

WHEN SHOULD YOU REPLACE YOUR WAREHOUSE SHELVING?

A practical guide to recognising warning signs and deciding whether to inspect, repair, reconfigure or replace your storage system.

Use this guide as a prompt for action—not as a substitute for a competent inspection or the manufacturer's instructions.

Seven signs your shelving needs attention

Warehouse racking and shelving should be reviewed when its condition, configuration or the way it is used changes. These warning signs can help you decide what to do next.

1. Visible damage

Bent or twisted uprights, beams, bracing, footplates or connectors; impact marks from trucks; cracked welds; or missing components. Even damage that looks small can affect load capacity.

2. Shelves or beams no longer level

Uneven beams, leaning frames, movement at connections or a rack that appears out of plumb can indicate impact, poor installation, an uneven floor or a developing stability issue.

3. Changing storage needs

New pallet sizes, different goods, heavier loads, altered picking methods or changing stock volumes may mean the current layout or load ratings are no longer suitable.

4. Frequent repairs

Repeated damage, recurring loose or missing components, and frequent call-outs may suggest that the layout, traffic routes, protection or system design needs attention.

5. Access and operational issues

Blocked aisles, poor visibility, awkward picking, congestion or unsafe manoeuvres can signal that the layout no longer supports the operation effectively.

6. Older system or unavailable parts

Age alone does not mean a system must be replaced. However, missing documentation, unknown load ratings, corrosion, obsolete components or difficulty sourcing approved replacements warrant a competent review.

7. Business growth or site changes

More stock, new equipment, automation, a new building or a change in workflow may justify reconfiguring or redesigning the system rather than simply adding more bays.

Stop and assess: If you find significant deformation, a leaning frame, a damaged connection or another condition that may affect stability, keep people clear, prevent further loading where safe to do so, and arrange prompt assessment by a competent person. Do not attempt an improvised repair.

What should you do when you find a problem?

Choose the response based on the condition of the system, the manufacturer's guidance and the findings of a competent assessment.

Make the area safe

For suspected structural damage or instability, stop use of the affected area, keep people away and prevent access. Do not unload or move stock if doing so could increase risk; get competent advice on the safest sequence.

Record what you found

Note the location, rack/bay identification, type of damage, date and likely cause. Take photographs from a safe position and record any relevant impact or maintenance history.

Arrange a competent inspection

Use a suitably trained and experienced person familiar with the specific storage system. Follow the manufacturer's inspection, reporting and escalation arrangements.

Act on the findings

Prioritise any immediate hazards, agree who is responsible for corrective action and record when it is completed. Do not return affected equipment to service until it has been judged safe.

Repair, reconfigure or replace?

Option	May be appropriate when…	Check before proceeding
Repair	Damage is localised and an approved repair solution exists.	Use an approved method and compatible parts; confirm the system is safe before reuse.
Reconfigure	Storage patterns, aisle widths, beam levels or workflow need to change.	Confirm the revised design, load notices, clearances and any required approvals.
Replace	The system is unsuitable, badly deteriorated, unsupported or uneconomic to maintain.	Plan removal, temporary storage, installation, commissioning and staff communication.

Important: Do not straighten, weld, drill, heat or otherwise modify damaged components unless the manufacturer or an appropriately qualified engineer has approved the method. A replacement component must be compatible with the system.

Build a simple inspection routine

A planned approach helps spot issues early and provides a record of how risks are managed. Set the frequency and scope using the system manufacturer's guidance, risk assessment, usage and applicable requirements.

At the start of a shift or during routine checks

- Look for obvious impact damage, missing locking pins, displaced components or unusual leaning.
- Check that loads are stable, within the stated limits and stored in the intended locations.
- Keep aisles, exits, fire equipment and pedestrian routes clear.
- Report and isolate suspected damage promptly under your site procedure.

As part of planned inspections

- Inspect the system in line with the manufacturer's recommendations and your risk assessment.
- Check frames, bracing, beams, connectors, baseplates, anchors and protective devices where applicable.
- Review damage reports, near misses, repairs and repeated impact locations.
- Verify that load notices are present, legible and reflect the current configuration.
- Record findings, actions, owners, deadlines and close-out evidence.

Before changing the layout or loads

- Confirm the proposed loads, pallet dimensions, handling equipment and required clearances.
- Obtain the appropriate design review and approval before making changes.
- Update load information, drawings, procedures and staff briefings as needed.

Keep a clear record of inspections, damage reports, repairs, approvals and changes to the configuration. Records help you identify recurring problems and demonstrate that follow-up actions have been completed.

A practical decision checklist

Question	Yes / No / Action
Is there damage, distortion, movement or missing hardware?	_____
Are load ratings and system details known and legible?	_____
Have stock types, weights or handling methods changed?	_____
Are repairs becoming frequent or parts difficult to source?	_____
Has a competent person assessed any significant concern?	_____
Are actions recorded, assigned and completed?	_____

From inspection to action

Use this simple sequence to make sure concerns lead to a clear outcome.

1. Identify	Find and record the issue; make the area safe if there may be an immediate risk.
2. Assess	Arrange competent advice and confirm whether the system can remain in use.
3. Decide	Choose an approved repair, a reviewed reconfiguration or a replacement plan.
4. Implement	Complete work using competent personnel and suitable approved components.
5. Verify	Confirm the system is safe for use, update records and brief affected staff.
6. Review	Look for root causes—such as truck routes, protection, training or layout—that could prevent recurrence.

Questions to ask your shelving supplier or inspection provider

- What is the current condition and risk priority of each affected bay?
- Are the load ratings, configuration and component compatibility confirmed?
- Can the damage be repaired using an approved solution, or is replacement recommended?
- What is the scope, cost and lead time for the options?
- What needs to happen before the system can safely return to service?
- How can the layout or traffic management be improved to reduce repeat damage?

Disclaimer: This guide provides general information only. It is not a structural assessment, inspection report or substitute for competent professional advice, manufacturer instructions, site risk assessments or applicable legal requirements. The correct action depends on the system, its condition and the circumstances.