

Bomba rejected my plans!

Shortcomings and reasons for rejection

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Why are my plans rejected?

Two reasons:

1. Insufficient information

2. Incorrect DESIGN

Design

Primary compliance

1. Uniform Building By-Laws
2. Malaysian Standards 1183:2015
3. Notices, Guidelines and Directives issued by JBPM



a publication of

PERTUBUHAN AKITEK MALAYSIA

Quick Reference Guide to Compliance
With Fire Safety Requirements Under
The UBBL 84

PAM PRACTICE NOTES

June 2002

Serial No : 3-2002

QUICK REFERENCE GUIDE TO COMPLIANCE WITH FIRE SAFETY REQUIREMENTS UNDER THE UBBL 84

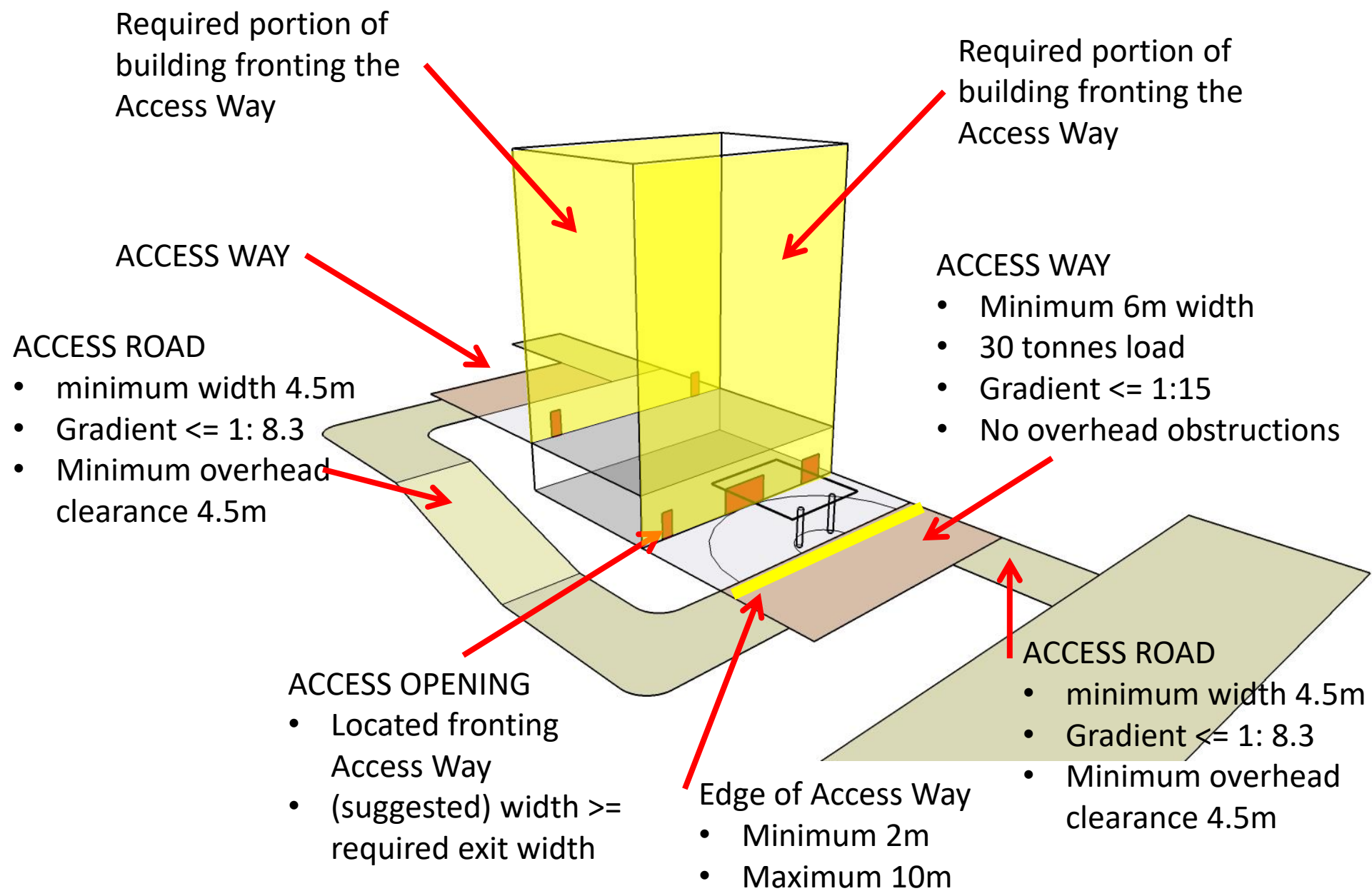
1. Establish Usage / Purpose Group (By-law 134) 5th Schedule for Building.
2. At Schematic Design, establish size and volume of the building. This gives perimeter extent necessary for access of fire fighting appliances (By-law 140).
3. Establish permissible limits of dimensions of building and compartments (By-law 136, 5th Schedule).
4. Re-check perimeter with regard to 6th Schedule (By-laws 142 & 145) to establish extent of unprotected openings allowed or to establish sufficiency of setback.
5. Use 10th Schedule (By-laws 225, 237) to establish fire extinguishment requirements, alarm systems and emergency lighting.
6. After 5 above, establish compliance with maximum travel distances allowable under the 7th Schedule.
7. Using Schematic plan areas and purpose grouping calculate the Occupant Load and capacity of exits to ensure adequacy. Check sufficiency minus one staircase (By-laws 174, 175, 176, 177, 178, 179, 180 and 181).

