

Roadside inspectors across the country are following special guidelines when it comes to checking how hay and straw haulers secure their loads. A technical review from the Federal Motor Carrier Administration (FMCA) provided new details about the proper use of ropes and tiedowns to immobilize bales against shifting and affect on vehicles stability or maneuverability.

This new review supersedes previous findings but confirmed a combination of longitudinal tiedown assemblies that effectively unitizes bales of hay and straw, along with the addition of one or two lateral cargo securement devices, depending on vehicle length, provides a securement system that “. . . meets or exceeds the performance criteria . . .” established in federal rules.

The following is a summary of acceptable securement practices. Tiedowns are exempt from the working load limit set in 49 CFR 393.106(d) if they meet the working load limit requirements listed.

BALE PLACEMENT- Loads must be well-balanced and positioned on the vehicle, so the load is stable without tiedowns.

Small Bales (see **Fig. 1**)

- Sides of load: outside bales must not be placed in the same direction in more than two successive tiers (**A**), except one bale above and below a tier, up to three tiers in succession (**B**).
- Bales in the top tier must be loaded crosswise to the vehicle (**C**).
- No bale must be loaded vertically.

Big Bales:

Sides of load: Outside bales must not be placed in the same direction in more than three successive tiers.

Load projection:

No bales may extend beyond the vehicle bed between a truck and trailer, or semi-trailer and trailer. No bales may extend more than one-third the bale length beyond the rear of the bed surface on a single vehicle or the last vehicle in a combination of vehicles.

Bales may extend over the cab, provided they are supported, interlocked with other bales, and do not obstruct the driver’s view.

LONGITUDINAL TIEDOWNS- The load must be unitized with two longitudinal tiedowns, each having a minimum working load limit of 2,100 lbs., and secured with a tightening device (**F, 1**). The tiedowns must be applied over V-boards (**E**), or big bales may use the alternative method below.

With V-boards:

(Big or Small Bales) Two tiedowns must be anchored at the front and rear near the corners (**D**), extend over the top, and crossed or connected with a tightening device at the center (**F**).

Alternate Securement:

(Big Bales)

Two tiedowns must be anchored at the front and rear of the load at least 48 inches apart, crossed at the front and rear (**G**), passed to the outside around the upper corners of the load (**H**), and connected with a tightening device at the top center (**I**).

LATERAL TIEDOWNS-

Each tiedown must have a minimum working load limit of 4,000 lbs. Multiple tiedowns may be substituted, provided each has a minimum working load limit of 625 lbs., with a combined working load limit of 4,000 lbs. or more. Tiedowns less than two inches in width or diameter must include V-boards.

Vehicles 32 feet or less in length:

One tiedown shall be placed in the center of the length of the vehicle.

Vehicles greater than 32 feet in length:

Two tiedowns shall be positioned at one-third and two thirds the length of the vehicle.

NOTE: Bales not unitized by the longitudinal tiedowns must be secured according to the general cargo securement requirements of FMCSR 393.100-114.

Fig. 1

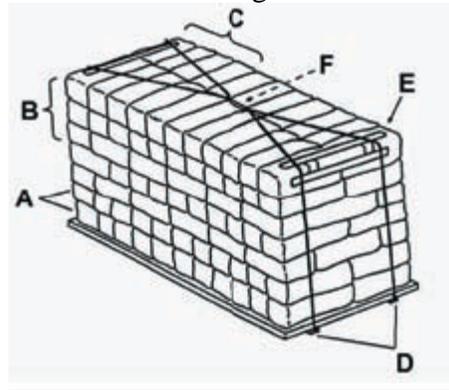
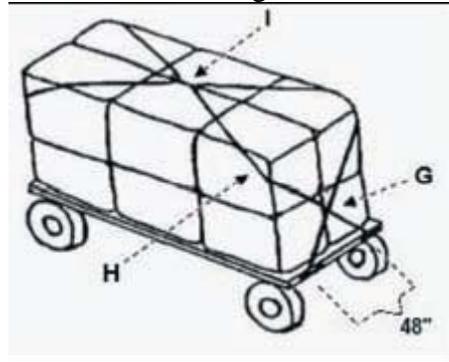


Fig. 2



Hay Bales Minimum Securement Requirements



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