



REFINED METAL

Metal Material catalog 2025

website: www.refined-metal.com

phone: 929-235-7999

address: 15-30 131st College Point NY 11356

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REFINED METAL

Metal Material catalog

Metal Studs + Track



2x2

2x3

2x4

Any Gauge

Any Length



REFINED METAL

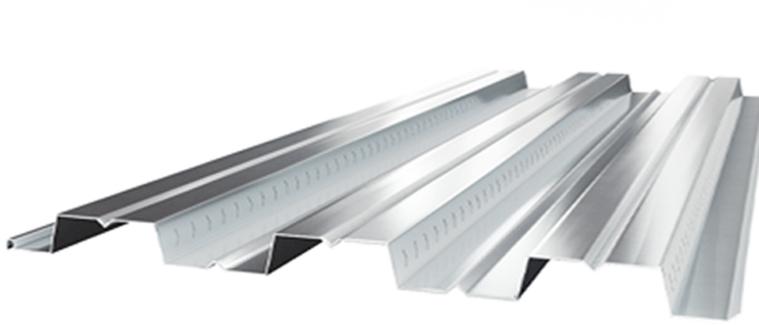
Metal Material catalog

Metal Deck 18 Gauge~24 Gauge Available Any Length

- composite metal decking



1 1/2"



2"



3"

C-Joist Any length Available



6"



8"



10"



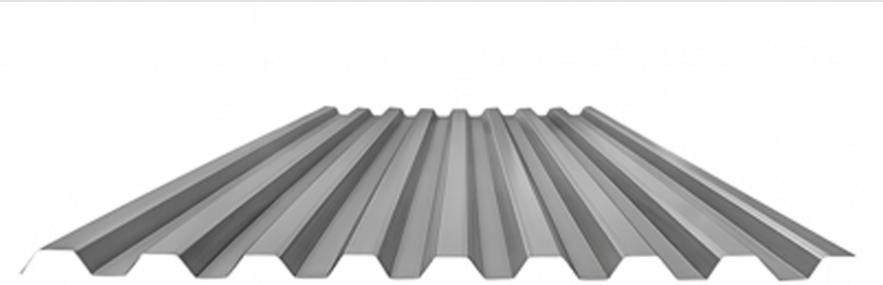
12"



REFINED METAL

Metal Material catalog

Standard Metal Deck Any Length Available

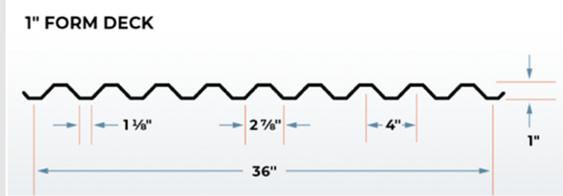


1 1/2"

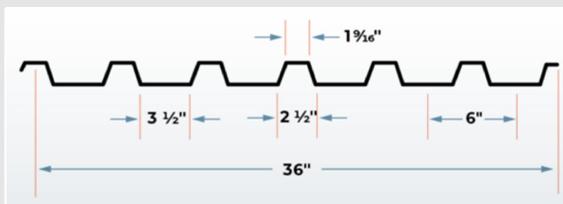


1 1/4"

Form Deck Any Length Available



1"



1 1/4"

C-Joist Product & Design

NON-STRUCTURAL PROPERTIES TABLES® STUDS

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy						Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-lbs)	V _{ag} (lb)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β	Beta	
1 5/8" STUDS																			
158S114-25	0.0190	70	0.086	0.29	0.040	0.685	0.019	0.468	0.035	0.028	1194	405	0.01032	0.012	-1.105	1.382	0.361		
158S114-22	0.0283	33	0.120	0.41	0.056	0.682	0.02	0.444	0.06	0.05	1.01	526	0.03	0.01	-1.05	1.33	0.38		
158S114-20	0.0312	33	0.137	0.47	0.064	0.681	0.029	0.458	0.064	0.067	1332	572	0.04459	0.017	-1.070	1.348	0.371		
2 1/2" STUDS																			
212S114-25	0.0190	70	0.104	0.35	0.107	1.017	0.023	0.470	0.099	0.056	2361	256	0.01250	0.031	-1.004	1.504	0.555		
212S114-22	0.0283	33	0.144	0.49	0.147	1.009	0.027	0.434	0.144	0.092	1.81	700	0.039	0.0333	-0.919	1.432	0.589		
212S114-20	0.0312	33	0.165	0.56	0.169	1.012	0.034	0.451	0.168	0.121	2356	832	0.05345	0.042	-0.941	1.454	0.581		
3 1/2" STUDS																			
312S114-25	0.0190	70	0.115	0.39	0.215	1.366	0.021	0.423	0.197	0.087	1,72	172	0.014	0.049	-0.819	1.648	0.753		
312S114-22	0.0283	33	0.173	0.59	0.320	1.361	0.030	0.418	0.312	0.147	2.90	589	0.046	0.071	-0.809	1.637	0.756		
312S114-20	0.0312	33	0.190	0.65	0.351	1.359	0.033	0.417	0.346	0.167	3.29	790	0.062	0.077	-0.805	1.634	0.757		
3 5/8" STUDS																			
358S114-25	0.0190	70	0.126	0.43	0.254	1.421	0.026	0.456	0.234	0.074	3102	174	0.01512	0.070	-0.884	1.734	0.740		
358S114-22	0.0283	33	0.176	0.60	0.347	1.404	0.031	0.416	0.338	0.154	3.05	568	0.047	0.077	-0.797	1.677	0.771		
358S114-20	0.0312	33	0.200	0.68	0.398	1.411	0.038	0.434	0.396	0.170	3358	776	0.06484	0.096	-0.820	1.689	0.764		
4" STUDS																			
4S114-25	0.0190	70	0.133	0.45	0.321	1.551	0.027	0.453	0.286	0.084	3532	157	0.01605	0.089	-0.859	1.830	0.780		
4S114-22	0.0283	33	0.187	0.64	0.438	1.531	0.031	0.410	0.426	0.178	3.52	511	0.050	0.096	-0.764	1.759	0.811		
4S114-20	0.0312	33	0.212	0.72	0.501	1.540	0.039	0.428	0.499	0.189	3737	701	0.06864	0.120	-0.787	1.781	0.805		
5 1/2" STUDS																			
550S114-25	0.0190	70	0.15	0.52	0.630	2,029	0.02	0.390					0.02	0.14	-0.67	2.17	0.91		
550S114-22	0.0283	33	0.23	0.78	0.938	2,023	0.03	0.385	0.93	0.25	5.00	366	0.06	0.2	-0.66	2.16	0.91		
550S114-20	0.0312	33	0.25	0.86	1.031	2,021	0.04	0.384	1.02	0.31	6.06	491	0.08	0.220	-0.65	2.16	0.91		
6" STUDS																			
600S114-25	0.0190	70	0.173	0.59	0.855	2,223	0.032	0.431	0.669	0.141	5,891	104	0.02083	0.233	-0.739	2.382	0.904		
600S114-22	0.0283	33	0.243	0.83	1.160	2,183	0.035	0.377	0.669	0.141	5,891	104	0.02083	0.233	-0.739	2.382	0.904		
600S114-20	0.0312	33	0.274	0.93	1.324	2,199	0.043	0.396	1.281	0.338	6,031	461	0.08888	0.303	-0.651	2.327	0.922		

STRUCTURAL PROPERTIES TABLES ° STUDS

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties								Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	M _{ad} (lb-k)	J _{x1000} (in ⁴)	C _w (in ³)	X _o (in)	R _o (in)	β Beta		
2 1/2 " STUDS																				
212S138-20	0.0346	33	0.197	0.671	0.203	0.163	1.02	0.0524	0.515	0.203	0.158	3.11	2.92	0.079	0.076	-1.14	1.61	0.499		
212S138-18	0.0451	33	0.255	0.868	0.261	0.208	1.01	0.0665	0.511	0.261	0.205	4.53*	4.06	0.173	0.096	-1.13	1.60	0.501		
212S138-16	0.0566	50	0.316	1.07	0.318	0.255	1.00	0.0802	0.504	0.318	0.244	8.22*	7.14	0.337	0.115	-1.11	1.58	0.504		
212S138-14	0.0713	50	0.390	1.33	0.386	0.309	0.99	0.0956	0.495	0.386	0.308	10.7*	9.16	0.661	0.138	-1.10	1.56	0.507		
212S138-12	0.1017	50	0.533	1.81	0.507	0.406	0.98	0.121	0.476	0.507	0.406	14.8*	12.06	1.84	0.176	-1.06	1.51	0.513		
212S158-20	0.0346	33	0.223	0.759	0.235	0.188	1.03	0.0870	0.624	0.235	0.180	3.55	3.42	0.089	0.146	-1.47	1.90	0.401		
212S158-18	0.0451	33	0.289	0.984	0.302	0.242	1.02	0.111	0.620	0.302	0.240	5.22*	4.72	0.196	0.184	-1.46	1.88	0.402		
212S158-16	0.0566	50	0.358	1.22	0.370	0.296	1.02	0.135	0.613	0.370	0.284	9.42*	8.35	0.383	0.223	-1.44	1.87	0.404		
212S158-14	0.0713	50	0.443	1.51	0.450	0.360	1.01	0.162	0.605	0.450	0.357	12.1*	10.72	0.752	0.268	-1.42	1.85	0.405		
212S158-12	0.1017	50	0.610	2.07	0.597	0.478	0.99	0.210	0.587	0.597	0.478	16.9*	14.21	2.10	0.346	-1.39	1.80	0.408		
212S2-20	0.0346	33	0.258	0.877	0.279	0.223	1.04	0.154	0.773	0.276	0.197	3.90	3.96	0.103	0.302	-1.93	2.32	0.312		
212S2-18	0.0451	33	0.334	1.14	0.358	0.287	1.04	0.198	0.769	0.358	0.278	5.49	5.50	0.227	0.382	-1.91	2.31	0.312		
212S2-16	0.0566	50	0.415	1.41	0.440	0.352	1.03	0.241	0.763	0.440	0.321	9.61	9.70	0.443	0.464	-1.90	2.29	0.313		
212S2-14	0.0713	50	0.515	1.75	0.538	0.430	1.02	0.293	0.755	0.538	0.417	14.0*	12.69	0.872	0.561	-1.88	2.27	0.313		
212S2-12	0.1017	50	0.711	2.42	0.719	0.575	1.01	0.386	0.737	0.719	0.575	19.8*	17.13	2.45	0.735	-1.84	2.22	0.314		
3 1/2 " STUDS																				
312S138-20	0.0346	33	0.232	0.789	0.442	0.252	1.38	0.0587	0.503	0.442	0.223	4.41	4.55	0.0925	0.153	-1.02	1.79	0.676		
312S138-18	0.0451	33	0.300	1.02	0.568	0.324	1.38	0.0746	0.498	0.568	0.307	6.07	6.39	0.204	0.193	-1.00	1.77	0.679		
312S138-16	0.0566	50	0.372	1.27	0.696	0.398	1.37	0.0900	0.492	0.696	0.366	10.95	11.43	0.398	0.233	-0.991	1.76	0.683		
312S138-14	0.0713	50	0.461	1.57	0.849	0.485	1.36	0.107	0.483	0.849	0.472	14.13	14.53	0.782	0.280	-0.973	1.74	0.687		
312S138-12	0.1017	50	0.635	2.16	1.13	0.646	1.33	0.136	0.463	1.13	0.630	22.91	19.34	2.19	0.361	-0.935	1.69	0.695		
312S158-20	0.0346	33	0.258	0.877	0.508	0.291	1.40	0.0981	0.617	0.508	0.257	5.09	5.01	0.103	0.277	-1.32	2.03	0.573		
312S158-18	0.0451	33	0.334	1.14	0.655	0.374	1.40	0.125	0.612	0.654	0.357	7.05	7.02	0.227	0.350	-1.31	2.01	0.575		
312S158-16	0.0566	50	0.415	1.41	0.805	0.460	1.39	0.152	0.606	0.804	0.426	12.74	12.41	0.443	0.426	-1.30	2.00	0.578		
312S158-14	0.0713	50	0.515	1.75	0.985	0.563	1.38	0.184	0.597	0.985	0.549	16.44	16.15	0.872	0.514	-1.28	1.98	0.581		
312S158-12	0.1017	50	0.711	2.42	1.32	0.755	1.36	0.238	0.579	1.32	0.739	26.20	22.11	2.45	0.672	-1.24	1.93	0.587		
312S2-20	0.0346	33	0.292	0.995	0.599	0.342	1.43	0.175	0.773	0.593	0.283	5.59	5.76	0.117	0.541	-1.76	2.40	0.461		
312S2-18	0.0451	33	0.379	1.29	0.771	0.441	1.43	0.224	0.768	0.771	0.410	8.09	8.09	0.257	0.687	-1.75	2.38	0.462		
312S2-16	0.0566	50	0.471	1.60	0.950	0.543	1.42	0.274	0.762	0.950	0.470	14.07	14.29	0.503	0.838	-1.73	2.37	0.464		
312S2-14	0.0713	50	0.586	1.99	1.17	0.667	1.41	0.333	0.754	1.17	0.638	19.11	18.92	0.993	1.02	-1.71	2.35	0.465		
312S2-12	0.1017	50	0.813	2.77	1.58	0.901	1.39	0.440	0.736	1.58	0.885	30.53	26.49	2.80	1.35	-1.68	2.30	0.469		

STRUCTURAL PROPERTIES TABLES[®] STUDS

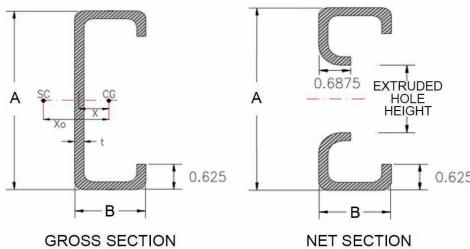
Member	Design thickness (in)	Fy (ksi)	Gross Section Properties							Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	M _{ad} (lb-k)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta	
3 5/8 " STUDS																			
358S138-20	0.0346	33	0.236	0.804	0.479	0.264	1.42	0.0594	0.501	0.479	0.232	4.59	4.48	0.094	0.165	-1.00	1.81	0.694	
358S138-18	0.0451	33	0.306	1.04	0.616	0.340	1.42	0.0755	0.497	0.616	0.320	6.33	6.30	0.207	0.208	-0.991	1.80	0.697	
358S138-16	0.0566	50	0.379	1.29	0.756	0.417	1.41	0.0911	0.490	0.756	0.382	11.42	11.15	0.405	0.251	-0.978	1.79	0.700	
358S138-14	0.0713	50	0.470	1.60	0.923	0.509	1.40	0.109	0.481	0.923	0.493	14.77	14.55	0.797	0.302	-0.959	1.76	0.704	
358S138-12	0.1017	50	0.648	2.20	1.23	0.678	1.38	0.138	0.461	1.23	0.663	24.11	19.84	2.23	0.390	-0.922	1.72	0.713	
358S158-20	0.0346	33	0.262	0.892	0.551	0.304	1.45	0.099	0.616	0.551	0.268	5.29	5.22	0.105	0.297	-1.31	2.05	0.592	
358S158-18	0.0451	33	0.340	1.16	0.710	0.392	1.45	0.127	0.611	0.710	0.372	7.34	7.32	0.230	0.376	-1.30	2.04	0.594	
358S158-16	0.0566	50	0.422	1.44	0.873	0.482	1.44	0.154	0.605	0.873	0.444	13.28	12.94	0.451	0.457	-1.28	2.02	0.597	
358S158-14	0.0713	50	0.524	1.78	1.07	0.590	1.43	0.186	0.596	1.07	0.574	17.19	16.94	0.887	0.552	-1.26	2.00	0.600	
358S158-12	0.1017	50	0.724	2.46	1.44	0.792	1.41	0.241	0.577	1.44	0.776	27.54	23.24	2.50	0.723	-1.23	1.95	0.606	
358S2-20	0.0346	33	0.297	1.01	0.648	0.358	1.48	0.177	0.772	0.642	0.294	5.81	5.99	0.118	0.577	-1.74	2.41	0.478	
358S2-18	0.0451	33	0.385	1.31	0.836	0.461	1.47	0.227	0.767	0.836	0.427	8.43	8.43	0.261	0.734	-1.73	2.40	0.480	
358S2-16	0.0566	50	0.479	1.63	1.03	0.568	1.47	0.277	0.761	1.03	0.490	14.66	14.88	0.511	0.896	-1.71	2.38	0.482	
358S2-14	0.0713	50	0.595	2.02	1.27	0.698	1.46	0.337	0.753	1.27	0.666	19.95	19.72	1.01	1.09	-1.70	2.36	0.484	
358S2-12	0.1017	50	0.826	2.81	1.71	0.945	1.44	0.446	0.735	1.71	0.929	32.04	27.81	2.85	1.44	-1.66	2.32	0.487	
4 " STUDS																			
4S138-20	0.0346	33	0.249	0.848	0.603	0.302	1.56	0.0612	0.496	0.603	0.259	5.12	5.01	0.0994	0.204	-0.965	1.90	0.741	
4S138-18	0.0451	33	0.323	1.10	0.776	0.388	1.55	0.0778	0.491	0.776	0.359	7.09	7.08	0.219	0.257	-0.954	1.89	0.744	
4S138-16	0.0566	50	0.401	1.36	0.953	0.477	1.54	0.0939	0.484	0.953	0.428	12.82	12.54	0.428	0.311	-0.940	1.87	0.747	
4S138-14	0.0713	50	0.497	1.69	1.17	0.583	1.53	0.112	0.475	1.17	0.558	16.70	16.65	0.842	0.375	-0.922	1.85	0.751	
4S138-12	0.1017	50	0.686	2.33	1.56	0.779	1.51	0.142	0.455	1.56	0.765	27.83	22.90	2.36	0.486	-0.885	1.81	0.760	
4S158-20	0.0346	33	0.275	0.936	0.692	0.346	1.59	0.103	0.611	0.692	0.299	5.91	5.83	0.110	0.363	-1.26	2.12	0.644	
4S158-18	0.0451	33	0.357	1.21	0.892	0.446	1.58	0.131	0.606	0.892	0.417	8.23	8.21	0.242	0.460	-1.25	2.11	0.647	
4S158-16	0.0566	50	0.443	1.51	1.10	0.549	1.57	0.159	0.600	1.10	0.498	14.90	14.52	0.473	0.560	-1.24	2.09	0.649	
4S158-14	0.0713	50	0.550	1.87	1.35	0.673	1.56	0.192	0.591	1.35	0.648	19.41	19.26	0.933	0.677	-1.22	2.07	0.653	
4S158-12	0.1017	50	0.762	2.59	1.81	0.907	1.54	0.250	0.572	1.81	0.892	31.65	26.72	2.63	0.889	-1.18	2.03	0.660	
4S2-20	0.0346	33	0.310	1.05	0.812	0.406	1.62	0.183	0.769	0.804	0.329	6.49	6.69	0.124	0.697	-1.69	2.46	0.530	
4S2-18	0.0451	33	0.402	1.37	1.05	0.524	1.61	0.235	0.764	1.05	0.478	9.45	9.43	0.272	0.886	-1.68	2.45	0.532	
4S2-16	0.0566	50	0.500	1.70	1.29	0.646	1.61	0.287	0.758	1.29	0.549	16.43	16.66	0.534	1.08	-1.66	2.43	0.534	
4S2-14	0.0713	50	0.622	2.12	1.59	0.795	1.60	0.349	0.750	1.59	0.751	22.48	22.15	1.05	1.32	-1.64	2.41	0.536	
4S2-12	0.1017	50	0.864	2.94	2.16	1.08	1.58	0.463	0.732	2.16	1.06	36.69	31.84	2.98	1.75	-1.60	2.37	0.541	

STRUCTURAL PROPERTIES TABLES[®] STUDS

Member	Design thickness (in)	Fy (ksi)	Area (in ²)	Gross Section Properties					Effective Section Properties at Fy					Torsional Properties				
				Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	M _{ad} (lb-k)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta
6 " STUDS																		
6S138-20	0.0346	33	0.318	1.08	1.58	0.528	2.23	0.0685	0.464	1.55	0.455	8.98	7.82	0.127	0.500	-0.807	2.42	0.889
6S138-18	0.0451	33	0.413	1.41	2.04	0.681	2.22	0.0871	0.459	2.04	0.645	12.74	11.26	0.280	0.633	-0.796	2.41	0.890
6S138-16	0.0566	50	0.514	1.75	2.52	0.839	2.21	0.105	0.452	2.52	0.777	23.26	20.04	0.549	0.769	-0.784	2.39	0.893
6S138-14	0.0713	50	0.640	2.18	3.10	1.03	2.20	0.125	0.443	3.09	1.03	30.85	27.21	1.08	0.930	-0.768	2.37	0.895
6S138-12	0.1017	50	0.889	3.03	4.19	1.40	2.17	0.159	0.423	4.19	1.40	50.8*	41.53	3.07	1.22	-0.734	2.33	0.901
6S158-20	0.0346	33	0.344	1.17	1.79	0.598	2.28	0.116	0.581	1.79	0.577	11.41	9.13	0.137	0.861	-1.07	2.59	0.828
6S158-18	0.0451	33	0.447	1.52	2.32	0.772	2.28	0.148	0.576	2.32	0.767	16.7*	13.06	0.303	1.10	-1.06	2.58	0.830
6S158-16	0.0566	50	0.556	1.89	2.86	0.954	2.27	0.180	0.570	2.86	0.916	30.3*	23.17	0.594	1.34	-1.05	2.56	0.833
6S158-14	0.0713	50	0.693	2.36	3.53	1.18	2.26	0.218	0.561	3.52	1.16	39.5*	31.28	1.17	1.63	-1.03	2.54	0.835
6S158-12	0.1017	50	0.966	3.29	4.80	1.60	2.23	0.283	0.542	4.80	1.60	56.7*	47.61	3.33	2.15	-1.00	2.50	0.841
6S2-20	0.0346	33	0.379	1.29	2.08	0.692	2.34	0.209	0.743	2.06	0.621	12.28	10.46	0.151	1.59	-1.46	2.86	0.740
6S2-18	0.0451	33	0.492	1.67	2.68	0.894	2.34	0.268	0.739	2.68	0.873	17.24	14.93	0.334	2.03	-1.45	2.84	0.742
6S2-16	0.0566	50	0.613	2.09	3.32	1.11	2.33	0.329	0.732	3.32	1.02	30.40	26.42	0.655	2.49	-1.43	2.83	0.744
6S2-14	0.0713	50	0.764	2.60	4.10	1.37	2.32	0.400	0.723	4.10	1.32	43.7*	35.65	1.30	3.05	-1.41	2.81	0.746
6S2-12	0.1017	50	1.07	3.63	5.61	1.87	2.29	0.530	0.705	5.61	1.87	64.5*	55.28	3.68	4.08	-1.38	2.77	0.752
6S212-20	0.0451	33	0.537	1.83	3.08	1.03	2.40	0.458	0.923	3.08	0.918	18.14	15.74	0.364	3.41	-1.87	3.18	0.652
6S212-18	0.0566	50	0.670	2.28	3.82	1.27	2.39	0.562	0.917	3.77	1.07	32.00	27.75	0.715	4.19	-1.86	3.16	0.654
6S212-14	0.0713	50	0.836	2.84	4.73	1.58	2.38	0.688	0.908	4.72	1.39	41.50	37.69	1.42	5.15	-1.84	3.14	0.657
6S212-12	0.1017	50	1.17	3.98	6.50	2.17	2.36	0.923	0.889	6.50	2.06	69.4*	59.34	4.03	6.95	-1.80	3.10	0.661

STRUCTURAL PROPERTIES TABLES® STEEL JOIST

Product Code	Dimensions		Design Thickness (in)	Weight (lbs/ft)	Gross Section Properties				Net Section Properties (at Extruded Hole)				Torsional Section Properties							
	A (in)	B (in)			Area (in ²)	I _{xx} (in ⁴)	r _x (in)	I _{yy} (in ⁴)	r _y (in)	Area (in ²)	I _{net} (in ⁴)	r _{x,net} (in)	I _{y,net} (in ⁴)	R _{y,net} (in)	X _o (in)	X (in)	J [*] 1000 (in ⁴)	C _w (in ⁶)	R _o (in)	β
7 1/4" Joists																				
714J134-18	7.25	1.75	0.0451	1.721	0.526	3.898	2.723	0.206	0.626	0.390	3.868	3.149	0.160	0.639	-1.138	0.414	0.356	2.251	3.018	0.858
714J134-16	7.25	1.75	0.0566	2.146	0.655	4.825	2.714	0.251	0.620	0.483	4.782	3.145	0.194	0.633	-1.125	0.408	0.700	2.758	3.003	0.860
714J134-14	7.25	1.75	0.0713	2.673	0.817	5.964	2.701	0.305	0.611	0.598	5.899	3.140	0.233	0.625	-1.109	0.400	1.386	3.367	2.984	0.862
714J134-12	7.25	1.75	0.1017	3.758	1.143	8.170	2.674	0.101	0.297	0.821	8.046	3.130	0.302	0.606	-1.075	0.384	3.942	4.498	2.943	0.867
8" Joists																				
8J134-18	8.00	1.75	0.0451	1.829	0.559	4.942	2.972	0.211	0.615	0.424	4.912	3.404	0.171	0.635	-1.086	0.389	0.379	2.794	3.224	0.887
8J134-16	8.00	1.75	0.0566	2.284	0.698	6.122	2.962	0.258	0.608	0.526	6.079	3.400	0.208	0.629	-1.074	0.383	0.745	3.423	3.210	0.888
8J134-14	8.00	1.75	0.0713	2.850	0.871	7.573	2.949	0.313	0.599	0.652	7.508	3.394	0.251	0.621	-1.058	0.376	1.476	4.182	3.191	0.890
8J134-12	8.00	1.75	0.1017	4.007	1.219	10.396	2.920	0.411	0.581	0.898	10.272	3.383	0.326	0.603	-1.025	0.360	4.205	5.595	3.150	0.894
9 1/4" Joists																				
914J134-18	9.25	1.75	0.0451	2.015	0.616	7.037	3.380	0.219	0.597	0.390	6.676	4.137	0.160	0.639	-1.010	0.353	0.418	3.852	3.579	0.920
914J134-16	9.25	1.75	0.0566	2.516	0.768	8.725	3.370	0.268	0.590	0.483	8.258	4.133	0.194	0.633	-0.998	0.348	0.821	4.724	3.565	0.922
914J134-14	9.25	1.75	0.0713	3.141	0.960	10.809	3.355	0.324	0.581	0.598	10.196	4.128	0.233	0.625	-0.983	0.341	1.627	5.776	3.546	0.923
914J134-12	9.25	1.75	0.1017	4.423	1.346	14.880	3.325	0.426	0.563	0.821	13.932	4.119	0.302	0.606	-0.952	0.326	4.644	7.739	3.505	0.926
10" Joists																				
10J2-16	10.00	2.00	0.0566	2.748	0.839	11.271	3.665	0.377	0.671	0.554	10.804	4.415	0.287	0.720	-1.135	0.398	0.896	7.665	3.896	0.915
10J2-14	10.00	2.00	0.0713	3.432	1.049	13.984	3.651	0.459	0.662	0.687	13.370	4.411	0.348	0.712	-1.120	0.391	1.779	9.401	3.877	0.917
10J2-12	10.00	2.00	0.1017	4.838	1.473	19.314	3.621	0.609	0.643	0.948	18.365	4.400	0.456	0.693	-1.088	0.376	5.082	12.679	3.836	0.920
11 1/4" Joists																				
1114J134-16	11.25	1.75	0.0566	2.886	0.882	14.162	4.008	0.279	0.563	0.597	13.694	4.791	0.228	0.618	48.89	48.46	72.89	43.75	1471	1328
1114J134-14	11.25	1.75	0.0713	3.605	1.103	17.574	3.992	0.339	0.554	0.741	16.959	4.785	0.275	0.610	71.02	67.33	90.27	59.81	2961	2357
1114J134-12	11.25	1.75	0.1017	5.087	1.550	24.283	3.959	0.445	0.536	1.025	23.332	4.772	0.359	0.592	124.55	110.42	124.19	93.32	8714	4208
12" Joists																				
12J2-16	12.00	2.00	0.0566	3.118	0.952	17.653	4.305	0.393	0.643	0.568	16.354	5.364	0.293	0.718	-1.032	0.351	1.017	11.550	4.475	0.947
12J2-14	12.00	2.00	0.0713	3.898	1.192	21.932	4.290	0.478	0.634	0.705	20.255	5.360	0.355	0.710	-1.017	0.344	2.020	14.176	4.456	0.948
12J2-12	12.00	2.00	0.1017	5.503	1.677	30.386	4.257	0.634	0.615	0.974	27.868	5.349	0.466	0.692	-0.987	0.331	5.783	19.150	4.415	0.950
14" Joists																				
14J2-14	14.00	2.00	0.0713	4.365	1.334	32.264	4.917	0.494	0.608	0.705	28.447	6.352	0.355	0.710	-0.932	0.308	2.262	20.083	5.043	0.966
14J2-12	14.00	2.00	0.1017	6.168	1.880	44.810	4.882	0.654	0.590	0.974	39.167	6.342	0.466	0.692	-0.904	0.295	6.484	27.156	5.002	0.967



