

SOUTHEASTERN STUD AND COMPONENTS, INC.

THE COMPANY

Southeastern Stud and Components, Incorporated located in Montgomery, Alabama manufactures the highest quality light gauge steel framing - studs, joists, track, and light gauge steel trusses - for nonload-bearing systems, load-bearing systems, floor and ceiling joists assemblies, panelized systems, and light gauge steel truss systems.

THE MISSION

The mission of Southeastern Stud and Components, Inc. is "Simply Be the Best."

Southeastern Stud and Components, Inc. is unique, in that we can supply the complete light gauge steel package for any project or application imaginable. Our overall product performance, product quality, product design, technical support, product versatility, and overall commitment to "Simply Be The Best" manufacturer of Light Gauge Steel is unmatched. Southeastern Stud and Components, Inc.'s dedication to quality and commitment to the end-user is a by-product of many years of experience in the manufacturing of steel framing products, and the experience associated with the installation of millions of feet of light gauge steel framing.

THE PRODUCTS

The design and, most importantly, quality of the steel that goes into our dry-wall products are unrivaled in the industry. We will not manufacture drywall stud and track from cold-reduced or re-manufactured steel. The structural products manufactured by Southeastern Stud and Components, Inc. are held to the tightest of manufacturing tolerances.

The light gauge steel truss members are the strongest in the industry and the most user friendly.

The variety and types of Southeastern Stud and Components, Inc. products used for various applications depend on member size, thickness, coating type, yield strengths, section properties, testing, specifications, and standards established by the American Society for Testing and Materials (ASTM), the American Iron and Steel Institute (AISI), and other code authorities.

Galvanized and carbon sheet steel products manufactured by Southeastern Stud and Components, Inc. are formed from steel, with a minimum yield stress of 33ksi or 50ksi.

All products covered in this publication are engineered to meet the 1996 edition of the American and Iron and Steel Institute, "Specification for the Design of Cold-Formed Steel Structural Members." The structural properties included in this brochure have been computed based on the same AISI document.

The manufacturers of the (light gauge) cold-formed steel-framing members formed the Steel Stud Manufacturers Association (SSMA). Southeastern Stud and Components, Inc. is a member in good standing and places a Director on the Board of Directors with the Steel Stud Manufacturers Association (SSMA). SSMA is a leading edge and dynamic association representing manufacturers of cold-formed steel studs, joist and track framing members.

One of the primary goals of the SSMA is to create standardization throughout the cold-formed steel framing industry. This publication represents this standardization with which Southeastern Stud and Components, Inc. and other manufacturers with SSMA can form a unified force to face the constantly evolving construction industry.

All Southeastern Stud and Components, Inc., and SSMA products have a four-part identification code which identifies the depth size, flange width, type of member, and material thickness of each member.

DISCLAIMER:

All data, specification and details contained in this publication are intended as a general guide for using the products manufactured by Southeastern Stud and Components, Inc. These products should not be used in design or construction without an independent evaluation by a qualified engineer or architect to verify the suitability of a particular product use in a structure. Southeastern Stud and Components, Inc. shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by product application for other than its intended use. Southeastern Stud & Components, Inc.'s liability is expressly limited to "replacement only" for defective products. Any claim shall be deemed waived, unless made in writing thirty (30) days from the date the material was received.

This publication contains the latest information available at the time of printing. Southeastern Stud and Components, Inc. reserves the right to make modifications, and/or change materials of any of their products without prior notice or obligation.

"INDUSTRY STANDARD AND NOMENCLATURE"

362 S 125 -18

Member Depth: Represents the depth of the member to two (2) decimal places without the use of a decimal point.
Example: $3 \frac{5}{8} + 362, 6" = 600$
For all Track, "T", section member depth is the inside to inside dimension.

Type of Member: Example: Stud or Joist section = S;
Track section = T
The four alpha character utilized by the designator system are:
S = Stud or Joist Sections
T = Track Sections
U = Channel Sections
F = Furring Channels Sections

Flange Width: Represents the flange width of the member to two (2) decimal places without the use of a decimal point. Example: $1 \frac{1}{4} + 125, 1 \frac{5}{8} = 162, 2" = 200$

Material Thickness (mils): Material thickness is the minimum base metal thickness in mils (.001 in). Minimum base metal thickness represents 95% of the design thickness, as permitted by Section A 3.4 of the AISI Specification.

The thickness corresponds to the gauges as follows:

Thickness - Steel Components

Minimum Thickness ¹ (mils)	Design Thickness (in)	Inside Corner Radius (in)	Reference Only Gauge No.
18	0.0188	0.0843	25
27	0.0283	0.0796	22
30	0.0312	0.0761	20 - Drywall
30	0.0346	0.0764	20 - Structural
43	0.0451	0.0712	18
54	0.0566	0.0649	16
68	0.0713	0.1069	14
97	0.1017	0.1325	12

¹ Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on Section A 3.4 of the 1996 AISI Code.

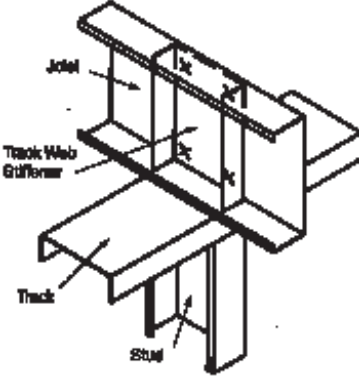
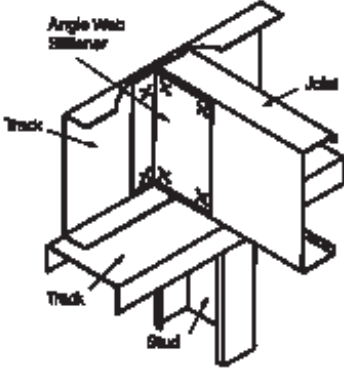
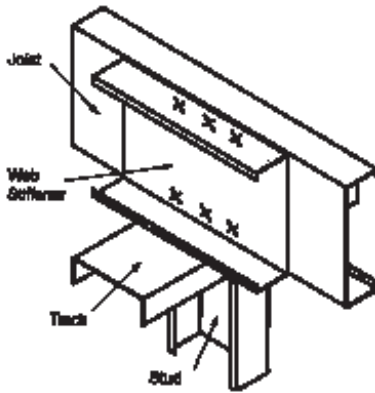
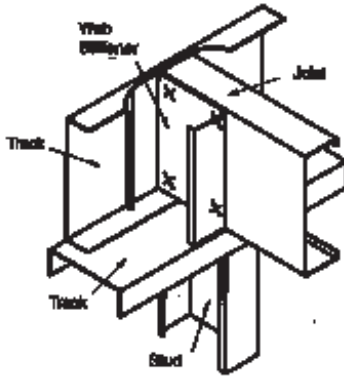
Design Stiffening Lip Length

Section	Flange Length	Design Stiffening Lip Length (in)
S125	1 1/4"	0.188
S137	1 3/8"	0.275
S162	1 5/8"	0.500
S200	2"	0.625
S250	2 1/2"	0.625

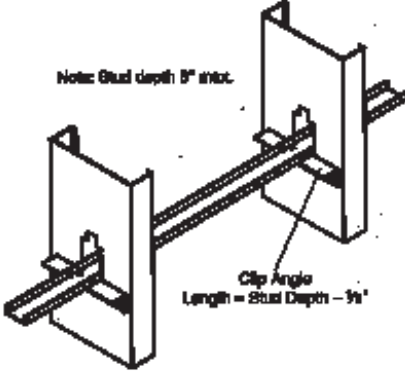
TECHNICAL ASSISTANCE

The technical support consultants of Southeastern Stud and Components, Inc. can provide engineering and design support for general and specific building conditions for studs, joists, and light gauge steel trusses.

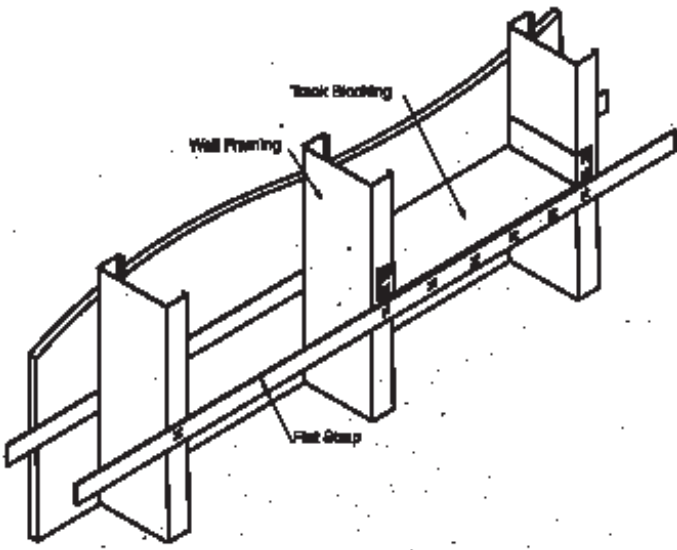
Joist Web Stiffeners



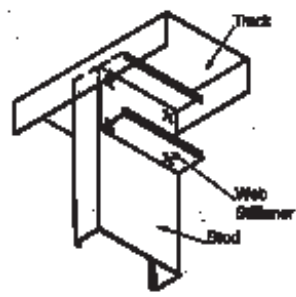
Cold Rolled Lateral Bracing



Flat Strap Lateral Bracing



Wall Stud Web Stiffener



Fasteners (Screws and Welds)

Screw Table Notes

1. Screw spacing and edge distance shall not be less than 3 x D. (D = Normal screw diameter)
2. The allowable screw values are based on the steel properties of the members being connected, per AISI section E4.
3. When connecting materials of different metal thicknesses or yield strength, the lowest applicable values should be used.
4. Screw strength needs to be verified by the screw manufacturer.
5. Values include a 3.0 factor of safety.
6. Applied loads may be multiplied by 0.75 for seismic or wind loading, per AISI A.5.1.3.
7. Penetration of screws through joined materials should not be less than 3 exposed threads.

