

## **1.3 FIRE EMERGENCY REGULATIONS**

### **1.3.1 Fire exits and escape routes**

The capacity of the exits is subject to the Spanish law specifications CTE (Technical Building Code).

Signage of escape routes and emergency exits must remain illuminated at all times and adequately maintained general and safety lighting, with maintained illuminated exit signs, that should be provided to any enclosed area on the stand.

During the event, as well as build-up and dismantling, escape routes within the stand and hall must remain in good condition and free from any obstacles. The stand fittings and its layout should not obstruct the access to fire equipment that might exist within the stand; they must remain visible and accessible at all times.

Stands over 200m<sup>2</sup> require a minimum of two emergency exits.

The length of an evacuation route to an open area should not exceed 25m. The widths of escape routes should be as the follows:

Stands up to 100m <sup>2</sup>	1m width minimum
Stands over 100m <sup>2</sup>	1.5m width minimum

Emergency exit doors:

The width of a door must be at least 0.80m and not exceed 1.23m;

Emergency exit doors must be non-lockable;

They must have a system of easy and fast opening accessible on the side from which an evacuation would occur. Emergency exit doors must open in the direction of the evacuation.

### **1.3.2 Material specifications**

All materials used must meet the relevant Spanish build regulations CTE (Código Técnico de la Edificación), and of the EU (European Union). The Technical Department at Fira de Barcelona reserves the right to request certifications at all times. In order to comply with the CTE (DB-SI), covering materials must follow:

On ceilings and walls: C-s2 (resists briefly to flames and burning of a single object both limiting the spread of flame, light smoke blockage) and d0 (no drops in 10min).

On floorings: EFL. (Withstands brief flames and limits the spreading of flame).

For auditoriums, upholstered seats should not be combustible and need to meet the corresponding layout.

### **1.3.3 Fire extinguishers**

According to CTE regulations, a portable and suitable fire extinguisher must be provided for each 15m on the emergency escape routes, equally on ground and upper floors. They must be properly marked and be visible at all times.

Stands where demonstrations are carried out, fire precautions must be provided with suitable equipment in case of fire.

At least one fire extinguisher must be provided on the upper floor, in case of double-deck stands.

### **1.3.4 Fire detections and alarms**

Exhibitors may cover their stands with a ceiling structure provided that they observe the material specifications as laid out in the exhibitor manual. Test certificates should meet DIN 4102-B1 or its equivalent standards. Relevant certificates should be available for presentation upon request.

Stands with completely enclosed rooms that do not allow the release of smoke must provide smoke detectors and a fire alarm system fitted with CE certification. At least one smoke detector for each 60m<sup>2</sup> of enclosed ceiling is required, i.e. an enclosed ceiling of 100m<sup>2</sup> requires minimum two smoke detectors.

In narrow aisles and covered spaces less than 3m wide, the minimum distance between detectors has to be 15m.

For stands less than 350m<sup>2</sup> independent, autonomous smoke detectors with integrated alarms are acceptable as long as they are certified according to the CE regulation.

Conventional textile ceilings are classed as solid ceilings and will require smoke detectors.

#### General Exceptions

If the ceiling area to be covered is less than 40m<sup>2</sup>, the corresponding smoke detector can be avoided if and only the covered ceiling has at least 2 openings on opposite corners of the room to be covered, resulting in a total uncovered area of minimum 0.18m<sup>2</sup> for a room of 40m<sup>2</sup>. Smaller areas have to apply the same ratio (0.0045 m<sup>2</sup> per m<sup>2</sup> enclosed) i.e. if the room is 30m<sup>2</sup> the sum of the total area of the 2 openings in the opposite corners would be of 0.135m<sup>2</sup> minimum

Ceilings made from textile wire mesh are accepted without smoke detector if they are fire resistant M0, M1 or M2 (Euroclass A, B or C) and have a minimum grid opening of 2mm x 4mm or 3mm x 3mm. The textile has to be stretched horizontally and has to be in one layer only.

Ceilings made with metal grid are accepted without smoke detector if they are fire resistant M0, M1 or M2 (Euroclass A, B or C) and have a minimum grid opening of 10mm x 10mm.

#### Stands of 350m<sup>2</sup> and above

Stands of 350sqm and above will require a professional smoke detector system that meets the requirements of UNE 23007-14:2009 including alarm buttons, interconnected smoke detectors and control panel. Such installations will need a certificate by an authorised and competent local supplier. Each enclosed room on these stands will require at least one smoke detector. For such stands it is recommended to contact ServiFira for a quote for the installation through Fira de Barcelona's smoke detectors official supplier. Below is a list of some of the requirements for such installations as an example:

Alarm buttons must be placed so that any person within these spaces should not have to walk more than 25m in order to reach/press the alarm button. In places where it is expected that users may have limited mobility, the distance covered should be reduced. In general, the buttons should be set at a height between 1.2m and 1.6m from the floor.

The sound of the fire alarm must have a minimum level of 65 dB (A) or 5 dB (A) above any other noise that will probably persist for a period of 30 seconds, if this level is higher. The sound level should not exceed 120 dB(A) at any point where there is likely to be people.

All detectors shall be provided with the CE mark.

### **1.3.5 Storage**

Storage of containers, packaging or any flammable materials in the stands is strictly not allowed.

### **1.3.6 Waste removal**

Please refer to the exhibitor manual for the waste policy. The containers used for waste and rubbish placed in the stands should not be made of flammable materials.

### **1.3.7 Balloons**

The use of balloons as decoration of stands is restricted to previous consultation with the Fira de Barcelona Office. Balloons with light gases are banned. (i.e.: Helium gas)

### **1.3.8 Flammable gases and vapours**

The emission of toxic gases and vapours is not permitted as this could represent a risk to workers and visitors. The redirection of these gases/vapours to the exterior requires prior approval by Fira de Barcelona.

### **1.3.9 Use motor vehicles in stands**

Motor vehicles used in stands must have enough fuel to enter and leave the exhibition venue at the end of the event. It is obligatory that the vehicle has passed its MOT inspection, or has submitted the corresponding certification from the country of origin.

### **1.3.10 Smoke machines**

The use of smoke machines must be previously approved by Fira de Barcelona.

### **1.3.11 Work machinery**

All equipment used during build-up and dismantling of stands must comply with the regulations of RD 1627/97 Health and Safety guideline in the workplace.

### **1.3.12 Welding and hot works**

Before using welding and works involving the risk of fire, exhibitor/contractor must apply for permission from Fira de Barcelona. Work surfaces should be suitably protected.

At least one CE fire extinguisher, with the corresponding permission, must be provided when working with a fire risk.

### **1.3.13 Smoking**

Smoking in covered areas within Fira de Barcelona during the build-up, dismantling and the event is strictly forbidden.