



TITAN HEADER SYSTEM



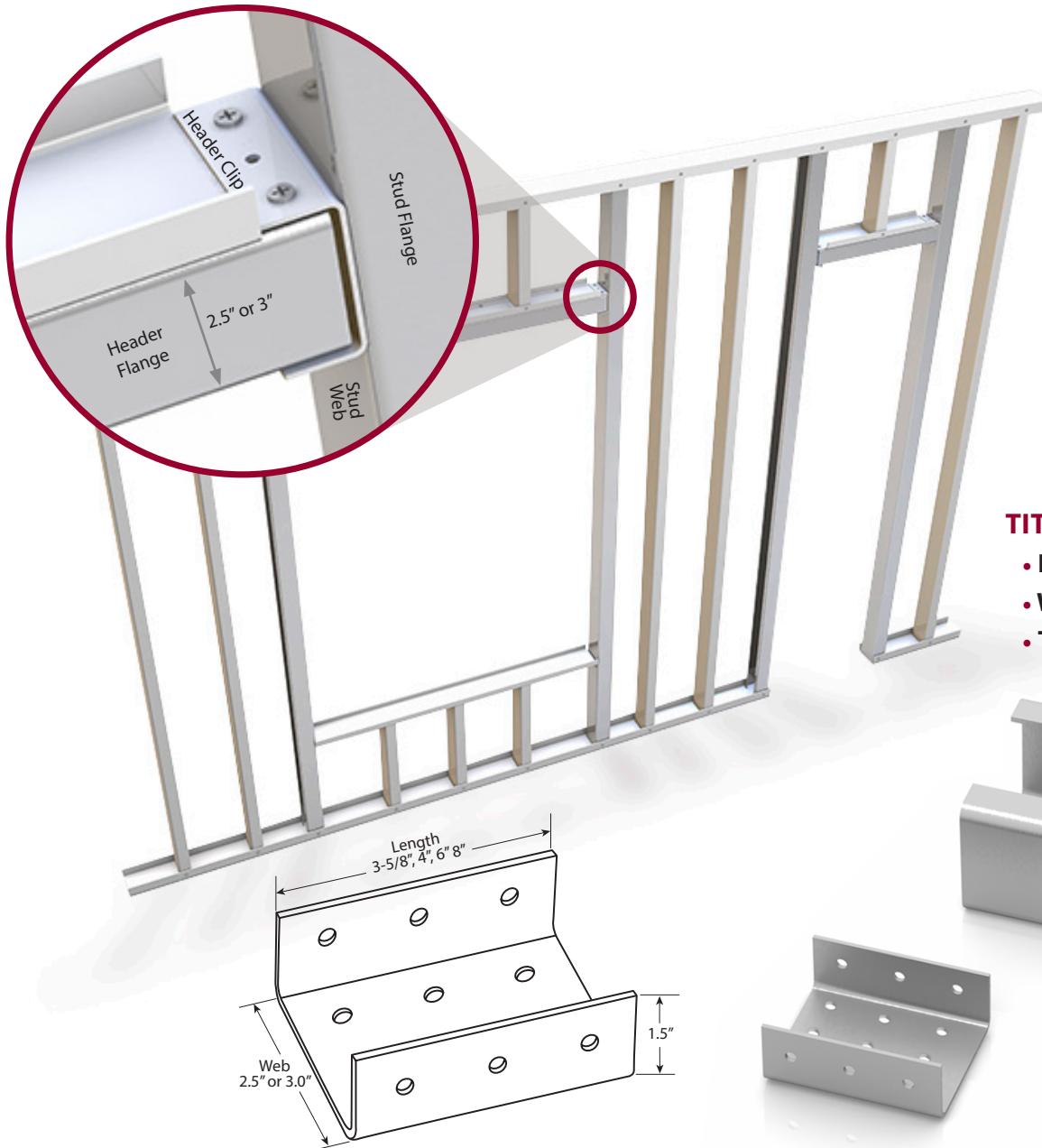
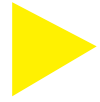
ONE PIECE HEADER FRAMING SYSTEM

The Titan one piece wide flange header and jamb offers a better solution for framing multiple openings than the conventional lay-in or boxed headers.

