

Storage Racking and Display Cases

Purpose

This handout summarizes the requirements for a complete plan review submittal for the installation of storage pallet racks, movable shelf racks, fixtures and stacker-racks in commercial or industrial buildings.

The following guideline shall be reviewed and approval must be obtained before commencing any work.

Permits Required

- Storage racks less than 5-ft and 9-in in height: No permit required.
- Storage racks between 5-ft and 9-in and 8-ft:
 Building permit required for anchors and bracing.
 No engineering requirements.
- Storage racks greater than 8-ft: Building permit required and engineered design in accordance with 2025 CBC Section 2209 and RMI/ANSI MH 16.1.
- High-piled storage racks greater than 12-ft above ground in any occupancy: Building permit required and engineered design for seismic lateral bracing.
 Fire Prevention permit required to comply with the 2025 CBC 413.1 and California Fire Code

High-Piled Storage

High-piled storage can include racks, shelving, solid piled or pallet storage 12-ft or higher. A Fire Prevention permit is required regardless if the rack height is less than 12-ft but the proposed storage will be 12-ft or higher. The overall height is taken from the ground to "top of storage". It includes certain high hazard commodities such as rubber tires, Group A plastics, flammable liquids, idle pallets where the top of storage is greater than 6-ft in height. Design includes information such as

commodity clearance between top of storage; fire sprinkler head locations; aisle clearances; location and classification of commodities; types of fire suppression and fire detection systems, etc. Contact **Dixon Fire Department** at (707) 678-7060 for detailed information.

Submittal for Construction

- To submit a permit must be completed electronically through the Dixon Civic Access Portal City of Dixon, CA
- All required form (special inspection, etc.) can be found <u>Welcome to the Official Website of the</u> City of Dixon, CA - Forms, Fees, and Permits
- Complete sets of plans prepared and signed by a CA licensed engineer.
- Engineered calculation reports prepared and signed by a CA licensed engineer.
- Complete all required fields and plan check fee paid.
- Please contact Building Division
 <u>buildingdivision@cityofdixonca.gov</u> or call
 707-678-7000 and ask for the building
 department (permit technician) with any
 questions about applying for this permit.

Plans

- Plot plan and/or Cover sheet: job address and suite number; name, address, phone number of business owner /contractor /design professional.
- Complete description of scope of work; type of business; current codes; type of construction; occupancies; type of fire sprinkler system.
- Floor plans identifying location and square footage of all storage areas, racks and

- shelving; location of exit door, exit access doors and exit signs.
- Location of and dimensions of smoke vents and curtain boards (if required).
- Aisle clearances between racks (36-in minimum aisle width when serving only one side; 44-in when serving both sides per CBC 1005.1, 11B-403.5.1).
- Shelf and rack support base anchorage connection details and specifications to reinforced concrete slab and footing foundation and/or elevated wood floor framing system.
- Rack details showing dimensions, number of tiers, if these are single, double or multiple racks.
- Shelving installation method, support and brace framing details; if utilizing drilled and inset expansion or epoxy type anchorage bolt systems, specify on plans "Special Inspection and Testing shall be required.
- The bolts or expansion anchors referenced to a valid ICC-ES Research Report or equivalent.

Structural Calculations (when greater than 8- ft or taller)

- Signed and stamped calculation reports prepared by a CA licensed engineer (if top shelf is higher than 8-ft).
- Lateral bracing details.
- Anchorage details including type, size, depth and spacing of anchors. The anchorage details must be clearly shown on the plans.

Special Inspection

A fully completed Special Inspection and Testing Agreement form signed by all parties, if required. The special inspection form can be located at Welcome to the Official Website of the City of Dixon, CA - Forms, Fees, and Permits

Fees

Building fees are based on the total value of all construction work (including labor and materials). Consult with a permit technician for details.