STRUCTURAL PROPERTIES TABLES® TRACK

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties							Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in ^{-k})	V _a (lb)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta	
1 5/8 " TRACK (1 1/4" Leg)																			
158T114-25	0.0158	50	0.065	0.22	0.034	0.048	0.717	0.011	0.412	0.021	0.016	0.51	309	0.009	0.006	-0.881	1.208	0.468	
158T114-22	0.0283	33	0.117	0.40	0.063	0.072	0.735	0.020	0.410	0.050	0.044	0.87	577	0.031	0.010	-0.886	1.221	0.474	
158T114-20	0.0312	33	0.128	0.44	0.067	0.079	0.722	0.022	0.409	0.057	0.048	1.00	637	0.042	0.011	-0.884	1.204	0.475	
158T114-20S	0.0346	33	0.143	0.49	0.077	0.087	0.736	0.024	0.408	0.066	0.058	1.15	707	0.057	0.013	-0.882	1.219	0.476	
2 1/2 " TRACK (1 1/4", 1 1/2", 2 " Legs)																			
212T114-20	0.0346	33	0.173	0.588	0.192	0.145	1.05	0.027	0.397	0.166	0.103	2.03	1046	0.069	0.033	-0.760	1.36	0.687	
212T114-18	0.0451	33	0.225	0.766	0.250	0.188	1.05	0.035	0.395	0.231	0.147	2.91	1446	0.153	0.042	-0.755	1.36	0.690	
212T114-16	0.0566	50	0.282	0.961	0.318	0.236	1.06	0.043	0.392	0.297	0.188	5.64	1804	0.301	0.054	-0.749	1.36	0.696	
212T114-14	0.0713	50	0.355	1.21	0.409	0.297	1.07	0.054	0.389	0.403	0.262	7.85	2552	0.602	0.069	-0.740	1.36	0.704	
212T114-12	0.1017	50	0.506	1.72	0.604	0.423	1.09	0.074	0.383	0.605	0.423	14.24	2605	1.75	0.101	-0.724	1.37	0.719	
212T112-20	0.0346	33	0.190	0.647	0.221	0.167	1.08	0.045	0.485	0.180	0.107	2.11	1046	0.076	0.054	-0.973	1.53	0.596	
212T112-18	0.0451	33	0.248	0.843	0.289	0.217	1.08	0.058	0.483	0.252	0.154	3.03	1446	0.168	0.070	-0.968	1.53	0.599	
212T112-16	0.0566	50	0.311	1.06	0.368	0.273	1.09	0.072	0.481	0.325	0.197	5.89	1804	0.332	0.089	-0.961	1.53	0.605	
212T112-14	0.0713	50	0.391	1.33	0.472	0.344	1.10	0.089	0.478	0.445	0.276	8.27	2252	0.663	0.114	-0.953	1.53	0.613	
212T112-12	0.1017	50	0.557	1.90	0.701	0.491	1.12	0.124	0.472	0.701	0.463	13.87	2605	1.92	0.168	-0.935	1.53	0.629	
212T2-20	0.0346	33	0.225	0.765	0.280	0.212	1.12	0.097	0.658	0.719	0.575	19.8*	1046	2.45	0.735	-1.84	2.22	0.314	
212T2-18	0.0451	33	0.293	1.00	0.366	0.275	1.12	0.126	0.656	0.203	0.112	2.22	1446	0.090	0.118	-1.42	1.92	0.455	
212T2-16	0.0566	50	0.367	1.25	0.466	0.346	1.13	0.157	0.654	0.288	0.163	3.21	1804	0.198	0.153	-1.41	1.92	0.457	
212T2-14	0.0713	50	0.462	1.57	0.600	0.437	1.14	0.196	0.652	0.372	0.209	6.25	2252	0.392	0.195	-1.41	1.92	0.462	
212T2-12	0.1017	50	0.659	2.24	0.894	0.626	1.16	0.275	0.646	0.517	0.296	8.87	2605	0.783	0.251	-1.40	1.92	0.469	
3 1/2 " TRACK (1 1/4", 1 1/2", 2 " Legs)																			
312T114-20	0.0346	33	0.207	0.706	0.405	0.222	1.40	0.0299	0.379	0.355	0.165	3.27	1033	0.083	0.070	-0.668	1.59	0.824	
312T114-18	0.0451	33	0.270	0.919	0.528	0.288	1.40	0.0385	0.377	0.490	0.233	4.61	1777	0.183	0.090	-0.663	1.59	0.826	
312T114-16	0.0566	50	0.339	1.15	0.668	0.361	1.40	0.0477	0.375	0.626	0.297	8.90	2551	0.362	0.114	-0.658	1.59	0.830	
312T114-14	0.0713	50	0.427	1.45	0.851	0.454	1.41	0.0591	0.372	0.839	0.407	12.19	3193	0.723	0.144	-0.650	1.60	0.835	
312T114-12	0.1017	50	0.608	2.07	1.24	0.645	1.43	0.0815	0.366	1.24	0.645	21.69	3841	2.10	0.209	-0.636	1.61	0.844	
312T112-20	0.0346	33	0.225	0.765	0.461	0.253	1.43	0.0494	0.469	0.382	0.171	3.39	1033	0.090	0.114	-0.866	1.74	0.752	
312T112-18	0.0451	33	0.293	1.00	0.601	0.329	1.43	0.0638	0.467	0.531	0.243	4.80	1777	0.198	0.148	-0.861	1.74	0.754	
312T112-16	0.0566	50	0.367	1.25	0.762	0.412	1.44	0.0793	0.465	0.679	0.310	9.28	2551	0.392	0.187	-0.855	1.74	0.758	
312T112-14	0.0713	50	0.462	1.57	0.972	0.518	1.45	0.0986	0.462	0.919	0.428	12.81	3193	0.783	0.238	-0.847	1.74	0.763	
312T112-12	0.1017	50	0.659	2.24	1.42	0.738	1.47	0.137	0.456	1.42	0.701	20.98	3841	2.27	0.346	-0.831	1.75	0.774	
312T2-20	0.0346	33	0.259	0.883	0.574	0.315	1.49	0.108	0.646	0.428	0.181	3.57	1033	0.103	0.249	-1.29	2.07	0.614	
312T2-18	0.0451	33	0.338	1.15	0.749	0.409	1.49	0.140	0.645	0.601	0.257	5.09	1777	0.229	0.323	-1.28	2.07	0.616	
312T2-16	0.0566	50	0.424	1.44	0.949	0.513	1.50	0.175	0.642	0.770	0.329	9.85	2551	0.453	0.409	-1.27	2.07	0.621	
312T2-14	0.0713	50	0.534	1.82	1.21	0.647	1.51	0.218	0.639	1.05	0.458	13.72	3193	0.904	0.522	-1.26	2.07	0.627	
312T2-12	0.1017	50	0.761	2.59	1.78	0.924	1.53	0.305	0.633	1.71	0.769	23.02	3841	2.62	0.765	-1.25	2.07	0.638	

STRUCTURAL PROPERTIES TABLES ° TRACK

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties							Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	V _a (lb)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta	
3 5/8 " TRACK (1 1/4" , 1 1/2" , 2 " Legs)																			
358T114-20	0.0346	33	0.212	0.721	0.438	0.232	1.44	0.0301	0.377	0.385	0.174	3.44	996	0.0845	0.076	-0.658	1.63	0.836	
358T114-18	0.0451	33	0.276	0.939	0.571	0.302	1.44	0.0388	0.375	0.531	0.245	4.84	1777	0.187	0.098	-0.654	1.62	0.838	
358T114-16	0.0566	50	0.346	1.18	0.723	0.378	1.45	0.0481	0.373	0.678	0.312	9.34	2645	0.369	0.123	-0.648	1.63	0.841	
358T114-14	0.0713	50	0.436	1.48	0.921	0.475	1.45	0.0596	0.370	0.908	0.427	12.78	3311	0.738	0.156	-0.641	1.63	0.846	
358T114-12	0.1017	50	0.621	2.11	1.34	0.675	1.47	0.0822	0.364	1.34	0.675	22.70	3956	2.14	0.226	-0.626	1.64	0.854	
358T112-20	0.0346	33	0.229	0.780	0.499	0.264	1.48	0.0499	0.467	0.414	0.180	3.56	996	0.091	0.124	-0.854	1.77	0.766	
358T112-18	0.0451	33	0.298	1.02	0.650	0.344	1.48	0.0644	0.465	0.575	0.255	5.04	1777	0.202	0.160	-0.850	1.77	0.768	
358T112-16	0.0566	50	0.374	1.27	0.823	0.431	1.48	0.0801	0.462	0.735	0.325	9.74	2645	0.400	0.202	-0.844	1.77	0.772	
358T112-14	0.0713	50	0.471	1.60	1.05	0.542	1.49	0.100	0.460	0.993	0.449	13.43	3311	0.799	0.257	-0.836	1.77	0.777	
358T112-12	0.1017	50	0.672	2.29	1.53	0.771	1.51	0.138	0.453	1.53	0.733	21.94	3956	2.32	0.374	-0.820	1.78	0.787	
358T2-20	0.0346	33	0.264	0.897	0.619	0.329	1.53	0.110	0.645	0.464	0.190	3.76	996	0.105	0.269	-1.27	2.09	0.631	
358T2-18	0.0451	33	0.343	1.17	0.808	0.427	1.53	0.142	0.643	0.650	0.270	5.34	1777	0.233	0.350	-1.27	2.09	0.633	
358T2-16	0.0566	50	0.431	1.47	1.02	0.536	1.54	0.177	0.640	0.832	0.345	10.34	2645	0.460	0.442	-1.26	2.09	0.638	
358T2-14	0.0713	50	0.543	1.85	1.31	0.675	1.55	0.221	0.638	1.14	0.480	14.38	3311	0.919	0.564	-1.25	2.09	0.643	
358T2-12	0.1017	50	0.773	2.63	1.92	0.963	1.57	0.308	0.632	1.84	0.804	24.06	3956	2.67	0.825	-1.23	2.10	0.655	
4" TRACK (1 1/4" , 1 1/2" , 2 " Legs)																			
4T114-20	0.0346	33	0.225	0.765	0.549	0.265	1.56	0.0309	0.371	0.484	0.201	3.97	901	0.090	0.095	-0.630	1.73	0.867	
4T114-18	0.0451	33	0.293	1.00	0.716	0.344	1.56	0.0398	0.369	0.666	0.282	5.57	1777	0.198	0.122	-0.626	1.72	0.868	
4T114-16	0.0566	50	0.367	1.25	0.904	0.431	1.57	0.0493	0.366	0.850	0.359	10.74	2799	0.392	0.154	-0.621	1.73	0.871	
4T114-14	0.0713	50	0.462	1.57	1.15	0.541	1.58	0.0611	0.364	1.13	0.488	14.62	3664	0.783	0.194	-0.614	1.73	0.874	
4T114-12	0.1017	50	0.659	2.24	1.67	0.768	1.59	0.0842	0.358	1.67	0.768	25.84	4529	2.27	0.280	-0.600	1.74	0.881	
4T112-20	0.0346	33	0.242	0.824	0.622	0.300	1.60	0.0513	0.460	0.519	0.208	4.12	901	0.097	0.155	-0.821	1.86	0.805	
4T112-18	0.0451	33	0.315	1.07	0.811	0.390	1.60	0.0662	0.458	0.719	0.293	5.80	1777	0.214	0.200	-0.817	1.86	0.807	
4T112-16	0.0566	50	0.396	1.35	1.03	0.489	1.61	0.0822	0.456	0.918	0.374	11.19	2799	0.422	0.252	-0.811	1.86	0.810	
4T112-14	0.0713	50	0.498	1.69	1.31	0.615	1.62	0.102	0.453	1.24	0.513	15.36	3664	0.844	0.320	-0.804	1.86	0.814	
4T112-12	0.1017	50	0.710	2.41	1.90	0.874	1.64	0.142	0.447	1.90	0.832	24.92	4529	2.45	0.463	-0.788	1.87	0.823	
4T2-20	0.0346	33	0.277	0.941	0.768	0.371	1.67	0.113	0.639	0.581	0.220	4.34	901	0.110	0.336	-1.23	2.17	0.678	
4T2-18	0.0451	33	0.360	1.23	1.00	0.482	1.67	0.146	0.637	0.811	0.311	6.14	1777	0.244	0.436	-1.22	2.16	0.680	
4T2-16	0.0566	50	0.452	1.54	1.27	0.604	1.67	0.182	0.635	1.04	0.397	11.88	2799	0.483	0.551	-1.22	2.17	0.684	
4T2-14	0.0713	50	0.569	1.94	1.62	0.761	1.69	0.227	0.632	1.41	0.549	16.43	3664	0.965	0.702	-1.21	2.17	0.689	
4T2-12	0.1017	50	0.811	2.76	2.36	1.09	1.71	0.318	0.626	2.27	0.911	27.29	4529	2.80	1.02	-1.19	2.17	0.699	

STRUCTURAL PROPERTIES TABLES® TRACK

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties							Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	V _a (lb)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta	
5 1/2" TRACK (1 1/4", 1 1/2", 2 " Legs)																			
512T114-20	0.0346	33	0.277	0.941	1.16	0.411	2.05	0.0332	0.346	1.03	0.270	5.33	652	0.110	0.195	-0.541	2.15	0.936	
512T114-18	0.0451	33	0.360	1.23	1.51	0.534	2.05	0.0428	0.344	1.43	0.417	8.23	1443	0.244	0.252	-0.537	2.14	0.937	
512T114-16	0.0566	50	0.452	1.54	1.90	0.668	2.05	0.0530	0.342	1.81	0.535	16.01	2799	0.483	0.315	-0.532	2.15	0.939	
512T114-14	0.0713	50	0.569	1.94	2.41	0.839	2.06	0.0656	0.340	2.38	0.769	23.02	4442	0.965	0.397	-0.526	2.15	0.940	
512T114-12	0.1017	50	0.811	2.76	3.48	1.19	2.07	0.0904	0.334	3.48	1.19	40.01	5877	2.80	0.564	-0.514	2.16	0.943	
512T112-20	0.0346	33	0.294	1.00	1.30	0.459	2.10	0.0555	0.434	1.12	0.310	6.12	652	0.117	0.320	-0.714	2.26	0.900	
512T112-18	0.0451	33	0.383	1.30	1.69	0.596	2.10	0.0716	0.432	1.52	0.468	9.25	1443	0.260	0.414	-0.709	2.26	0.901	
512T112-16	0.0566	50	0.480	1.63	2.13	0.747	2.10	0.0889	0.430	1.93	0.595	17.81	2799	0.513	0.519	-0.704	2.26	0.903	
512T112-14	0.0713	50	0.605	2.06	2.70	0.939	2.11	0.111	0.427	2.57	0.804	24.07	4442	1.03	0.655	-0.698	2.27	0.905	
512T112-12	0.1017	50	0.862	2.93	3.91	1.33	2.13	0.153	0.421	3.90	1.28	38.28	5877	2.97	0.937	-0.684	2.27	0.909	
512T2-20	0.0346	33	0.329	1.12	1.57	0.555	2.18	0.123	0.613	1.25	0.307	6.06	652	0.131	0.694	-1.09	2.52	0.813	
512T2-18	0.0451	33	0.428	1.46	2.04	0.722	2.19	0.160	0.611	1.69	0.495	9.79	1443	0.290	0.900	-1.08	2.51	0.814	
512T2-16	0.0566	50	0.537	1.83	2.58	0.905	2.19	0.199	0.609	2.15	0.630	18.86	2799	0.573	1.13	-1.08	2.52	0.817	
512T2-14	0.0713	50	0.676	2.30	3.27	1.14	2.20	0.248	0.606	2.89	0.857	25.67	4442	1.15	1.43	-1.07	2.52	0.820	
512T2-12	0.1017	50	0.964	3.28	4.75	1.62	2.22	0.347	0.600	4.57	1.39	41.64	5877	3.32	2.07	-1.05	2.53	0.826	
6" TRACK (1 1/4", 1 1/2", 2 " Legs)																			
6T114-20	0.0346	33	0.294	1.00	1.43	0.465	2.20	0.0338	0.339	1.26	0.297	5.87	597	0.117	0.238	-0.516	2.29	0.949	
6T114-18	0.0451	33	0.383	1.30	1.86	0.604	2.20	0.0435	0.337	1.77	0.461	9.11	1321	0.260	0.307	-0.513	2.29	0.950	
6T114-16	0.0566	50	0.480	1.63	2.34	0.757	2.21	0.0539	0.335	2.24	0.592	17.74	2617	0.513	0.384	-0.508	2.29	0.951	
6T114-14	0.0713	50	0.605	2.06	2.97	0.951	2.22	0.0668	0.332	2.93	0.858	25.69	4442	1.03	0.483	-0.503	2.30	0.952	
6T114-12	0.1017	50	0.862	2.93	4.28	1.35	2.23	0.0919	0.327	4.28	1.347	45.31	7850	2.97	0.685	-0.491	2.31	0.955	
6T112-20	0.0346	33	0.311	1.06	1.59	0.52	2.26	0.057	0.426	1.33	0.303	5.99	597	0.124	0.390	-0.684	2.40	0.919	
6T112-18	0.0451	33	0.405	1.38	2.07	0.67	2.26	0.073	0.424	1.89	0.474	9.36	1321	0.275	0.504	-0.680	2.40	0.920	
6T112-16	0.0566	50	0.509	1.73	2.61	0.84	2.27	0.091	0.422	2.40	0.609	18.24	2617	0.543	0.632	-0.675	2.40	0.921	
6T112-14	0.0713	50	0.641	2.18	3.31	1.06	2.27	0.113	0.419	3.16	0.891	26.68	4442	1.09	0.797	-0.669	2.41	0.923	
6T112-12	0.1017	50	0.913	3.11	4.78	1.50	2.29	0.156	0.414	4.78	1.444	43.24	7850	3.15	1.14	-0.656	2.42	0.926	
6T2-20	0.0346	33	0.346	1.18	1.91	0.623	2.35	0.126	0.604	1.54	0.333	6.59	597	0.138	0.847	-1.05	2.64	0.843	
6T2-18	0.0451	33	0.451	1.53	2.49	0.810	2.35	0.163	0.602	2.08	0.565	11.16	1321	0.305	1.10	-1.04	2.64	0.844	
6T2-16	0.0566	50	0.565	1.92	3.15	1.01	2.36	0.203	0.600	2.64	0.717	21.48	2617	0.604	1.38	-1.04	2.65	0.846	
6T2-14	0.0713	50	0.712	2.42	3.99	1.28	2.37	0.254	0.597	3.54	0.973	29.12	4442	1.21	1.75	-1.03	2.65	0.849	
6T2-12	0.1017	50	1.01	3.45	5.77	1.82	2.39	0.355	0.591	5.56	1.57	46.95	7850	3.50	2.51	-1.02	2.66	0.854	

STRUCTURAL PROPERTIES TABLES ° TRACK

Member	Design thickness (in)	Fy (ksi)	Area (in ²)	Gross Section Properties						Effective Section Properties at Fy					Torsional Properties				
				Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	V _a (lb)	J _{x1000} (in ⁴)	C _w (in ⁴)	X _o (in)	R _o (in)	β Beta	
8" TRACK (1 1/4", 1 1/2", 2 " Legs)																			
8T114-20	0.0346	33	0.363	1.24	2.90	0.711	2.82	0.0356	0.313	2.44	0.407	8.03	446	0.145	0.456	-0.439	2.88	0.977	
8T114-18	0.0451	33	0.473	1.61	3.77	0.925	2.82	0.0458	0.311	3.48	0.640	12.65	998	0.321	0.589	-0.436	2.87	0.977	
8T114-16	0.0566	50	0.594	2.02	4.75	1.16	2.83	0.0568	0.309	4.43	0.824	24.66	1956	0.634	0.735	-0.432	2.88	0.977	
8T114-14	0.0713	50	0.748	2.54	6.00	1.45	2.83	0.0703	0.307	5.96	1.22	36.40	3920	1.27	0.920	-0.427	2.88	0.978	
8T114-12	0.1017	50	1.07	3.63	8.62	2.06	2.84	0.0967	0.301	8.61	2.06	69.34	9037	3.67	1.30	-0.417	2.89	0.979	
8T112-20	0.0346	33	0.380	1.29	3.18	0.781	2.89	0.0600	0.397	2.57	0.414	8.18	446	0.152	0.751	-0.588	2.98	0.961	
8T112-18	0.0451	33	0.496	1.69	4.15	1.02	2.89	0.0774	0.395	3.69	0.655	12.95	998	0.336	0.972	-0.584	2.98	0.961	
8T112-16	0.0566	50	0.622	2.12	5.22	1.27	2.90	0.0961	0.393	4.69	0.844	25.27	1956	0.664	1.22	-0.580	2.98	0.962	
8T112-14	0.0713	50	0.783	2.67	6.60	1.60	2.90	0.119	0.390	6.36	1.26	37.58	3920	1.33	1.53	-0.575	2.98	0.963	
8T112-12	0.1017	50	1.12	3.80	9.48	2.27	2.91	0.165	0.385	9.48	2.19	65.62	9037	3.85	2.16	-0.564	2.99	0.965	
8T2-20	0.0346	33	0.415	1.41	3.75	0.921	3.01	0.135	0.571	2.79	0.424	8.37	446	0.166	1.64	-0.917	3.19	0.918	
8T2-18	0.0451	33	0.541	1.84	4.89	1.20	3.01	0.175	0.569	4.04	0.676	13.35	998	0.367	2.12	-0.913	3.19	0.918	
8T2-16	0.0566	50	0.679	2.31	6.15	1.50	3.01	0.218	0.567	5.15	0.872	26.09	1956	0.725	2.66	-0.908	3.20	0.919	
8T2-14	0.0713	50	0.954	2.91	7.79	1.89	3.02	0.272	0.564	7.05	1.31	39.22	3920	1.45	3.36	-0.902	3.20	0.921	
8T2-12	0.1017	50	1.22	4.15	11.2	2.68	3.03	0.379	0.558	10.8	2.35	70.28	9037	4.20	4.79	-0.889	3.21	0.923	
10" TRACK (1 1/4", 1 1/2", 2 " Legs)																			
10T114-18	0.0451	33	0.563	1.92	6.63	1.31	3.43	0.0474	0.290	5.89	0.819	16.19	789	0.382	0.973	-0.379	3.46	0.988	
10T114-16	0.0566	50	0.707	2.41	8.34	1.63	3.43	0.0587	0.288	7.48	1.06	31.59	1561	0.755	1.21	-0.376	3.47	0.988	
10T114-14	0.0713	50	0.890	3.03	10.5	2.05	3.44	0.0727	0.286	10.2	1.57	47.15	3128	1.51	1.51	-0.372	3.47	0.989	
10T114-12	0.1017	50	1.27	4.32	15.1	2.91	3.45	0.100	0.281	15.1	2.75	82.42	9037	4.38	2.12	-0.363	3.48	0.989	
10T112-18	0.0451	33	0.586	1.99	7.21	1.42	3.51	0.0804	0.370	6.20	0.837	16.54	789	0.397	1.61	-0.513	3.56	0.979	
10T112-16	0.0566	50	0.735	2.50	9.06	1.78	3.51	0.100	0.368	7.88	1.08	32.30	1561	0.785	2.01	-0.509	3.57	0.980	
10T112-14	0.0713	50	0.926	3.15	11.4	2.23	3.52	0.124	0.366	10.8	1.62	48.53	3128	1.57	2.52	-0.505	3.57	0.980	
10T112-12	0.1017	50	1.32	4.49	16.4	3.17	3.53	0.172	0.361	16.4	2.90	86.90	9037	4.55	3.56	-0.495	3.58	0.981	
10T2-18	0.0451	33	0.631	2.15	8.36	1.65	3.64	0.183	0.539	6.72	0.861	17.01	789	0.428	3.54	-0.813	3.77	0.953	
10T2-16	0.0566	50	0.792	2.69	10.5	2.06	3.65	0.228	0.537	8.56	1.11	33.26	1561	0.845	4.43	-0.809	3.77	0.954	
10T2-14	0.0713	50	0.997	3.39	13.3	2.59	3.65	0.284	0.534	11.8	1.68	50.42	3128	1.69	5.58	-0.803	3.78	0.955	
6S2-12	0.1017	50	1.42	4.84	19.1	3.69	3.66	0.397	0.528	18.6	3.08	92.26	9037	4.90	7.92	-0.791	3.79	0.956	

STRUCTURAL PROPERTIES TABLES ° TRACK

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties							Effective Section Properties at Fy					Torsional Properties				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in ^{-k})	V _a (lb)	J _{x1000} (in ⁴)	C _w (in ³)	X _o (in)	R _o (in)	β Beta	
12" TRACK (1 1/4", 1 1/2", 2 " Legs)																			
12T114-16	0.0566	50	0.820	2.79	13.3	2.19	4.03	0.0601	0.271	11.5	1.29	38.51	1299	0.88	1.82	-0.333	4.06	0.993	
12T114-14	0.0713	50	1.03	3.51	16.8	2.75	4.04	0.0744	0.268	15.7	1.93	57.90	2602	1.75	2.27	-0.329	4.06	0.993	
12T114-12	0.1017	50	1.47	5.01	24.1	3.90	4.04	0.102	0.264	23.8	3.44	103.07	7579	5.08	3.17	-0.322	4.07	0.994	
12T112-16	0.0566	50	0.848	2.89	14.4	2.36	4.12	0.103	0.348	12.0	1.31	39.32	1299	0.91	3.03	-0.454	4.16	0.988	
12T112-14	0.0713	50	1.07	3.64	18.2	2.96	4.12	0.127	0.345	16.6	1.99	59.48	2602	1.81	3.79	-0.450	4.16	0.988	
12T112-12	0.1017	50	1.52	5.18	26.0	4.21	4.13	0.176	0.340	25.7	3.62	108.27	7579	5.25	5.33	-0.441	4.17	0.989	
12T2-16	0.0566	50	0.905	3.08	16.5	2.70	4.27	0.236	0.510	13.0	1.35	40.42	1299	0.97	6.71	-0.730	4.36	0.972	
12T2-14	0.0713	50	1.14	3.88	20.8	3.40	4.27	0.294	0.508	18.0	2.06	61.63	2602	1.93	8.43	-0.725	4.36	0.972	
12T2-12	0.1017	50	1.62	5.53	29.8	4.83	4.28	0.410	0.502	29.0	3.82	114.35	7579	5.60	11.9	-0.714	4.37	0.973	

ALLOWABLE WALL HEIGHT TABLES- COMPOSITE

Member	Spacing (in) O.C.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
2 1/2 "										
212S114-25	12	15' 1"	11' 11"	10' 5"	12' 4" f	10' 5"	9' 1"	10' 9" f	9' 6"	
212S114-25	16	13' 3" f	11' 3"	9' 10"	10' 10" f	9' 10"	8' 7"	9' 5" f	8' 11"	
212S114-25	24	11' 10" f	10' 7"	9' 3"	9' 8" f	9' 3"	8' 1"	8' 5" f	8' 5"	
212S114-20	12	17' 9"	13' 11"	12' 1"	15' 6" f	12' 1"	10' 6"	13' 11"	10' 11"	9' 5"
212S114-20	16	16' 5"	12' 10"	11' 2"	14' 4"	11' 2"	9' 8"	12' 10"	10' 0"	8' 8"
212S114-20	24	14' 10"	11' 7"	10' 0"	13' 0"	10' 0"	8' 7"	11' 7"	8' 11"	7' 8"
212S114-18	12	20' 0"	15' 9"	13' 9"	17' 1"	13' 3"	11' 5"	15' 3"	11' 9"	10' 1"
212S114-18	16	18' 8"	14' 9"	12' 10"	15' 1"	12' 3"	10' 7"	14' 2"	10' 10"	9' 3"
212S114-18	24	17' 2"	13' 6"	11' 9"	14' 2" f	11' 1"	9' 6"	12' 4" f	9' 7"	8' 2"
3 5/8 "										
358S114-25	12	17' 8" f	15' 4"	13' 3"	14' 3" f	13' 3"	11' 7"	12' 95" f	12' 0"	10' 5"
358S114-25	16	15' 4" f	14' 4"	12' 4"	12' 5" f	12' 5"	10' 10"	10' 9" f	10' 9" f	9' 9"
358S114-25	24	13' 9" f	13' 5"	11' 7"	11' 0" f	11' 0" f	10' 1"	9' 5" f	9' 5" f	9' 1"
358S114-20	12	22' 6"	17' 10"	15' 6"	19' 8" f	15' 6"	13' 7"	17' 10"	14' 1"	12' 4"
358S114-20	16	20' 8"	16' 5"	14' 3"	18' 1"	14' 3"	12' 6"	16' 5"	12' 11"	11' 4"
358S114-20	24	18' 6"	14' 9"	12' 9"	16' 2"	12' 9"	11' 2"	14' 9"	11' 7"	10' 1"
358S114-18	12	25' 3"	19' 7"	16' 10"	21' 8"	16' 10"	14' 6"	19' 5"	15' 2"	13' 1"
358S114-18	16	23' 5"	18' 0"	15' 6"	20' 0"	15' 5"	13' 3"	17' 11"	13' 10"	11' 11"
358S114-18	24	21' 3"	16' 3"	13' 10"	17' 10" f	13' 9"	11' 8"	15' 5" f	12' 3"	10' 6"
358S114-16	12	26' 9"	21' 2"	18' 6"	23' 4"	17' 9"	15' 3"	21' 1"	15' 10"	13' 10"
358S114-16	16	24' 9"	19' 7"	17' 1"	21' 7"	16' 3"	13' 10"	19' 6"	14' 5"	12' 7"
358S114-16	24	22' 4"	17' 8"	15' 5"	19' 6"	14' 4"	12' 1"	17' 7"	12' 7"	11' 0"
358S114-14	12	27' 6"	21' 10"	19' 1"	24' 0"	19' 0"	16' 7"	21' 10"	17' 3"	15' 0"
358S114-14	16	25' 2"	20' 0"	17' 5"	22' 0"	17' 4"	15' 1"	19' 11"	15' 9"	13' 9"
358S114-14	24	22' 4"	17' 8"	15' 6"	19' 6"	15' 4"	13' 4"	17' 8"	13' 11"	12' 1"

ALLOWABLE WALL HEIGHT TABLES- COMPOSITE

Member	Spacing (in) O.C.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
4 "										
4S114-25	12	19' 6" f	16' 5"	14' 4"	15' 9" f	14' 4"	12' 6"	13' 8" f	13' 0"	11' 4"
4S114-25	16	17' 2" f	15' 4"	13' 4"	13' 10" f	13' 4"	11' 8"	11' 11" f	11' 11" f	10' 6"
4S114-25	24	15' 1" f	14' 2"	12' 4"	12' 1" f	12' 1" f	10' 9"	10' 5" f	10' 5" f	9' 9"
4S114-20	12	25' 1"	19' 11"	17' 4"	21' 11"	17' 4"	15' 0"	19' 11"	15' 8"	13' 7"
4S114-20	16	23' 1"	18' 4"	15' 11"	20' 2"	15' 11"	13' 9"	18' 4"	14' 5"	12' 6"
4S114-20	24	20' 9"	16' 5"	14' 3"	18' 1"	14' 3"	12' 4"	16' 5"	12' 10"	11' 2"
4S114-18	12	27' 4"	21' 2"	18' 3"	23' 6"	18' 4"	15' 11"	21' 2"	16' 8"	14' 5"
4S114-18	16	25' 2"	19' 5"	16' 8"	21' 7"	16' 9"	14' 6"	19' 4"	15' 2"	13' 2"
4S114-18	24	22' 7"	17' 2"	14' 8"	19' 3"	14' 10"	12' 8"	16' 11" f	13' 4"	11' 6"
4S114-16	12	29' 1"	22' 11"	20' 0"	25' 3"	19' 10"	17' 3"	22' 9"	17' 11"	15' 7"
4S114-16	16	26' 9"	21' 1"	18' 4"	23' 2"	18' 2"	15' 9"	20' 11"	16' 4"	14' 2"
4S114-16	24	23' 11"	18' 10"	16' 4"	20' 8"	16' 1"	13' 11"	18' 4"	14' 6"	12' 6"
4S114-14	12	31' 6"	25' 0"	21' 10"	27' 5"	21' 8"	18' 10"	24' 10"	19' 6"	16' 11"
4S114-14	16	29' 1"	23' 1"	20' 2"	25' 3"	19' 11"	17' 4"	22' 10"	17' 11"	15' 6"
4S114-14	24	26' 2"	20' 9"	18' 2"	22' 9"	17' 10"	15' 6"	20' 6"	15' 11"	13' 9"
6 "										
6S114-25	12	22' 10"	22' 1"	19' 4"	18' 7" f	18' 7"	16' 9"	16' 2" f	16' 2" f	15' 0"
6S114-25	16	19' 9" f	19' 9" f	17' 11"	16' 2" f	16' 2"	15' 7"	14' 0" f	14' 0" f	13' 10"
6S114-25	24	16' 9" f	16' 9" f	16' 9" f	13' 5" f	13' 5" f	13' 5" f	11' 5" f	11' 5" f	11' 5" f
6S114-20	12	33' 9"	26' 9"	23' 5"	29' 6" f	23' 5"	20' 6"	26' 9"	21' 3"	18' 7"
6S114-20	16	30' 10"	24' 6"	21' 4"	27' 0"	21' 4"	18' 9"	24' 6"	19' 5"	17' 0"
6S114-20	24	27' 2"	21' 7"	18' 10"	23' 10"	18' 10"	16' 7"	19' 1" s	17' 2"	15' 0"
6S114-18	12	38' 7"	30' 7"	26' 8"	33' 9"	26' 6"	23' 0"	30' 7"	23' 11"	20' 9"
6S114-18	16	35' 8"	28' 3"	24' 8"	31' 3"	24' 6"	21' 3"	27' 8" f	22' 1"	19' 1"
6S114-18	24	32' 0" f	25' 7"	22' 4"	26' 1" f	22' 1"	19' 1"	22' 7" f	19' 10"	17' 1"
6S114-16	12	40' 11"	32' 6"	28' 4"	35' 1"	28' 3"	24' 7"	32' 6"	25' 6"	22' 2"
6S114-16	16	37' 10"	30' 0"	26' 2"	33' 1"	26' 1"	22' 8"	30' 0"	23' 6"	20' 5"
6S114-16	24	34' 1"	27' 0"	23' 7"	29' 10"	23' 5"	20' 5"	27' 0"	21' 1"	18' 3"
6S114-14	12	43' 9"	34' 8"	30' 4"	38' 3"	30' 4"	26' 6"	34' 8"	27' 5"	23' 11"
6S114-14	16	40' 4"	32' 0"	28' 0"	35' 3"	28' 0"	24' 5"	32' 0"	25' 3"	22' 0"
6S114-14	24	36' 3"	28' 9"	25' 2"	31' 9"	25' 2"	22' 0"	28' 9"	22' 8"	19' 8"

ALLOWABLE WALL HEIGHT TABLES- COMPOSITE

Member	Spacing (in) o.c.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
8 "										
8S114-18	12	47' 3"	37' 6"	32' 9"	41' 3"	32' 9"	28' 8"	37' 6"	29' 8"	25' 11"
8S114-18	16	43' 3"	34' 4"	30' 0"	37' 10"	30' 1"	26' 3"	34' 3" f	27' 2"	23' 9"
8S114-18	24	38' 5"	30' 6"	26' 8"	32' 4" f	26' 9"	23' 5"	28' 0" f	24' 2"	21' 0"
8S114-16	12	50' 6"	40' 0"	35' 0"	44' 1"	35' 0"	30' 7"	40' 1"	31' 9"	27' 9"
8S114-16	16	46' 2"	36' 8"	32' 0"	40' 4"	32' 1"	28' 0"	36' 8"	29' 1"	25' 5"
8S114-16	24	41' 0"	32' 6"	28' 5"	35' 10"	28' 6"	24' 10"	32' 6"	25' 9"	22' 6"
8S114-14	12	54' 7"	43' 4"	37' 10"	47' 8"	37' 11"	33' 1"	43' 4"	34' 5"	30' 0"
8S114-14	16	50' 1"	39' 9"	34' 9"	43' 9"	34' 9"	30' 5"	39' 9"	31' 7"	27' 7"
8S114-14	24	44' 7"	35' 5"	30' 11"	39' 0"	31' 0"	27' 1"	35' 5"	28' 1"	24' 6"

