

The Dangers of Tarping Flatbed Loads



The work life of flatbed truck drivers is dangerous enough considering they drive on America's roadways everyday. But that's not the only danger these drivers encounter. Even something that sounds simple - covering a load with a tarp can lead to severe injury and even death.



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Introduction

Tarping flatbed loads is a difficult and dangerous task, especially when it is done manually. Walking on top of unstable or uneven loads is a risk that can lead to tragic falls. The tarps themselves are often heavy and unwieldy creating an ergonomic nightmare.



The Versatile Flatbed

Flatbed trailers are perfect for carrying different types of loads whether those loads are heavy, oversized or oddly shaped. This is what makes them so appealing to shippers. Manual tarping is by far the most dangerous way to cover a flatbed load. Hazards include having to climb on top of the flatbed sometimes without a properly designed ladder or platform and a lack of guardrails. A tarp can be heavy, weighing anywhere from 80 to 150 pounds so spreading one is akin to wrestling a small person. And if it's raining, a slippery plastic tarp can become deadly.

Why Tarp?

There are many reasons a shipment might need to be covered with a tarp. Items can come loose and blow off the truck onto the road; inclement weather can damage certain types of loads like plasterboard and drywall, create watermarks on aluminum or steel, and warp plywood. Tarps also protect loads that may be damaged by road gravel and other flying bits. Since about 60% of all flatbed shipments requiring tarping, there are frequent instances where falls are likely to occur.

An Array of Tarps

There are all sorts of tarps including heavy-, medium- and lightweight styles. Each has its own use. A lightweight tarp is easier to spread but doesn't hold up to heavy use. Medium- and heavy-duty tarps weigh more making them difficult to spread but more durable. Basically, you have to take the good with the bad. Besides different weights there are also various styles for different load types –machinery tarps, steel tarps, lumber tarps, water resistant tarps, neoprene asphalt tarps, smoke tarps and the list goes on. The heavier tarps may be more durable, but they also require greater forces meaning drivers will have more ergonomic stressors over time. The driver could also fall backward off the trailer because of a misstep or lost grip while pulling the tarp over the load.

Why is Tarping a Flatbed Dangerous?

Just getting onto the flatbed poses a risk of falling if there's not a properly installed flatbed ladder. Then come the dangers of walking on the load. Following are just a few examples that illustrate the dangers that drivers face. These injuries were documented by The Department of Labor and Industries in Washington

State in 2007 yet they are representative of the everyday dangers drivers face and the monetary repercussions for their employers. You can tell by the drivers' ages that they are probably not beginners.

A 49-year-old truck driver was tarping a load when the wind blew the tarp causing the driver to fall. He landed on one shoulder, spraining it and later developed serious complications. Workers' compensation costs were \$170,000 plus more than four years of time loss.

While a 45-year-old driver was manually tarping a load of steel tubing, the heel of his boot got caught on a load strap. He fell to the pavement spraining his neck, shoulder and back. Workers' compensation costs were \$28,000 including 40 weeks of time loss.

A 40-year-old driver, tarping a load of wood chips, fell from the catwalk, landed on his outstretched arm and broke his wrist. Workers' compensation costs were \$9,000, including 8 weeks of time loss.

What Can Your Company Do?

The versatility of flatbed trailers is what makes them attractive to shippers, so it's not likely they will be replaced any time soon. Since few U.S. standards and regulations actually address tarping, the lack of rules and their enforcement create little incentive to correct the fall risks associated with truck and trailer tarping. This puts the obligation on each individual company. Every time a truck drives onto your business property, you are held accountable for the safety of the individuals loading your products onto the flatbed. Realize the risk to workers' lives and the impact it could have on your company if something were to happen. Don't wait until there is a fatality to evaluate tasks and make changes.

Operator and Driver Training

Employees need training on how to avoid tarping hazards and use equipment properly to safely tarp a load. One simple way to ensure this happens is to include a requirement in the contract for site-specific training. Basic fall prevention and protection training could be added as part of driver training and qualification requirements. Also, accessing a flatbed by climbing should be prohibited because edges (usually 5 to 7 feet high) are a fall hazard, too. The likelihood of a head injury can start at falls from as little as four feet.

Flatbed Fall Prevention

There is a difference between fall protection and fall prevention. Fall protection merely protects the worker after a fall is in progress while fall prevention keeps the fall from happening in the first place. Prevention is



always superior to protection. If a driver accidentally slips or falls, becomes injured or loses his or her life there is no going back to change those consequences.

It's also possible for the drivers themselves to become immune to the true danger of fall hazards since they deal with it everyday and may become overly confident. Maybe a four-foot high platform doesn't really seem that high, but if you're six feet tall and standing on a four-foot tall platform, the fall will be from a height of ten feet and that can cause serious injuries. So protect your company and your drivers by providing proper fall prevention now to stave off accidents in the future.

Flatbed Trailer Tarping Platforms

There are two major types of fall prevention for flatbed tarping. The first is a trailer tarping platform that allows drivers to work above the danger by placing them higher than the flatbed and out of harm's way on sturdy aluminum platforms with non-skid surfaces and side guardrails. These safety features allow drivers to inspect loads, tarp flatbeds and perform other job duties while ensuring fall prevention. Trying to spread a tarp over a flatbed load can be dangerous because of shifting contents that may have uneven or slippery surfaces.

Once the flatbed is positioned between two platforms, one operator using a remote can sandwich the trailer between the two platforms by adjusting them horizontally. At that point a driver can safely reach the load for tarping, inspecting or sampling.

Flatbed tarping platforms have options for customizing to your company's specific needs:

- Single or double-sided systems.
- Fixed position or rolling designs.

- Optional canopy protects against inclement weather.
- Optional swing gates add another level of fall prevention.

Flatbed Overhead Tarping System

The ideal safety solution for tarping a flatbed comes in the form of an overhead tarping system. This is the best scenario because the driver's feet remain on the ground the entire time so falls from heights are impossible. The overhead system uses an electric motor to drag the tarp over the entire length of the flatbed. No personnel are needed to climb on the load. All the operator has to do is connect the tarp to the spreader bar then guide it along the length of trailer using a hand-held control. This saves lives, manpower, time and money while reducing ergonomic injuries and eliminating falls from the flatbed. There's no downside here. An overhead tarping system can be added to an existing structure or it can be designed as a freestanding unit to meet certain specifications for each unique business. It's easy to use and requires only one operator.

Conclusion

Safety is key when working any job especially one that combines heights and moving vehicles. An overhead tarping system or tarping platforms protect drivers so they aren't forced to walk on top of a load and risk a deadly fall.

SOURCES

Ellis, Nigel J., *Tarping Flatbed Trailers, Recognizing and Responding to Fall Exposures*, May 2008, ASSE (American Society of Safety Engineers)

Flatbed Fall Protection, Carbis.com

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