cable ties are prohibited!).

4.7.6 Stand bounding walls

Messe Frankfurt shall erect, in general, standard partition walls having a height of 2.50 m and supporting feet up to 0.12 m in length.

Stands open on one side shall be provided with one rear wall and two side walls. Stands open on two sides shall be provided with either one rear wall and one right or left side wall, or two side walls only. Stands open on three sides shall be provided with one rear wall only.

Stands open on all four sides shall not be provided with any partition walls. The areas of such stands shall be delimited by markings on exhibition hall floors.

In the case of stands open on one side or two sides, 5 cm shall be deducted from the confirmed stand widths in order to obtain the clearances between the inner surfaces of their partition walls.

Under no circumstances shall partition walls be damaged. Messe Frankfurt reserves the right to invoice exhibitors for any repairs that may be required.

In the event that exhibitors or their stand builders shall notice any damage to these plastic-coated walls at the commencement of stand construction, the service office responsible for the hall shall be informed immediately.

Light objects may be attached to stand walls using decoration hooks, which are available from hall service offices. These hooks are to be hung on the top edges of stand wall systems and are capable of supporting loads of 4 kg or less.

No more than two such hooks shall be hung on any wall element. The stand wall system employed has plastic-coated surfaces, into which no nails or screws shall be driven, which shall not be painted, and onto which nothing shall be glued. In exceptional cases, Messe Frankfurt Medien und Service GmbH (MFS) shall allow walls to be wallpapered using suitable materials, provided that it shall be reimbursed for the costs of restoring them to their original conditions by exhibitors prior to the commencement of the wallpapering work involved. Affixing lacquered wallpaper, washable wallpaper or any other wallpaper having a barrier coating of any kind to stand wall systems is prohibited. Affixing any self-adhesive tapes, foils, or similar to stand wall systems is also prohibited. Additional partitioning walls for conference cabins on stands or for other subdivisions of stands shall be set up at exhibitors' expense upon request. MFS shall have the work required performed by a specialist company. Fairconstruction also offers exhibitors system stands for rental in a range of standard sizes, equipment and furnishing packages ranging from 9 to 150 m², as well as custom stands for other stand sizes on request. These stands can be ordered using the Fairconstruction stand configurator (www.fairconstruction.com).

4.7.7 Advertising media/ presentations

Stand and exhibit lettering and company and brand logos shall not

exceed the maximum construction height (cf. the addendum hereto). Advertising materials, logos etc. are to be kept at least 1.00 m from the border of the neighbouring stand. Same should have an attractive appearance.

Presentations, visual advertising media, slow-moving and acoustic advertising media, and playback of recorded music shall be allowed, provided that neighbours shall not be disturbed thereby, no traffic jams shall occur in aisles, and Messe Frankfurt's own public address system shall not be drowned out. Sound pressure levels at the boundaries of the stands involved shall not exceed 70 dB(A). In the event of violations of that regulation, Messe Frankfurt shall be entitled to take action against offenders and, if necessary, demand that the offending equipment be shut down.

For shows and similar events, the Employers' Liability Association regulations "Event and production locations for stage presentations" DGUV-17/18 must be observed. Messe Frankfurt is to be notified of any shows, or product presentations involving shows, that are planned.

Distribution of printed matter and employment of advertising media by exhibitors is allowed on their own stands only.

4.7.8 Barrier-free construction

Stands should be designed to ensure barrier-free access. It should be possible for mobility-impaired persons to easily access stands and use their facilities without assistance.

4.7.9 Foundations, pits

In the event that exhibitors are planning any foundations, pits or other structural alterations, scaled plans detailing the loads and dimensions of exhibits and storage areas must be submitted to Messe Frankfurt Venue GmbH's Technical Project Management for its consent by no later than six weeks before the start of the event.

Exhibitors shall be responsible for all associated costs as well as expenses to restore any items altered to their original conditions immediately following conclusion of the event. Orders are to be directed exclusively to Messe Frankfurt. The foregoing general regulations governing stand construction also apply, suitably modified, to stand construction and stands erected on outdoor exhibition areas. In the case of stands to be erected on outdoor exhibition areas, exhibitors shall submit scale floor plans and top/side/perspective view drawings covering the planned stand structures and stand design, complete with their precise dimensions, to Messe Frankfurt Venue GmbH, Technical Event Management, for ap-

proval no later than six weeks prior to the start of set-up work. Exhibitors shall be charged for approvals of stands to be erected on outdoor exhibition areas.

Checked, or checkable, static computations shall be included with the sets of drawings submitted. If no checked static computations are submitted, checking by a firm of engineering consultants engaged by Messe Frankfurt shall be required. The charges therefor shall be separately invoiced to exhibitors by the respective firm of engineering consultants.

Insofar as superstructures have been classified as temporary structures, a valid certification book must be submitted. Messe Frankfurt's Technical Event Management must be notified if temporary structures are to be erected. The approval documentation/certification book must be at the stand for approval before the start of the event. The exhibitor/stand constructor will be invoiced for the costs of approving the temporary structure. In the event that exhibitors plan any excavations for foundations, pits, pipelines, cables, flagpoles etc. in outdoor exhibition areas, approvals for same must be obtained from Messe Frankfurt, Technical Event Management, in good time. This work may not be carried out until approval has been obtained. Ground anchors such as ground pegs etc. are not permitted.

4.8 Outdoor areas

Outdoor areas at Messe Frankfurt are paved or asphalted circulation areas.

During hours of darkness, outdoor areas are illuminated by a general

network of street and pavement lighting in accordance with the opening hours of the event.

The required utility connections are present at irregular intervals.

The foregoing general provisions for stand construction shall apply analogously for stands in outdoor areas.

4.8 Outdoor areas

4.8.1 Stand construction permits / stand structures requiring consent

For stands in outdoor areas, dimensioned floor plans and perspective views for the planned stand constructions and stand designs, including the precise dimensions, must be submitted to Messe Frankfurt Venue GmbH's Technical Project Management for its consent by no later than six weeks before the start of set-up. The inspection of stands in outdoor areas is subject to a fee. In the event that structural calculations examined by a second, independent structural engineer are not submitted, Messe Frankfurt will commission a firm of engineering consultants to check the plans and separately invoice the exhibitor for their services. The structural engineer will contact the stand construction manager at a specified time / after consultation to provide assistance and examine structural characteristics, and to inspect the structure for a fee. Due to the additional work entailed, the absence of structural calculations results in additional costs for the exhibitor / stand constructor. Insofar as superstructures have been classified as temporary structures, a valid certification book must be kept at the stand. Messe Frankfurt Venue GmbH's Technical Project Management must be notified if temporary structures are to be erected. The approval documentation / certification book must be at the stand for approval before the start of the event. The exhibitor / stand constructor will be invoiced for the costs of inspecting the temporary structure.

