

7. Fire Protection System Requirements

7.1. Fire protection systems for marinas shall comply with **Table 20.5.**

Table 20.5.: Marinas Fire Protection Systems

OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
1. PIERS AND WHARVES	<p><u>1. PIERS AND WHARVES</u></p> <ul style="list-style-type: none"> i. Yard hydrant system shall be provided along the wharves and piers as per Chapter 9. Section 3.11. ii. No pier, wharf or building portion shall be in excess of 60 m from a yard hydrant. iii. Hydrant network need not be looped. iv. Trolley type foam fire extinguishers shall be provided along the marinas at 60 m intervals. v. The equipment and cabinet shall be approved for outdoor application. <p><u>2. BUILDINGS ON PIERS AND WHARVES HAVING TOAL BUILT UP-AREA MORE THAN 230 m² AND/OR BUILT-UP AREA OF INDIVIDUAL BUILDING IS MORE THAN 46 m² OR BUILDINGS ARE LESS THAN 9 m FROM ADJACENT BUILDING</u></p> <ul style="list-style-type: none"> i. Automatic sprinklers shall be provided in all buildings as per Chapter 9. Section 3.5. ii. The sprinkler design density shall be 0.30 gpm with area of sprinkler operation of 2500 ft² (232 m²). iii. Dry riser or Hose reel system shall not be required. 	<p><u>1. PIERS AND WHARVES</u></p> <ul style="list-style-type: none"> i. The capacity of the fire pump set for hydrant system shall be 1000 gpm at a pressure as required to satisfy 6.9 bar at the most remote hydrant valve. ii. The water tank shall have a capacity of 90 minutes of operation, complete with low water level detection and instantaneous refilling arrangement. <p><u>2. BUILDINGS ON PIERS AND WHARVES HAVING TOAL BUILT UP-AREA MORE THAN 230 m² AND/OR BUILT-UP AREA OF INDIVIDUAL BUILDING IS MORE THAN 46 m² OR BUILDINGS ARE LESS THAN 9 m FROM ADJACENT BUILDING</u></p> <ul style="list-style-type: none"> i. The fire pump and fire water tank feeding hydrant system in accordance with Table 20.3.1.1. shall be sufficient to serve the sprinkler system. ii. Where there is danger of damage to sprinkler, piping or equipment by floating objects, physical barrier shall be provided to exclude such objects.
2. COVERED PIERS AND WHARVES	<p><u>1. COVERED PIERS AND WHARVES</u></p> <ul style="list-style-type: none"> i. Yard hydrant system shall be provided along the wharves and piers as per Chapter 9. Section 3.11. ii. No area shall be in excess of 60 m from a yard hydrant. iii. Hydrant network need not be looped. iv. Automatic sprinklers shall be provided in covered piers and wharves as per Chapter 9. Section 3.5. v. The sprinkler design density shall be 0.30 gpm with area of sprinkler operation of 2500 ft² (232 m²). vi. Dry riser or Hose reel system shall not be required. vii. Trolley type foam fire extinguishers shall be provided along the fire access road at 120 m intervals. viii. The equipment and cabinet shall be approved for outdoor application. 	<p><u>1. COVERED PIERS AND WHARVES</u></p> <ul style="list-style-type: none"> i. The capacity of the fire pump set for hydrant system shall be 1000 gpm at a pressure as required to satisfy 6.9 bar at the most remote hydrant valve. ii. The water tank shall have a capacity of 90 minutes of operation, complete with low water level detection and instantaneous refilling arrangement. iii. Where there is danger of damage to sprinkler, piping or equipment by floating objects, physical barrier shall be provided to exclude such objects. iv. Sprinklers shall be of corrosion-resistant type.