

Proposed 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	<b>→</b>	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	1050 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.		

## 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

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 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

- 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

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

Final Fire Exit D18, clear opening width = 1050mm Final Fire Exit EX2, clear opening width = 1010mm

Total Aggregate Width for Ground Floor 3110(Less Largest Opening Width 1050mm from Fire Exit D2) = 2060mm Ground Floor Maximum Occupancy Capacity = 2060 / 5.3 = 388 people

The maximum escape capacity of the Ground Floor = 388 persons. The target occupancy of the gym is 200 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 to nearest Final Exit D1 = 26.3m Distance before divergence is 13.1m A.O.D to be > (2.5 X 13.1)+45 = 77.75° Drawn A.O.D = 161° thus complies

<u>Position B</u> Total escape to nearest Final Exit D18 = 29.7m Distance before divergence is 9.5m A.O.D to be > (2.5 X 9.5)+45 = 68.75°

Drawn A.O.D = 80° thus complies

<u>Position D</u>
Total escape distance to nearest Final Exit Door D18 =6.3m This is less than the maximum travel distance of 12m and thus

Position E
Total escape distance to nearest Final Exit Door D18 =8.9m This is less than the maximum travel distance of 12m and thus complies.

<u>Position F</u> Total escape distance to nearest Final Exit Door EX1 = 6.4m This is less than the maximum travel distance of 12m an thus

C01 24.05.23 Vending updated. Water fountain relocated. Rev Date Description Fire Evacuation Plan Ground Floor Plans Unit 4 Dumfries Retail Park, Dumfries DG2 0NU 1:100 @ A1 CONSTRUCTION

