



STEELERJOIST™ **TECHNICAL DATA**





INTRODUCING THE *STEELER*[®] FLOOR JOIST

Available webs of 10", 12", & 14"

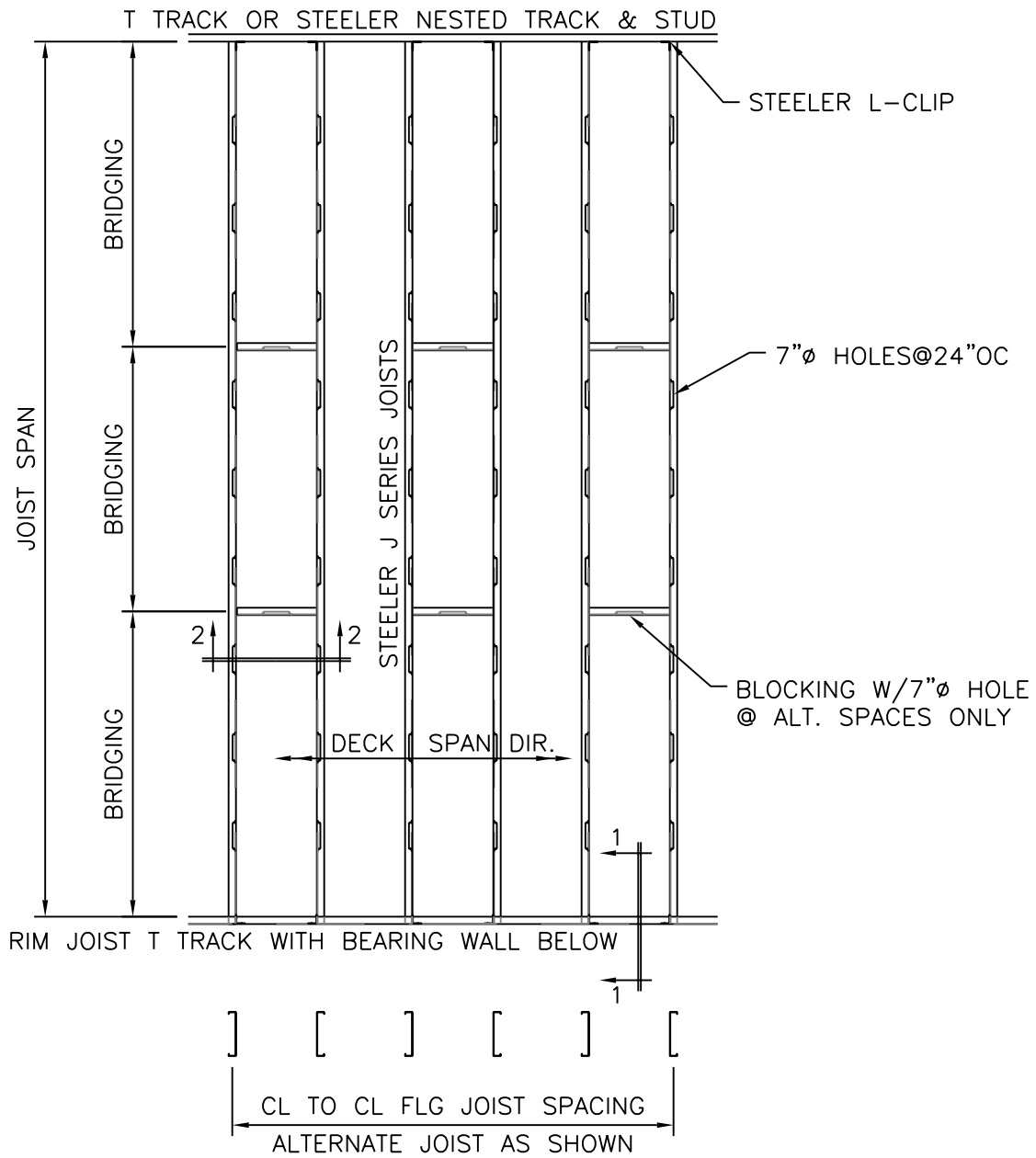
The 7" knock out every two feet offers more room for HVAC, plumbing and electrical wiring and strengthens the joist.

Available in 18, 16, and 14 gauge

Standard 2" Flange

Joist Clips Available

Call your local Steeler branch or Steeler Sales Representative for more details.