4.8.2 Ground anchors / excavations

Ground anchors such as ground pegs etc. are not permitted. In the event that exhibitors are planning any excavations for foundations, pits, pipelines, cables, flagpoles etc. in outdoor areas, consent for same must be obtained from Messe Frankfurt Venue GmbH's Technical Project Management in good time beforehand. This work may only be carried out by companies commissioned by Messe Frankfurt Venue.

4.8.3 Weather-related loads

4.8.3.1 Wind loads

All stand constructions in outdoor areas must be adequate in design and size to withstand the strains resulting from wind loads in accordance with DIN EN 1991-1-4 and the location-specific wind zone.

4.8.4 Severe weather warnings

In the event that severe weather is expected and any of the following are forecast:

- Wind gusts > 13 m/s (wind speed > 6 Beaufort scale – including for individual gusts)
 - Severe thunderstorms with wind gusts, torrential rain or hail
 - Torrential rain > 20 l/m² in an hour
 - Snowfall up to 10 cm within the next 6 hours
 - Icy surfaces / black ice resulting from the rapid freezing of rain, drizzle or other moisture
- Messe Frankfurt will issue a general severe weather warning to all exhibitors / customers with stand constructions in outdoor areas.

Once this has occurred, all exhibitors with stand constructions and/or temporary structures that are vulnerable to wind load must immediately take all measures necessary to shut down operations. The necessary measures must be carried out in accordance with the model approval and/or the structural engineer's specifications / inspection report.

For mobile items/equipment (e.g. small exhibits, furniture, sun umbrellas, small promotional signs/displays etc.), the exhibitor must ensure that these items can be removed and stored quickly at any time in the event of a severe weather warning. Suitable storage capabilities must be maintained at the stand.

Person responsible

In order to ensure that everyone can be informed directly of severe weather warnings, an individual must be designated as the person responsible for this for every phase of the event (set-up/event/dismantling) by no later than the start of the set-up period. The name and mobile phone number of this person must be provided, and they must remain in the stand/event area in order to be able to immediately carry out the necessary measures for shutting down operations.

4.9 Two-storey structures

4.9.1 Requests for approval

Two-storey structures require the consent of Messe Frankfurt Venue GmbH's Technical Project Management. Requests must be submitted by no later than six weeks before the start of set-up to:

Messe Frankfurt Venue GmbH
Technical Project Management
Ludwig-Erhard-Anlage 1
60327 Frankfurt am Main
Germany

Email: standapproval@messefrankfurt.com

Exhibitors shall be charged for checking of plans for two-storey structures. Said charges are exclusive of charges for a required fire alarm system or other fire protection measures that may become necessary.

4.9.2 Restrictions applying to stand superstructures, safety clearances and the heights of stand interiors

In the interest of the overall character of the exhibition hall and for safety reasons, Messe Frankfurt reserves the right to withhold approval of two-storey structures at its own discretion.

The clear height of interiors in multi-storey structures must be at least 2.30 m. If 30 m² or more of the stand area is covered by the upper storey, this area must be equipped with an automatic fire alarm system. Other measures may also be necessary – please see Item 4.4.1, Tables 1 and 2, for detailed information. The exhibitor is to order any necessary compensatory measures from Messe

Frankfurt Venue GmbH's Technical Project Management.

Messe Frankfurt will arrange for the necessary installations and invoice the exhibitor for the costs entailed.

Structural calculations submitted to Messe Frankfurt for inspection or which have already been inspected will be given to a firm of engineering consultants commissioned by Messe Frankfurt to determine if they are in compliance with the construction plans submitted. In the event that structural calculations examined by a second, independent structural engineer are not submitted, the engineering consultants will inspect the plans themselves and separately invoice the exhibitor for their services. The structural engineer will contact the stand construction manager at a specified time/after consultation in order to inspect the structural characteristics of the stand.

4.9.3 Live loads/design loads

The following working load requirements apply to the upper floor of a two-storey stand in an exhibition hall, as perpendicular live loads in accordance with DIN EN 1991-1-1/NA:2010-12 Table 6.1DE:

- The following live load (Cat. C1) is required for limited use by trade visitors or by stand personnel engaged in discussions or assisting customers, i.e. furnished with tables and chairs arranged freely or in separate meeting rooms: $q_k = 3.0 \text{ kN/m}^2$.
- The following live load (Cat. C3

or higher) is required for unrestricted use as a freely accessible area for exhibitions and assemblies, either with or without densely arranged seating: $q_k = 5.0 \text{ kN/m}^2$.

The intended use must be clearly evident in the plans submitted for consent. The evidence of stand safety must allow for the fact that anchorings are not permitted.

A horizontal load amounting to $H = q_k/20$ (q_k = perpendicular live load) at upper floor level must be assumed for a two-storey exhibition stand or grandstand in order to achieve adequate longitudinal and transverse stability.

In accordance with DIN EN 1991-1-1/NA:2010-12 Table 6.12DE, railings and banisters must be designed to withstand a horizontal live load (for areas of Cat. C1 – C4) of $q_k = 1.0 \text{ kN/m}$ at handrail height.

Evidence showing that the permitted loads on the hall floor have not been exceeded, e.g. by individual supports (also refer to "Technical Data on the Exhibition Halls of Messe Frankfurt") must be provided. For multi-storey structures and special constructions, load-distributing base plates measuring at least 0.20 m x 0.20 m are to be provided beneath the supports; with high loads these must comply with the corresponding structural engineering requirements. Stairs and landings must always be designed for a live load (Cat. T2) of $q_k = 5.0 \text{ kN/m}^2$.

4.9 Two-storey structures

4.9.4 Escape routes / stairways

On the top floors of two-storey exhibition stands, the walking distance from any accessible location to the nearest exhibition hall aisle via the stairway shall not exceed 20.00 m.

All stairway structures shall comply with DIN 18065. The number and inner width of stairs shall depend on the area of the top floor and the number of persons on the top floor (cf. Section 4.4.1):

- Top floor areas up to 100 m² and maximum occupancies of less than 200 persons:
1 stair, minimum width 0.90 m.
- Top floor areas from 100-200 m² and maximum occupancies of less than 200 persons:
2 stairs, minimum width 0.90 m each, arranged oppositely
- Top floor areas from 100-200 m² and maximum occupancies of more than 200 persons:
2 stairs, minimum width 1.20 m each, arranged oppositely
- Top floor areas exceeding 200 m²:
2 stairs, minimum width 1.20 m each, arranged oppositely
- For each additional 100 persons:
+ 0.60 m inner stair width

Spiral and circular staircases are approved for use as auxiliary stairways. Moving components, such

as escalators or rotating stages (special constructions), require the prior consent of Messe Frankfurt Venue GmbH's Technical Project Management. Steps that are wider than 2.40 m must have central handrails. Handrails shall be rigid, provide a secure grip and have no exposed ends.

