

Escape Route Widths: Escape Route Widths: Escape Route with Sections 3.21 & 3.22 of 'Approved Document Part B, To provide justification for the class appearance of the start of the class appearance of the start of the start

Existing wall to achieve min 30 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor

Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor

New wall to achieve min of 30min fire rating

New wall to achieve min of 30min fire rating

New wall to achieve min of 60min fire rating

New wall to achieve min of 60min fire rating

From New wall to achieve min of 60min fire rating

From New wall to achieve min of 60min fire rating

From New walls, floors, ceilings and doors to achieve 30minute fire resistant construction.

FDXX

Fire Door Rating

All perimeter edges of mezzanine to be appropriately fire stopped to create compartment floor and protect mezzanine structure Suspended Ceiling Ht: 2.60 FL: 53.86m —Refuge call point to be installed Wall Ht. Full Height 17.5m SINGLE DIRECTION POINT D POINT C 13.7m SINGLE DIRECTION TOTAL 33.1m POINT B Refuge call-point to be Extent of lift shaft TB(upon strip out works. 60Min walls to be tied into existing structure 🖁 FL: 52.06m -----**FL: 53.66m** Ceiling Ht: 2.59

Escape Route Widths:
In line with Sections 3.21 & 3.22 of 'Approved Document Part B, Volume 2 - buildings other than dwellinghouses' - the adjacent calculations provide justification for the clear opening widths for escape from each floor level/room in accordance with Table 4 & Appendix C.

Ground Floor

Exit a Clear Opening Width = 1338mm (constrained by Speedgates exit c, 1060mm) (allows 222 persons to escape)

Exit 2 Clear Opening Width = 1392mm (largest opening to be discounted) (allows 288 persons to escape)

Total Aggregate Width for Floor (Less Largest Opening Width of 1392mm from Exit 2) = 1060mm

Total Ground Floor Estimated Occupancy Capacity = 222 Persons

Mezzanine Floor
Exit 4 Clear Opening Width = 1338mm (constrained by Speedgates exit c, 1060mm)(allows 222 persons to escape)
Exit 5 Clear Opening Width = 1065mm (allows 223 persons to escape) (largest opening discounted)
Total Aggregate Width for Floor (Less Largest Opening Width of 1065mm from Exit 2) = 1060mm

Total Mezzanine Floor Estimated Occupancy Capacity = 222 Persons

Merging Flows

Exit 1 caters for the Ground Floor Exit a and Mezzanine Floor Exit 4 and allows the combined occupants of both floors to escape. Due to the fixed nature of the speedgates this is the narrowest point and thereby constrains the occupancy through to a max of 222 persons based on the 1060mm large opening (the single lane is 585mm and therefore unable to be used for occupancy purposes – even though during an alarm activation it would be open). Occupancy is therefore limited at each exit to 111 persons to each floor. For this reason the Occupancy should be limited to 222 persons

Based on an NIA of 11452sqft the Puregym Average occupancy target is 218 persons Calculated using Puregym Fire Safety Occupancy Forecast Tool

The designed occupancy of the unit as calculated would allow a max. No. of 222 persons to escape, which is larger than the total estimated occupancy capacity of 218 persons and is therefore thought to meet with the Approved Document Part B. To allow free movement between the floors the occupancy has not been split 50/50% but rather allows for occupancy based on gym stations and functions assuming that a high percentage of the total occupancy could be on a single floor at one time.

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.

Specifications.

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. 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

Fire Stopping
All perimeter edges of mezzanine to be appropriately fire stopped to create compartment floor and protect mezzanine structure. All services/drainage penetrations passing through fire rated compartment floor to be fire collared/sealed.

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