To indicate in submission drawings

- Purpose Group
- Fire Appliance Accessway
- Compartmentation
- 6th Schedule calculation
- Active Systems
- Travel distance and exit routes
- Exit Capacity Calculation

8. Check placement or position of exits using maximum permissible distances (By-laws 165, 166, 167, 170).
9. Check dead ends, 45° to alternate route, occupancy of last room, etc. (mezzanine floor).
10. Check need for ventilation, smoke lobby or pressurisation of staircases (By-laws 196, 197, 198, 199, 200, 201).
11. Locate Fire Fighting Appliances. (Dry riser, wet riser, hose reel, alarms, breeching inlets, tanks, pumps, gen sets, etc.). Locate Control Panel / Room.
12. If multiple lift cores are used, check Fire Lifts and fire fighting access lobbies (By-law 229(2)) Ht > 18.3m. Check distance between cores (45.75m max).
13. Check internal and external finishes to comply with the 8th Schedule (Restriction of Spread of Flames over surface of wall and ceilings).
14. For single staircase buildings, refer to By-law 194.
 - i) Office or residential purpose only.
 - ii) Only ground floor can be used as shops.
 - iii) Top most floor of building must not exceed 12m height.

- Storey, horizontal and Final Exits
- Travel distance
- Ventilation of protected shaft
- Active systems
- Fire Fighting Access Lobby
- Surface Finishes
- Single Stair : details of compliance



Required portion of building fronting the Access Way

Required portion of building fronting the Access Way

ACCESS WAY

ACCESS WAY

ACCESS ROAD

- minimum width 4.5m
- Gradient $\leq 1: 8.3$
- Minimum overhead clearance 4.5m

- Minimum 6m width
- 30 tonnes load
- Gradient $\leq 1:15$
- No overhead obstructions