Allowable Loads for Screw Connections

Mil	Sheet Properties			#6 Screw		#8 Screw		#10 Screw		#12 Screw	
	Thickness in.	Yield ksi	Tensile ksi	Shear lbs.	Pullout lbs.	Shear lbs.	Pullout lbs.	Shear lbs.	Pullout lbs.	Shear lbs.	Pullout lbs.
18	0.0188	33	45	60	33	66	39	71	46	75	52
27	0.0283	33	45	111	50	121	59	131	69	139	78
30	0.0312	33	45	129	55	141	65	151	76	161	86
33	0.0346	33	45	151	61	164	72	177	84	188	95
43	0.0451	33	45	224	79	244	94	263	109	280	124
54	0.0566	33	45	315	100	344	118	370	137	394	156
68	0.0713	33	45	398	125	474	149	523	173	557	196
97	0.1017	33	45	568	179	675	213	783	246	890	280
54	0.0566	50	65	455	144	496	171	534	198	569	225
68	0.0713	50	65	576	181	684	215	755	249	805	284
97	0.1017	50	65	821	258	976	307	1130	356	1285	405

Weld Table Notes

1. Weld capacities based on AISI, section E2
2. When connecting materials of different metal thicknesses or yield strength, the lowest applicable values should be used.
3. Values include a 2.5 factor of safety.
4. Applied loads may be multiplied by 0.75 for seismic or wind loading per AISI A 5.1.3.

Allowable Loads for Fillet Welds and Flare Groove Welds

	Design Thickness in.	Steel Properties		E60XX Electrodes lbs/in	
		Yield ksi	Tensile ksi		
	43	0.0451	33	45	609
	54	0.0566	33	45	764
	68	0.0713	33	45	963
	97	0.1017	33	45	1373
	43	0.0451	50	65	879
	54	0.0566	50	65	1104
	68	0.0713	50	65	1390
	97	0.1017	50	65	1983

Section Properties

Section Properties Table Notes

1. The centerline bend radius is the greater of 2 times the design thickness or 3/32".
2. Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius.
3. Hems on non-structural track sections are ignored.
4. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
5. Tabulated gross properties are based on the full-unreduced cross section of the studs, away from punchouts.
6. For deflection calculations, use the effective of inertia.
7. For those steels that have both 33 and 50 ksi listings, if the design is based upon 50 ksi, the 50 ksi steel needs to be specified. (362S137-54(5p ksi))

Non-Structural (S) Stud Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
162S125-18	0.0188	0.080	0.27	0.038	0.046	0.686	0.016	0.447	0.034	0.033	0.66	309	0.924					0.009	0.009	-1.061	1.340	0.373	
162S125-27	0.0283	0.120	0.41	0.056	0.068	0.682	0.023	0.443	0.055	0.051	1.01	526	0.909					0.032	0.013	-1.049	1.327	0.375	
162S125-30	0.0312	0.131	0.45	0.061	0.075	0.681	0.026	0.441	0.060	0.059	1.16	579	0.894					0.043	0.014	-1.046	1.323	0.376	
162S125-33	0.0346	0.145	0.49	0.067	0.083	0.679	0.028	0.440	0.066	0.068	1.35	641	0.877					0.058	0.015	-1.042	1.319	0.376	
250S125-18	0.0188	0.097	0.33	0.099	0.079	1.014	0.019	0.439	0.089	0.059	1.17	247	1.391					0.011	0.023	-0.930	1.444	0.585	
250S125-27	0.0283	0.144	0.49	0.147	0.118	1.009	0.027	0.434	0.144	0.092	1.81	700	1.372					0.039	0.033	-0.919	1.432	0.589	
250S125-30	0.0312	0.159	0.54	0.161	0.129	1.008	0.030	0.433	0.159	0.104	2.06	851	1.354					0.052	0.036	-0.915	1.429	0.590	
250S125-33	0.0346	0.176	0.60	0.178	0.142	1.006	0.033	0.431	0.175	0.120	2.38	1040	1.333					0.070	0.039	-0.911	1.425	0.591	
250S125-43	0.0451	0.227	0.77	0.228	0.182	1.001	0.041	0.426	0.226	0.173	3.43	1350	1.275					0.154	0.049	-0.899	1.412	0.594	
250S125-54	0.0566	0.280	0.95	0.277	0.222	0.994	0.049	0.419	0.277	0.218	4.98	1656	1.260	0.275	0.205	6.14	2510	1.289	0.299	0.059	-0.890	1.398	0.595
250S125-68	0.0713	0.345	1.18	0.334	0.267	0.984	0.057	0.408	0.334	0.266	6.30	2017	1.252	0.334	0.261	7.81	3057	1.262	0.585	0.069	-0.880	1.381	0.594
350S125-18	0.0188	0.115	0.39	0.215	0.123	1.366	0.021	0.423	0.197	0.087	1.72	172	1.992					0.014	0.049	-0.819	1.648	0.753	
350S125-27	0.0283	0.173	0.59	0.320	0.183	1.361	0.030	0.418	0.312	0.147	2.90	589	1.892					0.046	0.071	-0.809	1.637	0.756	
350S125-30	0.0312	0.190	0.65	0.351	0.201	1.359	0.033	0.417	0.346	0.167	3.29	790	1.871					0.062	0.077	-0.805	1.634	0.757	
350S125-33	0.0346	0.210	0.72	0.387	0.221	1.358	0.036	0.415	0.382	0.191	3.77	1046	1.847					0.084	0.085	-0.802	1.630	0.758	
350S125-43	0.0451	0.272	0.93	0.498	0.284	1.352	0.046	0.410	0.493	0.272	5.37	1777	1.870					0.184	0.106	-0.790	1.619	0.762	
350S125-54	0.0566	0.337	1.15	0.608	0.348	1.344	0.055	0.402	0.608	0.342	7.82	2403	1.762	0.603	0.324	9.71	3446	1.796	0.360	0.127	-0.781	1.605	0.763
350S125-68	0.0713	0.417	1.42	0.739	0.422	1.332	0.064	0.391	0.737	0.421	9.95	2959	1.752	0.737	0.413	12.36	4483	1.765	0.706	0.151	-0.770	1.587	0.765
362S125-18	0.0188	0.118	0.40	0.234	0.129	1.409	0.021	0.421	0.215	0.090	1.78	166	2.075					0.014	0.053	-0.807	1.677	0.768	
362S125-27	0.0283	0.176	0.60	0.347	0.192	1.404	0.031	0.416	0.338	0.154	3.05	568	1.957					0.047	0.077	-0.797	1.667	0.771	
362S125-30	0.0312	0.194	0.66	0.381	0.210	1.402	0.033	0.415	0.375	0.175	3.46	761	1.935					0.063	0.084	-0.794	1.664	0.772	
362S125-33	0.0346	0.215	0.73	0.421	0.232	1.400	0.037	0.413	0.415	0.201	3.96	1039	1.911					0.086	0.092	-0.790	1.660	0.774	
362S125-43	0.0451	0.278	0.95	0.540	0.298	1.395	0.046	0.408	0.536	0.285	5.64	1777	1.843					0.188	0.115	-0.779	1.649	0.777	
362S125-54	0.0566	0.344	1.17	0.661	0.365	1.386	0.055	0.400	0.661	0.358	8.21	2497	1.825	0.655	0.341	10.20	3446	1.859	0.367	0.138	-0.769	1.635	0.779
362S125-68	0.0713	0.426	1.45	0.803	0.443	1.374	0.065	0.389	0.802	0.442	10.44	3076	1.815	0.802	0.434	12.98	4661	1.827	0.721	0.164	-0.758	1.617	0.780
400S125-18'	0.0188	0.125	0.42	0.294	0.147	1.536	0.021	0.414	0.265	0.099	1.96	150	2.325					0.015	0.066	-0.774	1.769	0.809	
400S125-27'	0.0283	0.187	0.64	0.438	0.219	1.531	0.031	0.410	0.426	0.178	3.52	511	2.150					0.050	0.096	-0.764	1.759	0.811	
400S125-30	0.0312	0.206	0.70	0.481	0.240	1.529	0.034	0.408	0.473	0.202	3.99	686	2.127					0.067	0.105	-0.761	1.756	0.812	
400S125-33	0.0346	0.228	0.77	0.531	0.265	1.527	0.038	0.407	0.523	0.231	4.56	936	2.102					0.091	0.115	-0.757	1.752	0.813	
400S125-43	0.0451	0.295	1.00	0.682	0.341	1.521	0.048	0.402	0.676	0.327	6.46	1777	2.032					0.200	0.145	-0.746	1.742	0.816	
400S125-54	0.0566	0.365	1.24	0.835	0.418	1.512	0.057	0.394	0.835	0.411	9.40	2777	2.013	0.828	0.391	11.71	3446	2.048	0.390	0.174	-0.737	1.728	0.818
400S125-68	0.0713	0.452	1.54	1.017	0.509	1.499	0.066	0.383	1.015	0.507	11.98	3429	2.003	1.015	0.498	14.91	5196	2.015	0.767	0.206	-0.725	1.709	0.820
550S125-18'	0.0188	0.153	0.52	0.630	0.229	2.029	0.023	0.390	0.925	0.253	5.00	366	3.072					0.018	0.138	-0.666	2.171	0.906	
550S125-27'	0.0283	0.229	0.78	0.938	0.341	2.023	0.034	0.385	1.017	0.307	6.06	491	2.956					0.061	0.202	-0.657	2.162	0.908	
550S125-30	0.0312	0.252	0.86	1.031	0.375	2.021	0.037	0.384	1.107	0.307	6.06	491	2.956					0.082	0.220	-0.654	2.159	0.908	
550S125-33	0.0346	0.279	0.95	1.139	0.414	2.019	0.041	0.382	1.124	0.368	7.26	670	2.864					0.112	0.242	-0.651	2.156	0.909	
550S125-43	0.0451	0.362	1.23	1.468	0.534	2.013	0.052	0.377	1.456	0.514	10.16	1487	2.786					0.246	0.304	-0.641	2.146	0.911	
550S125-54	0.0566	0.450	1.53	1.805	0.656	2.002	0.061	0.369	1.805	0.647	14.80	2799	2.765	1.790	0.620	18.57	2967	2.804	0.481	0.366	-0.631	2.132	0.912
550S125-68	0.0713	0.559	1.90	2.209	0.803	1.987	0.072	0.358	2.205	0.801	18.94	4442	2.753	2.205	0.789	23.62	5468	2.767	0.948	0.437	-0.620	2.112	0.914
600S125-18'	0.0188	0.162	0.55	0.778	0.259	2.189	0.024	0.382	1.145	0.274	5.42	335	3.413					0.019	0.169	-0.637	2.312	0.924	
600S125-27'	0.0283	0.243	0.83	1.160	0.387	2.183	0.035	0.377	1.259	0.331	6.54	448	3.292					0.065	0.247	-0.628	2.303	0.926	
600S125-30	0.0312	0.268	0.91	1.275	0.425	2.181	0.038	0.376	1.391	0.408	8.06	612	3.154					0.087	0.270	-0.625	2.300	0.926	
600S125-33	0.0346	0.297	1.01	1.409	0.470	2.179	0.042	0.374	1.391	0.408	8.06	612	3.154					0.118	0.296	-0.622	2.297	0.927	
600S125-43	0.0451	0.385	1.31	1.817	0.606	2.173	0.053	0.369	1.802	0.584	11.55	1358	3.037					0.261	0.373	-0.612	2.287	0.928	
600S125-54	0.0566	0.479	1.63	2.236	0.745	2.161	0.063	0.362	2.236	0.735	16.82	2708	3.015	2.218	0.706	21.14	2708	3.056	0.511	0.449	-0.603	2.273	0.930
600S125-68	0.0713	0.595	2.02	2.740	0.913	2.146	0.073	0.351	2.735	0.911	21.53	4442	3.003	2.735	0.898	26.88	5468	3.018	1.008	0.536	-0.592	2.253	0.931
800S125-33'	0.0346	0.366	1.25	2.881	0.720	2.806	0.044	0.347	2.855	0.525	10.37	455	4.521					0.146	0.576	-0.530	2.877	0.966	
800S125-43	0.0451	0.475	1.62	3.721	0.930	2.799	0.056	0.342	3.696	0.894	17.67	1008	4.056					0.322	0.727	-0.521	2.867	0.967	
800S125-54	0.0566	0.592	2.01	4.593	1.148	2.786	0.066	0.335	4.593	1.134	25.96	2006	4.016	4.560	1.097	32.84	2006	4.060	0.632	0.877	-0.512	2.852	0.968
800S125-68	0.0713	0.738	2.51	5.653	1.413	2.768	0.078	0.324	5.644	1.410	33.33	4048	4.003	5.644	1.393	41.69	4048	4.019	1.250	1.050	-0.501	2.832	0.969