4.9.5 Building materials

All stand construction and decorative materials must at least be classified as flame-retardant class B1 in accordance with DIN 4102 and/or class C s2 d2 in accordance with EN 13501-1. Stricter requirements apply in particular for materials that are used for ceiling structures or overhead: they must not only be flame-retardant, but also must not drip while burning. This corresponds to class C s2 d0 in accordance with EN 13501-1. For floor coverings, class C fl s1 is required. For safety reasons, special requirements may be imposed for load-bearing structural components in individual cases. Materials such as rigid polystyrene foam, PVC or similar, as well as various acrylic glass products, that are readily flammable, drip while burning or form toxic gases shall not be employed. The materials used must not contribute to the generation of a large

volume of smoke in the event of a fire.

4.9.6 Top floors

Guards at least 0.05 m high that will prevent objects from rolling off top floors shall be installed on the flooring of top floors, in the vicinity of railings, if required.

Railings shall comply with Sections 4.6 and 4.9.3 above.

The second floor must be at least 2.5 m away from neighbouring stands, or the side of the top floor adjacent to the neighbouring stand must be closed with a wall at least 2 m high.

The top storey should always be left open to ensure that the effectiveness of the fire extinguishing systems is not impaired. If the ceilings of top storeys are closed, the requirements as shown in table 2 of 4.4 Fire protection and safety regulations shall apply. All of the necessary fire protection measures can be found under Item 4.4.1. In addition to the fire extinguishers already present on the ground floor, at least one approved and suitable fire extinguisher per stairway (in compliance with DIN 14406 / EN3) is to be located in a clearly visible and easily accessible place.

Technical Guidelines

4.10 Misuse / Violation and liability

4.10 Misuse / Violation and liability

Stand structures that have not been granted permission or that fail to comply with these Technical Guidelines or legal requirements may be subject to alteration or removal. Should this alteration or removal not be completed on time, Messe Frankfurt is entitled to undertake this itself and/or have this performed by a third party, at the expense and risk of the exhibitor. In the event that the exhibitor or the stand constructor they have

commissioned fails to comply with these stand construction regulations, the exhibitor shall be liable for all damages arising as a consequence of the violation of these stand construction regulations. In addition, the exhibitor or the stand constructor they have commissioned shall already indemnify Messe Frankfurt against any and all third-party claims that might be asserted against Messe Frankfurt as a result of the violation of these stand construction regulations.

5. Operational safety, technical safety provisions, technical regulations and utilities

5.1 General regulations

Exhibitors are responsible for operational safety and maintaining compliance with occupational health and safety and accident prevention regulations on their stands. All set-up and dismantling work shall comply with occupational health and safety and industrial regulations.

5.1.1 Damage

Any and all damage caused by exhibitors or their agents on the exhibition grounds or in the grounds' buildings or facilities shall be remedied by Messe

Frankfurt at said exhibitors' expense following the close of the event.

5.1.2 Coordinating work on the exhibition grounds

Should it be necessary for employees of multiple companies to work at the stand / in the event area simultaneously (particularly during the set-up/dismantling phases), their work shall be coordinated by the stand construction manager / assembly supervisor in accordance with the Occupational Health and Safety Act (ArbSchG) and

DGUV Regulation 1 (German Statutory Accident Insurance) if there is the potential for endangering one another. This also applies to work performed at the stand by the trade fair company's service providers. Furthermore, the measures that are necessary for improving safety and preventing health hazards for employees in the workplace in accordance with the currently applicable European Union Directive 89/391/EEC must be observed and put into practice during work on the exhibition grounds.

5.2 Employment of tools and other equipment

The use of stud guns may be approved on a case-by-case basis. The employment of woodworking machinery that lacks sawdust/chip extraction systems is prohibited. Cranes, forklifts and other devices for loading/unloading may only be used by the Messe Frankfurt's

Logistics Service. The employment of exhibitors' own forklifts is prohibited for safety reasons. If required, forklifts for loading and unloading are available on a fee basis from the Messe Frankfurt Logistics Service.

The utilisation of electric lift trucks

for transporting goods at ground level is permitted.

Electric lift trucks may only be used for assembly work on the rented stand area; their use for loading or unloading is prohibited.

5.3 Electrical installations

5.3.1 Electrical outlets

Every stand that is supplied with electric power is provided with one or more electrical outlets. This is done exclusively by contract partners of Messe Frankfurt and is subject to a fee. The electrical supply shall be shut off one hour after events close on their final day for safety reasons.

For safety and fire protection rea-

sons it is necessary that all devices that consume electricity be turned off at the end of every event day when leaving the stand. Exception: Emergency lighting, all systems pertaining to safety and security, refrigerators, computers and servers that are required for stand facilities and which would require a great deal of time/effort were they to be restarted.

5.3.2 Electrical installations on stands

Electrical installations on stands may be carried out by an approved hall electrician. Exhibitors should submit their orders for same directly to the hall electrician. Installation shall be performed by an electrical contractor authorised by Messe Frankfurt.

5.3 Electrical installations

5.3.3 Installation and operating regulations

All electrical systems shall be installed and operated in compliance with the latest safety regulations of the VDE German Electrical Engineering Association, in particular VDE 0100, 0100-718, 0128 and IEC standard 60364-7-711.

Exhibitors shall be fully liable for any damage to Messe Frankfurt's exhibition halls, sections of its buildings, or to exhibition stands or exhibits of other exhibitors that may occur due to defective or incorrectly installed electrical installations.

The percentages of high-frequency or low-frequency interference transmitted to the network shall not exceed those stated under VDE 0160 and VDE 0838 (EN 50 006). For devices and exhibits with frequency converters, the exhibitor shall install suitable universal current-sensitive residual current-operated protective devices (RCD) of type B in accordance with DIN VDE 0664.100.

Furthermore, exclusively insulated

copper wiring of types NYM, H05VV-F and H05RR-F having a minimum cross-sectional area of 1.5 mm² shall be employed. All types of wiring shall be employed exclusively in compliance with the regulations of DIN 0281 and 0282 of the VDE (German Electrical Engineering Association). Employment of any type of flat conductors is prohibited. Employment of bare electrical wiring or terminals on low-voltage systems is prohibited.

