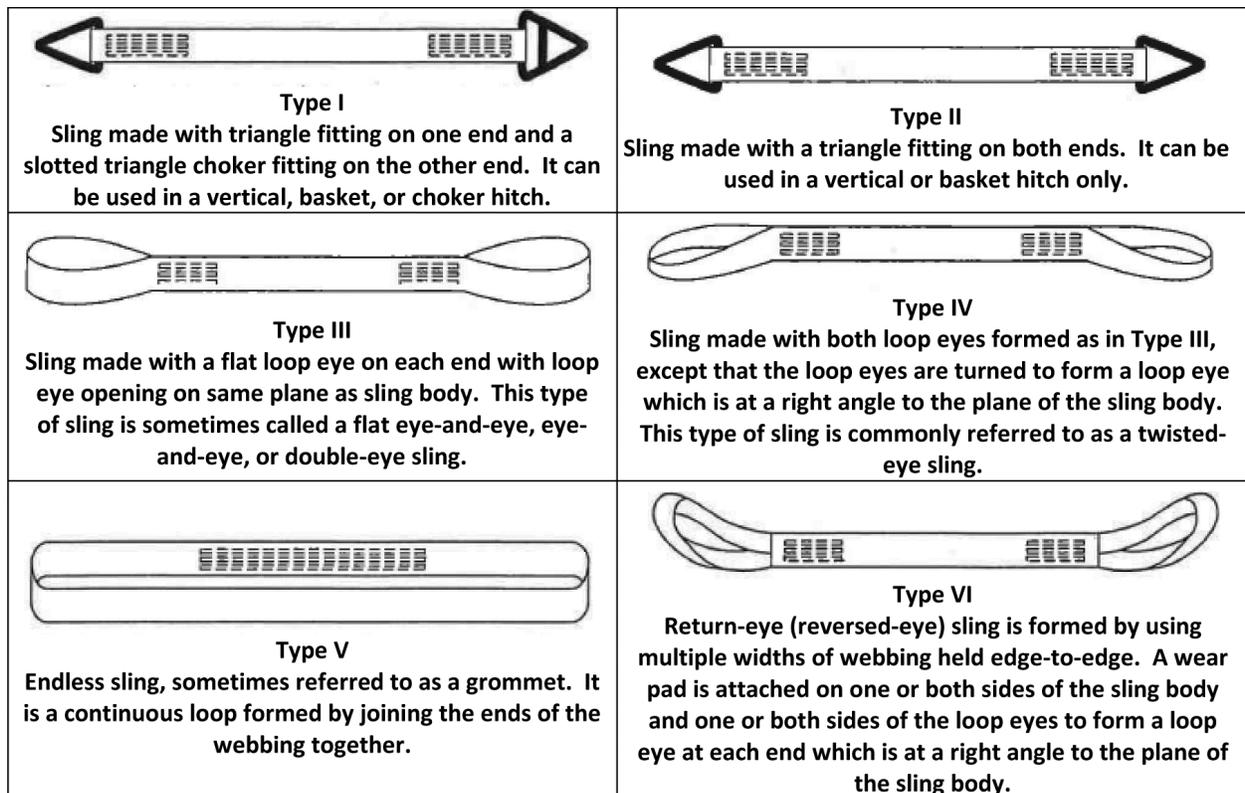


WAC 296-155-33820 Synthetic webbing slings. (1) Identification.

You must make sure all slings have legible identification information permanently attached to the sling which includes the following information:

- (a) Name or trademark of the manufacturer;
- (b) Manufacturer's code or stock number;
- (c) Rated loads for the types of hitches used, and the angle that the load is based on;
- (d) Type of synthetic web material;
- (e) Number of legs, if more than one;
- (f) Repairing agency, if the sling is ever repaired.



**Figure 14
Synthetic Webbing Slings**

(2) Inspection.

(a) A qualified person must inspect synthetic webbing slings before their initial use, according to Table 14:

- (i) When the sling is new; and
- (ii) Whenever a repair, alteration, or modification has been done.

(b) A qualified person must perform a visual inspection for damage, each day or shift the synthetic webbing sling is used. Immediately remove from service any sling that is damaged beyond the criteria listed in Table 15.

(c) A qualified person must perform periodic inspections on synthetic webbing slings, according to Table 15.

(i) You must examine each sling and component individually, taking care to expose and examine all surfaces.

(ii) You must remove slings from use if any of the conditions in Table 15 are found.

(iii) You must keep a written record of the most recent periodic inspection available, including the condition of the sling.

Note: An external code mark on the sling is an acceptable means of recording the inspection as long as the code can be traced back to a record.

