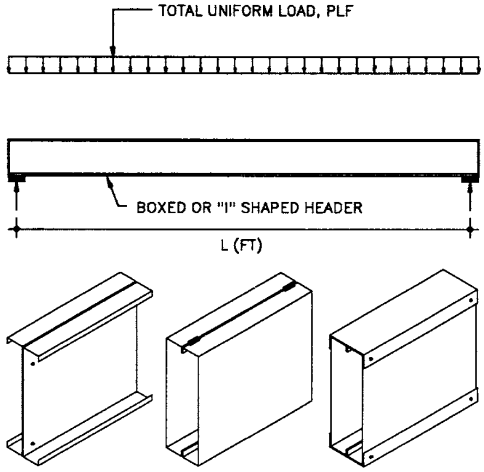
SUGGESTED DESIGN GUIDES
ALLOWABLE UNIFORM LOAD CAPACITIES – HEADERS
POUNDS PER LINEAR FOOT, PLF

USE:

The tables are used to select a simply supported boxed or "I" shaped header subjected to uniform load. Select a header which provides an allowable uniform load in excess of the applied load.

NOTES:

1. The values represent the allowable total load, in pounds per Linear foot (PLF), limited by the bending or shear capacity of the header. Additionally, deflection was limited to 1/360 of span length.



SECTION	4FT	5FT	6FT	7FT	8FT	9FT	10FT	11FT	12FT	13FT	14FT	15FT	16FT
(2)4SSJ18	730	467	324	229	154	108	79	59	45	36	29	23	19
(2)4SSJ16	1369	778	450	284	190	133	97	73	56	44	35	29	24
(2)4SS J14	1654	941	545	343	230	161	118	88	68	54	43	35	29
(2)6SSJ18	1275	816	567	416	319	252	204	153	118	93	74	61	50
(2)6SSJ16	2401	1537	1067	740	496	348	254	191	147	116	93	75	62
(2)6SSJ14	2915	1865	1295	898	602	423	308	232	178	140	112	91	75
(2)8SSJ18	985	788	657	563	475	375	304	251	211	180	149	121	100
(2)8SSJ16	1962	1569	1308	1121	896	698	509	382	295	232	185	151	124
(2)8SSJ14	3959	2793	1940	1425	1091	850	620	466	359	282	226	184	151
(2)8SSJ12	5669	3628	2519	1851	1417	1106	806	606	467	367	294	239	197

2. The use of these tables is limited to simply supported conditions. Applications involving cantilevers, concentrated loads, eccentricities, multiple spans, impact loading, etc. should be investigated separately.

3. The compression flange of the header shall be laterally braced at intervals not to exceed 2'-0" on center.

4. Web crippling should be investigated separately. Web reinforcement is suggested at all bearing and/or concentrated load locations unless deemed unnecessary by analysis. Shapes having multiple un-reinforced webs (sections which provide a high degree of restraint against rotation of the web)subjected to a combination of concentrated load or reaction and bending shall be designed to meet the requirements of AISI Section C3.4. Reference Page 29 for additional information. Avoid locating a web knockout within a distance equaling 1.5 x depth of the member (h) from the edge of bearing. Should a knockout be located in this area, web reinforcement is required.

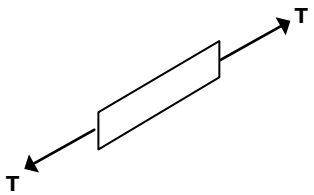
5. Contact Super Stud for allowable load capacities of sections not shown herein.

SECTION	8FT	9FT	10FT	11FT	12FT	13FT	14FT	15FT	16FT	17FT	18FT	19FT	20FT
(2)6SSJ18										42	35	30	26
(2)6SSJ16										52	44	37	32
(2)6SSJ14										63	53	45	39
(2)8SSJ18										83	70	60	51
(2)8SSJ16										104	87	74	64
(2)8SSJ14										126	106	90	77
(2)8SSJ12										164	138	118	101
(2)10SSJ16	779	692	623	567	483	402	322	261	215	180	151	129	110
(2)1 0SSJ14	1526	1206	977	807	624	491	393	319	263	219	185	157	135
(2)10SSJ12	2000	1580	1280	1058	818	643	515	419	345	288	242	206	177
(2)12SSJ16	646	574	517	470	431	398	369	345	316	280	239	203	174
(2)12SSJ14	1300	1142	832	625	482	379	303	247	203	169	143	121	104
(2)12SSJ12	2665	2106	1706	1410	1185	1009	821	668	550	459	386	329	282
(2)14SJW14	1109	986	887	807	739	682	634	591	555	522	466	416	357
(2)14SJW12	3255	2893	2490	2058	1729	1473	1270	1107	935	779	657	558	479

FLAT STRAP ALLOWABLE TENSION CAPACITIES

USE:

The table provides the allowable capacity of strap subjected to tensile forces.

