



SUBSTITUTION REQUEST

(During the Bidding/Negotiating Stage)

Project: _____ Substitution Request Number: _____

From: _____

To: _____ Date: _____

A/E Project Number: _____

Re: _____ Contract For: _____

Specification Title: _____ Description: _____

Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

ProSTUD™ 25 Drywall Stud

ClarkWestern ProSTUD 25 physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDS125-15	0.0158	70ksi	0.071	0.241	0.033	0.041	0.688	0.015	0.466	0.028	0.028	0.022	902	0.00589	0.009	-1.088	1.369	0.368
250PDS125-15	0.0158	70ksi	0.085	0.288	0.088	0.070	1.020	0.018	0.459	0.029	0.077	0.038	1582	0.00704	0.023	-0.959	1.473	0.576
362PDS125-15 ₁	0.0158	70ksi	0.102	0.348	0.206	0.114	1.420	0.020	0.442	0.029	0.159	0.051	2128	0.00852	0.051	-0.837	1.706	0.760
400PDS125-15 ₁	0.0158	70ksi	0.108	0.369	0.260	0.130	1.549	0.021	0.436	0.029	0.197	0.056	2364	0.00901	0.064	-0.803	1.798	0.800
600PDS125-15 ₂	0.0158	70ksi	0.140	0.476	0.683	0.228	2.209	0.023	0.404	—	—	—	—	0.01164	0.161	-0.666	2.343	0.919

ProTRAK™ 25 Drywall Track

ClarkWestern ProTRAK 25 physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDT125-15	1.25	0.0158	50ksi	0.065	0.222	0.034	0.040	0.717	0.011	0.412	0.020	0.021	0.016	464	0.00542	0.006	-0.881	1.208	0.468
162PDT150-15	1.50	0.0158	50ksi	0.073	0.249	0.039	0.046	0.731	0.018	0.497	0.020	0.023	0.015	460	0.00608	0.009	-1.110	1.419	0.388
162PDT200-15	2.00	0.0158	50ksi	0.089	0.302	0.050	0.059	0.752	0.039	0.663	0.020	0.025	0.015	455	0.00739	0.020	-1.579	1.870	0.287
162PDT250-15	2.50	0.0158	50ksi	0.105	0.356	0.061	0.072	0.766	0.071	0.824	0.020	0.025	0.015	464	0.00871	0.038	-2.058	2.345	0.230
162PDT300-15	3.00	0.0158	50ksi	0.120	0.410	0.073	0.086	0.776	0.116	0.981	0.020	0.025	0.016	486	0.01002	0.063	-2.542	2.834	0.195
250PDT125-15	1.25	0.0158	50ksi	0.079	0.269	0.085	0.066	1.038	0.013	0.400	0.020	0.059	0.024	724	0.00657	0.015	-0.771	1.353	0.675
250PDT150-15	1.50	0.0158	50ksi	0.087	0.296	0.098	0.076	1.062	0.021	0.489	0.020	0.061	0.024	723	0.00723	0.024	-0.985	1.529	0.585
250PDT200-15	2.00	0.0158	50ksi	0.103	0.349	0.124	0.096	1.098	0.045	0.662	0.021	0.064	0.024	720	0.00854	0.052	-1.431	1.921	0.445
250PDT250-15	2.50	0.0158	50ksi	0.118	0.403	0.150	0.116	1.123	0.082	0.831	0.021	0.064	0.024	702	0.00986	0.096	-1.892	2.352	0.353
250PDT300-15	3.00	0.0158	50ksi	0.134	0.457	0.175	0.136	1.143	0.133	0.996	0.021	0.067	0.025	748	0.01117	0.158	-2.363	2.807	0.291
362PDT125-15 ₁	1.25	0.0158	50ksi	0.097	0.329	0.196	0.106	1.425	0.014	0.381	0.021	0.125	0.035	1059	0.00805	0.034	-0.668	1.619	0.830
362PDT150-15 ₁	1.50	0.0158	50ksi	0.105	0.356	0.223	0.121	1.460	0.023	0.470	0.021	0.129	0.035	1061	0.00871	0.056	-0.865	1.761	0.759
362PDT200-15 ₁	2.00	0.0158	50ksi	0.120	0.410	0.277	0.150	1.516	0.051	0.648	0.021	0.137	0.036	1063	0.01002	0.120	-1.282	2.088	0.623
362PDT250-15 ₁	2.50	0.0158	50ksi	0.136	0.464	0.330	0.179	1.557	0.092	0.823	0.021	0.147	0.036	1046	0.01134	0.220	-1.720	2.462	0.512
362PDT300-15 ₁	3.00	0.0158	50ksi	0.152	0.517	0.384	0.208	1.589	0.151	0.995	0.021	0.145	0.036	1090	0.01265	0.361	-2.172	2.869	0.427
400PDT125-15 ₁	1.25	0.0158	50ksi	0.103	0.349	0.247	0.121	1.550	0.014	0.374	0.021	0.153	0.039	1171	0.00854	0.043	-0.640	1.718	0.861
400PDT150-15 ₁	1.50	0.0158	50ksi	0.111	0.376	0.279	0.137	1.589	0.024	0.464	0.021	0.158	0.039	1175	0.00920	0.070	-0.832	1.852	0.798
400PDT200-15 ₁	2.00	0.0158	50ksi	0.126	0.430	0.344	0.169	1.650	0.052	0.642	0.021	0.168	0.039	1178	0.01052	0.151	-1.240	2.162	0.671
400PDT250-15 ₁	2.50	0.0158	50ksi	0.142	0.484	0.409	0.201	1.696	0.095	0.819	0.021	0.178	0.040	1181	0.01183	0.275	-1.670	2.517	0.560
400PDT300-15 ₁	3.00	0.0158	50ksi	0.158	0.538	0.474	0.233	1.732	0.155	0.992	0.021	0.178	0.040	1204	0.01315	0.450	-2.116	2.909	0.471
600PDT125-15 ₂	1.25	0.0158	50ksi	0.134	0.457	0.646	0.213	2.194	0.016	0.343	—	—	—	—	0.01117	0.108	-0.524	2.282	0.947
600PDT150-15 ₂	1.50	0.0158	50ksi	0.142	0.484	0.719	0.237	2.249	0.026	0.430	—	—	—	—	0.01183	0.177	-0.692	2.392	0.916
600PDT200-15 ₂	2.00	0.0158	50ksi	0.158	0.538	0.864	0.285	2.338	0.058	0.608	—	—	—	—	0.01315	0.383	-1.058	2.638	0.839
600PDT250-15 ₂	2.50	0.0158	50ksi	0.174	0.591	1.009	0.332	2.409	0.108	0.787	—	—	—	—	0.01446	0.697	-1.452	2.921	0.753
600PDT300-15 ₂	3.00	0.0158	50ksi	0.190	0.645	1.153	0.380	2.467	0.177	0.965	—	—	—	—	0.01578	1.136	-1.865	3.239	0.669

