ANNEX
OCCUPATIONAL HEALTH AND SAFETY

CONTENTS:

1. The main laws on occupational health and safety to be complied with in Fira de Barcelona facilities.
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4. Risks of a general nature in Fira de Barcelona facilities, broken down into the different halls.
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6. Risks, preventive measures and action to be taken in the event of an emergency in Fira de Barcelona facilities during stand assembly and dismantling phases.
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1. The main laws on occupational health and safety to be complied with in Fira de Barcelona facilities

   o Law 31/1995, on occupational health and safety and its subsequent amendments.
   o Royal Decree 39/1997, approving the Regulations on safety and its subsequent amendments.
   o Royal Legislative Decree 5/2000, approving the amended text of the Law on social order infringements and penalties.
   o Royal Decree 1644/2008, establishing the regulations applicable to new machinery and accessories.
   o Royal Decree 393/2007, approving the Basic Self-Protection Standards for schools, institutions and agencies engaged in activities that may lead to emergency situations.
   o Decree 82/2010, approving the catalogue of activities and centres obligated to adopt self-protection measures and recording the content of these measures.

- Royal Decree 2060/2008, approving the Regulations on pressure equipment and their supplementary technical instructions.


- Royal Decree 171/2004, developing Article 24 of Law 31/1995, of 8 November, on occupational health and safety, on the coordination of business activities.

- Royal Decree 1627/1997, establishing the minimum health and safety provisions for construction works, and its subsequent amendments.

- Royal Decree 614/2001, on the minimum health and safety provisions to protect workers from electrical risk.

- Royal Decree 842/2002, laying down the low-voltage Electrotechnical Regulations and their supplementary technical instructions.

- Royal Decree 1495/1986, approving the Safety Regulations for machinery.


- Royal Decree 1215/1997, establishing the minimum health and safety provisions for the use of equipment by workers.

- Royal Decree 2177/2004, amending Royal Decree 1215/1997, of 18 July, establishing the minimum health and safety provisions for the use of equipment by workers, on people working temporarily at height.

- Royal Decree 773/1997, on the minimum health and safety provisions for workers’ use of personal protective equipment.

- Royal Decree 486/1997, establishing the minimum health and safety provisions in workplaces, and its subsequent amendments.

- Royal Decree 485/1997, on the minimum health and safety regulations on health and safety signage in the workplace.

- Royal Decree 374/2001, on the protection of the health and safety of workers from the risks related to the use of chemical agents at work.

- Royal Decree 363/1995, approving the Regulations on notifications of new substances and the classification, packing and labelling of hazardous substances, and its subsequent amendments.

- Royal Decree 255/2003, approving the Regulations on the classification, packaging and labelling of hazardous products.
Royal Decree 1311/2005, on the protection of the health and safety of workers against risks deriving from exposure to mechanical vibrations.

Royal Decree 286/2006, on the protection of the health and safety of workers against risks deriving from exposure to noise.

Royal Decree 488/1997, on the minimum health and safety provisions for working with equipment with visual display screens.

2.- Advice on health and safety at work within Fira de Barcelona compounds during the assembling and disassembly of stands.

IDENTIFICATION OF RISKS DURING THE TASKS OF THE ASSEMBLY AND DISASSEMBLY OF STANDS AND STRUCTURES.

The development stages are as follows:

- SUPPLY AND TRANSPORTING OF MATERIALS TO ASSEMBLY AREA.
- ASSEMBLY OF STANDS / STRUCTURES.
- DISASSEMBLY AND WITHDRAWAL OF MATERIALS.

The most frequent risks are detailed below and are to be found in the three stages:

- People falling from heights while using ladders and scaffolding and in the construction of two-level stands.
- People falling on the ground level due to materials and obstacles in access areas.
- Fall of objects due to a collapse or detachment or during handling.
- Slipping on objects due to wood with nails, tools, etc.
- Being hit or trapped by objects during assembly tasks.
- Knocks, cuts and contact with tools, electrical tools and machine tools.
- Discharge of fragments and particles while working with tools.
- Overexertion due to the handling of loads or incorrect movements.
- Electrical hazard due to possible failure in insulation or deficiencies in electrical tools.
- Inhaling and ingesting dangerous substances, due to carpentry or paintwork, etc.
- Fire and explosions due to combustible and/or inflammable substances.
- Accidents or blows due to trolleys, cranes, vehicles, etc.
GENERAL SAFETY REGULATIONS.

