

# New Requirements for Securing Cargo Apply to Truck Bodies

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## QUESTION:

**Our company manufactures and installs truck bodies. We understand that new requirements are coming for cargo securement in January 2004.**

**What are these requirements, and do they apply to truck bodies**



## ANSWER:

The new requirements are discussed below and they indirectly apply to your business.

The Federal Motor Carrier Safety Requirements apply to the motor carriers, their agents and employees that operate commercial motor vehicles (CMV) in interstate commerce. However, although the end-user is ultimately responsible for proper cargo securement, they will look to the distributor and/or manufacturer to supply them with vehicles that are capable of meeting these requirements. Knowing these new requirements will help you assist your customers.

The Federal Motor Carrier Safety Administration (FMCSA) published a final rule, "Development of a North American Standard for Protection Against

Shifting and Falling Cargo," on Sept. 27, 2002. The purpose of the final rule "is to reduce the number of accidents caused by cargo shifting on or within, or falling from, CMVs operating in interstate commerce, and to harmonize to the greatest extent practicable U.S., Canadian, and Mexican cargo securement regulations." The new requirements also contain more specific methods for the tiedown of specific types of cargo.

As with the current requirements for cargo securement found in Title 49 CFR Section 393.100, this new rule applies to "trucks, truck tractors, semi-trailers, full trailers, and pole trailers." The new requirements went into effect Dec. 26, 2002, but motor carriers have until Jan. 1, 2004 to ensure compliance.

A Notice of Proposed Rulemaking (NPRM) for these requirements was published Dec. 18, 2000. Copies of the NPRM were subsequently mailed to applicable NTEA Affiliate Division and Committee members and to all NTEA Manufacturer members, noting these upcoming requirements. As indicated in the NPRM, the new requirements have performance criteria for cargo securement systems, including any part of the body used to contain or secure cargo (such as anchor points). There are also new requirements for the securement of hook lift and roll-off containers.

To highlight what applies to NTEA members, changes to the requirements for anchor points and the new requirements for

hook lift and roll-off container securement follow.

## Modifications to Anchor Point Requirements

The current requirements for anchor points on truck bodies are found in Section 393.102 (d), "Attachment to the Vehicle," stating "[t]he hook, bolt, weld, or other connector by which a tiedown assembly is attached to a vehicle, and the mounting place and means of mounting the connector, must be at least as strong as the tiedown assembly when that connector is loaded in any direction in which the tiedown assembly may load it."

- Section 393.5 is amended to define anchor points as "[p]art of the structure, fitting or attachment on a vehicle or article of cargo to which a tiedown is attached."
- The new requirements in Section 393.104 (c), "Vehicle Structures and Anchor Points," states "Vehicle structures, floors, walls, decks, tiedown anchor points, headerboards, bulkheads, stakes, posts and associated mounting pockets used to contain or secure articles of cargo must be strong enough to meet the performance criteria of Section 393.102, with no damaged or weakened components that will adversely effect their performance for cargo securement purposes, including reducing the working load limit, and must not have any cracks or cuts."
- The new performance criteria for cargo securement devices and systems are as follows:

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Section 393.102 “(a) Performance criteria — Cargo securement devices and systems must be capable of withstanding the following three forces, applied separately: (1) 0.8g deceleration in the forward direction; (2) 0.5g acceleration in the rearward direction; and (3) 0.5g acceleration in a lateral direction. (b) Performance criteria for devices to prevent vertical movement of loads that are not contained within the structure of the vehicle. Securement systems must provide a downward force equivalent to at least 20% of the weight of the article of cargo if the article is not fully contained within the structure of the vehicle. If the article is fully contained within the structure of the vehicle, it may be secured in accordance with Section 393.106 (b).”

For cargo fully contained within the structure of the vehicle, Section 393.106 (b) General — “Cargo must be firmly immobilized or secured on or within a vehicle by structures of adequate

strength, dunnage or dunnage bags, shoring bars, tiedowns or a combination of these.”

The new rule “does not include a requirement that anchor points be rated and marked.” In the preamble to the final rule, the FMCSA states “...safety-conscious motor carriers and drivers could achieve compliance with the rules being adopted, and make wise choices about cargo securement devices, without the mandatory marking of anchor points.” It further states, “[b]ased on the anecdotal information available to-date, the vast majority of cargo-securement related accidents do not involve problems with the anchor points. The majority of these accidents appear to involve an inadequate number of tiedown devices, improper placement of the tiedowns, or other factors unrelated to the design or performance capability of the anchor points. Therefore, we [the FMCSA] continue to believe that our focus should remain on the actual tiedowns and the way motor carriers use such devices to

secure articles of cargo, rather than on vehicle-based anchor points.”

Please note the final rule does not prohibit using current securement methods. End-users can use the same tiedown hardware, as long as it meets the performance criteria. The preamble in the final rule states the “FMCSA believes motor carriers already have all the hardware they need to comply with the proposed changes. The challenge for motor carriers is to learn how to properly use tiedown devices to further reduce the occurrence of cargo securement-related accidents.”

In most cases, compliance will involve better use of the existing securement systems, and possibly more of the same tiedowns. In fact, the FMCSA indicates “[m]ost of the costs associated with this rulemaking are believed to be associated with the training of drivers, motor carrier employees responsible for loading CMVs, and enforcement officials to ensure they understand the requirements being adopted.”

## New Roll-on/Roll-off and Hook-lift Container Requirements

Section 393.5 is amended to define a hook-lift container as “[a] specialized container, primarily used to contain and transport materials in the waste, recycling, construction/demolition and scrap industries, that are used in conjunction with specialized vehicles in which the container is loaded and unloaded onto a tilt frame body by an articulating arm.”

- A new Sec. 393.134 contains the requirements for the “transportation of roll-on/roll-off or hook lift containers.”
- Each roll-on/roll-off and hook lift container carried on a vehicle that is not equipped with an integral securement system must be:
  - (1) Blocked against forward movement by the lifting device, stops, a combination of both or other suitable restraint mechanism
  - (2) Secured to the front of the vehicle by the lifting device or other suitable restraint against lateral and vertical movement
  - (3) Secured to the rear of the vehicle with at least one of the following mechanisms:
    - (i) One tiedown attached to the vehicle chassis and the container chassis
    - (ii) Two tiedowns installed lengthwise, each securing one side of the container to one of the vehicle’s side rails; or two hooks, or an equivalent mechanism, securing both sides of the container to the vehicle chassis at least as effectively as the tiedowns in the two previous items.”

Section 393.5 is amended to define Integral Securement System as “[a] system on certain roll-on/roll-off containers and hook-lift containers and their related transport vehicles in which compatible front and rear hold down devices are mated to provide securement of the complete vehicle and its articles of cargo.”