

**LSTA** – 20 or 18 gauge, light-capacity 1 1/4" wide strapping.

**LSTI** – 3 3/4" wide strap ties provide tension load path for truss top chords. The nail pattern accommodates open web trusses with double top chord.

**MSTA** – 18 or 16 gauge, medium-capacity 1 1/4" wide strapping.

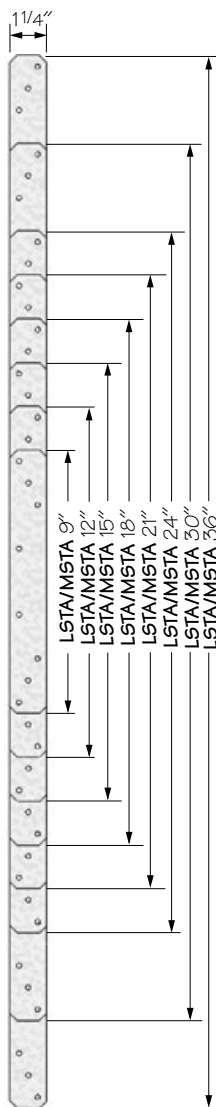
**ST** – 16 gauge, medium-capacity 1 1/4" wide strapping.

**MSTC** – 3" wide strapping. Slotted hole design allows for higher load capacities and reduce splitting of lumber when attached to multiple 2x members.

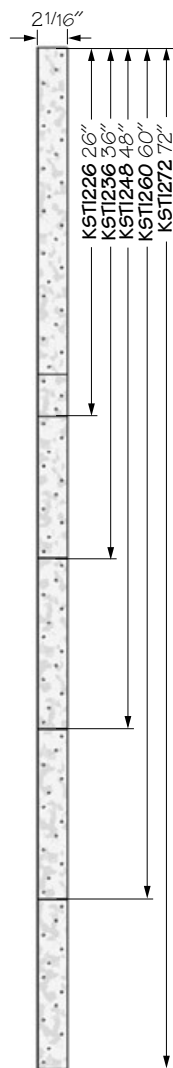
**KST** – 2 1/16" wide strapping. Straps can be fastened using either nails or bolts. Some KST straps install only with nails.

**KSTI** – 2 1/16" wide strapping. Straps are designed for installation to wood I-Joist flanges.

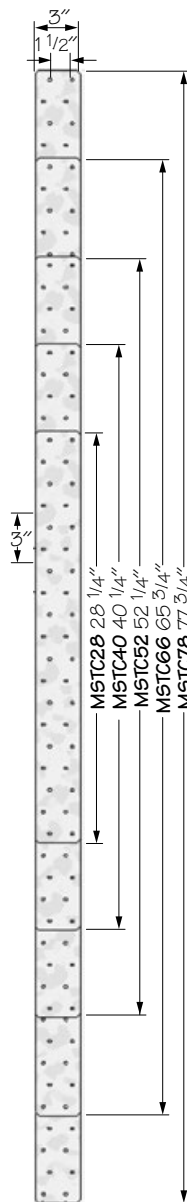
Some model designs may vary from illustration shown



