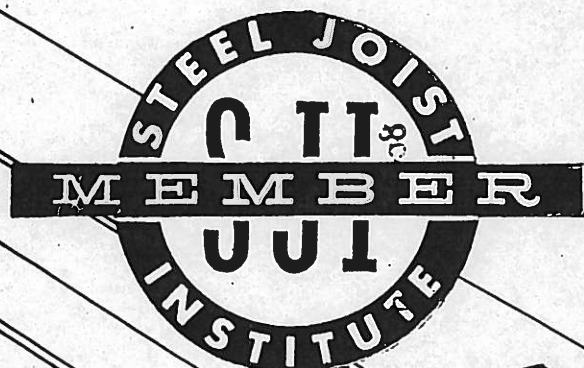


A.I.A. File No.

**FOR ECONOMY  
AND STRENGTH**



**STANDARD  
and  
LONG SPAN  
Steel  
JOISTS**

**S I  
&  
W**

1959

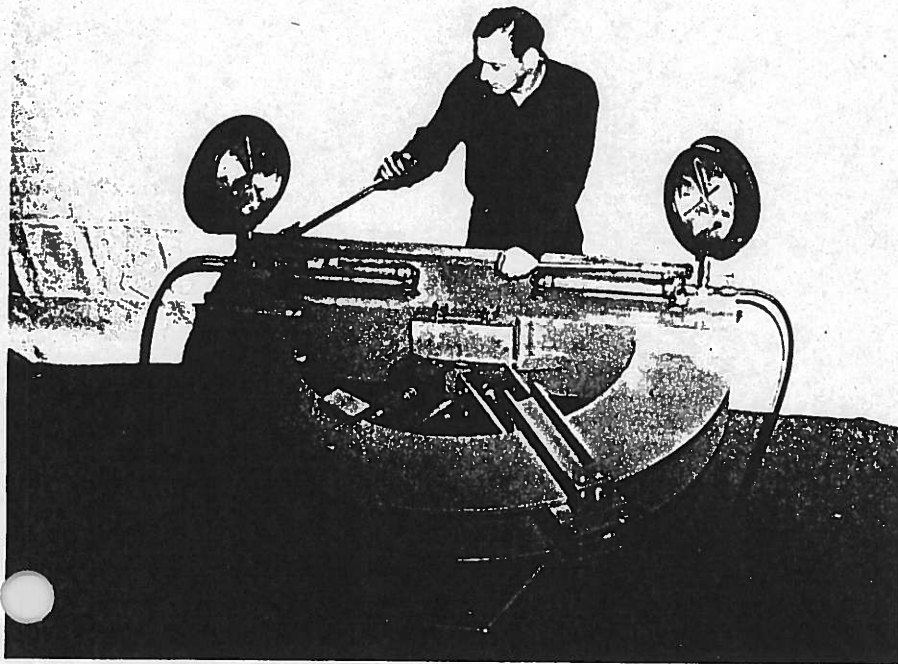
Jackson 2-4461

A.I.A. File No. 13-G

**Standard Iron & Wire Works, inc.**  
2930 North Second Street • Minneapolis 11, Minnesota

## STANDARD IRON & WIRE WORKS, INC.

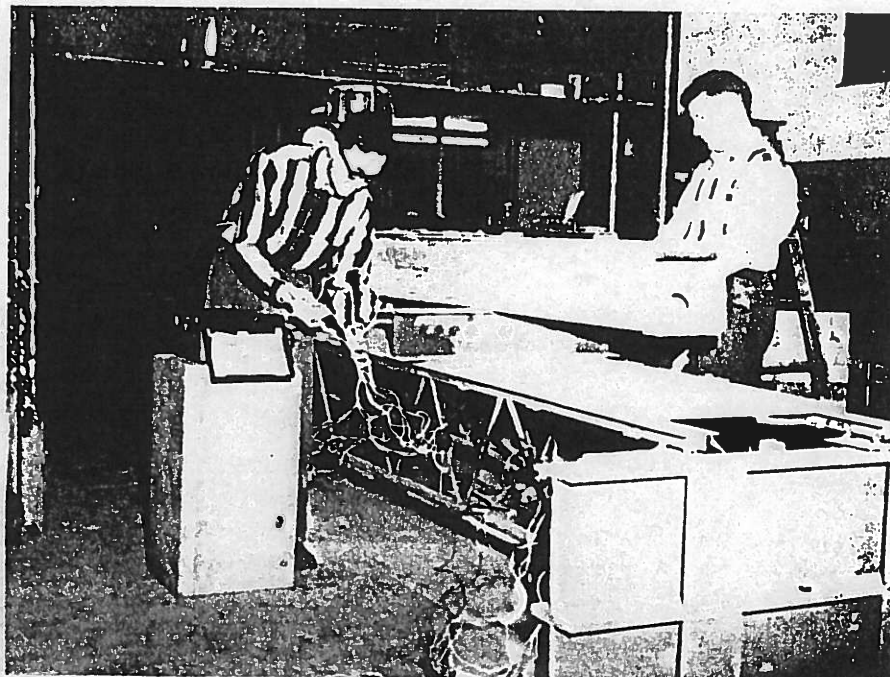
2930 Second Street North  
MINNEAPOLIS 11, MINNESOTA  
Established 1930



## QUALITY CONTROL

This specially designed testing machine tests the welds at the panel points. These tests are made to determine the quality of the welds.

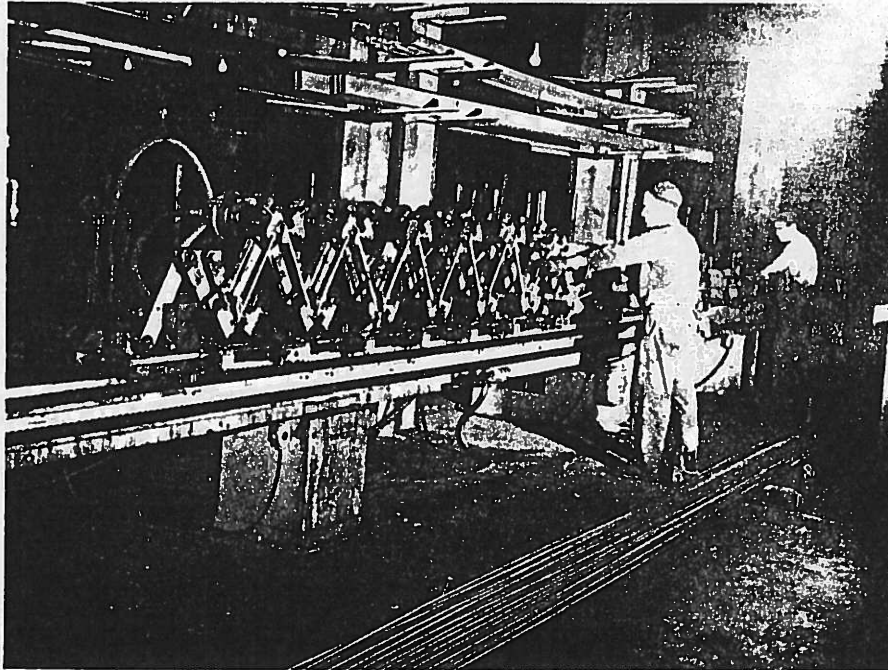
In addition to the above, tests are made by an independent testing laboratory at least every thirty days on joists selected at random by a laboratory representative.



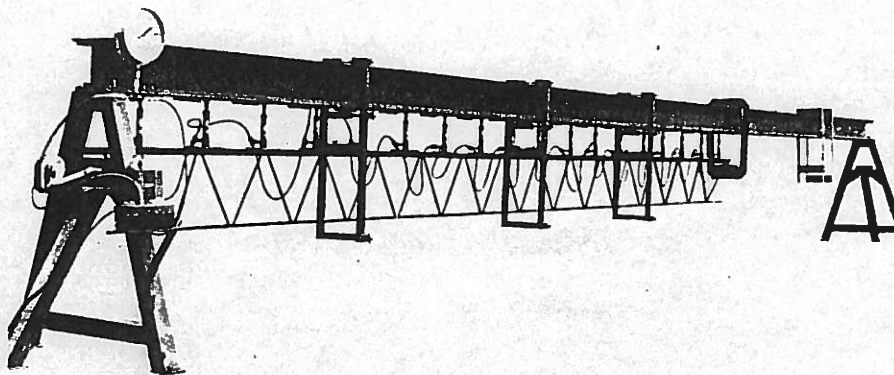


**In Addition to Joist, We Manufacture Many  
Other Metal Products Such As;**

**Ornamental Iron  
Ornamental Bronze  
Ornamental Aluminum  
Miscellaneous Iron  
Structural Steel  
Flag Poles**



**This machine accurately forms  
the bent sections for the Standard Joists.**



**This Specially Designed Test Stand is Used  
to Test Joists Up to 50'-0" Long**

**STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA**

ST'D  
LOAD  
TABLES

ST'D  
DIMENSIONS

ST'D  
EXT.  
ENDS

ST'D  
SPECS

L.S.  
LOAD  
TABLES

L.S.  
DIMENSIONS

L.S.  
EXT.  
ENDS

L.S.  
SPECS

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																										
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"
4'-0"	852	3800	950	877	814	760	713	671	633	600	570	543	518	496	475	456	438	407	380	356	317	271	238	211	190	173	158	146	136
4'-6"	852	3800	844	780	724	676	633	596	563	533	507	483	461	441	422	405	390	362	338	317	281	241	211	188	169	154	141	130	121
5'-0"	852	3800	760	702	651	608	570	536	507	480	456	434	415	397	380	365	351	326	304	285	253	217	190	169	152	138	127	117	109
5'-6"	852	3800	691	638	592	553	518	488	461	436	415	395	377	360	345	332	319	296	276	259	230	197	173	154	138	126	115	106	99
6'-0"	852	3800	633	585	543	507	475	447	422	400	380	362	345	330	317	304	292	271	253	237	211	181	158	141	127	115	106	97	90
6'-6"	852	3800	585	540	501	468	438	413	390	369	351	334	319	305	292	281	270	251	234	219	195	167	146	130	117	106	97	90	84
7'-0"	852	3800	543	501	465	434	407	383	362	343	326	310	296	283	272	261	251	233	217	204	181	155	136	121	109	99	90	84	78
7'-6"	852	3800	507	468	434	405	380	358	338	320	304	290	277	265	254	243	234	217	203	190	169	145	127	113	101	92	84	78	72
8'-0"	852	3800	475	438	407	380	356	335	317	300	285	271	259	248	238	228	219	204	190	178	158	136	119	106	95	86	79	73	68
8'-6"	852	3800	447	413	383	358	335	315	298	282	268	255	244	233	224	215	206	192	179	168	149	128	112	99	89	81	74	69	64
9'-0"	852	3800	422	390	362	338	317	298	281	266	253	241	230	220	211	203	195	181	169	158	141	121	106	94	84	77	70	65	60
9'-6"	852	3684	388	359	333	311	291	274	259	245	233	222	212	202	194	186	179	166	155	146	129	111	97	86	78	71	65	60	55
10'-0"	852	3500	350	323	300	280	263	247	233	221	210	200	191	183	175	168	162	150	140	131	117	100	88	78	70	64	58	54	50
	1052	3800	380	351	326	304	285	268	253	240	228	217	207	198	190	182	175	163	152	142	127	109	95	84	76	69	63	58	54
	1053	4000	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	61	57
	1054	4400	440	406	377	352	330	311	293	278	264	251	240	230	220	211	203	189	176	165	147	126	110	98	88	80	73	68	63
10'-6"	852	3333	317	292	272	254	238	224	211	200	190	181	173	165	159	152	147	136	127	119	106	91	79	71	63	58	53	49	45
	1052	3800	362	334	310	290	272	255	241	229	217	207	197	189	181	174	167	155	145	136	121	103	91	80	72	66	60	56	52
	1053	4000	381	352	327	305	286	269	254	241	229	218	208	199	191	183	176	163	152	143	127	109	95	85	76	69	63	59	54
	1054	4400	419	387	359	335	314	296	279	265	251	239	229	219	210	201	193	180	168	157	140	120	105	93	84	76	70	64	60
11'-0"	852	3182	289	267	248	231	217	204	193	183	173	165	158	151	145	139	133	124	116	108	96	83	72	64	58	53	48	44	41
	1052	3800	345	319	296	276	259	244	230	218	207	197	188	180	173	166	159	148	138	130	115	99	86	77	69	63	57	53	49
	1053	4000	364	336	312	291	273	257	243	230	218	208	199	190	182	175	168	156	146	136	121	104	91	81	73	66	61	56	52
	1054	4400	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57
11'-6"	852	3043	265	244	227	211	199	187	177	167	159	151	145	138	133	127	122	113	106	99	88	76	66	59	53	48	44	41	38
	1052	3768	328	303	281	262	246	232	219	207	197	187	179	171	164	157	151	141	131	123	109	94	82	73	66	60	55	50	47
	1053	4000	348	321	298	278	261	246	232	220	209	199	190	182	174	167	161	149	139	130	116	99	87	77	70	63	58	54	50
	1054	4400	383	353	328	306	287	270	255	242	230	219	209	200	192	184	177	164	153	143	128	109	96	85	77	70	64	59	55
12'-0"	852	2917	243	225	208	195	182	172	162	153	146	139	133	127	122	117	112	104	97	91	81	69	61	54	49	44	40	37	35
	1052	3611	301	278	258	241	226	212	201	190	181	172	164	157	151	144	139	129	120	113	100	86	75	67	60	55	50	46	43
	1053	4000	333	307	285	266	250	235	222	210	200	190	182	174	167	160	154	143	133	125	111	95	83	74	67	61	55	51	48
	1054	4400	367	338	315	293	275	259	245	232	220	210	200	191	184	176	169	157	147	137	122	105	92	81	73	67	61	56	52
	1253	4400	367	338	315	293	275	259	245	232	220	210	200	191	184	176	169	157	147	137	122	105	92	81	73	67	61	56	52
	1254	4600	383	354	328	307	287	270	255	242	230	219	209	200	192	184	177	164	153	144	128	109	96	85	77	70	64	59	55
12'-6"	852	2800	224	207	192	179	168	158	149	141	134	128	122	117	112	108	103	96	90	84	75	64	56	50	45	41	37	34	32
	1052	3467	277	256	237	222	208	196	185	175	166	158	151	145	139	133	128	119	111	104	92	79	69	62	55	50	46	43	40
	1053	4000	320	295	274	256	240	226	213	202	192	183	175	167	160	154	148	137	128	120	107	91	80	71	64	58	53	49	46
	1054	4400	352	325	302	282	264	248	235	222	211	201	192	184	176	169	162	151	141	132	117	101	88	78	70	64	59	54	50
12'-0"	1253	4400	352	325	302	282	264	248	235	222	211	201	192	184	176	169	162	151	141	132	117	101	88	78	70	64	59	54	50
	1254	4600	368	340	315	294	276	260	245	232	221	210	201	192	184	177	170	158	147	138	123	105	92	82	74	67	61	57	53
	1255	5000	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57
	1256	5600	448	414	384	358	336	316	299	283	269	256	244	234	224	215	207	192	179	168	149	128	112	100	90	81	75	69	64

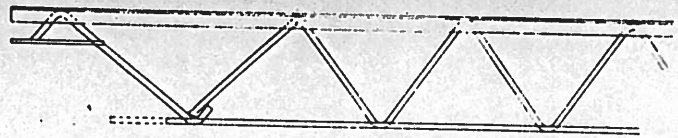


## ESTIMATED WEIGHTS

POUNDS PER FOOT

8S2-4.1	12S5-6.6	14S7- 9.7
10S2-4.3	12S6-8.1	
10S3-4.7	14S4-6.5	
10S4-5.9	14S5-7.0	
8-5.1	14S6-8.4	
12S4-6.0		

Add 1.75 pounds to  
weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS &amp; SECTIONS

ST'D  
LOAD TABLESST'D  
DIMENSIONSST'D  
EXT. ENDSST'D  
SPECSL.S.  
LOAD TABLESL.S.  
DIMENSIONSL.S.  
EXT. ENDSL.S.  
SPECS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																										
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"
13'-0"	8S2	2692	207	191	177	166	155	146	138	131	124	118	113	108	104	99	96	89	83	78	69	59	52	46	41	38	34	32	30
	10S2	3333	256	236	219	205	192	181	171	162	154	146	140	134	128	123	118	110	102	96	85	73	64	57	51	47	43	39	37
	10S3	4000	308	284	264	246	231	217	205	195	185	176	168	161	154	148	142	132	123	115	103	88	77	68	62	56	51	47	44
	10S4	4400	338	312	290	271	254	239	225	213	203	193	184	176	169	162	156	145	135	127	113	97	85	75	68	62	56	52	48
	12S3	4400	338	312	290	271	254	239	225	213	203	193	184	176	169	162	156	145	135	127	113	97	85	75	68	62	56	52	48
	12S4	4600	354	327	303	283	266	250	236	224	212	202	193	185	177	170	163	152	142	133	118	101	89	79	71	64	59	54	51
	12S5	5000	385	355	330	308	289	272	257	243	231	220	210	201	193	185	178	165	154	144	128	110	96	85	77	70	64	59	55
	12S6	5600	431	398	369	345	323	304	287	272	259	246	235	225	216	207	199	185	172	162	144	123	108	96	86	78	72	66	62
13'-6"	8S2	2593	192	177	165	153	144	136	128	121	115	110	105	100	96	92	89	82	77	72	64	55	48	43	38	35	32	..	..
	10S2	3210	238	220	204	190	179	168	159	150	143	136	130	124	119	114	110	102	95	89	79	68	60	53	48	43	40	37	34
	10S3	4000	296	273	254	237	222	209	197	187	178	169	161	154	148	142	137	127	118	111	99	85	74	66	59	54	49	46	42
	10S4	4400	326	301	279	261	245	230	217	206	196	186	178	170	163	156	150	140	130	122	109	93	82	72	65	59	54	50	47
	12S3	4400	326	301	279	261	245	230	217	206	196	186	178	170	163	156	150	140	130	122	109	93	82	72	65	59	54	50	47
	12S4	4600	341	315	292	273	256	241	227	215	205	195	186	178	171	164	157	146	136	128	114	97	85	76	68	62	57	52	49
	12S5	5000	370	342	317	296	278	261	247	234	222	211	202	193	185	178	171	159	148	139	123	106	93	82	74	67	62	57	53
	12S6	5600	415	383	356	332	311	293	277	262	249	237	226	217	208	199	192	178	166	156	138	119	104	92	83	75	69	64	59
14'-0"	8S2	2500	179	165	153	143	134	126	119	113	107	102	98	93	90	85	82	77	72	67	60	51	45	40	36	32	30	..	..
	10S2	3095	221	204	189	177	166	156	147	140	133	126	121	115	111	106	102	95	88	83	74	63	55	49	44	40	37	34	32
	10S3	3952	282	260	242	226	212	199	188	178	169	161	154	147	141	135	130	121	113	106	94	81	71	63	56	51	47	43	40
	10S4	4400	314	290	269	251	236	222	209	198	188	179	171	164	157	151	145	135	126	118	105	90	79	70	63	57	52	48	45
	12S3	4400	314	290	269	251	236	222	209	198	188	179	171	164	157	151	145	135	126	118	105	90	79	70	63	57	52	48	45
	12S4	4600	329	303	282	263	247	232	219	208	197	188	179	172	165	158	152	141	132	123	110	94	82	73	66	60	55	51	47
	12S5	5000	357	330	306	286	268	252	238	225	214	204	195	186	179	171	165	153	143	134	119	102	89	79	71	65	59	55	51
	12S6	5600	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57
	14S4	5200	371	342	319	297	279	263	248	235	223	213	203	194	186	178	171	159	149	139	124	106	93	82	74	67	62	57	53
	14S5	5800	414	382	355	331	311	292	276	261	248	237	226	216	207	199	191	178	166	155	138	118	104	92	83	75	69	64	59
	14S6	6200	443	409	380	354	332	313	295	280	266	253	242	231	222	213	204	190	177	166	148	127	111	98	89	81	74	68	63
	14S7	6800	486	448	417	389	365	343	324	307	292	278	265	254	243	233	224	208	194	182	162	139	122	108	97	88	81	75	69
	14'-6"	8S2	2414	166	153	142	133	125	117	111	105	100	95	91	87	83	80	77	71	66	62	55	47	42	37	33	30	..	..
10S2		2989	206	190	177	165	155	145	137	130	124	118	112	107	103	99	95	88	82	77	69	59	52	46	41	37	34	32	..
10S3		3816	263	243	225	210	197	186	175	166	158	150	143	137	132	126	121	113	105	99	88	75	66	58	53	48	44	40	38
10S4		4400	303	280	260	243	227	214	202	191	182	173	165	158	152	146	140	130	121	114	101	87	76	67	61	55	50	47	43
12S3		4400	303	280	260	243	227	214	202	191	182	173	165	158	152	146	140	130	121	114	101	87	76	67	61	55	50	47	43
12S4		4600	317	293	272	254	238	224	211	200	190	181	173	165	159	152	146	136	127	119	106	91	79	70	63	58	53	49	45
12S5		5000	345	318	296	276	259	244	230	218	207	197	188	180	173	166	159	148	138	129	115	99	86	77	69	63	57	53	49
12S6		5600	386	356	331	309	290	272	257	244	232	221	211	201	193	185	178	165	154	145	129	110	97	86	77	70	64	59	55
14S4		5200	359	331	308	287	269	253	239	227	215	205	196	187	180	172	166	154	144	135	120	103	90	80	72	65	60	55	51
14S5		5800	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57
14S6		6200	428	395	367	342	321	302	285	270	257	245	233	223	214	205	197	183	171	160	143	122	107	95	86	78	71	66	61
14S7		6800	469	433	402	375	352	331	313	296	281	268	256	245	235	225	216	201	188	176	156	134	117	104	94	85	78	72	67
15'-0"		8S2	2333	156	144	134	124	117	110	104	99	94	89	85	81	78	75	72	67	62	58	52	45	39	35	31	..	..	..
	10S2	2889	193	178	165	154	145	136	129	122	116	110	105	101	97	93	89	83	77	72	64	55	48	43	39	35	32	..	..
	10S3	3689	246	227	211	197	185	174	164	155	148	141	134	128	123	118	114	105	98	92	82	70	62	55	49	45	41	38	35
	10S4	4400	293	271	251	235	220	207	195	185	176	167	160	153	147	141	135	126	117	110	98	84	73	65	59	53	49	45	42
	12S3	4400	293	270	251	235	220	207	195	185	176	167	160	153	147	141	135	126	117	110	98	84	73	65	59	53	49	45	42
	12S4	4600	307	283	263	245	230	217	205	194	184	175	167	160	154	147	142	131	123	115	102	88	77	68	61	56	51	47	44
	12S5	5000	333	308	285	267	250	235	222	210	200	190	182	174	167	160	154	143	133	125	111	95	83	74	67	6			

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																											
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"	
15'-6"	8S2	2258	146	135	125	117	110	103	97	92	88	83	80	76	73	70	67	62	58	55	49	42	37	32	..	..	..	..	..	
	10S2	2796	180	166	154	144	135	127	120	114	108	103	98	94	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..	
	10S3	3570	230	212	197	184	173	162	153	145	138	131	125	120	115	110	106	99	92	86	77	66	58	51	46	42	38	35	33	
	10S4	4400	284	262	243	227	213	200	189	179	170	162	155	148	142	136	131	122	114	106	95	81	71	63	57	52	47	44	41	
	12S3	4301	277	256	237	222	208	196	185	175	166	158	151	145	139	133	128	119	111	104	92	79	69	62	55	50	46	43	40	
	12S4	4600	297	274	255	237	223	210	198	188	178	170	162	155	149	142	137	127	119	111	99	85	74	66	59	54	49	46	42	
	12S5	5000	323	298	277	258	242	228	215	204	194	185	176	169	162	155	149	138	129	121	108	92	81	72	65	59	54	50	46	
	12S6	5600	361	333	309	289	271	255	241	228	217	206	197	188	181	173	167	155	144	135	120	103	90	80	72	66	60	56	52	
	14S4	5200	335	309	287	268	251	236	223	212	201	191	183	175	168	161	155	144	134	126	112	96	84	74	67	61	56	52	48	
	14S5	5800	374	345	321	299	281	264	249	236	224	214	204	195	187	180	173	160	150	140	125	107	94	83	75	68	62	58	53	
14S6	6200	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57		
14S7	6800	439	405	376	351	329	310	293	277	263	251	239	229	220	211	202	188	176	165	146	125	110	97	88	80	73	67	63		
16'-0"	8S2	2188	137	126	117	110	103	97	91	87	82	78	75	71	69	66	63	59	55	51	46	39	34	30	..	..	..	..	..	
	10S2	2708	169	156	145	135	127	119	113	107	101	97	92	88	85	81	78	72	68	63	56	48	42	38	34	31	..	..	..	
	10S3	3458	216	199	185	173	162	152	144	136	130	123	118	113	108	104	100	93	86	81	72	62	54	48	43	39	36	33	31	
	10S4	4292	268	247	230	214	201	189	179	169	161	153	146	140	134	129	124	115	107	100	89	77	67	60	54	49	45	41	38	
	12S3	4167	260	240	223	208	195	184	173	164	156	149	142	136	130	125	120	111	104	97	87	74	65	58	52	47	43	40	37	
	12S4	4600	288	265	247	230	216	203	192	182	173	165	157	150	144	138	133	123	115	108	96	82	72	64	58	52	48	44	41	
	12S5	5000	313	288	268	250	235	221	209	198	188	179	171	163	157	150	144	134	125	117	104	89	78	69	63	57	52	48	45	
	12S6	5600	350	323	300	280	263	247	233	221	210	200	191	183	175	168	162	150	140	131	117	100	88	78	70	64	58	54	50	
	14S4	5200	325	300	279	260	244	229	217	205	195	186	177	170	163	156	150	139	130	122	108	93	81	72	65	59	54	50	46	
	14S5	5800	363	335	311	290	272	256	242	229	218	207	198	189	182	174	167	155	145	136	121	104	91	81	73	66	60	56	52	
	14S6	6200	388	358	333	310	291	274	259	245	233	222	212	202	194	186	179	166	155	145	129	111	97	86	78	70	65	60	55	
	14S7	6800	425	392	364	340	319	300	283	268	255	243	232	222	213	204	197	182	170	159	142	121	106	94	85	77	71	65	61	
	16S5	6000	375	346	321	300	281	265	250	237	225	214	205	196	188	180	173	161	150	141	125	107	94	83	75	68	62	58	54	
	16S6	6600	413	381	354	330	310	291	275	261	248	236	225	215	207	198	191	177	165	155	138	118	103	92	83	75	69	64	59	
	16S7	7200	450	415	386	360	338	318	300	284	270	257	245	235	225	216	208	193	180	169	150	129	113	100	90	82	75	69	64	
	16S8	7800	488	450	418	390	366	344	325	308	293	279	266	255	244	234	225	209	195	183	163	139	122	108	98	89	81	75	70	
16'-6"	10S2	2626	159	147	136	127	119	112	106	100	95	91	87	83	80	76	73	68	64	60	53	45	40	35	32	..	..	..	..	
	10S3	3354	203	187	174	162	152	143	135	128	122	116	111	106	102	97	94	87	81	76	68	58	51	45	41	37	34	31	..	
	10S4	4162	252	233	216	202	189	178	168	159	151	144	137	131	126	121	116	108	101	94	84	72	63	56	50	46	42	39	36	
	12S3	4040	245	226	210	196	184	173	163	155	147	140	134	128	123	118	113	105	98	92	82	70	61	54	49	45	41	38	35	
	12S4	4600	279	257	239	223	209	197	186	176	167	159	152	146	140	134	129	119	112	105	93	80	70	62	56	51	46	43	40	
	12S5	5000	303	280	260	242	227	214	202	191	182	173	165	158	152	145	140	130	121	114	101	87	76	67	61	55	50	47	43	
	12S6	5600	339	313	291	271	254	239	226	214	203	194	185	177	170	163	156	145	136	127	113	97	85	75	68	62	56	52	48	
	14S4	5200	315	291	270	252	236	222	210	199	189	180	172	164	158	151	145	135	126	118	105	90	79	70	63	57	52	48	45	
	14S5	5800	352	324	302	281	264	248	235	222	211	201	192	184	176	169	162	151	141	132	117	101	88	78	70	64	59	54	50	
	14S6	6200	376	347	322	301	282	265	251	237	226	215	205	196	188	180	173	161	150	141	125	107	94	84	75	68	63	58	54	
	14S7	6800	412	380	353	330	309	291	275	260	247	235	225	215	206	198	190	177	165	155	137	118	103	92	82	75	69	63	59	
	16S5	6000	364	336	312	291	273	257	243	230	218	208	199	190	182	175	168	156	146	136	121	104	91	81	73	66	61	56	52	
	16S6	6600	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57	
	16S7	7200	436	403	374	349	327	308	291	275	262	249	238	227	218	209	201	187	174	164	145	125	109	97	87	79	73	67	62	
	16S8	7800	473	437	405	378	355	334	315	299	284	270	258	247	237	227	218	203	189	177	158	135	118	105	95	86	79	73	68	
	17'-0"	10S2	2549	150	138	129	120	113	106	100	95	90	86	82	78	75	72	69	64	60	56	50	43	38	33	30	..	..	..	..
10S3		3255	191	176	164	153	143	135	127	121	115	109	104	100	96	92	88	82	76	72	64	55	48	42	38	35	32	..	..	

