



Proposed Mezzanine Floor Fire Evacuation Plan

## Fire Evacuation Key

Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site Occupany level within area by Pure Gym Main Contractor New wall to achieve min of 60min fire rating Fire Escape Route Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant Minimum Clear Widths construction. Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction. Shared Escape Route

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 = 1320mm (allows 264 persons to escape) (based upon 5mm per person).

Exit B Clear Opening Width = 1710mm (largest opening to be discounted)

Total Aggregate Width for Ground Floor (Less Largest Opening Width of 1710mm from Exit B) =1320mm Ground Floor Total Estimated Occupancy Capacity = 80 Persons

Taking into account the clear opening width of Exit A (after discounting Exit B) this would allow a max. No. of 264 persons to escape in case of an emergency. This is larger than the total estimated occupancy of 80 Persons and is therefore thought to meet with the Approved Document Part B.

First Floor
Exit C Clear Opening Width = 1320mm (allows 264 persons to escape)

First Floor Total Estimated Occupancy Capacity = 60 Persons

Taking into account the clear opening width of Exit C this would allow a max. No. of 264 persons to escape in case of an emergency. The limiting factor in the escape route is the staircase width in the protected stairway. Even when taking this into consideration this is sufficient to accommodate 240 persons which is larger than the total estimated first floor occupancy of 61 Persons and is therefore thought to meet with the Approved Document Part B. Where the final point of escape at ground floor is located the speed gates provide a combined clear width of 1525mm which is sufficient to take the combined occupancy of both the Ground and First Floor in the eventuality that the Exite B is discounted from the assessment. The Speed gates are linked to the Fire Alarm and in the event of an evacuation would default to an open position.

Sprinklers
System design and installed in compliance with BS EN 12845:2015 & LPC Technical Bulletins

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.

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.

A 10.01.19 Functional Area updated following Operations & Commercial Feedback. Server room relocated to rear of building. FR of Cleaners and Break room enclosing walls annotated as 60min with 30min Fire Doors following feedback from Morgan Hereford
Maplin, Holmer Road, Hereford, HR4 9SB, Herefordshire
Proposed Fire Evacuation Plan
Ground & Mezzanine Floor 1:100@A1 IA-SBF-009 XX-003-FEP CONSTRUCTION Pure Gym Ltd Town Centre House The Merrion Centre