

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

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
O. WAREHOUSE  ROLLED PAPER	<b>1. IF TOTAL BUILT-UP FLOOR AREA OF THE COMPARTMENT IS LESS THAN 230 m<sup>2</sup></b>  i. Hose Reel System shall be provided throughout the building as per <b>Section 3.3.</b> ii. Dry landing valves and risers shall not be required.	<b>1. IF TOTAL BUILT-UP FLOOR AREA OF THE COMPARTMENT IS LESS THAN 230 m<sup>2</sup></b>  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 45 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.
	<b>2. IF TOTAL BUILT-UP FLOOR AREA OF THE COMPARTMENT IS 230 m<sup>2</sup>—900 m<sup>2</sup></b>  i. Sprinklers shall be provided throughout the facility as per <b>Section 3.5.</b> ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> iii. Hose Reel System shall be provided throughout the building as per <b>Section 3.3.</b> Dry landing valves are not required.	<b>2. IF TOTAL BUILT-UP FLOOR AREA OF THE COMPARTMENT IS 230 m<sup>2</sup>—900 m<sup>2</sup></b>  iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> 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 and instantaneous refilling arrangement.
	<b>3. IF TOTAL BUILT-UP FLOOR AREA IS 901 m<sup>2</sup> - 3600 m<sup>2</sup></b>  i. Sprinklers shall be provided throughout the facility as per <b>Section 3.5.</b> ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> iii. Hose Reel System shall be provided throughout the building as per <b>Section 3.3.</b> Dry landing valves are not required	<b>3. IF TOTAL BUILT-UP FLOOR AREA IS 901 m<sup>2</sup> - 3600 m<sup>2</sup></b>  iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> 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.
	<b>4. IF SUM OF ALL GROUND FLOOR BUILT-UP AREAS IS MORE THAN 3600 m<sup>2</sup></b>  i. Sprinklers shall be provided throughout the facility as per <b>Section 3.5.</b> ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> iii. Yard Fire Hydrants shall be provided as per <b>Section 3.11.</b> , in a loop to cover the entire facility. iv. Hose Reel System shall be provided throughout the building as per <b>Section 3.3.</b> v. A dry riser and wet riser System shall not be required.	<b>4. IF SUM OF ALL GROUND FLOOR BUILT-UP AREAS IS MORE THAN 3600 m<sup>2</sup></b>  vi. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with <b>Table 9.7.GG.</b> 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.