

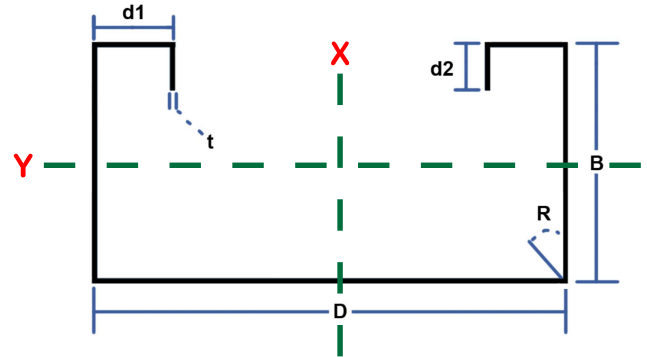
# Exterior Wall Framing & Accessories

## Material Properties

ASTM A1003/A1003M or ASTM A653/A653M, Grade 50 (340), 50ksi (340MPa) minimum yield strength, 65ksi (450 MPa) minimum tensile strength, G-60 (Z180) hot-dipped galvanized coating.

# JamStud® Section Properties

JamStud® Section Dimensions							
Section (All Studs 50ksi)	Overall Depth	Flange Width	Return Lip 1	Return Lip 2	Inside Bend Radius	Design Thickness	Unit Weight (lbs/ft)
	D	B	d1	d2	R	t	
	(in)	(in)	(in)	(in)	(in)	(in)	
350JAM250-43	3.5	2.5	0.6102	0.5	0.105	0.0451	1.553
350JAM250-54	3.5	2.5	0.6332	0.5	0.105	0.0566	1.942
350JAM250-68	3.5	2.5	0.6626	0.5	0.105	0.0713	2.435
350JAM250-97	3.5	2.5	0.7234	0.5	0.105	0.1017	3.438
350JAM350-68	3.5	3.5	0.6626	0.5	0.105	0.0713	2.920
362JAM250-43	3.625	2.5	0.6102	0.5	0.105	0.0451	1.572
362JAM250-54	3.625	2.5	0.6332	0.5	0.105	0.0566	1.966
362JAM250-68	3.625	2.5	0.6626	0.5	0.105	0.0713	2.465
362JAM250-97	3.625	2.5	0.7234	0.5	0.105	0.1017	3.481
362JAM350-68	3.625	3.5	0.6626	0.5	0.105	0.0713	2.950
400JAM250-43	4	2.5	0.6102	0.5	0.105	0.0451	1.630
400JAM250-54	4	2.5	0.6332	0.5	0.105	0.0566	2.038
400JAM250-68	4	2.5	0.6626	0.5	0.105	0.0713	2.556
400JAM250-97	4	2.5	0.7234	0.5	0.105	0.1017	3.611
400JAM350-68	4	3.5	0.6626	0.5	0.105	0.0713	3.041
400JAM350-97	4	3.5	0.7234	0.5	0.105	0.1017	4.303
400JAM350-118	4	3.5	0.7684	0.5	0.105	0.1242	5.216
550JAM250-43	5.5	2.5	0.6102	0.5	0.105	0.0451	1.860
550JAM250-54	5.5	2.5	0.6332	0.5	0.105	0.0566	2.327
550JAM250-68	5.5	2.5	0.6626	0.5	0.105	0.0713	2.920
550JAM250-97	5.5	2.5	0.7234	0.5	0.105	0.1017	4.130
550JAM250-118	5.5	2.5	0.7684	0.5	0.105	0.1242	5.005
550JAM350-68	5.5	3.5	0.6626	0.5	0.105	0.0713	3.405
550JAM350-97	5.5	3.5	0.7234	0.5	0.105	0.1017	4.822
550JAM350-118	5.5	3.5	0.7684	0.5	0.105	0.1242	5.849
600JAM250-43	6	2.5	0.6102	0.5	0.105	0.0451	1.937
600JAM250-54	6	2.5	0.6332	0.5	0.105	0.0566	2.424
600JAM250-68	6	2.5	0.6626	0.5	0.105	0.0713	3.041
600JAM250-97	6	2.5	0.7234	0.5	0.105	0.1017	4.303
600JAM250-118	6	2.5	0.7684	0.5	0.105	0.1242	5.216
600JAM350-68	6	3.5	0.6626	0.5	0.105	0.0713	3.527
600JAM350-97	6	3.5	0.7234	0.5	0.105	0.1017	4.995
600JAM350-118	6	3.5	0.7684	0.5	0.105	0.1242	6.060
800JAM250-43	8	2.5	0.6102	0.5	0.105	0.0451	2.244
800JAM250-54	8	2.5	0.6332	0.5	0.105	0.0566	2.809
800JAM250-68	8	2.5	0.6626	0.5	0.105	0.0713	3.527
800JAM250-97	8	2.5	0.7234	0.5	0.105	0.1017	4.995
800JAM250-118	8	2.5	0.7684	0.5	0.105	0.1242	6.060
800JAM350-68	8	3.5	0.6626	0.5	0.105	0.0713	4.012
800JAM350-97	8	3.5	0.7234	0.5	0.105	0.1017	5.688
800JAM350-118	8	3.5	0.7684	0.5	0.105	0.1242	6.904



