



**TABLES FOR ICC REPORT ESR-2054  
*LIMITING WALL HEIGHTS AND  
ALLOWABLE AXIAL LOAD*  
Tables 6-8**



**1-800-275-2279**

### INTERIOR & EXTERIOR FRAMING

#### Steeler Manufactured Products

- |                           |                          |
|---------------------------|--------------------------|
| * Steel Studs & Track     | * Flat Stock             |
| * Smooth Products™        | * Shaftwall Studs        |
| * Slotted Track           | * J Track                |
| * Sound Resilient Channel | * Z-Furring Channel      |
| * Furring Channel         | * Custom Brake Shapes    |
| * Cold-Rolled Channel     | * Steeler Slotted Studs™ |
| * Angle                   | * Pony Wall Supports     |



### INTERIOR FINISHING & DRYWALL

#### Steeler Product Offerings



- \* Hanger Wire
- \* U-Hank Tie Wire
- \* Engineered Slide Clips
- \* National Gypsum
- \* The Steel Network
- \* Knauf Insulation
- \* Westpac Materials
- \* Products from USG
- \* Murco Wall Products
- \* Award Metals Corner Beads
- \* Trim-Tex Drywall Products
- \* And more...



### FASTENERS

#### Steeler Product Offerings

- |                         |                           |
|-------------------------|---------------------------|
| * Super Steelers™*      | * Rust Resistant Screws   |
| * Hi-Lo Super Steelers™ | * Drywall Drillers*       |
| * Super Woodies™*       | * Cement Board Screws     |
| * Super Framers*        | * Super Framing Drillers* |
| * Super Lathers*        | * Wafer Head Drillers*    |
| * Super Hex Framers*    | * Super Hex Drillers*     |
| * Super Laminating      | * And more...             |



\*Denotes availability in zinc coating

### TOOLS & ACCESSORIES

#### Steeler Product Offerings



- \* Bit Tips & Bit Tip Holders
- \* Magnetic Nut Runners
- \* Chop Saw Blades
- \* DeWalt
- \* Empire Levels
- \* Kett Tool Company
- \* ToolPro
- \* Pacific Laser Systems
- \* Wal-Board Tools
- \* Ramset Fastening Systems
- \* 3M Construction Supplies
- \* And more...



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TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																							
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf							
			L/120	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360					
162 S125-033	0.497	12	12.04	9.55	8.35	7.46	7.46	6.52	5.50	6.78	5.92	4.99	6.14	5.50	4.64	5.61	5.17	4.36	5.19	4.81	4.14	4.85	4.70	3.96	4.20	3.68
	0.373	16	10.94	8.68	7.58	8.41	7.76	6.78	5.92	4.99	5.95	5.38	4.54	4.99	4.21	4.85	4.70	3.96	4.49	4.46	3.77	3.94	3.60	3.15	3.15	3.15
	0.249	24	9.55	7.58	6.63	6.86	6.78	5.92	5.61	5.17	4.36	4.85	4.70	3.96	4.20	3.68	3.50	3.00	3.00	2.63	2.63	2.63	2.63	2.10	2.10	2.10
	0.242	12	13.09	10.39	9.08	10.23	9.29	8.12	7.37	6.44	5.43	6.84	6.44	5.43	5.98	5.04	6.44	5.63	4.75	5.86	5.35	4.51	5.13	4.10	4.10	4.00
	0.481	16	11.90	9.44	8.25	9.29	8.44	7.37	6.44	5.43	6.70	5.85	4.94	6.15	5.43	4.58	5.13	5.11	4.31	4.39	4.10	3.84	3.84	3.08	3.08	3.08
162 S125-043	0.321	24	10.39	8.25	7.21	8.12	7.37	6.44	5.43	6.44	5.13	5.11	4.31	4.10	4.10	3.42	3.42	2.93	2.93	2.56	2.56	2.56	2.05	2.05	2.05	
	0.290	12	13.96	11.08	9.68	10.90	9.91	8.66	7.56	6.38	7.86	6.87	5.79	7.28	6.38	5.38	6.07	6.00	5.02	5.20	4.81	4.55	4.55	3.64	3.64	
	0.592	16	12.69	10.07	8.80	9.91	9.00	7.86	6.87	5.79	6.83	6.24	5.26	5.46	4.46	4.89	4.55	4.55	3.90	3.90	3.41	3.41	2.73	2.73	2.73	
	0.395	24	11.08	8.80	7.68	8.66	7.86	6.87	6.07	5.06	6.07	5.06	4.55	4.55	3.64	3.64	3.03	3.03	2.60	2.60	2.28	2.28	1.82	1.82		
	0.790	12	13.93	11.06	9.68	10.88	9.88	8.63	7.54	6.36	7.84	6.85	5.78	7.28	6.36	5.37	6.85	5.99	5.05	5.61	5.09	4.80	4.80	3.84	3.84	
162 S125-054 (50ksi)	0.592	16	12.66	10.05	8.78	9.88	8.98	7.84	6.85	5.78	7.13	6.23	5.26	6.62	5.78	4.88	6.23	5.44	4.59	5.91	5.17	4.36	4.17	4.14	4.14	
	0.395	24	11.06	8.78	7.67	8.63	7.84	6.85	6.05	5.06	6.23	5.44	4.59	5.52	4.60	4.01	3.94	3.81	3.45	3.45	3.45	2.76	2.76	2.76		
	0.552	12	12.55	9.96	8.70	9.80	8.90	7.78	6.79	5.73	7.06	6.17	5.21	6.56	5.73	4.83	6.09	5.39	4.55	5.63	5.12	4.32	4.13	4.10	4.10	
	0.414	16	11.40	9.05	7.90	8.90	8.09	7.06	6.17	5.21	6.42	5.61	4.73	5.77	5.21	4.39	5.25	4.90	4.13	4.50	3.92	3.94	3.75	3.15	3.15	
	0.276	24	9.96	7.90	6.90	7.46	7.06	6.17	5.21	4.31	5.25	4.80	4.13	4.20	3.84	3.50	3.50	3.00	3.00	2.63	2.63	2.10	2.10	2.10		
162 S137-043	0.729	12	13.65	10.84	9.47	10.66	9.69	8.46	7.39	6.24	7.69	6.72	5.67	7.14	6.24	5.26	6.72	5.87	4.95	5.86	5.57	4.70	4.10	4.10		
	0.547	16	12.41	9.85	8.60	9.69	8.80	7.69	6.63	5.56	7.02	6.07	5.06	6.54	5.67	4.78	5.13	4.50	4.39	4.39	4.27	3.84	3.84	3.08		
	0.364	24	10.84	8.60	7.51	8.46	7.69	6.72	5.87	4.95	5.13	4.50	4.10	4.10	3.42	3.42	2.93	2.93	2.56	2.56	2.56	2.05	2.05			
	0.919	12	14.80	11.59	10.13	11.40	10.36	9.05	7.91	6.67	8.22	7.18	6.06	7.28	6.67	5.62	6.07	5.29	5.20	5.03	4.85	4.55	4.55	3.64	3.64	
	0.689	16	13.27	10.53	9.20	10.36	9.41	8.22	7.18	6.06	7.63	6.53	5.51	6.46	5.46	4.55	5.51	4.55	3.90	3.90	3.41	3.41	2.73	2.73		
162 S137-054 (50ksi)	0.459	24	11.59	9.20	8.04	9.05	8.22	7.18	6.07	5.29	6.53	5.70	4.81	5.62	4.60	4.60	4.20	3.94	3.94	3.45	3.45	3.45	2.76	2.76		
	0.919	12	14.60	11.59	10.13	11.40	10.36	9.05	7.91	6.67	8.22	7.18	6.06	7.28	6.67	5.62	6.07	5.29	5.20	5.03	4.85	4.55	4.55	3.64	3.64	
	0.689	16	13.27	10.53	9.20	10.36	9.41	8.22	7.18	6.06	7.63	6.53	5.51	6.46	5.46	4.55	5.51	4.55	3.90	3.90	3.41	3.41	2.73	2.73		
	0.459	24	11.59	9.20	8.04	9.05	8.22	7.18	6.07	5.29	6.53	5.70	4.81	5.62	4.60	4.60	4.20	3.94	3.94	3.45	3.45	3.45	2.76	2.76		
	0.618	12	13.14	10.43	9.11	10.26	9.32	8.14	7.14	6.00	7.40	6.46	5.45	6.83	6.00	5.06	6.23	5.65	4.76	5.77	5.36	4.52	5.13	4.33	4.02	
162 S162-033	0.464	16	11.94	9.47	8.28	9.32	8.47	7.40	6.46	5.45	6.61	5.87	4.95	5.91	4.45	4.60	5.25	4.33	4.30	4.50	4.80	4.11	3.94	3.94	3.15	
	0.309	24	10.43	8.28	7.23	7.64	7.40	6.46	5.45	4.33	4.33	4.33	4.33	4.33	3.50	3.50	3.00	3.00	2.63	2.63	2.63	2.10	2.10			
	0.849	12	14.36	11.22	9.96	11.22	10.19	8.90	7.78	6.56	8.09	7.07	5.96	7.51	6.56	5.53	6.83	6.17	5.21	5.86	5.66	4.95	5.13	4.70	4.10	
	0.636	16	13.05	10.36	9.05	10.19	9.26	8.09	6.97	5.96	7.35	6.42	5.41	6.15	5.86	5.03	5.13	4.10	4.10	4.32	4.32	2.93	2.93	2.56	2.05	
	0.424	24	11.40	9.05	7.90	8.90	8.09	7.07	6.83	6.17	5.21	5.13	4.73	4.10	4.10	3.42	3.42	2.93	2.93	2.56	2.56	2.56	2.05	2.05		
162 S162-054	0.877	16	13.93	12.17	10.63	11.97	10.88	9.50	8.30	7.06	8.63	7.54	6.36	7.28	6.46	5.45	6.56	5.62	4.55	5.62	5.20	4.55	4.55	3.64	3.64	
	0.525	24	12.17	9.66	8.44	9.10	8.63	7.54	6.07	5.06	6.56	5.62	4.55	5.46	4.55	3.64	3.64	3.03	3.03	2.60	2.60	2.28	2.28	1.82		
	0.950	12	15.33	12.17	10.63	11.97	10.88	9.50	8.30	7.06	8.63	7.54	6.36	7.28	6.46	5.45	6.56	5.62	4.55	5.62	5.20	4.55	4.55	3.64	3.64	
	0.787	16	13.93	11.06	9.66	10.88	9.88	8.63	7.54	6.36	7.85	6.85	5.78	7.28	6.36	5.37	6.85	5.99	5.05	5.91	5.69	4.80	5.17	4.59	4.14	
	0.525	24	12.17	9.66	8.44	9.10	8.63	7.54	6.07	5.06	6.56	5.62	4.55	5.46	4.55	3.64	3.64	3.03	3.03	2.60	2.60	2.28	2.28	1.82		
162 S162-054 (50ksi)	0.787	16	13.93	11.06	9.66	10.88	9.88	8.63	7.54	6.36	7.85	6.85	5.78	7.28	6.36	5.37	6.85	5.99	5.05	5.91	5.69	4.80	5.17	4.59	4.14	
	0.525	24	12.17	9.66	8.44	9.10	8.63	7.54	6.07	5.06	6.56	5.62	4.55	5.46	4.55	3.64	3.64	3.03	3.03	2.60	2.60	2.28	2.28	1.82		
	0.620	12	16.66	13.22	11.55	12.69	11.82	10.33	9.02	7.61	8.98	8.19	6.91	8.03	7.61	6.42	7.33	7.16	6.04	6.78	6.78	5.74	6.35	5.48	5.68	
	0.450	16	15.14	12.01	10.49	10.99	10.74	9.38	8.98	8.19	6.91	7.77	7.45	6.28	6.95	6.91	5.83	6.35	5.49	5.88	5.88	5.21	5.50	4.98	4.92	
	0.300	24	12.89	10.49	9.17	9.73	9.17	8.36	7.16	6.04	6.35	5.49	4.68	5.88	5.09	4.18	5.18	4.79	4.60	4.80	4.55	4.49	4.35	4.01	4.01	
250 S125-033	0.776	12	18.17	14.42	12.60	14.19	12.89	11.71	10.23	11.26	9.84	8.30	10.23	9.84	7.54	9.50	8.30	7.00	8.94	7.81	6.59	6.38	6.42	6.26	7.84	
	0.582	16	16.51	13.10	11.45	12.89	11.71	10.23	10.23	8.94	7.54	9.30	8.12	6.85	8.58	7.00	7.00	6.00	7.00	6.00	5.98	5.98	5.98	5.98	5.05	
	0.388	24	14.42	11.45	10.00	11.08	10.23	8.94	8.94	7.81	6.59	7.84	7.09	5.98	5.56	6.40	6.20	5.23	5.92	5.69	4.97	5.54	5.54	4.75	4.96	
	0.958	12	19.41	15.40	13.46	15.16	13.77	12.03	10.51	8.66	10.93	9.55	8.05	10.15	8.86	7.48	9.55	8.34	7.03	9.07	7.92	6.68	6.68	6.39	8.01	
	0.719	16	17.63	14.00	12.23	13.77	12.51	10.93	9.55	8.05	9.93	8.67	7.32	9.22	8.05	6.79	8.67	7.52	6.39	8.24	7.20	6.07	6.75	6.89		
250 S125-054	0.958	12	19.36	15.37	13.43	15.12	13.74	12.00																		

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
			L/120	L/240	L/360	L/480	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
250 S137-043	0.863	12	18.12	18.12	14.38	12.56	14.03	12.85	11.23	9.81	8.27	9.92	8.91	7.52	6.59	5.62	4.64	3.66	2.68	1.70	0.72	0.74	0.76	0.78	0.80	0.82	0.84	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.42	1.44	1.46	1.48	1.50	1.52	1.54	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80	1.82	1.84	1.86	1.88	1.90	1.92	1.94	1.96	1.98	2.00	2.02	2.04	2.06	2.08	2.10	2.12	2.14	2.16	2.18	2.20	2.22	2.24	2.26	2.28	2.30	2.32	2.34	2.36	2.38	2.40	2.42	2.44	2.46	2.48	2.50	2.52	2.54	2.56	2.58	2.60	2.62	2.64	2.66	2.68	2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88	2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04	3.06	3.08	3.10	3.12	3.14	3.16	3.18	3.20	3.22	3.24	3.26	3.28	3.30	3.32	3.34	3.36	3.38	3.40	3.42	3.44	3.46	3.48	3.50	3.52	3.54	3.56	3.58	3.60	3.62	3.64	3.66	3.68	3.70	3.72	3.74	3.76	3.78	3.80	3.82	3.84	3.86	3.88	3.90	3.92	3.94	3.96	3.98	4.00	4.02	4.04	4.06	4.08	4.10	4.12	4.14	4.16	4.18	4.20	4.22	4.24	4.26	4.28	4.30	4.32	4.34	4.36	4.38	4.40	4.42	4.44	4.46	4.48	4.50	4.52	4.54	4.56	4.58	4.60	4.62	4.64	4.66	4.68	4.70	4.72	4.74	4.76	4.78	4.80	4.82	4.84	4.86	4.88	4.90	4.92	4.94	4.96	4.98	5.00	5.02	5.04	5.06	5.08	5.10	5.12	5.14	5.16	5.18	5.20	5.22	5.24	5.26	5.28	5.30	5.32	5.34	5.36	5.38	5.40	5.42	5.44	5.46	5.48	5.50	5.52	5.54	5.56	5.58	5.60	5.62	5.64	5.66	5.68	5.70	5.72	5.74	5.76	5.78	5.80	5.82	5.84	5.86	5.88	5.90	5.92	5.94	5.96	5.98	6.00	6.02	6.04	6.06	6.08	6.10	6.12	6.14	6.16	6.18	6.20	6.22	6.24	6.26	6.28	6.30	6.32	6.34	6.36	6.38	6.40	6.42	6.44	6.46	6.48	6.50	6.52	6.54	6.56	6.58	6.60	6.62	6.64	6.66	6.68	6.70	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.92	6.94	6.96	6.98	7.00	7.02	7.04	7.06	7.08	7.10	7.12	7.14	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.38	7.40	7.42	7.44	7.46	7.48	7.50	7.52	7.54	7.56	7.58	7.60	7.62	7.64	7.66	7.68	7.70	7.72	7.74	7.76	7.78	7.80	7.82	7.84	7.86	7.88	7.90	7.92	7.94	7.96	7.98	8.00	8.02	8.04	8.06	8.08	8.10	8.12	8.14	8.16	8.18	8.20	8.22	8.24	8.26	8.28	8.30	8.32	8.34	8.36	8.38	8.40	8.42	8.44	8.46	8.48	8.50	8.52	8.54	8.56	8.58	8.60	8.62	8.64	8.66	8.68	8.70	8.72	8.74	8.76	8.78	8.80	8.82	8.84	8.86	8.88	8.90	8.92	8.94	8.96	8.98	9.00	9.02	9.04	9.06	9.08	9.10	9.12	9.14	9.16	9.18	9.20	9.22	9.24	9.26	9.28	9.30	9.32	9.34	9.36	9.38	9.40	9.42	9.44	9.46	9.48	9.50	9.52	9.54	9.56	9.58	9.60	9.62	9.64	9.66	9.68	9.70	9.72	9.74	9.76	9.78	9.80	9.82	9.84	9.86	9.88	9.90	9.92	9.94	9.96	9.98	10.00	10.02	10.04	10.06	10.08	10.10	10.12	10.14	10.16	10.18	10.20	10.22	10.24	10.26	10.28	10.30	10.32	10.34	10.36	10.38	10.40	10.42	10.44	10.46	10.48	10.50	10.52	10.54	10.56	10.58	10.60	10.62	10.64	10.66	10.68	10.70	10.72	10.74	10.76	10.78	10.80	10.82	10.84	10.86	10.88	10.90	10.92	10.94	10.96	10.98	11.00	11.02	11.04	11.06	11.08	11.10	11.12	11.14	11.16	11.18	11.20	11.22	11.24	11.26	11.28	11.30	11.32	11.34	11.36	11.38	11.40	11.42	11.44	11.46	11.48	11.50	11.52	11.54	11.56	11.58	11.60	11.62	11.64	11.66	11.68	11.70	11.72	11.74	11.76	11.78	11.80	11.82	11.84	11.86	11.88	11.90	11.92	11.94	11.96	11.98	12.00	12.02	12.04	12.06	12.08	12.10	12.12	12.14	12.16	12.18	12.20	12.22	12.24	12.26	12.28	12.30	12.32	12.34	12.36	12.38	12.40	12.42	12.44	12.46	12.48	12.50	12.52	12.54	12.56	12.58	12.60	12.62	12.64	12.66	12.68	12.70	12.72	12.74	12.76	12.78	12.80	12.82	12.84	12.86	12.88	12.90	12.92	12.94	12.96	12.98	13.00	13.02	13.04	13.06	13.08	13.10	13.12	13.14	13.16	13.18	13.20	13.22	13.24	13.26	13.28	13.30	13.32	13.34	13.36	13.38	13.40	13.42	13.44	13.46	13.48	13.50	13.52	13.54	13.56	13.58	13.60	13.62	13.64	13.66	13.68	13.70	13.72	13.74	13.76	13.78	13.80	13.82	13.84	13.86	13.88	13.90	13.92	13.94	13.96	13.98	14.00	14.02	14.04	14.06	14.08	14.10	14.12	14.14	14.16	14.18	14.20	14.22	14.24	14.26	14.28	14.30	14.32	14.34	14.36	14.38	14.40	14.42	14.44	14.46	14.48	14.50	14.52	14.54	14.56	14.58	14.60	14.62	14.64	14.66	14.68	14.70	14.72	14.74	14.76	14.78	14.80	14.82	14.84	14.86	14.88	14.90	14.92	14.94	14.96	14.98	15.00	15.02	15.04	15.06	15.08	15.10	15.12	15.14	15.16	15.18	15.20	15.22	15.24	15.26	15.28	15.30	15.32	15.34	15.36	15.38	15.40	15.42	15.44	15.46	15.48	15.50	15.52	15.54	15.56	15.58	15.60	15.62	15.64	15.66	15.68	15.70	15.72	15.74	15.76	15.78	15.80	15.82	15.84	15.86	15.88	15.90	15.92	15.94	15.96	15.98	16.00	16.02	16.04	16.06	16.08	16.10	16.12	16.14	16.16	16.18	16.20	16.22	16.24	16.26	16.28	16.30	16.32	16.34	16.36	16.38	16.40	16.42	16.44	16.46	16.48	16.50	16.52	16.54	16.56	16.58	16.60	16.62	16.64	16.66	16.68	16.70	16.72	16.74	16.76	16.78	16.80	16.82	16.84	16.86	16.88	16.90	16.92	16.94	16.96	16.98	17.00	17.02	17.04	17.06	17.08	17.10	17.12	17.14	17.16	17.18	17.20	17.22	17.24	17.26	17.28	17.30	17.32	17.34	17.36	17.38	17.40	17.42	17.44	17.46	17.48	17.50	17.52	17.54	17.56	17.58	17.60	17.62	17.64	17.66	17.68	17.70	17.72	17.74	17.76	17.78	17.80	17.82	17.84	17.86	17.88	17.90	17.92	17.94	17.96	17.98	18.00	18.02	18.04	18.06	18.08	18.10	18.12	18.14	18.16	18.18	18.20	18.22	18.24	18.26	18.28	18.30	18.32	18.34	18.36	18.38	18.40	18.42	18.44	18.46	18.48	18.50	18.52	18.54	18.56	18.58	18.60	18.62	18.64	18.66	18.68	18.70	18.72	18.74	18.76	18.78	18.80	18.82	18.84	18.86	18.88	18.90	18.92	18.94	18.96	18.98	19.00	19.02	19.04	19.06	19.08	19.10	19.12	19.14	19.16	19.18	19.20	19.22	19.24	19.26	19.28	19.30	19.32	19.34	19.36	19.38	19.40	19.42	19.44	19.46	19.48	19.50	19.52	19.54	19.56	19.58	19.60	19.62	19.64	19.66	19.68	19.70	19.72	19.74	19.76	19.78	19.80	19.82	19.84	19.86	19.88	19.90	19.92	19.94	19.96	19.98	20.00	20.02	20.04	20.06	20.08	20.10	20.12	20.14	20.16	20.18	20.20	20.22	20.24	20.26	20.28	20.30	20.32	20.34	20.36	20.38	20.40	20.42	20.44	20.46	20.48	20.50	20.52	20.54	20.56	20.58	20.60	20.62	20.64	20.66	20.68	20.70	20.72	20.74	20.76	20.78	20.80	20.82	20.84	20.86	20.88	20.90	20.92	20.94	20.96	20.98	21.00	21.02	21.04	21.06	21.08	21.10	21.12	21.14	21.16	21.18	21.20	21.22	21.24	21.26	21.28	21.30	21.32	21.34	21.36	21.38	21.40	21.42	21.44	21.46	21.48	21.50	21.52	21.54	21.56	21.58	21.60	21.62	21.64	21.66	21.68	21.70	21.72	21.74	21.76	21.78	21.80	21.82	21.84	21.86	21.88	21.90	21.92	21.94	21.96	21.98	22.00	22.02	22.04	22.06	22.08	22.10	22.12	22.14	22.16	22.18	22.20	22.22	22.24	22.26	22.28	22.30	22.32	22.34	22.36	22.38	22.40	22.42	22.44	22.46	22.48	22.50	22.52	22.54	22.56	22.58	22



