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

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
M. WAREHOUSE **PLASTIC, RUBBER,**	**1. IF TOTAL BUILT-UP GROUND FLOOR AREA OF THE COMPARTMENT IS LESS THAN 230 m^2** i. Hose Reel System shall be provided throughout the building as per **Section 3.3.** ii. Dry landing valves and risers shall not be required.	**1. IF TOTAL BUILT-UP GROUND FLOOR AREA OF THE COMPARTMENT IS LESS THAN 230 m^2** iii. The fire pump capacity shall be 50 gpm at a pressure of 4.5 bar available at the remote Hose reel valve. iv. The water tank shall have a capacity of 60 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.
	2. IF TOTAL BUILT-UP GROUND FLOOR AREA OF THE COMPARTMENT IS 230 m^2—900 m^2 i. Sprinklers shall be provided throughout the facility as per **Section 3.5.** ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD.,and 9.7.EE.** iii. Hose Reel System shall be provided throughout the building as per **Section 3.3.** Dry landing valves are not required.	**2. IF TOTAL BUILT-UP GROUND FLOOR AREA OF THE COMPARTMENT IS 230 m^2—900 m^2** iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD., and 9.7.EE.** at a pressure as required to satisfy 4.5 bar at the most remote Hose reel valve. v. The water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, direct breeching inlet and instantaneous refilling arrangement.
	3. IF TOTAL BUILT-UP GROUND FLOOR AREA IS 901 m^2 - 3600 m^2 i. Sprinklers shall be provided throughout the facility as per **Section 3.5.** ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD.,and 9.7.EE.** iii. Hose Reel System shall be provided throughout the building as per **Section 3.3.** Dry landing valves are not required.	**3. IF TOTAL BUILT-UP GROUND FLOOR AREA IS 901 m^2 - 3600 m^2** iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD.,and 9.7.EE.** at a pressure as required to satisfy 4.5 bar at the most remote hose reel valve. v. The water tank shall have a capacity of 90 minutes of operation, complete with low water level detection, direct breeching inlet and instantaneous refilling arrangement.
	4. IF SUM OF ALL GROUND FLOOR BUILT-UP AREAS IS MORE THAN 3600 m^2 i. Sprinklers shall be provided throughout the facility as per **Section 3.5.** ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD., and 9.7.EE.** 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. A dry riser and wet riser System shall not be required.	**4. IF SUM OF ALL GROUND FLOOR BUILT -UP AREAS IS MORE THAN 3600 m^2** vi. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with **9.7.X., 9.7.DD.,and 9.7.EE.** at a pressure as required to satisfy 6.9 bar at the most remote Hydrant valve. vii. The water tank shall have a capacity of 90 minutes of operation, complete with low water level detection, direct breeching inlet and instantaneous refilling arrangement.