When installation work is carried out at the Fira de Barcelona, prevailing regulations on health and safety at work must obligatorily be followed, in particular those detailed hereunder which, due to their particular importance, may imply a more notable risk during the performing of certain work.

TIDINESS AND CLEANLINESS

Ensuring the tidiness and cleanliness of the workplace is a basic principle of safety. There exists a series of basic actions in order to ensure tidiness and cleanliness, together with suitable managing of the same:

- All items should be tidied, planning beforehand the tasks of loading and unloading.
- Safe piling methods for the materials should be specified.
- In assembly areas, transit areas, passageways, assembly areas, etc. have been delimited, and therefore no materials should be left in such transit areas.
- There should be no obstruction of passageways, stairs, extinguishing devices, doors or emergency exits.
- Any spillage or leakage of liquids should be cleaned up immediately.
- Used packaging, remains thereof, remainders, planks, etc. should be tidied away immediately.

WORK AT HEIGHT

The main objective is to prevent falls of those persons involved in work at height during the execution of the activity, in general taking the following precautions, in descending order of priority:

1. Vertical physical protection.

   - Establishing of safe work places, regardless of location, through a platform more than 60 cms wide, with a railing of 90 cms, an intermediate railing of 45 cms and skirting of 15 – 20 cms.
   - All vertical spaces must have a system of vertical protection, preventing people from falling.
   - The various auxiliary devices used in the activity, such as scaffolding, baskets, lifting platforms, etc. must have an identical system of protection for the worker using the same.

*Only when this is not feasible will the following be done:*
2. **Placing of horizontal nets.**

- Placing of resistant horizontal and/or vertical nets over the length and breadth of the workspace.
- Load testing of the same will take place, this being recorded and reviewed periodically by those responsible at the installing companies.

*When neither one nor the other is feasible, the following will be done:*

3. **Use of Individual Protection Equipment.**

- A harness will be used providing this is accompanied by:
  - Safe clamping points.
  - Suitable training of the worker.
  - Weekly review of the Individual Protection Equipment (IPE).

Preparation of a rescue and evacuation plan for the operator affected by the fall, with suitable equipment and sufficiently trained staff.

**One-piece ladders.**

- All one-piece ladders should be in perfect conditions, with no defects nor breaks in any of their main parts (crossbars, steps, hinges).
- All one-piece ladders will have non-slips feet and the top end will be fixed. The operator should also wear a safety harness and attach this to a fixed point.
- They should be extended at least one metre from the unloading point, keeping a comfortable, safe space to reach the higher level, without crossing the protection railing.
- Nothing may be carried by hand during the ascent or descent. Should it be carried on the back, the maximum load will be 25 Kg.
- The ladder may not be moved horizontally while someone is working on it. Therefore, its two extremities should be safely fixed.
- The ladder will always be placed at an angle of 30° in respect of the vertical support plane of the same, or at 30 cm on the horizontal, for every 120 cms on the vertical.

**Stepladders.**

- All one-piece ladders should be in perfect conditions, with no defects nor breaks in any of their main parts (crossbars, steps, hinges).
- Stepladders will have rubber feet. The operator should wear a safety harness and attach this to a fixed point in case of lengthy static work at great heights.
- All stepladders must have an anti-opening system.
- Metal stepladders will not be used where there is a risk of electrocution due to...
the presence of conducting equipment and material in the area.

**Portable scaffolding.**

- This should be installed by qualified staff. Any platform not meeting the following conditions will be dismantled and withdrawn from the installations.
- It must have railings of 90 cms with an intermediate railing and skirting of 15-20 cms. Access will be gained via an inside stairway through an opening hatch.
- A brake system should be in place for each of the legs of the portable platforms. Transportation will take place horizontally near the base and never while anyone is on it.
- The minimum width of the work platforms will be 1.2 m, and they will always have a complete surface of metal trays on the work level, never terraced.
- The height of the platform must be adapted to the level where the work is being carried out, this not being an excuse for not providing protection.
- A helmet with strap and safety harness should be used, and work carried out in pairs.

