Escape Route Widths

the room or storey.

Mezzanine Floor

Combined Occupancy Provision

Ground floor maximum occupancy:
Mezzanine floor maximum occupancy:

Total occupancy provision:

Ground Floor

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

Aggregate Clear Opening Width of Escape Routes Calculation:

Total Aggregate Width for Ground Floor 7038mm(Less Largest Opening Width 1060mm from Fire Exit DR2) = 2858mm

Aggregate Clear Opening Width of Escape Routes Calculation: Storey Exit DR11, leading to Final Fire Exit DR4 at GF level = 865mm Storey Exit DR19, leading to Final Fire Exit DR9 at GF level = 1050mm Total Aggregate Width for Mezzanine Floor 1915mm(Less Largest Opening Width 1050mm from Fire Exit DR19) = 865mm

Mezzanine Floor Maximum Occupancy Capacity = 865 / 5.3 = 198

Based on PG existing occupancy data of comparable sites, the

with the Section 2.9 of Technical Handbook - Non Domestic.

Escape Distance and Angle of Divergence

Total escape to nearest Final Exit DR1 = 31.5m

Position G
Total escape to nearest Final Exit DR11 = 24.6m
Distance before divergence is 13.1m
A.O.D to be > (2.5 X 13.1)+45 = 77.75°
Drawn A.O.D = 133° thus complies

Position H
Total escape to nearest Final Exit DR19 = 22.2m
Distance before divergence is 14.8m
A.O.D to be > (2.5 X 14.8)+45 = 82.00°
Drawn A.O.D = 86° thus complies

Distance before divergence is 12.8m A.O.D to be > (2.5 X 12.8)+45 = 77°

Drawn A.O.D = 136° thus complies

proposed max occupancy of a Pure Gym at this size will be unlikely to exceed 300 people, which is smaller than the max. no of 737 persons (see calculation above) and is therefore thought to meet

Total escape distance to nearest Final Exit DR1 = 14.0m thus complies

Total escape distance to nearest Final Exit DR3 = 11.7m thus complies

Position D Total escape distance to nearest Final Exit DR5 = 9.8m thus complies

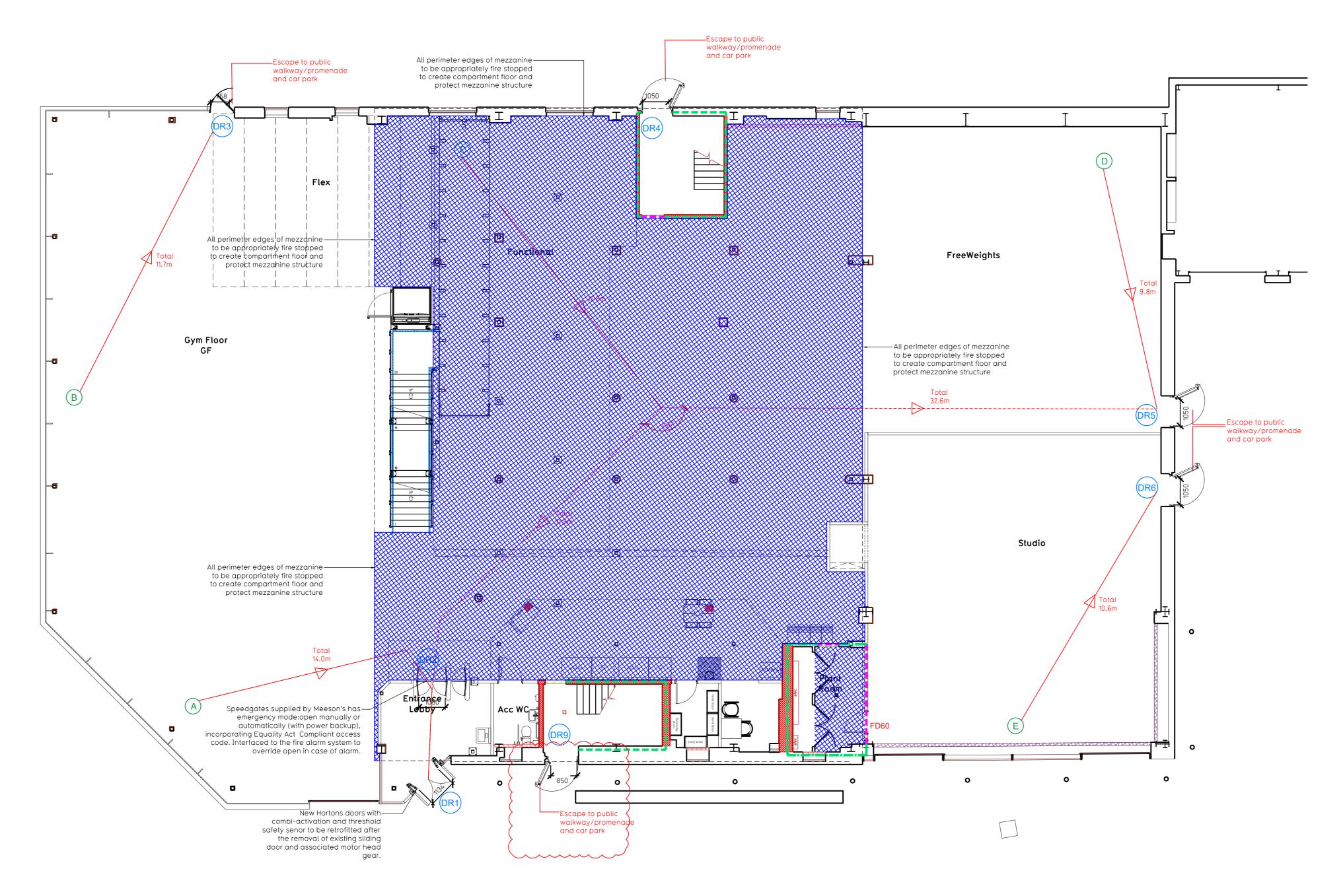
Position E Total escape distance to nearest Final Exit DR6 = 10.6m thus complies

