



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 DR1, clear opening width = 1300mm Final Fire Exit DR4, clear opening width = 1050mm Final Fire Exit DR6, clear opening width = 1000mm

Total Aggregate Width for Ground Floor 3350mm(Less Largest Opening Width 1300mm from Fire Exit DR1) = 2050mm

Ground Floor Maximum Occupancy Capacity = 2050/ 5.3 = 386 people First Floor

Aggregate Clear Opening Width of Escape Routes Calculation: Storey Exit DR9, leading to Final Fire Exit DR4 at GF level = 924mm

Total Aggregate Width for First Storey 924mm

First Floor Maximum Occupancy Capacity = 924 / 5.3 = 174 people Due to use of a single mean of escape from first level, occupancy from first level is restricted to 60 person in accordance with Section 2.9.7 of the Technical Handbook - Non Domestic. This will be achieved by 24/7 CCTV monitoring and on-site staff management.

386

60

446

Combined Occupancy Provision

Ground floor maximum occupancy: First floor maximum occupancy: Total occupancy provision:

Based on PG existing occupancy data of comparable sites, the average total occupancy of a Pure Gym at this size will NOT exceed 70 people (including staff), which is smaller than the max. no of 446 persons (see calculation above) and is therefore thought to meet with the Section 2.9 of Technical Handbook - Non Domestic.

Escape Distance and Angle of Divergence

Position A Total escape distance to nearest Final Exit DR4 = 13.7m The total escape distance is less than 15m and thus complies.

<u>Position B</u> Total escape distance to nearest Final Exit DR4 = 7.4m

The total escape distance is less than 15m and thus complies.

<u>Position C</u> Total escape distance to nearest Final Exit DR4 = 9.5m The total escape distance is less than 15m and thus complies.

<u>Position D</u> Total escape to nearest Final Exit DR6 = 19.2m Distance before divergence is 2.7m A.O.D to be > (2.5 X 2.7)+45 = 51.75° Drawn A.O.D = 157° thus complies

<u>Position E</u> Total escape to nearest Final Exit DR9 = 12.3m

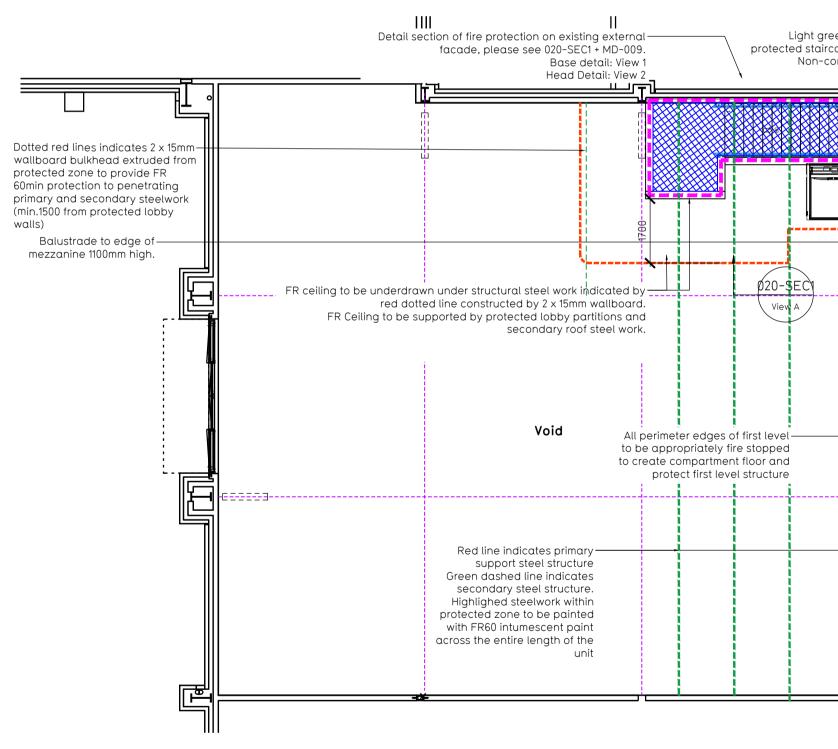
The total escape distance is less than 15m and thus complies.