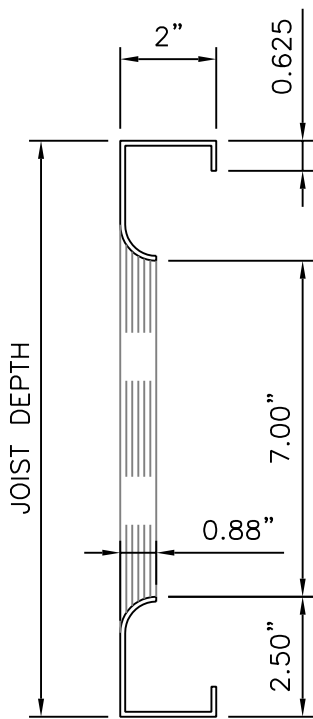


TYPICAL JOIST FRAMING PLAN

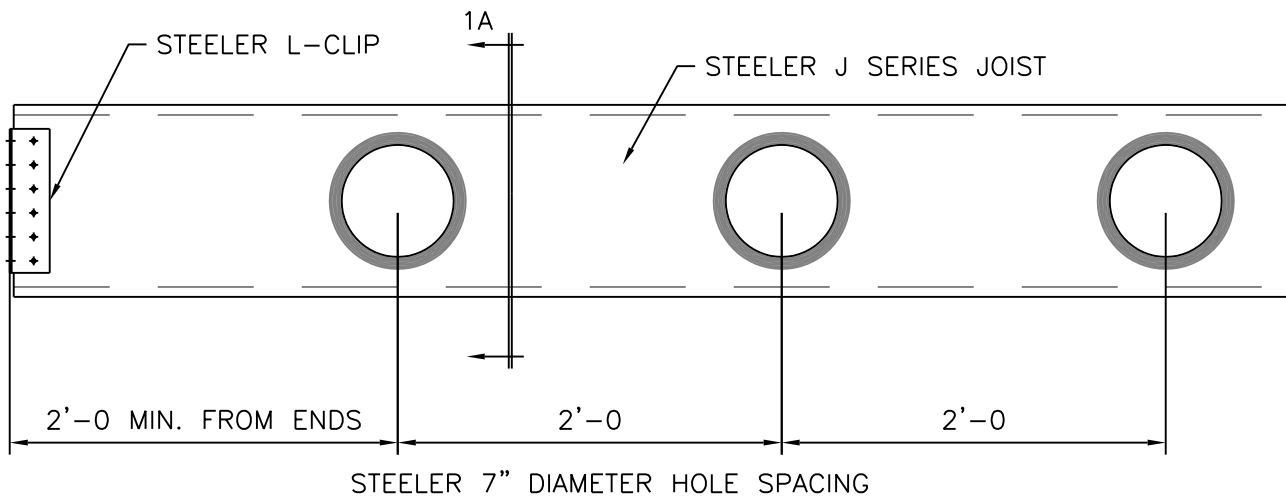
SCALE: 1/4"=1'-0

NOTES

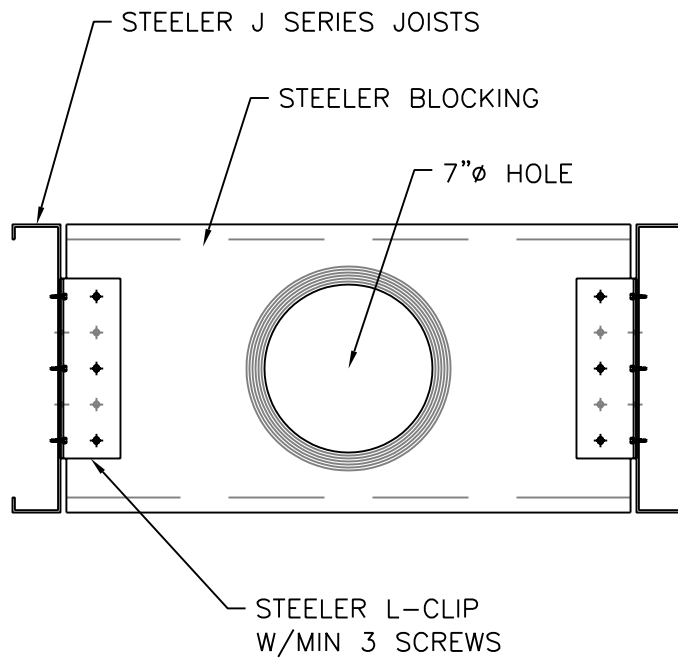
1. SEE TABLES 1J, 4J, & 5J FOR JOIST DESIGN.



