



SPRINKLER PROTECTION OF STORAGE FACILITIES GOES GREEN

Table 1. Building Height: 30 feet; Storage Height: 25 feet

| Sprinkler | K-25.2 EC | K-14.0 ESFR | K-16.8 ESFR | K-25.2 ESFR | K-16.8 CMSA | K-19.6 CMSA | K-25.2 CMSA |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum Coverage | 196 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² |
| Pressure | 30 psi | 50 psi | 35 psi | 15 psi | 22 psi | 16 psi | 15 psi |
| Sprinklers Calculated | 6 | 12 | 12 | 12 | 15 | 12 | 12 |
| System Demand | 828 gpm | 1200 gpm | 1200 gpm | 1200 gpm | 1200 gpm | 941 gpm | 1171 gpm |
| Hose Allowance | 250 gpm | 250 gpm | 250 gpm | 250 gpm | 500 gpm | 250 gpm | 250 gpm |
| Duration | 60 min. | 60 min. | 60 min. | 60 min. | 120 min. | 60 min. | 60 min. |
| Total Gallons | 64,680 | 87,000 | 87,000 | 87,000 | 204,000 | 71,460 | 85,260 |

Table 2. Building Height: 35 feet; Storage Height: 30 feet

| Sprinkler | K-25.2 EC | K-14.0 ESFR | K-16.8 ESFR | K-25.2 ESFR | K-19.6 CMSA | K-25.2 CMSA |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum Coverage | 144 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² |
| Pressure | 40 psi | 75 psi | 52 psi | 20 psi | 25 psi | 30 psi |
| Sprinklers Calculated | 8 | 12 | 12 | 12 | 15 | 12 |
| System Demand | 1275 gpm | 1455 gpm | 1452 gpm | 1352 gpm | 1470 gpm | 1656 gpm |
| Hose Allowance | 250 gpm | 250 gpm | 250 gpm | 250 gpm | 500 gpm | 250 gpm |
| Duration | 60 min. | 60 min. | 60 min. | 60 min. | 90 min. | 60 min. |
| Total Gallons | 91,500 | 102,300 | 102,120 | 110,760 | 177,300 | 114,360 |

Table 3. Building Height: 40 feet; Storage Height: 35 feet

| Sprinkler | K-14.0 ESFR | K-16.8 ESFR | K-25.2 ESFR | K-19.6 CMSA | K-25.2 CMSA |
|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum Coverage | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² |
| Pressure | 90 psi | 52 psi | 25 psi | 30 psi | 30 psi |
| Sprinklers Calculated | 12 | 12 | 12 | 15 | 12 |
| System Demand | 1594 gpm | 1452 gpm | 1512 gpm | 1611 gpm | 1656 gpm |
| Hose Allowance | 250 gpm | 250 gpm | 250 gpm | 500 gpm | 250 gpm |
| Duration | 60 min. | 60 min. | 60 min. | 90 min. | 60 min. |
| Total Gallons | 110,640 | 102,120 | 105,720 | 189,990 | 114,360 |

Table 4. Building Height: 45 feet; Storage Height: 40 feet

| Sprinkler | K-22.4 ESFR UL | K-25.2 ESFR UL | K-22.4 ESFR FM | K-25.2 ESFR FM |
|-----------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum Coverage | 100 ft ² | 100 ft ² | 100 ft ² | 100 ft ² |
| Pressure | 40 psi | 40 psi | 50 psi | 50 psi |
| Sprinklers Calculated | 12 | 12 | 12 | 12 |
| System Demand | 1700 gpm | 1915 gpm | 1900 gpm | 2140 gpm |
| Hose Allowance | 250 gpm | 250 gpm | 250 gpm | 250 gpm |
| Duration | 60 min. | 60 min. | 60 min. | 60 min. |
| Total Gallons | 117,000 | 129,900 | 129,000 | 143,400 |