

RACK SAFETY

360 Load Testing Services (Pty) Ltd

TOP 10 SAFETY TIPS

1. **Understand** the building and fire protection regulations.
2. **Ensure** that the rack is installed as shown in the engineering drawings.
3. **Maintain** the load capacity plaques for all rack configurations.
4. **Train** your employees in rack safety, particularly forklift drivers.
5. **Don't** exceed listed rack capacity.
6. **Install** protective guarding devices where appropriate.
7. **Repair** damaged racks under the supervision of a qualified engineer.
8. **Don't** reconfigure racks without the review and approval of a qualified engineer.
9. **Conduct** rack inspections on a regular basis.
10. **Do not** mix racks from different vendors.



FORKLIFT SAFETY

1. **Wear** proper protective equipment.
2. **Maintain** your lifting equipment used.
3. **Ensure** that the drivers are licensed.
4. **Conduct** load tests on your forklifts as per required standards.
5. **Ensure** that warning buzzers are working.
6. **Put up** signs to show that forklifts are working in the area.
7. **Make** sure the load is stable before you move it.
8. **Drive** in reverse if the load blocks your view.
9. **Obey** posted speed limit and aisle markings.
10. **Do not** let someone ride on the forks.



LOAD TESTING & INSPECTION OF RACK ACCORDING TO THE STANDARD EN-15620

CLEARANCE FOR GANGWAYS

⇒ For one-way only truck gangway the minimum gangway width shall be the greater of the overall truck or load with, plus 600mm

⇒ For two-way truck gangway the minimum gangway width shall be the greater of twice the overall truck or load width, plus 900mm.

BEAM DEFORMATION

⇒ Maximum deformation of supporting beams under load shall not exceed the serviceability criteria.

= Maximum vertical deflection of a beam $L/200$

Where L = Beam Span

= Maximum vertical deflection of a cantilever $L/100$

Where L = Cantilever length from centerline of upright

FRAME DEFORMATION

⇒ The permissible sway (movement) deformation of rack uprights in Z or X directions, shall not exceed 1/200 of the rack height measured from unloaded racking upright.

