

Pallet racking systems



Consider the business impact should part or all of your pallet racking system collapse. Consider the possible injury or worse to occupants, damage to property, plant and stock. The cost and time involved with the aftermath of a pallet racking collapse could add up significantly.

Are all pallet racking systems constructed alike? Definitely not. Pallet racking systems are designed and installed specifically to a client's needs. With varying configurations, they often hold considerable weights and stand at significant heights.

All pallet racking systems should be designed and installed by a pallet racking professional. These contractors should be able to certify the system to AS 4084:2012 - Steel storage racking, on completion of the installation. Pre-owned racking should be installed by a professional and certification obtained. It should be noted that racking components themselves cannot be certified to AS 4084:2012 - Steel storage racking, as only a fully installed system can meet the requirements of this standard.

As well as having the appropriate steel components, a pallet racking system should also have signage attached in a prominent location outlining the permissible working unit load limit, permissible total working unit load limit for each pallet beam level, permissible total working unit load limit for each bay, designer's name, racking manufacturer's name, supplier's name and trademark, and the installation date.

The sign should also include the maximum distance from base plate level to the first beam level, and the maximum distance between first and second beam levels.

To maintain the integrity of a certified racking system, ensuring the risk of collapse is minimised, all racking systems should be maintained. Regular visual inspections for obvious physical damage should form part of a facilities self

inspection regime. A fully documented in-depth racking inspection should be undertaken on an annual basis by a competent person as described in AS 4084:2012 - Steel storage racking.

Minimum inspection criteria include:

- ▼ the correct application and use of racking system
- ▼ that the working load limits are adhered to
- ▼ that the racking installation has not been altered since certification
- ▼ the extent of any damage due to impact in the racking installation
- ▼ examine for any out-of-plumb racking
- ▼ examine for any dislocation and deformation of sections and connections for uprights and beams
- ▼ examine connectors for deformation or signs of cracking of the welds
- ▼ examine base plates and floor anchors.

As well as having a fully certified and maintained racking system installed, significant risk is reduced from impact by having rack impact protection installed. These simple steel devices attach to the floor, protecting uprights from vehicle impact such as forklifts. End of racking barriers are also advised to reduce the risk of impact.

Certification and ongoing maintenance should ensure your pallet racking system stands silent and tall for many years.