ACCESS OPENING

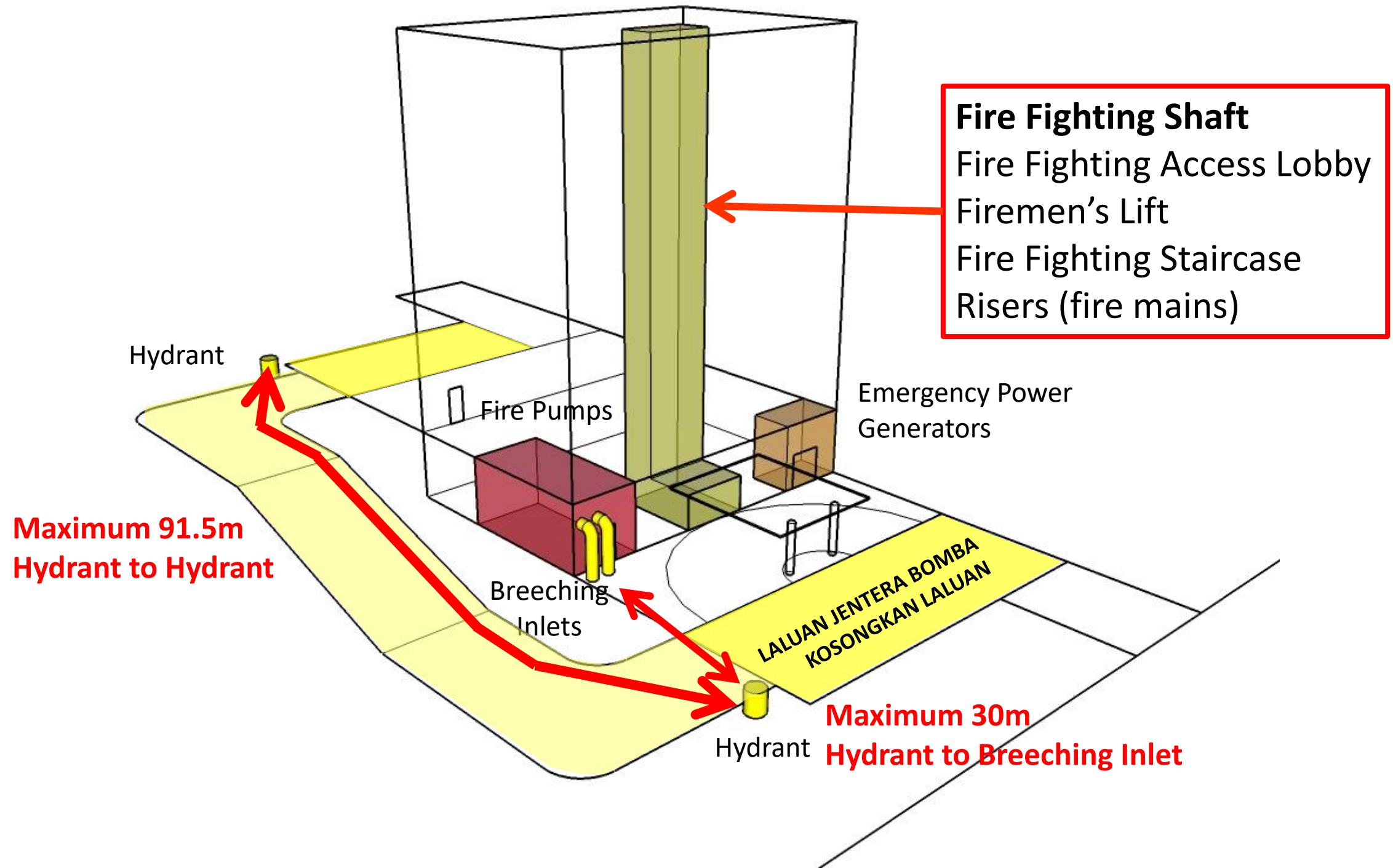
- Located fronting Access Way
- (suggested) width \geq required exit width

ACCESS ROAD

- minimum width 4.5m
- Gradient $\leq 1: 8.3$
- Minimum overhead clearance 4.5m

Edge of Access Way

- Minimum 2m
- Maximum 10m



FIRE FIGHTING SHAFTS : LOCATION

Direct distance (radius)

Risers (UBBL 230, 231)

All parts of floor within **45m** from a landing valve

Fire Fighting Access Lobbies (UBBL 197A)

Level distance from furthestmost point does not exceed **45m**

Route distance

Fire Lifts (UBBL 197A)

