RedHeader PRO™ PRODUCT CATALOG

ClarkDietrich
BUILDING SYSTEMS

INTERIOR AND EXTERIOR FRAMING

Rough openings have always been a challenge on the jobsite. At ClarkDietrich, we make them easy. Our collection of rough opening systems offers simplicity, strength, and labor savings. In fact, when it comes to efficiently installed, code-compliant products that address the many challenges of jambs, headers and sills—ClarkDietrich's offerings are unmatched.

As we take perspective of today's construction environment, our vision is clear. We're focused on intelligent approaches and products that provide clear advantages over the traditional ways of doing things. The current reality is that contractors are seeking better alternatives to using standard wall framing members for the field-assembly of opening components.

That's why we have multiple rough opening answers that reduce liability, streamline your processes and even cut on-site labor up to half. This catalog is your guide to these products and the specific benefits that belong to each. The content includes overview information, product data and properties, framing details and more.

Far beyond what you need to confidently handle any rough opening, ClarkDietrich manufactures a comprehensive array of steel framing products. Not only do our products perform as a system, but we support a range of efforts for smarter installation and design, while also providing the expertise of a versatile engineering services team. And we do it all on a nationwide scale.

By using this resource, you can quickly find what you need and make the best rough opening choices for your projects. But please contact us at any time for additional clarity or support. You'll discover that the real strength of our products is the company that stands behind them.

Need Product Submittals?
Use SubmittalPro® at clarkdietrich.com.

RedHeader RO™ is now RedHeader PRO™.
New name and color. Same strengths and advantages.

What is different? The color. A change has been made to the manufacturing process, resulting in a product that is no longer red. This is an outward, aesthetic change, and it does not affect the material's core strength or the system's performance. To coincide with this change, the product is getting a new name. The new name better signifies the higher level of advantages RedHeader has always delivered.

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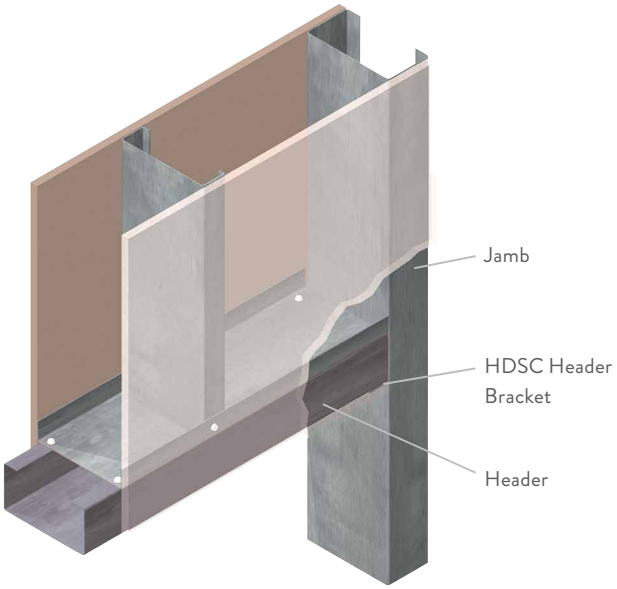
RedHeader PRO™

RedHeader PRO™ can cut your labor time in half. It's designed to replace conventional boxed headers and built-up jambs and provide better results in half the time. One-piece headers and jambs eliminate the additional studs, track and screws required to frame conventional rough openings. Headers and jambs are also pre-cut to specified lengths to eliminate field cutting.

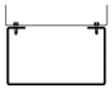
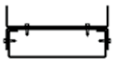
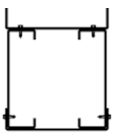
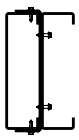
CONSTRUCTION ADVANTAGES:

- Eliminates built-up jambs and boxed or lay-in headers.
- Reduces material pieces and screws by up to 50%.
- The header easily slides into the HDSC Clip.
- Eliminates "capped" members, allowing drywall screws to drive through only one thickness of material.
- Header stud allows for easier fit of rigid insulation without additional cutting.
- Opened jamb stud does not require pre-insulating.
- SAVES LABOR in installation and handling!



ORDERING INFORMATION:

- Pre-cut headers (4' 0" and over) available standard, based on minimum quantity orders.
- Minimum quantity orders of 30 headers required.
- HEADER LENGTHS SHOULD BE ORDERED 1/2" SHORTER THAN OPENING WIDTH TO FIT INSIDE CLIPS (header length = inside of jamb to inside of jamb minus 1/2").

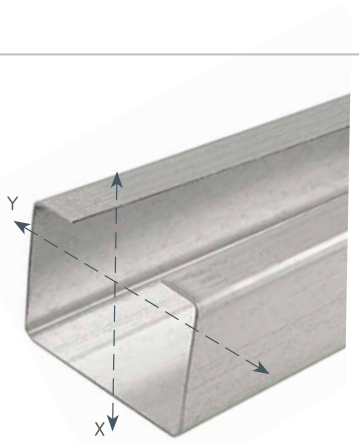
One RedHeader PRO	Replaces		One RedHeader PRO jamb stud	Replaces
				
(1) RedHeader with: (1) track for cripple attachments w/ (2) screws at 16" o.c.	Typical lay-in header with: (1) 1-5/8" flange stud & (2) tracks w/ (4) screws at 16" o.c.	Typical boxed header with: (2) 1-5/8" flange studs & (2) tracks w/ (4) screws at 16" o.c.	(1) RedHeader jamb stud: No track or screws required to build up sections	Typical jamb with: (2) 1-5/8" flange studs & (1) track w/ (4) screws at 16" o.c.

RedHeader PRO™ HEADER STUDS

Product code	Thickness			ksi	Depth (in)	Flange (in)	Return (in)
	Gauge	Mils	Design thickness (in)				
PRO Header (unpunched)	20	33	0.0346	33	3-5/8, 4, 6, 8	3"	1
	18	43	0.0451				
	16	54	0.0566	50		3" or 3-1/2"	
	14	68	0.0713				
	12	97	0.1017				

HEADER LENGTHS SHOULD BE ORDERED 1/2" SHORTER THAN OPENING WIDTH TO FIT INSIDE CLIPS
(header length = inside of jamb to inside of jamb minus 1/2")

All header studs are unpunched.
Standard material coating is CP60 per ASTM C955; G90 available.



HEADER STUD SECTION PROPERTIES

Unperforated Effective Properties

Section (ksi)	Design thickness (in)	Gross								Effective									Torsional				
		Area (in^2)	Weight (lb/ft)	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Sy (in^3)	Ry (in)	Ixe (in^4)	Iye[1] (in^4)	Sxe (in^3)	Sye[1] (in^3)	Max-L (in-k)	May-L[1] (in-k)	Max-D (in-k)	May-D[1] (in-k)	Vax_g	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	Beta
362PRO300-33(33)	0.0346	0.392	1.33	0.898	0.495	1.514	0.543	0.317	1.177	0.806	0.436	0.357	0.257	7.06	5.09	8.07	5.17	1024	0.156	2.437	-2.979	3.543	0.293
362PRO300-43(33)	0.0451	0.509	1.73	1.159	0.640	1.509	0.700	0.408	1.172	1.108	0.627	0.521	0.360	10.30	7.11	11.41	7.29	1739	0.345	3.116	-2.967	3.529	0.293
362PRO300-54(50)	0.0566	0.634	2.16	1.433	0.791	1.503	0.863	0.504	1.166	1.380	0.791	0.656	0.451	19.64	13.51	20.20	12.86	3372	0.677	3.829	-2.953	3.513	0.293
362PRO300-68(50)	0.0713	0.791	2.69	1.770	0.977	1.496	1.062	0.619	1.158	1.770	1.028	0.885	0.601	26.48	17.99	26.97	17.10	4370	1.341	4.695	-2.935	3.492	0.294
362PRO300-97(50)	0.1017	1.105	3.76	2.420	1.335	1.480	1.441	0.839	1.142	2.421	1.423	1.324	0.840	43.74	28.96	39.98	25.13	5943	3.811	6.329	-2.897	3.448	0.294
362PRO350-54(50)	0.0566	0.691	2.35	1.614	0.890	1.528	1.240	0.627	1.340	1.507	1.143	0.691	0.566	20.69	16.95	21.31	15.00	3372	0.738	5.430	-3.447	4.001	0.258
362PRO350-68(50)	0.0713	0.862	2.93	1.995	1.101	1.521	1.529	0.772	1.332	1.973	1.483	0.922	0.751	27.60	22.48	28.63	20.08	4370	1.461	6.669	-3.428	3.980	0.258
362PRO350-97(50)	0.1017	1.207	4.11	2.736	1.510	1.506	2.085	1.052	1.314	2.736	2.059	1.365	1.052	40.87	36.29	44.07	30.71	5943	4.162	9.022	-3.391	3.936	0.258
400PRO300-33(33)	0.0346	0.405	1.38	1.121	0.561	1.664	0.563	0.321	1.179	1.008	0.452	0.407	0.261	8.04	5.16	8.98	5.14	976	0.162	2.835	-2.912	3.555	0.329
400PRO300-43(33)	0.0451	0.526	1.79	1.448	0.724	1.660	0.726	0.414	1.175	1.386	0.647	0.592	0.365	11.70	7.21	12.73	7.27	1739	0.356	3.628	-2.900	3.542	0.330
400PRO300-54(50)	0.0566	0.655	2.23	1.793	0.896	1.654	0.895	0.510	1.169	1.727	0.821	0.746	0.458	22.33	13.70	22.52	12.82	3372	0.700	4.461	-2.886	3.526	0.330
400PRO300-68(50)	0.0713	0.818	2.78	2.216	1.108	1.646	1.102	0.628	1.161	2.216	1.069	1.005	0.609	30.10	18.24	30.16	17.09	4871	1.386	5.475	-2.868	3.504	0.330
400PRO300-97(50)	0.1017	1.144	3.89	3.037	1.518	1.630	1.497	0.851	1.144	3.037	1.480	1.504	0.852	49.69	29.39	45.46	25.49	6658	3.942	7.395	-2.830	3.460	0.331
400PRO350-54(50)	0.0566	0.712	2.42	2.013	1.006	1.681	1.286	0.635	1.344	1.882	1.186	0.785	0.574	23.50	17.20	23.68	14.95	3372	0.760	6.333	-3.375	4.003	0.289
400PRO350-68(50)	0.0713	0.889	3.03	2.491	1.245	1.674	1.586	0.783	1.336	2.464	1.540	1.046	0.762	31.31	22.81	31.89	20.06	4871	1.507	7.786	-3.357	3.982	0.289
400PRO350-97(50)	0.1017	1.245	4.24	3.423	1.712	1.658	2.165	1.068	1.318	3.423	2.140	1.545	1.068	46.26	36.84	49.34	30.78	6658	4.293	10.555	-3.319	3.937	0.290
600PRO300-33(33)	0.0346	0.474	1.61	2.816	0.939	2.437	0.652	0.337	1.173	2.572	0.503	0.653	0.275	12.89	5.43	13.92	5.01	638	0.189	5.749	-2.598	3.750	0.520
600PRO300-43(33)	0.0451	0.616	2.10	3.645	1.215	2.433	0.841	0.435	1.168	3.501	0.734	1.010	0.384	19.95	7.59	19.90	7.13	1416	0.418	7.375	-2.586	3.738	0.521
600PRO300-54(50)	0.0566	0.769	2.62	4.523	1.508	2.426	1.038	0.537	1.162	4.370	0.953	1.274	0.482	38.13	14.43	35.22	12.54	2823	0.821	9.094	-2.572	3.722	0.522
600PRO300-68(50)	0.0713	0.960	3.27	5.611	1.870	2.417	1.280	0.661	1.154	5.610	1.245	1.713	0.642	51.27	19.22	47.66	16.85	5350	1.627	11.200	-2.554	3.701	0.524
600PRO300-97(50)	0.1017	1.347	4.58	7.748	2.583	2.398	1.742	0.899	1.137	7.748	1.730	2.551	0.899	84.28	31.02	74.42	25.90	10472	4.644	15.243	-2.516	3.657	0.527
600PRO350-54(50)	0.0566	0.825	2.81	5.023	1.674	2.467	1.491	0.671	1.344	4.722	1.377	1.335	0.607	39.98	18.18	36.57	14.65	2823	0.881	12.942	-3.037	4.137	0.461
600PRO350-68(50)	0.0713	1.032	3.51	6.238	2.079	2.459	1.841	0.828	1.336	6.167	1.794	1.771	0.805	53.02	24.11	49.71	19.79	5350	1.748	15.968	-3.018	4.116	0.462
600PRO350-97(50)	0.1017	1.449	4.93	8.633	2.878	2.441	2.518	1.131	1.318	8.632	2.501	2.594	1.131	77.65	39.02	78.38	30.79	10472	4.994	21.811	-2.979	4.071	0.464
800PRO300-43(33)	0.0451	0.706	2.40	7.074	1.769	3.165	0.927	0.449	1.146	6.847	0.805	1.414	0.396	27.94	7.83	27.25	6.91	1051	0.479	13.021	-2.340	4.099	0.674
800PRO300-54(50)	0.0566	0.882	3.00	8.792	2.198	3.158	1.145	0.554	1.139	8.541	1.050	1.814	0.498	54.31	14.90	48.22	12.15	2091	0.942	16.083	-2.326	4.084	0.676
800PRO300-68(50)	0.0713	1.103	3.75	10.928	2.732	3.148	1.411	0.682	1.131	10.926	1.375	2.519	0.662	75.41	19.83	65.73	16.42	4221	1.869	19.850	-2.308	4.064	0.677
800PRO300-97(50)	0.1017	1.550	5.28	15.155	3.789	3.127	1.923	0.929	1.114	15.152	1.915	3.739	0.929	123.55	32.05	104.18	25.53	10885	5.345	27.132	-2.271	4.022	0.681
800PRO350-54(50)	0.0566	0.938	3.19	9.685	2.421	3.213	1.646	0.694	1.324	9.191	1.520	1.869	0.628	55.97	18.81	49.75	14.26	2091	1.002	22.897	-2.766	4.442	0.612
800PRO350-68(50)	0.0713	1.174	4.00	12.048	3.012	3.203	2.034	0.856	1.316	11.910	1.984	2.596	0.833	77.74	24.95	68.07	19.35	4221	1.990	28.308	-2.748	4.421	0.614
800PRO350-97(50)	0.1017	1.652	5.62	16.741	4.185	3.183	2.784	1.171	1.298	16.738	2.772	3.786	1.171	113.35	40.41	108.71	30.42	10885	5.696	38.834	-2.710	4.378	0.617