¹Web-height to thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads.

Section Properties

Structural (S) Stud Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
250S137-33	0.0346	0.197	0.67	0.203	0.163	1.015	0.052	0.515	0.203	0.156	3.09	1040	1.272					0.079	0.075	-1.170	1.633	0.486	
250S137-43	0.0451	0.255	0.87	0.261	0.208	1.010	0.067	0.511	0.261	0.205	4.53	1350	1.260					0.173	0.094	-1.158	1.620	0.489	
250S137-54	0.0566	0.316	1.07	0.318	0.255	1.004	0.080	0.504	0.318	0.255	5.76	1656	1.250	0.318	0.244	8.22	2510	1.274	0.337	0.113	-1.150	1.608	0.488
250S137-68	0.0713	0.390	1.33	0.386	0.309	0.994	0.095	0.495	0.386	0.309	7.19	2017	1.250	0.386	0.308	10.65	3057	1.251	0.661	0.134	-1.142	1.593	0.486
250S162-33	0.0346	0.223	0.76	0.235	0.188	1.027	0.087	0.624	0.235	0.180	3.55	1040	1.274					0.089	0.144	-1.501	1.923	0.390	
250S162-43	0.0451	0.289	0.98	0.302	0.242	1.022	0.111	0.620	0.302	0.240	5.22	1350	1.253					0.196	0.182	-1.489	1.909	0.392	
250S162-54	0.0566	0.358	1.22	0.370	0.296	1.016	0.135	0.613	0.370	0.296	6.57	1656	1.250	0.370	0.288	8.62	2510	1.267	0.383	0.219	-1.482	1.898	0.391
250S162-68	0.0713	0.443	1.51	0.450	0.360	1.007	0.162	0.605	0.450	0.360	8.21	2017	1.250	0.450	0.357	12.10	3057	1.255	0.752	0.262	-1.474	1.885	0.389
350S162-33	0.0346	0.258	0.88	0.508	0.290	1.404	0.098	0.617	0.508	0.279	5.50	1046	1.779					0.103	0.273	-1.351	2.044	0.563	
350S162-43	0.0451	0.334	1.14	0.654	0.374	1.400	0.125	0.612	0.654	0.372	8.08	1777	1.755					0.227	0.345	-1.339	2.031	0.565	
350S162-54	0.0566	0.415	1.41	0.804	0.460	1.392	0.152	0.606	0.804	0.460	10.20	2403	1.750	0.804	0.447	13.37	3446	1.773	0.443	0.418	-1.331	2.019	0.566
350S162-68	0.0713	0.515	1.75	0.985	0.563	1.383	0.184	0.597	0.985	0.563	12.83	2959	1.750	0.985	0.557	18.89	4483	1.758	0.872	0.503	-1.321	2.004	0.565
362S137-33	0.0346	0.236	0.80	0.479	0.264	1.424	0.059	0.501	0.479	0.254	5.02	1039	1.842					0.094	0.162	-1.026	1.826	0.684	
362S137-43	0.0451	0.306	1.04	0.616	0.340	1.419	0.075	0.497	0.616	0.334	7.38	1777	1.826					0.207	0.204	-1.015	1.814	0.687	
362S137-54	0.0566	0.379	1.29	0.756	0.417	1.411	0.091	0.490	0.756	0.417	9.43	2497	1.812	0.756	0.400	13.47	3446	1.844	0.405	0.246	-1.006	1.801	0.688
362S137-68	0.0713	0.470	1.60	0.922	0.509	1.401	0.109	0.480	0.922	0.509	11.87	3076	1.812	0.922	0.508	17.56	4661	1.814	0.797	0.294	-0.996	1.784	0.689
362S162-33	0.0346	0.262	0.89	0.551	0.304	1.450	0.099	0.616	0.551	0.292	5.77	1039	1.843					0.105	0.293	-1.335	2.065	0.582	
362S162-43	0.0451	0.340	1.16	0.710	0.392	1.445	0.127	0.611	0.710	0.389	8.46	1777	1.818					0.230	0.371	-1.323	2.052	0.585	
362S162-54	0.0566	0.422	1.44	0.873	0.481	1.438	0.154	0.604	0.873	0.481	10.69	2497	1.812	0.873	0.468	14.00	3446	1.836	0.451	0.449	-1.314	2.040	0.585
362S162-68	0.0713	0.524	1.78	1.069	0.590	1.429	0.186	0.596	1.069	0.590	13.44	3076	1.812	1.069	0.584	19.80	4661	1.820	0.887	0.540	-1.305	2.024	0.585
362S200-33	0.0346	0.297	1.01	0.648	0.358	1.478	0.177	0.772	0.643	0.318	6.29	1039	1.898					0.118	0.571	-1.770	2.432	0.470	
362S200-43	0.0451	0.385	1.31	0.836	0.461	1.474	0.227	0.767	0.836	0.448	8.85	1777	1.834					0.261	0.726	-1.758	2.419	0.472	
362S200-54	0.0566	0.479	1.63	1.030	0.568	1.467	0.277	0.761	1.030	0.568	12.36	2497	1.812	1.030	0.509	15.25	3446	1.898	0.511	0.884	-1.750	2.407	0.471
362S200-68	0.0713	0.595	2.02	1.265	0.698	1.458	0.337	0.753	1.265	0.698	15.54	3076	1.812	1.265	0.673	22.34	4661	1.844	1.008	1.070	-1.741	2.393	0.470
400S137-33	0.0346	0.249	0.85	0.603	0.301	1.556	0.061	0.496	0.603	0.290	5.74	936	2.031					0.099	0.200	-0.987	1.908	0.732	
400S137-43	0.0451	0.323	1.10	0.776	0.388	1.551	0.078	0.491	0.776	0.382	8.43	1777	2.014					0.219	0.253	-0.976	1.897	0.735	
400S137-54	0.0566	0.401	1.36	0.953	0.477	1.542	0.094	0.484	0.953	0.477	10.78	2777	2.000	0.953	0.457	15.40	3446	2.034	0.428	0.305	-0.967	1.884	0.737
400S137-68	0.0713	0.497	1.69	1.165	0.582	1.531	0.112	0.475	1.165	0.582	13.58	3429	2.000	1.165	0.581	20.10	5196	2.002	0.842	0.365	-0.956	1.866	0.738
400S162-33	0.0346	0.275	0.94	0.692	0.346	1.586	0.103	0.611	0.692	0.332	6.57	936	2.032					0.110	0.358	-1.288	2.133	0.635	
400S162-43	0.0451	0.357	1.21	0.892	0.446	1.581	0.131	0.606	0.892	0.443	9.63	1777	2.006					0.242	0.453	-1.276	2.121	0.638	
400S162-54	0.0566	0.443	1.51	1.098	0.549	1.574	0.159	0.600	1.098	0.549	12.18	2777	2.000	1.098	0.533	15.96	3446	2.026	0.473	0.550	-1.268	2.108	0.638
400S162-68	0.0713	0.550	1.87	1.346	0.673	1.564	0.192	0.591	1.346	0.673	15.34	3429	2.000	1.346	0.666	22.60	5196	2.009	0.933	0.663	-1.258	2.092	0.639
400S200-33	0.0346	0.310	1.05	0.812	0.406	1.619	0.183	0.769	0.805	0.362	7.16	936	2.091					0.124	0.689	-1.715	2.481	0.522	
400S200-43	0.0451	0.402	1.37	1.047	0.524	1.615	0.235	0.764	1.047	0.509	10.06	1777	2.023					0.272	0.876	-1.703	2.468	0.524	
400S200-54	0.0566	0.500	1.70	1.292	0.646	1.608	0.287	0.758	1.292	0.646	14.06	2777	2.000	1.292	0.580	17.36	3446	2.091	0.534	1.068	-1.695	2.456	0.524
400S200-68	0.0713	0.622	2.12	1.589	0.795	1.599	0.349	0.750	1.589	0.795	17.68	3429	2.000	1.589	0.766	25.41	5196	2.035	1.054	1.295	-1.686	2.441	0.523
550S162-33	0.0346	0.327	1.11	1.458	0.530	2.112	0.113	0.589	1.458	0.512	10.11	670	2.787					0.130	0.704	-1.134	2.468	0.789	
550S162-43	0.0451	0.424	1.44	1.883	0.685	2.107	0.145	0.584	1.883	0.681	14.79	1487	2.757					0.288	0.894	-1.123	2.458	0.791	
550S162-54	0.0566	0.528	1.80	2.324	0.845	2.098	0.176	0.577	2.324	0.845	18.76	2799	2.750	2.324	0.821	24.59	2967	2.782	0.564	1.088	-1.114	2.445	0.792
550S162-68	0.0713	0.657	2.24	2.861	1.040	2.081	0.240	0.570	2.861	1.040	23.72	4452	2.750	2.861	1.031	34.94	5468	2.761	1.114	1.316	-1.103	2.427	0.793
600S137-33	0.0346	0.318	1.08	1.582	0.527	2.229	0.069	0.464	1.582	0.510	10.07	612	3.039					0.127	0.493	-0.823	2.421	0.884	
600S137-43	0.0451	0.413	1.41	2.042	0.681	2.223	0.087	0.459	2.042	0.670	14.80	1358	3.018					0.280	0.625	-0.813	2.411	0.886	
600S137-54	0.0566	0.514	1.75	2.518	0.839	2.213	0.105	0.452	2.518	0.839	18.98	2708	3.000	2.518	0.809	27.23	2708	3.042	0.549	0.757	-0.804	2.398	0.888
600S137-68	0.0713	0.640	2.18	3.094	1.031	2.200	0.125	0.443	3.094	1.031	24.05	4442	3.000	3.094	1.029	35.60	5468	3.002	1.084	0.911	-0.793	2.380	0.889
600S137-97	0.1017	0.889	3.03	4.188	1.396	2.170	0.159	0.422	4.188	1.396	34.48	7372	3.000	4.188	1.396	50.80	11124	3.000	3.066	1.179	-0.770	2.341	0.892
600S162-33	0.0346	0.344	1.17	1.793	0.598	2.282	0.116	0.581	1.793	0.577	11.41	612	3.039					0.137	0.851	-1.091	2.595	0.823	
600S162-43	0.0451	0.447	1.52	2.316	0.772	2.276	0.148	0.576	2.316	0.767	16.68	1358	3.007					0.303	1.082	-1.081	2.585	0.825	
600S162-54	0.0566	0.556	1.89	2.860	0.953	2.267	0.180	0.570	2.860	0.953	21.17	2708	3.000	2.860	0.927	27.76	2708	3.034	0.594	1.318	-1.072	2.572	0.826
600S162-68	0.0713	0.693	2.36	3.525	1.175	2.255	0.218	0.560	3.525	1.175	26.79	4442	3.000	3.525	1.164	39.46	5468	3.011	1.174	1.596	-1.061	2.554	0.828
600S162-97	0.1017	0.966	3.29	4.797	1.599	2.229	0.283	0.541	4.797	1.599	38.37	7372	3.000	4.797	1.599	56.73	11124	3.000	3.329	2.093	-1.039	2.518	0.830
600S200-33	0.0346	0.379	1.29	2.075	0.692	2.340	0.209	0.743	2.059	0.617	12.20	612	3.135					0.151	1.577	-1.479	2.866	0.734	
600S200-43	0.0451	0.492	1.67	2.683	0.894	2.335	0.268	0.739	2.683														