Not more than **61m** travel distance from furthestmost point

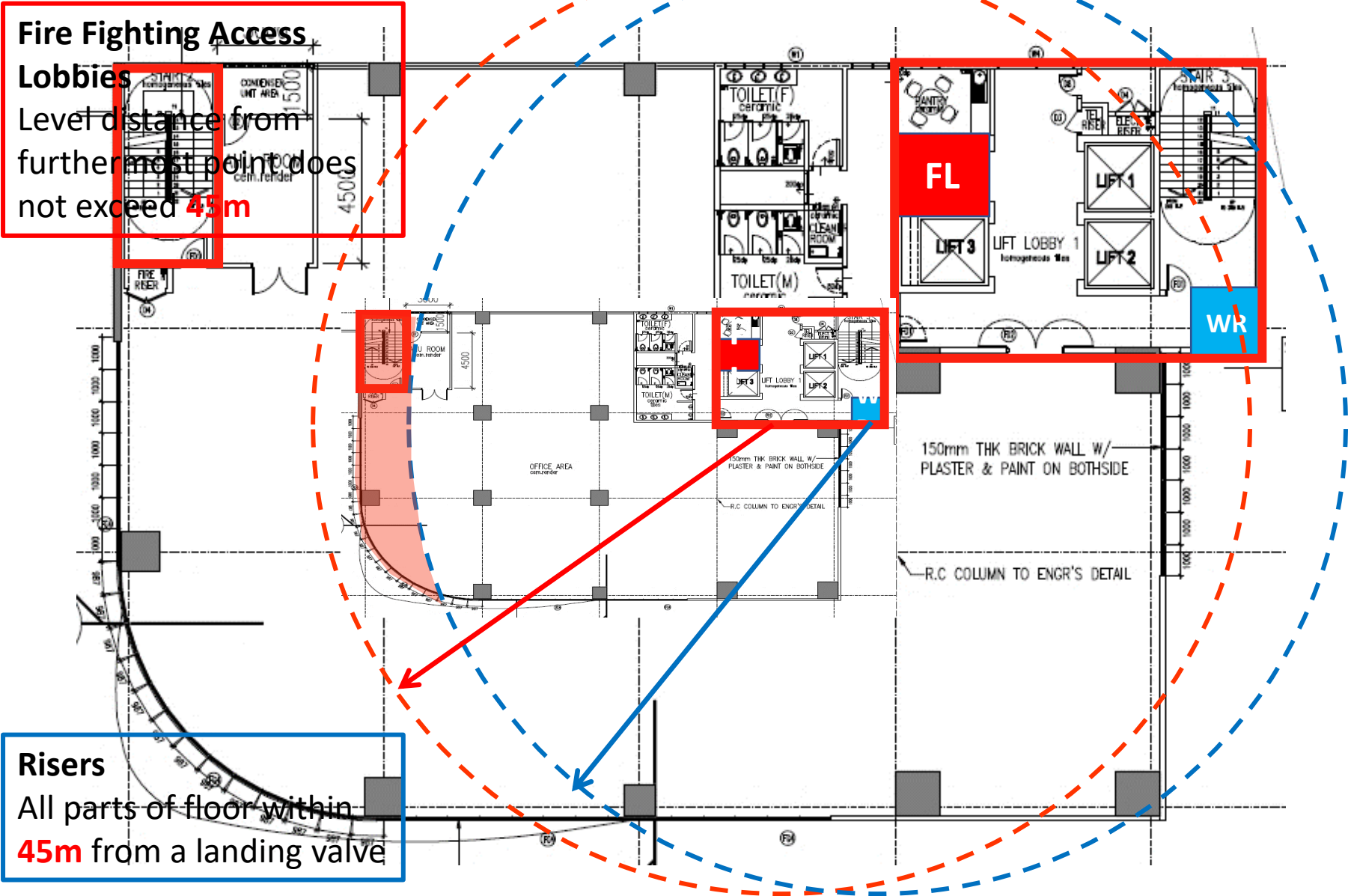
Fire Fighting Shafts (MS1183 21.2.3)

With Fire Lift, no more than **61m** from fire mains outlet measured on route in laying a hose

