

Regulation DD-17.0: Racking System

- 17.1 Racking should be set up, operated and maintained according to the design, installation and operational guidelines of the racking manufacturer. It should be designed specifically for the size, shape and weight of the products being stored. Any modification should be checked by the original supplier/ manufacturer/ designer prior to installation implementation in the facility.
- 17.2 Bottom portions of frames exposed to possible collisions by forklifts or other moving equipment should be fitted with upright protectors and end of rack protectors.
- 17.3 Racking should be inspected frequently for damage and overloading and at least annually to check its integrity.
- 17.4 The height-to-depth ratio of a storage rack shall not exceed 3 meters to 1 meter measured to the topmost beam position, unless the rack is anchored or braced externally to resist all forces.
- 17.5 Connections of racks to buildings, if any, shall be designed and installed to prevent reactions or displacements of the buildings from damaging the racks or displacements of the racks from damaging the building.
- 17.6 The clear width of a pick module walkway shall be at least 30" (76 cm). Fixed stairways shall have a minimum tread width of 30" (76 cm). A vertical clearance of seven feet shall be maintained between the stairway and any overhead obstruction measured from the leading edge of the tread.
- 17.7 The horizontal top rail of the guardrail shall be 110 cm above the walking surface.
Guardrails shall have a top rail and intermediate rail.
- 17.8 Guardrail must be provided to close any other openings through which a person may fall. Where guardrails are omitted for pallet drops, safety gates, removable guardrail sections or removable chains must be used for fall protection. These devices must meet the same strength and configuration requirements as permanently installed guardrail.
- 17.9 Kick plates to be installed at the edge of the elevated racking floor. Kick-plates shall extend at least 4" (10 cm) above the floor surface. Kick-plates are not required at picking locations but are required at pallet drop locations.
- 17.10 Lighting fixtures and smoke detectors should not be located above the rack/shelves.
- 17.11 Rack/shelves should not be loaded beyond their designed capacity. Rack/shelves shall be labelled accordingly for material specification & safe uniformly distributed load.

17.12 All columns inside the warehouse (fork-lift operating areas) shall be provided with protection bollards and painted with 150-mm wide red and white or yellow and black strips.