High-Piled Combustible codes under which the

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Storage

The 2021 Seattle Fire Code Chapter 32 provides specific requirements for permits and plan submittals in buildings having high-piled combustible storage exceeding 500 square feet in area.

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, lithium ion batteries, flammable liquids, idle pallets or similar high hazard commodities stacked or stored more than six feet above the floor. For definitions or additional information on specific commodities see Seattle Fire Code Chapters 2 and 32.

Requirements

- 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. Permit applications can be downloaded, filled out and emailed to <u>permits@seattle.gov</u>. Permit fee payment can be made by mail or with credit card over the phone. Download permit applications at: <u>web.seattle.gov/sfd/permitsearch/</u> SearchbyAllPermit.asp
- 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 occupancy maintains compliance with the permit conditions and with the fire and building

- codes under which the original permit was issued.
- b) The type of commodity and the storage arrangement have not changed.

-part of a multi-departmental series on City services & permitting

Note: Any change in practice, process, materials used or storage configuration may require compliance with the current fire code (SFC Section 102.1).

- 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 new structures designed to accommodate high-piled storage submitted for review through the Seattle Department of Construction and Inspections must clearly specify the intended use of the building:
 - a) If the structure designed to accommodate highpiled storage is to be used for high-piled combustible storage, the requirements of Seattle Fire Code Chapter 32 (including, but not limited to, automatic sprinkler protection, building access, smoke and heat removal, draft curtains and storage arrangement) must be addressed on the architectural plan set.
 - b) If the structure designed to accommodate highpiled storage 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 Fire Department inspection of the building.
- 6. Automatic sprinkler system shop drawing submittals must include a complete description of the storage, including:



- a) Type of commodity.
- Storage arrangement (pile dimensions, use of pallets, configuration of shelves or racks, aisle widths, height of stock).
- c) Clearance to sprinklers.
- d) 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.
- e) Hydraulic calculations.
- f) Cut-sheets of system components.

Note: Plans must include water supply information from a recent flow test (conducted within five years) in close proximity to the building site and in the same pressure zone.

- Central station monitoring of the automatic sprinkler system water flow and valve tamper indicators is required for all systems.
- 8. For further information regarding Seattle Fire Code requirements for high-piled storage, contact the SFD Code Coordinator at (206) 386-1450.