Notes:

- Tables are based on using AISI S100-12 & AISI S100-07 with S2-10 supplement.

1 Web-Height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

2 Web-Height to thickness ratio exceeds 260 or flange-width to thickness ratio exceeds 60.

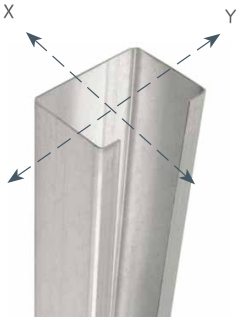
3 For header design, use unperforated effective section properties.

4 For Jamb design, use perforated effective section properties.

RedHeader PRO™ Jamb Studs (3" or 3-1/2" Flange)

RedHeader PRO™ JAMB STUDS

Product code	Thickness			ksi	Depth (in)	Flange (in)	Return (in)
	Gauge	Mils	Design thickness (in)				
PRO JAMB	20	33	0.0346	33	3-5/8	3	1
					4		
					6		
	18	43	0.0451	33	3-5/8, 4, 6, 8	3	1
	16	54	0.0566	50	3-5/8, 4, 6, 8	3" or 3-1/2"	1
	14	68	0.0713				
	12	97	0.1017				



Standard material coating is CP60 per ASTM C955; G90 available.

JAMB STUD SECTION PROPERTIES

Perforated Effective Properties

Section (ksi)	Design thickness (in)	Gross								Effective					Torsional					Lu (in)
		Area (in^2)	Weight (lb/ft)	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Sy (in^3)	Ry (in)	Ixe (in^4)	Sxe (in^3)	Max-L (in-k)	Max-D (in-k)	Vax (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	Beta	
362PRO300-33(33)	0.0346	0.392	1.33	0.898	0.495	1.514	0.543	0.317	1.177	0.806	0.324	6.39	8.07	521	0.156	2.437	-2.979	3.543	0.293	86.3
362PRO300-43(33)	0.0451	0.509	1.73	1.159	0.640	1.509	0.700	0.408	1.172	1.108	0.492	9.73	11.41	676	0.345	3.116	-2.967	3.529	0.293	86.3
362PRO300-54(50)	0.0566	0.634	2.16	1.433	0.791	1.503	0.863	0.504	1.166	1.380	0.624	18.68	20.20	1016	0.677	3.829	-2.953	3.513	0.293	70.0
362PRO300-68(50)	0.0713	0.791	2.69	1.770	0.977	1.496	1.062	0.619	1.158	1.770	0.863	25.83	26.97	1004	1.341	4.695	-2.935	3.492	0.294	70.1
362PRO300-97(50)	0.1017	1.105	3.76	2.420	1.335	1.480	1.441	0.839	1.142	2.421	1.307	43.19	39.98	875	3.811	6.329	-2.897	3.448	0.294	70.8
362PRO350-54(50)	0.0566	0.691	2.35	1.614	0.890	1.528	1.240	0.627	1.340	1.507	0.655	19.62	21.31	1016	0.738	5.430	-3.447	4.001	0.258	78.8
362PRO350-68(50)	0.0713	0.862	2.93	1.995	1.101	1.521	1.529	0.772	1.332	1.973	0.895	26.80	28.63	1004	1.461	6.669	-3.428	3.980	0.258	79.0
362PRO350-97(50)	0.1017	1.207	4.11	2.736	1.510	1.506	2.085	1.052	1.314	2.736	1.340	40.12	44.07	875	4.162	9.022	-3.391	3.936	0.258	79.7
400PRO300-33(33)	0.0346	0.405	1.38	1.121	0.561	1.664	0.563	0.321	1.179	1.008	0.361	7.14	8.98	595	0.162	2.835	-2.912	3.555	0.329	84.9
400PRO300-43(33)	0.0451	0.526	1.79	1.448	0.724	1.660	0.726	0.414	1.175	1.386	0.552	10.91	12.73	810	0.356	3.628	-2.900	3.542	0.330	84.9
400PRO300-54(50)	0.0566	0.655	2.23	1.793	0.896	1.654	0.895	0.510	1.169	1.727	0.700	20.97	22.52	1223	0.700	4.461	-2.886	3.526	0.330	68.8
400PRO300-68(50)	0.0713	0.818	2.78	2.216	1.108	1.646	1.102	0.628	1.161	2.216	0.973	29.14	30.16	1356	1.386	5.475	-2.868	3.504	0.330	68.9
400PRO300-97(50)	0.1017	1.144	3.89	3.037	1.518	1.630	1.497	0.851	1.144	3.037	1.488	49.18	45.46	1207	3.942	7.395	-2.830	3.460	0.331	69.4
400PRO350-54(50)	0.0566	0.712	2.42	2.013	1.006	1.681	1.286	0.635	1.344	1.882	0.735	22.01	23.68	1223	0.760	6.333	-3.375	4.003	0.289	77.6
400PRO350-68(50)	0.0713	0.889	3.03	2.491	1.245	1.674	1.586	0.783	1.336	2.464	1.007	30.16	31.89	1356	1.507	7.786	-3.357	3.982	0.289	77.8
400PRO350-97(50)	0.1017	1.245	4.24	3.423	1.712	1.658	2.165	1.068	1.318	3.423	1.520	45.52	49.34	1207	4.293	10.555	-3.319	3.937	0.290	78.3
600PRO300-33(33)	0.0346	0.474	1.61	2.816	0.939	2.437	0.652	0.337	1.173	2.572	0.653	12.89	13.92	638	0.189	5.749	-2.598	3.750	0.520	81.1
600PRO300-43(33)	0.0451	0.616	2.10	3.645	1.215	2.433	0.841	0.435	1.168	3.501	1.010	19.95	19.90	1240	0.418	7.375	-2.586	3.738	0.521	81.0
600PRO300-54(50)	0.0566	0.769	2.62	4.523	1.508	2.426	1.038	0.537	1.162	4.370	1.274	38.13	35.22	1947	0.821	9.094	-2.572	3.722	0.522	65.6
600PRO300-68(50)	0.0713	0.960	3.27	5.611	1.870	2.417	1.280	0.661	1.154	5.610	1.713	51.27	47.66	2879	1.627	11.200	-2.554	3.701	0.524	65.5
600PRO300-97(50)	0.1017	1.347	4.58	7.748	2.583	2.398	1.742	0.899	1.137	7.748	2.551	84.28	74.42	3805	4.644	15.243	-2.516	3.657	0.527	65.5
600PRO350-54(50)	0.0566	0.825	2.81	5.023	1.674	2.467	1.491	0.671	1.344	4.722	1.335	39.98	36.57	1947	0.881	12.942	-3.037	4.137	0.461	74.4
600PRO350-68(50)	0.0713	1.032	3.51	6.238	2.079	2.459	1.841	0.828	1.336	6.167	1.771	53.02	49.71	2879	1.748	15.968	-3.018	4.116	0.462	74.4
600PRO350-97(50)	0.1017	1.449	4.93	8.633	2.878	2.441	2.518	1.131	1.318	8.632	2.594	77.65	78.38	3805	4.994	21.811	-2.979	4.071	0.464	74.4
800PRO300-43(33)	0.0451	0.706	2.40	7.074	1.769	3.165	0.927	0.449	1.146	6.847	1.414	27.94	27.25	1051	0.479	13.021	-2.340	4.099	0.674	79.2
800PRO300-54(50)	0.0566	0.882	3.00	8.792	2.198	3.158	1.145	0.554	1.139	8.541	1.814	54.31	48.22	2091	0.942	16.083	-2.326	4.084	0.676	64.1
800PRO300-68(50)	0.0713	1.103	3.75	10.928	2.732	3.148	1.411	0.682	1.131	10.926	2.519	75.41	65.73	3367	1.869	19.850	-2.308	4.064	0.677	64.0
800PRO300-97(50)	0.1017	1.550	5.28	15.155	3.789	3.127	1.923	0.929	1.114	15.152	3.739	123.55	104.18	5938	5.345	27.132	-2.271	4.022	0.681	63.7
800PRO350-54(50)	0.0566	0.938	3.19	9.685	2.421	3.213	1.646	0.694	1.324	9.191	1.869	55.97	49.75	2091	1.002	22.897	-2.766	4.442	0.612	73.1
800PRO350-68(50)	0.0713	1.174	4.00	12.048	3.012	3.203	2.034	0.856	1.316	11.910	2.596	77.74	68.07	3367	1.990	28.308	-2.748	4.421	0.614	72.9
800PRO350-97(50)	0.1017	1.652	5.62	16.741	4.185	3.183	2.784	1.171	1.298	16.738	3.786	113.35	108.71	5938	5.696	38.834	-2.710	4.378	0.617	72.7

Notes:

- Tables are based on using AISI S100-12 & AISI S100-07 with S2-10 supplement.

