

**Table 9.7: Automatic Sprinkler System Requirements**

ITEMS	REQUIREMENTS
<b>44. DESIGN CRITERIA OF CMSA AND NOMINAL K-FACTOR FOR CLASS I TO IV, STORED IN SINGLE, DOUBLE OR MULTIPLE RACKS TO A HEIGHT OF 7.6 M.</b>	i. The automatic Sprinkler Design criteria of CMSA (Control Mode Specific Application) and Nominal K-factor 16.8 (240) for Class I to Class IV, stored on Single, Double or Multiple racks with storage height up to 7.6 m shall be as per <b>Table 9.7.Z.b.</b>

**Table 9.7.Z.b. CMSA and Nominal K-factor of 16.8 for Class I to Class IV, stored in Racks up to 7.6 m**

TYPE OF SYSTEM	COMMODITY CLASS	MAXIMUM STORAGE HEIGHT	MAXIMUM CEILING HEIGHT	K-FACTOR 16.8 (240) NUMBER OF SPRINKLERS BY MINIMUM DESIGN PRESSURE / ORIENTATION					
				10 PSI (0.7 BAR)	15 PSI (1 BAR)	22 PSI (1.5 BAR)	35 PSI (2.4 BAR)	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH HYDRANTS
<b>WET</b>	<b>I, II</b>	6.1	9.1	15 / upright	-	-	-	750 gpm	1250 gpm
		7.6	9.1	15 / upright	-	-	-	750 gpm	1250 gpm
	<b>III</b>	6.1	9.1	-	15 / upright	-	-	1000 gpm	1500 gpm
		7.6	9.1	-	-	15 / upright	-	1250 gpm	1500 gpm
		7.6	10.6	-	15+ 1 level of in-rack	-	-	1250 gpm	2000 gpm
	<b>IV</b>	6.1	7.6	-	-	15 / upright	-	1250 gpm	1500 gpm
		6.1	9.1	-	-	15 / upright	-	1250 gpm	1500 gpm
		7.6	9.1	-	-	15 / upright	-	1250 gpm	1500 gpm
		7.6	10.6	-	-	20+ 1 level of in-rack	15+ 1 level of in-rack	2000 gpm	2500 gpm
<b>PRE-ACTION OR DRY</b>	<b>I, II</b>	6.1	9.1	-	25 / upright	-	-	1500 gpm	2000 gpm
		7.6	9.1	-	30 / upright	-	-	2000 gpm	2500 gpm
	<b>III</b>	6.1	9.1	-	25 / upright	-	-	1500 gpm	2000 gpm