

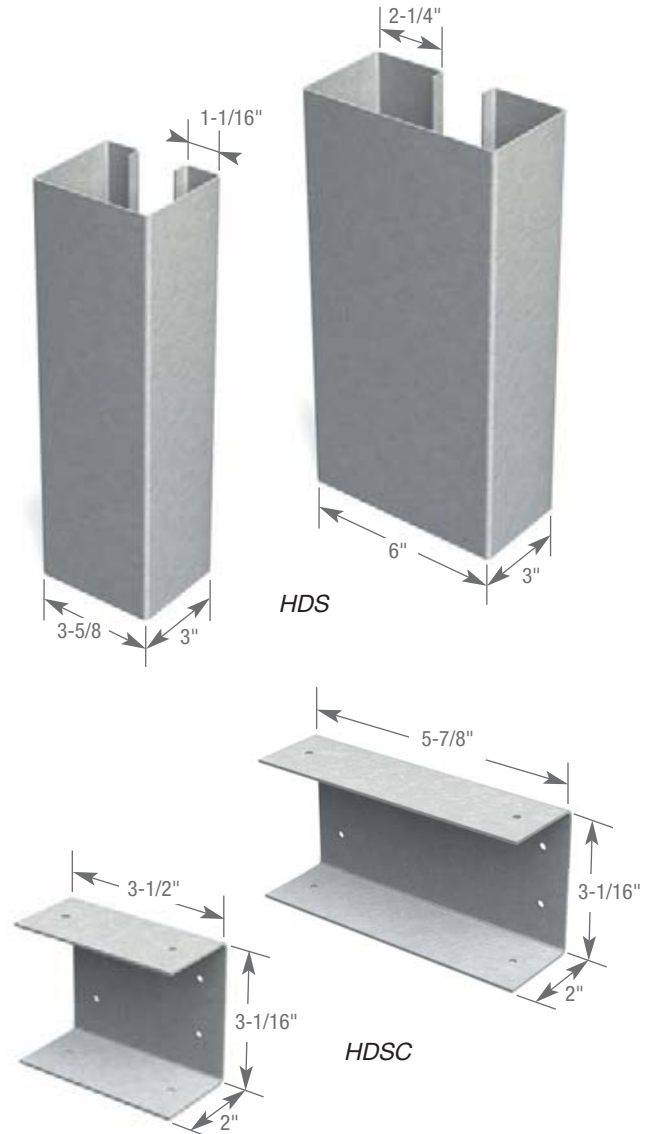
The highly innovative multipurpose HDS® Framing System provides cost-effective, member-reducing framing solutions for headers, jambs, posts and heavy-duty, built-up tube truss chords and webs.

Applications

- Curtain-wall headers, jambs and sills.
- Drywall headers and jambs.
- Load-bearing jambs.
- Trusses.
- Shearwall posts.
- Heavily loaded or long-span wall studs.
- Any other application involving nested stud and track.

Benefits

- Outstanding bending strength in two directions.
- Reduces installation time by 50%.
- Eliminates box beam header assembly.
- Reduces material and labor costs up to 50%.
- HDS® can be screw-attached from either side.
- Eliminates stud-to-track nesting for post, header and jamb studs.
- Openings up to 15' wide.
- Eliminates multimember built-up truss chords and webs.
- Eliminates excessive bridging for load-bearing walls and posts.
- Improves drywall finishing around doors and windows. No screw head buildup.
- Superior axial strength.



Patent Pending

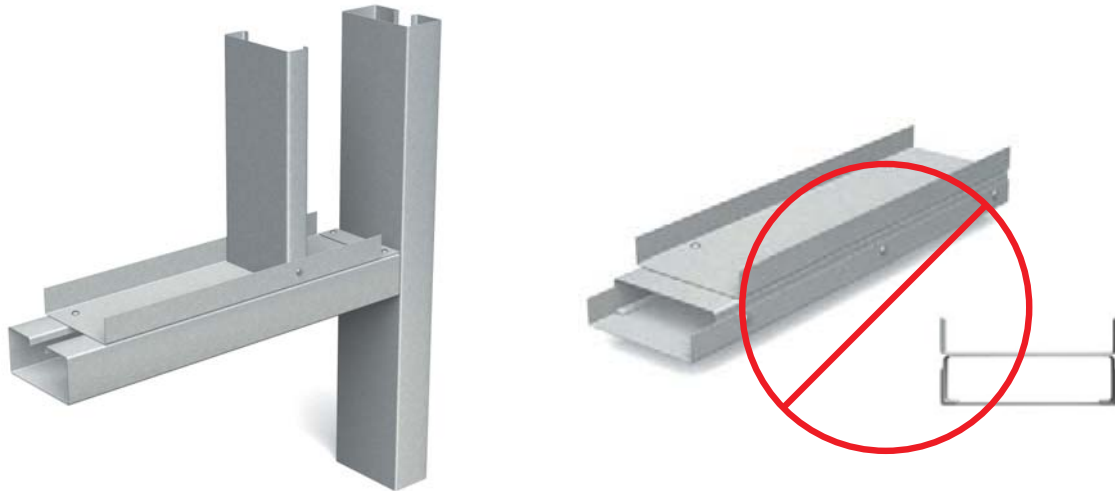
HDS® Cost Savings for Window Headers and Jambs

Window Width (ft.)	Material Costs			Labor Costs			Total Savings
	Conventional Framing	HDS Framing	Savings	Conventional Framing	HDS Framing	Savings	
6	\$67	\$66	\$1 (2%)	\$38	\$19	\$19 (50%)	\$20 (19%)
8	\$107	\$104	\$3 (3%)	\$71	\$21	\$50 (70%)	\$53 (30%)
10	\$138	\$122	\$16 (12%)	\$92	\$23	\$69 (75%)	\$85 (37%)

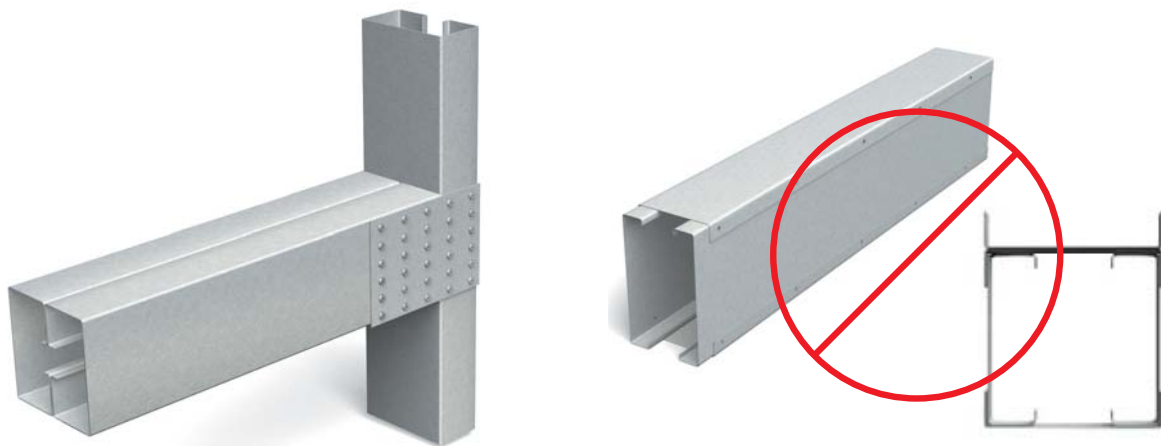
Table Notes

- 1) Based on a wall height of 12' with 1' parapet, with 30 psf wind load and L/600 deflection.
- 2) Assumed screw cost is \$0.02 per screw.
- 3) Framing labor assumed to be \$1.00 per foot of header.
- 4) Labor savings associated with header installation neglected.

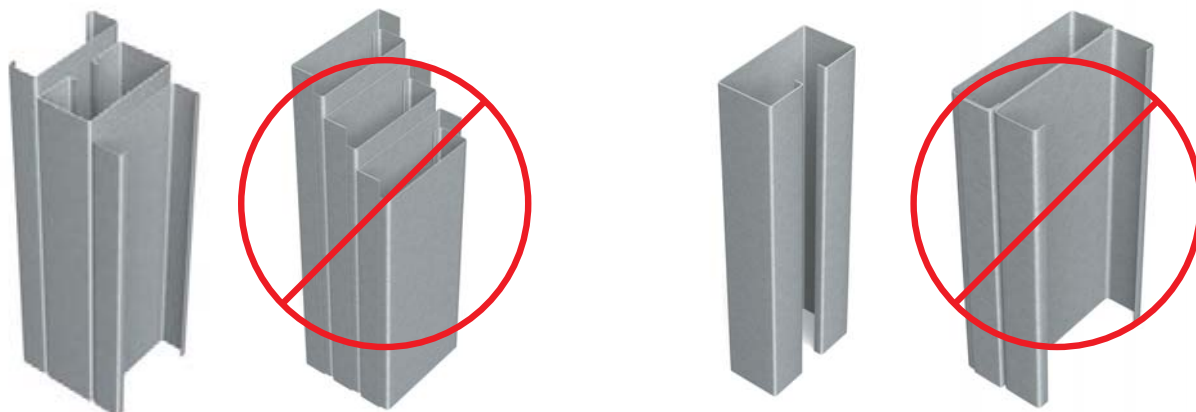
HDS Replaces Built-up Curtain-wall Headers



HDS Replaces Load-Bearing Box Beam Headers



HDS Replaces or Reduces Jambs and Posts



HDS Replaces Built-up or Tube Truss Chords



HDS Simplifies Shear-wall Framing

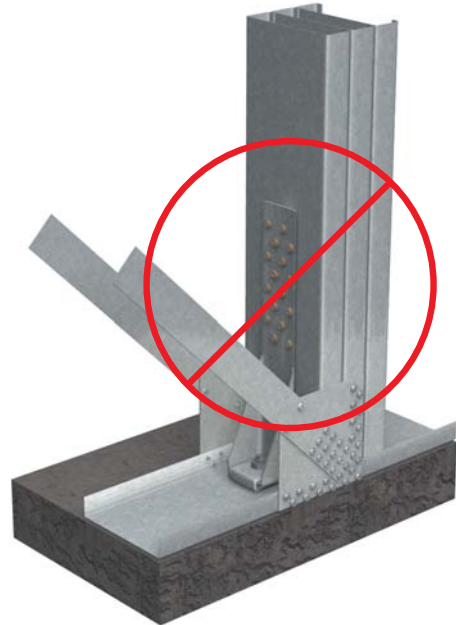
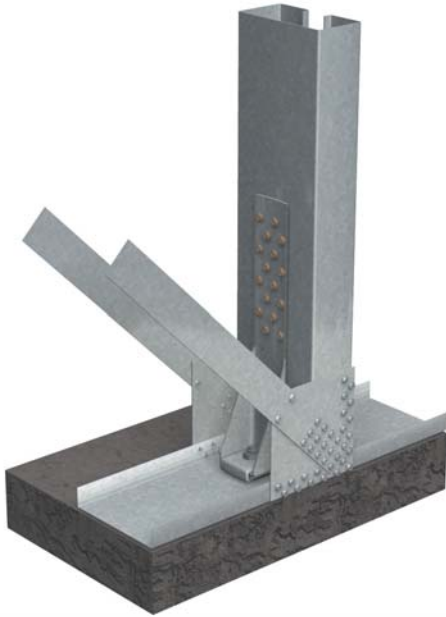




Photo courtesy of Blackhawk Interiors, Inc., Morgantown, WV

The HDS® Framing System is a new, high-performance, cost-effective, multipurpose, heavy-duty framing stud for headers, jambs, posts and built-up tube truss chords and webs. The superior strength and carrying capacity of the HDS means higher performance with fewer members. It means eliminating box beam headers, nesting track and stud for posts and jambs and eliminating multimember built-up truss chords and webs. It also means improved finish quality by eliminating excessive material and screw head buildup around doors and windows.

