Material Storage: Pallets, Racks, Overlots and Falling Objects Meeting Kit



WHAT’S AT STAKE

A storage area can look completely fine right up until it isn’t. Overloaded racks. Pallets stacked a little too high. A damaged upright that’s been there so long nobody notices it anymore. These hazards don’t announce themselves. They accumulate quietly until the weight is wrong or the bump is in the wrong place, and then they fail fast.

WHAT’S THE DANGER

Overloaded and Unstable Racks

Every rack has a weight rating. When that rating gets exceeded, even slightly, the risk of partial or total rack failure goes up. Uneven loading is just as dangerous as overloading. A pallet that’s hanging off the edge or sitting on a bent arm is a collapse waiting to be triggered by the next forklift pass or temperature shift in the building.

Poor Stacking Habits

Boxes stacked too high, pallets sitting on top of other pallets without a stable base, or loads leaned against walls or racking can tip with surprisingly little force. Forklifts create vibration. People walking by create vibration. A stack that looked fine at the start of the shift can be a fall hazard by the end of it.

Damaged Equipment That Gets Ignored

A dented upright, a cracked pallet board, a rack arm that’s been pushed slightly out of alignment by a forklift, these are warnings. They’re easy to walk past because nothing has happened yet. But each one reduces the load the system can safely hold, and they compound. A rack that’s taken three minor impacts is not the same rack it was.

HOW TO PROTECT YOURSELF

Good storage habits aren’t complicated. They’re about taking a few extra seconds before you add to a system, and speaking up when something doesn’t look right.

Respect the Rated Load

Before you place anything on a rack, check that the load stays within the rated capacity and that it’s centred and stable. If you’re not sure what the rating is, find out before you load. ‘It’s always held this much before’ is not a capacity check.

Stack It Right

Some basics that prevent a lot of incidents:

- Heaviest items on the lowest levels. Always.
- Stacks should be plumb, not leaning. If it looks like it’s tilting, it is.
- Damaged pallets don’t get used as a base. Flag them and pull them from service.
- Nothing stored in aisles, in front of exits, or blocking emergency equipment.

Inspect Before You Add More

Before stacking anything on an existing rack or on top of a load, take five seconds to check what’s already there. Are items hanging over the edge? Is the rack arm sitting straight? Is the pallet in good shape? If anything looks wrong, flag it. Don’t add more weight to a system that’s already showing signs of stress.

Report Damage and Tag It Out

A bent upright or cracked arm is not a cosmetic problem. Tag it out of service, tell your supervisor, and don’t load it further until it’s been inspected and cleared or replaced. Passing a damaged rack on to the next shift without flagging it puts the next crew at risk too.

Use Mechanical Aids for Heavy or Awkward Loads

If a load needs to go on or off a rack and it’s too heavy or too awkward to handle safely by hand, use the right equipment. Pallet jacks, forklifts, and hand trucks exist specifically so that workers don’t have to carry what machines should be moving. Using them isn’t slowing the job down. It’s doing the job correctly. If the mechanical aid you need isn’t available, that’s a conversation with your supervisor before the load moves, not after.

Wear the Right PPE for the Storage Area

Storage areas have specific PPE requirements that are easy to overlook when the work feels routine. Safety footwear rated for falling objects is non-negotiable where loads are being moved at any height. In areas where overhead storage is active, a hard hat is required. If forklifts operate in the same space, high-visibility clothing helps ensure operators can see you.

FINAL WORD

Storage areas look like the least exciting place on the floor. They’re not. Every load you place is a decision about who’s safe in that area for the rest of the shift.