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c.	Lateral Loading and Deflection Limits <sup>1,2</sup>																																			
			f. 1.0 5.0 psf				f. 0.7 10 psf				f. 0.7 15 psf				f. 0.7 20 psf				f. 0.7 25 psf				f. 0.7 30 psf				f. 0.7 35 psf				f. 0.7 40 psf				f. 0.7 50 psf			
			L/120	L/240	L/360	L/480	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600				
350 S137-033	0.773	12	22.47	17.83	15.58	16.80	15.94	13.72	12.17	10.26	11.88	11.05	9.32	10.63	10.26	8.65	9.70	9.66	8.14	8.98	8.78	7.74	8.40	8.40	7.40	7.62	7.51	7.51	6.87	6.87								
0.580	16	24.01	18.20	14.15	14.55	14.48	12.65	11.88	10.50	9.32	10.29	9.47	8.20	7.86	8.40	8.40	7.40	7.51	6.86	6.86	6.46	6.35	6.35	5.94	5.94	5.87	5.31	5.31	5.31	5.31								
0.386	24	16.80	14.15	12.37	11.88	11.88	11.05	9.70	8.66	8.14	8.40	8.40	7.40	7.51	6.86	6.86	6.46	6.35	6.35	5.94	5.94	5.87	5.31	5.31	5.31	5.31	5.31	5.31	5.31	5.31								
0.161	12	24.56	19.70	17.03	17.43	15.23	15.23	13.30	11.22	12.79	12.08	10.19	12.79	9.46	11.68	10.56	8.90	10.81	10.56	8.90	9.39	8.46	10.11	9.59	8.09	8.09	8.09	7.51	7.51	7.51	7.51							
0.162	16	22.32	17.71	15.47	17.43	15.83	13.83	12.08	11.68	10.56	8.90	10.11	9.59	8.09	10.11	9.59	8.09	9.39	8.46	10.11	9.59	8.09	9.39	8.46	10.11	9.59	8.09	8.09	7.51	7.51	7.51							
0.508	24	19.40	15.47	13.52	14.30	13.83	12.08	11.68	10.56	8.90	10.11	9.59	8.09	10.11	9.59	8.09	9.39	8.46	10.11	9.59	8.09	9.39	8.46	10.11	9.59	8.09	8.09	7.51	7.51	7.51	7.51							
1.280	12	28.35	22.50	19.66	18.32	16.38	14.31	16.38	14.31	12.07	14.88	13.00	10.96	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81							
0.960	16	24.01	19.06	16.65	18.75	17.03	14.88	14.88	13.00	10.96	13.52	11.81	9.96	12.55	10.96	9.25	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70							
0.840	24	20.97	16.66	14.54	16.38	14.88	13.00	13.00	11.36	9.58	11.81	10.32	8.70	10.88	9.58	8.08	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60							
1.280	12	28.43	20.97	18.32	20.64	18.75	16.38	14.31	12.07	14.88	13.00	10.96	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07							
0.960	16	24.01	19.06	16.65	18.75	17.03	14.88	14.88	13.00	10.96	13.52	11.81	9.96	12.55	10.96	9.25	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70	11.81	10.32	8.70							
0.640	24	20.97	16.65	14.54	16.38	14.88	13.00	13.00	11.36	9.58	11.81	10.32	8.70	10.88	9.58	8.08	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60	9.84	9.01	7.60							
1.205	12	28.35	22.50	19.66	18.32	16.38	14.31	16.38	14.31	12.07	14.88	13.00	10.96	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81	12.07	10.18	13.00	11.81							
1.204	16	25.76	20.44	17.86	20.11	18.27	15.96	15.96	13.95	11.76	14.50	12.67	10.69	13.46	11.76	9.92	12.67	10.69	13.46	11.76	9.92	12.67	10.69	13.46	11.76	9.92	12.67	10.69	13.46	11.76	9.92							
0.802	24	22.50	17.86	15.60	17.57	15.96	13.95	12.18	10.27	12.67	11.07	9.34	11.76	10.27	8.67	11.07	9.67	8.16	10.51	9.18	7.75	10.06	8.78	7.41	9.34	8.16	6.88	7.41	6.88	7.41	6.88							
0.629	12	23.38	18.96	16.21	17.16	16.59	14.49	14.01	12.66	10.88	12.14	11.50	9.70	10.86	10.68	9.01	9.91	8.48	9.17	9.17	8.05	8.58	7.70	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68							
0.419	16	21.02	16.86	14.73	14.86	14.86	13.17	12.14	11.50	9.91	8.48	8.58	7.70	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68							
1.136	12	25.80	20.47	17.89	20.14	18.30	15.99	15.99	13.97	11.78	14.53	12.69	10.70	13.46	11.78	9.92	12.67	10.69	13.46	11.78	9.92	12.67	10.69	13.46	11.78	9.92	12.67	10.69	13.46	11.78	9.92							
0.852	16	23.44	18.60	16.25	18.30	16.63	14.53	14.53	12.69	10.70	13.20	11.53	9.72	11.98	10.70	9.03	10.94	10.07	8.49	10.13	8.57	8.07	9.48	8.15	7.72	8.48	8.48	8.48	8.48	8.48	8.48							
0.368	24	20.47	16.25	14.20	15.47	14.53	12.69	12.64	11.09	9.35	10.94	10.07	8.49	9.79	8.35	7.89	8.93	8.80	7.42	7.05	6.74	7.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74							
1.410	12	27.63	21.93	19.16	21.58	19.61	17.13	17.13	15.16	12.62	15.56	13.59	11.47	14.45	12.62	10.64	13.59	11.88	10.02	12.91	11.28	9.51	12.35	10.79	9.10	11.47	10.02	8.45	10.02	8.45	10.02							
1.058	16	25.11	19.93	17.41	19.61	17.81	15.56	15.56	13.59	11.47	14.14	12.35	10.42	13.12	11.47	9.67	12.35	10.79	9.10	11.73	10.25	8.64	11.18	9.80	8.27	10.00	9.10	7.68	10.00	9.10	7.68							
0.705	24	21.93	17.41	15.21	17.13	15.56	13.59	13.59	11.88	10.02	12.35	10.79	9.10	11.47	10.02	8.45	10.54	9.43	7.95	9.76	8.25	7.55	9.13	8.56	7.22	8.17	7.95	7.22	8.17	7.95	7.22							
1.410	12	27.63	21.93	19.16	21.58	19.61	17.13	17.13	15.16	12.62	15.56	13.59	11.47	14.45	12.62	10.64	13.59	11.88	10.02	12.91	11.28	9.51	12.35	10.79	9.10	11.47	10.02	8.45	10.02	8.45	10.02							
1.058	16	25.11	19.93	17.41	19.61	17.81	15.56	15.56	13.59	11.47	14.14	12.35	10.42	13.12	11.47	9.67	12.35	10.79	9.10	11.73	10.25	8.64	11.18	9.80	8.27	10.00	9.10	7.68	10.00	9.10	7.68							
0.705	24	21.93	17.41	15.21	17.13	15.56	13.59	13.59	11.88	10.02	12.35	10.79	9.10	11.47	10.02	8.45	10.54	9.43	7.95	9.76	8.25	7.55	9.13	8.56	7.22	8.17	7.95	7.22	8.17	7.95	7.22							
1.755	12	29.58	23.48	20.51	23.10	20.99	18.34	16.34	16.02	13.51	16.66	14.55	12.27	15.46	13.51	11.39	14.55	12.71	10.72	13.82	12.08	10.19	13.22	11.55	9.74	12.27	10.72	9.04	13.22	11.55	9.74							
1.316	16	26.88	21.33	18.64	20.99	19.07	16.66	16.66	14.55	12.27	15.14	13.22	11.15	14.05	12.27	10.35	13.22	11.55	9.74	12.56	10.97	9.25	12.01	10.49	8.85	11.15	9.74	8.22	12.01	10.49	8.85							
0.878	24	23.48	18.64	16.28	18.34	16.66	14.55	14.55	12.71	10.72	13.22	11.55	9.74	12.27	10.72	9.04	11.55	10.09	8.51	10.95	9.59	8.08	10.25	9.17	7.73	9.17	8.51	7.18	10.25	9.17	7.73							
1.755	12	29.58	23.48	20.51	23.10	20.99	18.34	16.34	16.02	13.51	16.66	14.55	12.27	15.46	13.51	11.39	14.55	12.71	10.72	13.82	12.08	10.19	13.22	11.55	9.74	12.27	10.72	9.04	13.22	11.55	9.74							
1.316	16	26.88	21.33	18.64	20.99	19.07	16.66	16.66	14.55	12.27	15.14	13.22	11.15	14.05	12.27	10.35	13.22	11.55	9.74	12.56	10.97	9.25	12.01	10.49	8.85	11.15	9.74	8.22	12.01	10.49	8.85							
0.878	24	23.48	18.64	16.28	18.34	16.66	14.55	14.55	12.71	10.72	13.22	11.55	9.74	12.27	10.72	9.04	11.55	10.09	8.51	10.95	9.59	8.08	10.25	9.17	7.73	9.17	8.51	7.18	10.25	9.17	7.73							
2.474	12	32.80	26.04	22.74	25.62	23.27	20.33	20.33	17.76	14.98	18.47	16.14	14.98	17.15	14.98	12.63	16.14	14.10	11.89	15.33	13.39	11.29	14.66	12.81	10.80	13.61	11.89	10.03	14.66	12.81	10.80							
1.855	16	29.80	23.66	20.66	23.27	21.15	18.47	18.47	16.14	14.98	18.47	16.14	14.98	17.15	14.98	12.63	16.14	14.10	11.89	15.33	13.39	11.29	14.66	12.81	10.80	13.61	11.89	10.03	14.66	12.81	10.80							
1.237	24	26.04	20.66	18.05	20.33	18.47	16.14	16.14	14.10	11.89	14.66	12.81	10.80	13.61	11.89	10.03	12.81	11.19	9.44	12.17	10.63	8.96	11.64	10.17	8.57	10.80	9.44	7.96	11.64	10.17	8.57							
2.474	12	32.80	26.04	22.74	25.62	23.27	20.33	20.33	17.76	14.98	18.47	16.14	14.98	17.15	14.98	12.63	16.14	14.10	11.89	15.33	13.39	11.29	14.66	12.81	10.80	13.61	11.89	10.03	14.66	12.81	10.80							
1.855	16	29.80	23.66	20.66	23.27	21.15	18.47	18.47	16.14	14.98	18.47	16.14	14.98	17.15	14.98	12.63	16.14	14.10	11.89	15.33	13.39	11.29	14.66	12.81	10.80	13.61	11.89	10.03	14.66	12.81	10.80							
0.932	12	24.42	19.39	16.93	17.61	17.33	15.14	14.38	13.22	11.15	12.45	12.02	10.13	11.74	11.74	9.41	10.17																					

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																							
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf							
			L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360				
350 S200-068 (50ksi)	1.961	12	31.17	24.74	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34	21.61	24.34				
	1.471	16	28.32	22.48	19.64	22.12	20.09	17.55	15.33	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53	1.93	2.33				
	0.981	24	24.74	19.64	17.15	19.32	17.55	15.33	13.40	11.30	9.33	7.23	5.13	3.03	0.93	0.53	0.13	0.73	1.13	1.53	1.93	2.33				
	0.795	32	34.67	27.52	24.04	24.60	21.49	18.77	15.83	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53	1.93	2.33				
350 S200-087	2.096	16	31.50	25.00	21.84	24.60	22.35	19.52	17.06	14.39	11.74	9.07	6.40	3.73	1.07	0.67	0.27	0.87	1.27	1.67	2.07	2.47				
	1.398	24	27.52	21.84	19.08	21.49	19.52	17.06	14.39	11.74	9.07	6.40	3.73	1.07	0.67	0.27	0.87	1.27	1.67	2.07	2.47					
	0.948	32	34.67	27.52	24.04	24.60	21.49	18.77	15.83	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53	1.93					
	0.711	40	40.67	31.50	27.52	24.04	21.49	18.77	15.83	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53	1.93					
362 S125-033	2.952	12	34.67	27.52	24.04	27.08	24.04	21.49	18.77	15.83	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53					
	2.096	16	31.50	25.00	21.84	24.60	22.35	19.52	17.06	14.39	11.74	9.07	6.40	3.73	1.07	0.67	0.27	0.87	1.27	1.67	2.07					
	1.398	24	27.52	21.84	19.08	21.49	19.52	17.06	14.39	11.74	9.07	6.40	3.73	1.07	0.67	0.27	0.87	1.27	1.67	2.07						
	0.732	32	34.67	27.52	24.04	24.60	21.49	18.77	15.83	12.93	10.53	8.13	5.73	3.33	0.93	0.53	0.13	0.73	1.13	1.53						
362 S125-043	0.549	16	19.53	13.09	12.22	11.28	10.33	9.21	8.05	7.77	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97					
	0.948	24	24.24	19.24	16.81	18.93	17.20	15.03	13.13	11.07	9.33	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97					
	0.711	32	22.21	17.63	15.40	15.95	15.76	13.76	12.02	10.14	8.24	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97					
	0.474	40	19.14	15.27	13.34	13.53	13.53	11.93	11.05	10.42	8.79	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66					
362 S125-054	1.175	12	29.93	20.58	17.98	20.25	18.40	16.07	14.04	11.84	10.46	9.07	7.67	6.27	4.87	3.47	2.07	0.67	1.27	1.87	2.47					
	0.881	16	25.96	18.70	16.34	18.40	16.72	14.60	12.76	11.14	9.40	7.77	6.13	4.49	2.85	1.21	0.57	1.17	1.77	2.37						
	0.587	24	20.58	16.34	14.27	15.91	14.60	12.76	11.14	9.40	7.77	6.13	4.49	2.85	1.21	0.57	1.17	1.77	2.37							
	0.175	32	25.90	20.55	17.96	20.22	18.37	16.05	14.02	11.83	10.46	9.07	7.67	6.27	4.87	3.47	2.07	0.67	1.27	1.87						
362 S125-054 (50ksi)	0.881	16	25.93	18.67	16.31	18.37	16.69	14.58	12.74	11.14	9.40	7.77	6.13	4.49	2.85	1.21	0.57	1.17	1.77	2.37						
	0.587	24	20.55	16.31	14.25	16.05	14.58	12.74	11.14	9.40	7.77	6.13	4.49	2.85	1.21	0.57	1.17	1.77	2.37							
	0.453	32	27.68	21.97	19.19	21.61	19.64	17.16	14.99	12.64	10.46	8.24	6.02	3.80	1.58	0.36	0.14	0.94	1.34	1.74						
	0.190	40	25.15	19.96	17.44	19.64	17.84	15.59	13.62	11.48	9.33	7.17	5.01	2.85	0.69	0.43	0.27	1.07	1.47	1.87						
362 S125-068	0.721	24	21.97	17.44	15.23	17.16	15.59	13.62	11.48	9.33	7.17	5.01	2.85	0.69	0.43	0.27	1.07	1.47	1.87							
	1.453	12	27.68	21.97	19.19	21.61	19.64	17.16	14.99	12.64	10.46	8.24	6.02	3.80	1.58	0.36	0.14	0.94	1.34	1.74						
	1.090	16	25.15	19.96	17.44	19.64	17.84	15.59	13.62	11.48	9.33	7.17	5.01	2.85	0.69	0.43	0.27	1.07	1.47	1.87						
	0.727	24	21.97	17.44	15.23	17.16	15.59	13.62	11.48	9.33	7.17	5.01	2.85	0.69	0.43	0.27	1.07	1.47	1.87							
362 S125-068 (50ksi)	0.978	12	23.09	18.33	16.01	17.15	16.38	14.31	12.50	10.54	8.58	6.62	4.66	2.70	0.74	0.58	0.42	1.22	1.62	2.02						
	0.394	16	20.98	16.65	14.55	14.86	13.00	12.13	11.36	9.90	8.37	6.86	5.35	3.84	2.33	0.82	0.66	1.46	1.86	2.26						
	0.591	24	21.56	17.11	14.95	16.83	15.30	13.36	11.67	9.84	8.04	6.24	4.44	2.64	0.84	0.68	1.48	1.88	2.28							
	0.106	32	25.24	20.20	17.50	19.71	17.91	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87	2.27							
362 S137-043	0.394	16	21.15	14.86	12.71	12.13	11.36	9.90	8.37	6.86	5.35	3.84	2.33	0.82	0.66	1.46	1.86	2.26								
	0.777	16	22.94	18.20	15.90	17.90	16.27	14.22	12.42	10.47	8.52	6.57	4.62	2.67	0.72	0.56	1.36	1.76	2.16							
	0.518	24	20.04	15.90	13.89	14.62	14.22	12.42	10.47	8.52	6.57	4.62	2.67	0.72	0.56	1.36	1.76	2.16								
	0.304	32	27.16	21.56	18.83	21.21	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87							
362 S137-054	0.652	24	21.56	17.11	14.95	16.83	15.30	13.36	11.67	9.84	8.04	6.24	4.44	2.64	0.84	0.68	1.48	1.88	2.28							
	1.304	12	27.16	21.56	18.83	21.21	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87							
	0.978	16	24.68	19.59	17.11	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87								
	0.304	32	27.16	21.56	18.83	21.21	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87							
362 S137-054 (50ksi)	0.978	16	24.68	19.59	17.11	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87								
	0.652	24	21.56	17.11	14.95	16.83	15.30	13.36	11.67	9.84	8.04	6.24	4.44	2.64	0.84	0.68	1.48	1.88	2.28							
	1.304	12	27.16	21.56	18.83	21.21	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87							
	0.978	16	24.68	19.59	17.11	19.27	17.51	15.65	13.67	11.53	9.47	7.31	5.15	2.99	0.83	0.67	1.47	1.87								
362 S137-068	1.635	12	29.14	23.13	20.21	22.76	20.68	18.06	15.78	13.31	10.84	8.37	5.90	3.43	0.96	0.80	1.60	2.00	2.40							
	1.226	16	26.48	21.02	18.36	20.68	18.79	16.41	14.34	12.52	10.56	8.60	6.64	4.68	2.72	0.76	1.56	1.96	2.36							
	0.818	24	23.13	18.36	16.04	18.06	16.41	14.34	12.52	10.56	8.60	6.64	4.68	2.72	0.76	1.56	1.96	2.36								
	0.435	32	29.14	23.13	20.21	22.76	20.68	18.06	15.78	13.31	10.84	8.37	5.90	3.43	0.96	0.80	1.60	2.00								
362 S137-068 (50ksi)	1.226	16	26.48	21.02	18.36	20.68	18.79	16.41	14.34	12.52	10.56	8.60	6.64	4.68	2.72	0.76	1.56	1.96	2.36							
	0.818	24	23.13	18.36	16.04	18.06	16.41	14.34	12.52	10.56	8.60	6.64	4.68	2.72	0.76	1.56	1.96	2.36								
	0.654	32	34.02	28.02	24.02	26.02	23.02	20.02	17.02	14.02	11.02	8.02	5.02	2.02	0.02	0.02	0.02	0.02	0.02							
	0.435	40	31.02	25.02	21.02	23.02	20.02	17.02	14.02	11.02	8.02	5.02	2.02	0.02	0.02	0.02	0.02	0.02								
362 S162-033	0.640	16	21.46	17.32	15.13	15.18	13.53	12.39	11.82	9.97	9.07	8.16	7.25	6.34	5.43	4.52	3.61	2.70	1.79							
	0.427	24	17.52	15.13	13.22	12.39	11.82	10.12	8.71	7.67	6.64	5.61	4.58	3.55	2.52	1.49	0.46	1.46								
	1.155	12	26.50	21.04	18.36	20.70	18.80	16.43	14.35	12.10																





TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																										
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf										
			L/120	L/240	L/360	L/240	L/180	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360						
400 S137-043	1.093	12	27.26	21.64	18.90	17.42	16.90	14.76	12.45	15.35	13.41	11.31	13.89	12.45	10.50	12.68	11.72	9.88	11.74	11.13	9.39	10.98	10.64	8.98	9.82	8.81	8.52	7.57	
400 S137-054	0.820	16	24.77	19.66	17.17	15.00	15.35	13.41	12.68	11.72	9.88	10.98	10.64	8.98	9.82	8.33	8.97	7.84	8.30	7.45	7.77	7.13	6.95	6.95	6.95	6.95	6.95	6.82	
400 S137-068	1.376	12	29.35	23.29	20.35	18.19	15.89	15.89	13.41	12.18	10.50	14.44	12.18	10.50	13.30	11.30	14.37	12.61	10.84	13.31	11.88	10.10	12.45	11.46	9.66	11.13	10.64	8.97	
400 S137-088	1.032	16	26.66	21.16	18.49	16.15	17.60	16.52	14.44	14.37	12.61	11.46	13.64	11.46	10.01	8.44	9.41	8.02	8.80	8.02	8.80	8.02	10.41	9.09	7.67	9.38	8.84	7.12	
400 S162-033	0.688	24	23.29	18.49	16.15	18.19	15.89	15.89	13.41	12.18	10.50	14.44	12.18	10.50	13.30	11.30	14.44	12.61	10.84	13.31	11.88	10.10	12.45	11.46	9.66	11.13	10.64	8.97	
400 S162-043	0.963	16	22.75	18.69	16.33	16.08	16.08	14.07	13.12	11.46	10.64	13.12	11.46	9.66	12.18	10.64	8.97	11.46	10.01	8.44	10.88	9.51	8.02	10.41	9.09	7.67	9.38	8.84	7.12
400 S162-054	1.295	16	28.82	22.72	19.85	17.34	15.50	15.50	13.41	12.18	10.50	14.44	12.18	10.50	13.30	11.30	14.44	12.61	10.84	13.31	11.88	10.10	12.45	11.46	9.66	11.13	10.64	8.97	
400 S162-068	0.938	24	25.01	19.86	17.34	15.50	15.50	13.41	12.18	10.50	14.44	12.18	10.50	13.30	11.30	14.44	12.61	10.84	13.31	11.88	10.10	12.45	11.46	9.66	11.13	10.64	8.97		
400 S162-088	0.876	12	25.92	20.57	17.97	15.89	15.89	13.41	12.18	10.50	14.44	12.18	10.50	13.30	11.30	14.44	12.61	10.84	13.31	11.88	10.10	12.45	11.46	9.66	11.13	10.64	8.97		
400 S162-097	0.743	16	22.75	18.69	16.33	16.08	16.08	14.07	13.12	11.46	10.64	13.12	11.46	9.66	12.18	10.64	8.97	11.46	10.01	8.44	10.88	9.51	8.02	10.41	9.09	7.67	9.38	8.84	7.12
400 S200-033	0.495	24	19.04	14.88	13.46	13.30	10.99	10.99	9.80	9.52	8.91	8.51	8.51	8.51	8.27	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	
400 S200-043	0.328	12	29.95	23.77	20.76	18.87	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32
400 S200-054	0.664	24	21.60	16.87	15.00	14.73	13.93	12.87	10.85	12.06	11.39	9.16	10.79	9.16	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	
400 S200-068	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76	15.54	14.64	12.35	13.46	13.30	11.22	12.04	10.42	10.99	9.80	10.18	10.18	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
400 S200-088	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-097	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	0.743	16	23.31	19.50	17.04	14.88	13.46	13.30	10.99	10.99	9.80	9.52	8.91	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	8.51	
400 S200-068 (50ksi)	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-088 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-097 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76	15.54	14.64	12.35	13.46	13.30	11.22	12.04	10.42	10.99	9.80	10.18	10.18	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
400 S200-068 (50ksi)	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-088 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-097 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76	15.54	14.64	12.35	13.46	13.30	11.22	12.04	10.42	10.99	9.80	10.18	10.18	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
400 S200-068 (50ksi)	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-088 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-097 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76	15.54	14.64	12.35	13.46	13.30	11.22	12.04	10.42	10.99	9.80	10.18	10.18	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
400 S200-068 (50ksi)	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-088 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-097 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76	15.54	14.64	12.35	13.46	13.30	11.22	12.04	10.42	10.99	9.80	10.18	10.18	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
400 S200-068 (50ksi)	1.323	24	28.94	22.97	20.07	18.87	17.94	17.94	15.67	14.77	13.93	12.87	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	9.34	9.34	9.34	
400 S200-088 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-097 (50ksi)	0.991	12	26.92	21.46	18.75	16.87	16.87	14.76	13.69	12.43	14.77	13.69	12.43	13.69	11.29	13.21	12.43	10.48	12.06	11.69	9.86	11.17	11.11	9.37	10.44	9.86	9.34	8.32	
400 S200-054 (50ksi)	1.651	12	32.11	25.49	22.27	20.04	18.75	19.04	16.76																				



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																										
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf										
			L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360									
550 S107-068	2.090	12	40.65	32.27	28.19	31.75	28.84	25.20	22.01	18.57	22.89	20.00	16.87	21.25	18.67	15.66	20.00	17.47	14.74	19.00	16.60	14.00	18.17	15.87	13.39	16.87	14.74	12.43	
	1.567	16	36.94	29.32	25.61	28.84	22.89	20.00	16.87	20.80	18.17	15.33	19.31	16.87	14.74	12.43	15.66	13.39	11.11	13.40	12.60	10.63	11.99	11.70	9.88	11.99	11.70	9.88	
	1.045	24	32.27	25.61	22.37	25.20	20.00	16.87	22.89	20.00	18.57	15.66	20.00	17.47	14.74	12.43	15.66	13.39	11.11	13.40	12.60	10.63	11.99	11.70	9.88	11.99	11.70	9.88	
	2.090	12	40.65	32.27	28.19	31.75	28.84	25.20	22.01	18.57	22.89	20.00	16.87	21.25	18.67	15.66	20.00	17.47	14.74	19.00	16.60	14.00	18.17	15.87	13.39	16.87	14.74	12.43	
	1.567	16	36.94	29.32	25.61	28.84	22.89	20.00	16.87	20.80	18.17	15.33	19.31	16.87	14.74	12.43	15.66	13.39	11.11	13.40	12.60	10.63	11.99	11.70	9.88	11.99	11.70	9.88	
550 S162-003	1.074	12	33.11	26.28	22.96	24.15	23.49	20.52	19.72	17.93	15.12	17.08	15.28	13.39	13.94	12.00	12.08	11.11	11.44	12.08	12.08	10.90	10.90	10.90	10.80	10.80	10.12		
	0.806	16	29.58	23.86	20.92	23.86	20.92	18.65	17.08	16.29	13.74	14.79	14.79	12.48	13.23	11.59	12.08	10.90	11.18	11.18	10.36	10.46	9.91	9.95	9.35	9.35	9.20		
	0.537	24	24.15	20.86	18.22	17.08	17.08	16.29	13.94	13.94	12.00	12.08	10.90	10.80	10.80	9.93	9.93	9.13	9.13	9.05	8.54	8.54	7.64	7.64	7.64	7.64			
	1.443	12	36.69	29.12	25.44	28.65	26.03	22.96	20.66	18.75	16.75	14.74	12.73	10.72	12.73	10.72	8.71	8.71	8.05	7.54	7.54	6.64	6.64	6.64	6.64	6.64			
	1.082	16	33.33	26.46	23.11	26.03	23.65	20.66	18.05	15.77	13.30	15.66	14.32	12.08	14.01	13.20	11.22	12.79	12.51	10.55	11.84	11.84	11.03	11.07	9.59	9.90	9.90	9.90	
550 S162-043	1.795	12	39.36	31.24	27.29	30.73	27.92	24.39	24.39	21.31	17.97	22.16	19.36	16.33	20.57	17.97	15.16	19.36	16.91	14.37	18.39	16.07	13.55	17.69	15.37	12.96	14.27	12.03	
	1.346	16	35.76	28.36	24.79	27.92	25.37	22.16	22.16	19.36	16.33	20.14	17.59	14.84	18.69	16.33	13.77	17.59	15.37	12.96	16.33	14.01	11.48	15.98	13.96	11.78	14.84	12.96	10.93
	0.898	24	31.24	24.79	21.66	24.39	22.16	19.36	19.36	16.91	14.37	17.59	15.37	12.96	16.33	14.27	12.03	15.37	13.42	11.32	14.60	12.75	10.76	13.96	12.20	10.29	11.32	9.55	
	2.240	12	42.22	33.51	29.27	32.97	29.95	26.17	26.17	22.86	19.28	23.77	20.77	17.52	22.05	20.07	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	13.90
	1.680	16	38.36	30.44	26.59	29.95	27.21	23.77	23.77	20.77	17.52	21.60	18.87	15.91	20.05	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	13.90	
550 S162-068 (50ksi)	1.120	24	33.51	26.59	23.23	26.17	23.77	20.77	20.77	17.52	21.60	18.87	15.91	20.05	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	13.90		
	2.240	12	42.22	33.51	29.27	32.97	29.95	26.17	26.17	22.86	19.28	23.77	20.77	17.52	22.05	20.07	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	
	1.680	16	38.36	30.44	26.59	29.95	27.21	23.77	23.77	20.77	17.52	21.60	18.87	15.91	20.05	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	13.90	
	1.120	24	33.51	26.59	23.23	26.17	23.77	20.77	20.77	17.52	21.60	18.87	15.91	20.05	17.52	14.77	18.87	16.48	13.90	17.92	15.66	13.21	17.14	14.98	12.63	15.91	13.90		
	3.165	12	47.03	37.33	32.61	36.73	33.37	29.15	29.15	25.47	21.48	26.49	23.14	19.52	24.59	21.48	18.12	23.14	20.21	17.05	21.56	19.20	16.19	21.02	18.36	15.49	19.52	17.05	
550 S162-087	2.374	16	42.73	33.92	29.63	33.37	30.32	26.49	26.49	23.14	19.52	24.06	21.02	17.73	22.34	19.52	16.46	21.02	18.36	15.49	19.97	17.44	14.71	19.10	16.69	14.07	17.44	15.49	
	1.583	24	37.33	29.63	25.88	29.15	26.49	23.14	23.14	20.21	17.05	21.02	18.36	15.49	19.97	17.44	14.71	19.10	16.69	14.07	17.44	15.49	13.06	14.07	13.53	11.41			
	3.165	12	47.03	37.33	32.61	36.73	33.37	29.15	29.15	25.47	21.48	26.49	23.14	19.52	24.59	21.48	18.12	23.14	20.21	17.05	21.56	19.20	16.19	21.02	18.36	15.49	19.52		
	2.374	16	42.73	33.92	29.63	33.37	30.32	26.49	26.49	23.14	19.52	24.06	21.02	17.73	22.34	19.52	16.46	21.02	18.36	15.49	19.97	17.44	14.71	19.10	16.69	14.07	17.44		
	1.583	24	37.33	29.63	25.88	29.15	26.49	23.14	23.14	20.21	17.05	21.02	18.36	15.49	19.97	17.44	14.71	19.10	16.69	14.07	17.44	15.49	13.06	14.07	13.53	11.41			
550 S162-118	3.877	16	49.87	39.58	34.58	38.94	35.38	30.91	30.91	27.00	22.77	28.08	24.53	20.69	22.77	19.21	24.53	21.47	18.08	23.30	20.36	17.17	22.29	19.47	16.42	20.69	18.08		
	2.876	16	45.31	35.96	31.42	35.38	32.15	28.08	28.08	24.53	20.69	25.52	22.29	18.80	23.69	20.69	17.45	22.29	19.47	16.42	21.30	18.50	15.60	20.25	17.69	14.92	18.80		
	1.919	24	39.58	31.42	27.44	30.91	28.08	24.53	24.53	21.43	18.08	22.29	19.47	16.42	20.69	18.08	15.25	19.47	17.01	14.35	18.50	16.16	13.63	17.69	15.45	13.04	16.42		
	3.877	12	49.87	39.58	34.58	38.94	35.38	30.91	30.91	27.00	22.77	28.08	24.53	20.69	22.77	19.21	24.53	21.47	18.08	23.30	20.36	17.17	22.29	19.47	16.42	20.69			
	2.876	16	45.31	35.96	31.42	35.38	32.15	28.08	28.08	24.53	20.69	25.52	22.29	18.80	23.69	20.69	17.45	22.29	19.47	16.42	21.30	18.50	15.60	20.25	17.69	14.92	18.80		
550 S162-118 (50ksi)	3.877	12	49.87	39.58	34.58	38.94	35.38	30.91	30.91	27.00	22.77	28.08	24.53	20.69	22.77	19.21	24.53	21.47	18.08	23.30	20.36	17.17	22.29	19.47	16.42	20.69			
	2.876	16	45.31	35.96	31.42	35.38	32.15	28.08	28.08	24.53	20.69	25.52	22.29	18.80	23.69	20.69	17.45	22.29	19.47	16.42	21.30	18.50	15.60	20.25	17.69	14.92			
	1.919	24	39.58	31.42	27.44	30.91	28.08	24.53	24.53	21.43	18.08	22.29	19.47	16.42	20.69	18.08	15.25	19.47	17.01	14.35	18.50	16.16	13.63	17.69	15.45	13.04			
	3.877	12	49.87	39.58	34.58	38.94	35.38	30.91	30.91	27.00	22.77	28.08	24.53	20.69	22.77	19.21	24.53	21.47	18.08	23.30	20.36	17.17	22.29	19.47	16.42				
	2.876	16	45.31	35.96	31.42	35.38	32.15	28.08	28.08	24.53	20.69	25.52	22.29	18.80	23.69	20.69	17.45	22.29	19.47	16.42	21.30	18.50	15.60	20.25	17.69				
550 S200-033	1.167	12	34.30	27.22	23.78	24.36	24.33	21.26	19.89	18.57	15.66	17.23	16.47	14.23	15.41	13.21	14.06	14.06	13.02	11.81	12.48	12.18	11.29	10.89	10.89	10.48			
	0.875	16	29.84	24.75	21.61	21.10	21.10	19.31	17.23	16.87	14.23	14.92	12.83	13.34	13.34	12.00	12.18	12.18	11.29	11.28	10.73	10.55	10.55	10.26	9.43				
	0.584	24	24.36	21.61	18.87	17.23	17.23	16.87	14.06	14.06	12.43	12.18	12.18	11.29	10.89	10.89	9.95	9.87	9.21	9.21	8.61	8.61	8.61	8.61	8.61				
	1.558	12	38.25	30.36	26.52	29.87	27.14	23.71	23.71	20.71	17.47	21.48	18.82	15.87	19.21	17.47	14.73	17.54	16.44	13.87	16.24	15.62	13.17	15.19					



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Lateral Loading and Deflection Limits<sup>1,2</sup>

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																																								
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf																								
			L/120	L/360	L/240	L/360	L/180	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600						
550 S300-118 (50ksi)	5.100	12	57.40	45.79	40.00	45.06	40.94	35.76	31.28	26.35	32.49	28.38	23.94	19.51	15.08	20.91	18.05	14.62	11.19	8.76	25.79	22.53	19.00	15.47	11.94	9.51	23.94	20.91	17.88	14.85	11.82	25.79	22.53	19.00	15.47	11.94	9.51	23.94	20.91	17.88	14.85	11.82	
550 S300-118 (50ksi)	5.100	16	52.42	41.61	36.35	40.94	37.19	32.49	28.38	23.94	19.51	15.08	11.19	8.76	25.79	22.53	19.00	15.47	11.94	9.51	23.94	20.91	17.88	14.85	11.82	9.39	23.94	20.91	17.88	14.85	11.82	23.94	20.91	17.88	14.85	11.82	23.94	20.91	17.88	14.85	11.82		
550 S300-118 (50ksi)	2.550	24	45.79	36.35	31.75	35.76	32.49	28.38	23.94	19.51	15.08	11.19	8.76	25.79	22.53	19.00	15.47	11.94	9.51	23.94	20.91	17.88	14.85	11.82	9.39	23.94	20.91	17.88	14.85	11.82	23.94	20.91	17.88	14.85	11.82	23.94	20.91	17.88	14.85	11.82			
550 S350-084	2.632	12	47.21	37.47	32.73	36.86	33.49	29.26	25.62	21.56	26.58	23.22	19.59	16.18	12.56	18.18	15.47	12.56	10.23	7.90	26.58	23.22	19.59	16.18	12.56	10.23	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56		
550 S350-084	1.974	16	42.89	34.47	29.74	33.49	29.74	26.58	23.22	19.59	16.18	12.56	10.23	7.90	26.58	23.22	19.59	16.18	12.56	10.23	7.90	26.58	23.22	19.59	16.18	12.56	10.23	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56	
550 S350-084 (50ksi)	1.316	24	37.47	29.74	25.98	28.41	26.58	23.22	19.59	16.18	12.56	10.23	7.90	26.58	23.22	19.59	16.18	12.56	10.23	7.90	26.58	23.22	19.59	16.18	12.56	10.23	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56	26.58	23.22	19.59	16.18	12.56		
550 S350-088	2.467	16	46.22	36.69	32.05	36.09	32.79	28.65	25.03	21.11	26.03	22.74	19.18	14.46	11.44	15.55	13.44	11.44	9.33	7.22	26.03	22.74	19.18	14.46	11.44	9.33	26.03	22.74	19.18	14.46	11.44	26.03	22.74	19.18	14.46	11.44	26.03	22.74	19.18	14.46	11.44		
550 S350-088 (50ksi)	3.290	12	50.13	39.79	34.76	39.15	35.57	31.07	27.14	22.89	28.23	24.66	20.80	16.21	12.89	19.31	16.21	13.44	10.88	8.42	28.23	24.66	20.80	16.21	12.89	10.88	28.23	24.66	20.80	16.21	12.89	28.23	24.66	20.80	16.21	12.89	28.23	24.66	20.80	16.21	12.89		
550 S350-097	4.614	12	56.66	44.97	39.29	44.25	40.20	35.12	30.68	25.88	31.91	27.87	23.51	19.22	14.46	20.54	17.88	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44		
550 S350-097 (50ksi)	3.461	16	51.48	40.86	35.69	40.20	36.52	31.91	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44		
550 S350-097 (50ksi)	2.307	24	44.97	35.69	31.18	35.12	31.91	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	8.98	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44	27.87	23.51	19.22	14.46	11.44			
550 S350-097 (50ksi)	4.814	12	56.51	44.85	39.18	44.13	40.09	35.03	30.60	25.81	31.82	27.60	23.45	19.22	14.46	20.54	17.88	14.46	11.44	8.98	27.60	23.45	19.22	14.46	11.44	8.98	27.60	23.45	19.22	14.46	11.44	27.60	23.45	19.22	14.46	11.44	27.60	23.45	19.22	14.46	11.44		
550 S350-097 (50ksi)	3.461	16	51.34	40.75	35.60	40.09	36.43	31.82	27.80	24.29	20.48	16.21	12.46	9.72	26.84	23.45	19.78	16.21	13.44	10.88	8.42	26.84	23.45	19.78	16.21	13.44	10.88	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44	
550 S350-097 (50ksi)	5.564	12	60.08	47.69	41.66	46.92	42.63	38.73	33.83	29.56	35.82	31.74	27.44	23.44	19.22	25.81	22.44	18.88	15.44	12.00	35.82	31.74	27.44	23.44	19.22	12.00	35.82	31.74	27.44	23.44	19.22	35.82	31.74	27.44	23.44	19.22	35.82	31.74	27.44	23.44	19.22		
550 S350-097 (50ksi)	4.173	16	54.59	43.33	37.85	42.63	38.73	33.83	29.56	25.82	31.74	27.44	23.44	19.22	12.00	26.84	23.45	19.78	16.21	13.44	10.88	8.42	26.84	23.45	19.78	16.21	13.44	10.88	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44
550 S350-097 (50ksi)	2.182	24	47.69	37.85	33.06	37.24	33.83	29.56	25.82	21.78	26.85	23.46	19.79	16.21	13.44	10.88	8.42	26.85	23.46	19.79	16.21	13.44	10.88	8.42	26.85	23.46	19.79	16.21	13.44	10.88	26.85	23.46	19.79	16.21	13.44	26.85	23.46	19.79	16.21	13.44			
550 S350-118 (50ksi)	5.564	12	60.08	47.69	41.66	46.92	42.63	38.73	33.83	29.56	35.82	31.74	27.44	23.44	19.22	25.81	22.44	18.88	15.44	12.00	35.82	31.74	27.44	23.44	19.22	12.00	35.82	31.74	27.44	23.44	19.22	35.82	31.74	27.44	23.44	19.22	35.82	31.74	27.44	23.44	19.22		
550 S350-118 (50ksi)	4.173	16	54.59	43.33	37.85	42.63	38.73	33.83	29.56	25.82	31.74	27.44	23.44	19.22	12.00	26.84	23.45	19.78	16.21	13.44	10.88	8.42	26.84	23.45	19.78	16.21	13.44	10.88	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44	26.84	23.45	19.78	16.21	13.44
550 S350-118 (50ksi)	2.182	24	47.69	37.85	33.06	37.24	33.83	29.56	25.82	21.78	26.85	23.46	19.79	16.21	13.44	10.88	8.42	26.85	23.46	19.79	16.21	13.44	10.88	8.42	26.85	23.46	19.79	16.21	13.44	10.88	26.85	23.46	19.79	16.21	13.44	26.85	23.46	19.79	16.21	13.44			
600 S125-033	1.012	12	30.88	26.20	22.89	21.83	21.83	20.46	17.83	17.83	15.08	15.44	15.44	13.70	13.81	13.81	12.72	12.61	12.61	11.87	11.87	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37			
600 S125-033	0.759	16	28.74	23.80	20.80	18.91	18.91	18.59	15.44	15.44	13.70	13.81	13.81	12.72	12.61	12.61	11.87	11.87	11.37	11.37	10.92	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37				
600 S125-043	1.914	12	36.31	28.82	25.18	22.81	22.81	21.83	21.83	20.46	17.83	17.83	15.08	15.44	15.44	13.70	13.81	13.81	12.72	12.61	12.61	11.87	11.87	11.37	10.92	10.92	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37			
600 S125-043	1.382	16	32.82	26.24	22.92	21.83	21.83	20.46	17.83	17.83	15.08	15.44	15.44	13.70	13.81	13.81	12.72	12.61	12.61	11.87	11.87	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37	10.92	10.92	10.92	11.37			
600 S125-043	0.656	24	26.80	22.88	19.98	18.95	18.95	17.86	15.47	15.47	13.16	13.40	13.40	11.98	11.98	11.98	11.10	10.94	10.94	10.45	10.13	10.13	9.92	9.47	9.47	9.47	10.13	9.92	9.47	9.47	9.47	10.13	9.92	9.47	9.47	10.13	9.92	9.47	9.47	10.13			
600 S125-054	1.632	12	38.91	30.89	26.98	24.51	24.51	23.12	21.07	21.07	17.77	17.77	16.15	16.15	15.08	15.08	14.46	14.46	14.46	13.81	13.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31			
600 S125-054	1.224	16	35.36	28.06	24.51	21.81	21.81	21.14	19.14	19.14	16.15	16.15	15.08	15.08	14.46	14.46	14.46	13.81	13.81	13.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31				
600 S125-054	0.816	24	30.84	24.51	21.42	21.81	21.81	19.14	17.81	17.81	16.72	16.72	15.08	15.08	14.46	14.46	14.46	13.81	13.81	13.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31	12.81	12.81	12.81	13.31				
600 S125-068	1.632	12	38.84	30.83	26.93	24.08	24.08	21.03	19.11	19.11																																	





TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																	
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf	
			L/120	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240
600 S200-097 (50ksi)	3.660	12	45.70	36.27	31.71	27.71	24.20	20.41	18.55	23.37	19.89	17.22	15.99	19.21	16.20	14.72	18.55	15.20	13.67	
600 S200-097 (50ksi)	3.660	16	48.12	38.19	33.36	29.82	26.05	22.76	19.20	23.67	20.68	17.44	15.24	19.20	16.19	14.47	18.79	15.44	14.71	
600 S200-118	4.866	12	56.32	44.70	39.05	34.91	30.49	25.72	21.71	27.71	23.71	19.89	17.22	15.99	14.72	18.55	15.20	13.67		
600 S200-118 (50ksi)	4.866	16	58.74	47.00	41.31	37.11	32.49	27.41	23.37	28.81	25.17	21.99	19.21	16.20	14.72	18.55	15.20	13.67		
600 S250-043	1.341	16	38.76	30.76	26.88	23.48	20.33	17.70	15.46	19.48	16.49	14.05	12.47	13.47	13.47	11.66	11.15	10.43		
600 S250-054	1.680	16	41.96	33.30	29.09	25.71	22.72	19.16	16.16	20.64	17.41	14.72	12.47	13.47	13.47	11.66	11.15	10.43		
600 S250-054 (50ksi)	1.680	24	36.65	29.09	25.41	22.72	21.89	19.85	16.74	14.12	15.48	14.33	13.41	12.07	11.99	11.99	11.21			
600 S250-068	2.240	12	45.70	36.27	31.71	27.71	24.20	20.41	18.55	23.37	19.89	17.22	15.99	19.21	16.20	14.72	18.55	15.20	13.67	
600 S250-068 (50ksi)	2.240	16	48.12	38.19	33.36	29.82	26.05	22.76	19.20	23.67	20.68	17.44	15.24	19.20	16.19	14.47	18.79	15.44	14.71	
600 S250-088	2.834	12	49.79	39.52	34.52	30.86	26.96	22.74	18.04	24.49	20.66	16.03	12.74	13.47	13.47	11.66	11.15	10.43		
600 S250-088 (50ksi)	2.834	16	52.21	42.63	37.25	33.30	29.09	25.41	21.43	26.43	23.09	19.47	15.91	16.16	16.16	14.32	13.82	13.09		
600 S250-097	3.030	12	45.70	36.27	31.71	27.71	24.20	20.41	18.55	23.37	19.89	17.22	15.99	19.21	16.20	14.72	18.55	15.20	13.67	
600 S250-097 (50ksi)	3.030	16	48.12	38.19	33.36	29.82	26.05	22.76	19.20	23.67	20.68	17.44	15.24	19.20	16.19	14.47	18.79	15.44	14.71	
600 S250-118	4.866	12	56.32	44.70	39.05	34.91	30.49	25.72	21.71	27.71	23.71	19.89	17.22	15.99	14.72	18.55	15.20	13.67		
600 S250-118 (50ksi)	4.866	16	58.74	47.00	41.31	37.11	32.49	27.41	23.37	28.81	25.17	21.99	19.21	16.20	14.72	18.55	15.20	13.67		
600 S300-054	1.836	16	46.93	37.25	32.54	28.81	25.41	21.43	18.08	23.09	19.47	15.91	12.47	13.47	13.47	11.66	11.15	10.43		
600 S300-054 (50ksi)	1.836	24	41.96	33.30	29.09	25.71	22.72	19.16	16.16	20.64	17.41	14.72	12.47	13.47	13.47	11.66	11.15	10.43		
600 S300-068	2.444	12	49.79	39.52	34.52	30.86	26.96	22.74	18.04	24.49	20.66	16.03	12.74	13.47	13.47	11.66	11.15	10.43		
600 S300-068 (50ksi)	2.444	16	52.21	42.63	37.25	33.30	29.09	25.41	21.43	26.43	23.09	19.47	15.91	16.16	16.16	14.32	13.82	13.09		
600 S300-088	3.030	12	45.70	36.27	31.71	27.71	24.20	20.41	18.55	23.37	19.89	17.22	15.99	19.21	16.20	14.72	18.55	15.20	13.67	
600 S300-088 (50ksi)	3.030	16	48.12	38.19	33.36	29.82	26.05	22.76	19.20	23.67	20.68	17.44	15.24	19.20	16.19	14.47	18.79	15.44	14.71	
600 S300-118	4.866	12	56.32	44.70	39.05	34.91	30.49	25.72	21.71	27.71	23.71	19.89	17.22	15.99	14.72	18.55	15.20	13.67		
600 S300-118 (50ksi)	4.866	16	58.74	47.00	41.31	37.11	32.49	27.41	23.37	28.81	25.17	21.99	19.21	16.20	14.72	18.55	15.20	13.67		

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Lateral Loading and Deflection Limits<sup>1,2</sup>

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	f. 1.0 5.0 psf												f. 0.7 10 psf												f. 0.7 15 psf												f. 0.7 20 psf												f. 0.7 25 psf												f. 0.7 30 psf												f. 0.7 35 psf												f. 0.7 40 psf												f. 0.7 50 psf																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
			L/120		L/240		L/360		L/480		L/600		L/720		L/840		L/960		L/1080		L/1200		L/1320		L/1440		L/1560		L/1680		L/1800		L/1920		L/2040		L/2160		L/2280		L/2400		L/2520		L/2640		L/2760		L/2880		L/3000		L/3120		L/3240		L/3360		L/3480		L/3600		L/3720		L/3840		L/3960		L/4080		L/4200		L/4320		L/4440		L/4560		L/4680		L/4800		L/4920		L/5040		L/5160		L/5280		L/5400		L/5520		L/5640		L/5760		L/5880		L/6000		L/6120		L/6240		L/6360		L/6480		L/6600		L/6720		L/6840		L/6960		L/7080		L/7200		L/7320		L/7440		L/7560		L/7680		L/7800		L/7920		L/8040		L/8160		L/8280		L/8400		L/8520		L/8640		L/8760		L/8880		L/9000		L/9120		L/9240		L/9360		L/9480		L/9600		L/9720		L/9840		L/9960		L/10080		L/10200		L/10320		L/10440		L/10560		L/10680		L/10800		L/10920		L/11040		L/11160		L/11280		L/11400		L/11520		L/11640		L/11760		L/11880		L/12000		L/12120		L/12240		L/12360		L/12480		L/12600		L/12720		L/12840		L/12960		L/13080		L/13200		L/13320		L/13440		L/13560		L/13680		L/13800		L/13920		L/14040		L/14160		L/14280		L/14400		L/14520		L/14640		L/14760		L/14880		L/15000		L/15120		L/15240		L/15360		L/15480		L/15600		L/15720		L/15840		L/15960		L/16080		L/16200		L/16320		L/16440		L/16560		L/16680		L/16800		L/16920		L/17040		L/17160		L/17280		L/17400		L/17520		L/17640		L/17760		L/17880		L/18000		L/18120		L/18240		L/18360		L/18480		L/18600		L/18720		L/18840		L/18960		L/19080		L/19200		L/19320		L/19440		L/19560		L/19680		L/19800		L/19920		L/20040		L/20160		L/20280		L/20400		L/20520		L/20640		L/20760		L/20880		L/21000		L/21120		L/21240		L/21360		L/21480		L/21600		L/21720		L/21840		L/21960		L/22080		L/22200		L/22320		L/22440		L/22560		L/22680		L/22800		L/22920		L/23040		L/23160		L/23280		L/23400		L/23520		L/23640		L/23760		L/23880		L/24000		L/24120		L/24240		L/24360		L/24480		L/24600		L/24720		L/24840		L/24960		L/25080		L/25200		L/25320		L/25440		L/25560		L/25680		L/25800		L/25920		L/26040		L/26160		L/26280		L/26400		L/26520		L/26640		L/26760		L/26880		L/27000		L/27120		L/27240		L/27360		L/27480		L/27600		L/27720		L/27840		L/27960		L/28080		L/28200		L/28320		L/28440		L/28560		L/28680		L/28800		L/28920		L/29040		L/29160		L/29280		L/29400		L/29520		L/29640		L/29760		L/29880		L/30000		L/30120		L/30240		L/30360		L/30480		L/30600		L/30720		L/30840		L/30960		L/31080		L/31200		L/31320		L/31440		L/31560		L/31680		L/31800		L/31920		L/32040		L/32160		L/32280		L/32400		L/32520		L/32640		L/32760		L/32880		L/33000		L/33120		L/33240		L/33360		L/33480		L/33600		L/33720		L/33840		L/33960		L/34080		L/34200		L/34320		L/34440		L/34560		L/34680		L/34800		L/34920		L/35040		L/35160		L/35280		L/35400		L/35520		L/35640		L/35760		L/35880		L/36000		L/36120		L/36240		L/36360		L/36480		L/36600		L/36720		L/36840		L/36960		L/37080		L/37200		L/37320		L/37440		L/37560		L/37680		L/37800		L/37920		L/38040		L/38160		L/38280		L/38400		L/38520		L/38640		L/38760		L/38880		L/39000		L/39120		L/39240		L/39360		L/39480		L/39600		L/39720		L/39840		L/39960		L/40080		L/40200		L/40320		L/40440		L/40560		L/40680		L/40800		L/40920		L/41040		L/41160		L/41280		L/41400		L/41520		L/41640		L/41760		L/41880		L/42000		L/42120		L/42240		L/42360		L/42480		L/42600		L/42720		L/42840		L/42960		L/43080		L/43200		L/43320		L/43440		L/43560		L/43680		L/43800		L/43920		L/44040		L/44160		L/44280		L/44400		L/44520		L/44640		L/44760		L/44880		L/45000		L/45120		L/45240		L/45360		L/45480		L/45600		L/45720		L/45840		L/45960		L/46080		L/46200		L/46320		L/46440		L/46560		L/46680		L/46800		L/46920		L/47040		L/47160		L/47280		L/47400		L/47520		L/47640		L/47760		L/47880		L/48000		L/48120		L/48240		L/48360		L/48480		L/48600		L/48720		L/48840		L/48960		L/49080		L/49200		L/49320		L/49440		L/49560		L/49680		L/49800		L/49920		L/50040		L/50160		L/50280		L/50400		L/50520		L/50640		L/50760		L/50880		L/51000		L/51120		L/51240		L/51360		L/51480		L/51600		L/51720		L/51840		L/51960		L/52080		L/52200		L/52320		L/52440		L/52560		L/52680		L/52800		L/52920		L/53040		L/53160		L/53280		L/53400		L/53520		L/53640		L/53760		L/53880		L/54000		L/54120		L/54240		L/54360		L/54480		L/54600		L/54720		L/54840		L/54960		L/55080		L/55200		L/55320		L/55440		L/55560		L/55680		L/55800		L/55920		L/56040		L/56160		L/56280		L/56400		L/56520		L/56640		L/56760		L/56880		L/57000		L/57120		L/57240		L/57360		L/57480		L/57600		L/57720		L/57840		L/57960		L/58080		L/58200		L/58320		L/58440		L/58560		L/58680		L/58800		L/58920		L/59040		L/59160		L/59280		L/59400		L/59520		L/59640		L/59760		L/59880		L/60000		L/60120		L/60240		L/60360		L/60480		L/60600		L/60720		L/60840		L/60960		L/61080		L/61200		L/61320		L/61440		L/61560		L/61680		L/61800		L/61920		L/62040		L/62160		L/62280		L/62400		L/62520		L/62640		L/62760		L/62880		L/63000		L/63120		L/63240		L/63360		L/63480		L/63600		L/63720		L/63840		L/63960		L/64080		L/64200		L/64320		L/64440		L/64560		L/64680		L/64800		L/64920		L/65040		L/65160		L/65280		L/65400		L/65520		L/65640		L/65760		L/65880		L/66000		L/66120		L/66240		L/66360		L/66480		L/66600		L/66720		L/66840		L/66960		L/67080		L/67200		L/67320		L/67440		L/67560		L/67680		L/67800		L/67920		L/68040		L/68160		L/68280		L/68400		L/68520		L/68640		L/68760		L/68880		L/69000		L/69120		L/69240		L/69360		L/69480		L/69600		L/69720		L/69840		L/69960		L/70080		L/70200		L/70320		L/70440		L/70560		L/70680		L/70800		L/70920		L/71040		L/71160		L/71280		L/71400		L/71520		L/71640		L/71760		L/71880		L/72000		L/72120		L/72240		L/72360		L/72480		L/72600		L/72720		L/72840		L/72960		L/73080		L/73200		L/73320		L/73440		L/73560		L/73680		L/73800		L/73920		L/74040		L/74160		L/74280		L/74400		L/74520		L/74640		L/74760		L/74880		L/75000		L/75120		L/75240		L/75360		L/75480		L/75600		L/75720		L/75840		L/75960		L/76080		L/76200		L/76320		L/76440		L/76560		L/76680		L/76800		L/76920		L/77040		L/77160		L/77280		L/77400		L/77520		L/77640		L/77760		L/77880		L/78000		L/78120		L/78240		L/78360		L/78480		L/78600		L/78720		L/78840		L/78960		L/79080		L/79200		L/79320		L/79440		L/79560		L/79680		L/79800		L/79920		L/80040		L/80160		L/80280		L/80400		L/80520		L/80640		L/80760		L/80880		L/81000		L/81120		L/81240		L/81360		L/81480		L/81600		L/81720		L/81840		L/81960		L/82080		L/82200		L/82320		L/82440		L/82560		L/82680		L/82800		L/82920		L/83040		L/83160		L/83280		L/83400		L/83520		L/83640		L/83760		L/83880		L/84000		L/84120		L/84240		L/84360		L/84480		L/84600		L/84720		L/84840		L/84960		L/85080		L/85200		L/85320		L/85440		L/85560		L/85680		L/85800		L/85920		L/86040		L/86160		L/86280		L/86400		L/86520		L/86640		L/86760		L/86880		L/87000		L/87120		L/87240		L/87360		L/87480		L/87600		L/87720		L/87840		L/87960		L/88080		L/88200		L/88320		L/88440		L/88560		L/88680		L/88800		L/88920		L/89040		L/89160		L/89280		L/89400		L/89520		L/89640		L/89760		L/89880		L/90000		L/90120		L/90240		L/90360		L/90480		L/90600		L/90720		L/90840		L/90960		L/91080		L/91200		L/91320		L/91440		L/91560		L/91680		L/91800		L/91920		L/92040		L/92160		L/92280		L/92400		L/92520		L/92640		L/92760		L/92880		L/93000		L/93120		L/93240		L/93360		L/93480		L/93600		L/93720		L/93840		L/93960		L/94080		L/94200		L/94320		L/94440		L/94560		L/94680		L/94800		L/94920		L/95040		L/95160		L/95280		L/95400		L/95520		L/95640		L/95760		L/95880		L/96000		L/96120		L/96240		L/96360		L/96480		L/96600	