Secondary lines shall be protected against short circuiting and overloading.

5.3.4 Safety precautions

All electrical appliances, which give off heat (hot plates, spotlights, transformers etc.) shall be mounted on non-inflammable, heat-resistant, insulating bases in order to provide extra protection. Sufficiently large distances, suited to the quantities of heat generated, from any combustible materials shall be maintained at all times. Lighting fixtures shall not be attached to

any combustible decorations or similar.

5.3.5 Emergency lighting

Stands on which existing general emergency lighting is ineffective due to their construction shall require their own additional emergency lighting, as required by VDE 0100-718, which shall be laid out such that it will reliably allow finding one's way to the general escape routes.

5.3.6 Equipotential bonding (stand earthing) for metal constructions

The constructor must ensure that all metal constructions (e.g. trusses) with electrical appliances are fitted with an additional equipotential bonding (copper, at least 10 mm²) (VDE 0100 Part 711).

The transfer point on the hall floor (stand earthing) can be ordered from Messe Frankfurt Venue GmbH / Infrastructure Services.

5.4 Water and drain installations

Every stand that is to be supplied with water or a drain will be supplied with one or more connections to water/drain lines. Connections to exhibition hall water and drain lines shall be via 1/2-inch pipes in the case of water lines and 40-mm

pipes in the case of drain lines. Water and drain lines shall be routed over exhibition hall floors to the rear or side walls of stands via the shortest routes. Underfloor/underground routing may be provided on Hall levels 4.0,

8.0 and 9.0 and on outdoor exhibition areas. Within stands, lines will be routed above floor level, along stand walls.

In order to be able to provide exhibitors with rapid assistance in the event that problems arise,

5.4 Water and drain installations

Messe Frankfurt shall operate an emergency stand-by service, whose location may be obtained from the hall manager's office, on all days of the event in question. Connections on stands shall also be installed exclusively by Messe Frankfurt's contract plumbers.

Charges for additional plumbing fixtures, such as rentals of wash basins, sinks etc., and for installation

of exhibitor-supplied equipment shall be invoiced to exhibitors. Both contracting parties accept the "Terms and Conditions for the Connection and Supply of Water and Drains" as integral parts of the contractual agreement binding upon both of them.

Water supplies shall be shut off on the last day of events, usually one hour before the trade fair closes,

for safety reasons.

All installations within the stand must comply with the current German Drinking Water Ordinance to ensure that the installation and operation of a water connection does not exert any long-term detrimental effects on the quality of the drinking water.

5.5 Compressed air/gas installations

5.5.1 Compressed air installations

Every stand that is to be supplied with compressed air shall be equipped with one or more connections to supply lines. Installation of said connections shall be arranged by Messe Frankfurt.

Max. pressure: 8 bar (A pressure reducer should be used, if required.)

Supplied via compressed air hoses equipped with ball valves:

½" for flow rates up to 1,500 l/min.

¾" for flow rates exceeding

1,500 l/min.

Compressed air shall be supplied commencing on the final day of set-up periods. Thereafter, compressed air shall be supplied on a daily basis, commencing one hour prior to the opening of the event and terminating thirty minutes after it closes.

5.5.2 Gas installations

Every stand that may be supplied with gas/natural gas has one or more connections to supply lines.

DVGW regulations regarding installation of items of equipment shall be binding upon exhibitors. Exhaust gases from larger items of equipment shall be conducted outdoors. Installation of connections to supply lines shall be arranged by Messe Frankfurt. Access to shut-off valves for gas systems installed on stands shall be clearly identified by identifying markings (safety markings) thereon complying with ASR A 1.3 ("Health and Safety Signage").

5.6 Machinery, pressure vessels, exhaust systems

5.6.1 Noise generated by machinery

Operation of noisy machinery and other equipment should be restricted in the best interests of all exhibitors and visitors. Noise levels at the boundaries of stands shall not

exceed 70 dB(A).

5.6.2 Product safety

Exhibitors of technical equipment have to comply with the provisions of the German Product Safety Act (ProdSG) and the respective appli-

cable harmonised EU regulations. Equipment shall be properly operated for its intended purposes only such that users or third parties shall be protected against hazards to life and limb. Under no circumstances shall machinery or other items of

5.6 Machinery, pressure vessels, exhaust systems

equipment be demonstrated without the associated safety equipment. In the event that items of equipment are to be displayed in operation, components thereof or items of safety equipment may be fabricated from transparent materials, provided that the same degree of safety shall be guaranteed. Exhibited equipment may be subjected to visual inspection(s) by a commission during the event involved. In the event that said inspection(s) shall show that the equipment involved fails to comply with the provisions of the Product Safety Act, the Darmstadt Regional Administrative Council (Regierungspräsidium) (Department of Occupational Health and Safety and Technical Safety) may, among other measures, assess a fine or prohibit its exhibition, effective immediately, even if the equipment involved shall have already been set up for exhibition. CE symbols are to be affixed to certain types of machinery and other equipment as visible evidence of compliance with the aforementioned regulations. In order that it may be determined whether applicable regulations have been observed in conjunction with their CE certification, exhibitors shall keep both the associated German-language EU certificates of compliance or manufacturers' certificates of compliance and German-language operating manuals available on their stands at all times.

According to Section 3 (5) of the ProdSG, equipment that fails to comply with applicable EU regulations may be exhibited at trade

fairs, exhibitions, demonstrations or similar events, provided that the exhibitor clearly points out that the respective equipment fails to comply with the provisions of said regulations and may not be purchased until such time as its manufacturer, or its agent domiciled within the EU, shall provide that it complies therewith.

Appropriate safety precautions must be taken when demonstrating machinery or equipment.

Messe Frankfurt Venue GmbH shall be entitled to prohibit the exhibition or demonstration of equipment at any time if, in its opinion, same might cause safety hazards or disturb others. Irrespective thereof, the Darmstadt Regional Administrative Council (Regierungspräsidium) (Department of Occupational Health and Safety and Environment) shall be entitled to issue injunctions prohibiting operation of same.

5.6.2.1 Safety equipment

Components of machinery and apparatus shall be placed in operation only if all of their safety equipment is in place and fully operational.

Safe, transparent covers may be used instead of the normal guards. In the event that items of equipment shall not be placed in operation, its safety equipment may be removed in order to allow visitors to inspect the design and workmanship of its exposed components. However, said safety equipment shall remain visibly displayed alongside the machine at all times.

