

Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
51. DESIGN CRITERIA GROUP A PLASTIC STORED PALLETIZED, BIN BOX, SHELF OR RACKS WITH STORAGE HEIGHT UP TO 3.7 M.	i. The automatic Sprinkler Design criteria for Group A plastic stored palletized, bin box, shelf or racks with storage height of up to 3.7 m shall be as per Table 9.7.DD.

Table 9.7.DD.: Group A Plastic stored up to 3.7 m

COMMODITY CLASS		STORAGE ARRANGE- MENT	MAXI- MUM STORAGE HEIGHT	MAXI- MUM CEIL- ING HEIGHT	RE- QUIRED DESIGN DENSITY Gpm (LPM)	AREA OF SPRIN- KLER OPER- ATION FT ² (m ²)	IN RACK SPRIN- KLER	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
GROUP A PLASTIC CAR- TONED UNEXPANDED AND EXPANDED		PALLETIZED	< 1.5 m	-	0.20 (8.1)	1500 (140)	No need	350 gpm	750 gpm
			1.5 m – 3 m	4.6 m	0.30 (12.2)	2500 (232)	No need	750 gpm	1250 gpm
		BIN BOX,SHELF,	1.5 m – 3 m	6.1 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
			3 m – 3.7 m	5.2 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
			3 m – 3.7 m	10 m	0.20 (8.1)	1500 (140)	1 LEVEL	500 gpm	1000 gpm
		PALLETIZED BIN BOX, SHELF	3 m – 3.7 m	10 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
		IN RACK	3 m – 3.7 m	10 m	0.20 (8.1)	1500 (140)	1 LEVEL	400 gpm	750 gpm
GROUP A PLAS- TIC EX- POSED	UNEXPANDED AND EXPANDED	PALLETIZED BIN BOX, SHELF, IN RACK	< 1.5 m	-	0.20 (8.1)	1500 (140)	No need	350 gpm	750 gpm
			1.5 m – 3 m	4.6 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
		PALLETIZED BIN BOX, SHELF	1.5m–2.4m	8.5 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
			3 m – 3.7 m	5.2 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
		IN RACK	3 m – 3.7 m	5.2 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
			3 m – 3.7 m	10 m-	0.20 (8.1)	1500 (140)	1 LEVEL	500 gpm	1000 gpm
	UNEXPANDED	PALLETIZED BIN BOX, SHELF, IN RACK	1.5 m – 3 m	6.1 m	0.40 (16.3)	2500 (232)	No need	1000 gpm	1500 gpm
	EXPANDED	IN RACK	1.5 m – 3 m	6.1 m	0.20 (8.1)	1500 (140)	1 LEVEL	500 gpm	1000 gpm