**Installation of scaffolding structure.**

- This should be installed by qualified staff. Any scaffolding not meeting the following conditions will be dismantled and withdrawn from the installations.
- It must have railings of 90 cms with an intermediate railing and skirting of 15-20 cms. Access will be gained via an inside stairway through an opening hatch.
- The support surfaces of the scaffolding will be horizontal and compact. Should they be on sloped planes, wedges will be used to transmit the load vertically.
- During the assembly of the scaffolding, all staff will use a safety harness, attached to the structure itself as bodies are added.
- The scaffolding will not be used for other purposes except for those which are the object of its installation (collecting of materials, access to vertical spaces, raising and lowering materials, etc.)

**Hung scaffolding / gondolas**

- All staff mounting hung scaffolding must use an anti-fall system.
- It must have double railings, one of 90 cms, and the other of 70 cms, with an intermediate railing and skirting of 15-20 cms. The floor will be non-slip and work always carried out on a horizontal level.
- The fixing of hanging systems should be reviewed periodically and suitably documented load testing take place prior to use.
- Prior to the assembly of the elevation systems, all the parts comprising it should be reviewed, the results of said review being put in writing.
- This system will not be used when heavy materials are being used. Raising and lowering can not take place with a person inside.

**Platform lifts**

- These should be used by qualified staff.
- All lifting platforms will have railings of 90 cms with an intermediate railing and skirting of 15-20 cms. The work surface must be flat, compact and resistant.
- Periodical inspections of the machines will take place, reviewing the visual and acoustic marking devices, as well as any possible oil leaks, the state of wheels, etc.
- It is forbidden to work on a plane other than the base of the platform, i.e. on top of the railings, using ladders or other elements contained therein, etc.
- A helmet with strap and safety harness should be used, and work carried out in pairs.
- Workers must use a safety helmet with a chin strap, wear a safety harness whenever required by the manufacturer, must always work in pairs, and must be familiar with the relevant risk assessment documents relating to the work to be carried out.

HANDLING OF MATERIALS.

- For the handling and piling of materials, mechanical means should be used when possible.
- For the manual handling of loads, the weight will be placed near the body, with the back straight. The back should not be bent during the lifting, and the strongest muscles should be used, those of the arms, legs and thighs.
- To transport small weights, manual trolleys will be used, taking into account the following recommendations:
  - They will not be used to transport people.
  - Piles of materials must allow for sufficient visibility.
  - The trolley should always be pushed from behind, especially when descending ramps.
  - If a trolley needs to be left parked, do so in a safe place away from any passageway.
  - Do not overload them, and distribute the load evenly.

- To raise and transport heavy loads, lifting and transportation equipment will be used (cranes, forklifts), following these recommendations for use:
  - Cranes and forklifts may only access the compounds with the prior consent of Fira de Barcelona.
  - Loads should never be raised if the chains or cables are twisted.
  - The slings, chains, etc, shall be in perfect condition, with no defect or breaks, and will be appropriate for the weight to be raised.
  - The hook will be in good condition, and will have a safety-catch to avoid accidental unhooking.
  - No loads will be lifted while the crane is moving.
  - No loads will be lifted while suspended above people.
  - No loads should be dragged nor force applied laterally.
  - Prior to commencing a transportation movement, the machine operator should ensure there are no people on the load to be lifted nor in the space to where it is to be moved.
- No loads will be left suspended. They should not be rocked to be moved.
- When the load is placed on a platform or trolley, it must be ensured that both ends are on the same level.
- The hook should never be lowered below the point where less than two full loops of the cable around the drum remain.
- The manoeuvres of raising and lowering the load will be directed by one single person.
- In the tasks of hooking and unhooking the loads, when this is done over 2 metres, anti-fall protection equipment will be used.

CHEMICAL PRODUCTS

All chemical products must be correctly marked with their respective labels, always preserving their original packaging and their safety information leaflet, so that the user might be informed of the risks of the product and of the preventive measures it is suitable to adopt for their control.

During the handling of chemical products, workers may not smoke, eat or drink.

Chemical products should not be heated nor located near points of ignition, unless they need to be heated for their handling.

Safe, ergonomic, preferably metallic recipients will be used. Glass recipients are only suitable for small amounts. Plastic recipients should be monitored for possible deterioration, and should not be left in the sun.

Individual protection equipment corresponding to the label and safety leaflet instructions should be used.

They should be handled in duly ventilated places and, if needed, the corresponding breathing protection means should be supplied.

On completion of the work, any brushes, cloths, rags, etc. impregnated with these products should be placed in closed metallic recipients specifically for this purpose, to be disposed of.