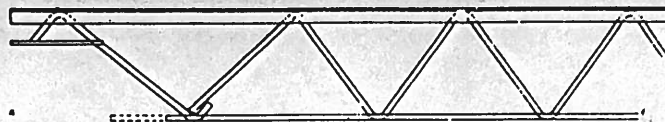


# ESTIMATED WEIGHTS

POUNDS PER FOOT

8S2-4.1	12S6-8.1	16S7- 9.9
10S2-4.3	14S4-6.5	16S8-11.3
10S3-4.7	14S5-7.0	18S6- 9.0
10S4-5.9	14S6-8.4	18S7-10.2
12S3-5.1	14S7-9.7	18S8-11.5
4-6.0	16S5-7.4	
12S5-6.6	16S6-8.5	

Add 1.75 pounds to weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																								ST'D DIMENSIONS			
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"		72"	78"	84"
17'-6"	10S2	2476	141	130	121	113	106	100	94	89	85	81	77	74	71	68	65	60	56	53	47	40	35	31	..	..	..	..	..	ST'D EXT. ENDS
	10S3	3162	181	167	155	145	136	128	121	114	109	103	99	94	91	87	84	78	72	68	60	52	45	40	36	33	30	..	..	
	10S4	3924	224	207	192	179	168	158	149	141	134	128	122	117	112	107	103	96	90	84	75	64	56	50	45	41	38	34	32	
	12S3	3810	218	201	187	174	164	154	145	138	131	125	119	114	109	105	101	93	87	82	73	62	55	48	44	40	36	34	31	
	12S4	4600	263	243	225	210	197	186	175	166	158	150	143	137	132	126	121	113	105	99	88	75	66	58	53	48	44	40	38	
	12S5	5000	286	264	245	229	215	202	191	181	172	163	156	149	143	137	132	122	114	107	95	82	72	63	57	52	48	44	41	
	12S6	5600	320	295	274	256	240	226	213	202	192	183	175	167	160	154	148	137	128	120	107	91	80	71	64	58	53	49	46	
	14S4	5200	297	274	255	238	223	210	198	188	178	170	162	155	149	143	137	127	119	111	99	85	74	66	59	54	49	46	42	
	14S5	5800	331	306	284	265	248	234	221	209	199	189	181	173	166	159	153	142	132	124	110	95	83	74	66	60	55	51	47	
	14S6	6200	354	327	303	283	266	250	236	224	212	202	193	185	177	170	163	152	142	133	118	101	89	79	71	64	59	54	51	
	14S7	6800	389	359	333	311	292	275	259	246	233	222	212	203	195	187	179	167	156	146	130	111	97	86	78	71	65	60	56	
	16S5	6000	343	317	294	274	257	242	229	217	206	196	187	179	172	165	158	147	137	129	114	98	86	76	69	62	57	53	49	
	16S6	6600	377	348	323	302	283	266	251	238	226	215	206	197	189	181	174	162	151	141	126	108	94	84	75	69	63	58	54	
	16S7	7200	411	380	352	329	308	290	274	260	247	235	224	214	206	197	190	176	164	154	137	117	103	91	82	75	68	63	59	
	16S8	7800	446	412	382	357	335	315	297	282	268	255	243	233	223	214	206	191	178	167	149	127	112	99	89	81	74	69	64	
18'-0"	10S2	2407	134	124	115	107	101	95	89	85	80	77	73	70	67	64	62	57	54	50	45	38	34	30	..	..	..	..	..	ST'D SPEC'S
	10S3	3074	171	158	147	137	128	121	114	108	103	98	93	89	86	82	79	73	68	64	57	49	43	38	34	31	..	..	..	
	10S4	3815	212	196	182	170	159	150	141	134	127	121	116	111	106	102	98	91	85	79	71	61	53	47	42	39	35	33	30	
	12S3	3704	206	190	177	165	155	145	137	130	124	118	112	107	103	99	95	88	82	77	69	59	52	46	41	37	34	32	..	
	12S4	4600	256	236	219	205	192	181	171	162	154	146	140	134	128	123	118	110	102	96	85	73	64	57	51	47	43	39	37	
	12S5	5000	278	256	238	222	209	196	185	176	167	159	152	145	139	133	128	119	111	104	93	79	70	62	56	51	46	43	40	
	12S6	5600	311	287	267	249	233	220	207	196	187	178	170	162	156	149	144	133	124	117	104	89	78	69	62	57	52	48	44	
	14S4	5200	289	267	248	231	217	204	193	183	173	165	158	151	145	139	133	124	116	108	96	83	72	64	58	53	48	44	41	
	14S5	5800	322	297	276	258	242	227	215	203	193	184	176	168	161	155	149	138	129	121	107	92	81	72	64	59	54	50	46	
	14S6	6200	344	318	295	276	258	243	229	217	206	197	188	179	172	165	159	148	138	129	115	98	86	77	69	63	57	53	49	
	14S7	6800	378	349	324	302	284	267	252	239	227	216	206	197	189	181	174	162	151	142	126	108	95	84	76	69	63	58	54	
	16S5	6000	333	307	286	266	251	236	223	211	200	191	182	174	167	160	154	143	134	125	111	95	84	74	67	61	56	51	48	
	16S6	6600	367	339	315	294	275	259	245	232	220	210	200	191	184	176	169	157	147	138	122	105	92	82	73	67	61	56	52	
	16S7	7200	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57	
	16S8	7800	433	400	371	346	325	306	289	273	260	247	236	226	217	208	200	186	173	162	144	124	108	96	87	79	72	67	62	
18'-6"	18S6	7200	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57	L.S. LOAD TABLES
	18S7	7600	422	390	362	338	317	298	281	266	253	241	230	220	211	203	195	181	169	158	141	121	106	94	84	77	70	65	60	
	18S8	8200	456	421	391	365	342	322	304	288	274	261	249	238	228	219	210	195	182	171	152	130	114	101	91	83	76	70	65	
	10S2	2342	127	117	109	102	95	90	85	80	76	73	69	66	64	61	59	54	51	48	42	36	32	..	..	..	..	..	..	
	10S3	2991	162	150	139	130	122	114	108	102	97	93	88	85	81	78	75	69	65	61	54	46	41	36	32	..	..	..	..	
	10S4	3712	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	75	67	57	50	45	40	37	33	31	..	
	12S3	3604	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..	
	12S4	4505	243	224	208	194	182	172	162	153	146	139	133	127	122	117	112	104	97	91	81	69	61	54	49	44	40	37	35	
	12S5	5000	270	249	231	216	203	191	180	171	162	154	147	141	135	130	125	116	108	101	90	77	68	60	54	49	45	42	39	
	12S6	5600	303	280	260	242	227	214	202	191	182	173	165	158	152	145	140	130	121	114	101	87	76	67	61	55	50	47	43	
	14S4	5200	281	259	241	225	211	198	187	177	169	161	153	147	141	135	130	120	112	105	94	80	70	62	56	51	47	43	40	
	14S5	5800	314	290	269	251	236	222	209	198	188	179	171	164	157	151	145	135	126	118	105	90	79	70	63	57	52	48	45	
	14S6	6200	335	309	287	268	251	236	223	212	201	191	183	175	168	161	155	144	134	126	112	96	84	74	67	61	56	52	48	
	14S7	6800	368	339	315	294	276	260	245	232	221	210	201	192	184	176	170	158	147	138	123	105	92	82	74	67	61	57	53	
	18'-6"	16S5	6000	324	299	278	259	243	229	216	205	194	185	177	169	162	156	150	139	130	121	108	93	81	72	65	59	54	50	
16S6		6600	357	330	306	286	268	252	238	225	214	204	195	186	179	171	165	153	143	134	119	102	89	79	71	65	59	55	51	
16S7		7200	389	359	333	311	292	275	259	246	233	222	212	203	195	187	180	167	156	146	130	111	97	86	78	71	65	60	56	
16S8		7800	422	390	362	338	317	298	281	266	253	241	230	220	211	203														

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																							
			12" 13" 14"	15" 16" 17"	18" 19" 20"	21" 22" 23"	24" 25" 26"	28" 30" 32"	36" 42" 48"	54" 60" 66"	72" 78" 84"															
19'-0"	1052	2281	120 111 103	96 90 85	80 76 72	69 65 63	60 58 55	51 48 45	40 34 30	34 31 ..	.. .. ..															
	1053	2912	153 141 131	122 115 108	102 97 92	87 83 80	77 73 71	66 61 57	51 44 38	34 31 ..	.. .. ..															
	1054	3614	190 175 163	152 143 134	127 120 114	109 104 99	95 91 88	81 76 71	63 54 48	42 38 35	32 .. ..															
	1253	3509	185 171 158	148 138 130	123 116 110	105 100 96	92 89 85	79 74 69	61 53 46	41 37 34	31 .. ..															
	1254	4386	231 213 198	185 173 163	154 146 139	132 126 121	116 111 107	99 92 87	77 66 58	51 46 42	38 36 33															
	1255	5000	263 242 225	210 197 186	175 166 158	150 143 137	132 126 121	113 105 98	88 75 66	58 53 48	44 40 38															
	1256	5600	295 272 253	236 221 208	197 186 177	169 161 154	148 142 136	126 118 111	98 84 74	66 59 54	49 45 42															
	1454	5158	271 250 233	217 204 192	181 172 163	155 148 142	136 130 125	116 109 102	91 78 68	60 54 49	45 42 39															
	1455	5800	305 282 261	244 229 215	203 193 183	174 166 159	153 146 141	131 122 114	102 87 76	68 61 55	51 47 44															
	1456	6200	326 301 279	261 245 230	217 206 196	186 178 170	163 157 151	140 130 122	109 93 82	73 65 59	54 50 47															
	1457	6800	358 330 307	286 269 253	239 226 215	205 195 187	179 172 165	153 143 134	119 102 90	80 72 65	60 55 51															
	1655	6000	316 292 271	253 237 223	211 200 190	181 172 165	158 152 146	135 126 118	105 90 79	70 63 57	53 49 45															
	1656	6600	347 320 297	278 260 245	231 219 208	198 189 181	174 167 160	149 139 130	116 99 87	77 69 63	58 53 50															
	1657	7200	379 350 325	303 284 267	253 239 227	217 207 198	190 182 175	162 152 142	126 108 95	84 76 69	63 58 54															
	1658	7800	411 379 352	329 308 290	274 260 247	235 224 214	206 197 190	176 164 154	137 117 103	91 82 75	68 63 59															
	1856	7200	379 350 325	303 284 267	253 239 227	217 207 198	190 182 175	162 152 142	126 108 95	84 76 69	63 58 54															
	1857	7600	400 369 343	320 300 282	267 253 240	229 218 209	200 192 185	171 160 150	133 114 100	89 80 73	67 62 57															
	1858	8200	432 399 370	346 324 305	288 273 259	247 236 225	216 207 199	185 173 162	144 123 108	96 86 79	72 66 62															
19'-6"	1052	2222	114 105 98	91 86 80	76 72 68	65 62 59	57 55 53	49 46 43	38 33 ..	.. .. ..	.. .. ..															
	1053	2838	146 135 125	117 110 103	97 92 88	83 80 76	73 70 67	63 58 55	49 42 36	32 .. ..	.. .. ..															
	1054	3521	181 167 155	145 136 128	121 114 109	103 99 94	91 87 84	78 72 68	60 52 45	40 36 33	30 .. ..															
	1253	3419	175 162 150	140 131 124	117 111 105	100 95 91	88 84 81	75 70 66	58 50 44	39 35 32	.. .. ..															
	1254	4274	219 202 188	175 164 155	146 138 131	125 119 114	110 105 101	94 88 82	73 63 55	49 44 40	36 34 31															
	1255	5000	256 236 219	205 192 181	171 162 154	146 140 134	128 123 118	110 102 96	85 73 64	57 51 47	43 39 37															
	1256	5600	287 265 246	230 215 203	191 181 172	164 157 150	144 138 132	123 115 108	96 82 72	64 57 52	48 44 41															
	1454	5026	258 238 221	206 194 182	172 163 155	147 141 135	129 124 119	111 103 97	86 74 65	57 52 47	43 40 37															
	1455	5800	297 274 255	238 223 210	198 188 178	170 162 155	149 143 137	127 119 111	99 85 74	66 59 54	49 46 42															
	1456	6200	318 294 273	254 239 224	212 201 191	182 173 166	159 153 147	136 127 119	106 91 80	71 64 58	53 49 45															
	1457	6800	349 322 299	279 262 246	233 220 209	199 190 182	175 168 161	150 140 131	116 100 87	78 70 63	58 54 50															
	1655	6000	308 284 264	246 231 217	205 195 185	176 168 161	154 148 142	132 123 115	103 88 77	68 62 56	51 47 44															
	1656	6600	338 312 290	270 254 239	225 213 203	193 184 176	169 162 156	145 135 127	113 97 85	75 68 61	56 52 48															
	1657	7200	369 341 316	295 277 260	246 233 221	211 201 193	185 177 170	158 148 138	123 105 92	82 74 67	61 57 53															
	1658	7800	400 369 343	320 300 282	267 253 240	229 218 209	200 192 184	171 160 150	133 114 100	89 80 73	67 62 57															
	1856	7200	369 341 316	295 277 260	246 233 221	211 201 193	185 177 170	158 148 138	123 105 92	82 74 67	61 57 53															
	1857	7600	390 360 334	312 293 275	260 246 234	223 213 203	195 187 180	167 156 146	130 111 98	87 78 71	65 60 56															
	1858	8200	421 389 361	337 316 297	281 266 253	241 230 220	211 202 194	180 168 158	140 120 105	94 84 77	70 65 60															
20'-0"	1052	2167	108 100 93	86 81 76	72 68 65	62 59 56	54 52 50	46 43 40	36 31 ..	.. .. ..	.. .. ..															
	1053	2767	138 127 118	110 104 97	92 87 83	79 75 72	69 66 64	59 55 52	46 39 35	31 .. ..	.. .. ..															
	1054	3433	172 159 147	138 129 121	115 109 103	98 94 90	86 83 79	74 69 65	57 49 43	38 34 31	.. .. ..															
	1253	3333	167 154 143	134 125 118	111 105 100	95 91 87	84 80 77	72 67 63	56 48 42	37 33 30	.. .. ..															
	1254	4167	208 192 178	166 156 147	139 131 125	119 113 109	104 100 96	89 83 78	69 59 52	46 42 38	35 32 30															
	1255	4967	248 229 213	198 186 175	165 157 149	142 135 129	124 119 114	106 99 93	83 71 62	55 50 45	41 38 35															
	1256	5600	280 258 240	224 210 198	187 177 168	160 153 146	140 134 129	120 112 105	93 80 70	62 56 51	47 43 40															
	1454	4900	245 226 210	196 184 173	163 155 147	140 134 128	123 118 113	105 98 92	82 70 61	54 49 45	41 38 35															
	1455	5800	290 268 249	232 217 205	193 183 174	166 158 151	145 139 134	124 116 109	97 83 73	64 58 53	48 45 41															
	1456	6200	310 286 266	248 233 219	207 196 186	177 169 162	155 149 143	133 124 116	103 89 78	69 62 56	52 48 44															
	1457	6800	340 314 291	272 255 240	227 215 204	194 185 177	170 163 157	146 136 127	113 97 85	76 68 62	57 52 49															
	1655	6000	300 277 257	240 225 212	200 189 180	171 164 157	150 144 138	129 120 112	100 86 75	67 60 55	50 46 43															
	1656	6600	330 305 283	264 248 233	220 208 198	189 180 172	165 158 152	141 132 124	110 94 83	73 66 60	55 51 47															
	1657	7200	360 332 309	288 270 254	240 227 216	206 196 188	180 173 166	154 144 135	120 103 90	80 72 65	60 55 51															
	1658	7800	390 360 334	312 293 275	260 246 234	223 213 203	195 187 180	167 156 146	130 111 98	87 78 71	65 60 56															
	1856	7200	360 332 309	288 270 254	240 227 216	206 196 188	180 173 166	154 144 135	120 103 90	80 72 65	60 55 51															
	1857	7600	380 351 326	304 285 268	253 240 228	217 207 198	190 182 175	163 152 142	127 109 95	84 76 69	63 58 54															
	1858	8200	410 378 351	328 308 289	273 259 246	234 224 214	205 197 189	176 164 154	137 117 103	91 82 75	68 63 59															
2056	7400	370 342 317	296 278 261	247 234 222	211 202 193	185 178 171	159 148 139	123 106 93	82 74 67	62 57 53																
2057	7800	390 360 334	312 293 275	260 246 234	223 213 203	195 187 180	167 156 146	130 111 98	87 78 71	65 60 56																
2058	8400	420 388 360	336 315 296	280 265 252	240 229 219	210 202 194	180 168 157	140 120 105	93 84 76	70 65 60																

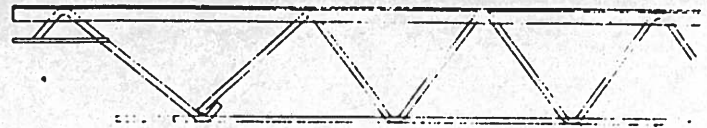


# ESTIMATED WEIGHTS

POUNDS PER FOOT

10S2-4.3	14S4-6.5	16S8-11.3
10S3-4.7	14S5-7.0	18S6- 9.0
10S4-5.9	14S6-8.4	18S7-10.2
12S3-5.1	14S7-9.7	18S8-11.5
2S4-6.0	16S5-7.4	20S6- 9.5
12S5-6.6	16S6-8.5	20S7-10.3
12S6-8.1	16S7-9.9	20S8-11.9

Add 1.75 pounds to weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																																				ST'D DIMENSIONS
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"	ST'D EXT. ENDS									
20'-6"	12S3	3252	159	147	136	127	119	112	106	100	95	91	87	83	80	76	73	68	64	60	53	45	40	35	32	..	..	..	..	..	..	..	..	..					
	12S4	4065	198	183	170	158	149	140	132	125	119	113	108	103	99	95	91	85	79	74	66	57	50	44	40	36	33	30	..	..	..	..	..						
	12S5	4846	236	218	202	189	177	167	157	149	142	135	129	123	118	113	109	101	94	88	79	67	59	52	47	43	39	36	34	..	..	..	..	..					
	12S6	5600	273	252	234	218	205	193	182	172	164	156	149	142	137	131	126	117	109	102	91	78	68	61	55	50	45	42	39	..	..	..	..	..					
	14S4	4780	233	215	200	186	175	164	155	147	140	133	127	122	117	112	108	100	93	87	78	67	58	52	47	42	39	36	33	..	..	..	..	..					
	14S5	5691	278	257	238	222	209	196	185	176	167	159	152	145	139	133	128	119	111	104	93	79	70	62	56	51	46	43	40	..	..	..	..	..					
	14S6	6200	302	279	259	242	227	213	201	191	181	173	165	158	151	145	140	130	121	113	101	86	76	67	60	55	50	47	43	..	..	..	..	..					
	14S7	6800	332	306	285	266	249	234	221	210	199	190	181	173	166	159	153	142	133	124	111	95	83	74	66	60	55	51	47	..	..	..	..	..					
	16S5	6000	293	270	251	234	220	207	195	185	176	167	160	153	147	141	135	126	117	110	98	84	73	65	59	53	49	45	42	..	..	..	..	..					
	16S6	6600	322	297	276	258	241	227	215	203	193	184	176	168	161	155	149	138	129	121	107	92	81	72	64	59	54	49	46	..	..	..	..	..					
	16S7	7200	351	324	301	281	263	248	234	222	211	201	191	183	176	169	162	151	140	132	117	100	88	78	70	64	58	54	50	..	..	..	..	..					
	16S8	7800	380	351	326	304	285	268	253	240	228	217	207	198	190	182	175	163	152	142	127	109	95	84	76	69	63	58	54	..	..	..	..	..					
18S6	7200	351	324	301	281	263	248	234	222	211	201	191	183	176	169	162	151	140	132	117	100	88	78	70	64	58	54	50	..	..	..	..	..						
18S7	7600	371	342	318	297	278	262	247	234	223	212	202	194	186	178	171	159	148	139	124	106	93	82	74	67	62	57	53	..	..	..	..	..						
18S8	8200	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	88	80	73	67	62	57	..	..	..	..	..						
20S6	7400	361	333	309	288	271	255	241	228	217	206	197	188	181	173	167	154	144	135	120	103	90	80	72	65	60	56	52	..	..	..	..	..						
20S7	7800	380	351	326	304	285	268	253	240	228	217	207	198	190	183	176	163	152	143	127	109	95	85	76	69	63	59	54	..	..	..	..	..						
20S8	8400	410	378	351	328	308	289	273	259	246	234	224	214	205	197	189	176	164	154	137	117	103	91	82	75	68	63	59	..	..	..	..	..						
21'-0"	12S3	3175	151	139	129	121	113	107	101	95	91	86	82	79	76	72	70	65	60	57	50	43	38	34	30	..	..	..	..	..	..	..	..	..					
	12S4	3968	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..	..	..	..	..						
	12S5	4730	225	208	193	180	169	159	150	142	135	129	123	117	113	108	104	96	90	84	75	64	56	50	45	41	37	34	..	..	..	..	..						
	12S6	5600	267	246	229	214	200	188	178	169	160	153	146	139	134	128	123	114	107	100	89	76	67	59	53	49	44	41	38	..	..	..	..	..					
	14S4	4667	222	205	190	178	167	157	148	140	133	127	121	116	111	106	102	95	89	83	74	63	56	49	44	40	37	34	..	..	..	..	..						
	14S5	5556	265	245	227	212	199	187	177	167	159	151	145	138	133	127	122	114	106	99	88	76	66	59	53	48	44	41	38	..	..	..	..	..					
	14S6	6200	295	273	253	236	221	208	197	186	177	169	161	154	148	142	136	127	118	111	98	84	74	66	59	54	49	45	42	..	..	..	..	..					
	14S7	6800	324	299	278	259	243	229	216	205	194	185	177	169	162	155	149	139	130	121	108	93	81	72	65	59	54	50	46	..	..	..	..	..					
	16S5	6000	286	264	245	228	215	202	191	181	172	163	156	149	143	137	132	123	114	107	95	82	72	64	57	52	48	44	41	..	..	..	..	..					
	16S6	6600	314	290	269	251	236	222	209	198	188	179	171	164	157	151	144	135	126	118	105	90	79	69	63	57	52	48	45	..	..	..	..	..					
	16S7	7200	343	316	294	274	257	242	229	217	206	196	187	179	172	165	158	147	137	129	114	98	86	76	69	62	57	53	49	..	..	..	..	..					
	16S8	7800	371	342	318	297	278	262	247	234	223	212	202	194	186	178	171	159	148	139	124	106	93	82	74	67	62	57	53	..	..	..	..	..					
18S6	7200	343	316	294	274	257	242	229	217	206	196	187	179	172	165	158	147	137	129	114	98	86	76	69	62	57	53	49	..	..	..	..	..						
18S7	7600	362	334	310	290	272	255	241	229	217	207	197	189	181	174	167	155	145	136	121	103	91	80	72	66	60	56	52	..	..	..	..	..						
18S8	8200	390	360	334	312	293	275	260	246	234	223	213	203	195	187	179	167	156	146	130	111	98	86	78	71	65	60	56	..	..	..	..	..						
20S6	7400	352	325	302	282	264	248	235	222	211	201	192	184	176	168	162	151	141	132	117	101	88	78	70	64	59	54	50	..	..	..	..	..						
20S7	7800	371	343	318	297	278	262	247	234	223	212	202	194	186	178	171	159	148	139	124	106	93	83	74	68	62	57	53	..	..	..	..	..						
20S8	8400	400	369	343	320	300	282	267	253	240	229	218	209	200	192	185	171	160	150	133	114	100	89	80	73	67	62	57	..	..	..	..	..						
21'-6"	12S3	3101	144	133	123	115	108	102	96	91	86	82	79	75	72	69	66	62	58	53	48	41	36	32	..	..	..	..	..	..	..	..	..	..					
	12S4	3876	180	166	154	144	135	127	120	114	108	103	98	94	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..	..	..	..	..						
	12S5	4620	215	198	184	172	161	151	143	136	129	123	117	112	108	103	99	92	86	81	72	61	54	48	43	39	36	33	..	..	..	..	..						
	12S6	5600	260	240	223	208	195	184	173	164	156	149	142	136	130	125	119	111	104	97	87	74	65	58	52	47	43	40	37	..	..	..	..	..					
	14S4	4558	212	196	182	169	159	150	141	134	127	121	116	111	106	102	98	91	85	79	71	61	53	47	42	39	35	33	30	..	..	..	..	..					
	14S5	5426	252	233	216	202	189	178	168	159	151	144	137	131	126	121	116	108	101	94	84	72	63	56	50	46	42	39	36	..	..	..	..	..					
	14S6	6200	288	266	247	231	216	203	192	182	173	165	157	150	144	138	133	124	115	108	96	82	72	64	58	52	48												

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																										
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"
22'-0"	1253	3030	138	127	117	110	103	97	91	87	82	78	75	71	69	66	64	59	55	52	46	39	34	31	..	..	..	..	..
	1254	3788	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	..	..	..
	1255	4515	205	189	176	164	154	145	137	129	123	117	112	107	103	98	95	88	82	77	68	59	51	46	41	37	34	32	..
	1256	5515	251	232	215	201	188	177	167	159	151	143	137	131	126	121	116	108	100	94	84	72	63	56	50	46	42	39	36
	1454	4455	202	187	174	162	152	143	135	128	122	116	111	106	102	97	93	87	81	76	68	58	51	45	41	37	34	31	..
	1455	5303	241	222	207	193	181	170	161	152	145	138	131	126	121	116	111	103	96	90	80	69	60	54	48	44	40	37	34
	1456	6200	282	260	242	225	212	199	188	178	169	161	154	147	141	135	130	121	113	106	94	81	71	63	56	51	47	43	40
	1457	6800	309	285	265	247	232	218	206	195	185	177	169	161	155	148	143	132	124	116	103	88	77	69	62	56	51	48	44
	1655	6000	273	252	234	218	205	193	182	172	164	156	149	142	137	131	126	117	109	102	91	78	68	61	55	50	45	42	39
	1656	6600	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46	43
	1657	7200	327	302	280	262	245	231	218	207	196	187	178	171	164	157	151	140	131	123	109	93	82	73	65	60	54	50	47
	1658	7800	355	328	304	284	266	251	237	224	213	203	194	185	178	170	164	152	142	133	118	101	89	79	71	65	59	55	51
	1856	7200	327	302	280	262	245	231	218	207	196	187	178	171	164	157	151	140	131	123	109	93	82	73	65	59	54	50	47
	1857	7600	345	319	295	276	259	244	230	218	207	197	188	180	173	166	159	148	138	130	115	99	86	77	69	63	57	53	49
	1858	8200	373	344	320	298	280	263	249	236	224	213	203	195	187	179	172	160	149	140	124	107	93	83	75	68	62	57	53
	2056	7400	336	310	288	269	252	237	224	212	202	192	183	175	168	161	155	144	134	126	112	96	84	75	67	61	56	52	48
	2057	7800	355	327	304	284	266	251	237	224	213	203	194	185	178	170	164	152	142	133	118	101	89	79	71	64	59	55	51
	2058	8400	382	353	327	306	287	270	255	241	229	218	208	199	191	183	176	164	153	143	127	109	96	85	76	69	64	59	55
	2257	8000	364	336	312	291	273	257	243	230	218	208	199	190	182	175	168	156	146	136	121	104	91	81	73	66	61	56	52
	2258	8600	391	361	335	312	293	276	261	247	235	223	213	204	196	188	180	168	156	147	131	112	98	87	78	71	65	60	56
22'-6"	1253	2963	132	122	113	106	99	93	88	83	79	75	72	69	66	63	61	57	53	49	44	38	33	..	..	..	..	..	..
	1254	3704	165	152	141	132	124	116	110	104	99	94	90	86	83	79	76	71	66	62	55	47	41	37	33	30	..	..	..
	1255	4415	196	181	168	157	147	138	131	124	118	112	107	102	98	94	90	84	78	74	65	56	49	44	39	36	33	30	..
	1256	5393	240	222	206	192	180	169	160	152	144	137	131	125	120	115	111	103	96	90	80	69	60	53	48	44	40	37	34
	1454	4356	194	179	166	155	146	137	129	123	116	111	106	101	97	93	90	83	78	73	65	55	49	43	39	35	32	30	..
	1455	5185	230	212	197	184	173	162	153	145	138	131	125	120	115	110	106	99	92	86	77	66	58	51	46	42	38	35	33
	1456	6200	276	255	237	221	207	195	184	174	166	158	151	144	138	132	127	118	110	103	92	79	69	61	55	50	46	42	39
	1457	6800	302	279	259	242	227	213	201	191	181	173	165	158	151	145	139	130	121	113	101	86	76	67	60	55	50	46	43
	1655	5985	266	246	228	213	200	188	177	168	160	152	145	139	133	128	123	114	106	100	89	76	67	59	53	48	44	41	38
	1656	6600	293	270	251	234	220	207	195	185	176	167	160	153	147	141	135	126	117	110	98	84	73	65	59	53	49	45	42
	1657	7200	320	295	274	256	240	226	213	202	192	183	175	167	160	154	148	137	128	120	107	91	80	71	64	58	53	49	46
	1658	7800	347	320	297	278	260	245	231	219	208	198	189	181	174	167	160	149	139	130	116	99	87	77	69	63	58	53	50
	1856	7200	320	295	274	256	240	226	213	202	192	183	175	167	160	154	148	137	128	120	107	91	80	71	64	58	53	49	46
	1857	7600	338	312	290	270	254	239	225	213	203	193	184	176	169	162	156	145	135	127	113	97	85	75	68	61	56	52	48
	1858	8200	364	336	312	291	273	257	243	230	218	208	199	190	182	175	168	156	146	136	121	104	91	81	73	66	61	56	52
	2056	7400	329	304	282	263	247	232	219	208	197	188	179	172	165	158	152	141	132	123	110	94	82	73	66	60	55	51	47
	2057	7800	347	320	297	277	260	245	231	219	208	198	189	181	174	166	160	149	139	130	116	99	87	77	69	63	58	53	50
	2058	8400	373	344	320	298	280	263	249	236	224	213	203	195	187	179	172	160	149	140	124	107	93	83	75	68	62	57	53
	2257	8000	356	329	305	285	267	251	237	225	214	203	194	186	178	171	164	153	142	133	119	102	89	79	71	65	59	55	51
	2258	8600	382	353	327	306	287	270	255	241	229	218	208	199	191	183	176	164	153	143	127	109	96	85	76	69	64	59	55
23'-0"	1253	2899	126	116	108	101	95	89	84	80	76	72	69	66	63	60	58	54	50	47	42	36	32	..	..	..	..	..	..
	1254	3623	158	146	135	126	119	112	105	100	95	90	86	82	79	76	73	68	63	59	53	45	40	35	32	..	..	..	..
	1255	4319	188	174	161	150	141	133	125	119	113	107	103	98	94	90	87	81	75	70	63	54	47	42	38	34	31	..	..
	1256	5275	229	211	196	183	172	162	153	145	137	131	125	119	115	110	106	98	92	86	76	65	57	51	46	42	38	35	33
	1454	4261	185	171	159	148	139	131	123	117	111	106	101	97	93	89	85	79	74	69	62	53	46	41	37	34	31	..	..
	1455	5072	221	204	189	177	166	156	147	140	1																		

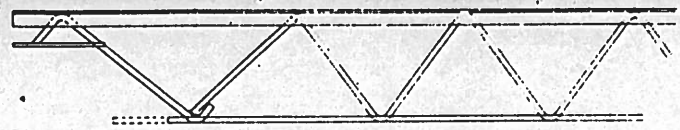


# ESTIMATED WEIGHTS

POUNDS PER FOOT

12S3-5.1	14S7- 9.7	18S8-11.5
12S4-6.0	16S5- 7.4	20S6- 9.5
12S5-6.6	16S6- 8.5	20S7-10.3
14S6-8.1	16S7- 9.9	20S8-11.9
14S7-8.5	16S8-11.3	22S7-11.5
14S5-7.0	18S6- 9.0	22S8-12.3
14S6-8.4	18S7-10.2	24S8-12.7

Add 1.75 pounds to weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

ST'D  
DIMENSIONS

ST'D  
EXT. ENDS

ST'D  
SPECS

L.S.  
LOAD TABLES

L.S.  
DIMENSIONS

ST'D  
EXT. ENDS

L.S.  
SPECS

Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																												
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"		
23'-6"	12S3	2837	121	112	104	97	91	85	81	76	73	69	66	63	61	58	56	52	48	45	40	35	30	34	30	27	24	21	18	15	
	12S4	3546	151	139	129	121	113	107	101	95	91	86	82	79	76	72	70	65	60	57	50	43	38	34	30	27	24	21	18	15	
	12S5	4227	180	166	154	144	135	127	120	114	108	103	98	94	90	86	83	77	72	67	60	51	45	40	36	33	30	27	24	21	
	12S6	5163	220	203	189	176	165	155	147	139	132	126	120	115	110	106	102	94	88	82	73	63	55	49	44	40	37	34	31	28	
	14S4	4170	177	163	152	142	133	125	118	112	106	101	97	92	89	85	82	76	71	66	59	51	44	39	35	32	29	26	23	20	
	14S5	4965	211	195	181	169	158	149	141	133	127	121	115	110	106	101	97	90	84	79	70	60	53	47	42	38	35	32	30	27	
	14S6	6071	258	238	221	206	194	182	172	163	155	147	141	135	129	124	119	111	103	97	86	74	65	57	52	47	43	40	37	34	
	14S7	6800	289	267	248	231	217	204	193	183	173	165	158	151	145	139	134	124	116	109	96	83	72	64	58	53	48	45	41	38	35
	16S5	5730	244	225	208	195	182	172	162	153	146	139	133	127	122	117	113	105	97	92	81	69	61	54	49	44	40	38	35	32	30
	16S6	6600	281	259	241	225	211	198	187	177	169	161	153	147	141	135	130	120	112	105	94	80	70	62	56	51	47	43	40	37	34
	16S7	7200	306	283	262	245	230	216	204	193	184	175	167	160	153	147	141	131	122	115	102	87	77	68	61	56	51	47	44	41	38
	16S8	7800	332	306	285	266	249	234	221	210	199	190	181	173	166	159	153	142	133	124	111	95	83	74	66	60	55	51	47	44	41
24'-0"	18S6	7200	306	283	262	245	230	216	204	193	184	175	167	160	153	147	141	131	122	115	102	87	77	68	61	56	51	47	44	41	38
	18S7	7600	323	299	277	259	242	228	215	204	194	185	176	169	162	155	149	139	129	121	108	92	81	72	65	59	54	50	46	43	40
	18S8	8200	349	322	299	279	262	246	233	220	209	199	190	182	175	168	161	150	140	131	116	100	87	78	70	63	58	54	50	46	43
	20S6	7400	315	291	270	252	236	222	210	199	189	180	172	164	158	151	145	135	126	118	105	90	79	70	63	57	52	48	45	42	39
	20S7	7800	332	306	285	266	249	234	221	210	199	190	181	173	166	159	153	142	133	124	111	95	83	74	66	60	55	51	47	44	41
	20S8	8400	357	330	306	286	268	252	238	225	214	204	195	186	179	171	165	153	143	134	119	102	89	79	71	65	59	55	51	47	44
	22S7	8000	340	314	291	272	255	240	227	215	204	194	185	177	170	163	157	146	136	127	113	97	85	76	68	62	57	52	49	46	43
	22S8	8600	366	338	314	293	275	258	244	231	220	209	200	191	183	176	169	157	146	137	122	105	92	81	73	67	61	56	52	48	45
	12S3	2778	116	107	99	93	87	82	77	73	70	66	63	61	58	56	54	50	46	43	39	33	29	26	23	20	18	15	12	9	6
	12S4	3472	145	134	124	116	109	102	97	92	87	83	79	76	73	70	67	62	58	54	48	41	36	32	28	24	21	18	15	12	9
	12S5	4139	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	28	24	21	18	15
	12S6	5056	211	195	181	169	158	149	141	133	127	121	115	110	106	101	97	90	84	79	70	60	53	47	42	38	35	32	30	27	24
24'-6"	14S4	4083	170	157	146	136	128	120	113	107	102	97	93	89	85	82	78	73	68	64	57	49	43	38	34	31	28	24	21	18	15
	14S5	4861	203	187	174	162	152	143	135	128	122	116	111	106	102	97	94	87	81	76	68	58	51	45	41	37	34	31	28	24	21
	14S6	5944	248	229	213	198	186	175	165	157	149	142	135	129	124	119	114	106	99	93	83	71	62	55	50	45	41	38	35	32	30
	14S7	6800	283	262	243	227	212	200	189	179	170	162	154	148	142	136	131	121	113	106	94	81	71	63	57	52	47	44	40	37	34
	16S5	5611	234	216	201	187	176	165	156	148	140	134	128	122	117	112	108	100	94	88	78	67	59	52	47	43	39	36	33	30	27
	16S6	6600	275	254	236	220	206	194	183	174	165	157	150	143	138	132	127	118	110	103	92	79	69	61	55	50	46	42	39	36	33
	16S7	7200	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46	43	40	37
	16S8	7800	325	300	279	260	244	229	217	205	195	186	177	170	163	156	150	139	130	122	108	93	81	72	65	59	54	50	46	43	40
	18S6	7200	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46	43	40	37
	18S7	7600	317	292	272	254	238	224	211	200	190	181	173	165	159	152	146	136	127	119	106	91	79	70	63	58	53	49	45	42	39
	18S8	8200	342	316	293	274	257	241	228	216	205	195	187	178	171	164	158	147	137	128	114	98	86	76	68	62	57	53	49	45	42
	20S6	7400	308	284	264	246	231	217	205	195	185	176	168	161	154	148	142	132	123	116	103	88	77	68	62	55	51	47	44	41	38
20S7	7800	325	300	279	260	244	229	217	205	195	186	177	170	163	156	150	139	130	122	108	93	81	72	65	59	54	50	46	43	40	
20S8	8400	350	323	300	280	263	247	233	221	210	200	191	183	175	168	162	150	140	131	117	100	88	78	70	64	58	54	50	46	43	
22S7	8000	333	307	285	266	250	235	222	210	200	190	182	174	167	160	154	143	133	125	111	95	83	74	67	61	55	51	47	44	41	
22S8	8600	358	330	307	286	269	253	239	226	215	205	195	187	179	172	165	153	143	134	119	102	90	80	72	64	60	55	51	47	44	
24S8	9000	375	346	321	300	281	265	250	237	225	214	205	196	189	180	173	161	150	141	125	107	94	83	75	67	62	58	54	50	46	
24'-6"	14S4	4000	163	150	140	130	122	115	109	103	98	93	89	85	82	78	75	70	65	61	54	47	41	36	33	30	27	24	21	18	15
	14S5	4762	194	179	166	155	146	137	129	123	116	111	106	101	97	93	90	83	78	73	65	55	49	43	39	35	32	30	27	24	21
	14S6	5823	238	220	204	190	179	168	159	150	143	136	130	124	119	114	110	102	95	89	79	68	60	53	48	43	40	37	34	31	28
	14S7	6800	278	257	238	222	209	196	185	176	167	159	152	145	139	133	128	119	111	104	93	79	70	62	56	51	46	43	40	37	34
	16S5	5497	224	207	192	179	168																								

