

4.3. Highrise Building Fire Protection Systems

- 4.3.1.** Highrise building having building height of more than 23 m but less than 90 m, of any occupancy classification shall be provided with Fire protection Systems in compliance with **Table 9.19.** and Auxiliary Rooms Fire Protection Systems as per **Table 9.30**

Table 9.19.: Highrise Building Fire Protection Systems

CATEGORY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
A. HIGHRISE BUILDING HAVING HEIGHT OF MORE THAN 45 M BUT BELOW 90 M FROM LOWEST PUMP SET LEVEL AND PLOT AREA EXCEEDING 20,000 M²	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. The wet risers shall be provided with looped High Zones and Low zones according to the pressure limitations as per Table 9.6.13. v. Wet risers shall be interconnected both at lowest level and at the highest level of each zone. vi. Yard Fire Hydrants shall be provided as per Section 3.11. vii. Yard hydrants shall not be required where infrastructure yard hydrants are available within 60 m of such towers. Tapping from existing yard hydrant network shall be permitted to extend the yard hydrants to comply with coverage requirements.	viii. Where a fire pump set is combined and serves yard hydrants and internal building systems, the capacity of the fire pump set shall be 1000 gpm (Irrespective of number of stairs) at pressure as required to satisfy 6.9 bar at the most remote landing valve. ix. Where a fire pump set is combined and serves yard hydrants and internal building systems, the combined water tank shall have capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breeching inlet for refilling and instantaneous refilling arrangement for the utility supply.
B. HIGHRISE BUILDING HAVING HEIGHT OF MORE THAN 45 M BUT BELOW 90 M FROM LOWEST PUMP SET LEVEL AND PLOT AREA LESS THAN 20,000 M²	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. A wet riser System shall be provided throughout the building as per Section 3.4. iv. The wet risers shall be provided with High Zones and Low zones according to pressure limitations as per Table 9.6.13. v. The wet risers shall be interconnected both at lowest level and at the highest level of each zone.	vi. The capacity of the fire pump set 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. vii. Water tank shall have capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breeching inlet for refilling and instantaneous refilling arrangement for the utility water supply.