

**Table 9.7: Automatic Sprinkler System Requirements**

ITEMS	REQUIREMENTS
<b>47. DESIGN CRITERIA OF CMSA AND NOMINAL K-FACTOR FOR CLASS I TO IV, STORED IN SINGLE, DOUBLE OR MULTIPLE RACKS TO A HEIGHT OF OVER 7.6 M.</b>	<p>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 over 7.6 m shall be as per <b>Table 9.7.AA.b.</b></p> <p>ii. <b>NFPA 13</b> shall be followed for in-rack installation criteria.</p>

**Table 9.7.AA.b.: CMSA and Nominal K-factor 16.8 for Class I to Class IV, stored in Racks Over 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			
				15 PSI(1 BAR)	22 PSI(1.5 BARS)	PUMP CAPACITY WITH HOSE DEMAND	PUMP CAPACITY WITH YDRANTS
WET	I, II	9.1	10.6	20 + 1 level of in rack	-	1500 gpm	2000 gpm
		10.6	12.1	-	-		
	III, IV	9.1	10.6	-	-		
		10.6	12.1	-	-		
PRE -ACTION OR DRY	I, II	9.1	10.6	30 + 1 level of in rack	-	2000 gpm	2500 gpm
		10.6	12.1		36 /upright	3000 gpm	3500 gpm