ALLOWABLE WALL HEIGHT TABLES- NON-COMPOSITE

Member	Spacing (in) O.C.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
2 1/2 "										
212S114-25	12	13' 3"	10' 6"	9' 2"	11' 7"	9' 2"	8' 0"	10' 2" f	8' 4"	7' 3"
212S114-25	16	12' 0"	9' 6"	8' 4"	10' 2" f	8' 4"	7' 3"	8' 10" f	7' 7"	6' 7"
212S114-25	24	10' 2" f	8' 4"	7' 3"	8' 4" f	7' 3"	6' 4"	7' 2" f	6' 7"	5' 9"
212S114-22	12	15' 6"	12' 4"	10' 9"	13' 7"	10' 9"	9' 5"	12' 4"	9' 9"	8' 6"
212S114-22	16	14' 1"	11' 2"	9' 9"	12' 4"	9' 9"	8' 6"	10' 11" f	8' 10"	7' 9"
212S114-22	24	12' 4"	9' 9"	8' 6"	10' 4" f	8' 6"	7' 5"	8' 11" f	7' 9"	6' 9"
212S114-20	12	16' 1"	12' 9"	11' 1"	14' 0"	11' 1"	9' 8"	12' 9"	10' 1"	8' 10"
212S114-20	16	14' 7"	11' 7"	10' 1"	12' 9"	10' 1"	8' 10"	11' 7"	9' 2"	8' 0"
212S114-20	24	12' 9"	10' 1"	8' 10"	11' 0" f	8' 10"	7' 8"	9' 6" f	8' 0"	7' 0"
212S114-20S	12	16' 7"	13' 2"	11' 6"	14' 6"	11' 6"	10' 0"	13' 2"	10' 5"	9' 1"
212S114-20S	16	15' 1"	11' 11"	10' 5"	13' 2"	10' 5"	9' 1"	11' 11"	9' 6"	8' 3"
212S114-20S	24	13' 2"	10' 5"	9' 1"	11' 6"	9' 1"	7' 11"	10' 3" f	8' 3"	7' 3"
212S114-18	12	18' 1"	14' 4"	12' 6"	15' 9"	12' 6"	10' 11"	14' 4"	11' 4"	9' 11"
212S114-18	16	16' 5"	13' 0"	11' 4"	14' 4"	11' 4"	9' 11"	13' 0"	10' 4"	9' 0"
212S114-18	24	14' 4"	11' 4"	9' 11"	12' 6"	9' 11"	8' 8"	11' 4"	9' 0"	7' 10"
3 5/8 "										
358S114-25	12	17' 3"	13' 8"	11' 11"	14' 3" f	11' 11"	10' 5"	12' 4" f	10' 10"	9' 6"
358S114-25	16	15' 1" f	12' 5"	10' 10"	12' 4" f	10' 10"	9' 6"	10' 8" f	9' 10"	8' 7"
358S114-25	24	12' 4" f	10' 10"	9' 6"	10' 1" f	9' 6"	8' 3"	8' 9" f	8' 7"	7' 6"
358S114-22	12	20' 1"	15' 11"	13' 11"	17' 7"	13' 11"	12' 2"	15' 11"	12' 8"	11' 0"
358S114-22	16	18' 3"	14' 6"	12' 8"	15' 11"	12' 8"	11' 0"	13' 10" f	11' 6"	10' 0"
358S114-22	24	15' 11"	12' 8"	11' 0"	13' 1" f	11' 0"	9' 8"	11' 4" f	10' 0"	8' 9"
358S114-20	12	20' 10"	16' 6"	14' 5"	18' 2"	14' 5"	12' 7"	16' 6"	13' 1"	11' 5"
358S114-20	16	18' 11"	15' 0"	13' 1"	16' 6"	13' 1"	11' 5"	14' 9" f	11' 11"	10' 5"
358S114-20	24	16' 6"	13' 1"	11' 5"	13' 11" f	11' 5"	10' 0"	12' 1" f	10' 5"	9' 1"
358S114-20S	12	21' 6"	17' 1"	14' 11"	18' 9"	14' 11"	13' 0"	17' 1"	13' 6"	11' 10"
358S114-20S	16	19' 6"	15' 6"	13' 6"	17' 1"	13' 6"	11' 10"	15' 6"	12' 4"	10' 9"
358S114-20S	24	17' 1"	13' 6"	11' 10"	14' 11"	11' 10"	10' 4"	12' 11" f	10' 9"	9' 4"
358S114-18	12	23' 5"	18' 7"	16' 3"	20' 6"	16' 3"	14' 2"	18' 7"	14' 9"	12' 11"
358S114-18	16	21' 3"	16' 11"	14' 9"	18' 7"	14' 9"	12' 11"	16' 11"	13' 5"	11' 8"
358S114-18	24	18' 7"	14' 9"	12' 11"	16' 3"	12' 11"	11' 3"	14' 9"	11' 8"	10' 3"
358S114-16	12	25' 1"	19' 11"	17' 4"	21' 11"	17' 4"	15' 2"	19' 11"	15' 9"	13' 9"
358S114-16	16	22' 9"	18' 1"	15' 9"	19' 11"	15' 9"	13' 9"	18' 1"	14' 4"	12' 6"
358S114-16	24	19' 11"	15' 9"	13' 9"	17' 4"	13' 9"	12' 0"	15' 9"	12' 6"	10' 11"
358S114-14 (50 KSI)	12	26' 10"	21' 3"	18' 7"	23' 5"	18' 7"	16' 3"	21' 3"	16' 10"	14' 9"
358S114-14 (50 KSI)	16	24' 4"	19' 4"	16' 10"	21' 3"	16' 10"	14' 9"	19' 4"	15' 4"	13' 5"
358S114-14 (50 KSI)	24	21' 3"	16' 10"	14' 9"	18' 7"	14' 9"	12' 10"	16' 10"	13' 5"	11' 8"

ALLOWABLE WALL HEIGHT TABLES- NON-COMPOSITE

Member	Spacing (in) O.C.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
4 "										
4S114-25	12	18' 8" f	15' 1"	13' 2"	15' 2" f	13' 2"	11' 6"	13' 2" f	12' 0"	10' 6"
4S114-25	16	16' 2" f	13' 9"	12' 0"	13' 2" f	12' 0"	10' 6"	11' 5" f	10' 11"	9' 6"
4S114-25	24	13' 2" f	12' 0"	10' 6"	10' 9" f	10' 6"	9' 2"	9' 4" f	9' 4" f	8' 4"
4S114-22	12	22' 4"	17' 8"	15' 5"	19' 6"	15' 5"	13' 6"	17' 8" f	14' 0"	12' 3"
4S114-22	16	20' 3"	16' 1"	14' 0"	17' 8" f	14' 0"	12' 3"	15' 3" f	12' 9"	11' 2"
4S114-22	24	17' 8" f	14' 0"	12' 3"	10' 4" f	12' 3"	10' 8"	12' 6" f	11' 2"	9' 9"
4S114-20	12	23' 1"	18' 4"	16' 0"	20' 2"	16' 0"	9' 8"	18' 4"	14' 7"	12' 8"
4S114-20	16	21' 0"	16' 8"	14' 7"	18' 4"	14' 7"	12' 8"	16' 3" f	13' 3"	11' 6"
4S114-20	24	18' 4"	14' 7"	12' 8"	15' 4" f	12' 8"	11' 1"	13' 3" f	11' 6"	10' 1"
4S114-20S	12	23' 11"	18' 11"	16' 7"	20' 10"	16' 7"	14' 5"	18' 11"	15' 0"	13' 2"
4S114-20S	16	21' 8"	17' 3"	15' 0"	18' 11"	15' 0"	13' 2"	17' 3"	13' 8"	11' 11"
4S114-20S	24	18' 11"	15' 0"	13' 2"	16' 5" f	13' 2"	11' 6"	14' 2" f	11' 11"	10' 5"
4S114-18	12	26' 0"	20' 8"	18' 0"	22' 9'6	18' 0"	15' 9"	20' 8"	16' 5"	14' 4"
4S114-18	16	23' 8"	18' 9"	16' 5"	20' 8"	16' 5"	14' 4"	18' 9"	14' 11"	13' 0"
4S114-18	24	20' 8"	16' 5"	14' 4"	18' 0"	14' 4"	12' 6"	16' 5"	13' 0"	11' 4"
4S114-16	12	27' 10"	22' 1"	19' 4"	24' 4"	19' 4"	16' 10"	22' 1"	17' 6"	15' 4"
4S114-16	16	25' 4"	20' 1"	17' 6"	22' 1"	17' 6"	15' 4"	20' 1"	15' 11"	13' 11"
4S114-16	24	22' 1"	17' 6"	15' 4"	19' 4"	15' 4"	13' 4"	17' 6"	13' 11"	12' 2"
4S114-14	12	29' 10"	23' 8"	20' 8"	26' 0"	20' 8"	18' 1"	23' 8"	18' 9"	16' 5"
4S114-14	16	27' 1"	21' 6"	18' 9"	23' 8"	18' 9"	16' 5"	21' 6"	17' 1"	14' 11"
4S114-14	24	23' 8"	18' 9"	16' 5"	20' 8"	16' 5"	14' 4"	18' 9"	14' 11"	13' 0"

ALLOWABLE WALL HEIGHT TABLES- NON-COMPOSITE

Member	Spacing (in) O.C.	5psf			7.5 psf			10psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
6"										
6S114-22	12	31' 0" f	24' 8"	21' 6"	25' 4" f	21' 6"	18' 9"	21' 11" f	19' 6"	17' 1"
6S114-22	16	26' 10" f	22' 4"	19' 6"	21' 11" f	19' 6"	17' 1"	19' 0" f	17' 9"	15' 6"
6S114-22	24	21' 11" f	19' 6"	17' 1"	17' 11" f	17' 1"	14' 11"	15' 6" f	15' 6" f	13' 6"
6S114-20	12	32' 0"	25' 5"	22' 2"	27' 10" f	22' 2"	19' 5"	24' 1" f	20' 2"	17' 7"
6S114-20	16	29' 1"	23' 1"	20' 2"	24' 1" f	20' 2"	17' 7"	20' 10" f	18' 4"	16' 0"
6S114-20	24	24' 1" f	20' 2"	17' 7"	19' 8" f	17' 7"	15' 5"	17' 0" f	16' 0"	14' 0"
6S114-20S	12	33' 1"	26' 3"	22' 11"	28' 11"	22' 11"	20' 1"	26' 3"	20' 10"	18' 3"
6S114-20S	16	30' 1"	23' 11"	20' 10"	26' 3"	20' 10"	18' 3"	23' 2" f	18' 11"	16' 6"
6S114-20S	24	26' 3"	20' 10"	18' 3"	21' 10" f	18' 3"	15' 11"	18' 11" f	16' 6"	14' 5"
6S114-18	12	36' 1"	28' 8"	25' 0"	31' 7	25' 0"	21' 10"	28' 8"	22' 9"	19' 10"
6S114-18	16	32' 10"	26' 0"	22' 9"	28' 8"	22' 9"	19' 10"	26' 0"	20' 8"	18' 0"
6S114-18	24	28' 8"	22' 9"	19' 10"	25' 0"	19' 10"	17' 4"	22' 7" f	18' 0"	15' 9"
6S114-16	12	38' 8"	30' 9"	26' 10"	33' 10"	26' 10"	23' 5"	30' 9"	24' 4"	21' 3"
6S114-16	16	35' 2"	27' 11"	24' 4"	30' 9"	24' 4"	21' 3"	27' 11"	22' 2"	19' 4"
6S114-16	24	30' 9"	24' 4"	21' 3"	26' 10"	21' 3"	18' 7"	24' 4"	19' 4"	16' 11"
6S114-14	12	41' 6"	32' 11"	28' 9"	36' 3"	28' 9"	25' 1"	32' 11"	26' 2"	22' 10"
6S114-14	16	37' 8"	29' 11"	26' 2"	32' 11"	26' 2"	22' 10"	29' 11"	23' 9"	20' 9"
6S114-14	24	32' 11"	26' 2"	22' 10"	28' 9"	22' 10"	19' 11"	26' 2"	20' 9"	18' 1"
8"										
8S114-18	12	45' 11"	36' 5"	31' 10"	40' 1"	31' 10"	27' 9"	36' 5"	28' 11"	25' 3"
8S114-18	16	41' 8"	33' 1"	28' 11"	36' 5"	28' 11"	25' 3"	33' 1"	26' 3"	22' 11"
8S114-18	24	36' 5"	28' 11"	25' 3"	31' 10"	25' 3"	22' 0"	28' 0" f	22' 11"	20' 0"
8S114-16	12	49' 3"	39' 1"	34' 1"	43' 0"	34' 1"	29' 10"	39' 1"	31' 0"	27' 1"
8S114-16	16	44' 9"	35' 6"	31' 0"	39' 1"	31' 0"	27' 1"	35' 6"	28' 2"	24' 7"
8S114-16	24	39' 1"	31' 0"	27' 1"	34' 1"	27' 1"	23' 8"	31' 0"	24' 7"	21' 6"
8S114-14	12	52' 10"	41' 11"	36' 8"	46' 2"	36' 8"	32' 0"	41' 11"	33' 3"	29' 1"
8S114-14	16	48' 0"	38' 1"	33' 3"	41' 11"	33' 3"	29' 1"	38' 1"	30' 3"	26' 5"
8S114-14	24	41' 11"	33' 3"	29' 1"	36' 8"	29' 1"	25' 5"	33' 3"	26' 5"	23' 1"

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf			
		L/240	L/360	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
3 1/2 "																							
312S158-20	12	23' 8"	18' 9"	16' 5"	13' 0"	11' 4"	9' 7"	11' 10"	10' 4"	8' 8"	11' 0"	9' 7"	8' 1"	10' 4"	9' 0"	7' 7"	9' 10"	8' 7"	7' 2"	9' 4"	8' 2"	6' 11"	
312S158-20	16	21' 6"	17' 1"	14' 11"	11' 10"	10' 4"	8' 8"	10' 9"	9' 4"	7' 11"	9' 11"	8' 8"	7' 4"	9' 4"	8' 2"	6' 11"	8' 11"	7' 9"	6' 7"	8' 6"	7' 5"	6' 3"	
312S158-20	24	18' 9"	14' 11"	13' 0"	10' 4"	9' 0"	7' 7"	9' 4"	8' 2"	6' 11"	8' 8"	7' 7"	6' 5"	8' 2"	7' 2"	6' 0"	7' 9"	6' 9"	5' 9"	7' 5"	6' 6"	5' 6"	
312S158-18	12	25' 9"	20' 5"	17' 10"	14' 2"	12' 4"	10' 5"	12' 10"	11' 3"	9' 6"	11' 11"	10' 5"	8' 9"	11' 3"	9' 10"	8' 3"	10' 8"	9' 4"	7' 10"	10' 2"	8' 11"	7' 6"	
312S158-18	16	23' 5"	18' 7"	16' 2"	12' 10"	11' 3"	9' 6"	11' 8"	10' 2"	8' 7"	10' 10"	9' 6"	8' 0"	10' 2"	8' 11"	7' 6"	9' 8"	8' 5"	7' 1"	9' 3"	8' 1"	6' 10"	
312S158-18	24	20' 5"	16' 2"	14' 2"	11' 3"	9' 10"	8' 3"	10' 2"	8' 11"	7' 6"	9' 6"	8' 3"	7' 0"	8' 11"	7' 9"	6' 7"	8' 5"	7' 5"	6' 3"	8' 1"	7' 1"	5' 11"	
312S158-16	12	27' 7"	21' 11"	19' 1"	15' 2"	13' 3"	11' 2"	13' 9"	12' 0"	10' 2"	12' 9"	11' 2"	9' 5"	12' 0"	10' 6"	8' 10"	11' 5"	10' 0"	8' 5"	10' 11"	9' 6"	8' 0"	
312S158-16	16	25' 1"	19' 11"	17' 4"	13' 9"	12' 0"	10' 2"	12' 6"	10' 11"	9' 2"	11' 7"	10' 2"	8' 7"	10' 11"	9' 6"	8' 0"	10' 4"	9' 1"	7' 8"	9' 11"	8' 8"	7' 4"	
312S158-16	24	21' 11"	17' 4"	15' 2"	12' 0"	10' 6"	8' 10"	10' 11"	9' 6"	8' 0"	10' 2"	8' 10"	7' 5"	9' 6"	8' 4"	7' 0"	9' 1"	7' 11"	6' 8"	8' 8"	7' 7"	6' 4"	
312S158-14	12	29' 6"	23' 5"	20' 5"	16' 3	14' 2"	11' 11"	14' 9"	12' 10"	10' 10"	13' 8"	11' 11"	10' 1"	12' 10"	11' 3"	9' 6"	12' 3"	10' 8"	9' 0"	11' 8"	10' 2"	8' 7"	
312S158-14	16	26' 10"	21' 3"	18' 7"	14' 9"	12' 10"	10' 10"	13' 5"	11' 8"	9' 10"	12' 5"	10' 10"	9' 2"	11' 8"	10' 2"	8' 7"	11' 1"	9' 8"	8' 2"	10' 7"	9' 3"	7' 10"	
312S158-14	24	23' 5"	18' 7"	16' 3"	12' 10"	11' 3"	9' 6"	11' 8"	10' 2"	8' 7"	10' 10"	9' 6"	8' 0"	10' 2"	8' 11"	7' 6"	9' 8"	8' 6"	7' 2"	9' 3"	8' 1"	6' 10"	

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf			
		L/240	L/360	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
3 5/8 "																							
358S138-20	12	23' 2"	18' 5"	16' 1"	12' 9"	11' 2"	9' 5"	11' 7"	10' 1"	8' 6"	10' 9"	9' 5"	7' 11"	10' 1"	8' 10"	7' 5"	9' 7"	8' 5"	7' 1"	9' 2"	8' 0"	6' 9"	
358S138-20	16	21' 1"	16' 9"	14' 7"	11' 7"	10' 1"	8' 6"	10' 6"	9' 2"	7' 9"	9' 9"	8' 6"	7' 2"	9' 2"	8' 0"	6' 9"	8' 9"	7' 7"	6' 5"	8' 4"	7' 3"	6' 2"	
358S138-20	24	18' 5"	14' 7"	12' 9"	10' 1"	8' 10"	7' 5"	9' 2"	8' 0"	6' 9"	8' 6"	7' 5"	6' 3"	8' 0"	7' 0"	5' 11"	7' 7"	6' 8"	5' 7"	7' 3"	6' 4"	5' 4"	
358S158-20	12	24' 4"	19' 3"	16' 10"	13' 4"	11' 8"	9' 10"	12' 2"	10' 7"	8' 11"	11' 3"	9' 10"	8' 3"	10' 7"	9' 3"	7' 10"	10' 1"	8' 9"	7' 5"	9' 7"	8' 5"	7' 1"	
358S158-20	16	22' 1"	17' 6"	15' 4"	12' 2"	10' 7"	8' 11"	11' 0"	9' 7"	8' 1"	10' 3"	8' 11"	7' 6"	9' 7"	8' 5"	7' 1"	9' 2"	8' 0"	6' 9"	8' 9"	7' 8"	6' 5"	
358S158-20	24	19' 3"	15' 4"	13' 4"	10' 7"	9' 3"	7' 10"	9' 7"	8' 5"	7' 1"	8' 11"	7' 10"	6' 7"	8' 5"	7' 4"	6' 2"	8' 0"	7' 0"	5' 10"	7' 8"	6' 8"	5' 7"	
358S2-20	12	25' 7"	20' 4"	17' 9"	14' 1"	12' 3"	10' 4"	12' 9"	11' 2"	9' 5"	11' 10"	10' 4"	8' 9"	11' 2"	9' 9"	8' 3"	10' 7"	9' 3"	7' 10"	10' 2"	8' 10"	7' 5"	
358S2-20	16	23' 3"	18' 5"	16' 1"	12' 9"	11' 2"	9' 5"	11' 7"	10' 2"	8' 6"	10' 9"	9' 5"	7' 11"	10' 2"	8' 10"	7' 5"	9' 7"	8' 5"	7' 1"	9' 2"	8' 0"	6' 9"	
358S2-20	24	20' 4"	16' 1"	14' 1"	11' 2"	9' 9"	8' 3"	10' 2"	8' 10"	7' 5"	9' 5"	8' 3"	6' 11"	8' 10"	7' 9"	6' 6"	8' 5"	7' 4"	6' 2"	8' 0"	7' 0"	5' 11"	
358S138-18	12	25' 3"	20' 0"	17' 6"	13' 10"	12' 1"	10' 3"	12' 7"	11' 0"	9' 3"	11' 8"	10' 3"	8' 7"	11' 0"	9' 7"	8' 1"	10' 5"	9' 1"	7' 8"	10' 0"	8' 9"	7' 4"	
358S138-18	16	22' 11"	18' 2"	15' 11"	12' 7"	11' 0"	9' 3"	11' 5"	10' 0"	8' 5"	10' 7"	9' 3"	7' 10"	10' 0"	8' 9"	7' 4"	9' 6"	8' 3"	7' 0"	9' 1"	7' 11"	6' 8"	
358S138-18	24	20' 0"	15' 11"	13' 10"	11' 0"	9' 7"	8' 1"	10' 0"	8' 9"	7' 4"	9' 3"	8' 1"	6' 10"	8' 9"	7' 7"	6' 5"	8' 3"	7' 3"	6' 1"	7' 11"	6' 11"	5' 10"	
358S158-18	12	26' 6"	21' 0"	18' 4"	14' 7"	12' 8"	10' 8"	13' 3"	11' 6"	9' 9"	12' 3"	10' 8"	9' 0"	11' 6"	10' 1"	8' 6"	10' 11"	9' 7"	8' 1"	10' 6"	9' 2"	7' 8"	
358S158-18	16	24' 0"	19' 1"	16' 8"	13' 3"	11' 6"	9' 9"	12' 0"	10' 6"	8' 10"	11' 2"	9' 9"	8' 2"	10' 6"	9' 2"	7' 8"	9' 11"	8' 8"	7' 4"	9' 6"	8' 4"	7' 0"	
358S158-18	24	21' 0"	16' 8"	14' 7"	11' 6"	10' 1"	8' 6"	10' 6"	9' 2"	16' 11"	9' 9"	8' 6"	7' 2"	9' 2"	8' 0"	6' 9"	8' 8"	7' 7"	6' 5"	8' 4"	7' 3"	6' 1"	
358S2-18	12	27' 11"	22' 2"	19' 4"	15' 4"	13' 5"	11' 4"	13' 11"	12' 2"	10' 3"	12' 11"	11' 4"	9' 6"	12' 2"	10' 8"	9' 0"	11' 7"	10' 1"	8' 6"	11' 1"	9' 8"	8' 2"	
358S2-18	16	25' 5"	20' 2"	17' 7"	13' 11"	12' 2"	10' 3"	12' 8"	11' 1"	9' 4"	11' 9"	10' 3"	8' 8"	11' 1"	9' 8"	8' 2"	10' 6"	9' 2"	7' 9"	10' 1"	8' 9"	7' 5"	
358S2-18	24	22' 2"	17' 7"	15' 4"	12' 2"	10' 8"	9' 0"	11' 1"	9' 8"	8' 2"	10' 3"	9' 0"	7' 7"	9' 8"	8' 5"	7' 1"	9' 2"	8' 0"	6' 9"	8' 9"	7' 8"	6' 5"	
358S138-16	12	27' 0"	21' 5"	18' 9"	14' 10"	13' 0"	10' 11"	13' 6"	11' 9"	9' 11"	12' 6"	10' 11"	9' 3"	11' 9"	10' 3"	8' 8"	11' 2"	9' 9"	8' 3"	10' 8"	9' 4"	7' 10"	
358S138-16	16	24' 7"	19' 6"	17' 0"	13' 6"	11' 9"	9' 11"	12' 3"	10' 8"	9' 0"	11' 4"	9' 11"	8' 4"	10' 8"	9' 4"	7' 10"	10' 2"	8' 10"	7' 6"	9' 9"	8' 6"	7' 2"	
358S138-16	24	21' 5"	17' 0"	14' 10"	11' 9"	10' 3"	8' 8"	10' 8"	9' 4"	7' 10"	9' 11"	8' 8"	7' 4"	9' 4"	8' 2"	6' 10"	8' 10"	7' 9"	6' 6"	8' 6"	7' 5"	6' 3"	
358S158-16	12	28' 4"	22' 6"	19' 8"	15' 7"	13' 7"	11' 6"	14' 2"	12' 4"	10' 5"	13' 2"	11' 6"	9' 8"	12' 4"	10' 9"	9' 1"	11' 9"	10' 3"	8' 8"	11' 3"	9' 10"	8' 3"	
358S158-16	16	25' 9"	20' 5"	17' 10"	14' 2"	12' 4"	10' 5"	12' 4"	11' 3"	9' 6"	11' 11"	10' 5"	8' 9"	11' 3"	9' 10"	8' 3"	10' 8"	9' 4"	7' 10"	10' 2"	8' 11"	7' 6"	
358S158-16	24	22' 6"	17' 10"	15' 7"	12' 4"	10' 9"	9' 1"	16' 6"	9' 10"	8' 3"	10' 5"	9' 1"	7' 8"	9' 10"	8' 7"	7' 3"	9' 4"	8' 2"	6' 10"	8' 11"	7' 9"	6' 7"	
358S2-16	12	30' 0"	23' 9"	20' 9"	16' 6"	14' 5"	12' 1"	15' 0"	13' 1"	11' 0"	13' 11"	12' 1"	10' 3"	13' 1"	11' 5"	9' 7"	12' 5"	10' 10"	9' 2"	11' 10"	10' 4"	8' 9"	
358S2-16	16	27' 3"	21' 7"	18' 10"	15' 0"	13' 1"	11' 0"	13' 1"	11' 10"	10' 0"	12' 7"	11' 0"	9' 3"	11' 10"	10' 4"	8' 9"	11' 3"	10' 10"	9' 2"	11' 9"	10' 4"	8' 11"	
358S2-16	24	23' 9"	18' 10"	16' 6"	13' 1"	11' 5"	9' 7"	11' 10"	10' 4"	8' 9"	11' 0"	9' 7"	8' 1"	10' 4"	9' 1"	7' 7"	9' 10"	8' 7"	7' 3"	9' 5"	8' 3"	6' 11"	
358S138-14	12	28' 11"	22' 11"	20' 0"	15' 10"	13' 10"	11' 8"	14' 5"	12' 7"	10' 7"	13' 5"	11' 8"	9' 10"	12' 7"	11' 0"	9' 3"	11' 11"	10' 5"	8' 10"	11' 5"	10' 0"	8' 5"	
358S138-14	16	26' 3"	20' 10"	18' 2"	14' 5"	12' 7"	10' 7"	13' 1"	11' 5"	9' 8"	12' 2"	10' 7"	8' 11"	11' 5"	10' 0"	8' 5"	10' 10"	9' 6"	8' 0"	10' 5"	9' 1"	7' 8"	
358S138-14	24	22' 11"	18' 2"	15' 10"	12' 7"	11' 0"	9' 3"	11' 5"	10' 0"	8' 5"	10' 7"	9' 3"	7' 10"	10' 0"	8' 9"	7' 4"	9' 6"	8' 3"	7' 0"	9' 1"	7' 11"	6' 8"	
358S158-14	12	30' 4"	24' 1"	21' 0"	16' 8"	14' 7"	12' 3"	15' 2"	13' 3"	11' 2"	14' 1"	12' 3"	10' 4"	13' 3"	11' 7"	9' 9"	12' 7"	11' 0"	9' 3"	12' 0"	10' 6"	8' 10"	
358S158-14	16	27' 7"	21' 10"	19' 1"	15' 2"	13' 3"	11' 2"	13' 9"	12' 0"	10' 2"	12' 9"	11' 2"	9' 5"	12' 0"	10' 6"	8' 10"	11' 5"	10' 0"	8' 5"	10' 11"	9' 6"	8' 0"	
358S158-14	24	24' 1"	19' 1"	16' 8"	13' 3"	11' 7"	9' 9"	12' 0"	10' 6"	8' 10"	11' 2"	9' 9"	8' 2"	10' 6"	9' 2"	7' 9"	10' 0"	8' 8"	7' 4"	9' 6"	8' 4"	7' 0"	
358S2-14	12	32' 1"	25' 6"	22' 3"	17' 8"	15' 5"	13' 0"	16' 0"	14' 0"	11' 0"	14' 10"	13' 0"	10' 11"	14' 0"	12' 3"	10' 4"	13' 3"	11' 7"	9' 9"	12' 9"	11' 1"	9' 4"	
358S2-14	16	29' 2"	23' 2"	20' 2"	16' 0"	14' 0"	11' 10"	14' 7"	12' 9"	10' 9"	13' 6"	11' 10"	9' 3"	12' 9"	11' 1"	9' 4"	12' 1"	10' 6"	8' 11"	11' 7"	10' 1"	8' 6"	
358S2-14	24	25' 6"	20' 2"	17' 8"	14' 0"	12' 3"	10' 4"	12' 9"	11' 1"	9' 4"	11' 10"	10' 4"	8' 8"	11' 1"	9' 8"	8' 2"	10' 6"	9' 2"	7' 9"	10' 1"	8' 10"	7' 5"	

