

When Unsecured Cargo Turns a Trailer Into a Hazard

Securement Devices and Required Inspections Can Reveal Why the Load Moved

[Unsecured cargo](#) doesn't have to fall onto the highway to cause a catastrophic truck crash. A heavy load that shifts several feet inside a trailer can change the truck's center of gravity, overload one side, interfere with braking, or force the trailer into a rollover. Cargo that breaks through doors, falls from a flatbed, or enters another vehicle creates an even more direct danger.

These incidents are not always caused by how the warehouse originally positioned the cargo. The load may have been distributed correctly but restrained with too few tiedowns, damaged straps, underrated chains, weak anchor points, or inadequate blocking. A securement system can also loosen during transit and remain uncorrected because the required inspections never occurred.

A [truck accident lawyer](#) investigating one of these crashes must determine how the cargo was supposed to be restrained, what forces the securement system could withstand, whether its components were damaged, and what the driver and motor carrier did after the trailer left the loading facility.

Securement Failure Is Different from Load-Origin Liability

Load-origin liability focuses on decisions made when the cargo entered the trailer. Those questions may involve weight distribution, cargo placement, loading order, inaccurate weight information, and whether a shipper or warehouse created a condition the driver could not reasonably detect.

A securement case asks different questions:

- *Were the chains, straps, blocking, bracing, chocks, or anchor points appropriate for the commodity?*
- *Did their combined working-load limits satisfy federal requirements?*
- *Could the tiedowns loosen or release during transportation?*
- *Did the driver inspect and adjust the system when required?*

The two theories can exist in the same case. A loader may position cargo unsafely while the motor carrier independently fails to use adequate restraints or conduct required inspections. Separating the theories helps identify the evidence needed to establish when the danger arose and which company had an opportunity to correct it.

Shipper-loader liability can also turn on whether a loading defect was apparent or concealed. Many courts have cited [United States v. Savage Truck Line, Inc.](#) for the framework that places the primary duty for safe loading on the carrier while recognizing potential shipper responsibility when the shipper undertakes the loading and creates a latent or concealed defect that ordinary observation would not reveal. Later courts have applied or discussed that framework in negligence cases, but its use varies by jurisdiction. A sealed trailer, loader

assurances, the driver's opportunity to inspect, and whether the problem was visible can therefore change the liability analysis.

Federal Rules Govern How Cargo Must Be Restrained and Rechecked

[FMCSA's cargo securement rules](#) do more than prohibit objects from falling onto the road. They require cargo to remain contained, immobilized, or secured so that movement does not adversely affect the truck's stability or maneuverability. Our [Motor Carrier Claims resource](#) also addresses how the inspection duties in 49 C.F.R. § 392.9 fit into a trucking case.

The rules are also built around measurable performance criteria. Under [49 C.F.R. § 393.102](#), securement devices must be designed, installed, and maintained so their breaking strength is not exceeded under 0.8 g of forward deceleration and 0.5 g of rearward or lateral acceleration. The regulation separately sets working-load-limit criteria and requires downward force equal to at least 20% of the cargo's weight for loads that are not fully contained by the vehicle structure. In a serious case, those numbers can turn the post-crash inspection into an engineering question rather than an argument over whether a strap merely looked tight.

The requirements include:

- **Protection Against Shifting or Falling:** Cargo must be contained, immobilized, or secured so it does not leak, spill, blow, or fall from the vehicle, and it must not shift enough to adversely affect the vehicle's stability or maneuverability.
- **Securement Components in Proper Condition:** Tiedowns, chains, synthetic webbing, anchor points, blocking, bracing, chocks, and related equipment must be appropriate for the job and maintained so defects do not reduce performance.
- **Adequate Working-Load Limits:** Under [49 C.F.R. § 393.106](#), the aggregate working-load limit of tiedowns used to secure an article or group of articles against movement must be at least one-half the cargo's weight. Each tiedown's rating is limited by its lowest-rated component, connector, or anchor point.
- **Enough Tiedowns for the Cargo:** The minimum number of tiedowns depends on the article's length, weight, placement, and whether it is blocked against forward movement. [49 C.F.R. § 393.110](#) sets the general tiedown-count rules, in addition to the working-load requirements.
- **Pre-Trip Assurance:** When the driver-inspection rules apply, [49 C.F.R. § 392.9](#) requires the driver to assure that the cargo is properly distributed and adequately secured before driving.
- **Inspection Within the First 50 Miles:** The driver generally must inspect the cargo and securement devices within the first 50 miles after beginning the trip and make necessary adjustments.
- **Continuing Reinspection:** The driver must reexamine the cargo and securement devices after a change in duty status, after three hours of driving, or after 150 miles, whichever occurs first.
- **Commodity-Specific Securement:** Additional rules apply to commodities such as logs, dressed lumber, metal coils, paper rolls, concrete pipe, automobiles, heavy machinery, flattened vehicles, and certain intermodal or roll-on/roll-off containers.

The driver-specific assurance, inspection, and reinspection duties in § 392.9(b) do not apply when a driver is operating a sealed commercial vehicle and has been ordered not to open it, or when the cargo was loaded in a way that makes inspection impracticable. That exception can be important when deciding what a driver reasonably could have discovered. It does not, by itself, determine whether the shipper, loader, motor carrier, or another party bears responsibility for the unsafe load.

