

Master Brewers Safety Toolbox Talk



Racking Systems and Safety

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Overview

Storage is a constant concern for craft breweries, and pallet racking is a quick and cost-effective solution. Simple pallet racking can be purchased through commonly known industrial supply companies. For more advanced storage systems, a third-party materials handling company should be consulted. Pallet racking does come with its own set of risks: exceeding load capacities or not anchoring vertical supports, for example, just to name a couple. Pallet racking is very useful for making a space more accessible to the craft brewer, and safety must be a constant concern in your facility.

General Racking Facts

- Standard pallet-racking beams are 96 in. wide (2 pallet spaces) and have a capacity of 5,000 lb/pair.
- Racking uprights come in different styles depending on the application: 3 in. wide teardrop (standard/pallet flow) and 4 in. wide structural (pushback).
- No one should ever climb on pallet racking; a powered industrial truck utilizing an approved personnel basket or personnel lift must be used.
- Pallet racking should be inspected annually to ensure that fasteners and bolts haven't shifted or loosened over time.
- All vertical supports must be anchored to the floor to prevent shifting of racking.



Guarding and Safety

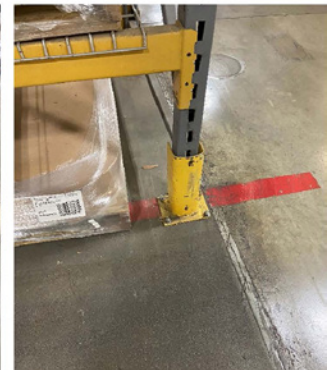
- Guarding for pallet racking is not always required but is strongly recommended for all storage systems.
- Thoroughfares and aisles must be clearly marked with painted lines and signage.
- If pallets with loose items (e.g., full kegs, boxes, cases, etc.) are stored on racks, ensure that the items are wrapped or secured to prevent falling on people.
- A good practice is to label each rack with its total load capacity.
- Structural guarding should be affixed to the racking and/or the floor.
- Nonstructural guarding is only affixed to the racking.

Examples of good racking guards (structural)

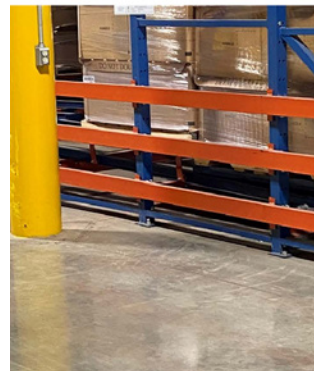
Safety Curb



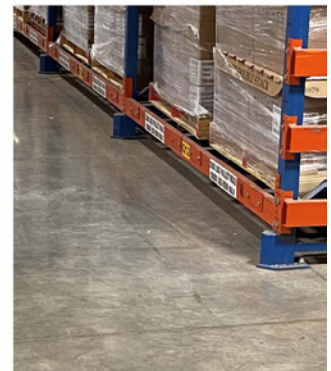
Rack Protectors



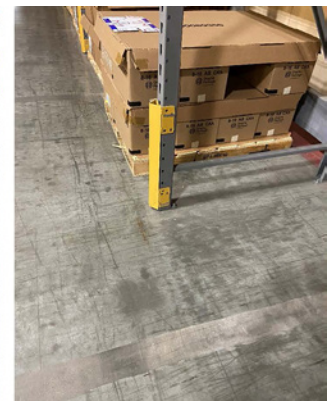
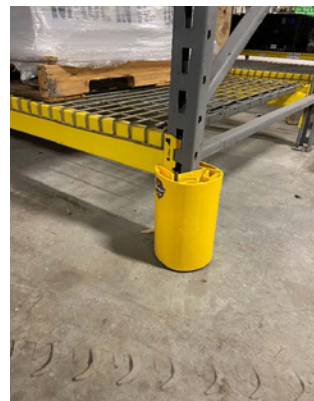
Guard Rails



End of Rack Protectors



Example of good racking guarding (nonstructural)



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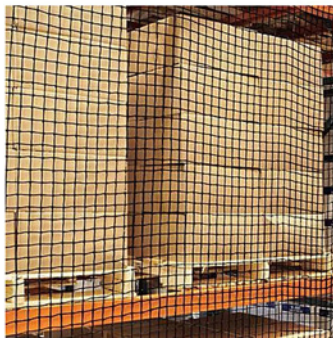
If you have any questions or comments regarding this Toolbox Talk, please contact a member of the Brewery Safety Committee.

Additional safety accessories for pallet racking

Wall Brackets*



Pallet Racking Nets



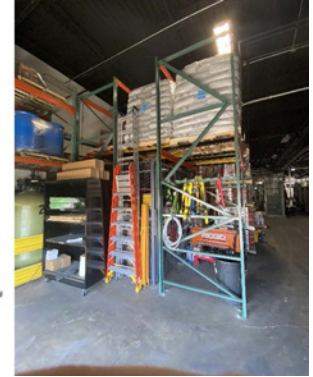
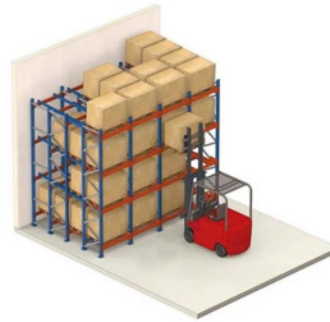
* Wall brackets have the added value of creating a standardized air gap between the wall and racking. Wall brackets may also provide protection from racks tipping over in areas where earthquakes are a risk. Rack system stability can be increased by anchoring racks to walls or by ganging several racks together.

Additional Types of Racking Systems

- Gravity Racking: Gravity racking is a good option if you are using a first in first out (FIFO) method for storing your materials.



- Pushback Racking: Pushback racking allows you to utilize space that would otherwise be unusable. It has a single load in/load out point and is great for storing spare parts, kegs, and raw materials.



Good Practices

- Air gapping below and behind pallet racking helps keep rodents away from your materials and assists with future cleaning.
- Segregate and label racking where allergens are stored to help prevent any potential for cross-contamination.

OSHA Reference

OSHA Standards 1910.176 (a)(b) and (c)