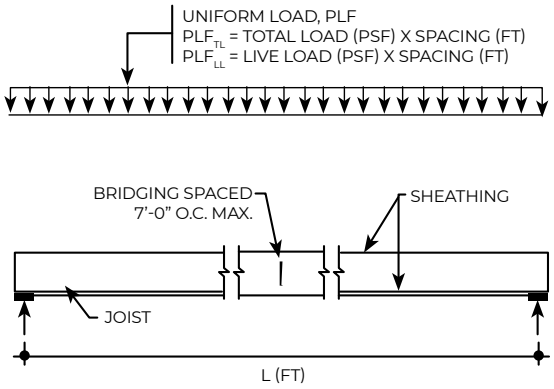


Allowable Strap Tension, Pounds			
Strap Width	Thickness (Mils)	Gauge	Capacity (Pounds)
2"	33	20	1,370
3"	33	20	2.050
2"	43	18	1.780
3"	43	18	2,670
4"	43	18	3,570
2"	54	16	2,240
3"	54	16	3,360
4"	54	16	4,480
3"	68	14	6,410
4"	68	14	8,550
5"	68	14	10,690

SUGGESTED DESIGN GUIDES
ALLOWABLE UNIFORM LOAD CAPACITIES – JOISTS
POUNDS PER LINEAR FOOT, PLF

USE:

The tables are used to select a simply supported joist or rafter subjected to uniform lateral loads. Select a joist, based on span and deflection limit, which provides an allowable uniform load in excess of the applied load.



NOTES:

1. **TL** values denote the **TOTAL LOAD** capacity of the section expressed in pounds per linear foot (PLF), which will not exceed stress limitations or generate deflections in excess of L/240.

LL values denote the **LIVE LOAD**, in pounds per linear loot (PLF), which will generate a deflection equaling L/360.

To determine LIVE LOAD deflection limits of L/480 and L/240, multiply the LL values 0.75 and 1.5 respectively. In either case, the TOTAL LOAD capacity of the joist shall not be exceeded.

2. To determine the equivalent pound per square foot (PSF) load carrying capacities, divide the pound per linear foot (PLF) values by the joist spacing expressed in feet.

$$\text{Pound Per Linear Foot (PLF)} = \frac{\text{Pound Per Square Foot (PSF)}}{\text{Joist Spacing (Feet On Center)}}$$

For joists spaced: 12" O.C., divide values by 1.0
16" O.C., divide values by 1.333
24" O.C., divide values by 2.0

3. The use of these tables is limited to simply supported conditions installed to a maximum slope of 1/2" per foot. Conditions involving cantilevers, concentrated loads, eccentricities, multiple spans, impact loading, etc. should be investigated separately.

4. The compression flange of the section should be braced by means of the attachment of continuous diaphragm rated sheathing. Additionally, mechanical bridging shall be installed at intervals not to exceed 7'-0" on center.

5. Joist ends shall be restrained against rotation by means of a fixed attachment to each side of continuous track or alternative methods preventing end rotation shall be provided.

6. Deflections were calculated without regard to the composite contribution of collateral materials.

7. Web crippling per AISI Section C3.4 should be investigated separately. Web reinforcement is suggested at all bearing and/ or concentrated load locations unless deemed unnecessary by analysis. Reference Pages 40 and 41 for allowable un-reinforced web capacities.

8. Contact Super Stud for allowable load capacities of sections not shown herein.

SUGGESTED DESIGN GUIDES
ALLOWABLE UNIFORM LOAD CAPACITIES – JOISTS
POUNDS PER LINEAR FOOT, PLF
TOTAL LOAD (TL), LIVE LOAD (LL)

