



SCAFCO STEEL STUD MANUFACTURING CO.

PRICELESS HEADER AND KWIK-JAMB SYSTEM

CSI Section:

05 40 00 Cold-Formed Metal Framing

1.0 RECOGNITION

The Priceless Header and Kwik-Jamb System recognized in this report has been evaluated for use as a system of cold-formed steel framing components. The structural properties of the header and jamb system were evaluated for compliance with the following codes:

- 2015 and 2012 International Building Code® (IBC)
- 2016 California Building Code® (CBC) – supplement attached

2.0 LIMITATIONS

Use of the SCAFCO Priceless Header and Kwik-Jamb System described in this report is subject to the following limitations:

2.1 Complete plans and design calculations demonstrating that applied loads are less than the allowable loads shall be submitted to the building official for approval. The calculations and details shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

2.2 Spacing of the cripple studs attached to the Priceless HD or HDR Header shall be based on a design in accordance with the applicable code and shall not exceed 24 inches (610 mm).

2.3 The uncoated minimum base-metal thickness of cold-formed steel framing members, as delivered to the jobsite, shall be at least 95 percent of the design thickness.

3.0 PRODUCT USE

3.1 General: The Priceless Header and Kwik-Jamb System provides lateral (out-of-plane) and vertical load support for cold-formed steel framing of wall openings, such as door and window openings, in both interior and exterior walls. The system complies with requirements for headers and studs in IBC Sections 2211.1, 2211.2, and 2211.4. [S100 and S200]

3.2 Design

3.2.1 Priceless HD and HDR Headers: The section properties for the HD and HDR Headers, indicated in Tables

2 and 4 of this report, are in accordance with the *North American Specification for the Design of Cold-Formed Steel Structural Members* (AISI S100-07/S2-10). The allowable moment, M_a , as indicated in Tables 2 and 4 of this report are for use with Allowable Strength Design (ASD) and are for Priceless Headers used as a flexural member braced by the cripple studs not exceeding 24 inches (610 mm) on center. For other conditions of flange bracing, the allowable moment shall be determined in accordance with AISI S100-07/S2-10. The x and y axis referenced in the tables apply to bending about the corresponding axis as illustrated in the profile figure below each table.

3.2.2 Flush Mount and Saddle Clip: The ASD load imposed by the HD and HDR Headers on the Flush Mount and Saddle Clip, respectively, shall not exceed the allowable load capacities as listed in Tables 3 and 5 of this report.

3.2.3 Connection Design: The scope of this report is limited to the connection of the Priceless Header member to the clip, and the clip to the Kwik-Jamb Stud member. All other connections referenced in this report shall be verified by a design professional and submitted to the code official for approval.

3.2.4 ASD Load Combinations: When using the ASD loads in Tables 2 and 4 of this report in conjunction with the basic ASD Load Combinations in Section 1605.3.1 of the IBC that include wind or seismic loads, the combinations shall not be reduced by a factor of 0.75. When using the alternative basic ASD Load Combinations in Section 1605.3.2 of the IBC that include wind or seismic loads, the ASD loads in Tables 2 and 4 of this report shall not be increased by 33⅓ percent. When using “component and cladding loads”, as defined by ASCE 7 and in accordance with Section 1604.3 of the IBC, use of the 0.42 factor under the IBC is allowed for determining deflections from exterior wind design loads greater than 10 psf (479 Pa).

3.3 Installation

3.3.1 Installation General: The Priceless Header and Kwik-Jamb components shall be installed in accordance with this report, the approved plans and details, and the manufacturers published installation instructions. Where conflicts occur the more restrictive shall govern. The Priceless Header and Kwik-Jamb System is assembled by first fastening the vertical Kwik-Jamb studs to the top and bottom track. The Flush Mount or Saddle Clip is then fastened to the jambs at the required elevation, and the HD or HDR Header is then fastened to the corresponding clip at each end of the Header member. The cold-formed steel cripple studs shall be installed at the spacing set forth in the approved wall schedule, but not to exceed 24-inches (610 mm) on center. The cripple studs shall be fastened to the HD Header via a



standard track section that is fastened to the HD Header or an attachment clip. The cripple studs for the HDR assembly shall sit inside of, and be fastened to, the flanges of the insert. The width of the Priceless header and Kwik-Jamb assembly shall be compatible with the web depth of the wall and cripple studs.

3.3.2 Attachment of Kwik-Jamb Stud to Steel Runner Tracks: Installation of the Kwik-Jamb stud shall be in full contact and fastened to the bottom track or secure clip in accordance with a connection design as described in Section 3.2.3 of this report. The top connection shall be connected via a secure or deflection top track or clip to the support structure. The Kwik-Jamb studs are installed vertically in accordance with the rough opening width. The web (flat) side of each Kwik-Jamb stud shall face inward towards the opening.

3.3.3 Attachment of Flush Mount and Saddle Clip to Kwik-Jamb: Installation of the Flush mount and Saddle Clip shall be in full contact with the Kwik-Jamb Stud. The web of the Flush Mount or Saddle Clip shall be attached to the web of the Kwik-Jamb member at the desired elevation. The clips shall be fastened to the Kwik-Jamb studs with No. 10 screws complying with Section 4.3.4 of this report at the predrilled hole locations. The number of fasteners shall correspond to the allowable load desired in Tables 3 and 5 of this report.

3.3.4 Attachment of Priceless HD/HDR Header to Flush Mount-Saddle Clip: Installation of the Flush Mount and Saddle Clips shall be in full contact with the Priceless HD or HDR header member. The clips shall be fastened to the header member with No. 10 screws complying with Section 4.3.4 of this report at the predrilled hole locations. The number of fasteners shall correspond to the allowable load desired in Tables 3 and 5 of this report. The gap between the end of the Priceless HD or HDR Header member and vertical face of the Flush Mount or Saddle Clip shall not exceed 3/8 inch (9 mm) at each end of the header.

3.3.5 Attachment of HDR Insert to HDR Header: The insert for the HDR member is mechanically attached to the return of the outer member at maximum 12-inch-on-center (305 mm) increments as illustrated in Figure 3 of this report.

4.0 PRODUCT DESCRIPTION

The Priceless Header and Kwik-Jamb System is a cold-formed steel header (or sill) and cold-formed steel Kwik-Jamb Studs. The Priceless Header may be either a one-piece HD Header or a two-piece HDR Header and corresponding clips. Figure 1 of this report provides examples and explanations for the nomenclature.

