

Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
36. DESIGN CRITERIA FOR CLASS I TO IV STORED ON RACKS OF 6.1 M TO AND 6.7 M. (WITHOUT SOLID SHELVES)	<p>i. The automatic Sprinkler Design criteria for Class I to Class IV stored on single or double row racks with storage height 6.1 m to 6.7 m (without solid shelves) shall be as per Table 9.7.P., with Area of sprinkler operation of 2000 ft² (186m²).</p> <p>ii. Figure 9.22 is applicable for all design criteria in Table 9.7.P except where in-rack sprinkler requirement is mandatory.</p> <p>iii. The fire pump capacity indicated is for high temperature ceiling sprinkler and storage height of 6.7 m.</p>

Table 9.7.P: Class I to Class IV stored on racks without solid shelves and storage height of 6.1 m to 6.7 m

AISLE WIDTH & ENCAPSULATION	COM-MODITY CLASS	IN RACK SPRINKLERS	CEILING SPRINKLER DESIGN DENSITY , Gpm/ft ² (mm/min)					
			WITH IN RACK SPRINKLERS		WITHOUT IN RACK SPRINKLERS			
			SINGLE OR DOUBLE ROW RACKS		SINGLE OR DOUBLE ROW RACKS			
			HIGH TEMPERATURE CEILING SPRINKLER & ORDINARY TEMPERATURE RACK SPRINKLER	ORDINARY TEMPERATURE CEILING SPRINKLER & ORDINARY TEMPERATURE RACK SPRINKLER	HIGH TEMPERATURE CEILING SPRINKLERS	ORDINARY TEMPERATURE CEILING SPRINKLERS	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
1.2 M ENCAPSULATED	I	1 LEVEL	0.30 (12.2)	0.35 (14.3)	---	---	750 gpm	1250 gpm
	II	1 LEVEL	0.30 (12.2)	0.35 (14.3)	---	---	750 gpm	1250 gpm
	III	1 LEVEL	0.35 (14.3)	0.39 (15.9)	---	---	1000 gpm	1500 gpm
	IV	1 LEVEL	0.47 (19.1)	0.55 (22.4)	---	---	1250 gpm	1500 gpm
1.2 M NOT ENCAPSULATED	I	No Need			0.32 (13.0)	0.37 (15.0)	1000 gpm	1250 gpm
	II	No Need			0.38 (15.5)	0.44 (17.9)	1000 gpm	1500 gpm
	III	No Need			0.43 (17.5)	0.49 (20.0)	1250 gpm	1500 gpm
	IV	No Need			0.58 (23.6)	0.60 (24.5)	1500 gpm	2000 gpm
2.4 M ENCAPSULATED	I	1 LEVEL	0.24 (9.8)	0.27 (11.0)	---	---	750 gpm	1250 gpm
	II	1 LEVEL	0.24 (9.8)	0.27 (11.0)	---	---	750 gpm	1250 gpm
	III	1 LEVEL	0.28 (11.4)	0.32 (13.0)	---	---	750 gpm	1250 gpm
	IV	1 LEVEL	0.39 (15.9)	0.45 (18.3)	---	---	1000 gpm	1500 gpm
2.4 M NOT ENCAPSULATED	I	No Need			0.29 (11.8)	0.33 (13.4)	750 gpm	1250 gpm
	II	No Need			0.32 (13.0)	0.37 (15.0)	1000 gpm	1250 gpm
	III	No Need			0.37 (15.0)	0.42 (17.1)	1000 gpm	1500 gpm
	IV	No Need			0.49 (20.0)	0.57 (23.2)	1500 gpm	2000 gpm