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																										
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"
25'-0"	1454	3920	157	145	135	126	118	111	105	99	94	90	86	82	79	75	72	67	63	59	52	45	39	35	31	..	..	..	..
	1455	4667	187	173	160	150	140	132	125	118	112	107	102	98	94	90	86	80	75	70	62	53	47	42	37	34	31	..	..
	1456	5707	228	210	195	182	171	161	152	144	137	130	124	119	114	109	105	98	91	85	76	65	57	51	46	41	38	35	33
	1457	6693	268	247	230	214	201	189	179	169	161	153	146	140	134	129	124	115	107	100	89	77	67	60	54	49	45	41	38
	1655	5387	215	198	184	172	161	152	143	136	129	123	117	112	108	103	99	92	86	81	72	61	54	48	43	39	36	33	31
	1656	6453	258	238	221	206	194	182	172	163	155	147	141	135	129	124	119	111	103	97	86	74	65	57	52	47	43	40	37
	1657	7200	288	266	247	230	216	203	192	182	173	165	157	150	144	138	133	123	115	108	96	82	72	64	58	52	48	44	41
	1658	7800	312	288	267	250	234	220	208	197	187	178	170	163	156	150	144	134	125	117	104	89	78	69	62	57	52	48	45
	1856	7200	288	266	247	230	216	203	192	182	173	165	157	150	144	138	133	123	115	108	96	82	72	64	58	52	48	44	41
	1857	7600	304	281	261	243	228	215	203	192	182	174	166	159	152	146	140	130	122	114	101	87	76	68	61	55	51	47	43
	1858	8200	328	303	281	262	246	232	219	207	197	187	179	171	164	157	151	141	131	123	109	94	82	73	66	60	55	50	47
	2056	7400	296	273	254	237	222	209	197	187	178	169	161	154	148	142	137	127	118	111	99	85	74	66	59	54	49	46	42
	2057	7800	312	288	267	250	234	220	208	197	187	178	170	163	156	150	144	134	125	117	104	89	78	69	62	57	52	48	45
	2058	8400	336	310	288	269	252	237	224	212	202	192	183	175	168	161	155	144	134	126	112	96	84	75	67	61	56	52	48
	2257	8000	320	295	274	256	240	226	213	202	192	183	175	167	160	154	148	137	128	120	107	91	80	71	64	58	53	49	46
	2258	8600	344	318	295	275	258	243	229	217	206	197	188	179	172	165	159	147	138	129	115	98	86	76	69	63	57	53	49
	2458	9000	360	332	309	288	270	254	240	227	216	206	196	188	180	173	166	154	144	135	120	103	90	80	72	65	60	55	51
25'-6"	1454	3843	151	139	129	121	113	107	101	95	91	86	82	79	76	72	70	65	60	57	50	43	38	34	30	..	..	..	..
	1455	4575	179	165	153	143	134	126	119	113	107	102	98	93	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..
	1456	5595	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34	31
	1457	6562	257	237	220	206	193	181	171	162	154	147	140	134	129	123	119	110	103	96	86	73	64	57	51	47	43	40	37
	1655	5281	207	191	177	166	155	146	138	131	124	118	113	108	104	99	96	89	83	78	69	59	52	46	41	38	34	32	30
	1656	6327	248	229	213	198	186	175	165	157	149	142	135	129	124	119	114	106	99	93	83	71	62	55	50	45	41	38	35
	1657	7200	282	261	242	226	212	199	188	178	169	161	154	147	141	136	130	121	113	106	94	81	71	63	56	51	47	43	40
	1658	7800	306	283	262	245	230	216	204	193	184	175	167	160	153	147	141	131	122	115	102	87	77	68	61	56	51	47	44
	1856	7111	279	258	239	223	209	197	186	176	167	159	152	146	140	134	129	120	112	105	93	80	70	62	56	51	46	43	40
	1857	7600	298	275	255	238	224	210	199	188	179	170	163	155	149	143	138	129	119	112	99	85	75	66	60	54	50	46	43
	1858	8200	322	297	276	257	242	227	215	203	193	184	176	168	161	155	149	138	129	121	107	92	81	71	64	58	54	50	46
	2056	7400	290	268	249	232	218	205	193	183	174	166	158	151	145	139	134	124	116	109	97	83	73	64	58	53	48	45	41
	2057	7800	306	282	262	245	230	216	204	193	184	175	167	160	153	147	141	131	122	115	102	87	77	68	61	56	51	47	44
	2058	8400	329	304	282	263	247	232	219	208	197	188	179	172	165	158	152	141	132	123	110	94	82	73	66	60	55	51	47
	2257	8000	314	290	269	251	236	222	209	198	188	179	171	164	157	151	145	135	126	118	105	90	79	70	63	57	52	48	45
	2258	8600	337	311	289	270	253	238	225	213	202	193	184	176	169	162	156	145	135	126	112	96	84	75	67	61	56	52	48
	2458	9000	353	326	303	282	265	249	235	223	212	202	193	184	177	169	163	151	141	132	118	101	88	78	71	64	59	54	50
26'-0"	1454	3769	145	134	124	116	109	102	97	92	87	83	79	76	73	70	67	62	58	54	48	41	36	32	..	..	..	..	..
	1455	4487	173	160	148	138	130	122	115	109	104	99	94	90	87	83	80	74	69	65	58	49	43	38	35	31	..	..	..
	1456	5487	211	195	181	169	158	149	141	133	127	121	115	110	106	101	97	90	84	79	70	60	53	47	42	38	35	32	30
	1457	6436	248	229	213	198	186	175	165	157	149	142	135	129	124	119	114	106	99	93	83	71	62	55	50	45	41	38	35
	1655	5179	199	184	171	159	149	140	133	126	119	114	109	104	100	96	92	85	80	75	66	57	50	44	40	36	33	31	..
	1656	6205	239	221	205	191	179	169	159	151	143	137	130	125	120	115	110	102	96	90	80	68	60	53	48	43	40	37	34
	1657	7200	277	256	237	222	208	196	185	175	166	158	151	145	139	133	128	119	111	104	92	79	69	62	55	50	46	43	40
	1658	7800	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46	43
	1856	6974	268	247	230	214	201	189	179	169	161	153	146	140	134	129	124	115	107	101	89	77	67	60	54	49	45	41	38
	1857	7600	292	270	250	234	219	206	195	184	175	167	159	152	146	140	135	125	117	110	97	83	73	65	58	53	49	45	42
	1858	8200	315	291	270	252	236	222	210	199	189	180	172	164	158	151	145	135	126	118	105	90	79	70	63	57	52	49	45
	2056	7400	285	263	244	228	21																						

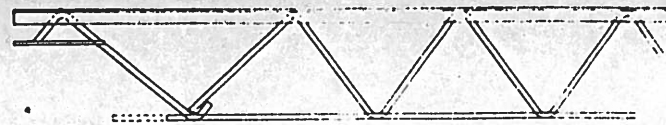


# ESTIMATED WEIGHTS

POUNDS PER FOOT

14S4-6.5	16S7- 9.9	20S7-10.3
14S5-7.0	16S8-11.3	20S8-11.9
14S6-8.4	18S6- 9.0	22S7-11.5
16S7- 9.7	18S7-10.2	22S8-12.3
18S7- 7.4	18S8-11.5	24S8-12.7
16S6-8.5	20S6- 9.5	

Add 1.75 pounds to weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																																	ST'D DIMENSIONS
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"							
26'-6"	14S4	3698	140	129	120	112	105	99	93	88	84	80	76	73	70	67	65	60	56	52	47	40	35	31	..	..	..	..	..	..	..					
	14S5	4403	166	153	142	133	125	117	111	105	100	95	91	87	83	80	77	71	66	62	55	47	42	37	33	30	..	..	..	..						
	14S6	5384	203	187	174	163	152	143	135	128	122	116	111	106	102	97	94	87	81	76	68	58	51	45	41	37	34	31	..	..						
	14S7	6314	238	220	204	190	179	168	159	150	143	136	130	124	119	114	110	102	95	89	79	68	60	53	48	43	40	37	34	..						
	16S5	5082	192	177	165	154	144	136	128	121	115	110	105	100	96	92	89	82	77	72	64	55	48	43	38	35	32	30	..	..						
	16S6	6088	230	212	197	184	173	162	153	145	138	131	125	120	115	110	106	99	92	86	77	66	58	51	46	42	38	35	33	..						
	16S7	7200	272	251	233	218	204	192	181	172	163	155	148	142	136	131	126	117	109	102	91	78	68	60	54	49	45	42	39	..						
	16S8	7800	294	271	252	235	221	208	196	186	176	168	160	153	147	141	136	126	118	110	98	84	74	65	59	54	49	45	42	..						
	18S6	6843	258	238	221	206	194	182	172	163	155	147	141	135	129	124	119	111	103	97	86	74	65	57	52	47	43	40	37	..						
	18S7	7600	287	265	246	230	215	203	191	181	172	164	157	150	144	138	132	123	115	108	96	82	72	64	57	52	48	44	41	..						
	18S8	8200	309	285	265	247	232	218	206	195	185	177	169	161	155	148	143	132	124	116	103	88	77	69	62	56	51	48	44	..						
	20S6	7400	279	258	239	223	209	197	186	176	167	159	152	146	140	134	129	120	112	105	93	80	70	62	56	51	46	43	40	..						
	20S7	7800	294	271	252	235	221	208	196	186	176	168	160	153	147	141	136	126	118	110	98	84	74	65	59	53	49	45	42	..						
	20S8	8400	317	293	272	254	238	224	211	200	190	181	173	165	159	152	146	136	127	119	106	91	79	71	63	58	53	49	45	..						
	22S7	8000	302	279	259	242	227	213	201	191	181	173	165	158	151	145	139	129	121	113	101	86	76	67	60	55	50	47	43	..						
	22S8	8600	325	300	279	260	244	229	217	205	195	186	177	170	163	156	150	139	130	122	108	93	81	72	65	59	54	50	46	..						
	24S8	9000	340	314	291	272	255	240	227	215	204	194	185	177	170	163	157	146	136	127	113	97	85	76	68	62	57	52	49	..						
27'-0"	14S4	3630	134	124	115	107	101	95	89	85	80	77	73	70	67	64	62	57	54	50	45	38	34	30	..	..	..	..	..	..						
	14S5	4321	160	148	137	128	120	113	107	101	96	91	87	83	80	77	74	69	64	60	53	46	40	36	32	..	..	..	..							
	14S6	5284	196	181	168	157	147	138	131	124	118	112	107	102	98	94	91	84	78	74	65	56	49	44	39	36	33	30	..							
	14S7	6198	230	212	197	184	173	162	153	145	138	131	125	120	115	110	106	99	92	86	77	66	58	51	46	42	38	35	33	..						
	16S5	4988	185	171	159	148	139	131	123	117	111	106	101	97	93	89	85	79	74	69	62	53	46	41	37	34	31	..	..							
	16S6	5975	221	204	189	177	166	156	147	140	133	126	121	115	111	106	102	95	88	83	74	63	55	49	44	40	37	34	32	..						
	16S7	7160	265	245	227	212	199	187	177	167	159	151	145	138	133	127	122	114	106	99	88	76	66	59	53	48	44	41	38	..						
	16S8	7800	289	267	248	231	217	204	193	183	173	165	158	151	145	139	133	124	116	108	96	83	72	64	58	53	48	45	41	..						
	18S6	6716	249	230	213	199	187	176	166	157	149	142	136	130	125	120	115	107	100	93	83	71	62	55	50	45	41	38	36	..						
	18S7	7600	281	259	241	225	211	198	187	177	169	161	153	147	141	135	130	120	112	105	94	80	70	63	56	51	47	43	40	..						
	18S8	8200	304	281	261	243	228	215	203	192	182	174	166	159	152	146	140	130	122	114	101	87	76	68	61	55	51	47	43	..						
	20S6	7284	270	249	231	216	203	191	180	171	162	154	147	141	135	130	125	116	108	101	90	77	68	60	54	49	45	42	39	..						
	20S7	7800	289	267	248	231	217	204	193	183	173	165	158	151	145	139	133	124	116	108	96	83	72	64	58	53	48	45	41	..						
	20S8	8400	311	287	267	249	233	220	207	196	187	178	170	162	156	149	144	133	124	117	104	89	78	69	62	57	52	48	44	..						
	22S7	8000	296	273	254	237	222	209	197	187	178	169	161	154	148	142	137	127	118	111	99	85	74	66	59	54	49	46	42	..						
	22S8	8600	319	294	273	255	239	225	213	201	191	182	174	166	160	153	147	137	128	120	106	91	80	71	64	58	53	49	46	..						
	24S8	9000	333	307	285	266	250	235	222	210	200	190	182	174	167	160	154	143	133	125	111	95	83	74	67	61	55	51	48	..						
27'-6"	14S4	3564	130	120	111	104	98	92	87	82	78	74	71	68	65	62	60	56	52	49	43	37	33	..	..	..	..	..	..	..						
	14S5	4242	154	142	132	123	116	109	103	97	92	88	84	80	77	74	71	66	62	58	51	44	39	34	31	..	..	..	..							
	14S6	5188	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..							
	14S7	6085	221	204	189	177	166	156	147	140	133	126	121	115	111	106	102	95	88	83	74	63	55	49	44	40	37	34	32	..						
	16S5	4897	178	164	153	142	134	126	119	112	107	102	97	93	89	85	82	76	71	67	59	51	45	40	36	32	30	..	..							
	16S6	5867	213	197	183	170	160	150	142	135	128	122	116	111	107	102	98	91	85	80	71	61	53	47	43	39	35	33	30	..						
	16S7	7030	256	236	219	205	192	181	171	162	154	146	140	134	128	123	118	110	102	96	85	73	64	57	51	47	43	39	37	..						
	16S8	7800	284	262	243	227	213	200	189	179	170	162	155	148	142	136	131	122	114	107	95	81	71	63	57	52	47	44	41	..						
	18S6	6594	240	222	206	192	180	169	160	152	144	137	131	125	120	115	111	103	96	90	80	69	60	53	48	43	40	37	34	..						
	18S7	7600	276	255	237	221	207	195	184	174	166	158	151	144	138	132	127	118	110	104	92	79	69	61	55	50	46	42	39	..						
	18S8	8200	298	275	255	238	224	210	199	188	179	170	163	155	149	143	138	128	119	112	99	85	75	66	60	54	50	46	43	..						
	20S6	7152	260	240	223	208	195	184	173	164	156	149	142	136	130	125	120	111	104	97	87	74	65	58	52	47	43	40	37	..						
	20S7	7800	284	262	243	227	213	200	189	179	170	162	155	148	142	136	131	122	114	106	95	81	71	63	57	52	47	44	41	..						
	20S8	8400	305	282	261	244	229	215	203	193	183	174	166	159																						

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																											
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"	
28'-0"	14S4	3500	125	115	107	100	94	88	83	79	75	71	68	65	63	60	58	54	50	47	42	36	31	..	..	..	..	..	..	
	14S5	4167	149	138	128	119	112	105	99	94	89	85	81	78	75	72	69	64	60	56	50	43	37	33	30	..	..	..	..	
	14S6	5095	182	168	156	146	137	128	121	115	109	104	99	95	91	87	84	78	73	68	61	52	46	40	36	33	30	..	..	
	14S7	5976	213	197	183	170	160	150	142	135	128	122	116	111	107	102	98	91	85	80	71	61	53	47	43	39	35	33	30	
	16S5	4810	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	..	..	..	
	16S6	5762	206	190	177	165	155	145	137	130	124	118	112	107	103	99	95	88	82	77	69	59	52	46	41	37	34	32	..	
	16S7	6905	247	228	212	198	185	174	165	156	148	141	135	129	124	119	114	106	99	93	82	71	62	55	49	45	41	38	35	
	16S8	7800	279	258	239	223	209	197	186	176	167	159	152	146	140	134	129	120	112	105	93	80	70	62	56	51	46	43	40	
	18S6	6476	231	213	198	185	173	163	154	146	139	132	126	121	116	111	107	99	92	87	77	66	58	51	46	42	38	36	33	
	18S7	7600	271	250	232	217	203	191	181	171	163	155	148	141	136	130	125	116	108	102	90	77	68	60	54	49	45	42	39	
	18S8	8200	293	270	251	234	220	207	195	185	176	167	160	153	147	141	135	126	117	110	98	84	73	65	59	53	49	45	42	
	20S6	7024	251	232	215	201	188	177	167	159	151	143	137	131	126	120	116	108	100	94	84	72	63	56	50	46	42	39	36	
	20S7	7800	279	257	239	223	209	197	186	176	167	159	152	146	140	134	129	119	112	104	93	80	70	62	56	51	46	43	40	
	20S8	8400	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46	43	
22S7	8000	286	264	245	229	215	202	191	181	172	163	156	149	143	137	132	123	114	107	95	82	72	64	57	52	48	44	41		
22S8	8600	307	283	263	246	230	217	205	194	184	175	167	160	154	147	142	132	123	115	102	88	77	68	61	56	51	47	44		
24S8	9000	321	296	275	257	241	227	214	203	193	183	175	167	161	154	148	138	128	120	107	92	80	71	64	58	53	49	46		
28'-6"	16S5	4725	166	153	142	133	125	117	111	105	100	95	91	87	83	80	77	71	66	62	55	47	42	37	33	30	..	..	..	
	16S6	5661	199	184	171	159	149	140	133	126	119	114	109	104	100	96	92	85	80	75	66	57	50	44	40	36	33	31	..	
	16S7	6784	238	220	204	190	179	168	159	150	143	136	130	124	119	114	110	102	95	89	79	68	60	53	48	43	40	37	34	
	16S8	7800	274	253	235	219	206	193	183	173	164	157	149	143	137	132	126	117	110	103	91	78	69	61	55	49	46	42	39	
	18S6	6363	223	206	191	178	167	157	149	141	134	127	122	116	112	107	103	96	89	84	74	64	56	50	45	41	37	34	32	
	18S7	7600	267	246	229	214	200	188	178	169	160	153	146	139	134	128	123	114	107	100	89	76	67	59	53	49	44	41	38	
	18S8	8200	288	266	247	230	216	203	192	182	173	165	157	150	144	138	133	123	115	108	96	82	72	64	58	52	48	44	41	
	20S6	6901	242	223	207	194	182	171	161	153	145	138	132	126	121	116	112	104	97	91	81	69	61	54	48	44	40	37	35	
	20S7	7800	274	253	235	219	206	193	183	173	164	157	149	143	137	131	126	117	110	103	91	78	69	61	55	50	46	42	39	
	20S8	8400	295	272	253	236	221	208	197	186	177	169	161	154	148	142	136	126	118	111	98	84	74	66	59	54	49	45	42	
	22S7	8000	281	259	241	225	211	198	187	177	169	161	153	147	141	135	130	120	112	105	94	80	70	62	56	51	47	43	40	
	22S8	8600	302	279	259	242	227	213	201	191	181	173	165	158	151	145	139	129	121	113	101	86	76	67	60	55	50	46	43	
	24S8	9000	316	292	271	253	237	223	211	200	190	181	172	165	158	152	146	135	126	118	105	90	79	70	63	57	53	49	45	
	29'-0"	16S5	4644	160	148	137	128	120	113	107	101	96	91	87	83	80	77	74	69	64	60	53	46	40	36	32	..	..	..	..
16S6		5563	192	177	165	154	144	136	128	121	115	110	105	100	96	92	89	82	77	72	64	55	48	43	38	35	32	30	..	
16S7		6667	230	212	197	184	173	162	153	145	138	131	125	120	115	110	106	99	92	86	77	66	58	51	46	42	38	35	33	
16S8		7724	266	246	228	213	200	188	177	168	160	152	145	139	133	128	123	114	106	100	89	76	67	59	53	48	44	41	38	
18S6		6253	216	199	185	173	162	152	144	136	130	123	118	113	108	104	100	93	86	81	72	62	54	48	43	39	36	33	31	
18S7		7540	260	240	223	208	195	184	173	164	156	149	142	136	130	125	120	111	104	97	87	74	65	58	52	47	43	40	37	
18S8		8200	283	261	243	226	212	200	189	179	170	162	154	148	142	136	131	121	113	106	94	81	71	63	57	51	47	44	40	
20S6		6782	234	216	201	187	176	165	156	148	140	134	128	122	117	112	108	100	94	88	78	67	59	52	47	43	39	36	33	
20S7		7800	269	248	231	215	202	190	179	170	161	154	147	140	135	129	124	115	108	101	90	77	67	60	54	49	45	41	38	
20S8		8400	290	268	249	232	218	205	193	183	174	166	158	151	145	139	134	124	116	109	97	83	73	64	58	53	48	45	41	
22S7		8000	276	255	237	221	207	195	184	174	166	158	151	144	138	132	127	118	110	103	92	79	69	61	55	50	46	42	39	
22S8		8600	297	274	255	238	223	210	198	188	178	170	162	155	149	143	137	127	119	111	99	85	74	66	59	54	49	46	42	
24S8		9000	310	286	266	248	233	219	207	196	186	177	169	162	155	149	143	133	124	116	103	89	78	69	62	56	52	48	44	

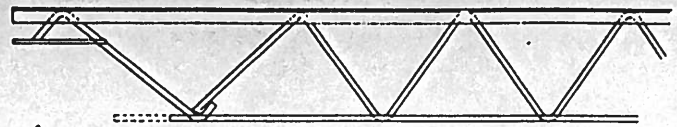


# ESTIMATED WEIGHTS

## POUNDS PER FOOT

14S4-6.5	16S7- 9.9	20S7-10.3
14S5-7.0	16S8-11.3	20S8-11.9
14S6-8.4	18S6- 9.0	22S7-11.5
14S7-9.7	18S7-10.2	22S8-12.3
17 7.4	18S8-11.5	24S8-12.7
18 8.5	20S6- 9.5	

Add 1.75 pounds to weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																								ST'D DIMENSIONS			
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"		72"	78"	84"
29'-6"	1655	4565	155	143	133	124	116	109	103	98	93	89	85	81	78	74	72	66	62	58	52	44	39	34	31	..	..	..	ST'D EXT. ENDS	
	1656	5469	185	171	159	148	139	131	123	117	111	106	101	97	93	89	85	79	74	69	62	53	46	41	37	34	31	..		..
	1657	6554	222	205	190	178	167	157	148	140	133	127	121	116	111	107	102	95	89	83	74	63	56	49	44	40	37	34		32
	1658	7593	257	237	220	206	193	181	171	162	154	147	140	134	129	123	119	110	103	96	86	73	64	57	51	47	43	40		37
	1856	6147	208	192	178	166	156	147	139	131	125	119	113	109	104	100	96	89	83	78	69	59	52	46	42	38	35	32		30
	1857	7412	251	232	215	201	188	177	167	159	151	143	137	131	126	120	116	108	100	94	84	72	63	56	50	46	42	39		36
	1858	8200	278	257	238	222	209	196	185	176	167	159	152	145	139	133	128	119	111	104	93	79	70	62	56	51	46	43		40
	2056	6667	226	209	194	181	170	160	151	143	136	129	123	118	113	108	104	97	90	85	75	65	57	50	45	41	38	35		32
	2057	7800	264	244	226	211	198	186	176	167	158	151	144	138	132	127	122	113	106	99	88	75	66	59	53	48	44	41		38
	2058	8400	285	263	244	228	214	201	190	180	171	163	155	149	143	137	132	122	114	107	95	81	71	63	57	52	47	44		41
	2257	8000	271	250	232	217	203	191	181	171	163	155	148	141	136	130	125	116	108	102	90	77	68	60	54	49	45	42		39
	2258	8600	292	270	250	234	219	206	195	184	175	167	159	152	146	140	135	125	117	109	97	83	73	65	58	53	49	45		42
	2458	9000	305	282	261	244	229	215	203	193	183	174	166	159	153	146	141	131	122	114	102	87	76	68	61	55	51	47		44
30'-0"	1655	4489	150	138	129	120	113	106	100	95	90	86	82	78	75	72	69	64	60	56	50	43	38	33	30	..	..	..	ST'D SPECS	
	1656	5378	179	165	153	143	134	126	119	113	107	102	98	93	90	86	83	77	72	67	60	51	45	40	36	33	30	..		..
	1657	6444	215	198	184	172	161	152	143	136	129	123	117	112	108	103	99	92	86	81	72	61	54	48	43	39	36	33		31
	1658	7467	249	230	213	199	187	176	166	157	149	142	136	130	125	120	115	107	100	93	83	71	62	55	50	45	41	38		36
	1856	6044	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	75	67	57	50	45	40	37	33	31		..
	1857	7289	243	224	208	194	182	172	162	153	146	139	133	127	122	117	112	104	97	91	81	69	61	54	49	44	40	37		35
	1858	8200	273	252	234	218	205	193	182	172	164	156	149	142	137	131	126	117	109	102	91	78	68	61	55	50	45	42		39
	2056	6556	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34		31
	2057	7800	260	240	223	208	195	184	173	164	156	149	142	136	130	125	120	111	104	97	87	74	65	58	52	47	43	40		37
	2058	8400	280	258	240	224	210	198	187	177	168	160	153	146	140	134	129	120	112	105	93	80	70	62	56	51	47	43		40
	2257	8000	267	246	229	214	200	188	178	169	160	153	146	139	134	128	123	114	107	100	89	76	67	59	53	49	44	41		38
	2258	8600	287	265	246	230	215	203	191	181	172	164	157	150	144	138	133	123	115	108	96	82	72	64	57	52	48	44		41
	2458	9000	300	277	257	240	225	212	200	189	180	171	164	157	150	144	138	129	120	112	100	86	75	67	60	55	50	46		43
30'-6"	1655	4415	145	134	124	117	109	102	97	92	87	83	79	76	73	70	67	62	58	54	48	41	36	32	..	..	..	ST'D DIMENSIONS		
	1656	5290	173	160	148	138	130	122	115	109	104	99	94	90	87	83	80	74	69	65	58	49	43	38	35	31	..		..	..
	1657	6339	208	192	178	166	156	147	139	131	125	119	113	109	104	100	96	89	83	78	69	59	52	46	42	39	35		32	30
	1658	7344	241	222	207	193	181	170	161	152	145	138	131	126	121	116	111	103	96	90	80	69	60	54	48	44	40		37	34
	1856	5945	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32		30	..
	1857	7169	235	217	201	188	176	166	157	148	141	134	128	123	118	113	108	101	94	88	78	67	59	52	47	43	39		36	34
	1858	8200	269	248	231	215	202	190	179	170	161	154	147	140	135	129	124	115	108	101	90	77	67	60	54	49	45		41	38
	2056	6448	211	195	181	169	158	149	141	133	127	121	115	110	106	101	97	90	84	79	70	60	53	47	42	38	35		32	30
	2057	7800	256	236	219	205	192	181	171	162	154	146	140	134	128	123	118	110	102	96	85	73	64	57	51	47	43		39	37
	2058	8400	275	254	236	220	206	194	183	174	165	157	150	143	138	132	127	118	110	103	92	79	69	61	55	50	46		42	39
	2257	8000	262	242	225	210	197	185	175	165	157	150	143	137	131	126	121	112	105	98	87	75	66	58	52	48	44		40	37
	2258	8600	282	260	242	226	212	199	188	178	169	161	154	147	141	135	130	121	113	106	94	81	71	63	56	51	47		43	40
	2458	9000	295	272	253	236	221	208	197	186	177	169	161	154	148	142	136	126	118	111	98	84	74	66	59	54	49		45	42

ST'D EXT. ENDS

ST'D SPECS

L.S. LOAD TABLES

L.S. DIMENSIONS

ST'D EXT. ENDS

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																											
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"	
31'-0"	1655	4344	140	129	120	112	105	99	93	88	84	80	76	73	70	67	65	60	56	52	47	40	35	31	..	..	..	..	..	..
	1656	5204	168	155	144	134	126	119	112	106	101	96	92	88	84	81	78	72	67	63	56	48	42	37	34	31	..	..	..	
	1657	6237	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	75	67	57	50	45	40	37	33	31	..	
	1658	7226	233	215	200	186	175	164	155	147	140	133	127	122	117	112	108	100	93	87	78	67	58	52	47	42	39	36	33	
	1856	5849	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	29	..	
	1857	7054	228	210	195	182	171	161	152	144	137	130	124	119	114	109	105	98	91	85	76	65	57	51	46	41	38	35	33	
	1858	8172	264	244	226	211	198	186	176	167	158	151	144	138	132	127	122	113	106	99	88	75	66	59	53	48	44	41	38	
	2056	6344	205	189	176	164	154	145	137	129	123	117	112	107	103	98	95	88	82	77	68	59	51	46	41	37	34	32	..	
	2057	7699	248	229	213	198	186	175	165	157	149	142	135	129	124	119	114	106	99	93	83	71	62	55	50	45	41	38	35	
	2058	8400	271	250	232	217	203	191	181	171	163	155	148	141	136	130	125	116	108	102	90	77	68	60	54	49	45	42	39	
	2257	8000	258	238	221	206	194	182	172	163	155	147	141	135	129	124	119	111	103	97	86	74	65	57	52	47	43	40	37	
	2258	8600	277	256	237	222	208	196	185	175	166	158	151	145	139	133	128	119	111	104	92	79	69	62	55	50	46	43	40	
2458	9000	290	268	249	232	218	205	193	183	174	166	158	151	145	139	134	124	116	109	97	83	73	64	58	53	48	45	41		
31'-6"	1655	4275	136	126	117	109	102	96	91	86	82	78	74	71	68	65	63	58	54	51	45	39	34	30	..	..	..	..	..	..
	1656	5122	163	150	140	130	122	115	109	103	98	93	89	85	82	78	75	70	65	61	54	47	41	36	33	30	..	..	..	
	1657	6138	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..	
	1658	7111	226	209	194	181	170	160	151	143	136	129	123	118	113	108	104	97	90	85	75	65	57	50	45	41	38	35	32	
	1856	5757	183	169	157	146	137	129	122	116	110	105	100	95	92	88	84	78	73	69	61	52	46	41	37	33	30	..	..	
	1857	6942	220	203	189	176	165	155	147	139	132	126	120	115	110	106	102	94	88	82	73	63	55	49	44	40	37	34	31	
	1858	8042	255	235	219	204	191	180	170	161	153	146	139	133	128	122	118	109	102	96	85	73	64	57	51	46	42	39	36	
	2056	6243	198	183	170	158	149	140	132	125	119	113	108	103	99	95	91	85	79	74	66	57	50	44	40	36	33	30	..	
	2057	7577	241	222	207	193	181	170	161	152	145	138	131	126	121	116	111	103	96	90	80	69	60	54	48	44	40	37	34	
	2058	8400	267	246	229	214	200	188	178	169	160	153	146	139	134	128	123	114	107	100	89	76	67	59	53	48	44	41	38	
	2257	8000	254	234	218	203	191	179	169	160	152	145	139	133	127	122	117	109	102	95	85	73	64	56	51	46	42	39	36	
	2258	8600	273	252	234	218	205	193	182	172	164	156	149	142	137	131	126	117	109	102	91	78	68	61	55	50	45	42	39	
2458	9000	286	264	245	229	215	202	191	181	172	163	156	149	143	137	132	123	114	107	95	82	72	64	57	52	48	44	41		
32'-0"	1655	4208	132	122	113	106	99	93	88	83	79	75	72	69	66	63	61	57	53	49	44	38	33	..	..	..	..	..	..	..
	1656	5042	158	146	135	126	119	112	105	100	95	90	86	82	79	76	73	68	63	59	53	45	40	35	32	..	..	..	..	..
	1657	6042	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..	
	1658	7000	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34	31	
	1856	5667	177	163	152	142	133	125	118	112	106	101	97	92	89	85	82	76	71	66	59	51	44	39	35	32	..	..	..	..
	1857	6833	214	198	183	171	161	151	143	135	128	122	117	112	107	103	99	92	86	80	71	61	54	48	43	39	36	33	31	
	1858	7917	247	228	212	198	185	174	165	156	148	141	135	129	124	119	114	106	99	93	82	71	62	55	49	45	41	38	35	
	2056	6146	192	177	165	154	144	136	128	121	115	110	105	100	96	92	89	82	77	72	64	55	48	43	38	35	32	30	..	
	2057	7458	233	215	200	186	175	164	155	147	140	133	127	122	117	112	108	100	93	87	78	67	58	52	47	42	39	36	33	
	2058	8400	263	243	225	210	197	186	175	166	158	150	143	137	132	126	121	113	105	99	88	75	66	58	53	48	44	40	38	
	2257	8000	250	231	214	200	188	176	167	158	150	143	136	130	125	120	115	107	100	94	83	71	63	56	50	45	42	38	36	
	2258	8600	269	248	231	215	202	190	179	170	161	154	147	140	135	129	124	115	108	101	90	77	67	60	54	49	45	41	38	
2458	9000	281	259	241	225	211	198	187	177	169	161	153	147	141	135	130	120	112	105	94	80	70	62	56	51	47	43	40		



# ESTIMATED WEIGHTS

POUNDS PER FOOT



Add 1.75 pounds to weights for nailer joists.