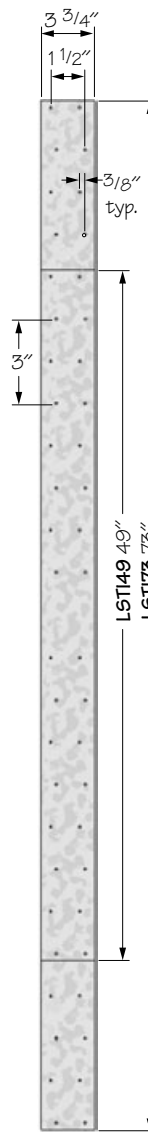
**LSTA/MSTA**



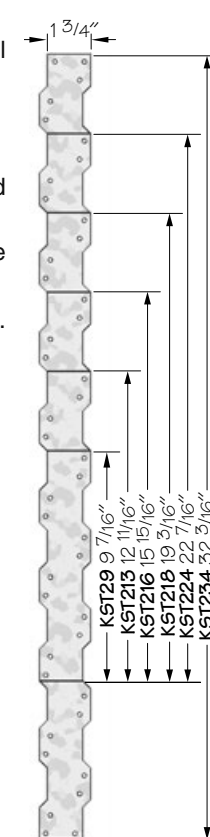
**KSTI**



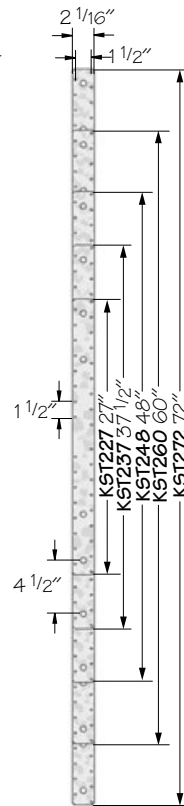
**MSTC**



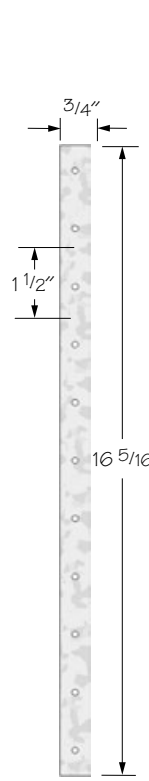
**LSTI**



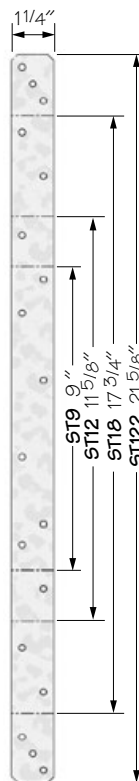
**KST scalloped design**



**KST straight edge design**



**KST116**



**ST**

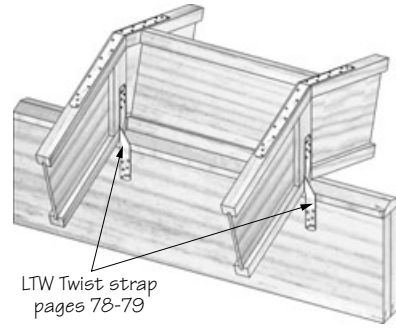
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**Materials:** See chart

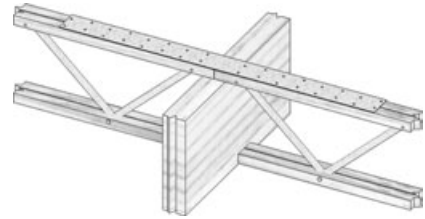
**Finish:** G90 galvanizing

**Options:** MSTA9, MSTA12, MSTA15, MSTA18, MSTA21, MSTA24, MSTA30, & MSTA36 are available in Triple Zinc. To order, add **TZ** to stock number, as in **MSTA9-TZ**. MSTA12, MSTA18, MSTA24 & MSTA36 are available in stainless steel. To order, add **SS** to stock number, as in **MSTA36-SS**.

**Codes:** ESR-1781, **ESR-1465**, ESR-1831, FL11664, FL822, FL817, **FL13825**, L.A. City RR 25749, **L.A. City RR 25843**, L.A. City RR 25836



**Typical LSTA/MSTA I-Joist on Ridge Beam installation**



**Typical LSTI open web truss installation**

**Installation:**

- Use all specified fasteners. See Product Notes, page 11.
- Designer may specify alternate nailing schedules. Refer to Nail Specification table on page 15 for nail shear values. Load values shall not exceed published allowable loads. The quantity of nails installed shall be equally distributed to both ends of the strap.
- The quantity of nails installed shall be equally distributed to both ends of the strap.