AISI Designation	Legacy Designation		SPAN																					
			6FT	7FT	8FT	9FT	10FT	11FT	12FT	13FT	14FT	15FT	16FT	17FT	18FT	19FT	20FT	21FT	22FT	23FT	24FT	25FT	26FT	27FT	28FT
600S162-33	6SSJ20	TL	199	155	119	94	76	63	53	45	39	34	29	24	20	17									
		LL	199	155	119	94	76	59	46	36	29	23	19	16	13	11									
600S162-43	6SSJ18	TL	283	208	159	126	102	84	71	60	52	45	37	31	26	22	19	17							
		LL	283	208	159	126	102	77	59	46	37	30	25	21	18	15	13	11							
600S200-43	6SJW18	TL	318	234	179	141	114	95	80	68	58	51	43	36	30	26	22	19	17						
		LL	318	234	179	141	114	88	68	53	43	35	29	24	20	17	15	13	11						
600S250-43	6SSW18	TL	346	254	194	154	124	103	86	74	63	55	49	42	35	30	26	22	19	17					
		LL	346	254	194	154	124	102	79	62	50	40	33	28	23	20	17	15	13	11					
600S162-54	6SSJ16	TL	534	392	300	237	190	143	110	87	69	56	46	39	33	28	24	21	18	16					
		LL	534	370	548	174	127	95	73	58	46	38	31	26	22	19	16	14	12	10					
600S200-54	6SJW16	TL	605	444	340	269	218	167	129	101	81	66	54	45	38	32	28	24	21	18	16				
		LL	605	433	290	204	148	111	86	68	54	44	36	30	25	22	19	16	14	12	11				
600S250-54	6SSW16	TL	657	483	370	292	237	194	150	118	94	77	63	53	44	38	32	28	24	21	19	17			
		LL	657	483	337	237	172	130	100	79	63	51	42	35	30	25	22	19	16	14	12	11			
600S162-68	6SSJ14	TL	648	476	364	288	231	174	134	105	84	68	56	47	40	34	29	25	22	19	17				
		LL	648	449	301	211	154	116	89	70	56	46	38	31	26	22	19	17	14	13	11				
600S200-68	6SJW14	TL	763	561	429	339	272	204	157	124	99	81	66	55	47	40	34	29	26	22	20	17	15		
		LL	763	529	354	249	181	136	105	83	66	54	44	37	31	26	23	20	17	15	13	12	10		
600S250-68	6SSW14	TL	884	649	497	393	318	244	188	148	118	96	79	66	56	47	41	35	30	27	23	21	18	16	
		LL	884	630	422	297	216	162	125	98	79	64	53	44	37	32	27	23	20	18	16	14	12	11	
600S200-97	6SJW12	TL	999	738	565	446	358	269	207	163	130	106	87	73	61	52	45	39	34	29	26	23	20	18	16
		LL	999	696	466	327	239	179	138	109	87	71	58	49	41	35	30	26	22	20	17	15	14	12	11
600S250-97	6SSW12	TL	999	901	690	545	437	328	253	199	159	129	107	89	75	64	55	47	41	36	32	28	25	22	20
		LL	999	849	569	400	291	219	169	133	106	86	71	59	50	42	36	31	27	24	21	19	17	15	13
725S162-43	7-1/4SSJ18	TL	363	268	206	162	132	109	91	78	67	58	51	46	41	35	30	26	23	20	17	15			
		LL	363	268	206	162	132	109	91	73	59	48	39	33	28	23	20	17	15	13	12	10			
725S200-43	7-1/4SJW18	TL	517	380	291	230	186	154	129	110	95	83	73	64	57	50	43	37	32	28	25	22	19	17	16
		LL	517	380	291	230	186	154	129	103	83	67	55	46	39	33	28	25	21	19	16	15	13	12	10
725S162-54	7-1/4SSJ16	TL	689	506	388	306	248	205	172	137	109	89	73	61	51	44	38	32	28	25	22	19	17	15	
		LL	689	506	388	275	200	150	116	91	73	59	49	41	34	29	25	22	19	16	14	13	11	10	
725S200-54	7-1/4SJW16	TL	724	571	437	345	280	231	194	159	127	103	85	71	60	51	44	38	33	29	25	22	20	18	16
		LL	724	571	437	319	232	175	134	106	85	69	57	47	40	34	29	25	22	19	17	15	13	12	11
725S162-68	7-1/4SSJ14	TL	838	616	471	372	302	249	210	166	133	108	89	74	63	53	46	39	34	30	26	23	21	19	17
		LL	838	616	471	334	244	183	141	111	89	72	59	50	42	36	30	26	23	20	18	16	14	12	11
725S200-68	7-1/4SJW14	TL	981	721	552	436	353	292	245	194	155	126	104	87	732	62	53	46	40	35	31	27	24	22	19
		LL	981	721	552	390	284	214	165	129	104	84	69	58	49	41	36	31	27	23	21	18	16	14	13
725S162-97	7-1/4SSJ12	TL	999	797	610	482	390	323	271	216	173	140	116	96	81	69	59	51	44	39	34	30	27	24	22
		LL	999	797	610	433	316	237	183	144	115	94	77	64	54	46	39	34	30	26	23	20	18	16	14
725S200-97	7-1/4SJW12	TL	999	951	728	575	466	385	323	256	205	167	138	115	97	82	70	61	53	46	41	36	32	29	26
		LL	999	951	728	515	376	282	217	171	137	111	92	76	64	55	47	41	35	31	27	24	21	19	17
800S162-43	8SSJ18	TL	328	281	237	188	152	126	106	90	78	68	59	53	47	42	38	33	29	25	22	20	17	16	
		LL	328	281	237	188	152	126	106	90	74	61	50	42	35	30	26	22	19	17	15	13	12	10	
800S200-43	8SJW18	TL	328	281	246	207	168	139	117	99	86	75	66	58	52	47	42	38	33	29	25	22	20	18	16
		LL	328	281	246	207	168	139	117	99	85	69	57	47	40	34	29	25	22	19	17	15	13	12	11
800S250-43	8SSW18	TL	328	281	246	217	176	145	122	104	90	78	69	61	54	49	44	40	36	33	29	26	23	20	18
		LL	328	281	246	217	176	145	122	104	90	78	65	54	46	39	33	29	25	22	19	17	15	14	12
800S162-54	8SSJ16	TL	654	560	448	354	287	237	199	170	139	113	93	78	65	56	48	41	36	31	28	24	22	19	17
		LL	654	560	448	349	254	191	147	116	93	75	62	52	44	37	32	27	24	21	18	16	14	13	12
800S200-54	8SJW16	TL	654	560	490	398	322	266	224	191	161	131	108	90	76	64	55	48	41	36	32	28	25	22	20
		LL	654	560	490	398	294	221	170	134	107	87	72	60	50	43	37	32	28	24	21	19	17	15	13
800S250-54	8SSW16	TL	654	560	490	419	339	281	236	201	173	150	124	103	87	74	63	55	48	42	37	32	29	26	23
		LL	654	560	490	419	338	254	196	154	123	100	82	69	58	49	42	36	32	28	24	22	19	17	15
800S162-68	8SSJ14	TL	970	712	545	431	349	289	242	207	169	138	113	95	80	68	58	50	44	38	34	30	26	24	21
		LL	970	712	545	425	310	233	179	141	113	92	76	63	53	45	39	33	29	25	22	20	18	16	14
800S200-68	8SJW14	TL	999	830	635	502	407	336	282	241	197	160	132	110	93	79	68	58	51	44	39	35	31	27	25
		LL	999	830	635	494	360	271	208	164	131	107	88	73	62	53	45	39	34	30	26	23	20	18	16
800S250-68	8SSW14	TL	999	954	730	577	467	386	324	276	232	189	156	130	109	93	80	69	60	52	46	41	36	32	29
		LL	999	954	730	577	425	319	246	193	155	126	104	87	73	62	53	46	40	35	31	27	24	22	19
800S162-97	8SSJ12	TL	999	925	709	560	453	375	315	268	220	179	148	123	104	88	76	65	57	50	44	39	34	31	28
		LL	999	925	709	553	403	304	233	183	147	119	98	82	69	59	50	44	38	33	29	26	23	20	18
800S200-97	8SJW12	TL	999	999	840	663	537	444	373	318	261	212	175	146	123	104	89	77	67	59	52	46	41	36	33
		LL	999	999	840	654	477	358	276	217	174	141	116	97	82	69	60	51	45	39	34	31	27	24	22
800S250-97	8SSW12	TL	999	999	999	801	649	536	451	384	314	255	210	175	148	126	108	93	81	71	62	55	49	44	39
		LL	999	999	999	78	574	431	332	261	209	170	140	117	98	84	72	62	54	47	42	37	33	29	26

