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

PREDOMINANT OCCUPANCY	SYSTEM REQUIREMENTS	COMBINED FIRE PUMP SET AND FIRE WATER TANK CAPACITIES
T. STORAGE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS IN ABOVE GROUND STORAGE TANKS	**1. IF THE STORAGE AREA IS LESS THAN 230 m^2 AND CAPACITY OF FLAMMABLE, COMSBUTIBLE LIQUID STORAGE TANK IS LESS THAN 190 m^3** i. Hose Reel System shall be provided throughout the building as per **Section 3.3.** ii. The hose stations shall incorporate the foam application. iii. Dry landing valves and risers shall not be required. **2. IF THE STORAGE AREA IS MORE THAN 230 m^2 OR CAPACITY OF FLAMMABLE, COMSBUTIBLE LIQUID STORAGE TANK IS MORE THAN 190 m^3** i. Aboveground storage tank storing class I or class II liquids shall be protected with fixed low expansion foam system in accordance with **Section 3.9.,** and **Table 9.11.A., 9.11.E.,** and **9.11.F.** (as applicable). **ii.** The tanks or section of the tanks exposed to heat radiation of greater than 12.2 Kw/m^2 due to fire in adjacent tanks or facility, shall be provided cooling with deluge water spray system in accordance with **Section 3.8.,** and **Table 9.10.D.** iii. Yard hydrant shall be provided as per **Section 3.11**, in loop to cover the entire facility. Hydrant shall incorporate option for foam application as per **Section 3.9** and **Table 9.11.C.,** Table **9.11.D., 9.11.G.,** and **9.11.H**. (as applicable). iv. Hose Reel System shall be provided throughout the building as per **Section 3.3.** v. The hose stations shall incorporate the foam application. vi. Dry landing valves and risers shall not be required.	**1. IF THE STORAGE AREA IS LESS THAN 230 m^2 AND CAPACITY OF FLAMMABLE, COMSBUTIBLE LIQUID STORAGE TANK IS LESS THAN 190 m^3** iv. The fire pump capacity shall be 100 gpm at a pressure of 4.5 bar available at the remote Hose reel valve. v. The water tank shall have a capacity of 60 minutes of operation, complete with low water level detection and instantaneous refilling arrangement. vi. The foam reserve shall be for a 15 minutes operation. **2. IF THE STORAGE AREA IS MORE THAN 230 m^2 OR CAPACITY OF FLAMMABLE, COMSBUTIBLE LIQUID STORAGE TANK IS MORE THAN 190 m^3** vii. The capacity of the fire pump set and foam reserve shall be suitable for a single largest hazard. Additional capacity of 1000 gpm shall be added for hose stream demand. viii. The water tank shall have a capacity of 120 minutes of operation, complete with low water level detection, direct breeching inlet and instantaneous refilling arrangement.