



**Corporate Headquarters**

1528 Island Home Avenue, Knoxville, TN 37920

Phone: 865.862.4721 | Fax: 865.609.8378

**Structural Stud Submittal**

Project: \_\_\_\_\_

Architect: \_\_\_\_\_

Contractor: \_\_\_\_\_

Submitted By: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

**Description**

OCS Steel Framing members C-shaped and U-shaped studs and track manufactured based on the AISI S100-07 North American Specification for the design of Cold-Formed Steel Structural Members Standard coating G60.

**References and Standards**

**ASTM**

Material - A 1003 Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold Formed Framing Members

Coating - A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron (Galvannealed) by the Hot Dip Process

Product - C 955 Standard Specification for Load-Bearing Steel Studs, Runners, and Bracing

Installation & Storage - C 754 Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products

**AISI**

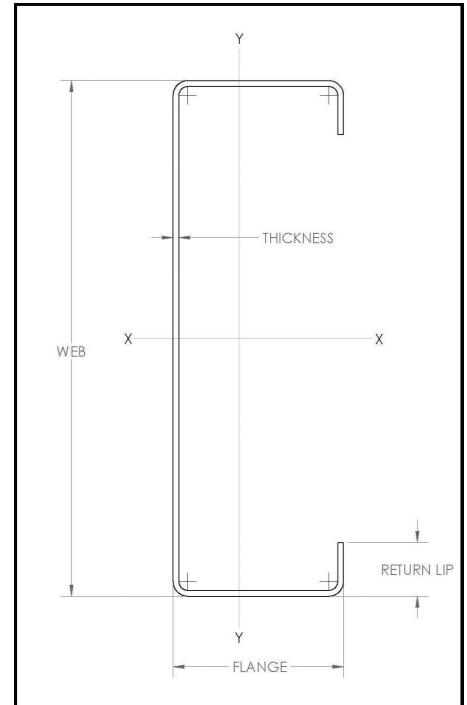
Design - S 100-2007 North American Specification for the Design of Cold Formed Steel Structural Members

Framing Standards - Code of Standard Practice for Cold-Formed Steel Structural members

**ICC**

ICC AC 46 - Acceptance Criteria for Cold-Formed Steel Framing Members

*MSDS available upon request*



Please Note Approval Below

**Industry Associations**

ASTM  
AWCI-Association of Wall and Ceiling Industries  
Cold-Formed Steel Engineers Institute  
Construction Specifications Institute  
Steel Framing Alliance  
USGBC

**Identification**

All OCS Steel Framing members are identified with the member depth, flange size, minimum steel thickness (in mils), minimum yield strength, minimum protective coating weight.

**LEED Credit and Recycled Information**

MR Credit 2.1 and 2.1 Construction Waste Management (2 Points) - Steel is the construction industry's most recycled material. Scrap can be salvaged and redirected to the manufacturer to be used for new product.

MR Credit 4.1 and 4.2 Recycled Content (2 Points) - OCS Steel Framing is manufactured from steel coil that contains an high percentage of pre-consumer (6.8%) and post-consumer (25.5%) recycled content.

MR Credit 5.1 and 5.2 Regional Materials (2 Points) - Available when OCS Steel Framing manufacturing and material sources are located within 500 miles of the project.

Please contact OCS Steel Framing for additional information.

This information is provided with the intention that it is accurate and current to the best of our knowledge. The information in this submittal is to be used as a guide for selecting and using OCS Steel Framing products. This information is provided only for guidance and is not intended to replace the design, drawings, specifications and decisions of a professional architect or engineer. OCS Steel Framing shall not be responsible for incidental or consequential damages, directly or indirectly sustained, nor for loss caused by application of our products for other than their intended uses. Our liability is limited to replacement of defective products. Claims shall be made to us in writing within thirty (30) days of the date the problem/defect was, or reasonably should have been, discovered.