4.1 HD Header with Flush Mount Clip Assembly: As illustrated by Figure 2 of this report, the components and assembly for the Priceless HD Header and Kwik-Jamb System include the HD Header, which is a C-shaped member, the Kwik-Jamb Stud, which is also a C-shaped member, and Flush Mount Clips. The Flush Mount Clip is an external

connector mechanically attached to the HD header and to the supporting vertical Jamb stud. Part numbers and corresponding section properties are provided in Table 2 of this report.

4.2 HDR Header with Saddle Clip Assembly: When increased strength is required, the two-piece HDR Header and Kwik-Jamb System can be used. A general schematic of the components is provided in Figure 3, and part numbers and corresponding section properties are provided in Table 4 of this report. The Priceless HDR Header and Kwik-Jamb System includes the HDR Header, which is a C-shaped member with an insert mechanically fastened to the return of the outer member, the Kwik-Jamb stud, and Saddle Clips. The Saddle clip is an external connector mechanically attached to the HDR header and the Jamb stud and transfers reaction loads from the HDR header to the supporting vertical Jamb stud.

4.3 Materials

4.3.1 HD Header and HDR Header with insert: The header members described in this report are cold-formed from hot-dipped galvanized sheet steel. All headers are manufactured from steel conforming to SSFSA's SS101-13 published specification for steel with minimum yield strength (F_y) of 57 ksi (393 MPa) and a minimum tensile strength (F_u) of 65 ksi (448 MPa). The minimum thickness as listed in Table 1 of this report is the minimum steel thickness to be delivered to the job site. The minimum thickness is defined by AISI S100 as 95 percent of the design thickness as listed in Table 1 of this report. The HD and HDR Header members have a minimum G60 galvanized coating designation in accordance with ASTM A653. HD and HDR Headers are available in web widths of 3½ inches (89 mm), 3⁵/₈ inches (92 inches), 4 inches (102 mm), 5½ inches (140 mm), 6 inches (152 mm), and 8 inches (203 mm), and are cut to custom lengths.

4.3.2 Flush Mount and Saddle Clips: The Flush Mount clips described in this report is an external end connection detailed in Figures 2 and 3 of this report. The Flush Mount Clip is manufactured from hot-dipped galvanized sheet steel. All flush mount clips are manufactured using 54 mil (1.37 mm) minimum thickness material conforming to SSFSA's SS101-13 published specification for steel with a minimum yield strength (F_y) of 57 ksi (393 MPa) and a minimum tensile strength (F_u) of 65 ksi (448 MPa). The Flush Mount Clips are available in 3½-inch (89 mm), 3⁵/₈-inch (92 mm), 4-inch (102 mm), 5½-inch (140 mm), 6-inch (152 mm), and 8-inch (203 mm) lengths to match the corresponding web width of the HD Header. The Flush Mount clip has 1½-inch-long (38 mm) legs and comes in 3-inch (76 mm) and 3½-inch (89 mm) web heights to match the flange of the HD header.

The Saddle Clip is manufactured from hot-dipped galvanized sheet steel. All saddle clips are manufactured with 54 mil (1.37 mm) minimum thickness material conforming to SSFSA's SS101-13 published specification. The Saddle Clips are also available in 3½-inch (89 mm), 3⁵/₈-inch (92



inches), 4-inch (102 mm), 5½-inch (140 mm), 6-inch (152 mm), and 8-inch (203 mm) lengths to match the corresponding web width of the HDR Header. The three legs of the Saddle Clips are 1½ inches (38 mm) long.

4.3.3 Kwik-Jamb Stud: The Kwik-Jamb Studs described in this report are cold-formed from hot-dipped galvanized sheet steel. All Kwik-Jamb members are manufactured from steel conforming to SSFSA’s SS101-13 published specification for steel with a minimum yield strength (F_y) of 57 ksi (393 MPa) and a minimum tensile strength (F_u) of 65 ksi (448 MPa). The minimum thickness as listed in Table 1 of this report is the minimum steel thickness to be delivered to the job site. The minimum thickness is defined by AISI S100 as 95 percent of the design thickness as listed in Table 1 of this report. The HD and HDR Header members have a minimum G60 galvanized coating designation in accordance with ASTM A653.

4.3.4 Fasteners: The Flush Mount and Saddle Clips shall be fastened to the corresponding header member and the Kwik-Jamb stud with fasteners that comply with the minimum material specifications of Grabber Self-Drill No. 10 (0.19 inch/4.8 mm shank diameter) wafer head screws. The screws shall comply with SAE J78 and ASTM C954. The screws shall be long enough to penetrate the header or stud opposite the head three or more exposed threads. Screws exposed to exterior, damp, or corrosive environments shall have corrosion-resistant coatings.

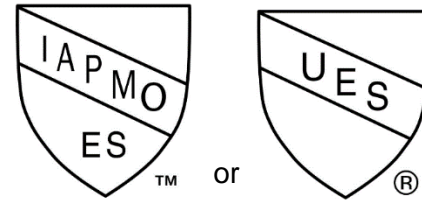
5.0 IDENTIFICATION

Each Priceless Header and Kwik-Jamb System assembly component shall be identified with a label on the product or packaging with the company name, model number, the IAPMO Uniform ES Mark of Conformity, and the Evaluation Report Number (ER-342).

Included with the label for the header and jamb members shall be the member type (HD, HDR, or KJS), the base metal thickness (uncoated) in decimal units, the minimum yield strength, and the galvanized coating.

Each clip identification shall include the name of the clip (Flush Mount [FM] or Saddle Clip [SC]), the base metal thickness (uncoated) in decimal units, the minimum yield strength, and the coating grade.

Either IAPMO Uniform ES Mark of Conformity below shall be acceptable:



IAPMO UES ER-342

6.0 SUBSTANTIATING DATA

The supporting data submitted in support of this recognition is in accordance with:

6.1 Acceptance Criteria for Cold-Formed Steel Framing Members (AC46), dated June 2012 (Editorially Revised April 2015).

6.2 Acceptance Criteria for connectors used with Cold-Formed Steel Structural Members (AC261) dated October 2011 (Editorially revised May 2015)

7.0 CONTACT INFORMATION

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8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on SCAFCO Steel Stud Manufacturing CO.’s Priceless Header and KWIK-Jamb System to assess compliance with the codes shown in Section 1.0 of this report and serves as documentation of the product certification.

