

# Marquee occupancy guidance

Acceptable solutions can be calculated using the information below

Total floor area of the marquee  m<sup>2</sup>

**Calculate the occupancy density** (refer table 1)

Total number of persons

$$\begin{array}{ccc} \text{area (m}^2\text{)} & \times & \text{occupancy density} \\ & & \text{(see table 1 for calculation)} \end{array} = \text{total no. of persons}$$

**Calculate the exits**

Total meters of exit width

$$\begin{array}{ccc} \text{no. of persons} & \times & \text{7mm of width per person} \\ & & \text{(not less than 850mm)} \end{array} = \text{total metres of exit width}$$

Notes:

See table 2 for number of exits required

Where two escape routes are required each escape route shall be sized for the required total width i.e. where a total of x metres of exit width is required, two exits of x metres shall be provided. Where more than one means of escape is required the minimum distance between the two routes shall be 8 metres. Exit ways must be evenly distributed around the perimeter of the marquee to avoid excess travel distances. The minimum width of any escape route is 850mm.

**Calculate the safety features required**

\*Exit signs must be illuminated when the marquee is used during the hours of darkness (refer table 3).

**Table 3 – Fire safety precautions required**

Number of persons	Exit signage	Illuminated exit signage	Fire alarm	Telephone	Evacuation procedure	Fire extinguishers	Emergency lighting throughout
Up to 50	Yes	No	No	No	Yes	No	No
51 to 100	Yes	No	Yes	Yes	Yes	No	No
101 to 250	Yes	No	Yes	Yes	Yes*	No	No
251 to 500	Yes	Yes	Yes	Yes	Yes*	Yes	Yes
501 to 1000	Yes	Yes	Yes	Yes	Yes*	Yes	Yes
1001 to 2000	Yes	Yes	Yes	Yes	Yes*	Yes	Yes
Over 2000	Specific design by a fire engineer						

\*To be approved by Fire and Emergency New Zealand (FENZ)

**Number of exits provided** (refer table 2)

**Number of sanitary fixtures provided** (refer table 4)

**Table 1**

No. of persons	m <sup>2</sup> per person
Bar standing area	0.5
Loose seating	0.8
Loose seating & tables	1.1
Dining tables & chairs	1.25
Fixed seating	no. of seats provided

**Table 2**

No. of persons	Persons per m <sup>2</sup>
Up to 500	2 means of escape
501–1,000	3 means of escape
1,001–2,000	4 means of escape

No exit way shall be less than 850mm in width

**Table 4**

No. of persons	Number of sanitary fixtures required
Up to 50	1 fixture
Up to 80	2 fixtures
Plus one for every additional 50 or part thereof	
Number of accessible (disabled) fixtures required	
Up to 300	1 fixture
Up to 600	2 fixtures
Up to 1,000	3 fixtures