1 Web-Height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

2 Web-Height to thickness ratio exceeds 260 or flange-width to thickness ratio exceeds 60.

3 For header design, use unperforated effective section properties.

4 For Jamb design, use perforated effective section properties.

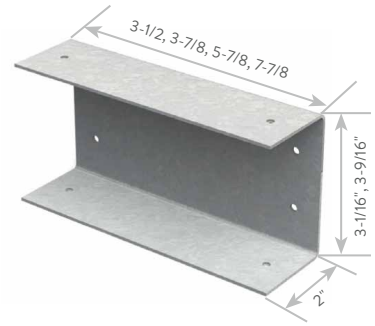
HDSC 33mil (20ga) Header Brackets (3" & 3-1/2" Flange)

CLIP EXPRESS

HDSC HEADER BRACKET

Product code	Thickness			ksi	Size (in)	Fits RedHeader PRO system size (in)
	Gauge	Mils	Design thickness (in)			
HDSC-33	20	33	0.0346	33	3-1/2 x 3-1/16 x 2 3-1/2 x 3-9/16 x 2	3-5/8 with 3" Flange 3-5/8 with 3-1/2" Flange
HDSC-33	20	33	0.0346	33	3-7/8 x 3-1/16 x 2 3-7/8 x 3-9/16 x 2	4 with 3" Flange 4 with 3-1/2" Flange
HDSC-33	20	33	0.0346	33	5-7/8 x 3-1/16 x 2 5-7/8 x 3-9/16 x 2	6 with 3" Flange 6 with 3-1/2" Flange
HDSC-33	20	33	0.0346	33	7-7/8 x 3-1/16 x 2 7-7/8 x 3-9/16 x 2	8 with 3" Flange 8 with 3-1/2" Flange

All material G90. Sold in pairs.



HDSC HEADER BRACKETS ALLOWABLE LOADS (LBS)

For 3" & 3-1/2" Flange Header Systems

Product code	Size (in)	Jamb/Head Gauge			F1 (lbs)		F2 (lbs)	
		Gauge	Mils	Fy	Jamb	Head	Jamb	Head
HDSC-33	3-1/2	20	33	33	708	573	166	166
		18	43	33	1052	851	166	166
		16	54	50	1466	1466	166	166
		14	68	50	1466	1466	166	166
		12	97	50	1466	1466	166	166
HDSC-33	3-7/8	20	33	33	708	596	184	184
		18	43	33	1052	886	184	184
		16	54	50	1695	1695	184	184
		14	68	50	1695	1695	184	184
		12	97	50	1695	1695	184	184
HDSC-33	5-7/8	20	33	33	708	633	279	279
		18	43	33	1052	941	279	279
		16	54	50	2136	1910	279	279
		14	68	50	2192	1961	279	279
		12	97	50	2192	1961	279	279
HDSC-33	7-7/8	20	33	33	708	474	373	373
		18	43	33	1052	1013	373	373
		16	54	50	2136	2057	373	373
		14	68	50	2192	2110	373	373
		12	97	50	2192	2110	373	373

Notes:

1. Listed capacities are based on AISI S100-12, North American Specification for Cold-Formed Steel Structural Members.
2. Screws shall be #10-16, with an ultimate shear capacity per screw of 1644#.
3. Table to be used by qualified engineers only.
4. To determine the capacity of any given connection, compare the jamb and header values, and use the minimum. For example, if a 54mil (16ga), 50 ksi jamb is used with a 3.625" 43mil (18ga), 33 ksi header, the design value for F2 is the minimum value of 166# for the jamb (HDSC3-33), and 166# for the header (HDSC3-33). Therefore, the design value is 166# (HDSC3-33).
5. For F1 and F2 occuring at the same time, use the squared interaction equation; (f1/F1)^2+(f2/F2)^2<1.0.

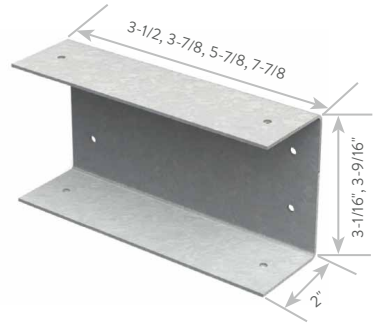
HDSC 68mil (14ga) Header Brackets (3" & 3-1/2" Flange)

CLIP EXPRESS

HDSC HEADER BRACKET

Product code	Thickness			ksi	Size (in)	Fits RedHeader PRO system size (in)
	Gauge	Mils	Design thickness (in)			
HDSC-68	14	68	0.0713	50	3-1/2 x 3-1/16 x 2 3-1/2 x 3-9/16 x 2	3-5/8 with 3" Flange 3-5/8 with 3-1/2" Flange
HDSC-68	14	68	0.0713	50	3-7/8 x 3-1/16 x 2 3-7/8 x 3-9/16 x 2	4 with 3" Flange 4 with 3-1/2" Flange
HDSC-68	14	68	0.0713	50	5-7/8 x 3-1/16 x 2 5-7/8 x 3-9/16 x 2	6 with 3" Flange 6 with 3-1/2" Flange
HDSC-68	14	68	0.0713	50	7-7/8 x 3-1/16 x 2 7-7/8 x 3-9/16 x 2	8 with 3" Flange 8 with 3-1/2" Flange

All material G90. Sold in pairs.



HDSC HEADER BRACKETS ALLOWABLE LOADS (LBS)

For 3" & 3-1/2" Flange Header Systems

Product code	Size (in)	Jamb/Head Gauge			F1 (lbs)		F2 (lbs)	
		Gauge	Mils	Fy	Jamb	Head	Jamb	Head
HDSC-68	3-1/2	20	33	33	708	573	708	430
		18	43	33	1052	851	1052	710
		16	54	50	2136	1727	1068	1068
		14	68	50	2192	1773	1068	1068
		12	97	50	2192	1773	1068	1068
HDSC-68	3-7/8	20	33	33	708	596	708	430
		18	43	33	1052	886	1052	710
		16	54	50	2136	1799	1182	1182
		14	68	50	2192	1846	1182	1182
		12	97	50	2192	1846	1182	1182
HDSC-68	5-7/8	20	33	33	708	633	708	430
		18	43	33	1052	941	1052	710
		16	54	50	2136	1910	1792	1610
		14	68	50	2192	1961	1792	1792
		12	97	50	2192	1961	1792	1792
HDSC-68	7-7/8	20	33	33	708	474	708	430
		18	43	33	1052	1013	1052	710
		16	54	50	2136	2057	2136	1610
		14	68	50	2192	2110	2192	2402
		12	97	50	2192	2110	2192	2402

Notes:

1. Listed capacities are based on AISI S100-12, North American Specification for Cold-Formed Steel Structural Members.
2. Screws shall be #10-16, with an ultimate shear capacity per screw of 1644#.
3. Table to be used by qualified engineers only.
4. To determine the capacity of any given connection, compare the jamb and header values, and use the minimum. For example, if a 54mil (16ga), 50 ksi jamb is used with a 3.625" 43mil (18ga), 33 ksi header, the design value for F1 is the minimum value of 2136# for the jamb (HDSC3.5-68), and 851# for the header (HDSC3.5-68). Therefore, the design value is 851# (HDSC3.5-68).
5. For F1 and F2 occuring at the same time, use the squared interaction equation; (f1/F1)^2+(f2/F2)^2<1.0.

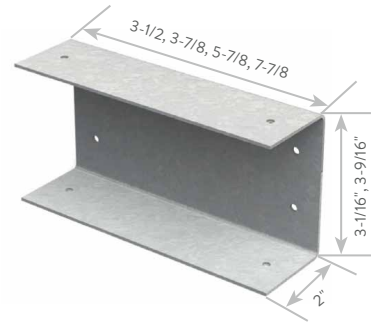
HDSC 97mil (12ga) Header Brackets (3" & 3-1/2" Flange)

CLIP EXPRESS

HDSC HEADER BRACKET

Product code	Thickness			ksi	Size (in)	Fits RedHeader PRO system size (in)
	Gauge	Mils	Design thickness (in)			
HDSC-97	12	97	0.1017	50	3-1/2 x 3-1/16 x 2 3-1/2 x 3-9/16 x 2	3-5/8 with 3" Flange 3-5/8 with 3-1/2" Flange
HDSC-97	12	97	0.1017	50	3-7/8 x 3-1/16 x 2 3-7/8 x 3-9/16 x 2	4 with 3" Flange 4 with 3-1/2" Flange
HDSC-97	12	97	0.1017	50	5-7/8 x 3-1/16 x 2 5-7/8 x 3-9/16 x 2	6 with 3" Flange 6 with 3-1/2" Flange
HDSC-97	12	97	0.1017	50	7-7/8 x 3-1/16 x 2 7-7/8 x 3-9/16 x 2	8 with 3" Flange 8 with 3-1/2" Flange

All material G90. Sold in pairs.



HDSC HEADER BRACKETS ALLOWABLE LOADS (LBS)

For 3" & 3-1/2" Flange Header Systems

Product code	Size (in)	Jamb/Head Gauge			F1 (lbs)		F2 (lbs)	
		Gauge	Mils	Fy	Jamb	Head	Jamb	Head
HDSC-97	3-1/2	20	33	33	752	608	752	430
		18	43	33	1120	906	1120	710
		16	54	50	2276	1841	2172	1610
		14	68	50	3108	2514	2172	2172
		12	97	50	3108	2514	2172	2172
HDSC-97	3-7/8	20	33	33	752	633	752	430
		18	43	33	1120	943	1120	710
		16	54	50	2276	1917	2276	1610
		14	68	50	3108	2618	2405	2405
		12	97	50	3108	2618	2405	2405
HDSC-97	5-7/8	20	33	33	752	638	752	430
		18	43	33	1120	1002	1120	710
		16	54	50	2276	2036	2276	1610
		14	68	50	3108	2780	3108	2413
		12	97	50	3108	2780	3108	3646
HDSC-97	7-7/8	20	33	33	752	474	752	430
		18	43	33	1120	1051	1120	710
		16	54	50	2276	2091	2276	1610
		14	68	50	3108	2992	3108	2413
		12	97	50	3108	2992	3108	4504

Notes:

1. Listed capacities are based on AISI S100-12, North American Specification for Cold-Formed Steel Structural Members.
2. For HDSC3-97 clips, Screws shall be #12-16 with an ultimate shear capacity per screw of 2330#.
3. Table to be used by qualified engineers only.
4. To determine the capacity of any given connection, compare the jamb and header values, and use the minimum. For example, if a 54mil (16ga), 50 ksi jamb is used with a 3.625" 43mil (18ga), 33 ksi header, the design value for F1 is the minimum value of 2276# for the jamb (HDSC3.5-97), and 906# for the header (HDSC3-97). Therefore, the design value is 906# (HDSC3-68).
5. For F1 and F2 occuring at the same time, use the squared interaction equation; (f1/F1)^2+(f2/F2)^2<1.0.

Allowable header spans for INTERIOR openings

RedHeader PRO™ 3" Flange Header

(Lateral Load = 5psf, Wall Dead Load = 10psf, Sill Height = 0", Deflection Factor = 1.0)

