Step-by-Step Guide to Inspecting Pallet Racking

Inspect Uprights

Uprights carry the entire load of the racking system. Check for:

- [ ] Dents
- [ ] Twists
- [ ] Buckling
- [ ] Cracks
- [ ] Rust
- [ ] Impact damage

Even small bends can weaken structural performance.

Inspect Beams

Inspect beams for:

- [ ] Sagging
- [ ] Bending
- [ ] Cracks
- [ ] Missing beam locks
- [ ] Loose connections

Beam locking devices should always be securely installed.

Check Base Plates & Anchors

Base plates connect the rack to the warehouse floor. Ensure:

- [ ] Anchor bolts are tight
- [ ] Base plates are not cracked
- [ ] No missing anchors
- [ ] Floor concrete remains intact

Loose anchors reduce rack stability significantly.

Inspect Bracing

Diagonal and horizontal bracing strengthens the entire frame. Look for:

- [ ] Missing braces
- [ ] Bent braces
- [ ] Loose bolts
- [ ] Broken welds

Damaged bracing increases the risk of rack collapse.

Verify Load Notices

Every pallet rack should clearly display its load capacity. Check that:

- [ ] Labels are visible
- [ ] Capacity matches current use
- [ ] Employees understand loading limits

Never exceed manufacturer-rated capacities.

Inspect Pallets

Sometimes the rack isn't the problem - the pallet is. Look for:

- [ ] Broken boards
- [ ] Cracked runners
- [ ] Missing blocks
- [ ] Warped pallets
- [ ] Moisture damage

Damaged pallets increase stress on racking.

Check Alignment

Walk along each aisle and look for:

- [ ] Leaning racks
- [ ] Uneven spacing
- [ ] Misaligned frames
- [ ] Twisted uprights

Misalignment often indicates structural damage.

Look for Corrosion

Warehouses with high humidity or chemical exposure may experience corrosion. Inspect for:

- [ ] Surface rust
- [ ] Deep corrosion
- [ ] Paint deterioration
- [ ] Moisture buildup

Rust weakens steel over time.

Inspect Safety Accessories

Ensure all protective equipment remains in place. Check:

- [ ] Rack guards
- [ ] Column protectors
- [ ] End-of-aisle barriers
- [ ] Wire mesh and timber decking
- [ ] Safety netting/anti-collapse mesh

These accessories help minimise forklift damage.

Record Every Finding

Maintain detailed inspection records including:

- [ ] Inspection date
- [ ] Inspector's name
- [ ] Identified issues
- [ ] Severity level
- [ ] Corrective actions
- [ ] Repair completion dates

Accurate documentation supports compliance and preventive maintenance.