Total escape distance to nearest Final Exit DR11 = 9.4m thus complies

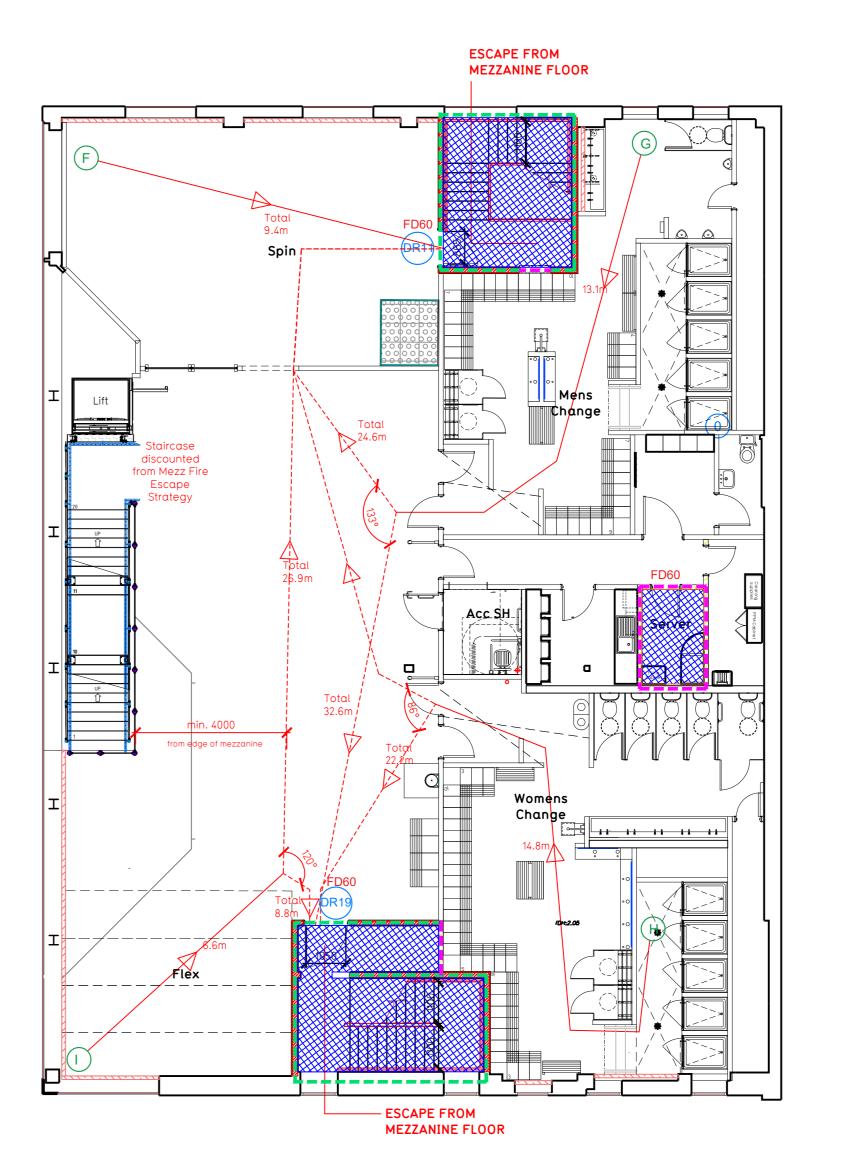
Position I
Total escape distance to nearest Final Exit DR19 = 8.8m thus complies