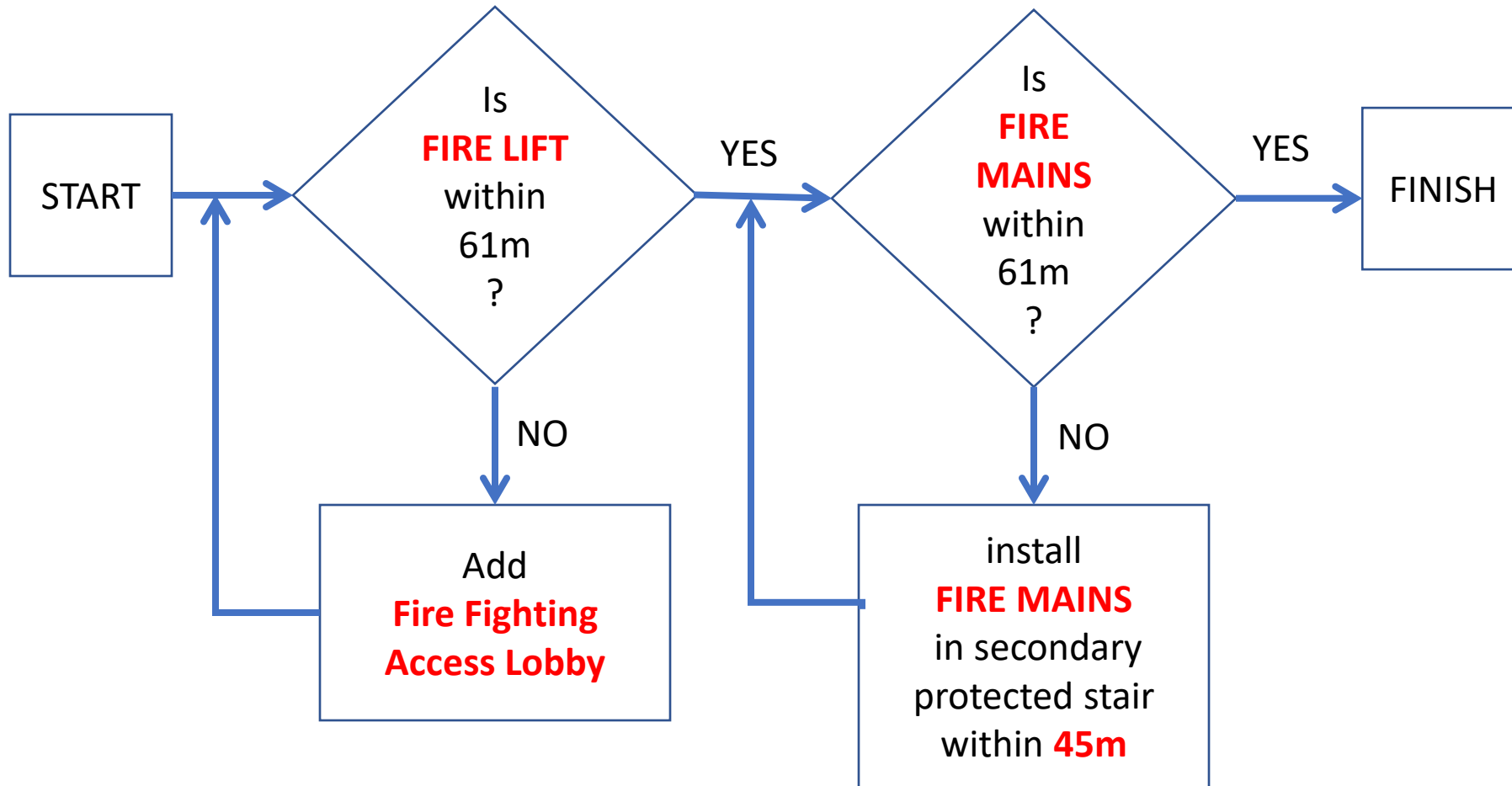
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Without Fire Lift, no more than **45m** from fire mains outlet measured on route in laying a hose