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### General Notes for All Tables

1. Where 'NASPEC' is referenced, it is the "North American Specification for the Design of Cold-Formed Steel Structural Members", 2007 edition (AISI S100-2007).
2. The strength increase from cold work of forming has been incorporated for flexural strength per NASPEC A7.2
3. Various sections may be manufactured with yield points of 33 or 50 ksi. The yield point used for calculations is indicated in the tables.
4. For sections available in both 33 and 50 ksi, the specifier must clearly indicate which yield point is required. For example: 362S162-54 (50).
5. When provided, factory punch-outs will be located along the centerline of the webs of the members and will have a minimum center-to-center spacing of 24 inches. Punch-outs for members > 2.5 inches deep are a maximum of 1.5 inches wide x 4 inches long. Members with depths 2.5" and smaller are maximum 3/4" wide x 4 inches long.

### Section Property Table Notes

1. Web depth for track sections equals nominal depth plus 2 x design thickness plus bend radius
2. Hems on non-structural track sections are ignored
3. Effective properties include the strength increase from cold-work of forming per NASPEC section A7.2 where applicable
4. For deflection determination, use the effective moment of inertia. Effective moment of inertia is based on Procedure 1 of the NASPEC.'
5. 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 local buckling moment.
6. Tabulated gross properties are based on the full, unreduced section away from punch-outs
7. Effective properties of all 'S' sections based on punched sections. Track sections are considered un-punched
8. Where effective properties are not listed for a section at 33 or 50 ksi yield, web depth-to-thickness or flange width-to-thickness limits from the NASPEC are exceeded. Only gross properties are available.
9. Where section designations include a superscript '1', web height-to-thickness exceeds 200. Web stiffeners are required at all supports and concentrated loads.

### Definitions of Structural Property Symbols

#### Gross Properties

Ixx: Moment of inertia of the gross section about the X-X axis (strong axis).

Sxx: Section modulus of the gross section about the X-X axis (strong axis).

Rx: Radius of gyration of the gross section about the X-X axis (strong axis).

Iyy: Moment of inertia of the gross section about the Y-Y (weak axis).

Ry: Radius of gyration of the gross section about the Y-Y axis (weak axis).

#### Effective Properties

Ixx: Effective Moment of inertia about the X-X axis (strong axis). See Notes 4 and 5 above.

Sxx: EffectiveSection modulus about the X-X axis (strong axis).

MaFy: Allowable moment at yield, based on local buckling.

Mn-Dist: Nominal moment based on distortional buckling (NASPEC C3.1.4(b)). Divide by 1.67 for allowable moment

Kfc: Critical value of rotational stiffness, kf, where allowable distortional buckling moment equals allowable local buckling moment Mn-dist/1.67 = MaFy

Vag: Allowable strong axis shear away from punchouts, per NASPEC C3.2.1

Vanet: Allowable strong axis shear at a punchout, per NASPEC C3.2.2

#### Torsional Properties:

J: St. Venant torsional constant

Cw: Torsional warping constant

Xo: Distance from shear center to the centroid along the principal X-axis

m: Distance from shear center to the mid-plane of the web

Ro: Polar radius of gyration about the centroidal principal axis.

b:  $1-(Xo/Ro)^2$

Lu: The longest weak axis (Ly) and torsional (Lt) unbraced length at which lateral-torsional buckling is restrained in accordance with NASPEC C3.1.2.1