SYSTEM ADVANTAGES:

- ◆ No more built-up jambs and headers
- ◆ Saves over 50% in installation and material over convention framing
- ◆ Substantial reduction in number of screws and labor
- ◆ Header quickly attaches to jamb with fully tested, pre-drilled Titan Header Clip

WATCH THE
INSTALLATION
VIDEO



MATERIAL SPECIFICATIONS:

ASTM 1003, Grade 50

PRODUCT AVAILABILITY:

Titan Header & Jamb

- **Web:** 3-5/8", 4", 6", & 8"
- **Flanges:** 2-1/2" & 3"
- **Lip/Return:** 7/8"
- **Thickness:**
 - 54 mils (16ga) 50KSI
 - 68 mils (14ga) 50KSI
 - 97 mils (12ga) 50KSI

TITAN HEADER CLIP

- **Length:** 3-5/8", 6" & 8" x 1-1/2"
- **Web:** 2.5", 3.0"
- **Thickness:** 68 mils (14ga) 50KSI



INNOVATION, SERVICE, QUALITY

www.BuildStrong.com • 1-866-372-6384





TITAN HEADER SYSTEM



Physical Properties				Gross Properties							Effective Properties							Torsional Properties							
Section	Thickness (in)	Lip (in)	Fy (ksi)	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 (in-k)	Vax (web) (lb)	Iye (in ⁴)	Sye (in ³)	May (in-k)	Vay (flanges) (lb)	Jx1000 (in ⁴)	Cw (in ⁶)	Xo (in)	m (in)	Ro (in)	β
362TH250-54	0.0566	0.875	50	0.563	1.917	1.242	0.685	1.485	0.535	0.362	0.975	1.242	0.589	17.64	3372	0.422	0.314	9.40	4706	0.602	2.137	-2.373	1.381	2.964	0.359
362TH250-68	0.0713	0.875	50	0.702	2.389	1.531	0.845	1.477	0.656	0.443	0.967	1.531	0.781	23.37	4370	0.534	0.404	12.10	5731	1.190	2.612	-2.355	1.371	2.943	0.360
362TH250-97	0.1017	0.875	50	0.978	3.329	2.085	1.150	1.460	0.882	0.595	0.950	2.085	1.134	38.15	5943	0.714	0.547	16.37	7595	3.373	3.497	-2.317	1.351	2.898	0.361
362TH300-54	0.0566	0.875	50	0.620	2.110	1.422	0.785	1.515	0.822	0.469	1.151	1.386	0.628	18.81	3372	0.653	0.408	12.20	5767	0.662	3.237	-2.860	1.640	3.435	0.307
362TH300-68	0.0713	0.875	50	0.773	2.631	1.756	0.969	1.507	1.010	0.576	1.143	1.756	0.812	24.31	4370	0.828	0.525	15.70	7068	1.310	3.965	-2.841	1.630	3.413	0.307
362TH300-97	0.1017	0.875	50	1.080	3.675	2.400	1.324	1.491	1.368	0.779	1.126	2.400	1.259	37.68	5943	1.115	0.715	21.41	9502	3.723	5.337	-2.803	1.610	3.369	0.307
400TH250-54	0.0566	0.875	50	0.585	1.989	1.556	0.778	1.632	0.555	0.366	0.975	1.556	0.662	19.82	3372	0.432	0.321	9.60	4706	0.624	2.519	-2.311	1.355	2.992	0.404
400TH250-68	0.0713	0.875	50	0.729	2.480	1.920	0.960	1.623	0.681	0.449	0.967	1.920	0.880	26.33	4871	0.563	0.408	12.22	5731	1.235	3.081	-2.292	1.345	2.971	0.405
400TH250-97	0.1017	0.875	50	1.016	3.459	2.621	1.311	1.606	0.917	0.603	0.950	2.621	1.296	43.59	6658	0.762	0.562	16.82	7595	3.504	4.135	-2.254	1.325	2.926	0.406
400TH300-54	0.0566	0.875	50	0.641	2.182	1.777	0.888	1.664	0.852	0.476	1.153	1.734	0.705	21.11	3372	0.667	0.415	12.43	5767	0.685	3.819	-2.792	1.613	3.449	0.345
400TH300-68	0.0713	0.875	50	0.800	2.722	2.195	1.098	1.657	1.048	0.584	1.145	2.195	0.913	27.33	4871	0.870	0.530	15.85	7068	1.356	4.683	-2.774	1.603	3.428	0.345
400TH300-97	0.1017	0.875	50	1.118	3.805	3.007	1.504	1.640	1.421	0.791	1.127	3.007	1.430	42.81	6658	1.858	0.735	21.99	9502	3.855	6.317	-2.735	1.583	3.383	0.346
600TH250-54	0.0566	0.875	50	0.698	2.375	3.963	1.321	2.383	0.642	0.384	0.959	3.963	1.203	32.21	2823	0.455	0.329	9.84	4706	0.745	5.344	-2.031	1.230	3.275	0.615
600TH250-68	0.0713	0.875	50	0.871	2.965	4.908	1.636	2.373	0.788	0.471	0.951	4.908	1.551	43.46	5350	0.610	0.417	12.48	5731	1.476	6.563	-2.013	1.221	3.254	0.617
600TH250-97	0.1017	0.875	50	1.220	4.151	6.754	2.251	2.353	1.063	0.635	0.934	6.754	2.251	73.36	10472	0.928	0.590	17.66	7595	4.205	8.880	-1.976	1.201	3.211	0.622
600TH300-54	0.0566	0.875	50	0.754	2.567	4.462	1.488	2.432	0.986	0.501	1.143	4.390	1.277	33.68	2823	0.700	0.425	12.72	5767	0.806	8.115	-2.483	1.481	3.659	0.539
600TH300-68	0.0713	0.875	50	0.943	3.207	5.534	1.845	2.423	1.214	0.616	1.135	5.534	1.610	45.70	5350	0.937	0.541	16.19	7068	1.597	9.992	-2.465	1.471	3.638	0.541
600TH300-97	0.1017	0.875	50	1.322	4.497	7.639	2.546	2.404	1.649	0.835	1.117	7.639	2.442	71.74	10472	1.431	0.771	23.09	9502	4.556	13.587	-2.427	1.451	3.594	0.544
800TH250-54	0.0566	0.875	50	0.811	2.760	7.765	1.941	3.094	0.705	0.395	0.932	7.765	1.756	44.21	2091	0.463	0.330	9.88	4706	0.866	9.639	-1.818	1.130	3.708	0.759
800TH250-68	0.0713	0.875	50	1.014	3.450	9.638	2.409	3.083	0.865	0.485	0.924	9.638	2.291	60.19	4221	0.628	0.420	12.57	5731	1.718	11.864	-1.801	1.120	3.688	0.762
800TH300-97	0.1017	0.875	50	1.423	4.843	13.327	3.332	3.060	1.167	0.654	0.906	13.327	3.332	103.13	10885	0.977	0.598	17.89	7595	4.907	16.123	-1.765	1.102	3.647	0.766
800TH300-54	0.0566	0.875	50	0.868	2.952	8.657	2.164	3.159	1.085	0.517	1.118	8.579	1.826	45.96	2091	0.712	0.427	12.78	5767	0.927	14.643	-2.244	1.372	4.033	0.690
800TH300-68	0.0713	0.875	50	1.085	3.693	10.758	2.758	3.149	1.336	0.636	1.110	10.758	2.371	62.83	4221	0.962	0.545	16.30	7068	1.839	18.066	-2.226	1.363	4.012	0.692
800TH300-97	0.1017	0.875	50	1.525	5.189	14.913	3.728	3.127	1.817	0.863	1.092	14.913	3.576	100.11	10885	1.502	0.781	23.39	9502	5.257	24.677	-2.188	1.343	3.970	0.696