Ground Floor Maximum Occupancy Capacity = 2858/ 5.3 = 539 people

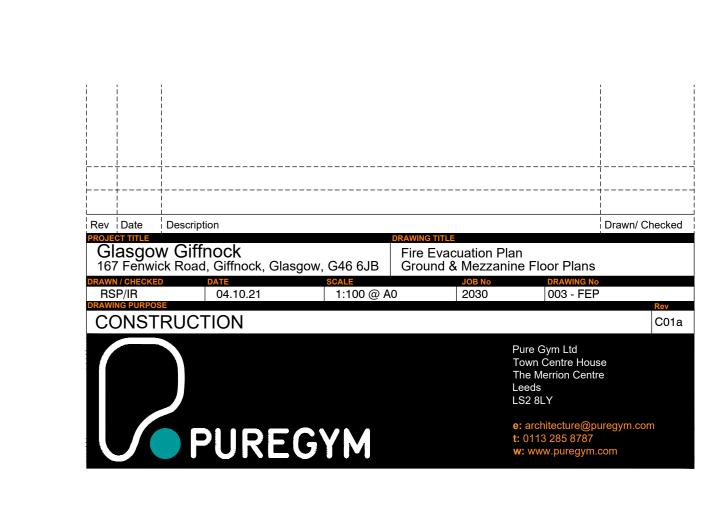
Final Fire Exit DR2, clear opening width = 1060mm Final Fire Exit DR3, clear opening width = 758mm Final Fire Exit DR5, clear opening width = 1050mm Final Fire Exit DR6, clear opening width = 1050mm

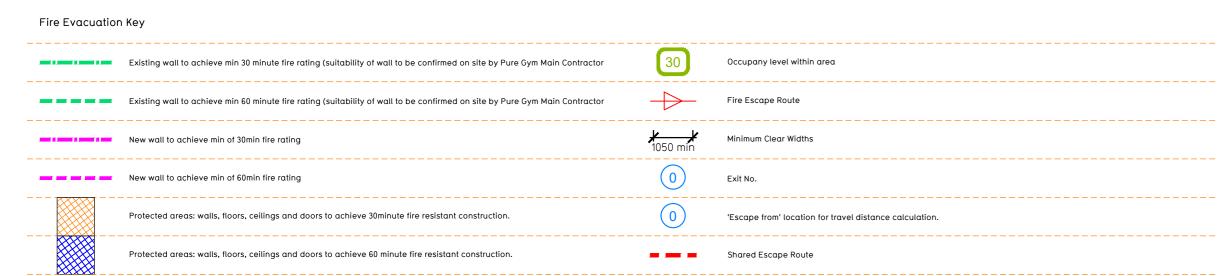


Proposed Ground Floor Plan



Proposed Mezzanine Floor Plan





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, provided at Stage 2.

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 provided at Stage 2.