

4. Application of Fire Protection Systems

4.2. Super Highrise Building Fire Protection Systems

Table 9.18.: Super Highrise Building Fire Protection Systems

| CATEGORY | SYSTEM REQUIREMENTS | COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES |
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| B. SUPER HIGHRISE BUILDING WITH PLOT AREA LESS THAN 20,000 M² OR C. WHERE SUPER HIGHRISE BUILDING IS PROVIDED WITH YARD HYDRANT SYSTEM, IRRESPECTIVE OF PLOT AREA, AS PART OF INFRASTRUCTURE DEVELOPMENT | <ul style="list-style-type: none"> i. Sprinklers shall be provided throughout the building including basements and podiums (open as well as closed) as per Section 3.5. ii. Auxiliary rooms and various areas of the building shall be protected as per Table 9.30. iii. The wet riser System shall be provided throughout the building as per Section 3.4. iv. Wet risers shall be provided with High Zones and Low zones according to pressure limitations as per Table 9.6.13. v. Wet risers shall be interconnected both at the lowest level and at the highest level of each zone. vi. A multi level Pump set arrangement shall be provided every 90 m height from the lowest fire pump set level as per Table 9.6.13. | <ul style="list-style-type: none"> vii. The capacity of the first fire pump set at the lowest level of the building shall be 1000 gpm (Irrespective of the number of standpipes) at 17 bar. viii. The water tank at the lowest level of the building shall have a capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breeching inlet for refill and instantaneous refilling arrangement for the utility supply.. ix. The capacity of the upper level pump sets located at every 90 m intervals from the lowest level fire pump, shall be 750 gpm if there are 2 standpipes and 1000 gpm if there are more than 2 standpipes, at pressure as required to satisfy 6.9 bar at the most remote landing valve. x. Fire water tank shall be provided for every upper level pump sets (At every 90 m intervals). Such upper level water tanks shall be for 30 minutes operation, complete with automatic low water level detection, instantaneous refilling arrangement, pumping and piping to refill tanks from lower levels. |