SECTION 1A



SECTION 1-1
SCALE: 1/4"=1'-0"



SECTION 2-2
SCALE: 1/4"=1'-0

TABLE 1J FULL SECTION PROPERTY & FULLY BRACED STRENGTH TABLES - STEELER JOIST J Members

Member ID (1)	Design Thick. in	Full Properties (2)						Torsional					Effective, Fy=33 ksi (3)				Effective, Fy=50 ksi (3)				
		Area in ²	Weight lb/ft	Ix in ⁴	Rx in	Iy in ⁴	Ry in	J 10 ⁻³ in ⁴	Cw in ⁶	ro in	Xo in	Maxo k-in	Ixe in ⁴	Sxe(t) in ³	Sxe(b) in ³	Vay k	Maxo k-in	Ixe in ⁴	Sxe(t) in ³	Sxe(b) in ³	Vay k
*1000 J200-43	0.0451	0.672	2.286	9.086	3.676	0.309	0.678	0.456	6.043	3.909	-1.142	29.077	8.143	1.472	1.674	0.657	38.069	7.430	1.272	1.662	0.836
1000 J200-54	0.0566	0.839	2.854	11.279	3.666	0.378	0.671	0.896	7.373	3.894	-1.129	39.205	10.386	1.984	2.077	0.773	51.152	9.673	1.709	2.066	1.171
1000 J200-68	0.0713	1.050	3.568	13.996	3.652	0.460	0.662	1.779	8.938	3.874	-1.111	51.526	13.526	2.608	2.810	2.648	72.569	13.001	2.424	2.804	1.338
1000 J200-97	0.1017	1.474	5.012	19.340	3.622	0.611	0.644	5.082	11.737	3.833	-1.075	81.182	17.617	3.523	3.523	1.503	112.030	17.617	3.523	3.523	1.503
*1200 J200-54	0.0566	0.953	3.239	17.663	4.306	0.394	0.643	1.017	11.119	4.473	-1.025	47.932	15.996	2.426	2.799	1.377	62.168	14.508	2.076	2.768	1.377
1200 J200-68	0.0713	1.192	4.053	21.949	4.291	0.480	0.634	2.020	13.492	4.453	-1.008	63.548	20.428	3.216	3.470	2.648	88.823	19.655	2.967	3.462	2.770
1200 J200-97	0.1017	1.677	5.703	30.422	4.259	0.637	0.616	5.783	17.759	4.412	-0.973	96.830	28.663	4.770	4.785	3.509	139.540	28.435	4.661	4.786	5.317
*1400 J200-54	0.0566	1.066	3.624	25.952	4.935	0.406	0.617	1.138	15.752	5.061	-0.939	56.639	22.637	2.866	3.581	1.176	73.158	20.415	2.444	3.521	1.176
1400 J200-68	0.0713	1.335	4.538	32.286	4.918	0.495	0.609	2.262	19.128	5.041	-0.923	75.569	29.051	3.824	4.454	2.364	105.040	27.835	3.508	4.431	2.364
1400 J200-97	0.1017	1.881	6.395	44.858	4.884	0.657	0.591	6.484	25.215	4.999	-0.890	112.240	41.418	5.680	6.174	6.026	163.620	40.567	5.465	6.168	6.938
*1600 J200-68	0.0713	1.477	5.023	45.293	5.537	0.507	0.586	2.503	25.875	5.633	-0.852	87.572	39.335	4.432	5.510	2.062	121.230	37.582	4.049	5.463	2.062
1600 J200-97	0.1017	2.084	7.086	63.057	5.500	0.673	0.568	7.186	34.146	5.590	-0.820	128.950	56.440	6.526	7.678	6.042	187.390	55.096	6.259	7.655	6.042

Notes:

1. Members marked * have height to thickness ratios exceeding 200 and require bearing stiffeners at all supports.
2. Full Section Properties and Fully Braced Strength--2004 North American Specifications-US (ASD)
3. Effective Properties are calculated at center of 7" diameter flared holes.