Flange Width: SSC=1 3/8", SSJ=1-5/8", SJW=2" and SSW=2-1/2"

SUGGESTED DESIGN GUIDES
ALLOWABLE UNIFORM LOAD CAPACITIES – JOISTS
POUNDS PER LINEAR FOOT, PLF
TOTAL LOAD (TL), LIVE LOAD (LL)

AISI Designation	Legacy Designation		SPAN																					
			14FT	15FT	16FT	17FT	18FT	19FT	20FT	21FT	22FT	23FT	24FT	25FT	26FT	27FT	28FT	29FT	30FT	31FT	32FT	33FT	34FT	35FT	36FT
925S162-43	9-1/4SSJ18	TL	97	76	66	59	52	47	42	39	35	32	29	27	25	22	20	18	16						
		LL	87	76	66	59	50	43	36	31	27	24	21	19	17	15	13	12	11						
925S200-43	9-1/4SJW18	TL	96	84	74	65	58	52	47	43	39	36	33	30	28	25	22	20	18	17	15				
		LL	96	84	74	65	56	48	41	36	31	27	24	21	19	17	15	13	12	11	10				
925S162-54	9-1/4SSJ16	TL	167	146	128	111	94	80	68	59	51	45	39	35	31	28	25	22	20	18	17	15			
		LL	133	108	89	74	62	53	45	39	34	30	26	23	21	18	17	15	13	12	11	10			
925S200-54	9-1/4SJW16	TL	136	162	143	126	107	91	78	68	59	51	45	40	36	32	29	26	23	21	19	14	16		
		LL	152	124	102	85	72	61	52	45	39	34	30	27	24	21	19	17	15	14	13	12	11		
925S162-68	9-1/4SSJ14	TL	221	193	162	135	114	97	83	72	62	55	48	43	38	34	30	27	25	22	20	19	17	16	
		LL	162	131	108	90	76	65	55	48	42	36	32	28	25	23	20	18	16	15	14	12	11	10	
925S200-68	9-1/4SJW14	TL	256	223	187	156	132	112	96	83	72	63	56	49	44	39	35	31	28	26	23	21	20	18	16
		LL	187	152	125	104	88	75	64	55	48	42	37	33	29	26	23	21	19	17	16	14	13	12	11
925S162-97	9-1/4SSJ12	TL	289	252	212	177	149	127	109	94	82	72	63	56	50	44	40	36	32	29	27	24	22	20	19
		LL	211	172	142	118	99	85	73	63	54	48	42	37	33	29	26	24	21	19	18	16	15	14	12
925S200-97	9-1/4SJW12	TL	339	296	249	207	175	149	127	110	96	84	74	65	58	52	46	42	38	34	31	28	26	24	22
		LL	248	201	166	138	117	99	85	73	64	56	49	43	39	35	31	28	25	23	21	19	17	16	15
1000S162-54	10SSJ16	TL	177	155	136	120	107	96	83	71	62	54	48	42	38	34	30	27	25	22	20	18	17	15	
		LL	161	131	108	90	76	64	55	48	41	36	32	28	25	22	20	18	16	15	13	12	11	10	
1000S200-54	10SJW16	TL	199	173	152	135	120	108	95	82	71	62	55	48	43	38	34	31	28	25	23	21	19	18	16
		LL	184	149	123	103	87	74	63	54	47	41	36	32	29	26	23	21	19	17	15	14	13	12	11
1000S250-54	10SSW16	TL	211	184	162	143	128	115	104	93	81	71	62	55	49	44	39	35	32	29	26	24	22	20	18
		LL	209	170	140	117	98	84	72	62	54	47	42	37	33	29	26	24	21	19	18	16	15	13	12
1000S162-68	10SSJ14	TL	249	217	191	165	139	118	101	87	76	66	58	52	46	41	37	33	30	27	25	22	21	19	17
		LL	196	160	132	110	92	79	67	58	51	44	39	34	31	27	25	22	20	18	16	15	14	13	12
1000S200-68	10SJW14	TL	287	250	219	189	159	135	116	100	87	76	67	59	53	47	42	38	34	31	28	26	24	22	20
		LL	226	188	151	126	106	90	77	67	58	51	45	40	35	31	28	25	23	21	19	17	16	14	13
1000S250-68	10SSW14	TL	327	285	250	221	186	158	136	117	102	89	78	69	62	55	49	44	40	36	33	30	28	25	23
		LL	264	214	177	147	124	105	90	78	68	59	52	46	41	37	33	30	27	24	22	20	18	17	16
1000S162-97	10SSJ12	TL	326	284	250	216	182	155	132	114	100	87	77	68	60	54	48	43	39	36	32	29	27	25	23
		LL	257	209	172	144	121	103	88	76	66	58	51	45	40	36	32	29	26	24	22	20	18	16	15
1000S200-97	10SJW12	TL	381	332	292	251	212	180	154	133	116	102	89	79	70	63	56	51	46	41	38	34	31	29	26
		LL	300	244	201	163	141	120	103	89	77	68	60	53	47	42	38	34	30	28	25	23	21	19	18
1000S250-97	10SSW12	TL	454	395	347	299	252	214	184	159	138	121	106	94	84	75	67	60	54	49	45	41	37	34	32
		LL	357	290	239	199	168	143	122	106	92	81	71	63	56	50	45	40	36	33	30	27	25	23	21
1150S162-54	11-1/2SSJ16	TL	193	173	152	135	120	108	98	88	81	74	68	60	53	48	43	38	35	32	29	26	24	22	20
		LL	193	173	152	127	107	91	78	68	59	51	45	40	36	32	29	26	23	21	19	17	16	15	13
1150S250-54	11-1/2SSW16	TL	193	180	169	159	145	130	118	107	97	89	82	75	69	61	55	49	45	40	37	34	31	28	26
		LL	193	180	169	159	138	117	100	87	75	66	58	51	46	41	37	33	30	27	25	22	20	19	17
1150S162-68	11-1/2SSJ14	TL	284	247	217	193	172	154	139	124	108	94	83	74	65	58	52	47	43	39	35	32	29	27	25