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For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



FIGURE 1 – NOMENCLATURE EXAMPLES

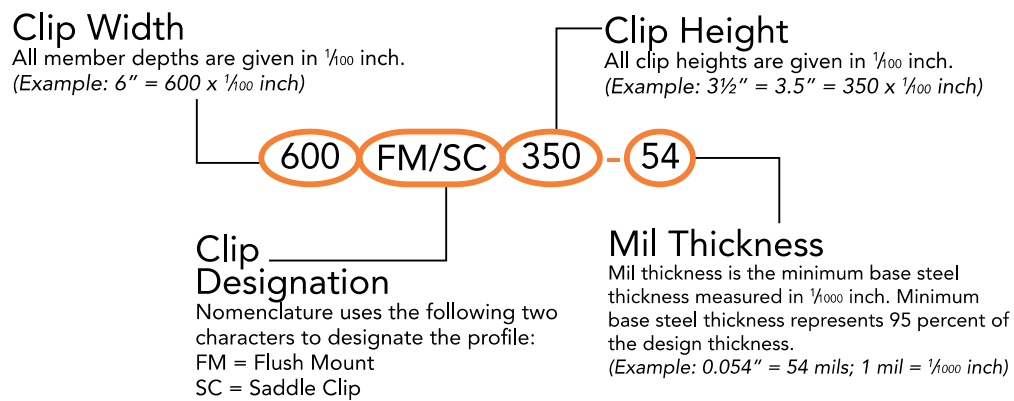
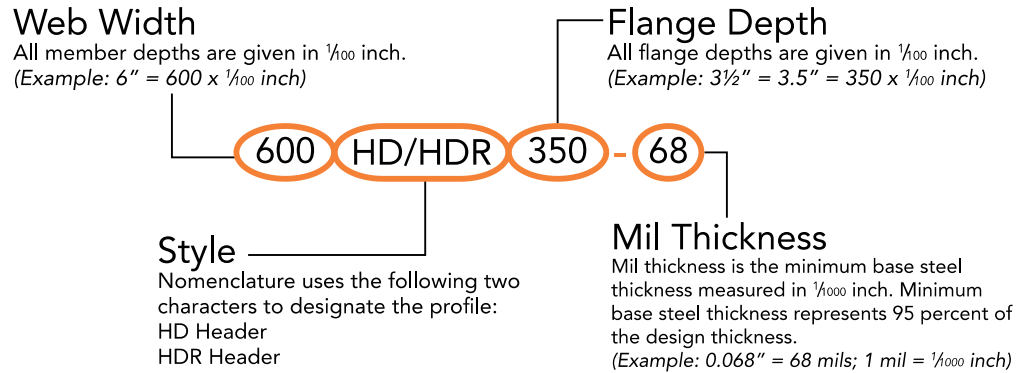


TABLE 1 – MATERIAL PROPERTIES

Designation	Minimum Thickness (in.)	Design Thickness (in.)	Yeild Strength (ksi)	Tensile Strength (ksi)	Min. Galvanized Coating
33EQS	0.0280	0.0295	57	65	G60
43EQS	0.0380	0.0400	57	65	G60
54	0.0538	0.0566	57	65	G60
68	0.0677	0.0713	57	65	G60
97	0.0966	0.1017	57	65	G60
127	0.1270	0.1337	57	65	G60



TABLE 2 – HD HEADER SECTION PROPERTIES

PartNo.	Gross Properties						Effective Properties _{x-x}						Effective Properties _{y-y}			Distortional		Shear	
	Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{x-defl. (+)} (in ⁴)	S _x (+) (in ³)	Max(I _x) (in ³)	I _{x-defl. (-)} (in ⁴)	S _x (-) (in ³)	Max(I _x) (in ³)	I _{y-defl.} (in ⁴)	S _y (in ³)	Max(I _y) (in ³)	May (in-k)	Vax (lb)	Vay (lb)	
350HD300-33EQS ¹	0.331	1.13	0.459	1.178	0.71	1.465	0.416	0.163	4.64	0.383	0.141	4.02	0.586	0.209	5.95	7.61	696	1642	
350HD300-43EQS ¹	0.447	1.52	0.616	1.173	0.954	1.461	0.589	0.261	8.92	0.552	0.236	8.07	0.845	0.349	11.92	13.88	1741	3596	
350HD350-54	0.684	2.33	1.224	1.338	1.491	1.477	1.191	0.553	18.88	1.148	0.589	20.09	1.371	0.641	21.87	22.32	3600	7200	
350HD350-68	0.853	2.9	1.509	1.33	1.843	1.47	1.509	0.735	25.08	1.503	0.747	25.51	1.801	0.851	29.04	30.06	4791	9582	
350HD350-97	1.194	4.06	2.057	1.312	2.525	1.454	2.057	1.046	35.7	2.057	1.046	35.7	2.525	1.248	42.6	46.49	6503	13006	
362HD300-33EQS ¹	0.335	1.14	0.465	1.179	0.769	1.516	0.421	0.163	4.66	0.384	0.139	3.97	0.636	0.218	6.21	7.94	670	1642	
362HD300-43EQS ¹	0.452	1.54	0.624	1.175	1.033	1.511	0.6	0.262	8.94	0.557	0.234	7.99	0.916	0.364	12.42	14.47	1677	3596	
362HD350-54	0.691	2.35	1.24	1.34	1.613	1.528	1.206	0.556	18.98	1.153	0.589	20.12	1.484	0.671	22.89	23.17	3600	7200	
362HD350-68	0.862	2.93	1.529	1.332	1.995	1.521	1.529	0.739	25.21	1.513	0.749	25.55	1.949	0.89	30.38	31.23	4981	9582	
362HD350-97	1.207	4.11	2.085	1.314	2.735	1.505	2.085	1.052	35.89	2.085	1.052	35.89	2.735	1.304	44.52	48.39	6775	13006	
400HD300-33EQS ¹	0.346	1.18	0.483	1.181	0.96	1.666	0.414	0.164	4.68	0.385	0.135	3.85	0.79	0.245	6.98	8.85	604	1642	
400HD300-43EQS ¹	0.467	1.59	0.647	1.177	1.29	1.662	0.609	0.263	8.96	0.555	0.228	7.77	1.139	0.41	14.01	16.09	1510	3596	
400HD350-54	0.712	2.42	1.286	1.344	2.012	1.681	1.251	0.564	19.26	1.167	0.591	20.18	1.854	0.762	26	25.74	3600	7200	
400HD350-68	0.889	3.03	1.586	1.336	2.491	1.674	1.586	0.75	25.58	1.54	0.752	25.67	2.434	1.01	34.49	34.77	5553	9582	
400HD350-97	1.245	4.24	2.164	1.318	3.422	1.658	2.164	1.067	36.43	2.164	1.067	36.42	3.422	1.478	50.43	54.13	7590	13006	
550HD300-33EQS ¹	0.39	1.33	0.542	1.179	1.975	2.25	0.485	0.171	4.87	0.395	0.12	3.42	1.612	0.361	10.3	12.47	433	1642	
550HD300-43EQS ¹	0.527	1.79	0.727	1.174	2.659	2.246	0.678	0.267	9.1	0.57	0.202	6.9	2.328	0.606	20.7	22.82	1080	3596	
550HD350-54	0.797	2.71	1.445	1.347	4.124	2.275	1.404	0.589	20.1	1.203	0.596	20.34	3.82	1.157	39.5	36.14	3093	7200	
550HD350-68	0.996	3.39	1.784	1.338	5.118	2.267	1.784	0.784	26.74	1.612	0.761	25.98	5.002	1.528	52.16	49.17	5713	9582	
550HD350-97	1.398	4.76	2.439	1.321	7.073	2.25	2.439	1.117	38.14	2.439	1.09	37.2	7.073	2.224	75.89	77.66	10851	13006	
600HD300-33EQS ¹	0.405	1.38	0.559	1.175	2.408	2.439	0.5	0.172	4.91	0.398	0.116	3.31	1.958	0.401	11.44	13.69	395	1642	
600HD300-43EQS ¹	0.547	1.86	0.75	1.171	3.243	2.435	0.699	0.268	9.16	0.574	0.196	6.68	2.83	0.674	23	25.07	987	3596	
600HD350-54	0.825	2.81	1.491	1.344	5.022	2.467	1.449	0.591	20.16	1.211	0.597	20.38	4.659	1.3	44.35	39.66	2823	7200	
600HD350-68	1.032	3.51	1.841	1.336	6.237	2.459	1.841	0.792	27.05	1.628	0.763	26.04	6.095	1.713	58.47	54.05	5713	9582	
600HD350-97	1.449	4.93	2.518	1.318	8.631	2.441	2.518	1.13	38.58	2.481	1.095	37.37	8.631	2.491	85.01	85.69	11622	13006	
800HD300-43EQS ¹	0.627	2.13	0.826	1.148	6.291	3.167	0.769	0.274	9.34	0.586	0.177	6.03	5.267	0.915	31.23	34.08	733	3596	
800HD350-54	0.938	3.19	1.646	1.325	9.683	3.212	1.603	0.596	20.33	1.233	0.6	20.47	9.015	1.919	65.5	53.88	2091	7200	
800HD350-68	1.174	4	2.034	1.316	12.046	3.203	2.034	0.82	27.99	1.672	0.768	26.22	11.773	2.517	85.9	73.88	4221	9582	
800HD350-97	1.652	5.62	2.784	1.298	16.737	3.183	2.784	1.171	39.97	2.599	1.108	37.8	16.737	3.649	124.54	118.57	11622	13006	

