

## 4.8. Parking Facilities Fire Protection Systems

**4.8.1.** Parking facilities shall be provided with fire protection systems in compliance with **Table 9.24.** and Auxiliary Rooms Fire Protection Systems as per **Table 9.30.**

**Table 9.24.: Parking Facility Fire Protection Systems**

OCCUPANCY	SYSTEM REQUIREMENTS	FIRE PUMP AND FIRE WATER TANK CAPACITIES
<b>A. PARKING GROUP A , ENCLOSED PARKING STRUCTURE</b>	<b><u>1. IF BUILT-UP GROUND FLOOR AREA IS UP TO 900 M<sup>2</sup> AND STRUCTURE HEIGHT IS UP TO 15 M (LOWRISE)</u></b> <ol style="list-style-type: none"> <li>A dry riser + Hose Reel System shall be provided throughout the building as per <b>Section 3.2. and Section 3.3.</b></li> <li>Dry risers shall be interconnected at the highest level.</li> </ol>	<b><u>1. IF BUILT-UP GROUND FLOOR AREA IS UP TO 900 M<sup>2</sup> AND STRUCTURE HEIGHT IS UP TO 15 M (LOWRISE)</u></b> <ol style="list-style-type: none"> <li>The capacity of the fire pump set shall be 50 gpm at a pressure as required to satisfy 4.5 bar at the most remote Hose reel outlet valve.</li> <li>The water tank shall have a capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.</li> </ol>
	<b><u>2. IF BUILT-UP GROUND FLOOR AREA IS 901 M<sup>2</sup> TO 3600 M<sup>2</sup> AND STRUCTURE HEIGHT IS UP TO 15 M (LOWRISE)</u></b> <ol style="list-style-type: none"> <li>Sprinklers shall be provided throughout the parking structure as per <b>Section 3.5.</b></li> <li>Auxiliary rooms and various areas of the building shall be protected as per <b>Table 9.30.</b></li> <li>A dry riser + Hose Reel System shall be provided throughout the building as per <b>Section 3.2. and Section 3.3.</b></li> <li>Dry risers shall be interconnected at the highest level.</li> </ol>	<b><u>2. IF BUILT-UP GROUND FLOOR AREA IS 901 M<sup>2</sup> TO 3600 M<sup>2</sup> AND STRUCTURE HEIGHT IS UP TO 15 M (LOWRISE)</u></b> <ol style="list-style-type: none"> <li>The capacity of the fire pump set shall be 300 gpm at a pressure as required to satisfy 4.5 bar at the most remote Hose valve.</li> <li>The water tank shall have a capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.</li> </ol>
	<b><u>3. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 3600 M<sup>2</sup> OR STRUCTURE HEIGHT EXCEEDS 15 M (MIDRISE AND ABOVE)</u></b> <ol style="list-style-type: none"> <li>Sprinklers shall be provided throughout the Parking structure as per <b>Section 3.5.</b></li> <li>Auxiliary rooms and various areas of the building shall be protected as per <b>Table 9.30.</b></li> <li>A wet riser System shall be provided throughout the building as per <b>Section 3.4.</b></li> <li>Wet risers shall be interconnected at the highest level.</li> </ol>	<b><u>3. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 3600 M<sup>2</sup> OR STRUCTURE HEIGHT EXCEEDS 15 M (MIDRISE AND ABOVE)</u></b> <ol style="list-style-type: none"> <li>The capacity of the fire pump set shall be 750 gpm if there are 2 standpipes, 1000 gpm if there are more than 3 standpipes at a pressure as required to satisfy 6.9 bar at the most remote landing valve.</li> <li>The water tank shall have capacity of 60 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.</li> </ol>