

Ground Floor Plan

Fire Evacuation Key		
Existing wall to achieve min 30 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor	Fire Escape Route	<u>Sprinklers</u> System design and installed in compliance with BS EN 12845:2015 & LPC Technical Bulletins
Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor	Minimum Clear Widths 1050 min	Fire Alarm Fire Alarm designed and installed to BS 5839. Smoke & heat detection / emergency lighting by specialist. Please refer to M&E engineer's drawings / specifications.
New wall to achieve min of 30min fire rating	0 Exit No.	Escape Lighting Emergency escape lighted designed and installed in accordance with BS 5266: Part 1. Please refer to M&E Engineer's drawings for final layout and specification.
New wall to achieve min of 60min fire rating	Shared Escape Route	Smoke Extract Smoke Extract System to be designed and installed in accordance with BS 7346: Part 8. Please refer to M&E Engineer's drawings for final layout and specification.
Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant construction.		Escape Signage and emergency lighting is CDP under the M&E specification. Details of contractors proposals to be provided to Building Control Approved Inspector and Fire Officer within the Contractors Proposals Package, Clause 1.4
Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.		

NOTE:

- Proposals must comply with all acoustic, fire & building regulation
- No dimensions are to be scaled from this drawing. The contractor is responsible for checking all dimensions on site

Escape Route Widths

In line with Section 2.9.8 of the Technical Handbook - Non Domestic, the aggregate unobstructed width in mm of all escape routes from a room, or storey, should be at least 5.3 x the occupancy capacity of the room or storey.

Ground Floor
Aggregate Clear Opening Width of Escape Routes Calculation:
Final Fire Exit D2, clear opening width = 1050mm
Final Fire Exit D19, clear opening width = 1064mm

Total Aggregate Width for Ground Floor 2114mm(Less Largest Opening Width 1064mm from Fire Exit D19) =

Ground Floor Maximum Occupancy Capacity = 1050 / 5.3 = 198 people
The maximum escape capacity of the Ground Floor = 198 persons. The target occupancy of the gym is 70

persons based on the sanitary provisions and is therefore thought to meet with Section 2.9.8 of The Technical Handbook.

Escape Distance and Angle of Divergence

<u>Position A</u>
Total escape distance to nearest Final Exit 1 =14.7m This is less than maximum travel distance of 15m thus complies

Position B

Total escape to nearest Final Exit 1 = 21.6m

Distance before divergence is 13.5m

A.O.D to be > (2.5 X 13.5)+45 = 78.7°

Drawn A.O.D = 136° thus complies

<u>Position C</u> Total escape to nearest Final Exit 1 = 25.1m A.O.D to be > (2.5 X 15)+45 = 82.5° Drawn A.O.D = 90° thus complies

<u>Position D</u> Total escape to nearest Final Exit D19 = 21m

A.O.D to be > (2.5 X9.1)+45 = 67.7°

Distance before divergence is 9.1m Drawn A.O.D = 89° thus complies