The HDSC header bracket is the perfect complement to the HDS® Framing system. This simple, yet innovative header bracket turns curtain-wall header installation from a two-man job into a one-person job. This unique, prepunched clip also eliminates surface head fastener buildup that can create finishing challenges. Let the light-gauge framing experts at Dietrich Design Group help you incorporate this new, cutting-edge, framing assembly into your next project. Photocopy and complete the HDS Preliminary Sizing Sheet on page 143 for FREE HDS Preliminary Sizing. The HDS Preliminary Sizing Sheet can also be downloaded from our website www.dietrichmetalframing.com or contact DDG at 1-800-873-2443.

Product Dimensions

HDS®—Heavy Duty Stud

3-5/8" x 3" x 1-1/16" x 3/4" (92.1mm x 76.2mm x 27.0mm x 19.1mm)

6" x 3" x 2-1/4" x 3/4" (152mm x 76.2mm x 57.2mm x 19.1mm)

HDSC—Header Brackets

3-1/2" x 3-1/16" x 2 (88.9mm x 77.8mm x 50.8mm)

5-7/8" x 3-1/16" x 2 (149mm x 77.8mm x 50.8mm)

Material Specifications

HDS

Gauge: 20 gauge (33 mils)

Design Thickness: 0.0346 inches (0.879 mm)

Gauge: 18 gauge (43 mils)

Design Thickness: 0.0451 inches (1.145 mm)

Gauge: 16 gauge (54 mils)

Design Thickness: 0.0566 inches (1.438 mm)

Gauge: 14 gauge (68 mils)

Design Thickness: 0.0713 inches (1.811 mm)

Gauge: 12 gauge (97 mils)

Design Thickness: 0.1017 inches (2.583 mm)

Coating: G 60 (Z180) hot-dipped galvanized coating or equivalent corrosion resistance.

Yield Strength: 33 ksi (230MPa) or 50 ksi (340MPa)

* 33 ksi for 20 and 18 gauge. 50 ksi for 16, 14 and 12 gauge.

ASTM: A 653/A 653M

HDSC Header Bracket

Gauge: 14 gauge (68 mils)

Design Thickness: 0.0713 inches (1.811 mm)

Coating: G 90 (Z275) hot-dipped galvanized coating

Yield Strength: Mill-certified SS Grade 50 ksi (340MPa)

ASTM: A 653/A 653M

Installation

Installation will vary based on framing application and use.

Consult Dietrich Design Group (DDG) for assistance.

Patent Pending

HDS® Properties

Web Size (in)	Ga	Mils	Fy (ksi)	Min. Delivered Thickness (in)	Unperforated Section Properties								Torsional Properties				
					Area (in. ²)	Wt. (lb./ft.)	Ix (in. ⁴)	Sx (in. ³)	rx (in.)	Iy (in. ⁴)	Sy (in. ³)	ry (in.)	Jx1000 (in. ⁴)	Cw (in. ⁶)	Xo (in.)	Ro (in.)	Beta
3.625	20	33	33	0.0329	0.445	1.51	0.934	0.515	1.448	0.631	0.405	1.190	0.178	4.700	-3.427	3.906	0.230
	18	43	33	0.0428	0.574	1.94	1.198	0.661	1.444	0.805	0.516	1.184	0.389	5.896	-3.405	3.884	0.231
	16	54	50	0.0538	0.715	2.41	1.483	0.818	1.441	0.990	0.632	1.177	0.764	7.093	-3.381	3.859	0.232
	14	68	50	0.0677	0.888	3.00	1.829	1.009	1.436	1.211	0.770	1.168	1.503	8.452	-3.349	3.827	0.234
	12	97	50	0.0966	1.239	4.19	2.520	1.390	1.426	1.645	1.039	1.152	4.271	10.869	-3.289	3.766	0.237
6	20	33	33	0.0329	0.610	2.06	3.034	1.011	2.230	0.993	0.644	1.276	0.244	25.386	-3.591	4.415	0.339
	18	43	33	0.0428	0.788	2.66	3.907	1.302	2.226	1.273	0.824	1.271	0.533	32.231	-3.574	4.398	0.340
	16	54	50	0.0538	0.984	3.32	4.856	1.619	2.222	1.573	1.016	1.265	1.052	39.292	-3.555	4.379	0.341
	14	68	50	0.0677	1.226	4.14	6.023	2.008	2.216	1.938	1.249	1.257	2.076	47.660	-3.531	4.354	0.343
	12	97	50	0.0966	1.722	5.82	8.380	2.793	2.206	2.662	1.707	1.243	5.936	63.365	-3.482	4.306	0.346

Web Size (in)	Ga	Mils	Unperforated Bending Properties				Perforated Bending Properties				Eff. Moment of Inertia						
			Sxe (in. ³)	Mxa (in.-lb.)	Web in Ten.		Web in Comp.		Sxe (in. ³)	Mxa (in.-lb.)	Web in Ten.		Web in Comp.		Ixe (in. ⁴)	Web in Ten. Iye (in. ⁴)	Web in Comp. Iye (in. ⁴)
					Sye (in. ³)	Mya (in.-lb.)	Sye (in. ³)	Mya (in.-lb.)			Sye (in. ³)	Mya (in.-lb.)	Sye (in. ³)	Mya (in.-lb.)			
3.625	20	33	0.397	7846	0.401	7917	0.294	5814	0.367	7247	0.313	6192	0.243	4804	0.851	0.631	0.537
	18	43	0.565	11165	0.516	10187	0.425	8401	0.540	10674	0.400	7903	0.342	6753	1.161	0.805	0.741
	16	54	0.711	21290	0.632	18925	0.535	16019	0.683	20464	0.492	14739	0.429	12844	1.449	0.990	0.921
	14	68	0.958	28672	0.770	23063	0.733	21944	0.939	28127	0.603	18051	0.572	17117	1.829	1.211	1.194
	12	97	1.390	41626	1.039	31111	1.039	31111	1.375	41154	0.820	24551	0.820	24551	2.520	1.645	1.645
6	20	33	0.769	15192	0.532	10508	0.329	6505	0.752	14868	0.514	10153	0.275	5434	2.822	0.954	0.694
	18	43	1.150	22733	0.762	15066	0.483	9535	1.141	22553	0.697	13773	0.394	7792	3.797	1.273	0.981
	16	54	1.449	43377	0.927	27741	0.610	18261	1.438	43053	0.865	25884	0.498	14913	4.753	1.573	1.229
	14	68	1.925	57642	1.226	36698	0.854	25573	1.916	57361	1.078	32268	0.686	20533	6.023	1.938	1.645
	12	97	2.793	83631	1.707	51102	1.429	42793	2.784	83346	1.484	44433	1.122	33607	8.380	2.662	2.522

Web Size (in)	Ga	Mils	Other Properties					
			Lu (in)	Unperforated Vx (kips)	Perforated Vx (kips)	Vy (kips)	Px (kips)	Py (kips)
3.625	20	33	103	1.03	0.54	2.05	0.29	0.38
	18	43	103	1.74	0.68	3.09	0.46	0.61
	16	54	83	3.38	1.02	5.77	1.02	1.38
	14	68	82	4.37	1.00	7.06	1.51	2.08
	12	97	82	6.05	0.92	9.71	2.85	4.00
6	20	33	126	0.63	0.63	2.05	0.27	0.38
	18	43	125	1.41	1.24	3.09	0.43	0.61
	16	54	101	2.83	1.95	5.77	0.97	1.38
	14	68	101	5.34	2.88	7.06	1.44	2.08
	12	97	100	10.58	3.90	9.71	2.74	4.00

Table Notes

Lu=Maximum unbraced length to attain Mxa.
 Vx=Allowable Shear for bending about x-axis.
 Vy=Allowable Shear for bending about y-axis.
 Px=Allowable Web Crippling per AISI Standard for CFS Wall Stud Design 2004. This value assumes the web resists web crippling and the HDS is nested in track having the same thickness. Bearing length is 1.25".
 Py=Allowable End One Flange Web Crippling per AISI NASPEC 2001. This value assumes 2 flanges resist web crippling for a bearing length of 1.25".

Ix=Gross Moment of Inertia about x-axis.
 Sx=Gross Section Modulus about x-axis.
 rx=Gross Radius of Gyration about x-axis.
 Iy=Gross Moment of Inertia about y-axis.
 Sy=Gross Section Modulus about y-axis.
 ry=Gross Radius of Gyration about y-axis.
 J=St. Venant Torsion Constant.
 Cw=Warping Torsion Constant.
 xo=Distance from shear center to the centroid along the principal x-axis.
 ro=Polar Radius of Gyration about the centroidal principal axis.
 Beta=1-(Xo/ro)²

Sxe=Effective Section Modulus about x-axis.
 Mxa=Allowable Moment about x-axis.
 Sxe=Effective Section Modulus about y-axis.
 Mya=Allowable Moment about y-axis.
 Ixe=Effective Moment of Inertia about x-axis for deflection calculations.
 Iye=Effective Moment of Inertia about y-axis for deflection calculations.

Unless otherwise noted, properties are computed according to the AISI NASPEC, 2001.
 Perforated properties are based on the standard 1.5" x 4" oval Dietrich web knockout.

Allowable Loads for HDSC Header Brackets (lbs)

Clip Size (Inches)	Designation	Jamb/Head Gauge (mils)	Jamb/Head Gauge Fy	F1 (lbs)		F2 (lbs)			
				Jamb	Head	Jamb	Head		
3.5	HDSC	20 (33)	33	560	453	560	449		
		18 (43)	33	832	673	832	713		
		16 (54)	33	1172	948	890	890		
		14 (68)	50	1680	1359	890	890		
			33	1656	1339	890	890		
		12 (97)	50	1680	1359	890	890		
			33	1680	1359	890	890		
		5-7/8	HDSC	20 (33)	33	560	501	560	449
				18 (43)	33	832	744	832	713
				16 (54)	33	1172	1048	1172	1064
14 (68)	50			1680	1503	1493	1493		
	33			1656	1481	1493	1493		
12 (97)	50			1680	1503	1493	1493		
	33			1680	1503	1493	1493		

Table Notes

- 1) Screws shall be #10-16 Buildex or equivalent, with an ultimate shear capacity per screw of 1400#.
- 2) Table to be used by qualified engineers only.
- 3) To determine the capacity of any given connection, compare the jamb and head values, and use the minimum. For example, if a 16-gauge, 50 ksi jamb is used with a 3.625" HDS 18-gauge, 33 ksi head, the design value for F1 is the minimum value of 1680# for the jamb and 682# for the head. Therefore, the design value is 682#.
- 4) For F1 and F2 occurring at the same time, use the squared interaction equation: (f1/F1)²+(f2/F2)²<1.0.