As regards the elimination and transformation of waste, this will only be done via a supplier.

WORK EQUIPMENT

All work equipment used at Fira de Barcelona must bear the EEC sign and be accompanied by Spanish instruction manuals, and a copy of the certificate showing compliance with prevailing European norms must be held.

Users of a machine, for their part, must adopt the measures necessary so that,
through suitable upkeep, the work equipment upholds safety conditions during the entire period of use.

In view of the existence of residual risks, workers will have the necessary individual protection equipment to eliminate or minimise the consequences.

Each machine must be provided with one or more devices for emergency stops through which harmful consequences can be avoided or minimised. The possibility must exist of being able to move by hand certain elements after an emergency stop.

The consigning of machines through suitable systems of blocking and signalling is essential to avoid uncontrolled start-ups, which can cause serious accidents.

INDIVIDUAL PROTECTION EQUIPMENT (PPE)

Individual Protection Equipment should be used when risks can not be avoided or limited sufficiently through collective technical protection means or through work organisation means, methods or procedures.

All IPE should be standardised, bearing the EC mark, and have an information leaflet attached.

Their distribution should be personalised, and each user shall be responsible for the upkeep and preservation of the equipment.

ELECTRICAL RISK

- All connections to the electricity supply will be made and authorised by the company carrying out the maintenance of the installations at Fira de Barcelona.
- All electricity panel cupboards should be kept closed, and the chassis of the electrical control panel should never be opened.
- Warning and protection signs should be respected, as their objective is to avoid contact with electrified parts.
- No intermediary plugs (adaptors) should be used. This type of plug overloads the line and may imply serious danger.
- Never use wiring in a poor condition or broken sockets.
- Never disconnect by pulling on the wire.
- Never touch or try to repair the installation or any electrical apparatus.
- It is forbidden to connect electrical wires to the power supply panels without the use of standardised plugs.
- All electrical machinery must be earthed in combination with the differentials of the general panel, or they must have double insulation.
- It is expressly forbidden to deactivate the earthing of machines-tools.
will be placed on each one to such end if they do not have double insulation.
- It is expressly forbidden to deactivate the earthing of feed pipes.

**MANUAL TOOLS**

**Inappropriate use of hand-held tools is the cause of a significant number of injuries on the basis that it is supposed that everyone knows how to use the most common manual tools. In general, the following is recommended:**

- Choose the correct tool for the work to be carried out.
- Keep the tools in good condition.
- Use the tools correctly.
- Avoid surroundings which prevent their correct use.
- Keep tools in a safe place.

**MACHINES - TOOLS**

**Before working:**

- Do not use any machine the handling and risks of which you are unaware of.
- The part being worked on should be correctly and firmly held, with no restrictions to its movement.
- Mechanism protection cases and protection devices should be correctly fixed and placed.
- There should be no loose parts or tools on top of the machine which might fly off when it is started.

**While working:**

- They should only be handled by duly authorised trained people.
- The machine should be stopped and unplugged prior to leaving the workplace.
- If for adjustment or repair reasons a protection device needs to be removed, the machine should be stopped and unplugged. Once the repair is complete, the protection device should be replaced.
- Should there be any irregularity (abnormal noise or vibrations, overheating, sparks, etc.) the machine should be stopped and the nearest supervisor informed. If necessary, it will be left out of order, disconnected, blocked and marked with a sign.
- While any parts are moving, they must not be touched or stopped with the hand.
- Special care must be taken for clothing or accessories not to be caught by moving parts of the machine.
- The machine must be stopped and safeguarded against accidental start-up when being cleaned, greased, parts changed, measured, repaired, etc.
- If there is a power cut, the switch of the machine must be turned to zero immediately before service is re-established.