**Table 15
Synthetic Webbing Sling Inspection**

Inspect synthetic webbing slings for the following conditions:	Perform inspections:
<ul style="list-style-type: none"> • Missing or illegible sling identification; • Acid or caustic burns; • Melting or charring on any part of the sling; • Holes, tears, cuts or snags; • Broken or worn stitching in load bearing splices; • Excessive abrasive wear; • Knots in any part of the sling; • Discoloration, brittle fibers, and hard or stiff areas that may indicate chemical or ultraviolet/sunlight damage; • Fittings that are pitted, corroded, cracked, bent, twisted, gouged or broken; • Hooks that have any of the following conditions: <ul style="list-style-type: none"> – Any visibly apparent bend or twist from the plane of the unbent hook; – Any distortion causing an increase in throat opening 5%, not to exceed one-quarter inch, or as recommended by the manufacturer; – Wear exceeding 10%, of the original section dimension of the hook or its load pin, or as recommended by the manufacturer; – Self-locking mechanism that does not lock. 	<ul style="list-style-type: none"> • At least once a year for slings in normal service; • At least once a quarter for slings in severe service; • As recommended by a qualified person for slings in special service.

Inspect synthetic webbing slings for the following conditions:	Perform inspections:
<ul style="list-style-type: none"> • Other visible damage that causes doubt about the safety of continued use of the sling. 	

(3) **Repair, alterations, or modifications.**

(a) You must meet the following requirements when repairing synthetic webbing slings:

(i) Slings are only to be repaired by the manufacturer or a qualified person;

(ii) Temporary repairs are prohibited;

(iii) You must mark the sling to show the repairing agency;

(iv) Components used for sling repair must meet the requirements of this part;

(v) You must not repair cracked, broken, melted, or otherwise damaged webbing material or fittings other than hooks;

(vi) You must not repair load bearing splices;

(b) You must proof load test repaired slings according to the requirements in subsection (4) of this section.

(4) **Proof load test.** The sling manufacturer or a qualified person must proof load test repaired slings and slings that have been altered or modified before initial use according to Table 16:

**Table 16
Synthetic Webbing Sling Proof Test Requirements**

Type of equipment:	Proof load test:
<ul style="list-style-type: none"> • Single leg slings; • Multiple leg slings; • Endless slings; • Fittings attached to single legs. 	To a minimum of two times the single leg vertical hitch rated load.
Master links for two-leg bridle slings.	To a minimum of 4 times the single leg vertical hitch rated load.
Master links for 3-leg bridle slings.	To a minimum of 6 times the single leg vertical hitch rated load.
Master links for 4-leg bridle slings.	To a minimum of 8 times the single leg vertical hitch rated load.

(5) **Rated loads.**

Note: Rated loads are based on the following factors:

- Strength of the material;
- Design factor;
- Type of hitch;
- Angle of loading (see Figure 7, Angle of Loading);
- Fabrication efficiency;
- Diameter of curvature over which the sling is used.

(a) You must use synthetic web slings within the rated loads shown in Tables 20 through 24 in ASME B30.9-2010. For angles that are not shown in these tables, use either the rated load for the next lower angle or one calculated by a qualified person.

(b) You must rate slings with the load capacity of the lowest rated component of the sling. For example, if you use fittings that

are rated lower than the sling material itself, identify the sling with the lower-rated capacity.

(c) The use of horizontal sling angles less than 30 manufacturer or a qualified person. (See Figure 7.)

(d) You must use Figure 9, Angle of Choke, the manufacturer, or a qualified person to determine the rated load if the angle of choke in a choker hitch is less than 120 degrees.

(e) Rated loads for slings used in a choker hitch must conform to the values shown in the above referenced tables, provided that the angle of choke is 120 degrees or greater. (See Figure 9.)

(6) Use of synthetic webbing slings.

(a) You must use synthetic webbing slings safely by meeting all of the following requirements:

(i) You must shorten or adjust slings only with methods approved by the manufacturer or qualified person;

(ii) You must not shorten or lengthen slings by knotting or twisting;

(iii) You must hitch slings in a way that provides control of the load;

(iv) You must protect slings with material of sufficient strength, thickness, and construction to prevent damage from sharp edges, corners, protrusions, or abrasive surfaces. See Figure 3;

(v) You must keep all parts of the human body from between the sling and the load, crane, or hoist hook.

(b) Intentional shock loading is prohibited.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-33820, filed 4/19/16, effective 5/20/16. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW, and 29 C.F.R. 1926, Subpart CC. WSR 13-02-068, § 296-155-33820, filed 12/31/12, effective 2/1/13.]