Table 4J-01 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/180													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	110	94	76	60	48	40	34			
1000 J200-54 (50 ksi)	390	293	234	195	167	133	105	85	70	59	48		
1000 J200-68 (50 ksi)	446	335	268	223	191	167	149	121	100	82	65	52	
1000 J200-97 (50 ksi)	501	376	301	251	215	188	167	150	137	111	88	70	57
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	230	197	162	128	104	86	72	61	53	46
1200 J200-68 (50 ksi)	923	693	554	411	302	231	183	148	122	103	88	76	64
1200 J200-97 (50 ksi)	1772	1329	930	646	475	363	287	233	192	162	138	113	92
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	168	147	131	118	101	85	72	62	54
1400 J200-68 (50 ksi)	788	591	473	394	338	274	216	175	145	122	104	89	78
1400 J200-97 (50 ksi)	2313	1700	1088	756	555	425	336	272	225	189	161	139	121
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	258	229	202	167	140	120	103	90
1600 J200-97 (50 ksi)	2014	1511	1208	868	637	488	386	312	258	217	185	159	139

Table 4J-02 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/240													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	110	94	76	60	48	40	34			
1000 J200-54 (50 ksi)	390	293	234	195	167	133	105	79	60	46	36		
1000 J200-68 (50 ksi)	446	335	268	223	191	167	146	107	80	62	48	39	
1000 J200-97 (50 ksi)	501	376	301	251	215	188	167	144	108	84	66	53	43
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	230	197	162	128	104	86	69	54	43	35
1200 J200-68 (50 ksi)	923	693	554	411	302	231	183	148	121	93	73	59	48
1200 J200-97 (50 ksi)	1772	1329	930	646	475	363	287	233	175	135	106	85	69
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	168	147	131	118	101	85	72	61	50
1400 J200-68 (50 ksi)	788	591	473	394	338	274	216	175	145	122	104	83	68
1400 J200-97 (50 ksi)	2313	1700	1088	756	555	425	336	272	225	189	151	121	98
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	258	229	202	167	140	120	103	90
1600 J200-97 (50 ksi)	2014	1511	1208	868	637	488	386	312	258	217	185	159	134

Table 4J-03 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/360													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	110	94	76	60	44	33	26			
1000 J200-54 (50 ksi)	390	293	234	195	154	103	72	53	40	31	24		
1000 J200-68 (50 ksi)	446	335	268	223	191	139	97	71	53	41	32	26	
1000 J200-97 (50 ksi)	501	376	301	251	215	188	132	96	72	56	44	35	29
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	230	197	155	109	79	60	46	36	29	23
1200 J200-68 (50 ksi)	923	693	554	411	302	210	147	107	81	62	49	39	32
1200 J200-97 (50 ksi)	1772	1329	930	646	453	303	213	155	117	90	71	57	46
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	168	147	131	112	84	65	51	41	33
1400 J200-68 (50 ksi)	788	591	473	394	338	274	209	152	114	88	69	55	45
1400 J200-97 (50 ksi)	2313	1700	1088	756	555	425	304	222	167	128	101	81	66
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	258	229	202	154	119	93	75	61
1600 J200-97 (50 ksi)	2014	1511	1208	868	637	488	386	301	226	174	137	110	89

Notes:

- Members marked * have height to thickness ratios exceeding 200 and require bearing stiffeners at all supports.
- Tables were developed by solving strength, deflection and shear equations for minimum uniform (PLF) load.

Table 4J-04 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/480													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	110	94	65	46	33	25	19			
1000 J200-54 (50 ksi)	390	293	234	183	116	77	54	40	30	23	18		
1000 J200-68 (50 ksi)	446	335	268	223	155	104	73	53	40	31	24	19	
1000 J200-97 (50 ksi)	501	376	301	251	210	141	99	72	54	42	33	26	21
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	230	173	116	82	59	45	34	27	22	18
1200 J200-68 (50 ksi)	923	693	554	373	235	157	110	81	61	47	37	29	24
1200 J200-97 (50 ksi)	1772	1329	930	539	340	228	160	117	88	67	53	42	35
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	168	147	115	84	63	48	38	30	25
1400 J200-68 (50 ksi)	788	591	473	394	332	223	156	114	86	66	52	42	34
1400 J200-97 (50 ksi)	2313	1700	1088	756	485	325	228	166	125	96	76	61	49
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	258	211	154	116	89	70	56	46
1600 J200-97 (50 ksi)	2014	1511	1208	868	637	441	310	226	170	131	103	82	67