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Product Selector	Physical Properties			Stiffening Lip Length (in)	F <sub>y</sub> (ksi)	Inside Radius	Gross Properties						Effective Properties						Torsional Properties							
	Section	Thickness (in)	Min Thick Design				Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>yy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	M <sub>a-L</sub> (in-k)	M <sub>a-D</sub> (in-k)	K <sub>k</sub> (in-lb/in)	V <sub>xx</sub> (lb)	V <sub>net</sub> (lb)	Jx1000 (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>c</sub> (in)	m (in)	R <sub>p</sub> (in)	β	L <sub>r</sub> (in)
□	162S162-33	0.0346	0.0329	0.5	33	0.105	0.193	0.66	0.088	0.677	0.074	0.619	0.088	0.102	2.01	2.15	0.0	601	105	0.077	0.073	-1.627	0.921	1.868	0.241	47.3
□	162S162-43	0.0451	0.0428	0.5	33	0.105	0.250	0.85	0.113	0.673	0.094	0.615	0.113	0.137	2.97	3.02	0.0	777	102	0.169	0.091	-1.615	0.914	1.854	0.242	45.5
□	162S162-54	0.0566	0.0538	0.5	50	0.105	0.309	1.05	0.137	0.667	0.114	0.608	0.137	0.161	5.34	5.60	0.0	1424	138	0.330	0.110	-1.601	0.906	1.838	0.241	36.8
□	162S162-68	0.0713	0.0677	0.5	50	0.105	0.381	1.30	0.166	0.659	0.137	0.600	0.166	0.199	6.76	6.91	0.0	1696	114	0.646	0.131	-1.583	0.897	1.816	0.241	37.0
□	162S162-97	0.1017	0.0966	0.5	50	0.105	0.521	1.77	0.215	0.642	0.175	0.581	0.215	0.260	9.22	9.38	0.0	2129	71	1.795	0.166	-1.545	0.877	1.771	0.239	38.1
□	162S200-33	0.0346	0.0329	0.625	33	0.105	0.228	0.77	0.105	0.681	0.131	0.760	0.105	0.111	2.19	2.52	0.0	601	105	0.091	0.165	-2.088	1.161	2.323	0.193	61.2
□	162S200-43	0.0451	0.0428	0.625	33	0.105	0.295	1.00	0.135	0.676	0.168	0.755	0.135	0.158	3.12	3.28	0.0	777	102	0.200	0.208	-2.076	1.154	2.310	0.193	61.9
□	162S200-54	0.0566	0.0538	0.625	50	0.105	0.365	1.24	0.164	0.671	0.205	0.749	0.164	0.183	5.47	6.05	0.0	1424	138	0.390	0.251	-2.062	1.147	2.294	0.192	50.2
□	162S200-68	0.0713	0.0677	0.625	50	0.105	0.452	1.54	0.199	0.663	0.248	0.740	0.199	0.237	7.87	8.13	0.0	1696	114	0.767	0.302	-2.045	1.137	2.273	0.191	48.4
□	162S200-97	0.1017	0.0966	0.625	50	0.105	0.622	2.12	0.261	0.647	0.324	0.721	0.261	0.316	10.91	11.07	0.0	2129	71	2.145	0.389	-2.009	1.118	2.230	0.189	49.9
□	250S162-33	0.0346	0.0329	0.5	33	0.105	0.223	0.76	0.235	1.027	0.087	0.624	0.235	0.180	3.55	3.56	0.0	975	399	0.089	0.146	-1.470	0.859	1.898	0.401	44.1
□	250S162-43	0.0451	0.0428	0.5	33	0.105	0.289	0.98	0.302	1.022	0.111	0.620	0.302	0.240	5.22	5.25	0.0	1265	394	0.196	0.184	-1.457	0.852	1.885	0.402	42.1