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (I_{xe}) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.

ProSTUD™ 22 Drywall Stud

ClarkWestern ProSTUD 22 physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDS125-18	0.0188	70ksi	0.084	0.286	0.040	0.049	0.687	0.018	0.464	0.036	0.033	0.027	1140	0.00989	0.011	-1.085	1.365	0.369
250PDS125-18	0.0188	70ksi	0.100	0.342	0.104	0.083	1.018	0.021	0.457	0.037	0.092	0.049	2059	0.01183	0.027	-0.955	1.469	0.577
362PDS125-18	0.0188	70ksi	0.122	0.414	0.244	0.135	1.418	0.024	0.441	0.037	0.194	0.065	2723	0.01432	0.061	-0.833	1.703	0.761
400PDS125-18 ₁	0.0188	70ksi	0.129	0.438	0.308	0.154	1.547	0.024	0.434	0.037	0.241	0.072	3028	0.01515	0.076	-0.800	1.795	0.801
600PDS125-18 ₂	0.0188	70ksi	0.166	0.566	0.810	0.270	2.207	0.027	0.402	—	—	—	—	0.01958	0.190	-0.663	2.340	0.920

ProTRAK™ 22 Drywall Track

ClarkWestern ProTRAK 22 physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDT125-18	1.25	0.0188	50ksi	0.078	0.264	0.040	0.047	0.718	0.013	0.411	0.027	0.026	0.022	649	0.00913	0.007	-0.879	1.208	0.470
162PDT150-18	1.50	0.0188	50ksi	0.087	0.296	0.047	0.055	0.733	0.021	0.496	0.028	0.028	0.021	640	0.01024	0.011	-1.108	1.418	0.389
162PDT200-18	2.00	0.0188	50ksi	0.106	0.360	0.060	0.070	0.753	0.046	0.662	0.028	0.032	0.021	629	0.01245	0.024	-1.577	1.869	0.288
162PDT250-18	2.50	0.0188	50ksi	0.125	0.424	0.073	0.086	0.767	0.084	0.823	0.028	0.034	0.021	623	0.01467	0.045	-2.056	2.344	0.231
162PDT300-18	3.00	0.0188	50ksi	0.143	0.488	0.087	0.102	0.777	0.138	0.981	0.028	0.037	0.020	643	0.01688	0.075	-2.540	2.832	0.195
250PDT125-18	1.25	0.0188	50ksi	0.094	0.320	0.101	0.079	1.038	0.015	0.400	0.028	0.072	0.034	1008	0.01107	0.017	-0.770	1.353	0.676
250PDT150-18	1.50	0.0188	50ksi	0.103	0.352	0.117	0.091	1.063	0.025	0.488	0.028	0.078	0.034	1003	0.01218	0.028	-0.984	1.528	0.586
250PDT200-18	2.00	0.0188	50ksi	0.122	0.416	0.147	0.114	1.099	0.053	0.661	0.028	0.086	0.033	996	0.01439	0.062	-1.430	1.920	0.446
250PDT250-18	2.50	0.0188	50ksi	0.141	0.480	0.178	0.138	1.124	0.097	0.830	0.028	0.089	0.033	991	0.01661	0.114	-1.891	2.351	0.353
250PDT300-18	3.00	0.0188	50ksi	0.160	0.544	0.209	0.162	1.144	0.158	0.995	0.028	0.092	0.034	964	0.01882	0.189	-2.361	2.806	0.292
362PDT125-18	1.25	0.0188	50ksi	0.115	0.392	0.234	0.126	1.426	0.017	0.380	0.029	0.170	0.049	1467	0.01356	0.040	-0.666	1.619	0.831
362PDT150-18	1.50	0.0188	50ksi	0.125	0.424	0.266	0.144	1.461	0.027	0.470	0.029	0.175	0.049	1469	0.01467	0.066	-0.863	1.761	0.760