How Cargo Securement Failures Cause Crashes

A securement failure rarely announces itself before it happens. The load behaves normally until the truck brakes hard, takes a curve too fast for the cargo's grip on the trailer, or hits an obstacle that tests every strap and chain holding the freight in place.

How cargo securement failures cause crashes:

- **Load Shift During Turns or Braking:** An improperly secured load can move suddenly enough to unbalance the trailer, contributing directly to a rollover.
- **Cargo Falling Into the Roadway:** A load that breaks loose entirely becomes its own hazard, capable of striking another vehicle independent of the truck itself.
- **Uneven Weight Distribution:** A load that shifts unevenly changes how the trailer steers and brakes, sometimes before the driver realizes anything has gone wrong.
- **Jackknife and Trailer Sway:** A heavy load shifting rearward or sideways can make the combination harder to control and may contribute to trailer sway or a jackknife.
- **Debris Striking Following Traffic:** Cargo or securement equipment that separates from a moving trailer can become a hazard for vehicles behind the truck even if they never collide with the tractor-trailer itself.

None of these failure modes require a dramatic initial event. A load that was marginally under-secured at departure can behave normally for miles before a single hard brake or sharp curve exposes the gap, which is exactly why the securement math matters before the truck ever leaves the yard.

Who Can Be Held Responsible When a Load Isn't Properly Secured

[Responsibility for a securement failure](#) does not automatically default to the driver simply because the driver was behind the wheel when the load shifted. Several parties can share responsibility, depending on who packed the trailer, who inspected it, and who set the schedule the driver was working under.

Who can be held responsible when a load isn't properly secured may include:

- **The Driver:** For cargo the driver can inspect and when § 392.9(b) applies, the driver generally must assure that the load is properly distributed and secured before departure, inspect it within the first 50 miles, and recheck it at the required intervals.
- **The Motor Carrier:** Section 392.9(a) also prohibits a motor carrier from requiring or permitting operation unless the cargo is properly distributed and adequately secured. Training, compliant equipment, securement policies, supervision, and the carrier's response to known problems can all become part of the liability analysis.

- **A Third-Party Loader or Shipper:** A company that actually loads or secures the cargo may face liability under applicable state law when its conduct creates the dangerous condition. Whether the problem was hidden, whether the trailer was sealed, and what the driver could reasonably inspect can matter.
- **A Trailer or Equipment Defect:** Anchor points, tiedown hardware, tensioners, or the trailer structure itself can fail even when the securement plan was otherwise adequate. Depending on the evidence, that can shift part of the investigation toward the equipment owner, maintenance provider, or manufacturer.

This is also where the securement question and the load-origin question can overlap without being the same thing. Where cargo came from is a separate issue from whether it was actually tied down for the road, and a case can turn on either one, or both, depending on what the evidence shows.

The Securement System Can Show How the Failure Occurred

A meaningful investigation requires more than photographs of cargo scattered across the road. The physical components must be compared with the cargo's weight, dimensions, position, and expected movement.

Important evidence may include:

- **Tiedowns and Related Components:** Chains, straps, hooks, binders, tensioners, chocks, blocking, edge protection, anchor points, and damaged trailer structures should be preserved.
- **Ratings and Manufacturer Markings:** Working-load ratings can establish whether the securement system had enough capacity. An unmarked, mismatched, damaged, or underrated component may change the calculation.
- **Damage and Wear:** Cuts, abrasion, broken stitching, corrosion, cracks, knots, loose fittings, bent hooks, and missing edge protection may reveal why a device failed.
- **Cargo Records:** Bills of lading, weight tickets, load sheets, cargo dimensions, securement diagrams, and loading instructions can help reconstruct what the system was required to hold.
- **Driver Activity and Stops:** ELD data, GPS information, duty-status changes, fuel purchases, toll records, and surveillance footage may show when the driver stopped and whether the claimed inspections fit the trip timeline.
- **Carrier Policies and Training:** Securement manuals, driver instruction, equipment-purchase records, prior violations, and replacement practices can show whether the company treated cargo control as an operational safety requirement.
- **Post-Crash Positions:** Scene photographs, police measurements, cargo-rest locations, trailer damage, and marks left by securement devices can help establish the direction and sequence of movement.

Federal regulations do not necessarily create a separate written record for every cargo inspection. ELD data, GPS records, fuel and toll transactions, dispatch communications, and video can therefore become important when testing testimony about when the driver stopped, whether a reinspection should have occurred, and what the driver could have observed.

Securement evidence can disappear quickly. Straps and chains may be discarded, cargo may be reloaded, damaged equipment may be replaced, and the trailer may return to service.

[Preserving truck-crash evidence](#) early can make the difference between identifying a specific securement failure and being left with only the fact that the load moved.

Fried Goldberg LLC Investigates How the Cargo Became Dangerous

At [Fried Goldberg LLC](#), we know the most important evidence after a cargo failure may be lying beside the trailer or still attached to it. We preserve securement equipment, reconstruct cargo movement, analyze the federal rules, and identify the companies whose loading, equipment, inspection, or operational decisions allowed the load to become dangerous.

Our [case results](#) include a \$2.25 million recovery for a client who required neck and back fusion after a logging truck turned and logs penetrated the client's windshield in Effingham County, Georgia. Cargo-related crashes demand an investigation that accounts for the load, the equipment, the truck's movement, and the human decisions behind each of them.

Truck crash victims and families can [contact us](#) for a free, confidential consultation. [Plaintiffs' attorneys](#) may also contact us to discuss co-counsel or referral assistance in a cargo securement case.