Table 4J-05 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/600													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	110	78	52	37	27	20	15			
1000 J200-54 (50 ksi)	390	293	234	147	92	62	43	32	24	18	14		
1000 J200-68 (50 ksi)	446	335	268	197	124	83	58	43	32	25	19	16	
1000 J200-97 (50 ksi)	501	376	301	251	168	113	79	58	43	33	26	21	17
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	220	139	93	65	48	36	28	22	17	14
1200 J200-68 (50 ksi)	923	693	515	298	188	126	88	64	48	37	29	23	19
1200 J200-97 (50 ksi)	1772	1329	746	431	272	182	128	93	70	54	42	34	28
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	168	131	92	67	50	39	30	24	20
1400 J200-68 (50 ksi)	788	591	473	394	266	178	125	91	69	53	42	33	27
1400 J200-97 (50 ksi)	2313	1700	1064	616	388	260	182	133	100	77	61	48	39
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	241	169	123	93	71	56	45	36
1600 J200-97 (50 ksi)	2014	1511	1208	836	527	353	248	181	136	105	82	66	54

Table 4J-06 STEELER FLOOR JOIST J200 Members													
Allowable Span Tables, PLF (Pounds per Linear Foot) Deflection Limit = L/720													
Member	Joist Span, ft												
	6	8	10	12	14	16	18	20	22	24	26	28	30
Web Depth 10.00" Flange Width 2.00"													
*1000 J200-43 (33 ksi)	219	164	131	103	65	43	31	22	17	13			
1000 J200-54 (50 ksi)	390	293	211	122	77	52	36	26	20	15	12		
1000 J200-68 (50 ksi)	446	335	268	164	104	69	49	36	27	21	16	13	
1000 J200-97 (50 ksi)	501	376	301	223	140	94	66	48	36	28	22	18	14
Web Depth 12.00" Flange Width 2.00"													
*1200 J200-54 (50 ksi)	459	344	275	183	116	77	54	40	30	23	18	14	12
1200 J200-68 (50 ksi)	923	693	429	249	157	105	74	54	40	31	24	20	16
1200 J200-97 (50 ksi)	1772	1214	621	360	226	152	107	78	58	45	35	28	23
Web Depth 14.00" Flange Width 2.00"													
*1400 J200-54 (50 ksi)	392	294	235	196	163	109	76	56	42	32	25	20	17
1400 J200-68 (50 ksi)	788	591	473	352	222	148	104	76	57	44	35	28	23
1400 J200-97 (50 ksi)	2313	1700	886	513	323	216	152	111	83	64	50	40	33
Web Depth 16.00" Flange Width 2.00"													
*1600 J200-68 (50 ksi)	687	516	412	344	295	200	141	103	77	59	47	37	30
1600 J200-97 (50 ksi)	2014	1511	1204	697	439	294	206	150	113	87	68	55	45

Notes:

- Members marked * have height to thickness ratios exceeding 200 and require bearing stiffeners at all supports.
- Tables were developed by solving strength, deflection and shear equations for minimum uniform (PLF) load.

Table 5J-01 STEELER FLOOR JOIST J200 Members							
Allowable Joist Span Tables, Feet: Total Load=L/360, Live Load=L/480							
Joist Size	No. Equal Spans	LL 30 psf, DL 10 psf			LL 40 psf, DL 10 psf		
		12"	16"	24"	12"	16"	24"
1000 J200-54 (50 ksi)	One	22.67	20.58	18.00	20.58	18.75	16.33
	Two	25.50	23.17	20.25	23.17	21.00	18.33
1000 J200-68 (50 ksi)	One	24.58	22.33	19.50	22.33	20.25	17.75
	Two	27.58	25.08	21.92	25.08	22.75	19.92
1000 J200-97(50 ksi)	One	27.58	25.08	21.92	25.08	22.75	19.92
	Two	31.00	28.17	24.58	28.17	25.58	22.33
1200 J200-68 (50 ksi)	One	28.33	25.75	22.50	25.75	23.33	20.42
	Two	31.83	28.92	25.25	28.92	26.25	22.92
1200 J200-97(50 ksi)	One	32.00	29.08	25.42	29.08	26.42	23.08
	Two	36.00	32.67	28.50	32.67	29.67	25.92
1400 J200-68 (50 ksi)	One	31.92	29.00	25.33	29.00	26.33	23.00
	Two	35.83	32.50	28.42	32.50	29.58	25.83
1400 J200-97(50 ksi)	One	36.25	32.92	28.75	32.92	29.92	26.08
	Two	40.67	36.92	32.25	36.92	33.58	29.33
1600 J200-97(50 ksi)	One	40.25	36.58	31.92	36.58	33.25	29.00
	Two	45.25	41.08	35.92	41.08	37.33	32.58

