4. Application of Fire Protection Systems

4.2. Super Highrise Building Fire Protection Systems

4.2.1. Super Highrise buildings having a building height greater than 90 m, of any occupancy classification shall be provided with Fire protection Systems in compliance with **Table 9.18.** and Auxiliary Rooms Fire Protection Systems as per **Table 9.30.**

Table 9.18.: Super Highrise Building Fire Protection Systems

CATEGORY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
A. SUPER HIGHRISE BUILDING WITH PLOT AREA EXCEEDING 20,000 M^2	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.** vii. Yard Fire Hydrants shall be provided where the plot area exceeds 20,000 m^2 , as per **Section 3.11.** viii. 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.	ix. Where a fire pump set is combined and serves both yard hydrants and internal building systems, the capacity of the first fire pump set at the lowest level of the building shall be 1000 gpm (Irrespective of number of stairs and standpipes) at 17 bar. x. Where a fire pump set is combined and serves both yard hydrants and internal building systems, the combined 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. xi. Where a fire pump set only serves internal building systems, the capacity of the pump sets located vertically at every 90 m intermediate 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. xii. 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.