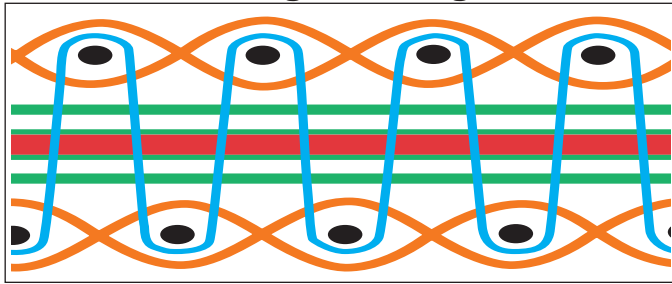


## WHY LIFT-ALL WEB SLINGS?

**Lift-All web slings meet or exceed OSHA, ASME B30.9 and WSTDA standards and regulations**

All sling webbing contained in this catalog is recommended for general purpose lifting. Sling webbing has surface yarns connected from side to side, which not only protect the core yarns, but position surface and tensile yarns to work together to support the load. Wear or damage to sling webbing face yarns cause an immediate strength loss. Sling webbing has red core yarns to visually reveal damage which is one indicator for sling rejection. Please read warning sheet provided with each sling for additional details.

### Sling Webbing



- Transverse pick yarns inter-relate with binder/surface yarns.
- Woven surface yarns cover each side and carry a portion of the load.
- Strip of longitudinal core yarns bears majority of load.
- Binder yarns secure the surface yarns to web core yarns.
- Red core warning yarns.

### TUFF-TAG™

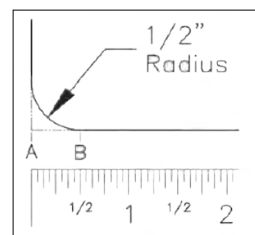
OSHA requires all web slings to show rated capacities and type of material. The *Lift-All Tuff-Tag* is made from an abrasion resistant polymer that will remain legible far longer than any leather or vinyl tag. In fact, *Tuff-Tags* will consistently outlast the useful life of slings.



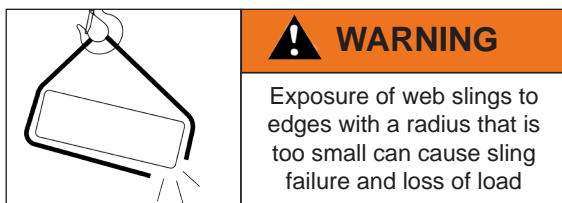
## SAFETY BULLETIN

A safety bulletin is packaged with every web sling from *Lift-All*. The bulletin includes:

- Inspection and removal from service criteria.
- Environmental considerations.
- Inspection frequency.
- Effect of angles.
- Rigging configuration.
- Sling protection.
- Exposure of slings to edges.



Measure the edge radius. The radius is equal to the distance between points A and B.



Edges do not need to be sharp to cause failure of the sling. The table shows the minimum allowable edge radii suitable for contact with unprotected webbing slings. Chamfering or cutting off edges is not an acceptable substitute for fully rounding the edges to the minimum radius. Slings can also be damaged from contact with the edges or burrs at the sling connections.

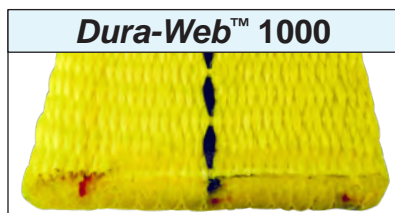
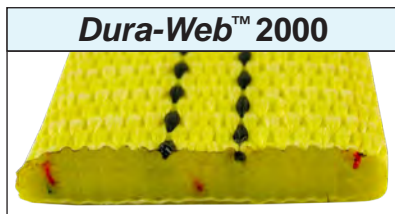
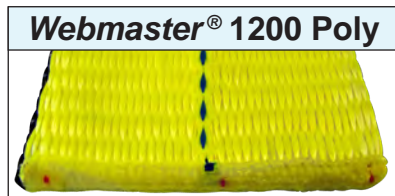
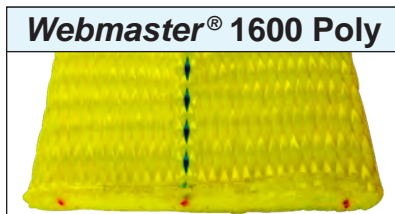
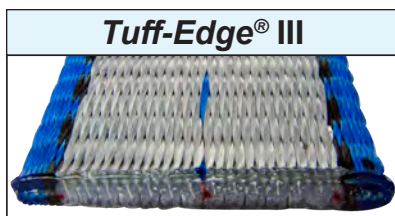
Minimum edge radii suitable for contact with unprotected web slings.

