

DONEGAL COUNTY COUNCIL

FIRE SERVICE DEPARTMENT



***Fire Safety Requirements for Domes, Marquees
and similar structures.***

Note: Where the word "**Marquee**" is written here, it shall be taken to include Marquees,
Domes and similar structures

SITE

1. Plans describing the location and to a suitable scale (1:500) showing the proposed site where the Marquee is to be located and showing the position of the structure (including all entrances and exits), together with access for emergency vehicles, to any adjacent buildings should be submitted to this Department at least two weeks before the marquee is to be used. Details of the materials to be used in the structure should be submitted with the plans.
2. A certificate from approved authority shall be available in respect of each Marquee to show that the material used complies with BS 3120 "Performance Requirements of Materials for Flameproof Clothing and Other Purposes" **for existing materials only**, in the short term and BS: 7157: Method of Test for ignitability of fabrics used in the construction of Large Tented Structures; and BS: 5438 Tests 2A and 2B for newly manufactured membranes and fabrics. This certificate shall bear a code mark to compare with a similar mark on the canvas of the marquee covered by the particular certificate.
3. The spacing between the marquee and any other structure shall be not less than 6m. For large marquees (500m²) the distance should be increased to 12m.
4. Where the Marquee is being erected within an enclosed space, at least 3 gates, each 3.6m wide shall be provided in it. These gates shall be spaced around the perimeter.
5. The structure shall be erected by a competent person and shall not readily collapse when exposed to fire. All supporting poles, frames, guys, stakes, anchors, fastenings etc. shall be regularly tested by the supplier and maintained in a safe condition. **For large marquees (>500m²) a certificate of structural integrity should be provided from a Structural Engineer.**
6. Under no circumstances shall any equipment ancillary to the Marquee or any car park used in connection with the Marquee be sited so as to obstruct access to fire hydrants or egress from the Marquee. Easy unobstructed access should always be provided for Fire Appliances. Site location should be chosen taking all these points into account and ideally the location should be adjacent to a Hydrant or an open source.
7. All flammable material and in particular long grass shall be removed from the vicinity of the Marquee and under any ground/floor opening used.
8. The erection of the marquee shall be fully completed at least 24 hours before first use.

EXITS

9. Seats in Marquees shall either be fixed securely in position or rigidly linked together in rows. No rows shall be less than 4 seats and not greater than 12 seats. Seats on a sloping floor shall be fixed in position. Where seating for more than 100 people is provided, detailed plans of the seating layout shall be submitted to the Fire Authority for approval prior to erection.

10. The maximum number of persons to be admitted shall be calculated on the basis of one person for each **0.5m²** of available floor area.

11. The exits from the Marquee shall each have a minimum clear width of 1.5m. They shall consist of conventional outward opening doors and shall be distributed evenly around the perimeter. The minimum number of exits to be provided shall be based on the area of the marquee as set out in the table below.

<u>Area of Structure</u>			<u>Minimum no. of exits</u>		
up	to	150 sq.m	2 no.	(x 1.5m)	exits
150	to	300 sq.m	3 no.	(x 1.5m)	exits
300	to	450 sq.m	4 no.	(x 1.5m)	exits
450	to	600 sq.m	5 no.	(x 1.5m)	exits
greater than 600 sq.m			1 extra exit for each 150 sq.m		

12. Each door across an escape route shall be readily openable from the inside without the use of a key while the premises is in use. All emergency exit doors shall be kept free from fastenings other than automatic panic bolts (full push bar).

Panic bolts shall comply with IS 1125: 2008, shall be without sharp projections and shall be of such a pattern that normal horizontal pressure on the cross bar, if on a single leaf door or on either cross bar if on double leaf doors, will open the doors. The cross bars shall be placed at a height of not less than 900mm and not more than 1050mm from the floor and shall be permanently marked '**PUSH BAR TO OPEN**' in 25mm plain letters in a conspicuous position.

Flush bolts, barrel bolts or similar fastenings shall not be permitted on any leaf of a door across an escape route.

13. Final exit doors, which are not in normal use, shall be provided with an external sign complying with BS 5499 reading '**FIRE ESCAPE - KEEP CLEAR**'.

14. No exit shall open directly onto a step and any difference in level between the floor and ground level shall be made good by a ramp at a slope of not more than 1 in 12.

LIGHTING

15. All electrical installations shall comply with the Regulations for Electrical Installations (15th Edition) of the Institute of Electrical Engineers and to the rules of the Electro-Technical Council of Ireland.