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf			
		L/240	L/360	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
4"																							
4S138-20	12	25' 1"	19' 11"	17' 4"	13' 9"	12' 0"	10' 2"	12' 6"	10' 11"	9' 2"	11' 2"	10' 2"	8' 7"	10' 11"	9' 6"	8' 0"	10' 4"	9' 1"	7' 8"	9' 11"	8' 8"	7' 4"	
4S138-20	16	22' 9"	18' 1"	15' 9"	12' 6"	10' 11"	9' 2"	11' 4"	9' 11"	8' 4"	10' 7"	9' 2"	7' 9"	9' 11"	8' 8"	7' 4"	9' 5"	8' 3"	6' 11"	9' 0"	7' 10"	6' 8"	
4S138-20	24	19' 11"	15' 9"	13' 9"	10' 11"	9' 6"	8' 0"	9' 11"	8' 8"	7' 4"	9' 2"	8' 0"	6' 9"	8' 8"	7' 7"	6' 4"	8' 3"	7' 2"	6' 1"	7' 10"	6' 10"	5' 9"	
4S158-20	12	26' 3"	20' 10"	18' 2"	14' 5"	12' 7"	10' 7"	13' 1"	11' 5"	9' 8"	12' 2"	10' 7"	8' 11"	11' 5"	10' 0"	8' 5"	10' 10"	9' 6"	8' 0"	10' 5"	9' 1"	7' 8"	
4S158-20	16	23' 10"	18' 11"	16' 6"	13' 1"	11' 5"	9' 8"	11' 11"	10' 5"	8' 9"	11' 0"	9' 8"	8' 1"	10' 5"	9' 1"	7' 8"	9' 10"	8' 7"	7' 3"	9' 5"	8' 3"	6' 11"	
4S158-20	24	20' 10"	16' 6"	14' 5"	11' 5"	10' 0"	8' 5"	10' 5"	9' 1"	7' 8"	9' 8"	8' 5"	7' 1"	9' 1"	7' 11"	6' 8"	8' 7"	7' 6"	6' 4"	8' 3"	7' 2"	6' 1"	
4S2-20	12	27' 7"	21' 11"	19' 1"	15' 2"	13' 3"	11' 2"	13' 9"	12' 0"	10' 2"	12' 9"	11' 2"	9' 5"	12' 0"	10' 6"	8' 10"	11' 5"	10' 0"	8' 5"	10' 11"	9' 6"	8' 0"	
4S2-20	16	25' 1"	19' 11"	17' 4"	13' 9"	12' 0"	10' 2"	12' 6"	10' 11"	9' 2"	11' 7"	10' 2"	8' 7"	10' 11"	9' 6"	8' 0"	10' 5"	9' 1"	7' 8"	9' 11"	8' 8"	7' 4"	
4S2-20	24	21' 11"	17' 4"	15' 2"	12' 0"	10' 6"	8' 10"	10' 11"	9' 6"	8' 0"	10' 2"	8' 10"	7' 6"	9' 6"	8' 4"	7' 0"	9' 1"	7' 11"	6' 8"	8' 8"	7' 7"	6' 4"	
4S138-18	12	27' 3"	21' 8"	18' 11"	15' 10"	13' 1"	11' 0"	13' 7"	11' 11"	10' 0"	12' 8"	11' 0"	9' 4"	11' 11"	10' 5"	8' 9"	11' 3"	9' 10"	8' 4"	10' 10"	9' 5"	7' 11"	
4S138-18	16	24' 0"	19' 8"	17' 2"	13' 7"	11' 11"	10' 0"	12' 4"	10' 10"	9' 1"	11' 6"	10' 0"	8' 5"	10' 10"	9' 5"	7' 11"	10' 3"	8' 11"	7' 7"	9' 10"	8' 7"	7' 3"	
4S138-18	24	21' 8"	17' 2"	15' 0"	11' 11"	10' 5"	8' 9"	10' 10"	9' 5"	7' 11"	10' 0"	8' 9"	7' 4"	9' 5"	8' 3"	6' 11"	8' 11"	7' 10"	6' 7"	8' 7"	7' 6"	6' 4"	
4S158-18	12	28' 7"	22' 8"	19' 9"	15' 8"	13' 8"	11' 7"	14' 3"	12' 5"	10' 6"	13' 3"	11' 7"	9' 9"	12' 5"	10' 10"	9' 2"	11' 10"	10' 4"	8' 8"	11' 4"	9' 10"	8' 4"	
4S158-18	16	25' 11"	20' 7"	18' 0"	14' 3"	12' 5"	10' 6"	12' 11"	11' 4"	9' 6"	12' 0"	10' 6"	8' 10"	11' 4"	9' 10"	8' 4"	10' 9"	9' 5"	7' 11"	10' 3"	9' 0"	7' 7"	
4S158-18	24	22' 8"	18' 0"	15' 8"	12' 5"	10' 10"	9' 2"	11' 4"	9' 10"	8' 4"	10' 6"	9' 2"	7' 9"	9' 10"	8' 7"	7' 3"	9' 5"	8' 2"	6' 11"	9' 0"	7' 10"	6' 7"	
4S2-18	12	30' 2"	23' 11"	20' 11"	16' 7"	14' 6"	12' 2"	15' 1"	13' 2"	11' 1"	14' 0"	12' 2"	10' 3"	13' 2"	11' 6"	9' 8"	12' 6"	10' 11"	9' 2"	11' 11"	10' 5"	8' 9"	
4S2-18	16	27' 4"	21' 9"	19' 0"	15' 1"	13' 2"	11' 1"	13' 8"	11' 11"	10' 1"	12' 8"	11' 1"	9' 4"	11' 11"	10' 5"	8' 9"	11' 4"	9' 11"	8' 4"	10' 10"	9' 6"	8' 0"	
4S2-18	24	23' 11"	19' 0"	16' 7"	13' 2"	11' 6"	9' 8"	11' 11"	10' 5"	8' 9"	11' 1"	9' 8"	8' 2"	10' 5"	9' 1"	7' 8"	9' 11"	8' 8"	7' 3"	9' 6"	8' 3"	7' 0"	
4S138-16	12	29' 2"	23' 2"	20' 3"	16' 1"	14' 0"	11' 10"	14' 7"	12' 9"	10' 9"	13' 6"	11' 10"	9' 11"	12' 9"	11' 11"	9' 4"	12' 1"	10' 7"	8' 11"	11' 7"	10' 1"	8' 6"	
4S138-16	16	26' 6"	21' 1"	18' 5"	14' 7"	12' 9"	10' 9"	13' 3"	11' 7"	9' 9"	12' 3"	10' 9"	9' 1"	11' 7"	10' 1"	8' 6"	11' 0"	9' 7"	8' 1"	10' 6"	9' 2"	7' 9"	
4S138-16	24	23' 2"	18' 5"	16' 1"	12' 9"	11' 1"	9' 4"	11' 7"	10' 1"	8' 6"	10' 9"	9' 4"	7' 8"	10' 1"	8' 10"	7' 5"	9' 7"	8' 4"	7' 1"	9' 2"	8' 0"	6' 9"	
4S158-16	12	30' 7"	24' 3"	21' 2"	16' 10"	14' 8"	12' 5"	15' 3"	13' 4"	11' 3"	14' 2"	12' 5"	10' 5"	13' 4"	11' 8"	9' 10"	12' 8"	11' 1"	9' 4"	12' 1"	10' 7"	8' 11"	
4S158-16	16	27' 10"	22' 1"	19' 3"	15' 3"	13' 4"	11' 3"	13' 11"	12' 1"	10' 3"	12' 11"	11' 3"	9' 6"	12' 1"	10' 7"	8' 11"	11' 6"	10' 1"	8' 6"	11' 0"	9' 7"	8' 1"	
4S158-16	24	24' 3"	19' 3"	16' 10"	13' 4"	11' 8"	9' 10"	12' 1"	10' 7"	8' 11"	11' 3"	9' 10"	8' 3"	10' 7"	9' 3"	7' 9"	10' 1"	8' 9"	7' 5"	9' 7"	8' 5"	7' 1"	
4S2-16	12	32' 4"	25' 8"	22' 5"	17' 9"	15' 6"	13' 1"	16' 2"	14' 1"	11' 11"	15' 0"	13' 1"	11' 0"	14' 1"	12' 4"	10' 4"	13' 5"	11' 8"	9' 10"	12' 10"	11' 2"	9' 5"	
4S2-16	16	29' 4"	23' 4"	20' 4"	16' 2"	14' 1"	11' 11"	14' 8"	12' 10"	10' 9"	13' 7"	11' 11"	10' 0"	12' 10"	11' 2"	9' 5"	12' 2"	10' 7"	8' 11"	11' 8"	10' 2"	8' 7"	
4S2-16	24	25' 8"	20' 4"	17' 9"	14' 1"	12' 4"	10' 4"	12' 10"	11' 2"	9' 5"	11' 11"	10' 4"	8' 9"	11' 2"	9' 9"	8' 3"	10' 7"	9' 3"	7' 10"	10' 2"	8' 10"	7' 6"	
4S138-14	12	31' 3"	24' 9"	21' 8"	17' 2"	15' 0"	12' 8"	15' 7"	13' 7"	11' 6"	14' 6"	12' 8"	10' 8"	13' 7"	11' 11"	10' 0"	12' 11"	11' 3"	9' 6"	12' 4"	10' 10"	9' 1"	
4S138-14	16	28' 4"	22' 6"	19' 8"	15' 7"	13' 7"	11' 6"	14' 2"	12' 4"	10' 5"	13' 2"	11' 6"	9' 8"	12' 4"	10' 10"	9' 1"	11' 9"	10' 3"	8' 8"	11' 3"	9' 10"	8' 3"	
4S138-14	24	24' 9"	19' 8"	17' 2"	13' 7"	11' 11"	10' 0"	12' 4"	10' 10"	9' 1"	11' 6"	10' 0"	8' 5"	10' 10"	9' 5"	7' 11"	10' 3"	8' 11"	7' 7"	9' 10"	8' 7"	7' 3"	
4S158-14	12	32' 9"	26' 0"	22' 8"	18' 0"	15' 9"	13' 3"	16' 4"	14' 3"	12' 1"	15' 2"	13' 3"	11' 2"	14' 3"	12' 6"	10' 6"	13' 7"	11' 10"	10' 0"	13' 0"	11' 4"	9' 7"	
4S158-14	16	29' 9"	23' 7"	20' 7"	16' 4"	14' 3"	12' 1"	14' 10"	13' 0"	10' 11"	13' 10"	12' 1"	10' 2"	13' 0"	11' 4"	9' 7"	12' 4"	10' 9"	9' 1"	11' 9"	10' 3"	8' 8"	
4S158-14	24	26' 0"	20' 7"	18' 0"	14' 3"	12' 6"	10' 6"	13' 0"	11' 4"	9' 7"	12' 1"	10' 6"	8' 10"	11' 4"	9' 11"	8' 4"	10' 9"	9' 5"	7' 11"	10' 3"	9' 0"	7' 7"	
4S2-14	12	34' 8"	27' 6"	24' 0"	19' 0"	16' 8"	14' 0"	17' 4"	15' 1"	12' 9"	16' 1"	14' 0"	11' 10"	15' 1"	13' 2"	11' 1"	14' 4"	12' 6"	10' 7"	13' 9"	12' 0"	10' 1"	
4S2-14	16	31' 5"	25' 0"	21' 10"	17' 4"	15' 1"	12' 9"	15' 8"	13' 9"	11' 7"	14' 7"	12' 9"	10' 9"	13' 9"	12' 0"	10' 1"	13' 0"	11' 5"	9' 7"	12' 6"	10' 11"	9' 2"	
4S2-14	24	27' 6"	21' 10"	19' 0"	15' 1"	13' 2"	11' 1"	13' 9"	12' 0"	10' 1"	12' 9"	11' 1"	9' 4"	12' 0"	10' 5"	8' 10"	11' 5"	9' 8"	8' 4"	10' 11"	9' 6"	8' 0"	

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf		
		L/240 L/360 L/360			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600		
		4"																				
512S158-20	12	33' 8"	26' 8"	23' 4"	18' 6"	16' 2"	13' 7"	16' 10"	14' 8"	12' 4"	15' 7"	13' 7"	11' 6"	14' 8"	12' 10"	10' 10"	13' 11"	12' 2"	10' 3"	13' 4"	11' 8"	9' 10"
512S158-20	16	30' 7"	24' 3"	21' 2"	16' 10"	14' 8"	12' 4"	15' 3"	13' 4"	11' 3"	14' 2"	12' 4"	10' 5"	13' 4"	11' 8"	9' 10"	12' 8"	11' 1"	9' 4"	12' 1"	10' 7"	8' 11"
512S158-20	24	26' 8"	21' 2"	18' 6"	14' 8"	12' 10"	10' 10"	13' 4"	11' 8"	9' 10"	12' 4"	10' 10"	9' 1"	11' 8"	10' 2"	8' 7"	11' 1"	9' 8"	8' 2"	10' 7" f	9' 3"	7' 9"
512S158-18	12	36' 8"	29' 1"	25' 5"	20' 2"	17' 7"	14' 10"	18' 4"	16' 0"	13' 6"	17' 0"	14' 10"	12' 6"	16' 0"	13' 11"	11' 9"	15' 2"	13' 3"	11' 2"	14' 6"	12' 8"	10' 8"
512S158-18	16	33' 3"	26' 5"	23' 1"	18' 4"	16' 0"	13' 6"	16' 7"	14' 6"	12' 3"	15' 5"	13' 6"	11' 4"	14' 6"	12' 8"	10' 8"	13' 9"	12' 0"	10' 2"	13' 2"	11' 6"	9' 8"
512S158-18	24	29' 1"	23' 1"	20' 2"	16' 0"	13' 11"	11' 9"	14' 6"	12' 8"	10' 8"	13' 6"	11' 9"	9' 11"	12' 8"	11' 1"	9' 4"	12' 0"	10' 6"	8' 10"	11' 6"	10' 1"	8' 6"
512S158-16	12	39' 4"	31' 2"	27' 3"	21' 7"	18' 11"	15' 11"	19' 8"	17' 2"	14' 5"	18' 3"	15' 11"	13' 5"	17' 2"	15' 0"	12' 7"	16' 3"	14' 3"	12' 0"	15' 7"	13' 7"	11' 6"
512S158-16	16	35' 9"	28' 4"	24' 9"	19' 8"	17' 2"	14' 5"	17' 10"	15' 7"	13' 2"	16' 7"	14' 5"	12' 2"	15' 7"	13' 7"	11' 6"	14' 10"	12' 11"	10' 11"	14' 2"	12' 4"	10' 5"
512S158-16	24	31' 2"	24' 9"	21' 7"	17' 2"	15' 0"	12' 7"	15' 7"	13' 7"	11' 6"	14' 5"	12' 7"	10' 8"	13' 7"	11' 11"	10' 0"	12' 11"	11' 3"	9' 6"	12' 4"	10' 9"	9' 1"
512S158-14	12	42' 2"	33' 5"	29' 2"	23' 2"	20' 3"	17' 1"	21' 1"	18' 5"	15' 6"	19' 6"	17' 1"	14' 5"	18' 5"	16' 1"	13' 6"	17' 5"	15' 3"	12' 10"	16' 8"	14' 7"	12' 3"
512S158-14	16	38' 3"	30' 4"	26' 6"	21' 1"	18' 5"	15' 6"	19' 1"	16' 8"	14' 1"	17' 9"	15' 6"	13' 1"	16' 8"	14' 7"	12' 3"	15' 10"	13' 10"	11' 8"	15' 2"	13' 3"	11' 2"
512S158-14	24	33' 5"	26' 6"	23' 2"	18' 5"	16' 1"	13' 6"	16' 8"	14' 7"	12' 3"	15' 6"	13' 6"	11' 5"	14' 7"	12' 9"	10' 9"	13' 10"	12' 1"	10' 2"	13' 3"	11' 7"	9' 9"

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf			
		L/240	L/360	L/360	L/240	L/360	L/600																
6 "																							
6S138-20	12	34' 7"	27' 5"	24' 0"	19' 0"	16' 7"	14' 0"	17' 3"	15' 1"	12' 9"	16' 0"	14' 0"	11' 10"	15' 1"	13' 2"	11' 1"	14' 4"	12' 6"	10' 6"	13' 8"	8' 8"	10' 1"	
6S138-20	16	31' 5"	24' 11"	21' 9"	17' 3"	15' 1"	12' 9"	15' 8"	13' 8"	11' 7"	14' 7"	12' 9"	10' 9"	13' 8"	12' 0"	10' 1"	13' 0"	11' 4"	9' 7"	12' 5"	7' 10"	9' 2"	
6S138-20	24	27' 5"	21' 9"	19' 0"	15' 1"	13' 2"	11' 1"	13' 8"	12' 0"	10' 1"	12' 9"	11' 1"	9' 4"	12' 0"	10' 5"	8' 10"	11' 3"	9' 11"	8' 4"	10' 6"	9' 6"	8' 0"	
6S158-20	12	36' 1"	28' 7"	25' 0"	19' 10"	17' 4"	14' 7"	18' 0"	15' 9"	13' 3"	16' 9"	14' 7"	12' 4"	15' 9"	13' 9"	11' 7"	14' 11"	13' 0"	11' 0"	14' 3"	12' 6"	10' 6"	
6S158-20	16	32' 9"	26' 0"	22' 8"	18' 0"	15' 9"	13' 3"	16' 4"	14' 3"	8' 9"	15' 2"	13' 3"	11' 2"	14' 3"	12' 6"	10' 6"	13' 7"	11' 10"	10' 0"	13' 0"	8' 3"	9' 7"	
6S158-20	24	28' 7"	22' 8"	19' 10"	15' 9"	13' 9"	11' 7"	14' 3"	12' 6"	10' 6"	13' 3"	11' 7"	9' 9"	12' 6"	10' 11"	9' 2"	11' 10"	10' 4"	8' 9"	11' 3"	9' 11"	8' 4"	
6S2-20	12	37' 9"	29' 11"	26' 2"	20' 9"	18' 2"	15' 3"	18' 10"	16' 6"	13' 11"	17' 6"	15' 3"	12' 11"	16' 6"	14' 5"	12' 1"	15' 8"	13' 8"	11' 6"	14' 11"	9' 6"	11' 0"	
6S2-20	16	34' 4"	27' 3"	23' 9"	18' 10"	16' 6"	13' 11"	17' 2"	14' 11"	12' 7"	15' 11"	13' 11"	11' 8"	14' 11"	13' 1"	11' 0"	14' 2"	12' 5"	10' 5"	13' 7"	8' 8"	10' 0"	
6S2-20	24	29' 11"	23' 9"	20' 9"	16' 6"	14' 5"	12' 1"	14' 11"	13' 1"	11' 0"	13' 11"	12' 1"	10' 3"	13' 1"	11' 5"	9' 7"	12' 5"	10' 10"	9' 2"	11' 7"	10' 4"	8' 9"	
6S138-18	12	37' 8"	29' 10"	26' 1"	20' 8"	18' 1"	15' 3"	18' 10"	16' 5"	13' 10"	17' 5"	15' 3"	12' 10"	16' 5"	14' 4"	12' 1"	15' 7"	9' 10"	11' 6"	14' 11"	13' 0"	11' 0"	
6S138-18	16	34' 2"	27' 2"	23' 8"	18' 10"	16' 5"	13' 10"	17' 1"	14' 11"	12' 7"	15' 10"	13' 10"	11' 8"	14' 11"	13' 0"	11' 0"	14' 2"	8' 11"	10' 5"	13' 7"	11' 10"	10' 0"	
6S138-18	24	29' 10"	23' 8"	20' 8"	16' 5"	14' 4"	12' 1"	14' 11"	13' 0"	11' 0"	13' 10"	12' 1"	10' 2"	13' 0"	11' 4"	9' 7"	12' 4"	10' 10"	9' 1"	11' 10"	10' 4"	8' 8"	
6S158-18	12	39' 3"	31' 2"	27' 3"	21' 7"	18' 10"	15' 11"	19' 7"	17' 2"	14' 5"	18' 2"	15' 11"	13' 5"	17' 2"	14' 11"	12' 7"	16' 3"	14' 2"	12' 0"	15' 7"	13' 7"	11' 5"	
6S158-18	16	35' 8"	28' 4"	24' 9"	19' 7"	17' 2"	14' 5"	17' 10"	15' 7"	13' 1"	16' 6"	14' 5"	12' 2"	15' 7"	13' 7"	11' 5"	14' 9"	12' 11"	10' 11"	14' 2"	12' 4"	10' 5"	
6S158-18	24	31' 2"	24' 9"	21' 7"	17' 2"	14' 11"	12' 7"	15' 7"	13' 7"	11' 5"	14' 5"	12' 7"	10' 8"	13' 7"	11' 10"	10' 0"	12' 11"	11' 3"	9' 6"	12' 4"	10' 9"	9' 1"	
6S2-18	12	41' 3"	32' 9"	28' 7"	22' 8"	19' 10"	16' 8"	20' 7"	18' 0"	15' 2"	19' 1"	16' 8"	14' 1"	18' 0"	15' 9"	13' 3"	17' 1"	14' 11"	12' 7"	16' 4"	14' 3"	12' 0"	
6S2-18	16	37' 6"	29' 9"	26' 0"	20' 7"	18' 0"	15' 2"	18' 9"	16' 4"	13' 9"	17' 4"	15' 2"	12' 9"	16' 4"	14' 3"	12' 0"	15' 6"	13' 7"	11' 5"	14' 10"	13' 0"	10' 11"	
6S2-18	24	32' 9"	26' 0"	22' 8"	18' 0"	15' 9"	13' 3"	16' 4"	14' 3"	12' 0"	15' 0"	13' 3"	11' 2"	14' 3"	12' 6"	10' 6"	13' 7"	11' 10"	10' 0"	13' 0"	11' 4"	9' 6"	
6S138-16	12	40' 4"	32' 0"	28' 0"	22' 2"	19' 5"	16' 4"	20' 2"	17' 7"	14' 10"	18' 9"	16' 4"	13' 9"	17' 7"	15' 5"	13' 0"	16' 9"	14' 7"	12' 4"	16' 0"	14' 0"	11' 9"	
6S138-16	16	36' 8"	29' 1"	25' 5"	20' 2"	17' 7"	14' 10"	18' 4"	16' 0"	13' 6"	17' 0"	14' 10"	12' 6"	16' 0"	14' 0"	11' 9"	15' 2"	13' 3"	11' 2"	14' 6"	12' 8"	10' 8"	
6S138-16	24	32' 0"	25' 5"	22' 2"	17' 7"	15' 5"	13' 0"	16' 0"	14' 0"	11' 9"	14' 10"	13' 0"	10' 11"	14' 0"	12' 2"	10' 3"	13' 3"	11' 7"	9' 9"	12' 8"	11' 1"	9' 4"	
6S158-16	12	42' 2"	33' 5"	29' 2"	23' 2"	20' 3"	17' 1"	21' 1"	18' 5"	15' 6"	19' 6"	17' 1"	14' 5"	18' 5"	16' 1"	13' 6"	17' 5"	15' 3"	12' 10"	16' 8"	14' 7"	12' 3"	
6S158-16	16	38' 3"	30' 4"	26' 6"	21' 1"	18' 5"	15' 6"	19' 1"	16' 8"	14' 1"	17' 9"	15' 6"	13' 1"	16' 8"	14' 7"	12' 3"	15' 10"	13' 10"	11' 8"	15' 2"	13' 3"	11' 2"	
6S158-16	24	33' 5"	26' 6"	23' 2"	18' 5"	16' 1"	13' 6"	16' 8"	14' 7"	12' 3"	15' 6"	13' 6"	11' 5"	14' 7"	12' 9"	10' 9"	13' 10"	12' 1"	10' 2"	13' 3"	11' 7"	9' 9"	
6S2-16	12	44' 3"	35' 2"	30' 8"	24' 4"	21' 3"	17' 11"	22' 1"	19' 4"	16' 3"	20' 6"	17' 11"	15' 1"	19' 4"	16' 10"	14' 3"	18' 4"	16' 0"	13' 6"	17' 7"	15' 4"	12' 11"	
6S2-16	16	40' 3"	31' 1"	27' 11"	22' 1"	19' 4"	16' 3"	20' 1"	17' 7"	14' 10"	18' 8"	16' 3"	13' 9"	17' 7"	15' 4"	12' 11"	16' 8"	14' 7"	12' 3"	15' 11"	13' 11"	11' 9"	
6S2-16	24	35' 2"	27' 11"	24' 4"	19' 4"	16' 10"	14' 3"	17' 7"	15' 4"	12' 11"	16' 3"	14' 3"	12' 0"	15' 4"	13' 5"	11' 3"	14' 7"	12' 8"	10' 9"	13' 11"	12' 2"	10' 3"	
6S138-14	12	43' 3"	34' 4"	30' 0"	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	15' 11"	20' 1"	17' 6"	14' 9"	18' 10"	16' 6"	13' 11"	17' 11"	15' 8"	13' 2"	17' 2"	15' 0"	12' 7"	
6S138-14	16	39' 4"	31' 2"	27' 3"	21' 7"	18' 10"	15' 11"	19' 8"	17' 2"	14' 5"	18' 3"	15' 11"	13' 5"	17' 2"	15' 0"	12' 7"	16' 3"	14' 3"	12' 0"	15' 7"	13' 7"	11' 6"	
6S138-14	24	34' 4"	27' 3"	23' 9"	18' 10"	16' 6"	13' 11"	17' 2"	15' 0"	12' 7"	15' 11"	13' 11"	11' 9"	15' 0"	13' 1"	11' 0"	14' 3"	12' 5"	10' 6"	13' 7"	11' 10"	10' 0"	
6S158-14	12	45' 2"	35' 10"	31' 4"	24' 10"	21' 8"	18' 3"	22' 7"	19' 8"	16' 7"	20' 11"	18' 3"	15' 5"	19' 8"	17' 3"	14' 6"	18' 9"	16' 4"	13' 9"	17' 11"	15' 8"	13' 2"	
6S158-14	16	41' 0"	32' 7"	28' 5"	22' 7"	19' 8"	16' 7"	20' 6"	17' 11"	15' 1"	19' 0"	16' 7"	14' 0"	17' 11"	15' 8"	13' 2"	17' 0"	14' 10"	12' 6"	16' 3"	14' 2"	12' 0"	
6S158-14	24	35' 10"	28' 5"	24' 10"	19' 8"	17' 3"	14' 6"	17' 11"	15' 8"	13' 2"	16' 7"	14' 6"	12' 3"	15' 8"	13' 8"	11' 6"	14' 10"	13' 0"	10' 11"	14' 2"	12' 5"	10' 5"	
6S2-14	12	47' 6"	37' 8"	32' 11"	26' 2"	22' 10"	19' 3"	23' 9"	20' 9"	17' 6"	22' 0"	19' 3"	16' 3"	20' 9"	18' 1"	15' 3"	19' 8"	17' 2"	14' 6"	18' 10"	16' 5"	13' 10"	
6S2-14	16	43' 2"	34' 3"	29' 11"	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	15' 10"	20' 0"	17' 6"	14' 9"	18' 10"	16' 5"	13' 10"	17' 11"	15' 7"	13' 2"	17' 1"	14' 11"	12' 7"	
6S2-14	24	37' 8"	29' 11"	26' 2"	20' 9"	18' 1"	15' 3"	18' 10"	16' 5"	13' 10"	17' 6"	15' 3"	12' 10"	16' 5"	14' 4"	12' 1"	15' 7"	13' 8"	11' 6"	14' 11"	13' 1"	11' 0"	

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf			
		L/240	L/360	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
6 "																							
6S138-12	12	47' 10"	38' 0"	33' 2"	26' 4"	23' 0"	19' 5"	23' 11"	20' 11"	17' 7"	22' 2"	19' 5"	16' 4"	20' 11"	18' 3"	15' 4"	19' 10"	17' 4"	14' 7"	19' 0"	16' 7"	14' 0"	
6S138-12	16	43' 6"	34' 6"	30' 2"	23' 11"	20' 11"	17' 7"	21' 9"	19' 0"	16' 0"	20' 2"	17' 7"	14' 10"	19' 0"	16' 7"	14' 0"	18' 0"	15' 9"	13' 3"	17' 3"	15' 1"	12' 8"	
6S138-12	24	38' 0"	30' 2"	26' 4"	20' 11"	18' 3"	15' 4"	19' 0"	16' 7"	14' 0"	17' 7"	15' 4"	12' 11"	16' 7"	14' 6"	12' 2"	15' 9"	13' 9"	11' 7"	15' 1"	13' 2"	11' 1"	
6S158-12	12	50' 1"	39' 9"	34' 8"	27' 6"	24' 1"	20' 3"	25' 0"	21' 10"	18' 5"	23' 3"	20' 3"	17' 1"	21' 10"	19' 1"	16' 1"	20' 9"	18' 1"	15' 3"	19' 10"	17' 4"	14' 7"	
6S158-12	16	45' 6"	36' 1"	31' 6"	25' 0"	21' 10"	18' 5"	22' 9"	19' 10"	16' 9"	21' 1"	18' 5"	15' 6"	19' 10"	17' 4"	14' 7"	18' 10"	16' 6"	13' 11"	18' 0"	15' 9"	13' 3"	
6S158-12	24	39' 9"	31' 6"	27' 6"	21' 10"	19' 1"	16' 1"	19' 10"	17' 4"	14' 7"	18' 5"	16' 1"	13' 7"	17' 4"	15' 2"	12' 9"	16' 6"	14' 4"	12' 1"	15' 9"	13' 9"	11' 7"	
6S2-12	12	52' 9"	41' 10"	36' 7"	29' 0"	25' 4"	21' 4"	26' 4"	23' 0"	19' 5"	24' 6"	21' 4"	18' 0"	23' 0"	20' 1"	16' 11"	21' 10"	19' 1"	16' 1"	20' 11"	18' 3"	15' 5"	
6S2-12	16	47' 11"	38' 0"	33' 3"	26' 4"	23' 0"	19' 5"	23' 11"	20' 11"	17' 8"	22' 3"	19' 5"	16' 4"	20' 11"	18' 3"	15' 5"	19' 10"	17' 4"	14' 7"	19' 0"	16' 7"	14' 0"	
6S2-12	24	41' 10"	33' 3"	29' 0"	23' 0"	20' 1"	16' 11"	20' 11"	18' 3"	15' 5"	19' 5"	16' 11"	14' 3"	18' 3"	15' 11"	13' 5"	17' 4"	15' 2"	12' 9"	16' 7"	14' 6"	12' 3"	