**WELDING**
- Prior to carrying out any welding work, a welding permit must be filled in.
- Periodical monitoring must take place of the status of the insulation and connection of the equipment and control panel.
- The earthing of the chassis must be connected to prevent any defect in the insulation.
- The handle of the electrode holder pincer must be perfectly insulated and in good condition. The operator must use standardised leather gloves.
- Fireproof screens, canvas or sheets must be placed around the welding area to protect not only the people but also surrounding material.
- The covering of the electrodes, and the nature of the parts to be welded, mean that, due to the high temperatures reached, many of these elements are volatised giving rise to harmful, sometimes poisonous, metallic gases and fumes.
- Extractions located at the actual point of welding should be used, the room suitably ventilated and, where needed, breathing protection used.
- Certain solvents and grease removers which might have been used recently on the parts might decompose due to the action of heat and radiation forming phosgene (toxic). It is best to clean this type of part first with warm water before welding. Furthermore, extractions located at the actual point of welding should be used, the room suitably ventilated and, where needed, breathing protection used.
- Oxygen should not be used as a substitute for air to ventilate, as an excess of oxygen implies a serious fire risk.
- Should the gas catch fire as a result of an escape of acetylene from the tap or pressure valve, close the valve of the bottle.
- Neither copper nor its alloys should be used in acetylene conduction lines, as copper acetylurea may be formed, which is explosive.
- In the case of spontaneous heating of a bottle of acetylene, it should be placed outside to an enclosed open space, and sprayed from afar until it cools. The supplier should be notified for it to withdraw the bottle. Do not use it again.
- The oxygen and acetylene bottles, whether empty or full, should be stored apart from each other, except for those being used on the same welding equipment.
- The bottles should always be attached to supply trolleys, both when stored as well as when in service.
- When stored, they should always be sheltered from sources of heat, electrical hazard and protected from the sun.
- They should always be transported on trolleys, avoiding rolling or hitting them.
- Those bottles in service should always be kept vertical, either attached to their support or trolley.
- Before starting a bottle, verify that the manometer is pointing to zero with the valve closed.
- Do not use up bottles completely so air does not enter them. Leave a slight excess pressure inside.
- Open the valves of the bottles slowly.
- The verifying for leaks should only be done with soapy water or a suitable detector, never with flames.
- The bottle valves should be closed at the end of the work session or during long
- intervals. Once the valve has been closed, the pressure valve, tubes and blowtorch should be emptied.
- Do not force the valve of a bottle if it sticks, nor try to dismantle one ever. Any breakages should be repaired by the supplier.
- The opening of the blowtorch should be cleaned periodically to avoid the flame returning, which could be dangerous. A brass needle should be used.
- Consult the scales of pressure to use the correct gas pressure for each job to be done. Incorrect pressure may cause explosions or flame delays which destroy the inside of the tubes.
- To light the blowtorch, first gradually open the oxygen valve and then that of the acetylene to a greater extent. Next, light the mixture with a spark lighter, then regulate the flame to obtain the correct size.
- Do not light the blowtorch with a flame, as this may cause serious burns. Always use a spark lighter.
- To put out the blowtorch, first close the acetylene and then the oxygen valves.
- Never hang the blowtorch up on the bottles, even when off.
- Hot blowtorches should be placed far from raw materials which may burn or ignite.
- Prevent the tubes from resting on hot objects, sharp edges or in pools of liquid, and do not let vehicles pass over them.

- Individual Protection Equipment should be used:
  - Protection screen for face and eyes.
  - Long-sleeved leather gloves.
  - Leather couplings.
  - Easy-opening leather leggings, with outer trousers.
  - Apron.
  - Safety footwear with non-conducting soles.
  - Replacement glass should be at hand to substitute that deteriorating through use.

CONSTRUCTION OF TWO-FLOOR STANDS, OR STANDS WITH A SECOND RAISED FLOOR.

- Two-floor stands should provide the Logistics department of the Fira de Barcelona with specifications and a set of 1:200 scale plans, duly signed by a competent technician approved by the corresponding professional body. Said technician will assume at all times the management and responsibility of the works, having to comply with prevailing construction regulations.

- The design should envisage the installation of railings to prevent people and objects from falling during assembly and disassembly works.
During the assembly and disassembly of the two-floor stands, the necessary individual protection equipment will be used for the works carried out, in particular safety helmets, the use of which is obligatory.

3.- Action measures in case of emergency in the assembly and disassembly stage.

In case of detecting fire, where it smells of burning or in an emergency situation:

- Call the internal Self-Protection number, indicating where you are, the area and type of incident:  
  Emergency telephone numbers: 3100 Montjuic 4100 Gran Via

- If the foregoing is not possible, use the nearest alarm:

- After raising the alarm, you may, if suitably trained, try to put out the fire with an extinguisher, providing your safety is not at risk:
  Remove the safety-latch, pulling on the ring.
  Take the hose off the support and aim it at the base of the flames.
  Press the handle intermittently to active the extinguisher.