USP Stock No. <sup>8</sup>	Ref. No.	Steel Gauge	Dimensions		Fastener Schedule <sup>3,6</sup>			Allowable Loads (Lbs.) <sup>1,2</sup>		Code Ref.
			W	L	Total Qty <sup>4</sup>	Nails		Uplift		
						Min Qty <sup>5</sup>	Type	DF-L / SP 160%	S-P-F / Hem Fir 160%	
KST116	ST2115	20	3/4	16-5/16	10	8	16d	665	665	10, F16, R14
LSTA9	LSTA9	20	1-1/4	9	8	8	10d	740	635	
LSTA12	LSTA12	20	1-1/4	12	10	10	10d	930	790	5, F30, R5
LSTA15	LSTA15	20	1-1/4	15	12	12	10d	1115	950	
LSTA18	LSTA18	20	1-1/4	18	14	14	10d	1235	1110	
LSTA21	LSTA21	20	1-1/4	21	16	16	10d	1235	1235	
LSTA24	LSTA24	20	1-1/4	24	18	16	10d	1235	1235	
KST29	ST292	20	1-3/4	9-7/16	14	14	16d	1680	1320	10, F16, R14
KST213	ST2122	20	1-3/4	12-11/16	18	18	16d	1785	1700	
KST216	ST2215	20	1-3/4	15-15/16	22	18	16d	1785	1700	
LSTA30	LSTA30	18	1-1/4	30	22	22	10d	1640	1640	
LSTA36	LSTA36	18	1-1/4	36	26	22	10d	1640	1640	
MSTA9	MSTA9	18	1-1/4	9	8	8	10d	750	645	5, F30, R5
MSTA12	MSTA12	18	1-1/4	12	10	10	10d	935	810	
MSTA15	MSTA15	18	1-1/4	15	12	12	10d	1125	970	
MSTA18	MSTA18	18	1-1/4	18	14	14	10d	1310	1130	
MSTA21	MSTA21	18	1-1/4	21	16	16	10d	1500	1295	
MSTA24	MSTA24	18	1-1/4	24	18	18	10d	1640	1455	
LSTI49	LSTI49	18	3-3/4	49	32	32	10d x 1-1/2	3175	2510	
LSTI73	LSTI73	18	3-3/4	73	48	48	10d x 1-1/2	4340	3765	
ST9	ST9	16	1-1/4	9	8	8	16d	885	760	10, F16, R14
ST12	ST12	16	1-1/4	11-5/8	10	10	16d	1105	950	
ST18	ST18	16	1-1/4	17-3/4	14	14	16d	1395	1335	
ST22	ST22	16	1-1/4	21-5/8	18	18	16d	1395	1395	
MSTA30	MSTA30	16	1-1/4	30	22	22	10d	2065	1815	5, F30, R5
MSTA36	MSTA36	16	1-1/4	36	26	26	10d	2065	2065	
MSTA48	MSTA49	16	1-1/4	48	32	26	10d	2045	2045	
KST218	ST6215	16	1-3/4	19-3/16	26	26	16d	2960	2540	10, F16, R14
KST224	ST6224	16	1-3/4	22-7/16	30	30	16d	2960	2930	
MSTC28	MSTC28	16	3	28-1/4	36	36	10d	3455	2965	
					36	34	16d	3860	3320	
MSTC40	MSTC40	16	3	40-1/4	52	52	10d	4715	4285	11, F12
					52	46	16d	4715	4490	
MSTC52	MSTC52	16	3	52-1/4	70	60	10d	4715	4715	
					70	52	16d	4715	4715	
KST234	ST6236	14	1-3/4	32-3/16	42	36	16d	3775	3660	10, F16, R14
MSTC66	MSTC66	14	3	65-3/4	88	72	10d	6015	6015	
					88	62	16d	6015	6015	
MSTC78	MSTC78	14	3	77-3/4	104	76	10d	6015	6015	11, F12
					104	66	16d	6015	6015	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Minimum nail embedment shall be 1-1/2" for 10d nails and 1-5/8" for 16d nails.

3) Total number of nail and/or bolt holes provided in the strap.

4) Minimum quantity of fasteners to be installed with equal fasteners at each end of the connection. Product may have additional nail holes not needed to meet published allowable load of product.

5) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.

6) Allowable bolt loads are based on parallel-to-grain loading, minimum of 2-1/2" thick.

7) For MSTC straps: 16d sinker nails may be substituted for 10d nails with no reduction in load.