<u>Position F</u> Total escape to nearest Final Exit DR9 = 10.6m

The total escape distance is less than 15m and thus complies.

Fire Evacuation Key

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 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
 Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor	1 050 min	Minimum Clear Widths
 New wall to achieve min of 30min fire rating	0	Exit No.
 New wall to achieve min of 60min fire rating		Shared Escape Route
Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant construction.		
Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.		



Proposed First Floor Plan

<u>Sprinklers</u> 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.

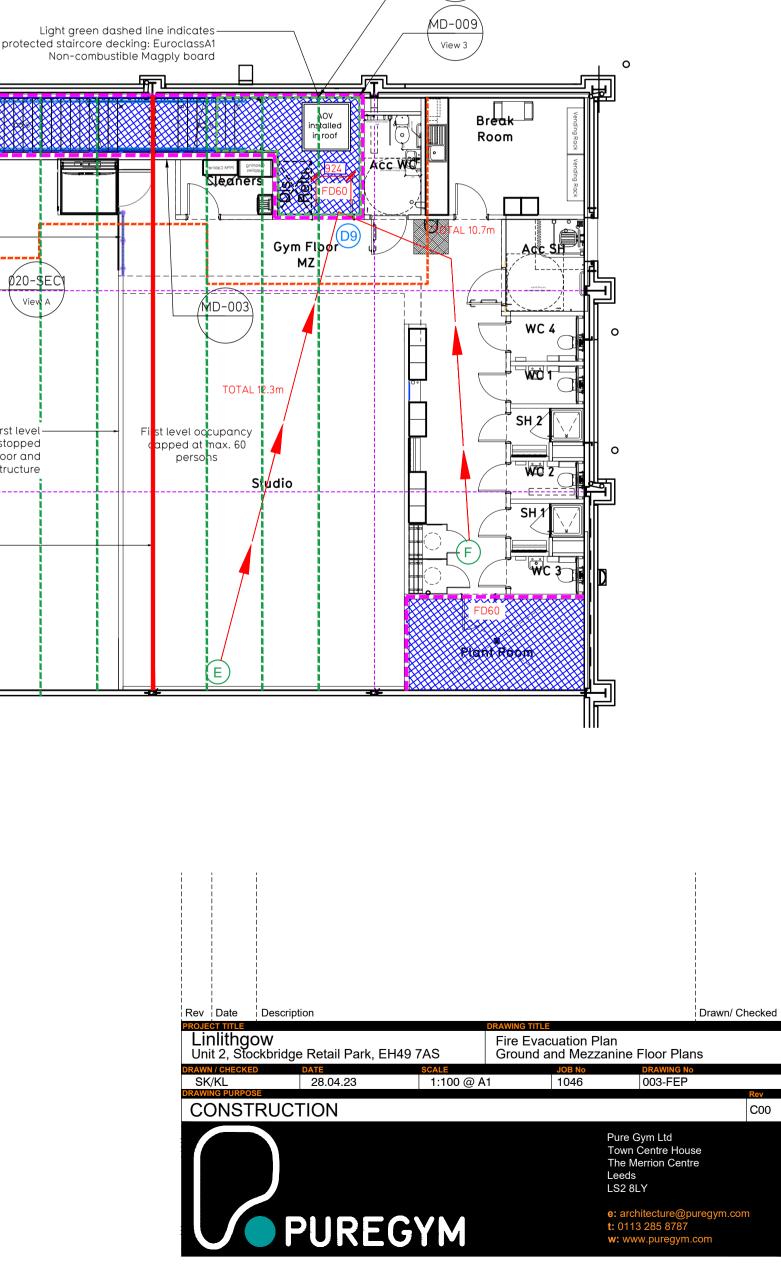
Escape Lighting Emergency escape lighted designed and installed in accordance with BS 5266: Part 1. Please refer to M&E Engineer's drawings for final layout and specification.

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.

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 DELETE ABOVE SECTIONS AS NECCESSARY DEPENDING UPON WHETHER RELEVANT TO SITE AND DELETE THIS TEXT

NOTE:

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



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