□	250S162-54	0.0566	0.0538	0.5	50	0.105	0.358	1.22	0.370	1.016	0.135	0.613	0.370	0.284	9.42	9.46	0.0	2353	565	0.383	0.223	-1.443	0.845	1.868	0.403	33.9
□	250S162-68	0.0713	0.0677	0.5	50	0.105	0.443	1.51	0.450	1.007	0.162	0.605	0.450	0.357	12.11	12.21	0.0	2866	519	0.752	0.268	-1.424	0.835	1.846	0.405	33.7
□	250S162-97	0.1017	0.0966	0.5	50	0.105	0.610	2.07	0.596	0.989	0.209	0.586	0.596	0.477	16.93	16.93	0.0	3798	429	2.102	0.346	-1.386	0.815	1.801	0.408	33.5
□	250S200-33	0.0346	0.0329	0.625	33	0.105	0.258	0.88	0.279	1.040	0.154	0.773	0.276	0.197	3.90	4.09	0.0	975	399	0.103	0.302	-1.926	1.108	2.321	0.312	56.0
□	250S200-43	0.0451	0.0428	0.625	33	0.105	0.334	1.14	0.358	1.036	0.198	0.769	0.358	0.278	5.49	5.66	0.0	1265	394	0.227	0.382	-1.914	1.101	2.308	0.312	56.1
□	250S200-54	0.0566	0.0538	0.625	50	0.105	0.415	1.41	0.440	1.030	0.241	0.763	0.440	0.321	9.60	10.11	0.0	2353	565	0.443	0.464	-1.899	1.093	2.291	0.313	45.5
□	250S200-68	0.0713	0.0677	0.625	50	0.105	0.515	1.75	0.537	1.022	0.293	0.754	0.537	0.417	13.84	14.27	0.0	2866	519	0.872	0.561	-1.881	1.084	2.270	0.313	43.4
□	250S200-97	0.1017	0.0966	0.625	50	0.105	0.711	2.42	0.718	1.005	0.386	0.736	0.718	0.575	19.82	19.82	0.0	3798	429	2.452	0.735	-1.843	1.063	2.224	0.314	43.4
□	362S162-33	0.0346	0.0329	0.5	33	0.105	0.262	0.89	0.551	1.450	0.099	0.616	0.551	0.268	5.29	5.43	0.0	1024	521	0.105	0.297	-1.308	0.789	2.048	0.592	42.6
□	362S162-43	0.0451	0.0428	0.5	33	0.105	0.340	1.16	0.710	1.445	0.127	0.611	0.710	0.372	7.34	7.62	0.0	1739	676	0.230	0.376	-1.297	0.782	2.036	0.594	42.5
□	362S162-54	0.0566	0.0538	0.5	50	0.105	0.422	1.44	0.873	1.438	0.154	0.604	0.873	0.444	13.28	13.59	0.0	3372	1016	0.451	0.457	-1.283	0.774	2.020	0.597	34.4
□	362S162-68	0.0713	0.0677	0.5	50	0.105	0.524	1.78	1.069	1.429	0.186	0.596	1.069	0.574	17.18	17.65	0.0	4370	1004	0.887	0.552	-1.264	0.765	1.998	0.600	34.3
□	362S162-97	0.1017	0.0966	0.5	50	0.105	0.724	2.46	1.435	1.408	0.241	0.577	1.435	0.776	27.52	28.08	0.0	5943	875	2.496	0.723	-1.226	0.745	1.954	0.606	31.5
□	362S200-33	0.0346	0.0329	0.625	33	0.105	0.297	1.01	0.648	1.478	0.177	0.772	0.647	0.294	5.81	6.18	0.0	1024	521	0.118	0.577	-1.741	1.030	2.411	0.478	53.6
□	362S200-43	0.0451	0.0428	0.625	33	0.105	0.385	1.31	0.836	1.474	0.227	0.767	0.836	0.427	8.43	8.70	0.0	1739	676	0.261	0.734	-1.729	1.024	2.398	0.480	53.5
□	362S200-54	0.0566	0.0538	0.625	50	0.105	0.479	1.63	1.030	1.467	0.277	0.761	1.030	0.490	14.66	15.47	0.0	3372	1016	0.511	0.896	-1.715	1.016	2.382	0.482	43.3