## Important Notes

1. Section properties and capacities are calculated in accordance with AISI S100-16 Spec, "North American Specification for the Design of Cold-Formed Steel Structural Members"
2. Tabulated gross properties are based on the full-unreduced cross section of the studs, away from punchouts.
3. Effective properties incorporate the strength increase from the cold-work of forming as applicable per AISI S100-16 Spec, Sec. A3.3.2 (3).
4. Net effective section properties are calculated at a cross section through the punchout.
5. Allowable moment about x-axis is the lesser of  $M_{al}$  and  $M_{ad}$  at solid section, and the lesser of  $M_{al(net)}$  and  $M_{ad(net)}$  at net section. Stud distortional buckling is based on an assumed  $k_{\phi} = 0$ .
6. For deflection calculations, use the effective moment of inertia.
7. The effective moment of inertia for deflection is calculated at a stress which results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. AISI S100-16 Procedure I for Serviceability Determination has been used.

Section (All 50 ksi)	Gross Properties (for Un-punched Sections)											Effective Properties 50 ksi ("net" = Punched Sections)											Effective Properties if limited to 33 ksi Strength								
	Area	$I_x$	$S_x$	$R_x$	$I_y$	$R_y$	$Jx10^3$	$C_w$	$R_o$	$m$	$X_o$	$\beta$	$I_{xe}$	$S_{xe}$	$S_{xe(net)}$	$M_{al}$	$M_{al(net)}$	$M_{ad}$	$M_{ad(net)}$	$V_a$	$V_{a(net)}$	$I_{ye}^1$	$M_{yal}^1$	$M_{yad}^1$	$I_{ye}^2$	$M_{yal}^2$	$I_{xe}$	$M_{al}$	$M_{al(net)}$	$M_{ad}$	$M_{ad(net)}$
	(in <sup>2</sup> )	(in <sup>4</sup> )	(in <sup>3</sup> )	(in)	(in <sup>4</sup> )	(in)	(in <sup>3</sup> )	(in <sup>6</sup> )	(in)	(in)	(in)		(in <sup>4</sup> )	(in <sup>4</sup> )	(in <sup>3</sup> )	(in <sup>3</sup> )	(in-k)	(in-k)	(in-k)	(in-k)	(lbs)	(lbs)	(in <sup>4</sup> )	(in-k)	(in-k)	(in <sup>4</sup> )	(in-k)	(in <sup>4</sup> )	(in-k)	(in-k)	(in-k)
350JAM250-43	0.456	0.945	0.540	1.439	0.424	0.964	0.309	1.565	3.017	1.445	-2.471	0.329	0.933	0.447	0.418	13.371	12.505	13.045	12.687	2,141	747	0.424	8.738	8.738	0.383	8.097	0.945	9.764	9.389	9.864	9.628
350JAM250-54	0.571	1.171	0.669	1.432	0.526	0.960	0.609	1.953	3.008	1.442	-2.465	0.329	1.171	0.571	0.545	17.099	16.324	17.616	17.120	3,371	925	0.526	10.864	10.864	0.508	10.390	1.171	12.370	12.069	13.136	12.804
350JAM250-68	0.715	1.450	0.829	1.424	0.653	0.955	1.212	2.443	2.996	1.439	-2.457	0.328	1.450	0.748	0.728	22.400	21.809	23.676	23.014	4,208	900	0.653	13.522	13.522	0.653	13.302	1.450	17.765	17.494	18.039	17.735
350JAM250-97	1.010	1.999	1.142	1.406	0.904	0.946	3.483	3.431	2.972	1.430	-2.441	0.325	1.999	1.125	1.107	37.597	37.006	38.177	37.438	5,886	850	0.904	18.806	18.806	0.904	18.806	1.999	25.603	25.240	25.603	25.237
350JAM350-68	0.858	1.870	1.068	1.476	1.471	1.309	1.454	5.401	3.980	1.965	-3.456	0.246	1.812	0.804	0.774	24.073	23.179	26.651	25.932	4,208	900	1.471	22.321	22.321	1.471	21.873	1.866	17.681	17.250	20.057	19.595