What to do on hearing evacuation alarms:

- Stop what you are doing.
  - Leave equipment switched off from the electricity supply and close gas valves.
  - Leave quickly, without running or pausing.
  - Close the doors you go through, if you are the last to leave.
  - If you are with people from outside the Fira, inform them that an order to evacuate has been given and tell them to accompany you.
o Head for the outside meeting points following the evacuation routes marked.

**Meeting points:**

- Hall 1: in front of office entrance hall 8 (Plaza España).
- Hall 5: in front of entrance hall 8 (Av. Reina María Cristina s/n)
- Hall 8: in front of entrance SERVIFIRA (Plaza España)

o Listen to the instructions of the security staff of Fira.

o Do not return to the affected area until receiving instructions from the security staff.

o If the evacuation route is obstructed by smoke:
  - Go to an alternative exit
  - If this is not possible, crawl, as smoke tends to rise.

**What to do if you need urgent medical health:**

o Report the incident to Security using the following telephone numbers:

  3100 Montjuic
  4100 Gran Vía

o If someone falls unconscious, stretch them out on the floor with their feet raised.

o In case of vomiting, place their head in a lateral position.

o Always loosen and undo clothing, ties, belts, etc.

o Fira de Barcelona has a **sick bay** in each of its compounds:
  - Gran Vía Compound: Paseo Central or de la Restauración. Near CISS. Telephone 93 233 40 02. Internal telephone 40 02. (open during trade fairs and meetings)
4. Risks of a general nature in the GRAN VIA Exhibition Centre of Fira de Barcelona, broken down into halls

**Technical areas with restricted access**

Technical and/or isolated areas are those not regarded as interior exhibition areas and/or exterior areas at street level that are considered to be publicly trafficked, this being a non-exhaustive and non-exclusive definition.

**List of technical and/or isolated areas:** roofs, flat roofs, terraces, intermediate galleries, underground galleries, raised galleries, tunnels, wells, air-conditioning machine rooms, electrical transformer stations, any other kind of machine room and storage rooms in the facilities of Fira de Barcelona.

Request for access to TECHNICAL AREAS WITH RESTRICTED ACCESS must be formally sent to Fira de Barcelona and will be authorised subject to completion of the relevant Coordination of Business Activities for Occupational Health and Safety procedure. Access to these areas is restricted to those companies authorised by Fira de Barcelona.

**Exhibition areas. Areas with free access inside the halls and in exterior areas at street level.**

**GRAN VIA EXHIBITION CENTRE - Exhibition Areas**

**GRAN VIA, EUROPA LOBBY (southern entrance)**

**People falling to a different level.** Lack of fixed or auxiliary measures to reach the picture windows on the outside section of the ridge. Terrace accessible from the ridge without handrails; collective protective equipment limited to a lifeline installed on the profile of the terrace which in any event would be adequate for work on the building’s façade.

**People falling on the same level.** Horizontal Tramex platform. Escalators.

**GRAN VIA, EUROPA LOBBY – Conference room (CC1)**

**Falls to a different level.** There are slats on the dais, about 10 cm high, which may cause falls to a different level.

**Falls on the same level.** Ackermann boxes: they cannot be kept closed when cables are connected. Stairs giving access to the dais in the different rooms.
**GRAN VIA, HALL 1 – Exhibition area**

**Falls to different levels. Side mezzanines inside the hall.** The hall has two mezzanines located above the bars which can be accessed by workers. Both mezzanines are protected by perimeter handrails except for two small sections where the illuminated ‘bar & beer’ signs are located, though it would be difficult for anyone to get through here.

**Falls to different levels. Side mezzanines.** On the two mezzanines in hall 1 there are some Tramex panels on the floor installed over two holes (one in each mezzanine). These panels are fixed by wiring.

**Falls to different levels.** There are some hatches in the floor whose purpose is to facilitate the transfer of material and equipment between the two levels. When the hatches are open there is the risk of falling from a height (more than 2 metres) for the workers involved in these operations.

**Falls on the same level: Exhibition area.** Presence of manholes without covers in the floor.

**Falls of objects being handled.** In the area below the illuminated signage installed above the side mezzanines without baseboards.

**Knocks against immobile objects.** There are some areas inside the hall with glass surfaces that are not easily visible, with a distance between uprights of more than 0.60 metres.

