



Risk Control

Load Securement – Synthetic Webbing

Not everything can be secured with chains. Sometimes, synthetic web tie downs are the most feasible solution. Federal Motor Carrier Safety Regulations (FMCSR) recognizes synthetic tie downs for load securement when these guidelines are followed.

Synthetic web tie downs shall be marked or labeled by the manufacturer using an identification tag, stencil or other means, which includes the following required information:

- Name and/or trademark of the tie down manufacturer
- Working Load Limit (WLL) in pounds and kilograms.

If the identification markings become illegible or missing, the tie down shall be removed from service.

How To Select The Proper Synthetic Tie Down:

- Identify the WLL marked on the synthetic tie down
- Identify the WLL of the vehicle anchor points
- Determine the number of tie downs required based on the type, weight and length of the cargo.

These determinations will guide you in determining the Aggregate Load Limit value of the securement system that's needed.

Fmcsa Cargo Securement Rules State:

- At least two tie downs for equipment less than 10,000 lbs.
- At least four tie downs for heavy equipment more than 10,000 lbs. with tie downs having a minimum WLL of 5,000 lbs.
- Refer to FMCSA 393.108 Tables for specific Working Load Limits for synthetic webbing.

Inspecting Synthetic Tie Downs:

If any of the following are visible, the tie down should be removed from service:

- Holes, tears, cuts, snags or embedded particles.
- Broken or worn stitching in load bearing stitch patterns.
- Excessive abrasive wear.
- Knots in any part of the webbing.
- Acid or alkali burns.
- Melting, charring or weld spatter on any part of the webbing.
- Signs of UV light degradation.
- Excessive pitting, corrosion, cracked, distorted or broken buckles or end fittings.
- The WLL is no longer visible.
- Any other visible damage which causes doubt as to the strength of the tie down.

We want to use synthetic webbing that is properly marked and shows the WLL. However, the FMCSA does allow unmarked synthetic webbing to be used.

Working Load Limits for Unmarked Synthetic Webbing

Size	Working Load Limit
1 ¾ inch	1,750 lbs.
2 inch	2,000 lbs.
3 inch	3,000 lbs.
4 inch	4,000 lbs.

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