□	362S200-68	0.0713	0.0677	0.625	50	0.105	0.595	2.02	1.265	1.458	0.337	0.753	1.265	0.666	19.95	20.51	0.0	4370	1004	1.008	1.089	-1.696	1.006	2.360	0.484	43.3
□	362S200-97	0.1017	0.0966	0.625	50	0.105	0.826	2.81	1.711	1.440	0.446	0.735	1.711	0.928	32.03	32.57	0.0	5943	875	2.847	1.441	-1.658	0.986	2.315	0.487	40.5
□	600S162-33	0.0346	0.0329	0.5	33	0.105	0.344	1.17	1.793	2.282	0.116	0.581	1.793	0.577	11.41	9.47	102.4	638	638	0.137	0.861	-1.072	0.677	2.587	0.828	41.1
□	600S162-43	0.0451	0.0428	0.5	33	0.105	0.447	1.52	2.316	2.276	0.148	0.576	2.316	0.767	16.68	14.46	182.3	1416	1240	0.303	1.095	-1.062	0.670	2.577	0.830	39.0
□	600S162-54	0.0566	0.0538	0.5	50	0.105	0.556	1.89	2.860	2.267	0.180	0.570	2.860	0.916	30.33	25.90	396.6	2823	1947	0.594	1.337	-1.049	0.663	2.562	0.832	31.4
□	600S162-68	0.0713	0.0677	0.5	50	0.105	0.693	2.36	3.525	2.255	0.218	0.560	3.525	1.164	39.47	35.70	534.3	5350	2879	1.174	1.626	-1.032	0.655	2.543	0.835	30.8
□	600S162-97	0.1017	0.0966	0.5	50	0.105	0.966	3.29	4.797	2.229	0.283	0.541	4.797	1.599	56.73	56.73	0.0	10472	3805	3.329	2.153	-0.997	0.636	2.501	0.841	29.8
□	600S200-33	0.0346	0.0329	0.625	33	0.105	0.379	1.29	2.075	2.340	0.209	0.743	2.058	0.621	12.28	10.76	58.8	638	638	0.151	1.593	-1.457	0.901	2.855	0.740	51.6
□	600S200-43	0.0451	0.0428	0.625	33	0.105	0.492	1.67	2.683	2.335	0.268	0.739	2.683	0.873	17.24	15.39	128.7	1416	1240	0.334	2.033	-1.446	0.894	2.844	0.742	51.4
□	600S200-54	0.0566	0.0538	0.625	50	0.105	0.613	2.09	3.319	2.327	0.328	0.732	3.319	1.015	30.40	27.38	216.3	2823	1947	0.655	2.493	-1.432	0.887	2.829	0.744	41.6
□	600S200-68	0.0713	0.0677	0.625	50	0.105	0.764	2.60	4.101	2.316	0.400	0.723	4.101	1.317	43.71	39.69	443.7	5350	2879	1.295	3.047	-1.415	0.878	2.809	0.746	39.3
□	600S200-97	0.1017	0.0966	0.625	50	0.105	1.067	3.63	5.612	2.293	0.530	0.705	5.612	1.871	64.53	63.67	196.7	10472	3805	3.679	4.080	-1.378	0.859	2.767	0.752	38.3
□	800S162-33	0.0346	0.0329	0.5	33	0.105	0.413	1.41	3.582	2.943	0.125	0.550	3.384	0.710	14.03	12.61	33.8	474	474	0.165	1.630	-0.936	0.607	3.137	0.911	40.1
□	800S162-43	0.0451	0.0428	0.5	33	0.105	0.537	1.83	4.633	2.937	0.160	0.546	4.500	1.019	20.14	18.33	75.3	1051	1051	0.364	2.076	-0.926	0.601	3.128	0.912	39.8
□	800S162-54	0.0566	0.0538	0.5	50	0.105	0.670	2.28	5.736	2.927	0.194	0.539	5.600	1.229	36.79	32.81	189.8	2091	2091	0.715	2.539	-0.914	0.594	3.113	0.914	32.1
□	800S162-68	0.0713	0.0677	0.5	50	0.105	0.836	2.84	7.089	2.913	0.235	0.530	7.070	1.663	49.80	45.11	384.9	4221	3367	1.416	3.093	-0.899	0.5			