Patent Pending

Interior Span Chart

Allowable HDS® Header Spans for Window and Door Openings (Dead Load=10psf & Wind Load=5psf)

(Dead Load Deflection Limited to L/240 or a Maximum of 0.5 in.)

Wall Height (ft)	Member Size (in)	Gauge	Mils (in)	Fy (ksi)	Deflection												
					240				360				600				
					Opening Height (ft)												
8	10	12	14	8	10	12	14	8	10	12	14						
9	3.625	20	33	33	11' 0"	-	-	-	-	10' 4"	-	-	-	9' 6"	-	-	-
		18	43	33	11' 6"	-	-	-	-	10' 10"	-	-	-	10' 0"	-	-	-
		16	54	50	11' 11"	-	-	-	-	11' 3"	-	-	-	10' 4"	-	-	-
		14	68	50	12' 3"	-	-	-	-	11' 7"	-	-	-	10' 9"	-	-	-
	12	97	50	12' 10"	-	-	-	-	12' 2"	-	-	-	11' 3"	-	-	-	
	6	20	33	33	12' 12"	-	-	-	-	12' 4"	-	-	-	11' 6"	-	-	-
		18	43	33	13' 5"	-	-	-	-	12' 10"	-	-	-	11' 12"	-	-	-
		16	54	50	13' 9"	-	-	-	-	13' 2"	-	-	-	12' 4"	-	-	-
14		68	50	14' 1"	-	-	-	-	13' 6"	-	-	-	12' 9"	-	-	-	
12	97	50	14' 5"	-	-	-	-	13' 11"	-	-	-	13' 3"	-	-	-		
11	3.625	20	33	33	9' 2"	11' 12"	-	-	9' 2"	11' 3"	-	-	9' 2"	10' 5"	-	-	
		18	43	33	10' 6"	12' 7"	-	-	10' 6"	11' 9"	-	-	9' 11"	10' 11"	-	-	
		16	54	50	11' 11"	13' 0"	-	-	11' 2"	12' 2"	-	-	10' 4"	11' 3"	-	-	
		14	68	50	12' 3"	13' 6"	-	-	11' 7"	12' 8"	-	-	10' 9"	11' 8"	-	-	
		12	97	50	12' 10"*	14' 2"	-	-	12' 2"	13' 4"	-	-	11' 3"	12' 3"	-	-	
	6	20	33	33	12' 0"	14' 5"	-	-	12' 0"	13' 7"	-	-	11' 6"	12' 6"	-	-	
		18	43	33	12' 11"*	15' 0"	-	-	12' 10"*	14' 2"	-	-	11' 12"	13' 1"	-	-	
		16	54	50	13' 7"*	15' 6"	-	-	13' 2"*	14' 8"	-	-	12' 4"	13' 7"	-	-	
		14	68	50	14' 1"*	15' 11"	-	-	13' 6"*	15' 2"	-	-	12' 9"*	14' 1"	-	-	
		12	97	50	14' 5"*	16' 7"	-	-	13' 11"*	15' 10"	-	-	13' 3"*	14' 9"	-	-	
		20	33	33	7' 7"	9' 2"	11' 11"	-	7' 7"	9' 2"	11' 11"	-	-	7' 7"	9' 2"	10' 6"	-
		18	43	33	8' 8"*	10' 5"	13' 6"	-	8' 8"*	10' 5"	12' 8"	-	-	8' 8"*	10' 5"	11' 4"	-
16	54	50	10' 8"*	12' 2"	13' 11"	-	10' 8"*	12' 2"	13' 1"	-	-	10' 3"*	11' 1"	12' 2"	-		
14	68	50	11' 3"*	12' 9"*	14' 5"	-	11' 3"*	12' 7"*	13' 7"	-	-	10' 8"*	11' 7"	12' 7"	-		
12	97	50	12' 1"*	13' 9"*	15' 2"	-	12' 1"*	13' 3"*	14' 3"	-	-	11' 3"*	12' 3"	13' 2"	-		
13	3.625	20	33	33	9' 11"*	11' 10"	15' 6"	-	9' 11"*	11' 10"	14' 6"	-	9' 11"*	11' 10"	13' 5"	-	
		18	43	33	11' 4"*	12' 11"*	16' 2"	-	11' 4"*	12' 11"*	15' 2"	-	11' 4"*	12' 11"*	14' 0"	-	
		16	54	50	11' 12"*	13' 7"*	16' 9"	-	11' 12"*	13' 7"*	15' 9"	-	11' 12"*	13' 7"*	14' 6"	-	
		14	68	50	12' 8"*	14' 4"*	17' 4"	-	12' 8"*	14' 4"*	16' 4"	-	12' 8"*	14' 1"*	15' 1"	-	
		12	97	50	13' 8"*	15' 6"*	18' 2"	-	13' 8"*	15' 6"*	17' 2"	-	13' 3"*	14' 9"*	15' 11"	-	
	6	20	33	33	6' 7"*	7' 7"	9' 2"	11' 11"	6' 7"*	7' 7"	9' 2"	11' 11"	6' 7"*	7' 7"	9' 2"	10' 6"	
		18	43	33	7' 7"*	8' 8"*	10' 5"	13' 7"	7' 7"*	8' 8"*	10' 5"	12' 12"	7' 7"*	8' 8"*	10' 5"	11' 4"	
15	3.625	16	54	50	9' 9"*	10' 8"*	12' 2"	14' 10"	9' 9"*	10' 8"*	12' 2"	13' 9"	9' 9"*	10' 8"*	11' 5"	12' 0"	
		14	68	50	10' 4"*	11' 3"*	12' 9"*	15' 4"	10' 4"*	11' 3"*	12' 9"*	14' 6"	10' 4"*	11' 3"*	12' 3"*	12' 9"	
		12	97	50	11' 2"*	12' 1"*	13' 9"*	16' 1"	11' 2"*	12' 1"*	13' 9"*	15' 2"	11' 2"*	12' 1"*	12' 12"*	13' 11"	
		20	33	33	8' 7"*	9' 10"*	11' 10"	15' 4"	8' 7"*	9' 10"*	11' 10"	15' 4"	8' 7"*	9' 10"*	11' 10"	14' 4"	
		18	43	33	10' 1"*	11' 4"*	12' 11"*	16' 12"	10' 1"*	11' 4"*	12' 11"*	16' 1"	10' 1"*	11' 4"*	12' 11"*	14' 11"	
	6	16	54	50	11' 0"*	11' 12"*	13' 7"*	17' 9"*	11' 0"*	11' 12"*	13' 7"*	16' 8"	11' 0"*	11' 12"*	13' 7"*	15' 5"	
		14	68	50	11' 7"*	12' 8"*	14' 4"*	18' 5"*	11' 7"*	12' 8"*	14' 4"*	17' 4"	11' 7"*	12' 8"*	14' 4"*	15' 12"	
		12	97	50	12' 7"*	13' 8"*	15' 6"*	19' 5"*	12' 7"*	13' 8"*	15' 6"*	18' 3"*	12' 7"*	13' 8"*	15' 6"*	16' 10"	

HDS® Framing System

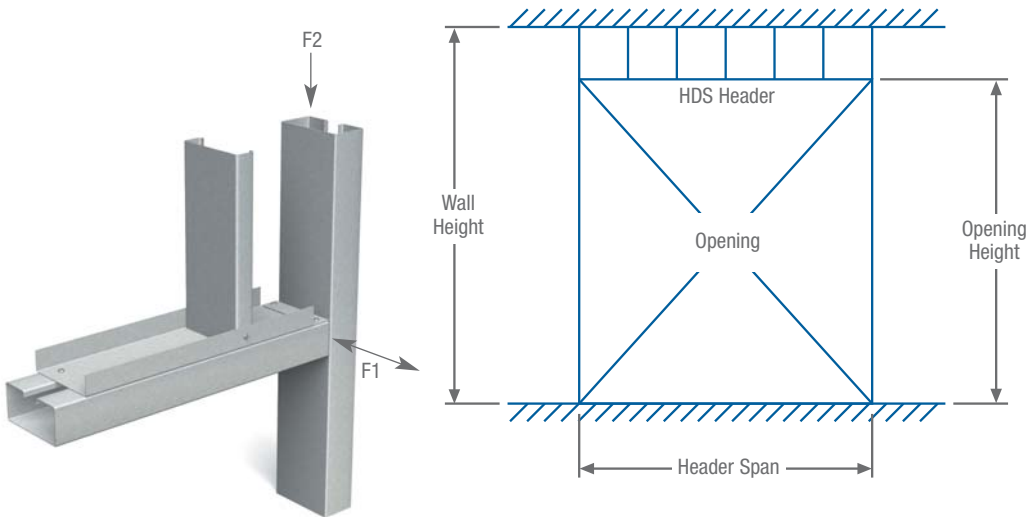


Table Notes

- 1) Tabulated values are for a single HDS header installed with standard HDS clips. Each head-to-jamb connection requires (4) #10-16 screws to the header, and (4) #10-16 screws to the jamb. Tabulated values marked with an asterisk will require special engineering of the header-to-jamb connections.
- 2) Tabulated values include a connection check assuming 25 gauge jamb studs.
- 3) HDS Header to be installed with open side facing up.
- 4) HDS properties computed in accordance with AISI NASPEC 2001.

Patent Pending

Exterior Span Chart

Allowable HDS® Header Spans for Window and Door Openings (Dead Load=12psf & Wind Load=25psf)

(Dead Load Deflection Limited to L/240 or a Maximum of 0.5 in.)