Channel Properties

U - Channel Section Properties

Section	Min. Bare Metal Thickness (in)	Design Thickness (in)	Gross Properties				Effective Properties ³			
			Area (in ²)	Ixx (in ⁴)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx 2 (in ⁴)	Sxx (in ³)	Ma (ft-lb)
075U50-54	0.0538	0.0566	0.0871	0.0072	0.2882	0.0021	0.1549	0.0072	0.0193	38.0
150U50-54	0.0538	0.0566	0.1296	0.0390	0.5483	0.0027	0.1442	0.0390	0.0520	102.3
200U50-54	0.0538	0.0566	0.1579	0.0796	0.7101	0.0029	0.1360	0.0796	0.0796	156.7
250U50-54	0.0538	0.0566	0.1862	0.1400	0.8672	0.0031	0.1285	0.1400	0.1120	220.5

¹ Minimum bare metal thickness is 95% of design thickness.

² Moment of inertia given is for deflection calculations.

³ Effective properties based on Fy = 33 ksi.

(Hat) Furring (F) Channel Section Properties

Section	Min. Bare Metal Thickness ¹ (in)	Design Thickness (in)	Gross Area (in ²)	"Effective Properties ^{3,4}	
				Ixx 2 (in ⁴)	Ma (Ft-lb)
087F125-18	0.0179	0.0188	0.0702	0.0086	26.4
087F125-27	0.0269	0.0283	0.1046	0.0131	44.8
087F125-30	0.0296	0.0312	0.1184	0.0144	50.3
087F125-33	0.0329	0.0346	0.1270	0.0157	55.4
087F125-43	0.0428	0.0451	0.1636	0.0198	70.1
150F125-18	0.0179	0.0188	0.0939	0.0299	56.4
150F125-27	0.0269	0.0283	0.1403	0.0458	93.4
150F125-30	0.0296	0.0312	0.1543	0.0502	104.9
150F125-33	0.0329	0.0346	0.1707	0.0553	115.6
150F125-43	0.0428	0.0451	0.2206	0.0705	147.5

¹ Minimum bare metal thickness is 95% of design thickness.

² Moment of inertia given is for deflection calculations.

³ Effective properties are given as the minimum value for either positive or negative bending.

⁴ Effective properties based on Fy = 33 ksi.

