

4.5. Lowrise Building Fire Protection Systems

- 4.5.4.** Lowrise existing villas converted to commercial outlets shall be provided with Fire protection Systems in compliance with **Table 9.21.d.** and Auxiliary Rooms Fire Protection Systems as per **Table 9.30.**

Table 9.21.d.: Lowrise Building Fire Protection Systems

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
A. EXISTING VILLAS (G+1) CONVERTED TO NURSERIES, CLINICS, DAY CARE CENTERS, RESTAURANTS, SHOW ROOMS, BOUTIQUES OR SUCH COMMERCIAL OUTLETS	<u>1. IF BUILT-UP GROUND FLOOR AREA IS LESS THAN 900 M² IRRESPECTIVE OF NUMBER OF STAIRS</u> i. Fire Extinguishers as per Chapter 4.	<u>1. IF BUILT-UP GROUND FLOOR AREA IS LESS THAN 900 M² IRRESPECTIVE OF NUMBER OF STAIRS</u> NA
	<u>2. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 900 M² BUT TWO EXIT STAIRS ARE AVAILABLE</u> i. Fire Extinguishers as per Chapter 4.	<u>2. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 900 M² BUT TWO EXIT STAIRS ARE AVAILABLE</u> NA
	<u>3. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 900 M² AND SECOND EXIT STAIR IS NOT AVAILABLE</u> i. It is highly recommended to the owner to consider providing second exit stair externally from first floor. OR ii. It is highly recommended to consider providing automatic sprinkler system throughout the building including basements as per Section 3.5. and Hose Reel System as per Section 3.3.	<u>3. IF BUILT-UP GROUND FLOOR AREA IS MORE THAN 900 M² AND SECOND EXIT STAIR IS NOT AVAILABLE</u> iii. Where automatic sprinkler system is considered, the capacity of the fire pump set shall be 250 gpm with pressure of 4.5 bar available at most remote hose reel outlet. iv. The water tank shall have capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement. v. Fire Pump and/or Fire water tank shall be permitted to be installed on the roof, if existing structure is capable of accommodating such additional load.