



Load Securement - Flatbed

Toolbox Talks are intended to facilitate health and safety discussions. Find more Toolbox Talks on the [Occupational Safety web page](#).

General Information

Transporting vehicles, equipment, and other cargo on flatbed trailers is a necessary task for construction, repair, and research projects. The Department of Transportation (DOT) has specific requirements to secure and prevent cargo movement during transport on public roads. Rules, in their entirety, cannot be reduced to one page, but securement regulations for common loads are summarized below. Loads should never exceed trailer or vehicle towing capacity.

Tiedown selection

- Consist of chain and binder, ratchet strap, wire rope, steel strap, or cords.
- All components must have a rated breaking strength greater than the weight of the load. Tiedowns are only as good as the weakest component.

Minimum number of tiedowns

- Refer to the table below for general tiedown requirements. Automobiles, equipment, and loads with specialized trailers may have additional requirements.

Length v	Weight >	<1,100 pounds	1,100+ pounds
< 5 ft		1	2
5 to 10 ft		2	2
> 10 ft		length/10 + 1	length/10 + 1

- Vehicles weighing < 10,000 pounds may be secured with 2 tiedowns, 1 in the front and 1 in the rear.
- Automobiles weighing > 10,000 pounds and agriculture or construction equipment must be secured with at least 4 tiedowns, as close to each corner as possible.
 - Loaders, buckets, attachments, implements, etc. must be lowered completely and secured.
 - If equipment has mounting points, they must be used.

Warning flags

- Required when a load is more than 4 inches wider or more than 4 feet longer than the trailer platform.
- Must be red or orange and a minimum of 18 inches square.
- Required at the extreme rear of the load. Two flags are required if the projecting load is wider than 2 feet.

Discussion Date:

Supervisor:

Participants:

Source: [49 CFR Part 393](#)