Section Properties

Structural (T) Track Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
800T125-33'	0.035	0.363	1.24	2.895	0.711	2.824	0.036	0.313	2.706	0.433	8.56	446	4.860					0.145	0.456	-0.444	2.875	0.976	
800T125-43	0.045	0.473	1.61	3.773	0.924	2.824	0.046	0.311	3.600	0.739	14.61	988	4.408					0.321	0.588	-0.440	2.875	0.977	
800T125-54	0.057	0.594	2.02	4.745	1.158	2.827	0.057	0.309	4.653	1.065	21.04	1956	4.208	4.548	0.961	28.78	1956	4.367	0.634	0.734	-0.438	2.878	0.977
800T125-68	0.071	0.748	2.54	5.998	1.454	2.833	0.070	0.306	5.998	1.409	27.85	3920	4.166	5.925	1.355	40.58	3920	4.217	1.267	0.919	-0.434	2.882	0.977
800T125-97	0.102	1.066	3.63	8.613	2.062	2.843	0.096	0.301	8.613	2.062	46.57	9037	4.178	8.613	2.062	61.72	11124	4.178	3.674	1.293	-0.427	2.891	0.978
800T150-33'	0.035	0.380	1.29	3.180	0.781	2.891	0.060	0.397	2.866	0.437	8.63	446	4.995					0.152	0.750	-0.593	2.978	0.960	
800T150-43	0.045	0.496	1.69	4.144	1.015	2.891	0.077	0.395	3.825	0.741	14.64	988	4.550					0.336	0.970	-0.590	2.977	0.961	
800T150-54	0.057	0.622	2.12	5.214	1.272	2.896	0.096	0.393	4.952	1.106	21.85	1956	4.287	4.835	0.963	28.83	1956	4.509	0.664	1.213	-0.587	2.980	0.961
800T150-68	0.071	0.783	2.67	6.594	1.599	2.902	0.119	0.390	6.506	1.474	29.13	3920	4.234	6.317	1.410	42.20	3920	4.294	1.327	1.522	-0.583	2.985	0.962
800T150-97	0.102	1.116	3.80	9.479	2.269	2.914	0.165	0.384	9.479	2.269	44.83	9037	4.178	9.479	2.192	65.62	11124	4.225	3.849	2.155	-0.576	2.995	0.963
800T200-33'	0.035	0.415	1.41	3.749	0.921	3.005	0.135	0.571	3.155	0.440	8.70	446	5.245					0.166	1.635	-0.925	3.196	0.916	
800T200-43	0.045	0.541	1.84	4.887	1.197	3.006	0.175	0.569	4.230	0.741	14.63	988	4.814					0.367	2.119	-0.921	3.195	0.917	
800T200-54	0.057	0.679	2.31	6.152	1.501	3.011	0.218	0.567	5.475	1.170	23.13	1956	4.444	5.353	0.962	28.79	1956	4.776	0.725	2.657	-0.917	3.198	0.918
800T200-68	0.071	0.854	2.91	7.786	1.888	3.019	0.272	0.564	7.265	1.573	31.09	3920	4.381	6.997	1.494	44.74	3920	4.450	1.448	3.346	-0.913	3.204	0.919
800T200-97	0.102	1.218	4.15	11.212	2.683	3.034	0.379	0.558	11.176	2.491	49.22	9037	4.285	10.827	2.362	70.73	11124	4.360	4.200	4.770	-0.905	3.215	0.921
1000T125-43'	0.045	0.563	1.92	6.630	1.305	3.431	0.047	0.290	6.433	0.891	17.62	789	5.833					0.382	0.973	-0.383	3.464	0.988	
1000T125-54	0.057	0.707	2.41	8.333	1.634	3.434	0.059	0.288	8.213	1.443	28.51	1561	5.322	8.116	1.155	34.58	1561	5.785	0.755	1.212	-0.380	3.467	0.988
1000T125-68	0.071	0.890	3.03	10.522	2.053	3.438	0.073	0.286	10.522	1.998	39.48	3128	5.168	10.416	1.897	56.80	3128	5.259	1.508	1.514	-0.377	3.470	0.988
1000T125-97	0.102	1.269	4.32	15.077	2.912	3.447	0.100	0.280	15.077	2.912	65.77	9037	5.178	15.077	2.912	87.18	9119	5.178	4.375	2.121	-0.371	3.478	0.989
1000T150-43'	0.045	0.586	1.99	7.207	1.419	3.507	0.080	0.370	6.793	0.901	17.80	789	5.974					0.397	1.610	-0.518	3.565	0.979	
1000T150-54	0.057	0.735	2.50	9.061	1.777	3.511	0.100	0.368	8.703	1.451	28.68	1561	5.467	8.575	1.168	34.96	1561	5.926	0.785	2.011	-0.515	3.567	0.979
1000T150-68	0.071	0.926	3.15	11.445	2.233	3.516	0.124	0.366	11.303	2.081	41.12	3128	5.240	11.048	1.908	57.13	3128	5.404	1.569	2.519	-0.511	3.572	0.980
1000T150-97	0.102	1.320	4.49	16.413	3.170	3.526	0.171	0.360	16.413	3.170	62.64	9037	5.178	16.413	3.075	92.08	9119	5.228	4.550	3.551	-0.504	3.580	0.980
1000T200-43'	0.045	0.631	2.15	8.361	1.646	3.640	0.183	0.539	7.442	0.911	18.01	789	6.244					0.428	3.535	-0.819	3.770	0.953	
1000T200-54	0.057	0.792	2.69	10.516	2.062	3.645	0.228	0.537	9.579	1.456	28.77	1561	5.749	9.402	1.181	35.36	1561	6.197	0.845	4.426	-0.816	3.773	0.953
1000T200-68	0.071	0.997	3.39	13.292	2.594	3.651	0.284	0.534	12.477	2.209	43.65	3128	5.395	12.176	1.912	57.26	3128	5.688	1.690	5.564	-0.812	3.778	0.954
1000T200-97	0.102	1.422	4.84	19.087	3.686	3.664	0.397	0.528	19.021	3.450	68.18	9037	5.292	18.480	3.294	98.61	9119	5.370	4.901	7.899	-0.804	3.788	0.955
1200T125-54'	0.057	0.820	2.79	13.335	2.186	4.033	0.060	0.271	13.267	1.662	32.85	1299	6.748	13.117	1.362	40.79	1299	7.246	0.876	1.820	-0.337	4.056	0.993
1200T125-68	0.071	1.033	3.51	16.826	2.747	4.036	0.074	0.268	16.826	2.682	52.99	2602	6.169	16.801	2.176	65.15	2602	6.678	1.750	2.271	-0.334	4.059	0.993
1200T125-97	0.102	1.472	5.01	24.078	3.897	4.044	0.102	0.263	24.078	3.897	88.03	7579	6.178	24.078	3.897	116.69	7579	6.178	5.076	3.173	-0.328	4.066	0.994
1200T150-54'	0.057	0.848	2.89	14.378	2.357	4.117	0.103	0.348	13.993	1.685	33.30	1299	6.888	13.796	1.382	41.37	1299	7.386	0.906	3.032	-0.459	4.157	0.988
1200T150-68	0.071	1.068	3.64	18.148	2.963	4.121	0.127	0.345	17.939	2.783	54.99	2602	6.244	17.740	2.207	66.09	2602	6.816	1.810	3.793	-0.456	4.161	0.988
1200T150-97	0.102	1.523	5.18	25.987	4.206	4.130	0.176	0.340	25.987	4.206	83.12	7579	6.178	25.987	4.095	122.59	7579	6.229	5.252	5.332	-0.449	4.169	0.988
1200T200-54'	0.057	0.905	3.08	16.464	2.699	4.265	0.236	0.510	15.279	1.710	33.79	1299	7.169	15.011	1.406	42.08	1299	7.662	0.966	6.706	-0.736	4.358	0.971
1200T200-68	0.071	1.140	3.88	20.791	3.395	4.271	0.294	0.508	19.699	2.797	55.27	2602	6.535	19.395	2.240	67.06	2602	7.098	1.931	8.419	-0.732	4.363	0.972
1200T200-97	0.102	1.625	5.53	29.805	4.824	4.283	0.410	0.502	29.700	4.546	89.84	7579	6.296	28.926	4.361	130.58	7579	6.378	5.602	11.921	-0.725	4.373	0.973

¹Web-height to thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads. See Section Property Notes on page 3.

Section Properties

Structural (S) Stud Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
800S137-33'	0.0346	0.388	1.32	3.198	0.799	2.873	0.073	0.435	3.198	0.663	13.10	455	4.335					0.155	0.948	-0.709	2.991	0.944	