Wall Height (ft)	Member Size (in)	Gauge	Mils (in)	Fy (ksi)	Deflection													
					240				360				600					
					Opening Height (ft)													
8	10	12	14	8	10	12	14	8	10	12	14							
9	3.625	20	33	33	7' 5"	-	-	-	-	7' 5"	-	-	-	-	7' 5"	-	-	-
		18	43	33	8' 6"	-	-	-	-	8' 6"	-	-	-	-	8' 3"	-	-	-
		16	54	50	9' 10"	-	-	-	-	9' 3"	-	-	-	-	8' 6"	-	-	-
		14	68	50	10' 2"	-	-	-	-	9' 7"	-	-	-	-	8' 10"	-	-	-
	12	97	50	10' 9"	-	-	-	-	10' 1"	-	-	-	-	9' 3"	-	-	-	
	6	20	33	33	9' 7"	-	-	-	-	9' 7"	-	-	-	-	9' 5"	-	-	-
		18	43	33	11' 5"	-	-	-	-	10' 9"	-	-	-	-	9' 11"	-	-	-
		16	54	50	11' 9"	-	-	-	-	11' 1"	-	-	-	-	10' 3"	-	-	-
		14	68	50	12' 2"	-	-	-	-	11' 6"	-	-	-	-	10' 8"	-	-	-
	12	97	50	12' 9"	-	-	-	-	12' 1"	-	-	-	-	11' 2"	-	-	-	
	11	3.625	20	33	33	6' 1"	7' 5"	-	-	6' 1"	7' 5"	-	-	-	6' 1"	7' 5"	-	-
			18	43	33	7' 0"	8' 6"	-	-	7' 0"	8' 6"	-	-	-	7' 0"	8' 3"	-	-
16			54	50	9' 2"	10' 9"	-	-	9' 1"	9' 11"	-	-	-	8' 3"	8' 8"	-	-	
14			68	50	10' 2"	11' 1"	-	-	9' 6"	10' 5"	-	-	-	8' 7"	9' 3"	-	-	
12		97	50	10' 8"	11' 8"	-	-	10' 0"	10' 11"	-	-	-	9' 2"	10' 2"	-	-		
6		20	33	33	7' 11"	9' 6"	-	-	7' 11"	9' 6"	-	-	-	7' 11"	9' 6"	-	-	
		18	43	33	9' 4"	11' 1"	-	-	9' 4"	11' 1"	-	-	-	9' 4"	10' 9"	-	-	
		16	54	50	11' 9"	12' 11"	-	-	11' 1"	12' 1"	-	-	-	10' 3"	11' 2"	-	-	
		14	68	50	12' 2"	13' 4"	-	-	11' 6"	12' 7"	-	-	-	10' 7"	11' 7"	-	-	
12		97	50	12' 9"	14' 1"	-	-	12' 1"	13' 3"	-	-	-	11' 2"	12' 2"	-	-		
13		3.625	20	33	33	5' 3"	6' 1"	7' 5"	-	5' 3"	6' 1"	7' 5"	-	-	5' 3"	6' 1"	7' 5"	-
			18	43	33	6' 1"	7' 0"	8' 6"	-	6' 1"	7' 0"	8' 6"	-	-	6' 1"	7' 0"	8' 3"	-
	16		54	50	8' 0"	9' 2"	10' 9"	-	8' 0"	9' 2"	9' 11"	-	-	7' 7"	8' 1"	8' 8"	-	
	14		68	50	9' 0"	10' 3"	11' 9"	-	9' 0"	9' 11"	10' 7"	-	-	8' 4"	8' 8"	9' 3"	-	
	12	97	50	10' 7"	11' 6"	12' 7"	-	9' 11"	10' 9"	11' 6"	-	-	8' 12"	9' 5"	10' 1"	-		
	6	20	33	33	6' 11"	7' 11"	9' 6"	-	6' 11"	7' 11"	9' 6"	-	-	6' 11"	7' 11"	9' 6"	-	
		18	43	33	8' 1"	9' 4"	11' 0"	-	8' 1"	9' 4"	11' 0"	-	-	8' 1"	9' 4"	11' 0"	-	
		16	54	50	10' 10"	12' 2"	13' 10"	-	10' 10"	11' 12"	12' 12"	-	-	10' 2"	10' 12"	11' 10"	-	
		14	68	50	12' 1"	13' 4"	14' 4"	-	11' 6"	12' 6"	13' 5"	-	-	10' 7"	11' 5"	12' 6"	-	
	12	97	50	12' 9"	14' 0"	15' 1"	-	12' 1"	13' 2"	14' 2"	-	-	11' 2"	12' 1"	13' 1"	-		
	15	3.625	20	33	33	4' 8"	5' 3"	6' 1"	7' 5"	4' 8"	5' 3"	6' 1"	7' 5"	4' 8"	5' 3"	6' 1"	7' 5"	
			18	43	33	5' 5"	6' 1"	7' 0"	8' 6"	5' 5"	6' 1"	7' 0"	8' 6"	5' 5"	6' 1"	7' 0"	8' 3"	
16			54	50	7' 2"	8' 0"	9' 2"	10' 9"	7' 2"	8' 0"	9' 2"	9' 11"	7' 2"	7' 7"	8' 1"	8' 8"		
14			68	50	8' 1"	9' 0"	10' 3"	11' 9"	8' 1"	9' 0"	9' 11"	10' 7"	7' 9"	8' 2"	8' 8"	9' 3"		
12		97	50	9' 6"	10' 6"	11' 10"	12' 9"	9' 6"	10' 5"	10' 10"	11' 6"	8' 9"	8' 11"	9' 5"	10' 1"			
6		20	33	33	6' 2"	6' 11"	7' 11"	9' 6"	6' 2"	6' 11"	7' 11"	9' 6"	6' 2"	6' 11"	7' 11"	9' 6"		
		18	43	33	7' 3"	8' 1"	9' 4"	11' 0"	7' 3"	8' 1"	9' 4"	11' 0"	7' 3"	8' 1"	9' 4"	11' 0"		
		16	54	50	9' 8"	10' 8"	12' 1"	13' 11"	9' 8"	10' 8"	12' 1"	13' 6"	9' 8"	10' 8"	11' 2"	11' 10"		
		14	68	50	10' 11"	12' 0"	13' 5"	15' 3"	10' 11"	12' 0"	13' 3"	14' 5"	10' 7"	11' 4"	11' 11"	12' 7"		
12		97	50	12' 0"	13' 1"	14' 10"	15' 12"	12' 0"	13' 1"	14' 0"	15' 1"	11' 2"	12' 0"	12' 10"	13' 8"			

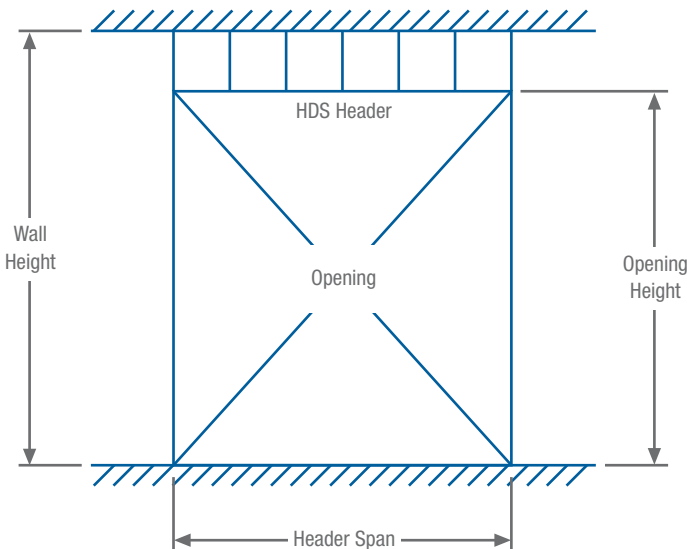


Table Notes

- 1) Tabulated values are for a single HDS header installed with standard HDSC clips. Each head-to-jamb connection requires (4) #10-16 screws to the header, and (4) #10-16 screws to the jamb. Tabulated values marked with an asterisk will require special engineering of the header-to-jamb connections.
- 2) Deflections are computed using 0.7 times the components and cladding wind load per Section B1 of the AISI Standard for Cold-Formed Steel Framing - Wall Design. Note that the 0.7 factor is not used for the interior 5 psf loading condition.
- 3) Unless connections are engineered separately, jambs must be the same gauge and strength as the header.
- 4) HDS Header to be installed with open side facing up.
- 5) HDS properties computed in accordance with AISI NASPEC 2001.

Patent Pending

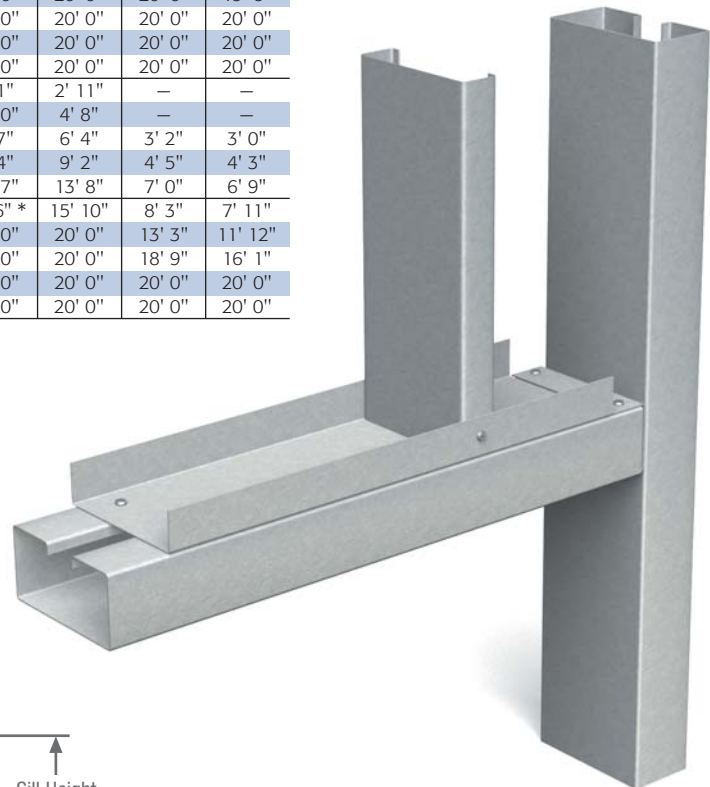
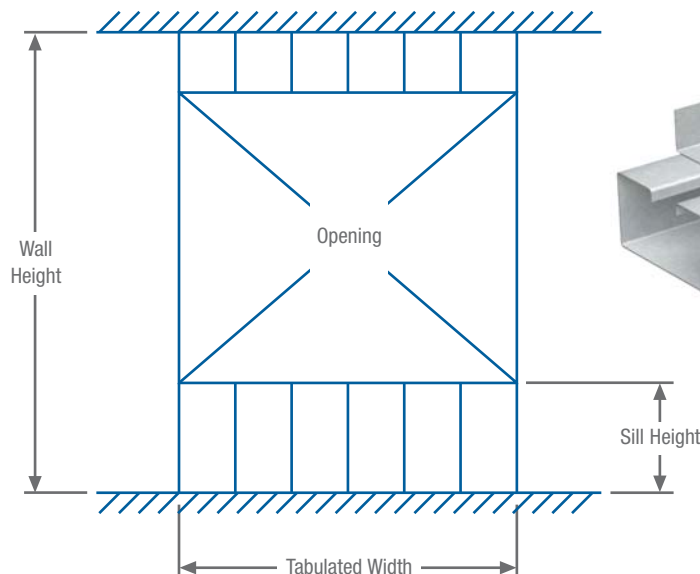
Allowable Opening Widths for Single HDS® Framing Used as Jamb Studs

Wall Height (ft)	Member Size (in)	Gauge	Mils (in)	Fy (ksi)	5 psf					
					Deflection					
					240		360		600	
					Sill Height					
		2		3		2		3		
9	3.625	20	33	33	16' 0"	16' 0"	16' 0"	16' 0"	12' 10"	11' 2"
		18	43	33	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"
		16	54	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"
		14	68	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"
		12	97	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"
	6	20	33	33	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		18	43	33	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
11	3.625	20	33	33	16' 0"	16' 0"	12' 1"	10' 6"	5' 8"	5' 7"
		18	43	33	16' 0"	16' 0"	16' 0"	15' 3"	9' 2"	8' 2"
		16	54	50	16' 0"	16' 0"	16' 0"	16' 0"	12' 5"	10' 9"
		14	68	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	14' 3"
		12	97	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"
	6	20	33	33	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		18	43	33	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
13	3.625	20	33	33	10' 8"	9' 8"	5' 9"	5' 6"	2' 8"	—
		18	43	33	16' 0"	14' 4"	9' 10"	8' 6"	4' 3"	4' 1"
		16	54	50	16' 0"	16' 0"	12' 11"	11' 4"	5' 11"	5' 8"
		14	68	50	16' 0"	16' 0"	16' 0"	15' 2"	8' 8"	6' 0"
		12	97	50	16' 0"	16' 0"	16' 0"	16' 0"	13' 9"	11' 12"
	6	20	33	33	20' 0" *	20' 0"	20' 0" *	20' 0"	16' 2"	13' 10"
		18	43	33	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	19' 8"
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
15	3.625	20	33	33	5' 6"	5' 4"	3' 1"	2' 11"	—	—
		18	43	33	8' 8"	8' 4"	4' 10"	4' 8"	—	—
		16	54	50	12' 3"	11' 3"	6' 7"	6' 4"	3' 2"	3' 0"
		14	68	50	16' 0"	15' 4"	9' 4"	9' 2"	4' 5"	4' 3"
		12	97	50	16' 0"	16' 0"	15' 7"	13' 8"	7' 0"	6' 9"
	6	20	33	33	20' 0" *	20' 0" *	18' 6" *	15' 10"	8' 3"	7' 11"
		18	43	33	20' 0"	20' 0"	20' 0"	20' 0"	13' 3"	11' 12"
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	18' 9"	16' 1"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"