		LL	279	227	187	156	131	112	96	83	72	63	55	49	44	39	35	31	28	26	23	21	19	18	16
1150S250-68	11-1/2SSW14	TL	372	324	285	252	225	202	182	164	43	125	110	97	86	77	69	62	56	51	46	42	39	35	33
		LL	369	300	247	206	174	148	127	109	95	83	73	65	58	51	46	42	38	34	31	28	26	24	22
1150S162-97	11-1/2SSJ12	TL	407	354	311	276	246	221	189	164	142	124	110	97	86	77	69	62	56	51	46	42	39	35	32
		LL	368	299	247	206	173	147	126	109	95	83	73	65	57	51	46	41	37	34	31	28	26	24	22
1150S250-97	11-1/2SSW12	TL	555	483	425	376	336	301	258	223	194	170	149	132	117	105	94	85	76	69	63	57	52	48	44
		LL	501	407	336	280	236	201	172	149	129	113	99	88	78	70	63	56	51	46	42	38	35	32	29
1200S162-54	12SSJ16	TL	185	172	158	140	125	112	101	92	84	76	70	65	59	53	48	43	39	35	32	29	27	24	22
		LL	185	172	158	140	120	102	87	75	65	57	50	45	40	35	32	29	26	23	21	19	18	16	15
1200S200-54	12SJW16	TL	185	172	162	152	141	127	114	104	95	86	79	73	67	60	54	49	44	40	36	33	30	28	25
		LL	185	172	162	152	135	115	99	85	74	65	57	51	45	40	36	32	29	27	24	22	20	18	17
1200S250-54	12SSW16	TL	185	172	162	152	144	136	122	111	101	93	85	78	72	67	61	55	49	45	41	37	34	31	29
		LL	185	172	162	152	144	130	111	96	84	73	64	57	51	45	41	37	33	30	27	25	23	21	19
1200S162-68	12SSJ14	TL	293	255	224	198	177	159	143	130	118	105	93	82	73	65	58	52	47	43	39	36	33	30	27
		LL	293	253	208	174	146	124	107	92	80	70	62	55	49	43	39	35	32	29	26	24	22	20	18
1200S200-68	12SJW14	TL	340	296	260	230	205	184	166	151	137	120	105	93	83	74	66	60	54	49	44	41	37	34	31
		LL	340	288	237	198	166	142	121	105	91	80	70	62	55	49	44	40	36	33	30	27	35	23	21
1200S250-68	12SSW14	TL	371	336	295	261	233	209	189	171	156	138	122	108	96	86	77	69	62	57	51	47	43	39	36
		LL	371	333	274	229	193	164	140	121	106	92	81	72	64	57	51	46	42	38	34	31	29	26	24
1200S162-97	12SSJ12	TL	435	379	333	295	263	236	211	182	159	139	122	108	96	86	77	69	63	57	52	47	43	39	36
		LL	411	334	275	229	193	164	141	122	106	93	82	72	64	57	51	46	42	38	34	31	29	26	24
1200S200-97	12SJW12	TL	501	437	384	340	303	272	243	210	183	160	141	124	111	99	89	80	72	65	59	54	49	45	42
		LL	473	384	317	264	222	189	162	140	122	107	94	83	74	66	59	53	48	44	40	66	33	30	28
1200S250-97	12SSW12	TL	590	514	452	400	357	320	286	247	215	188	166	146	130	116	104	94	85	77	70	64	58	53	49
		LL	556	452	373	311	262	222	191	165	143	125	110	98	87	78	70	63	57	51	47	42	39	36	33
1400S200-54	14SJW16	TL	158	147	138	130	123	116	110	105	100	96	92	84	78	72	67	63	59	55	52	48	44	41	37
		LL	158	147	138	130	123	116	110	105	100	95	84	74	66	59	53	48	43	39	35	32	29	27	25
1400S200-68	14SJW14	TL	317	296	277	261	233	209	189	171	156	143	131	121	112	104	96	88	79	72	65	60	54	50	46
		LL	317	296	277	261	233	208	178	154	134	117	103	91	81	73	65	59	53	48	44	40	36	33	31
1400S250-68	14SSW14	TL	317	296	277	261	246	233	216	196	179	163	150	138	128	119	110	101	91	82	75	68	63	57	53
		LL	317	296	277	261	246	233	205	177	154	135	118	105	93	83	75	67	61	55	50	46	42	38	35
1400S200-97	14SJW12	TL	635	553	486	431	384	345	311	282	257	235	208	184	163	146	131	118	106	96	88	80	73	67	62
		LL	635	553	467	390	328	279	239	207	180	157	139	123	109	97	87	79	71	64	58	53	49	45	41
1400S250-97	14SSW12	TL	740	645	567	502	448	402	363	329	300	274	242	214	190	170	152	137	124	112	102	93	85	78	72
		LL	740	645	545	454	382	325	279	241	209	183	161	143	127	113	102	91	83	75	68	62	57	52	48
1600S250-68	16SSW14	TL	276	258	242	228	215	204	193	184	176	168	161	155	144	134	125	116	108	102	95	90	84	80	73
		LL	276	258	242	228	215	204	193	184	176	168	161	146	130	116	104	93	84	77	70	63	58	53	49
1600S250-97	16SSW12	TL	810	746	656	581	518	465	420	381	347	317	292	269	248	230	213	191	173	157	142	130	119	109	100
		LL	810	746	656	581	518	454	389	336	292	256	225	199	177	158	142	128	115	104	95	87	79	73	67