Number of Sling Web Plies	Minimum Edge Radii (in.)	
1 Ply	.18	3/16
2 Plies	.50	1/2
3 Plies	.75	3/4
4 Plies	1.00	1

For further information on minimum edge radii, contact *Lift-All*.

## LIFT-ALL WEB SELECTOR

General Information  
Web Slings  
Round Slings  
Sling Protection  
Wire Rope  
Chain Slings  
Rigging Hardware  
Mesh Slings  
Load Huggers  
Tow Products  
Lift-All Hoists  
Hoist Rings  
Plate Clamps  
Lifting Devices



Approx. Thickness	Single-Ply Capacity Per Inch of Width	Material	Identifier	Applications*
0.156"	1600-lbs.	Polyester	Blue Edge Damage Limit (EDL) Blue center stripe Silver surface	Daily use under good to rugged lifting conditions. 30% more resistant to edge damage than our Tuff-Edge II webbing.
0.156"	1600-lbs.	Polyester	Blue center stripe	Daily use under good to moderate lifting conditions. Polyester stretches less for better load control, reduced abrasion.
0.156"	1600-lbs.	Nylon	No center stripe	Daily use under good to moderate lifting conditions. Nylon stretches more to help avoid shock loading.
0.125"	1200-lbs.	Polyester	Blue center stripe Black yarn one edge	Light use under good lifting conditions. Polyester stretches less for better load control, reduced abrasion.
0.125"	1200-lbs.	Nylon	No center stripe Black yarn on one edge	Light use under good lifting conditions. Nylon stretches more to help avoid shock loading.
0.3125"	2000-lbs.	Nylon	Two black center stripes	Heavy use under moderate to rugged lifting conditions. Abrasion resistant yarns cover entire surface.
0.1875"	1000-lbs.	Nylon	One black center stripe	Daily use under moderate lifting conditions. Abrasion resistant yarns cover entire surface.

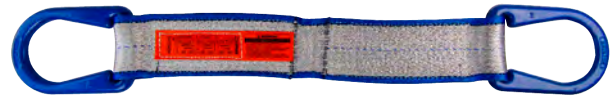
\* **WARNING** Always protect synthetic slings from being cut by corners and edges. See Sling Protection section in this catalog.

## STANDARD WEB SLING TYPES

### HARDWARE SLINGS

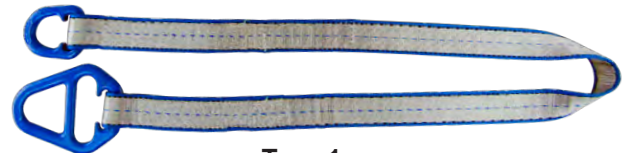
*Unilink™* and *Web-Trap™* hardware can help to extend sling life by protecting the webbing from abrasion on rough crane hooks. Hardware can often be reused, lowering sling replacement costs.

**Type U (UU)** - Has the preferred and economical *Unilink* fitting with *Web-Trap* on each end for use in a vertical, choker or basket hitch. *Unilinks* allow choking from either end to save time and vary wear points.



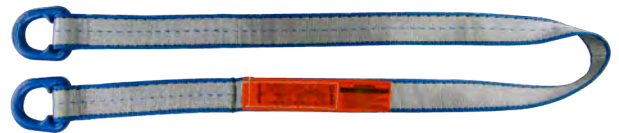
Type U

**Type 1 (TC)** - Has a *Web-Trap* triangle on one end and choker on the other end. Typical use is in a choker hitch. Can also be used in vertical and basket hitches.



Type 1

**Type 2 (TT)** - Has a *Web-Trap* triangle on each end. Normally used in a basket hitch, but can also be used in a vertical hitch. Cannot be used as a choker.



Type 2

### EYE / EYE

**Type 3 (EE)** - Flat Eye slings are very popular and can be used in all three types of hitches. They are easier to remove from beneath the load than sling Types 1, 2 and 4. Type 3 will be supplied as the standard EE sling, unless Type 4 is requested.



Type 3

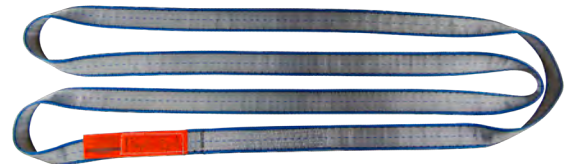
**Type 4 (EE)** - Twisted Eye slings are similar to Type 3 except the eyes are turned 90°. The eyes of a Type 4 nest easily on the crane hook. Reverse the eyes to allow more even wear in eyes.



