

Pallet Racking Safety Checklist

The right pallet racking system can make all the difference in the efficiency of the warehouse, but it takes an entire team to confirm safe setup and optimal working status. From initial build to regular inspections, it's important that your warehouse be certain of the safety of the complex structure that is holding your company's products and assets together.

Racking and Pallet Design

- Confirm that setup and operations meet manufacturer standards
- Check racking compatibility with pallets
- Check racking compatibility with handling equipment
- Chart out sufficient maneuvering space for forklift
- Consult expert on any proposed modifications
- Receive manufacturer approval before making any modifications
- Never physically alter uprights, bracings, beams, or components, including welding additional cleats or bearers
- Use only replacement parts from original equipment manufacturer
- Assign engineering report to confirm racking integrity upon any replacement
- Never change product storage design on pallets without agreement from racking supplier
- Require expert assessment of change to pallet design
- Fit bottom portions of frames with upright protectors and end-of-rack protectors

Operating Protocol

- Establish safe working load limits: (image Figure 1)
- Train employees on safe working load limits
- Post signage that includes information for: manufacturer, supplier details, unit load limit, beam level limit, bay load limit, etc
- Establish procedures to ensure safety with racking design, load, capability of lifting equipment
- Setup operating instructions including:
 - Correct use of equipment
 - SWLs
 - Prohibitions on unauthorized alterations
 - Requirements for reporting any damage for assessment
- Thoroughly train each individual working in this zone
- Establish protocol for immediate reporting of safety risks to operation and maintenance
- Post information about safety reporting protocol
- Establish protocol for immediate reporting of damage to equipment for inspection and assessment
- Design method of recording level of damage to equipment using colored stick-on tags (Figure 3)
- Install quality general lighting to working area
- Keep floor surrounding racking system clear
- Ensure frequent cleaning and maintenance to areas near racking system

Inspections

- Enlist qualified experts to inspect racking routinely for damage and overloading

Check for:

- Overloaded beams: 'v-shaped' deformity at beam connectors
 - Obvious signs of damage from being struck with pallet or forklift, such as cracking
 - Missing beam connectors
 - Broken or missing safety clips
 - Beams that popped out of upright, risking possible collapse
 - Damage to uprights
 - Sufficient splices
 - Vertical, correctly plumbed racking
 - Bent or damaged racking braces, either horizontal or diagonal
 - Damage to floor fixings or footplate
 - Broken pallets
 - Appropriate signage
- Perform inspections to check racking integrity annually

Careful setup, thorough checks, and clear safety protocols can help maintain a safe working environment for your warehouse. Keep this checklist close to hand and modify each step to include each aspect of your unique structure and processes.