362PDT200-18	2.00	0.0188	50ksi	0.143	0.488	0.330	0.178	1.517	0.060	0.648	0.029	0.184	0.049	1470	0.01688	0.143	-1.281	2.088	0.624
362PDT250-18	2.50	0.0188	50ksi	0.162	0.552	0.393	0.212	1.558	0.110	0.823	0.029	0.192	0.049	1469	0.01910	0.262	-1.718	2.461	0.512
362PDT300-18	3.00	0.0188	50ksi	0.181	0.616	0.457	0.247	1.590	0.179	0.994	0.029	0.195	0.049	1442	0.02131	0.430	-2.170	2.868	0.427
400PDT125-18 ₁	1.25	0.0188	50ksi	0.122	0.416	0.294	0.144	1.550	0.017	0.374	0.029	0.207	0.054	1621	0.01439	0.051	-0.638	1.718	0.862
400PDT150-18 ₁	1.50	0.0188	50ksi	0.132	0.448	0.332	0.163	1.589	0.028	0.463	0.029	0.214	0.054	1625	0.01550	0.083	-0.830	1.852	0.799
400PDT200-18 ₁	2.00	0.0188	50ksi	0.150	0.512	0.410	0.201	1.651	0.062	0.642	0.029	0.225	0.054	1629	0.01771	0.179	-1.238	2.161	0.672
400PDT250-18 ₁	2.50	0.0188	50ksi	0.169	0.576	0.487	0.239	1.697	0.113	0.818	0.029	0.235	0.054	1629	0.01993	0.327	-1.669	2.517	0.560
400PDT300-18 ₁	3.00	0.0188	50ksi	0.188	0.640	0.565	0.277	1.733	0.185	0.991	0.029	0.239	0.055	1603	0.02214	0.536	-2.114	2.908	0.471
600PDT125-18 ₂	1.25	0.0188	50ksi	0.160	0.544	0.769	0.253	2.195	0.019	0.342	—	—	—	—	0.01882	0.129	-0.523	2.282	0.947
600PDT150-18 ₂	1.50	0.0188	50ksi	0.169	0.576	0.856	0.282	2.249	0.031	0.429	—	—	—	—	0.01993	0.211	-0.691	2.392	0.916
600PDT200-18 ₂	2.00	0.0188	50ksi	0.188	0.640	1.028	0.338	2.339	0.069	0.607	—	—	—	—	0.02214	0.456	-1.057	2.637	0.839
600PDT250-18 ₂	2.50	0.0188	50ksi	0.207	0.704	1.201	0.395	2.410	0.128	0.786	—	—	—	—	0.02436	0.829	-1.450	2.920	0.753
600PDT300-18 ₂	3.00	0.0188	50ksi	0.226	0.768	1.373	0.452	2.468	0.210	0.965	—	—	—	—	0.02657	1.352	-1.863	3.239	0.669

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (I_{xe}) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.

ProSTUD™ 20 Drywall Stud

ClarkWestern ProSTUD 20 physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDS125-22	0.0232	65ksi	0.103	0.351	0.048	0.059	0.685	0.022	0.462	0.051	0.042	0.037	1444	0.01850	0.013	-1.079	1.359	0.369
250PDS125-22	0.0232	65ksi	0.123	0.420	0.127	0.102	1.016	0.026	0.455	0.052	0.114	0.071	2765	0.02214	0.033	-0.950	1.464	0.579
362PDS125-22	0.0232	65ksi	0.150	0.509	0.300	0.166	1.417	0.029	0.438	0.052	0.252	0.091	3526	0.02684	0.074	-0.828	1.699	0.762
400PDS125-22	0.0232	65ksi	0.158	0.538	0.377	0.189	1.544	0.030	0.432	0.052	0.313	0.101	3924	0.02838	0.092	-0.795	1.790	0.803
600PDS125-22 ₁	0.0232	65ksi	0.205	0.696	0.994	0.331	2.204	0.033	0.400	0.053	0.802	0.167	6495	0.03671	0.231	-0.658	2.335	0.921

