



Corporate Headquarters
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 www.ocssteel framing.com

Non-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 G40. 33 KSI minimum yield strength steel.

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 645 Standard Specification for Nonstructural Steel Framing Members

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

Fasteners - C 1002 Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs

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

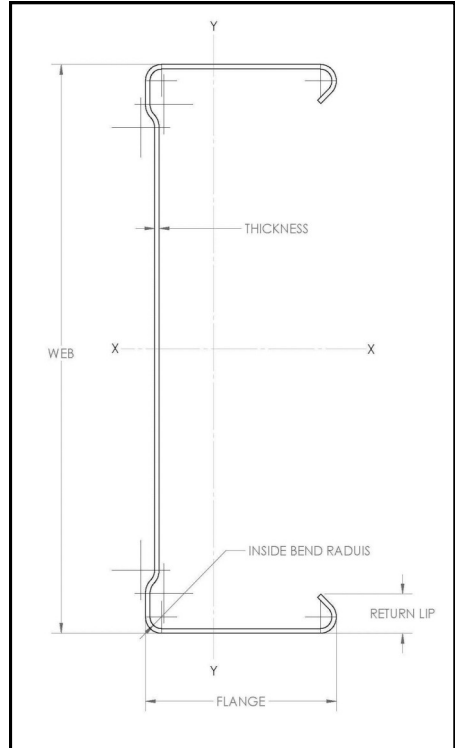
ICC

ICC AC 86 - Acceptance Criteria for Cold-Formed Steel Framing Members-Interior Nonload-Bearing Wall Assemblies

Underwriters Laboratories Assemblies

OCS Steel can be used in any non-proprietary UL Design®

MSDS and Product Certification available at www.ocssteel framing.com



Please Note Approval Below

Product Selector							
<input checked="" type="checkbox"/> if used	Member	Web	Flange	Design Stiffening Lip (in)	Inside Bend Radius	Minimum Thickness (in) ¹	Reference Gauge Number
<input type="checkbox"/>	162S125-18	1 5/8"	1 1/4"	0.188	0.075	0.0179	25
<input type="checkbox"/>	162S125-30	1 5/8"	1 1/4"	0.188	0.075	0.0296	20-Dw
<input type="checkbox"/>	250S125-18	2 1/2"	1 1/4"	0.188	0.075	0.0179	25
<input type="checkbox"/>	250S125-30	2 1/2"	1 1/4"	0.188	0.075	0.0296	20-Dw
<input type="checkbox"/>	362S125-18	3 5/8"	1 1/4"	0.188	0.075	0.0179	25
<input type="checkbox"/>	362S125-30	3 5/8"	1 1/4"	0.188	0.075	0.0296	20-Dw
<input type="checkbox"/>	362S125-33	3 5/8"	1 1/4"	0.188	0.075	0.0329	20-Str
<input type="checkbox"/>	600S125-18	6"	1 1/4"	0.188	0.075	0.0179	25
<input type="checkbox"/>	600S125-30	6"	1 1/4"	0.188	0.075	0.0296	20-Dw
<input type="checkbox"/>	600S125-33	6"	1 1/4"	0.188	0.075	0.0329	20-Str

Table Notes

- 1.) Minimum Design Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the jobsite based upon Section A2.4 of AISI S100-07 specification.
- 2.) Full tables per SFIA technical guide on page 2 of submittal.

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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Non-Structural Stud Section Properties