800S137-43	0.0451	0.503	1.71	4.134	1.033	2.866	0.093	0.430	4.134	1.033	20.42	1008	4.000					0.341	1.202	-0.700	2.981	0.945	
800S137-54	0.0566	0.627	2.13	5.110	1.277	2.855	0.112	0.423	5.110	1.277	28.89	2006	4.000	5.110	1.249	37.38	2006	4.032	0.670	1.460	-0.691	2.967	0.946
800S137-68	0.0713	0.782	2.66	6.303	1.576	2.839	0.134	0.414	6.303	1.576	36.74	4048	4.000	6.303	1.573	54.40	4048	4.003	1.325	1.762	-0.680	2.948	0.947
800S137-97	0.1017	1.093	3.72	8.597	2.149	2.805	0.169	0.394	8.597	2.149	53.09	9037	4.000	8.597	2.149	78.22	11124	4.000	3.767	2.295	-0.658	2.908	0.949
800S162-33'	0.0346	0.413	1.41	3.582	0.896	2.943	0.125	0.550	3.582	0.757	14.96	455	4.306					0.165	1.615	-0.951	3.142	0.908	
800S162-43	0.0451	0.537	1.83	4.633	1.158	2.937	0.160	0.546	4.633	1.158	22.89	1008	4.000					0.364	2.056	-0.941	3.132	0.910	
800S162-54	0.0566	0.670	2.28	5.736	1.434	2.927	0.194	0.539	5.736	1.434	31.83	2006	4.000	5.736	1.397	41.84	2006	4.039	0.715	2.509	-0.932	3.119	0.911
800S162-68	0.0713	0.836	2.84	7.089	1.772	2.913	0.235	0.530	7.089	1.772	40.41	4048	4.000	7.089	1.757	59.57	4048	4.013	1.416	3.047	-0.921	3.101	0.912
800S162-97	0.1017	1.169	3.98	9.713	2.428	2.883	0.305	0.510	9.713	2.428	58.27	9037	4.000	9.713	2.428	86.14	11124	4.000	4.030	4.023	-0.899	3.062	0.914
800S200-33'	0.0346	0.448	1.52	4.096	1.024	3.023	0.227	0.712	4.096	0.812	16.04	455	4.410					0.179	2.945	-1.306	3.369	0.850	
800S200-43	0.0451	0.582	1.98	5.302	1.325	3.018	0.292	0.708	5.302	1.293	25.54	1008	4.038					0.395	3.763	-1.295	3.359	0.851	
800S200-54	0.0566	0.726	2.47	6.573	1.643	3.009	0.357	0.701	6.573	1.643	35.75	2006	4.000	6.573	1.475	44.15	2006	4.168	0.775	4.612	-1.286	3.346	0.852
800S200-68	0.0713	0.907	3.09	8.140	2.035	2.996	0.435	0.692	8.140	2.035	45.29	4048	4.000	8.140	1.964	65.21	4048	4.055	1.537	5.631	-1.275	3.329	0.853
800S200-97	0.1017	1.271	4.32	11.203	2.801	2.969	0.576	0.673	11.203	2.801	65.12	9037	4.000	11.203	2.801	96.63	11124	4.000	4.381	7.524	-1.253	3.292	0.855
800S250-43	0.0451	0.627	2.13	6.015	1.504	3.097	0.500	0.893	6.015	1.313	25.95	1008	4.219					0.425	6.320	-1.695	3.641	0.783	
800S250-54	0.0566	0.783	2.66	7.465	1.866	3.088	0.614	0.886	7.465	1.712	33.82	2006	4.134	7.378	1.525	45.66	2006	4.323	0.836	7.769	-1.686	3.628	0.784
800S250-68	0.0713	0.978	3.33	9.261	2.315	3.077	0.752	0.877	9.261	2.240	44.26	4048	4.053	9.261	2.003	59.96	4048	4.219	1.658	9.526	-1.674	3.611	0.785
800S250-97	0.1017	1.372	4.67	12.789	3.197	3.053	1.009	0.857	12.789	3.190	72.06	9037	4.004	12.789	3.053	102.70	11124	4.073	4.731	12.838	-1.652	3.575	0.787
1000S162-43'	0.0451	0.627	2.13	8.025	1.605	3.577	0.168	0.518	8.025	1.414	27.94	802	5.292					0.425	3.404	-0.836	3.709	0.949	
1000S162-54	0.0566	0.783	2.66	9.950	1.990	3.565	0.204	0.511	9.950	1.990	39.32	1593	5.000	9.950	1.712	51.26	1593	5.332	0.836	4.160	-0.827	3.696	0.950
1000S162-68	0.0713	0.978	3.33	12.325	2.465	3.550	0.246	0.502	12.325	2.465	56.20	3209	5.000	12.325	2.465	56.20	3209	5.000	1.658	5.060	-0.817	3.677	0.951
1000S162-97	0.1017	1.372	4.67	16.967	3.393	3.516	0.320	0.483	16.967	3.393	81.43	9037	5.000	16.967	3.393	120.37	9461	5.000	4.731	6.708	-0.795	3.637	0.952
1000S200-43'	0.0451	0.672	2.29	9.085	1.817	3.676	0.309	0.677	9.085	1.580	31.23	802	5.319					0.456	6.189	-1.162	3.914	0.912	
1000S200-54	0.0566	0.839	2.86	11.278	2.256	3.666	0.378	0.671	11.278	2.256	44.57	1593	5.000	11.278	1.805	54.04	1593	5.478	0.896	7.595	-1.153	3.901	0.913
1000S200-68	0.0713	1.050	3.57	13.994	2.799	3.652	0.460	0.662	13.994	2.799	62.28	3209	5.000	13.994	2.744	82.15	3209	5.037	1.779	9.291	-1.142	3.883	0.913
1000S200-97	0.1017	1.474	5.02	19.336	3.867	3.622	0.609	0.643	19.336	3.867	89.92	9037	5.000	19.336	3.867	133.42	9461	5.000	5.082	12.460	-1.120	3.845	0.915
1000S250-43'	0.0451	0.717	2.44	10.203	2.041	3.771	0.531	0.860	10.203	1.617	31.95	802	5.508					0.486	10.404	-1.535	4.161	0.864	
1000S250-54	0.0566	0.896	3.05	12.677	2.535	3.762	0.653	0.854	12.677	2.277	44.99	1593	5.213	12.660	1.879	56.26	1593	5.635	0.957	12.805	-1.525	4.148	0.865
1000S250-68	0.0713	1.121	3.81	15.751	3.150	3.749	0.799	0.844	15.751	3.054	60.34	3209	5.060	15.751	2.670	79.94	3209	5.317	1.899	15.726	-1.514	4.130	0.866
1000S250-97	0.1017	1.576	5.36	21.827	4.365	3.722	1.072	0.825	21.827	4.356	98.40	9037	5.004	21.827	4.181	140.63	9461	5.082	5.433	21.268	-1.491	4.093	0.867
1200S162-54'	0.0566	0.896	3.05	15.730	2.622	4.190	0.212	0.486	15.730	2.334	46.11	1321	6.311	15.730	2.024	60.60	1321	6.695	0.957	6.293	-0.744	4.283	0.970
1200S162-68	0.0713	1.121	3.81	19.518	3.253	4.173	0.255	0.477	19.518	3.253	64.28	2658	6.000	19.518	2.953	88.41	2658	6.257	1.899	7.666	-0.734	4.264	0.970
1200S162-97	0.1017	1.576	5.36	26.966	4.494	4.137	0.331	0.459	26.966	4.494	107.85	7814	6.000	26.966	4.494	107.85	7814	6.000	5.433	10.187	-0.713	4.223	0.971
1200S200-54'	0.0566	0.953	3.24	17.662	2.944	4.306	0.393	0.643	17.662	2.658	52.52	1321	6.281	17.662	2.143	64.17	1321	6.836	1.017	11.462	-1.047	4.478	0.945
1200S200-68	0.0713	1.192	4.06	21.947	3.658	4.291	0.479	0.634	21.947	3.658	81.40	2658	6.000	21.947	3.265	97.75	2658	6.300	2.020	14.038	-1.036	4.459	0.946
1200S200-97	0.1017	1.677	5.71	30.417	5.069	4.258	0.635	0.615	30.417	5.069	117.87	7814	6.000	30.417	5.069	174.89	7814	6.000	5.783	18.876	-1.014	4.420	0.947
1200S250-54'	0.0566	1.009	3.43	19.681	3.280	4.416	0.683	0.823	19.681	2.238	67.01	1321	6.995	19.681	2.238	67.01	1321	6.995	1.078	19.354	-1.395	4.704	0.912
1200S250-68	0.0713	1.263	4.30	24.484	4.081	4.402	0.836	0.813	24.484	3.963	78.31	2658	6.065	24.484	3.963	78.31	2658	6.065	2.141	23.796	-1.384	4.686	0.913
1200S250-97	0.1017	1.779	6.05	34.016	5.669	4.373	1.121	0.794	34.016	5.658	127.80	7814	6.004	34.016	5.446	183.15	7814	6.088	6.134	32.260	-1.361	4.648	0.914