Type 4

### ENDLESS

**Type 5 (EN)** - Endless slings are versatile and the most economically priced. They can be used in all three types of hitches. The sling can be rotated to minimize wear. The sling legs can be spread for improved load balance.



Type 5

### REVERSE EYE




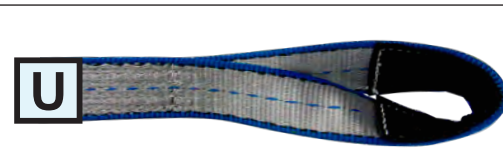



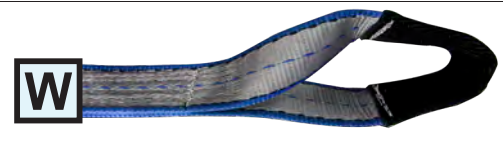


**Type 6 (RE)** - An endless sling with butted edges sewn together to double the sling width. They have reinforced eyes and wear pads on both sides of body and eyes for premium wear resistance.



Type 6

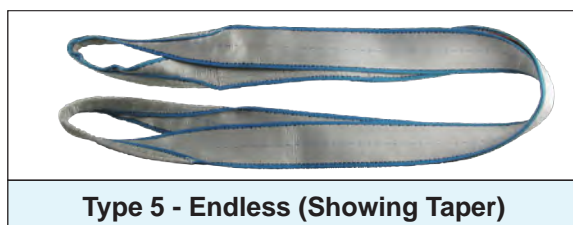
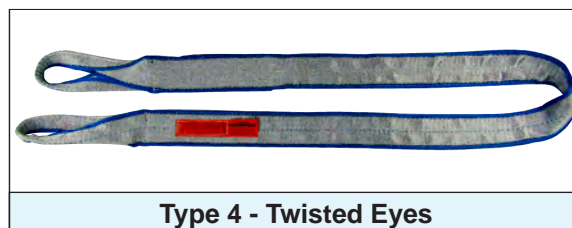
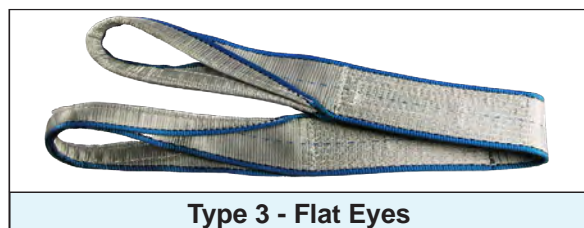
## WEB SLING EYE TREATMENTS

The eyes of web slings are often subjected to the harsh treatment of rough crane hooks. Specialty eye treatments are available to help reduce the wear in that area, thereby extending sling life. The following photos illustrate the more common eye treatments using wear-resistant webbing in various forms. Should you want eye treatment on your eye & eye web slings, please specify using the terminology below.

TYPE 3 – FLAT EYES		TYPE 4 – TWISTED EYES	
	Standard Style		
	Lined Bearing Point		
	Fully Lined Eye		
	Wrapped Bearing Point		
	Fully Wrapped Eye		

Textured, wear-resistant material is standard for these eye treatments.  
Other pad materials are available in the Sling Protection section of this catalog.

**Tapering Eyes** - As a standard practice, the bearing points of the eyes on Type 3 and Type 4 slings are tapered to accommodate a crane hook on slings 3" and wider. Untapered eyes are available upon request. Type 5 (endless) slings are NOT tapered unless specified on order. *Dura-Web™* 2000 slings are NOT tapered in any width.



General Information  
Web Slings  
Round Slings  
Sling Protection  
Wire Rope  
Chain Slings  
Rigging Hardware  
Mesh Slings  
Load Huggers  
Tow Products  
Lift-All Hoists  
Hoist Rings  
Plate Clamps  
Lifting Devices



## ENVIRONMENTAL CONSIDERATIONS

Exposure to sunlight and other environmental factors can result in accelerated deterioration of web slings. The rate of this deterioration varies with the level of exposure and with the thickness of the sling material.

Visible indication of such environmental deterioration can include the following:

- Fading of webbing color.
- Uneven or disoriented surface yarn of the webbing.
- Shortening of the sling length.
- Reduction in elasticity of the sling.
- Accelerated abrasive damage to the surface yarns of the sling.
- Breakage or damage to yarn fibers is often evident by a fuzzy appearance on the web.
- Stiffening of the web.

### Anti-Abrasion Treatment

*Lift-All* webbing is treated for abrasion. Heavy duty treatments are available as a supplemental process for greater protection. Natural, untreated webbing is available upon request.