Table 5J-02 STEELER FLOOR JOIST J200 Members							
Allowable Joist Span Tables, Feet: Total Load=L/360, Live Load=L/480							
Joist Size	No. Equal Spans	LL 50 psf, DL 15 psf			LL 70 psf, DL 15 psf		
		12"	16"	24"	12"	16"	24"
1000 J200-54 (50 ksi)	One	19.17	17.42	15.17	17.08	15.50	13.58
	Two	21.50	19.50	15.42	19.25	16.92	12.67
1000 J200-68 (50 ksi)	One	20.75	18.83	16.42	18.50	16.83	14.67
	Two	23.25	21.17	18.50	20.83	18.92	16.50
1000 J200-97(50 ksi)	One	23.25	21.17	18.50	20.83	18.92	16.50
	Two	26.17	23.75	20.75	23.33	21.25	18.50
1200 J200-68 (50 ksi)	One	23.83	21.67	18.92	21.33	19.42	16.92
	Two	26.83	24.33	21.25	24.00	21.75	18.50
1200 J200-97(50 ksi)	One	27.00	24.50	21.42	24.17	21.92	19.17
	Two	30.33	27.58	24.08	27.08	24.58	21.50
1400 J200-68 (50 ksi)	One	26.92	24.42	21.33	24.00	21.83	19.08
	Two	30.17	27.42	22.00	27.00	24.25	18.17
1400 J200-97(50 ksi)	One	30.50	27.75	24.25	27.33	24.83	21.67
	Two	34.25	31.17	27.17	30.67	27.83	24.33
1600 J200-97(50 ksi)	One	33.92	30.83	26.92	30.33	27.58	24.08
	Two	38.17	34.67	30.25	34.08	30.92	27.00

Notes:

1. Tables based on the 2001 North American Specifications w/ 2004 Supplement-US (ASD)

Table 5J-03 STEELER FLOOR JOIST J200 Members

Allowable Joist Span Tables, Feet: Total Load=L/360, Live Load=L/480							
Joist Size	No. Equal Spans	LL 100 psf, DL 15 psf			LL 125 psf, DL 15 psf		
		12"	16"	24"	12"	16"	24"
1000 J200-54 (50 ksi)	One	15.17	13.83	12.08	14.08	12.83	11.00
	Two	16.75	13.67	10.17	14.58	11.83	8.75
1000 J200-68 (50 ksi)	One	16.42	14.92	13.08	15.25	13.83	12.08
	Two	18.50	16.75	14.42	17.17	15.58	13.08
1000 J200-97(50 ksi)	One	18.50	16.75	14.67	17.17	15.58	13.58
	Two	20.75	18.83	16.42	19.25	17.50	15.25
1200 J200-68 (50 ksi)	One	18.92	17.17	15.00	17.58	16.00	13.92
	Two	21.25	19.33	14.92	19.75	17.33	12.92
1200 J200-97(50 ksi)	One	21.42	19.50	17.00	19.92	18.08	15.75
	Two	24.08	21.83	19.08	22.33	20.25	17.75
1400 J200-68 (50 ksi)	One	21.33	19.42	16.92	19.83	18.00	15.67
	Two	23.92	19.58	14.50	20.92	16.92	12.42
1400 J200-97(50 ksi)	One	24.25	22.00	19.25	22.50	20.42	17.83
	Two	27.17	24.75	21.58	25.25	22.92	24.50
1600 J200-97(50 ksi)	One	26.92	24.50	21.33	25.00	22.75	19.83
	Two	30.25	27.50	23.75	28.08	25.50	21.50