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Section Properties  
1/23/2012  
2007 Specification

Product Selector	Section	Thickness (in)	Fy (ksi)	Min Thick Design	Gross Properties							Effective Properties Fy = 33 ksi				Torsional Properties						
					Inside Radius	Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>yy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	M <sub>xy</sub> (in-k)	V <sub>s</sub> (lb)	J (in <sup>8</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>c</sub> (in)	m (in)	R <sub>o</sub> (in)	β
□	162T125-33	0.0346	33	0.0329	0.085	0.143	0.490	0.077	0.087	0.736	0.024	0.408	0.066	0.058	1.15	663	0.057	0.013	-0.868	0.499	1.209	0.484
□	162T125-43	0.0451	33	0.0428	0.085	0.186	0.630	0.101	0.113	0.737	0.031	0.407	0.093	0.085	1.68	867	0.126	0.017	-0.863	0.496	1.206	0.488
□	162T125-54	0.0566	50	0.0538	0.085	0.233	0.790	0.129	0.142	0.746	0.038	0.404	0.120	0.109	3.27	1634	0.249	0.021	-0.856	0.492	1.205	0.496
□	162T125-68	0.0713	50	0.0677	0.085	0.293	1.000	0.168	0.179	0.757	0.047	0.401	0.166	0.155	4.65	2029	0.497	0.028	-0.846	0.487	1.205	0.506
□	162T125-97	0.1017	50	0.0966	0.085	0.417	1.420	0.255	0.257	0.781	0.065	0.395	0.255	0.257	7.70	2808	1.439	0.042	-0.827	0.475	1.204	0.528
□	162T200-33	0.0346	33	0.0329	0.085	0.194	0.660	0.116	0.131	0.773	0.085	0.660	0.081	0.063	1.25	663	0.078	0.047	-1.565	0.865	1.866	0.297
□	162T200-43	0.0451	33	0.0428	0.085	0.253	0.860	0.152	0.170	0.775	0.110	0.658	0.117	0.094	1.85	867	0.172	0.061	-1.559	0.862	1.861	0.298
□	162T200-54	0.0566	50	0.0538	0.085	0.318	1.080	0.196	0.215	0.785	0.137	0.656	0.153	0.121	3.62	1634	0.339	0.078	-1.551	0.858	1.858	0.303
□	162T200-68	0.0713	50	0.0677	0.085	0.400	1.360	0.255	0.272	0.799	0.171	0.653	0.218	0.176	5.26	2029	0.678	0.102	-1.540	0.852	1.854	0.310
□	162T200-97	0.1017	50	0.0966	0.085	0.570	1.940	0.389	0.393	0.827	0.239	0.648	0.373	0.313	9.38	2808	1.965	0.157	-1.519	0.840	1.846	0.323
□	162T250-33	0.0346	33	0.0329	0.085	0.229	0.780	0.142	0.161	0.788	0.154	0.821	0.130	0.097	1.92	867	0.091	0.087	-2.043	1.112	2.339	0.237
□	162T250-43	0.0451	33	0.0428	0.085	0.298	1.020	0.186	0.209	0.790	0.200	0.819	0.170	0.125	3.76	1634	0.202	0.114	-2.037	1.109	2.333	0.238
□	162T250-54	0.0566	50	0.0538	0.085	0.374	1.270	0.240	0.263	0.800	0.250	0.817	0.170	0.125	3.76	1634	0.400	0.147	-2.028	1.104	2.329	0.241
□	162T250-68	0.0713	50	0.0677	0.085	0.471	1.600	0.313	0.334	0.815	0.313	0.815	0.244	0.183	5.49	2029	0.799	0.192	-2.017	1.098	2.324	0.246