Table Notes

- 1) The opening is centered vertically about the wall height.
- 2) The assumed stud spacing adjacent to the opening is 16" O/C or less. For door openings, this table is conservative, and therefore valid.
- 3) The tabulated values assume a single HDS member is used at each jamb stud.
- 4) The tabulated values are limited to 16' for 3.625" walls and 20' for 6" walls. For wider openings or other conditions, contact Dietrich Design Group at 1-800-873-2443.
- 5) Depending on the actual window width versus the tabulated window width, cells marked with an asterisk may require an end connection that will prevent web crippling. Web crippling is computed in accordance with the AISI Standard for CFS Wall Stud Design 2004. End track must have a minimum thickness equal to the jamb stud.
- 6) The tabulated values are based on an unbraced length of 6' for bending.
- 7) HDS properties computed in accordance with the 2001 AISI NASPEC.
- 8) Table not valid for openings in load-bearing walls.

HDS® Framing System



Allowable Opening Widths for Single HDS® Framing Used as Jamb Studs

Wall Height (ft)	Member Size (in)	Gauge	Mils (in)	Fy (ksi)	25 psf						35 psf					
					Deflection						Deflection					
					240		360		600		240		360		600	
					Sill Height						Sill Height					
2		3		2		3		2		3		2		3		
9	3.625	20	33	33	3' 3"	3' 0"	3' 3"	3' 0"	—	—	—	—	—	—	—	—
		18	43	33	6' 4"	5' 4"	6' 4"	5' 4"	3' 4"	3' 1"	3' 7"	3' 4"	3' 7"	3' 4"	—	—
		16	54	50	13' 6"	11' 6"	9' 10"	8' 8"	4' 11"	4' 3"	9' 3"	7' 9"	6' 2"	5' 6"	2' 9"	—
		14	68	50	16' 0"	14' 11"	13' 2"	11' 6"	6' 9"	5' 12"	11' 2"	10' 3"	8' 7"	7' 7"	3' 12"	3' 10"
	12	97	50	16' 0"	16' 0"	16' 0"	16' 0"	10' 5"	9' 1"	12' 1"	12' 5"	12' 1"	11' 3"	6' 7"	5' 10"	
	6	20	33	33	8' 9" *	7' 7" *	8' 9" *	7' 7" *	8' 9" *	7' 7" *	4' 0" *	4' 11" *	4' 0" *	4' 11" *	4' 0" *	4' 11" *
		18	43	33	15' 8" *	13' 2" *	15' 8" *	13' 2" *	15' 8" *	13' 2" *	10' 9" *	8' 10" *	10' 9" *	8' 10" *	10' 9" *	8' 10" *
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	19' 3"	20' 0"	17' 9" *	20' 0" *	17' 9" *	15' 0" *	13' 1"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	19' 10" *	17' 2"
	12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	
	11	3.625	20	33	33	—	—	—	—	—	—	—	—	—	—	—
			18	43	33	3' 3"	2' 12"	2' 11"	2' 8"	—	—	—	—	—	—	—
16			54	50	6' 0"	6' 12"	4' 2"	3' 10"	—	—	4' 7"	4' 4"	—	—	—	
14			68	50	10' 10"	9' 6"	5' 11"	5' 9"	2' 8"	—	6' 10"	6' 1"	3' 6"	3' 3"	—	
12		97	50	13' 2"	13' 1"	9' 7"	8' 6"	4' 5"	4' 1"	9' 1"	8' 11"	5' 9"	5' 7"	2' 7"		
6		20	33	33	5' 6" *	5' 5" *	5' 6" *	5' 5" *	5' 3" *	5' 1" *	3' 3" *	2' 11" *	3' 3" *	2' 11" *	3' 2" *	2' 10" *
		18	43	33	10' 12" *	9' 5" *	10' 12" *	9' 5" *	8' 3" *	7' 5" *	6' 6" *	4' 0" *	6' 6" *	4' 0" *	4' 12" *	4' 9" *
		16	54	50	20' 0" *	18' 10" *	20' 0" *	18' 3" *	11' 5"	9' 11"	15' 4" *	12' 12" *	14' 5" *	12' 4" *	7' 4"	6' 5"
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	15' 7"	13' 3"	20' 0" *	18' 4"	19' 5" *	16' 3"	9' 11"	8' 9"
12		97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	19' 6"	20' 0"	20' 0"	20' 0"	20' 0"	15' 6"	13' 2"	
13		3.625	20	33	33	—	—	—	—	—	—	—	—	—	—	—
			18	43	33	—	—	—	—	—	—	—	—	—	—	—
	16		54	50	3' 7"	3' 5"	—	—	—	—	—	—	—	—	—	
	14		68	50	5' 1"	4' 10"	2' 9"	2' 7"	—	—	3' 1"	2' 11"	—	—	—	
	12	97	50	8' 4"	6' 0"	4' 6"	4' 3"	—	—	4' 12"	4' 9"	2' 8"	2' 6"	—		
	6	20	33	33	3' 3" *	3' 1" *	3' 3" *	3' 1" *	—	—	—	—	—	—	—	
		18	43	33	6' 2" *	5' 11" *	6' 2" *	5' 11" *	3' 10"	3' 8"	3' 9" *	3' 6" *	3' 9" *	3' 6" *	—	
		16	54	50	17' 9" *	14' 9" *	11' 9"	10' 5"	5' 5"	5' 2"	10' 4" *	9' 5" *	6' 12"	6' 9"	3' 3"	
		14	68	50	20' 0"	20' 0"	16' 6"	14' 1"	7' 8"	7' 6"	16' 6" *	14' 0"	10' 1"	9' 2"	4' 8"	
	12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	12' 9"	11' 3"	20' 0"	20' 0"	16' 4"	13' 12"	7' 7"		
	15	3.625	20	33	33	—	—	—	—	—	—	—	—	—	—	
			18	43	33	—	—	—	—	—	—	—	—	—	—	
16			54	50	—	—	—	—	—	—	—	—	—	—		
14			68	50	2' 8"	2' 7"	—	—	—	—	—	—	—	—		
12		97	50	4' 4"	4' 2"	—	—	—	—	2' 7"	—	—	—			
6		20	33	33	—	—	—	—	—	—	—	—	—	—		
		18	43	33	4' 0" *	3' 11" *	4' 0" *	3' 11" *	—	—	—	—	—	—		
		16	54	50	11' 3" *	10' 2"	5' 12"	5' 10"	2' 10"	2' 9"	6' 3"	6' 1"	3' 9"	3' 7"		
		14	68	50	16' 2" *	14' 2"	8' 6"	8' 2"	4' 1"	3' 11"	9' 5"	9' 3"	5' 3"	5' 1"		
12		97	50	20' 0"	20' 0"	14' 5"	12' 10"	6' 6"	6' 3"	16' 0"	14' 0"	8' 5"	8' 0"	4' 0"		

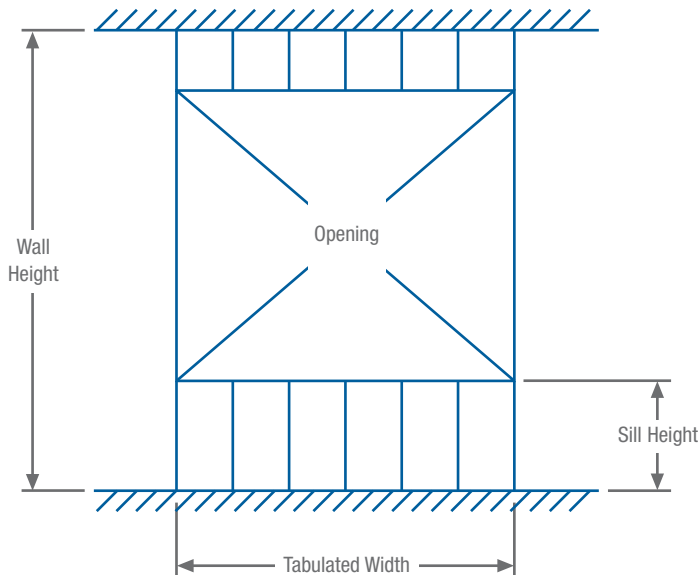


Table Notes

- 1) The opening is centered vertically about the wall height.
- 2) The assumed stud spacing adjacent to the opening is 16" O/C or less.
- 3) The tabulated values assume a single HDS member is used at each jamb stud.
- 4) The tabulated values are limited to 16' for 3.625" walls and 20' for 6" walls. For wider openings or other conditions, contact Dietrich Design Group at 1-800-873-2443.
- 5) Depending on the actual window width versus the tabulated window width, cells marked with an asterisk may require an end connection that will prevent web crippling. Web crippling is computed in accordance with the AISI Standard for CFS Wall Stud Design 2004. End track must have a minimum thickness equal to the jamb stud.
- 6) The tabulated values are based on an unbraced length for bending of 6'.
- 7) Deflections are computed using 0.7 times the components and cladding wind load per Section B1 of the AISI Standard for Cold-Formed Steel Framing - Wall Design. Note that the 0.7 factor is not used for the interior 5 psf loading condition.
- 8) HDS properties computed in accordance with the 2001 AISI NASPEC.
- 9) Table not valid for openings in load-bearing walls.