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf		15 psf		20psf		25psf		30psf		35psf		40psf								
		L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600				
8"																						
8S138-20	12	43' 9"	34' 8"	30' 4"	24' 1"	21' 0"	17' 8"	21' 10"	19' 1"	16' 1"	20' 3"	17' 8"	14' 11"	19' 1"	16' 8"	14' 1"	18' 1"	15' 10"				
8S138-20	16	39' 9"	31' 6"	27' 6"	21' 10"	19' 1"	16' 1"	19' 10"	17' 4"	14' 7"	18' 5"	16' 1"	13' 7"	17' 0' f	15' 2"	12' 9"	15' 9' f	13' 9"	11' 7"			
8S138-20	24	34' 1" f	27' 6"	24' 1"	19' 1"	16' 8"	14' 1"	17' 0"	15' 2"	12' 9"	15' 3" f	14' 1"	11' 10"	13' 11" f	13' 3"	11' 2"	12' 10" f	12' 7"	10' 7"	12' 0" f	12' 0"	10' 1"
8S158-20	12	45' 5"	36' 0"	31' 6"	25' 0"	21' 10"	18' 5"	22' 8"	19' 10"	16' 8"	21' 1"	18' 5"	15' 6"	19' 10"	17' 4"	14' 7"	18' 10"	16' 5"	13' 10"	18' 0"	15' 9"	13' 3"
8S158-20	16	41' 3"	32' 9"	28' 7"	22' 8"	19' 10"	16' 8"	20' 7"	18' 0"	15' 2"	19' 2"	16' 8"	14' 1"	18' 0"	15' 9"	13' 3"	16' 10" f	14' 11"	12' 7"	15' 9" f	14' 3"	12' 0"
8S158-20	24	36' 0"	28' 7"	25' 0"	19' 10"	17' 4"	14' 7"	18' 0"	15' 9"	13' 3"	16' 3" f	14' 7"	12' 4"	14' 10"	13' 9"	11' 7"	13' 9" f	13' 0"	11' 0"	12' 10" f	12' 6"	10' 6"
8S2-20	12	47' 6"	37' 8"	32' 11"	26' 1"	22' 10"	19' 3"	23' 9"	20' 9"	17' 6"	22' 0"	19' 3"	16' 3"	20' 9"	18' 1"	15' 3"	19' 8"	17' 2"	14' 6"	18' 10"	16' 5"	13' 10"
8S2-20	16	43' 2"	34' 3"	29' 11"	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	15' 10"	20' 0"	17' 6"	14' 9"	18' 10"	16' 5"	13' 10"	17' 5" f	15' 7"	13' 2"	16' 4" f	14' 11"	12' 7"
8S2-20	24	37' 8"	29' 11"	26' 1"	20' 9"	18' 1"	15' 3"	18' 10"	16' 5"	13' 10"	16' 10" f	15' 3"	12' 10"	15' 5" f	14' 4"	12' 1"	14' 3" f	13' 8"	11' 6"	13' 4" f	13' 0"	11' 0"
8S138-18	12	47' 8"	37' 10"	33' 0"	26' 2"	22' 11"	19' 3"	23' 10"	20' 9"	17' 6"	22' 1"	19' 3"	16' 3"	20' 9"	18' 2"	15' 4"	19' 9"	17' 3"	14' 6"	18' 11"	16' 6"	13' 11"
8S138-18	16	43' 3"	34' 4"	30' 0"	23' 10"	20' 9"	17' 6"	21' 7"	18' 11"	15' 11"	20' 1"	17' 6"	14' 9"	18' 11"	16' 6"	13' 11"	17' 11"	15' 8"	13' 2"	17' 2"	15' 0"	12' 8"
8S138-18	24	37' 10"	30' 0"	26' 2"	20' 9"	18' 2"	15' 4"	18' 11"	16' 6"	13' 11"	17' 6"	15' 4"	12' 11"	16' 6"	14' 5"	12' 2"	15' 8"	13' 8"	11' 6"	15' 0"	13' 1"	11' 0"
8S158-18	12	49' 6"	39' 3"	34' 4"	27' 3"	23' 9"	20' 0"	24' 9"	21' 7"	18' 2"	22' 11"	20' 0"	16' 11"	21' 7"	18' 10"	15' 11"	20' 6"	17' 11"	15' 1"	19' 7"	17' 2"	14' 5"
8S158-18	16	44' 11"	35' 8"	31' 2"	24' 9"	21' 7"	18' 2"	22' 5"	19' 7"	16' 6"	20' 10"	18' 2"	15' 4"	19' 7"	17' 2"	14' 5"	18' 8"	16' 3"	13' 9"	17' 10"	15' 7"	13' 1"
8S158-18	24	39' 3"	31' 2"	27' 3"	21' 7"	18' 10"	15' 11"	19' 7"	17' 2"	14' 5"	18' 2"	15' 11"	13' 5"	17' 2"	14' 11"	12' 7"	16' 3"	14' 2"	12' 0"	15' 7"	13' 7"	11' 5"
8S2-18	12	51' 9"	41' 1"	35' 11"	28' 6"	24' 10"	21' 0"	25' 10"	22' 7"	19' 1"	24' 0"	21' 0"	17' 8"	22' 7"	19' 9"	16' 8"	21' 5"	18' 9"	15' 10"	20' 6"	17' 11"	15' 1"
8S2-18	16	47' 0"	37' 4"	32' 7"	25' 10"	22' 7"	19' 1"	23' 6"	20' 6"	17' 4"	21' 10"	19' 1"	16' 1"	20' 6"	17' 11"	15' 1"	19' 6"	17' 0"	14' 4"	18' 8"	16' 3"	13' 9"
8S2-18	24	41' 1"	32' 7"	28' 6"	22' 7"	19' 9"	16' 8"	20' 6"	17' 11"	15' 1"	19' 1"	16' 8"	14' 0"	17' 11"	15' 8"	13' 2"	17' 0"	14' 10"	12' 6"	16' 3"	14' 3"	12' 0"
8S138-16	12	51' 2"	40' 7"	35' 5"	28' 1"	24' 7"	20' 8"	25' 7"	22' 4"	18' 10"	23' 9"	20' 8"	17' 6"	22' 4"	19' 6"	16' 5"	21' 2"	18' 6"	15' 7"	20' 3"	17' 8"	14' 11"
8S138-16	16	46' 5"	36' 10"	32' 2"	25' 7"	22' 4"	18' 10"	23' 2"	20' 3"	17' 1"	21' 6"	18' 10"	15' 10"	20' 3"	17' 8"	14' 11"	19' 3"	16' 10"	14' 2"	18' 5"	16' 1"	13' 7"
8S138-16	24	40' 7"	32' 2"	28' 1"	22' 4"	19' 6"	16' 5"	20' 3"	17' 8"	14' 11"	18' 10"	16' 5"	13' 10"	17' 8"	15' 5"	13' 0"	16' 10"	14' 8"	12' 4"	16' 1"	14' 0"	11' 10"
8S158-16	12	53' 2"	42' 2"	36' 10"	29' 3"	25' 6"	21' 6"	26' 7"	23' 2"	19' 7"	24' 8"	21' 6"	18' 2"	23' 2"	20' 3"	17' 1"	22' 0"	19' 3"	16' 3"	21' 1"	18' 5"	15' 6"
8S158-16	16	48' 3"	38' 4"	33' 6"	26' 7"	23' 2"	19' 7"	24' 1"	21' 1"	17' 9"	22' 5"	19' 7"	16' 6"	21' 1"	18' 5"	15' 6"	20' 0"	17' 6"	14' 9"	19' 2"	16' 9"	14' 1"
8S158-16	24	42' 2"	33' 6"	29' 3"	23' 2"	20' 3"	17' 1"	21' 1"	18' 5"	15' 6"	19' 7"	17' 1"	14' 5"	18' 5"	16' 1"	13' 7"	17' 6"	15' 3"	12' 10"	16' 9"	14' 7"	12' 4"
8S2-16	12	55' 7"	44' 2"	38' 7"	30' 7"	26' 9"	22' 6"	27' 9"	24' 3"	20' 6"	25' 9"	22' 6"	19' 0"	24' 3"	21' 2"	17' 10"	23' 1"	20' 2"	17' 0"	22' 1"	19' 3"	16' 3"
8S2-16	16	50' 6"	40' 1"	35' 0"	27' 9"	24' 3"	20' 6"	24' 3"	22' 1"	18' 7"	23' 5"	20' 6"	17' 3"	22' 1"	19' 3"	16' 3"	20' 11"	18' 3"	15' 5"	20' 0"	17' 6"	14' 9"
8S2-16	24	44' 2"	35' 0"	30' 7"	24' 3"	21' 2"	17' 10"	30' 2"	19' 3"	16' 3"	20' 6"	17' 10"	15' 1"	19' 3"	16' 10"	14' 2"	18' 3"	16' 0"	13' 6"	17' 6"	15' 3"	12' 10"
8S138-14	12	54' 10"	43' 6"	38' 0"	30' 2"	26' 4"	22' 3"	27' 5"	23' 11"	20' 2"	25' 5"	22' 3"	18' 9"	23' 11"	20' 11"	17' 7"	22' 9"	19' 10"	16' 9"	21' 9"	19' 0"	16' 0"
8S138-14	16	49' 10"	39' 6"	34' 6"	27' 5"	23' 11"	20' 2"	24' 11"	21' 9"	18' 4"	23' 1"	20' 2"	17' 0"	21' 9"	19' 0"	16' 0"	20' 8"	18' 0"	15' 2"	19' 9"	17' 3"	14' 6"
8S138-14	24	43' 6"	34' 6"	30' 2"	23' 11"	20' 11"	17' 7"	21' 9"	19' 0"	16' 0"	20' 2"	17' 7"	14' 10"	19' 0"	16' 7"	14' 0"	18' 0"	15' 9"	13' 3"	17' 3"	15' 1"	12' 8"
8S158-14	12	57' 0"	45' 3"	39' 6"	31' 4"	27' 5"	23' 1"	28' 6"	24' 11"	21' 0"	26' 5"	23' 1"	19' 6"	24' 11"	21' 9"	18' 4"	23' 8"	20' 8"	17' 5"	22' 7"	19' 9"	16' 8"
8S158-14	16	51' 10"	41' 1"	35' 11"	28' 6"	24' 11"	21' 0"	25' 11"	22' 7"	19' 1"	24' 0"	21' 0"	17' 8"	22' 7"	19' 9"	16' 8"	21' 6"	18' 9"	15' 10"	20' 6"	17' 11"	15' 1"
8S158-14	24	45' 3"	35' 11"	31' 4"	24' 11"	21' 9"	18' 4"	22' 7"	19' 9"	16' 8"	21' 0"	18' 4"	15' 5"	19' 9"	17' 3"	14' 6"	18' 9"	16' 5"	13' 10"	17' 11"	15' 8"	13' 2"
8S2-14	12	59' 9"	47' 5"	41' 5"	32' 10"	28' 8"	24' 2"	29' 10"	26' 1"	22' 0"	27' 8"	24' 2"	20' 5"	26' 1"	22' 9"	19' 2"	24' 9"	21' 7"	18' 3"	23' 8"	20' 8"	17' 5"
8S2-14	16	54' 3"	43' 1"	37' 7"	29' 10"	26' 1"	22' 0"	27' 1"	23' 8"	20' 0"	25' 2"	22' 0"	18' 6"	23' 8"	20' 8"	17' 5"	22' 6"	19' 8"	16' 7"	21' 6"	18' 9"	15' 10"
8S2-14	24	47' 5"	37' 7"	32' 10"	26' 1"	22' 9"	19' 2"	23' 8"	20' 8"	17' 5"	22' 0"	19' 2"	16' 2"	20' 8"	18' 1"	15' 3"	19' 8"	17' 2"	14' 6"	18' 9"	16' 5"	13' 10"

LIMITING WALL HEIGHT TABLES- CURTAIN WALL

Member	Spacing (in) O.C.	5psf			15 psf			20psf			25psf			30psf			35psf			40psf		
		L/240 L/360 L/360			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600			L/240 L/360 L/600		
		8 "																				
8S138-12	12	60' 10"	48' 3"	42' 2"	33' 5"	29' 3"	24' 8"	30' 5"	26' 7"	22' 5"	28' 2"	24' 8"	20' 9"	26' 7"	23' 2"	19' 7"	25' 3"	22' 0"	18' 7"	24' 1"	21' 1"	17' 9"
8S138-12	16	55' 3"	43' 10"	38' 4"	30' 5"	26' 7"	22' 5"	27' 7"	24' 1"	20' 4"	25' 7"	22' 5"	18' 10"	24' 1"	21' 1"	17' 9"	22' 11"	20' 0"	16' 10"	21' 11"	19' 2"	16' 2"
8S138-12	24	48' 3"	38' 4"	33' 5"	26' 7"	23' 2"	19' 7"	24' 1"	21' 1"	17' 9"	22' 5"	19' 7"	16' 6"	21' 1"	18' 5"	15' 6"	20' 0"	17' 6"	14' 9"	19' 2"	16' 8"	14' 1"
8S158-12	12	63' 4"	50' 3"	43' 11"	34' 10"	30' 5"	25' 8"	31' 8"	27' 8"	23' 4"	29' 5"	25' 8"	21' 8"	27' 8"	24' 2"	20' 4"	26' 3"	22' 11"	19' 4"	25' 1"	21' 11"	18' 6"
8S158-12	16	57' 7"	45' 8"	39' 11"	31' 8"	27' 8"	23' 4"	28' 9"	25' 1"	21' 2"	26' 8"	23' 4"	19' 8"	25' 1"	21' 11"	18' 6"	23' 10"	20' 10"	17' 7"	22' 10"	19' 11"	16' 10"
8S158-12	24	50' 3"	39' 11"	34' 10"	27' 8"	24' 2"	20' 4"	25' 1"	21' 11"	18' 6"	23' 4"	20' 4"	17' 2"	21' 11"	19' 2"	16' 2"	20' 10"	18' 2"	15' 4"	19' 11"	17' 5"	14' 8"
8S2-12	12	66' 5"	52' 9"	46' 1"	36' 7"	31' 11"	26' 11"	33' 2"	29' 0"	24' 5"	30' 10"	26' 11"	22' 8"	29' 0"	25' 4"	21' 4"	27' 6"	24' 1"	20' 3"	26' 4"	23' 0"	19' 5"
8S2-12	16	60' 4"	47' 11"	41' 10"	33' 2"	29' 0"	24' 5"	30' 2"	26' 4"	22' 3"	28' 0"	24' 5"	20' 7"	26' 4"	23' 0"	19' 5"	25' 0"	21' 10"	18' 5"	23' 11"	20' 11"	17' 7"
8S2-12	24	52' 9"	41' 10"	36' 7"	29' 0"	25' 4"	21' 4"	26' 4"	23' 0"	19' 5"	24' 5"	21' 4"	18' 0"	23' 0"	20' 1"	16' 11"	21' 10"	19' 1"	16' 1"	20' 11"	18' 3"	15' 5"

ALLOWABLE COMBINED AXIAL AND LATERAL LOAD TABLES

Wall Height (ft)	Spacing (in) O.C.	5psf Lateral Load																														
		5psf						25psf						30psf																		
		L/240		L/360		L/240 L/360 L/600		L/240		L/360		L/600		L/2		L/240 L/																
8	12	43' 9"		24' 1"	21' 0"	17' 8"	21' 10"	19' 1"	20' 3"	17' 8"	14' 11"	19' 1"	16' 8"	18' 1"	17' 0" f	15' 2"																
	16	39' 9"	31' 6"	21' 10"	19' 1"	16' 1"	19' 10"	17' 4"	18' 5"	16' 1"	13' 7"	17' 0" f	15' 2"	15' 9" f	14' 9" f	13' 9"																
	24	34' 1" f	27' 6"	19' 1"	16' 8"	14' 1"	17' 0" f	15' 2"	15' 3" f	14' 1"	11' 10"	13' 11" f	13' 3"	12' 10" f	12' 0" f	12' 0"																
9	12	45' 5"	36' 0"	25' 0"	21' 10"	18' 5"	22' 6"	19' 10"	21' 1"	18' 5"	15' 6"	19' 10"	17' 4"	18' 10"	18' 0"	15' 9"																
	16	41' 3"	32' 9"	22' 8"	19' 10"	16' 8"	20' 7"	18' 0"	19' 2"	16' 8"	14' 1"	18' 0"	15' 9"	16' 10" f	15' 9" f	14' 3"																
	24	36' 0"	28' 7"	19' 10"	17' 4"	14' 7"	18' 0"	15' 9"	16' 3" f	14' 7"	12' 4"	14' 10" f	13' 9"	13' 9" f	12' 10" f	12' 6"																
10	12	47' 6"	37' 8"	26' 1"	22' 10"	19' 3"	23' 9"	20' 9"	22' 0"	19' 3"	16' 3"	20' 9"	18' 1"	19' 8"	18' 10"	16' 5"																
	16	43' 2" 3"	34'	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	20' 0"	17' 6"	14' 9"	18' 10"	16' 5"	17' 5" f	16' 4" f	14' 11"																
	24	37' 8"	29' 11"	20' 9"	18' 1"	15' 3"	18' 10"	16' 5"	16' 10" f	15' 3"	12' 10"	15' 5" f	14' 4"	14' 3" f	13' 4" f	13' 0"																
12	12	47' 8"	37' 10"	26' 2"	22' 11"	19' 3"	23' 10"	20' 9"	22' 1"	19' 3"	16' 3"	20' 9"	18' 2"	19' 9"	18' 11"	16' 6"																
	16	43' 3"	34' 4"	23' 10"	20' 9"	17' 6"	21' 7"	18' 11"	20' 1"	17' 6"	14' 9"	18' 11"	16' 6"	17' 11"	17' 2"	15' 0"																
	24	37' 10"	30' 0"	20' 9"	18' 2"	15' 4"	18' 11"	16' 6"	17' 6"	15' 4"	12' 11"	16' 6"	14' 5"	15' 8"	15' 0"	13' 1"																
14	12	49' 6"	39' 3"	27' 3"	23' 9"	20' 0"	24' 9"	21' 7"	22' 11"	20' 0"	16' 11"	21' 7"	18' 10"	20' 6"	19' 7"	17' 2"																
	16	44' 11"	35' 8"	24' 9"	21' 7"	18' 2"	22' 5"	19' 7"	20' 10"	18' 2"	15' 4"	19' 7"	17' 2"	18' 8"	17' 10"	15' 7"																
	24	39' 3"	31' 2"	21' 7"	18' 10"	15' 11"	19' 7"	17' 2"	18' 2"	15' 11"	13' 5"	17' 2"	14' 11"	16' 3"	15' 7"	13' 7"																
16	12	51' 9"	41' 1"	28' 6"	24' 10"	21' 0"	25' 10"	22' 7"	24' 0"	21' 0"	17' 8"	22' 7"	19' 9"	21' 5"	20' 6"	17' 11"																
	16	47' 0"	37' 4"	25' 10"	22' 7"	19' 1"	23' 6"	20' 6"	21' 10"	19' 1"	16' 1"	20' 6"	17' 11"	19' 6"	18' 8"	16' 3"																
	24	41' 1"	32' 7"	22' 7"	19' 9"	16' 8"	20' 6"	17' 11"	19' 1"	16' 8"	14' 0"	17' 11"	15' 8"	17' 0"	16' 3"	14' 3"																
5psf Lateral Load																																

C-Joist, Metal Studs Technical Manual

PRODUCT IDENTIFICATION

Every refined metal product is assigned a four-part code that specifies its dimensions, including depth and flange width, along with its style and material thickness.

Example: 312S114-22

Member Depth in inches
Including fraction, e.g., 3 $\frac{1}{2}$ inches

312

Flange Width in inches, including fraction, e.g., 1 $\frac{1}{4}$ inches

114

-

22

S = Stud Sections

Base Metal Thickness in Gauge

J = Joist Sections

T = Track Sections

U = Channel Sections

F = Furring Channel Section



S = C stud or Cjoist



T=Track , T-Sections



U = CRC or U-channel



F = Furring channel

Member depths

Flange widths range

Mils range

Gauge range

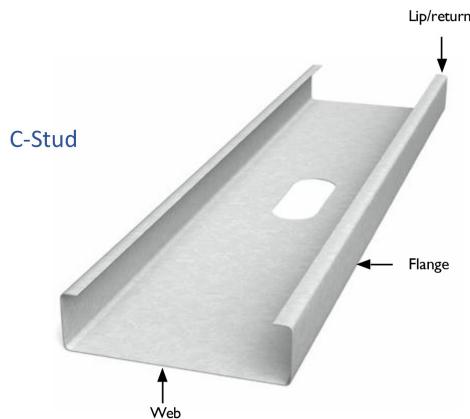
(158) 1-5/8"	1-1/4", 1-3/8", 1-5/8,"	18-68	25-14 ga
(250) 2-1/2"	1-1/4", 1-3/8", 1-1/2", 1-5/8," 2" & 2-1/2"	18-68	25-14 ga
(350) 3-1/2"	1-1/4", 1-3/8", 1-1/2", 1-5/8," 2" & 2-1/2"	18-68	25-14 ga
(362) 3-5/8"	1-1/4", 1-3/8", 1-1/2", 1-5/8," 2" & 2-1/2"	33-97	20-12 ga
(400) 4"	1-1/4", 1-3/8, 1-1/2", 1-5/8," 2" & 2-1/2"	33-97	20-12 ga
(550) 5-1/2"	1-1/4", 1-1/2 ", 1-5/8," 2" & 2-1/2"	33-97	20-12 ga
(600) 6"	1-1/4", 1-3/8," 1-1/2 ", 1-5/8," 2," 2-1/2" & 3"	33-97	20-12 ga
(800) 8"	1-1/4", 1-3/8," 1-1/2 ", 1-5/8," 2," 2-1/2" & 3"	33-97	20-12 ga
(925) 9-1/4"	1-1/4", 1-1/2 ", 1-5/8," 2" & 2-1/2"	43-97	18-12 ga
(1000) 10"	1-1/4", 1-1/2 ", 1-5/8," 2," 2-1/2" & 3"	43-97	18-12 ga
(1200) 12"	1-1/4", 1-1/2 ", 1-5/8," 2," 2-1/2" & 3"	54-97	16-12 ga
(1400) 14"	1-1/4", 1-1/2 ", 1-5/8," 2," 2-1/2" & 3"	54-97	16-12 ga

Designation Mils (ga)	Thickness Mils (ga)	Minimum Thickness ¹ (in)	Design Thickness ¹ (in)	Design Inside Corner Radius ² (in)
18 (25g)	0.0179	0.0188	0.0376	
28.3(22g)	0.0269	0.0283	0.057	
33 (20g)	0.0329	0.0346	0.0764	
43 (18g)	0.0428	0.0451	0.0712	
54 (16g)	0.0538	0.0566	0.0849	
68 (14g)	0.0677	0.0713	0.1069	
97 (12g)	0.0966	0.1017	0.1525	

Note: For those sections where two different yield strengths (33 ksi and 50 ksi) are shown, the yield strength used in the design, if greater than 33 ksi, needs to be identified on the design and ordering of steel.[i.e., 4S114-20(50ksi for 4"deep stud , 20 gauge. 1 $\frac{1}{4}$ wide and 50 ksi]

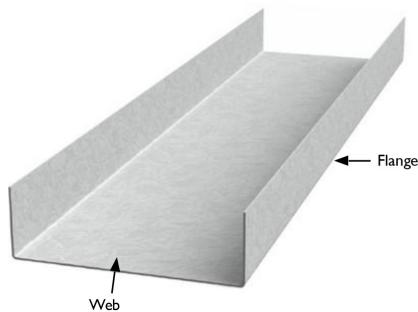
Wall stud and floor joist section properties

Refined Metal manufactures cold-formed C-studs that meet AISI S240 standards, making them suitable for axial load-bearing applications and curtain wall framing. These studs come prepunched with knockouts at consistent intervals, facilitating the quick and efficient installation of pipes, electrical conduit, and wall bridging without additional modifications.



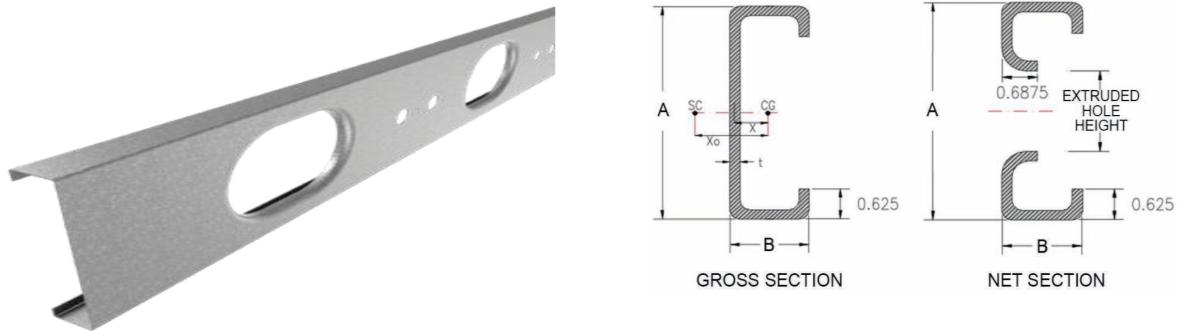
Track section properties

Refined Metal structural track is a U-shaped framing component designed to serve as top and bottom runners, securely holding wall studs in place. Manufactured to meet AISI S240 standards, it is available in standard 10-foot lengths. In addition to framing walls, structural track also functions as end-support closures for joists at exterior or foundation walls, heads and sill plates of wall openings, and solid blocking. Typically, it is ordered in corresponding size and gauge to match the wall studs for seamless integration.



Steel Joist

Refined Metal steel joists are designed to support common building layouts and floor/roof loads, offering consistent quality and a high strength-to-weight ratio. They feature large extruded holes spaced at 24 inches on center, allowing for HVAC, mechanical, plumbing, electrical, and sprinkler runs, along with smaller holes for electrical and technology lines. Depending on member depth, hole sizes range from 4-1/4 inches (oval) to 10 inches (round), ensuring efficient integration into building systems while maintaining predictable performance.

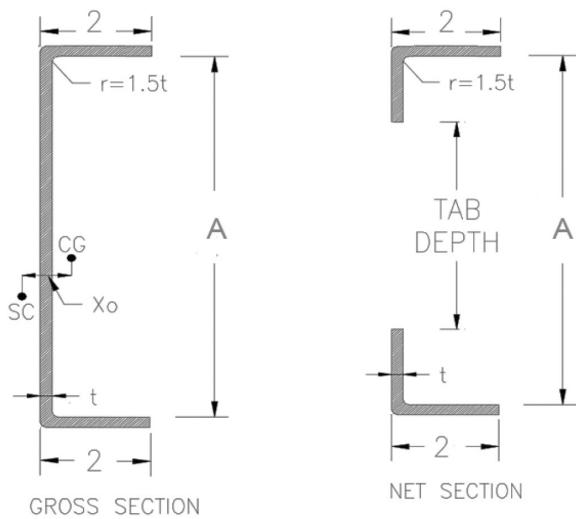


ksi	Thickness	Depth (in)	Flange (in)	Return (in)
	Mils (gauge)			
43mil = 33ksi 54, 68, 97mil =	43mil (18ga) 0.0451 design thickness, 54mil (16ga) 0.0566 design thickness, 68mil (14ga) 0.0713 design thickness,	7-1/4, 8, 9-1/4, 11-1/4	1-3/4	5/8
50ksi	97 mil (12ga) 0.1017 design thickness	10, 12, 14	2	

I_x = Moment of Inertia about X axis
 I_y = Moment of Inertia about Y axis
 r_x = Radius of Gyration about X axis
 r_y = Radius of Gyration about Y axis
 S_{x0} = Effective Section Modulus at Stress = F_y
 I_{x0} = Effective Moment of Inertia of Full Section for Deflection Calculations
 $M_{al\ full}$ = Fully Braced Allowable Local Moment at Full Section
 $M_{al\ exhole}$ = Fully Braced Allowable Local Moment at Extruded Hole
 $M_{ad\ exhole}$ = Fully Braced Allowable Distortional Moment at Extruded Hole
 $V_{a\ full}$ = Allowable Shear at Full Section
 $V_{a\ exhole}$ = Allowable Shear at Extruded Hole
 X_o = Distance between Centroid and Shear-center
 X = Distance between Centroid and Web-centerline
 J = St. Venant Torsional Constant
 C_w = Torsional Warping Constant
 R_g = Radius of Gyration about Centroid

Notes:

- 1 Allowable capacities are in accordance with AISI S100-16 w/S2-20 (Direct Strength Method (DSM) utilized for calculating flexural strength).
- 2 $F_y = 33 \text{ ksi}$ for 18ga, and 50 ksi for 16ga, 14ga and 12ga.

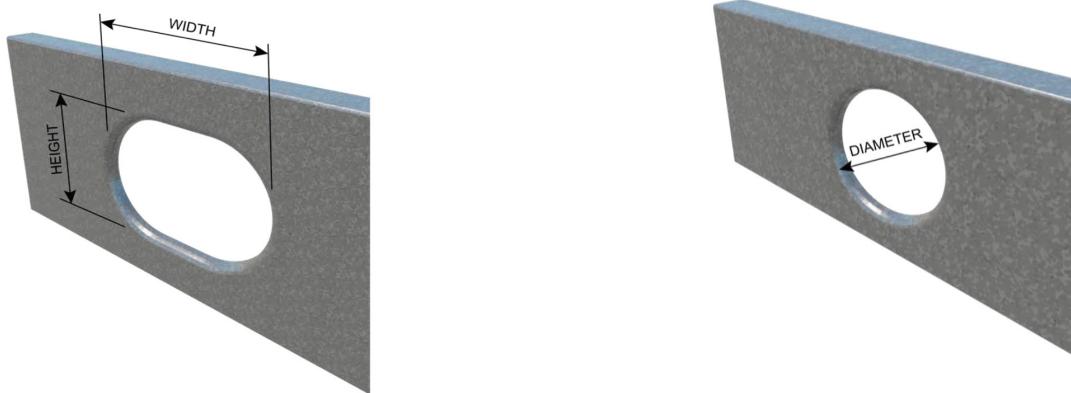


Tab Depth:

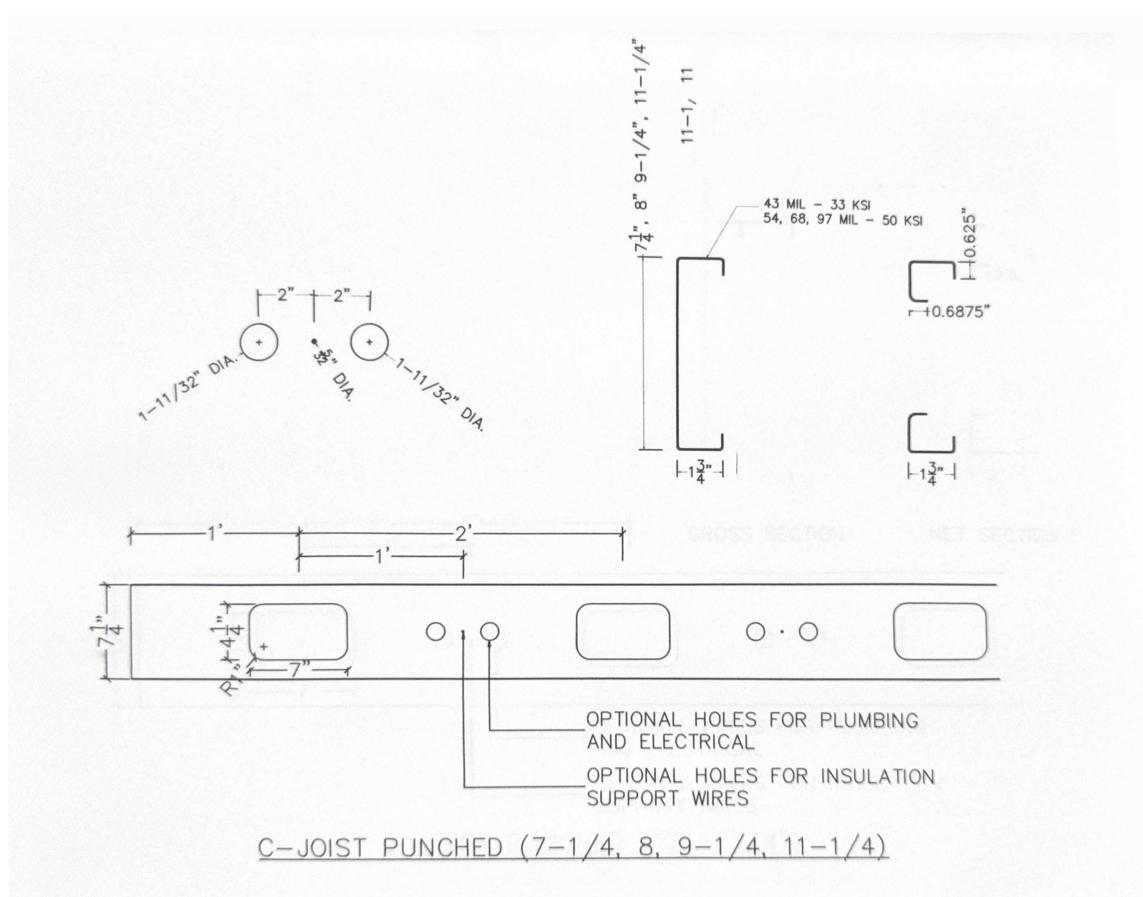
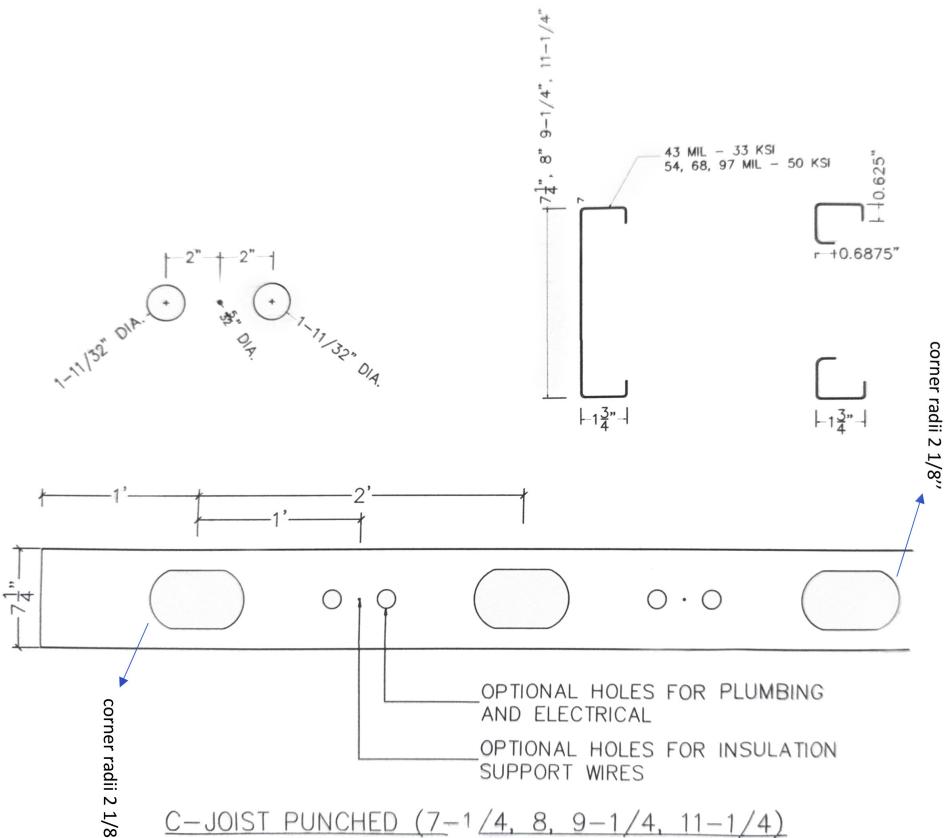
4" inches (joist depths up to 9.25")