Flange Width: SSC=1 3/8", SSJ=1-5/8", SJW=2" and SSW=2-1/2"

WEB CRIPPLING CAPACITIES
UNSTIFFENED WEB(S) SUBJECTED TO LOCAL FORCES
KIPS (1,000 LBS)

USE:

The tables are used to verify the allowable capacity of an unreinforced web subjected to local forces.

NOTES:

1. Values have been omitted where the height to thickness ratio of the web, h/t, exceeds 200.

2. Values shown below represent the allowable concentrated load or reaction for one solid unreinforced web. Values shown on the following page represent the allowable concentrated load or reaction for "][" shaped sections connected back to back or similar sections which provide a high degree of restraint against rotation of the web.

3. Unreinforced flat webs of sections subjected to a combination of concentrated load or reaction and bending shall be designed to meet the following requirements:

a. For shapes having single unreinforced webs:

1.2(P/Pa) + (M/Ma) < 1.5

b. For shapes having multiple unreinforced webs (i.e. "I" sections or similar sections which provide a high degree of restraint against rotation of the web): 1.1(P/Pa) + (M/Ma) < 1.5 where:

P = Concentrated load or reaction

Pa = Allowable concentrated load or reaction

M = Applied bending moment at, or immediately adjacent to, the point of application of the concentrated load or reaction

Ma = Allowable bending moment if bending alone exists

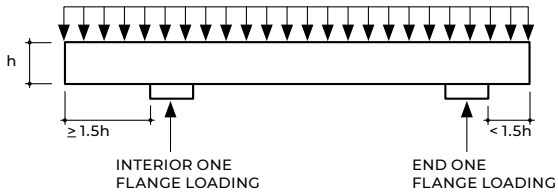
h = flat width of web

4. Avoid locating a web knockout within a distance equaling 1.5 x depth of the member (h) from the edge of bearing. If a knockout is located in this area, web reinforcement is required.

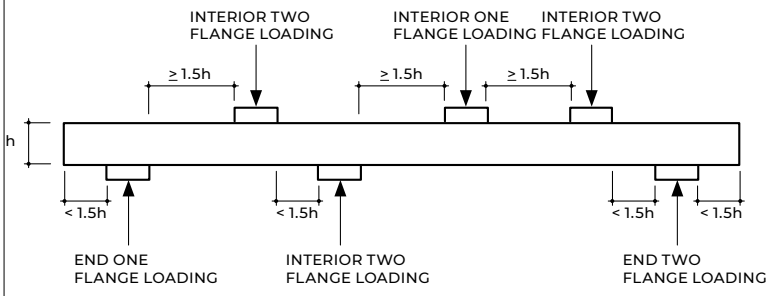
SINGLE WEB

DOUBLE WEB

UNIFORM LOAD ON BEAM



CONSENTRATED LOADS ON BEAM



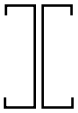
DOUBLE WEB

SECTION	6" X 33 MIL				6" X 43 MIL				6" X 54 MIL				6" X 68 MIL				6" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.867	0.982	1.075	1.155	1.357	1.523	1.658	1.775	2.996	3.339	3.618	3.859	4.434	4.907	5.291	5.623	8.226	9.007	9.642	10.190
INTERIOR ONE FLANGE	1.294	1.515	1.695	1.851	2.074	2.410	2.682	2.918	3.394	3.916	4.340	4.706	5.199	5.955	6.568	7.099	10.194	11.544	12.641	13.590
END TWO FLANGE	0.445	0.504	0.551	0.593	0.797	0.894	0.974	1.042	1.315	1.465	1.588	1.694	2.198	2.433	2.623	2.788	4.928	5.395	5.776	6.104
INTERIOR TWO FLANGE	1.086	1.272	1.423	1.554	1.874	2.177	2.424	2.637	2.973	3.430	3.801	4.122	4.745	5.434	5.995	6.479	9.613	10.885	11.920	12.814

