

Seattle Fire Department

Permit Conditions

8101

Site Address:

High-piled Combustible Storage

Storage of high-piled combustible material is limited to the commodities, aggregate areas and maximum storage heights specified on the face of this permit. Any commodities other than those specified, or any changes that exceed the permit limits will require a new permit.

This permit shall be kept on the premises designated herein at all times and shall be readily available for inspection by the fire code official. [SFC 105.3.5]

1. The structural integrity of racks shall be maintained. (SFC 3205.1)
2. No idle pallets shall be piled over six feet in height or stored in rack shelving unless protected as a High-hazard commodity. (SFC 3203.6)
3. Flue spaces shall be maintained for in-rack storage per Table 3208.3. (SFC 3208.3)

**TABLE 3208.3
REQUIRED FLUE SPACES FOR RACK STORAGE**

RACK CONFIGURATION	FLUE DESIGN		AUTOMATIC SPRINKLER PROTECTION		
			Sprinklers at the ceiling with or without minimum in-rack sprinklers		In-rack sprinklers at every tier
			Storage height ≤ 25 feet	Storage height > 25 feet	Any height
Single-row rack	Transverse flue space	Size ^b	3 inches	3 inches	Not required
		Vertically aligned	Not required	Yes	Not required
	Longitudinal flue space		Not required	Not required	Not required
Double-row rack (Option 1)	Transverse flue space	Size ^b	6 inches ^a	3 inches	Not required
		Vertically aligned	Not required	Yes	Not required
	Longitudinal flue space		Not required	6 inches	Not required
Double-row rack (Option 2)	Transverse flue space	Size ^b	3 inches	6 inches	Not required
		Vertically aligned	Not required	Yes	Not required
	Longitudinal flue space		6 inches	Not required	Not required
Multiple-row rack	Transverse flue space	Size ^b	6 inches	6 inches	Not required
		Vertically aligned	Not required	Yes	Not required
	Longitudinal flue space		Not required	Not required	Not required

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. Three-inch transverse flue spaces shall be provided not less than every 10 feet where ESFR sprinkler protection is provided.
- b. Random variations are allowed, provided that the configuration does not obstruct water penetration.

4. Ignition sources, including, but not limited to, luminaries and heaters shall be maintained at a safe distance from the high-piled combustible storage. (SFC 305 & 3205.2)
5. Smoking shall be prohibited in high-piled combustible material storage areas. Approved "NO SMOKING" signs shall be conspicuously posted. (SFC 3205.3)
6. When manual restocking is being conducted, aisles shall be kept clear of storage, waste material, debris and a minimum unobstructed aisle width of 24-inches shall be maintained in 48-inch or less aisles. A minimum unobstructed aisle width of one-half of the required aisle width shall be maintained in aisles greater than 48 inches. (SFC 3205.4)

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7. The required aisle width shall extend from floor to ceiling. Rack structural supports and catwalks are allowed to cross aisles at a minimum height of 6 feet 8 inches above the finished floor level provided such supports do not interfere with fire department hose stream trajectory. (SFC 3206.10.2)
8. During mechanical stocking operations, a minimum unobstructed aisle width of 44 inches shall be maintained. (SFC 3205.4)
9. Fire Department access doors, aisles and exit doors shall not be obstructed. (SFC 3205.4)
10. At least one portable fire extinguisher having a minimum rating of 4A 20B shall be provided a maximum travel distance of 50 feet from any location in the high-piled storage area. (SFC 3206.11 & 906)
11. Fire and life safety systems shall be tested and maintained in accordance with SFD Administrative Rule 9.02.21, *Inspection, Testing, Maintenance and Reporting Requirements for Fire Protection Systems and Emergency Responder Radio Amplification Systems*. (SFC 901.6)
12. A visual method of indicating the maximum allowable storage height shall be provided. (SFC 3205.6)