Property Summary			Gross Properties							Effective Properties X-X			Dist ⁿ l		Shear	Torsional Properties					
Design	F _y		Area	Wt.	I _{xx}	S _{xx}	R _x	I _{yy}	R _y	I _{xx}	S _{xx}	M _{x-L}	M _{x-D}	K _{fc}	V _a	Jx1000	C _w	X _c	m	R _o	β
Section	t (in)	(ksi)	(in ²)	(lb/ft)	(in ⁴)	(in ³)	(in)	(in ⁴)	(in)	(in ⁴)	(in ³)	(in-k)	(in-k)	(in-lb/in)	(lb)	(in ⁴)	(in ⁶)	(in)	(in)	(in)	
162S125-18	0.0188	33	0.084	0.29	0.039	0.048	0.685	0.018	0.461	0.036	0.032	0.64	0.64	0.0	302	0.010	0.009	-1.057	0.592	1.341	0.379
162S125-27	0.0283	33	0.125	0.43	0.058	0.071	0.681	0.026	0.459	0.057	0.056	1.10	1.14	0.0	497	0.033	0.013	-1.048	0.587	1.331	0.380
162S125-30	0.0312	33	0.137	0.47	0.063	0.078	0.679	0.029	0.458	0.062	0.063	1.25	1.30	0.0	545	0.045	0.014	-1.046	0.585	1.328	0.380
162S125-33	0.0346	33	0.152	0.52	0.070	0.086	0.678	0.032	0.457	0.069	0.073	1.44	1.49	0.0	602	0.061	0.015	-1.043	0.583	1.325	0.381
250S125-18	0.0188	33	0.100	0.34	0.104	0.083	1.017	0.021	0.455	0.094	0.058	1.14	1.02	16.9	256	0.012	0.023	-0.928	0.540	1.450	0.590
250S125-27	0.0283	33	0.150	0.51	0.154	0.123	1.012	0.031	0.453	0.151	0.102	2.01	1.83	57.7	685	0.040	0.033	-0.920	0.534	1.441	0.592
250S125-30	0.0312	33	0.165	0.56	0.168	0.135	1.011	0.034	0.452	0.165	0.115	2.27	2.10	66.1	832	0.054	0.036	-0.917	0.533	1.438	0.593
250S125-33	0.0346	33	0.182	0.62	0.186	0.149	1.009	0.037	0.451	0.183	0.131	2.59	2.43	78.4	977	0.073	0.040	-0.914	0.531	1.434	0.594
362S125-18	0.0188	33	0.121	0.41	0.244	0.134	1.417	0.023	0.439	0.226	0.078	1.55	1.51	2.5	172	0.014	0.053	-0.808	0.487	1.689	0.771
362S125-27	0.0283	33	0.182	0.62	0.362	0.200	1.412	0.035	0.436	0.356	0.142	2.80	2.76	5.5	590	0.049	0.077	-0.800	0.482	1.680	0.773
362S125-30	0.0312	33	0.200	0.68	0.397	0.219	1.410	0.038	0.436	0.391	0.164	3.23	3.18	7.5	792	0.065	0.084	-0.797	0.480	1.677	0.774
362S125-33	0.0346	33	0.221	0.75	0.439	0.242	1.408	0.042	0.435	0.432	0.191	3.77	3.70	13.5	1024	0.088	0.092	-0.794	0.479	1.674	0.775
600S125-18	0.0188	33	0.166	0.57	0.808	0.269	2.205	0.027	0.402							0.020	0.169	-0.640	0.406	2.331	0.925
600S125-27 ¹	0.0283	33	0.249	0.85	1.204	0.401	2.200	0.040	0.399	1.135	0.282	5.57	4.65	55.9	348	0.067	0.247	-0.633	0.401	2.323	0.926
600S125-30	0.0312	33	0.274	0.93	1.323	0.441	2.198	0.043	0.398	1.261	0.328	6.48	5.42	79.2	467	0.089	0.270	-0.631	0.400	2.321	0.926
600S125-33	0.0346	33	0.303	1.03	1.463	0.488	2.196	0.048	0.397	1.409	0.385	7.602	6.38	114.7	638	0.121	0.296	-0.628	0.398	2.318	0.927

Section Properties Table Notes

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

Industry Associations

ASTM
 AWC-Association of Wall and Ceiling Industries
 Cold-Formed Steel Engineers Institute
 Construction Specifications Institute
 Steel Framing Alliance
 Steel Framing Industry Association
 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 a 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.