SEE PAGE 13 FOR DIMENSIONS & SECTIONS

16S5- 7.4	18S7-10.2	20S8-11.9
16S6- 8.5	18S8-11.5	22S7-11.5
16S7- 9.9	20S6- 9.5	22S8-12.3
16S8-11.3	20S7-10.3	24S8-12.7
18" .0		

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																								ST'D DIMENSIONS					
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"		72"	78"	84"		
2'-6"	1856	5579	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	..	..	..	ST'D EXT. ENDS		
	1857	6728	207	191	177	166	155	146	138	131	124	118	113	108	104	99	96	89	83	78	69	59	52	46	41	38	34	32	30			
	1858	7795	240	222	206	192	180	169	160	152	144	137	131	125	120	115	111	103	96	90	80	69	60	53	48	44	40	37	34			
	2056	6051	186	172	159	149	140	131	124	117	112	106	101	97	93	89	86	80	74	70	62	53	47	41	37	34	31	..	..			
	2057	7344	226	209	194	181	170	160	151	143	136	129	123	118	113	108	104	97	90	85	75	65	57	50	45	41	38	35	32			
	2058	8400	258	238	221	206	194	182	172	163	155	147	141	135	129	124	119	111	103	97	86	74	65	57	52	47	43	40	37			
	2257	7897	243	224	208	194	182	172	162	153	146	139	133	127	122	117	112	104	97	91	81	69	61	54	49	44	40	37	35			
	2258	8600	265	245	227	212	199	187	177	167	159	151	145	138	133	127	122	114	106	100	88	76	66	59	53	48	44	41	38			
	2458	9000	277	256	237	222	208	196	185	175	166	158	151	145	139	133	128	119	111	104	92	79	69	62	55	50	46	43	40			
	3'-0"	1856	5495	167	154	143	134	125	118	111	105	100	95	91	87	84	80	77	72	67	63	56	48	42	37	33	30	..	..		..	ST'D SPEC'S
	1857	6626	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	75	67	57	50	45	40	37	33	31	..			
	1858	7677	233	215	200	186	175	164	155	147	140	133	127	122	117	112	108	100	93	87	78	67	58	52	47	42	39	36	33			
2056	5960	181	167	155	145	136	128	121	114	109	103	99	94	91	87	84	78	72	68	60	52	45	40	36	33	30	..	..				
2057	7232	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34	31				
2058	8400	255	235	219	204	191	180	170	161	153	146	139	133	128	122	118	109	102	96	85	73	64	57	51	46	42	39	36				
2257	7778	236	218	202	189	177	167	157	149	142	135	129	123	118	113	109	101	94	88	79	67	59	52	47	43	39	36	34				
2258	8600	261	241	224	209	196	184	174	165	157	149	142	136	131	125	120	112	104	98	87	75	65	58	52	47	43	40	37				
2458	9000	273	252	234	218	205	193	182	172	164	156	149	142	137	131	126	117	109	102	91	78	68	61	55	50	45	42	39				
3'-6"	1856	5413	162	150	139	130	122	114	108	102	97	93	88	85	81	78	75	70	65	61	54	46	41	36	32	..	..	..	..	L.S. LOAD TABLES		
1857	6527	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..				
1858	7562	226	209	194	181	170	160	151	143	136	129	123	118	113	108	104	97	90	85	75	65	57	50	45	41	38	35	32				
2056	5871	175	162	150	140	131	124	117	111	105	100	95	91	88	84	81	75	70	66	58	50	44	39	35	32	..	..	..				
2057	7124	213	197	183	170	160	150	142	135	128	122	116	111	107	102	98	91	85	80	71	61	53	47	43	39	35	33	30				
2058	8358	249	230	213	199	187	176	166	157	149	142	136	130	125	120	115	107	100	93	83	71	62	55	50	45	41	38	36				
2257	7662	229	211	196	183	172	162	153	145	137	131	125	119	115	110	106	98	92	86	76	65	57	51	46	42	38	35	33				
2258	8600	257	237	220	206	193	181	171	162	154	147	140	134	129	123	119	110	103	96	86	73	64	57	51	47	43	40	37				
2458	9000	269	248	231	215	202	190	179	170	161	154	147	140	135	129	124	115	108	101	90	77	67	60	54	49	45	41	38				
4'-0"	1856	5333	157	145	135	126	118	111	105	99	94	90	86	82	79	75	72	67	63	59	52	45	39	35	31	..	..	..	..		L.S. EXT. ENDS	
1857	6431	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..				
1858	7451	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34	31				
2056	5784	170	157	146	136	128	120	113	107	102	97	93	89	85	82	78	73	68	64	57	49	43	38	34	31	..	..	..				
2057	7020	206	190	177	165	155	145	137	130	124	118	112	107	103	99	95	88	82	77	69	59	52	46	41	37	34	32	..				
2058	8235	242	223	207	194	182	171	161	153	145	138	132	126	121	116	112	104	97	91	81	69	61	54	48	44	40	37	35				
2257	7549	222	205	190	178	167	157	148	140	133	127	121	116	111	107	102	95	89	83	74	63	56	49	44	40	37	34	32				
2258	8600	253	234	217	202	190	179	169	160	152	145	138	132	127	121	117	108	101	95	84	72	63	56	51	46	42	39	36				
2458	9000	265	245	227	212	199	187	177	167	159	151	145	138	133	127	122	114	106	99	88	76	66	59	53	48	44	41	38				

# LOAD TABLE for "S" SERIES JOISTS

The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

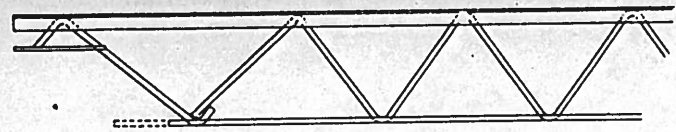
Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																											
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"	
34'-6"	1856	5256	152	140	130	122	114	107	101	96	91	87	83	79	76	73	70	65	61	57	51	43	38	34	30	..	..	..	..	
	1857	6338	184	170	158	147	138	130	123	116	110	105	100	96	92	88	85	79	74	69	61	53	46	41	37	33	31	..	..	
	1858	7343	213	197	183	170	160	150	142	135	128	122	116	111	107	102	98	91	85	80	71	61	53	47	43	39	35	33	30	
	2056	5700	165	152	141	132	124	116	110	104	99	94	90	86	83	79	76	71	66	62	55	47	41	37	33	30	..	..	..	
	2057	6918	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	76	67	57	50	45	40	37	33	31	..	
	2058	8116	235	217	201	188	176	166	157	148	141	134	128	123	118	113	109	101	94	88	78	67	57	50	45	40	37	39	36	34
	2257	7440	216	199	185	173	162	152	144	136	130	123	118	113	108	104	100	93	86	81	72	62	54	48	43	39	36	33	31	
	2258	8600	249	230	213	199	187	176	166	157	149	142	136	130	125	120	115	107	100	93	83	71	62	55	50	45	41	38	36	
	2458	9000	261	241	224	209	196	184	174	165	157	149	142	136	131	125	120	112	104	98	87	75	65	58	52	47	43	40	37	
35'-0"	1856	5181	148	137	127	118	111	104	99	93	89	85	81	77	74	71	68	63	59	56	49	42	37	33	30	..	..	..	..	
	1857	6248	179	165	153	143	134	126	119	113	107	102	98	93	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..	
	1858	7238	207	191	177	166	155	146	138	131	124	118	113	108	104	99	96	89	83	78	69	59	52	46	41	38	34	32	30	
	2056	5619	161	149	138	129	121	114	107	102	97	92	88	84	81	77	74	69	64	60	54	46	40	36	32	..	..	..	..	
	2057	6819	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..	
	2058	8000	229	211	196	183	172	162	153	145	137	131	125	119	115	110	106	98	92	86	76	65	57	51	46	42	38	35	33	
	2257	7333	210	194	180	168	158	148	140	133	126	120	115	110	105	101	97	90	84	79	70	60	53	47	42	38	35	32	30	
	2258	8600	246	227	211	197	185	174	164	155	148	141	134	128	123	118	114	105	98	92	82	70	62	55	49	45	41	38	35	
	2458	9000	257	237	220	206	193	181	171	162	154	147	140	134	129	123	119	110	103	96	86	73	64	57	51	47	43	40	37	
35'-6"	1856	5108	144	133	123	115	108	102	96	91	86	82	79	75	72	69	66	62	58	54	48	41	36	32	..	..	..	..	..	
	1857	6160	174	161	149	139	131	123	116	110	104	99	95	91	87	84	80	75	70	65	58	50	44	39	35	32	..	..	..	
	1858	7136	201	186	172	161	151	142	134	127	121	115	110	105	101	96	93	86	80	75	67	57	50	45	40	37	33	31	..	
	2056	5540	156	144	134	125	117	110	104	99	94	89	85	81	78	75	72	67	62	58	52	45	39	35	31	..	..	..	..	
	2057	6723	189	175	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..	
	2058	7887	222	205	190	178	167	157	148	140	133	127	121	116	111	107	103	95	89	83	74	63	54	49	44	40	37	34	32	
	2257	7230	204	188	175	163	153	144	136	129	122	117	111	106	102	98	94	87	82	77	68	58	51	45	41	37	34	31	..	
	2258	8563	241	222	207	193	181	170	161	152	145	138	131	126	121	116	111	103	96	90	80	69	60	54	48	44	40	37	34	
	2458	9000	254	235	218	203	191	179	169	160	152	145	139	133	127	122	117	109	102	95	85	73	64	56	51	46	42	39	36	
36'-0"	1856	5037	140	129	120	112	105	99	93	88	84	80	76	73	70	67	65	60	56	52	47	40	35	31	..	..	..	..	..	
	1857	6074	169	156	145	135	127	119	113	107	101	97	92	88	85	81	78	72	68	63	56	48	42	38	34	31	..	..	..	
	1858	7037	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..	
	2056	5463	152	140	130	122	114	107	101	96	91	87	83	79	76	73	70	65	61	57	51	43	38	34	30	..	..	..	..	
	2057	6630	184	170	158	147	138	130	123	116	110	105	100	96	92	88	85	79	74	69	61	53	46	41	37	34	31	..	..	
	2058	7778	216	199	185	173	162	152	144	136	130	123	118	113	108	104	100	93	86	81	72	62	54	48	43	39	36	33	30	
	2257	7130	198	183	170	158	149	140	132	125	119	113	108	103	99	95	91	85	79	74	66	57	50	44	40	36	33	30	..	
	2258	8444	235	217	201	188	176	166	157	148	141	134	128	123	118	113	108	101	94	88	78	67	59	52	47	43	39	36	34	
	2458	9000	250	231	214	200	188	176	167	158	150	143	136	130	125	120	115	107	100	94	83	71	63	55	50	45	42	38	36	
36'-6"	2056	5388	148	137	127	118	111	104	99	93	89	85	81	77	74	71	68	63	59	55	49	42	37	33	30	..	..	..	..	
	2057	6539	179	165	153	148	134	126	119	113	107	102	98	93	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..	
	2058	7671	210	194	180	168	158	148	140	133	126	120	115	110	105	101	97	90	84	79	70	60	53	47	42	38	35	32	30	
	2257	7032	193	178	165	154	145	136	129	122	116	110	105	101	97	93	89	83	77	72	64	55	48	43	39	35	32	30	..	
2258	8329	228	210	195	182	171	161	152	144	137	130	124	119	114	109	105	98	91	85	76	65	57	51	46	41	38	35	33		
2458	9000	247	228	212	198	185	174	165	156	148	141	135	129	124	119	114	106	99	93	82	71	62	55	49	45	41	38	35		
37'-0"	2056	5315	144	133	123	115	108	102	96	91	86	82	79	75	72	69	66	62	58	54	48	41	36	32	..	..	..	..	..	
	2057	6450	174	161	149	139	131	123	116	110	104	99	95	91	87	84	80	75	70	65	58	50	44	39	35	32	..	..	..	
	2058	7568	205	189	176	164	154	145	137	129	123	117	112	107	103	98	95	88	82	77	68	59	51	46	41	37	34	32	..	
	2257	6937	187	173	160	150	140	132	125	118	112	107	102	98	94	90	86	80	75	70	62	53	47	42	37	34	31	..	..	
2258	8216	222	205	190	178	167	157	148	140	133	127	121	116	111	107	102	95	89	83	74	63	56	49	44	40	37	34	32		
2458	9000	243	224	208	194	182	172	162	153	146	139	133	127	122	117	112	104	97	91	81	69	61	54	49	44	40	37	35		



# ESTIMATED WEIGHTS POUNDS PER FOOT

18S6- 9.0	20S6- 9.5	22S7-11.5
18S7-10.2	20S7-10.3	22S8-12.3
18S8-11.5	20S8-11.9	24S8-12.7

Add 1.75 pounds to  
weights for nailer joists.



SEE PAGE 13 FOR DIMENSIONS & SECTIONS

Clear Span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																								ST'D DIMENSIONS			
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"		72"	78"	84"
37'-6"	20S6	5244	140	129	120	112	105	99	93	88	84	80	76	73	70	67	65	60	56	53	47	40	35	31	..	..	..	..	..	ST'D EXT. ENDS
	20S7	6364	170	157	146	136	128	120	113	107	102	97	93	89	85	82	78	73	68	64	57	49	43	38	34	31	..	..	..	
	20S8	7467	199	184	171	159	149	140	133	126	119	114	109	104	100	96	92	85	80	75	66	57	50	44	40	36	33	31	..	
	22S7	6844	183	169	157	146	137	129	122	116	110	105	100	95	92	88	84	78	73	69	61	52	46	41	37	33	30	..	..	ST'D SPEC'S
	22S8	8107	216	200	185	173	162	152	144	136	130	123	118	113	108	104	100	93	86	81	72	62	54	48	43	39	36	33	31	
	24S8	8889	237	219	203	190	178	167	158	150	142	135	129	124	119	114	109	102	95	89	79	68	59	53	47	43	39	37	34	
38'-0"	20S6	5175	136	126	117	109	102	96	91	86	82	78	74	71	68	65	63	58	54	51	45	39	34	30	..	..	..	..	..	L.S. LOAD TABLES
	20S7	6281	165	152	141	132	124	116	110	104	99	94	90	86	83	79	76	71	66	62	55	47	41	37	33	30	..	..	..	
	20S8	7368	194	179	166	155	146	137	129	123	116	111	106	101	97	93	90	83	78	73	65	55	49	43	39	35	32	30	..	
	22S7	6754	178	164	153	142	134	126	119	112	107	102	97	93	89	85	82	76	71	67	59	51	45	40	36	32	30	..	..	L.S. DIMENSIONS
	22S8	8000	211	195	181	169	158	149	141	133	127	121	115	110	106	101	97	90	84	79	70	60	53	47	42	38	35	32	30	
	24S8	8772	231	213	198	185	173	163	154	146	139	132	126	121	116	111	107	99	92	87	77	66	58	51	46	42	38	36	33	
38'-6"	20S6	5108	133	123	114	106	100	94	89	84	80	76	73	69	67	64	61	57	53	50	44	38	33	30	..	..	..	..	..	L.S. EXT. ENDS
	20S7	6199	161	149	138	129	121	114	107	102	97	92	88	84	81	77	74	69	64	60	54	46	40	36	32	..	..	..	..	
	20S8	7273	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..	
	22S7	6667	173	160	148	138	130	122	115	109	104	99	94	90	87	83	80	74	69	65	58	49	43	38	35	31	..	..	..	L.S. DIMENSIONS
	22S8	7896	205	189	176	164	154	145	137	129	123	117	112	107	103	98	95	88	82	77	68	59	51	46	41	37	34	32	..	
	24S8	8658	225	208	193	180	169	159	150	142	135	129	123	117	113	108	104	96	90	84	75	64	56	50	45	41	37	35	32	
39'	20S6	5043	129	119	111	103	97	91	86	81	77	74	70	67	65	62	60	55	52	48	43	37	32	30	..	..	..	..	..	L.S. DIMENSIONS
	20S7	6120	157	145	135	126	118	111	105	99	94	90	86	82	79	75	72	67	63	59	52	45	39	35	31	..	..	..	..	
	20S8	7179	184	170	158	147	138	130	123	116	110	105	100	96	92	88	85	79	74	69	61	53	46	41	37	33	31	..	..	
	22S7	6581	169	156	145	135	127	119	113	107	101	97	92	88	85	81	79	72	68	63	56	48	42	38	34	31	..	..	..	L.S. EXT. ENDS
	22S8	7795	200	185	171	160	150	141	133	126	120	114	109	104	100	96	92	86	80	75	67	57	50	44	40	36	33	31	..	
	24S8	8547	219	202	188	175	164	155	146	138	131	125	119	114	110	105	101	94	88	82	73	63	55	49	44	40	36	34	31	
39'-6"	20S6	4979	126	116	108	101	95	89	84	80	76	72	69	66	63	60	58	54	50	47	42	36	32	..	..	..	..	..	..	L.S. DIMENSIONS
	20S7	6042	153	141	131	122	115	108	102	97	92	87	83	80	77	73	71	66	61	57	51	44	38	34	31	..	..	..	..	
	20S8	7087	179	165	153	143	134	126	119	113	107	102	98	93	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..	
	22S7	6498	165	152	141	132	124	116	110	104	99	94	90	86	83	79	76	71	66	62	55	47	41	37	33	30	..	..	..	L.S. EXT. ENDS
	22S8	7696	195	180	167	156	146	138	130	123	117	111	106	102	98	94	90	84	78	73	65	56	49	43	39	35	32	30	..	
	24S8	8439	214	198	183	171	161	151	143	135	128	122	117	112	107	103	99	92	86	80	71	61	54	48	43	39	36	33	31	
40'-0"	20S6	4917	123	114	105	98	92	87	82	78	74	70	67	64	62	59	57	53	49	46	41	35	31	..	..	..	..	..	..	L.S. DIMENSIONS
	20S7	5967	149	138	128	119	112	105	99	94	89	85	81	78	75	72	69	64	60	56	50	43	37	33	30	..	..	..	..	
	20S8	7000	175	162	150	140	131	124	117	111	105	100	95	91	88	84	81	75	70	66	58	50	44	39	35	32	..	..	..	
	22S7	6417	160	148	137	128	120	113	107	101	96	91	87	83	80	77	74	69	64	60	53	46	40	36	32	..	..	..	..	L.S. EXT. ENDS
	22S8	7600	190	175	163	152	143	134	127	120	114	109	104	99	95	91	88	81	76	71	63	54	48	42	38	35	32	..	..	
	24S8	8333	208	192	178	166	156	147	139	131	125	119	113	109	104	100	96	89	83	78	69	59	52	46	42	38	35	32	30	
40'-6"	22S7	6337	156	144	134	125	117	110	104	99	94	89	85	81	78	75	72	67	62	58	52	45	39	35	31	..	..	..	..	L.S. EXT. ENDS
	22S8	7506	185	171	159	148	139	131	123	117	111	106	101	97	93	89	85	79	74	69	62	53	46	41	37	34	31	..	..	
	24S8	8230	203	187	174	162	152	143	135	128	122	116	111	106	102	97	94	87	81	76	68	58	51	45	41	37	34	31	..	

# LOAD TABLE for "S" SERIES JOISTS

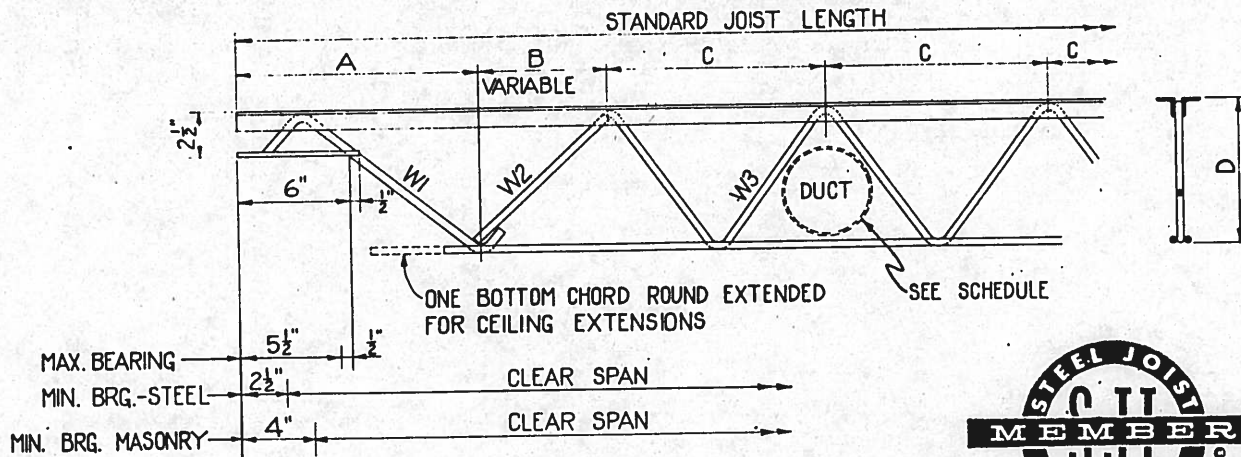
The following table gives the total safe uniformly-distributed load carrying capacity of Standard Iron & Wire Works Steel Joists.

THE WEIGHT OF DEAD LOADS must be deducted in all cases to determine the safe live load carrying capacities of the joists.

Clear span	Joist Type	Total Safe Load Lbs.	Total Safe Loads in Pounds Per Square Foot for Joist Spacings Shown																										
			12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	28"	30"	32"	36"	42"	48"	54"	60"	66"	72"	78"	84"
1'-0"	2257	6260	153	141	131	122	115	108	102	97	92	87	83	80	77	73	71	66	61	57	51	44	38	34	31	..	..	..	..
	2258	7415	181	167	155	145	136	128	121	114	109	103	99	94	91	87	84	78	72	68	60	52	45	40	36	33	30	..	..
	2458	8130	198	183	170	158	149	140	132	125	119	113	108	103	99	95	91	85	79	74	66	57	50	44	40	36	33	30	..
1'-6"	2257	6185	149	138	128	119	112	105	99	94	89	85	81	78	75	72	69	64	60	56	50	43	37	33	30	..	..	..	..
	2258	7325	177	163	152	142	133	125	118	112	106	101	97	92	89	85	82	76	71	66	59	51	44	39	35	32	..	..	..
	2458	8032	194	179	166	155	146	137	129	123	116	111	106	101	97	93	90	83	78	73	65	55	49	43	39	35	32	30	..
2'-0"	2257	6111	146	135	125	117	110	103	97	92	88	83	80	76	73	70	67	63	58	55	49	42	37	32	..	..	..	..	..
	2258	7238	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	..	..	..
	2458	7937	189	174	162	151	142	133	126	119	113	108	103	99	95	91	87	81	76	71	63	54	47	42	38	34	31	..	..
2'-6"	2257	6039	142	131	122	114	107	100	95	90	85	81	77	74	71	68	66	61	57	53	47	41	36	32	..	..	..	..	..
	2258	7153	168	155	144	134	126	119	112	106	101	96	92	88	84	81	78	72	67	63	56	48	42	37	34	31	..	..	..
	2458	7843	185	171	159	148	139	131	123	117	111	106	101	97	93	89	85	79	74	69	62	53	46	41	37	34	31	..	..
3'-0"	2257	5969	139	128	119	111	104	98	93	88	83	79	76	73	70	67	64	60	56	52	46	40	35	31	..	..	..	..	..
	2258	7070	164	151	141	131	123	116	109	104	98	94	89	86	82	79	76	70	66	61	55	47	41	36	33	30	..	..	..
	2458	7752	180	166	154	144	135	127	120	114	108	103	98	94	90	86	83	77	72	67	60	51	45	40	36	33	30	..	..
3'-6"	2257	5900	136	126	117	109	102	96	91	86	82	78	74	71	68	65	63	58	54	51	45	39	34	30	..	..	..	..	..
	2258	6989	161	149	138	129	121	114	107	102	97	92	88	84	81	77	74	69	64	60	54	46	40	36	32	..	..	..	..
	2458	7663	176	162	151	141	132	124	117	111	106	101	96	92	88	84	81	75	70	66	59	50	44	39	35	32	..	..	..
4'-0"	2257	5833	133	123	114	106	100	94	89	84	80	76	73	69	67	64	61	57	53	50	44	38	33	30	..	..	..	..	..
	2258	6909	157	145	135	126	118	111	105	99	94	90	86	82	79	75	72	67	63	59	52	45	39	35	31	..	..	..	..
	2458	7576	172	159	147	138	129	121	115	109	103	98	94	90	86	83	79	74	69	64	57	49	43	38	34	31	..	..	..
4'-6"	2458	7491	168	155	144	134	126	119	112	106	101	96	92	88	84	81	78	72	67	63	56	48	42	37	34	31	..	..	..
5'-0"	2458	7407	165	152	141	132	124	116	110	104	99	94	90	86	83	79	76	71	66	62	55	47	41	37	33	30	..	..	..
5'-6"	2458	7326	161	149	138	129	121	114	107	102	97	92	88	84	81	77	74	69	64	60	54	46	40	36	32	..	..	..	..
5'-0"	2458	7246	158	146	135	126	119	112	105	100	95	90	86	82	79	76	73	68	63	59	53	45	40	35	32	..	..	..	..
5'-6"	2458	7168	154	142	132	123	116	109	103	97	92	88	84	80	77	74	71	66	62	58	51	44	39	34	31	..	..	..	..
7'-0"	2458	7092	151	139	129	121	113	107	101	95	91	86	82	79	76	72	70	65	60	57	50	43	38	34	30	..	..	..	..
7'-6"	2458	7018	148	137	127	118	111	104	99	93	89	85	81	77	74	71	68	63	59	55	49	42	37	33	30	..	..	..	..
8'-0"	2458	6944	145	134	124	116	109	102	97	92	87	83	79	76	73	70	67	62	58	54	48	41	36	32	..	..	..	..	..



# DIMENSIONS and SECTIONS



Joist Designation	D Nominal Depth Inches	Top Chord Section No.	Bottom Chord Two Rd. Bars Diam. Inches	A	B Varies with SPAN Min. Max.	C	Est. Weight Lbs. Per Ft.	Resisting Moment Inch Pounds	Largest Diameter of Duct Permissible
8S2	8	1	.500	1'-1"	1" 7"	1'-0"	4.1	52,500	5"
10S2	10	2	.500	1'-3½"	1" 7"	1'-0"	4.3	65,000	5½"
10S3	10	3	.5625	1'-3½"	1" 7"	1'-0"	4.7	83,000	5½"
10S4	10	4	.625	1'-3½"	1" 7"	1'-0"	5.9	103,000	5½"
12S3	12	3	.5625	1'-6"	1" 9"	1'-4"	5.1	100,000	7½"
12S4	12	5	.625	1'-6"	1" 9"	1'-4"	6.0	125,000	7½"
12S5	12	6	.6875	1'-6"	1" 9"	1'-4"	6.6	149,000	7"
12S6	12	7	.75	1'-6"	1" 9"	1'-4"	8.1	182,000	7"
14S4	14	5	.625	1'-8½"	1" 10"	1'-6"	6.5	147,000	8½"
14S5	14	8	.6875	1'-8½"	1" 10"	1'-6"	7.0	175,000	8½"
14S6	14	9	.75	1'-8½"	1" 10"	1'-6"	8.4	214,000	8½"
14S7	14	10	.8125	1'-8½"	1" 10"	1'-6"	9.7	251,000	8½"
16S5	16	8	.6875	1'-11"	1" 11"	1'-8"	7.4	202,000	9½"
16S6	16	11	.750	1'-11"	1" 11"	1'-8"	8.5	242,000	9½"
16S7	16	12	.8125	1'-11"	1" 11"	1'-8"	9.9	290,000	9½"
16S8	16	13	.875	1'-11"	1" 11"	1'-8"	11.3	336,000	9½"
18S6	18	11	.75	2'-1½"	1" 1'-0"	1'-10"	9.0	272,000	11"
18S7	18	12	.8125	2'-1½"	1" 1'-0"	1'-10"	10.2	328,000	11"
18S8	18	14	.875	2'-1½"	1" 1'-0"	1'-10"	11.5	380,000	11"
20S6	20	15	.75	2'-4"	1" 1'-1"	2'-0"	9.5	295,000	12"
20S7	20	16	.8125	2'-4"	1" 1'-1"	2'-0"	10.3	358,000	12"
20S8	20	14	.875	2'-4"	1" 1'-1"	2'-0"	11.9	420,000	12"
22S7	22	16	.8125	2'-6½"	1" 1'-2"	2'-2"	11.5	385,000	13½"
22S8	22	17	.875	2'-6½"	1" 1'-2"	2'-2"	12.3	456,000	13"
24S8	24	17	.875	2'-9"	1" 1'-3"	2'-4"	12.7	500,000	14½"

End bearing plates

18S8-20S8-22S8-24S8  $\frac{3}{8}$ " x  $4\frac{1}{2}$ " x  $6\frac{1}{2}$ "

16S7-16S8-18S7 }  $\frac{5}{16}$ " x 4" x  $6\frac{1}{2}$ "

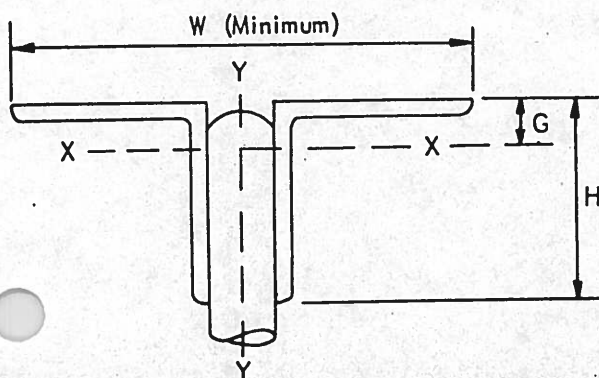
20S6-20S7-22S7 }  
Balance to have  $\frac{1}{4}$ " x  $3\frac{1}{2}$ " x  $6\frac{1}{2}$ "

All dimensions are subject to slight mill and manufacturing tolerances.

Nominal depth of joists shown in table is for standard joists; nailer joists are  $1\frac{5}{8}$ " deeper. Nailer joists are 1.75 pounds per foot heavier.

Additional data will be provided by Standard Iron & Wire Works upon request.