Wall height (ft)	Wall size (in)	Member	Gauge (mils)	L/120						L/240						L/360					
				Opening Height (ft)																	
				7		8		9		7		8		9		7		8		9	
9	3-5/8	362PRO300-33	20ga (33mils)	9'-8"	1	11'-4"	2	-		9'-8"	1	11'-4"	2	-		9'-8"	1	11'-4"	2	-	
		362PRO300-43	18ga (43mils)	11'-6"	2	13'-7"	2	-		11'-6"	2	13'-7"	2	-		11'-6"	2	12'-10"	2	-	
		362PRO300-54	16ga (54mils)	12'-8"	2	15'-1"	2	-		12'-8"	2	15'-1"	2	-		12'-8"	2	13'-10"	2	-	
		362PRO300-68	14ga (68mils)	13'-6"	2	16'-1"	2	-		13'-6"	2	16'-1"	2	-		13'-6"	2	15'-1"	2	-	
		362PRO300-97	12ga (97mils)	14'-8"	2	17'-5"	2	-		14'-8"	2	17'-5"	2	-		14'-8"	2	16'-9"	2	-	
	4	400PRO300-33	20ga (33mils)	9'-11"	1	11'-10"	1	-		9'-11"	1	11'-10"	1	-		9'-11"	1	11'-10"	1	-	
		400PRO300-43	18ga (43mils)	11'-10"	2	14'-2"	2	-		11'-10"	2	14'-2"	2	-		11'-10"	2	13'-10"	2	-	
		400PRO300-54	16ga (54mils)	12'-9"	2	15'-2"	2	-		12'-9"	2	15'-2"	2	-		12'-9"	2	14'-11"	2	-	
		400PRO300-68	14ga (68mils)	13'-8"	2	16'-3"	2	-		13'-8"	2	16'-3"	2	-		13'-8"	2	16'-3"	2	-	
		400PRO300-97	12ga (97mils)	14'-10"	2	17'-7"	2	-		14'-10"	2	17'-7"	2	-		14'-10"	2	17'-7"	2	-	
	6	600PRO300-33	20ga (33mils)	11'-1"	1	13'-5"	1	-		11'-1"	1	13'-5"	1	-		11'-1"	1	13'-5"	1	-	
		600PRO300-43	18ga (43mils)	12'-5"	1	14'-9"	1	-		12'-5"	1	14'-9"	1	-		12'-5"	1	14'-9"	1	-	
		600PRO300-54	16ga (54mils)	13'-3"	1	15'-9"	1	-		13'-3"	1	15'-9"	1	-		13'-3"	1	15'-9"	1	-	
		600PRO300-68	14ga (68mils)	14'-2"	1	16'-10"	1	-		14'-2"	1	16'-10"	1	-		14'-2"	1	16'-10"	1	-	
		600PRO300-97	12ga (97mils)	15'-5"	1	18'-4"	2	-		15'-5"	1	18'-4"	2	-		15'-5"	1	18'-4"	2	-	
11	3-5/8	362PRO300-33	20ga (33mils)	7'-6"	1	8'-3"	2	9'-2"	2	7'-6"	1	8'-3"	2	9'-2"	2	7'-6"	1	8'-3"	2	9'-2"	2
		362PRO300-43	18ga (43mils)	8'-11"	2	9'-10"	2	11'-0"	2	8'-11"	2	9'-10"	2	11'-0"	2	8'-11"	2	9'-10"	2	11'-0"	2
		362PRO300-54	16ga (54mils)	10'-8"	2	11'-5"	2	12'-8"	2	10'-8"	2	11'-5"	2	12'-8"	2	10'-8"	2	11'-5"	2	12'-8"	2
		362PRO300-68	14ga (68mils)	11'-4"	2	12'-2"	2	13'-6"	2	11'-4"	2	12'-2"	2	13'-6"	2	11'-4"	2	12'-2"	2	13'-6"	2
		362PRO300-97	12ga (97mils)	12'-4"	2	13'-3"	2	14'-8"	2	12'-4"	2	13'-3"	2	14'-8"	2	12'-4"	2	13'-3"	2	14'-8"	2
	4	400PRO300-33	20ga (33mil)	7'-8"	1	8'-5"	1	9'-6"	2	7'-8"	1	8'-5"	1	9'-6"	2	7'-8"	1	8'-5"	1	9'-6"	2
		400PRO300-43	18ga (43mil)	9'-2"	2	10'-1"	2	11'-4"	2	9'-2"	2	10'-1"	2	11'-4"	2	9'-2"	2	10'-1"	2	11'-4"	2
		400PRO300-54	16ga (54mil)	10'-9"	2	11'-6"	2	12'-9"	2	10'-9"	2	11'-6"	2	12'-9"	2	10'-9"	2	11'-6"	2	12'-9"	2
		400PRO300-68	14ga (68mil)	11'-6"	2	12'-4"	2	13'-8"	2	11'-6"	2	12'-4"	2	13'-8"	2	11'-6"	2	12'-4"	2	13'-8"	2
		400PRO300-97	12ga (97mil)	12'-5"	2	13'-4"	2	14'-10"	2	12'-5"	2	13'-4"	2	14'-10"	2	12'-5"	2	13'-4"	2	14'-10"	2
	6	600PRO300-33	20ga (33mils)	8'-4"	1	9'-3"	1	10'-8"	1	8'-4"	1	9'-3"	1	10'-8"	1	8'-4"	1	9'-3"	1	10'-8"	1
		600PRO300-43	18ga (43mils)	10'-0"	1	11'-2"	1	12'-5"	1	10'-0"	1	11'-2"	1	12'-5"	1	10'-0"	1	11'-2"	1	12'-5"	1
		600PRO300-54	16ga (54mils)	11'-2"	2	12'-0"	1	13'-3"	1	11'-2"	2	12'-0"	1	13'-3"	1	11'-2"	2	12'-0"	1	13'-3"	1
		600PRO300-68	14ga (68mils)	11'-11"	2	12'-10"	2	14'-2"	2	11'-11"	2	12'-10"	2	14'-2"	2	11'-11"	2	12'-10"	2	14'-2"	2
		600PRO300-97	12ga (97mils)	12'-11"	2	13'-11"	2	15'-5"	2	12'-11"	2	13'-11"	2	15'-5"	2	12'-11"	2	13'-11"	2	15'-5"	2
13	3-5/8	362PRO300-33	20ga (33mils)	6'-4"	2	6'-9"	2	7'-3"	2	6'-4"	2	6'-9"	2	7'-3"	2	6'-4"	2	6'-9"	2	7'-3"	2
		362PRO300-43	18ga (43mils)	7'-6"	2	8'-1"	2	8'-8"	2	7'-6"	2	8'-1"	2	8'-8"	2	7'-6"	2	8'-1"	2	8'-8"	2
		362PRO300-54	16ga (54mils)	9'-6"	2	10'-1"	2	10'-8"	2	9'-6"	2	10'-1"	2	10'-8"	2	9'-6"	2	10'-1"	2	10'-8"	2
		362PRO300-68	14ga (68mils)	10'-3"	2	10'-9"	2	11'-4"	2	10'-3"	2	10'-9"	2	11'-4"	2	10'-3"	2	10'-9"	2	11'-4"	2
		362PRO300-97	12ga (97mils)	11'-1"	2	11'-8"	2	12'-4"	2	11'-1"	2	11'-8"	2	12'-4"	2	11'-1"	2	11'-8"	2	12'-4"	2
	4	400PRO300-33	20ga (33mil)	6'-6"	2	6'-11"	2	7'-6"	2	6'-6"	2	6'-11"	2	7'-6"	2	6'-6"	2	6'-11"	2	7'-6"	2
		400PRO300-43	18ga (43mil)	7'-8"	2	8'-3"	2	8'-11"	2	7'-8"	2	8'-3"	2	8'-11"	2	7'-8"	2	8'-3"	2	8'-11"	2
		400PRO300-54	16ga (54mil)	9'-7"	2	10'-2"	2	10'-9"	2	9'-7"	2	10'-2"	2	10'-9"	2	9'-7"	2	10'-2"	2	10'-9"	2
		400PRO300-68	14ga (68mil)	10'-4"	2	10'-10"	2	11'-6"	2	10'-4"	2	10'-10"	2	11'-6"	2	10'-4"	2	10'-10"	2	11'-6"	2
		400PRO300-97	12ga (97mil)	11'-3"	2	11'-9"	2	12'-5"	2	11'-3"	2	11'-9"	2	12'-5"	2	11'-3"	2	11'-9"	2	12'-5"	2
	6	600PRO300-33	20ga (33mils)	7'-0"	1	7'-6"	1	8'-2"	1	7'-0"	1	7'-6"	1	8'-2"	1	7'-0"	1	7'-6"	1	8'-2"	1
		600PRO300-43	18ga (43mils)	8'-4"	1	9'-0"	1	9'-9"	1	8'-4"	1	9'-0"	1	9'-9"	1	8'-4"	1	9'-0"	1	9'-9"	1
		600PRO300-54	16ga (54mils)	10'-1"	2	10'-6"	2	11'-2"	2	10'-1"	2	10'-6"	2	11'-2"	2	10'-1"	2	10'-6"	2	11'-2"	2
		600PRO300-68	14ga (68mils)	10'-9"	2	11'-3"	2	11'-11"	2	10'-9"	2	11'-3"	2	11'-11"	2	10'-9"	2	11'-3"	2	11'-11"	2
		600PRO300-97	12ga (97mils)	11'-8"	2	12'-3"	2	12'-11"	2	11'-8"	2	12'-3"	2	12'-11"	2	11'-8"	2	12'-3"	2	12'-11"	2
15	3-5/8	362PRO300-33	20ga (33mils)	5'-7"	2	5'-10"	2	6'-2"	2	5'-7"	2	5'-10"	2	6'-2"	2	5'-7"	2	5'-10"	2	6'-2"	2
		362PRO300-43	18ga (43mils)	6'-8"	2	7'-0"	2	7'-5"	2	6'-8"	2	7'-0"	2	7'-5"	2	6'-8"	2	7'-0"	2	7'-5"	2
		362PRO300-54	16ga (54mils)	8'-7"	2	9'-0"	2	9'-6"	2	8'-7"	2	9'-0"	2	9'-6"	2	8'-7"	2	9'-0"	2	9'-6"	2
		362PRO300-68	14ga (68mils)	9'-5"	2	9'-10"	2	10'-3"	2	9'-5"	2	9'-10"	2	10'-3"	2	9'-5"	2	9'-10"	2	10'-3"	2
		362PRO300-97	12ga (97mils)	10'-4"	2	10'-8"	2	11'-1"	2	10'-4"	2	10'-8"	2	11'-1"	2	10'-4"	2	10'-8"	2	11'-1"	2
	4	400PRO300-33	20ga (33mil)	5'-8"	2	6'-0"	2	6'-4"	2	5'-8"	2	6'-0"	2	6'-4"	2	5'-8"	2	6'-0"	2	6'-4"	2
		400PRO300-43	18ga (43mil)	6'-9"	2	7'-2"	2	7'-7"	2	6'-9"	2	7'-2"	2	7'-7"	2	6'-9"	2	7'-2"	2	7'-7"	2
		400PRO300-54	16ga (54mil)	8'-9"	2	9'-1"	2	9'-7"	2	8'-9"	2	9'-1"	2	9'-7"	2	8'-9"	2	9'-1"	2	9'-7"	2
		400PRO300-68	14ga (68mil)	9'-6"	2	10'-0"	2	10'-4"	2	9'-6"	2	10'-0"	2	10'-4"	2	9'-6"	2	10'-0"	2	10'-4"	2
		400PRO300-97	12ga (97mil)	10'-5"	2	10'-10"	2	11'-3"	2	10'-5"	2	10'-10"	2	11'-3"	2	10'-5"	2	10'-10"	2	11'-3"	2
	6	600PRO300-33	20ga (33mils)	6'-1"	1	6'-5"	1	6'-10"	1	6'-1"	1	6'-5"	1	6'-10"	1	6'-1"	1	6'-5"	1	6'-10"	1
		600PRO300-43	18ga (43mils)	7'-3"	2	7'-8"	2	8'-3"	2	7'-3"	2	7'-8"	2	8'-3"	2	7'-3"	2	7'-8"	2	8'-3"	2
		600PRO300-54	16ga (54mils)	9'-2"	2	9'-7"	2	10'-1"	2	9'-2"	2	9'-7"	2	10'-1"	2	9'-2"	2	9'-7"	2	10'-1"	2
		600PRO300-68	14ga (68mils)	10'-0"	2	10'-4"	2	10'-9"	2	10'-0"	2	10'-4"	2	10'-9"	2	10'-0"	2	10'-4"	2	10'-9"	2
		600PRO300-97	12ga (97mils)	10'-10"	2	11'-3"	2	11'-8"	2	10'-10"	2	11'-3"	2	11'-8"	2	10'-10"	2	11'-3"	2	11'-8"	2

Span notes: (Reference number shown to the right of spans)

1 Use 20ga (33mil) HDSC™ Clip with a 4/4 screw pattern. **2** Use 14ga (68mil) HDSC™ Clip with a 4/4 screw pattern.

Notes:

1 All headers require the attachment of the HDSC™ Clip at each end with headers installed leg up.

2 Recommended HDSC™ clip attachments above are based on the jamb stud thickness being equal to or greater than header thickness.