1. Allowable moments and the moment of inertia for deflection (I_{x-defl.} and I_{y-defl.}) are established based on the Direct Strength Method (DSM) per AISI S100 North American Specification for the Design of Cold Formed Steel Structural Members.

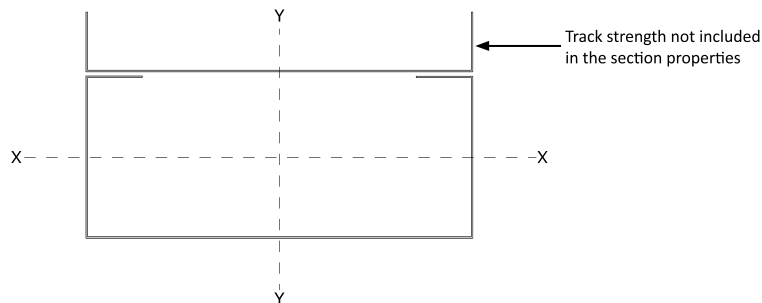




FIGURE 2 – HD HEADER ASSEMBLY AND FLUSH MOUNT CLIP

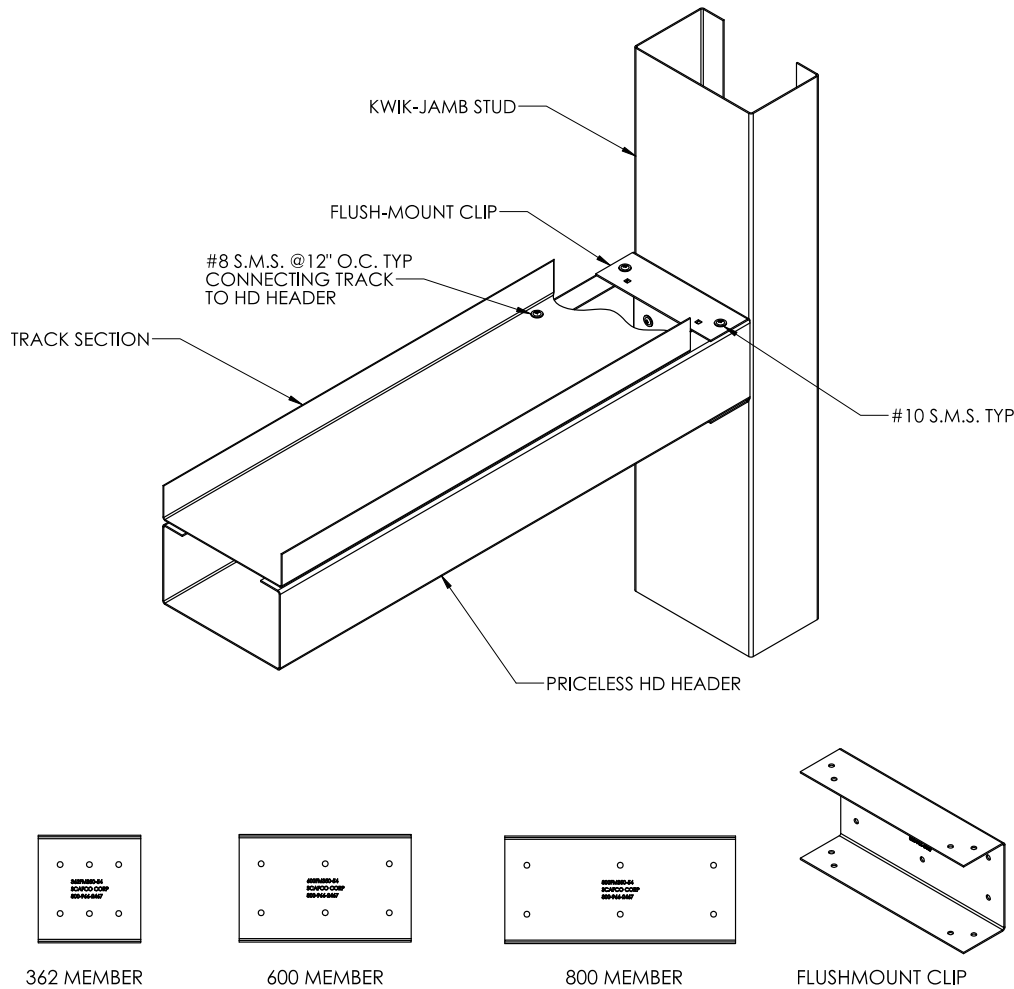


TABLE 3 – FLUSH MOUNT CLIP ALLOWABLE LOADS^{1,2,3,4}

Header	Jamb	Clip	Number of Fasteners from Clip to Header	Number of Fasteners from Clip to Jamb	Allowable Shear Load (lbs)	
					Vertical	Horizontal
362HD300-33EQS	362KJS238-33EQS	362FM300-54	4	4	154	338
362HD300-43EQS	362KJS238-43EQS	362FM300-54	4	4	431	445
362HD350-54	362KJS338-54	362FM350-54	4	4	955	485
362HD350-68	362KJS338-68	362FM350-54	6	6	1090	1245
600HD300-33EQS	600KJS238-33EQS	600FM300-54	4	4	235	226
600HD300-43EQS	600KJS238-43EQS	600FM300-54	4	4	503	392
600HD350-54	600KJS338-54	600FM350-54	6	6	868	1053
600HD350-68	600KJS338-68	600FM350-54	6	6	988	1549
800HD300-43EQS	800KJS238-43EQS	800FM300-54	4	4	606	578
800HD350-54	800KJS338-54	800FM350-54	6	6	848	699
800HD350-68	800KJS338-68	800FM350-54	6	6	1036	974

1. In the case of varying thickness of header and jamb material, use the lowest of the two corresponding allowable loads listed.

2. For web widths not listed, use the next web width smaller in size (Ex. For 4" members use 3.625" values)

3. Maximum gap between end of header member and vertical face of clip shall not exceed 3/8 inch

4. For the fastener connection screws are to be installed in corner pre-drilled hole locations.

For the fastener connection screws are to fill all pre-drilled holes.



TABLE 4 – HDR HEADER SECTION PROPERTIES ²

PartNo.	Gross Properties						Effective Properties _{x-x}						Effective Properties _{y-y}			Distortional		Shear	
	Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x -defl. ₍₊₎ (in ⁴)	S _x (+) (in ³)	Max I _x (+) (in-k)	I _x -defl. ₍₋₎ (in ⁴)	S _x (-) (in ³)	Max I _x (-) (in-k)	I _y -defl. (in ⁴)	S _y (in ³)	May (in-k)	May (in-k)	Vax (lb)	Vay (lb)	
350HDR200-33EQS	0.541	1.842	0.419	0.88	0.854	1.256	0.321	0.15	5.1	0.389	0.226	7.72	0.707	0.34	11.59	11.75	1195	4330	
350HDR350-54	1.368	4.654	2.597	1.378	2.146	1.253	2.514	0.907	31	2.599	1.08	36.87	1.944	0.913	31.15	31.55	5519	15712	
350HDR350-68	1.71	5.817	3.205	1.369	2.658	1.247	3.242	1.201	41	3.284	1.372	46.83	2.492	1.183	40.39	42.82	7097	21837	
350HDR350-97	2.4	8.165	4.375	1.35	3.66	1.235	4.51	1.889	64.5	4.51	1.889	64.49	3.548	1.774	60.56	65.1	9614	30185	
362HDR200-33EQS	0.549	1.868	0.43	0.885	0.933	1.304	0.329	0.152	5.2	0.402	0.231	7.88	0.777	0.36	12.3	12.46	1161	4378	
362HDR300-43EQS ¹	0.903	3.072	1.355	1.225	1.539	1.306	1.223	0.414	14.14	1.384	0.44	15.02	1.324	0.546	18.63	20.82	2744	7556	
362HDR350-54	1.382	4.702	2.65	1.385	2.345	1.303	2.564	0.917	31.3	2.642	1.087	37.09	2.133	0.967	32.99	33.14	5580	15812	
362HDR350-68	1.727	5.878	3.27	1.376	2.906	1.297	3.307	1.215	41.5	3.351	1.386	47.32	2.731	1.253	42.75	45	7470	21981	
