Safety requirements for the design and construction of a double decker stands

1. **Load carrying structure, floor covering:**
The structure of double deck must have a static analysis of load capacity;
The podium and booth should withstand a load of not less than 500 kg/м²;
Parts of the podium resisting the load of the double deck structure should withstand a load of not less than 2500 kg/м²;
The floor covering on the double deck should withstand a load of not less than 400 kg/м²;

2. **Stand barriers:**
Barriers on the second level should have a height of not less than 1100 mm from the second level floor and prevent falling of various objects on the first level from upstairs;
Barriers of the second level should withstand a lateral load of not less than 100 kg/м²;
The walls of the second level filled with light-weight filling should be equipped with hard protective beams at a height of 1100 mm from the floor of the second level capable of withstanding lateral load of not less than 100 kg;
Only triplex glass is used for stand decoration.

3. **Stairs:**
The stairs should be equipped with railings on both sides of the stairs;
The handrails should be offset from the wall by 80 mm minimum to ensure reliable grip and maintain side loading not less than 100 kg.
Each step should maintain loading not less than 350 kg/м²
The structure of the flight stairs should be tested for strength under simultaneous loading of steps with 90 kg.
The stairway should withstand a load of not less than 500 kg/м²;
The width of the stairway should not be less than 900 mm, the width of the step should be between 280 mm and 425 mm. The height of each step should be between 150mm and 170mm. The tread depth and height of each step should be the same throughout a set of stairs.
Ensure that there are kickboards between steps, to ensure that items or people do not slip between any gaps between the steps
Ensure there is a fully filled in hand rail on both sides of a staircase, ensuring there will be no gap, anywhere on the sides of the staircase
Inclination of the stairway should not exceed 36° from the horizontal axis.
In front of the exit from the stairs there should be no obstacles and there shall be enough free space.
The exit from the stairs should end in the booth territory. The clearance between the bottom stair landing and the booth limit should be 500 mm minimum.

4. **Barriers (Handrails):**
Barriers shall be provided to protect exposed edges of staircases, landings, balconies, galleries and other changes of level.

5. **The construction of barriers (handrails) should:**

- Provide guarding to all exposed edges of stairs and ramps at a height of 1100 mm.
- Be non-climbable, i.e., with solid infills or vertical guard rails a maximum of 100mm apart.

Must have lower sections that reach to the floor of the upper level, «Toe-Boards», so that no item can be accidently kick through an opening gap.