5.6.2.2. Inspection procedures

Exhibited items of equipment shall be inspected by the responsible regulatory agency, i.e. the Frankfurt-based Department of Occupational Health and Safety and Environment of the Darmstadt Regional Administrative Council (Regierungspräsidium), jointly with the responsible specialist committees of the associated professional and industrial associations, if applicable, and their compliance or non-compliance with applicable accident prevention and safety regulations determined. In order that CE certifications may be readily verified by the agency, EU certificates of conformity should be available for inspection on stands at all times. Exhibitors who have any doubts about the equipment to be exhibited should contact the responsible agency well in advance of the opening of the trade fair involved.

5.6.2.3 Prohibition of operation

In addition, Messe Frankfurt shall be entitled to prohibit the operation of machinery, apparatus or other items of equipment at any time if, in its opinion, their operation might cause personal injuries or property damage.

5.6.2.4 Additional protective measures

All work equipment and construction machinery must have been tested regularly as specified in the German Ordinance on Industrial Safety and Health. Unsecured loads must not be lifted above per-

5.6 Machinery, pressure vessels, exhaust systems

sons. Further information regarding loads above persons at events can be found in DGUV Information 215-313 "Lasten über Personen" (Loads above persons). Furthermore, technical and/or organisational measures must be put in place to ensure that the failure of a hydraulic system or cable drive does not result in the uncontrolled lowering of equipment/components/loads. These measures may include blocking access to the danger area, using hydraulic fuses to protect against line breaks, or mechanical couplings to support the hydraulic cylinder. The exhibitor is responsible for the structural stability and safe operation of all exhibits and may be required to submit proof of same. Messe Frankfurt reserves the right to engage a qualified person to conduct an inspection at the exhibitor's expense.

5.6.3 Pressure vessels

5.6.3.1 Certificates of approval

Pressure vessels may only be operated at the stand if the testing mandated by the current version of the German Ordinance on Industrial Safety and Health (BetrSichV) has been carried out. The test certificates issued based on said testing shall be kept on hand at the exhibition site and presented to the responsible regulatory agencies for inspection upon request. Information regarding the applicable regulations may be obtained from the Regierungspräsidium Darmstadt

Abt. Arbeitsschutz und Umwelt
Gutleutstraße 138
60327 Frankfurt am Main
Telephone +49 69 2714-0
Fax +49 69 2714-5951

5.6.3.2 Testing

In addition to the submission of certifications of structural and hydrostatic pressure testing (EC declaration of conformity and required documentation in German or English), on-site approval is also required. In the event that they are registered by six weeks before the start of the trade fair, pressure vessels subject to inspection can be subjected to an acceptance test at the stand by the German Technical Inspection Association [TÜV] up to one day prior to the opening of the trade fair. An individual responsible for the pressure vessel must be present at the stand. Inquiries regarding same should be addressed to Messe Frankfurt.

5.6.3.3 Rental equipment

Since assessments of pressure vessels manufactured in foreign countries cannot be completed during the relatively short set-up periods, employment of tested rental vessels is to be preferred. Exhibitors shall be charged for rentals of rental containers.

5.6.3.4 Inspections by regulatory agencies

The necessary acceptance certificates shall be kept on hand for inspection by regulatory agencies during the event involved. Information on same is available from

the Frankfurt-based Department of Occupational Health and Safety and Environment of the Darmstadt Regional Administrative Council (Regierungspräsidium), which is the responsible regulatory agency.

5.6.4 Exhaust gases and vapours

Combustible or toxic gases or vapours or gases regarded as offensive by the general public liberated or evolved by exhibits or items of equipment shall not be conducted into exhibition halls.

Same shall be conducted outdoors via suitable exhaust ducts, as stipulated under the currently valid version of the German Federal Pollution Protection Act ("Bundesimmissionsschutzgesetz").

5.6.5 Exhaust systems

Installation of exhaust ducts connected to an exhaust outlet for exhausting combustible or toxic gases or vapours or gases regarded as offensive by the general public shall be required. Exhaust ducts extending outdoors shall be installed exclusively by Messe Frankfurt, using its own materials, wherever feasible. Connections to exhibits are to be installed by exhibitors. Orders for such exhaust systems may be submitted informally, but should be accompanied by floor plans indicating where connections should be installed. Cost estimates shall be sent to applicants. Work shall commence only once they have accepted said cost estimates and place their orders.

5.7 Employment of compressed gases, liquefied gases and combustible liquids

5.7.1 Compressed gas and liquefied gas systems

The storage or use of compressed gas or liquefied gas in the exhibition halls or in outdoor areas without the written consent of Messe Frankfurt is prohibited.

5.7.1.1 Permission for the use of compressed gas bottles

If liquefied gas or other inflammable gases in compressed gas bottles are to be used in the presentation of exhibits, it is necessary to obtain the written consent of Messe Frankfurt Venue GmbH's Technical Project Management in good time beforehand.

In accordance with applicable accident prevention regulations, compressed gas bottles shall be protected against impacts, falling over, tampering by unauthorised persons and sources of heat. Technical Regulations for Hazardous Substances 800 [TRGS 800] must be observed, and designation in accordance with DIN EN 1089 (colour coding) is required. Storage of compressed gas cylinders/tanks in the exhibition hall is to be limited to the daily requirement. The storage location must be clearly and visibly identified by pictograms.

5.7.1.2 Employment of liquefied gases

Employment of liquefied gases in exhibition halls is generally prohibited. However, in the case of approved exceptions, i.e. if necessary

to accomplish the purpose of the exhibition, a single compressed gas bottle having a content of 11 kg or less may be set up on exhibition stands.

Empty gas bottles shall not be kept or stored on stands or in the exhibition halls. A gas detection system is required in some circumstances. The replacement of cylinders within the exhibition hall must be agreed with Messe Frankfurt Venue GmbH's Technical Project Management. The exhibitor must check to ensure there are no leaks before commencing operation.

5.7.1.3 Installation and maintenance

When installing or maintaining liquefied gas systems, the Technical Rules for Liquefied Gases [DVFG-TRF 2012] (published by the German Technical and Scientific Association for Gas and Water [DVGW] and the German Liquid Gas Association [DVFG]) and DGUV Regulation 80 on the Use of Liquid Gas must be observed. 5.7.1.1. must be observed. The operator of the system must compile an explosion protection document pursuant to Sections 3 and 5 of the Ordinance on Industrial Safety and Health [BetrSichV] and present this with any application for approval. The entire system must be inspected by an expert (qualified person) in accordance with DGUV Guideline 310-005.

5.7.2 Combustible liquids

5.7.2.1 Operation requirements

Systems that are operated by, or demonstrated using, combustible liquids shall be equipped with non-flammable collecting basins on their filling fittings, and at other locations where liquids might exit. Any combustible liquids that may enter collecting basins shall be immediately removed and safely disposed of in order to preclude any fire and/or explosion hazards.