362HDR350-97	2.425	8.252	4.468	1.357	4.003	1.285	4.606	1.93	65.9	4.606	1.93	65.87	3.889	1.876	64.02	69.05	10132	30022	
400HDR200-33EQS	0.571	1.943	0.46	0.897	1.196	1.447	0.352	0.159	5.4	0.426	0.236	8.05	1.01	0.425	14.52	14.39	1070	4506	
400HDR300-43EQS ¹	0.933	3.174	1.437	1.241	1.973	1.454	1.292	0.425	14.51	1.423	0.452	15.44	1.710	0.636	21.69	24.00	2535	7723	
400HDR350-54	1.424	4.846	2.802	1.403	3.008	1.453	2.707	0.945	32.3	2.764	1.107	37.77	2.761	1.135	38.74	38	5749	16087	
400HDR350-68	1.781	6.06	3.46	1.394	3.73	1.447	3.496	1.252	42.7	3.517	1.416	48.33	3.526	1.468	50.1	51.67	8605	21802	
400HDR350-97	2.501	8.511	4.735	1.376	5.146	1.434	4.88	1.988	67.9	4.88	1.988	67.85	5.027	2.192	74.8	80.54	11713	29596	
550HDR200-33EQS	0.659	2.244	0.56	0.921	2.663	2.01	0.425	0.177	6	0.506	0.253	8.65	2.315	0.719	24.54	21.99	809	4637	
550HDR300-43EQS ¹	1.053	3.583	1.719	1.278	4.387	2.041	1.527	0.458	15.62	1.642	0.452	15.44	3.766	1.042	35.57	37.72	1977	8212	
550HDR350-54	1.594	5.424	3.328	1.445	6.692	2.049	3.203	1.032	35.2	3.179	1.165	39.76	6.247	1.882	64.25	58.03	5477	15540	
550HDR450-68	2.28	7.758	7.22	1.779	9.692	2.062	7.236	2.055	70.1	7.061	2.199	75.04	8.842	2.498	85.24	83.46	9874	24432	
550HDR450-97	3.213	10.934	9.976	1.762	13.456	2.046	10.199	3.202	109.3	10.199	3.202	109.29	12.8	3.78	129.02	132.53	18071	36991	
550HDR450-127	4.17	14.191	12.675	1.743	17.185	2.03	13.04	4.13	141	13.04	4.13	140.97	16.831	5.189	177.1	184.98	22550	46189	
600HDR200-33EQS	0.689	2.344	0.588	0.924	3.313	2.193	0.445	0.181	6.2	0.528	0.258	8.8	2.896	0.828	28.27	24.54	748	4572	
600HDR300-43EQS ¹	1.093	3.719	1.799	1.283	5.447	2.233	1.594	0.466	15.91	1.704	0.452	15.44	4.782	1.163	39.70	41.60	1806	8329	
600HDR350-54	1.651	5.617	3.48	1.452	8.309	2.244	3.346	1.055	36	3.296	1.179	40.24	7.774	2.155	73.56	64.83	5073	15290	
600HDR450-68	2.351	8.001	7.534	1.79	12.03	2.262	7.547	2.097	71.6	7.304	2.223	75.88	10.992	2.865	97.8	93.31	10071	24048	
600HDR450-97	3.315	11.28	10.419	1.773	16.724	2.246	10.65	3.266	111.5	10.592	3.249	110.89	15.933	4.336	147.98	148.89	20283	36505	
600HDR450-127	4.304	14.646	13.248	1.754	21.389	2.229	13.632	4.216	143.9	13.632	4.216	143.89	20.975	5.94	202.75	208.33	25468	45817	
800HDR250-33EQS	1.173	3.99	1.418	1.1	10.158	2.943	1.205	0.415	14.2	1.274	0.512	17.46	9.322	1.984	67.71	55.02	1405	7554	
800HDR300-43EQS ¹	1.253	4.263	2.069	1.285	11.106	2.977	1.820	0.496	16.92	1.913	0.449	15.33	9.627	1.759	60.04	62.97	1426	8055	
800HDR350-54	1.877	6.387	3.996	1.459	16.912	3.002	3.831	1.124	38.3	3.689	1.22	41.66	15.905	3.355	114.52	92.48	3911	14578	
800HDR450-68	2.637	8.971	8.624	1.809	24.41	3.043	8.621	2.229	76.1	8.131	2.295	78.33	22.386	4.487	153.15	133.38	7977	22907	
800HDR450-97	3.722	12.664	11.95	1.792	34.065	3.025	12.209	3.468	118.4	11.877	3.373	115.14	32.582	6.781	231.44	216.29	21515	34910	
800HDR450-127	4.839	16.466	15.228	1.774	43.75	3.007	15.676	4.482	153	15.676	4.482	152.98	43	9.231	315.07	305.28	36407	44763	

