

Table 9.27.: Storage, Warehouse and Industrial Fire Protection Systems

OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
P. COLD STORAGE (STORAGE FACILITIES WITH BELOW 4°C TEMPERATURES)	1. IF TOTAL BUILT-UP FLOOR AREA IS LESS THAN 230 m² i. Hose Reel System shall be provided throughout the building as per Section 3.3 . ii. Dry landing valves and risers shall not be required.	1. IF TOTAL BUILT-UP FLOOR AREA IS LESS THAN 230 m² iii. 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. iv. The water tank shall have a capacity of 30 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.
	2. IF TOTAL BUILT-UP FLOOR AREA IS BETWEEN 230 m²—900 m² i. Dry Type Sprinklers shall be provided throughout the facility as per Section 3.6 . ii. The sprinkler design density shall be as per hazard classification, storage height and storage arrangement, in accordance with Table 9.7.H., Table 9.7.I., Table 9.8.A., Table 9.7.Z.a., 9.7.Z.b., Table 9.7.AA.a., 9.7.AA.b., and 9.7.AA.c., iii. Hose Reel System shall be provided throughout the building as per Section 3.3 . Dry landing valves shall not be required.	2. IF TOTAL BUILT-UP FLOOR AREA IS BETWEEN 230 m²—900 m² iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance with Table 9.7.H., Table 9.7.I., Table 9.8.A., Table 9.7.Z.a., 9.7.Z.b., Table 9.7.AA.a., 9.7.AA.b., and 9.7.AA.c., at a pressure as required to satisfy 4.5 bar at the most remote Hose reel valve. v. The water tank shall have a capacity of 45 minutes of operation, complete with low water level detection and instantaneous refilling arrangement.
	3. IF TOTAL FLOOR AREA IS BETWEEN 901 m²—3600 m² i. Dry Type Sprinklers shall be provided throughout the facility as per Section 3.6 . ii. The sprinkler design density shall be as per storage height and storage arrangement, in accordance with Table 9.7.H., Table 9.7.I., Table 9.8.A., Table 9.7.Z.a., 9.7.Z.b., Table 9.7.AA.a., 9.7.AA.b., and 9.7.AA.c., iii. Hose Reel System shall be provided throughout the building as per Section 3.3 . Dry landing valves shall not be required.	3. IF TOTAL FLOOR AREA IS BETWEEN 901 m²—3600 m² iv. The capacity of the fire pump set shall be as per storage height and storage arrangement, in accordance Table 9.7.H., Table 9.7.I., Table 9.8.A., Table 9.7.Z.a., 9.7.Z.b., Table 9.7.AA.a., 9.7.AA.b., and 9.7.AA.c., at a pressure as required to satisfy 6.9 bar at the most remote Hose reel valve. v. The water tank shall have a capacity of 60 minutes of operation, complete with low water level detection, direct breaching inlet and instantaneous refilling arrangement.