### Elasticity

The stretch characteristics of web slings depends on the type of yarn and the web treatment. Approximate stretch at rated sling capacity:

NYLON		POLYESTER	
Treated	10%	Treated	7%
Untreated	6%	Untreated	3%

### TOLERANCES FOR WEB SLINGS

Sling Type	Length Tolerance*
1-Ply	± (1.5" + 1.5% of sling length)
2-Ply	± (2.0" + 2% of sling length)
3-Ply & 4-Ply	± (3.0" + 3% of sling length)

\* For web sling widths wider than 6", add 1/2" to these values. For tighter tolerance or matched set lengths, please consult with Customer Service prior to ordering.

### Sunlight / UV Exposure Service Life

Nylon and polyester web slings possess a limited useful service life due to the degradation caused by exposure to sunlight or other measurable sources of UV radiation.

*Lift-All* web slings that are regularly exposed to UV radiation should be identified with the date they are placed into service and should be proof-tested to twice their rated capacity every six months.

*Lift-All* nylon and polyester web slings shall be permanently removed from service when the cumulative UV or outdoor exposure has reached these limits:

- 2 years: 1-Ply and 2-Ply web slings
- 3 years: 3-Ply and 4-Ply web slings

### Temperature

Nylon and polyester slings degrade at temperatures above 200°F.

### Chemical Environment Data

Many chemicals have an adverse effect on nylon and polyester. The chemical chart below is a general guide only. For specific temperature, concentration and time factors, please consult *Lift-All* prior to purchasing or use.

CHEMICAL	NYLON	POLYESTER
Acids	NO	OK*
Alcohols	OK	OK
Aldehydes	OK	NO
Alkalis	OK	NO
Bleaching Agents	NO	OK
Dry Cleaning Solvents	OK	OK
Ethers	OK	OK
Halogenated Hydro-Carbons	OK	OK
Hydro-Carbons	OK	OK
Ketones	OK	OK
Oils Crude	OK	OK
Oils Lubricating	OK	OK
Soap & Detergents	OK	OK
Water & Seawater	OK	OK
Weak Alkalis	OK	OK

\* Disintegrated by concentrated sulfuric acid.

Prior to sling selection and use, review and understand the General Information section of this catalog.

- General Information
- Web Slings
- Round Slings
- Sling Protection
- Wire Rope
- Chain Slings
- Rigging Hardware
- Mesh Slings
- Load Huggers
- Tow Products
- Lift-All* Hoists
- Hoist Rings
- Plate Clamps
- Lifting Devices

## HOW TO ORDER WEB SLINGS

- General Information
- Web Slings
- Round Slings
- Sling Protection
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- Hoist Rings
- Plate Clamps
- Lifting Devices

**EE 1 8 02 T F X 12**

**Sling Type**

- UU** - Type U - *Unilink™* Each End
- TC** - Type 1 - Triangle/Choker
- TT** - Type 2 - Triangle/Triangle
- EE** - Type 3 & 4 - Eye/Eye
- EN** - Endless
- RE** - Reverse Eye
- WL** - Wide Lift

**Number of Plies**  
1, 2, 3 or 4

**Web Class**

- 1** - *Dura-Web™* 1000
- 2** - *Dura-Web™* 2000
- 8** - *Webmaster®* 1600 or *Tuff-Edge®* III
- 6** - *Webmaster®* 1200
- SH** - Stone Handling

Always protect synthetic slings from being cut or damaged by corners, edges and protrusions by using protection sufficient for each application.



Refer to Sling Protection section in this catalog.

**Sling Length**  
Use actual pull to pull length (reach) in feet.

**'X'**

**EYE TREATMENTS**

**Flat Eyes (Type 3)**

- F** - Standard
- G** - Lined Bearing Point
- H** - Fully Lined
- I** - Wrapped Bearing Point
- J** - Fully Wrapped

**Twisted Eyes (Type 4)**

- T** - Standard
- U** - Lined Bearing Point
- V** - Fully Lined
- W** - Wrapped Bearing Point
- X** - Fully Wrapped

Exceptions: Class 1, 2 and SH slings

**TAPERED EYE STANDARDS**

**Non-Tapered:** 1" and 2" wide slings.  
**Tapered:** 3" wider and up, in Class 6 & 8 slings only.

**Note:** Other treatments can be accommodated. Please specify at time of order.

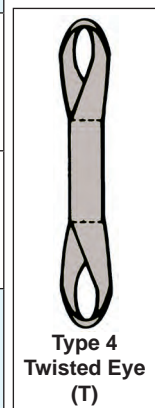
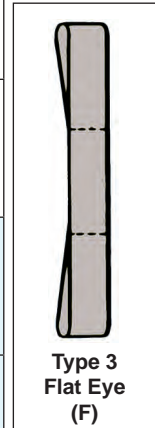
**Web Material**