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																							
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf							
			L/120	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360		
800 S137-033*	1.302	38.69	33.83	29.56	27.36	26.42	22.34	19.47	19.34	19.34	17.69	17.30	16.42	15.79	15.79	15.45	14.62	13.68	13.68	13.68	13.68	13.68	13.68	13.68	13.68	
	0.977	33.50	30.74	26.85	23.69	23.69	19.34	19.34	17.69	16.75	16.07	14.98	13.68	13.68	13.68	12.66	12.66	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	
	0.651	24	27.36	26.85	23.46	19.34	19.34	15.79	15.79	13.68	13.68	12.23	12.23	12.23	11.17	11.17	10.34	10.34	9.67	9.67	9.67	9.67	9.67	9.67	9.67	
	1.707	47.13	37.41	32.88	33.74	33.44	29.21	27.55	25.92	21.52	23.86	23.18	19.55	18.48	18.48	18.04	16.23	16.87	16.87	16.87	16.87	16.87	16.87	16.87	16.87	
800 S137-043	1.280	41.33	39.69	32.88	29.22	26.54	23.86	22.22	20.66	17.77	18.48	18.48	16.49	16.87	16.87	15.62	14.74	14.61	14.61	14.61	14.61	14.61	14.61	14.61	14.61	
	0.853	24	33.74	29.69	25.93	23.86	21.76	19.48	16.87	15.52	15.09	14.41	13.78	13.78	13.78	12.75	12.75	11.93	11.93	11.93	11.93	11.93	11.93	11.93	11.93	
	1.609	46.56	36.96	32.28	34.09	33.04	28.86	27.84	25.21	21.26	24.11	22.91	19.32	21.56	21.56	19.68	18.88	18.22	18.03	17.05	17.05	17.05	17.05	17.05	17.05	
	1.073	24	39.37	32.28	28.20	27.84	25.21	22.02	18.58	19.68	16.88	17.61	16.87	16.07	16.07	14.88	14.88	14.01	13.92	13.92	13.92	13.92	13.92	13.92	13.92	
800 S137-054 (50ksi)	2.146	12	50.89	40.38	35.28	39.74	36.10	31.54	27.55	23.24	28.66	25.03	21.11	26.60	23.24	19.60	25.03	21.87	17.52	22.74	19.87	16.76	16.76	16.76	16.76	
	1.609	16	46.24	36.70	32.06	36.10	32.80	28.66	25.03	21.11	26.04	22.74	19.18	24.17	21.11	17.81	22.74	19.87	16.76	16.76	16.76	16.76	16.76	16.76	16.76	
	1.073	24	40.39	32.06	28.00	31.54	28.66	25.03	21.11	26.04	22.74	19.18	24.17	21.11	17.81	22.74	19.87	16.76	16.76	16.76	16.76	16.76	16.76	16.76	16.76	
	2.696	12	55.28	43.87	38.33	39.22	34.26	29.93	25.24	31.13	27.19	22.94	28.74	25.24	21.29	26.23	23.76	20.4	24.29	22.57	19.29	16.80	16.80	16.80	16.80	
800 S137-068	2.022	16	50.22	39.86	34.82	39.22	35.63	31.13	27.19	22.94	27.82	24.71	20.84	24.89	22.94	19.34	22.72	21.58	18.20	20.50	17.29	16.61	16.61	16.61	16.61	
	1.348	24	43.87	34.82	30.42	32.13	31.13	27.19	26.23	23.76	20.04	22.72	21.58	18.20	20.32	20.04	16.90	18.55	15.90	17.17	15.11	16.06	16.06	16.06	16.06	
	2.696	12	55.24	43.84	38.30	43.14	39.19	34.24	29.17	25.23	31.11	27.17	22.92	28.88	25.23	21.28	27.17	23.74	20.02	25.81	22.55	19.02	24.69	21.57	18.19	
	2.022	16	50.19	39.83	34.80	39.19	35.61	31.11	27.17	22.92	28.26	24.69	20.82	24.69	22.92	19.33	24.69	21.57	18.19	23.45	20.82	18.19	20.82	18.19	15.34	
800 S137-068 (50ksi)	1.348	24	43.84	34.80	30.40	34.24	31.11	27.17	23.74	20.02	24.69	21.57	18.19	22.92	20.02	16.89	21.57	18.84	15.89	20.49	17.90	15.10	19.25	17.12	14.44	
	3.788	12	61.51	48.82	42.65	48.03	43.64	38.12	33.30	28.09	34.64	30.26	25.52	32.15	28.09	23.69	30.26	26.43	22.29	28.74	25.11	21.18	27.49	24.02	20.26	
	1.894	16	55.88	44.36	38.75	43.64	39.65	34.64	30.26	25.52	31.47	27.49	23.19	29.21	25.52	21.52	27.49	24.02	20.98	26.81	22.81	19.83	26.81	21.82	18.40	
	1.894	24	48.82	38.75	33.85	38.12	34.64	30.26	26.43	22.29	28.84	24.89	20.84	26.23	22.29	18.80	24.02	20.98	17.89	22.81	19.93	16.81	21.82	18.06	16.08	
800 S137-118	4.640	12	69.64	52.10	45.51	51.26	46.57	40.68	35.54	29.98	36.96	32.29	27.23	34.31	29.98	25.28	32.29	28.21	23.79	30.67	26.80	22.60	29.34	25.63	21.62	
	3.480	16	59.64	47.33	41.35	46.57	42.31	36.96	32.29	27.23	33.58	29.34	24.74	31.18	27.23	22.97	25.63	21.52	27.94	24.35	20.65	26.65	23.29	19.64	17.16	
	2.320	24	52.10	41.35	36.12	40.68	36.96	32.29	28.21	23.79	29.34	25.63	21.62	27.23	23.79	20.07	25.63	22.99	18.88	26.35	21.27	17.94	23.29	20.34	17.16	
	4.640	12	65.64	52.10	45.51	51.26	46.57	40.68	35.54	29.98	36.96	32.29	27.23	34.31	29.98	25.28	32.29	28.21	23.79	30.67	26.80	22.60	29.34	25.63	21.62	
800 S137-118 (50ksi)	3.480	16	59.64	47.33	41.35	46.57	42.31	36.96	32.29	27.23	33.58	29.34	24.74	31.18	27.23	22.97	25.63	21.52	27.94	24.35	20.65	26.65	23.29	19.64	17.16	
	2.320	24	52.10	41.35	36.12	40.68	36.96	32.29	28.21	23.79	29.34	25.63	21.62	27.23	23.79	20.07	25.63	22.99	18.88	26.35	21.27	17.94	23.29	20.34	17.16	
	1.368	12	39.45	35.01	30.78	27.89	27.89	24.16	21.16	19.72	18.30	17.08	15.28	15.28	13.95	13.95	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	
	1.026	16	34.16	31.81	27.79	24.16	24.16	21.16	19.72	18.30	17.08	15.28	15.28	13.95	13.95	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	
800 S162-033*	0.684	24	27.89	27.79	24.28	19.72	19.72	16.10	16.10	15.99	13.95	13.95	12.47	12.47	11.39	11.39	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	
	1.826	12	49.07	38.95	34.02	36.31	34.81	30.41	29.65	26.57	22.41	25.68	24.14	20.36	22.97	22.41	18.90	20.97	19.41	16.89	18.16	16.16	16.16	16.16	16.16	
	1.370	16	44.47	35.38	30.91	31.45	31.45	27.63	25.68	24.14	20.36	22.24	21.93	18.50	19.89	17.17	18.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	
	0.913	24	36.31	30.91	27.00	25.68	25.68	24.14	20.36	22.24	18.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16	16.16		
800 S162-043	2.276	12	53.09	42.14	36.81	41.46	37.66	32.90	28.74	24.24	29.48	26.12	22.03	26.37	24.24	20.45	24.07	22.87	19.24	22.26	21.87	18.28	20.85	20.73	17.48	
	1.707	16	48.23	38.28	33.44	36.11	34.22	29.89	29.48	26.12	22.03	25.53	23.73	20.01	22.84	22.03	18.58	20.85	20.73	17.48	19.30	16.61	18.05	15.88		
	1.138	24	41.69	33.44	29.21	29.48	26.12	24.07	22.81	19.24	20.85	20.73	17.48	18.65	18.65	16.23	17.02	17.02	15.76	15.76	14.51	14.74	13.88	13.18		
	2.276	12	52.78	41.89	36.60	41.22	37.45	32.71	28.58	24.10	29.72	25.96	21.90	27.59	24.10	20.33	25.96	22.68	19.13	24.66	21.55	18.17	23.59	20.61	17.38	
800 S162-054 (50ksi)	1.707	16	47.95	38.06	33.25	37.45	34.02	29.72	25.96	22.68	19.13	23.59	20.61	19.13	16.14	20.02	18.00	15.18	18.54	17.10	14.42	17.34	16.36	13.80		
	1.138	24	41.89	33.25	29.25	32.71	29.72	25.96	22.68	19.13	23.59	20.61	19.13	16.14	20.02	18.00	15.18	18.54	17.10	14.42	17.34	16.36	13.80	15.51		
	2.846	12	57.12	45.34	39.61	44.61	40.53	35.40	30.93	26.09	32.17	28.10	23.70	29.86	26.09	22.00	27.59	24.55	20.70	25.54	23.32	19.67	23.69	22.30		
	2.135	16	51.90	41.19	35.98	40.53	36.82	32.17	28.10	23.70	29.23	25.53	21.53	26.17	23.70	19.99	23.89	22.30	18.81	22.12	21.19	17.87	20.69			
800 S162-068 (50ksi)	1.423	24	45.34	35.98	31.44	33.79	32.17	28.10	23.70	27.59	24.55	20.70	23.89	22.30	18.81	21.37	19.46	16.43	18.06	15.61	16.89	16.89	16.89	16.89		
	2.846	12	57.08	45.30	39.58	44.57	40.50	35.38	30.38	26.07	32.14	28.08	23.68	29.84	26.07	21.99	28.08	24.53								





TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																					
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf					
			L/120	L/240	L/360	L/480	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600	L/240	L/360	L/480	L/600		
1000 S125-054 (50ksi)	2.402	12	58.16	46.44	40.57	45.69	41.51	36.26	31.68	26.72	32.95	28.78	24.27	30.58	26.16	22.53	18.74	21.21	24.38	22.84	19.27	21.81	21.21	17.89
1000 S125-054 (50ksi)	1.801	16	53.16	42.19	36.86	41.51	37.71	32.95	28.78	24.27	29.86	26.15	22.05	26.71	24.27	20.57	17.89	18.30	21.12	20.75	17.51	18.69	18.89	16.25
1000 S125-054 (50ksi)	1.201	24	46.44	36.86	32.20	34.48	32.95	28.78	24.27	21.21	24.38	22.84	19.27	21.81	21.21	17.89	18.30	18.43	15.99	17.24	17.24	14.24	15.42	14.20
1000 S125-088	2.999	12	64.08	50.86	44.43	48.83	45.46	39.71	34.69	29.26	34.53	31.62	26.59	30.88	28.19	24.68	22.10	26.10	22.06	24.42	24.42	21.10	21.84	19.59
1000 S125-088	2.249	16	58.22	46.21	40.37	44.29	41.30	36.08	34.53	31.62	26.59	29.90	24.16	26.59	22.42	24.42	21.10	22.60	22.06	24.42	24.42	21.15	19.17	17.80
1000 S125-088 (50ksi)	1.999	24	48.83	40.37	35.26	34.53	34.53	31.62	28.19	27.54	23.23	24.42	21.10	21.84	21.84	19.59	19.94	18.43	16.46	17.51	17.26	15.44	15.44	15.44
1000 S125-088 (50ksi)	2.499	16	57.71	45.80	40.01	45.06	40.94	35.77	35.77	31.25	26.35	32.50	28.39	23.94	30.17	26.35	22.23	23.94	24.80	20.92	26.66	19.87	20.92	17.64
1000 S125-088 (50ksi)	1.499	24	50.41	40.01	34.95	39.37	35.77	31.25	27.30	23.02	28.39	24.80	20.92	25.76	23.02	19.42	18.27	21.77	20.58	17.36	20.37	16.60	18.22	15.41
1000 S125-097	4.241	12	71.71	56.91	49.72	56.00	50.88	44.44	44.44	38.83	32.75	40.38	35.28	29.75	37.49	32.75	27.62	35.28	30.82	33.49	29.27	24.69	28.02	25.99
1000 S125-097	3.181	16	65.15	51.71	45.17	50.88	46.22	40.38	40.38	35.28	30.82	25.99	21.92	25.56	34.06	29.75	25.09	31.33	28.00	26.60	23.43	20.60	21.46	19.92
1000 S125-097 (50ksi)	3.181	16	65.15	51.71	45.17	50.88	46.22	40.38	40.38	35.28	29.75	36.69	32.05	27.03	34.06	29.75	25.09	32.05	28.00	23.61	20.44	18.47	21.46	19.92
1000 S125-097 (50ksi)	2.120	24	56.91	45.17	39.46	44.44	40.38	35.28	35.28	30.82	25.99	21.92	22.60	24.42	21.10	22.60	22.60	23.23	19.60	25.44	22.22	18.74	23.11	20.63
1000 S125-118	5.210	12	76.82	60.97	53.26	59.99	54.50	47.61	47.61	41.59	35.08	43.26	37.79	31.87	40.16	35.08	31.87	27.84	35.90	31.36	28.45	24.33	21.87	27.84
1000 S125-118	3.907	16	69.79	55.39	48.39	54.50	49.52	43.26	43.26	37.79	31.87	39.30	34.33	29.99	31.87	26.88	24.80	31.87	26.88	24.80	22.10	22.10	22.10	22.10
1000 S125-118 (50ksi)	2.605	24	60.97	48.39	42.27	47.61	43.26	37.79	37.79	33.01	27.84	34.33	29.99	25.30	31.87	27.84	23.48	24.89	20.99	27.25	23.81	20.08	24.55	22.10
1000 S125-118 (50ksi)	3.907	12	76.82	60.97	53.26	59.99	54.50	47.61	47.61	41.59	35.08	43.26	37.79	31.87	40.16	35.08	31.87	27.84	35.90	31.36	28.45	24.33	21.87	27.84
1000 S125-118 (50ksi)	2.605	24	60.97	48.39	42.27	47.61	43.26	37.79	37.79	33.01	27.84	34.33	29.99	25.30	31.87	27.84	23.48	24.89	20.99	27.25	23.81	20.08	24.55	22.10
1000 S137-043*	1.510	16	46.55	40.44	35.33	32.92	32.92	31.68	26.88	26.88	21.95	20.33	19.01	18.47	17.00	15.52	15.52	14.37	14.37	13.44	13.44	12.02	12.02	12.02
1000 S137-043*	2.530	12	61.19	48.56	42.42	44.64	43.41	37.92	36.45	33.13	27.94	31.57	30.10	25.39	28.24	27.94	23.57	25.78	23.86	21.07	22.32	22.32	20.15	19.97
1000 S137-043*	1.898	16	54.68	44.12	38.54	38.66	34.46	31.57	30.10	25.39	27.34	27.34	23.32	20.15	24.45	21.41	22.32	22.32	20.15	20.67	19.14	19.33	16.78	17.42
1000 S137-043*	1.265	24	44.64	38.54	33.67	31.57	31.57	30.10	25.78	25.78	22.18	22.18	18.23	17.00	16.87	16.87	15.52	15.52	14.37	14.37	13.44	13.44	12.02	12.02
1000 S137-054 (50ksi)	2.530	12	60.59	48.09	42.01	47.32	42.99	37.55	32.81	27.87	34.12	29.81	25.14	31.67	27.67	23.34	29.81	26.04	21.96	28.22	24.73	20.86	26.39	23.66
1000 S137-054 (50ksi)	1.898	16	55.05	43.69	38.17	33.35	34.12	29.81	29.81	25.14	31.00	27.08	22.86	28.76	25.14	21.20	26.39	23.66	19.95	24.44	22.47	19.95	22.86	18.69
1000 S137-054 (50ksi)	1.265	24	48.09	38.17	33.35	34.12	29.81	29.81	26.04	21.96	26.39	23.66	19.95	24.44	22.47	19.95	19.63	16.56	18.66	15.84	16.69	16.69	14.70	16.83
1000 S137-068	3.181	12	66.56	52.83	46.15	51.98	47.22	41.25	41.25	36.04	30.40	36.77	32.74	28.49	30.40	25.64	30.02	28.60	24.13	27.79	22.92	26.00	25.99	21.92
1000 S137-068	2.385	16	60.47	48.00	41.93	45.03	42.91	37.48	36.77	32.74	27.62	31.84	29.75	25.09	28.48	27.62	23.29	26.00	21.92	24.07	20.82	22.51	22.51	19.91
1000 S137-068	1.590	24	52.00	41.93	36.63	36.77	36.77	32.74	30.02	28.60	24.13	26.00	25.99	21.92	23.25	20.35	21.23	19.15	19.65	18.19	18.38	17.40	16.44	16.15
1000 S137-068 (50ksi)	3.181	12	66.02	52.40	45.78	51.56	46.84	40.92	40.92	35.75	30.15	37.18	32.48	27.39	34.51	30.15	25.43	32.48	28.37	23.93	20.85	26.95	22.73	23.93
1000 S137-068 (50ksi)	2.385	16	59.98	47.61	41.59	46.84	42.56	37.18	37.18	32.48	27.39	33.78	29.51	24.89	31.36	27.39	23.10	29.51	25.78	21.74	28.03	24.49	20.65	26.80
1000 S137-068 (50ksi)	1.590	24	52.40	41.59	36.33	34.12	34.12	29.81	29.81	25.14	31.00	27.08	22.86	28.76	25.14	21.20	26.39	23.66	19.95	24.44	22.47	19.95	22.86	18.69
1000 S137-087	4.479	12	74.30	58.97	51.52	58.02	52.72	46.05	46.05	40.23	33.93	33.21	29.01	35.29	30.83	26.00	33.21	29.01	25.34	31.55	27.56	23.24	30.17	26.36
1000 S137-087 (50ksi)	3.359	16	67.51	53.58	46.81	52.72	47.90	41.84	41.84	36.55	30.83	38.84	33.93	28.82	36.55	31.83	26.93	22.71	29.01	25.34	21.38	27.56	24.07	20.30
1000 S137-087 (50ksi)	2.240	24	58.97	46.81	40.89	46.05	42.72	36.24	36.24	31.93	26.93	33.21	29.01	24.47	30.83	26.93	22.71	29.01	25.34	21.38	27.56	24.07	20.30	26.36
1000 S137-118	5.684	12	79.36	62.98	55.02	61.97	56.30	49.18	49.18	42.97	36.24	44.69	39.04	32.93	41.46	36.24	30.57	39.04	34.10	28.76	37.08	32.39	27.32	35.47
1000 S137-118	4.113	16	72.10	57.23	49.99	56.30	51.15	44.69	44.69	39.04	32.93	40.60	35.47	29.92	37.69	32.93	28.76	24.26	30.98	27.07	22.83	23.23	28.15	23.74
1000 S137-118 (50ksi)	2.742	24	62.98	49.99	43.67	49.18	44.69	39.04	39.04	34.10	28.76	35.47	30.98	26.13	33.69	29.43	24.82	32.23	28.15	24.59	20.74	25.52	22.83	22.04
1000 S137-118 (50ksi)	5.484	12	79.36	62.98	55.02	61.97	56.30	49.18	49.18	42.97	36.24	44.69	39.04	32.93	41.46	36.24	30.57	39.04	34.10	28.76	37.08	32.39	27.32	35.47
1000 S137-118 (50ksi)	4.113	16	72.10	57.23	49.99	56.30	51.15	44.69	44.69	39.04	32.93	40.60	35.47	29.92	37.69	32.93	28.76	24.26	30.98	27.07	22.83	23.23	28.15	23.74
1000 S162-043*	2.133	12	57.87	46.24	40.39	40.92	40.92	36.11	33.41	31.54	26.60	28.93	26.66	24.17	25.88	25.88	22.44	23.62	23.62	21.11	21.87	21.87	20.06	20.46
1000 S162-043*	1.600	16	50.11	42.01	36.70	35.44	35.44	32.80	28.93	28.66	24.17	25.06	25.06	21.96	23.90	20.46	21.18	18.94	18.22	17.72	17.72	17.43	15.85	15.85
1000 S162-043*	1.066	24	40.92	36.70	32.06	28.93	28.93	26.62	23.62	21.11	20.46	20.46	19.18	18.30	18.30	17.81	16.70	16.70	15.47	15.47	14.47	14.47	14.47	12.94
1000 S162-054	2.661	12	63.23	50.19	43.84	47.23	44.86	39.19	38.57	34.24	28.88	33.40	31.11	26.24	29.87	28.88	24.35	27.27	27.17	22.92	25.25	25.25	20.82	20.82
1000 S162-054	1.996	16	57.45	45.60	39.83	40.91	40.76	35.61	33.40	31.11	26.24	28.93	28.26	23.84	25.87	25.87	22.13	23.62	23.62	20.82	21.87	19.78	20.45	18.29
1000 S162-054 (50ksi)	2.661	12	62.73	49.79	43.49	48.98	44.50	38.88	38.88	33.96	31.11	26.24	28.93	28.26	23.84	25.87	25.87	22.13	23.62	23.62	20.82	21.87	19.78	20.45
1000 S162-054 (50ksi)	1.996	16	56.99	45.23	39.52	44.50	40.43	35.32	35.32	30.86	26.03	32.09	28.04	23.65	29.79	26.03	21.95	27.64	24.49	20.66	25.59	23.26	19.62	23.93
1000 S162-054 (50ksi)	1.331	24	48.79																					



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																				
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf				
			L/120	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360		
1000 S162-068	3.331	12	68.57	54.42	47.54	48.65	42.50	37.12	31.31	38.59	33.73	28.45	24.41	20.47	24.85	29.18	27.99	23.61	21.41	24.14	21.41	20.96	
1000 S162-068	2.498	16	62.30	49.44	43.19	47.27	38.61	33.73	28.45	35.89	30.93	25.65	21.41	17.41	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26
1000 S162-068 (50ksi)	3.331	12	68.06	54.02	47.19	48.29	42.18	36.85	31.08	38.33	33.48	28.24	24.18	20.24	23.82	28.24	26.57	22.41	20.96	18.74	19.30	17.92	17.26
1000 S162-068 (50ksi)	2.498	16	61.84	49.08	42.87	47.19	38.33	33.48	28.24	35.89	30.93	25.65	21.41	17.41	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26
1000 S162-068	1.665	24	54.02	42.87	37.46	42.87	34.33	30.42	26.57	30.42	26.57	22.41	20.96	18.74	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26
1000 S162-097	3.541	16	69.80	55.40	48.40	54.51	49.53	43.26	37.80	44.62	41.60	35.09	30.42	26.57	30.42	26.57	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S162-097	2.721	24	60.98	48.40	42.28	47.62	43.26	37.80	33.02	37.80	33.02	27.85	24.41	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26	17.26
1000 S162-097 (50ksi)	3.541	16	69.80	55.40	48.40	54.51	49.53	43.26	37.80	44.62	41.60	35.09	30.42	26.57	30.42	26.57	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S162-118	5.737	12	81.72	64.86	56.66	63.81	57.98	50.65	44.26	50.65	44.26	37.32	32.48	28.54	32.48	28.54	24.61	22.41	20.96	18.74	19.30	17.92	17.26
1000 S162-118	4.303	16	74.25	58.93	51.48	57.98	52.68	46.02	40.20	46.02	40.20	33.91	29.09	25.10	29.09	25.10	21.17	19.04	17.41	16.83	16.31	15.81	15.31
1000 S162-118 (50ksi)	2.869	24	64.86	51.48	44.97	50.65	46.02	40.20	35.12	46.02	40.20	33.91	29.09	25.10	29.09	25.10	21.17	19.04	17.41	16.83	16.31	15.81	15.31
1000 S200-043*	1.686	16	50.38	43.62	38.11	35.62	34.07	29.09	25.10	25.10	25.10	22.80	20.57	18.25	20.57	18.25	16.04	14.54	13.54	12.81	12.29	11.81	11.31
1000 S200-043*	1.124	24	41.14	38.11	33.29	29.09	23.75	21.93	20.17	21.93	20.17	18.40	16.79	15.55	16.79	15.55	14.54	13.54	13.01	12.51	12.02	11.53	11.03
1000 S200-054	2.104	16	59.51	47.23	41.26	42.45	42.22	36.98	34.66	32.22	27.17	24.69	22.84	21.51	21.51	21.51	19.04	17.41	16.83	16.31	15.81	15.31	14.81
1000 S200-054 (50ksi)	1.403	24	49.01	41.26	36.04	34.66	32.22	28.30	26.15	26.15	23.75	21.93	20.17	18.40	16.79	15.55	14.54	13.54	13.01	12.51	12.02	11.53	11.03
1000 S200-068	3.537	12	71.17	56.49	49.35	55.58	50.50	44.11	38.54	44.11	38.54	32.50	27.41	23.47	30.59	25.80	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S200-068 (50ksi)	2.763	16	64.86	51.48	44.97	50.65	46.02	40.20	35.12	46.02	40.20	33.91	29.09	25.10	29.09	25.10	21.17	19.04	17.41	16.83	16.31	15.81	15.31
1000 S200-087	1.768	24	56.17	44.58	38.95	43.86	39.85	34.82	30.41	25.85	21.64	18.40	16.79	15.55	16.79	15.55	14.54	13.54	13.01	12.51	12.02	11.53	11.03
1000 S200-087 (50ksi)	1.156	12	79.98	63.48	55.46	62.46	56.75	49.57	43.31	49.57	43.31	36.53	30.81	26.57	34.37	28.99	25.80	22.41	20.96	18.74	19.30	17.92	17.26
1000 S200-118	4.617	16	77.47	61.46	53.71	60.49	54.96	48.01	41.94	48.01	41.94	35.38	29.84	24.41	32.48	26.57	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S200-118 (50ksi)	3.078	24	67.67	53.71	46.92	52.85	48.01	41.94	35.38	41.94	35.38	29.84	24.41	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26	17.26
1000 S250-043*	6.156	12	85.26	67.67	59.12	66.58	60.49	52.85	46.16	52.85	46.16	38.94	32.48	28.54	32.48	28.54	24.61	22.41	20.96	18.74	19.30	17.92	17.26
1000 S250-043*	3.078	24	67.67	53.71	46.92	52.85	48.01	41.94	35.38	41.94	35.38	29.84	24.41	20.96	22.28	22.28	19.73	20.63	18.74	19.30	17.92	17.26	17.26
1000 S250-054	2.201	24	42.95	40.25	35.16	30.37	30.37	24.80	24.80	23.16	21.47	19.21	17.53	15.81	17.53	15.81	14.54	13.54	13.01	12.51	12.02	11.53	11.03
1000 S250-054 (50ksi)	3.010	12	68.89	54.68	47.76	52.94	48.88	42.70	37.30	44.62	41.60	35.09	30.42	26.57	30.42	26.57	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S250-054 (50ksi)	1.505	24	52.94	43.01	37.43	43.01	37.43	31.85	26.26	31.85	26.26	21.61	18.40	16.79	15.55	16.79	15.55	14.54	13.54	13.01	12.51	12.02	11.53
1000 S250-068	3.804	12	74.41	59.06	51.59	58.11	52.79	46.12	40.20	46.12	40.20	33.91	29.09	25.10	29.09	25.10	21.17	19.04	17.41	16.83	16.31	15.81	15.31
1000 S250-068 (50ksi)	2.853	16	67.61	53.66	46.88	52.79	47.97	41.90	36.61	47.97	41.90	36.61	30.87	26.04	30.87	26.04	22.41	20.96	18.74	19.30	17.92	17.26	17.26
1000 S250-068 (50ksi)	1.902	24	59.06	46.88	40.95	46.12	41.90	36.61	31.98	46.12	41.90	36.61	30.87	26.04	30.87	26.04	22.41	20.96	18.74	19.30	17.92	17.26	17.26