3 Header framing was calculated with a sill height of 0" for worst case design.

4 Section properties are based upon the AISI S100-2012 or Direct Strength Method.

5 Increase strength in cold work of forming was used per AISI S100 section A7.2.

6 For deflection calculations, the effective moment of inertia was used. Reference the AISI S100 commentary C1.

7 On interior framing, lateral deflection calculations are based on using 1.0 times the interior wind load.

8 Dead load deflection calculations are limited to L/240 or 0.5" max. deflection.

9 Header lengths should be ordered 1/2" shorter to fit inside clips.

Allowable header spans for **EXTERIOR** openings

RedHeader PRO™ 3" Flange Header

(Lateral Load = 25psf, Wall Dead Load = 12psf, Sill Height = 0", Deflection Factor = 0.7)

Wall height (ft)	Wall size (in)	Member	Gauge (mils)	L/240			L/360			L/600		
				Opening Height (ft)								
				7	8	9	7	8	9	7	8	9
9	3-5/8	362PRO300-33	20ga (33mils)	5'-8" 2	6'-0" 2	-	5'-8" 2	6'-0" 2	-	5'-8" 2	6'-0" 2	-
		362PRO300-43	18ga (43mils)	6'-9" 3	7'-3" 3	-	6'-9" 3	7'-3" 3	-	6'-9" 3	7'-3" 3	-
		362PRO300-54	16ga (54mils)	9'-5" 2	10'-0" 2	-	9'-5" 2	10'-0" 2	-	9'-5" 2	9'-9" 2	-
		362PRO300-68	14ga (68mils)	10'-11" 2	11'-7" 2	-	10'-11" 2	11'-7" 2	-	10'-7" 2	10'-7" 2	-
		362PRO300-97	12ga (97mils)	14'-0" 2	14'-11" 2	-	13'-11" 2	13'-11" 2	-	11'-9" 2	11'-9" 2	-
	4	400PRO300-33	20ga (33mils)	5'-11" 2	6'-4" 2	-	5'-11" 2	6'-4" 2	-	5'-11" 2	6'-4" 2	-
		400PRO300-43	18ga (43mils)	7'-2" 3	7'-8" 3	-	7'-2" 3	7'-8" 3	-	7'-2" 3	7'-8" 3	-
		400PRO300-54	16ga (54mils)	9'-10" 2	10'-7" 2	-	9'-10" 2	10'-7" 2	-	9'-10" 2	10'-6" 2	-
		400PRO300-68	14ga (68mils)	11'-5" 2	12'-3" 2	-	11'-5" 2	12'-3" 2	-	11'-5" 2	11'-5" 2	-
		400PRO300-97	12ga (97mils)	14'-2" 2	15'-9" 2	-	14'-2" 2	15'-1" 2	-	12'-8" 2	12'-8" 2	-
	6	600PRO300-33	20ga (33mils)	7'-1" 3	7'-9" 3	-	7'-1" 3	7'-9" 3	-	7'-1" 3	7'-9" 3	-
		600PRO300-43	18ga (43mils)	8'-8" 3	9'-7" 3	-	8'-8" 3	9'-7" 3	-	8'-8" 3	9'-7" 3	-
		600PRO300-54	16ga (54mils)	12'-0" 2	13'-3" 2	-	12'-0" 2	13'-3" 2	-	12'-0" 2	13'-3" 2	-
		600PRO300-68	14ga (68mils)	13'-6" 2	15'-4" 2	-	13'-6" 2	15'-4" 2	-	13'-6" 2	15'-4" 2	-
		600PRO300-97	12ga (97mils)	14'-8" 2	17'-6" 2	-	14'-8" 2	17'-6" 2	-	14'-8" 2	17'-4" 2	-
11	3-5/8	362PRO300-33	20ga (33mils)	4'-9" 2	5'-0" 2	5'-2" 2	4'-9" 2	5'-0" 2	5'-2" 2	4'-9" 2	5'-0" 2	5'-2" 2
		362PRO300-43	18ga (43mils)	5'-9" 3	6'-0" 3	6'-3" 3	5'-9" 3	6'-0" 3	6'-3" 3	5'-9" 3	6'-0" 3	6'-3" 3
		362PRO300-54	16ga (54mils)	7'-11" 2	8'-3" 2	8'-8" 2	7'-11" 2	8'-3" 2	8'-8" 2	7'-11" 2	8'-3" 2	8'-8" 2
		362PRO300-68	14ga (68mils)	9'-2" 2	9'-7" 2	10'-1" 2	9'-2" 2	9'-7" 2	10'-1" 2	9'-2" 2	9'-7" 2	9'-11" 2
		362PRO300-97	12ga (97mils)	11'-9" 3	12'-3" 3	12'-11" 3	11'-9" 3	12'-3" 3	12'-11" 3	11'-0" 2	11'-0" 2	11'-0" 2
	4	400PRO300-33	20ga (33mil)	5'-0" 2	5'-3" 2	5'-6" 2	5'-0" 2	5'-3" 2	5'-6" 2	5'-0" 2	5'-3" 2	5'-6" 2
		400PRO300-43	18ga (43mil)	6'-0" 3	6'-3" 3	6'-7" 3	6'-0" 3	6'-3" 3	6'-7" 3	6'-0" 3	6'-3" 3	6'-7" 3
		400PRO300-54	16ga (54mil)	8'-3" 2	8'-8" 2	9'-2" 2	8'-3" 2	8'-8" 2	9'-2" 2	8'-3" 2	8'-8" 2	9'-2" 2
		400PRO300-68	14ga (68mil)	9'-7" 2	10'-1" 2	10'-7" 2	9'-7" 2	10'-1" 2	10'-7" 2	9'-7" 2	10'-1" 2	10'-7" 2
		400PRO300-97	12ga (97mil)	11'-11" 2	12'-9" 3	13'-7" 3	11'-11" 2	12'-9" 3	13'-7" 3	11'-10" 2	11'-10" 2	11'-10" 2
	6	600PRO300-33	20ga (33mils)	5'-10" 3	6'-2" 3	6'-7" 3	5'-10" 3	6'-2" 3	6'-7" 3	5'-10" 3	6'-2" 3	6'-7" 3
		600PRO300-43	18ga (43mils)	7'-1" 3	7'-6" 3	8'-1" 3	7'-1" 3	7'-6" 3	8'-1" 3	7'-1" 3	7'-6" 3	8'-1" 3
		600PRO300-54	16ga (54mils)	9'-9" 2	10'-5" 2	11'-2" 2	9'-9" 2	10'-5" 2	11'-2" 2	9'-9" 2	10'-5" 2	11'-2" 2
		600PRO300-68	14ga (68mils)	11'-4" 2	12'-1" 2	13'-0" 2	11'-4" 2	12'-1" 2	13'-0" 2	11'-4" 2	12'-1" 2	13'-0" 2
		600PRO300-97	12ga (97mils)	12'-4" 2	13'-3" 2	14'-8" 2	12'-4" 2	13'-3" 2	14'-8" 2	12'-4" 2	13'-3" 2	14'-8" 2
13	3-5/8	362PRO300-33	20ga (33mils)	4'-2" 2	4'-4" 2	4'-6" 2	4'-2" 2	4'-4" 2	4'-6" 2	4'-2" 2	4'-4" 2	4'-6" 2
		362PRO300-43	18ga (43mils)	5'-0" 2	5'-2" 2	5'-5" 2	5'-0" 2	5'-2" 2	5'-5" 2	5'-0" 2	5'-2" 2	5'-5" 2
		362PRO300-54	16ga (54mils)	7'-0" 3	7'-2" 3	7'-6" 3	7'-0" 3	7'-2" 3	7'-6" 3	7'-0" 3	7'-2" 3	7'-6" 3
		362PRO300-68	14ga (68mils)	8'-1" 3	8'-4" 3	8'-8" 3	8'-1" 3	8'-4" 3	8'-8" 3	8'-1" 3	8'-4" 3	8'-8" 3
		362PRO300-97	12ga (97mils)	10'-4" 3	10'-8" 3	11'-1" 3	10'-4" 3	10'-8" 3	11'-1" 3	10'-4" 3	10'-5" 3	10'-5" 3
	4	400PRO300-33	20ga (33mil)	4'-4" 2	4'-6" 2	4'-9" 2	4'-4" 2	4'-6" 2	4'-9" 2	4'-4" 2	4'-6" 2	4'-9" 2
		400PRO300-43	18ga (43mil)	5'-3" 2	5'-5" 2	5'-8" 2	5'-3" 2	5'-5" 2	5'-8" 2	5'-3" 2	5'-5" 2	5'-8" 2
		400PRO300-54	16ga (54mil)	7'-3" 3	7'-6" 3	7'-10" 3	7'-3" 3	7'-6" 3	7'-10" 3	7'-3" 3	7'-6" 3	7'-10" 3
		400PRO300-68	14ga (68mil)	8'-5" 3	8'-9" 3	9'-1" 3	8'-5" 3	8'-9" 3	9'-1" 3	8'-5" 3	8'-9" 3	9'-1" 3
		400PRO300-97	12ga (97mil)	10'-9" 3	11'-2" 3	11'-7" 3	10'-9" 3	11'-2" 3	11'-7" 3	10'-9" 3	11'-2" 3	11'-3" 3
	6	600PRO300-33	20ga (33mils)	5'-0" 2	5'-3" 2	5'-6" 2	5'-0" 2	5'-3" 2	5'-6" 2	5'-0" 2	5'-3" 2	5'-6" 2
		600PRO300-43	18ga (43mils)	6'-1" 2	6'-5" 2	6'-9" 2	6'-1" 2	6'-5" 2	6'-9" 2	6'-1" 2	6'-5" 2	6'-9" 2
		600PRO300-54	16ga (54mils)	8'-5" 3	8'-10" 3	9'-4" 3	8'-5" 3	8'-10" 3	9'-4" 3	8'-5" 3	8'-10" 3	9'-4" 3
		600PRO300-68	14ga (68mils)	9'-9" 3	10'-3" 3	10'-10" 3	9'-9" 3	10'-3" 3	10'-10" 3	9'-9" 3	10'-3" 3	10'-10" 3
		600PRO300-97	12ga (97mils)	11'-2" 3	11'-8" 3	12'-4" 3	11'-2" 3	11'-8" 3	12'-4" 3	11'-2" 3	11'-8" 3	12'-4" 3
15	3-5/8	362PRO300-33	20ga (33mils)	3'-9" 2	3'-11" 2	4'-0" 2	3'-9" 2	3'-11" 2	4'-0" 2	3'-9" 2	3'-11" 2	4'-0" 2
		362PRO300-43	18ga (43mils)	4'-7" 2	4'-8" 2	4'-10" 2	4'-7" 2	4'-8" 2	4'-10" 2	4'-7" 2	4'-8" 2	4'-10" 2
		362PRO300-54	16ga (54mils)	6'-3" 3	6'-6" 3	6'-8" 3	6'-3" 3	6'-6" 3	6'-8" 3	6'-3" 3	6'-6" 3	6'-8" 3
		362PRO300-68	14ga (68mils)	7'-3" 3	7'-6" 3	7'-9" 3	7'-3" 3	7'-6" 3	7'-9" 3	7'-3" 3	7'-6" 3	7'-9" 3
		362PRO300-97	12ga (97mils)	9'-4" 3	9'-7" 3	9'-11" 3	9'-4" 3	9'-7" 3	9'-11" 3	9'-4" 3	9'-7" 3	9'-11" 3
	4	400PRO300-33	20ga (33mil)	3'-11" 2	4'-1" 2	4'-2" 2	3'-11" 2	4'-1" 2	4'-2" 2	3'-11" 2	4'-1" 2	4'-2" 2
		400PRO300-43	18ga (43mil)	4'-9" 2	4'-10" 2	5'-0" 2	4'-9" 2	4'-10" 2	5'-0" 2	4'-9" 2	4'-10" 2	5'-0" 2
		400PRO300-54	16ga (54mil)	6'-6" 3	6'-9" 3	6'-11" 3	6'-6" 3	6'-9" 3	6'-11" 3	6'-6" 3	6'-9" 3	6'-11" 3
		400PRO300-68	14ga (68mil)	7'-7" 3	7'-10" 3	8'-1" 3	7'-7" 3	7'-10" 3	8'-1" 3	7'-7" 3	7'-10" 3	8'-1" 3
		400PRO300-97	12ga (97mil)	9'-8" 3	10'-0" 3	10'-4" 3	9'-8" 3	10'-0" 3	10'-4" 3	9'-8" 3	10'-0" 3	10'-4" 3
	6	600PRO300-33	20ga (33mils)	4'-6" 2	4'-8" 2	4'-10" 2	4'-6" 2	4'-8" 2	4'-10" 2	4'-6" 2	4'-8" 2	4'-10" 2
		600PRO300-43	18ga (43mils)	5'-5" 2	5'-8" 3	5'-11" 3	5'-5" 2	5'-8" 3	5'-11" 3	5'-5" 2	5'-8" 3	5'-11" 3
		600PRO300-54	16ga (54mils)	7'-7" 3	7'-10" 3	8'-2" 3	7'-7" 3	7'-10" 3	8'-2" 3	7'-7" 3	7'-10" 3	8'-2" 3
		600PRO300-68	14ga (68mils)	8'-9" 3	9'-1" 3	9'-5" 3	8'-9" 3	9'-1" 3	9'-5" 3	8'-9" 3	9'-1" 3	9'-5" 3
		600PRO300-97	12ga (97mils)	10'-5" 3	10'-9" 3	11'-2" 3	10'-5" 3	10'-9" 3	11'-2" 3	10'-5" 3	10'-9" 3	11'-2" 3

Span notes: (Reference number shown to the right of spans)

1 Use 20ga (33mil) HDSC™ Clip with a 4/4 screw pattern. **2** Use 14ga (68mil) HDSC™ Clip with a 4/4 screw pattern. **3** Use 12ga (97mil) HDSC™ Clip with a 4/4 screw pattern.