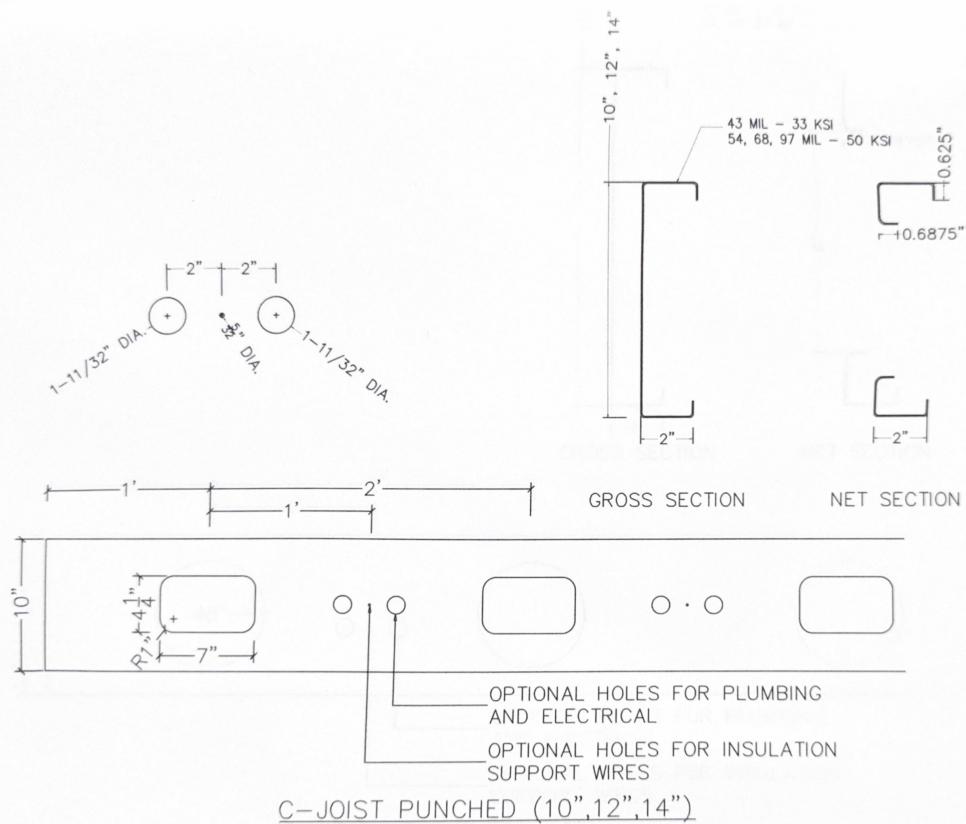
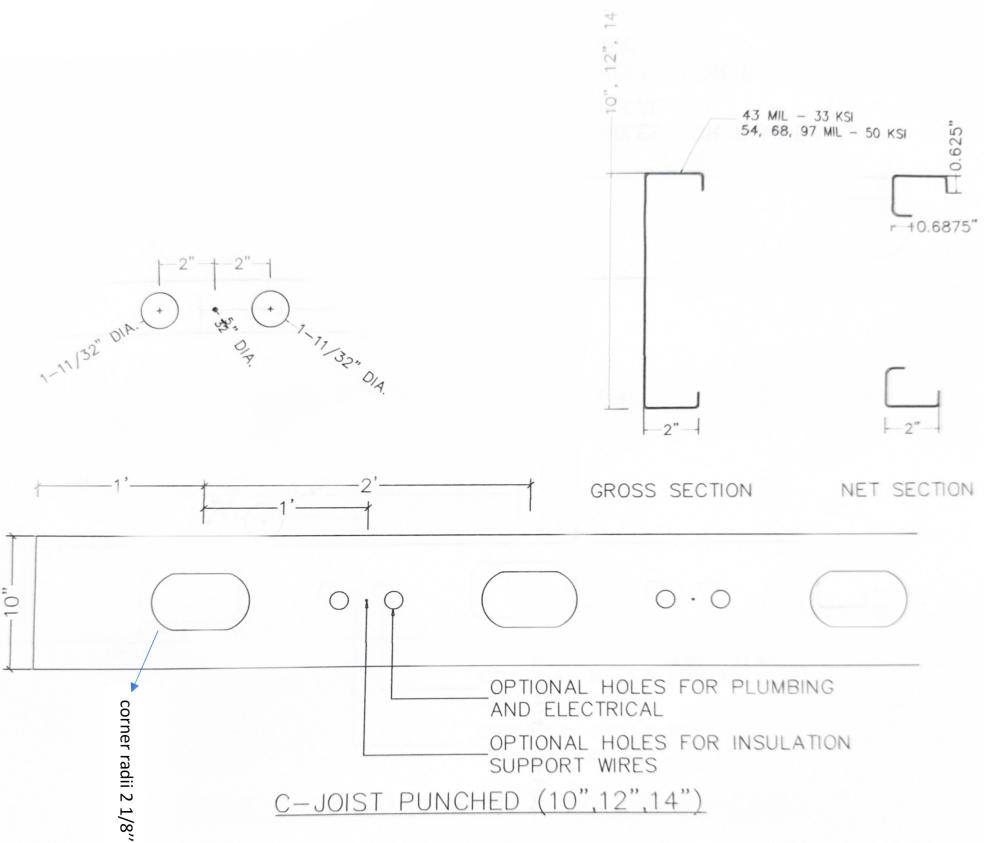
6" inches (joist depth greater than 9.25")

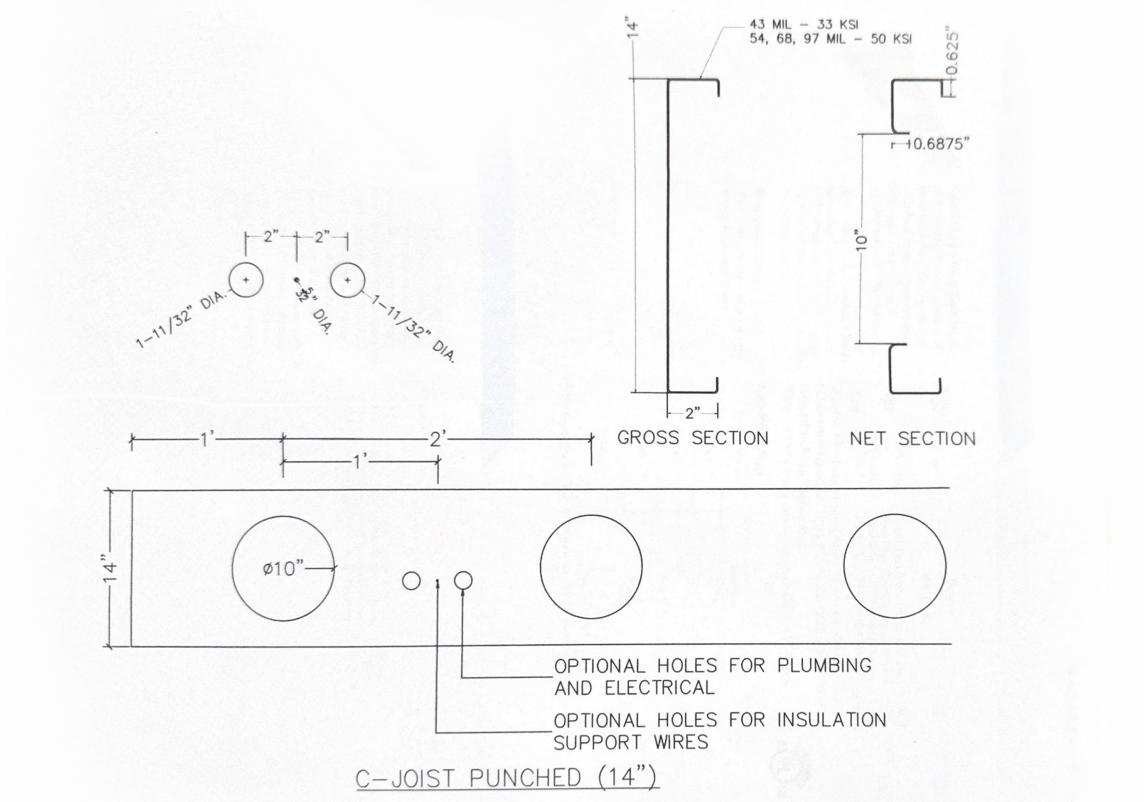
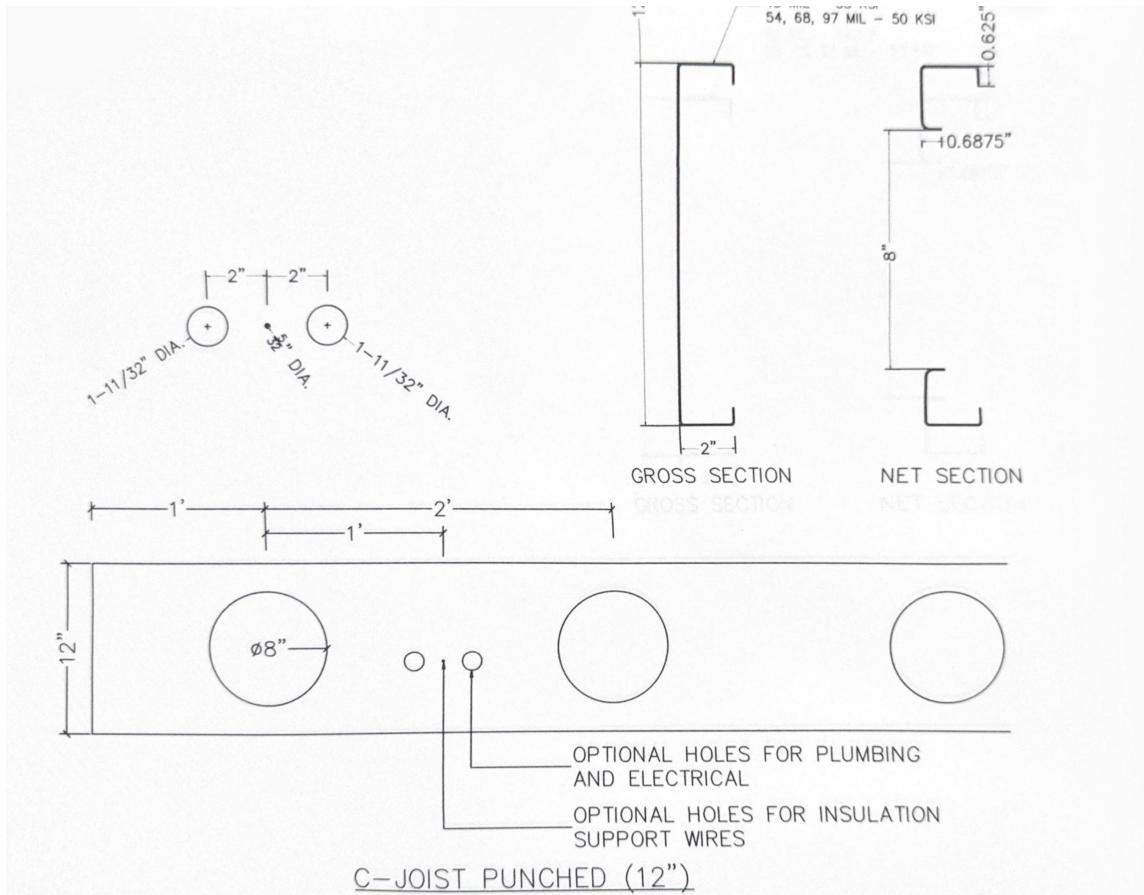
Prepunched tabs are located at 12", 16, 19.2" or 24" o.c.



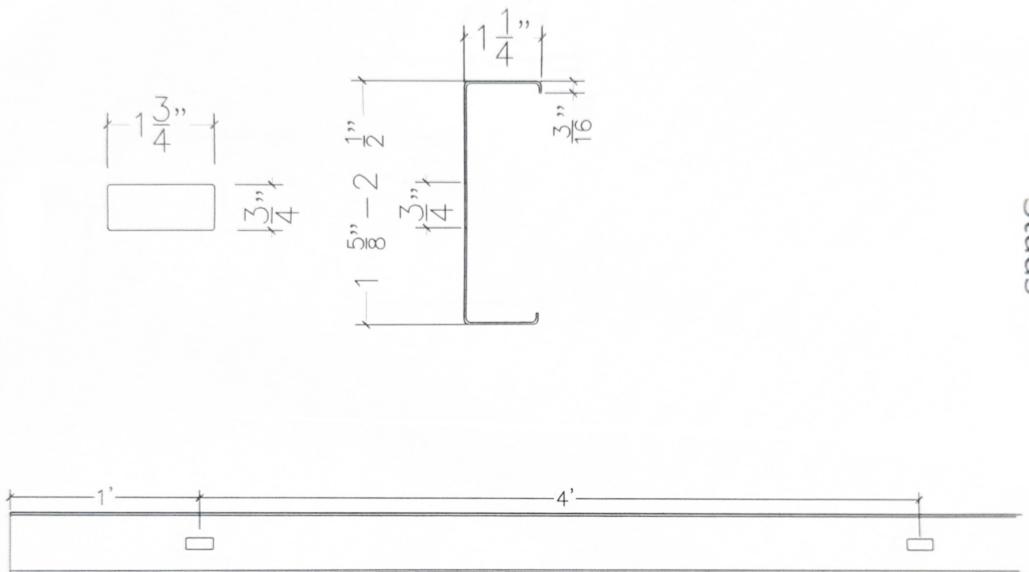
		EXTRUDED HOLE DIAMETER PER JOIST SIZE						
Joist Size		7-1/4"	8"	9-1/4"	10"	11-1/4"	12"	14"
Extruded Hole Height		4-1/4"	4-1/4"	6-1/4"	6-1/4"	6-1/4"		
Extruded Hole Width		7"	7"	7"	7"	7"		
Extruded Hole Diameter							8"	10"



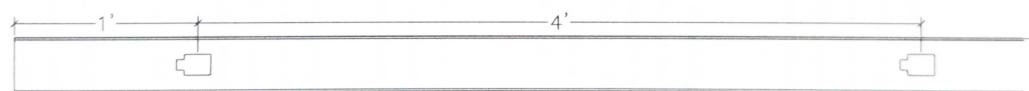
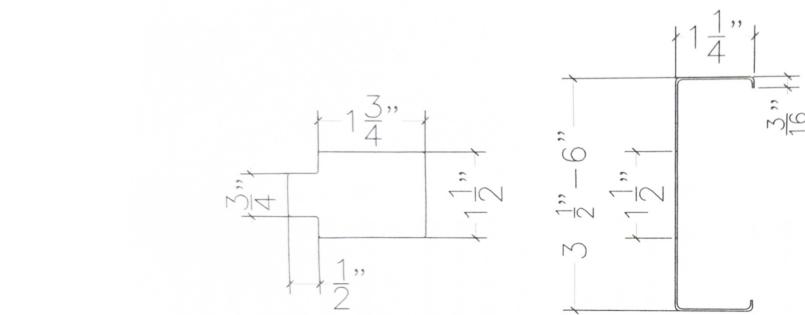




Non Structural Studs

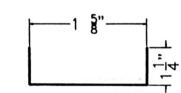


NON STRUCTURAL METAL STUD
(G40/G40EQ COATING STANDARD
MIN. THICKNESS 0.0179(18 MIL) - 0.0296(30 MIL)

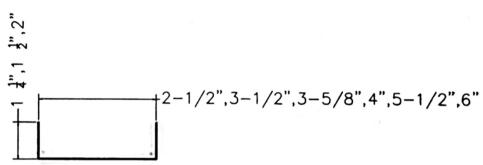


NON STRUCTURAL METAL STUD
(G40/G40EQ COATING STANDARD
MIN. THICKNESS 0.0179(18 MIL) - 0.0296(30 MIL)

STRUCTURAL TRACK



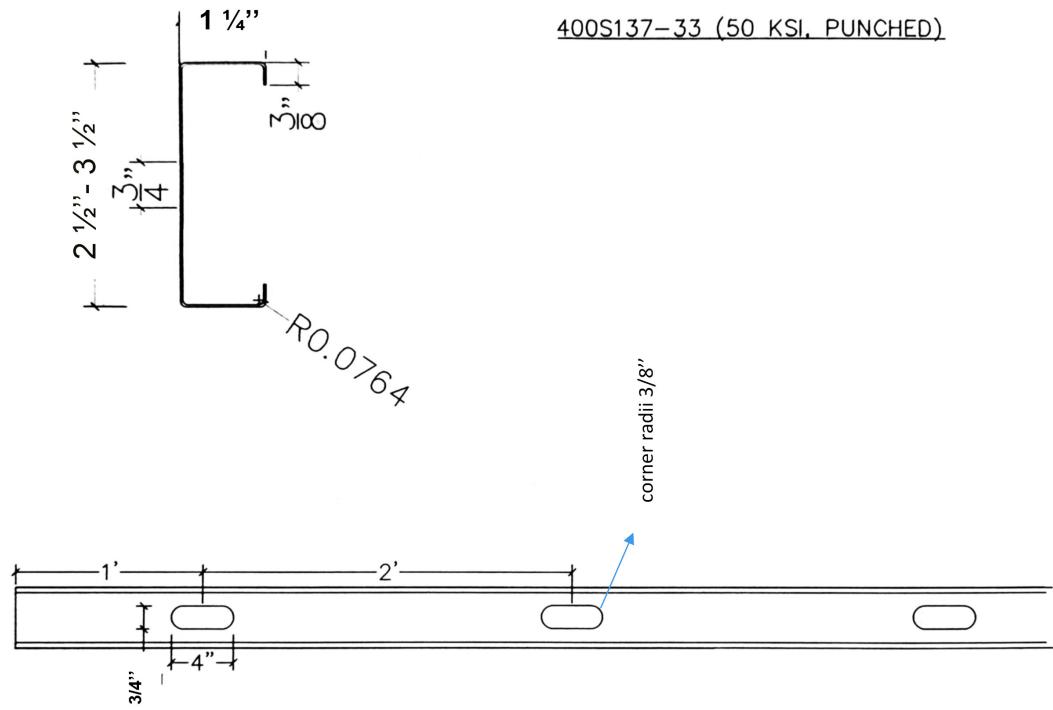
METAL STUD TRACK



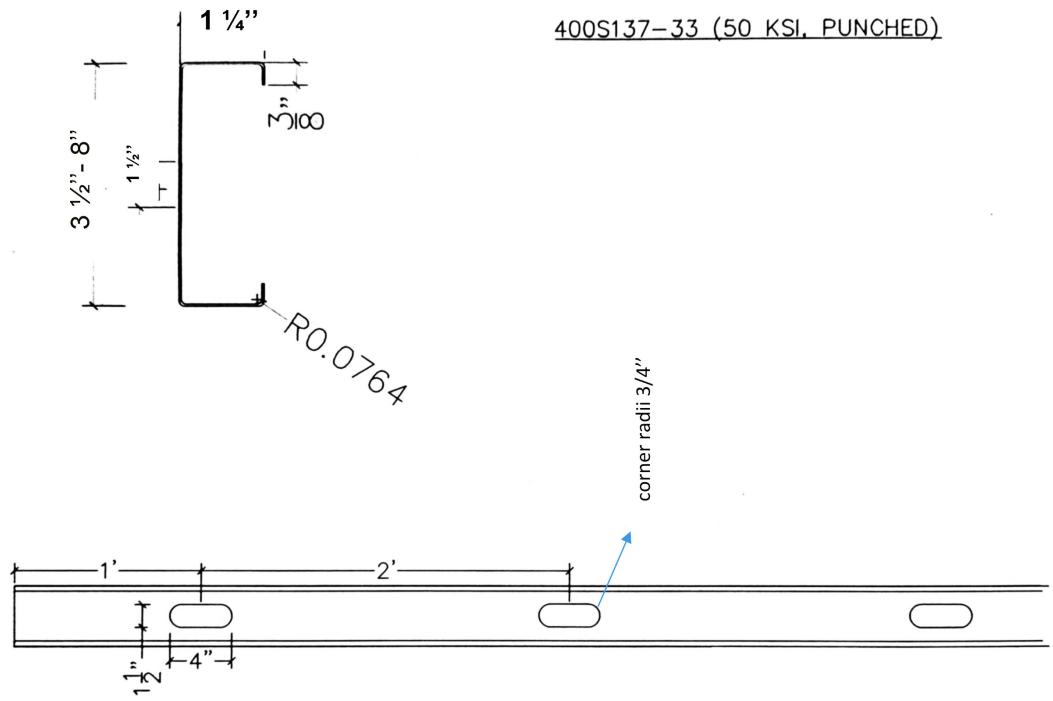
METAL STUD TRACK

STRUCTURAL STUDS

STRUCTURAL STUDS



400S137-33 (50 KSI, PUNCHED)

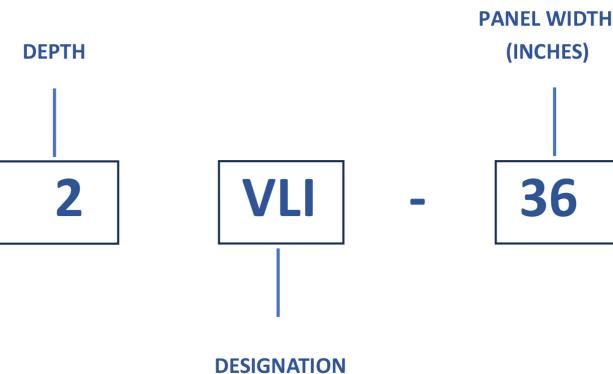


Metal Deck Technical Manual

PRODUCT IDENTIFICATION

Whether it is a roof deck or a floor deck, the labeling of the deck is done in a similar way.

Example: 2VLI-36



Designations Vocabulary

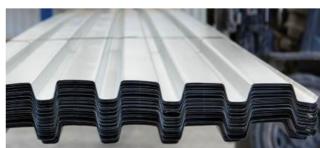
VI - Standard composite deck with nested side-lap

VLI - Composite deck with interlocking side-lap

VLR - Composite deck reversed

PLVLI - PunchLok II side-lap connection

D - Dovetail-Deck with nested side-lap connection



ROOF DECK

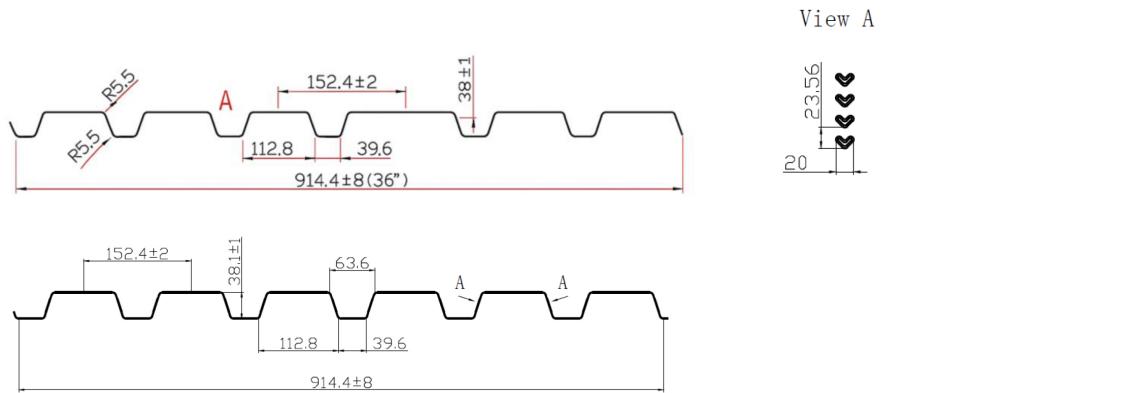


FORM DECK

Designation thickness (ga)	Design Thickness ¹ (in)
26	0.0179
24	0.0239
22	0.0295
20	0.0358
18	0.0474
16	0.0598

1.5" COMPOSITE DECK

GRADE 40 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F _v ksi	S _v + (inch ³) per foot	S _e - (inch ³) per foot	ASD (Q = 1.67)		I _d + (inch ⁴) per ft.	I _d - (inch ⁴) per ft.
						M _v /0 inch-lbs per ft	M _e /0 inch-lbs per foot		
22	0.0295	1.6	40	0.173	0.184	4135	4415	0.147	0.171
20	0.0358	2.0	40	0.219	0.231	5246	5533	0.187	0.216
18	0.0474	2.6	40	0.299	0.312	7154	7473	0.263	0.290
16	0.0598	3.0	40	0.383	0.390	9166	9333	0.350	0.363

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V _r /0 (lbs/ft)	Web Crippling (R _v /0), lbs/ft One Flange Loading End Bearing			Web Crippling (R _v /0), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
22	1939	640	704	810	877	951	1076
20	3042	915	1002	1149	1284	1388	1563
18	4025	1531	1670	1902	2218	2386	2667
16	4975	2345	2547	2885	3476	3723	4138

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7"-6"	8'-0"	8"-6"	9'-0"	9"-6"	10'-0"
Single	22	110	91	77	65	56	49	43	38	34	31	28
	20	140	116	97	83	71	62	55	48	43	39	35
	18	191	158	132	113	97	85	75	66	59	53	48
	16	244	202	170	145	125	109	95	85	75	68	61
Double	22	118	97	82	70	60	52	46	41	36	33	29
	20	148	122	102	87	75	66	58	51	46	41	37
	18	199	165	138	118	102	89	78	69	62	55	50
	16	249	206	173	147	127	111	97	86	77	69	62
Triple	22	147	122	102	87	75	65	57	51	45	41	37
	20	184	152	128	109	94	82	72	64	57	51	46
	18	249	206	173	147	127	111	97	86	77	69	62
	16	311	257	216	184	159	138	122	108	96	86	78

Notes

- All section properties and ASD (Q = 1.67) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
- Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
- Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wl^2}{8}$ Three Span or More $M = \frac{wl^2}{10}$
- Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	77	58	45	35	28	23	19	16	13	11	10
	20	98	74	57	45	36	29	24	20	17	14	12
	18	138	104	80	63	50	41	34	28	24	20	17
	16	184	138	106	84	67	54	45	37	32	27	23
Double	22	185	139	107	84	68	55	45	38	32	27	23
	20	236	177	137	107	86	70	58	48	40	34	30
	18	333	250	193	152	121	99	81	68	57	49	42
	16	443	333	256	201	161	131	108	90	76	65	55
Triple	22	145	109	84	66	53	43	35	30	25	21	18
	20	185	139	107	84	67	55	45	38	32	27	23
	18	261	196	151	119	95	77	64	53	45	38	33
	16	346	260	200	158	126	103	85	71	59	51	43

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Normal Weight Concrete (145 pcf)				Lightweight Concrete (115 pcf)			
Total Slab Depth	Deck Type	Maximum Unshored Clear Span 1 span	Unshored Clear Span 2 span	Maximum Unshored Clear Span 1 span	Unshored Clear Span 2 span	Unshored Clear Span 3 span	
3.50 (t=2.00) 31 PSF	1.5x6x22 ga	5' 7"	6' 7"	6' 8"			
	1.5x6x20 ga	6' 8"	7' 10"	7' 11"			
	1.5x6x18 ga	8' 3"	9' 7"	9' 9"			
	1.5x6x16 ga	9' 8"	10' 9"	11' 1"			
4.00 (t=2.50) 37 PSF	1.5x6x22 ga	5' 4"	6' 4"	6' 5"			
	1.5x6x20 ga	6' 4"	7' 5"	7' 6"			
	1.5x6x18 ga	7' 10"	9' 1"	9' 3"			
	1.5x6x16 ga	9' 2"	10' 2"	10' 6"			
4.50 (t=3.00) 43 PSF	1.5x6x22 ga	5' 2"	6' 0"	6' 1"			
	1.5x6x20 ga	6' 7"	7' 8"	7' 9"			
	1.5x6x18 ga	7' 5"	8' 8"	8' 9"			
	1.5x6x16 ga	8' 9"	9' 9"	10' 0"			
5.00 (t=3.50) 49 PSF	1.5x6x22 ga	4' 11"	5' 10"	5' 10"			
	1.5x6x20 ga	5' 10"	6' 10"	6' 10"			
	1.5x6x18 ga	7' 1"	8' 4"	8' 5"			
	1.5x6x16 ga	8' 4"	9' 4"	9' 7"			
5.50 (t=4.00) 55 PSF	1.5x6x22 ga	4' 9"	5' 7"	5' 8"			
	1.5x6x20 ga	5' 7"	6' 6"	6' 7"			
	1.5x6x18 ga	6' 10"	7' 12"	8' 1"			
	1.5x6x16 ga	7' 12"	8' 11"	9' 3"			
6.00 (t=4.50) 61 PSF	1.5x6x22 ga	4' 8"	5' 5"	5' 6"			
	1.5x6x20 ga	5' 5"	6' 4"	6' 5"			
	1.5x6x18 ga	6' 7"	7' 8"	7' 9"			
	1.5x6x16 ga	7' 8"	8' 7"	8' 11"			
6.00 (t=4.50) 46 PSF	1.5x6x22 ga	5' 2"	6' 0"	6' 1"			
	1.5x6x20 ga	6' 1"	7' 1"	7' 2"			
	1.5x6x18 ga	7' 5"	8' 8"	8' 9"			
	1.5x6x16 ga	8' 9"	9' 9"	10' 0"			

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Composite Deck-Slab Allowable Superimposed Load (ASD), PSF

22 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	354	295	249	212	182	158
4	37	400	400	372	314	268	231	200
4.5	43	400	400	400	383	326	281	244
5	49	400	400	400	400	387	333	290
5.5	55	400	400	400	400	400	387	336
6	61	400	400	400	400	400	400	383

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	138	121	107	95	84	75	67	60
4	175	154	136	120	107	96	86	77
4.5	213	188	166	147	131	118	105	95
5	253	223	197	175	156	140	126	113
5.5	294	259	229	204	182	163	146	132
6	336	296	262	233	208	186	168	151

20/18/16 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	400	359	303	259	223	194
4	37	400	400	400	383	328	283	246
4.5	43	400	400	400	400	400	345	300
5	49	400	400	400	400	400	400	357
5.5	55	400	400	400	400	400	400	400
6	61	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	170	150	132	118	105	94	85	76
4	215	190	168	150	134	120	108	98
4.5	263	232	206	183	164	147	133	120
5	313	276	245	218	195	176	158	143
5.5	364	321	285	254	227	204	184	167
6	400	367	326	290	260	234	211	191

Note

Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.

22 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	341	285	241	206	178	154
4	28	400	400	361	305	261	225	196
4.5	33	400	400	400	372	319	275	239
5	37	400	400	400	400	379	327	285
5.5	42	400	400	400	400	400	380	332
6	46	400	400	400	400	400	400	379

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	135	119	106	94	84	76	68	61
4	172	151	134	120	107	96	87	78
4.5	210	185	164	146	131	118	106	96
5	250	221	196	175	157	141	127	115
5.5	291	257	228	204	182	164	148	134
6	333	294	261	233	209	188	170	154

20/18/16 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	400	344	291	249	216	188
4	28	400	400	400	370	317	274	239
4.5	33	400	400	400	400	388	335	292
5	37	400	400	400	400	400	400	349
5.5	42	400	400	400	400	400	400	400
6	46	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	165	146	129	115	104	93	84	76
4	210	185	165	147	132	119	107	97
4.5	257	227	202	180	162	146	132	119
5	306	271	241	216	194	174	158	143
5.5	357	316	281	251	226	203	184	167
6	400	362	322	288	259	233	211	192

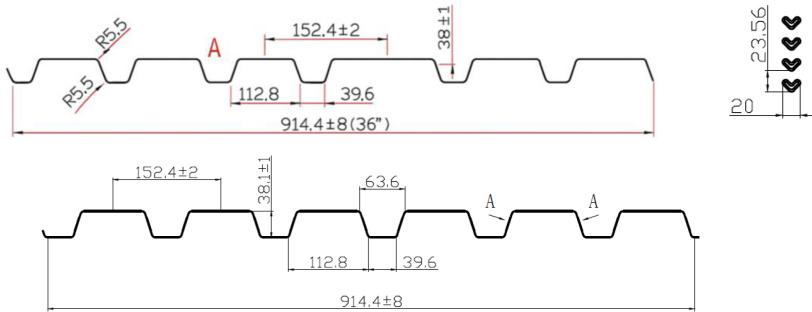
Note

Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.