ProTRAK™ 20 Drywall Track

ClarkWestern ProTRAK 20 physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDT125-22	1.25	0.0232	50ksi	0.096	0.325	0.050	0.058	0.720	0.016	0.411	0.040	0.034	0.029	877	0.01715	0.008	-0.877	1.206	0.472
162PDT150-22	1.50	0.0232	50ksi	0.107	0.365	0.058	0.068	0.734	0.026	0.496	0.040	0.037	0.030	902	0.01923	0.013	-1.105	1.417	0.391
162PDT200-22	2.00	0.0232	50ksi	0.130	0.444	0.074	0.087	0.755	0.057	0.661	0.041	0.041	0.031	935	0.02340	0.030	-1.574	1.867	0.289
162PDT250-22	2.50	0.0232	50ksi	0.154	0.523	0.091	0.106	0.769	0.104	0.823	0.041	0.045	0.031	921	0.02756	0.055	-2.053	2.342	0.231
162PDT300-22	3.00	0.0232	50ksi	0.177	0.602	0.107	0.125	0.779	0.170	0.980	0.041	0.048	0.030	912	0.03172	0.093	-2.538	2.830	0.196
250PDT125-22	1.25	0.0232	50ksi	0.116	0.394	0.125	0.097	1.040	0.018	0.399	0.041	0.092	0.051	1525	0.02079	0.021	-0.767	1.352	0.678
250PDT150-22	1.50	0.0232	50ksi	0.128	0.434	0.144	0.112	1.064	0.030	0.487	0.042	0.100	0.050	1508	0.02288	0.035	-0.981	1.527	0.587
250PDT200-22	2.00	0.0232	50ksi	0.151	0.513	0.182	0.141	1.100	0.066	0.660	0.042	0.112	0.050	1485	0.02704	0.076	-1.427	1.919	0.447
250PDT250-22	2.50	0.0232	50ksi	0.174	0.592	0.221	0.171	1.126	0.120	0.829	0.042	0.122	0.049	1472	0.03120	0.141	-1.888	2.350	0.354
250PDT300-22	3.00	0.0232	50ksi	0.197	0.671	0.259	0.200	1.145	0.195	0.994	0.042	0.131	0.049	1462	0.03536	0.233	-2.359	2.804	0.293
362PDT125-22	1.25	0.0232	50ksi	0.142	0.483	0.290	0.156	1.428	0.020	0.379	0.042	0.228	0.073	2197	0.02549	0.050	-0.664	1.620	0.832
362PDT150-22	1.50	0.0232	50ksi	0.154	0.523	0.329	0.177	1.463	0.034	0.469	0.042	0.244	0.073	2195	0.02757	0.082	-0.861	1.761	0.761
362PDT200-22	2.00	0.0232	50ksi	0.177	0.602	0.408	0.220	1.519	0.074	0.647	0.043	0.268	0.073	2189	0.03173	0.177	-1.278	2.088	0.625
362PDT250-22	2.50	0.0232	50ksi	0.200	0.681	0.487	0.262	1.560	0.135	0.822	0.043	0.277	0.073	2183	0.03590	0.324	-1.716	2.460	0.514
362PDT300-22	3.00	0.0232	50ksi	0.223	0.760	0.566	0.305	1.592	0.220	0.994	0.043	0.286	0.073	2177	0.04006	0.532	-2.167	2.867	0.429
400PDT125-22	1.25	0.0232	50ksi	0.151	0.513	0.363	0.178	1.551	0.021	0.373	0.042	0.290	0.081	2419	0.02704	0.062	-0.636	1.718	0.863
400PDT150-22	1.50	0.0232	50ksi	0.162	0.552	0.411	0.201	1.590	0.035	0.462	0.043	0.311	0.081	2422	0.02912	0.102	-0.828	1.852	0.800
400PDT200-22	2.00	0.0232	50ksi	0.186	0.631	0.506	0.248	1.652	0.076	0.641	0.043	0.326	0.081	2421	0.03328	0.221	-1.236	2.161	0.673
400PDT250-22	2.50	0.0232	50ksi	0.209	0.710	0.602	0.295	1.698	0.139	0.817	0.043	0.338	0.081	2418	0.03744	0.404	-1.666	2.516	0.561
400PDT300-22	3.00	0.0232	50ksi	0.232	0.789	0.698	0.342	1.735	0.228	0.991	0.043	0.349	0.081	2414	0.04161	0.662	-2.112	2.907	0.472
600PDT125-22 ₁	1.25	0.0232	50ksi	0.197	0.671	0.950	0.312	2.195	0.023	0.341	0.043	0.638	0.119	3568	0.03536	0.158	-0.522	2.282	0.948
600PDT150-22 ₁	1.50	0.0232	50ksi	0.209	0.710	1.056	0.347	2.250	0.038	0.429	0.043	0.668	0.120	3604	0.03744	0.259	-0.690	2.392	0.917
600PDT200-22 ₁	2.00	0.0232	50ksi	0.232	0.789	1.270	0.417	2.340	0.085	0.606	0.043	0.746	0.123	3675	0.04161	0.562	-1.055	2.637	0.840
600PDT250-22 ₁	2.50	0.0232	50ksi	0.255	0.868	1.483	0.487	2.411	0.157	0.785	0.043	0.779	0.123	3687	0.04577	1.022	-1.448	2.920	0.754
600PDT300-22 ₁	3.00	0.0232	50ksi	0.278	0.947	1.696	0.557	2.469	0.258	0.964	0.044	0.807	0.123	3691	0.04993	1.667	-1.861	3.238	0.670

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (I_{xe}) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.