5.7.2.2 Filling systems with combustible liquids

Due to the fact that filling systems with combustible liquids is particularly hazardous, this may only be done when there are no visitors at the event. It must also be ensured that there are no ignition sources or electrostatic charges present.

5.7.2.3 Empty containers

Empty containers that have contained combustible liquids shall not be kept or stored on stands or in exhibition halls.

5.7.3 Combustible pastes and other fuels

Heating or cooking devices fired by wood, coal, gas, combustible liquids or combustible pastes are prohibited.

5.8 Asbestos and other hazardous materials

Employment or use of building materials that contain asbestos or products that contain asbestos or any other hazardous materials is prohibited.

The bases for this injunction are the German Act on Protection Against Hazardous Substances (ChemG), BGBl I (German Federal Law Gazette I), Part I, Page 1703, in

conjunction with the German Regulation on Prohibited Chemicals (ChemVerbotsV), and the Regulation on Hazardous Substances (GefStoffV).

5.9 Movie and TV screenings, slide shows and other presentations, stages

Spectator rooms which are larger than 100 m² and/or intended for more than 100 visitors shall have at least two exits leading directly to exhibition hall aisles. Said exits shall be as widely separated as

possible and situated on opposite sides of said rooms. Auditoriums accommodating more than 200 people require a special permit (please see Item 4.5).

The provisions of Section 40 of H-VStättR [Hessian guidelines on public meeting places] shall apply for stages/platforms > 50 m².

5.10 Radiation protection

5.10.1 Radioactive materials

Handling or using radioactive materials requires approval pursuant to the German Radiation Protection Regulations (StrlSchV); this also applies to exhibiting such materials. Said approval shall be applied for in writing with the authorities responsible for the exhibition site

and submitted to Messe Frankfurt no later than six (6) weeks prior to the opening of the trade fair in question. In the event that approval has already been granted, it shall be shown that the planned handling or use of radioactive materials on the exhibition grounds is legally

justified.

The fire protection authorities of the city of Frankfurt am Main (Branddirektion, Vorbeugender Brandschutz) shall be informed in writing regarding approved handling or use of radioactive materials and the installation/usage sites involved.

5.10 Radiation protection

5.10.2 X-ray systems and sources of broadcast interference

Operation of X-ray systems or sources of broadcast interference requires approval and shall be coordinated with Messe Frankfurt. The provisions of the Regulation on Protection Against Injuries Due to X-Radiation (RöV) shall be observed at all times.

According to §§ 3, 4, 5 and 8, RöV, operation of X-ray systems or sources of broadcast interference requires either approval or notification thereof. The responsible regulatory agency is the Regierungspräsidium Darmstadt, Abt. Arbeitsschutz und Umwelt Dezernat IV / F45.2

Gutleutstraße 138
60327 Frankfurt am Main

Tel. +49 69 2714-1958 or

Tel. +49 69 2714-1961

to whom applications for approval or notifications shall be informally submitted in triplicate at least four (4) weeks prior to the opening of the event involved.

The fire protection authorities of the city of Frankfurt am Main (Branddirektion, Vorbeugender Brandschutz) shall be informed in writing regarding approved operation and the installation/usage sites of X-ray systems and sources of broadcast interference.

5.10.3 Laser systems

Messe Frankfurt must be notified if lasers or laser systems are to be used. The "Registering a laser sys-

tem" form is to be obtained from Messe Frankfurt Venue GmbH's Technical Project Management, filled out and submitted.

The operation of laser systems is to be reported to the responsible authorities pursuant to Section 6 of the Accident Prevention Regulations for Laser Radiation [DGUV Regulation 11]. The operation of laser systems must be in compliance with the requirements of the German occupational health and safety regulations on artificial optical radiation 2006/25/EG / OStrV, Technical Rules for Laser Radiation [TROS Laserstrahlung], DIN EN 60825-1 and DIN EN 12254; show lasers must also meet the requirements of DIN 56912.

There must be technical and/or organisational measures in place to ensure that no one is exposed to laser radiation above the maximum permissible dose when adjusting or operating the laser system. When laser systems of Class 3R, 3B or 4 are demonstrated at exhibitions or trade fairs, it must be ensured that no uncontrolled reflected radiation can occur, and that the laser area around the laser facilities is restricted using barriers or covers bearing the laser warning symbol so that it is not accessible to people (German occupational health and safety regulations on artificial optical radiation (OStrV), Section 7).

Furthermore, the operation of Class 3R, 3B or 4 laser systems at

stands is only permitted if they have been inspected by a publicly appointed and sworn authority before the start of the trade fair and declared safe. A copy of the "Inspection protocol for temporary installations" is to be submitted to Messe Frankfurt Venue GmbH. A tour inspection does not take the place of an inspection on site. In the event that the operator modifies or adds to the laser system after the inspection by a publicly appointed and sworn authority has taken place, the permission to operate the system becomes null and void. Should this occur, Messe Frankfurt Venue GmbH shall be entitled to turn off the power supply to the stand or to confiscate the laser system (the system would be returned on the final day of the trade fair after the event has closed).

5.10.4 LED

Frankfurt Venue GmbH's Technical Project Management must be notified if very powerful or very bright LED systems or spotlights of Risk Class 2 or 3 are to be used. Suitable extinguishing units/agents are to be kept in the direct vicinity of all LED systems and must be ready to use at all times. The rear of LED walls/screens must remain accessible to the fire brigade without the use of tools.

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

The operation of high-frequency equipment, radio transmitters or other devices emitting electromagnetic radiation requires the approval of the Federal Network Agency [Bundesnetzagentur] and of Messe Frankfurt. The frequency bands and transmission power must be specified in order to ensure an even distribution of frequencies and to help avoid any mutual interference where possible.

The fire protection authorities of the city of Frankfurt am Main (Branddirektion, Vorbeugender Brandschutz) shall be informed in writing regarding approved operation and the installation/usage sites of high-frequency equipment, radio transmitters or other devices emitting electromagnetic radiation. The operation of high-frequency equipment or radio transmitters shall only be approved if it is in

compliance with the provisions of the German Telecommunications Act [TKG] and the Electromagnetic Compatibility of Equipment Act [EMVG]. Operation of paging systems, microphone systems, intercommunications systems and radio-communication systems requires the approval of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Außenstelle Eschborn
Auf der Ludwigshöhe 204
64285 Darmstadt

Tel. +49 6151 170-255
Fax +49 6151 170-181

Irrespective of any approvals issued by said agency, placing wireless paging systems into operation requires the approval of Messe Frankfurt in order that the frequency bands involved will be evenly distributed and interference will be

precluded to the maximum extents feasible.