1.5" COMPOSITE DECK

GRADE 50 STEEL

View A



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_v ksi	$S_e +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD ($\Omega = 1.67$)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_p / Ω inch-lbs per ft	M_n / Ω inch-lbs per foot		
22	0.0295	1.6	50	0.170	0.179	5101	5358	0.144	0.167
20	0.0358	2.0	50	0.216	0.222	6457	6661	0.182	0.210
18	0.0474	2.6	50	0.294	0.310	8812	9291	0.257	0.290
16	0.0598	3.0	50	0.378	0.390	11327	11667	0.341	0.363

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V_c / Ω (lbs/ft)	Web Crippling (R_w / Ω , lbs/ft One Flange Loading End Bearing)			Web Crippling (R_w / Ω , lbs/ft One Flange Loading Interior Bearing)		
		1-1/2"	2"	3"	1-1/2"	2"	3"
22	2424	801	880	1013	1096	1189	1345
20	3803	1143	1253	1436	1605	1735	1953
18	5032	1914	2087	2377	2773	2983	3334
16	6219	2931	3183	3606	4345	4654	5172

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7"-6"	8'-0"	8"-6"	9'-0"	9"-6"	10'-0"
Single	22	136	112	94	80	69	60	53	47	42	38	34
	20	172	142	120	102	88	77	67	60	53	48	43
	18	235	194	163	139	120	104	92	81	73	65	59
	16	302	250	210	179	154	134	118	105	93	84	76
Double	22	143	118	99	85	73	64	56	49	44	40	36
	20	178	147	123	105	91	79	69	61	55	49	44
	18	248	205	172	147	126	110	97	86	76	69	62
	16	311	257	216	184	159	138	122	108	96	86	78
Triple	22	179	148	124	106	91	79	70	62	55	49	45
	20	222	183	154	131	113	99	87	77	69	62	56
	18	310	256	215	183	158	138	121	107	96	86	77
	16	389	321	270	230	198	173	152	135	120	108	97

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7"-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	76	57	44	35	28	22	19	15	13	11	9
	20	96	72	55	44	35	28	23	19	16	14	12
	18	135	101	78	61	49	40	33	27	23	20	17
	16	179	135	104	82	65	53	44	36	31	26	22
Double	22	183	137	106	83	67	54	45	37	31	27	23
	20	230	173	133	105	84	68	56	47	40	34	29
	18	325	244	188	148	118	96	79	66	56	47	41
	16	431	324	250	196	157	128	105	88	74	63	54
Triple	22	143	107	83	65	52	42	35	29	25	21	18
	20	180	135	104	82	66	53	44	37	31	26	23
	18	254	191	147	116	93	75	62	52	44	37	32
	16	338	254	195	154	123	100	82	69	58	49	42

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Normal Weight Concrete (145 pcf)										Lightweight Concrete (115 pcf)									
Total Slab Depth	Deck Type	Maximum Unshored Clear Span			1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span			
		1 span	2 span	3 span															
3.50 (t=2.00) 31 PSF	1.5x6x22 ga	6' 6"	7' 8"	7' 9"	7' 3"	8' 7"	8' 8"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x20 ga	7' 8"	8' 12"	9' 1"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x18 ga	9' 5"	10' 9"	11' 1"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x16 ga	11' 2"	12' 0"	12' 5"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
4.00 (t=2.50) 37 PSF	1.5x6x22 ga	6' 2"	7' 3"	7' 4"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x20 ga	7' 3"	8' 6"	8' 7"	7' 3"	8' 5"	8' 6"	8' 2"	9' 6"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x18 ga	8' 11"	10' 2"	10' 6"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
	1.5x6x16 ga	10' 6"	11' 5"	11' 9"	7' 3"	8' 6"	8' 7"	8' 2"	9' 7"	10' 2"	10' 4"	7' 9"	8' 2"	8' 8"	8' 2"	9' 8"	10' 4"	10' 2"	
4.50 (t=3.00) 43 PSF	1.5x6x22 ga	5' 11"	6' 11"	7' 0"	5' 11"	6' 10"	6' 11"	5' 11"	6' 10"	7' 0"	7' 10"	5' 11"	6' 10"	6' 11"	5' 11"	6' 10"	7' 0"	7' 10"	
	1.5x6x20 ga	7' 6"	8' 7"	8' 10"	7' 6"	8' 5"	8' 6"	7' 6"	8' 5"	8' 10"	8' 10"	7' 6"	8' 5"	8' 6"	7' 6"	8' 5"	8' 10"	8' 10"	
	1.5x6x18 ga	8' 6"	9' 8"	10' 0"	8' 6"	9' 5"	9' 6"	8' 6"	9' 5"	10' 0"	10' 10"	8' 6"	9' 5"	9' 6"	8' 6"	9' 5"	10' 0"	10' 10"	
	1.5x6x16 ga	9' 12"	10' 10"	11' 3"	9' 12"	10' 9"	10' 10"	9' 12"	10' 9"	11' 3"	12' 1"	9' 12"	10' 9"	11' 3"	9' 12"	10' 9"	12' 1"	12' 6"	
5.00 (t=3.50) 49 PSF	1.5x6x22 ga	5' 8"	6' 8"	6' 9"	5' 8"	6' 7"	6' 8"	5' 8"	6' 7"	6' 9"	6' 10"	5' 8"	6' 7"	6' 8"	5' 8"	6' 7"	6' 10"	6' 10"	
	1.5x6x20 ga	6' 8"	7' 9"	7' 10"	6' 8"	7' 7"	7' 8"	6' 8"	7' 7"	7' 9"	7' 10"	6' 8"	7' 7"	7' 8"	6' 8"	7' 7"	7' 9"	7' 10"	
	1.5x6x18 ga	8' 2"	9' 3"	9' 7"	8' 2"	9' 1"	9' 2"	8' 2"	9' 1"	9' 3"	10' 5"	8' 2"	9' 1"	9' 2"	8' 2"	9' 1"	9' 3"	10' 5"	
	1.5x6x16 ga	9' 6"	10' 5"	10' 9"	9' 6"	10' 4"	10' 5"	9' 6"	10' 4"	10' 9"	11' 8"	9' 6"	10' 4"	11' 7"	9' 6"	10' 4"	11' 8"	12' 1"	
5.50 (t=4.00) 55 PSF	1.5x6x22 ga	5' 6"	6' 5"	6' 6"	5' 6"	6' 4"	6' 5"	5' 6"	6' 4"	6' 6"	6' 10"	5' 6"	6' 4"	6' 5"	5' 6"	6' 4"	6' 6"	6' 10"	
	1.5x6x20 ga	6' 5"	7' 6"	7' 7"	6' 5"	7' 4"	7' 5"	6' 5"	7' 4"	7' 6"	7' 10"	6' 5"	7' 4"	7' 5"	6' 5"	7' 4"	7' 6"	7' 10"	
	1.5x6x18 ga	7' 10"	8' 11"	9' 2"	7' 10"	8' 9"	8' 10"	7' 10"	8' 9"	8' 12"	10' 4"	7' 10"	8' 9"	8' 12"	7' 10"	8' 9"	8' 12"	10' 4"	
	1.5x6x16 ga	9' 1"	9' 12"	10' 4"	9' 1"	9' 10"	9' 12"	9' 1"	9' 10"	9' 12"	11' 2"	9' 10"	9' 10"	11' 2"	9' 10"	9' 12"	11' 2"	11' 7"	
6.00 (t=4.50) 61 PSF	1.5x6x22 ga	5' 4"	6' 2"	6' 3"	5' 4"	6' 1"	6' 2"	5' 4"	6' 1"	6' 3"	6' 10"	5' 4"	6' 1"	6' 2"	5' 4"	6' 1"	6' 3"	6' 10"	
	1.5x6x20 ga	6' 2"	7' 2"	7' 3"	6' 2"	7' 0"	7' 1"	6' 2"	7' 0"	7' 1"	7' 10"	6' 2"	7' 0"	7' 1"	6' 2"	7' 0"	7' 1"	7' 10"	
	1.5x6x18 ga	7' 6"	8' 7"	8' 10"	7' 6"	8' 5"	8' 6"	7' 6"	8' 5"	8' 10"	9' 12"	7' 6"	8' 5"	8' 6"	7' 6"	8' 5"	8' 10"	9' 12"	
	1.5x6x16 ga	8' 9"	9' 7"	9' 11"	8' 9"	9' 5"	9' 7"	8' 9"	9' 5"	9' 11"	10' 10"	8' 9"	9' 5"	9' 7"	8' 9"	9' 5"	9' 11"	10' 10"	

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Maximum Cantilever Spans

1.5C Deck - Wide Flange Up		50 ksi		1.5INV Deck - Wide Flange Down		50 ksi	
Live Load	20	psf	with concrete	Live Load	20	psf	with concrete
P1	150	plf		P1	150	plf	
Deck Weight	2	psf		Deck Weight	2	psf	
Live Load	50	psf	without concrete	Live Load	50	psf	without concrete
Total Slab Thickness	Deck Gage	Maximum Cantilever (inches) NWC	Maximum Cantilever (inches) LWC	Total Slab Thickness	Deck Gage	Maximum Cantilever (inches) NWC	Maximum Cantilever (inches) LWC
3.5	22	26	26	3.5	22	25	25
3.5	20	31	31	3.5	20	30	30
3.5	18	40	40	3.5	18	38	38
3.5	16	47	47	3.5	16	46	46
4	22	26	26	4	22	25	25
4	20	31	31	4	20	30	30
4	18	40	40	4	18	38	38
4	16	47	47	4	16	46	46
4.5	22	26	26	4.5	22	25	25
4.5	20	31	31	4.5	20	30	30
4.5	18	40	40	4.5	18	38	38
4.5	16	47	47	4.5	16	46	46
5	22	26	26	5	22	25	25
5	20	31	31	5	20	30	30
5	18	40	40	5	18	38	38
5	16	47	47	5	16	46	46
5.5	22	26	26	5.5	22	25	25
5.5	20	31	31	5.5	20	30	30
5.5	18	40	40	5.5	18	38	38
5.5	16	47	47	5.5	16	46	46
6	22	26	26	6	22	25	25
6	20	31	31	6	20	30	30
6	18	40	40	6	18	38	38
6	16	47	47	6	16	46	46

 Assumes that back span is greater than the cantilever span.
Applicable to single, double, triple span or greater

 Controlled by concentrated load + 50 psf

 Controlled by concrete weight + 20 psf

 Controlled by Deflection

Composite Deck-Slab Allowable Superimposed Load (ASD), PSF

22 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	400	372	314	269	232	202
4	37	400	400	400	397	340	293	255
4.5	43	400	400	400	400	400	357	311
5	49	400	400	400	400	400	400	369
5.5	55	400	400	400	400	400	400	400
6	61	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	177	156	138	123	110	98	88	80
4	224	197	175	156	139	125	113	102
4.5	273	241	213	190	170	153	138	125
5	323	286	253	226	202	182	164	148
5.5	375	331	294	262	235	211	191	173
6	400	378	336	300	269	242	218	197

20/18/16 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	400	400	382	327	283	246
4	37	400	400	400	400	400	358	312
4.5	43	400	400	400	400	400	400	381
5	49	400	400	400	400	400	400	400
5.5	55	400	400	400	400	400	400	400
6	61	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	216	191	170	151	136	122	110	100
4	274	242	215	192	172	155	140	127
4.5	335	296	263	235	211	190	172	156
5	398	352	313	280	251	226	205	186
5.5	400	400	364	325	292	263	238	216
6	400	400	400	372	334	301	272	247

Note

Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.

22 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	400	359	304	260	225	196
4	28	400	400	400	385	329	285	248
4.5	33	400	400	400	400	400	348	304
5	37	400	400	400	400	400	400	362
5.5	42	400	400	400	400	400	400	400
6	46	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	172	152	135	121	108	97	88	80
4	218	193	172	153	138	124	112	102
4.5	267	236	210	188	168	152	137	125
5	318	281	250	224	201	181	164	149
5.5	369	327	291	260	234	211	191	173
6	400	374	333	298	268	242	219	199

20/18/16 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	400	400	367	314	272	238
4	28	400	400	400	400	399	346	302
4.5	33	400	400	400	400	400	400	370
5	37	400	400	400	400	400	400	400
5.5	42	400	400	400	400	400	400	400
6	46	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	209	185	165	147	132	120	108	98
4	266	235	209	187	169	152	138	125
4.5	325	288	257	230	207	187	169	154
5	388	344	306	275	247	223	202	184
5.5	400	400	357	320	288	260	236	215
6	400	400	400	366	330	298	271	246

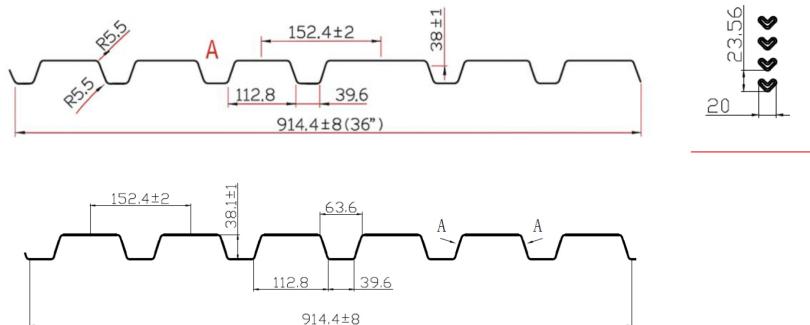
Note

Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.

1.5" COMPOSITE DECK

GRADE 80 STEEL

View A



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_v ksi	$S_e +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD (Q = 1.67)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_u / O inch-lbs per ft	M_u / O inch-lbs per foot		
22	0.0295	1.6	60	0.166	0.175	5958	6269	0.142	0.167
20	0.0358	2.0	60	0.206	0.215	7398	7738	0.178	0.209
18	0.0474	2.6	60	0.291	0.306	10455	11006	0.252	0.288
16	0.0598	3.0	60	0.375	0.389	13461	13976	0.334	0.363

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V_n/O (lbs/ft)	Web Crippling (R_v/O), lbs/ft One Flange Loading End Bearing			Web Crippling (R_v/O), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
22	2908	961	1056	1216	1316	1427	1614
20	4563	1372	1503	1723	1926	2082	2344
18	6038	2297	2505	2853	3327	3579	4001
16	7463	3517	3820	4327	5214	5584	6207

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	159	131	110	94	81	71	62	55	49	44	40
	20	197	163	137	117	101	88	77	68	61	55	49
	18	279	230	194	165	142	124	109	96	86	77	70
	16	359	297	249	212	183	160	140	124	111	99	90
Double	22	167	138	116	99	85	74	65	58	52	46	42
	20	206	171	143	122	105	92	81	71	64	57	52
	18	293	243	204	174	150	130	115	102	91	81	73
	16	373	308	259	221	190	166	146	129	115	103	93
Triple	22	209	173	145	124	107	93	82	72	65	58	52
	20	258	213	179	153	132	115	101	89	80	71	64
	18	367	303	255	217	187	163	143	127	113	102	92
	16	466	385	324	276	238	207	182	161	144	129	116

Notes

- All section properties and ASD (Q = 1.67) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
- Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
- Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wl^2}{8}$ Three Span or More $M = \frac{wl^2}{10}$

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	75	56	43	34	27	22	18	15	13	11	9
	20	93	70	54	43	34	28	23	19	16	14	12
	18	132	100	77	60	48	39	32	27	23	19	17
	16	176	132	102	80	64	52	43	36	30	26	22
Double	22	180	135	104	82	66	53	44	37	31	26	22
	20	225	169	130	102	82	67	55	46	39	33	28
	18	319	240	185	145	116	95	78	65	55	47	40
	16	423	318	245	193	154	125	103	86	73	62	53
Triple	22	141	106	81	64	51	42	34	29	24	21	18
	20	176	132	102	80	64	52	43	36	30	26	22
	18	250	188	144	114	91	74	61	51	43	36	31
	16	331	249	192	151	121	98	81	67	57	48	41

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Normal Weight Concrete (145pcf)													
Total Slab Depth	Deck Type	Maximum Unshored Clear Span			Lightweight Concrete (115pcf)			Maximum Unshored Clear Span			Lightweight Concrete (115pcf)		
		1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span
3.50 (t=2.00) 31 PSF	1.5x6x22 ga	7' 3"	8' 6"	8' 7"	3.50 (t=2.00) 23 PSF	8' 2"	9' 7"	9' 9"	4.00 (t=2.50) 28 PSF	7' 8"	9' 1"	9' 2"	
	1.5x6x20 ga	8' 5"	9' 9"	9' 12"		9' 6"	10' 11"	11' 4"		8' 11"	10' 4"	10' 8"	
	1.5x6x18 ga	10' 7"	11' 8"	12' 1"		12' 1"	13' 1"	13' 6"		11' 4"	12' 4"	12' 9"	
	1.5x6x16 ga	12' 5"	13' 2"	13' 7"		14' 3"	14' 9"	15' 3"		13' 4"	13' 11"	14' 5"	
4.00 (t=2.50) 37 PSF	1.5x6x22 ga	6' 11"	8' 1"	8' 2"	4.00 (t=2.50) 33 PSF	7' 4"	8' 7"	8' 8"	5.00 (t=3.00) 37 PSF	7' 1"	8' 3"	8' 5"	
	1.5x6x20 ga	7' 12"	9' 3"	9' 5"		9' 6"	10' 7"	10' 11"		8' 2"	9' 6"	9' 8"	
	1.5x6x18 ga	9' 12"	11' 1"	11' 5"		10' 8"	11' 9"	12' 2"		10' 3"	11' 4"	11' 9"	
	1.5x6x16 ga	11' 8"	12' 6"	12' 11"		12' 1"	13' 3"	13' 8"		12' 0"	12' 9"	13' 3"	
4.50 (t=3.00) 43 PSF	1.5x6x22 ga	6' 7"	7' 8"	7' 10"	5.50 (t=4.00) 42 PSF	6' 9"	7' 11"	8' 0"	6.00 (t=4.50) 46 PSF	6' 7"	7' 8"	7' 10"	
	1.5x6x20 ga	8' 4"	9' 4"	9' 8"		9' 6"	10' 7"	10' 11"		9' 1"	9' 3"	9' 5"	
	1.5x6x18 ga	9' 6"	10' 7"	10' 11"		10' 8"	11' 9"	12' 2"		10' 10"	11' 11"	11' 3"	
	1.5x6x16 ga	11' 1"	11' 11"	12' 3"		12' 1"	13' 3"	13' 8"		11' 6"	12' 3"	12' 8"	
5.00 (t=3.50) 49 PSF	1.5x6x22 ga	6' 4"	7' 5"	7' 6"	6.00 (t=4.50) 46 PSF	7' 11"	8' 3"	8' 5"	6.00 (t=4.50) 46 PSF	7' 7"	8' 10"	8' 12"	
	1.5x6x20 ga	7' 3"	8' 6"	8' 7"		8' 2"	9' 6"	9' 8"		8' 10"	10' 7"	10' 11"	
	1.5x6x18 ga	9' 1"	10' 1"	10' 5"		10' 3"	11' 4"	11' 9"		10' 7"	11' 11"	12' 3"	
	1.5x6x16 ga	10' 7"	11' 5"	11' 9"		11' 6"	12' 3"	12' 8"		11' 11"	12' 3"	12' 11"	
5.50 (t=4.00) 55 PSF	1.5x6x22 ga	6' 1"	7' 1"	7' 2"	6.00 (t=4.50) 46 PSF	6' 7"	7' 8"	7' 10"		6' 7"	7' 8"	7' 10"	
	1.5x6x20 ga	6' 12"	8' 2"	8' 3"		7' 10"	9' 1"	9' 3"		7' 7"	8' 10"	8' 12"	
	1.5x6x18 ga	8' 8"	9' 8"	10' 0"		9' 10"	10' 11"	11' 3"		9' 6"	10' 7"	10' 11"	
	1.5x6x16 ga	10' 1"	10' 11"	11' 4"		11' 6"	12' 3"	12' 8"		11' 11"	12' 3"	12' 11"	
6.00 (t=4.50) 61 PSF	1.5x6x22 ga	5' 11"	6' 10"	6' 11"	6.00 (t=4.50) 46 PSF	6' 7"	7' 8"	7' 10"		6' 7"	7' 8"	7' 10"	
	1.5x6x20 ga	6' 9"	7' 10"	7' 11"		7' 7"	8' 10"	8' 12"		7' 7"	8' 10"	8' 12"	
	1.5x6x18 ga	8' 4"	9' 4"	9' 8"		9' 6"	10' 7"	10' 11"		9' 6"	10' 7"	10' 11"	
	1.5x6x16 ga	9' 9"	10' 6"	10' 11"		11' 1"	11' 11"	12' 3"		11' 11"	12' 3"	12' 11"	

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Composite Deck-Slab Allowable Superimposed Load (ASD), PSF

22 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	400	372	314	269	232	202
4	37	400	400	400	397	340	293	255
4.5	43	400	400	400	400	400	357	311
5	49	400	400	400	400	400	400	369
5.5	55	400	400	400	400	400	400	400
6	61	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	177	156	138	123	110	98	88	80
4	224	197	175	156	139	125	113	102
4.5	273	241	213	190	170	153	138	125
5	323	286	253	226	202	182	164	148
5.5	375	331	294	262	235	211	191	173
6	400	378	336	300	269	242	218	197

Note

AISI/SDI C-2017 permits the use of Grade 80 steel for composite deck, but it limits the yield strength for determining composite deck-slab strength to 50 ksi. Therefore for Grade 80 steel, 50 ksi tables are used.

20/18/16 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	31	400	400	400	382	327	283	246
4	37	400	400	400	400	400	358	312
4.5	43	400	400	400	400	400	400	381
5	49	400	400	400	400	400	400	400
5.5	55	400	400	400	400	400	400	400
6	61	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	216	191	170	151	136	122	110	100
4	274	242	215	192	172	155	140	127
4.5	335	296	263	235	211	190	172	156
5	398	352	313	280	251	226	205	186
5.5	400	400	364	325	292	263	238	216
6	400	400	400	372	334	301	272	247

Notes

- Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.
- AISI/SDI C-2017 permits the use of Grade 80 steel for composite deck, but it limits the yield strength for determining composite deck-slab strength to 50 ksi. Therefore for Grade 80 steel, 50 ksi tables are used.

22 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	400	359	304	260	225	196
4	28	400	400	400	385	329	285	248
4.5	33	400	400	400	400	400	348	304
5	37	400	400	400	400	400	400	362
5.5	42	400	400	400	400	400	400	400
6	46	400	400	400	400	400	400	400

Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	172	152	135	121	108	97	88	80
4	218	193	172	153	138	124	112	102
4.5	267	236	210	188	168	152	137	125
5	318	281	250	224	201	181	164	149
5.5	369	327	291	260	234	211	191	173
6	400	374	333	298	268	242	219	199

Note

AISI/SDI C-2017 permits the use of Grade 80 steel for composite deck, but it limits the yield strength for determining composite deck-slab strength to 50 ksi. Therefore for Grade 80 steel, 50 ksi tables are used.

20/18/16 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0
3.5	23	400	400	400	367	314	272	238
4	28	400	400	400	400	399	346	302
4.5	33	400	400	400	400	400	400	370
5	37	400	400	400	400	400	400	400
5.5	42	400	400	400	400	400	400	400
6	46	400	400	400	400	400	400	400

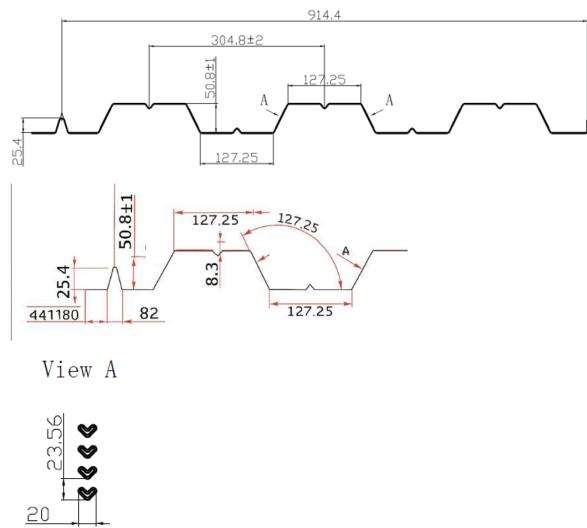
Slab Thickness (Inches)	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0	11'-6	12'-0
3.5	209	185	165	147	132	120	108	98
4	266	235	209	187	169	152	138	125
4.5	325	288	257	230	207	187	169	154
5	388	344	306	275	247	223	202	184
5.5	400	400	357	320	288	260	236	215
6	400	400	400	366	330	298	271	246

Notes

1. Because of the profile of the embossments, there is no gain in strength for the composite deck-slab when the deck gets thicker than 20 gage. However, the construction spans do get longer for 18 and 16 gage deck.
2. AISI/SDI C-2017 permits the use of Grade 80 steel for composite deck, but it limits the yield strength for determining composite deck-slab strength to 50 ksi. Therefore for Grade 80 steel, 50 ksi tables are used

2" COMPOSITE DECK

GRADE 50 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_y ksi	$S_u +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD ($\Omega = 1.67$)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_u / Ω inch-lbs per ft	M_e / Ω inch-lbs per ft		
22	0.0295	1.6	50	0.247	0.254	7407	7595	0.311	0.290
20	0.0358	1.9	50	0.329	0.336	9860	10060	0.393	0.373
18	0.0474	2.5	50	0.493	0.500	14760	14960	0.548	0.530
16	0.0598	3.2	50	0.645	0.644	19321	19271	0.703	0.693

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016.

Shear and Web Crippling

Gage	V_u / Ω (lbs/ft)	Web Crippling (R_u / Ω , lbs/ft One Flange Loading End Bearing)			Web Crippling (R_u / Ω , lbs/ft One Flange Loading Interior Bearing)		
		2"	3"	4"	2"	3"	4"
22	1881	414	476	529	627	709	779
20	2781	590	677	749	904	1018	1113
18	3665	986	1123	1239	1532	1712	1865
16	4601	1507	1707	1875	2367	2631	2854

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016.

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
Single	22	137	101	77	61	49	41	34	29	25	22	19
	20	183	134	103	81	66	54	46	39	34	29	26
	18	273	201	154	121	98	81	68	58	50	44	38
	16	358	263	201	159	129	106	89	76	66	57	50
Double	22	141	103	79	63	51	42	35	30	26	23	20
	20	186	137	105	83	67	55	47	40	34	30	26
	18	277	204	156	123	100	82	69	59	51	44	39
	16	357	262	201	159	128	106	89	76	66	57	50
Triple	22	176	129	99	78	63	52	44	37	32	28	25
	20	233	171	131	103	84	69	58	50	43	37	33
	18	346	254	195	154	125	103	87	74	64	55	49
	16	446	328	251	198	161	133	112	95	82	71	63

Notes

1. All section properties and ASD ($\Omega = 1.67$) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
2. Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
3. Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wl^2}{8}$ Three Span or More $M = \frac{wl^2}{10}$

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
Single	22	88	56	37	26	19	14	11	9	7	6	5
	20	113	71	48	34	25	18	14	11	9	7	6
	18	161	101	68	48	35	26	20	16	13	10	8
	16	211	133	89	62	46	34	26	21	17	13	11
Double	22	212	134	90	63	46	34	27	21	17	14	11
	20	273	172	115	81	59	44	34	27	22	17	14
	18	388	244	164	115	84	63	48	38	31	25	20
	16	507	320	214	150	110	82	63	50	40	32	27
Triple	22	166	105	70	49	36	27	21	16	13	11	9
	20	214	135	90	63	46	35	27	21	17	14	11
	18	304	191	128	90	66	49	38	30	24	19	16
	16	397	250	168	118	86	64	50	39	31	25	21

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

		Normal Weight Concrete (145 pcf)			Lightweight Concrete (115 pcf)					
			Maximum	Unshored	Clear Span		Maximum	Unshored	Clear Span	
4.00 (t=2.00) 39 PSF	2x12x22 ga	7'- 11	9'- 1	9'- 3		4.00 (t=2.00) 31 PSF	2x12x22 ga	8'- 6	9'- 9	10'- 0
	2x12x20 ga	9'- 3	10'- 6	10'- 10			2x12x20 ga	10'- 0	11'- 3	11'- 8
	2x12x18 ga	10'- 5	12'- 9	12'- 5			2x12x18 ga	11'- 2	13'- 9	13'- 2
	2x12x16 ga	11'- 4	14'- 2	13'- 4			2x12x16 ga	12'- 0	14'- 11	14'- 1
4.50 (t=2.50) 45 PSF	2x12x22 ga	7'- 7	8'- 8	8'- 10		4.50 (t=2.50) 35 PSF	2x12x22 ga	8'- 2	9'- 5	9'- 8
	2x12x20 ga	8'- 10	10'- 0	10'- 4			2x12x20 ga	9'- 7	10'- 10	11'- 3
	2x12x18 ga	9'- 11	12'- 2	12'- 0			2x12x18 ga	10'- 9	13'- 3	12'- 9
	2x12x16 ga	10'- 11	13'- 8	12'- 10			2x12x16 ga	11'- 8	14'- 6	13'- 8
5.00 (t=3.00) 51 PSF	2x12x22 ga	7'- 3	8'- 4	8'- 6		5.00 (t=3.00) 39 PSF	2x12x22 ga	7'- 11	9'- 1	9'- 3
	2x12x20 ga	8'- 6	9'- 7	9'- 11			2x12x20 ga	9'- 3	10'- 6	10'- 10
	2x12x18 ga	9'- 7	11'- 8	11'- 8			2x12x18 ga	10'- 5	12'- 9	12'- 5
	2x12x16 ga	10'- 6	13'- 3	12'- 6			2x12x16 ga	11'- 4	14'- 2	13'- 4
5.50 (t=3.50) 57 PSF	2x12x22 ga	6'- 11	8'- 0	8'- 2		5.50 (t=3.50) 44 PSF	2x12x22 ga	7'- 7	8'- 9	8'- 11
	2x12x20 ga	8'- 3	9'- 3	9'- 6			2x12x20 ga	8'- 11	10'- 1	10'- 5
	2x12x18 ga	9'- 3	11'- 3	11'- 4			2x12x18 ga	10'- 0	12'- 4	12'- 1
	2x12x16 ga	10'- 1	12'- 9	12'- 2			2x12x16 ga	11'- 0	13'- 9	12'- 11
6.00 (t=4.00) 63 PSF	2x12x22 ga	6'- 9	7'- 9	7'- 10		6.00 (t=4.00) 48 PSF	2x12x22 ga	7'- 5	8'- 6	8'- 8
	2x12x20 ga	7'- 11	8'- 11	9'- 2			2x12x20 ga	8'- 8	9'- 9	10'- 1
	2x12x18 ga	8'- 11	10'- 10	11'- 0			2x12x18 ga	9'- 9	11'- 11	11'- 10
	2x12x16 ga	9'- 9	12'- 4	11'- 10			2x12x16 ga	10'- 8	13'- 6	12'- 8
6.50 (t=4.50) 69 PSF	2x12x22 ga	6'- 6	7'- 6	7'- 7		6.50 (t=4.50) 53 PSF	2x12x22 ga	7'- 2	8'- 3	8'- 4
	2x12x20 ga	7'- 9	8'- 7	8'- 10			2x12x20 ga	8'- 5	9'- 5	9'- 9
	2x12x18 ga	8'- 8	10'- 6	10'- 9			2x12x18 ga	9'- 5	11'- 6	11'- 7
	2x12x16 ga	9'- 6	11'- 11	11'- 7			2x12x16 ga	10'- 4	13'- 1	12'- 4

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Maximum Cantilever Spans

2C Deck		50 ksi	
Live Load	20	psf	with concrete
P1	150	plf	
Deck Weight	2	psf	
Live Load	50	psf	without concrete
Total Slab Thickness	Deck Gage	Maximum Cantilever (inches) NWC	Maximum Cantilever (inches) LWC
4	22	34	34
4	20	42	42
4	18	56	56
4	16	66	66
4.5	22	34	34
4.5	20	42	42
4.5	18	56	56
4.5	16	66	66
5	22	34	34
5	20	42	42
5	18	56	56
5	16	66	66
5.5	22	34	34
5.5	20	42	42
5.5	18	56	56
5.5	16	66	66
6	22	34	34
6	20	42	42
6	18	56	56
6	16	64	66
6.5	22	34	34
6.5	20	42	42
6.5	18	56	56
6.5	16	62	67



Assumes that back span is greater than the cantilever span.
Applicable to single, double, triple span or greater



Controlled by concentrated load + 50 psf



Controlled by concrete weight + 20 psf



Controlled by Deflection

Composite Deck-Slab Allowable Superimposed Load (ASD), PSF

22 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0"	8'-6	9'-0	9'-6	10'-0
4	39	325	280	243	213	188	166	148
4.5	45	394	340	296	259	228	202	180
5	51	400	400	350	307	271	240	214
5.5	57	400	400	400	357	315	279	249
6	63	400	400	400	400	359	319	284
6.5	69	400	400	400	400	400	359	321

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	132	118	106	96	86	78	71	64
4.5	161	144	130	117	106	96	87	79
5	191	172	155	140	126	115	104	95
5.5	222	200	180	163	147	134	122	111
6	255	229	206	186	169	154	140	127
6.5	287	258	233	211	191	174	158	144

20 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	39	393	339	296	259	229	203	181
4.5	45	400	400	359	315	278	247	220
5	51	400	400	400	373	329	293	261
5.5	57	400	400	400	400	383	340	304
6	63	400	400	400	400	400	389	347
6.5	69	400	400	400	400	400	400	391

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	162	146	132	119	108	98	89	82
4.5	197	178	160	145	132	120	109	100
5	234	211	190	173	157	143	130	119
5.5	272	245	222	201	183	166	152	139
6	312	281	254	230	209	191	174	160
6.5	351	317	286	260	236	216	197	180

18 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	39	400	400	389	342	303	269	241
4.5	45	400	400	400	400	367	326	292
5	51	400	400	400	400	400	387	346
5.5	57	400	400	400	400	400	400	400
6	63	400	400	400	400	400	400	400
6.5	69	400	400	400	400	400	400	400

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	216	195	177	160	146	133	122	112
4.5	263	237	215	195	178	162	149	136
5	311	281	255	231	211	193	177	162
5.5	362	327	296	269	246	225	206	189
6	400	374	339	308	281	257	236	217
6.5	400	400	382	348	318	291	267	245

16 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	39	400	400	400	400	377	336	301
4.5	45	400	400	400	400	400	400	365
5	51	400	400	400	400	400	400	400
5.5	57	400	400	400	400	400	400	400
6	63	400	400	400	400	400	400	400
6.5	69	400	400	400	400	400	400	400

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	271	245	222	202	185	169	155	143
4.5	328	297	269	245	224	205	188	173
5	389	352	320	291	266	244	224	206
5.5	400	400	372	339	310	284	261	240
6	400	400	400	388	355	325	299	276
6.5	400	400	400	400	400	368	338	312

22 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	31	315	272	237	208	184	163	145
4.5	35	384	332	289	254	224	199	178
5	39	400	394	344	302	267	237	212
5.5	44	400	400	400	351	311	276	247
6	48	400	400	400	400	356	317	283
6.5	53	400	400	400	400	400	357	319

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	130	117	106	96	87	79	72	66
4.5	160	144	130	118	107	97	89	81
5	190	171	155	141	128	116	106	97
5.5	222	200	181	164	149	136	124	114
6	254	229	207	188	171	156	143	131
6.5	287	259	234	213	193	177	162	148

20 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	31	380	329	287	252	223	198	177
4.5	35	400	400	349	307	272	242	216
5	39	400	400	400	365	323	287	257
5.5	44	400	400	400	400	375	334	299
6	48	400	400	400	400	400	383	343
6.5	53	400	400	400	400	400	400	387

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	159	143	130	118	107	98	89	82
4.5	194	175	159	144	131	120	110	101
5	231	209	189	172	157	143	131	120
5.5	269	243	220	200	183	167	153	140
6	309	279	253	230	210	192	176	162
6.5	348	315	285	260	237	217	199	183

18 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	31	400	400	375	330	292	261	233
4.5	35	400	400	400	400	355	317	284
5	39	400	400	400	400	400	376	337
5.5	44	400	400	400	400	400	400	393
6	48	400	400	400	400	400	400	400
6.5	53	400	400	400	400	400	400	400

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	210	190	172	157	143	131	120	110
4.5	256	231	210	191	174	160	147	135
5	304	275	250	227	208	191	175	161
5.5	354	320	291	265	242	222	204	188
6	400	367	334	304	278	255	234	216
6.5	400	400	377	344	314	288	265	244

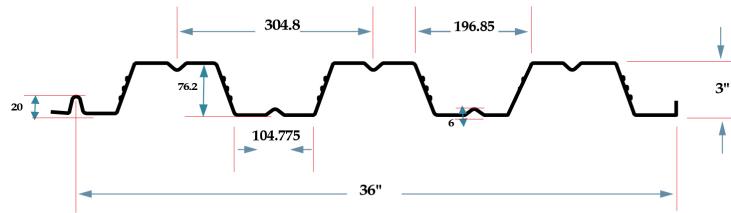
16 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	7'-0	7'-6	8'-0	8'-6	9'-0	9'-6	10'-0
4	31	400	400	400	400	362	323	290
4.5	35	400	400	400	400	400	392	352
5	39	400	400	400	400	400	400	400
5.5	44	400	400	400	400	400	400	400
6	48	400	400	400	400	400	400	400
6.5	53	400	400	400	400	400	400	400

Slab Thickness (Inches)	10'-6	11'-0	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0
4	261	236	215	196	179	164	151	139
4.5	317	287	261	238	218	200	184	170
5	377	342	311	284	260	238	219	202
5.5	400	398	362	330	303	278	256	236
6	400	400	400	380	348	319	294	272
6.5	400	400	400	400	393	361	333	307

3" COMPOSITE DECK

GRADE 50 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_v ksi	$S_e +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD (0 = 1.67)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_r / O inch-lbs per ft	M_u / O inch-lbs per foot		
22	0.0295	1.7	50	0.397	0.426	11895	12744	0.722	0.680
20	0.0358	2.1	50	0.525	0.559	15709	16747	0.908	0.870
18	0.0474	2.7	50	0.796	0.795	23822	23812	1.274	1.260
16	0.0598	3.5	50	1.009	1.010	30200	30230	1.624	1.610

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016.