Notes:

1 All headers require the attachment of the HDSC™ Clip at each end with headers installed leg up.

2 Recommended HDSC™ clip attachments above are based on the jamb stud thickness being equal to or greater than header thickness.

3 Header framing was calculated with a sill height of 0" for worst case design.

4 Section properties are based upon the AISI S100-2012 or Direct Strength Method.

5 Increase strength in cold work of forming was used per AISI S100 section A7.2.

6 For deflection calculations, the effective moment of inertia was used. Reference the AISI S100 commentary C1.

7 On exterior framing, lateral deflection calculations are based on using 0.7 times the Components and Cladding wind load.

8 Dead load deflection calculations are limited to L/240 or 0.5" max. deflection.

9 Header lengths should be ordered 1/2" shorter to fit inside clips.

The technical content of this literature is effective 7/26/16 and supersedes all previous information. Pub. No. CD-RoughOpenings 7/16

Allowable header spans for **EXTERIOR** openings

RedHeader PRO™ 3-1/2" Flange Header

(Lateral Load = 25psf, Wall Dead Load = 12psf, Sill Height = 0", Deflection Factor = 0.7)

Wall height (ft)	Wall size (in)	Member	Gauge (mils)	L/240						L/360						L/600					
				Opening Height (ft)																	
				7		8		9		7		8		9		7		8		9	
9	3-5/8	362PRO350-54	16ga (54mil)	9'-10"	2	10'-4"	2	-		9'-10"	2	10'-4"	2	-		9'-10"	2	10'-0"	2	-	
		362PRO350-68	14ga (68mil)	11'-4"	2	12'-0"	2	-		11'-4"	2	12'-0"	2	-		11'-0"	2	11'-0"	2	-	
		362PRO350-97	12ga (97mil)	13'-11"	2	14'-8"	2	-		13'-11"	2	14'-6"	2	-		12'-3"	2	12'-3"	2	-	
	4	400PRO350-54	16ga (54mil)	10'-4"	2	11'-0"	2	-		10'-4"	2	11'-0"	2	-		10'-4"	2	10'-10"	2	-	
		400PRO350-68	14ga (68mil)	11'-11"	2	12'-8"	2	-		11'-11"	2	12'-8"	2	-		11'-10"	2	11'-10"	2	-	
		400PRO350-97	12ga (97mil)	14'-8"	2	15'-6"	2	-		14'-8"	2	15'-6"	2	-		13'-3"	2	13'-3"	2	-	
	6	600PRO350-54	16ga (54mils)	12'-8"	2	13'-10"	2	-		12'-8"	2	13'-10"	2	-		12'-8"	2	13'-10"	2	-	
		600PRO350-68	14ga (68mils)	14'-7"	2	15'-11"	2	-		14'-7"	2	15'-11"	2	-		14'-7"	2	15'-11"	2	-	
		600PRO350-97	12ga (97mils)	16'-2"	2	19'-2"	2	-		16'-2"	2	19'-2"	2	-		16'-2"	2	18'-0"	2	-	
11	3-5/8	362PRO350-54	16ga (54mils)	8'-4"	2	8'-8"	2	9'-1"	2	8'-4"	2	8'-8"	2	9'-1"	2	8'-4"	2	8'-8"	2	9'-1"	2
		362PRO350-68	14ga (68mils)	9'-8"	2	10'-0"	2	10'-5"	2	9'-8"	2	10'-0"	2	10'-5"	2	9'-8"	2	10'-0"	2	10'-3"	2
		362PRO350-97	12ga (97mils)	11'-11"	3	12'-4"	3	12'-10"	3	11'-11"	3	12'-4"	3	12'-10"	3	11'-6"	3	11'-6"	3	11'-6"	2
	4	400PRO350-54	16ga (54mil)	8'-9"	2	9'-1"	2	9'-7"	2	8'-9"	2	9'-1"	2	9'-7"	2	8'-9"	2	9'-1"	2	9'-7"	2
		400PRO350-68	14ga (68mil)	10'-1"	2	10'-6"	2	11'-0"	2	10'-1"	2	10'-6"	2	11'-0"	2	10'-1"	2	10'-6"	2	11'-0"	2
		400PRO350-97	12ga (97mil)	12'-5"	3	12'-11"	3	13'-6"	3	12'-5"	3	12'-11"	3	13'-6"	3	12'-4"	3	12'-4"	2	12'-4"	2
	6	600PRO350-54	16ga (54mils)	10'-5"	2	11'-1"	2	11'-10"	2	10'-5"	2	11'-1"	2	11'-10"	2	10'-5"	2	11'-1"	2	11'-10"	2
		600PRO350-68	14ga (68mils)	12'-0"	2	12'-9"	2	13'-7"	2	12'-0"	2	12'-9"	2	13'-7"	2	12'-0"	2	12'-9"	2	13'-7"	2
		600PRO350-97	12ga (97mils)	13'-7"	2	14'-7"	2	16'-2"	2	13'-7"	2	14'-7"	2	16'-2"	2	13'-7"	2	14'-7"	2	16'-2"	2
13	3-5/8	362PRO350-54	16ga (54mils)	7'-5"	3	7'-7"	3	7'-10"	3	7'-5"	3	7'-7"	3	7'-10"	3	7'-5"	3	7'-7"	3	7'-10"	3
		362PRO350-68	14ga (68mils)	8'-6"	3	8'-9"	3	9'-1"	3	8'-6"	3	8'-9"	3	9'-1"	3	8'-6"	3	8'-9"	3	9'-1"	3
		362PRO350-97	12ga (97mils)	10'-6"	3	10'-10"	3	11'-2"	3	10'-6"	3	10'-10"	3	11'-2"	3	10'-6"	3	10'-10"	3	10'-10"	3
	4	400PRO350-54	16ga (54mil)	7'-8"	3	8'-0"	3	8'-3"	3	7'-8"	3	8'-0"	3	8'-3"	3	7'-8"	3	8'-0"	3	8'-3"	3
		400PRO350-68	14ga (68mil)	8'-11"	3	9'-2"	3	9'-6"	3	8'-11"	3	9'-2"	3	9'-6"	3	8'-11"	3	9'-2"	3	9'-6"	3
		400PRO350-97	12ga (97mil)	11'-0"	3	11'-4"	3	11'-9"	3	11'-0"	3	11'-4"	3	11'-9"	3	11'-0"	3	11'-4"	3	11'-8"	3
	6	600PRO350-54	16ga (54mils)	9'-1"	3	9'-6"	3	9'-11"	3	9'-1"	3	9'-6"	3	9'-11"	3	9'-1"	3	9'-6"	3	9'-11"	3
		600PRO350-68	14ga (68mils)	10'-5"	3	10'-11"	3	11'-5"	3	10'-5"	3	10'-11"	3	11'-5"	3	10'-5"	3	10'-11"	3	11'-5"	3
		600PRO350-97	12ga (97mils)	12'-3"	3	12'-10"	3	13'-7"	3	12'-3"	3	12'-10"	3	13'-7"	3	12'-3"	3	12'-10"	3	13'-7"	3
15	3-5/8	362PRO350-54	16ga (54mils)	6'-8"	3	6'-10"	3	7'-0"	3	6'-8"	3	6'-10"	3	7'-0"	3	6'-8"	3	6'-10"	3	7'-0"	3
		362PRO350-68	14ga (68mils)	7'-9"	3	7'-11"	3	8'-2"	3	7'-9"	3	7'-11"	3	8'-2"	3	7'-9"	3	7'-11"	3	8'-2"	3
		362PRO350-97	12ga (97mils)	9'-7"	3	9'-9"	3	10'-0"	3	9'-7"	3	9'-9"	3	10'-0"	3	9'-7"	3	9'-9"	3	10'-0"	3
	4	400PRO350-54	16ga (54mil)	7'-0"	3	7'-2"	3	7'-4"	3	7'-0"	3	7'-2"	3	7'-4"	3	7'-0"	3	7'-2"	3	7'-4"	3
		400PRO350-68	14ga (68mil)	8'-1"	3	8'-3"	3	8'-6"	3	8'-1"	3	8'-3"	3	8'-6"	3	8'-1"	3	8'-3"	3	8'-6"	3
		400PRO350-97	12ga (97mil)	10'-0"	3	10'-3"	3	10'-6"	3	10'-0"	3	10'-3"	3	10'-6"	3	10'-0"	3	10'-3"	3	10'-6"	3
	6	600PRO350-54	16ga (54mils)	8'-2"	3	8'-5"	3	8'-9"	3	8'-2"	3	8'-5"	3	8'-9"	3	8'-2"	3	8'-5"	3	8'-9"	3
		600PRO350-68	14ga (68mils)	9'-4"	3	9'-8"	3	10'-1"	3	9'-4"	3	9'-8"	3	10'-1"	3	9'-4"	3	9'-8"	3	10'-1"	3
		600PRO350-97	12ga (97mils)	11'-5"	3	11'-9"	3	12'-3"	3	11'-5"	3	11'-9"	3	12'-3"	3	11'-5"	3	11'-9"	3	12'-3"	3

Span notes: (Reference number shown to the right of spans)

1 Use 20ga (33mil) HDSC™ Clip with a 4/4 screw pattern. **2** Use 14ga (68mil) HDSC™ Clip with a 4/4 screw pattern. **3** Use 12ga (97mil) HDSC™ Clip with a 4/4 screw pattern.

Notes:

1 All headers require the attachment of the HDSC™ Clip at each end with headers installed leg up.

2 Recommended HDSC™ clip attachments above are based on the jamb stud thickness being equal to or greater than header thickness.

3 Header framing was calculated with a sill height of 0" for worst case design.

4 Section properties are based upon the AISI S100-2012 or Direct Strength Method.

5 Increase strength in cold work of forming was used per AISI S100 section A7.2.

6 For deflection calculations, the effective moment of inertia was used. Reference the AISI S100 commentary C1.

7 On exterior framing, lateral deflection calculations are based on using 0.7 times the Components and Cladding wind load.

