

Table 9.29.: Various Locations and Extension of Fire Protection Systems

| LOCATION/ HAZARD | SYSTEM REQUIREMENTS |
|---|--|
| K. ROOF | i. Building roofs having LPG tanks, roof spaces used for restaurant seating, assembly and as sheesha bars shall be provided with a wet riser System as per Section 3.4 . The building wet riser with hose reel shall be extended to such roofs. |
| L. GARBAGE CHUTE | i. A garbage chute shaft shall be provided with one sprinkler head at the top of the shaft, one sprinkler head at alternating floors and one sprinkler head at the lowest level, as per Section 3.5 . |
| M. CEILINGS EXCEEDING 10 M IN HEIGHT | <p>i. Where building ceiling height exceeds 10 m in height, sprinklers shall be provided in accordance with Section 3.5 and Table 9.29.A. High Ceiling Sprinkler Protection.</p> <p>ii. The sprinklers for high ceiling protection shall be extended coverage, 160°F (70°C), listed and approved for such applications.</p> <p>iii. The requirements of Table 9.29.A. High Ceiling Sprinkler Protection, is a minimum guideline. Other design criteria recommended by approved and listed manufacturer's detailed design guideline specifically for high ceiling sprinkler protection shall be permitted.</p> |

Table 9.29.A.: High Ceiling Sprinkler Protection Design Criteria

| HAZARD | CEILING HEIGHT 10 m TO 13.5 m | CEILING HEIGHT 13.5 m TO 18 m | CEILING HEIGHT 18 m TO 30 m |
|---------------------------|--|---|--|
| 1. LIGHT HAZARD | <p>K-factor- K11.2 (K160)</p> <p>Min Pressure 12 psi (0.8 bar)</p> <p>Min No of Sprinklers- 06</p> <p>Design Density gpm/ft² (mm/m²) 0.20 (8.0)</p> <p>Design area ft² (m²) 2500 (230)</p> <p>Pump Capacity Without hydrant-750 gpm With hydrants-1000 gpm</p> | <p>K-factor- K11.2 (K160)</p> <p>Min Pressure 18 psi (1.2 bar)</p> <p>Min No of Sprinklers 04</p> <p>Design Density gpm/ft² (mm/m²) 0.20 (8.0)</p> <p>Design area ft² (m²) 2500 (230)</p> <p>Pump Capacity Without hydrant-750 gpm With hydrants-1000 gpm</p> | <p>K-factor- K25.2 (K360)</p> <p>Min Pressure 7 psi (0.5 bar)</p> <p>Min No of Sprinklers 12</p> <p>Pump Capacity Without hydrant- 1000 gpm With hydrants-1250 gpm</p> |
| 2. ORDINARY HAZARD | <p>K-factor- K11.2 (K160)</p> <p>Min Pressure 12 psi (0.8 bar)</p> <p>Min No of Sprinklers 06</p> <p>Design Density gpm/ft² (mm/m²) 0.20 (8.0)</p> <p>Design area ft² (m²) 2500 (230)</p> <p>Pump Capacity Without hydrant-750 gpm With hydrants-1000 gpm</p> | <p>K-factor- K11.2 (K160)</p> <p>Min Pressure 18 psi (1.2 bar)</p> <p>Min No of Sprinklers 04</p> <p>Design Density gpm/ft² (mm/m²) 0.20 (8.0)</p> <p>Design area ft² (m²) 2500 (230)</p> <p>Pump Capacity Without hydrant-750 gpm With hydrants-1000 gpm</p> | <p>K-factor- K25.2 (K360)</p> <p>Min Pressure 7 psi (0.5 bar)</p> <p>Min No of Sprinklers 12</p> <p>Pump Capacity Without hydrant- 1000 gpm With hydrants-1250 gpm</p> |