1. Allowable moments and the moment of inertia for deflection (I_x-defl. and I_y-defl.) are established based on the Direct Strength Method (DSM) per AISI S100 North American Specification for the Design of Cold Formed Steel Structural Members
2. Allowable moment (Max and May) of combined section are based on a non-composite relative stiffness model.

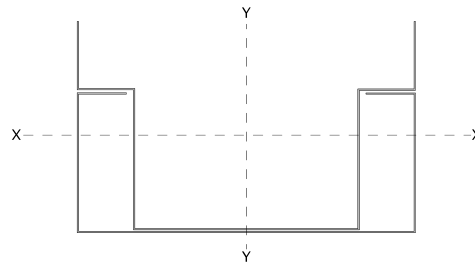


FIGURE 3 – HDR HEADER ASSEMBLY AND SADDLE CLIP

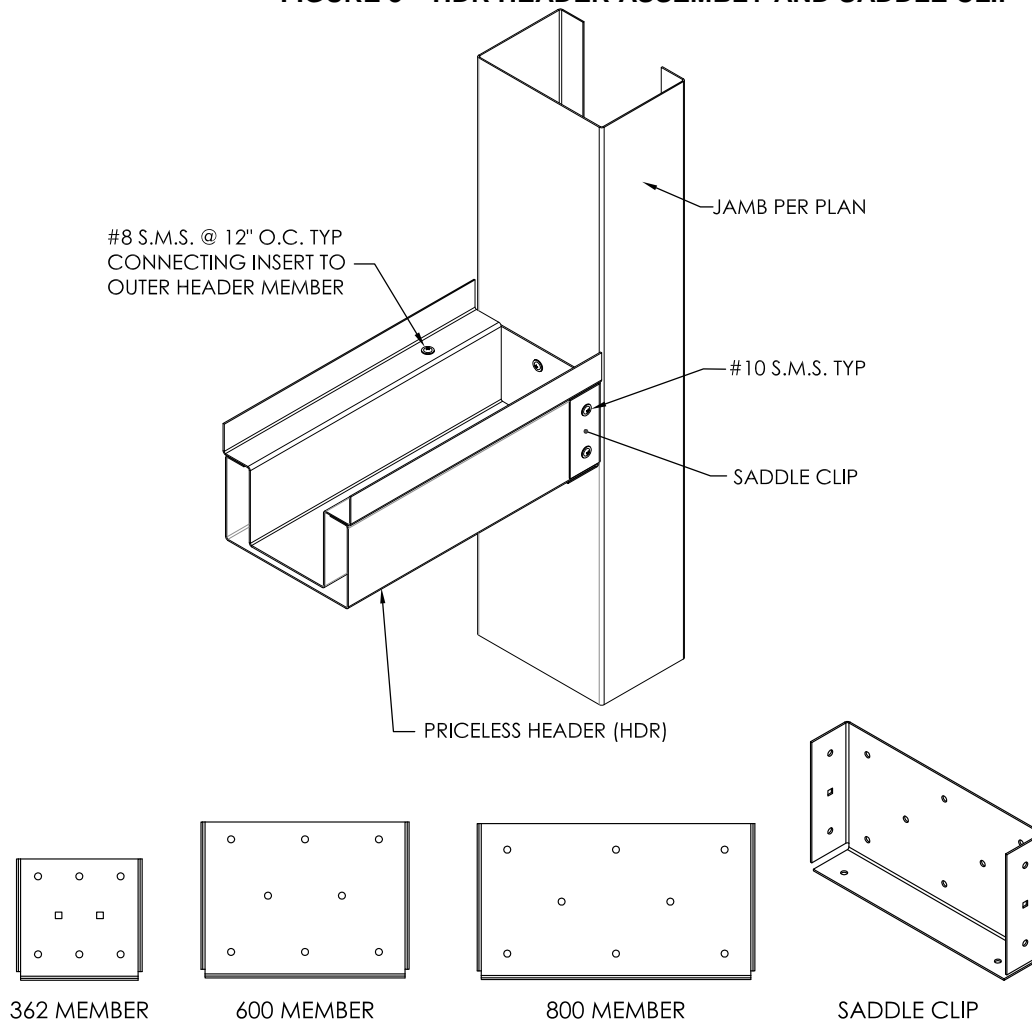


TABLE 5 – SADDLE CLIP ALLOWABLE LOADS^{1,2,3,4}

Header	Jamb	Clip	Number of Fasteners from Clip to Header	Number of Fasteners from Clip to Jamb	Allowable Shear Load (lbs)	
					Vertical	Horizontal
362HDR200-33EQS	362KJS238-33EQS	362SC200-54	4	4	655	218
362HDR350-54	362KJS338-54	362SC350-54	6	6	2248	610
362HDR350-68	362KJS338-68	362SC350-54	6	8	2802	1002
600HDR200-33EQS	600KJS238-33EQS	600SC200-54	4	4	519	201
600HDR350-54	600KJS338-54	600SC350-54	6	6	2327	618
600HDR450-68	600KJS338-68	600SC450-54	6	8	2638	872
600HDR450-97	600KJS338-68	600SC450-54	8	8	3314	1344
800HDR250-43EQS	800KJS238-43EQS	800SC250-54	6	6	1038	367
800HDR350-54	800KJS338-54	800SC350-54	6	6	1937	578
800HDR450-68	800KJS338-68	800SC450-54	6	8	3570	1035
800HDR450-97	800KJS338-68	800SC450-54	8	8	2700	1083

1. In the case of varying thickness of header and jamb material, use the lowest of the two corresponding allowable loads listed.

2. For web widths not listed, use the next web width smaller in size (Ex. For 3" members use 3.625" values)

3. Maximum gap between end of header member and vertical face of clip shall not exceed 3/8 inch

4. For the fastener connection screws are to be installed in corner pre-drilled hole locations.

For the fastener connection screws are to be installed in top and bottom rows of pre-drilled holes

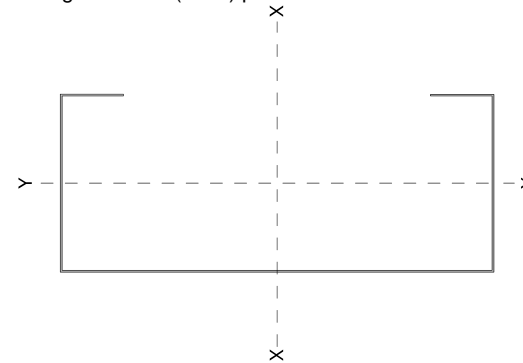
For the fastener connection screws are to fill all pre-drilled holes.