8 Dead load deflection calculations are limited to L/240 or 0.5" max. deflection.

9 Header lengths should be ordered 1/2" shorter to fit inside clips.

Allowable opening widths for jamb studs

Interior and Exterior RedHeader PRO™ 3" Flange Jamb

Wall height (ft)	Wall size (in)	Member	Gauge (mils)	Wind Pressure (psf)					
				5psf (interior)			25psf (exterior)		
				Deflection Limit					
				L/120	L/240	L/360	L/240	L/360	L/600
9	3-5/8	362PRO300-33	20ga (33mils)	16'-0"	16'-0"	16'-0"	3'-1" *	3'-1"*	—
		362PRO300-43	18ga (43mils)	16'-0"	16'-0"	16'-0"	5'-7" *	5'-7"*	3'-6"
		362PRO300-54	16ga (54mils)	16'-0"	16'-0"	16'-0"	12'-3" *	8'-11"	4'-9"
		362PRO300-68	14ga (68mils)	16'-0"	16'-0"	16'-0"	16'-0"	11'-10"	6'-6"
		362PRO300-97	12ga (97mils)	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	9'-5"
	4	400PRO300-33	20ga (33mil)	16'-0"	16'-0"	16'-0"	3'-7" *	3'-7"*	3'-1"
		400PRO300-43	18ga (43mil)	16'-0"	16'-0"	16'-0"	6'-5" *	6'-5"*	4'-9"
		400PRO300-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	13'-11" *	11'-6"	6'-4"
		400PRO300-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	16'-0"	15'-2"	8'-6"
		400PRO300-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	12'-3"
	6	600PRO300-33	20ga (33mils)	16'-0"	16'-0"	16'-0"	7'-9" *	7'-9"*	7'-9" *
		600PRO300-43	18ga (43mils)	16'-0"	16'-0"	16'-0"	13'-0" *	13'-0"*	13'-0" *
		600PRO300-54	16ga (54mils)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	18'-3"
		600PRO300-68	14ga (68mils)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
		600PRO300-97	12ga (97mils)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
11	3-5/8	362PRO300-33	20ga (33mils)	13'-4" *	13'-4" *	10'-1"	—	—	—
		362PRO300-43	18ga (43mils)	16'-0"	16'-0"	14'-5"	3'-1" *	3'-1"	—
		362PRO300-54	16ga (54mils)	16'-0"	16'-0"	16'-0"	7'-0"	4'-2"	—
		362PRO300-68	14ga (68mils)	16'-0"	16'-0"	16'-0"	9'-5"	5'-9"	—
		362PRO300-97	12ga (97mils)	16'-0"	16'-0"	16'-0"	13'-5"	8'-5"	4'-5"
	4	400PRO300-33	20ga (33mil)	15'-1" *	15'-1" *	13'-0"	—	—	—
		400PRO300-43	18ga (43mil)	16'-0"	16'-0"	16'-0"	3'-8" *	3'-8"*	—
		400PRO300-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	8'-5" *	5'-7"	—
		400PRO300-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	12'-2"	7'-7"	3'-11"
		400PRO300-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	16'-0"	10'-11"	6'-0"
	6	600PRO300-33	20ga (33mils)	16'-0"	16'-0"	16'-0"	4'-6" *	4'-6"*	4'-6" *
		600PRO300-43	18ga (43mils)	16'-0"	16'-0"	16'-0"	7'-10" *	7'-10"*	7'-1"
		600PRO300-54	16ga (54mils)	20'-0"	20'-0"	20'-0"	15'-2" *	15'-2"*	9'-3"
		600PRO300-68	14ga (68mils)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	12'-4"
		600PRO300-97	12ga (97mils)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	17'-7"
13	3-5/8	362PRO300-33	20ga (33mil)	8'-10" *	8'-10" *	5'-6"	—	—	—
		362PRO300-43	18ga (43mil)	14'-6" *	13'-0"	8'-2"	—	—	—
		362PRO300-54	16ga (54mil)	16'-0"	16'-0"	10'-6"	3'-8"	—	—
		362PRO300-68	14ga (68mil)	16'-0"	16'-0"	13'-11"	5'-1"	—	—
		362PRO300-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	7'-7"	4'-6"	—
	4	400PRO300-33	20ga (33mil)	10'-1" *	10'-1" *	7'-4"	—	—	—
		400PRO300-43	18ga (43mil)	16'-0"	16'-0"	10'-7"	—	—	—
		400PRO300-54	16ga (54mil)	16'-0"	16'-0"	13'-7"	4'-11"	—	—
		400PRO300-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	6'-9"	4'-0"	—
		400PRO300-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	9'-10"	6'-1"	3'-0"
	6	600PRO300-33	20ga (33mil)	16'-0"	16'-0"	16'-0"	-	-	-
		600PRO300-43	18ga (43mil)	16'-0"	16'-0"	16'-0"	5'-1" *	5'-1"*	3'-9"
		600PRO300-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	10'-2" *	9'-5"	5'-0"
		600PRO300-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	14'-4" *	12'-6"	6'-11"
		600PRO300-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	20'-0"	17'-10"	10'-1"
15	3-5/8	362PRO300-33	20ga (33mil)	6'-2" *	5'-5"	3'-1"	—	—	—
		362PRO300-43	18ga (43mil)	10'-4" *	8'-0"	4'-10"	—	—	—
		362PRO300-54	16ga (54mil)	16'-0"	10'-4"	6'-4"	—	—	—
		362PRO300-68	14ga (68mil)	16'-0"	13'-8"	8'-7"	—	—	—
		362PRO300-97	12ga (97mil)	16'-0"	16'-0"	12'-4"	4'-5"	—	—
	4	400PRO300-33	20ga (33mil)	7'-0" *	7'-0" *	4'-3"	—	—	—
		400PRO300-43	18ga (43mil)	11'-9" *	10'-4"	6'-5"	—	—	—
		400PRO300-54	16ga (54mil)	16'-0"	13'-3"	8'-4"	—	—	—
		400PRO300-68	14ga (68mil)	16'-0"	16'-0"	11'-2"	3'-11"	—	—
		400PRO300-97	12ga (97mil)	16'-0"	16'-0"	15'-10"	5'-11"	3'-5"	—
	6	600PRO300-33	20ga (33mil)	13'-10" *	13'-10" *	13'-2"	—	—	—
		600PRO300-43	18ga (43mil)	16'-0"	16'-0"	16'-0"	3'-4" *	3'-4"*	—
		600PRO300-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	7'-2" *	5'-7"	—
		600PRO300-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	10'-3" *	7'-8"	4'-0"
		600PRO300-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	16'-10" *	11'-2"	6'-1"

Notes:

1 This table was prepared conservatively with an analysis of the opening being vertically centered in relation to the overall wall height indicated. Minimum opening height is 36 inches, at the center of the wall height, contact technical services for other conditions.
2 Opening widths are limited to 16'-0" for 3-5/8" & 4" members and 20'-0" for 6" & 8" members. For wider openings please submit a RedHeader PRO™ sizing sheet to CDBS technical services.
3 Physical properties and this table have been calculated in conformance with the AISI S100-2012 or by Direct Strength Method.
4 Effective properties incorporate the strength increase from the Cold Work of Forming as applicable per AISI S100 section A7.2.
5 On exterior framing, lateral deflection calculations are based on using 0.7 times the Components and Cladding wind load.
6 The tabulated values for flexural stress were based upon a fully braced side jamb.
7 Web crippling must be checked separately for end bearing lengths other than 1."
8 This table is not applicable for load bearing walls but is applicable for a curtainwall application.
9 The strength analysis included separate bending and shear checks plus the combined interaction of bending and shear effects per section C3.3 of AISI S100.
10 Tables were prepared using a 16"o.c. spacing from the jamb stud to the first adjacent typical wall stud.
11 Tabled widths marked with an * (asterisk) require web stiffening at each end of the jamb. Web crippling check uses 1" of bearing length.

Allowable opening widths for jamb studs

Interior and Exterior RedHeader PRO™ 3-1/2" Flange Jamb

Wall height (ft)	Wall size (in)	Member	Gauge (mils)	Wind Pressure (psf)					
				5psf (interior)			25psf (exterior)		
				Deflection Limit					
				L/120	L/240	L/360	L/240	L/360	L/600
9	3-5/8	362PRO350-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	12'-11" *	9'-10"	5'-4"
		362PRO350-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	16'-0"	13'-4"	7'-5"
		362PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	10'-10"
	4	400PRO350-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	14'-8" *	12'-8"	7'-0"
		400PRO350-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	9'-8"
		400PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"	14'-0"
	6	600PRO350-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	19'-10"
		600PRO350-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
		600PRO350-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"
11	3-5/8	362PRO350-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	7'-9"	4'-8"	—
		362PRO350-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	10'-8"	6'-7"	3'-4"
		362PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	15'-4"	9'-9"	5'-3"
	4	400PRO350-54	16ga (54mil)	16'-0"	16'-0"	16'-0"	8'-11" *	6'-3"	3'-2"
		400PRO350-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	12'-10" *	8'-7"	4'-7"
		400PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	16'-0"	12'-7"	6'-11"
	6	600PRO350-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	15'-10" *	15'-10"*	10'-1"
		600PRO350-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	13'-8"
		600PRO350-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	19'-9"
13	3-5/8	362PRO350-54	16ga (54mil)	16'-0"	16'-0"	11'-8"	4'-2"	—	—
		362PRO350-68	14ga (68mil)	16'-0"	16'-0"	15'-9"	5'-10"	3'-5"	—
		362PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	8'-9"	5'-4"	—
	4	400PRO350-54	16ga (54mil)	16'-0"	16'-0"	14'-11"	5'-6"	3'-2"	—
		400PRO350-68	14ga (68mil)	16'-0"	16'-0"	16'-0"	7'-8"	4'-8"	—
		400PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	11'-4"	7'-0"	3'-7"
	6	600PRO350-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	10'-8" *	10'-3"	5'-7"
		600PRO350-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	15'-0" *	13'-10"	7'-9"
		600PRO350-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	11'-5"
15	3-5/8	362PRO350-54	16ga (54mil)	16'-0"	11'-5"	7'-1"	—	—	—
		362PRO350-68	14ga (68mil)	16'-0"	15'-5"	9'-9"	3'-4"	—	—
		362PRO350-97	12ga (97mil)	16'-0"	16'-0"	14'-2"	5'-2"	—	—
	4	400PRO350-54	16ga (54mil)	16'-0"	14'-7"	9'-3"	3'-1"	—	—
		400PRO350-68	14ga (68mil)	16'-0"	16'-0"	12'-7"	4'-6"	—	—
		400PRO350-97	12ga (97mil)	16'-0"	16'-0"	16'-0"	6'-10"	4'-1"	—
	6	600PRO350-54	16ga (54mil)	20'-0"	20'-0"	20'-0"	7'-6" *	6'-2"	3'-1"
		600PRO350-68	14ga (68mil)	20'-0"	20'-0"	20'-0"	10'-9" *	8'-7"	4'-6"
		600PRO350-97	12ga (97mil)	20'-0"	20'-0"	20'-0"	17'-8" *	12'-7"	6'-11"

Notes:

1 This table was prepared conservatively with an analysis of the opening being vertically centered in relation to the overall wall height indicated. Minimum opening height is 36", at the center of the wall height, contact technical services for other conditions.
2 Opening widths are limited to 16'-0" for 3-5/8" & 4" members and 20'-0" for 6" & 8" members. For wider openings please submit a RedHeader PRO™ sizing sheet to CDBS technical services.
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5 On exterior framing, lateral deflection calculations are based on using 0.7 times the Components and Cladding wind load.
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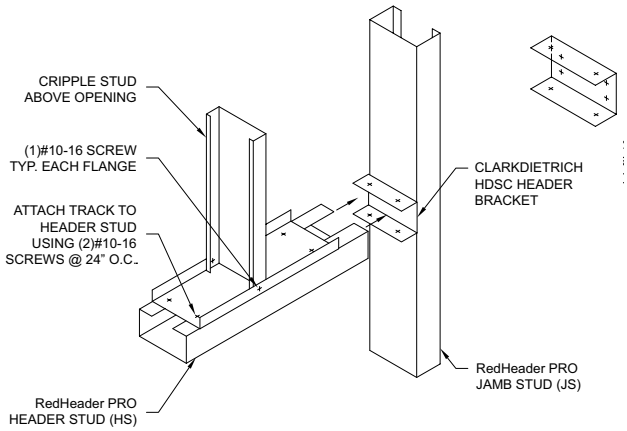
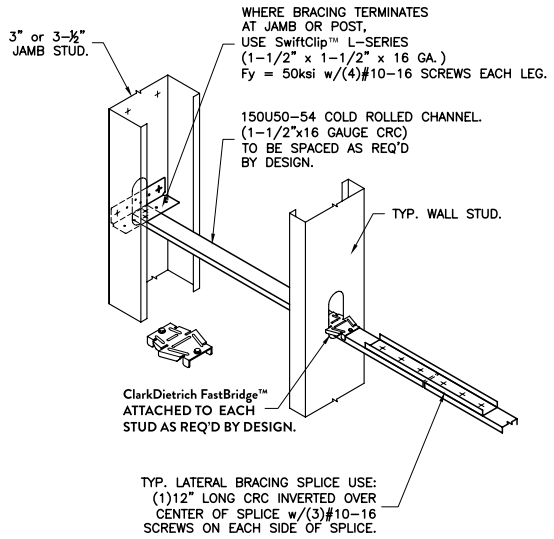
7 Web crippling must be checked separately for end bearing lengths other than 1."
8 This table is not applicable for load bearing walls but is applicable for a curtainwall application.
9 The strength analysis included separate bending and shear checks plus the combined interaction of bending and shear effects per section C3.3 of AISI S100.
10 Tables were prepared using a 16"o.c. spacing from the jamb stud to the first adjacent typical wall stud.
11 Tabled widths marked with an * (asterisk) require web stiffening at each end of the jamb. Web crippling check uses 1" of bearing length.