Patent Pending

Allowable Opening Widths for HDS® Framing Coupled with CSJ Studs Used as Jamb Studs

Wall Height (ft)	Member Size (in)	Gauge	Mils (in)	Fy (ksi)	25 psf						35 psf						
					Deflection						Deflection						
					240		360		600		240		360		600		
					Sill Height						Sill Height						
2		3		2		3		2		3		2		3			
9	3.625	20	33	33	8' 2"	6' 10"	8' 2"	6' 10"	4' 8"	4' 1"	5' 0"	4' 2"	5' 0"	4' 2"	2' 7"	—	
		18	43	33	13' 4"	10' 8"	13' 4"	10' 8"	6' 11"	6' 2"	8' 5"	7' 0"	8' 5"	7' 0"	4' 2"	3' 12"	
		16	54	50	16' 0"	16' 0"	16' 0"	15' 3"	9' 4"	8' 3"	14' 11"	12' 5"	11' 8"	10' 3"	4' 0"	5' 3"	
		14	68	50	16' 0"	16' 0"	16' 0"	16' 0"	12' 5"	10' 10"	16' 0"	15' 10"	15' 4"	13' 4"	7' 12"	7' 1"	
		12	97	50	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	16' 0"	15' 8"	16' 0"	16' 0"	16' 0"	12' 1"	10' 6"	
	6	20	33	33	17' 7" *	15' 3" *	17' 7" *	15' 3" *	17' 7" *	15' 3" *	12' 2" *	10' 5" *	12' 2" *	10' 5" *	12' 2" *	10' 5" *	
		18	43	33	20' 0" *	20' 0"	20' 0" *	20' 0"	20' 0" *	20' 0"	20' 0" *	20' 0"	17' 3" *	20' 0" *	17' 3" *	20' 0" *	
		16	54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	
		11	3.625	20	33	33	4' 3"	3' 12"	3' 11"	3' 8"	—	—	—	—	—	—	—
				18	43	33	6' 0"	6' 11"	6' 2"	5' 12"	2' 10"	2' 6"	4' 5"	4' 2"	3' 8"	3' 5"	—
16	54			50	14' 11"	12' 8"	8' 6"	7' 8"	3' 11"	3' 7"	9' 5"	8' 4"	5' 1"	4' 11"	—		
14	68			50	16' 0"	16' 0"	11' 8"	10' 2"	5' 6"	5' 4"	12' 10"	11' 1"	7' 7"	6' 6"	3' 3"		
12	97			50	16' 0"	16' 0"	16' 0"	14' 10"	8' 10"	7' 11"	15' 3"	14' 5"	11' 4"	9' 11"	5' 4"		
6	20		33	33	13' 4" *	11' 1" *	13' 4" *	11' 1" *	11' 0" *	9' 7" *	8' 3" *	7' 4" *	8' 3" *	7' 4" *	6' 12" *	6' 2" *	
	18		43	33	20' 0" *	18' 4" *	20' 0" *	18' 4" *	15' 11" *	13' 6"	15' 1" *	12' 6" *	15' 1" *	12' 6" *	10' 2" *	8' 11"	
	16		54	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	17' 5"	20' 0"	20' 0"	20' 0"	20' 0"	13' 8"	11' 9"	
	14		68	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	18' 3"	15' 4"	
	12		97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	
	13		3.625	20	33	33	—	—	—	—	—	—	—	—	—	—	—
				18	43	33	4' 5"	4' 3"	2' 11"	2' 8"	—	—	2' 7"	—	—	—	—
16		54		50	7' 3"	7' 1"	3' 12"	3' 9"	—	—	4' 5"	—	—	—	—		
14		68		50	10' 3"	9' 3"	5' 6"	5' 3"	2' 7"	—	6' 1"	3' 5"	3' 4"	3' 2"	—		
12		97		50	16' 0"	13' 11"	9' 4"	8' 2"	4' 2"	3' 11"	8' 0"	5' 6"	5' 4"	5' 1"	—		
6		20	33	33	7' 11" *	6' 0"	7' 11" *	6' 0"	5' 2"	4' 11"	4' 8" *	4' 6" *	4' 8" *	4' 6" *	3' 2"	2' 12"	
		18	43	33	15' 6" *	13' 3" *	15' 6" *	13' 3" *	7' 10"	7' 9"	9' 5" *	8' 3" *	9' 5" *	8' 3" *	4' 9"	4' 6"	
		16	54	50	20' 0"	20' 0"	20' 0"	18' 8"	11' 1"	9' 11"	19' 6" *	13' 2"	14' 4"	12' 5"	6' 7"	6' 3"	
		14	68	50	20' 0"	20' 0"	20' 0"	20' 0"	15' 5"	13' 3"	20' 0"	17' 4"	19' 6"	16' 5"	9' 12"	8' 7"	
		12	97	50	20' 0"	20' 0"	20' 0"	20' 0"	20' 0"	19' 7"	20' 0"	20' 0"	20' 0"	20' 0"	15' 2"	13' 1"	
		15	3.625	20	33	33	—	—	—	—	—	—	—	—	—	—	—
				18	43	33	2' 9"	2' 8"	—	—	—	—	—	—	—	—	—
16	54			50	3' 10"	3' 8"	—	—	—	—	—	—	—	—	—		
14	68			50	5' 4"	5' 1"	2' 11"	2' 9"	—	—	3' 3"	3' 1"	—	—	—		
12	97			50	8' 4"	7' 12"	4' 8"	4' 6"	—	—	5' 2"	4' 12"	2' 10"	2' 8"	—		
6	20		33	33	5' 0" *	4' 10"	5' 0" *	4' 10"	2' 9"	2' 7"	3' 0"	2' 11"	3' 0"	2' 11"	—		
	18		43	33	9' 1" *	9' 3"	8' 8"	8' 4"	4' 2"	3' 12"	5' 6"	5' 4"	5' 4"	5' 2"	—		
	16		54	50	20' 0"	17' 12"	12' 4"	11' 3"	5' 8"	5' 6"	10' 0"	11' 2"	7' 4"	7' 0"	3' 6"		
	14		68	50	20' 0"	20' 0"	17' 7"	15' 2"	7' 10"	7' 7"	17' 11"	15' 6"	10' 6"	8' 0"	4' 10"		
	12		97	50	20' 0"	20' 0"	20' 0"	20' 0"	13' 2"	11' 11"	20' 0"	20' 0"	17' 4"	14' 12"	7' 9"		

HDS® Framing System

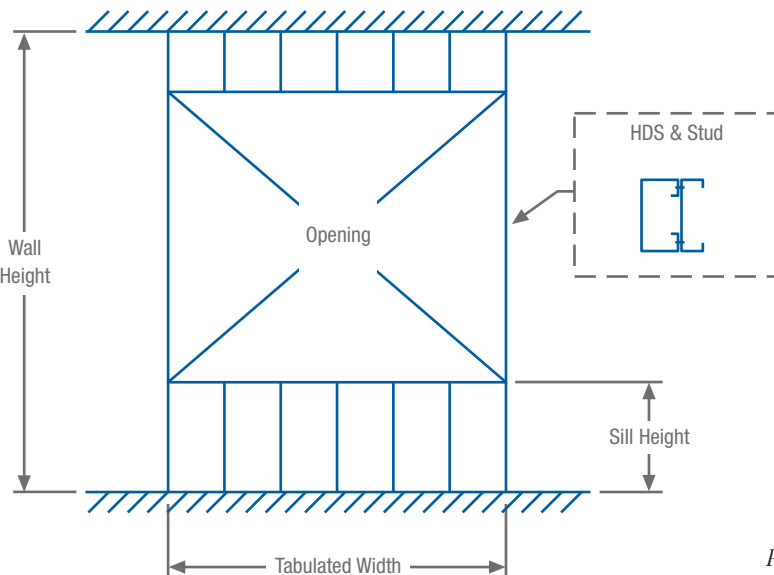


Table Notes

- 1) The opening is centered vertically about the wall height.
- 2) The assumed stud spacing adjacent to the opening is 16" O/C or less.
- 3) The tabulated values assume a single stud is also attached to the HDS member. The assumed stud is a Dietrich CSJ of equal web size and gauge. Stud strength is assumed to be 33 ksi. Attach the stud to the HDS framing with (2) #10-16 screws at 24" O/C as shown in the diagram left.
- 4) The tabulated values are limited to 16' for 3.625" walls, and 20' for 6" walls. For wider openings or other conditions, contact Dietrich Design Group at 1-800-873-2443.
- 5) Depending on the actual window width versus the tabulated window width, cells marked with an asterisk may require an end connection that will prevent web crippling. Web crippling is computed in accordance with the AISI Standard for CFS Wall Stud Design 2004. End track must have a minimum thickness equal to the jamb stud.
- 6) The tabulated values are based on an unbraced length of 6' for bending.
- 7) Deflections are computed using 0.7 times the components and cladding wind load per Section B1 of the AISI Standard for Cold-Formed Steel Framing - Wall Design. Note that the 0.7 factor is not used for the interior 5 psf loading condition.
- 8) HDS properties computed in accordance with the 2001 AISI NASPEC.
- 9) Table not valid for openings in load-bearing walls.

Patent Pending

Allowable HDS® Axial Loads (Kips)

Member Length (ft)	Stud Spacing (in)	Wind Load = 5 psf									
		3.625 HDS Members					6" HDS Members				
		Gauge (Mils)									
		20 (33)	18 (43)	16 (54)	14 (68)	12 (97)	20 (33)	18 (43)	16 (54)	14 (68)	12 (97)
8	12	3.37 **	5.12 **	8.39 **	10.86 **	15.07 **	5.09 **	8.12 **	14.82 **	20.91 **	31.35 **
	16	3.27 **	5.01 **	8.3 **	10.76 **	14.98 **	5.03 **	8.05 **	14.76 **	20.84 **	31.27 **
	24	3.08 **	4.81 **	8.1 **	10.58 **	14.8 **	4.91 **	7.92 **	14.62 **	20.69 **	31.12 **
9	12	3.15 **	4.8 **	7.76 **	9.93 **	13.8 **	4.97 **	7.94 **	14.53 **	20.27 **	30.32 **
	16	3.02 **	4.67 **	7.64 **	9.81 **	13.69 **	4.89 **	7.86 **	14.45 **	20.18 **	30.22 **
	24	2.78 **	4.41 **	7.4 **	9.58 **	13.47 **	4.73 **	7.69 **	14.27 **	19.99 **	30.02 **
10	12	2.9 **	4.46 **	7.09 **	8.96 **	12.49 **	4.83 **	7.74 **	14.16 **	19.56 **	29.18 **
	16	2.75 **	4.3 **	6.94 **	8.82 **	12.35 **	4.73 **	7.63 **	14.05 **	19.44 **	29.05 **
	24	2.47 **	3.99 **	6.65 **	8.54 **	12.09 **	4.53 **	7.42 **	13.82 **	19.2 **	28.8 **
11	12	2.65 **	4.09 **	6.34 **	7.98 **	11.15 **	4.67 **	7.51 **	13.63 **	18.78 **	27.94 **
	16	2.47 **	3.9 **	6.17 **	7.82 **	11 **	4.55 **	7.38 **	13.5 **	18.63 **	27.78 **
	24	2.15 **	3.55 **	5.85 **	7.51 **	10.7 **	4.31 **	7.12 **	13.22 **	18.33 **	27.46 **
12	12	2.38 **	3.71 **	5.55 **	7.02 **	9.86 **	4.5 **	7.26 **	13.06 **	17.86 **	26.61 **
	16	2.19 **	3.5 **	5.37 **	6.84 **	9.69 **	4.35 **	7.1 **	12.9 **	17.68 **	26.42 **
	24	1.84 **	3.11 **	5.02 **	6.52 **	9.36 **	4.07 **	6.79 **	12.57 **	17.32 **	26.03 **
14	12	1.86 **	2.95 **	4.25 **	5.44 **	7.73 **	4.11 **	6.68 **	11.72 **	15.88 **	23.76 **
	16	1.65 **	2.71 **	4.06 **	5.25 **	7.54 **	3.92 **	6.46 **	11.49 **	15.63 **	23.49 **
	24	1.27 *	2.29 **	3.7 **	4.91 **	7.18 **	3.55 **	6.05 **	11.05 **	15.15 **	22.96 **
16	12	1.39 **	2.25 **	3.28 **	4.25 **	6.11 **	3.68 **	6.03 **	10.28 **	13.8 **	20.76 **
	16	1.17 *	2.01 **	3.08 **	4.06 **	5.91 **	3.44 **	5.75 **	9.99 **	13.49 **	20.41 **
	24	0.8	1.59 *	2.73 *	3.71 **	5.55 **	2.99 **	5.24 **	9.45 **	12.9 **	19.74 **



