

Table 9.27.: Storage, Warehouse and Industrial Fire Protection Systems

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
E. MULTI TENANT INDUSTRIES, AND FACTORIES (EXTRA HAZARD, GROUP 2 CATEGORY ACTIVITIES AS PER DEFINITION 1.1.13.5.a.)	1. IF TOTAL GROUND FLOOR BUILT-UP AREA IS LESS THAN 3600 m² i. Sprinklers shall be provided throughout the facility as per Section 3.5. ii. The sprinkler design density shall be 0.40 gpm with area of sprinkler operation of 2500 ft ² (232 m ²). iii. Hose Reel System shall be provided throughout the building as per Section 3.3. iv. Dry landing valves and risers shall not be required.	1. IF TOTAL GROUND FLOOR BUILT-UP AREA IS LESS THAN 3600 m² v. The capacity of the fire pump set shall be 1000 gpm at pressure as required to satisfy 4.5 bar at the most remote Hose reel outlet valve. vi. The water tank shall have capacity of 60 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.
	2. IF SUM OF ALL GROUND FLOOR BUILT-UP AREAS IS MORE THAN 3600 m² i. Sprinklers shall be provided throughout the facility as per Section 3.5. ii. Sprinkler design density shall be 0.40 gpm with area of sprinkler operation of 2500 ft ² (232 m ²). iii. Yard Fire Hydrants shall be provided as per Section 3.11. , in a loop to cover the entire facility. iv. Hose Reel System shall be provided throughout the building as per Section 3.3. v. Wet risers and internal landing valves shall not be required.	4. IF SUM OF ALL GROUND FLOOR BUILT-UP AREAS IS MORE THAN 3600 m² vi. The capacity of the fire pump set shall be 1500 gpm at a pressure as required to satisfy 6.9 bar at the most remote Hydrant valve. vii. The water tank shall have capacity of 120 minutes of operation, complete with low water level detection, dedicated direct breaching inlet and instantaneous refilling arrangement.