□	162T250-97	0.1017	50	0.0966	0.085	0.672	2.290	0.479	0.484	0.845	0.441	0.810	0.427	0.332	9.95	2808	2.315	0.295	-1.995	1.086	2.313	0.256
□	250T125-33	0.0346	33	0.0329	0.085	0.173	0.590	0.192	0.145	1.054	0.027	0.397	0.166	0.103	2.03	1024	0.069	0.033	-0.760	0.456	1.358	0.687
□	250T125-43	0.0451	33	0.0428	0.085	0.225	0.770	0.250	0.188	1.055	0.035	0.395	0.231	0.147	2.91	1356	0.153	0.042	-0.755	0.453	1.356	0.690
□	250T125-54	0.0566	50	0.0538	0.085	0.282	0.960	0.318	0.236	1.062	0.043	0.392	0.297	0.188	5.64	2563	0.301	0.054	-0.749	0.449	1.357	0.696
□	250T125-68	0.0713	50	0.0677	0.085	0.355	1.210	0.408	0.297	1.072	0.054	0.389	0.402	0.262	7.85	3199	0.602	0.069	-0.740	0.444	1.360	0.704
□	250T125-97	0.1017	50	0.0966	0.085	0.506	1.720	0.604	0.423	1.092	0.074	0.383	0.604	0.423	12.67	4476	1.745	0.101	-0.724	0.434	1.365	0.719
□	250T200-33	0.0346	33	0.0329	0.085	0.225	0.760	0.280	0.212	1.117	0.097	0.658	0.203	0.112	2.22	1024	0.090	0.118	-1.418	0.813	1.921	0.455
□	250T200-43	0.0451	33	0.0428	0.085	0.293	1.000	0.366	0.275	1.118	0.126	0.657	0.288	0.163	3.21	1356	0.198	0.153	-1.413	0.810	1.918	0.457
□	250T200-54	0.0566	50	0.0538	0.085	0.367	1.250	0.466	0.346	1.127	0.157	0.654	0.371	0.209	6.25	2563	0.392	0.195	-1.405	0.806	1.917	0.462
□	250T200-68	0.0713	50	0.0677	0.085	0.462	1.570	0.600	0.437	1.139	0.196	0.652	0.517	0.296	8.86	3199	0.783	0.251	-1.396	0.800	1.916	0.469
□	250T200-97	0.1017	50	0.0966	0.085	0.659	2.240	0.893	0.626	1.165	0.275	0.646	0.856	0.510	15.27	4476	2.271	0.374	-1.376	0.789	1.915	0.484
□	250T250-33	0.0346	33	0.0329	0.085	0.259	0.880	0.339	0.256	1.144	0.178	0.827	0.318	0.169	3.34	1356	0.103	0.218	-1.879	1.056	2.350	0.361
□	250T250-43	0.0451	33	0.0428	0.085	0.338	1.150	0.443	0.333	1.146	0.230	0.826	0.410	0.217	6.50	2563	0.229	0.283	-1.873	1.053	2.346	0.362
□	250T250-54	0.0566	50	0.0538	0.085	0.424	1.440	0.565	0.419	1.155	0.287	0.824	0.410	0.217	6.50	2563	0.453	0.361	-1.865	1.049	2.343	0.366
□	250T250-68	0.0713	50	0.0677	0.085	0.534	1.820	0.728	0.530	1.168	0.360	0.821	0.576	0.310	9.27	3199	0.904	0.466	-1.855	1.043	2.341	0.372
□	250T250-97	0.1017	50	0.0966	0.085	0.761	2.590	1.086	0.761	1.195	0.506	0.815	0.972	0.541	16.20	4476	2.622	0.696	-1.834	1.031	2.336	0.384
□	362T125-33	0.0346	33	0.0329	0.085	0.212	0.720	0.438	0.232	1.438	0.030	0.377	0.384	0.174	3.44	1024	0.085	0.076	-0.658	0.409	1.626	0.836
□	362T125-43	0.0451	33	0.0428	0.085	0.276	0.940	0.571	0.302	1.439	0.039	0.375	0.531	0.245	4.84	1739	0.187	0.098	-0.654	0.407	1.625	0.838