FIRE FIGHTING SHAFTS : LOCATION check with DIRECT DISTANCE

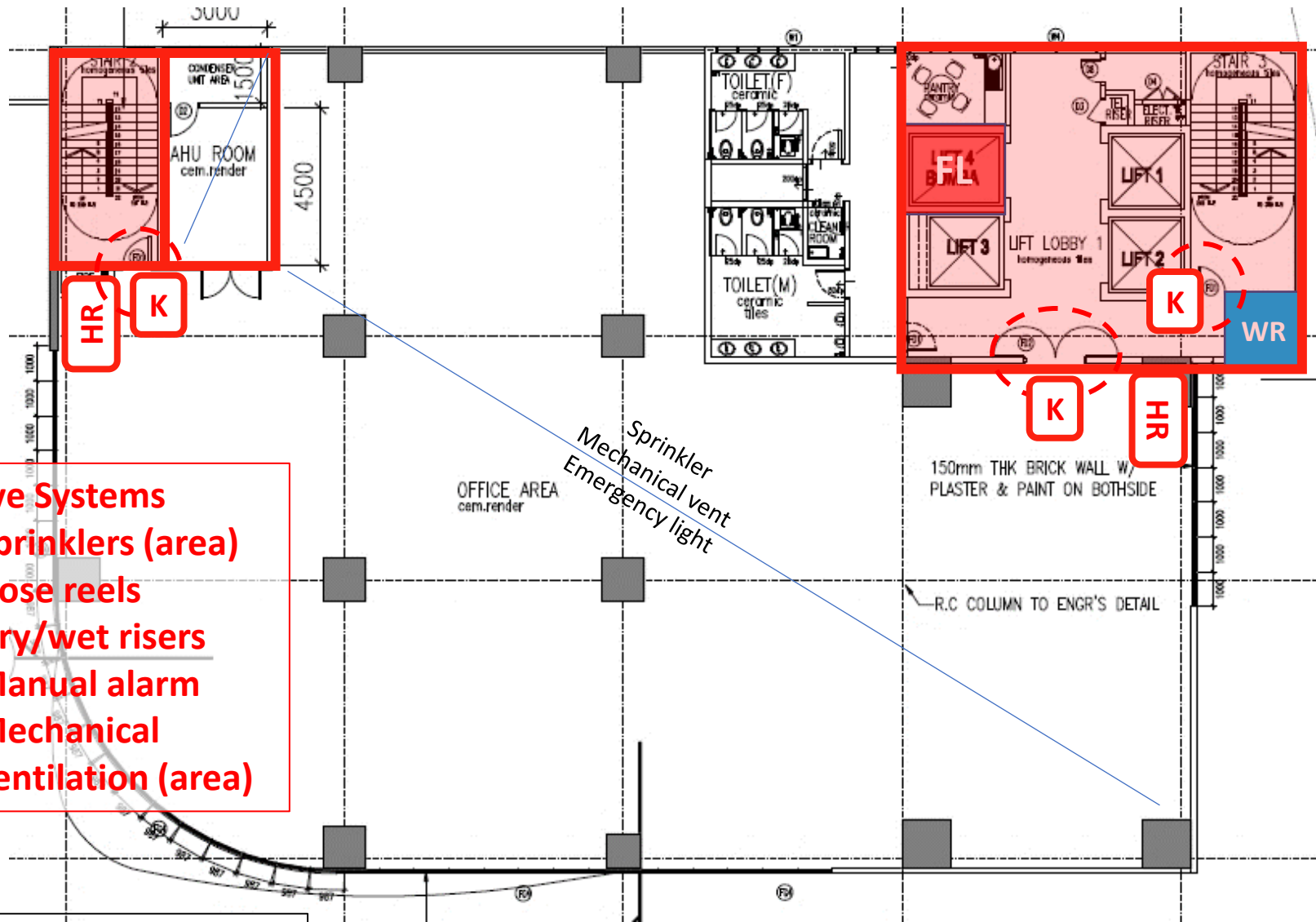


FIRE FIGHTING SHAFTS : LOCATION check with ROUTE DISTANCE



Information

- Site plan
- Fire Appliance Access Level
- Floor plans
- Building Sections
- Calculations and tabulations



- Active Systems**
- Sprinklers (area)
 - Hose reels
 - Dry/wet risers
 - Manual alarm
 - Mechanical ventilation (area)

