

Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
32. DESIGN CRITERIA FOR IDLE PALLETS	<p>i. The automatic Control Mode (Design/Area) Sprinkler Design criteria for idle wooden pallets stored indoors shall be as per Table 9.7.G.</p> <p>ii. The automatic special application Sprinkler Design criteria for wooden pallets stored indoors shall be as per (K11.2), Table 9.7.H.</p> <p>iii. The automatic Specific Application Sprinkler Design criteria for idle wooden pallets stored indoors on floor shall be as per (K16.8), Table 9.7.I.</p> <p>iv. The automatic Specific Application Sprinkler Design criteria for idle wooden pallets stored indoors on floor shall be as per (K19.6), Table 9.7.J.</p>

Table 9.7.G: Control Mode (Design/Area) for Idle Wooden Pallets Stored Indoors

INDOOR STORAGE ARRANGEMENT	K-FACTOR	MAXIMUM STORAGE HEIGHT	MAXIMUM CEILING HEIGHT	REQUIRED DESIGN DENSITY Gpm (LPM)	AREA OF SPRINKLER OPERATION FT ² (m ²)		PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
					HIGH TEMP SPRINKLER	ORDINARY TEMP SPRINKLER		
ON FLOOR	8 (115) or Larger	< 1.8 m	6.1 m	0.20 (8.2)	2000 (186)	3000 (279)	750 gpm	1000 gpm
	11.2 (160) or larger	< 2.4 m	9.1 m	0.45 (18.3)	2500 (232)	-	1250 gpm	1500 gpm
	16.8 (242)	< 6.1	9.1 m	0.60 (24.5)	-	-	-	-
ON FLOOR OR RACK WITHOUT SOLID SHELVES	11.2 (161) or larger	2.4 m - 3.7 m	9.1 m	0.60 (24.5)	3500 (325)	-	2000 gpm	2500 gpm
		3.7 m - 6.1 m	9.1 m	0.60 (24.5)	4500 (418)	-	2500 gpm	3000 gpm

Table 9.7.H: Specific Application for Idle Wooden Pallets Stored Indoors On Floor

TYPE OF SYSTEM	K-FACTOR / ORIENTATION	MAXIMUM STORAGE HEIGHT	MAXIMUM CEILING HEIGHT	NUMBER OF DESIGN SPRINKLERS BY MINIMUM PRESSURE			PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
				25 psi	50 psi	75 psi		
WET	11.2 (160) Upright	< 6.1 m	9.1 m	15	-	-	1000 gpm	1250 gpm
DRY	11.2 (160) Upright	< 6.1 m	9.1 m	25	-	-	1500 gpm	2000 gpm

Table 9.7.I: Specific Application (K-factor 16.8) for Idle wooden Pallets Stored Indoors On Floor

TYPE OF SYSTEM	K-FACTOR/ ORIENTATION	MAXIMUM STORAGE HEIGHT	MAXIMUM CEILING HEIGHT	NUMBER OF DESIGN SPRINKLERS	MINIMUM OPERATING PRESSURE (PSI)	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
WET	16.8 (240) Upright	6.1 m	9.1 m	15	15 psi	1000 gpm	1500 gpm
DRY	16.8 (240) Upright	6.1 m	9.1 m	15	15 psi	1000 gpm	1500 gpm

Table 9.7.J: Specific Application (K-factor 19.6) for Idle wooden Pallets Stored Indoors On Floor

TYPE OF SYSTEM	K-FACTOR/ ORIENTATION	MAXIMUM STORAGE HEIGHT	MAXIMUM CEILING HEIGHT	NUMBER OF DESIGN SPRINKLERS	MINIMUM OPERATING PRESSURE (PSI)	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
WET	19.6 (280) Pendent	6.1 m	9.1 m	15	16psi	1250 gpm	1500 gpm
WET	19.6 (280) Pendent	6.1 m	11 m	15	25psi	1500 gpm	2000 gpm
WET	19.6 (280) Pendent	6.1 m	12 m	15	30psi	1500 gpm	2000 gpm