Said approval shall be applied for with Messe Frankfurt, stating the technical data of the systems to be involved. Orders for assignment of frequency bands shall be submitted on the respective order form. The provisions of the 26th Regulation on the Implementation of the German Federal Pollution Protection Act ("26. Verordnung zur Durchführung des Bundesimmissionsschutzgesetzes") shall be observed whenever exhibits or stand decorations that employ electric, magnetic or electromagnetic fields are exhibited or employed. Messe Frankfurt shall be notified regarding any sources of strong magnetic fields present on stands and their respective locations.

5.12 Cranes, forklifts, and empty packings

For safety reasons, the operation of exhibitors' own lifting equipment on the exhibition grounds is prohibited. Only the equipment of Messe Frankfurt and its official logistics partners may be operated. Forklift and crane services on the exhibition grounds can only be ordered from Messe Frankfurt; these services will be performed by its logistics partners. The same shall apply for the storage of freight/goods and empty packaging during the event.

Customs clearances for temporary or permanent imports, on the other

hand, will be provided and invoiced directly by the logistics partners. The latest version of the General Terms and Conditions for German Freight Forwarders ("Allgemeine Deutsche Spediteurbedingungen" (ADSp)) and the Schedule of Freight Forwarding Rates for Trade Fairs and Exhibitions in Frankfurt ("Speditionstarif für Messen und Ausstellungen in Frankfurt") shall apply to all freight forwarding orders on the exhibition grounds. No empty packaging or combustible materials of any kind are to be stored in halls, either inside or out-

side stands.

Packaging must be removed as soon as it is empty. It can be stored by the Messe Frankfurt's Logistics Services:

Logistics Services
Cargo Center Messe Frankfurt
Ludwig-Erhard-Anlage 1
60327 Frankfurt am Main
Tel.: +49 69 75 75-60 75
Fax: +49 69 75 75-9 6075
logistics@messefrankfurt.com

No packaging material or exhibits must be left in hall aisles, even for a short period.

5.13 Musical reproduction

Any kind of musical reproductions shall be subject to provisions of the German Act for Protection of Copyright and Related Property Rights ("Urheberrechtsgesetz"), Section 15 of the German Copyright Act ("Urhebergesetz") (German Federal Law Gazette [BGBl], and shall require the approval of GEMA, the musical authors' rights society, which may be reached at:
GEMA Generaldirektion Berlin
Postal address:
Postfach 30 12 40
10722 Berlin
Office address:
Bayreuther Straße 37
10787 Berlin
Telephone +49 30 212 45-00
Fax +49 30 212 45-950

messe@gema.de
gema@gema.de
www.gema.de

Musical reproductions that have not been registered with GEMA may result in damage claims being filed by the latter (cf. Section 97 of the Copyright Act).

For events featuring musical performances where high sound pressure levels (volumes) are expected, the contracting party is responsible for determining what, if any, safety measures are required to prevent injury to listeners. The contracting party is responsible for taking these measures. The contracting party must limit the volume such that visitors and third parties are

not injured during the event (hearing loss etc.). Generally recognised engineering standards are set out in DIN 15905 "Event Technology – Sound Engineering – Part 5: Measures to prevent the risk of hearing loss of the audience by high sound exposure of electroacoustic sound systems". The contracting party must comply with these standards. Furthermore, the contracting party must ensure that there is a sufficient quantity of hearing protection devices (e.g. earplugs) on hand and provide these to visitors on request unless any danger to visitors through excessive sound pressure can be excluded. There must be clear notification of this.

5.14 Beverage dispensing systems

The installation and operation of beverage dispensing systems is no longer subject to registration; however, the operator of a beverage dispensing system has sole responsibility for its safety and hygiene. It must be possible to demonstrate that said systems are free of any technical or hygienic concerns, and

this may in some cases be tested by the Ordnungsamt. EU Regulation No. 852/2004 of the European Parliament and Council dated 29 April 2004 on food hygiene shall apply. The monitoring of beverage dispensing systems is performed by the veterinary and food safety

department at the
Stadt Frankfurt am Main
Ordnungsamt
Kleyerstraße 86
60326 Frankfurt am Main
Tel. +49 69 212 47099
E-Mail: veterinaerwesen@stadt-frankfurt.de

5.15 Food inspections

In the event that free samples of foods or beverages are to be distributed for consumption on site, statutory regulations must be observed, particularly the German Food Hygiene Regulations [LMHV] and Regulation (EU) No 1169/2011 on the provision of food information to consumers [LMIV].

Exhibitors should contact the
Stadt Frankfurt am Main
Ordnungsamt
Kleyerstraße 86
60326 Frankfurt am Main
Tel. +49 69 212 47099
E-Mail: veterinaerwesen@stadt-frankfurt.de

Over-the-counter sales of food or beverages at events (including cash sales) is prohibited. Said prohibition explicitly includes the final days of events.

5.16 Vehicle and driving demonstrations

Vehicle demonstrations of all kinds (in exhibition halls and in outdoor areas) require an application and are subject to consent. For more information, please contact Messe

Frankfurt Venue GmbH's Technical Project Management: standapproval@messefrankfurt.com.

6. Environmental protection

Messe Frankfurt is fully committed to protection of the environment.

As a contracting party of Messe Frankfurt, exhibitors must ensure that their own contracting parties

(e.g. stand constructors) are also obligated to observe all rules and regulations pertaining to environmental protection. Exhibitors shall be obliged to comply with all regulations

related to preservation of species, and shall be held legally and financially responsible for their participation in exhibitions.

6.1 Waste

All the following provisions are based on the Waste Management Act [KrWG, as amended], the associated regulations and ordinances, particularly the Commercial Waste Ordinance [GewAbfV], state laws and municipal codes.

Exhibitors shall be responsible for proper, environmentally friendly disposal of waste arising during set-up and dismantling of their stands, as well as during the event. The exhibitor is considered to be the party that generated this waste. Collection and transport of waste for recycling or disposal shall be handled solely by Messe Frankfurt or its appointed contractors.

6.1.1 Waste disposal

In accordance with the Waste Management Act (KrWG), the Commercial Waste Ordinance (GewAbfV) and the Waste Framework Directive (Directive 2008/98/EC as amended by Directive (EU) 2018/851), the emphasis should be placed on avoiding the generation of waste at the exhibition grounds during the set-up, event and dismantling phases. This objective

must be taken into account during the planning stage and coordinated with all involved.

In general, reusable, environmentally friendly materials are to be used for stand construction and operation.