Shear and Web Crippling

Gage	V_r / O (lbs/ft)	Web Crippling (R_r / O), lbs/ft One Flange Loading End Bearing			Web Crippling (R_r / O), lbs/ft One Flange Loading Interior Bearing		
		2"	3"	4"	2"	3"	4"
22	1781	402	463	515	643	728	799
20	2985	578	663	734	928	1045	1143
18	4372	974	1110	1224	1575	1760	1917
16	7370	1497	1696	1864	2435	2707	2936

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016.

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
Single	22	220	162	124	98	79	66	55	47	40	35	31
	20	291	214	164	129	105	87	73	62	53	47	41
	18	441	324	248	196	159	131	110	94	81	71	62
	16	559	411	315	249	201	166	140	119	103	89	79
Double	22	236	173	133	105	85	70	59	50	43	38	33
	20	310	228	174	138	112	92	78	66	57	50	44
	18	441	324	248	196	159	131	110	94	81	71	62
	16	560	411	315	249	202	167	140	119	103	90	79
Triple	22	295	217	166	131	106	88	74	63	54	47	41
	20	388	285	218	172	140	115	97	83	71	62	55
	18	551	405	310	245	198	164	138	117	101	88	78
	16	700	514	394	311	252	208	175	149	129	112	98

Notes

- All section properties and ASD ($\Omega = 1.67$) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
- Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
- Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wl^2}{8}$ Three Span or More $M = \frac{wl^2}{10}$
- Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

4. Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
Single	22	207	130	87	61	45	34	26	20	16	13	11
	20	264	167	112	78	57	43	33	26	21	17	14
	18	383	241	162	113	83	62	48	38	30	25	20
	16	489	308	206	145	106	79	61	48	39	31	26
Double	22	498	313	210	147	107	81	62	49	39	32	26
	20	637	401	269	189	138	103	80	63	50	41	34
	18	922	581	389	273	199	150	115	91	73	59	49
	16	1178	742	497	349	254	191	147	116	93	75	62
Triple	22	389	245	164	115	84	63	49	38	31	25	21
	20	498	314	210	148	108	81	62	49	39	32	26
	18	722	454	304	214	156	117	90	71	57	46	38
	16	922	581	389	273	199	150	115	91	73	59	49

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Normal Weight Concrete (145pcf)														
Total Slab Depth	Deck Type	Maximum Unshored Clear Span			Lightweight Concrete (115pcf)			Maximum Unshored Clear Span			Lightweight Concrete (115pcf)			
		1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span	1 span	2 span	3 span	
5.00 (t=2.00) 46 PSF	3x12x22 ga	10' 3"	11' 4"	11' 9"	5.00 (t=2.00) 37 PSF	3x12x22 ga	11' 2"	12' 3"	12' 7"	5.00 (t=2.50) 42 PSF	3x12x22 ga	10' 8"	11' 8"	12' 1"
	3x12x20 ga	11' 12"	13' 0"	13' 5"		3x12x20 ga	12' 11"	13' 12"	14' 6"		3x12x20 ga	12' 4"	13' 5"	13' 10"
	3x12x18 ga	13' 5"	15' 6"	16' 0"		3x12x18 ga	14' 5"	16' 8"	17' 3"		3x12x18 ga	13' 10"	15' 2"	15' 8"
	3x12x16 ga	14' 7"	17' 6"	18' 1"		3x12x16 ga	15' 8"	18' 10"	19' 5"		3x12x16 ga	15' 0"	18' 0"	18' 8"
5.50 (t=2.50) 52 PSF	3x12x22 ga	9' 10"	10' 10"	11' 3"	5.50 (t=2.50) 44 PSF	3x12x22 ga	10' 10"	11' 11"	12' 1"	6.00 (t=3.00) 58 PSF	3x12x22 ga	10' 2"	11' 3"	11' 8"
	3x12x20 ga	11' 6"	12' 5"	12' 10"		3x12x20 ga	12' 4"	13' 5"	13' 10"		3x12x20 ga	12' 4"	14' 2"	14' 8"
	3x12x18 ga	12' 11"	14' 10"	15' 4"		3x12x18 ga	13' 10"	16' 0"	16' 6"		3x12x18 ga	13' 4"	15' 5"	15' 11"
	3x12x16 ga	14' 0"	16' 9"	17' 4"		3x12x16 ga	15' 0"	18' 0"	18' 8"		3x12x16 ga	14' 6"	17' 4"	17' 11"
6.00 (t=3.00) 58 PSF	3x12x22 ga	9' 5"	10' 5"	10' 9"	6.00 (t=3.00) 47 PSF	3x12x22 ga	10' 2"	11' 3"	11' 8"	6.50 (t=3.50) 64 PSF	3x12x22 ga	10' 0"	11' 1"	11' 6"
	3x12x20 ga	11' 4"	12' 10"	13' 4"		3x12x20 ga	12' 4"	14' 2"	14' 8"		3x12x20 ga	11' 9"	12' 9"	13' 2"
	3x12x18 ga	12' 5"	14' 3"	14' 9"		3x12x18 ga	13' 4"	15' 5"	15' 11"		3x12x18 ga	13' 2"	15' 2"	15' 8"
	3x12x16 ga	13' 6"	16' 1"	16' 7"		3x12x16 ga	14' 6"	17' 4"	17' 11"		3x12x16 ga	14' 3"	17' 1"	17' 8"
6.50 (t=3.50) 64 PSF	3x12x22 ga	9' 0"	10' 1"	10' 5"	7.00 (t=4.00) 52 PSF	3x12x22 ga	9' 10"	10' 10"	11' 3"	7.50 (t=4.50) 69 PSF	3x12x22 ga	9' 4"	10' 4"	10' 9"
	3x12x20 ga	10' 8"	11' 6"	11' 11"		3x12x20 ga	11' 6"	12' 5"	12' 10"		3x12x20 ga	11' 0"	11' 11"	12' 3"
	3x12x18 ga	12' 0"	13' 9"	14' 3"		3x12x18 ga	12' 11"	14' 10"	15' 4"		3x12x18 ga	12' 4"	14' 2"	14' 8"
	3x12x16 ga	13' 1"	15' 6"	16' 0"		3x12x16 ga	14' 0"	16' 9"	17' 4"		3x12x16 ga	13' 5"	16' 0"	16' 6"
7.00 (t=4.00) 70 PSF	3x12x22 ga	8' 9"	9' 9"	10' 1"	7.00 (t=4.00) 52 PSF	3x12x22 ga	11' 6"	12' 5"	12' 10"	7.50 (t=4.50) 76 PSF	3x12x22 ga	9' 4"	10' 4"	10' 9"
	3x12x20 ga	10' 3"	11' 2"	11' 6"		3x12x20 ga	12' 11"	14' 10"	15' 4"		3x12x20 ga	11' 0"	11' 11"	12' 3"
	3x12x18 ga	11' 8"	13' 3"	13' 9"		3x12x18 ga	13' 2"	15' 2"	15' 8"		3x12x18 ga	12' 4"	14' 2"	14' 8"
	3x12x16 ga	12' 8"	15' 0"	15' 6"		3x12x16 ga	14' 0"	16' 9"	17' 4"		3x12x16 ga	13' 5"	16' 0"	16' 6"
7.50 (t=4.50) 76 PSF	3x12x22 ga	8' 5"	9' 5"	9' 9"	7.50 (t=4.50) 59 PSF	3x12x22 ga	11' 0"	11' 11"	12' 3"	8.00 (t=5.00) 80 PSF	3x12x22 ga	8' 4"	9' 4"	9' 10"
	3x12x20 ga	9' 11"	10' 9"	11' 2"		3x12x20 ga	12' 4"	14' 2"	14' 8"		3x12x20 ga	11' 0"	11' 11"	12' 3"
	3x12x18 ga	11' 4"	12' 10"	13' 4"		3x12x18 ga	13' 2"	15' 2"	15' 8"		3x12x18 ga	12' 4"	14' 2"	14' 8"
	3x12x16 ga	12' 4"	14' 6"	15' 0"		3x12x16 ga	14' 3"	16' 9"	17' 4"		3x12x16 ga	13' 5"	16' 0"	16' 6"

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Composite Deck-Slab Allowable Superimposed Load (ASD), PSF

22 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	46	272	238	210	186	165	147	132
5.5	52	329	288	254	225	200	179	160
6	58	388	340	300	266	237	212	190
6.5	64	400	394	347	308	274	245	220
7	70	400	400	396	351	313	280	252
7.5	76	400	400	400	395	352	316	284

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	118	107	96	87	79	71	65	59
5.5	144	130	117	106	96	88	80	72
6	171	154	140	127	115	105	95	87
6.5	199	179	162	147	134	122	111	102
7	227	205	186	169	154	140	128	117
7.5	256	231	210	191	174	158	145	132

20 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	46	329	288	254	226	201	180	162
5.5	52	397	349	308	273	244	218	196
6	58	400	400	363	323	288	258	232
6.5	64	400	400	400	374	334	299	270
7	70	400	400	400	400	381	342	308
7.5	76	400	400	400	400	400	385	347

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	146	132	119	108	98	90	82	75
5.5	177	160	145	132	120	110	100	92
6	210	190	172	157	143	131	120	110
6.5	244	221	201	183	167	152	140	128
7	278	252	229	209	191	175	160	147
7.5	314	285	259	236	216	198	181	166

18 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	46	400	400	381	339	303	273	246
5.5	52	400	400	400	397	355	320	289
6	58	400	400	400	400	400	370	334
6.5	64	400	400	400	400	400	400	381
7	70	400	400	400	400	400	400	400
7.5	76	400	400	400	400	400	400	400

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	223	203	185	169	155	142	130	120
5.5	262	238	217	198	182	167	153	141
6	303	275	251	230	210	193	178	164
6.5	345	314	287	262	241	221	204	188
7	390	355	324	296	272	250	230	213
7.5	400	397	362	331	304	280	258	238

16 ga Normalweight Concrete (145 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	46	400	400	400	368	330	297	268
5.5	52	400	400	400	400	400	360	325
6	58	400	400	400	400	400	400	386
6.5	64	400	400	400	400	400	400	400
7	70	400	400	400	400	400	400	400
7.5	76	400	400	400	400	400	400	400

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	243	221	202	185	169	155	143	132
5.5	295	269	245	225	206	190	175	161
6	350	319	291	267	245	225	208	192
6.5	400	371	339	311	285	263	243	224
7	400	400	388	356	327	301	278	257
7.5	400	400	400	400	370	341	315	291

22 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	37	263	231	204	181	161	144	129
5.5	42	319	280	247	219	196	175	158
6	47	377	331	293	260	232	208	187
6.5	49	400	386	341	303	271	243	219
7	52	400	400	391	347	311	279	252
7.5	59	400	400	400	390	349	313	282

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	117	105	95	87	79	72	65	60
5.5	142	129	117	106	97	88	80	74
6	169	153	139	126	115	105	96	88
6.5	198	180	163	149	136	125	114	105
7	228	207	188	172	157	144	132	122
7.5	256	232	211	193	176	161	148	136

20 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	37	316	277	245	218	194	174	157
5.5	42	383	336	297	264	236	212	191
6	47	400	398	352	313	280	252	227
6.5	49	400	400	400	366	327	294	266
7	52	400	400	400	400	375	337	305
7.5	59	400	400	400	400	400	379	342

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	142	129	117	106	97	89	81	75
5.5	173	157	143	130	119	109	100	92
6	205	186	170	155	142	130	119	110
6.5	241	219	199	182	167	153	141	130
7	276	251	229	210	192	177	163	150
7.5	310	282	258	236	216	198	183	169

18 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	37	400	400	368	328	294	265	240
5.5	42	400	400	400	385	345	310	281
6	47	400	400	400	400	399	359	325
6.5	49	400	400	400	400	400	400	373
7	52	400	400	400	400	400	400	400
7.5	59	400	400	400	400	400	400	400

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	217	198	181	166	152	140	129	119
5.5	255	232	212	194	178	164	151	140
6	295	269	245	225	207	190	176	162
6.5	339	309	282	259	238	219	203	188
7	384	350	320	294	270	249	230	213
7.5	400	390	357	327	301	278	257	237

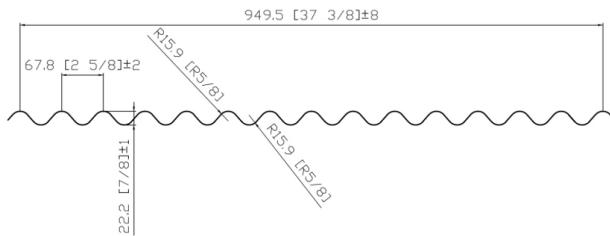
16 ga Lightweight Concrete (115 pcf, f'c = 3,000 psi)

Slab Thickness (Inches)	Weight (psf)	8'-0	8'-6	9'-0	9'-6	10'-0	10'-6	11'-0
5	37	400	400	391	349	313	282	255
5.5	42	400	400	400	400	380	343	310
6	47	400	400	400	400	400	400	369
6.5	49	400	400	400	400	400	400	400
7	52	400	400	400	400	400	400	400
7.5	59	400	400	400	400	400	400	400

Slab Thickness (Inches)	11'-6	12'-0	12'-6	13'-0	13'-6	14'-0	14'-6	15'-0
5	231	211	193	177	162	149	138	127
5.5	282	257	235	215	198	182	168	156
6	335	306	280	257	236	217	201	186
6.5	393	358	328	301	277	256	237	219
7	400	400	378	347	320	295	273	253
7.5	400	400	400	391	361	333	308	286

7/8" S DECK

GRADE 50 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_y ksi	$S_u +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD ($\Omega = 1.67$)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_u / Ω inch-lbs per ft	M_e / Ω inch-lbs per foot		
28	0.0149	0.7	60	0.034	0.036	1239	1304	0.012	0.012
26	0.0179	0.9	60	0.045	0.047	1599	1683	0.015	0.015
24	0.0239	1.2	60	0.065	0.068	2348	2433	0.021	0.021
22	0.0295	1.4	60	0.084	0.084	3024	3024	0.024	0.024

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V_n/Ω (lbs/ft)	Web Crippling (R_n/Ω), lbs/ft One Flange Loading End Bearing			Web Crippling (R_n/Ω), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
28	2191	670	744	869	721	791	909
26	2686	934	1034	1203	1058	1157	1324
24	3551	1570	1732	2002	1902	2071	2354
22	4384	2291	2519	2900	2890	3135	3546

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Table 1 Allowable wind pressures for panels over spaced supports

Assembly No.	PANEL	SUPPORT ^{1,2}	FASTENING PATTERN ³	SPAN ⁴ (inch)	ALLOWABLE NEGATIVE PRESSURE (psf)	ALLOWABLE POSITIVE PRESSURE (psf)
1	HC-16 (24-gauge steel, 16" width)	Steel Spaced Supports	Two (2) #12-14 x 1 1/4" long HWH screws with 5/8" diameter washer at panel fastening leg at all supports.	60	47	36
				24	104	104
2	HC-16 (22-gauge steel, 16" width)	Steel Spaced Supports	Two (2) #12-14 x 1 1/4" long HWH screws with 5/8" diameter washer at panel fastening leg at all supports.	60	62	36

Assembly No.	PANEL	SUPPORT ^{1,2}	FASTENING PATTERN ³	SPAN ⁴ (inch)	ALLOWABLE NEGATIVE PRESSURE (psf)	ALLOWABLE POSITIVE PRESSURE (psf)
6	HS-12 (24-gauge steel, 12" width) or HS-8 (24-gauge steel, 8" width)	Steel Spaced Supports	Two (2) #10-16 x 1" long pancake head screws at panel fastening leg at all supports.	60	44	20
				24	83	80
7	HS-12 (22-gauge steel, 12" width) or HS-8 (22-gauge steel, 8" width)	Steel Spaced Supports	Two (2) #10-16 x 1" long pancake head screws at panel fastening leg at all supports.	60	72	20

10	HR-16 (24-gauge steel, 16" width)	Steel Spaced Supports	Two (2) #10-16 x 1" long pancake head screws at panel fastening leg at all supports.	60	55	90
				24	100	90
11	HR-16 (22-gauge steel, 16" width)	Steel Spaced Supports	Two (2) 1/4-14 x 1" long pancake head screws at panel fastening leg at all supports.	60	62	125
				24	110	125

14	FW-12 with grooves (24-gauge steel, 12" width) or FW-1025 with grooves (24-gauge steel, 10.25" width)	Steel Spaced Supports	Two (2) #10-16 x 1" long pancake head screws at panel fastening leg at all supports. Sidelap fasteners are 1/4-14 x 7/8" long HWH screw with EPDM washer @ 24" o.c. along panel length.	60	45	50
				24	65	50
15	FW-12 with grooves and seam lock feature (24-gauge steel, 12" width) or FW-1025 with grooves and seam lock feature (24-gauge steel, 10.25" width)	Steel Spaced Supports	Two (2) #12-14 x 1 1/4" long HWH screws with 5/8" diameter washer at panel fastening leg at all supports.	60	31	50
				24	67	50
16	FW-12 with grooves (22-gauge steel, 12" width) or FW-1025 with grooves (22-gauge steel, 10.25" width)	Steel Spaced Supports	Two (2) 1/4-14 x 1" long pancake head screws at panel fastening leg at all supports. Sidelap fasteners are 1/4 x 7/8" long screw @ 24" o.c. along panel length.	60	70	70
				24	100	70

7/8" FORM DECK

GRADE 50 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_v ksi	$S_e +$ (inch 3) per foot	$S_e -$ (inch 3) per foot	ASD ($\Omega = 1.67$)		$I_d +$ (inch 4) per ft.	$I_d -$ (inch 4) per ft.
						M_p / Ω inch-lbs per ft	M_n / Ω inch-lbs per foot		
26	0.0179	0.9	60	0.061	0.064	2184	2314	0.035	0.035
24	0.0239	1.2	60	0.090	0.095	3218	3416	0.048	0.048
22	0.0295	1.5	60	0.118	0.124	4248	4449	0.061	0.061
20	0.0358	1.8	60	0.152	0.152	5446	5443	0.077	0.077

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

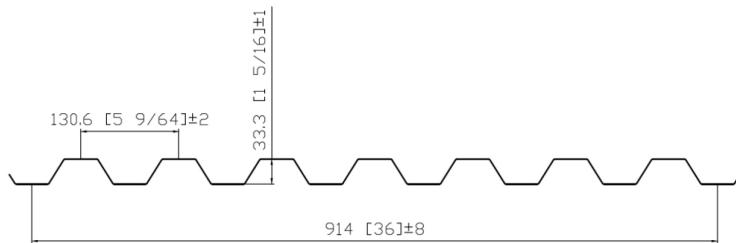
Gage	V_n / Ω (lbs/ft)	Web Crippling (R_n / Ω), lbs/ft One Flange Loading End Bearing			Web Crippling (R_n / Ω), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
26	1691	458	507	590	559	611	700
24	3005	779	860	994	1006	1096	1246
22	3715	1146	1259	1450	1531	1660	1878
20	4508	1631	1787	2049	2240	2421	2726

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	2'-0"	2"-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"
Single	26	364	233	162	119	91	72	58	48	40	34	30
	24	536	343	238	175	134	106	86	71	60	51	44
	22	708	453	315	231	177	140	113	94	79	67	58
	20	908	581	403	296	227	179	145	120	101	86	74
Double	26	386	247	171	126	96	76	62	51	43	37	31
	24	569	364	253	186	142	112	91	75	63	54	46
	22	742	475	330	242	185	146	119	98	82	70	61
	20	907	581	403	296	227	179	145	120	101	86	74
Triple	26	482	309	214	157	121	95	77	64	54	46	39
	24	712	455	316	232	178	141	114	94	79	67	58
	22	927	593	412	303	232	183	148	123	103	88	76
	20	1134	726	504	370	283	224	181	150	126	107	93

1 5/16" FORM DECK

GRADE 50 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F_v ksi	S_e + (inch 3) per foot	S_e - (inch 3) per foot	ASD (0 = 1.67)		I_d + (inch 4) per ft.	I_d - (inch 4) per ft.
						M_p / O inch-lbs per ft	M_n / O inch-lbs per foot		
22	0.0295	1.6	50	0.179	0.170	5358	5101	0.167	0.144
20	0.0358	2.0	50	0.222	0.216	6661	6457	0.210	0.182
18	0.0474	2.6	50	0.310	0.294	9291	8812	0.290	0.257
16	0.0598	3.0	50	0.390	0.378	11667	11327	0.363	0.341

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V_r /O (lbs/ft)	Web Crippling (R_c /O), lbs/ft One Flange Loading End Bearing			Web Crippling (R_c /O), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
22	2424	801	880	1013	1096	1189	1345
20	3803	1143	1253	1436	1605	1735	1953
18	5032	1914	2087	2377	2773	2983	3334
16	6219	2931	3183	3606	4345	4654	5172

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	143	118	99	85	73	64	56	49	44	40	36
	20	178	147	123	105	91	79	69	61	55	49	44
	18	248	205	172	147	126	110	97	86	76	69	62
	16	311	257	216	184	159	138	122	108	96	86	78
Double	22	136	112	94	80	69	60	53	47	42	38	34
	20	172	142	120	102	88	77	67	60	53	48	43
	18	235	194	163	139	120	104	92	81	73	65	59
	16	302	250	210	179	154	134	118	105	93	84	76
Triple	22	170	141	118	101	87	76	66	59	52	47	43
	20	215	178	149	127	110	96	84	74	66	60	54
	18	294	243	204	174	150	131	115	102	91	81	73
	16	378	312	262	223	193	168	147	131	117	105	94

Notes

- All section properties and ASD ($\Omega = 1.67$) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
- Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
- Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wl^2}{8}$ Three Span or More $M = \frac{wl^2}{10}$
- Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span condition

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	5'-0"	5"-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
Single	22	68	51	40	31	25	20	17	14	12	10	9
	20	86	64	50	39	31	25	21	17	15	13	11
	18	126	95	73	57	46	37	31	26	22	18	16
	16	173	130	100	79	63	51	42	35	30	25	22
Double	22	164	124	95	75	60	49	40	33	28	24	21
	20	207	155	120	94	75	61	50	42	35	30	26
	18	303	228	176	138	111	90	74	62	52	44	38
	16	417	314	241	190	152	124	102	85	72	61	52
Triple	22	129	97	74	59	47	38	31	26	22	19	16
	20	162	121	94	74	59	48	39	33	28	24	20
	18	238	178	137	108	87	70	58	48	41	35	30
	16	327	245	189	149	119	97	80	66	56	48	41

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Normal Weight Concrete (145 pcf)													
Total Slab Depth	Deck Type	Maximum Unshored Clear Span			Lightweight Concrete (115 pcf)			Total Slab Depth	Deck Type	Maximum Unshored Clear Span			
		1 span	2 span	3 span	1 span	2 span	3 span			1 span	2 span	3 span	
3.50 (t=2.00) 36 PSF	1.5x6x22 ga	6' 8"	7' 9"	7' 11"	3.50 (t=2.00) 27 PSF	7' 3"	8' 6"	8' 7"		1.5x6x22 ga	6' 10"	8' 1"	8' 2"
	1.5x6x20 ga	7' 8"	8' 9"	9' 1"		8' 5"	9' 7"	9' 11"		1.5x6x20 ga	7' 12"	9' 1"	9' 5"
	1.5x6x18 ga	9' 7"	10' 3"	10' 7"		9' 12"	10' 8"	10' 12"		1.5x6x18 ga	9' 10"	10' 2"	10' 6"
	1.5x6x16 ga	11' 1"	11' 7"	12' 0"		11' 7"	12' 1"	12' 5"		1.5x6x16 ga	10' 7"	11' 2"	11' 6"
4.00 (t=2.50) 42 PSF	1.5x6x22 ga	6' 4"	7' 5"	7' 6"	4.00 (t=2.50) 32 PSF	6' 10"	8' 1"	8' 2"		1.5x6x22 ga	6' 4"	7' 4"	8' 5"
	1.5x6x20 ga	7' 4"	8' 4"	8' 7"		7' 12"	9' 1"	9' 5"		1.5x6x20 ga	7' 10"	8' 10"	9' 12"
	1.5x6x18 ga	9' 1"	9' 9"	10' 1"		9' 12"	10' 8"	10' 12"		1.5x6x18 ga	9' 10"	10' 2"	10' 6"
	1.5x6x16 ga	10' 6"	11' 0"	11' 5"		10' 6"	11' 2"	11' 7"		1.5x6x16 ga	10' 7"	11' 4"	11' 9"
4.50 (t=3.00) 48 PSF	1.5x6x22 ga	6' 1"	7' 1"	7' 2"	4.50 (t=3.00) 37 PSF	6' 7"	7' 9"	7' 10"		1.5x6x22 ga	6' 4"	7' 6"	7' 7"
	1.5x6x20 ga	7' 8"	8' 3"	8' 7"		8' 6"	9' 2"	9' 6"		1.5x6x20 ga	7' 4"	8' 5"	8' 8"
	1.5x6x18 ga	8' 8"	9' 4"	9' 7"		9' 6"	10' 2"	10' 6"		1.5x6x18 ga	9' 2"	9' 10"	10' 2"
	1.5x6x16 ga	9' 12"	10' 6"	10' 11"		11' 0"	11' 6"	11' 11"		1.5x6x16 ga	10' 7"	11' 2"	11' 6"
5.00 (t=3.50) 54 PSF	1.5x6x22 ga	5' 10"	6' 9"	6' 11"	5.00 (t=3.50) 41 PSF	6' 4"	7' 6"	7' 7"		1.5x6x22 ga	5' 10"	6' 11"	7' 12"
	1.5x6x20 ga	6' 8"	7' 8"	7' 11"		7' 4"	8' 5"	8' 8"		1.5x6x20 ga	6' 10"	7' 10"	8' 12"
	1.5x6x18 ga	8' 3"	8' 11"	9' 3"		9' 2"	9' 10"	10' 2"		1.5x6x18 ga	7' 12"	8' 12"	9' 14"
	1.5x6x16 ga	9' 6"	10' 1"	10' 5"		10' 2"	11' 2"	11' 6"		1.5x6x16 ga	10' 7"	11' 4"	11' 9"
5.50 (t=4.00) 60 PSF	1.5x6x22 ga	5' 7"	6' 6"	6' 8"	5.50 (t=4.00) 46 PSF	6' 2"	7' 2"	7' 3"		1.5x6x22 ga	5' 12"	6' 12"	7' 13"
	1.5x6x20 ga	6' 6"	7' 4"	7' 7"		7' 1"	8' 1"	8' 4"		1.5x6x20 ga	6' 11"	7' 10"	8' 11"
	1.5x6x18 ga	7' 12"	8' 7"	8' 10"		8' 10"	9' 5"	9' 9"		1.5x6x18 ga	8' 6"	9' 2"	9' 6"
	1.5x6x16 ga	9' 2"	9' 9"	10' 1"		10' 2"	10' 8"	11' 1"		1.5x6x16 ga	9' 10"	10' 5"	10' 9"
6.00 (t=4.50) 66 PSF	1.5x6x22 ga	5' 5"	6' 3"	6' 5"	6.00 (t=4.50) 50 PSF	5' 12"	6' 12"	7' 1"		1.5x6x22 ga	5' 12"	6' 12"	7' 13"
	1.5x6x20 ga	6' 3"	7' 1"	7' 4"		6' 11"	7' 10"	8' 1"		1.5x6x20 ga	6' 11"	7' 10"	8' 11"
	1.5x6x18 ga	7' 8"	8' 3"	8' 7"		8' 10"	9' 2"	9' 6"		1.5x6x18 ga	8' 6"	9' 2"	9' 6"
	1.5x6x16 ga	8' 10"	9' 4"	9' 8"		9' 10"	10' 5"	10' 9"		1.5x6x16 ga	9' 10"	10' 5"	10' 9"

Note

Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.



REFINED METAL

Metal Material catalog 2025