**GRAN VIA, HALL 2 – Exhibition area**

**Falls on the same level. Exhibition area.** Presence of manholes without covers in the floor. Take great care when moving around inside the Halls.

**Falls to different levels. Structural features.** In the central and side areas of the exhibition space there are structural crossbeams between the columns. It is completely forbidden to get up on any structural feature in the halls.

**GRAN VIA HALL 3 – CONFERENCE ROOM CC3 Area**

**Falls on the same level.** Ackermann boxes: they cannot be kept closed when cables are connected. Stairs giving access to the dais in the different rooms.

**GRAN VIA, HALL 3 – Exhibition area**

**People falling to a different level.** Due to the absence of perimeter handrails on the side mezzanines inside the hall.

**Falls on the same level. Exhibition area.** Presence of manholes without covers in the floor.
**GRAN VIA, HALLS 4 AND 6 – Exhibition area**

**People falling to a different level.** Due to the absence of perimeter handrails on the side mezzanines inside the hall.

**Falls on the same level. Exhibition area.** Presence of manholes without covers in the floor.

**GRAN VIA, HALLS 4 AND 6 – Conference room (CC4)**

**People falling to a different level.** The stairs leading to the control room and translators’ booths in room 3.1 do not have a handrail. Non-trafficable service corridors, false ceilings housing the air-conditioning, electrical and telephone installations. To access these, there are hatches in the ceilings of the corridors; the doors are wooden and the floor of the galleries is plasterboard. The height of the galleries allows enough room for people to get inside.

**Falls on the same level.** Akerman boxes: they cannot be kept closed when cables are connected. Stairs giving access to the dais in the different rooms.

**Falling objects.** Panels situated above the exit doors of room 3.1. The tension spring of the doors is fixed to this panel.

**Electrical contact.** Electrical control panels. Sound decks: there is no cut-off switch in the control room; the switch is located on the rooftop.

**Knocks and/or cuts from immobile objects.** Corridor giving access to the control rooms of room 3.1: the air-conditioning conduit is at a low height. Room 3.1: the service gallery has a low ceiling and obstacles on both the floor and ceiling. Room 3.1: the service gallery has metal studs protruding in passageways. Control rooms and translators’ booths in room 3.1: low beams.

**GRAN VIA HALL 6 - TIBIDABO ROOM Area**

**Falls on the same level.** Ackermann boxes: they cannot be kept closed when cables are connected.

**Knocks against immobile objects.** Glass surfaces have been observed with a distance between struts of over 0.60 metres that are not immediately visible.
GRAN VIA, HALLS 5 AND 7 – Exhibition area

Falls to different levels. The hall has a mezzanine area located above the bars, washrooms, etc. These mezzanines are not protected by perimeter handrails so access to these areas is prohibited.

Falls on the same level. Presence of manholes without covers in the floor.

GRAN VIA HALL 5 – CONFERENCE ROOM CC5 Area

Falls on the same level. Connected utility cables crossing pedestrian areas.
Knocks against immobile objects. Room furniture.

GRAN VIA HALL 7 – CONFERENCE ROOM CC7 Area

Falls on the same level. There are holes in the false floor for channelling cables without a protective cover. Cables crossing pedestrian areas.

Falling objects. Partition panels in Room 7.1 dividing zones A, B and C.

GRAN VIA, HALL 8

Falling objects. Hanging panels used to separate and break areas into sectors within the hall.

Falls on the same level. Due to the protrusion of some of the edges on the covers of the connection boxes in the floor. Staircases within the facility: access from the ground floor, Tramex flooring (escalators).

Knocks and/or cuts from immobile objects. The glass windows of two of the restaurants do not have safety markings.

GRAN VIA HALL 8 – CONFERENCE ROOM CC8 Area

Falling objects. Mobile partition walls of the room.

Knocks against immobile objects. When handling the panels.

Falls on the same level. Presence of cables crossing pedestrian areas.
**Occupational risks in all the exhibition areas**

**Being hit or run over by vehicles.** Forklift trucks and other moving vehicles.

**People falling to a different level.** Due to the absence of anchoring points and lifelines when working at height inside the halls and in the turrets of galleries. Fixed and movable ladders.

**Falls on the same level.** During the assembly and dismantling period of events held in the halls, the covers protecting the connection boxes inside the halls may come loose, leading to trips and falls.