ProSTUD™ 20HD Heavy Duty Drywall Stud

ClarkWestern ProSTUD 20HD physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDS125-26	0.0274	65ksi	0.121	0.412	0.056	0.070	0.683	0.026	0.460	0.065	0.051	0.046	1807	0.03033	0.015	-1.074	1.353	0.370
250PDS125-26	0.0274	65ksi	0.145	0.494	0.149	0.119	1.014	0.030	0.453	0.067	0.136	0.089	3465	0.03633	0.038	-0.945	1.458	0.580
362PDS125-26	0.0274	65ksi	0.176	0.599	0.352	0.194	1.413	0.033	0.436	0.067	0.305	0.115	4489	0.04404	0.086	-0.824	1.693	0.763
400PDS125-26	0.0274	65ksi	0.186	0.634	0.443	0.221	1.542	0.034	0.430	0.068	0.381	0.129	5008	0.04661	0.107	-0.791	1.785	0.804
600PDS125-26 ₁	0.0274	65ksi	0.241	0.820	1.168	0.389	2.201	0.038	0.398	0.068	0.985	0.215	8375	0.06033	0.269	-0.654	2.331	0.921

ProTRAK™ 20HD Heavy Duty Drywall Track

ClarkWestern ProTRAK 20HD physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDT125-26	1.25	0.0274	50ksi	0.113	0.384	0.059	0.068	0.721	0.019	0.410	0.054	0.043	0.037	1103	0.02824	0.010	-0.874	1.205	0.474
162PDT150-26	1.50	0.0274	50ksi	0.127	0.431	0.068	0.080	0.736	0.031	0.495	0.054	0.046	0.038	1136	0.03167	0.016	-1.103	1.415	0.393
162PDT200-26	2.00	0.0274	50ksi	0.154	0.524	0.088	0.102	0.756	0.067	0.661	0.055	0.052	0.040	1183	0.03853	0.035	-1.572	1.865	0.290
162PDT250-26	2.50	0.0274	50ksi	0.181	0.617	0.108	0.125	0.771	0.123	0.822	0.055	0.056	0.041	1215	0.04539	0.066	-2.050	2.340	0.232
162PDT300-26	3.00	0.0274	50ksi	0.209	0.710	0.127	0.148	0.781	0.200	0.980	0.055	0.059	0.041	1239	0.05224	0.110	-2.535	2.828	0.196
250PDT125-26	1.25	0.0274	50ksi	0.137	0.466	0.148	0.114	1.041	0.022	0.398	0.056	0.113	0.068	2042	0.03424	0.025	-0.765	1.352	0.679
250PDT150-26	1.50	0.0274	50ksi	0.151	0.512	0.171	0.132	1.065	0.036	0.486	0.057	0.121	0.070	2104	0.03767	0.041	-0.979	1.526	0.588
250PDT200-26	2.00	0.0274	50ksi	0.178	0.605	0.216	0.166	1.102	0.077	0.660	0.057	0.137	0.069	2053	0.04453	0.090	-1.425	1.918	0.448
250PDT250-26	2.50	0.0274	50ksi	0.205	0.699	0.261	0.201	1.128	0.141	0.829	0.057	0.150	0.068	2022	0.05139	0.167	-1.886	2.348	0.355
250PDT300-26	3.00	0.0274	50ksi	0.233	0.792	0.306	0.236	1.147	0.230	0.994	0.057	0.160	0.067	2003	0.05824	0.276	-2.356	2.803	0.293
362PDT125-26	1.25	0.0274	50ksi	0.168	0.571	0.342	0.184	1.427	0.024	0.379	0.058	0.275	0.102	3052	0.04196	0.059	-0.663	1.619	0.832
362PDT150-26	1.50	0.0274	50ksi	0.181	0.617	0.388	0.209	1.463	0.040	0.468	0.058	0.295	0.101	3036	0.04539	0.096	-0.859	1.760	0.762
362PDT200-26	2.00	0.0274	50ksi	0.209	0.710	0.482	0.259	1.519	0.087	0.646	0.058	0.331	0.101	3011	0.05224	0.209	-1.276	2.086	0.626
362PDT250-26	2.50	0.0274	50ksi	0.236	0.804	0.575	0.309	1.561	0.159	0.821	0.058	0.361	0.100	2993	0.05910	0.382	-1.714	2.459	0.514
362PDT300-26	3.00	0.0274	50ksi	0.264	0.897	0.668	0.359	1.593	0.260	0.993	0.059	0.382	0.100	2979	0.06596	0.627	-2.165	2.865	0.429
400PDT125-26	1.25	0.0274	50ksi	0.178	0.605	0.429	0.209	1.552	0.025	0.372	0.058	0.350	0.112	3352	0.04453	0.074	-0.635	1.718	0.863
400PDT150-26	1.50	0.0274	50ksi	0.192	0.652	0.485	0.237	1.591	0.041	0.462	0.058	0.375	0.112	3345	0.04796	0.120	-0.826	1.852	0.801
400PDT200-26	2.00	0.0274	50ksi	0.219	0.745	0.599	0.292	1.653	0.090	0.640	0.059	0.420	0.111	3330	0.05481	0.261	-1.234	2.160	0.674
400PDT250-26	2.50	0.0274	50ksi	0.246	0.839	0.712	0.348	1.700	0.164	0.817	0.059	0.455	0.111	3317	0.06167	0.477	-1.664	2.515	0.562
400PDT300-26	3.00	0.0274	50ksi	0.274	0.932	0.825	0.403	1.736	0.268	0.990	0.059	0.467	0.110	3306	0.06853	0.782	-2.109	2.906	0.473
600PDT125-26 ₁	1.25	0.0274	50ksi	0.233	0.792	1.122	0.368	2.196	0.027	0.340	0.059	0.819	0.161	4833	0.05824	0.187	-0.520	2.282	0.948
600PDT150-26 ₁	1.50	0.0274	50ksi	0.246	0.839	1.248	0.410	2.251	0.045	0.428	0.059	0.860	0.163	4891	0.06167	0.306	-0.688	2.392	0.917
600PDT200-26 ₁	2.00	0.0274	50ksi	0.274	0.932	1.500	0.492	2.341	0.100	0.606	0.059	0.996	0.168	5038	0.06853	0.663	-1.053	2.637	0.841
600PDT250-26 ₁	2.50	0.0274	50ksi	0.301	1.025	1.753	0.575	2.412	0.185	0.785	0.060	1.038	0.169	5051	0.07538	1.206	-1.446	2.920	0.755
600PDT300-26 ₁	3.00	0.0274	50ksi	0.329	1.118	2.005	0.658	2.470	0.305	0.963	0.060	1.073	0.169	5056	0.08224	1.969	-1.859	3.238	0.670