- T** - *Tuff-Edge* III
- D** - Polyester
- N** - Nylon

**Sling Width** in inches

## TUFF-EDGE® III & WEBMASTER® 1600 SLINGS

EYE / EYE SLINGS**								
Ply	Tuff-Edge III Part No.	Webmaster 1600 Polyester Part No.	Webmaster 1600 Nylon Part No.	Web Width (in.)	Rated Capacity* (lbs.)			
					Vertical	Choker	V. Basket	
One Ply	EE1801TF	EE1801DF	EE1801NF	1	1,600	1,280	3,200	
	EE1802TF	EE1802DF	EE1802NF	2	3,200	2,500	6,400	
	EE1803TF	EE1803DF	EE1803NF	3	4,800	3,800	9,600	
	EE1804TF	EE1804DF	EE1804NF	4	6,400	5,000	12,800	
	EE1806TF	EE1806DF	EE1806NF	6	9,600	7,700	19,200	
	EE1808TF	EE1808DF	EE1808NF	8	12,800	10,200	25,600	
	EE1810TF	EE1810DF	EE1810NF	10	16,000	12,800	32,000	
	EE1812TF	EE1812DF	EE1812NF	12	19,200	15,400	38,400	
Two Ply	EE2801TF	EE2801DF	EE2801NF	1	3,200	2,500	6,400	
	EE2802TF	EE2802DF	EE2802NF	2	6,400	5,000	12,800	
	EE2803TF	EE2803DF	EE2803NF	3	8,800	7,040	17,600	
	EE2804TF	EE2804DF	EE2804NF	4	11,500	9,200	23,000	
	EE2806TF	EE2806DF	EE2806NF	6	16,500	13,200	33,000	
	EE2808TF	EE2808DF	EE2808NF	8	19,200	15,400	38,400	
	EE2810TF	EE2810DF	EE2810NF	10	22,400	17,900	44,800	
	EE2812TF	EE2812DF	EE2812NF	12	26,900	21,500	53,800	
	Three Ply	EE3801TF	EE3801DF	EE3801NF	1	4,100	3,300	8,200
		EE3802TF	EE3802DF	EE3802NF	2	8,300	6,600	16,600
EE3803TF		EE3803DF	EE3803NF	3	12,500	10,000	25,000	
EE3804TF		EE3804DF	EE3804NF	4	16,000	12,800	32,000	
EE3806TF		EE3806DF	EE3806NF	6	23,000	18,400	46,000	
EE3808TF		EE3808DF	EE3808NF	8	30,700	24,500	61,400	
EE3810TF		EE3810DF	EE3810NF	10	36,800	29,400	73,600	
EE3812TF		EE3812DF	EE3812NF	12	44,000	35,200	88,000	
Four Ply		EE4801TF	EE4801DF	EE4801NF	1	5,000	4,000	10,000
		EE4802TF	EE4802DF	EE4802NF	2	10,000	8,000	20,000
	EE4803TF	EE4803DF	EE4803NF	3	14,900	11,900	29,800	
	EE4804TF	EE4804DF	EE4804NF	4	19,800	15,800	39,600	
	EE4806TF	EE4806DF	EE4806NF	6	29,800	23,800	59,600	
	EE4808TF	EE4808DF	EE4808NF	8	39,700	31,700	79,400	
	EE4810TF	EE4810DF	EE4810NF	10	49,600	39,600	99,200	
	EE4812TF	EE4812DF	EE4812NF	12	59,500	47,600	119,000	



\*\* Replace the F with a T for Twisted Eyes (Type 4).

Eyes on Type 3 and Type 4 slings are tapered at 3" and wider, unless otherwise specified.

EYE LENGTH – APPLIES TO ALL SLINGS								
Plies of Web	Sling Width (in.)							
	1	2	3	4	6	8	10	12
1	8.5	10	11	12	16	20	24	24
2	8.5	10	11	12	16	20	24	24
3	10.0	12	14	16	18	24	24	24
4	10.0	12	14	16	18	24	24	24

\* **WARNING** Do not exceed rated capacities. Sling tension increases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°. Refer to the Effect of Angle chart in the General Information section of this catalog. **Always protect synthetic slings from being cut by corners and edges. See the Sling Protection section in this catalog.**

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