A LEED® submittal may be obtained from our website at: www.ocssteel framing.com

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Interior Non-Structural Non-Composite Limiting Wall Heights											
Stud Member	Spacing in,oc	Fy,ksi	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162S125-18	12	33	9'-3"	7'-9"	6'-9"	7'-6"	6'-9"	5'-11"	6'-6"	6'-2"	5'-5"
162S125-18	16	33	8'-0"	7'-1"	6'-2"	6'-6"	6'-2"	5'-5"	5'-8"	5'-7"	4'-11"
162S125-18	24	33	6'-6"	6'-2"	5'-5"	5'-4"	5'-4"	4'-8"	4'-7"	4'-7"	4'-3"
162S125-30	12	33	11'-9"	9'-4"	8'-2"	10'-4"	8'-2"	7'-2"	9'-2"	7'-5"	6'-6"
162S125-30	16	33	10'-9"	8'-6"	7'-5"	9'-2"	7'-5"	6'-6"	7'-11"	6'-9"	5'-11"
162S125-30	24	33	9'-2"	7'-5"	6'-6"	7'-5"	6'-6"	5'-8"	6'-5"	5'-11"	5'-2"
250S125-18	12	33	11'-8"	10'-9"	9'-4"	9'-6"	9'-4"	8'-2"	8'-3"	8'-3"	7'-5"
250S125-18	16	33	10'-1"	9'-9"	8'-6"	8'-3"	8'-3"	7'-5"	7'-2"	7'-2"	6'-9"
250S125-18	24	33	8'-3"	8'-3"	7'-5"	6'-9"	6'-9"	6'-6"	5'-10" _e	5'-10" _e	5'-10" _e
250S125-30	12	33	16'-4"	12'-11"	11'-4"	13'-8"	11'-4"	9'-11"	11'-10"	10'-3"	9'-0"
250S125-30	16	33	14'-6"	11'-9"	10'-3"	11'-10"	10'-3"	9'-0"	10'-3"	9'-4"	8'-2"
250S125-30	24	33	11'-10"	10'-3"	9'-0"	9'-8"	9'-0"	7'-10"	8'-4"	8'-2"	7'-1"
362S125-18	12	33	14'-2"	14'-2"	12'-6"	11'-7"	11'-7"	10'-11"	10'-0" _e	10'-0" _e	9'-11" _e
362S125-18	16	33	12'-3"	12'-3"	11'-5"	10'-0" _e	10'-0" _e	9'-11" _e	8'-8" _e	8'-8" _e	8'-8" _e
362S125-18	24	33	10'-0" _e	10'-0" _e	9'-11" _e	8'-2" _e	8'-2" _e	8'-2" _e	7'-1" _e	7'-1" _e	7'-1" _e
362S125-30	12	33	20'-7"	17'-3"	15'-1"	16'-10"	15'-1"	13'-2"	14'-7"	13'-8"	11'-11"
362S125-30	16	33	17'-10"	15'-8"	13'-8"	14'-7"	13'-8"	11'-11"	12'-7"	12'-5"	10'-10"
362S125-30	24	33	14'-7"	13'-8"	11'-11"	11'-11"	11'-11"	10'-5"	10'-4"	10'-4"	9'-6"
362S125-33	12	33	22'-3"	17'-10"	15'-7"	18'-2"	15'-7"	13'-7"	15'-9"	14'-2"	12'-4"
362S125-33	16	33	19'-3"	16'-2"	14'-2"	15'-9"	14'-2"	12'-4"	13'-7"	12'-10"	11'-3"
362S125-33	24	33	15'-9"	14'-2"	12'-4"	12'-10"	12'-4"	10'-10"	11'-1"	11'-1"	9'-10"
600S125-30	12	33	26'-11"	25'-6"	22'-3"	21'-11"	21'-11"	19'-5"	19'-0"	19'-0"	17'-8"
600S125-30	16	33	23'-3"	23'-2"	20'-3"	19'-0"	19'-0"	17'-8"	16'-6"	16'-6"	16'-1"
600S125-30	24	33	19'-0"	19'-0"	17'-8"	15'-6"	15'-6"	15'-5"	13'-5" _e	13'-5" _e	13'-5" _e
600S125-33	12	33	29'-2"	26'-5"	23'-1"	23'-10"	23'-1"	20'-2"	20'-7"	20'-7"	18'-4"
600S125-33	16	33	25'-3"	24'-0"	21'-0"	20'-7"	20'-7"	18'-4"	17'-10"	17'-10"	16'-8"
600S125-33	24	33	20'-7"	20'-7"	18'-4"	16'-10"	16'-10"	16'-0"	14'-7"	14'-7"	14'-7"

Table notes

- 1.) Lateral loads have not been modified for strength or deflection checks.
- 2) Flexural strength taken as the minimum of local buckling and distortional buckling allowable moments.
- 3) For distortional buckling allowable moment, $k\phi = 0$.
- 4) Limiting heights based on continuous support of each flange over the full length of the stud
- 5) Limiting heights are based on steel properties only (non-composite).
- 6) Web crippling check based on 1 inch end bearing. Where listed limiting heights are followed by "e"