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (I_{xe}) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.

ProSTUD™ 30MIL Drywall Stud

ClarkWestern ProSTUD 30MIL physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDS125-30	0.0312	33ksi	0.137	0.468	0.064	0.078	0.681	0.029	0.458	0.098	0.063	0.067	1332	0.04459	0.017	-1.070	1.348	0.371
250PDS125-30	0.0312	33ksi	0.165	0.561	0.169	0.135	1.012	0.034	0.451	0.106	0.168	0.121	2383	0.05345	0.042	-0.941	1.454	0.581
362PDS125-30	0.0312	33ksi	0.200	0.680	0.398	0.220	1.411	0.038	0.434	0.107	0.385	0.176	3488	0.06484	0.096	-0.820	1.689	0.764
400PDS125-30	0.0312	33ksi	0.212	0.720	0.501	0.251	1.540	0.039	0.428	0.108	0.485	0.198	3910	0.06864	0.120	-0.787	1.781	0.805
600PDS125-30	0.0312	33ksi	0.274	0.932	1.324	0.441	2.199	0.043	0.396	0.109	1.281	0.338	6671	0.08888	0.303	-0.651	2.327	0.922

ProTRAK™ 30MIL Drywall Track

ClarkWestern ProTRAK 30MIL physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	B Beta
162PDT125-30	1.25	0.0312	33ksi	0.128	0.437	0.067	0.078	0.722	0.022	0.409	0.080	0.054	0.048	951	0.04168	0.011	-0.872	1.204	0.475
162PDT150-30	1.50	0.0312	33ksi	0.144	0.490	0.078	0.091	0.737	0.035	0.494	0.080	0.059	0.050	983	0.04674	0.018	-1.101	1.414	0.394
162PDT200-30	2.00	0.0312	33ksi	0.175	0.596	0.101	0.117	0.758	0.076	0.660	0.081	0.067	0.052	1028	0.05687	0.040	-1.570	1.864	0.291
162PDT250-30	2.50	0.0312	33ksi	0.206	0.703	0.123	0.143	0.772	0.139	0.821	0.082	0.073	0.054	1059	0.06699	0.075	-2.048	2.338	0.233
162PDT300-30	3.00	0.0312	33ksi	0.238	0.809	0.146	0.169	0.783	0.228	0.979	0.082	0.078	0.055	1081	0.07712	0.125	-2.532	2.826	0.197
250PDT125-30	1.25	0.0312	33ksi	0.156	0.530	0.169	0.130	1.042	0.025	0.397	0.084	0.140	0.087	1713	0.05054	0.029	-0.763	1.351	0.681
250PDT150-30	1.50	0.0312	33ksi	0.171	0.583	0.195	0.150	1.066	0.040	0.486	0.085	0.151	0.090	1773	0.05560	0.047	-0.977	1.526	0.590
250PDT200-30	2.00	0.0312	33ksi	0.203	0.689	0.246	0.189	1.103	0.088	0.659	0.086	0.170	0.094	1862	0.06573	0.103	-1.423	1.917	0.449
250PDT250-30	2.50	0.0312	33ksi	0.234	0.795	0.298	0.229	1.129	0.160	0.828	0.086	0.186	0.097	1926	0.07585	0.190	-1.883	2.347	0.356
250PDT300-30	3.00	0.0312	33ksi	0.265	0.902	0.350	0.269	1.149	0.261	0.993	0.087	0.199	0.100	1973	0.08597	0.315	-2.354	2.801	0.294
362PDT125-30	1.25	0.0312	33ksi	0.191	0.649	0.389	0.209	1.428	0.027	0.378	0.087	0.330	0.149	2938	0.06193	0.067	-0.661	1.619	0.833
362PDT150-30	1.50	0.0312	33ksi	0.206	0.703	0.443	0.237	1.464	0.045	0.468	0.088	0.354	0.154	3042	0.06699	0.109	-0.858	1.760	0.763
362PDT200-30	2.00	0.0312	33ksi	0.238	0.809	0.549	0.295	1.520	0.099	0.645	0.089	0.397	0.160	3159	0.07712	0.237	-1.274	2.086	0.627
