- For use in abnormal conditions of heat, cold, or chemical activity, consult the manufacturer.
- Always follow Federal DOT, State, or Provincial regulations and the Commercial Vehicle Safety Alliance (CVSA) guidance for securing cargo.

Care:

- Store away from possible mechanical damage, corrosion, dust, grit, extreme temperatures, sun, and any ultraviolet light source.
- Exposure to sunlight will reduce the strength of a synthetic tiedown.
- Polyester webbing losses 30% of sling strength after 12 months.
- Nylon sling losses 40% to 60% of sling strength after a 12 to 36 month constant exposure period.

Repair:

- Any hazardous condition disclosed by an inspection shall require repair or replacement.
- Field repair is not permitted. Only manufacturers or other qualified persons may make repairs.

LOAD ANGLE CHART

Angle factor must be applied to calculate the reduced tiedown capacity when holding force is not at 90° to the plane of the load!



Percent x tiedown rated load = the reduced capacity at that angle.

Angle	Factor	Angle	Factor	Angle	Factor	Angle	Factor
90°	1.0000	70°	0.9397	55°	0.8192	40°	0.6248
80°	0.9848	65°	0.9063	50°	0.7660	35°	0.5736
75°	0.9659	60°	0.8660	45°	0.7071	30°	0.5000

Factors to consider in determining the number and locations of tiedowns:

- 1) Article weight and expected dynamic "G" forces
- 2) Configuration of the load: pipe, coil, equipment, stacking, length, etc.
- 3) Work load limit, number and placement of tiedowns
- 4) Need for wear protection
- 5) Strength of anchorage point(s)
- 6) Other factors affecting normal and emergency conditions

The aggregate working load limit of the tiedown assemblies used to secure an article against movement in any direction must be at least 1/2 times the weight of the article. A minimum of three tiedown assemblies is required to secure an article, based only on the weight of the article. It is the responsibility of the user to determine the proper work load limit for the application.



AWARNING

Can fail if damaged, misued, or overloaded. Use only if trained.

DEATH or INJURY can occur from improper use or care.

Inspect before use and observe rated load to avoid death or personal injury.

Avoid exposure to acid, alkali, sunlight, ultraviolet light and temperatures over 180°F.

Pad edges of load to avoid damage to web.

RATED LOAD = RATED CAPACITY = WORKING LOAD LIMIT

SYNTHETIC WEB TIEDOWN

Instructions for inspection, use, care, and repair

Inspection:

- Before use: Check tag for the tiedown rated load. If tag is missing or illegible, do not use tiedown.
- Inspect the webbing for cuts, knots, fraying, melted or charred fabric; ultraviolet light or chemical damage.
- Inspect for broken or worn stitching in load bearing stitch patters.
- Inspect hardware for distorted, cracked, or worn fittings. If this wear or damage is present, if rated load cannot be determined, do not use the tiedown.
- Frequent inspection is done by the person handling the tiedown each day it is used and must include all before use items.
- Periodic inspections should be conducted at least annually for normal service, more often if use is frequent or severe.
- Periodic inspections are performed by a designated person.

Use:

- Check cargo weight.
- Determine how many tiedowns are needed.
- Total rated load (working load limit) of all the tiedowns used to secure the load must not be less than 1/2 the cargo weight.
- Reduce the rated load if the angle (tiedown to load) is less than 90° (see load angle chart).
- Attach tiedown to restrict cargo movement.
- Be sure the load can't cut the tiedown by padding corners, edges, protrusions or abrasive surfaces; use materials of sufficient strength and thickness.
- Avoid dragging tiedown over rough surfaces and from under the load.
- Defective or weak anchor points reduce the rated load.
- Never use tiedowns to lift or suspend cargo.