## TOP CHORD - DIMENSIONS AND PROPERTIES

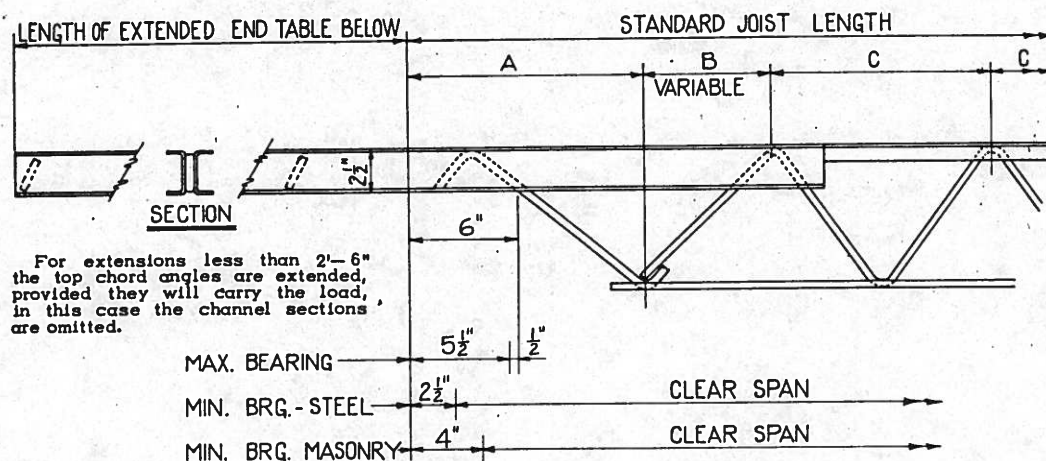


Sec. No.	Material Two Angles Inches	Total Area In. <sup>2</sup>	G In.	H In.	W Min. In.	About Axis XX		About Axis YY	
						I In. <sup>4</sup>	r In.	I In. <sup>4</sup>	r In.
1	1x1x.125	.46	.30	1.00	2.375	.04	.30	.150	.57
2	1x1x.125	.46	.30	1.00	2.438	.04	.30	.164	.60
3	1½x1½x.125	.60	.36	1.25	2.938	.08	.38	.282	.68
4	1½x1½x.125	.72	.42	1.50	3.438	.16	.47	.454	.79
5	1½x1½x.125	.72	.42	1.50	3.500	.16	.47	.484	.82
6	1½x1½x.125	.84	.48	1.75	4.000	.26	.55	.708	.92
7	1½x1½x.188	1.06	.44	1.50	3.500	.22	.46	.726	.83
8	1½x1½x.125	.84	.48	1.75	4.063	.26	.55	.746	.94
9	1½x1½x.188	1.06	.44	1.50	3.563	.22	.46	.772	.85
10	1½x1½x.188	1.24	.51	1.75	4.063	.36	.54	1.136	.96
11	1½x1½x.188	1.06	.44	1.50	3.625	.22	.46	.820	.88
12	1½x1½x.188	1.24	.51	1.75	4.125	.36	.54	1.199	.98
13	2x2x.188	1.42	.57	2.00	4.625	.54	.62	1.646	1.08
14	2x2x.188	1.42	.57	2.00	4.688	.54	.62	1.726	1.10
15	1½x1½x.188	1.06	.44	1.50	3.688	.22	.46	.872	.91
16	1½x1½x.188	1.24	.51	1.75	4.188	.36	.54	1.264	1.01
17	2x2x.188	1.42	.57	2.00	4.750	.54	.62	1.808	1.13

# STANDARD JOISTS EXTENDED ENDS

The modern architectural trend has increased the demand for steel joists with extended ends. In order to fill this demand, **Standard Iron & Wire Works** has adopted standard designs for extended ends that are safe, efficient and economical to manufacture. These ends are fabricated as an integral part of the joists, and are manufactured as one of five types shown. The type of the extended end furnished depends upon the length of extension and the load to be carried.

The load carrying capacities and properties of the five types of **STANDARD EXTENDED ENDS** furnished on **Standard Iron & Wire Works STEEL JOISTS** are given below.



Total Allowable Uniform Load in Pounds per Linear Foot of Extended End

Unsupported Length of Extended End	Type of Standard Extended Ends 2 1/2" Depth			
	No. 1	No. 2	No. 3	No. 4
2'6"	250	250	250	250
3'0"	231	250	250	250
3'6"	170	207	243	250
4'0"	131	159	187	234
4'6"	104	126	148	186
5'0"		102	120	150
5'6"			100	123

NOTE: The total allowable uniform load in pounds per linear foot of standard extended end shall not exceed 250 lbs. nor shall it exceed the total allowable uniform load in pounds per linear foot of the steel joist to which the extended end applies.

SAFE LOAD FOR MASONRY  
IN LBS. PER SQUARE INCH

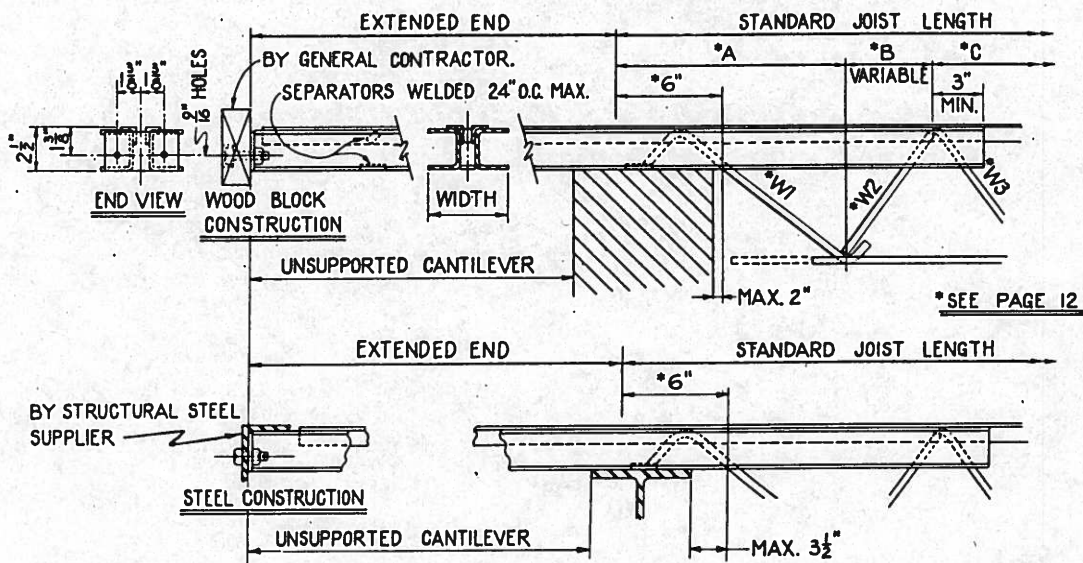
	Lime Mortar	Cement Mortar	Portland Cement Mortar
Brick—Vitrified	110	300	400
Brick—Hard	100	225	300
Brick—Medium	90	150	175
Stone—Rubble	70	100	125
Stone—Ashlar			
Granite	400	640	800
Limestone or Marble	250	400	500
Sandstone	160	320	400
Structural Clay Tile or Concrete Blocks and Soft Brick or Hollow Walls of Brick (Gross Area)	—	70	80

STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA



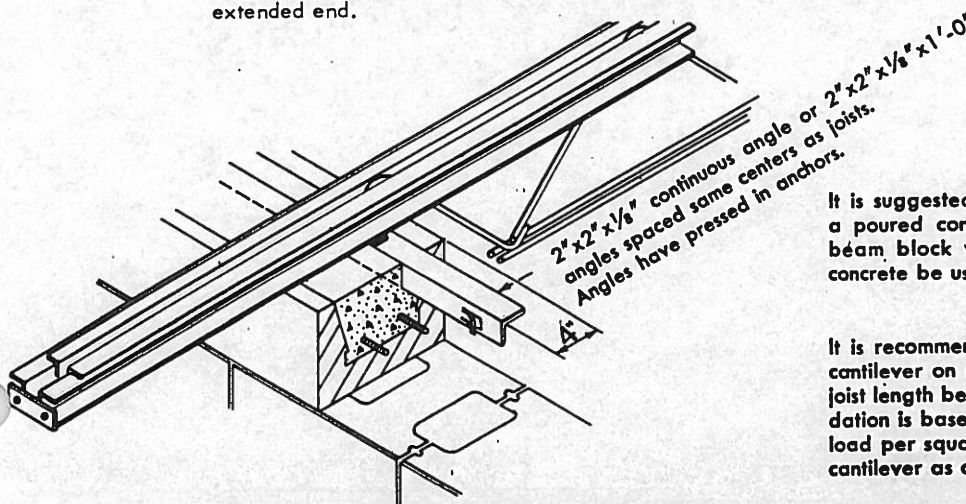
# STANDARD JOIST-EXTENDED ENDS

## TYPE 25



Joist Type SJ	†Allowable Loads—Pounds Per Lineal Foot of Unsupported Cantilever									Weight in Lbs. Per Foot of Extended Ends		Width in Inches
	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	Left of Heavy Line	Right of Heavy Line	
81	250	250	250	250	250	250	208	172	145	6.87	8.62	4.438
82	250	250	250	250	250	250	208	172	145	6.93	8.68	4.51
102	250	250	250	250	250	250	208	172	145	6.93	8.68	4.51
103	250	250	250	250	250	250	211	174	146	7.29	9.04	4.5
104	250	250	250	250	250	250	212	175	147	7.73	9.48	4.5
123	250	250	250	250	250	250	211	174	146	7.29	9.04	4.563
124	250	250	250	250	250	250	212	175	147	7.73	9.48	4.563
125	250	250	250	250	250	250	221	183	154	8.15	9.90	4.563
126	250	250	250	250	250	250	207	177	149	8.87	10.62	4.689
145	250	250	250	250	250	250	221	183	154	8.15	9.90	4.625
146	250	250	250	250	250	250	207	177	149	8.87	10.62	4.751
147	250	250	250	250	250	250	224	186	156	9.55	11.30	4.755
166	250	250	250	250	250	250	207	177	149	8.87	10.62	4.751
167	250	250	250	250	250	250	224	186	156	9.55	11.30	4.755
186	250	250	250	250	250	250	207	177	149	8.87	10.62	4.751
187	250	250	250	250	250	250	224	186	156	9.51	11.26	4.813
207	250	250	250	250	250	250	224	186	156	9.51	11.26	4.813

†Not to exceed extreme fiber stress of 18,000 lbs. per sq. in. or 250 lbs. per Lin. Ft. on extended end.



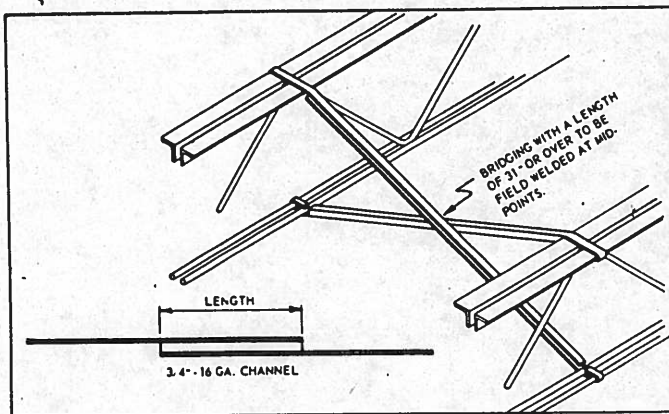
It is suggested for bearing on masonry walls that a poured concrete tie beam or poured concrete beam block with embedded angle in the fresh concrete be used.

It is recommended that the length of unsupported cantilever on any joist be not greater than 1/2 the joist length between bearing points. This recommendation is based on not more than the same uniform load per square foot occurring on the unsupported cantilever as on the balance of the joist.

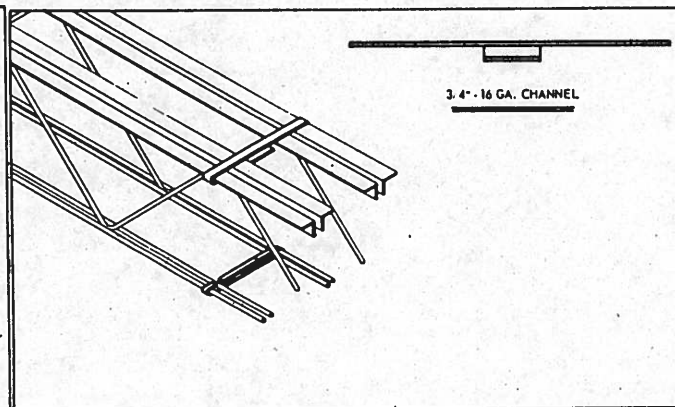
# DETAILS and DIMENSIONS

## STRUT BRIDGING

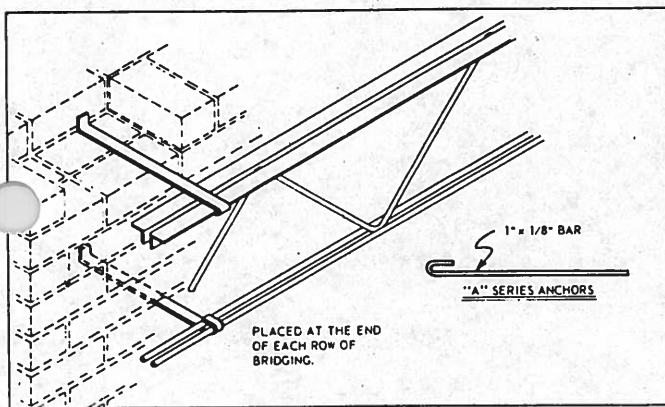
Strut bridging is made of 3/4", 16 gauge channel.



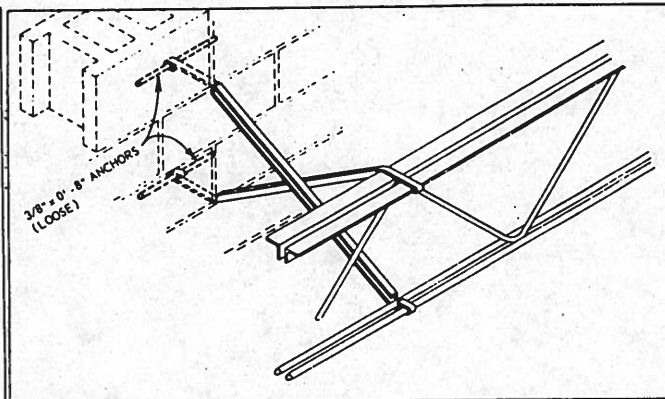
**FIGURE 1**  
**STRUT BRIDGING**



**FIGURE 2**  
**DOUBLE JOIST BRIDGING**



**FIGURE 3**  
**LATERAL ANCHOR**  
**FOR JOISTS CLOSE TO WALL**



**FIGURE 4**  
**LATERAL ANCHOR**  
**FOR JOISTS AWAY FROM WALL**

**This type of bridging is not recommended where top surface of joists must be left clear for pre-cast concrete or wood nailers.**

### MINIMUM LINES FOR ANY TYPE BRIDGING

SPAN	NUMBER OF LINES OF BRIDGING
Up to 14 feet	One row near center
14 to 21 feet	Two rows placed approximately 1/3 span apart and symmetrically disposed about the center of span.
21 to 32 feet	Three rows placed at approximately 1/4 points of span.
32 to 40 feet	Four rows symmetrically arranged about the center of span.



# Standard Iron & Wire Works

## STANDARD JOIST ACCESSORIES

### CONTINUOUS HORIZONTAL BRIDGING

Continuous Horizontal Bridging is made of 1/2" Round Bars

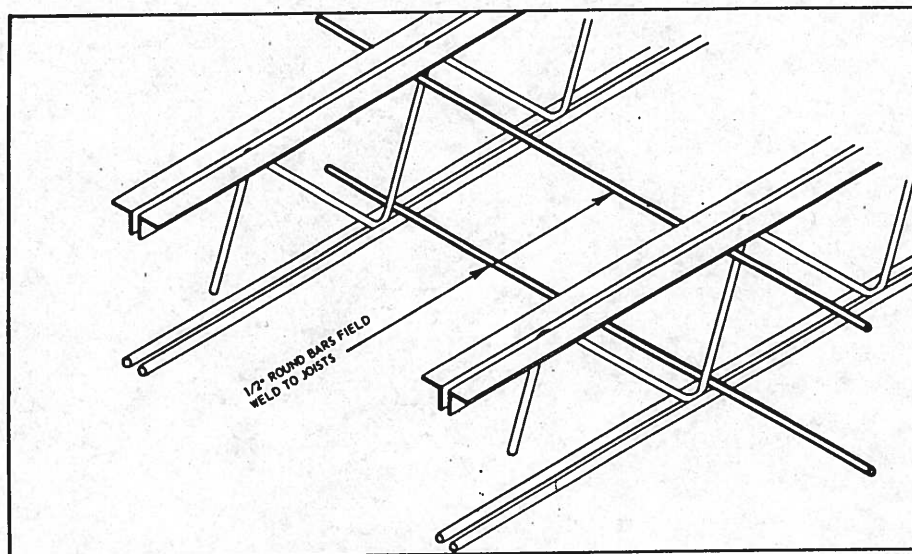


FIGURE 5

### HORIZONTAL BRIDGING

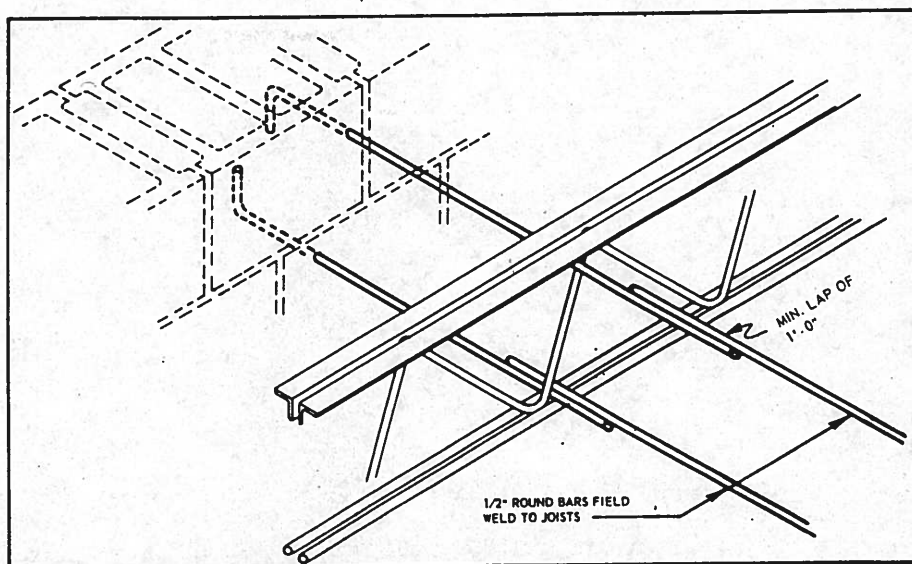
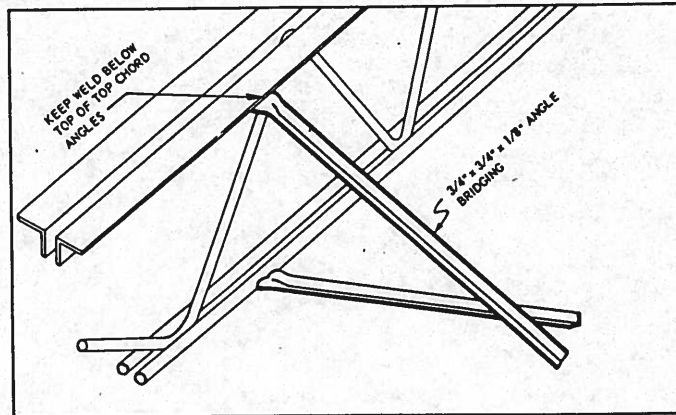


FIGURE 6

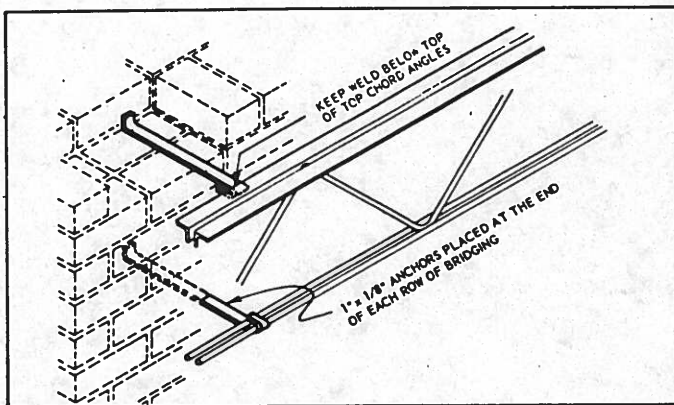
### LATERAL ANCHOR

# DETAILS and DIMENSIONS — — —

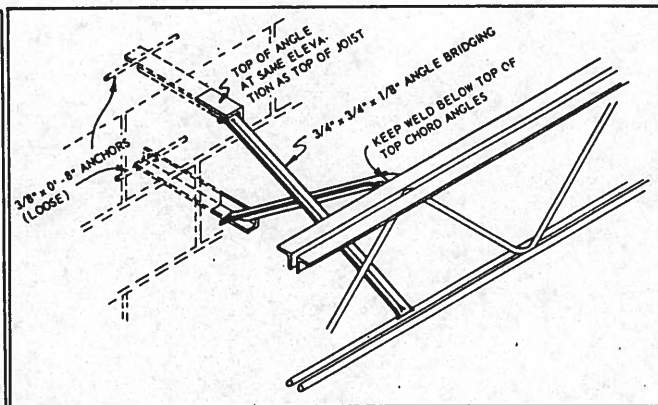
## WELDED ANGLE BRIDGING



**FIGURE 7**  
**WELDED BRIDGING**



**FIGURE 8**  
**LATERAL ANCHOR**  
**FOR JOIST CLOSE TO WALL**

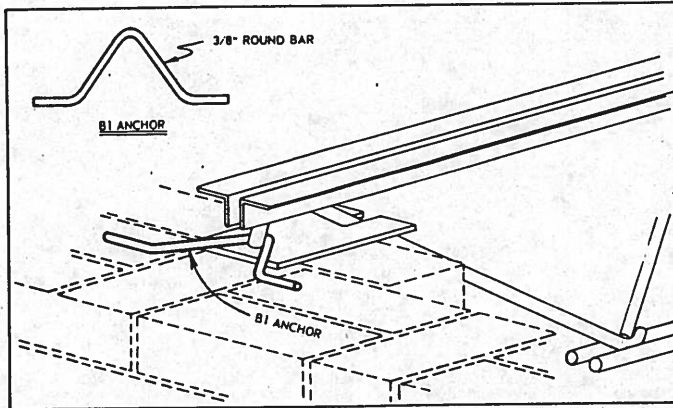


**FIGURE 9**  
**LATERAL ANCHOR**  
**FOR JOIST AWAY FROM WALL**

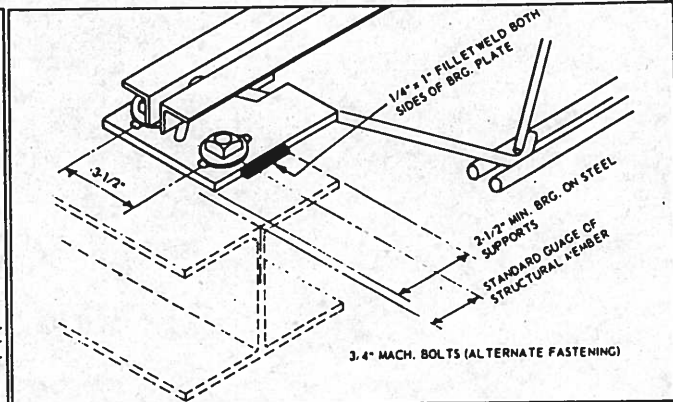


# Standard Iron & Wire Works

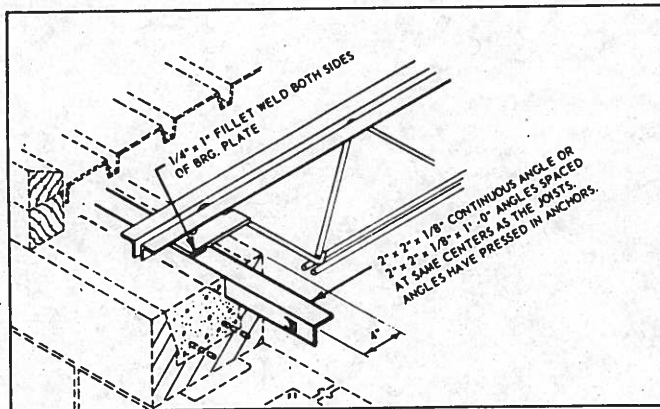
## STANDARD JOIST ACCESSORIES



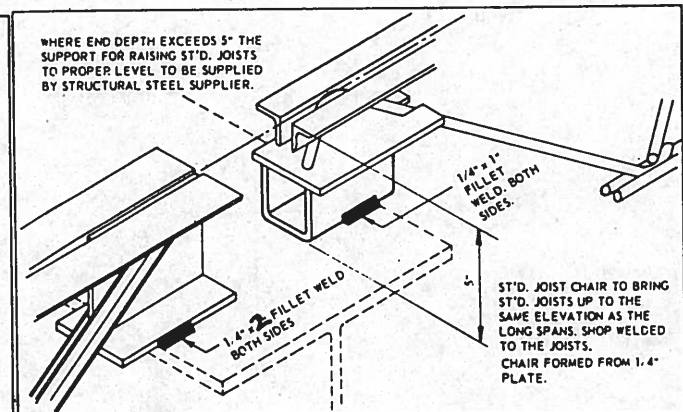
**FIGURE 10**  
**MASONRY ANCHOR**



**FIGURE 11**  
**WELDED OR BOLTED**  
**ANCHOR**



**FIGURE 12**  
**POURED CONCRETE**  
**TIE BEAM ANCHOR**



**FIGURE 13**  
**JOIST CHAIR**

# Standard Iron & Wire Works

## STANDARD JOIST ACCESSORIES

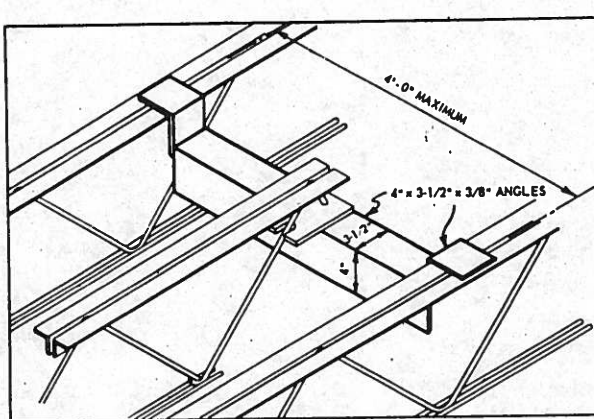


FIGURE 14

### HEADER

USED WHERE OPENINGS DO NOT  
EXCEED 4'-0"

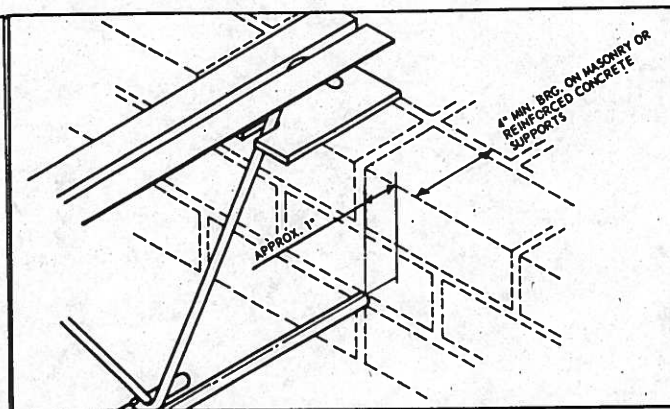


FIGURE 15

### CEILING EXTENSION

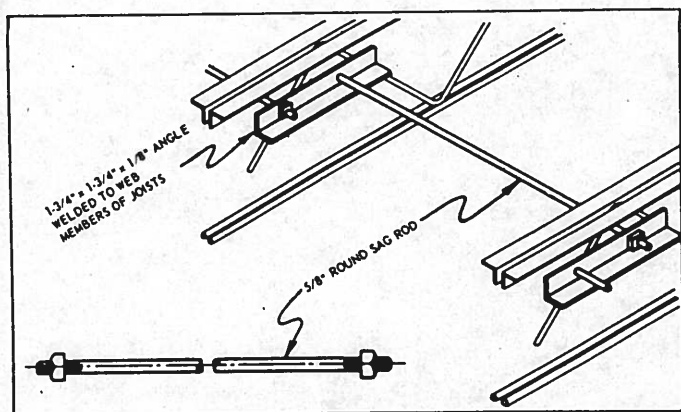


FIGURE 16  
SAG ROD

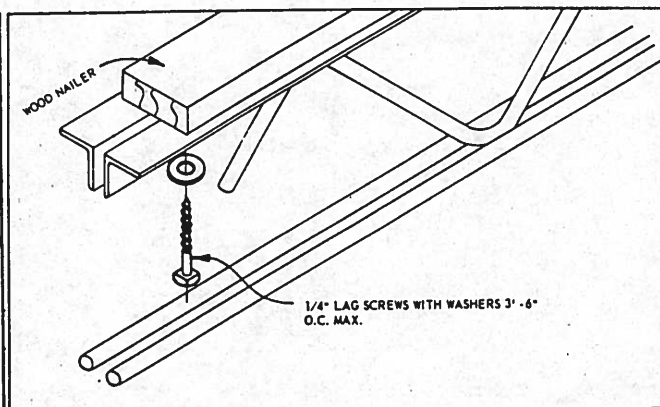
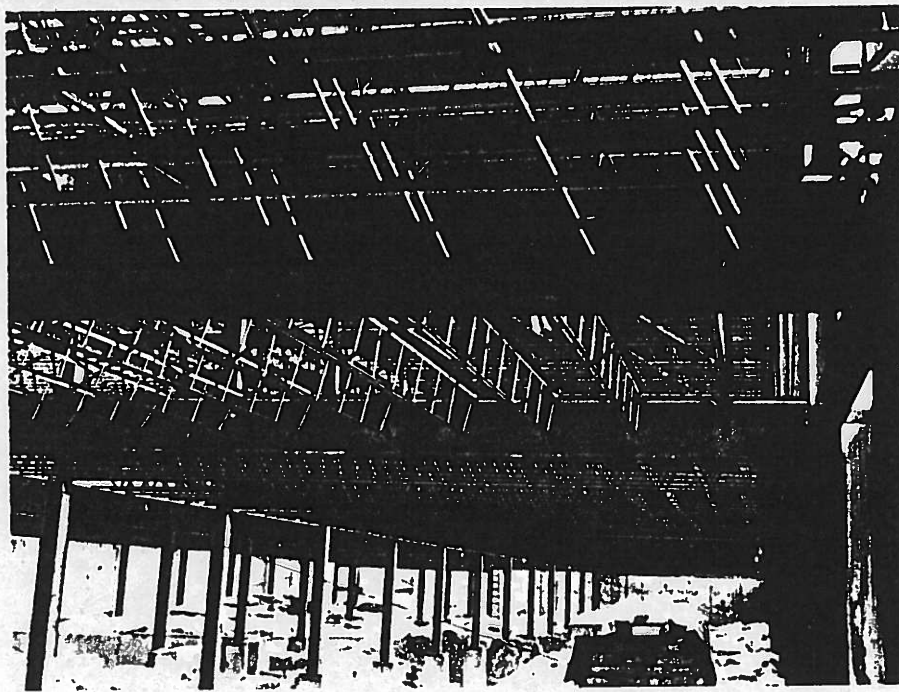
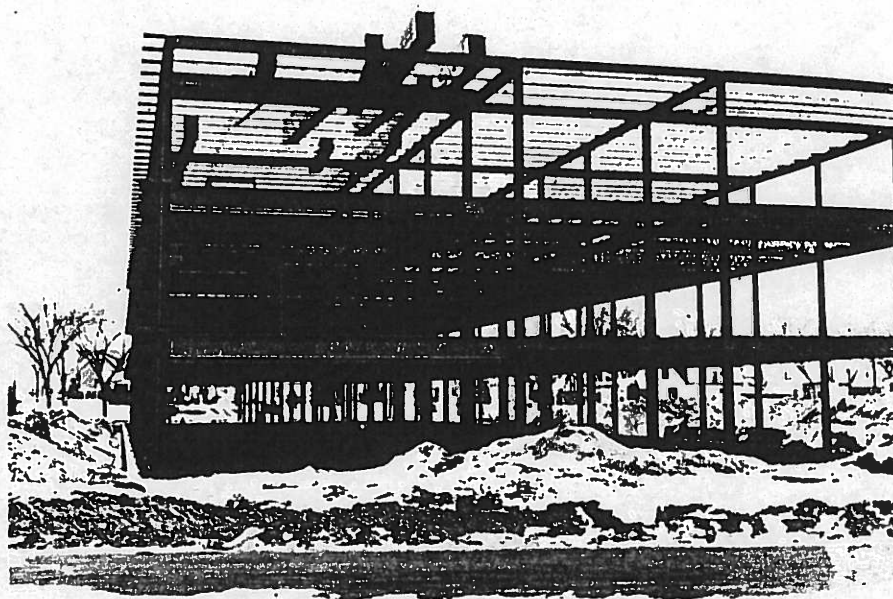


FIGURE 17  
WOOD NAILER





**NORTHEAST JUNIOR HIGH SCHOOL**  
**Minneapolis, Minnesota**



**NORTHEAST JUNIOR HIGH SCHOOL**  
**Minneapolis, Minnesota**

STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA

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# STANDARD SPECIFICATIONS

**1. General-** Where steel joists are shown on plans they shall be fabricated from hot rolled steel shapes in the form of a Warren truss as manufactured by

**Standard Iron & Wire Works**

**2. Materials-** All steel used in steel joist manufacture shall conform to the American Society for Testing Materials (ASTM) "Standard Specification for Steel for Bridges and Buildings, Designation A7" of welding quality, except that parts made of strip or sheet steel shall conform to Grade C of ASTM A-245, "Specification for Heavy Gauge Structural Quality Flat Hot Rolled Carbon Steel Sheets" or Grade C of ASTM A-246, "Specification for Light Gauge Structural Quality Flat Hot Rolled Carbon Steel Sheets" or Grade C of ASTM A-303, "Specification for Hot Rolled Carbon Steel Strip of Structural Quality." ASTM specification number herein referred to shall be of latest adoption.