362PDT250-30	2.50	0.0312	33ksi	0.269	0.915	0.656	0.352	1.562	0.181	0.820	0.089	0.436	0.157	3097	0.08724	0.435	-1.712	2.458	0.515
362PDT300-30	3.00	0.0312	33ksi	0.300	1.021	0.762	0.409	1.594	0.295	0.992	0.089	0.470	0.155	3056	0.09736	0.714	-2.163	2.864	0.430
400PDT125-30	1.25	0.0312	33ksi	0.203	0.689	0.489	0.238	1.553	0.028	0.371	0.088	0.417	0.172	3407	0.06573	0.084	-0.633	1.718	0.864
400PDT150-30	1.50	0.0312	33ksi	0.218	0.742	0.553	0.270	1.592	0.046	0.461	0.088	0.446	0.178	3526	0.07079	0.137	-0.825	1.851	0.802
400PDT200-30	2.00	0.0312	33ksi	0.249	0.849	0.682	0.333	1.654	0.102	0.639	0.089	0.502	0.176	3480	0.08091	0.297	-1.232	2.160	0.674
400PDT250-30	2.50	0.0312	33ksi	0.281	0.955	0.812	0.396	1.701	0.187	0.816	0.090	0.551	0.173	3425	0.09104	0.543	-1.662	2.514	0.563
400PDT300-30	3.00	0.0312	33ksi	0.312	1.061	0.941	0.459	1.737	0.305	0.989	0.090	0.593	0.171	3387	0.10116	0.891	-2.107	2.905	0.474
600PDT125-30	1.25	0.0312	33ksi	0.265	0.902	1.278	0.419	2.196	0.031	0.340	0.090	1.074	0.240	4737	0.08597	0.212	-0.519	2.282	0.948
600PDT150-30	1.50	0.0312	33ksi	0.281	0.955	1.422	0.466	2.251	0.051	0.427	0.090	1.136	0.244	4818	0.09104	0.347	-0.686	2.392	0.918
600PDT200-30	2.00	0.0312	33ksi	0.312	1.061	1.710	0.560	2.342	0.114	0.605	0.091	1.353	0.262	5170	0.10116	0.754	-1.051	2.637	0.841
600PDT250-30	2.50	0.0312	33ksi	0.343	1.167	1.997	0.655	2.413	0.211	0.784	0.092	1.473	0.261	5162	0.11128	1.373	-1.444	2.919	0.755
600PDT300-30	3.00	0.0312	33ksi	0.374	1.273	2.285	0.749	2.471	0.346	0.962	0.092	1.580	0.261	5152	0.12141	2.241	-1.857	3.237	0.671

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (I_{xe}) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.

ProSTUD™ 33MIL Drywall Stud

ClarkWestern ProSTUD 33MIL physical and structural properties

Member designation	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
			Area (in ²)	Weight (lbs/ft)	Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Ae (in ²)	Ixe (in ⁴)	Sxe (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	B Beta
162PDS125-33	0.0346	33ksi	0.152	0.517	0.070	0.086	0.679	0.032	0.456	0.114	0.069	0.078	1541	0.06059	0.019	-1.065	1.344	0.371
250PDS125-33	0.0346	33ksi	0.182	0.620	0.186	0.149	1.010	0.037	0.449	0.125	0.186	0.138	2735	0.07267	0.046	-0.937	1.449	0.582
362PDS125-33	0.0346	33ksi	0.221	0.752	0.439	0.242	1.409	0.041	0.433	0.127	0.426	0.207	4088	0.08820	0.106	-0.816	1.685	0.766
400PDS125-33	0.0346	33ksi	0.234	0.796	0.553	0.277	1.538	0.043	0.426	0.128	0.537	0.232	4590	0.09338	0.132	-0.783	1.777	0.806
600PDS125-33	0.0346	33ksi	0.303	1.032	1.463	0.488	2.196	0.047	0.394	0.130	1.428	0.399	7875	0.12100	0.332	-0.647	2.323	0.922

