

4.5. Lowrise Building Fire Protection Systems

- 4.5.1.** Lowrise buildings having building height of up to 15 m and low depth underground buildings or basements shall be provided with Fire protection Systems in compliance with **Table 9.21.a.** and Auxiliary Rooms Fire Protection Systems as per **Table 9.30.**

Table 9.21.a: Lowrise Building Fire Protection Systems

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
A. ASSEMBLY GROUP A, B, C. B. EDUCATION GROUP A, B, C. C. HEALTHCARE GROUP A, D. MERCANTILE GROUP A, B E. HOTEL GROUP A, B, C. F. DAY CARE GROUP A, B, C. G. MIXED AND MULTIPLE OCCUPANCIES H. LOW DEPTH UNDERGROUND BUILDINGS OR BUILDINGS WITH 2 OR LESS BASEMENTS	4. IF PLOT AREA IS MORE THAN 20,000 m² i. Sprinklers, hose reels or and wet risers shall be provided throughout the building including basements and podiums (open as well as closed) in accordance with Table 9.21.a. 1., 2., or 3., as applicable. ii. Auxiliary rooms and various areas of the building shall be protected as per Table 9.30. iii. Yard Fire Hydrants shall be provided as per Section 3.11. iv. Yard hydrants shall not be required where infrastructure yard hydrants are available within 60 m of such building. Tapping from existing yard hydrant network shall be permitted to extend the yard hydrants to comply with coverage requirements. In this scenario, requirements of Table 9.21.a.4.i. shall apply.	4. IF PLOT AREA IS MORE THAN 20,000 m² v. 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 stand-pipes at pressure as required to satisfy 6.9 bar at the most remote landing valve and hydrant valve. vi. Where fire pump set is combined and serves yard hydrants and internal fire systems, the combined water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breeching inlet and instantaneous refilling arrangement.