**3. Painting-** All standard steel joists receive a coat of black asphalt base paint, applied by dipping or spraying after welding. This type of paint provides a practical protective coating. If additional coats of different types of paint are to be used, black asphalt will bleed through; therefore, in such cases a different primer can be applied.

**4. Design-** All standard steel joists are designed as a truss and deck or top slab construction is not assumed to carry any part of the compression stress in the steel joists.

**5. Spacing-** It is recommended that standard steel joists shall be spaced not over 24 inches on centers for floor construction and 30 inches on centers for roof construction, but in no case spaced farther apart than the safe span of the top slab, deck or floor over the steel joists.

Joists at end walls shall be anchored to the walls with

anchors in line with the bridging.

Where a partition is parallel to the steel joists, an additional joist shall be placed under the partition, or if necessary for passage of pipes, etc., double joists spaced the desired distance apart shall be used. (See Figure 2 page 16.) Where partitions are at right angles to the joists, the additional weight of the partition shall be included in the dead load computations.

**6. Bridging-** As soon as steel joists are in place and before any materials are attached to them, bridging rows shall be applied as follows:

Clear span up to 14 feet –  
One row near center

Clear span 14 to 21 feet –  
Two rows at third points

Clear span 21 to 32 feet –  
Three rows at quarter points

Clear span 32 to 40 feet –  
Four rows

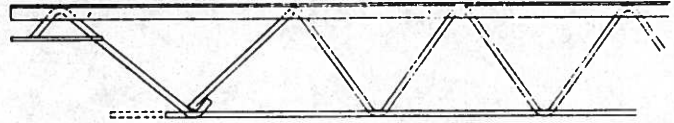
**7. Span-** The span of standard steel joists shall not exceed 24 times the depth of the steel joist.

**8. Anchorage-** The ends of steel joists shall extend at least  $2\frac{1}{2}$  inches onto structural supports and shall be welded to the structural supports by at least two welds each 1 inch long. (See figure 11 page 19.) For masonry walls or reinforced concrete the bearing of the steel joists shall be at least 4 inches and every third joist shall have its end anchored with a  $\frac{3}{8}$  inch round wall anchor. (See figure 10 page 19.)

**9. Ceilings-** Where plastered ceilings occur, ceiling extensions shall be provided at ends of steel joists. (See figure 15 page 20.)



# STANDARD



## 10. Floor Decks and Floor Slabs-

Decks or top slabs over steel joists may be of concrete or gypsum poured on metal lath centering or equally suitable permanent centering, or on removable centering, provided the top chords or flanges of the steel joists are stayed laterally by the top slab.

Pre-cast concrete top slabs, pre-cast gypsum top slabs, wood decks or steel decks may be used over steel joists provided they are securely anchored to the top chords or flanges of the joists.

**11. Wood Floors-** Wood nailer strips can be provided by the purchaser as they can be securely fastened to the top chord of the joists by lag screws spaced not over 3'-6" center to center. Punching of the top chord is not necessary as the lag screws pass between the two angles of the top chord.

**12. Roof Decks-** Where steel decks are used they shall be welded to the steel joists as recommended by the steel deck manufacturer.

Where pre-cast concrete or gypsum is used they should be securely attached to the top chord members to prevent any lateral deflection. Shims or plastic material needed to insure a level bearing for precast slabs are not to be furnished by the steel joist fabricator.

**13. Connections-** The joints and connections of all steel joists shall be made by connecting the members directly to one another by fusion welding.

All joints and connections shall be capable of withstanding a load at least three (3) times the designed load.

**14. Piling at Job.-** Joists and accessories shall be stored at job in such a manner that the lower portion of the piles is not affected by ground dampness. Piles should not be so high as to cause bending in members

near the bottom. Piles of materials should be protected from the weather with waterproof covers. In piling material, all shipping tags should be placed at the same end and in an accessible position. Materials required for upper floors or roof should not be placed above that to be used on lower floors.

**15. Setting Joists-** The first joist in any run should be placed not more than 4 inches clear of the end wall, except that where the wall can be used as a support for the floor or roof, the joist may be placed further from the wall. The other joists should be spaced accurately, measuring from the first joist. Joists should be laid upon supports, and not thrown on. Joists supported on masonry walls should be bedded in mortar. The failure to properly bed joists will often result in excessive vibration in the finished floor. If a system of rigid bridging is used in which the diagonals act in both tension and compression, it shall be installed before wall anchors, beam anchors or other specified means of attachment are applied. If diagonal crossed bridging which will resist only tension or continuous horizontal bridging is used, it shall be installed after joists are permanently anchored to the supports. This should always be done before any other work is performed which requires support from the joists. The safety and success of the work depends largely upon the faithful installation of the bridging in strict accordance with detailed plans.

**16. Decking-** No temporary decking or run-ways except planks used by workmen in installing bridging should be placed on joists until all bridging is in place. Two-inch nominal planks should then be provided for temporary decks and run-ways. Also spreader boards should be provided for dumping of concrete buggies. This will avoid excessive loss of mortar from concrete, which will result if concrete is dumped directly on lath.

ST'D  
SPEC'S

L.S.  
LOAD TABLES

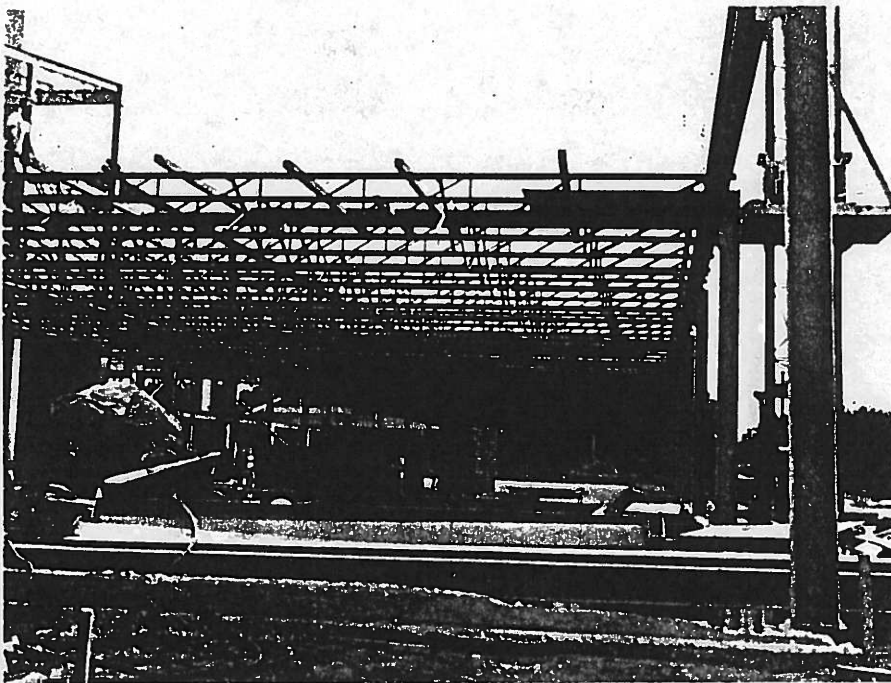
L.S.  
DIMENSIONS

L.S.  
EXT. ENDS

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SCHEM'S



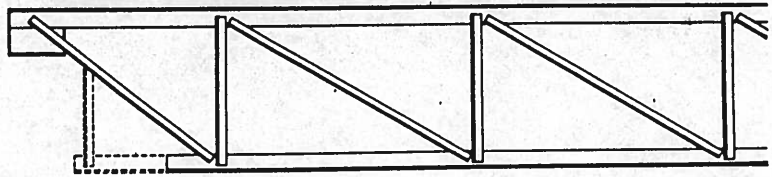
**ANOKA CITY HALL**  
**Anoka, Minnesota**



**SOUTHWEST HIGH SCHOOL**  
**Minneapolis, Minnesota**

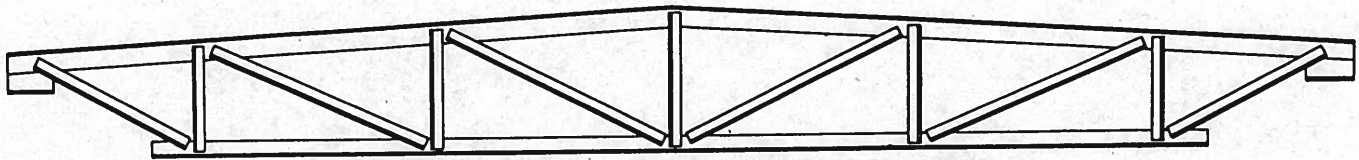


# LONGSPAN

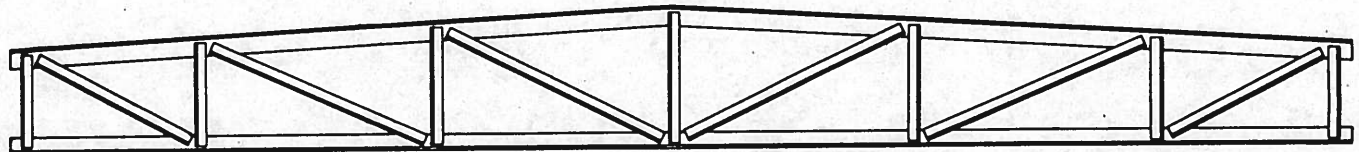


## PITCHED TOP CHORD

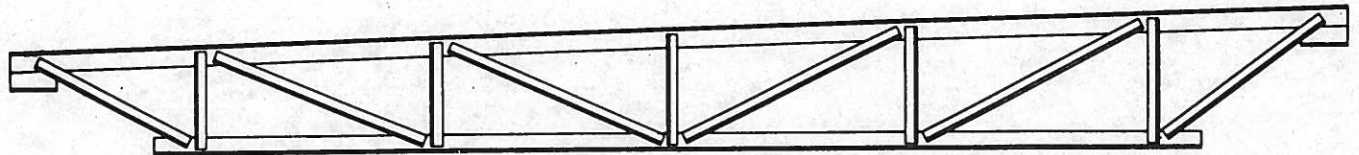
Standard Iron & Wire Works LONGSPAN JOISTS can be furnished with top chords pitched in one direction or pitched in both directions from the midpoint to provide for roof drainage.



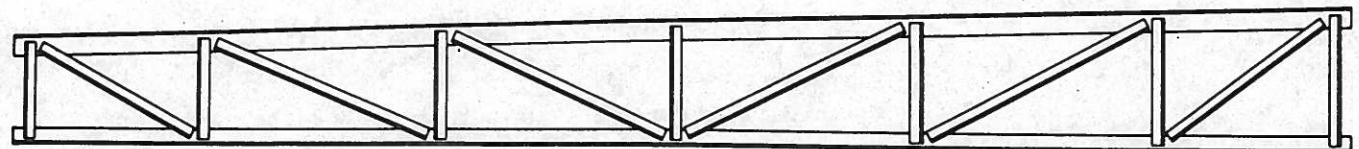
**TOP BEARING DOUBLE PITCHED JOIST**



**BOTTOM BEARING DOUBLE PITCHED JOIST**



**TOP BEARING SINGLE PITCHED JOIST**



**BOTTOM BEARING SINGLE PITCHED JOIST**

Depth Of Pitched Joists Are Figured At Center Of Span

Standard pitch is 1/8 inch per foot.

If pitch exceeds this amount, load tables do not apply.

# TABLE of TOTAL SAFE LOADS

These safe loads include both dead and live loads and are to be uniformly distributed along the top chord. Longspan joists must be investigated when not loaded in this manner. When holes are punched in the governing members, the safe load must be reduced accordingly. The floor slab or roof deck is considered adequate to support the top chord laterally. Spans shown to the right of heavy vertical line in the table are intended for roof construction only. Loads shown below heavy horizontal lines in the table are governed by maximum end reaction.

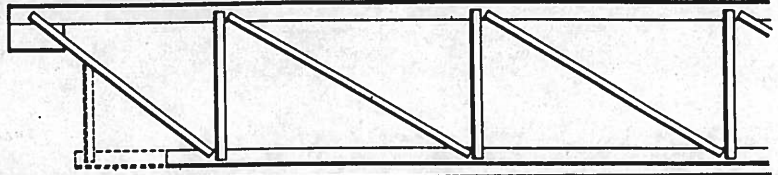
JOIST DATA				CLEAR SPAN IN FEET																									
Depth in Ins.	Type	Ap- prox. Wt., Lbs. per Ft.	Maxi- mum End Re- action	25	26	27	28	29	30	31	32	33	34	35	36														
18	18L02	12	3632	283	267	251	237	224	211	200	190	180	171	163	155	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L03	12	4094	319	300	283	267	253	239	227	215	204	194	185	176	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L04	14	4941	385	361	339	319	301	284	268	254	241	229	217	207	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L05	15	5364	418	394	372	351	331	313	298	282	268	254	242	231	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L06	17	6417	500	469	440	414	391	369	349	330	313	297	282	268	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L07	19	6880	536	516	486	458	432	408	386	365	346	329	313	296	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L08	21	7482	583	561	541	522	491	463	437	414	392	371	352	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L09	23	7697	600	577	556	537	519	502	474	449	425	403	383	364	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L10	25	8265	644	620	597	577	557	539	522	493	466	442	419	398	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L11	27	8753	682	656	633	611	590	571	553	536	520	493	469	445	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	18L12	30	9166	714	687	663	639	618	598	579	561	544	529	514	488	..	..	..	..	..	..	..	..	..	..	..	..	..	..
				CLEAR SPAN IN FEET																									
				25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40										
20	20L03	12	4235	330	312	296	280	266	252	240	228	217	207	197	188	180	172	164	157	..	..	..	..	..	..	..	..	..	..
	20L04	14	5185	404	381	360	340	320	304	288	273	259	247	235	224	213	204	194	186	..	..	..	..	..	..	..	..	..	..
	20L05	15	5557	433	409	387	367	348	331	314	299	285	271	259	247	236	226	216	207	..	..	..	..	..	..	..	..	..	..
	20L06	17	6763	527	496	467	441	417	395	374	355	337	320	305	290	277	264	252	241	..	..	..	..	..	..	..	..	..	..
	20L07	19	7110	554	533	514	486	459	435	412	391	372	354	337	321	306	292	279	267	..	..	..	..	..	..	..	..	..	..
	20L08	21	7832	610	587	566	546	528	499	472	447	425	403	383	365	348	332	317	303	..	..	..	..	..	..	..	..	..	..
	20L09	23	8107	632	608	586	566	547	529	512	485	460	437	416	396	377	360	344	329	..	..	..	..	..	..	..	..	..	..
	20L10	25	8568	668	643	619	598	578	559	541	525	509	483	459	436	415	396	378	361	..	..	..	..	..	..	..	..	..	..
	20L11	27	9095	709	682	657	634	613	593	574	557	540	525	510	485	462	441	421	403	..	..	..	..	..	..	..	..	..	..
	20L12	30	9605	748	720	694	670	647	626	607	588	571	554	539	524	510	486	463	442	..	..	..	..	..	..	..	..	..	..
	20L13	35	10533	821	790	761	735	710	687	665	645	626	608	591	575	559	545	531	518	..	..	..	..	..	..	..	..	..	..
				CLEAR SPAN IN FEET																									
				25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44						
22	22L04	14	5352	417	394	373	353	335	318	302	287	274	261	249	237	227	217	207	199	190	183	175	168	..	..	..	..	..	..
	22L05	15	5634	439	417	397	377	359	342	326	311	297	283	271	259	248	238	228	219	210	202	194	187	..	..	..	..	..	..
	22L06	17	6879	536	516	488	462	438	416	395	376	358	341	325	310	297	283	271	260	249	239	229	220	..	..	..	..	..	..
	22L07	19	7238	564	543	523	505	479	455	433	412	393	374	357	341	326	312	298	286	274	263	252	242	..	..	..	..	..	..
	22L08	21	8086	630	606	584	564	545	527	500	474	452	430	410	391	373	356	340	326	312	299	287	275	..	..	..	..	..	..
	22L09	23	8406	655	631	608	587	567	549	531	515	490	466	444	424	404	386	369	353	339	324	311	299	..	..	..	..	..	..
	22L10	25	8997	701	675	650	628	606	587	568	551	534	519	494	470	448	428	408	390	374	358	343	329	..	..	..	..	..	..
	22L11	27	9510	741	714	688	664	641	621	601	583	565	549	534	519	496	474	453	433	415	398	382	366	..	..	..	..	..	..
	22L12	30	9998	779	750	723	697	674	652	631	612	594	577	561	545	531	517	504	482	461	442	423	406	..	..	..	..	..	..
	22L13	35	11089	864	832	802	774	748	723	701	679	659	640	622	605	589	574	559	546	532	520	499	477	..	..	..	..	..	..
	22L14	37	11474	894	861	830	801	774	749	725	703	682	662	644	626	610	594	579	565	551	538	526	514	..	..	..	..	..	..
				CLEAR SPAN IN FEET																									
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48										
24	24L04	14	4798	285	272	260	249	238	228	219	210	201	193	186	179	172	166	160	154	..	..	..	..	..	..	..	..	..	..
	24L05	15	5117	304	292	279	268	257	247	237	228	219	211	203	196	189	182	175	169	..	..	..	..	..	..	..	..	..	..
	24L06	17	6245	371	354	339	324	310	297	284	273	262	251	242	232	224	215	207	200	..	..	..	..	..	..	..	..	..	..
	24L07	19	6868	408	390	373	357	342	328	314	301	289	278	267	257	248	238	230	222	..	..	..	..	..	..	..	..	..	..
	24L08	21	7996	475	453	432	412	394	377	361	346	332	318	306	294	283	272	262	252	..	..	..	..	..	..	..	..	..	..
	24L09	23	8652	514	490	468	447	427	409	391	375	360	345	331	319	306	295	284	274	..	..	..	..	..	..	..	..	..	..
	24L10	25	9345	555	539	524	500	477	456	436	417	400	383	368	353	339	326	314	302	..	..	..	..	..	..	..	..	..	..
	24L11	27	9686	575	559	543	528	514	501	480	460	441	424	407	391	376	362	349	336	..	..	..	..	..	..	..	..	..	..
	24L12	30	10431	619	601	585	569	554	539	526	513	491	471	452	434	417	401	386	371	..	..	..	..	..	..	..	..	..	..
	24L13	35	11479	682	662	644	626	610	594	579	565	551	538	526	514	494	475	457	440	..	..	..	..	..	..	..	..	..	..
	24L14	37	12087	718	697	678	659	642	625	609	594	580	567	554	541	529	518	496	476	..	..	..	..	..	..	..	..	..	..

The approximate weight is in pounds per foot of clear span.



# in Pounds Per Foot

# LONG SPAN



JOIST DATA				CLEAR SPAN IN FEET																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Depth in Ins.	Type	Ap- prox. Wt., Lbs. per Ft.	Maxi- mum End Re- action	41	42	43	44	45	46	47	48	49	50	51	52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

# TABLE of TOTAL SAFE LOADS

These safe loads include both dead and live loads and are to be uniformly distributed along the top chord. Longspan joists must be investigated when not loaded in this manner. When holes are punched in the governing members, the safe load must be reduced accordingly. The floor slab or roof deck is considered adequate to support the top chord laterally. Spans shown to the right of heavy vertical line in the table are intended for roof construction only. Loads shown below heavy horizontal lines in the table are governed by maximum end reaction.

JOIST DATA				CLEAR SPAN IN FEET																								
Depth in Ins.	Type	Ap- prox. Wt. Lbs. per Ft.	Max- imum End Re- action	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80									
40	40L09	23	7223	220	215	210	205	200	196	191	187	183	179	175	171	168	164	161	157	...	...	...	...	...	...	...	...	...
	40L10	25	8208	250	244	238	233	227	222	217	212	207	202	198	193	189	185	181	177	...	...	...	...	...	...	...	...	...
	40L11	27	8865	270	264	258	252	246	241	235	230	225	220	215	211	206	202	198	193	...	...	...	...	...	...	...	...	...
	40L12	30	10113	308	301	294	287	280	273	267	261	255	249	243	238	233	228	223	218	...	...	...	...	...	...	...	...	...
	40L13	35	12017	366	357	348	340	332	324	316	309	302	295	289	282	276	270	264	259	...	...	...	...	...	...	...	...	...
	40L14	37	13396	408	397	387	378	369	360	351	343	335	327	320	312	305	299	292	286	...	...	...	...	...	...	...	...	...
	40L15	41	15136	461	450	439	428	418	408	399	389	380	372	363	355	347	341	332	324	...	...	...	...	...	...	...	...	...
	40L16	48	17187	523	516	508	495	483	472	461	450	440	430	420	410	401	392	384	376	...	...	...	...	...	...	...	...	...
	40L17	54	18421	561	553	545	537	529	521	514	507	495	484	473	463	452	442	433	423	...	...	...	...	...	...	...	...	...
	40L18	61	19981	609	599	591	582	574	566	558	550	542	535	528	521	515	508	496	485	...	...	...	...	...	...	...	...	...
				CLEAR SPAN IN FEET																								
				73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88									
44	44L10	25	7993	217	212	208	203	199	195	191	187	183	179	176	172	169	165	162	159	...	...	...	...	...	...	...	...	...
	44L11	27	8582	233	228	224	219	215	210	206	202	198	194	191	187	183	180	177	173	...	...	...	...	...	...	...	...	...
	44L12	30	9835	267	261	256	250	245	240	235	230	225	221	217	212	208	204	200	196	...	...	...	...	...	...	...	...	...
	44L13	35	11639	316	310	303	297	290	284	278	273	267	262	257	251	246	242	237	232	...	...	...	...	...	...	...	...	...
	44L14	37	13039	354	348	338	331	324	317	310	304	297	291	285	279	274	268	263	258	...	...	...	...	...	...	...	...	...
	44L15	41	14733	400	392	383	375	367	359	352	344	337	330	324	317	311	305	299	293	...	...	...	...	...	...	...	...	...
	44L16	48	17054	463	453	443	434	424	415	407	398	390	382	374	367	360	352	345	339	...	...	...	...	...	...	...	...	...
	44L17	54	19040	517	510	499	489	478	468	458	449	439	430	422	413	405	397	389	382	...	...	...	...	...	...	...	...	...
	44L18	61	20743	563	556	548	541	534	527	521	514	508	497	487	477	467	457	448	439	...	...	...	...	...	...	...	...	...
	44L19	69	22311	606	598	590	582	575	567	560	553	546	540	533	527	521	515	509	498	...	...	...	...	...	...	...	...	...
				CLEAR SPAN IN FEET																								
				81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96									
48	48L11	27	8330	204	200	197	193	189	186	183	179	176	173	170	167	164	162	159	156	...	...	...	...	...	...	...	...	...
	48L12	30	9596	235	230	226	221	217	213	209	205	201	198	194	191	187	184	181	178	...	...	...	...	...	...	...	...	...
	48L13	35	11352	278	273	268	262	257	253	248	243	239	234	230	226	222	218	214	211	...	...	...	...	...	...	...	...	...
	48L14	37	12740	312	305	299	294	288	282	277	272	266	261	257	252	247	243	238	234	...	...	...	...	...	...	...	...	...
	48L15	41	14373	352	345	338	332	326	319	313	308	302	296	291	285	280	275	270	266	...	...	...	...	...	...	...	...	...
	48L16	48	16660	408	400	392	384	377	370	363	356	349	343	337	331	325	319	313	308	...	...	...	...	...	...	...	...	...
	48L17	54	18743	459	450	441	433	425	416	409	401	394	386	379	372	366	359	353	346	...	...	...	...	...	...	...	...	...
	48L18	61	21336	523	516	510	504	494	485	475	466	457	448	440	432	424	416	408	401	...	...	...	...	...	...	...	...	...
	48L19	69	23029	564	557	550	544	538	531	525	519	514	508	498	489	480	471	462	454	...	...	...	...	...	...	...	...	...
				CLEAR SPAN IN FEET																								
				82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97									
52	52L12	30	9601	232	230	227	224	222	219	216	214	211	207	203	200	196	193	190	186	...	...	...	...	...	...	...	...	...
	52L13	35	11556	280	276	273	270	267	264	260	256	252	248	243	239	235	231	227	223	...	...	...	...	...	...	...	...	...
	52L14	37	12747	308	305	301	298	294	291	287	284	279	274	269	264	259	254	249	245	...	...	...	...	...	...	...	...	...
	52L15	41	14440	350	345	341	337	333	330	326	322	317	311	306	300	294	290	285	280	...	...	...	...	...	...	...	...	...
	52L16	48	16745	405	400	396	391	387	382	378	374	367	361	354	348	341	336	330	324	...	...	...	...	...	...	...	...	...
	52L17	54	18820	456	450	445	440	435	430	425	420	413	405	398	391	384	377	371	365	...	...	...	...	...	...	...	...	...
	52L18	61	22590	546	540	534	527	521	516	510	504	495	486	477	468	459	451	443	435	...	...	...	...	...	...	...	...	...
	52L19	69	23940	578	572	565	558	551	546	540	534	528	522	517	511	506	497	489	480	...	...	...	...	...	...	...	...	...
				CLEAR SPAN IN FEET																								
				84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99									
54	54L12	30	9835	232	230	227	225	222	219	217	215	212	210	207	203	199	196	192	189	...	...	...	...	...	...	...	...	...
	54L13	35	11570	274	270	267	264	260	258	256	253	250	247	243	239	235	231	227	223	...	...	...	...	...	...	...	...	...
	54L14	37	13020	307	304	300	297	294	290	287	284	281	278	273	268	263	259	255	250	...	...	...	...	...	...	...	...	...
	54L15	41	14660	345	342	338	335	330	327	324	321	317	313	308	302	297	291	286	282	...	...	...	...	...	...	...	...	...
	54L16	48	17190	406	401	397	392	388	383	379	375	371	367	359	353	347	341	334	329	...	...	...	...	...	...	...	...	...
	54L17	54	19295	456	450	444	440	435	431	426	422	417	412	404	397	390	383	377	371	...	...	...	...	...	...	...	...	...
	54L18	61	22290	527	521	515	509	504	498	492	487	482	476	467	458	450	442	434	427	...	...	...	...	...	...	...	...	...
	54L19	69	24565	581	574	568	560	554	548	542	536	530	524	518	513	508	503	494	486	...	...	...	...	...	...	...	...	...

The approximate weight is in pounds per foot of clear span.

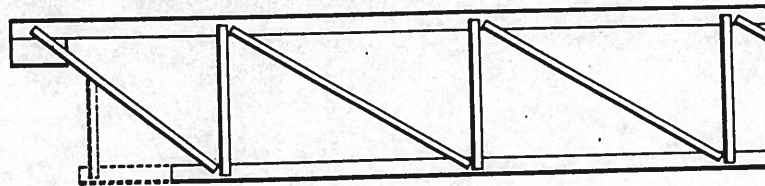
Joists over 75'0" long will have bolted splices when it is not feasible to ship in one piece.

**STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA**



# in Pounds Per Foot

# LONGSPAN



JOIST DATA				CLEAR SPAN IN FEET																					
Depth In.	Type	Approx. Wt. Lbs. per Ft.	Maximum End Reaction	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107
56	56L12	30	9620	224	221	218	216	213	211	209	206	204	202	200	198	195	192	189	186	183	180	177	174	171	168
	56L13	35	11585	267	264	261	258	255	253	250	247	244	242	240	237	234	230	226	222	218	215	212	208	205	201
	56L14	37	12825	296	294	290	286	283	280	277	274	271	269	266	263	259	255	250	246	241	237	234	230	226	222
	56L15	41	14575	338	334	330	326	323	320	316	313	309	306	303	299	294	289	284	279	275	270	266	262	258	253
	56L16	48	16870	390	385	380	376	372	368	364	360	356	353	350	346	341	336	330	324	318	313	308	303	298	293
	56L17	54	18825	435	430	425	420	416	411	406	402	398	394	390	386	380	375	369	364	359	353	347	342	336	331
60	60L18	61	22125	511	505	500	494	488	483	478	473	468	463	458	453	446	438	431	423	416	409	402	395	389	382
	60L19	69	25045	577	571	565	558	552	546	540	534	528	523	518	513	505	497	489	480	471	463	456	448	441	433
	60L13	35	11730	258	256	253	250	248	245	243	240	238	235	233	231	228	226	224	222	218	215	211	208	205	202
	60L14	37	13150	290	287	284	281	278	275	272	269	267	264	262	259	257	254	252	247	243	238	233	228	225	221
	60L15	41	14845	328	324	320	317	314	310	307	304	301	298	295	292	289	286	284	281	277	272	268	264	260	256
	60L16	48	17275	381	377	373	369	365	361	358	354	350	347	344	340	337	333	331	327	322	317	311	306	302	297
64	64L17	54	19445	429	424	420	415	412	407	403	398	395	390	387	383	379	375	372	368	362	357	351	345	340	335
	64L18	61	22400	494	489	482	478	473	468	464	459	454	450	445	441	437	432	429	424	417	411	404	397	391	385
	64L19	69	25520	564	557	551	545	539	534	528	523	517	512	507	502	498	493	488	483	474	467	459	452	445	438
	64L20	73	26847	616	610	604	598	592	586	580	575	569	564	559	554	549	544	539	534	526	521	517	513	508	501
	64L21	79	28724	678	671	665	659	653	647	641	635	629	624	618	612	606	601	596	591	582	575	567	560	553	546
	64L22	82	29726	716	709	703	697	691	685	679	673	667	661	655	649	643	637	632	627	620	613	605	598	591	584
68	68L23	84	30649	754	747	741	735	729	723	717	711	705	699	693	687	681	675	669	663	656	649	641	634	627	620
	68L14	39	12953	268	264	259	255	251	247	243	239	235	232	228	225	221	218	214	211	208	205	202	199	196	193
	68L15	43	14790	306	301	296	292	288	283	278	274	269	265	261	257	253	249	245	242	238	235	231	228	224	221
	68L16	48	17738	367	361	355	349	343	338	332	327	321	316	311	306	301	297	292	288	283	279	274	270	266	262
	68L17	55	20203	418	411	404	398	391	385	378	372	366	360	354	349	343	338	333	328	323	318	313	309	304	300
	68L18	62	23297	482	474	466	459	451	444	437	430	423	417	410	404	397	391	385	380	374	369	363	358	352	347
72	72L19	68	25569	529	524	518	513	508	500	492	485	477	470	462	455	448	442	435	429	422	416	409	403	397	392
	72L20	73	26847	556	551	545	540	534	529	524	519	513	505	497	489	481	474	466	459	452	446	438	432	425	419
	72L21	79	28724	595	589	583	577	571	566	560	555	550	545	540	535	530	525	520	515	510	506	501	494	486	479
	72L22	82	29726	616	610	604	598	592	586	580	575	569	564	559	554	549	544	539	534	526	521	517	513	508	501
	72L23	84	30649	635	629	622	616	610	604	598	592	586	581	575	570	565	560	555	550	545	540	535	531	526	522
	72L24	89	33320	678	671	665	659	653	647	641	635	629	623	617	611	605	599	593	587	581	574	567	560	553	546
76	76L16	48	16910	285	282	278	274	270	267	263	260	256	253	250	247	243	240	237	234	231	228	225	223	220	217
	76L17	55	19165	323	319	315	311	307	303	299	296	292	288	284	281	277	274	270	267	263	260	257	254	250	247
	76L18	62	22131	373	368	363	359	354	350	345	341	336	332	328	324	320	316	312	308	304	301	297	294	290	287
	76L19	68	24920	420	415	409	404	399	394	389	384	379	374	369	365	360	356	351	347	343	339	335	331	327	323
	76L20	73	27056	456	450	444	438	432	427	422	416	410	405	399	394	389	384	379	375	370	366	361	357	352	348
	76L21	79	30528	515	511	506	499	492	486	479	473	467	461	455	450	444	439	434	428	422	417	411	406	401	397
76	76L22	82	31852	537	533	528	524	520	516	511	504	497	491	484	478	471	465	459	453	447	441	435	430	424	419
	76L23	84	32488	548	544	539	535	530	525	521	516	510	505	499	493	487	480	474	468	463	457	452	446	441	435
	76L24	89	35152	592	587	582	578	573	569	564	558	553	547	541	535	529	523	517	511	505	499	493	487	481	475
	76L25	95	38152	644	639	634	629	624	619	613	608	602	596	591	585	579	573	567	561	555	549	543	537	531	525
	76L26	100	41152	696	691	686	681	676	670	665	659	653	647	641	635	629	623	617	611	605	599	593	587	581	575
	76L27	105	44152	748	743	738	733	728	722	717	711	705	699	693	687	681	675	669	663	657	651	645	639	633	627

The approximate weight is in pounds per foot of clear span.  
Joists over 75'-0" long will have bolted splices when it is not feasible to ship in one piece.

