



Design Guidelines and Installation for Steel Storage Racks and Shelves

This document applies to design guidelines and installation requirements for pallet racks, movable shelf racks, and stacker-racks made of cold formed or hat-rolled steel structural members. Applicant shall furnish rack installation drawings with full dimensional floor plans elevation views of each type of rack.

1. **Storage Rack Height Under 6'**: Anchorage is not required.
2. **Storage Rack Height between 6' and 8'**: Anchorage is required, and anchorage design calculations shall comply with ASCE 7-05, section 13.3. Submit rack installation drawings, including floor plans, and rack anchorage detail for each type of rack.
3. **Storage Rack Height 8' and Greater**: Complete rack engineering is required including beam to post, post to base plate, longitudinal and transverse diagonal braces, bolted and welded connections, and anchorage to concrete floor in compliance with the 2007 CBC Section 2208. Submit rack installation drawings including floor plan, rack framing system, member connections, and anchorage details for each type of rack 8 feet and taller.
4. **Rack Design**: Rack design documents shall be prepared by either a licensed civil or structural engineer.