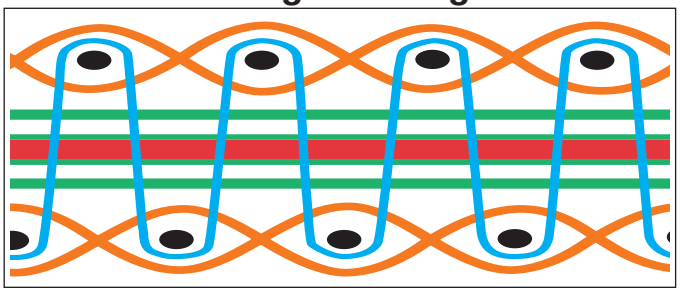
WHY *LIFT-ALL* WEB SLINGS?

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.

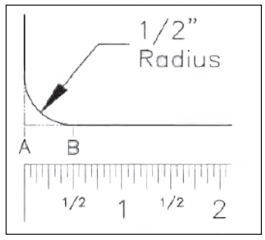
TUFF-TAG™

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.

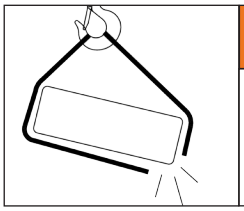
SAFETY BULLETIN

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.



WARNING

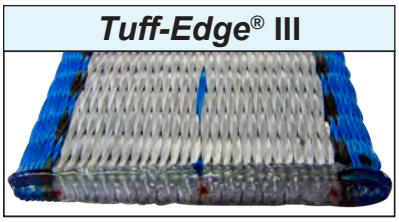
Exposure of web slings to edges with a radius that is too small can cause sling failure and loss of load

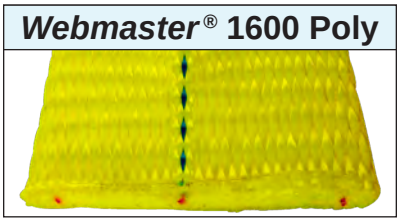
Edges do not need to be sharp to cause failure of the sling. The table shows the minimum allowable edge radii suitable for contact with unprotected webbing slings. Chamfering or cutting off edges is not an acceptable substitute for fully rounding the edges to the minimum radius. Slings can also be damaged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

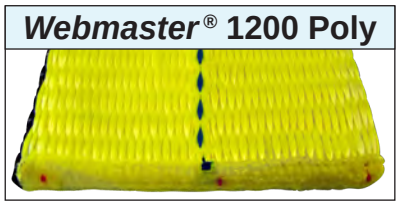
Minimum edge radii suitable for contact with unprotected web slings.		
Number of Sling Web Plies	**Minimum Edge Radii (in.)**	
1 Ply	.18	3/16
2 Plies	.50	1/2
3 Plies	.75	3/4
4 Plies	1.00	1

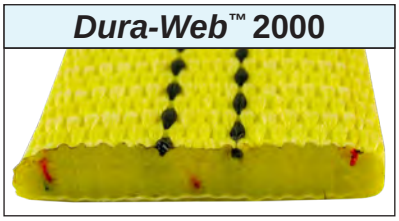
For further information on minimum edge radii, contact *Lift-All*.

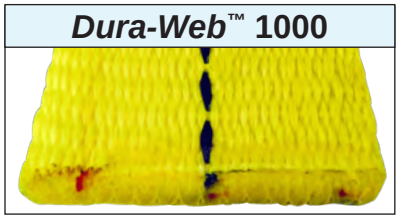
LIFT-ALL WEB SELECTOR











Approx. Thickness	Single-Ply Capacity Per Inch of Width	Material	Identifier	Applications*
0.156"	1600-lbs.	Polyester	Blue **E**dge **D**amage **L**imit (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

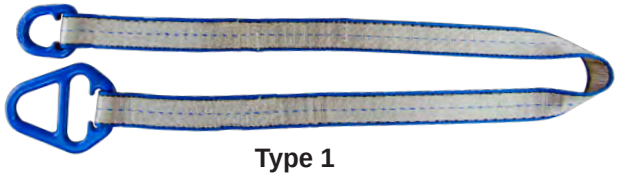
HARDWARE SLINGS

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.

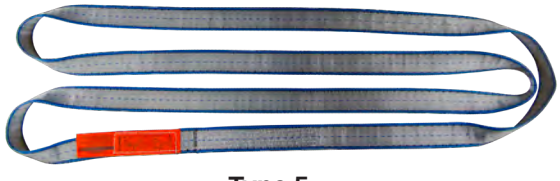
Type 3

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

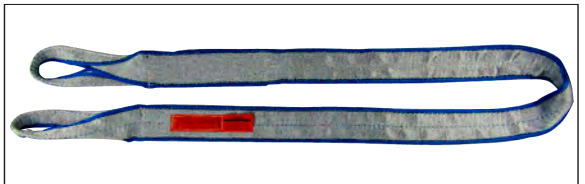
The eyes of web slings are often subjected to the harsh treatment of rough crane hooks. Specialty eye treatments are available to help reduce the wear in that area, thereby extending sling life. The following photos illustrate the more common eye treatments using wear-resistant webbing in various forms. 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
F	Standard Style	T
G	Lined Bearing Point	U
H	Fully Lined Eye	V
I	Wrapped Bearing Point	W
J	Fully Wrapped Eye	X

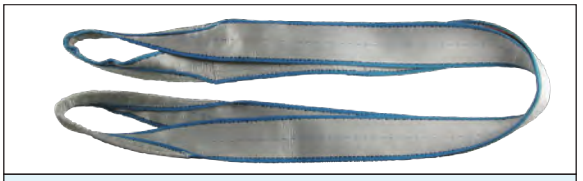
Textured, wear-resistant material is standard for these eye treatments.
Other pad materials are available in the Sling Protection section of this catalog.

