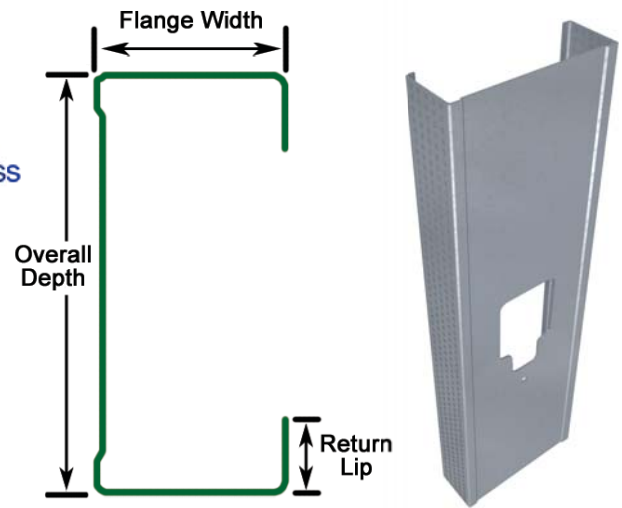


PrimeWall® Drywall Accesories

Stud Section Properties



Material Composition

ASTM A1003/A 1003M Non Structural Grade 33 (230), 33 ksi (230 MPa) minimum yield strength, G40 (Z120) hot-dipped galvanized coating, or equivalent conforming to ASTM C645. Other steel materials with G40 coating are also available upon request.

Knockouts

- Knockout is .75" wide in 1.625" and 2.5" studs
- Knockout is 1.5" wide in 3.5" and wider studs
- Knockouts begin 12" from the bottom and are spaced vertically every 24" o.c. for East and Central Region studs; for West Region studs, knockouts begin 24" from the bottom and are spaced vertically every 24" o.c.

Important Table Notes

1. Calculated properties are based on AISI S100-07, North American Specification for the Design of Cold-Formed Steel Structural Members.
2. The centerline bend radius is based upon inside corner radii shown in the Thickness Table in SFIA Technical Guide for Cold-Formed Steel Framing Products.
3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI S100-07 Sec. A7.2.
4. Tabulated gross properties, including torsional properties, are based upon full-unreduced cross section of the studs, away from punchouts.
5. For deflection calculations, use the effective moment of inertia.

Non-Structural PrimeWall® Stud Section Properties																				
Section	Design Thickness (in)	Gross							Effective - 33ksi							Torsional				
		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 _{al} (in-k)	V _{ag} (lb)	V _{anet} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β
162S125-18	0.0188	0.080	0.27	0.038	0.046	0.686	0.016	0.447	0.034	0.031	0.61	0.65	302	100	0.009	0.009	-1.029	0.594	1.315	0.388
162S125-27	0.0283	0.120	0.41	0.056	0.069	0.682	0.023	0.443	0.055	0.053	1.05	1.14	494	106	0.032	0.013	-1.018	0.587	1.303	0.390
162S125-30	0.0312	0.132	0.45	0.061	0.075	0.681	0.026	0.441	0.060	0.060	1.19	1.30	543	106	0.043	0.014	-1.014	0.585	1.299	0.390
250S125-18	0.0188	0.097	0.33	0.099	0.079	1.014	0.019	0.439	0.089	0.060	1.18	1.03	258	196	0.011	0.023	-0.904	0.543	1.428	0.599
250S125-27	0.0283	0.144	0.49	0.147	0.118	1.009	0.027	0.434	0.145	0.098	1.93	1.83	685	344	0.039	0.034	-0.893	0.537	1.416	0.602
250S125-30	0.0312	0.159	0.54	0.161	0.129	1.008	0.030	0.433	0.159	0.110	2.18	2.09	832	378	0.052	0.037	-0.890	0.535	1.413	0.603
350S125-18	0.0188	0.115	0.39	0.215	0.123	1.366	0.021	0.423	0.197	0.072	1.42	1.47	180	159	0.014	0.050	-0.798	0.495	1.638	0.763
350S125-27	0.0283	0.173	0.59	0.320	0.183	1.361	0.030	0.419	0.313	0.130	2.57	2.65	614	359	0.046	0.073	-0.788	0.489	1.627	0.766
350S125-30	0.0312	0.190	0.65	0.351	0.201	1.360	0.033	0.417	0.346	0.150	2.97	3.05	824	436	0.062	0.079	-0.784	0.488	1.624	0.767
362S125-18	0.0188	0.118	0.40	0.234	0.129	1.409	0.021	0.421	0.215	0.075	1.48	1.52	173	163	0.014	0.054	-0.786	0.490	1.667	0.778
362S125-27	0.0283	0.176	0.60	0.347	0.192	1.404	0.031	0.416	0.340	0.135	2.67	2.76	592	370	0.047	0.079	-0.776	0.484	1.657	0.781
362S125-30	0.0312	0.194	0.66	0.381	0.210	1.402	0.033	0.415	0.375	0.156	3.09	3.17	794	449	0.063	0.086	-0.773	0.482	1.654	0.782
400S125-18	0.0188	0.125	0.42	0.294	0.147	1.536	0.021	0.415	0.273	0.083	1.64	1.69	156	156	0.015	0.068	-0.755	0.475	1.761	0.816
400S125-27	0.0283	0.187	0.64	0.438	0.219	1.531	0.031	0.410	0.428	0.151	2.98	3.07	533	398	0.05	0.098	-0.745	0.469	1.751	0.819
400S125-30	0.0312	0.206	0.70	0.481	0.240	1.529	0.034	0.409	0.473	0.174	3.44	3.54	715	484	0.067	0.108	-0.742	0.467	1.748	0.820
550S125-18 ¹	0.0188	0.153	0.52	0.630	0.229	2.029	0.023	0.390							0.018	0.141	-0.651	0.423	2.166	0.910
550S125-27	0.0283	0.229	0.78	0.939	0.341	2.023	0.034	0.385	0.898	0.246	4.87	4.27	382	382	0.061	0.205	-0.642	0.417	2.158	0.912
550S125-30	0.0312	0.252	0.86	1.032	0.375	2.022	0.037	0.384	0.996	0.286	5.65	4.95	512	512	0.082	0.224	-0.639	0.416	2.155	0.912
600S125-18 ¹	0.0188	0.162	0.55	0.779	0.260	2.190	0.024	0.382							0.019	0.172	-0.623	0.408	2.308	0.927
600S125-27	0.0283	0.243	0.83	1.161	0.387	2.184	0.035	0.378	1.097	0.271	5.35	4.64	349	349	0.065	0.251	-0.614	0.403	2.300	0.929
600S125-30	0.0312	0.268	0.91	1.276	0.425	2.182	0.038	0.376	1.219	0.315	6.22	5.40	468	468	0.087	0.274	-0.611	0.401	2.297	0.929

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

² When web height to thickness ratio exceeds 260, or flange width to thickness ratio exceeds 60, effective properties are not calculated (limitations in AISI S100-07 Sec. B1).