Member Length (ft)	Stud Spacing (in)	Wind Load = 25 psf									
		3.625 HDS Members					6" HDS Members				
		Gauge (Mils)									
		20 (33)	18 (43)	16 (54)	14 (68)	12 (97)	20 (33)	18 (43)	16 (54)	14 (68)	12 (97)
8	12	2.26 **	3.94 **	7.28 **	9.78 **	14.03 **	4.35 **	7.33 **	14.02 **	20.04 **	30.43 **
	16	1.85 **	3.49 **	6.85 **	9.35 **	13.61 **	4.05 **	7.01 **	13.7 **	19.68 **	30.06 **
	24	1.07 **	2.64 **	6.04 **	8.55 **	12.82 **	3.46 **	6.37 **	13.05 **	18.98 **	29.31 **
9	12	1.81 **	3.36 **	6.4 **	8.61 **	12.52 **	4.03 **	6.93 **	13.49 **	19.15 **	29.13 **
	16	1.33 **	2.83 **	5.89 **	8.11 **	12.03 **	3.65 **	6.53 **	13.07 **	18.69 **	28.65 **
	24	0.46 *	1.87 **	4.96 **	7.19 **	11.09 **	2.92 **	5.73 **	12.25 **	17.79 **	27.69 **
10	12	1.37 **	2.78 **	5.5 **	7.44 **	10.99 **	3.68 **	6.49 **	12.85 **	18.14 **	27.68 **
	16	0.85 *	2.19 **	4.94 **	6.89 **	10.43 **	3.22 **	5.99 **	12.32 **	17.58 **	27.07 **
	24	-	1.15 *	3.94 **	5.89 **	9.39 **	2.35 **	5.03 **	11.31 **	16.48 **	25.89 **
11	12	0.96 *	2.22 **	4.61 **	6.31 **	9.48 **	3.3 **	6 **	12.04 **	17.05 **	26.09 **
	16	0.4 *	1.6 *	4.02 **	5.74 **	8.88 **	2.76 **	5.42 **	11.41 **	16.37 **	25.36 **
	24	-	0.51 *	2.99 *	4.7 **	7.79 **	1.76 **	4.3 **	10.23 **	15.07 **	23.95 **
12	12	0.58 *	1.7 **	3.76 **	5.28 **	8.09 **	2.9 **	5.48 **	11.17 **	15.81 **	24.39 **
	16	0.01	1.06 *	3.18 *	4.69 **	7.47 **	2.29 **	4.81 **	10.45 **	15.02 **	23.53 **
	24	-	-	2.17 *	3.67 *	6.37 **	1.17 **	3.55 **	9.1 **	13.55 **	21.9 **
14	12	-	0.84 *	2.46 *	3.66 *	5.86 **	2.07 **	4.38 **	9.27 **	13.21 **	20.79 **
	16	-	0.21	1.9	3.09 *	5.24 **	1.35 **	3.56 **	8.4 **	12.25 **	19.71 **
	24	-	-	-	2.11	4.17 *	0.04 *	2.07 **	6.82 **	10.52 **	17.74 **
16	12	-	0.21	1.55	2.51 *	4.24 *	1.28 **	3.29 **	7.41 **	10.68 **	17.18 **
	16	-	-	-	1.97	3.65 *	0.48 *	2.37 **	6.45 **	9.63 **	15.97 **
	24	-	-	-	-	2.64	-	0.76 *	4.78 *	7.8 **	13.83 **



Table Notes

- 1) Studs are assumed to be simple span.
- 2) Axial loads are assumed to pass through the geometric centroid of the section.
- 3) Use 5 psf tables for interior walls.
- 4) Cells marked with "****" meet L/600; cells marked with "*" meet L/360; unmarked cells meet L/240; blank cells do not meet L/240.
- 5) A 1/3 stress increase is not used.
- 6) Provide bridging and or bracing at at 5' O/C max.
- 7) Studs are assumed to be mechanically braced. Sheathing braced design has not been used for this table.
- 8) Studs are assumed punched with a maximum 1.5" centered web knockout at 18" O/C min.
- 9) Capacities are calculated according to the AISI NASPEC, 2002.
- 10) 20- and 18-gauge members are 33 ksi. 16-gauge and heavier are 50 ksi.
- 11) Deflections are computed using 0.7 times the components and cladding wind load per Section B1 of the AISI Standard for Cold-Formed Steel Framing - Wall Design. Note that the 0.7 factor is not used for the interior 5 psf loading condition.

Patent Pending

Allowable HDS® Axial Loads (Kips)

Member Length (ft)	Stud Spacing (in)	Wind Load = 30 psf									
		3.625 HDS Members					6" HDS Members				
		Gauge (Mils)									
		20 (33)	18 (43)	16 (54)	14 (68)	12 (97)	20 (33)	18 (43)	16 (54)	14 (68)	12 (97)
8	12	2.01 **	3.66 **	7.02 **	9.52 **	13.78 **	4.17 **	7.14 **	13.83 **	19.83 **	30.21 **
	16	1.53 **	3.14 **	6.52 **	9.03 **	13.29 **	3.81 **	6.75 **	13.44 **	19.4 **	29.76 **
	24	0.64 **	2.17 **	5.58 **	8.09 **	12.36 **	3.11 **	5.99 **	12.67 **	18.56 **	28.86 **
9	12	1.52 **	3.04 **	6.09 **	8.31 **	12.22 **	3.8 **	6.69 **	13.24 **	18.87 **	28.84 **
	16	0.97 **	2.44 **	5.51 **	7.73 **	11.64 **	3.36 **	6.2 **	12.74 **	18.33 **	28.26 **
	24	—	1.34 *	4.45 **	6.67 **	10.56 **	2.49 **	5.26 **	11.76 **	17.27 **	27.13 **
10	12	1.05 **	2.42 **	5.16 **	7.1 **	10.65 **	3.4 **	6.19 **	12.53 **	17.8 **	27.31 **
	16	0.46 *	1.76 **	4.52 **	6.47 **	10 **	2.87 **	5.6 **	11.91 **	17.13 **	26.6 **
	24	—	0.59 *	3.39 *	5.34 **	8.81 **	1.85 **	4.48 **	10.73 **	15.84 **	25.2 **
11	12	0.62 *	1.84 **	4.25 **	5.96 **	9.12 **	2.97 **	5.65 **	11.66 **	16.64 **	25.65 **
	16	—	1.14 *	3.59 **	5.31 **	8.43 **	2.35 **	4.96 **	10.93 **	15.84 **	24.79 **
	24	—	—	2.44 *	4.14 *	7.19 **	1.19 **	3.66 **	9.55 **	14.32 **	23.14 **
12	12	0.23 *	1.31 *	3.41 **	4.92 **	7.71 **	2.53 **	5.07 **	10.73 **	15.33 **	23.87 **
	16	—	0.6 *	2.75 *	4.26 *	7.01 **	1.83 **	4.29 **	9.89 **	14.42 **	22.87 **
	24	—	—	1.63 *	3.12 *	5.77 *	0.53 **	2.84 **	8.34 **	12.71 **	20.98 **
14	12	—	0.45 *	2.12 *	3.31 *	5.48 **	1.63 **	3.88 **	8.74 **	12.63 **	20.14 **
	16	—	—	1.5 *	2.68 *	4.79 *	0.81 *	2.94 **	7.74 **	11.54 **	18.89 **
	24	—	—	—	1.59 *	3.59 *	—	1.26 *	5.96 **	9.58 **	16.65 **
16	12	—	—	1.23 *	2.18 *	3.88 *	0.79 *	2.72 **	6.82 **	10.04 **	16.44 **
	16	—	—	—	1.59 *	3.23 *	—	1.69 *	5.75 **	8.86 **	15.08 **
	24	—	—	—	—	—	—	—	3.89 *	6.81 *	12.67 **

Member Length (ft)	Stud Spacing (in)	Wind Load = 35 psf									
		3.625 HDS Members					6" HDS Members				
		Gauge (Mils)									
		20 (33)	18 (43)	16 (54)	14 (68)	12 (97)	20 (33)	18 (43)	16 (54)	14 (68)	12 (97)
8	12	1.77 **	3.4 **	6.77 **	9.27 **	13.53 **	3.99 **	6.94 **	13.63 **	19.61 **	29.98 **
	16	1.22 **	2.81 **	6.2 **	8.71 **	12.97 **	3.57 **	6.5 **	13.18 **	19.12 **	29.46 **
	24	0.22 *	1.71 **	5.14 **	7.65 **	11.91 **	2.76 **	5.62 **	12.29 **	18.14 **	28.42 **
9	12	1.24 **	2.73 **	5.79 **	8.02 **	11.93 **	3.58 **	6.45 **	12.99 **	18.6 **	28.55 **
	16	0.63 *	2.06 **	5.14 **	7.37 **	11.27 **	3.07 **	5.89 **	12.41 **	17.97 **	27.88 **
	24	—	0.84 *	3.96 **	6.18 **	10.05 **	2.07 **	4.81 **	11.29 **	16.75 **	26.57 **
10	12	0.75 *	2.08 **	4.83 **	6.78 **	10.32 **	3.13 **	5.89 **	12.22 **	17.47 **	26.95 **
	16	0.09 *	1.35 *	4.13 **	6.08 **	9.59 **	2.52 **	5.22 **	11.51 **	16.7 **	26.13 **
	24	—	0.06 *	2.88 *	4.82 *	8.26 **	1.36 **	3.94 **	10.15 **	15.22 **	24.53 **
11	12	0.3 *	1.48 *	3.91 **	5.63 **	8.77 **	2.66 **	5.3 **	11.29 **	16.23 **	25.22 **
	16	—	0.72 *	3.19 *	4.9 **	8 **	1.95 **	4.52 **	10.46 **	15.32 **	24.23 **
	24	—	—	1.92 *	3.62 *	6.63 **	0.63 **	3.05 **	8.89 **	13.6 **	22.34 **
12	12	—	0.95 *	3.07 *	4.58 **	7.35 **	2.17 **	4.68 **	10.31 **	14.87 **	23.37 **
	16	—	0.17 *	2.36 *	3.86 *	6.58 **	1.38 **	3.79 **	9.36 **	13.83 **	22.22 **
	24	—	—	1.12 *	2.6 *	5.21 *	—	2.16 **	7.61 **	11.91 **	20.08 **
14	12	—	0.09 *	1.8 *	2.98 *	5.13 *	1.21 **	3.4 **	8.23 **	12.07 **	19.5 **
	16	—	—	1.13 *	2.29 *	4.37 *	0.29 *	2.36 **	7.12 **	10.85 **	18.11 **
	24	—	—	—	—	3.06 *	—	0.49 *	5.15 *	8.68 **	15.61 **
16	12	—	—	—	1.87 *	3.54 *	0.33 *	2.2 *	6.27 **	9.44 **	15.74 **
	16	—	—	—	—	2.83 *	—	1.06 *	5.1 *	8.14 **	14.23 **
	24	—	—	—	—	—	—	—	3.05 *	5.89 *	11.6 **

Table Notes

- 1) Studs are assumed to be simple span.
- 2) Axial loads are assumed to pass through the geometric centroid of the section.
- 3) Use 5 psf tables for interior walls.
- 4) Cells marked with **** meet L/600; cells marked with *** meet L/360; unmarked cells meet L/240; blank cells do not meet L/240.
- 5) A 1/3 stress increase is not used.
- 6) Provide bridging and or bracing at at 5' O/C max.
- 7) Studs are assumed to be mechanically braced. Sheathing braced design has not been used for this table.
- 8) Studs are assumed punched with a maximum 1.5" centered web knockout at 18" O/C min.
- 9) Capacities are calculated according to the AISI NASPEC, 2002.
- 10) 20- and 18-gauge members are 33 ksi. 16-gauge and heavier are 50 ksi.
- 11) Deflections are computed using 0.7 times the components and cladding wind load per Section B1 of the AISI Standard for Cold-Formed Steel Framing - Wall Design. Note that the 0.7 factor is not used for the interior 5 psf loading condition.