362JAM250-43	0.462	1.024	0.565	1.489	0.430	0.964	0.313	1.656	3.023	1.435	-2.447	0.344	1.011	0.468	0.435	14.012	13.038	13.565	13.194	2,141	802	0.430	8.783	8.663	0.384	8.106	1.024	10.223	9.796	10.265	10.021
362JAM250-54	0.578	1.269	0.700	1.482	0.533	0.961	0.617	2.066	3.014	1.432	-2.442	0.344	1.269	0.598	0.569	17.908	17.031	18.335	17.821	3,372	994	0.533	10.921	10.921	0.511	10.406	1.269	12.944	12.598	13.687	13.369
362JAM250-68	0.724	1.573	0.868	1.474	0.662	0.956	1.227	2.583	3.002	1.428	-2.434	0.342	1.573	0.783	0.761	23.449	22.775	24.670	23.982	4,375	1,007	0.662	13.593	13.593	0.662	13.332	1.573	18.596	18.333	18.889	18.574
362JAM250-97	1.023	2.169	1.197	1.456	0.916	0.946	3.527	3.625	2.977	1.420	-2.418	0.340	2.169	1.178	1.161	39.389	38.814	40.011	39.252	6,124	954	0.916	18.908	18.908	0.916	18.908	2.169	26.833	26.483	26.833	26.480
362JAM350-68	0.867	2.023	1.116	1.528	1.491	1.311	1.469	5.715	3.977	1.954	-3.430	0.256	1.961	0.841	0.808	25.186	24.190	27.689	26.946	4,375	1,007	1.491	22.444	22.444	1.491	21.921	2.019	18.481	18.050	20.857	20.377
400JAM250-43	0.479	1.283	0.641	1.637	0.446	0.965	0.325	1.951	3.046	1.404	-2.381	0.389	1.268	0.534	0.489	15.981	14.635	15.133	14.726	2,141	967	0.446	8.908	8.380	0.389	8.130	1.283	11.631	11.014	11.479	11.208
400JAM250-54	0.599	1.591	0.796	1.630	0.554	0.962	0.640	2.432	3.037	1.401	-2.375	0.388	1.591	0.681	0.640	20.397	19.150	20.506	19.938	3,372	1,201	0.554	11.077	11.077	0.520	10.449	1.591	14.708	14.190	15.351	14.995
400JAM250-68	0.751	1.975	0.987	1.622	0.688	0.957	1.273	3.038	3.025	1.398	-2.368	0.387	1.975	0.891	0.858	26.669	25.675	27.679	26.913	4,876	1,360	0.688	13.790	13.790	0.686	13.411	1.975	21.143	19.215	21.490	19.313
400JAM250-97	1.061	2.730	1.365	1.604	0.953	0.948	3.658	4.255	3.000	1.390	-2.352	0.386	2.730	1.343	1.351	44.884	40.448	45.635	40.443	6,839	1,299	0.953	19.189	19.189	0.953	19.189	2.730	30.605	30.288	30.605	30.284
400JAM350-68	0.894	2.525	1.263	1.681	1.547	1.316	1.514	6.736	3.976	1.922	-3.354	0.288	2.447	0.955	0.909	28.602	27.223	30.818	30.002	4,876	1,360	1.547	22.789	22.789	1.530	22.043	2.519	20.930	20.378	23.268	22.736
400JAM350-97	1.265	3.503	1.751	1.664	2.158	1.306	4.360	9.488	3.953	1.915	-3.339	0.286	3.483	1.502	1.473	44.961	44.092	49.104	47.809	6,839	1,299	2.158	31.903	31.903	2.158	31.903	3.503	36.019	35.587	37.965	37.478
400JAM350-118	1.533	4.184	2.092	1.652	2.587	1.299	7.855	11.458	3.936	1.909	-3.328	0.285	4.184	1.980	1.955	59.268	58.533	62.640	61.275	8,235	1,256	2.587	38.361	38.361	2.587	38.361	4.184	44.732	44.265	46.055	45.671
550JAM250-43	0.547	2.667	0.970	2.209	0.503	0.959	0.371	3.497	3.230	1.297	-2.153	0.556	2.650	0.820	0.820	24.561	24.561	21.511	20.968	1,570	1,192	0.503	9.288	6.962	0.400	8.190	2.667	17.716	17.716	16.435	16.062
550JAM250-54	0.684	3.317	1.206	2.202	0.625	0.956	0.730	4.352	3.221	1.294	-2.147	0.556	3.317	1.043	1.043	31.227	31.227	29.377	28.604	3,117	1,875	0.625	11.554	9.763	0.542	10.559	3.317	22.334	22.334	22.187	21.682