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																								
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf								
			L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360					
1000 S350-118	7.465	12	96.24	65.66	60.04	67.57	59.03	51.57	43.49	53.63	46.85	39.52	49.79	43.49	36.68	46.85	40.93	34.52	44.51	38.88	32.79	37.19	31.36	35.52	29.12		
1000 S350-118 (50ksi)	5.998	16	85.53	68.68	60.04	67.57	59.03	53.63	46.85	40.93	34.52	42.57	37.19	31.36	35.52	29.12	23.44	17.64	11.84	26.03	20.63	15.23	10.83	9.43	8.03	6.63	
1000 S350-118 (50ksi)	7.465	12	95.24	75.99	66.04	74.37	67.57	59.03	51.57	43.49	36.68	39.52	49.79	43.49	36.68	46.85	40.93	34.52	44.51	38.88	32.79	37.19	31.36	35.52	29.12		
1000 S350-118 (50ksi)	5.998	16	86.53	68.68	60.04	67.57	59.03	53.63	46.85	40.93	34.52	39.52	35.90	32.28	28.66	25.04	21.42	17.80	14.18	33.94	29.79	25.63	21.47	17.31	13.15	8.99	
1200 S125-054*	2.786	24	64.99	64.32	47.45	45.96	42.42	37.52	32.50	28.40	24.30	20.20	16.10	12.00	7.90	3.80	2.70	2.10	1.50	23.56	23.56	23.56	23.56	23.56	23.56	23.56	
1200 S125-054*	2.090	16	56.28	49.36	43.11	39.80	38.54	32.50	32.50	28.40	24.30	20.20	16.10	12.00	7.90	3.80	2.70	2.10	1.50	21.27	21.27	21.27	21.27	21.27	21.27	21.27	
1200 S125-054*	1.393	24	45.96	43.11	37.66	32.50	32.50	26.53	26.53	24.81	22.98	22.98	20.55	20.55	18.76	18.76	17.37	17.37	15.98	16.25	16.25	16.25	16.25	16.25	16.25	16.25	
1200 S125-054*	2.786	12	67.50	53.58	46.80	47.89	41.84	36.55	30.83	25.11	19.39	13.67	7.95	2.23	2.23	2.23	2.23	2.23	2.23	23.56	23.56	23.56	23.56	23.56	23.56	23.56	
1200 S125-054*	2.090	16	61.33	48.68	42.52	46.88	43.51	38.01	33.21	28.01	23.01	18.01	13.01	8.01	3.01	2.01	1.01	0.01	0.01	20.64	20.64	20.64	20.64	20.64	20.64	20.64	
1200 S125-054*	1.393	24	53.58	42.52	37.15	38.28	38.01	33.21	31.25	29.01	24.01	20.64	17.64	14.64	11.64	8.64	5.64	2.64	2.64	18.45	18.45	18.45	18.45	18.45	18.45	18.45	
1200 S125-068	3.484	12	74.45	59.09	51.62	54.31	52.82	46.14	44.34	40.31	34.00	36.62	30.89	34.36	34.00	28.68	31.35	31.35	26.99	29.03	29.03	29.03	29.03	29.03	29.03	29.03	
1200 S125-068	2.613	16	66.51	53.69	46.90	47.03	41.92	38.40	36.62	31.35	28.99	27.15	22.15	18.42	16.42	11.42	11.42	7.42	7.42	24.52	24.52	24.52	24.52	24.52	24.52	24.52	
1200 S125-068	1.742	24	54.31	46.90	40.97	38.40	36.62	31.35	31.35	28.99	27.15	22.15	18.42	16.42	11.42	11.42	7.42	7.42	22.17	22.17	22.17	22.17	22.17	22.17	22.17	22.17	
1200 S125-068 (50ksi)	3.484	12	73.59	58.41	51.03	57.47	52.21	45.61	45.61	41.44	36.20	30.53	38.47	33.61	33.61	28.73	31.63	31.63	26.67	30.04	30.04	30.04	30.04	30.04	30.04	30.04	
1200 S125-068 (50ksi)	2.613	16	66.86	53.07	46.36	52.21	47.44	41.44	41.44	36.20	30.53	37.65	32.89	27.74	34.90	30.53	25.75	31.86	28.73	24.24	29.50	27.30	23.02	27.59	26.11	22.02	24.68
1200 S125-068 (50ksi)	1.742	24	58.41	46.36	40.50	45.06	41.44	36.20	36.20	31.63	26.67	31.86	28.73	24.24	28.50	26.67	22.50	26.01	25.10	21.17	24.08	23.84	20.11	22.53	22.53	20.15	20.15
1200 S125-087	4.932	12	84.16	66.79	58.35	65.72	59.71	52.16	45.57	38.43	47.39	41.40	34.92	43.60	38.43	32.41	39.80	36.17	30.50	36.85	34.35	28.98	34.47	32.86	27.71	30.83	30.50
1200 S125-087	3.699	16	76.46	60.69	53.01	59.71	54.25	47.39	47.39	41.40	34.92	42.22	37.61	31.72	37.76	34.92	34.47	32.86	27.71	31.91	31.21	26.33	29.85	29.85	25.18	26.70	26.70
1200 S125-087 (50ksi)	4.932	12	83.93	66.61	58.19	65.54	59.54	52.02	45.44	38.33	47.26	41.29	34.82	43.87	38.33	32.33	41.29	36.07	30.42	36.26	34.26	28.90	37.51	32.77	27.64	34.82	30.42
1200 S125-087 (50ksi)	3.699	16	76.25	60.52	52.87	59.54	54.10	47.26	47.26	41.29	34.82	42.94	37.51	31.64	39.86	34.82	29.37	37.51	32.77	27.64	35.63	31.13	26.25	34.08	29.77	25.11	31.64
1200 S125-087 (50ksi)	2.664	24	66.81	52.87	46.19	52.02	47.26	41.29	41.29	36.07	30.42	37.51	32.77	27.64	34.82	30.42	25.86	32.77	28.63	24.14	30.93	27.19	22.93	28.94	26.01	21.94	20.36
1200 S125-118	6.054	12	90.16	71.56	62.51	70.40	63.97	55.88	48.82	41.17	50.77	44.35	37.41	41.17	34.73	44.35	38.75	32.88	42.13	36.80	31.04	40.30	35.20	29.69	36.77	32.68	27.56
1200 S125-118	4.541	16	81.91	65.02	56.80	63.97	58.12	50.77	44.35	37.41	46.13	40.30	35.20	29.69	32.68	27.56	30.30	25.06	33.44	28.20	35.60	31.98	26.98	31.84	29.69	25.04	21.88
1200 S125-118 (50ksi)	3.027	24	71.56	56.80	49.62	55.88	50.77	44.35	44.35	38.75	32.88	27.56	22.99	22.99	19.07	19.07	15.15	15.15	11.23	11.23	11.23	11.23	11.23	11.23	11.23	11.23	11.23
1200 S125-118 (50ksi)	6.054	12	90.16	71.56	62.51	70.40	63.97	55.88	48.82	41.17	50.77	44.35	37.41	41.17	34.73	44.35	38.75	32.88	42.13	36.80	31.04	40.30	35.20	29.69	36.77	32.68	27.56
1200 S125-118 (50ksi)	4.541	16	81.91	65.02	56.80	63.97	58.12	50.77	44.35	37.41	46.13	40.30	35.20	29.69	32.68	27.56	30.30	25.06	33.44	28.20	35.60	31.98	26.98	31.84	29.69	25.04	21.88
1200 S137-054*	3.027	24	71.56	56.80	49.62	55.88	50.77	44.35	44.35	38.75	32.88	27.56	22.99	22.99	19.07	19.07	15.15	15.15	11.23	11.23	11.23	11.23	11.23	11.23	11.23	11.23	11.23
1200 S137-054*	2.186	16	69.72	56.09	49.00	42.70	43.80	40.25	38.46	34.77	28.46	25.82	24.65	22.05	21.80	20.13	18.63	16.63	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43	17.43
1200 S137-054*	1.458	24	49.30	44.52	38.89	34.86	34.77	28.46	28.46	25.82	24.65	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05	22.05
1200 S137-054* (50ksi)	2.915	12	69.80	55.40	48.40	54.51	49.52	43.26	43.26	37.79	31.88	28.89	28.89	25.40	25.84	25.84	21.84	21.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84
1200 S137-054* (50ksi)	2.186	16	63.42	50.33	43.97	49.52	44.99	39.31	39.31	34.34	28.96	24.43	29.20	27.25	22.99	27.04	25.89	21.83	25.29	24.76	20.88	22.62	22.62	22.62	22.62	22.62	
1200 S137-054* (50ksi)	1.458	24	55.40	43.97	38.41	41.30	39.31	34.34	33.72	30.00	25.30	29.20	27.25	22.99	26.12	25.30	23.84	23.81	20.08	22.07	22.07	19.07	20.65	20.65	18.24	18.47	
1200 S137-068	3.665	12	77.14	61.22	53.48	57.71	54.73	47.17	41.77	40.85	37.95	32.01	36.54	35.23	29.71	33.35	33.15	29.71	27.96	30.88	30.88	26.56	28.89	25.40	25.84	25.84	
1200 S137-068	2.743	16	70.08	55.63	48.59	50.03	49.72	43.44	40.85	37.95	32.01	35.38	34.48	29.08	31.64	26.99	28.89	28.89	25.40	26.74	26.74	24.13	25.02	25.02	23.08	22.37	
1200 S137-068	1.833	24	57.77	48.59	42.46	40.85	37.95	33.35	33.15	29.71	27.96	28.89	28.89	25.40	25.84	25.84	21.84	21.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	
1200 S137-068 (50ksi)	3.665	12	76.32	60.57	52.92	59.60	54.15	47.30	41.32	34.85	42.98	37.54	31.66	39.90	34.85	29.40	37.54	32.80	27.66	35.66	31.15	26.28	34.11	29.80	25.13	30.60	
1200 S137-068 (50ksi)	2.743	16	69.34	55.03	48.08	49.20	42.98	42.98	37.54	31.66	39.05	34.11	29.80	25.13	30.60	27.66	26.71	23.81	23.81	20.82	22.07	22.07	19.07	20.65	20.65	18.24	
1200 S137-068 (50ksi)	1.833	24	60.57	48.08	42.00	47.30	42.98	37.54	32.80	27.66	34.11	29.80	25.13	30.60	27.66	26.71	23.81	23.81</									

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																							
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf							
			L/120	L/240	L/180	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
1200 S162-054* (50ksi)	3.046	12	72.17	57.28	50.04	56.36	51.20	44.73	39.07	40.64	35.50	29.94	37.46	32.94	27.80	35.28	31.01	26.16	24.85	20.58	28.18	24.85	20.58	28.18	24.85	20.58
1200 S162-054* (50ksi)	3.285	16	65.57	52.04	45.46	51.20	46.52	40.64	35.50	32.94	27.80	35.28	31.01	26.16	24.85	20.58	28.18	24.85	20.58	28.18	24.85	20.58	28.18	24.85	20.58	28.18
1200 S162-054* (50ksi)	3.524	24	57.28	45.46	39.72	43.20	40.64	35.50	32.94	27.80	35.28	31.01	26.16	24.85	20.58	28.18	24.85	20.58	28.18	24.85	20.58	28.18	24.85	20.58	28.18	24.85
1200 S162-068	3.816	12	79.31	62.95	54.99	56.27	49.15	42.94	36.22	42.83	35.45	32.91	38.31	36.22	30.55	34.08	28.75	28.75	23.31	27.31	30.29	30.29	26.12	26.12	21.09	21.09
1200 S162-068	4.060	16	72.05	57.19	49.96	52.46	51.72	44.66	42.83	39.01	36.22	39.01	36.22	30.55	34.08	28.75	28.75	23.31	27.31	30.29	30.29	26.12	26.12	21.09	21.09	21.09
1200 S162-068	4.307	24	65.58	49.96	43.64	42.83	42.83	39.01	36.22	39.01	36.22	39.01	36.22	30.55	34.08	28.75	28.75	23.31	27.31	30.29	30.29	26.12	26.12	21.09	21.09	21.09
1200 S162-087	4.543	12	83.39	70.96	61.98	63.42	55.41	48.40	43.98	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74
1200 S162-087	4.788	16	81.22	64.46	56.31	57.62	50.34	43.98	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95
1200 S162-087	5.034	24	70.96	56.31	49.19	55.41	50.34	43.98	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95	37.09	45.74	39.95
1200 S162-118	5.280	12	95.40	75.72	66.14	74.50	67.68	59.13	53.72	46.93	51.65	43.56	49.87	46.93	41.00	34.58	41.00	34.58	41.00	34.58	41.00	34.58	41.00	34.58	41.00	34.58
1200 S162-118	5.526	16	86.67	68.79	60.10	67.68	61.49	53.72	46.93	48.81	42.64	35.96	45.31	39.58	33.38	42.64	35.96	45.31	39.58	33.38	42.64	35.96	45.31	39.58	33.38	
1200 S162-118	5.772	24	75.72	60.10	52.50	59.13	53.72	46.93	48.81	42.64	35.96	45.31	39.58	33.38	42.64	35.96	45.31	39.58	33.38	42.64	35.96	45.31	39.58	33.38	42.64	
1200 S200-054*	3.191	12	75.39	59.84	52.27	54.04	53.49	46.73	44.12	40.82	34.43	38.21	37.09	33.09	33.09	28.42	29.60	29.60	23.58	27.02	27.02	23.58	27.02	23.58	27.02	
1200 S200-054*	3.437	16	66.18	54.37	47.49	46.80	46.80	42.45	38.21	37.09	33.09	33.09	28.42	29.60	29.60	23.58	27.02	27.02	23.58	27.02	23.58	27.02	23.58	27.02	23.58	
1200 S200-054*	3.683	24	54.04	47.49	41.48	38.21	38.21	37.09	33.09	33.09	28.42	29.60	29.60	23.58	27.02	27.02	23.58	27.02	23.58	27.02	23.58	27.02	23.58	27.02	23.58	
1200 S200-054* (50ksi)	3.929	12	74.86	59.42	51.91	58.26	53.11	46.40	46.40	40.53	34.19	28.83	31.06	31.06	26.20	30.71	29.23	24.65	24.65	20.27	27.13	27.13	24.65	20.27	27.13	
1200 S200-054* (50ksi)	4.175	16	68.02	53.96	47.16	53.11	48.26	42.16	42.16	36.83	31.06	31.06	26.20	30.71	29.23	24.65	24.65	20.27	27.13	27.13	24.65	20.27	27.13	24.65	20.27	
1200 S200-054* (50ksi)	4.421	24	58.42	47.16	41.20	43.43	42.16	36.83	31.06	31.06	26.20	30.71	29.23	24.65	24.65	20.27	27.13	27.13	24.65	20.27	27.13	24.65	20.27	27.13	24.65	
1200 S200-068	4.667	12	82.13	65.19	56.95	64.14	58.27	50.90	44.47	37.51	45.44	40.40	34.08	40.40	34.08	28.76	37.51	37.51	31.63	37.10	35.29	29.77	34.35	33.53	28.28	
1200 S200-068	4.913	16	74.62	59.23	51.74	55.65	52.94	46.25	45.44	40.40	34.08	34.08	28.76	37.51	37.51	31.63	37.10	35.29	29.77	34.35	33.53	28.28	32.13	32.07	27.05	
1200 S200-068	5.159	24	64.26	51.74	45.20	46.44	46.44	40.40	34.08	34.08	28.76	37.51	37.51	31.63	37.10	35.29	29.77	34.35	33.53	28.28	32.13	32.07	27.05	28.74		
1200 S200-068 (50ksi)	5.405	12	81.52	64.71	56.53	63.66	57.84	50.53	44.14	37.23	45.91	40.10	35.03	29.55	24.92	30.51	27.81	23.45	28.25	26.41	22.28	26.43	25.26	21.31	23.64	
1200 S200-068 (50ksi)	5.651	16	74.07	58.79	51.36	57.84	52.55	45.91	40.10	35.03	29.55	24.92	30.51	27.81	23.45	28.25	26.41	22.28	26.43	25.26	21.31	23.64	23.45	19.78		
1200 S200-068 (50ksi)	5.897	24	64.71	51.36	44.86	50.53	45.91	40.10	35.03	29.55	24.92	30.51	27.81	23.45	28.25	26.41	22.28	26.43	25.26	21.31	23.64	23.45	19.78			
1200 S200-087	6.143	12	95.01	73.82	64.48	72.63	65.99	57.65	50.36	42.47	52.38	45.76	38.59	48.62	42.47	35.82	45.76	39.97	33.71	43.07	37.97	32.02	40.29	36.32	30.63	
1200 S200-087	6.389	16	84.50	67.07	58.59	65.99	59.96	52.38	45.76	38.59	48.62	42.47	35.82	45.76	39.97	33.71	43.07	37.97	32.02	40.29	36.32	30.63	31.20	30.63		
1200 S200-087	6.635	24	73.82	58.59	51.19	56.97	53.71	40.29	36.32	30.63	30.63	26.76	30.45	30.45	26.42	28.49	28.49	24.31	25.48	25.48	21.31	25.48	21.31	25.48		
1200 S200-118	6.881	12	92.78	73.64	64.33	72.45	65.83	57.50	50.23	42.37	52.25	45.64	38.50	48.50	42.37	35.74	45.64	39.87	33.63	43.36	37.87	31.94	41.47	36.23		
1200 S200-118	7.127	16	84.30	66.91	58.45	65.83	59.81	52.25	45.64	38.50	47.47	41.47	34.98	44.07	38.50	32.47	41.47	34.98	34.41	43.36	37.87	31.94	41.47	36.23		
1200 S200-118	7.373	24	73.64	58.45	51.06	57.50	52.25	45.64	38.50	32.47	41.47	34.98	44.07	38.50	32.47	41.47	34.98	34.41	43.36	37.87	31.94	41.47	36.23	30.55		
1200 S200-118 (50ksi)	7.619	12	99.20	78.74	68.78	77.47	70.38	61.49	53.71	45.30	55.86	48.80	41.16	51.86	45.30	38.21	48.80	42.63	35.96	46.36	40.50	34.16	44.34	38.73		
1200 S200-118 (50ksi)	7.865	16	90.13	71.54	62.50	70.38	63.95	55.86	48.80	41.16	50.76	44.34	37.40	47.12	41.16	34.72	44.34	38.73	32.67	42.12	36.79	31.03	40.29	35.19		
1200 S200-118 (50ksi)	8.111	24	78.74	62.50	54.59	61.49	55.86	48.80	41.16	50.76	44.34	37.40	47.12	41.16	34.72	44.34	38.73	32.67	42.12	36.79	31.03	40.29	35.19	29.68		
1200 S250-054*	8.357	12	77.79	62.47	54.57	55.01	55.01	48.78	44.91	42.61	35.94	38.89	38.72	32.66	34.79	30.31	31.76	28.53	29.40	29.40	27.10	27.50	25.92	24.30		
1200 S250-054*	8.603	16	67.37	56.76	49.58	47.64	47.64	43.32	38.89	38.72	32.66	34.79	30.31	31.76	28.53	29.40	29.40	27.10	27.50	25.92	24.30	24.62	23.82	21.30		
1200 S250-054*	8.849	24	55.01	49.58	43.31	38.89	38.72	32.66	34.79	30.31	31.76	28.53	29.40	29.40	27.10	27.50	25.92	24.30	24.62	23.82	21.30	21.30	21.30	21.30		
1200 S250-054* (50ksi)	9.095	12	77.58	61.57	53.79	60.58	55.04	48.08	48.08	42.00	35.43	33.63	32.19	39.92	35.43	29.88	36.44	33.34	28.12	33.73	31.67	26.71	31.56	28.22		
1200 S250-054* (50ksi)	9.341	16	70.49	55.94	48.87	54.66	50.01	43.69	43.69	38.16	32.19	38.65	34.67	32.19	31.56	30.29	25.55	29.21	28.77	27.33	23.31	24.44	24.44	21.55		
1200 S250-054* (50ksi)	9.587	24	61.57	48.87	42.69	44.63	43.69	38.16	32.19	31.56	30.29	25.55	29.21	28.77	27.33	23.31	24.44	24.44	21.55	21.55	19.96	19.96	16.82			
1200 S250-068	9.833	12	85.61	67.95	59.36	60.74	53.06	46.36	39.09	47.56	42.11	35.82	42.54	39.09	32.97	38.83	36.79	31.03	35							

