## FLATBED TRUCKS & TRAILERS - SECURING LOADS BEST PRACTICES

Objects falling off a truck or trailer are bad. The Federal Motor Carrier Safety Administration rules governing load securement can be found at 393.5 -.134 in the Federal Motor Carrier Safety Regulations. The new rules require us to change the way we secure cargo to prevent items from shifting or falling from motor vehicles.

The rules require that all devices and systems used to secure cargo to a vehicle must be capable of meeting the performance criteria. First of all, tie-downs (cables, chains, straps) must be capable of providing a downward force of 20 percent of the weight of the article to prevent vertical movement. All load-securing devices must meet the requirements in 393.102. Devices shall be placed inboard of rub rails if practicable.

**General Rule:** Cargo must be firmly secured on a vehicle by structures of adequate strength, dunnage (loose materials used to support and protect cargo), shoring bars, tie downs, or a combination of these. When an article of cargo is not blocked to prevent movement in the forward direction, the number of tie-downs needed depends on the length & weight of the articles.

There must be at least one (1) tie-down for articles 5 ft. or less in length, and 1,100 lbs. or less in weight. *Give examples using your equipment, machines, supplies.* 

There must be at least two (2) tie-downs if the article is 5 ft. or less in length and more than 1,100 lbs. in weight; or greater than 5 ft. but less than 10 ft., regardless of weight.

Give examples using your equipment, machines, supplies.

Heavy Vehicles, Equipment, and Machinery - 393.130: These requirements are applicable to the transportation of heavy equipment and machinery which operate on wheels or tracks, such as front-end loaders, bulldozers, tractors, and power shovels and which individually weigh 10,000 lbs. or more.

These vehicles must have four independent points of securement, all accessories and attachments shall be grounded and secured, articulating equipment must be secured either by a brace or additional securement, and vehicles that have the ability to rotate must be secured to prevent rotation. Tie-down requirements:

- Restrain cargo with a minimum of 4 tie downs, each having a Working Load Limit of at least 5,000 lb.
  - Prevents cargo movement in the side-to-side, forward, rearward, & vertical directions.
- Attach tie downs:
  - Either at the front and rear of the vehicle, or
  - Using the mounting points on the vehicle designed for that purpose.
  - Use only chains marked as G70.