550JAM250-68	0.858	4.129	1.501	2.194	0.776	0.951	1.454	5.423	3.208	1.290	-2.139	0.555	4.129	1.357	1.357	40.642	40.642	40.041	38.971	5,352	2,535	0.776	14.391	13.625	0.728	13.608	4.129	32.111	32.111	31.984	31.245
550JAM250-97	1.214	5.747	2.090	2.176	1.077	0.942	4.184	7.559	3.183	1.282	-2.123	0.555	5.747	2.051	2.051	68.578	68.578	68.487	66.650	9,700	3,167	1.077	20.045	20.045	1.077	19.791	5.747	46.849	46.849	46.849	46.616
550JAM250-118	1.471	6.881	2.502	2.163	1.285	0.935	7.538	9.058	3.163	1.275	-2.111	0.555	6.881	2.502	2.502	85.210	85.210	85.210	84.778	11,723	3,100	1.285	24.010	24.010	1.285	24.010	6.881	57.274	57.274	57.274	56.984
550JAM350-68	1.001	5.180	1.883	2.275	1.743	1.320	1.696	12.048	4.054	1.806	-3.084	0.421	4.957	1.450	1.450	43.421	43.421	43.539	42.448	5,352	2,535	1.743	23.876	22.948	1.613	22.354	5.144	31.469	31.469	33.109	32.375
550JAM350-97	1.417	7.228	2.629	2.259	2.434	1.311	4.886	16.898	4.029	1.798	-3.069	0.420	7.160	2.262	2.262	67.718	67.718	70.434	68.637	9,700	3,167	2.434	33.453	33.453	2.434	32.810	7.228	53.935	53.935	56.053	54.824
550JAM350-118	1.719	8.673	3.154	2.246	2.921	1.304	8.809	20.344	4.012	1.792	-3.057	0.419	8.673	2.976	2.976	89.112	89.112	91.138	88.891	11,723	3,100	2.921	40.250	40.250	2.921	40.250	8.673	67.271	67.271	69.422	69.143
600JAM250-43	0.569	3.261	1.087	2.394	0.519	0.955	0.386	4.150	3.317	1.266	-2.088	0.604	3.245	0.919	0.919	27.502	27.502	23.662	23.076	1,432	1,235	0.519	9.385	6.495	0.403	8.203	3.261	19.902	19.902	18.114	17.709
600JAM250-54	0.712	4.058	1.353	2.387	0.644	0.951	0.760	5.163	3.307	1.263	-2.082	0.604	4.058	1.174	1.174	35.140	35.140	32.383	31.545	2,842	1,942	0.644	11.676	9.203	0.546	10.582	4.058	25.073	25.073	24.516	23.962
600JAM250-68	0.894	5.055	1.685	2.378	0.801	0.947	1.514	6.431	3.295	1.259	-2.074	0.604	5.055	1.526	1.526	45.679	45.679	44.254	43.085	5,352	2,882	0.801	14.544	13.002	0.737	13.650	5.055	36.037	36.037	35.425	34.610
600JAM250-97	1.265	7.047	2.349	2.361	1.111	0.937	4.360	8.956	3.269	1.250	-2.058	0.604	7.047	2.305	2.305	77.070	77.070	76.026	73.996	10,653	3,964	1.111	20.261	20.261	1.111	19.891	7.047	52.663	52.663	52.663	52.449
600JAM250-118	1.533	8.447	2.816	2.348	1.327	0.930	7.855	10.726	3.250	1.244	-2.045	0.604	8.447	2.816	2.816	95.893	95.893	95.893	95.389	12,885	3,889	1.327	24.274	24.274	1.327	24.264	8.447	64.455	64.455	64.455	64.189
600JAM350-68	1.036	6.309	2.103	2.467	1.799	1.318	1.756	14.285	4.106	1.771	-3.006	0.464	6.055	1.628	1.628	48.757	48.757	47.851	46.671	5,352	2,882	1.799	24.160	21.969	1.631	22.421	6.263	35.238	35.238	36.455	35.655
600JAM350-97	1.468	8.816	2.939	2.451	2.513	1.308	5.061	20.020	4.081	1.763	-2.990	0.463	8.730	2.534	2.534	75.856	75.856	77.711	75.750	10,653	3,964	2.513	33.858	33.858	2.512	32.975	8.816	60.297	60.297	61.964	60.610
600JAM350-118	1.781	10.588	3.529	2.438	3.017	1.302	9.127	24.090	4.063	1.757	-2.978																				