RedHeader PRO™ Framing Details



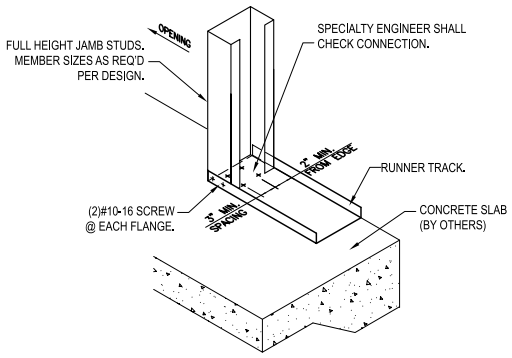
RedHeader PRO CONNECTION

CURTAIN WALL 3" OR 3-1/2" FLANGE HEADER USING: (1)HEADER STUD w/(1)TRACK.



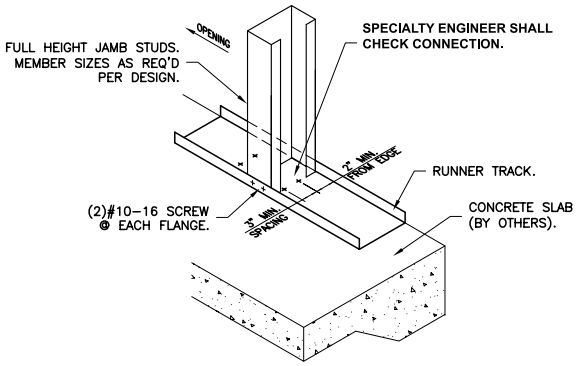
JAMB LATERAL BRACING

CRC LATERAL BRACING w/FastBridge™



DOOR JAMB ANCHORAGE

JAMB ANCHORAGE TO STRUCTURE w/(4)P.D.F.s



WINDOW JAMB ANCHORAGE

JAMB ANCHORAGE TO STRUCTURE w/(4)P.D.F.s

REDHEADER PRO DESIGN ADVANTAGES:

ClarkDietrich's Design and Technical Services are here to support you

- Use our RedHeader PRO sizing sheet (on page 14 or www.clarkdietrich.com) for quick preliminary sizing from ClarkDietrich's technical services team allowing you to see the advantages of using the opening system compared to the typical systems.
- Contact ClarkDietrich Technical Services at support@clarkdietrich.com.

ClarkDietrich's Engineering Services

- Engineering Services offers a complete shop drawing package using the RedHeader PRO framing system to simplify the submittal process.
- For additional information, contact ClarkDietrich Engineering Services at 877.832.3206.

RedHeader PRO™ Sizing Sheet

PROJECT INFORMATION:

Project Name: _____

City, State: _____

CONTACT INFORMATION:

Company Name: _____

Contact Name: _____

Phone: _____ Fax: _____

Email: _____

PROJECT DESIGN INFORMATION:

☐ Interior Framing

- Interior Pressure: ☐ 5 psf ☐ 10 psf ☐ 15 psf
- Wall Stud Spacing: ☐ 12"o.c. ☐ 16"o.c. ☐ 24"o.c.
- Wall Width: ☐ 3-5/8" ☐ 4" ☐ 6" ☐ 8"

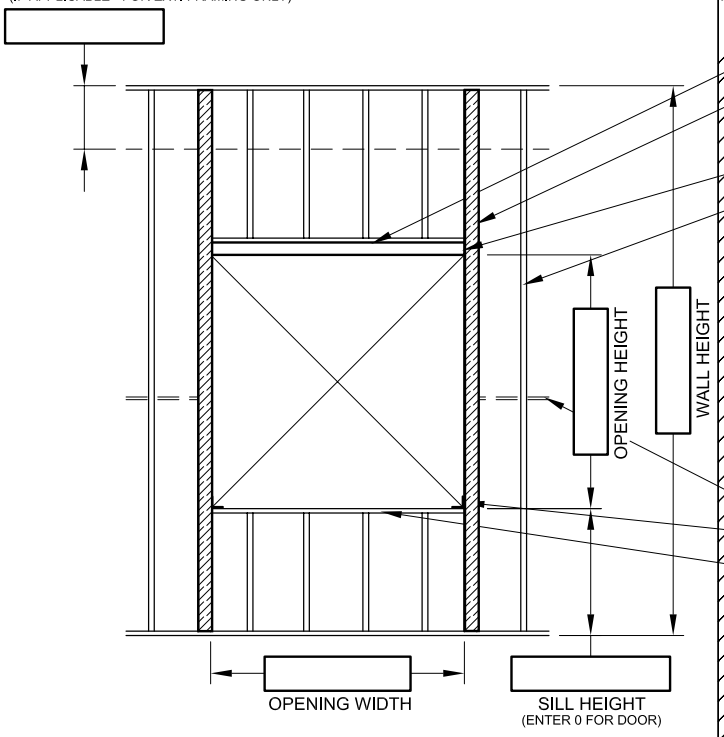
Deflection Guide: (CHECK ONE)
☐ L/120
☐ L/240
☐ L/360

☐ Exterior Framing

- Wind Load: _____ psf ☐ Unknown (Tech Support will contact you for more info.)
- Wall Stud Spacing: ☐ 12"o.c. ☐ 16"o.c. ☐ 24"o.c.
- Wall Width: ☐ 3-5/8" ☐ 4" ☐ 6" ☐ 8"

Deflection Guide: (CHECK ONE)
☐ Brick L/600
☐ Stucco L/360
☐ E.I.F.S. L/240
☐ Other _____

OPENING PROFILE INFORMATION:



FOR CLARKDIETRICH ENGINEERING ONLY:

Member Sizing Information

RedHeader PRO™

Header Stud Size: _____

Jamb Stud Size: _____

Header Bracket _____

Wall Stud Size: _____ (ksi) @ "o.c.

Lateral Bracing: ☐ None ☐ Mid-Pt. ☐ 1/3 Pt. ☐ ___"o.c.

SwiftClip™: _____

Sill Track Size: _____

Other Notes: _____

ClarkDietrich ENGINEERING SERVICES

RedHeader PRO™
SIZING SHEET

FAX TO: (877) 832-3208
TECHNICAL SERVICES: (888) 437-3244
E-MAIL: support@clarkdietrich.com

PDF of this sizing sheet is also available at www.clarkdietrich.com

The technical content of this literature is effective 06/01/2016 and supersedes all previous information. Pub. No. CD-RoughOpenings 6/16

Engineering and Technical Services

Smarter engineering and technical expertise. It's support that extends beyond the structure itself.

From the initial design phase to jobsite installation, we are focused on providing inventive, yet practical and hands-on know-how to help you think outside the box—or to help you just get it done.

ClarkDietrich Engineering Services is a full-service consulting firm that believes strongly in value engineering and customer input. Our engineering fees and lead times are competitive, and our customer service exceeds the industry standard with consistent point-of-contact through our regional project managers.

We are able to exploit the vast advantages of building information modeling (BIM) with add-on tools that allow our products, and the rich data attached to them, to quickly be imported into digital designs. Our team is also comprised of LEED® accredited professionals to consult on sustainable building design.

- Electronically sealed shop drawings and calculations.
- Preliminary sizing and pre-bid engineering pricing.
- Reference plan on large projects.
- Detailed wall sections, full elevation opening design and C-stud truss design.

ClarkDietrich Technical Services team provides immediate response to questions ranging from general installation to detailed specification requirements and can deliver one-day turnaround on technical sizing. We are experts on industry standards such as AISI, ASTM and SFIA. Our team also supports our online product submittal system, SubmittalPro,® and our design/engineering software is available as a free download from www.clarkdietrich.com.

- Product support and typical member sizing.
- Framing detail recommendations.
- Compliance and industry standards, such as AISI, ASTM and SFIA.
- Engineering software and product submittal support.
- LEED requirements support.

TRADEMARKS AND WARRANTY

TRADEMARKS

WARRANTY

Our products are manufactured in accordance with company standards and/or industry standards, as applicable. All ClarkDietrich Building Systems products are covered by our standard warranty which is contained in our Standard Terms and Conditions of Sale and which will be provided upon request. Generally, we warrant our products will be free from defects in material and workmanship at the time of shipment, subject to the limitations stated in the warranty. Unless specifically agreed in writing by us with respect to specific orders, we do not make any warranty of merchantability or fitness for a particular purpose. The buyer is responsible to assure that buyer orders the appropriate product for any applicable code or specification requirements.

NOTICE: Our liability is expressly limited to replacement of defective products. We shall not be liable for incidental and consequential damages, nor for any loss caused by misuse or misapplication of our products. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from the date it was or reasonably should have been discovered.

CODE APPROVALS AND PERFORMANCE STANDARDS

ClarkDietrich products meet or exceed these applicable performance standards.

AISI S100 "North American Specification for the Design of Cold-Formed Steel Structural Members"

ASTM American Society for Testing and Materials

Product specifications

ASTM C645	Non-structural steel framing members
ASTM C955	Load-bearing steel framing

Material specifications

ASTM A1003 (NS33, ST33H, ST50H)

ASTM A653	Zinc-coated hot-dip process

Protective coating standards

ASTM C645	Non-structural steel framing members
ASTM C955	Load-bearing steel framing
ASTM A1003	Standard specification for steel sheet, carbon, metallic- and nonmetallic-coated for cold-formed framing members
ASTM A653	Zinc-coated hot-dip process

UL® Underwriters Laboratories testing standard

UL 263 "Fire Tests of Building Construction and Materials"

ClarkDietrich Building Systems is a proud member of the Steel Framing Industry Association (SFIA). Check the updated list of Certified Production Facilities at Architectural Testing's website at www.archtest.com.

Scan for the most up-to-date ClarkDietrich literature.

LEED® Services

BUILD GREEN with ClarkDietrich Building Systems

ClarkDietrich Building Systems is an active member of the U.S. Green Building Council and is committed to supplying quality products that are environmentally responsible. We are continually working to develop greener building products and sustainable business practices. ClarkDietrich steel framing helps contribute points toward LEED® certification. For more details contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED.

ClarkDietrich Building Systems has prepared this literature with the utmost diligence and care for accuracy and conformance to standards.

ClarkDietrich intends this information to be accurate, informative, and helpful as a selection guide for choosing ClarkDietrich Building System products. However, this information is only to be used for guidance and is not intended to replace the design, drawings, specifications, and decisions of a professional architect or engineer.

ClarkDietrich Building Systems or its affiliates 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 deemed waived unless they are made to us in writing within thirty (30) days of the date a problem was or reasonably should have been discovered.

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F 951.360.3333

CONNECTICUT Bristol
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F 860.584.6899

FLORIDA Dade City
P 352.518.4400
F 352.518.4450

GEORGIA McDonough
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F 678.304.5555

HAWAII Kapolei
P 951.360.3500
F 951.360.3333

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