

4.7. Villa Fire Protection Systems

- 4.7.1.** Private and Commercial Villas shall be provided with Fire protection Systems in compliance with **Table 9.23.** and Auxiliary Rooms Fire Protection Systems, if any, shall be as per **Table 9.30.**

Table 9.23.: Private and Commercial Villa Fire Protection Systems

OCCUPANCY	SYSTEM REQUIREMENTS	FIRE PUMP AND FIRE WATER TANK CAPACITIES
A. PRIVATE VILLA	<p><u>1. Though it is not mandatory, it is highly recommended to consider providing automatic sprinklers throughout private villas irrespective of built-up area.</u></p>	<p>1.a. Domestic type and residential type sprinkler systems, with domestic water tank are acceptable.</p> <p>1.b. Fire Pump and/or Fire water tank shall be permitted to be installed on the roof, if structure is capable of accommodating such additional load.</p>
	<p><u>2. IF GROUND FLOOR BUILT-UP AREA IS MORE THAN 1500 m²</u></p> <p>i. Sprinklers shall be provided throughout the building including basements (open as well as closed) as per Section 3.5.</p> <p>ii. Hose Reel System shall be provided throughout the basement and ground floor as per Section 3.3.</p> <p>iii. Dry landing valves and risers shall not be required.</p> <p>iv. For Commercial developments, Fire Pump Room and Fire water tank are developer's responsibility and shall be provided at developer's facility management service block or areas.</p>	<p><u>2. IF GROUND FLOOR BUILT-UP AREA IS MORE THAN 1500 m²</u></p> <p>v. The capacity of the fire pump set shall be 250 gpm at pressure as required to satisfy 4.5 bar at the most remote Hose reel outlet valve.</p> <p>vi. The water tank shall have capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.</p>
	<p><u>3. IF BASEMENT FLOOR BUILT-UP AREA IS MORE THAN 1500 m²</u></p> <p>i. Sprinklers shall be provided throughout the basements (open as well as closed) as per Section 3.5.</p> <p>ii. Hose Reel System shall be provided throughout the basement and ground floor as per Section 3.3.</p> <p>iii. Dry landing valves and risers shall not be required.</p> <p>iv. For Commercial developments, Fire Pump Room and Fire water tank are developer's responsibility and shall be provided at developer's facility management service block or areas.</p>	<p><u>3. IF BASEMENT FLOOR BUILT-UP AREA IS MORE THAN 1500 m²</u></p> <p>v. The capacity of the fire pump set shall be 250 gpm at pressure as required to satisfy 4.5 bar at the most remote Hose reel outlet valve.</p> <p>vi. The water tank shall have capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.</p>