All installations shall be checked by a competent person to confirm that they provide the same level of safety as that provided in these rules. Certificates shall be retained on the premises confirming the adequacy of all electrical installations for inspection by the Fire Authority at all material times.

Each electrical circuit serving power outlets shall be protected by a Residual Current Circuit Breaker having a 30mA rating.

16. Adequate normal lighting shall be provided outside each final exit door, and on all external escape routes. The lighting shall be kept alight during the whole time it might be necessary for escape purposes.

17. No naked lights and no heating or cooking appliance shall be permitted in a marquee or within 6m of it while the public are present. Cooking appliances shall be used only in a fire resistant area well clear of the marquee.

18. An emergency lighting system shall be provided in the marquee. This shall operate automatically on failure of the normal power supply. It shall have an endurance of at least three hours and shall provide sufficient illumination to allow the occupants safely out of the structure. It shall be designed, installed, commissioned and serviced in accordance with I.S. 3217: 2013 and a completion certificate in the form set out in that Standard shall be retained and kept available for inspection.

19. The emergency lighting system shall cover all areas in use by the patrons or public. It shall also cover the escape routes and the area outside each final exit door, unless this is adequately illuminated by public lighting.

20. Exits and escape routes shall be indicated by illuminated "running man" signage as appropriate, which shall, where necessary, incorporate a supplementary arrow to indicate the direction of the exit. All exit, emergency exit and escape route signs shall be illuminated by lamps contained within the sign so that they are legible at all material times.

In the event of failure of the normal lighting, such signs shall be illuminated by the emergency lighting supply. The signs shall be placed over each exit at a height of between 2.0m and 2.5m above the floor level.

FIRE EXTINGUISHERS

21. An adequate number of fire extinguishers, suitable to the risk, shall be provided throughout the premises. The selection, installation and maintenance of extinguishers shall be in accordance with BS 5306:1985 or I.S. 291:2002.

22. Furnishings and fittings in the premises shall comply with the '**Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly**' issued by the Department of the Environment. Standards specified in this Code of Practice include the following :-

- (a) Upholstery in seating should, when tested in accordance with IS 254: 1983, pass the smouldering cigarette test and Ignition Source Grade No. 5 Test. Foam filling materials should comply with IS 419: 1988: Clause 2. Non-foam and composite filling materials should comply with IS 419: 1988: Clause 3.1.
- (b) Curtains and drapes should comply with the requirements for Type B performance of BS 5867: Part 2: 1980. Material used in the manufacture of blinds should meet the designation of "flameproof" when assessed in accordance with BS 3120: 1959, when subjected (prior to the test) to an appropriate washing procedure in accordance with BS 5651: 1978.
- (c) Textile floor coverings should comply with the performance requirements of "a low radius of effects of ignition" as defined in BS 5287: 1976.

Persons in control of the premises should ensure that they are supplied with test certificates for furnishings and fittings in accordance with the Code.

MANAGEMENT

23. The Event Controller (person in charge) shall ensure an adequate means of providing early warning in the event of a fire is available at all times, with management procedures documented in the event management plan.

24. The premises shall be managed in accordance with the '**Code of Practice for the Management of Fire Safety in Places of Assembly**' as issued by the Department of the Environment and available from Government Publications Sales Office, Sun Alliance House, Molesworth Street, Dublin 2 or any good Bookshop.

A copy of the Code of Practice shall be retained at the premises and shall be kept available for inspection.

25. The events during which use is made of marquees should be in accordance with the Guidelines laid down in '**Code of Practice for safety at Sports Grounds**' and '**Code of Practice for safety at Outdoor Pop Concerts**' and other musical events as published by the Dept. of Education and would be advisable from Government Publications, S.O. Sun Alliance House, Molesworth St., Dublin 2 or any good Bookshop.

SUMMARY CHECKLIST

- Event Management Plan
- Fire retardancy certification provided for marquee material
- Marquee located the minimum distance (6m or 12m as applicable) from buildings and boundaries
- All exits have push bar mechanisms in compliance with IS 1125 2008
- 1 No double door exit for every 150m² of floor area
- Structural certificate provided for marquee structure (where area exceeds 500m²)
- Fire extinguisher located at each exit and at the stage. Certificate provided
- Emergency lighting provided to illuminate marquee to 0.5 lux
- Illuminated escape signage (running man) provided above each exit
- Certificate for electrical and emergency lighting