

4.4. Midrise Building Fire Protection Systems

- 4.4.4.** Midrise buildings (Detention and Correctional, Prisons) having a building height from more than 15 m to less than 23 m shall be provided with Fire protection Systems in compliance with **Table 9.20.d.**, and Auxiliary Rooms Fire Protection Systems as per **Table 9.30.**

Table 9.20.d.: Midrise Building Fire Protection Systems

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
A. DETENTION AND CORRECTIONAL GROUP A, B, C.	<u>1. FOR CELLS AND INMATES AREAS</u> i. Pre-action type Sprinklers shall be provided throughout as per Section 3.7.	vii. 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 standpipes) at a pressure as required to satisfy 6.9 bar at the most remote landing valve and the hydrant.
	<u>2. FOR AREAS OTHER THAN CELLS AND INMATES AREAS</u> 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 interconnected at the highest level. v. Yard Fire Hydrants shall be provided as per Section 3.11. vi. 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 serves yard hydrants and internal building systems, the combined water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breaching inlet for refilling and instantaneous refilling arrangement for utility water supply. ix. Where a fire pump set serves only internal building systems, the capacity of the fire pump set shall be 750 gpm if building has 2 standpipes and 1000 gpm if the building has more than 2 standpipes. Pressure shall be as required to satisfy 6.9 bar at the most remote landing valve. x. Where a fire pump set serves only internal building systems, the water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breaching inlet for refilling and instantaneous refilling arrangement for utility water supply.