¹Web-height to thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads. See Section Property Notes on page 3.

Section Properties

Structural (T) Track Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
162T125-18	0.0188	0.078	0.26	0.042	0.048	0.740	0.013	0.411	0.031	0.026	0.51	309	1.093					0.009	0.007	-0.893	1.230	0.473	
162T125-27	0.0283	0.117	0.40	0.063	0.072	0.735	0.020	0.410	0.050	0.044	0.87	577	1.048					0.031	0.010	-0.886	1.221	0.474	
162T125-30	0.0312	0.129	0.44	0.070	0.079	0.735	0.022	0.409	0.057	0.050	1.00	637	1.038					0.042	0.012	-0.884	1.220	0.475	
162T125-33	0.0346	0.143	0.49	0.077	0.087	0.736	0.024	0.408	0.066	0.058	1.15	707	1.026					0.057	0.013	-0.882	1.219	0.476	
250T125-18	0.0188	0.094	0.32	0.105	0.080	1.057	0.015	0.399	0.079	0.046	0.90	237	1.593					0.011	0.018	-0.781	1.373	0.677	
250T125-27	0.0283	0.141	0.48	0.157	0.119	1.053	0.022	0.398	0.129	0.079	1.56	700	1.519					0.038	0.027	-0.774	1.366	0.679	
250T125-30	0.0312	0.156	0.53	0.173	0.131	1.053	0.025	0.397	0.145	0.090	1.77	851	1.507					0.051	0.030	-0.773	1.365	0.679	
250T125-33	0.0346	0.173	0.59	0.192	0.145	1.054	0.027	0.397	0.166	0.103	2.03	1046	1.492					0.069	0.033	-0.771	1.365	0.680	
250T125-43	0.0451	0.225	0.77	0.250	0.188	1.055	0.035	0.395	0.231	0.147	2.91	1446	1.454					0.153	0.042	-0.766	1.362	0.683	
250T125-54	0.0566	0.282	0.96	0.318	0.236	1.062	0.043	0.392	0.310	0.203	4.01	1804	1.426	0.297	0.188	5.64	2734	1.463	0.301	0.054	-0.763	1.365	0.688
250T125-68	0.0713	0.355	1.21	0.408	0.297	1.072	0.054	0.389	0.408	0.281	5.56	2252	1.404	0.402	0.262	7.85	3412	1.440	0.602	0.068	-0.758	1.369	0.694
250T150-27	0.0283	0.156	0.53	0.181	0.137	1.078	0.037	0.486	0.139	0.082	1.61	700	1.576					0.042	0.044	-0.989	1.542	0.588	
250T150-30	0.0312	0.172	0.58	0.199	0.151	1.078	0.040	0.486	0.157	0.093	1.83	851	1.563					0.056	0.048	-0.988	1.541	0.589	
250T150-33	0.0346	0.190	0.65	0.221	0.167	1.079	0.045	0.485	0.179	0.107	2.11	1046	1.548					0.076	0.054	-0.986	1.540	0.590	
250T150-43	0.0451	0.248	0.84	0.289	0.217	1.080	0.058	0.483	0.252	0.154	3.03	1446	1.508					0.168	0.070	-0.981	1.537	0.593	
250T150-54	0.0566	0.311	1.06	0.368	0.273	1.088	0.072	0.481	0.342	0.213	4.22	1804	1.477	0.325	0.197	5.89	2734	1.517	0.332	0.088	-0.977	1.539	0.597
250T150-68	0.0713	0.391	1.33	0.472	0.344	1.099	0.089	0.478	0.465	0.299	5.92	2252	1.449	0.445	0.276	8.27	3412	1.490	0.663	0.113	-0.972	1.543	0.603
250T200-33	0.0346	0.225	0.76	0.280	0.212	1.117	0.097	0.658	0.203	0.112	2.22	1046	1.647					0.090	0.118	-1.432	1.932	0.450	
250T200-43	0.0451	0.293	1.00	0.366	0.275	1.118	0.126	0.657	0.288	0.163	3.21	1446	1.605					0.198	0.153	-1.427	1.928	0.452	
250T200-54	0.0566	0.367	1.25	0.466	0.346	1.127	0.157	0.654	0.396	0.228	4.51	1804	1.572	0.297	0.188	5.64	2734	1.463	0.392	0.195	-1.422	1.929	0.456
250T200-68	0.0713	0.462	1.57	0.600	0.437	1.139	0.196	0.652	0.548	0.324	6.41	2252	1.538	0.402	0.262	7.85	3412	1.440	0.783	0.251	-1.417	1.932	0.462
350T125-18	0.0188	0.113	0.38	0.221	0.122	1.400	0.016	0.382	0.176	0.063	1.25	167	2.278					0.013	0.039	-0.685	1.605	0.818	
350T125-27	0.0283	0.170	0.58	0.331	0.182	1.396	0.025	0.381	0.277	0.128	2.53	566	2.044					0.045	0.057	-0.680	1.599	0.819	
350T125-30	0.0312	0.187	0.64	0.365	0.200	1.396	0.027	0.380	0.312	0.145	2.86	758	2.030					0.061	0.063	-0.679	1.598	0.820	
350T125-33	0.0346	0.207	0.71	0.405	0.222	1.397	0.030	0.379	0.354	0.165	3.27	1033	2.014					0.083	0.070	-0.677	1.598	0.820	
350T125-43	0.0451	0.270	0.92	0.528	0.288	1.397	0.038	0.377	0.490	0.233	4.61	1777	1.971					0.183	0.090	-0.673	1.596	0.822	
350T125-54	0.0566	0.339	1.15	0.668	0.361	1.404	0.048	0.375	0.651	0.317	6.26	2551	1.937	0.626	0.297	8.89	3446	1.978	0.362	0.113	-0.669	1.599	0.825
350T125-68	0.0713	0.427	1.45	0.851	0.454	1.412	0.059	0.372	0.851	0.433	8.55	3193	1.908	0.839	0.407	12.18	4838	1.949	0.723	0.143	-0.665	1.605	0.828
350T150-27	0.0283	0.184	0.63	0.377	0.207	1.431	0.041	0.470	0.298	0.132	2.62	566	2.111					0.049	0.093	-0.879	1.745	0.746	
350T150-30	0.0312	0.203	0.69	0.416	0.228	1.432	0.045	0.469	0.336	0.150	2.96	758	2.097					0.066	0.103	-0.878	1.744	0.747	
350T150-33	0.0346	0.225	0.76	0.461	0.253	1.432	0.049	0.469	0.382	0.171	3.39	1033	2.080					0.090	0.114	-0.876	1.743	0.747	
350T150-43	0.0451	0.293	1.00	0.601	0.328	1.433	0.064	0.467	0.531	0.243	4.80	1777	2.034					0.198	0.148	-0.872	1.741	0.749	
350T150-54	0.0566	0.367	1.25	0.761	0.412	1.440	0.079	0.465	0.712	0.332	6.57	2551	1.996	0.679	0.310	9.28	3446	2.042	0.392	0.186	-0.868	1.744	0.752
350T150-68	0.0713	0.462	1.57	0.972	0.518	1.450	0.099	0.462	0.957	0.459	9.07	3193	1.960	0.919	0.428	12.81	4838	2.007	0.783	0.236	-0.863	1.749	0.756
350T200-33	0.0346	0.259	0.88	0.574	0.315	1.487	0.108	0.647	0.428	0.181	3.57	1033	2.199					0.103	0.248	-1.297	2.077	0.610	
350T200-43	0.0451	0.338	1.15	0.749	0.409	1.489	0.140	0.645	0.600	0.257	5.09	1777	2.150					0.229	0.322	-1.292	2.074	0.612	
350T200-54	0.0566	0.424	1.44	0.949	0.513	1.496	0.175	0.642	0.814	0.355	7.01	2551	2.109	0.770	0.329	9.85	3446	2.159	0.453	0.408	-1.288	2.076	0.615
350T200-68	0.0713	0.534	1.82	1.213	0.647	1.508	0.218	0.639	1.112	0.496	9.80	3193	2.066	1.054	0.458	13.71	4838	2.121	0.904	0.520	-1.283	2.080	0.620
362T125-18	0.0188	0.115	0.39	0.240	0.127	1.442	0.017	0.380	0.192	0.066	1.30	161	2.366					0.014	0.042	-0.675	1.637	0.830	
362T125-27	0.0283	0.173	0.59	0.358	0.191	1.438	0.025	0.378	0.301	0.135	2.66	546	2.109					0.046	0.062	-0.670	1.631	0.831	
362T125-30	0.0312	0.191	0.65	0.395	0.210	1.438	0.027	0.378	0.339	0.152	3.01	731	2.095					0.062	0.068	-0.669	1.630	0.832	
362T125-33	0.0346	0.212	0.72	0.438	0.232	1.438	0.030	0.377	0.384	0.174	3.44	996	2.079					0.085	0.075	-0.667	1.630	0.832	
362T125-43	0.0451	0.276	0.94	0.571	0.302	1.439	0.039	0.375	0.531	0.245	4.84	1777	2.035					0.187	0.097	-0.663	1.628	0.834	
362T125-54	0.0566	0.346	1.18	0.723	0.378	1.445	0.048	0.373	0.705	0.332	6.57	2645	2.000	0.678	0.312	9.34	3446	2.042	0.369	0.122	-0.659	1.632	0.837
362T125-68	0.0713	0.436	1.48	0.921	0.475	1.454	0.060	0.370	0.921	0.453	8.95	3311	1.971	0.907	0.427	12.78	5017	2.012	0.738	0.155	-0.655	1.637	0.840
362T150-27	0.0283	0.187	0.64	0.408	0.217	1.475	0.041	0.468	0.323	0.140	2.76	546	2.177					0.050	0.101	-0.868	1.774	0.761	
362T150-30	0.0312	0.207	0.70	0.449	0.239	1.475	0.045	0.467	0.364	0.158	3.12	731	2.162					0.067	0.111	-0.866	1.773	0.761	
362T150-33	0.0346	0.229	0.78	0.499	0.264	1.475	0.050	0.467	0.414	0.180	3.56	996	2.146					0.091	0.123	-0.865	1.772	0.762	
362T150-43	0.0451	0.298	1.02	0.650	0.343	1.476	0.064	0.465	0.574	0.255	5.04	1777	2.099					0.202	0.160	-0.860	1.771	0.764	
362T150-54	0.0566	0.374	1.27	0.823	0.431	1.483	0.080	0.462	0.769	0.349	6.89	2645	2.060	0.735	0.325	9.74	3446	2.107	0.400	0.201	-0.856	1.774	0.767
362T150-68	0.0713	0.471	1.60	1.050	0.542	1.492	0.099	0.459	1.034	0.480	9.49	3311	2.024	0.993	0.449	13.43	5017	2.072	0.799	0.256	-0.852	1.779	0.771
362T200-33	0.0346	0.264	0.90	0.619	0.328	1.532	0.110	0.645	0.464	0.190	3.76	996	2.267					0.105	0.269	-1.282	2.100	0.627	
362T200-43	0.0451	0.343	1.17	0.808	0.427	1.534	0.142	0.643	0.649	0.270	5.34	1777	2.218					0.233	0.349	-1.277	2.097	0.629	
362T200-54	0.0566	0.431	1.47	1.024	0.53																		