TABLE 6 – KWIK-JAMB STUD SECTIONAL PROPERTIES

Part No.	Gross Properties							Effective Properties						Torsional Properties					β	Lu (in)
	Area (in ²)	Weight (lb/ft)	Ixx (in ⁴)	Sxx (in ³)	Rx (in)	Iyy (in ⁴)	Ry (in)	Ixx-defl. (in ⁴)	Sxx (in ³ -k)	MaFy (in-k)	Ma-Dist (in-k)	Vag (lb)	VaNet (lb)	Jx1000 (in ⁴)	Cw (in ⁶)	Xo (in)	m (in)	Ro (in)		
350KJS238-33EQS ¹	0.272	0.93	0.58	0.331	1.46	0.225	0.909	0.527	0.175	4.99	6.09	696	390	0.079	0.692	-2.119	1.233	2.729	0.397	46.9
350KJS238-43EQS	0.367	1.25	0.778	0.444	1.455	0.3	0.905	0.744	0.307	10.47	10.77	1741	714	0.196	0.917	-2.107	1.226	2.716	0.398	46.8
350KJS238-54	0.514	1.75	1.076	0.615	1.447	0.413	0.896	1.071	0.468	15.99	17.1	3600	1011	0.549	1.25	-2.087	1.215	2.693	0.4	46.8
350KJS338-54	0.67	2.28	1.449	0.828	1.471	1.123	1.295	1.354	0.598	20.43	22.06	3600	1011	0.715	4.742	-3.347	1.898	3.879	0.255	72.1
350KJS338-68	0.836	2.84	1.791	1.023	1.464	1.384	1.287	1.767	0.817	27.88	29.66	4791	1023	1.416	5.82	-3.329	1.889	3.858	0.255	72.3
350KJS338-97	1.169	3.98	2.452	1.401	1.448	1.885	1.27	2.452	1.215	41.45	45.76	6503	883	4.03	7.862	-3.291	1.868	3.814	0.255	72.9
350KJS338-127	1.505	5.12	3.084	1.762	1.431	2.355	1.251	3.084	1.69	57.68	60.14	8092	746	8.967	9.755	-3.252	1.847	3.767	0.255	73.9
362KJS238-33EQS ¹	0.276	0.94	0.627	0.346	1.508	0.228	0.909	0.57	0.183	5.21	6.32	670	402	0.08	0.739	-2.099	1.224	2.74	0.413	46.8
362KJS238-43EQS	0.372	1.27	0.842	0.464	1.504	0.304	0.904	0.806	0.319	10.88	11.18	1677	736	0.198	0.979	-2.087	1.217	2.726	0.414	46.7
362KJS238-54	0.521	1.77	1.165	0.643	1.495	0.418	0.896	1.16	0.488	16.65	17.77	3600	1085	0.556	1.335	-2.066	1.206	2.703	0.416	46.6
362KJS338-54	0.677	2.3	1.568	0.865	1.523	1.138	1.297	1.467	0.624	21.29	22.91	3600	1085	0.723	4.999	-3.323	1.89	3.879	0.266	71.7
362KJS338-68	0.845	2.87	1.939	1.07	1.515	1.403	1.289	1.913	0.853	29.1	30.83	4981	1144	1.431	6.137	-3.305	1.88	3.857	0.266	71.8
362KJS338-97	1.182	4.02	2.656	1.466	1.499	1.91	1.271	2.656	1.271	43.38	47.65	6775	997	4.074	8.297	-3.267	1.86	3.813	0.266	72.4
362KJS338-127	1.522	5.18	3.344	1.845	1.482	2.387	1.253	3.344	1.769	60.39	62.97	8449	852	9.067	10.302	-3.227	1.838	3.766	0.266	73.3
400KJS238-33EQS ¹	0.287	0.98	0.783	0.392	1.652	0.236	0.907	0.71	0.207	5.91	7.03	604	433	0.083	0.892	-2.04	1.199	2.778	0.46	46.4
400KJS238-43EQS	0.387	1.32	1.051	0.526	1.648	0.315	0.902	1.01	0.355	12.13	12.42	1510	794	0.206	1.182	-2.028	1.192	2.765	0.462	46.4
400KJS238-54	0.542	1.84	1.457	0.729	1.639	0.433	0.894	1.451	0.546	18.63	19.8	3600	1306	0.579	1.615	-2.008	1.181	2.742	0.464	46.3
400KJS338-54	0.698	2.37	1.957	0.979	1.675	1.18	1.301	1.837	0.699	23.87	25.46	3600	1306	0.745	5.829	-3.253	1.863	3.883	0.298	70.6
400KJS338-68	0.871	2.96	2.422	1.211	1.667	1.455	1.292	2.393	0.959	32.75	34.35	5553	1546	1.476	7.163	-3.234	1.853	3.861	0.298	70.7
400KJS338-97	1.22	4.15	3.326	1.663	1.651	1.983	1.275	3.326	1.444	49.28	53.35	7590	1376	4.205	9.703	-3.196	1.832	3.817	0.299	71.1
400KJS338-127	1.572	5.35	4.197	2.098	1.634	2.481	1.256	4.197	2.012	68.68	71.62	9521	1208	9.366	12.074	-3.156	1.811	3.769	0.299	71.8
550KJS238-33EQS ¹	0.331	1.13	1.616	0.587	2.209	0.263	0.891	1.439	0.344	9.79	9.89	433	433	0.096	1.696	-1.84	1.111	3.01	0.626	45.8
550KJS238-43EQS	0.447	1.52	2.173	0.79	2.204	0.351	0.887	2.074	0.589	20.09	17.43	1080	943	0.238	2.254	-1.828	1.105	2.998	0.628	45.6
