Fire Evacuation Key		
eFR30	Existing wall to achiev	
eFR60	Existina wall to achiev	

eFR30	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
eFR60	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
FR30	New wall to achieve min of 30min fire rating	0	Exit No.
FR60	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.	FD30 / FD60	Fire Door Rating - 30min. / 60min.
	Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.	FDKS / AFDKC / FDKL	Fire Door Signage - Fire Door Keep Shut / Automatic Fire Door Keep Clear / Fire Door Keep Locked

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 - is a split level with 1no exit to both levels (each is limited to a single direction of escape and 60 people per level
Exit D2 Clear Opening Width = 1060mm (allows up to 222 persons to escape)
Exit D3 Clear Opening Width (limited at intermediate door to D4) = 1170mm (allows up to 244 persons to escape, largest opening to be discounted)
Total Ground Floor Total Estimated Occupancy Capacity = 120 Persons

First Floor

Exit D6 Clear Opening Width (limited by D5 Final Exit) = 1094mm (allows 228 persons to escape)

Exit D7 Clear Opening Width (limited at intermediate door to D4) = 1170mm (allows 244 persons to escape, largest opening to be discounted)

Total Aggregate Width for First Floor (Less Largest Opening Width of 1170 mm from EXIT D7) = 1094mm.

First Floor Total Estimated Occupancy Capacity = 228 Persons

Second Floor

Exit D8 Clear Opening Width (limited at intermediate door to D4) = 1170mm (allows 244 persons to escape, largest opening to be discounted)

Exit D9 Clear Opening Width (limited at staircase)= 900mm (allows 110 persons to escape)

Total Aggregate Width for Second Floor (Less Largest Opening Width of 1170 mm from EXIT D8) = 900mm.

Second Floor Total Estimated Occupancy Capacity = 110 Persons

Based on NIA of 11999sqft, the PureGym max peak occupancy target = 207 persons Calculated using PureGym Fire Safety Occupancy Levels Forecast Tool. Both stair cores have merging flows. The primary core from the Ground, First and Second Floors and the secondary core from First and Second floors, W=((N/2.5)+(60S))/80 must therefore be used.

For Core 01 - N = 60 people, S is 1.5m and the final exit door achieves 1506mm, more than the 1.5m required. This is limited by an intermediate door of 1.17m (on door intermediate door D3 - D4), but forms an existing situation that will not be made worse by the works, so is thought to be

For Core 02 - N = 228, S is 1.1m and the final exit door achieves 1094mm. The distance from the SF stair to the FF exit and top of stair is more than 2m however the restricted stair and final exit does not achieve the approximate 1.965m clear for merging flows. In practice this core is limited to 228 persons, with a max of 110 persons from SF and the remainder of 118 persons from FF. This is an existing scenario and as such will not be made worse by the works, so thought to be acceptable. To allow free movement between floors the occupancy has not been split 50/50% but rather allows for occupancy based on gym stations and function assuming that a high percentage of the total occupancy could be on a single floor at one time.

The designed occupancy of the unit as calculated would allow a max. No. of 458 persons, which is larger than the total estimated occupancy target of 207 persons and is therefore thought to meet with Approved Document Part B. 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. Fire Stopping
All penetrations through stair cores to be appropriately fire stopped to create protected compartment and protect escape routes. All services/drainage penetrations passing through fire rated compartment floors to be fire collared/sealed. 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 prior to start on site, Clause 1.4 Guildford MBF

14 - 16 Friary Street, Guildford, Surrey, GU1 4EH

Fire Evacuation Plan

Ground, First and Second Floors Plans CONSTRUCTION

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