Section Properties

Structural (T) Track Section Properties

Design Thickness (in)	Gross							Effective 33ksi					Effective 50ksi					Torsional					
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Ixx (in ⁴)	Sxx (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	J (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β	
400T125-18'	0.0188	0.122	0.42	0.300	0.145	1.566	0.017	0.373	0.243	0.072	1.43	146	2.634					0.014	0.052	-0.647	1.735	0.861	
400T125-27	0.0283	0.184	0.63	0.449	0.217	1.562	0.025	0.372	0.380	0.156	3.08	494	2.306					0.049	0.077	-0.641	1.729	0.862	
400T125-30	0.0312	0.203	0.69	0.495	0.239	1.562	0.028	0.371	0.427	0.176	3.49	661	2.289					0.066	0.085	-0.640	1.729	0.863	
400T125-33	0.0346	0.225	0.76	0.549	0.265	1.563	0.031	0.371	0.484	0.201	3.97	901	2.272					0.090	0.094	-0.639	1.728	0.863	
400T125-43	0.0451	0.293	1.00	0.716	0.344	1.563	0.040	0.369	0.666	0.282	5.57	1777	2.227					0.198	0.122	-0.635	1.727	0.865	
400T125-54	0.0566	0.367	1.25	0.904	0.431	1.569	0.049	0.366	0.882	0.381	7.53	2799	2.191	0.849	0.359	10.74	3446	2.234	0.392	0.153	-0.631	1.730	0.867
400T125-68	0.0713	0.462	1.57	1.150	0.541	1.577	0.061	0.363	1.150	0.517	10.22	3664	2.159	1.134	0.488	14.62	5468	2.202	0.783	0.193	-0.627	1.736	0.870
400T150-27	0.0283	0.198	0.67	0.509	0.246	1.602	0.042	0.461	0.409	0.154	3.04	494	2.420					0.053	0.127	-0.834	1.864	0.800	
400T150-30	0.0312	0.218	0.74	0.561	0.271	1.603	0.046	0.461	0.458	0.183	3.61	661	2.359					0.071	0.139	-0.833	1.864	0.800	
400T150-33	0.0346	0.242	0.82	0.622	0.300	1.603	0.051	0.460	0.519	0.208	4.12	901	2.342					0.097	0.154	-0.831	1.863	0.801	
400T150-43	0.0451	0.315	1.07	0.811	0.390	1.604	0.066	0.458	0.719	0.293	5.80	1777	2.294					0.214	0.200	-0.827	1.862	0.803	
400T150-54	0.0566	0.396	1.35	1.025	0.489	1.610	0.082	0.456	0.960	0.399	7.89	2799	2.253	0.918	0.374	11.19	3446	2.301	0.422	0.251	-0.823	1.865	0.805
400T150-68	0.0713	0.498	1.69	1.306	0.615	1.619	0.102	0.453	1.286	0.548	10.82	3664	2.214	1.237	0.513	15.35	5468	2.264	0.844	0.318	-0.818	1.870	0.808
400T200-33	0.0346	0.277	0.94	0.768	0.371	1.666	0.113	0.639	0.581	0.220	4.34	901	2.469					0.110	0.335	-1.240	2.173	0.674	
400T200-43	0.0451	0.360	1.23	1.002	0.482	1.668	0.146	0.637	0.811	0.311	6.14	1777	2.418					0.244	0.435	-1.235	2.171	0.676	
400T200-54	0.0566	0.452	1.54	1.268	0.604	1.675	0.182	0.635	1.093	0.426	8.42	2799	2.374	1.037	0.397	11.88	3446	2.426	0.483	0.549	-1.231	2.173	0.679
400T200-68	0.0713	0.569	1.94	1.617	0.761	1.685	0.227	0.632	1.485	0.591	11.68	3664	2.327	1.412	0.549	16.42	5468	2.385	0.965	0.699	-1.226	2.178	0.683
550T125-27	0.028	0.226	0.77	0.948	0.336	2.046	0.027	0.348	0.836	0.207	4.09	357	3.337					0.060	0.160	-0.550	2.15	0.935	
550T125-30	0.031	0.250	0.85	1.045	0.370	2.046	0.030	0.347	0.931	0.252	4.97	478	3.223					0.081	0.176	-0.549	2.147	0.935	
550T125-33	0.035	0.277	0.94	1.159	0.410	2.046	0.033	0.346	1.042	0.312	6.16	652	3.094					0.110	0.194	-0.547	2.146	0.935	
550T125-43	0.045	0.360	1.23	1.510	0.533	2.047	0.043	0.344	1.417	0.451	8.91	1443	2.991					0.244	0.251	-0.544	2.146	0.936	
550T125-54	0.057	0.452	1.54	1.903	0.668	2.052	0.053	0.342	1.861	0.602	11.89	2799	2.949	1.800	0.572	17.13	2859	2.997	0.483	0.314	-0.540	2.149	0.937
550T125-68	0.071	0.569	1.94	2.412	0.839	2.058	0.066	0.339	2.412	0.807	15.95	4442	2.913	2.379	0.769	23.02	5468	2.960	0.965	0.395	-0.536	2.154	0.938
550T150-27	0.028	0.241	0.82	1.059	0.376	2.098	0.046	0.436	0.893	0.207	4.10	357	3.460					0.064	0.262	-0.724	2.262	0.898	
550T150-30	0.031	0.265	0.90	1.168	0.414	2.098	0.050	0.435	0.995	0.251	4.96	478	3.349					0.086	0.288	-0.723	2.262	0.898	
550T150-33	0.035	0.294	1.00	1.295	0.459	2.099	0.055	0.434	1.115	0.310	6.12	652	3.224					0.117	0.319	-0.721	2.261	0.898	
550T150-43	0.045	0.383	1.30	1.688	0.596	2.099	0.072	0.432	1.516	0.468	9.25	1443	3.066					0.260	0.412	-0.717	2.260	0.899	
550T150-54	0.057	0.480	1.63	2.128	0.747	2.105	0.089	0.430	2.005	0.628	12.41	2799	3.020	1.928	0.595	17.81	2859	3.072	0.513	0.517	-0.714	2.264	0.901
550T150-68	0.071	0.605	2.06	2.699	0.939	2.112	0.110	0.427	2.660	0.850	16.80	4442	2.974	2.569	0.804	24.07	5468	3.029	1.025	0.652	-0.710	2.269	0.902
550T200-33	0.035	0.329	1.12	1.567	0.555	2.184	0.123	0.613	1.246	0.307	6.06	652	3.453					0.131	0.692	-1.097	2.52	0.810	
550T200-43	0.045	0.428	1.46	2.043	0.722	2.185	0.160	0.611	1.690	0.495	9.79	1443	3.209					0.290	0.898	-1.093	2.52	0.812	
550T200-54	0.057	0.537	1.83	2.578	0.905	2.191	0.199	0.609	2.253	0.669	13.21	2799	3.158	2.153	0.63	18.86	2859	3.215	0.573	1.129	-1.089	2.52	0.814
550T200-68	0.071	0.676	2.30	3.274	1.139	2.200	0.248	0.606	3.027	0.914	18.06	4442	3.103	2.894	0.857	25.67	5468	3.166	1.146	1.428	-1.084	2.53	0.816
600T125-27'	0.028	0.241	0.82	1.168	0.381	2.204	0.028	0.340	1.041	0.225	4.44	327	3.693					0.064	0.195	-0.525	2.291	0.948	
600T125-30	0.031	0.265	0.90	1.288	0.419	2.204	0.031	0.340	1.159	0.272	5.37	438	3.573					0.086	0.214	-0.524	2.291	0.948	
600T125-33	0.035	0.294	1.00	1.428	0.465	2.204	0.034	0.339	1.297	0.335	6.62	597	3.438					0.117	0.237	-0.523	2.291	0.948	
600T125-43	0.045	0.383	1.30	1.861	0.604	2.205	0.044	0.337	1.750	0.515	10.17	1321	3.244					0.260	0.306	-0.519	2.290	0.949	
600T125-54	0.057	0.480	1.63	2.344	0.756	2.209	0.054	0.335	2.294	0.685	13.53	2617	3.202	2.221	0.653	19.55	2617	3.250	0.513	0.383	-0.516	2.293	0.949
600T125-68	0.071	0.605	2.06	2.969	0.950	2.215	0.067	0.332	2.969	0.916	18.09	4442	3.164	2.930	0.874	26.17	5251	3.211	1.025	0.481	-0.512	2.298	0.950
600T125-97	0.102	0.862	2.93	4.281	1.347	2.228	0.092	0.326	4.281	1.347	30.43	7850	3.178	4.281	1.347	30.43	7850	3.178	2.973	0.681	-0.504	2.308	0.952
600T150-27'	0.028	0.255	0.87	1.300	0.424	2.260	0.047	0.427	1.109	0.225	4.46	327	3.819					0.068	0.319	-0.694	2.402	0.917	
600T150-30	0.031	0.281	0.96	1.433	0.467	2.260	0.051	0.427	1.235	0.272	5.38	438	3.701					0.091	0.351	-0.693	2.402	0.917	
600T150-33	0.035	0.311	1.06	1.590	0.517	2.260	0.057	0.426	1.385	0.335	6.61	597	3.569					0.124	0.389	-0.691	2.401	0.917	
600T150-43	0.045	0.405	1.38	2.072	0.673	2.261	0.073	0.424	1.868	0.534	10.55	1321	3.321					0.275	0.503	-0.687	2.400	0.918	
600T150-54	0.057	0.509	1.73	2.611	0.843	2.266	0.091	0.422	2.464	0.714	14.11	2617	3.274	2.374	0.678	20.30	2617	3.327	0.543	0.630	-0.684	2.404	0.919
600T150-68	0.071	0.641	2.18	3.309	1.059	2.273	0.113	0.419	3.262	0.963	19.03	4442	3.227	3.154	0.913	27.34	5251	3.282	1.086	0.794	-0.680	2.409	0.920
600T150-97	0.102	0.913	3.11	4.778	1.504	2.288	0.156	0.413	4.778	1.504	29.71	7850	3.178	4.778	1.444	43.23	11124	3.222	3.148	1.131	-0.672	2.420	0.923
600T200-33	0.035	0.346	1.18	1.913	0.622	2.352	0.126	0.604	1.542	0.333	6.59	597	3.803					0.138	0.845	-1.057	2.648	0.841	
600T200-43	0.045	0.451	1.53	2.494	0.809	2.353	0.163	0.602	2.076	0.565	11.16	1321	3.469					0.305	1.095	-1.053	2.647	0.842	
600T200-54	0.057	0.565	1.92	3.145	1.015	2.359	0.203	0.600	2.759	0.759	15.00	2617	3.416	2.641	0.717	21.48	2617	3.475	0.604	1.376	-1.049	2.650	0.843
600T200-68	0.071	0.712	2.42	3.990	1.277	2.367	0.254	0.597	3.696	1.034	20.42	4442	3.360	3.540	0.973	29.12	5251	3.424	1.206	1.739	-1.045	2.656	0.845
600T200-97	0.102	1.015	3.45	5.773	1.816	2.385	0.354	0.591	5.773	1.667	32.95	7850	3.276	5.558	1.568	46.94	11124	3.345	3.499	2.496	-1.036	2.667	0.849

Architectural Specifications for Cold-Formed Metal

Part 1 - General

1.1 Description

- A. Work included: Provide metal studs and/or joist and accessories as indicated on the drawings, as specified herein, and as needed for a complete and proper installation.

1.2 Quality Assurance

- A. Contractor shall provide effective, full time quality control over all fabrication and erection complying with the pertinent codes and regulations of government agencies having jurisdiction.

1.3 Submittals

- A. The framing contractor shall be responsible for submitting part or all of the following items, as required by the construction documents:
 1. Materials list of items proposed to be provided under this section.
 2. Manufacturer's product information and other data needed to provide compliance with the specified requirements.
 3. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures on the work.

Part 2 - Products

2.1 Metal Studs, Joist, and Accessories

- A. All products to be manufactured by Southeastern Stud & Components. Manufacturers submitting published data showing their product values to be equal to those published by Southeastern Stud & Components shall also be supplied.
- B. All galvanized studs and joists shall be formed from steel that corresponds to the minimum requirements of 1996 A.I.S.I. standards.
- C. All structural members shall be designed in accordance with the American Iron and Steel Institute (AISI) "Specification for the Design of Cold-Formed Steel Structural Members" 1996 edition.
- D. Provide all accessories including, but not limited to, tracks, clips web stiffeners, anchors, fastening devices, resilient clips, and other accessories required for a complete and proper installation.
- E. Fastening of components shall be with self-drilling screws or welding. Screws or welds shall be of sufficient size to insure the strength of the connection. All welds of galvanized steel shall be touched up with a zinc-rich paint. All welds of carbon sheet steel shall be touched up with paint. Wire tying of components shall not be permitted.

Part 3 - Execution

3.1 Fabrication and Installation

- A. Prior to fabrication of framing, the contractor shall submit shop drawings to the architect or engineer to obtain approval.
- B. Framing components may be preassembled into panels prior to erecting. Prefabricated panels shall be square, with components attached in a manner to prevent racking and to minimize distortion while lifting and transporting.

- C. All framing components shall be cut squarely for attachment to perpendicular members or as required for an angular fit against abutting member.
- D. Studs shall be plumbed, aligned and securely attached to flanges of both upper and lower runners, except in the case of interior, non-load bearing walls, studs need not be attached to upper or lower runners.
- E. In all doubled jamb studs and double headers not accessible to insulation contractors, insulation equal to that specified elsewhere shall be provided.
- F. Splices in axial load bearing members other than runner track shall not be permitted.
- G. Temporary bracing where required, shall be provided until erection is complete.

3.2 Installation (Non-load bearing walls)

- A. Runners should be securely anchored to the supporting structure as shown on the drawings.
- B. Jack studs or cripples shall be installed below window sills, above window and door heads, and elsewhere to furnish supports.
- C. Lateral bracing shall be provided by use of gypsum board and gypsum sheathing or by horizontal straps or cold-rolled channels. Bracing shall conform to Section D3 of the AISI Specification.
- D. Provisions for structure vertical movement shall be provided where indicated on the drawings.
- E. Handling and lifting of prefabricated panels shall be done in a manner so as not to cause distortion in any member.

3.3 Installation (Axial load-bearing)

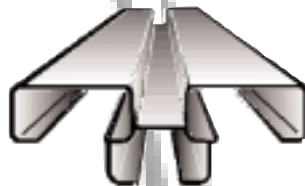
- A. Runners shall be securely anchored to the supporting structure as shown on the drawings.
- B. Complete, uniform and level bearing support shall be provided for the bottom runner.
- C. Framing of wall openings shall include headers and supporting studs as shown on the drawings.
- D. Diagonally braced stud walls, as indicated on the drawings, shall be provided at locations designated as "shear walls" for frame stability and lateral load resistance. Additional studs, when necessary, shall be positioned as indicated on the drawings to resist the vertical components.
- E. Splices in axially loaded studs shall not be permitted.

3.4 Installation (Joists)

- A. Uniform and level joist bearing shall be provided at foundation walls by means of shims and/or non-setting grout.
- B. Joists shall be located directly over bearing studs or a load distribution member shall be provided at the top of the bearing wall.
- C. Web stiffeners shall be provided at reaction points and/or points of concentrated loads where indicated on the drawings.
- D. Joist bridging shall be provided where indicated on the drawings.
- E. Additional joist shall be provided under parallel partitions when the partition length exceeds one-half the joist span, also around all floor and roof openings, which interrupt one or more spanning members unless otherwise noted.
- F. End blocking shall be provided where joist ends are not otherwise restrained from rotation.



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