

# SEATTLE FIRE DEPARTMENT

## Information Bulletin #983



## High-Piled Combustible Storage

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This bulletin provides information on Seattle Fire Department permits and plan submittals for buildings having high-piled combustible storage exceeding 500 square feet in area.

### Definitions

High-piled combustible storage is combustible materials stored in closely packed piles or on pallets, shelves, or racks where the commodity exceeds 12 feet in height. It also includes tires, Group A plastics, flammable liquids, idle pallets or similar high hazard commodities stacked or stored more than six feet above the floor. For definitions of the terms *commodity*, *array*, *curtain board*, *rack storage*, or *encapsulated*, see 2006 Seattle Fire Code Chapter 23.

### REQUIREMENTS

1. A Fire Department permit is required to use any building or portion of a building as a high-piled storage area exceeding 500 square feet. For permit information and applications, call the Fire Marshal's Office Permits Section at 386-1331.
2. Fire Department permits must be renewed annually. Permits are not transferable, and any change in use, occupancy, operation, or ownership will require a new permit (SFC Section 105.3.1).
3. Existing occupancies with high-piled combustible storage are not required to retroactively meet the design and construction requirements of the current fire code under the following conditions:
  - The occupant has a valid Fire Department permit for high-piled combustible storage.
  - The occupancy maintains compliance with the permit conditions and with the fire and building codes under which the original permit was issued.
4. When automatic sprinklers are required, the sprinkler system must be capable of providing the minimum required water supply for the type of commodity and the storage arrangement, regardless of pre-existing conditions.
5. Architectural plans for high bay warehouse buildings submitted for review through the Department of Planning and Development must clearly specify the intended use of the building:
  - The type of commodity and the storage arrangement have not changed.  
**Note:** Any change in practice, process, materials used or storage configuration may require compliance with the current fire code (SFC Section 102.1)
  - If the high bay warehouse is to be used for high-piled combustible storage, the requirements of Seattle Fire Code Chapter 23 (including, but not limited to, automatic sprinkler protection, building access, smoke and heat removal, curtain boards, hose stations and storage arrangement) must be addressed on the architectural plan set.
  - If the high bay warehouse will not be used for high-piled combustible storage, a note must be added to the architectural plans stating that the building *will not* be used for high-piled combustible storage. The local fire station will be instructed to look for high-piled combustible storage during the annual Fire Department inspection of the building.

6. Automatic sprinkler system shop drawing submittals must include a complete description of the storage, including:
- type of commodity
  - storage arrangement (pile dimensions, use of pallets, configuration of shelves or racks, aisle widths, height of stock)
  - clearance to sprinklers
  - the type and temperature rating of the sprinklers.

The submittal must indicate the sprinkler system design approach, and identify the applicable NFPA standard and all tables,

figures, and curves used to determine and adjust the selected design area and density. **Note:** Plans must include water supply information from a recent flow test (conducted within five years) in close proximity to the building site.

7. Central station monitoring of the automatic sprinkler system water flow and valve tamper indicators is required for systems having 100 or more sprinklers.
  8. For further information regarding Seattle Fire Code requirements for high-piled storage, call the Fire Marshal's Office Plan Review Section at 386-1443.
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