

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, if any, Fire Protection Systems 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 |
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| B. COMMERCIAL VILLA | <p>1. <u>Though it is not mandatory, it is highly recommended to consider providing automatic sprinklers throughout the villas irrespective of built-up area.</u></p> <p>2. <u>ALL COMMERCIAL VILLA DEVELOPMENTS HAVING PLOT AREA OF 20,000 m² OR MORE</u></p> <p>i. Yard Fire Hydrants shall be provided as per Section 3.11.</p> | <p>1.a. Domestic type and residential type sprinkler systems shall be permitted.</p> <p>2. <u>ALL COMMERCIAL VILLA DEVELOPMENTS HAVING PLOT AREA OF 20,000 m² OR MORE</u></p> <p>ii. The capacity of the fire pump set shall be 1000 gpm at pressure as required to satisfy 6.9 bar at the most remote hydrant outlet valve.</p> <p>iii. The water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, dedicated direct breeching inlet and instantaneous refilling arrangement.</p> |
| | <p>3. <u>IF GROUND FLOOR BUILT-UP AREA OF COMMERCIAL VILLA 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>4. <u>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>3. <u>IF GROUND FLOOR BUILT-UP AREA OF COMMERCIAL VILLA 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>vii. Where infrastructure yard hydrants are provided, the required villa sprinkler system shall be permitted to be fed by the yard hydrant pumpset and water.</p> <p>4. <u>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> |