- Fire Fighting Lift Lobby**
- Bomba Lift
 - Protected Stair
 - Riser

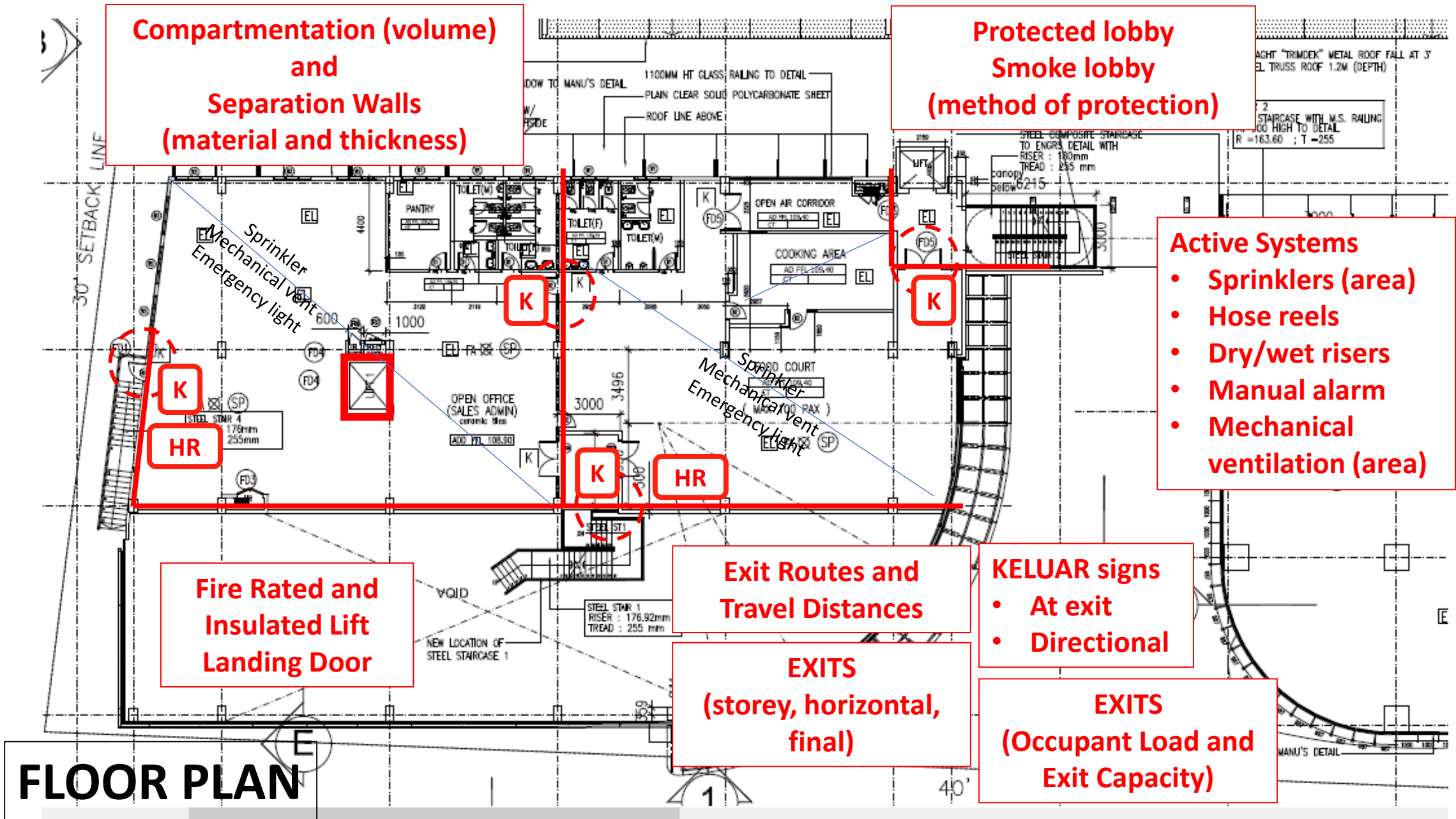
- Exit Routes and Travel Distances**

- EXITS**
(storey, horizontal, final)

- EXITS**
(Occupant Load and Exit Capacity)