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.

Type 3 - Flat Eyes



Type 4 - Twisted Eyes



Type 5 - Endless (Showing Taper)

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.

HOW TO ORDER WEB SLINGS

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

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

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.

WEBMASTER® 1200 SLINGS

Standard duty *Webmaster* 1200 is designed as an economical sling for less frequent use.

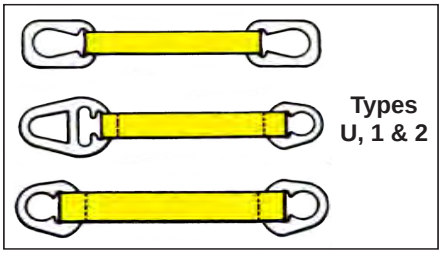
Features and Benefits

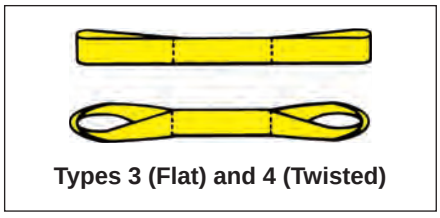
Promotes Safety

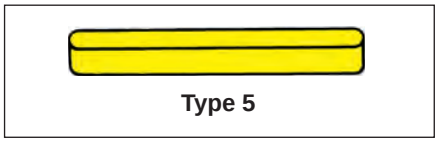
- Red core yarn warning system aids in the inspection process.
- Proven reliablity.
- *Tuff-Tag*™ provides serial numbered identification for traceability.

Saves Money

- Economical option for less frequent use.
- Yellow treatment for abrasion resistance and extended sling life.
- *Tuff-Tag* provides required OSHA information for the life of the sling.




Types 3 (Flat) and 4 (Twisted)


Type 5

Note: Types 3 and 4 slings are tapered at 3" and wider unless otherwise specified. Type 5 (Endless) slings are NOT tapered unless specified.

* **⚠ 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.**

HARDWARE SLINGS TYPES U, 1 & 2

Ply	*Webmaster* 1200 Polyester Part No.	*Webmaster* 1200 Nylon Part No.	Rated Capacity* (lbs.)		
			Vertical	Choker	V. Basket
One Ply	UU1602D	UU1602N	2,400	1,900	4,800
	UU1603D	UU1603N	3,600	2,900	7,200
	UU1604D	UU1604N	4,800	3,800	9,600
	TC1606D	TC1606N	7,200	5,800	14,400
	TT1606D	TT1606N	7,200	-	14,400
Two Ply	UU2602D	UU2602N	4,800	3,800	9,600
	UU2603D	UU2603N	6,600	5,280	13,200
	UU2604D	UU2604N	8,600	6,900	17,200
	TC2606D	TC2606N	12,600	10,100	25,200
	TT2606D	TT2606N	12,600	-	25,200

EYE / EYE (TYPES 3 & 4)**

One Ply	EE1601DF	EE1601NF	1,200	950	2,400
	EE1602DF	EE1602NF	2,400	1,900	4,800
	EE1603DF	EE1603NF	3,600	2,900	7,200
	EE1604DF	EE1604NF	4,800	3,800	9,600
	EE1606DF	EE1606NF	7,200	5,800	14,400
Two Ply	EE2601DF	EE2601NF	2,400	1,900	4,800
	EE2602DF	EE2602NF	4,800	3,800	9,600
	EE2603DF	EE2603NF	6,600	5,280	13,200
	EE2604DF	EE2604NF	8,600	6,900	17,200
	EE2606DF	EE2606NF	12,300	9,840	24,600
Three Ply	EE3601DF	EE3601NF	3,500	2,800	7,000
	EE3602DF	EE3602NF	7,000	5,600	14,000
	EE3603DF	EE3603NF	9,400	7,500	18,800
	EE3604DF	EE3604NF	12,000	9,600	24,000
	EE3606DF	EE3606NF	18,000	14,400	36,000
Four Ply	EE4601DF	EE4601NF	4,200	3,400	8,400
	EE4602DF	EE4602NF	8,000	6,400	16,000
	EE4603DF	EE4603NF	12,000	9,600	24,000
	EE4604DF	EE4604NF	16,000	12,800	32,000
	EE4606DF	EE4606NF	23,500	18,800	47,000

**Replace the F with a T for Twisted Eyes.

ENDLESS (TYPE 5)

One Ply	EN1601D	EN1601N	2,400	1,900	4,800
	EN1602D	EN1602N	4,800	3,800	9,600
	EN1603D	EN1603N	6,500	5,200	13,000
	EN1604D	EN1604N	8,600	6,900	17,200
	EN1606D	EN1606N	12,200	9,800	24,400
Two Ply	EN2601D	EN2601N	4,800	3,800	9,600
	EN2602D	EN2602N	9,600	7,700	19,200
	EN2603D	EN2603N	11,700	9,400	23,400
	EN2604D	EN2604N	15,500	12,400	31,000
	EN2606D	EN2606N	22,500	18,000	45,000
Three Ply	EN3601D	EN3601N	6,200	4,900	12,400
	EN3602D	EN3602N	12,500	10,000	25,000
	EN3603D	EN3603N	16,300	13,000	32,600
	EN3604D	EN3604N	20,600	16,400	41,200
	EN3606D	EN3606N	29,300	23,400	58,600
Four Ply	EN4601D	EN4601N	7,700	6,200	15,400
	EN4602D	EN4602N	15,500	12,400	31,000
	EN4603D	EN4603N	20,800	16,600	41,600
	EN4604D	EN4604N	26,600	21,200	53,200
	EN4606D	EN4606N	37,800	30,200	75,600