

Spot The Safety Violation: It'll Hit You Like a Tonne of Bricks



What do you think went wrong here'



A lot of attention is paid to how workers *move* materials, whether manually or using equipment such as pallet trucks. Improperly handling materials can endanger workers in a variety of ways. But improperly *storing* materials can be just as hazardous

This picture from the US Naval Safety Center shows stacks of bricks or paving stones. Some safety measures were taken in storing this material. For example, you can see straps on the stacks to keep the piles intact.

But the use of a Jenga-like column of stacked bricks to support the corner of one elevated pallet of bricks seriously undermines those safety measures. If a worker or piece of equipment should just brush against this column, the whole pile could come tumbling down. And given the likely weight of these materials, anyone in the vicinity could suffer serious 'if not fatal' injuries.

6 Steps for Safe Materials Storage

The OHS regulations in each jurisdiction address safe storage of materials. So ensure that you comply with the specific storage requirements in your jurisdiction. But employers should generally take the following steps to comply with materials storage requirements:

Step #1: Use Proper Storage Racks

Storage racks are commonly used to store materials in warehouses, distribution centres, retail stores and manufacturing plants. But if these racks are improperly installed or used, or become damaged in some way, they can endanger

workers.

Example: Workers at a home improvement store in Ontario were preparing to receive a load of merchandise from a trailer backed into the store's receiving area, which had three bays. Pallets of patio doors had been placed in overhead racks in two of the bays. When one worker opened a bay door, it came into contact with a pallet of patio doors, which tipped over, fell about 11 feet and struck another worker. He suffered injuries to the head, resulting in paralysis and fractures. The MOL investigation found that the racking system hadn't been installed properly. The store pleaded guilty to a materials storage violation and was fined \$90,000 [*Home Depot of Canada Inc.*, Govt. News Release, July 22, 2014].

Use this checklist to inspect the storage racks in your workplace to ensure that they're safe.

Step #2: Ensure that Stacks of Materials Are Safe

If materials are stored in stacks or piles, such as the bricks in this picture, ensure that such stacks don't endanger workers. For example, brace, strap, cross-tie or otherwise restrain stacked materials or containers to prevent them from collapsing or falling from the pile. And ensure that stacks aren't piled to a height that could endanger their stability.

Step #3: Take Extra Care Storing Certain Materials

Certain materials, such as those that can roll or loose/bulk materials, may be subject to specific or additional storage requirements. So make sure to check your OHS regulations for such requirements and comply with them.

For example, masonry materials, such as the materials in the picture, are often stored in stacked piles. The OHS regulations may limit the height of these piles or require that over a certain height, the tiers be progressively stepped back from the vertical face and supported by wooden strips. In addition, you may have to place stacks of masonry materials on wooden planks, platforms or other level bases.

Step #4: Ensure Storage Area Itself Is Safe

Also ensure that the areas around stacks, piles and storage racks are safe. For example, piles or stacks of materials shouldn't be located underneath energized electrical power lines. The aisles between racks should be wide enough for the safe operation of powered mobile equipment and kept free of obstacles. And stored materials shouldn't interfere with or block:

- Lighting;
- Ventilation;
- Doors or windows;
- Passageways or traffic lanes;
- The operation of machines;
- Sprinklers and firefighting equipment; or
- Electrical panels.

Step #5: Implement Safe Storage Rules and Practices

Create and implement rules and practices for the safe storage of materials and safe removal of those materials from storage. For example, bar workers from stacking materials too high or overloading racks beyond their safe load limits. And require workers to report any damage to such racks as soon as is practical.

Step #6: Train Workers on Safe Materials Storage

Be sure to train workers on your safe materials storage rules and procedures as well as the requirements in your jurisdiction.