SECTION	8" X 43 MIL				8" X 54 MIL				8" X 68 MIL				8" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	1.391	1.561	1.700	1.819	3.121	3.478	3.769	4.020	4.584	5.073	5.470	5.813	8.428	9.227	9.877	10.439
INTERIOR ONE FLANGE	2.074	2.410	2.682	2.918	3.394	3.916	4.340	4.706	5.199	5.955	6.568	7.099	10.194	11.544	12.641	13.590
END TWO FLANGE	0.748	0.839	0.914	0.978	1.253	1.396	1.513	1.613	2.118	2.344	2.527	2.686	4.806	5.262	5.632	5.953
INTERIOR TWO FLANGE	1.736	2.017	2.246	2.443	2.806	3.237	3.588	3.891	4.541	5.201	5.737	6.200	9.509	10.768	11.791	12.676

SECTION	10" X 54 MIL				10" X 68 MIL				10" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	3.169	3.532	3.827	4.082	4.734	5.239	5.649	6.003	8.629	9.448	10.113	10.689
INTERIOR ONE FLANGE	3.394	3.916	4.340	4.706	5.199	5.955	6.568	7.099	10.194	11.544	12.641	13.590
END TWO FLANGE	1.190	1.327	1.438	1.533	2.038	2.255	2.432	2.584	4.684	5.128	5.489	5.802
INTERIOR TWO FLANGE	2.640	3.045	3.375	3.660	4.337	4.967	5.479	5.922	9.225	10.446	11.439	12.297

DOUBLE WEB



SECTION	12" X 68 MIL				12" X 97 MIL				14" X 68 MIL				14" X 97 MIL				16" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	4.813	5.326	5.743	6.103	8.830	9.668	10.349	10.938	4.813	5.326	5.743	6.103	9.031	9.888	10.585	11.187	9.209	10.083	10.793	11.407
INTERIOR ONE FLANGE	5.199	5.955	6.568	7.099	10.194	11.544	12.641	13.590	5.199	5.955	6.568	7.099	10.194	11.544	12.641	13.590	10.194	11.544	12.641	13.590
END TWO FLANGE	1.958	2.166	2.336	2.483	4.562	4.994	5.346	5.650	1.877	2.078	2.240	2.381	4.439	4.861	5.203	5.499	4.317	4.727	5.060	5.348
INTERIOR TWO FLANGE	4.133	4.733	5.221	5.643	8.941	10.124	11.086	11.918	3.929	4.500	4.963	5.365	8.656	9.802	10.734	11.539	8.372	9.480	10.381	11.160

WEB CRIPPLING CAPACITIES
UNSTIFFENED WEB(S) SUBJECTED TO LOCAL FORCES
KIPS (1,000 LBS)

SINGLE WEB

SECTION	3-5/8"X 33 MIL				3-5/8"X 43 MIL				3-5/8"X 54 MIL				3-5/8"X 68 MIL				3-5/8"X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.221	0.265	0.310	0.354	0.386	0.451	0.515	0.579	0.752	0.857	0.962	1.067	1.173	1.309	1.445	1.581	2.332	2.531	2.731	2.931
INTERIOR ONE FLANGE	0.373	0.442	0.533	0.624	0.634	0.714	0.825	0.951	1.323	1.461	1.596	1.813	2.072	2.250	2.427	2.609	4.145	4.403	4.662	4.921
END TWO FLANGE	0.153	0.184	0.214	0.245	0.272	0.318	0.363	0.408	0.536	0.611	0.686	0.761	0.843	0.941	1.038	1.136	1.691	1.836	1.981	2.126
INTERIOR TWO FLANGE	0.356	0.369	0.382	0.394	0.669	0.688	0.706	0.724	1.490	1.523	1.556	1.589	2.457	2.501	2.545	2.588	5.215	5.280	5.345	5.411

SECTION	4"X 33 MIL				4"X 43 MIL				4"X 54 MIL				4"X 68 MIL				4"X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.215	0.259	0.302	0.345	0.380	0.443	0.506	0.569	0.742	0.845	0.949	1.052	1.161	1.295	1.429	1.564	2.315	2.513	2.712	2.910
INTERIOR ONE FLANGE	0.367	0.435	0.524	0.614	0.626	0.705	0.815	0.939	1.310	1.447	1.581	1.795	2.056	2.232	2.408	2.589	4.123	4.380	4.637	4.895
END TWO FLANGE	0.148	0.177	0.207	0.237	0.266	0.310	0.354	0.399	0.526	0.600	0.673	0.747	0.831	0.928	1.024	1.120	1.675	1.819	1.963	2.106
INTERIOR TWO FLANGE	0.340	0.352	0.365	0.377	0.648	0.666	0.684	0.702	1.455	1.487	1.519	1.552	2.414	2.457	2.499	2.542	5.153	5.217	5.282	5.347