□	362T125-54	0.0566	50	0.0538	0.085	0.346	1.180	0.723	0.378	1.445	0.048	0.373	0.678	0.312	9.34	3372	0.369	0.123	-0.648	0.404	1.627	0.841
□	362T125-68	0.0713	50	0.0677	0.085	0.436	1.480	0.921	0.475	1.454	0.060	0.370	0.907	0.427	12.78	4703	0.738	0.156	-0.641	0.399	1.631	0.846
□	362T125-97	0.1017	50	0.0966	0.085	0.621	2.110	1.343	0.675	1.471	0.082	0.363	1.343	0.675	20.20	6622	2.140	0.226	-0.626	0.390	1.639	0.854
□	362T200-33	0.0346	33	0.0329	0.085	0.264	0.900	0.619	0.328	1.532	0.110	0.645	0.464	0.190	3.76	1024	0.105	0.269	-1.270	0.754	2.092	0.631
□	362T200-43	0.0451	33	0.0428	0.085	0.343	1.170	0.808	0.427	1.534	0.142	0.643	0.649	0.270	5.34	1739	0.233	0.350	-1.265	0.752	2.090	0.633
□	362T200-54	0.0566	50	0.0538	0.085	0.431	1.470	1.024	0.536	1.541	0.177	0.640	0.832	0.345	10.34	3372	0.460	0.442	-1.259	0.748	2.091	0.637
□	362T200-68	0.0713	50	0.0677	0.085	0.543	1.850	1.307	0.675	1.552	0.221	0.638	1.138	0.480	14.37	4703	0.919	0.564	-1.250	0.743	2.093	0.643
□	362T200-97	0.1017	50	0.0966	0.085	0.773	2.630	1.917	0.963	1.575	0.308	0.631	1.839	0.803	24.06	6622	2.666	0.825	-1.232	0.732	2.097	0.655
□	362T250-33	0.0346	33	0.0329	0.085	0.298	1.020	0.740	0.392	1.575	0.200	0.820	0.119	0.493	1.708	0.992	0.119	0.493	-1.708	0.992	2.463	0.520
□	362T250-43	0.0451	33	0.0428	0.085	0.389	1.320	0.966	0.510	1.577	0.260	0.818	0.713	0.281	5.56	1739	0.263	0.641	-1.702	0.990	2.460	0.521
□	362T250-54	0.0566	50	0.0538	0.085	0.487	1.660	1.224	0.641	1.585	0.324	0.816	0.914	0.360	10.77	3372	0.521	0.812	-1.695	0.986	2.460	0.525
□	362T250-68	0.0713	50	0.0677	0.085	0.614	2.090	1.565	0.808	1.597	0.406	0.813	1.259	0.502	15.04	4703	1.040	1.038	-1.686	0.980	2.460	0.530
□	362T250-97	0.1017	50	0.0966	0.085	0.875	2.980	2.300	1.155	1.621	0.570	0.807	2.069	0.851	25.49	6622	3.016	1.524	-1.667	0.969	2.461	0.541
□	362T300-33	0.0346	33	0.0329	0.085	0.333	1.130	0.861	0.457	1.608	0.327	0.992	0.133	0.811	2.159	1.234	0.133	0.811	-2.159	1.234	2.869	0.434
□	362T300-43	0.0451	33	0.0428	0.085	0.434	1.480	1.124	0.594	1.610	0.425	0.990	0.294	1.055	2.153	1.231	0.294	1.055	-2.153	1.231	2.865	0.435
□	362T300-54	0.0566	50	0.0538	0.085	0.544	1.850	1.425	0.746	1.618	0.531	0.988	0.985	0.371	11.11	3372	0.581	1.337	-2.146	1.227	2.863	0.439
□	362T300-68	0.0713	50	0.0677	0.085	0.685	2.330	1.823	0.941	1.631	0.665	0.985	1.364	0.519	15.55	4703	1.161	1.171	-2.136	1.221	2.862	0.443
□	362T300-97	0.1017	50	0.0966	0.085	0.977	3.320	2.682	1.348	1.657	0.937	0.979	2.268	0.887	26.54	6622	3.367	2.518	-2.116	1.209	2.860	0.453
□	600T125-33	0.0346	33	0.0329	0.085	0.294	1.000	1.428	0.465													