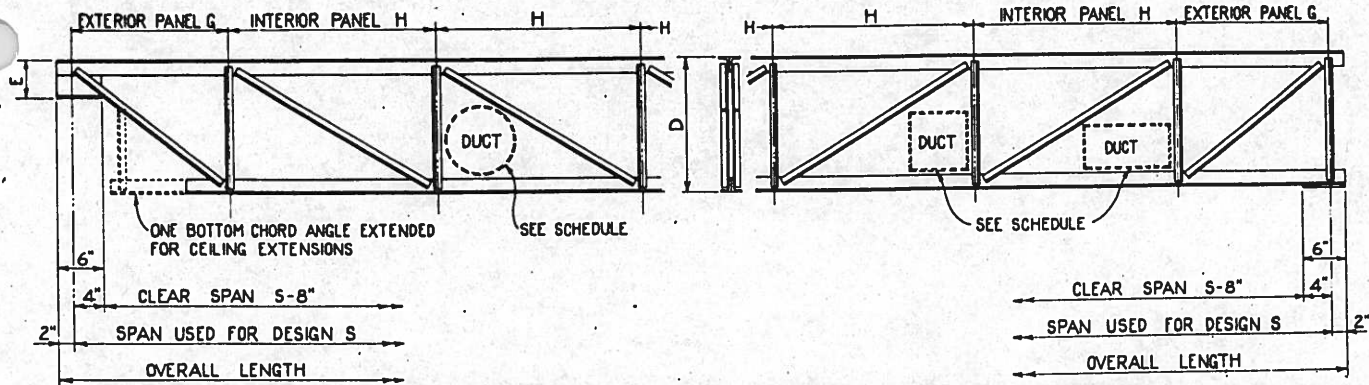
STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA

L.S.  
D I M E N S I O N S

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E X T. E N D S

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S P L I C E S

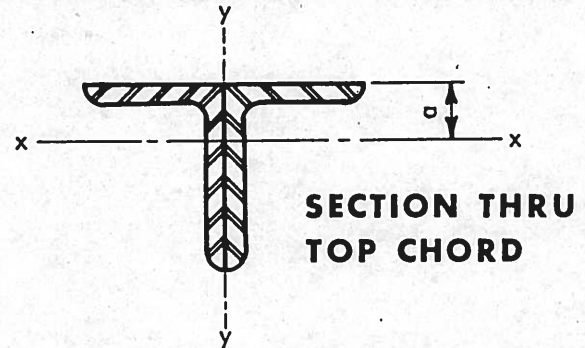
# DIMENSIONS and SECTIONS



**TOP BEARING JOISTS**

**BOTTOM BEARING JOISTS**

## DIMENSIONS - PANEL SPACING AND TOP CHORD SECTION PROPERTIES



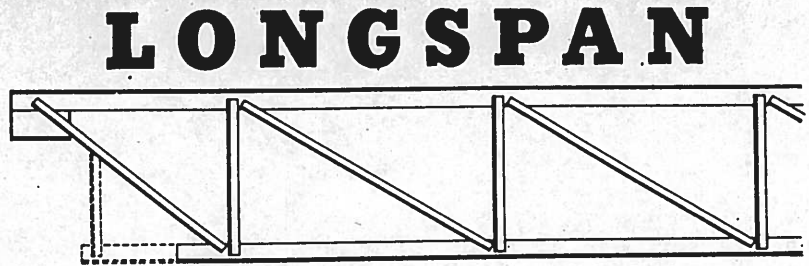
Joist Depth / In. D	Joist Type	End Depth E	Top 2 Angles *	Total Area Inches <sup>2</sup>	a Inches	Axis X-X		Axis Y-Y		Bottom 2 Angles *	Panel Lengths		Size of Duct That Will Pass Thru Joist			Joist Type	
						l Inches <sup>4</sup>	r Inches	l Inches <sup>4</sup>	r Inches		Exterior G		Interior H	Dia. Round	Square		Rect. angular
											Max.	Min.					
18	18L02	5"	2" x 1½" x ⅜"	1.24	.64	.50	.63	.43	.59	1½" x 1½" x ⅜"	3'-1½"	1'-10½"	2'-6"	10"	9"x9"	1'-3"x5"	18L02
	18L03	5"	2" x 2" x ⅜"	1.42	.57	.54	.62	1.0	.84	1½" x 1½" x ⅜"				10"	9"x9"	1'-3"x5"	18L03
	18L04	5"	2½" x 2" x ⅜"	1.62	.76	1.0	.79	1.0	.79	1½" x 1½" x ⅜"				10"	8"x8"	1'-3"x5"	18L04
	18L05	5"	2" x 2" x ½"	1.88	.59	.7	.61	1.4	.85	2" x 2" x ⅜"				10"	8"x8"	1'-3"x5"	18L05
	18L06	5"	2½" x 2" x ½"	2.12	.79	1.3	.78	1.4	.80	2½" x 2" x ⅜"				10"	8"x8"	1'-3"x5"	18L06
	18L07	5"	2½" x 2½" x ½"	2.38	.72	1.4	.77	2.6	1.05	2½" x 2½" x ⅜"				9"	8"x8"	1'-1½"x4½"	18L07
	18L08	5"	3" x 2½" x ½"	2.62	.91	2.3	.95	2.6	1.00	2½" x 2" x ½"				10"	8"x8"	1'-3" x5"	18L08
	18L09	5"	3" x 3" x ½"	2.88	.84	2.5	.93	4.5	1.25	2½" x 2½" x ½"				9"	8"x8"	1'-1½"x4½"	18L09
	18L10	5"	3½" x 3" x ½"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2½" x ½"				9"	8"x8"	1'-1½"x4½"	18L10
	18L11	5"	3" x 3" x ⅝"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x ½"				9"	7"x7"	1'-1½"x4½"	18L11
	18L12	5"	3½" x 3" x ⅝"	3.86	1.06	4.7	1.10	5.7	1.22	3½" x 3" x ½"				9"	7"x7"	1'-1½"x4½"	18L12
	20	20L03	5"	2" x 2" x ⅝"	1.42	.57	.54	.62	1.0	.84				1½" x 1½" x ⅝"	3'-5¼"	2'-0¼"	2'-9"
20L04		5"	2½" x 2" x ⅝"	1.62	.76	1.0	.79	1.0	.79	1½" x 1½" x ⅝"	11"	10"x10"	1'-4½"x5½"	20L04			
20L05		5"	2" x 2" x ¾"	1.88	.59	.7	.61	1.4	.85	2" x 2" x ⅝"	11"	10"x10"	1'-4½"x5½"	20L05			
20L06		5"	2½" x 2" x ¾"	2.12	.79	1.3	.78	1.4	.80	2½" x 2" x ⅝"	11"	10"x10"	1'-4½"x5½"	20L06			
20L07		5"	2½" x 2½" x ¾"	2.38	.72	1.4	.77	2.6	1.05	2½" x 2½" x ⅝"	10"	9"x9"	1'-3" x5"	20L07			
20L08		5"	3" x 2½" x ¾"	2.62	.91	2.3	.95	2.6	1.00	2½" x 2" x ¾"	11"	10"x10"	1'-4½"x5½"	20L08			
20L09		5"	3" x 3" x ¾"	2.88	.84	2.5	.93	4.5	1.25	2½" x 2½" x ¾"	10"	9"x9"	1'-3" x5"	20L09			
20L10		5"	3½" x 3" x ¾"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2½" x ¾"	10"	9"x9"	1'-3" x5"	20L10			
20L11		5"	3" x 3" x ⅞"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x ¾"	10"	9"x9"	1'-3" x5"	20L11			
20L12		5"	3½" x 3" x ⅞"	3.86	1.06	4.7	1.10	5.7	1.22	3½" x 3" x ¾"	10"	9"x9"	1'-3" x5"	20L12			
20L13		5"	3½" x 3" x 1"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x ⅞"	10"	9"x9"	1'-3" x5"	20L13			
22		22L04	5"	2½" x 2" x ¾"	1.62	.76	1.0	.79	1.0	.79	1½" x 1½" x ¾"	3'-9"	2'-3"	3'-0"			
	22L05	5"	2" x 2" x ¾"	1.88	.59	.7	.61	1.4	.85	2" x 2" x ⅝"	1'-0"				11"x11"	1'-6" x6"	22L05
	22L06	5"	2½" x 2" x ¾"	2.12	.79	1.3	.78	1.4	.80	2½" x 2" x ⅝"	1'-0"				11"x11"	1'-6" x6"	22L06
	22L07	5"	2½" x 2½" x ¾"	2.38	.72	1.4	.77	2.6	1.05	2½" x 2½" x ⅝"	1'-0"				10"x10"	1'-6" x6"	22L07
	22L08	5"	3" x 2½" x ¾"	2.62	.91	2.3	.95	2.6	1.00	2½" x 2" x ¾"	1'-0"				11"x11"	1'-6" x6"	22L08
	22L09	5"	3" x 3" x ¾"	2.88	.84	2.5	.93	4.5	1.25	2½" x 2½" x ¾"	1'-0"				10"x10"	1'-6" x6"	22L09
	22L10	5"	3½" x 3" x ¾"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2½" x ¾"	1'-0"				10"x10"	1'-6" x6"	22L10
	22L11	5"	3" x 3" x ⅞"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x ¾"	11"				10"x10"	1'-4½"x5½"	22L11
	22L12	5"	3½" x 3" x ⅞"	3.86	1.06	4.7	1.10	5.7	1.22	3½" x 3" x ¾"	11"				10"x10"	1'-4½"x5½"	22L12
	22L13	5"	3½" x 3" x 1"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x ⅞"	11"				10"x10"	1'-4½"x5½"	22L13
	22L14	5"	4" x 3" x 1"	4.96	1.28	7.9	1.26	6.9	1.18	3½" x 3" x ¾"	11"				10"x10"	1'-4½"x5½"	22L14
	24	24L04	5"	2½" x 2" x ¾"	1.62	.76	1.0	.79	1.0	.79	1½" x 1½" x ¾"				4'-0¼"	2'-5¼"	3'-3"
24L05		5"	2" x 2" x ¾"	1.88	.59	.7	.61	1.4	.85	2" x 2" x ⅝"	1'-2"	1'-0"x1'-0"	1'-9" x7"	24L05			
24L06		5"	2½" x 2" x ¾"	2.12	.79	1.3	.78	1.4	.80	2½" x 2" x ⅝"	1'-2"	1'-0"x1'-0"	1'-9" x7"	24L06			
24L07		5"	2½" x 2½" x ¾"	2.38	.72	1.4	.77	2.6	1.05	2½" x 2½" x ⅝"	1'-1"	1'-0"x1'-0"	1'-7½"x6½"	24L07			
24L08		5"	3" x 2½" x ¾"	2.62	.91	2.3	.95	2.6	1.00	2½" x 2" x ¾"	1'-2"	1'-0"x1'-0"	1'-9" x7"	24L08			
24L09		5"	3" x 3" x ¾"	2.88	.84	2.5	.93	4.5	1.25	2½" x 2½" x ¾"	1'-1"	1'-0"x1'-0"	1'-7½"x6½"	24L09			
24L10		5"	3½" x 3" x ¾"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2½" x ¾"	1'-1"	1'-0"x1'-0"	1'-7½"x6½"	24L10			
24L11		5"	3" x 3" x ⅞"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x ¾"	1'-1"	11"x11"	1'-7½"x6½"	24L11			
24L12		5"	3½" x 3" x ⅞"	3.86	1.06	4.7	1.10	5.7	1.22	3½" x 3" x ¾"	1'-1"	11"x11"	1'-7½"x6½"	24L12			
24L13		5"	3½" x 3" x 1"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x ⅞"	1'-1"	11"x11"	1'-7½"x6½"	24L13			
24L14		5"	4" x 3" x 1"	4.96	1.28	7.9	1.26	6.9	1.18	3½" x 3" x ¾"	1'-1"	11"x11"	1'-7½"x6½"	24L14			
24L15		5"	4" x 4" x 1"	5.72	1.14	8.7	1.23	16.1	1.68	3½" x 3½" x ¾"	1'-0"	11"x11"	1'-6" x6"	24L15			

\*Top Chord Angles Have Long Legs Vertical.  
 \*\*Bottom Chord Angles Have Short Legs Vertical.

STANDARD IRON & WIRE WORKS, INC., MINNEAPOLIS, MINNESOTA



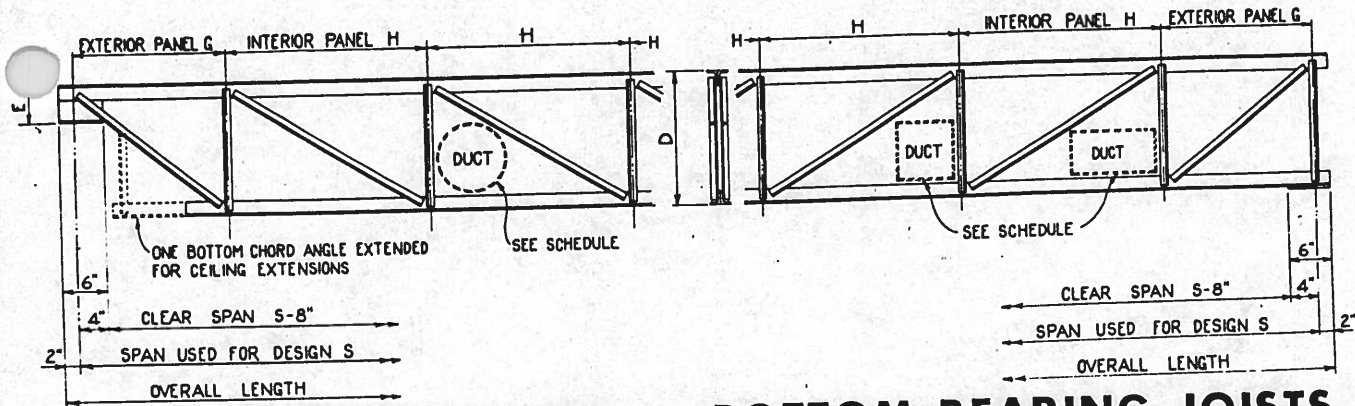
# of LONGSPAN STEEL JOISTS



## DIMENSIONS-PANEL SPACING AND TOP CHORD SECTION PROPERTIES

Joist Depth In Inches D	Joist Type	End Depth E	Top 2 Angles	Total Area Inches <sup>2</sup>	a Inches	Axis X-X		Axis Y-Y		Bottom 2 Angles	Panel Lengths			Size of Duct That Will Pass Thru Joist			Joist Type
						l Inches <sup>4</sup>	r Inches	l Inches <sup>4</sup>	r Inches		Exterior G		Interior H	Dia. Round	Square	Rect- angular	
											Max.	Min.					
26	26L05	5"	2" x 2" x 1/4"	1.88	.59	.7	.61	1.4	.85	2" x 2" x 3/8"	4'-4 1/2"	2'-7 1/2"	3'-6"	1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L05
	26L06	5"	2 1/2" x 2" x 1/4"	2.12	.79	1.3	.78	1.4	.80	2 1/2" x 2" x 3/8"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L06
	26L07	5"	2 1/2" x 2 1/2" x 1/4"	2.38	.72	1.4	.77	2.6	1.05	2 1/2" x 2 1/2" x 3/8"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L07
	26L08	5"	3" x 2 1/2" x 1/4"	2.62	.91	2.3	.95	2.6	1.00	2 1/2" x 2" x 1/4"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L08
	26L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L09
	26L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	26L10
	26L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				1'-2"	1'-0" x 1'-0"	1'-9" x 7"	26L11
	26L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				1'-2"	1'-0" x 1'-0"	1'-9" x 7"	26L12
	26L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				1'-2"	1'-0" x 1'-0"	1'-9" x 7"	26L13
	26L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				1'-2"	1'-0" x 1'-0"	1'-9" x 7"	26L14
26L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"	1'-2"	1'-0" x 1'-0"	1'-9" x 7"	26L15				
28	28L06	5"	2 1/2" x 2" x 1/4"	2.12	.79	1.3	.78	1.4	.80	2 1/2" x 2" x 3/8"	4'-8 1/4"	2'-9 1/4"	3'-9"	1'-5"	1'-2" x 1'-2"	2'-0" x 8"	28L06
	28L07	5"	2 1/2" x 2 1/2" x 1/4"	2.38	.72	1.4	.77	2.6	1.05	2 1/2" x 2 1/2" x 3/8"				1'-4"	1'-2" x 1'-2"	2'-0" x 8"	28L07
	28L08	5"	3" x 2 1/2" x 1/4"	2.62	.91	2.3	.95	2.6	1.00	2 1/2" x 2" x 1/4"				1'-5"	1'-2" x 1'-2"	2'-0" x 8"	28L08
	28L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"				1'-4"	1'-2" x 1'-2"	2'-0" x 8"	28L09
	28L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				1'-4"	1'-2" x 1'-2"	2'-0" x 8"	28L10
	28L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				1'-4"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L11
	28L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				1'-4"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L12
	28L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				1'-4"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L13
	28L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				1'-4"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L14
	28L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L15
28L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"	1'-3"	1'-1" x 1'-1"	1'-10 1/2" x 7 1/2"	28L16				
30	30L06	5"	2 1/2" x 2" x 1/4"	2.12	.79	1.3	.78	1.4	.80	2 1/2" x 2" x 3/8"	5'-0"	3'-0"	4'-0"	1'-6"	1'-3" x 1'-3"	2'-1 1/2" x 8 1/2"	30L06
	30L07	5"	2 1/2" x 2 1/2" x 1/4"	2.38	.72	1.4	.77	2.6	1.05	2 1/2" x 2 1/2" x 3/8"				1'-6"	1'-3" x 1'-3"	2'-1 1/2" x 8 1/2"	30L07
	30L08	5"	3" x 2 1/2" x 1/4"	2.62	.91	2.3	.95	2.6	1.00	2 1/2" x 2" x 1/4"				1'-6"	1'-3" x 1'-3"	2'-1 1/2" x 8 1/2"	30L08
	30L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"				1'-6"	1'-3" x 1'-3"	2'-1 1/2" x 8 1/2"	30L09
	30L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				1'-6"	1'-3" x 1'-3"	2'-1 1/2" x 8 1/2"	30L10
	30L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L11
	30L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L12
	30L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L13
	30L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L14
	30L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L15
30L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"	1'-5"	1'-2" x 1'-2"	2'-1 1/2" x 8 1/2"	30L16				
32	32L07	5"	2 1/2" x 2" x 1/4"	2.12	.72	1.4	.77	2.6	1.05	2 1/2" x 2" x 1/2"	5'-3 3/4"	3'-2 1/4"	4'-3"	1'-6"	1'-4" x 1'-4"	2'-4 1/2" x 9 1/2"	32L07
	32L08	5"	3" x 2 1/2" x 1/4"	2.62	.91	2.3	.95	2.6	1.00	2 1/2" x 2" x 1/2"				1'-7"	1'-5" x 1'-5"	2'-4 1/2" x 9 1/2"	32L08
	32L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"				1'-6"	1'-4" x 1'-4"	2'-4 1/2" x 9 1/2"	32L09
	32L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				1'-6"	1'-4" x 1'-4"	2'-4 1/2" x 9 1/2"	32L10
	32L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				1'-6"	1'-4" x 1'-4"	2'-3" x 9"	32L11
	32L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				1'-6"	1'-4" x 1'-4"	2'-3" x 9"	32L12
	32L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				1'-6"	1'-4" x 1'-4"	2'-3" x 9"	32L13
	32L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				1'-6"	1'-4" x 1'-4"	2'-3" x 9"	32L14
	32L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				1'-6"	1'-3" x 1'-3"	2'-3" x 9"	32L15
	32L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"				1'-6"	1'-3" x 1'-3"	2'-3" x 9"	32L16
32L17	5"	4" x 4" x 1 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"	1'-6"	1'-3" x 1'-3"	2'-3" x 9"	32L17				
36	36L08	5"	3" x 2 1/2" x 1/4"	2.62	.91	2.3	.95	2.6	1.00	2 1/2" x 2" x 1/2"	5'-11 1/4"	3'-6 1/4"	4'-9"	1'-10"	1'-7" x 1'-7"	2'-9" x 11"	36L08
	36L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"				1'-10"	1'-7" x 1'-7"	2'-9" x 11"	36L09
	36L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L10
	36L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L11
	36L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L12
	36L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L13
	36L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L14
	36L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L15
	36L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"				1'-9"	1'-6" x 1'-6"	2'-7 1/2" x 10 1/2"	36L16
	36L17	5"	4" x 4" x 1 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"				1'-8"	1'-5" x 1'-5"	2'-6" x 10"	36L17
36L18	7"	6" x 4" x 1 1/2"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1 1/2"	1'-8"	1'-5" x 1'-5"	2'-6" x 10"	36L18				
40	40L09	5"	3" x 3" x 1/4"	2.88	.84	2.5	.93	4.5	1.25	2 1/2" x 2 1/2" x 1/4"	6'-6 1/4"	3'-11 1/4"	5'-3"	2'-1"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L09
	40L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"				2'-1"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L10
	40L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				2'-0"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L11
	40L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				2'-0"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L12
	40L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				2'-0"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L13
	40L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				2'-0"	1'-9" x 1'-9"	3'-0" x 11'-0"	40L14
	40L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				2'-0"	1'-8" x 1'-8"	2'-10 1/2" x 11 1/2"	40L15
	40L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"				2'-0"	1'-8" x 1'-8"	2'-10 1/2" x 11 1/2"	40L16
	40L17	5"	4" x 4" x 1 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"				2'-1"	1'-8" x 1'-8"	2'-10 1/2" x 11 1/2"	40L17
	40L18	7"	6" x 4" x 1 1/2"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1 1/2"				2'-1"	1'-7" x 1'-7"	2'-9" x 11"	40L18
44	44L10	5"	3 1/2" x 3" x 1/4"	3.12	1.04	3.8	1.11	4.6	1.21	3" x 2 1/2" x 1/4"	7'-2 1/4"	4'-3 3/4"	5'-9"	2'-3"	1'-11" x 1'-11"	3'-4 1/2" x 11'-1 1/2"	44L10
	44L11	5"	3" x 3" x 1/2"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"				2'-3"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L11
	44L12	5"	3 1/2" x 3" x 1/2"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				2'-3"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L12
	44L13	5"	3 1/2" x 3" x 3/8"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/2"				2'-3"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L13
	44L14	5"	4" x 3" x 3/8"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 3/8"				2'-2"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L14
	44L15	5"	4" x 4" x 3/8"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 3/8"				2'-2"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L15
	44L16	5"	4" x 4" x 1/2"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/2"				2'-2"	1'-11" x 1'-11"	3'-3" x 11'-1"	44L16
	44L17	5"	4" x 4" x 1 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"				2'-2"	1'-10" x 1'-10"	3'-3" x 11'-1"	44L17
	44L18	7"	6" x 4" x 1 1/2"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1 1/2"				2'-1"	1'-10" x 1'-10"	3'-1 1/2" x 11'-0"	4

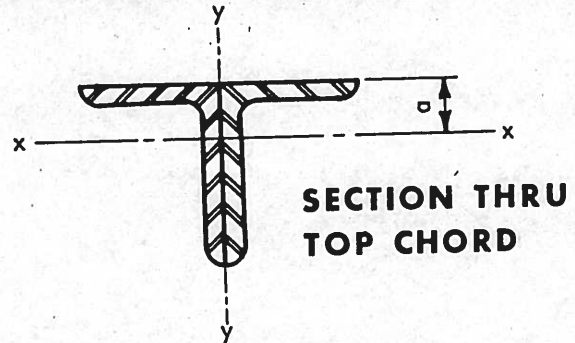
# DIMENSIONS and SECTIONS



**TOP BEARING JOISTS**

**BOTTOM BEARING JOISTS**

## DIMENSIONS - PANEL SPACING AND TOP CHORD SECTION PROPERTIES



**SECTION THRU TOP CHORD**

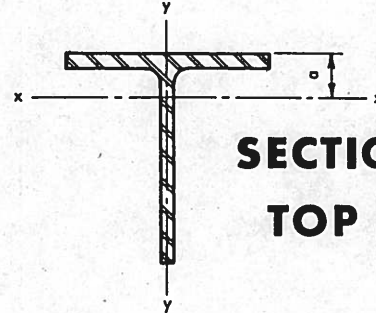
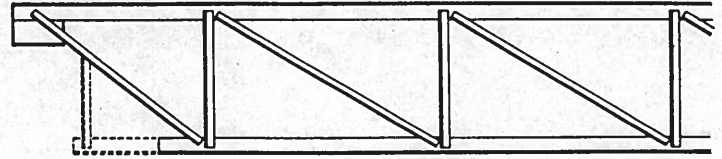
Joist Depth Inches	Joist Type	End Depth E	Top 2 Angles	Total Area Inches <sup>2</sup>	a Inches	Axis X-X		Axis Y-Y		Bottom 2 Angles	Panel Lengths			Size of Duct That Will Pass Thru Joist			Joist Type
						l Inches <sup>4</sup>	r Inches	l Inches <sup>4</sup>	r Inches		Exterior G		Interior H	Dia. Round	Square	Rectangular	
											Max.	Min.					
48	48L11	5"	3" x 3" x 1/4"	3.56	.87	3.0	.92	5.7	1.26	3" x 3" x 1/4"	7'-9 1/4"	4'-8 1/4"	6'-3"	2'-5"	2'-1" x 2'-1"	3'-7 1/2" x 1'-2 1/2"	48L11
	48L12	5"	3 1/2" x 3" x 1/4"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-7 1/2" x 1'-2 1/2"	48L12
	48L13	5"	3 1/2" x 3" x 1/4"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-7 1/2" x 1'-2 1/2"	48L13
	48L14	5"	4" x 3" x 1/4"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-7 1/2" x 1'-2 1/2"	48L14
	48L15	5"	4" x 4" x 1/4"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-6" x 1'-2"	48L15
	48L16	5"	4" x 4" x 1/4"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-6" x 1'-2"	48L16
	48L17	5"	4" x 4" x 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"				2'-5"	2'-1" x 2'-1"	3'-6" x 1'-2"	48L17
	48L18	7"	6" x 4" x 1/4"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1/4"				2'-5"	2'-1" x 2'-1"	3'-6" x 1'-2"	48L18
	48L19	7"	6" x 4" x 1/2"	9.50	1.99	34.8	1.91	21.9	1.52	4" x 4" x 1/2"				2'-4"	2'-0" x 2'-0"	3'-6" x 1'-2"	48L19
52	52L12	5"	3 1/2" x 3" x 1/4"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"	7'-9 1/4"	4'-8 1/4"	6'-3"	2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	52L12
	52L13	5"	3 1/2" x 3" x 1/4"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/4"				2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	52L13
	52L14	5"	4" x 3" x 1/4"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 1/4"				2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	52L14
	52L15	5"	4" x 4" x 1/2"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 1/4"				2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	52L15
	52L16	5"	4" x 4" x 1/4"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/4"				2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	52L16
	52L17	5"	4" x 4" x 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"				2'-7"	2'-2" x 2'-2"	3'-7 1/2" x 1'-2 1/2"	52L17
	52L18	7"	6" x 4" x 1/4"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1/4"				2'-6"	2'-2" x 2'-2"	3'-7 1/2" x 1'-2 1/2"	52L18
	52L19	7"	6" x 4" x 1/2"	9.50	1.99	34.8	1.91	21.9	1.52	4" x 4" x 1/2"				2'-6"	2'-2" x 2'-2"	3'-7 1/2" x 1'-2 1/2"	52L19
	54	54L12	5"	3 1/2" x 3" x 1/4"	3.86	1.06	4.7	1.10	5.7	1.22				3 1/2" x 3" x 1/4"	7'-9 1/4"	4'-8 1/4"	6'-3"
54L13		5"	3 1/2" x 3" x 1/4"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/4"	2'-8"	2'-4" x 2'-4"	3'-9" x 1'-3"	54L13			
54L14		5"	4" x 3" x 1/4"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 1/4"	2'-8"	2'-4" x 2'-4"	3'-9" x 1'-3"	54L14			
54L15		5"	4" x 4" x 1/4"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 1/4"	2'-8"	2'-3" x 2'-3"	3'-9" x 1'-3"	54L15			
54L16		5"	4" x 4" x 1/4"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/4"	2'-8"	2'-3" x 2'-3"	3'-9" x 1'-3"	54L16			
54L17		5"	4" x 4" x 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"	2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	54L17			
54L18		7"	6" x 4" x 1/4"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1/4"	2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	54L18			
54L19		7"	6" x 4" x 1/2"	9.50	1.99	34.8	1.91	21.9	1.52	4" x 4" x 1/2"	2'-7"	2'-3" x 2'-3"	3'-9" x 1'-3"	54L19			
56		56L12	5"	3 1/2" x 3" x 1/4"	3.86	1.06	4.7	1.10	5.7	1.22	3 1/2" x 3" x 1/4"	7'-9 1/4"	4'-8 1/4"	6'-3"			
	56L13	5"	3 1/2" x 3" x 1/4"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/4"	2'-9"				2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	56L13
	56L14	5"	4" x 3" x 1/4"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 1/4"	2'-9"				2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	56L14
	56L15	5"	4" x 4" x 1/4"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 1/4"	2'-9"				2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	56L15
	56L16	5"	4" x 4" x 1/4"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/4"	2'-9"				2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	56L16
	56L17	5"	4" x 4" x 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"	2'-8"				2'-4" x 2'-4"	3'-9" x 1'-3"	56L17
	56L18	7"	6" x 4" x 1/4"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1/4"	2'-8"				2'-3" x 2'-3"	3'-9" x 1'-3"	56L18
	56L19	7"	6" x 4" x 1/2"	9.50	1.99	34.8	1.91	21.9	1.52	4" x 4" x 1/2"	2'-8"				2'-3" x 2'-3"	3'-9" x 1'-3"	56L19
	60	60L13	5"	3 1/2" x 3" x 1/4"	4.60	1.08	5.4	1.09	6.8	1.22	3" x 3" x 1/4"				7'-9 1/4"	4'-8 1/4"	6'-3"
60L14		5"	4" x 3" x 1/4"	4.96	1.28	7.9	1.26	6.9	1.18	3 1/2" x 3" x 1/4"	2'-11"	2'-6" x 2'-6"	4'-0" x 1'-4"	60L14			
60L15		5"	4" x 4" x 1/4"	5.72	1.14	8.7	1.23	16.1	1.68	3 1/2" x 3 1/2" x 1/4"	2'-10"	2'-5" x 2'-5"	3'-10 1/2" x 1'-3 1/2"	60L15			
60L16		5"	4" x 4" x 1/4"	6.62	1.16	9.9	1.23	18.9	1.69	3 1/2" x 3 1/2" x 1/4"	2'-10"	2'-5" x 2'-5"	3'-10 1/2" x 1'-3 1/2"	60L16			
60L17		5"	4" x 4" x 1/2"	7.50	1.18	11.12	1.22	21.7	1.70	4" x 4" x 1/2"	2'-10"	2'-5" x 2'-5"	3'-10 1/2" x 1'-3 1/2"	60L17			
60L18		7"	6" x 4" x 1/4"	8.36	1.96	31.0	1.92	18.9	1.50	4" x 4" x 1/4"	2'-9"	2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	60L18			
60L19		7"	6" x 4" x 1/2"	9.50	1.99	34.8	1.91	21.9	1.52	4" x 4" x 1/2"	2'-9"	2'-4" x 2'-4"	3'-10 1/2" x 1'-3 1/2"	60L19			

\*Top Chord Angles Have Long Legs Vertical.  
\*\*Bottom Chord Angles Have Short Legs Vertical.