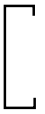
SECTION	6" X 33 MIL				6" X 43 MIL				6" X 54 MIL				6" X 68 MIL				6" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.187	0.224	0.262	0.299	0.343	0.400	0.457	0.514	0.687	0.783	0.879	0.974	1.094	1.221	1.348	1.475	2.225	2.416	2.607	2.797
INTERIOR ONE FLANGE	0.332	0.394	0.475	0.556	0.583	0.657	0.759	0.874	1.240	1.370	1.496	1.700	1.971	2.140	2.308	2.481	4.006	4.256	4.506	4.756
END TWO FLANGE	0.121	0.145	0.169	0.194	0.231	0.270	0.308	0.347	0.475	0.541	0.607	0.674	0.769	0.858	0.947	1.037	1.591	1.728	1.864	2.000
INTERIOR TWO FLANGE	0.255	0.265	0.274	0.283	0.537	0.552	0.566	0.581	1.269	1.297	1.325	1.353	2.181	2.220	2.258	2.297	4.823	4.884	4.944	5.005

SECTION	8" X 43 MIL				8" X 54 MIL				8" X 68 MIL				8" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.306	0.357	0.408	0.459	0.632	0.720	0.808	0.896	1.028	1.147	1.266	1.385	2.136	2.319	2.502	2.685
INTERIOR ONE FLANGE	0.540	0.608	0.703	0.809	1.170	1.292	1.412	1.604	1.886	2.047	2.209	2.374	3.889	4.132	4.374	4.617
END TWO FLANGE	0.197	0.230	0.263	0.295	0.423	0.482	0.541	0.600	0.707	0.789	0.871	0.953	1.507	1.636	1.765	1.895
INTERIOR TWO FLANGE	0.425	0.437	0.449	0.461	1.082	1.107	1.131	1.155	1.948	1.983	2.017	2.052	4.494	4.550	4.606	4.663

SECTION	9-1/4" X 54 MIL				9-1/4" X 68 MIL				9-1/4" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.597	0.681	0.764	0.848	0.987	1.101	1.215	1.330	2.080	2.258	2.436	2.614
INTERIOR ONE FLANGE	1.127	1.244	1.359	1.544	1.832	1.989	2.146	2.307	3.816	4.054	4.292	4.530
END TWO FLANGE	0.391	0.445	0.500	0.554	0.668	0.745	0.823	0.900	1.455	1.579	1.704	1.828
INTERIOR TWO FLANGE	0.966	0.988	1.009	1.030	1.802	1.834	1.866	1.898	4.288	4.341	4.395	4.449

SECTION	10" X 54 MIL				10" X 68 MIL				10" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.577	0.657	0.738	0.818	0.962	1.073	1.185	1.296	2.046	2.221	2.397	2.572
INTERIOR ONE FLANGE	1.100	1.215	1.327	1.508	1.801	1.955	2.109	2.267	3.772	4.007	4.243	4.478
END TWO FLANGE	0.371	0.423	0.475	0.527	0.645	0.719	0.794	0.869	1.423	1.545	1.667	1.789
INTERIOR TWO FLANGE	0.896	0.916	0.936	0.956	1.715	1.745	1.776	1.806	4.164	4.216	4.269	4.321

SINGLE WEB



SECTION	11-1/4" X 54 MIL				11-1/4" X 68 MIL				11-1/4" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.536	0.610	0.685	0.760	0.912	1.018	1.123	1.229	1.979	2.148	2.318	2.488
INTERIOR ONE FLANGE	1.048	1.157	1.264	1.436	1.737	1.885	2.034	2.186	3.684	3.914	4.144	4.374
END TWO FLANGE	0.333	0.379	0.426	0.472	0.598	0.667	0.737	0.806	1.360	1.476	1.593	1.709
INTERIOR TWO FLANGE	0.757	0.773	0.790	0.807	1.540	1.568	1.595	1.622	3.917	3.966	4.015	4.064

SECTION	12" X 68 MIL				12" X 97 MIL				14" X 68 MIL				14" X 97 MIL				16" X 97 MIL			
BEARING WIDTH (IN)->	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5	1.5	2.5	3.5	4.5
END ONE FLANGE	0.896	0.999	1.103	1.207	1.956	2.124	2.292	2.459	0.829	0.925	1.021	1.118	1.867	2.027	2.187	2.347	1.777	1.930	2.082	2.234
INTERIOR ONE FLANGE	1.715	1.862	2.009	2.159	3.655	3.883	4.111	4.339	1.630	1.769	1.909	2.052	3.538	3.759	3.980	4.200	3.421	3.635	3.848	4.061
END TWO FLANGE	0.582	0.650	0.717	0.785	1.339	1.454	1.568	1.683	0.520	0.581	0.641	0.701	1.255	1.362	1.470	1.577	1.170	1.271	1.371	1.471
INTERIOR TWO FLANGE	1.482	1.508	1.535	1.561	3.835	3.883	3.931	3.979	1.249	1.271	1.294	1.316	3.505	3.549	3.593	3.637	3.175	3.215	3.255	3.295