- KELUAR signs**
- At exit
 - Directional

FLOOR PLAN

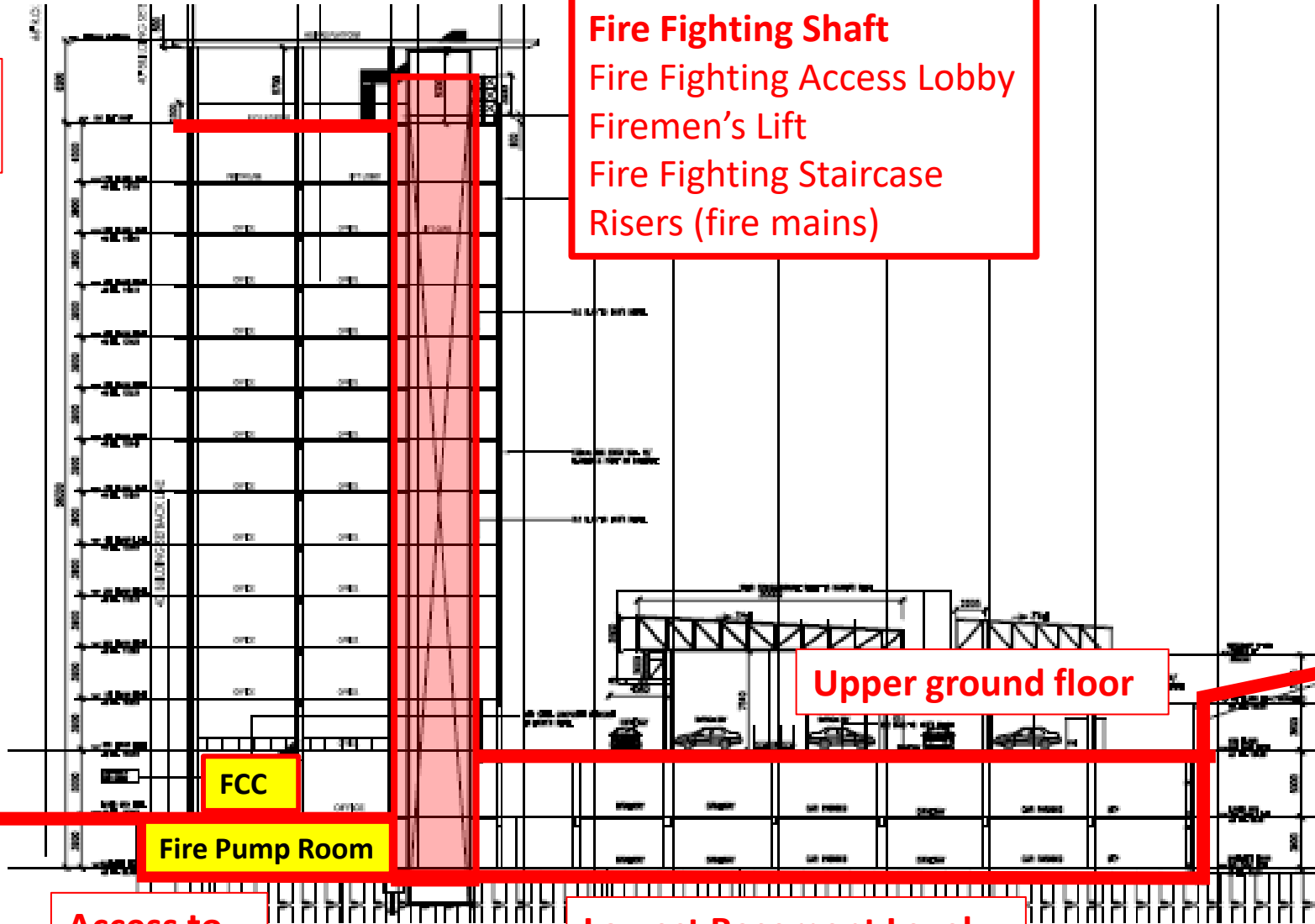


Topmost floor
Level

Fire Command
Centre

Fire Appliance
Access Level

SECTION



Fire Fighting Shaft
Fire Fighting Access Lobby
Firemen's Lift
Fire Fighting Staircase
Risers (fire mains)

Upper ground floor

FCC
Fire Pump Room

Access to
Fire Pump
Room

Lowest Basement Level

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