# of LONGSPAN STEEL JOISTS

# LONGSPAN



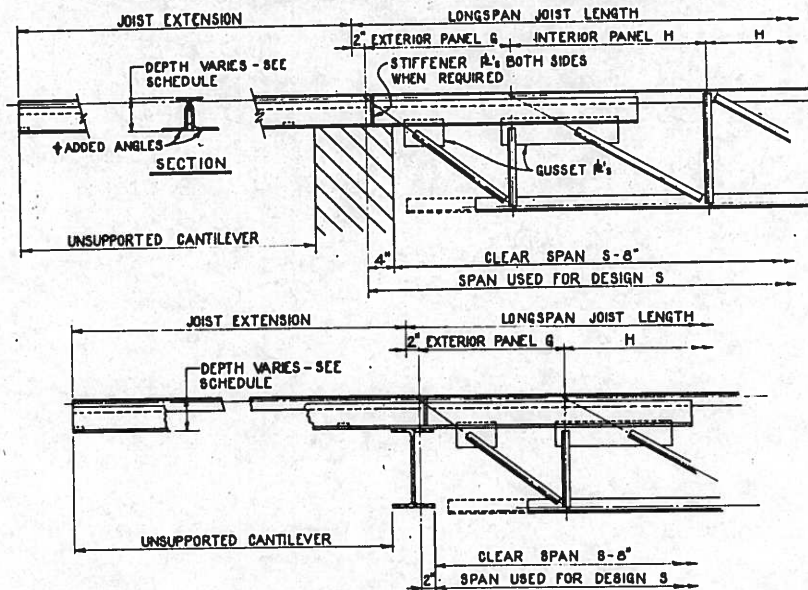
## SECTION THRU TOP CHORD

## DIMENSIONS - PANEL SPACING AND TOP CHORD SECTION PROPERTIES

Joist Depth in Inches D	Joist Type	End Depth E	Top "T" Chord	Total Area Inches <sup>2</sup>	a Inches	Axis X-X		Axis Y-Y		Bottom "T" Chord	Panel Lengths			Size of Duct That Will Pass Thru Joist			Joist Type
						l Inches <sup>4</sup>	r Inches	l Inches <sup>4</sup>	r Inches		Exterior G		Interior H	Dia. Round	Square	Rect- angular	
											Max.	Min.					
64	64L14	8"	ST7WF17	5.00	1.55	21.1	2.05	10.6	1.46	ST5WF10.5	8'-3"	4'-1½"	8'-3"	3'-3"	2'-10"x2'-10"	4'-9" x1'-7"	64L14
	64L15	8"	ST7WF19	5.59	1.56	23.5	2.05	12.3	1.49	ST5WF12.5				3'-3"	2'-10"x2'-10"	4'-9" x1'-7"	64L15
	64L16	9"	ST8WF22.5	6.62	1.87	37.8	2.39	15.2	1.52	ST7WF15				3'-1"	2'-8" x2'-8"	4'-7½"x1'-6½"	64L16
	64L17	9"	ST8WF25	7.35	1.89	42.2	2.40	17.4	1.54	ST7WF17				3'-1"	2'-8" x2'-8"	4'-7½"x1'-6½"	64L17
	64L18	9"	ST8WF29	8.52	1.70	43.6	2.26	30.2	1.88	ST8WF20				3'-0"	2'-7" x2'-7"	4'-6" x1'-6"	64L18
	64L19	10"	ST9WF32	9.40	1.93	61.8	2.56	35.2	1.93	ST8WF22.5				3'-0"	2'-7" x2'-7"	4'-6" x1'-6"	64L19
	64L20	10"	ST9WF35	10.28	1.96	68.1	2.57	39.2	1.95	ST7WF24				3'-1"	2'-8" x2'-8"	4'-7½"x1'-6½"	64L20
	64L21	10"	ST9WF38.5	11.32	1.99	75.3	2.58	44.3	1.98	ST8WF29				3'-0"	2'-7" x2'-7"	4'-6" x1'-6"	64L21
	64L22	11"	ST10WF41	12.05	2.48	115.4	3.09	44.8	1.93	ST9WF30				2'-11"	2'-6" x2'-6"	4'-4½"x1'-5½"	64L22
	64L23	10"	ST9WF42.5	12.49	2.05	84.4	2.60	49.7	2.00	ST9WF32				2'-11"	2'-6" x2'-6"	4'-4½"x1'-5½"	64L23
68	68L14	8"	ST7WF17	5.00	1.55	21.1	2.05	10.6	1.46	ST5WF10.5	8'-9"	4'-4½"	8'-9"	3'-6"	3'-0" x3'-0"	5'-1½"x1'-8½"	68L14
	68L15	8"	ST7WF19	5.59	1.56	23.5	2.05	12.3	1.49	ST5WF12.5				3'-6"	3'-0" x3'-0"	5'-1½"x1'-8½"	68L15
	68L16	9"	ST8WF22.5	6.62	1.87	37.8	2.39	15.2	1.52	ST7WF15				3'-4"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L16
	68L17	9"	ST8WF25	7.35	1.89	42.2	2.40	17.4	1.54	ST7WF17				3'-4"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L17
	68L18	9"	ST8WF29	8.52	1.70	43.6	2.26	30.2	1.88	ST8WF20				3'-3"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L18
	68L19	10"	ST9WF32	9.40	1.93	61.8	2.56	35.2	1.93	ST8WF22.5				3'-3"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L19
	68L20	10"	ST9WF35	10.28	1.96	68.1	2.57	39.2	1.95	ST7WF24				3'-4"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L20
	68L21	10"	ST9WF38.5	11.32	1.99	75.3	2.58	44.3	1.98	ST8WF29				3'-3"	2'-10"x2'-10"	4'-10½"x1'-7½"	68L21
	68L22	11"	ST10WF41	12.05	2.48	115.4	3.09	44.8	1.93	ST9WF30				3'-2"	2'-9" x2'-9"	4'-9" x1'-7"	68L22
	68L23	10"	ST9WF42.5	12.49	2.05	84.4	2.60	49.7	2.00	ST9WF32				3'-2"	2'-9" x2'-9"	4'-9" x1'-7"	68L23
68L24	11"	ST10WF48	14.11	2.55	137.1	3.11	54.7	1.97	ST9WF35	3'-2"	2'-9" x2'-9"	4'-9" x1'-7"	68L24				
72	72L15	8"	ST7WF19	5.59	1.56	23.5	2.05	12.3	1.49	ST5WF12.5	9'-3"	4'-7½"	9'-3"	3'-8"	3'-2" x3'-2"	5'-4½"x1'-9½"	72L15
	72L16	9"	ST8WF22.5	6.62	1.87	37.8	2.39	15.2	1.52	ST7WF15				3'-6"	3'-0" x3'-0"	5'-1½"x1'-8½"	72L16
	72L17	9"	ST8WF25	7.35	1.89	42.2	2.40	17.4	1.54	ST7WF17				3'-6"	3'-0" x3'-0"	5'-1½"x1'-8½"	72L17
	72L18	9"	ST8WF29	8.52	1.70	43.6	2.26	30.2	1.88	ST8WF20				3'-5"	3'-0" x3'-0"	5'-0" x1'-8"	72L18
	72L19	10"	ST9WF32	9.40	1.93	61.8	2.56	35.2	1.93	ST8WF22.5				3'-5"	3'-0" x3'-0"	5'-0" x1'-8"	72L19
	72L20	10"	ST9WF35	10.28	1.96	68.1	2.57	39.2	1.95	ST7WF24				3'-6"	3'-0" x3'-0"	5'-1½"x1'-8½"	72L20
	72L21	10"	ST9WF38.5	11.32	1.99	75.3	2.58	44.3	1.98	ST8WF29				3'-5"	3'-0" x3'-0"	5'-0" x1'-8"	72L21
	72L22	11"	ST10WF41	12.05	2.48	115.4	3.09	44.8	1.93	ST9WF30				3'-4"	2'-11"x2'-11"	4'-10½"x1'-7½"	72L22
	72L23	10"	ST9WF42.5	12.49	2.05	84.4	2.60	49.7	2.00	ST9WF32				3'-4"	2'-11"x2'-11"	4'-10½"x1'-7½"	72L23
	72L24	11"	ST10WF48	14.11	2.55	137.1	3.11	54.7	1.97	ST9WF35				3'-4"	2'-11"x2'-11"	4'-10½"x1'-7½"	72L24
76	76L16	9"	ST8WF22.5	6.62	1.87	37.8	2.39	15.2	1.52	ST7WF15	9'-9"	4'-10½"	9'-9"	3'-10"	3'-3" x3'-3"	5'-7½"x1'-10½"	76L16
	76L17	9"	ST8WF25	7.35	1.89	42.2	2.40	17.4	1.54	ST7WF17				3'-10"	3'-3" x3'-3"	5'-7½"x1'-10½"	76L17
	76L18	9"	ST8WF29	8.52	1.70	43.6	2.26	30.2	1.88	ST8WF20				3'-9"	3'-2" x3'-2"	5'-6" x1'-10"	76L18
	76L19	10"	ST9WF32	9.40	1.93	61.8	2.56	35.2	1.93	ST8WF22.5				3'-9"	3'-2" x3'-2"	5'-6" x1'-10"	76L19
	76L20	10"	ST9WF35	10.28	1.96	68.1	2.57	39.2	1.95	ST7WF24				3'-10"	3'-3" x3'-3"	5'-7½"x1'-10½"	76L20
	76L21	10"	ST9WF38.5	11.32	1.99	75.3	2.58	44.3	1.98	ST8WF29				3'-9"	3'-2" x3'-2"	5'-6" x1'-10"	76L21
	76L22	11"	ST10WF41	12.05	2.48	115.4	3.09	44.8	1.93	ST9WF30				3'-8"	3'-2" x3'-2"	5'-4½"x1'-9½"	76L22
	76L23	10"	ST9WF42.5	12.49	2.05	84.4	2.60	49.7	2.00	ST9WF32				3'-8"	3'-2" x3'-2"	5'-4½"x1'-9½"	76L23
76L24	11"	ST10WF48	14.11	2.55	137.1	3.11	54.7	1.97	ST9WF35	3'-8"	3'-2" x3'-2"	5'-4½"x1'-9½"	76L24				

Because of Manufacturing Problems "T" Chords are Used On All Joists over 64" Deep.

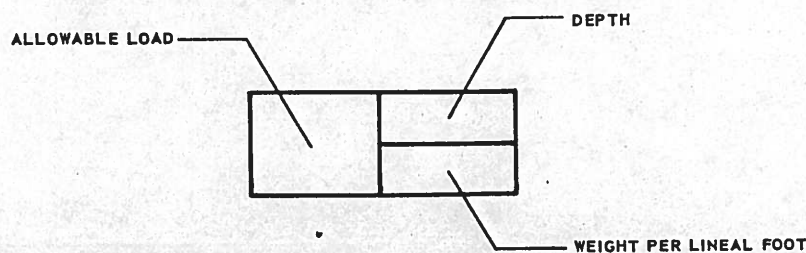
# EXTENDED ENDS FOR LONGSPAN JOISTS 18" to 60" Inclusive



TOP CHORD 2 ANGLES	*ALLOWABLE LOADS - POUNDS PER LINEAL FOOT OF UNSUPPORTED CANTILEVER																			
	1'-0"		2'-0"		3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"		10'-0"	
	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"	5"	7"
L02	700	4.24	700	21.24	700	21.24	700	21.24	659	21.24	381	21.24	303	29.84	474	32.84	333	32.84	260	36.64
L03	700	5"	312	5"	700	5"	700	5"	698	5"	403	5"	329	5"	505	5"	355	5"	276	5"
		4.88		4.88		21.88		21.88		21.88		21.88		30.48		33.48		33.48		37.28
L04	700	5"	500	5"	700	5"	700	5"	582	5"	337	5"	301	5"	514	5"	361	5"	282	5"
		5.5		5.5		16.3		16.3		16.3		16.3		28.10		34.1		34.1		37.9
L05	700	5"	405	5"	700	5"	700	5"	700	5"	471	5"	331	5"	562	5"	395	5"	306	5"
		6.38		6.38		23.38		23.38		23.38		23.38		25.98		34.98		34.98		38.78
L06	700	5"	665	5"	700	5"	700	5"	659	5"	381	5"	332	5"	569	5"	400	5"	310	5"
		7.24		7.24		18.04		18.04		18.04		18.04		26.84		35.84		35.84		39.64
L07	700	5"	665	5"	700	5"	700	5"	700	5"	414	5"	321	5"	316	5"	427	5"	311	5"
		8.2		8.2		19.0		19.0		19.0		19.0		25.2		40.6		36.8		36.8
L08	700	5"	700	5"	395	5"	700	5"	662	5"	381	5"	321	5"	300	5"	302	5"	312	5"
		9.0		9.0		18.0		18.0		18.0		18.0		24.8		37.6		37.6		37.6
L09	700	5"	700	5"	430	5"	700	5"	700	5"	413	5"	306	5"	322	5"	328	5"	330	5"
		9.8		9.8		18.8		18.8		18.8		18.8		22.0		38.4		38.4		38.4
L10	700	5"	700	5"	578	5"	700	5"	700	5"	414	5"	306	5"	320	5"	326	5"	329	5"
		10.8		10.8		19.8		19.8		19.8		19.8		23.0		39.4		39.4		39.4
L11	700	5"	700	5"	516	5"	700	5"	700	5"	448	5"	306	5"	319	5"	314	5"	358	5"
		12.2		12.2		21.2		21.2		21.2		21.2		22.0		37.8		34.8		40.8
L12	700	5"	700	5"	700	5"	340	5"	700	5"	539	5"	340	5"	303	5"	315	5"	359	5"
		13.2		13.2		13.2		25.4		25.4		25.4		25.4		35.8		35.8		41.8
L13	700	5"	700	5"	700	5"	390	5"	700	5"	580	5"	365	5"	305	5"	319	5"	359	5"
		15.8		15.8		15.8		28.0		28.0		28.0		28.0		35.4		32.8		44.4
L14	700	5"	700	5"	700	5"	570	5"	700	5"	594	5"	375	5"	300	5"	319	5"	305	5"
		17.0		17.0		17.0		29.2		29.2		29.2		29.2		34.0		34.0		49.4
L15	700	5"	700	5"	700	5"	643	5"	320	5"	670	5"	422	5"	302	5"	308	5"	331	5"
		19.6		19.6		19.6		19.6		31.8		31.8		31.8		32.8		48.2		48.2
L16	700	5"	700	5"	700	5"	700	5"	365	5"	700	5"	450	5"	301	5"	329	5"	316	5"
		22.6		22.6		22.6		22.6		34.8		34.8		34.8		34.8		51.2		48.2
L17	700	5"	700	5"	700	5"	700	5"	414	5"	700	5"	475	5"	319	5"	308	5"	316	5"
		25.6		25.6		25.6		25.6		37.8		37.8		37.8		37.8		51.2		48.2
L18	700	5"	700	5"	700	5"	700	5"	700	5"	663	5"	418	5"	534	5"	376	5"	303	5"
		28.6		28.6		28.6		28.6		28.6		28.6		28.6		40.8		40.8		44.4
L19	700	5"	700	5"	700	5"	700	5"	700	5"	700	5"	470	5"	315	5"	403	5"	306	5"
		32.4		32.4		32.4		32.4		32.4		32.4		32.4		32.4		44.6		45.6

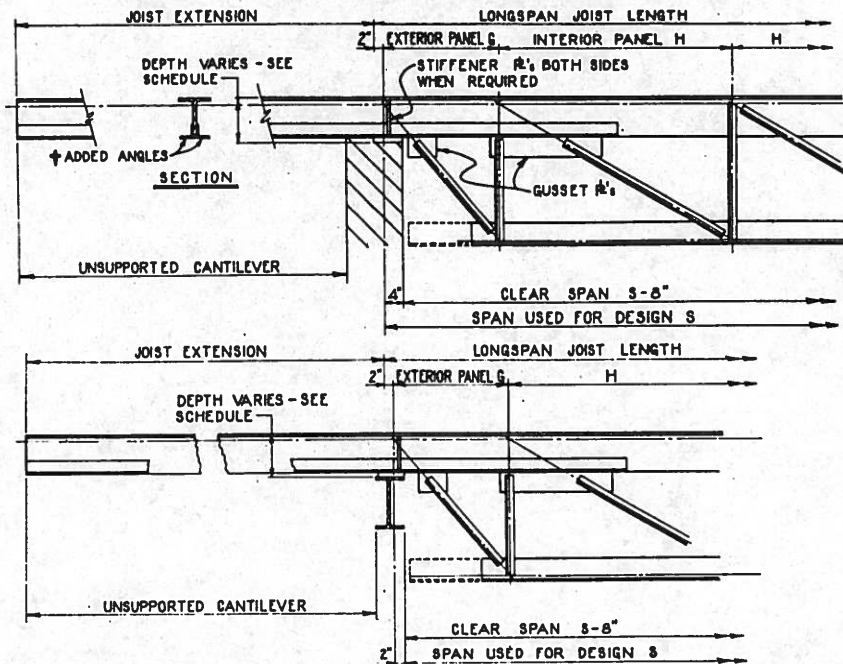
\*Deduct weight of End and all other Dead Loads for Allowable Live Load.

†Left of Heavy Line No Angle Reinforcement Req'd. - Right of Heavy Line Angle Reinforcements Req'd.





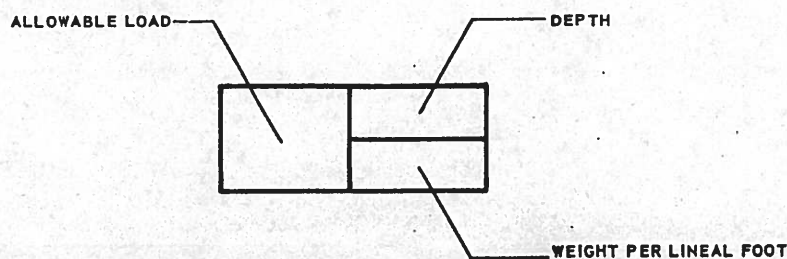
# EXTENDED ENDS FOR LONGSPAN JOISTS 64" to 76" Inclusive



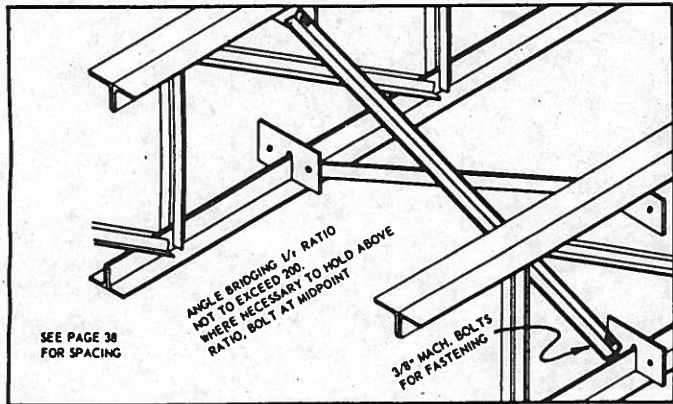
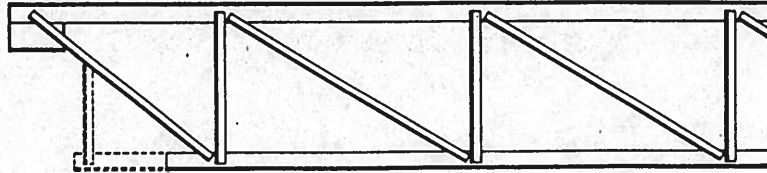
TOP HORD TEE	*ALLOWABLE LOADS – POUNDS PER LINEAL FOOT OF UNSUPPORTED CANTILEVER																			
	1'-0"		2'-0"		3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"		10'-0"	
L14	700	8"	700	8"	700	8"	700	8"	360	8"	700	8"	700	8"	612	8"	430	8"	313	8"
		17.0		17.0		17.0		17.0		17.0		29.2		29.2		29.2		29.2		29.2
L15	700	8"	700	8"	700	8"	700	8"	446	8"	700	8"	700	8"	663	8"	466	8"	339	8"
		19.0		19.0		19.0		19.0		19.0		31.2		31.2		31.2		31.2		31.2
L16	700	9"	700	9"	700	9"	700	9"	700	9"	406	9"	700	9"	700	9"	537	9"	391	9"
		22.5		22.5		22.5		22.5		22.5		22.5		28.88		28.88		28.88		28.88
L17	700	9"	700	9"	700	9"	700	9"	700	9"	495	9"	313	9"	700	9"	577	9"	420	9"
		25.0		25.0		25.0		25.0		25.0		25.0		25.0		31.38		31.38		31.38
L18	700	9"	700	9"	700	9"	700	9"	700	9"	550	9"	345	9"	700	9"	618	9"	450	9"
		29.0		29.0		29.0		29.0		29.0		29.0		29.0		35.38		35.38		35.38
L19	700	10"	700	10"	700	10"	700	10"	700	10"	687	10"	434	10"	700	10"	700	10"	589	10"
		32.0		32.0		32.0		32.0		32.0		32.0		32.0		38.38		38.38		38.38
L20	700	10"	700	10"	700	10"	700	10"	700	10"	700	10"	481	10"	345	10"	700	10"	624	10"
		35.0		35.0		35.0		35.0		35.0		35.0		35.0		41.38		41.38		41.38
L21	700	10"	700	10"	700	10"	700	10"	700	10"	700	10"	613	10"	412	10"	700	10"	668	10"
		38.5		38.5		38.5		38.5		38.5		38.5		38.5		44.88		44.88		44.88
L22	700	11"	700	11"	700	11"	700	11"	700	11"	700	11"	700	11"	587	11"	412	11"	301	11"
		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0
L23	700	10"	700	10"	700	10"	700	10"	700	10"	700	10"	700	10"	509	10"	358	10"	700	10"
		42.5		42.5		42.5		42.5		42.5		42.5		42.5		48.88		48.88		48.88
L24	700	11"	700	11"	700	11"	700	11"	700	11"	700	11"	700	11"	695	11"	487	11"	355	11"
		48.0		48.0		48.0		48.0		48.0		48.0		48.0		48.0		48.0		48.0

\*Deduct weight of end and all other dead loads for Allowable Live Load

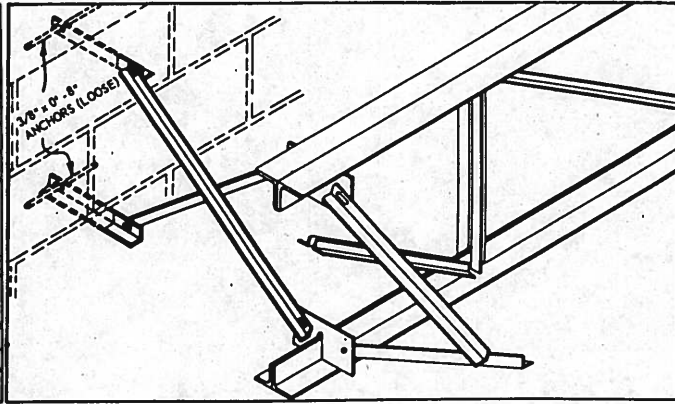
†Left of Heavy Line No Angle Reinforcements Req'd. - Right of Heavy Line Angle Reinforcements Req'd.



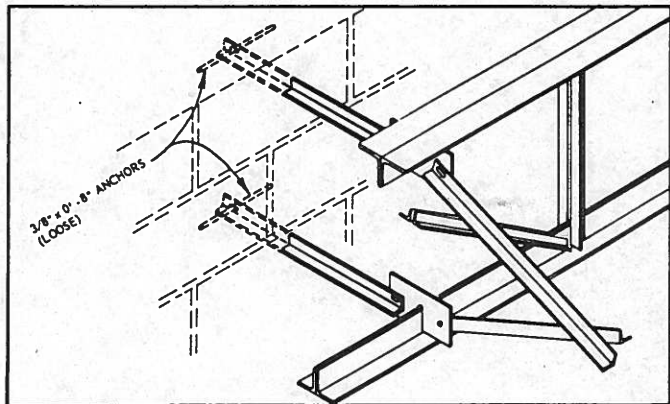
# LONGSPAN



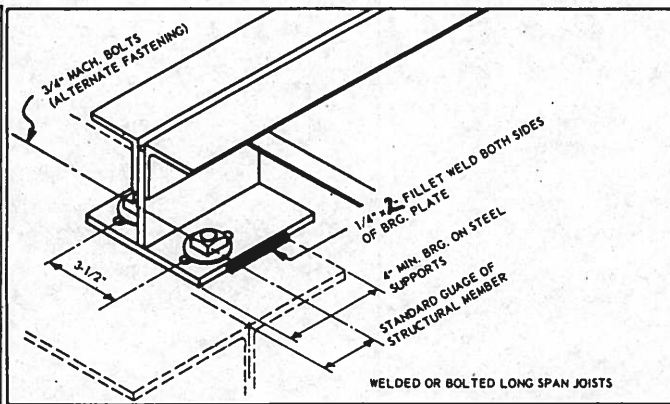
**FIGURE 18**  
**BRIDGING**



**FIGURE 19**  
**LATERAL ANCHOR**  
**FOR JOIST AWAY FROM WALL**



**FIGURE 20**  
**LATERAL ANCHOR**  
**FOR JOIST CLOSE TO WALL**



**FIGURE 21**  
**WELDED OR BOLTED**  
**ANCHOR**



# LONGSPAN

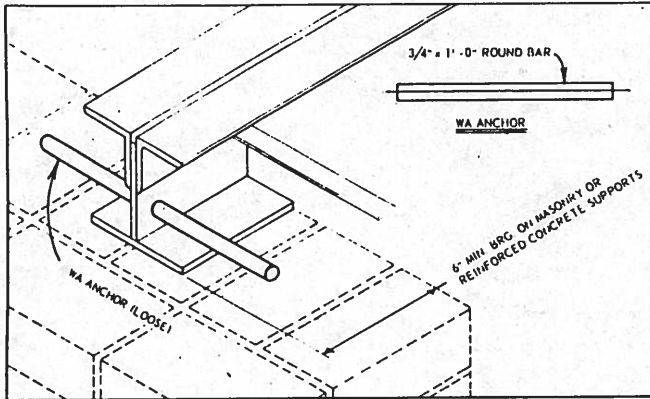
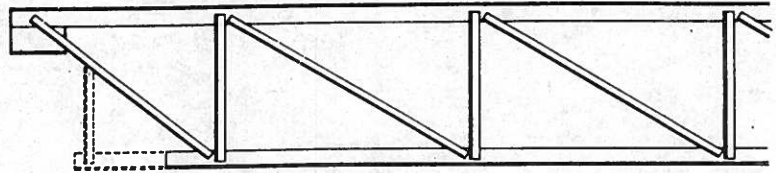


Figure 22

## MASONRY ANCHOR

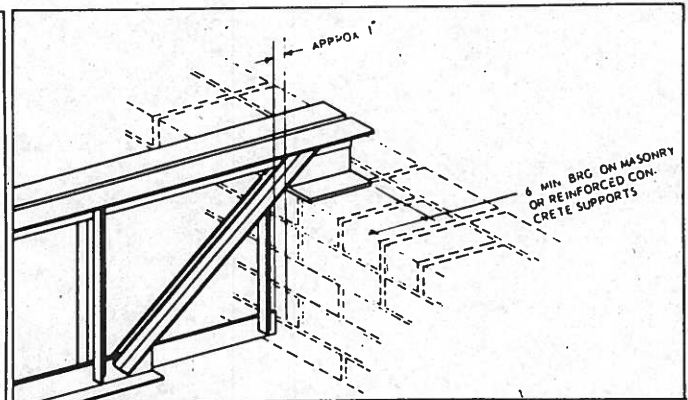


Figure 23

## CEILING EXTENSION

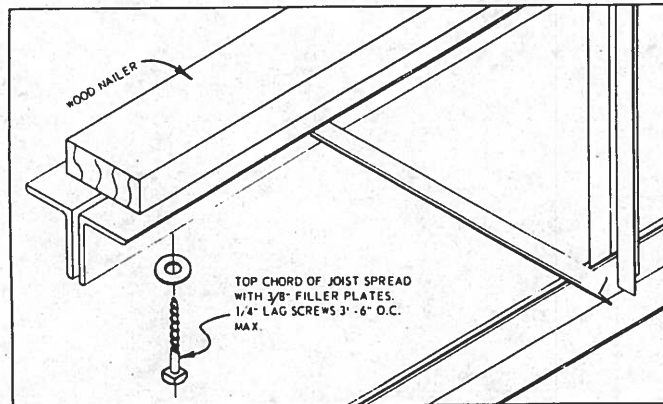
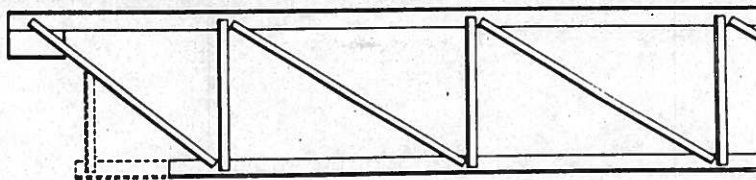


Figure 24

## WOOD NAILER

TENTATIVE

# SPECIFICATIONS for LONGSPAN



**1. General-** Where longspan steel joists are shown on the plans they shall be fabricated from hot rolled steel shapes and shall be designed as structural trusses in accordance with the American Institute of Steel Construction "Specifications for Design, Fabrication and Erection of Structural Steel Buildings."

**2. Materials-** All steel used in longspan steel joist construction shall conform to the American Society for Testing Materials "Standard Specification for Steel for Bridges and Buildings, Designation A7", of latest adoption.

**3. Connections.** All joints of longspan steel joists shall be made by welding, bolting, riveting or other approved methods. Connections at ends of members shall be proportioned to develop the actual design stress but not less than 50% of the allowable design strength of the members.

**4. Spacing-** The spacing of longspan steel joists shall not exceed the safe span of the floor slab or roof deck construction.

**5. Span-** The clear span of longspan steel joists shall not exceed 24 times the depth for roofs and 20 times the depth for floors.

**6. Anchorage-** Where longspan joists are supported by masonry or concrete walls they shall have a bearing of at least 6" and the ends of the longspan joists shall be anchored with a  $\frac{3}{4}$  inch round bar not less than 12 inches long. (See figure 22 page 37.)

Where longspan joists rest on steel supports they shall have a bearing of at least 4" and they shall be fastened with not less than two  $\frac{3}{4}$  inch bolts or by welds of equal strength. (See figure 21 page 36.)

**7. Wood Floors-** Where wood nailers are required at the top chord of the longspan joists the top chord is separated by a  $\frac{3}{8}$  inch filler. The nailers are secured by  $\frac{1}{4}$  inch lag screws or carriage bolts passed thru the space between the chords and spaced not over 3' - 6" center to center. (See figure 24 page 37.)

**8. Approximate Camber-** All longspan steel joists shall have approximate cambers in accordance with the following:

Top Chord Length	Camber
30'0"	$\frac{3}{8}$ "
40'0"	$\frac{5}{8}$ "
50'0"	1 $\frac{1}{4}$ "
60'0"	1 $\frac{1}{2}$ "
70'0"	2 $\frac{1}{4}$ "
80'0"	2 $\frac{3}{4}$ "
90'0"	3 $\frac{1}{2}$ "
100'0"	4 $\frac{1}{2}$ "
110'0"	5 $\frac{3}{8}$ "
120'0"	6 $\frac{3}{8}$ "
130'0"	7 $\frac{1}{2}$ "
140'0"	8 $\frac{1}{2}$ "
150'0"	10"

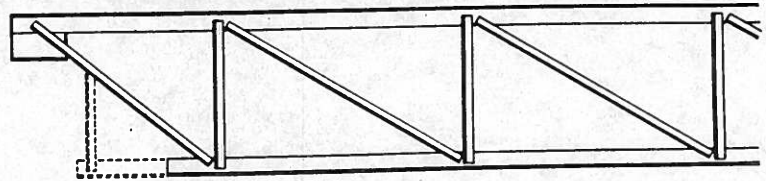
**9. Inspection-** All longspan joists shall be thoroughly inspected before shipment to make certain that materials and workmanship conform to the requirements of these specifications.

**10. Erection-** Longspan steel joists should be hoisted into place by hooking to the top chord of joists at approximately the third points. Hoisting facilities shall not be released during erection procedure until the line of bridging nearest midspan is installed, and in the case of bottom chord bearing longspan joists the ends of the top chords shall be restrained laterally. Care shall be exercised at all times to avoid damage through careless handling. As soon as longspan joists are erected they shall be permanently fastened in place and all bridging completely installed before the application of loads.



# STEEL JOISTS

# LONGSPAN



**11. Bridging-** As soon as longspan joists are in place and before any materials are attached to them bridging rows shall be applied as follows:

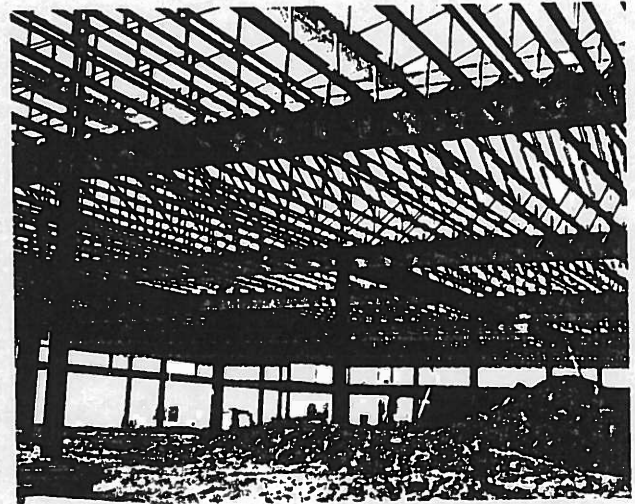
Joist Type	Maximum Spacing of Bridging Lines
#1 to #8 incl.	10'-0"
#9 to #16 incl.	12'-0"
#17 to #19 incl.	16'-0"
#20 to #24 incl.	18'-0"

Bridging shall consist of cross bracing having an  $l/r$  ratio of not more than 200.

$l$  = length of bracing from center to center of holes, except that where the cross bracing is connected at their point of intersection the above distance shall be the distance from the center of the bolt at the intersection to the center of the bolt on the joist.

$r$  = least radius of gyration of the bracing member.

**12. Painting-** All longspan joists receive a coat of black asphalt base paint applied by dipping or spraying after welding. This type of paint provides a practical protective coating. If additional coats of different types of paint are to be used, black asphalt will bleed through; therefore, in such cases a different primer can be applied.



**KNOLLWOOD PLAZA**  
**St. Louis Park, Minnesota**



**GENERAL MOTORS  
TRAINING CENTER**  
**Golden Valley, Minnesota**



**ADDITION TO  
TRUSSBILT PLANT**  
**St. Paul, Minnesota**