1. Section properties are based on the AISI S100-07 with Supplement S2-10 with U.S. provisions. 2. The structural properties are based on allowable strength design (ASD). 3. The distortional buckling calculations are based on $K\Phi=0.4$. 4. Effective properties incorporate the strength increase from the cold work of forming. 5. Tabulated gross properties are based on the full-unreduced cross section away from punch outs.

Header Size		Titan Header Clip Allowable Load Capacity	
Web Depth (in)	Flange Width (in)	Vertical Load (lbs)	Horizontal Load (lbs)
3-5/8	2-1/2	1140	1520
4		1140	1740
6		1140	1930
8			
3-5/8	3	1140	1520
4		1140	1740
6		1140	1930
8			

- Attach THC (clip) with (4) #10-16 screws to Titan Jamb and Titan Header respectively.
- Listed values are based on 54 mil (16 gauge), 50 ksi Titan Header and Jamb.
- For combined vertical and horizontal, use linear interaction equation.
- Tabulated values are based on testing in accordance with the requirements of ICC-ES AC261.
- Allowable loads are calculated with Safety factor, Ω , of 2.711 for vertical and 2.606 for horizontal.
- Safety factors are calculated in accordance with the provisions of Section F1 of AISI S100 with the statistical parameters given in AC261

Titan Header vs Clip vs Stud Comparison

Stud Web	Stud Flange	Header Web	Header Flange	Clip Length	Clip Web	Clip Flange
3-5/8"	any	3-5/8"	2-1/2"	3-5/8"	2.5"	1-1/2"
			3"		3"	
4"		4"	2-1/2"	4"	2.5"	1-1/2"
			3"		3"	
6"		6"	2-1/2"	6"	2.5"	1-1/2"
			3"		3"	
8"		8"	2-1/2"	8"	2.5"	1-1/2"
			3"		3"	



INNOVATION, SERVICE, QUALITY

www.BuildStrong.com • 1-866-372-6384

