

Plan Submittal Requirements for High-Piled Combustible Storage

HIGH-PILED COMBUSTIBLE STORAGE (DEFINED). Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. Where required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

Plan submittal requirements: If the HIGH-PILED COMBUSTIBLE STORAGE area was not included on the original permit plans and it involves a permanent change of use in an open or vacant space, a separate Occupancy Permit Application must be filed with the City along with Building Permit and Agent Plan Review (buildings > 50,000 cu. ft.) applications/plans detailing the requirements listed below.

International Fire Code (IFC) 3201.3 - Construction documents. At the time of building permit application for new structures designed to accommodate high-piled storage or for requesting a change of occupancy/use, and at the time of application for a storage permit, plans and specifications shall be submitted for review and approval. In addition to the information required by the International Building Code, the storage permit submittal shall include the information specified in this section. The construction documents shall include all of the following:

1. Floor plan of the building showing locations and dimensions of high-piled storage areas.
2. Usable storage height for each storage area.
3. Number of tiers within each rack, if applicable.
4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.
5. Aisle dimensions between each storage array.
6. Maximum pile volume for each storage array.
7. Location and classification of commodities in accordance with Section 3203.
8. Location of commodities that are banded or encapsulated.
9. Location of required fire department access doors.
10. Type of fire protection systems.
11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.
12. Type, location and specifications of smoke removal and curtain board systems.
13. Dimension and location of transverse and longitudinal flue spaces.
14. Plans shall clearly show dimensioned exit routes throughout the storage area which lead to the required building exits.
15. Plans shall also include photometrics of the emergency lighting and exit signage located within the portion(s) of the building containing the high-piled combustible storage.
16. Additional information regarding required design features, commodities, storage arrangement and fire protection features within the high-piled storage area may be required at the time of permit.
17. Fire protection plans shall be submitted to the Oak Creek Fire Department for approval.