

# SECURING LOADS

Workplaces often use vehicles to transport loads of materials from site to site. If these materials, such as pipes or lumber, aren't properly secured, they can fall from the vehicle during transport and endanger everyone on the road. In addition, improperly secured loads can endanger workers when they go to unload the materials.

## DANGERS

If a load isn't properly secured on your vehicle, it can severely injure you during loading and unloading. Risk factors for workers when securing loads include:

- Overexertion injuries
- Being struck by parts of the load
- Slips and falls—either when working at heights or from the ground due to ice, snow and rain.

Here are two examples of actual workplace incidents involving improperly secured loads:

1. Strapping loads – A flatbed driver was strapping a load of steel from the side of a flat-bed truck. While pulling and turning the strap wheel, he felt a sudden pain in his right shoulder, a musculoskeletal injury that required therapy and days off work.
2. Unstrapping loads – A worker was killed by a falling pipe when unloading a transport trailer. He was unstrapping the load when three high-density polyethylene pipes, weighing about 500 kg each, rolled off the top tier. Although the pipes were resting on dunnage, it didn't secure the load once the strap was removed.

If a load isn't properly secured, it can also cause major problems during transportation. Studies have found that up to 25% of unsafe highway incidents were attributed to cargo inadequately secured on vehicles.

## CONTROLS

There are many methods and materials available to secure loads and cargo on including:

- Strapping (steel, polyester, nylon, and polypropylene)
- Fasteners (nails and bolts)
- Lashing (ropes, cables, wires, and chains).



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## **To prevent injuries, follow proper work practices to secure loads:**

- All loads must be secured to comply with Facilities' rules and highway safety laws.
- Workers should wear comfortable boots with anti-slip resistance.
- Loading and unloading may involve equipment such as forklifts or cranes. Drivers shouldn't operate such equipment unless they're competent to do so based on their training.
- Always check the condition of tie downs and ropes to make sure they are not damaged or excessively worn.
- When using an internal rack system, check the anchorage points periodically to make sure they are sound. Check all doors to make sure they are closed.
- Check the load to make sure it is packed tightly. Loose loads can shift and cause difficulty with steering and braking. If a load shift occurs while the vehicle is turning a corner, a rollover could occur.
- The load must be well centered. A poorly centered load can cause problems during normal vehicle operation. If the load contains items of unequal weight, keep the heaviest items toward the center of the total load.

## **When traveling with a load, consider the following:**

- What is the weight of the load and are you sure it does not exceed the vehicle's capacity?
- Will the load height be an issue? Are there any low clearance underpasses on your planned route?
- Does your load extend beyond the back of your vehicle? Do you need a warning flag?
- If your load is in an open top truck, have you covered the top with a canvas or tarp to assure that the load will not fly out of the back?
- Do you know your route? Are there any steep hills or sharp corners that could present dangerous situations because of your load?

**When traveling with a load, make sure to address all load safety issues in order to assure that YOU and your load arrive safely at your destination.**