Table 5J-04 STEELER FLOOR JOIST J200 Members

Allowable Joist Span Tables, Feet: Total Load=L/360, Live Load=L/480							
Joist Size	No. Equal Spans	LL 100 psf, DL 40 psf			LL 125 psf, DL 40 psf		
		12"	16"	24"	12"	16"	24"
1000 J200-54 (50 ksi)	One	14.92	13.50	11.00	14.08	12.42	10.00
	Two	14.58	11.83	8.75	13.00	10.50	7.67
1000 J200-68 (50 ksi)	One	16.17	14.67	12.83	15.25	13.83	12.08
	Two	18.50	16.08	13.08	17.08	14.75	11.75
1000 J200-97(50 ksi)	One	18.17	16.50	14.42	17.17	15.58	13.58
	Two	20.75	18.83	16.25	19.25	17.50	15.00
1200 J200-68 (50 ksi)	One	18.67	16.92	14.50	17.58	16.00	13.33
	Two	20.50	17.33	12.92	18.83	15.42	11.50
1200 J200-97(50 ksi)	One	21.08	19.17	16.75	19.92	18.08	15.75
	Two	24.08	21.83	18.17	22.33	20.25	16.75
1400 J200-68 (50 ksi)	One	21.00	19.08	15.75	19.83	17.75	14.25
	Two	20.92	16.92	12.42	18.58	15.00	10.92
1400 J200-97(50 ksi)	One	23.83	21.67	18.92	22.50	20.42	17.83
	Two	27.17	24.42	19.92	25.25	22.50	18.33
1600 J200-97(50 ksi)	One	26.50	24.08	21.00	25.00	22.75	19.75
	Two	30.25	26.33	21.50	28.00	24.25	19.75

Notes:

1. Tables based on the 2001 North American Specifications w/ 2004 Supplement-US (ASD)

INTERIOR & EXTERIOR FRAMING

Steeler Manufactured Products

- * Steel Studs & Track
- * Smooth Products™
- * Slotted Track
- * Sound Resilient Channel
- * Furring Channel
- * Cold-Rolled Channel
- * Angle
- * Flat Stock
- * Shaftwall Studs
- * J Track
- * Z-Furring Channel
- * Custom Brake Shapes
- * Steeler Slotted Studs™
- * Pony Wall Supports



INTERIOR FINISHING & DRYWALL

Steeler Product Offerings

- * Hanger Wire
- * U-Hank Tie Wire
- * Engineered Slide Clips
- * National Gypsum
- * The Steel Network
- * Knauf Insulation
- * Westpac Materials
- * Products from USG
- * Murco Wall Products
- * Award Metals Corner Beads
- * Trim-Tex Drywall Products
- * And more...



FASTENERS

Steeler Product Offerings

- * Super Steelers™*
- * Hi-Lo Super Steelers™
- * Super Woodies™*
- * Super Framers*
- * Super Lathers*
- * Super Hex Framers*
- * Super Laminating
- * Rust Resistant Screws
- * Drywall Drillers*
- * Cement Board Screws
- * Super Framing Drillers*
- * Wafer Head Drillers*
- * Super Hex Drillers*
- * And more...



*Denotes availability in zinc coating

TOOLS & ACCESSORIES

Steeler Product Offerings

- * Bit Tips & Bit Tip Holders
- * Magnetic Nut Runners
- * Chop Saw Blades
- * DeWalt
- * Empire Levels
- * Kett Tool Company
- * ToolPro
- * Pacific Laser Systems
- * Wal-Board Tools
- * Ramset Fastening Systems
- * 3M Construction Supplies
- * And more...



STEELER

CONSTRUCTION SUPPLY



STEELER® ICC-ES REPORT ESR-2054



(206) 725-2500 (206) 725-1700 FAX
(800) 275-2279 Toll Free

10023 Martin Luther King Jr. Way South
Seattle, WA 98178

marketing@steeler.com

www.steeler.com

Seattle
206-725-8500
206-725-1100 FAX

Spokane
509-926-7403
509-928-5741 FAX

Sacramento
916-483-3600
916-483-3018 FAX

Redmond
425-869-5555
425-869-5557 FAX

Tacoma
253-572-8200
253-572-8400 FAX

Delta, B.C.
604-940-1332
604-940-1334 FAX

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520-292-1037 FAX

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510-505-0200 FAX

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503-231-1100
503-235-2908 FAX

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661-399-3333
661-399-0004 FAX

Phoenix
623-848-0007
623-848-3055 FAX

San Diego
619-527-1000
619-527-1005 FAX