The exhibitor and any stand construction companies they work with are responsible for cleaning their stand and disposing of waste during the event, as well as for disposing of any waste and special waste that is created during set-up and dismantling. These disposal services may be ordered from Messe Frankfurt using the corresponding form. Messe Frankfurt is to be entrusted with the proper disposal of any waste requiring disposal that is created during set-up and dismantling. Messe Frankfurt levies an environmental fee to cover the disposal of the average usual waste volume generated during the event (excl. set-up and dismantling period).

The exhibitor and/or any stand construction companies they work with are responsible for sorting their waste into recyclable materials and refuse.

Vacating exhibition areas after the end of the event: The exhibitor must return the exhibition area in a clean state by no later than the end of the dismantling period. Adhesive tape, paint residues etc. must be completely removed. If a request is made with the hall inspector's office, the exhibition area will be inspected jointly with the exhibitor's representative and its proper return confirmed in writing. If the exhibition area is not returned in proper condition, Messe Frankfurt will have it cleaned and restored at the exhibitor's expense. The exhibitor's liability for accidents and other consequential damages does not end until the area has been properly cleaned and restored. Any materials left behind will be disposed of at increased rates at the exhibitor's/organiser's expense, without their value being assessed.

6.1.2 Hazardous waste

Exhibitors and their contracting parties (e.g. stand constructors) shall be obliged to report wastes such as batteries, lacquers, sol-

6.1 Waste

vents, lubricants, paints etc. that are explosive or flammable, or whose type, characteristics or quantity make them particularly hazardous to health, air or water, to Messe Frankfurt, and to have

Messe Frankfurt dispose of them properly. Specially designated receptacles have been set up on the exhibition grounds for smaller quantities of these materials.

6.1.3 Waste brought onto the exhibition grounds

Any materials or wastes that are not produced in conjunction with the event or with set-up and dismantling work shall not be brought onto the exhibition grounds.

6.2 Water, waste water, soil protection

6.2.1 Oil/grease traps

The quantities of oil/grease conducted into the sewer system shall not exceed the usual household quantities. In the event that quantities of waste water containing oil and/or grease exceeding same are to be conducted into the sewer system, employment of oil/grease traps shall be required. These must be in compliance with generally recognised engineering standards. If mobile catering equipment is to be

employed, exhibitors shall make certain that oils and grease shall be separately trapped and disposed of separately.

6.2.2 Stand cleaning/cleaning agents

Messe Frankfurt shall assume responsibility for cleaning stands at exhibitors' expense if exhibitors have placed orders for same. Messe Frankfurt shall contract cleaning operations out to cleaning

companies that have been selected to perform the work involved. Exhibitors shall not be entitled to contract cleaning work out to contractors on their own.

Cleaning agents containing solvents hazardous to health shall be employed only in exceptional cases and in accordance with regulations.

6.3 Environmental pollution

Exhibitors shall immediately notify Messe Frankfurt regarding environmental hazards/pollution due to, e.g. petrol, oil, solvents or paints.

6.3.1 Packaging materials

The German Packaging Regulation ("Verpackungsverordnung") dated 21 August 1998 (German Federal Law Gazette [BGBl] I, p. 2379 including amendments) obliges manufacturers and sellers to either accept return of packaging, such as cartons, foils, crates, pallets etc., or

to have the materials involved recycled. In the event that packaging will be required again for dismantling, exhibitors can arrange for its storage by Messe Frankfurt Logistics Services. Exhibitors may have packaging materials that are no longer needed sent off for recycling by Messe Frankfurt.

6.3.2 Kitchen waste

Kitchen and catering waste shall be collected and carefully sorted into plastics, glass, paper and garbage.

Exhibitors who would rather not handle waste disposal themselves may order waste disposal services from Messe Frankfurt.

6.3.3 Manufacturing wastes

Incidences of manufacturing wastes shall be reported to Messe Frankfurt, stating the types and quantities of the materials involved.

6.3.4 Stand components

Exclusively PE or PP adhesive tapes shall be employed for laying carpe-

6.3 Environmental pollution

ting and cover foils. Waste shall be deposited in the waste containers supplied by Messe Frankfurt during set-up and dismantling periods.

Orders for disposal of bulk materials may also be placed with Messe Frankfurt.

7. General information

Messe Frankfurt's House Rules apply throughout the entire exhibition grounds.

Exhibitors are responsible for operational safety and for compliance with occupational safety and accident prevention regulations on their stands, and shall be liable for any damages that result from the construction or operation of their stands or the exhibits thereon.

The exhibitor and their contracting parties must ensure that their set-up and dismantling activities do not endanger any other persons present in the venue. Insofar as necessary, the exhibitor and their contracting parties must ensure that their activities and work are properly coordinated. If this is not possible, they must temporarily

halt work and contact Messe Frankfurt Venue GmbH. Throughout the entire set-up and dismantling periods, conditions inside and outside the exhibition halls and in outdoor areas are similar to those on a building site, and personnel must be informed of the particular hazards involved.

Throughout the setup and dismantling periods, conditions inside and outside the exhibition halls and in outdoor exhibition areas are similar to those on a building site. The exhibitor must inform their personnel of the hazards involved.

Hall aisles are rescue routes and must be kept clear during set-up and dismantling phases, as well as during the event. Storage of

stand construction materials, empty packaging and exhibits in the aisles is therefore prohibited. Representatives of the State Agency for Occupational Health and Safety Facilities ("Staatliches Amt für Arbeitsschutz und Sicherheitstechnik"), regulatory authorities, institutions for statutory accident insurance and prevention, police, fire brigades and Messe Frankfurt are to be granted access to the stand at any time in order to inspect operational safety and accident prevention measures. In the event that safety hazards are found, the instructions of the aforementioned organisations are to be followed without delay.

7.1 Limitation of Liability

Messe Frankfurt assumes no duty of care for exhibited goods or stand facilities and, in this respect, accepts no liability whatever for damage or loss. This disclaimer of liability is by no means restricted by guarding or surveillance measures implemented by Messe Frankfurt. All cases of damage must be reported to the police, to the insurance company and to Messe Frankfurt without delay.

In other respects, Messe Frankfurt only ever assumes liability in cases of wilful intent or gross negligence. Messe Frankfurt also accepts liability for damages caused by simple negligence as long as such negligence relates to an infringement of those contractual duties which are of essential importance for fulfilment of the purpose of the contract (material contractual obligations).

In such cases, claims for damages

shall be limited to the typical damages that were foreseeable when the contract was concluded. In this respect, Messe Frankfurt shall not accept any liability whatever for indirect damage or consequential damage caused by a defect, particularly including lost profits. The aforementioned disclaimer of liability does not apply to death, physical injury or damage to health.