ProTRAK™ 33MIL Drywall Track

ClarkWestern ProTRAK 33MIL physical and structural properties

Member designation	Leg (in)	Design thickness (inches)	Yield strength	Gross section properties							Effective section properties				Torsional section properties				
				Area (in ²)	Weight (lbs/ft)	Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Ae (in ²)	Ixe (in ⁴)	Sxe (in ³)	Allowable Moment (in-lbs)	J* 1000 (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	B Beta
162PDT125-33	1.25	0.0346	33ksi	0.142	0.485	0.075	0.086	0.723	0.024	0.409	0.095	0.063	0.056	1104	0.05683	0.012	-0.870	1.203	0.477
162PDT150-33	1.50	0.0346	33ksi	0.160	0.543	0.087	0.100	0.738	0.039	0.494	0.096	0.068	0.058	1143	0.06373	0.020	-1.099	1.413	0.395
162PDT200-33	2.00	0.0346	33ksi	0.194	0.661	0.112	0.129	0.759	0.085	0.660	0.097	0.077	0.061	1198	0.07754	0.045	-1.568	1.862	0.292
162PDT250-33	2.50	0.0346	33ksi	0.229	0.779	0.137	0.158	0.774	0.154	0.821	0.098	0.085	0.063	1235	0.09135	0.083	-2.046	2.336	0.233
162PDT300-33	3.00	0.0346	33ksi	0.264	0.897	0.162	0.187	0.784	0.252	0.979	0.098	0.091	0.064	1262	0.10515	0.139	-2.530	2.824	0.197
250PDT125-33	1.25	0.0346	33ksi	0.173	0.588	0.188	0.144	1.043	0.027	0.397	0.102	0.160	0.100	1972	0.06891	0.032	-0.762	1.351	0.682
250PDT150-33	1.50	0.0346	33ksi	0.190	0.646	0.216	0.166	1.067	0.045	0.485	0.102	0.173	0.103	2044	0.07581	0.052	-0.975	1.525	0.591
250PDT200-33	2.00	0.0346	33ksi	0.225	0.764	0.274	0.210	1.104	0.097	0.658	0.104	0.196	0.109	2150	0.08962	0.114	-1.421	1.916	0.450
250PDT250-33	2.50	0.0346	33ksi	0.259	0.882	0.331	0.254	1.130	0.177	0.827	0.104	0.214	0.113	2225	0.10343	0.211	-1.881	2.346	0.357
250PDT300-33	3.00	0.0346	33ksi	0.294	1.000	0.388	0.298	1.150	0.289	0.993	0.105	0.229	0.115	2282	0.11723	0.349	-2.352	2.800	0.294
362PDT125-33	1.25	0.0346	33ksi	0.212	0.720	0.432	0.231	1.429	0.030	0.377	0.105	0.375	0.170	3358	0.08444	0.074	-0.659	1.618	0.834
362PDT150-33	1.50	0.0346	33ksi	0.229	0.779	0.491	0.263	1.465	0.050	0.467	0.106	0.403	0.176	3481	0.09135	0.121	-0.856	1.760	0.763
362PDT200-33	2.00	0.0346	33ksi	0.264	0.897	0.610	0.327	1.521	0.110	0.645	0.107	0.452	0.186	3669	0.10515	0.263	-1.272	2.085	0.628
362PDT250-33	2.50	0.0346	33ksi	0.298	1.014	0.728	0.390	1.563	0.200	0.820	0.108	0.493	0.193	3808	0.11896	0.482	-1.710	2.457	0.516
362PDT300-33	3.00	0.0346	33ksi	0.333	1.132	0.846	0.453	1.595	0.327	0.992	0.109	0.532	0.190	3751	0.13277	0.793	-2.161	2.863	0.430
400PDT125-33	1.25	0.0346	33ksi	0.225	0.764	0.542	0.264	1.554	0.031	0.371	0.106	0.473	0.197	3887	0.08962	0.093	-0.632	1.718	0.865
400PDT150-33	1.50	0.0346	33ksi	0.242	0.823	0.614	0.299	1.593	0.051	0.460	0.107	0.507	0.204	4027	0.09652	0.152	-0.823	1.851	0.802
400PDT200-33	2.00	0.0346	33ksi	0.276	0.941	0.758	0.369	1.655	0.113	0.639	0.108	0.567	0.215	4246	0.11033	0.329	-1.230	2.159	0.675
400PDT250-33	2.50	0.0346	33ksi	0.311	1.059	0.901	0.439	1.702	0.207	0.815	0.109	0.622	0.214	4221	0.12414	0.602	-1.660	2.514	0.564
400PDT300-33	3.00	0.0346	33ksi	0.346	1.176	1.045	0.508	1.738	0.338	0.989	0.109	0.671	0.210	4158	0.13795	0.988	-2.105	2.904	0.474
600PDT125-33	1.25	0.0346	33ksi	0.294	1.000	1.418	0.464	2.197	0.034	0.339	0.109	1.237	0.287	5681	0.11723	0.234	-0.517	2.282	0.949
600PDT150-33	1.50	0.0346	33ksi	0.311	1.059	1.578	0.516	2.252	0.057	0.426	0.110	1.311	0.293	5790	0.12414	0.384	-0.685	2.392	0.918
600PDT200-33	2.00	0.0346	33ksi	0.346	1.176	1.897	0.621	2.342	0.126	0.604	0.111	1.520	0.322	6355	0.13795	0.835	-1.050	2.637	0.842
600PDT250-33	2.50	0.0346	33ksi	0.380	1.294	2.216	0.725	2.414	0.233	0.783	0.111	1.657	0.320	6327	0.15175	1.522	-1.443	2.919	0.756
600PDT300-33	3.00	0.0346	33ksi	0.415	1.412	2.535	0.830	2.472	0.384	0.962	0.112	1.780	0.319	6303	0.16556	2.485	-1.855	3.237	0.671

Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
 - Calculated effective moment of inertia (Ixe) is based on serviceability determination.
 - Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
 - Allow bending moment is based on a fully braced section about its major axis.
 - Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.
1. Web-depth to thickness ratio exceeds 200. Web stiffeners are required at all bearing locations.
 2. Web-depth to thickness ratio exceeds 260. Web stiffeners are required at all bearing and intermediate locations.