



VENUE CAPACITY CALCULATION

Castle Vale Stadium is a purpose built football stadium providing first class facilities:

- Home and Away Changing Rooms
- Separate officials changing facilities
- 300 Seated Spectator Accommodation
- Private, well stocked bar (100 capacity)
- Brand New state of the art FIFA Accredited 3G Pitch (100m x 64m)
- FIFA Accredited Floodlighting
- Turnstile Access
- On site catering facilities

As this site has less than 500 seat capacity there is no need for it to be licensed by the local authority, with this in mind the Guide to safety at Sports grounds has been used to calculate the capacity for the facility.

The following calculations have been used to establish figures for:

- Entry Capacity
- Holding Capacity
- Exit Capacity
- Emergency Evacuation Capacity
- Final capacity

ENTRY CAPACITY

This figure has been based upon using 2 x turnstiles and 1 x entry point

Turnstile capacity 660 people per turnstile per hour

$$2 \times 660 = \mathbf{1320}$$

Entry Point 1 at gate 1 will be utilised for disabled and less abled spectators to enter along, with anyone with prams/pushchairs.

This point will have a permanent steward for both ingress and egress and in case of emergency evacuation. Maximum entry per hour at this point **180** (this entry point will be used as an additional entry point should it be obvious that there is a larger than normal crowd anticipated).

Total Entry Capacity 1500

HOLDING CAPACITY

Holding capacity is split into 2 elements:

1. Seated
2. Standing

and also has to take into account a control factor for:

- Physical Condition p
 - Safety managements
- And has a value from 0.0 (low) to 1.0 (high)

1. Seated

300 seats available

$p = 0.9$

$s = 0.9$

Seating Capacity $300 \times 0.9 = 270$

2. Standing

No barriers therefore set levels to minimum risk with a maximum depth of 1.5 metres (4people deep)

Length of spectator run 280m

Available standing area 420 sq. metres

Allowed 47 people per 10 sq. metres

Therefore $42 \times 47 = 1974$

$P = 0.9$

$S = 0.9$

Standing capacity $1974 \times 0.9 = 1766$

Total Holding Capacity = 2306

EXIT CAPACITY

There are 2 identifiable main exits, one is 2.3 metres wide, the other 4.6 metres wide. After conducting a fire risk assessment, it is recommended that the smaller exit be excluded from this exercise as it is adjacent to the catering outlet.



82 spectators per metre per minute

$4.6 \times 82 = 377$ spectators per minute

In 8 minutes the one exit could cope with a capacity of 3016

Exit Capacity 3016

With a capacity set at 1500 the estimated time to clear the stadium would be 4 minutes.

Place of safety will be the main stadium car park

Fire risk is low – no smoking facility

Main risk is from kitchen

All gates to be stewarded at all times

Entry Capacity	1500
Holding Capacity	2306
Exit Capacity	3016
Emergency Exit Capacity	3016
Final Capacity	1500