550KJS238-54	0.627	2.13	3.021	1.099	2.195	0.483	0.878	2.976	0.914	31.19	28.09	3093	1881	0.67	3.091	-1.808	1.094	2.976	0.631	45.4
550KJS338-54	0.783	2.66	4.019	1.462	2.266	1.327	1.302	3.751	1.145	39.09	35.83	3093	1881	0.836	10.112	-2.996	1.757	3.976	0.432	68.1
550KJS338-68	0.978	3.33	4.986	1.813	2.258	1.637	1.294	4.904	1.517	51.79	48.7	5713	2703	1.658	12.462	-2.977	1.747	3.954	0.433	68.1
550KJS338-97	1.372	4.67	6.888	2.505	2.24	2.235	1.276	6.888	2.214	75.56	76.76	10850	3449	4.731	16.984	-2.939	1.727	3.91	0.435	68.1
550KJS338-127	1.772	6.03	8.748	3.181	2.222	2.803	1.258	8.748	3.07	104.8	106.85	13807	3186	10.561	21.272	-2.898	1.706	3.862	0.437	68.3
600KJS238-33EQS ¹	0.346	1.18	1.973	0.658	2.389	0.27	0.884	1.729	0.374	10.65	10.84	395	395	0.1	2.037	-1.783	1.085	3.109	0.671	45.6
600KJS238-43EQS	0.467	1.59	2.655	0.885	2.384	0.361	0.88	2.545	0.641	21.88	19.1	987	976	0.249	2.709	-1.771	1.079	3.098	0.673	45.4
600KJS238-54	0.655	2.23	3.694	1.231	2.374	0.497	0.871	3.634	1.029	35.14	30.89	2823	1947	0.7	3.719	-1.752	1.068	3.076	0.676	45.2
600KJS338-54	0.811	2.76	4.898	1.633	2.457	1.369	1.299	4.577	1.286	43.9	39.34	2823	1947	0.866	11.904	-2.92	1.724	4.031	0.475	67.6
600KJS338-68	1.014	3.45	6.08	2.027	2.449	1.689	1.291	5.98	1.701	58.07	53.57	5713	3074	1.718	14.682	-2.901	1.714	4.01	0.477	67.6
600KJS338-97	1.423	4.84	8.41	2.803	2.431	2.307	1.273	8.41	2.48	84.64	84.76	11622	4224	4.907	20.038	-2.863	1.694	3.966	0.479	67.5
600KJS338-127	1.839	6.26	10.697	3.566	2.412	2.895	1.255	10.697	3.439	117.38	118.45	15236	4043	10.959	25.137	-2.822	1.673	3.919	0.481	67.6
800KJS238-43EQS	0.547	1.86	5.193	1.298	3.081	0.394	0.849	5.047	0.852	29.08	25.71	733	733	0.292	5.059	-1.579	0.988	3.564	0.804	44.8
800KJS238-54	0.769	2.62	7.242	1.811	3.07	0.542	0.84	7.169	1.427	48.69	42.03	2091	2091	0.821	6.96	-1.561	0.978	3.544	0.806	44.5
800KJS338-54	0.924	3.14	9.46	2.365	3.199	1.511	1.278	8.959	1.756	59.94	53.52	2091	2091	0.987	21.059	-2.656	1.606	4.35	0.627	66.3
800KJS338-68	1.156	3.94	11.766	2.941	3.19	1.865	1.27	11.577	2.501	85.35	73.34	4221	3367	1.96	26.026	-2.637	1.597	4.329	0.629	66.2
800KJS338-97	1.627	5.53	16.341	4.085	3.17	2.551	1.252	16.341	3.633	124.01	117.52	11622	6340	5.608	35.674	-2.6	1.577	4.286	0.632	65.9
800KJS338-127	2.107	7.17	20.876	5.219	3.148	3.203	1.233	20.876	5.028	171.62	166.38	20087	8112	12.552	44.96	-2.56	1.557	4.241	0.636	65.8

1. Allowable moments and the moment of inertia for deflection (Ixx-defl.) are established based on the Direct Strength Method (DSM) per AISI S100 North American Specification for the Design of Cold Formed Steel Structural Member





CALIFORNIA SUPPLEMENT

SCAFCO STEEL STUD MANUFACTURING CO.

**PRICELESS HEADER AND KWIK-JAMB
SYSTEM**

CSI Section:

05400 Cold-Formed Metal Framing

1.0 RECOGNITION

The SCAFCO Steel Stud Manufacturing CO.'s Priceless Header and KWIK-Jamb System as evaluated and represented in IAPMO UES Evaluation Report ER-342 and with changes as noted in this supplement complies with the following codes:

- 2016 California Building Code® (CBC)

2.0 LIMITATIONS

Design and Installation shall be in accordance with Chapters 16 and 22 of the CBC, as applicable.

3.0 CONTACT INFORMATION

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