Patent Pending

RECEIVE FREE HDS SIZING!

Photocopy HDS Preliminary Sizing Sheet on page 143 or visit dietrichmetalframing.com and download the HDS® Preliminary Sizing Sheet. Then complete and fax it for your FREE HDS Sizing.



HDS® Framing System

HDS® Limiting Heights

HDS Member Size	Gauge (mils)	Stud Spacing (in)	Windload									
			5 psf			10 psf			20 psf			
			240	360	600	240	360	600	240	360	600	
3.625	20 (33)	12	22' 4"	19' 6"	16' 6"	17' 9"	15' 6"	13' 1"	15' 7"	13' 10"	11' 8"	
		16	20' 4"	17' 9"	14' 12"	16' 1"	14' 1"	11' 10"	13' 6"	12' 7"	10' 7"	
		24	17' 9"	15' 6"	13' 1"	14' 1"	12' 4"	10' 4"	10' 12"	10' 12"	9' 3"	
	18 (43)	12	24' 9"	21' 8"	18' 3"	19' 8"	17' 2"	14' 6"	17' 7"	15' 4"	12' 11"	
		16	22' 6"	19' 8"	16' 7"	17' 10"	15' 7"	13' 2"	15' 12"	13' 11"	11' 9"	
		24	19' 8"	17' 2"	14' 6"	15' 7"	13' 8"	11' 6"	13' 4"	12' 2"	10' 3"	
	16 (54)	12	26' 8"	23' 4"	19' 8"	21' 2"	18' 6"	15' 7"	18' 11"	16' 6"	13' 11"	
		16	24' 3"	21' 2"	17' 10"	19' 3"	16' 10"	14' 2"	17' 2"	15' 0"	12' 8"	
		24	21' 2"	18' 6"	15' 7"	16' 10"	14' 8"	12' 5"	15' 0"	13' 2"	11' 1"	
	14 (68)	12	28' 10"	25' 2"	21' 3"	22' 11"	19' 12"	16' 10"	20' 6"	17' 10"	15' 1"	
		16	26' 2"	22' 11"	19' 4"	20' 10"	18' 2"	15' 4"	18' 7"	16' 3"	13' 8"	
		24	22' 11"	19' 12"	16' 10"	18' 2"	15' 10"	13' 5"	16' 3"	14' 2"	11' 12"	
	12 (97)	12	32' 1"	28' 0"	23' 8"	25' 6"	22' 3"	18' 9"	22' 9"	19' 11"	16' 9"	
		16	29' 2"	25' 6"	21' 6"	23' 2"	20' 3"	17' 1"	20' 8"	18' 1"	15' 3"	
		24	25' 6"	22' 3"	18' 9"	20' 3"	17' 8"	14' 11"	18' 1"	15' 9"	13' 4"	
	6	20 (33)	12	33' 4"	29' 1"	24' 7"	26' 5"	23' 1"	19' 6"	22' 3"	20' 8"	17' 5"
			16	30' 3"	26' 5"	22' 4"	24' 0"	20' 12"	17' 8"	19' 3"	18' 9"	15' 10"
			24	26' 5"	23' 1"	19' 6"	20' 12"	18' 4"	15' 6"	15' 9" *	15' 9" *	13' 10" *
18 (43)		12	36' 9"	32' 2"	27' 1"	29' 2"	25' 6"	21' 6"	26' 1"	22' 10"	19' 3"	
		16	33' 5"	29' 2"	24' 8"	26' 6"	23' 2"	19' 7"	23' 9"	20' 9"	17' 6"	
		24	29' 2"	25' 6"	21' 6"	23' 2"	20' 3"	17' 1"	19' 5"	18' 1"	15' 3"	
16 (54)		12	39' 8"	34' 8"	29' 3"	31' 6"	27' 6"	23' 2"	28' 2"	24' 7"	20' 9"	
		16	36' 0"	31' 6"	26' 6"	28' 7"	24' 12"	21' 1"	25' 7"	22' 4"	18' 10"	
		24	31' 6"	27' 6"	23' 2"	24' 12"	21' 10"	18' 5"	22' 4"	19' 6"	16' 5"	
14 (68)		12	42' 11"	37' 6"	31' 7"	34' 1"	29' 9"	25' 1"	30' 5"	26' 7"	22' 5"	
		16	38' 12"	34' 1"	28' 9"	30' 11"	27' 0"	22' 10"	27' 8"	24' 2"	20' 5"	
		24	34' 1"	29' 9"	25' 1"	27' 0"	23' 7"	19' 11"	24' 2"	21' 1"	17' 10"	
12 (97)		12	47' 11"	41' 10"	35' 3"	38' 0"	33' 3"	28' 0"	33' 12"	29' 8"	25' 0"	
		16	43' 6"	38' 0"	32' 1"	34' 6"	30' 2"	25' 5"	30' 10"	26' 12"	22' 9"	
		24	38' 0"	33' 3"	28' 0"	30' 2"	26' 4"	22' 3"	26' 12"	23' 7"	19' 10"	

Table Notes

- 1) Except for wind loads less than 15 psf, values are based on deflection calculations using 70% of components and cladding wind load. This is per IBC 2002 and the AISI Standard for CFS Wall Stud Design 2004.
- 2) Members are checked for simple span moment and deflection at mid-span, and end shear.
- 3) Limiting heights marked with an asterisk (*) fail in web crippling per the AISI Standard for CFS Wall Stud Design 2004. A web stiffener or connection that is not susceptible to web crippling is required.
- 4) Check with your local Dietrich plant to verify if HDS members can be supplied in the length required for your job. Some Dietrich plants can supply HDS members only in 20' maximum lengths.

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HDS® Limiting Heights

HDS Member Size	Gauge (mils)	Stud Spacing (in)	Windload									
			25 psf			30 psf			35 psf			
			240	360	600	240	360	600	240	360	600	
3.625	20 (33)	12	13' 11"	12' 10"	10' 10"	12' 8"	12' 1"	10' 2"	11' 9"	11' 6"	9' 8"	
		16	12' 0"	11' 8"	9' 10"	10' 12"	10' 12"	9' 3"	10' 2"	10' 2"	8' 10"	
		24	9' 10"	9' 10"	8' 7"	8' 12"	8' 12"	8' 1"	8' 4" *	8' 4" *	7' 8"	
	18 (43)	12	16' 4"	14' 3"	12' 0"	15' 4"	13' 5"	11' 4"	14' 3"	12' 9"	10' 9"	
		16	14' 7"	12' 11"	10' 11"	13' 4"	12' 2"	10' 3"	12' 4"	11' 7"	9' 9"	
		24	11' 11"	11' 4"	9' 7"	10' 11"	10' 8"	8' 12"	10' 1"	10' 1"	8' 6"	
	16 (54)	12	17' 7"	15' 4"	12' 11"	16' 6"	14' 5"	12' 2"	15' 9"	13' 9"	11' 7"	
		16	15' 12"	13' 11"	11' 9"	15' 0"	13' 2"	11' 1"	14' 3"	12' 6"	10' 6"	
		24	13' 11"	12' 2"	10' 3"	13' 2"	11' 6"	9' 8"	12' 6"	10' 11"	9' 2"	
	14 (68)	12	18' 12"	16' 7"	13' 12"	17' 10"	15' 7"	13' 2"	16' 12"	14' 10"	12' 6"	
		16	17' 3"	15' 1"	12' 9"	16' 3"	14' 2"	11' 12"	15' 5"	13' 6"	11' 4"	
		24	15' 1"	13' 2"	11' 1"	14' 2"	12' 5"	10' 5"	13' 6"	11' 9"	9' 11"	
	12 (97)	12	21' 2"	18' 6"	15' 7"	19' 11"	17' 4"	14' 8"	18' 11"	16' 6"	13' 11"	
		16	19' 2"	16' 9"	14' 2"	18' 1"	15' 9"	13' 4"	17' 2"	14' 12"	12' 8"	
		24	16' 9"	14' 8"	12' 4"	15' 9"	13' 9"	11' 8"	14' 12"	13' 1"	11' 1"	
	6	20 (33)	12	19' 11"	19' 2"	16' 2"	18' 2" *	18' 1" *	15' 3"	16' 10" *	16' 10" *	14' 5"
			16	17' 3" *	17' 3" *	14' 8"	15' 9" *	15' 9" *	13' 10" *	14' 7" *	14' 7" *	13' 2" *
			24	14' 1" *	14' 1" *	12' 10" *	12' 10" *	12' 10" *	12' 1" *	11' 11" *	11' 11" *	11' 6" *
18 (43)		12	24' 3"	21' 2"	17' 10"	22' 5"	19' 11"	16' 10"	20' 9"	18' 11"	15' 11"	
		16	21' 3"	19' 3"	16' 3"	19' 5"	18' 1"	15' 3"	17' 11"	17' 2"	14' 6"	
		24	17' 4" *	16' 10"	14' 2"	15' 10" *	15' 10" *	13' 4"	14' 8" *	14' 8" *	12' 8" *	
16 (54)		12	26' 1"	22' 10"	19' 3"	24' 7"	21' 6"	18' 1"	23' 4"	20' 5"	17' 2"	
		16	23' 9"	20' 9"	17' 6"	22' 4"	19' 6"	16' 5"	21' 2"	18' 6"	15' 8"	
		24	20' 9"	18' 1"	15' 3"	19' 6"	17' 0"	14' 4"	18' 6"	16' 2"	13' 8"	
14 (68)		12	28' 3"	24' 8"	20' 10"	26' 7"	23' 3"	19' 7"	25' 3"	22' 1"	18' 7"	
		16	25' 8"	22' 5"	18' 11"	24' 2"	21' 1"	17' 10"	22' 11"	20' 1"	16' 11"	
		24	22' 5"	19' 7"	16' 6"	21' 1"	18' 5"	15' 7"	20' 1"	17' 6"	14' 9"	
12 (97)		12	31' 7"	27' 7"	23' 3"	29' 8"	25' 11"	21' 10"	28' 2"	24' 8"	20' 9"	
		16	28' 8"	25' 0"	21' 1"	26' 12"	23' 7"	19' 10"	25' 7"	22' 5"	18' 11"	
		24	25' 0"	21' 10"	18' 5"	23' 7"	20' 7"	17' 4"	22' 5"	19' 7"	16' 6"	

HDS® Framing System

Table Notes

- 1) Except for wind loads less than 15 psf, values are based on deflection calculations using 70% of components and cladding wind load. This is per IBC 2002 and the AISI Standard for CFS Wall Stud Design 2004.
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