**Falls on the same level.** There are areas in the hall, mainly zones without public access, such as technical rooms and service ladders, where there is a higher risk of falls on the same level due to irregular surfaces, untidiness and lack of cleaning, or the presence of obstacles.

**Tripping over objects.** Pieces and remnants of material on the floor in the hall during the stand assembly and dismantling periods. Covers of connection boxes in the floor not properly closed.

**Work on equipment installed at height.** During maintenance, assembly and dismantling operations, some work needs to be done at height.

**Electrical contact.** Due to the presence of open connection boxes and cabling being used by other exhibitors. Electrical control panels without signage. Handling of electrical control panels.

**Fire and explosion.** Jobs that entail the use of welding equipment, gas canisters, pressurized equipment, compressors, etc.

**Falling objects.** Lights, security cameras, metal plates or hoses of installations set in the ceiling.
5. Emergency information during events.

- **WHAT TO DO IN AN EMERGENCY:**
  
  - Keep calm. Don’t spread panic.
  - Notify the staff at Fira in Barcelona, at the Control Centre: Montjuïc 93 233 31 00 – Granvia: 93 233 41 00 or utilising the emergency buttons.
  - Don’t block emergency exits.

- **HOW TO EVACULATE THE AREA:**
  
  - Walk, don’t run, through the evacuation paths towards the emergency doors.
  - Follow the instructions given over the PA system and by emergency services personnel in uniform.
  - Don’t use the lifts.
  - Stay in the meeting area indicated by the staff in charge of evacuation and wait for instructions.

- **YOUR COLLABORATION IS NECESSARY:**
  
  - Notify the security service immediately (guards in uniform or by telephone on Montjuïc 93 233 31 00 – Granvia 93 233 41 00) about any object, situation or detail that, in your opinion, could be of significant consequence for the safety of people and/or objects.
7. Description of hazards and preventive measures during events.

<table>
<thead>
<tr>
<th>HAZARD</th>
<th>SOURCES AND CAUSES OF THE HAZARD</th>
<th>PREVENTIVE MEASURES</th>
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</table>
| People falling from heights.   | • Falls on steps and stairs – on two-tiered stands.  
                                  • Falls due to improper use of fixtures: failure to use ladders.                                   | Ensure that stairways have handrails.  
                                                                                                             Have ladders on hand and ensure that they are fit for use. |
| People falling on ground level.| • Tripping over raised platforms in stands.  
                                  • Tripping due to lack of order and cleanliness.  
                                  • Slipping on slippery surfaces.                                                               | Place warning signs to indicate different floor levels.  
                                                                                                             Ensure stands are kept clean and tidy at all times.  
                                                                                                             Place warning signs to indicate slippery surfaces after cleaning.  
                                                                                                             Ensure footwear is properly fastened. |
| Falling objects due to handling.| • Handling of office material, files, leaflets etc.                                             | Training and information on handling loads.                                                                  |
| Cuts and or/ knocks against stationary objects. | • Knocking against lamps and furniture.  
                                                          • Knocking against exhibits.                                                           | Place warning signs if objects are in circulation areas.  
                                                                                                             Keep stands clean and tidy. |
| Cuts and injuries from office material. | • Cuts from office material: scissors, cutters, etc.                                               | Training and information on the proper use of office material.                                               |
| Overexertion.                   | • Handling and transporting exhibition materials.  
                                                          • Handling packs of leaflets.                                                                 | Training and information on handling manual loads.                                                            |
| Heat hazards.                   | • Burns from spotlights, halogen lighting, etc.                                                   | Avoid bare light bulbs.                                                                                      |
| Electrical hazards              | • Equipment with badly maintained sockets and cables.  
                                                          • Open switchboards.                                                                        | Avoid using badly maintained equipment; withdraw it.  
                                                                                                             Close switchboards. Do not handle them. |
| Violent behaviour, assaults.    | • Large crowds.                                                                                | Give workers instructions on actions to be taken.                                                            |
| Ergonomic/posture deficiencies. | • Unsuitable furniture.  
                                                          • Muscle or joint pain from using laptops.                                                       | Provide ergonomic furniture.  
                                                                                                             Training and information on ergonomic postures.             |
| Hazards caused by material and machinery on display |                                                                 | Exhibitors must ensure that all the necessary preventive measures are enforced to avoid hazards derived from material or machinery displayed on their stands. |