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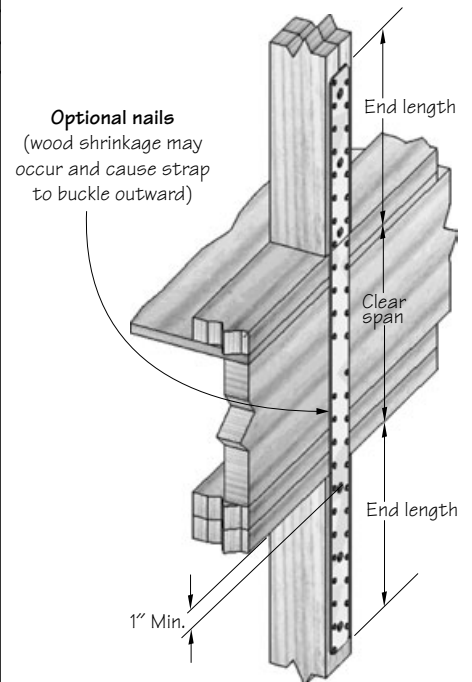
USP Stock No.	Ref. No.	Steel Gauge	Dimensions		Fastener Schedule <sup>3,6</sup>					Allowable Uplift Loads (Lbs.) <sup>1,2</sup>				Code Ref.	
			W	L	Total Qty <sup>4</sup>	Nails		Bolts			DF-L / SP		S-P-F / Hem Fir		
						Min Qty <sup>5</sup>	Type	Min Qty <sup>5</sup>	Dia.	Nails	Bolts <sup>5</sup>	Nails	Bolts <sup>8</sup>		
KST227	MST27, S/MST27	12	2-1/16	27	34	34	16d	4	1/2	4570	2285	3645	2020	10, F16, R14	
KST237	MST37, S/MST37	12	2-1/16	37-1/2	48	48	16d	6	1/2	5395	3240	5145	2875		
KST248	MST48, S/MST48	12	2-1/16	48	62	54	16d	8	1/2	5395	3915	5395	3555		
KSTI226	MSTI26	12	2-1/16	26	26	26	10d x 1-1/2	---	---	2830	---	2265	---		
KSTI236	MSTI36	12	2-1/16	36	36	36	10d x 1-1/2	---	---	3915	---	3140	---		
KSTI248	MSTI48	12	2-1/16	48	48	48	10d x 1-1/2	---	---	5220	---	4185	---		
KSTI260	MSTI60	12	2-1/16	60	60	60	10d x 1-1/2	---	---	5395	---	5230	---		
KSTI272	MSTI72	12	2-1/16	72	72	60	10d x 1-1/2	---	---	5395	---	5395	---		
KST260	MST60, S/MST60	10	2-1/16	60	72	64	16d	10	1/2	7055	4910	7055	4425		
KST272	MST72, S/MST72	10	2-1/16	72	72	64	16d	10	1/2	7055	4910	7055	4425		

- 1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Allowable loads are based on the use of either nails or bolts; nail and bolt values cannot be combined.
- 3) Minimum nail embedment shall be 1-5/8" for 16d nails.
- 4) Total number of nail and/or bolt holes provided in the strap.
- 5) Minimum quantity of fasteners to be installed with equal fasteners at each end of the connection. Product may have additional nail holes not needed to meet published allowable load of product.
- 6) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
- 7) Allowable bolt loads are based on parallel-to-grain loading, minimum of 2-1/2" thick.

**Clear Span Chart**

USP Stock No.	Ref. No.	Clear Span	10d x 1-1/2" Fasteners <sup>3</sup>		10d Fasteners <sup>2</sup>		16d Fasteners <sup>2</sup>	
			Total <sup>4</sup> Qty	DF-L / SP Uplift 160% <sup>1</sup>	Total <sup>4</sup> Qty	DF-L / SP Uplift 160% <sup>1</sup>	Total <sup>4</sup> Qty	DF-L / SP Uplift 160% <sup>1</sup>
		16	---	16	1535	14	1590	
MSTC40	MSTC40	18	---	28	2690	24	2725	
		16	---	32	3070	30	3410	
MSTC52	MSTC52	18	---	44	4225	38	4315	
		16	---	48	4610	42	4715	
MSTC66	MSTC66	18	---	62	6015	54	6015	
		16	---	64	6015	54	6015	
MSTC78	MSTC78	18	---	64	6015	54	6015	
		16	---	66	6015	56	6015	
KST237	MST37, S/MST37	18	---	---	---	20	2480	
		16	---	---	---	22	2730	
KST248	MST48, S/MST48	18	---	---	---	32	3970	
		16	---	---	---	34	4215	
KST260	MST60, S/MST60	18	---	---	---	46	6255	
		16	---	---	---	48	6530	
KST272	MST72, S/MST72	18	---	---	---	46	6255	
		16	---	---	---	48	6530	
KSTI236	MSTI36	18	14	1410	---	---	---	
		16	16	1615	---	---	---	
KSTI248	MSTI48	18	26	2620	---	---	---	
		16	28	2820	---	---	---	
KSTI260	MSTI60	18	38	3830	---	---	---	
		16	40	4030	---	---	---	
KSTI272	MSTI72	18	50	5040	---	---	---	
		16	52	5240	---	---	---	

- 1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Minimum nail embedment shall be 1-1/2" for 10d nails and 1-5/8" for 16d nails.
- 3) 10d x 1-1/2 nails are 9 gauge (0.148" diameter) by 1-1/2" long.
- 4) Total number of nail holes provided in the strap.



**Typical KST237 floor-to-floor installation**

Angles & Straps