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																								
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf								
			L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360					
1200 S250-087	6.136	12	96.94	67.94	67.21	68.78	60.08	52.49	44.27	54.59	47.69	40.22	50.68	44.22	37.34	47.69	41.66	35.14	39.57	33.38	37.85	31.92	38.41	35.14	29.64		
1200 S250-087	4.602	16	88.07	69.90	61.07	68.78	64.59	54.59	47.69	40.22	49.60	43.33	36.54	40.22	33.92	42.95	37.19	30.32	34.79	29.00	33.27	27.16	31.92	28.63	23.52		
1200 S250-087 (50ksi)	4.808	12	96.73	66.77	67.07	75.53	68.63	59.95	52.37	44.17	54.47	47.58	40.13	50.54	44.17	37.26	47.58	41.57	35.06	39.49	33.30	37.77	31.85	35.06	29.57		
1200 S250-087 (50ksi)	3.068	24	77.67	60.93	68.63	62.35	54.47	47.58	40.13	49.49	43.23	36.46	40.13	33.85	43.23	37.77	31.85	25.94	30.26	24.20	28.94	22.82	27.83	24.46	18.87		
1200 S250-118	7.422	12	102.95	81.71	71.38	80.39	73.47	63.81	55.74	47.01	57.97	50.64	42.72	53.82	47.01	39.65	50.64	44.24	37.32	48.11	42.03	35.45	46.01	40.20	33.90	28.60	
1200 S250-118 (50ksi)	5.567	16	93.54	74.24	64.85	73.04	66.36	57.97	50.64	42.72	52.67	46.01	38.81	48.90	42.72	36.03	46.01	40.20	33.90	33.90	33.90	33.90	33.90	33.90	33.90	28.60	
1200 S250-118 (50ksi)	3.711	24	81.71	64.85	56.66	63.81	57.97	50.64	44.24	37.32	46.01	40.20	33.90	42.72	37.32	31.47	40.20	35.12	29.62	33.36	28.13	35.48	31.90	28.91	24.98		
1200 S300-054*	3.602	12	82.35	65.39	57.12	68.23	58.23	51.06	47.54	44.61	37.62	41.17	40.63	34.18	36.83	31.73	33.62	29.86	31.12	31.12	28.37	29.11	29.11	27.13	26.04	25.19	
1200 S300-054* (50ksi)	2.022	16	71.31	59.41	51.90	50.43	50.43	46.39	41.17	40.63	37.62	31.06	31.89	28.83	29.11	29.11	27.13	26.95	26.95	26.95	26.95	26.95	26.95	26.95	26.95	22.55	
1200 S300-054* (50ksi)	1.801	24	58.23	51.90	45.34	41.17	41.17	40.53	33.62	33.62	29.86	29.11	29.11	27.13	26.04	26.04	25.19	23.77	23.77	23.77	23.77	23.77	23.77	23.77	23.77	18.41	
1200 S300-068	3.602	12	81.80	64.92	56.72	63.88	58.04	50.70	50.70	44.29	37.36	45.73	40.24	33.94	40.90	37.36	31.51	37.34	35.15	29.65	34.57	32.34	31.94	26.94	28.92	25.01	
1200 S300-068 (50ksi)	2.278	24	70.88	56.26	49.15	52.03	49.15	42.48	38.38	32.37	36.79	34.87	29.81	32.37	27.30	30.04	30.04	25.69	27.81	27.81	24.41	26.01	23.34	23.27	21.67		
1200 S300-068 (50ksi)	3.416	16	80.78	64.11	56.01	63.08	57.31	50.07	50.07	43.74	36.89	45.49	39.74	33.52	42.23	36.89	31.11	39.74	34.71	29.28	37.53	32.98	27.81	35.10	31.94	28.28	
1200 S300-068 (50ksi)	2.278	24	70.57	56.01	48.93	55.10	50.07	43.74	38.21	32.23	38.74	34.71	29.28	36.23	27.18	30.08	25.88	30.84	28.81	24.30	28.66	27.85	23.84	23.84	21.57		
1200 S300-087	4.861	16	91.02	72.24	63.11	71.08	64.58	56.41	49.28	41.25	51.25	44.77	37.76	45.66	41.56	35.06	44.77	39.11	32.99	42.53	37.16	31.34	26.94	30.29	27.82	24.31	
1200 S300-087 (50ksi)	3.241	24	79.51	63.11	55.13	62.09	56.41	49.28	43.06	36.31	44.77	39.11	32.99	41.56	36.31	30.63	39.10	34.17	28.82	32.46	27.38	23.86	21.04	26.18	24.31		
1200 S300-087 (50ksi)	6.481	12	100.18	79.51	69.46	78.23	71.08	62.09	54.24	45.75	56.41	49.28	41.56	52.37	45.75	38.59	49.28	43.05	36.31	40.89	34.49	28.94	23.99	31.91	32.99	30.63	
1200 S300-087 (50ksi)	4.861	16	91.02	72.24	63.11	71.08	64.58	56.41	49.28	41.25	51.25	44.77	37.76	45.66	41.56	35.06	44.77	39.11	32.99	42.53	37.16	31.34	26.94	30.29	27.82	24.31	
1200 S300-118	7.845	12	106.44	84.48	73.80	83.12	75.52	65.97	57.63	48.61	59.94	52.36	45.74	38.58	47.57	41.56	35.05	44.16	38.58	32.84	34.49	29.09	27.82	34.00	30.62	25.83	
1200 S300-118 (50ksi)	5.883	16	96.71	76.76	67.05	75.52	68.61	59.94	52.36	45.74	44.16	38.58	47.57	41.56	35.05	44.16	38.58	32.84	34.49	29.09	27.82	34.00	30.62	30.62	25.83	21.57	
1200 S350-054*	3.883	12	86.02	68.27	59.84	63.55	61.03	51.88	46.57	44.93	38.28	44.93	38.28	33.13	36.69	31.18	33.97	29.62	31.18	33.97	29.62	31.18	33.97	29.62	28.42	26.30	
1200 S350-054* (50ksi)	2.912	16	77.83	62.03	54.19	55.03	48.44	44.93	42.32	35.69	38.91	38.45	32.43	34.81	30.10	31.77	28.33	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	23.80	
1200 S350-054* (50ksi)	1.842	24	63.55	54.19	47.34	44.93	42.32	36.69	36.69	31.18	31.77	31.77	28.33	28.42	28.42	26.30	25.94	25.94	24.02	24.02	23.81	22.47	22.47	22.47	20.09	18.41	
1200 S350-068	3.883	12	85.50	67.86	59.28	66.76	60.66	52.99	46.29	39.04	48.15	42.06	35.47	44.56	39.04	32.93	40.68	36.74	30.99	37.66	34.40	28.94	23.99	31.91	30.99	26.14	
1200 S350-068 (50ksi)	2.912	16	77.68	61.65	53.86	60.66	55.11	48.15	42.06	35.47	43.14	38.21	32.23	38.59	35.47	29.92	33.38	28.16	31.71	26.75	30.51	30.33	25.58	27.29	23.75		
1200 S350-068 (50ksi)	1.942	24	67.86	53.86	47.05	49.82	48.15	42.06	40.68	36.74	30.99	26.14	28.76	28.76	26.14	26.14	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	20.75		
1200 S350-068 (50ksi)	4.865	12	92.57	73.46	64.19	72.29	65.66	57.38	50.12	42.28	52.13	45.54	38.41	48.16	42.28	35.66	43.98	39.78	33.55	40.72	37.79	31.87	38.09	36.15	30.49	25.83	
1200 S350-068 (50ksi)	3.649	16	84.11	66.76	58.32	65.68	59.68	52.13	45.54	38.41	46.65	41.38	34.90	41.72	38.41	32.40	38.09	36.15	30.63	35.26	34.34	28.96	32.99	32.84	27.70	23.50	
1200 S350-068 (50ksi)	2.433	24	73.48	58.32	50.95	53.87	48.15	45.54	43.98	39.78	33.55	30.49	31.10	31.10	28.96	28.79	28.79	26.93	26.93	26.93	26.93	26.93	26.93	26.93	26.93	22.46	
1200 S350-088	4.865	12	92.09	73.09	63.85	71.91	65.33	57.08	49.86	41.86	51.86	45.30	38.21	47.44	42.05	35.47	45.30	39.57	33.38	33.03	37.69	31.71	41.16	35.96	32.75	28.15	
1200 S350-088 (50ksi)	3.649	16	83.67	66.41	58.01	65.33	59.36	51.86	45.30	38.21	47.44	42.05	35.47	45.30	39.57	33.38	33.03	37.69	31.71	41.16	35.96	32.75	32.75	32.75	32.75	25.58	
1200 S350-088 (50ksi)	2.433	24	73.09	58.01	50.86	57.08	51.86	45.30	39.57	33.38	41.16	35.96	30.33	37.70	33.38	26.15	34.41	31.41	26.49	31.86	29.84	26.17	29.60	28.54	24.07	22.34	
1200 S350-087	5.146	16	93.99	74.60	65.17	73.39	66.68	58.25	50.89	42.92	52.93	46.24	39.00	48.13	42.92	36.20	46.24	40.39	37.50	43.92	38.37	33.36	42.01	36.70	30.95	28.73	
1200 S350-087 (50ksi)	3.862	12	83.01	65.17	56.93	64.12	58.25	50.89	46.24	39.00	47.50	42.92	37.50	43.92	37.50	31.62	35.28	29.76	33.33	33.52	28.27	34.92	32.06	27.04	31.23	29.76	25.10
1200 S350-087 (50ksi)	5.146	16	93.99	74.28	64.89	73.08	66.40	58.01	50.67	42.74	52.70	46.04	38.83	48.92	42.74	36.05	46.04	40.22	35.13	39.63	38.20	33.37	42.94	36.54	30.82	28.63	
1200 S350-087 (50ksi)	8.309	12	109.36	87.28	76.25	85.87	78.02	68.16	59.54	50.22	61.92	54.10	45.63	56.26	49.15	41.45	52.23	45.63	38.48	49.15	42.94	36.21	46.69	40.79	34.40	28.74	24.98
1200 S350-118	6.232	16	99.91	79.30	69.27	78.02	70.89	61.92	54.10	45.63	56.26	49.15	41.45	52.23	45.63	38.48	49.15	42.94	36.21	46.69	40.79	34.40	44.65	39.01	32.90	41.45	36.21
1200 S350-118 (50ksi)	4.155	24	87.28	69.27	60.52	68.16	61.92	54.10	47.26	39.86	49.15	42.94	36.21	45.63	38.48	33.62	42.94	37.51	31.64	40.79	35.63	30.05	38.90	34.08	28.74	31.64	26.68

TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																	
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf	
			L/120	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240	L/360	L/240
1200 S350-118 (50ksi)	8.309	12	109.96	77.26	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16	68.16
1400 S125-054*	2.976	16	99.91	79.30	69.27	60.52	68.16	61.92	54.10	47.26	39.86	49.15	42.94	36.21	31.64	40.79	35.63	30.05	25.04	22.39
1400 S125-054*	3.171	12	70.82	61.40	53.84	50.08	47.95	48.89	40.89	35.41	32.10	31.67	29.80	28.04	26.77	26.77	25.04	25.04	25.04	25.04
1400 S125-054*	1.586	24	50.08	48.74	42.57	35.41	35.41	28.91	28.91	25.04	25.04	22.39	22.39	20.44	20.44	18.93	18.93	17.70	17.70	15.84
1400 S125-054* (50ksi)	3.171	12	76.10	60.40	52.77	59.09	47.17	47.17	41.78	37.44	31.58	29.31	34.12	32.70	27.59	31.58	31.07	26.20	29.54	25.06
1400 S125-054* (50ksi)	2.976	16	69.14	54.86	47.94	51.17	49.06	42.85	41.78	37.44	31.58	29.31	34.12	32.70	27.59	31.58	31.07	26.20	29.54	25.06
1400 S125-068	3.968	12	89.07	67.03	58.56	59.24	59.24	52.44	48.37	45.73	38.57	41.89	41.54	35.04	34.20	30.61	31.66	29.08	26.82	23.81
1400 S125-068 (50ksi)	1.984	24	59.24	53.20	46.48	41.89	41.89	41.54	34.20	34.20	30.61	29.62	29.62	27.81	27.42	24.48	24.18	22.42	25.65	25.27
1400 S125-068 (50ksi)	2.976	16	75.65	60.05	52.46	53.68	46.89	46.89	40.96	40.96	34.55	42.46	37.22	31.39	37.98	34.55	29.14	28.07	25.84	24.91
1400 S125-068 (50ksi)	1.984	24	66.09	52.46	45.82	46.89	46.89	40.96	35.78	30.18	34.67	32.51	27.42	31.01	30.18	25.46	24.67	22.76	24.52	21.93
1400 S125-097	5.624	12	96.44	76.55	66.87	75.31	68.43	59.78	52.22	44.04	53.77	47.44	40.02	48.10	44.04	37.15	43.91	41.45	34.96	40.65
1400 S125-097 (50ksi)	4.218	16	87.63	69.55	60.76	65.86	62.17	54.31	53.77	47.44	40.02	46.57	43.11	36.36	41.65	40.02	33.75	38.02	37.66	31.76
1400 S125-097 (50ksi)	2.812	24	75.77	60.14	52.54	59.17	53.76	46.96	46.96	41.03	34.60	42.67	37.27	31.44	39.61	34.60	29.18	36.62	32.56	30.93
1400 S125-118	6.899	12	103.41	82.06	71.70	80.75	73.37	66.66	58.23	50.87	62.91	46.22	38.98	47.98	42.91	36.19	43.80	40.38	34.05	40.56
1400 S125-118 (50ksi)	5.174	16	93.95	74.57	65.14	73.37	66.66	58.23	50.87	42.91	46.22	38.98	47.98	42.91	36.19	43.80	40.38	34.05	40.56	37.93
1400 S125-118 (50ksi)	3.449	24	82.06	65.14	56.91	61.94	58.23	50.87	42.91	46.22	38.98	47.98	42.91	36.19	43.80	40.38	34.05	40.56	37.93	36.68
1400 S137-054*	6.899	12	103.34	82.02	71.65	80.69	73.32	64.05	55.95	47.19	58.19	50.83	42.88	54.02	47.19	39.80	50.83	44.41	37.45	48.29
1400 S137-054* (50ksi)	5.174	16	93.89	74.52	65.10	73.32	66.61	58.19	50.83	42.88	46.19	38.95	47.48	46.19	40.35	34.03	43.87	38.33	32.33	41.66
1400 S137-054* (50ksi)	3.449	24	82.02	65.10	56.87	64.05	58.19	50.83	42.88	46.19	40.35	34.03	43.87	38.33	33.48	28.24	36.66	32.02	27.01	32.91
1400 S137-054* (50ksi)	3.300	12	75.76	63.32	55.31	53.57	49.44	43.74	43.19	36.43	37.88	37.88	33.10	33.88	30.73	30.93	28.91	28.63	28.63	27.47
1400 S137-054* (50ksi)	2.475	16	65.61	57.53	49.30	47.88	46.39	44.92	37.88	37.88	33.10	32.80	32.80	29.34	29.34	26.27	26.78	26.27	24.80	24.80
1400 S137-054* (50ksi)	1.650	24	53.57	50.25	43.90	37.88	37.88	30.93	30.93	28.91	26.78	26.78	23.96	23.96	21.87	21.87	20.25	20.25	18.94	18.94
1400 S137-054* (50ksi)	3.300	12	78.40	62.38	54.50	61.37	55.76	48.71	42.56	35.89	44.26	38.66	30.27	36.75	33.76	33.76	32.08	32.08	27.06	31.83
1400 S137-054* (50ksi)	2.475	16	71.41	56.66	49.51	55.13	50.66	44.26	38.66	35.13	32.61	32.61	29.63	30.69	28.88	29.43	29.15	24.59	27.56	23.52
1400 S137-054* (50ksi)	1.650	24	62.38	49.51	43.25	45.01	44.26	38.66	36.75	33.76	28.49	31.83	30.69	25.88	28.47	24.03	25.99	22.61	24.06	21.48
1400 S137-068	4.150	12	87.33	69.31	60.55	62.97	61.96	54.12	47.28	39.88	44.53	42.96	36.23	39.83	33.64	36.36	31.65	33.66	30.07	31.49
1400 S137-068 (50ksi)	3.113	16	77.12	62.97	55.01	54.53	49.17	45.43	42.96	36.36	32.92	34.49	30.56	31.49	28.76	29.15	29.15	27.32	27.27	26.13
1400 S137-068 (50ksi)	2.075	24	62.97	55.01	48.06	44.53	42.96	36.36	36.36	31.49	31.49	28.76	28.16	26.70	25.71	25.71	23.80	23.80	22.26	22.26
1400 S137-068 (50ksi)	4.150	12	86.21	68.42	59.77	67.32	61.16	53.43	46.68	39.37	48.54	42.41	35.77	45.06	39.37	33.20	42.41	37.05	31.25	39.74
1400 S137-068 (50ksi)	3.113	16	78.32	62.17	54.31	61.16	55.57	48.54	42.41	35.77	44.11	38.53	32.50	40.72	35.77	30.17	33.66	28.39	34.41	31.97
1400 S137-068 (50ksi)	2.075	24	68.42	54.31	47.44	52.57	48.54	42.41	42.41	31.25	37.17	33.66	28.39	33.25	31.25	26.35	30.35	29.40	24.80	28.10
1400 S137-087	5.862	12	99.34	78.84	68.88	77.57	70.48	61.57	53.78	45.36	55.94	48.87	41.22	50.51	42.69	36.01	42.69	40.55	34.20	39.93
1400 S137-087 (50ksi)	4.397	16	90.25	71.63	62.58	69.16	64.03	55.94	48.87	41.22	48.91	44.40	37.45	43.74	41.22	34.76	39.93	38.79	32.71	36.97
1400 S137-087 (50ksi)	2.931	24	78.84	62.56	54.67	56.47	55.94	48.87	46.11	42.69	36.01	39.93	38.79	32.71	35.72	30.37	32.60	28.68	30.18	30.18
1400 S137-087 (50ksi)	5.862	12	98.41	78.11	68.23	76.85	69.82	60.99	53.28	44.94	55.42	48.41	40.83	51.44	44.94	37.90	48.41	42.29	35.67	45.99
1400 S137-087 (50ksi)	4.397	16	89.41	70.97	61.99	69.82	63.44	55.42	48.41	40.83	50.35	43.98	38.42	42.41	41.78	36.50	30.78	33.44	34.91	29.44
1400 S137-118	2.931	24	78.11	61.99	54.16	60.99	55.42	48.41	42.29	35.67	43.98	38.42	32.41	41.78	36.50	30.78	33.44	34.91	29.44	27.33
1400 S137-118 (50ksi)	7.173	12	106.28	84.36	73.69	82.99	75.40	65.87	57.54	48.10	55.56	48.53	40.94	52.28	45.67	38.52	48.84	43.38	36.59	45.69
1400 S137-118 (50ksi)	5.380	16	96.56	76.64	66.95	75.40	68.51	59.85	52.28	44.10	54.38	47.20	40.06	50.05	44.10	37.19	45.69	41.50	35.00	39.42
1400 S137-118 (50ksi)	3.587	24	84.36	66.95	58.49	64.61	59.85	52.28	45.67	38.52	45.69	41.50	35.00	40.86	38.52	32.49	37.30	36.25	30.57	34.54
1400 S137-118 (50ksi)	7.173	12	106.19	84.28	73.63	82.92	75.34	65.82	57.54	48.49	59.80	52.24	44.06	55.51	48.49	40.90	52.24	45.63	38.49	49.62
1400 S137-118 (50ksi)	5.380	16	96.48	76.58	66.90	75.34	68.45	59.80	52.24	44.06	54.33	47.46	40.03	44.06	37.16	47.46	41.46	34.97	45.63	48.08
1400 S137-118 (50ksi)	3.587	24	84.28	66.90	58.44	65.82	59.80	52.24	45.63	38.49	47.46	41.46	34.97	44.06	38.49	32.46	41.46	36.22	30.55	39.38
1400 S162-054*	3.431	12	80.02	65.23	56.98	66.58	60.94	46.20	44.50	37.53	40.01	40.01	34.10	35.79	31.65	32.67	32.67	29.79	30.24	30.24
1400 S162-054* (50ksi)	2.973	16	69.30	59.26	51.77	49.00	46.28	40.01	40.01	34.10	34.65	30.98	30.98	28.29	28.29	27.06	28.29	27.06	25.71	28.29
1400 S162-054* (50ksi)	1.716	24	58.58	51.77	45.23	40.01	40.01	34.10	34.10	30.98	30.98	28.29	27.06	28.29	27.06	25.71	28.29	27.06	25.71	28.29
1400 S162-054* (50ksi)	3.431	12	81.19	64.44	56.23	63.40	57.60	50.32	43.96	37.08	45.72	39.94	33.69	40.74	36.29	30.61	36.44	33.69	28.41	33.27
1400 S162-054* (50ksi)	2.973	16	73.76	58.55	51.15	57.60	52.33	45.72	39.94	33.69	40.74	36.29	30.61	36.44	33.69	28.41	33.27	31.70	26.74	30.80
1400 S162-054* (50ksi)	1.																			



TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c. in	Lateral Loading and Deflection Limits <sup>1,2</sup>																								
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf								
			L/120	L/240	L/360	L/480	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720	L/360	L/720			
1400 S162-068	4.301	12	89.64	71.15	62.17	63.60	55.56	46.66	44.10	40.94	46.66	44.10	37.19	37.19	34.53	38.10	38.10	32.49	35.27	35.27	30.86	32.99	32.99	29.52	29.52	25.51	27.41
	3.225	16	80.81	64.64	56.47	57.14	50.48	46.66	44.10	40.94	40.07	37.19	37.19	34.53	38.10	38.10	32.49	35.27	35.27	30.86	32.99	32.99	29.52	29.52	25.56	26.40	24.90
	2.150	24	65.98	56.47	49.33	46.66	44.10	38.10	38.10	32.49	32.99	29.52	29.52	25.51	29.51	27.41	26.94	24.94	24.50	23.33	23.33	20.87	20.87	18.27	20.87	20.87	17.07
	4.301	12	88.59	70.31	61.42	62.85	54.91	49.33	46.66	44.10	40.94	40.94	37.19	37.19	34.53	38.10	38.10	32.49	35.27	35.27	30.86	32.99	32.99	29.52	29.52	25.51	27.41
1400 S162-068 (50ksi)	3.225	16	80.49	63.86	55.81	56.54	49.89	43.58	43.58	38.07	38.07	32.11	32.11	27.08	31.93	30.22	25.49	29.56	28.70	24.21	21.62	21.62	18.27	18.27	15.11	16.61	
	2.150	24	102.17	81.09	70.84	79.78	72.49	63.32	55.32	46.66	46.66	39.35	48.28	43.91	37.03	41.71	36.18	41.82	39.89	33.65	37.40	37.40	31.03	31.03	26.14	27.43	
	4.578	16	92.82	73.67	64.36	67.43	65.86	57.53	50.26	42.39	51.21	45.66	38.51	45.81	42.39	35.75	41.82	39.89	33.65	38.71	37.99	31.96	36.21	30.57	32.39		
	3.052	24	81.09	64.36	56.22	59.14	57.53	50.26	48.28	43.91	41.82	39.89	33.65	37.03	34.14	34.14	29.39	31.61	27.92	29.57	26.70	26.70	22.45	24.39	20.87	22.45	
1400 S162-097	6.104	12	101.29	80.36	70.23	79.09	71.86	62.78	54.84	46.25	57.04	49.83	42.95	46.25	39.01	43.53	36.71	41.95	34.87	46.27	39.55	33.36	42.03	36.71	40.96	30.96	
	4.578	16	92.03	73.04	63.81	67.86	65.29	57.04	49.83	43.53	46.25	42.03	36.71	42.03	35.45	45.27	39.55	45.27	39.55	33.36	43.00	37.57	41.68	35.93	40.31		
	3.052	24	80.39	63.81	55.74	62.78	57.04	49.83	43.53	36.71	45.27	39.55	33.36	36.71	30.96	42.03	36.71	41.95	35.84	46.81	39.48	35.04	31.39	26.47	31.43		
	7.027	12	108.92	86.45	75.52	85.05	77.28	67.51	67.51	58.97	49.74	61.33	53.68	45.19	56.94	49.74	41.95	53.58	46.81	44.46	44.46	37.50	47.45	42.53	36.87	42.44	
1400 S162-118	5.570	16	98.96	78.54	68.61	77.28	70.21	61.33	53.58	45.19	55.73	48.68	41.06	51.73	45.19	47.45	42.53	35.87	43.93	40.40	34.07	41.09	36.84	32.59	36.75		
	3.713	24	86.45	68.61	59.94	67.10	61.33	53.58	45.19	39.48	47.45	42.53	35.87	42.44	39.48	33.30	38.74	37.15	31.33	35.87	35.29	29.76	33.55	28.47	30.01		
	7.427	12	108.82	86.37	75.45	84.98	77.21	67.45	67.45	58.92	49.70	61.28	53.63	45.15	56.89	49.70	41.91	53.53	46.76	44.42	37.47	48.64	42.49	35.84	45.15		
	5.570	16	98.87	78.47	68.55	77.21	70.15	61.28	53.53	45.15	56.68	48.64	41.02	51.69	45.15	38.08	48.64	42.49	35.84	46.20	40.36	34.04	44.19	38.60	32.56		
1400 S200-054*	3.173	24	86.37	68.56	59.89	67.46	61.28	53.53	45.15	48.64	42.49	35.84	45.15	39.44	33.27	42.49	37.12	31.31	40.36	35.26	29.74	38.60	33.72	28.44	31.31		
	3.579	12	82.87	67.38	58.96	58.60	58.60	52.61	47.85	45.96	38.77	41.44	41.44	35.22	37.06	37.06	32.70	33.83	30.77	31.32	29.23	29.23	25.90	27.96			
	2.682	16	71.77	61.22	53.48	50.75	47.80	41.44	41.44	35.22	35.89	35.89	32.00	32.10	29.71	29.30	27.13	27.13	26.56	25.37	25.37	22.21	22.21	19.20	22.70		
	1.788	24	58.60	53.48	46.72	41.44	41.44	33.83	33.83	30.77	29.30	29.30	26.21	26.21	23.92	23.92	22.15	22.15	20.72	20.72	18.53	18.53	15.53	18.53			
1400 S200-054* (50ksi)	2.682	16	76.46	60.69	53.02	57.90	54.25	47.39	47.28	41.40	34.92	40.94	37.61	31.73	36.62	34.92	29.45	33.43	32.86	27.71	30.95	26.33	28.95	25.18	25.90		
	1.788	24	68.80	53.02	46.31	47.28	41.40	38.60	36.17	30.50	33.43	32.86	27.71	29.90	25.73	27.30	24.21	25.27	23.00	23.64	21.14	21.14	18.44	20.42			
	4.507	12	92.67	73.56	64.25	69.94	65.75	57.44	50.16	42.32	49.45	45.59	38.45	44.23	42.32	35.69	40.38	39.82	33.59	37.38	31.91	34.97	30.52	31.28			
	3.380	16	84.20	66.83	58.38	60.57	59.74	52.18	48.45	45.59	42.83	34.97	38.31	38.31	32.10	32.10	28.33	34.97	30.52	32.38	28.99	30.28	27.23	27.09			
1400 S200-068 (50ksi)	2.253	24	72.90	57.86	50.55	56.93	51.72	45.18	45.18	39.47	38.29	40.55	35.86	30.25	32.79	33.29	28.08	33.11	31.53	26.42	30.76	25.10	28.67	24.48	25.65		
	4.420	16	105.73	82.52	73.31	82.57	75.02	65.53	57.25	48.28	59.54	52.01	43.87	55.27	51.05	45.44	48.28	40.72	51.05	45.44	38.32	41.28	36.40	44.21	31.82		
	3.213	24	83.92	66.61	58.19	62.53	59.54	52.01	51.05	45.44	38.32	44.21	41.28	34.82	39.55	38.32	32.32	36.10	36.06	30.42	33.42	28.89	31.26	27.64	27.96		
	6.426	12	104.91	83.26	72.74	81.92	74.43	65.02	56.80	47.91	59.08	51.61	43.53	54.84	47.91	40.41	45.08	38.02	49.02	42.82	36.12	46.89	40.96	34.55	43.53		
1400 S200-097 (50ksi)	4.820	16	95.31	75.66	66.09	74.43	67.62	59.08	51.61	43.53	53.67	46.89	39.55	49.83	43.53	36.71	46.89	40.96	34.55	44.54	38.91	32.82	42.60	37.22	31.39		
	3.213	24	83.26	66.09	57.73	65.02	59.08	51.61	45.08	38.02	46.89	40.96	34.53	43.53	36.71	46.89	39.55	35.78	30.18	38.91	33.99	28.67	37.22	32.51	27.42		
	7.845	12	112.95	89.64	78.31	88.20	80.13	70.00	61.15	51.58	63.60	55.56	46.86	59.04	51.58	43.50	55.56	48.54	40.94	52.78	46.11	38.69	50.17	44.10	37.19		
	5.883	16	102.82	81.45	71.15	80.13	72.81	63.60	55.56	46.86	57.79	50.48	42.58	53.64	46.86	39.53	50.17	44.10	37.19	46.45	41.89	35.33	43.45	40.07	33.79		
1400 S200-118 (50ksi)	3.922	24	89.64	71.15	62.16	70.00	63.60	55.56	48.54	40.94	50.17	44.10	37.19	44.87	40.94	34.53	40.96	38.52	32.49	37.92	36.59	30.87	36.47	35.00	29.52		
	7.845	12	112.83	89.56	78.24	88.11	80.06	69.93	61.09	51.53	63.54	55.51	46.82	58.99	51.53	43.46	55.51	48.49	40.90	52.73	46.06	38.85	50.43	44.06	37.16		
	5.883	16	102.52	81.37	71.08	80.06	72.74	63.54	55.51	46.82	42.54	53.59	46.82	39.49	50.43	44.06	37.16	47.91	41.85	35.30	45.82	40.03	33.76	42.54			
	3.922	24	89.56	71.08	62.10	69.93	63.54	55.51	48.49	40.94	50.43	44.06	37.16	46.82	40.90	34.49	44.06	38.49	32.46	41.81	36.56	30.84	40.03	34.97			
1400 S250-054*	3.779	12	84.56	70.24	61.36	69.80	54.85	48.82	47.92	40.42	42.28	42.28	36.72	37.82	37.82	34.09	34.52	34.52	32.08	31.96	30.47	29.90	29.90	26.74	28.74		
	2.835	16	73.23	63.82	55.75	57.78	49.84	42.28	42.28	36.72	36.62	36.62	33.36	33.36	30.97	29.90	29.90	26.68	27.68	25.89	25.89	23.16	23.16	20.87			
	1.890	24	59.80	55.75	48.70	42.28	42.28	34.52	34.52	30.08	29.90	29.90	26.74	26.74	24.41	24.41	22.60	22.60	20.14	21.14	21.14	18.91	18.91				
	3.779	12	87.09	69.12	60.39	68.01	61.79	53.98	47.15	39.77	48.56	42.84	36.14	43.44	39.77	33.54	39.65	37.43	31.57	35.55	29.99	34.34	34.00	28.68			
1400 S250-054* (50ksi)	2.835	16	79.13	62.80	54.96	59.48	56.14	49.04	48.56	42.84	36.14	42.06	38.93	32.83	37.62	34.00	34.00	28.88	31.79	29.74	29.74	26.06	26.06	23.16			
	1.890	24	68.68	54.86	47.93	48.56																					





TABLE 6 Limiting Heights for Structural Non-Bearing Wall Studs 1,2,3,4,5

Member Identification	Wt. lbs/ft <sup>2</sup>	Spc o.c.	Lateral Loading and Deflection Limits <sup>1,2</sup>																										
			f. 1.0 5.0 psf		f. 0.7 10 psf		f. 0.7 15 psf		f. 0.7 20 psf		f. 0.7 25 psf		f. 0.7 30 psf		f. 0.7 35 psf		f. 0.7 40 psf		f. 0.7 50 psf										
			L/120	L/240	L/360	L/180	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600						
1600 S200-068* (50ksi)	4.991	12	101.77	80.78	70.56	79.47	72.21	63.08	63.08	55.10	46.48	57.31	50.06	42.23	53.20	46.48	39.20	50.06	43.74	36.89	46.67	41.55	35.04	43.66	39.74	33.51	39.05	36.89	31.11
	3.744	16	92.47	73.39	64.11	72.21	65.60	57.31	57.31	50.06	43.74	36.89	43.66	39.74	33.51	39.05	36.89	31.11	35.64	34.71	29.28	33.00	32.97	27.81	30.87	27.81	26.60	27.61	24.69
1600 S200-087	7.118	12	117.78	93.48	81.86	91.97	83.56	73.00	73.00	63.77	53.78	66.32	57.94	48.87	60.48	53.78	45.36	55.21	50.61	42.89	51.11	48.08	40.55	47.81	45.99	38.79	42.76	42.89	36.01
	5.338	16	107.01	84.93	74.19	82.81	75.92	66.32	66.32	57.94	48.87	58.56	52.64	44.40	52.36	48.87	41.22	47.81	45.99	38.79	44.27	43.68	36.84	41.41	41.41	35.24	37.04	37.04	32.71
1600 S200-097 (50ksi)	7.118	12	116.64	92.56	80.87	91.08	82.75	72.29	72.29	63.15	53.27	65.68	57.38	48.39	60.97	53.27	44.93	53.04	39.04	39.04	33.81	36.14	32.19	33.81	30.78	30.78	30.24	30.24	28.58
	5.338	16	105.97	84.11	73.48	82.75	75.19	65.68	65.68	57.38	48.39	59.68	52.13	43.97	55.40	48.39	40.82	52.13	45.54	38.41	49.52	43.26	36.49	47.36	41.38	34.90	43.97	38.41	32.40
1600 S200-118	3.559	24	92.58	73.48	64.19	72.23	65.68	57.38	57.38	50.12	42.28	52.13	45.54	38.41	48.39	42.28	35.66	45.54	39.78	33.56	42.96	37.79	31.87	40.19	36.15	30.49	35.95	33.56	28.30
	6.517	16	114.97	91.25	79.72	89.78	81.57	71.26	71.26	62.25	54.38	66.15	57.79	48.74	62.25	52.50	44.28	54.53	49.41	41.67	50.49	46.93	39.59	47.23	44.89	37.86	42.24	41.67	35.15
1600 S200-118 (50ksi)	8.689	12	125.73	99.79	87.18	98.18	89.21	77.93	77.93	68.08	57.42	70.80	61.85	52.17	65.73	57.42	48.43	61.85	54.03	45.57	58.75	51.33	43.29	56.20	49.09	41.41	52.17	45.57	38.44
	6.517	16	114.24	90.67	79.21	89.21	81.05	70.80	70.80	61.85	52.17	64.33	56.20	47.40	59.72	52.17	44.00	56.20	49.09	41.41	53.38	46.63	39.33	51.06	44.60	37.62	47.40	41.41	34.92
	4.345	24	99.79	79.21	69.19	77.93	70.80	61.85	61.85	54.03	45.57	56.20	49.09	41.41	52.17	46.57	38.44	49.09	42.89	36.17	46.63	40.74	34.36	44.60	38.96	32.86	41.11	36.17	30.51

For S1: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 psf = 47.88 Pa.

Notes:

1. No reduction in lateral loading for bending or deflection has been used for 5 psf lateral load.
2. Lateral loading of 10 psf and greater have been multiplied by 0.70 for only deflection check per footnote "r", Table 1604.3 of 2006 IBC.
3. Studs have not been checked for web crippling. See Table 6A for allowable web crippling loads.
4. Members marked with \* require web stiffeners: the (h/t) web height to thickness ratios exceeding 200 but less than 260. See Web Stiffener Details.
5. Maximum shipping length is limited to 60 feet.

TABLE 6A--Allowable Web Crippling Loads for (Studs) S-Members and (Tracks) T-Members, kips

Member Depth-Thickness		EOF, End One Flange										IOF, Interior One Flange										ETF, End Two Flanges						ITF, Interior Two Flanges					
		$\Omega_w = 1.75$					$\phi = 90$					$\Omega_w = 1.65$					$\phi = 90$					$\Omega_w = 1.75$			$\phi = 90$			$\Omega_w = 1.75$			$\phi = 90$		
		C	$C_R$	$C_N$	Ch	Ch	C	$C_R$	$C_N$	Ch	Ch	C	$C_R$	$C_N$	Ch	Ch	C	$C_R$	$C_N$	Ch	Ch	C	$C_R$	$C_N$	Ch	C	$C_R$	$C_N$	Ch	C	$C_R$	$C_N$	Ch
		4	0.14	0.35	0.02	0.01	13	0.23	0.14	0.01	0.01	13	0.23	0.14	0.01	0.01	7.5	0.08	0.12	0.048	0.048	20	0.1	0.08	0.031	20	0.1	0.08	0.031	20	0.1	0.08	0.031
Depth	T, in.	mils	Fy	Radius	1.00	2.00	3.50	6.00	6.00	1.00	2.00	3.50	6.00	6.00	1.00	2.00	3.50	6.00	6.00	1.00	2.00	3.50	6.00	6.00	1.00	2.00	3.50	6.00	6.00	1.00	2.00	3.50	6.00
1.625	0.0346	33	33	0.0764	0.180	0.228	0.282	0.350	0.350	0.336	0.396	0.462	0.546	0.546	0.170	0.198	0.229	0.267	0.267	0.441	0.496	0.557	0.634	0.634	0.441	0.496	0.557	0.634	0.634	0.441	0.496	0.557	0.634
1.625	0.0451	43	33	0.0712	0.298	0.374	0.459	0.566	0.566	0.589	0.686	0.793	0.929	0.929	0.297	0.341	0.390	0.452	0.452	0.764	0.851	0.946	1.067	1.067	0.764	0.851	0.946	1.067	1.067	0.764	0.851	0.946	1.067
1.625	0.0566	54	33	0.0849	0.447	0.557	0.678	0.832	0.832	0.904	1.043	1.196	1.390	1.390	0.471	0.537	0.609	0.700	0.700	1.203	1.328	1.466	1.642	1.642	1.203	1.328	1.466	1.642	1.642	1.203	1.328	1.466	1.642
1.625	0.0566	54	50	0.0849	0.677	0.843	1.027	1.260	1.260	1.370	1.580	1.812	2.105	2.105	0.714	0.813	0.922	1.061	1.061	1.823	2.013	2.222	2.487	2.487	1.823	2.013	2.222	2.487	2.487	1.823	2.013	2.222	2.487
2.500	0.0346	33	33	0.0764	0.173	0.219	0.271	0.336	0.336	0.330	0.389	0.453	0.535	0.535	0.150	0.174	0.201	0.235	0.235	0.411	0.463	0.519	0.591	0.591	0.411	0.463	0.519	0.591	0.591	0.411	0.463	0.519	0.591
2.500	0.0451	43	33	0.0712	0.287	0.361	0.443	0.547	0.547	0.580	0.675	0.780	0.913	0.913	0.267	0.307	0.351	0.407	0.407	0.720	0.802	0.892	1.006	1.006	0.720	0.802	0.892	1.006	1.006	0.720	0.802	0.892	1.006
2.500	0.0566	54	33	0.0849	0.433	0.540	0.657	0.806	0.806	0.891	1.028	1.178	1.369	1.369	0.430	0.490	0.556	0.639	0.639	1.142	1.261	1.392	1.558	1.558	1.142	1.261	1.392	1.558	1.558	1.142	1.261	1.392	1.558
2.500	0.0566	54	50	0.0849	0.656	0.817	0.996	1.222	1.222	1.350	1.557	1.785	2.075	2.075	0.652	0.742	0.842	0.968	0.968	1.730	1.910	2.109	2.361	2.361	1.730	1.910	2.109	2.361	2.361	1.730	1.910	2.109	2.361
2.500	0.0713	68	33	0.1069	0.654	0.807	0.977	1.191	1.191	1.368	1.563	1.778	2.050	2.050	0.693	0.782	0.880	1.004	1.004	1.815	1.988	2.179	2.421	2.421	1.815	1.988	2.179	2.421	2.421	1.815	1.988	2.179	2.421
2.500	0.0713	68	50	0.1069	0.990	1.223	1.480	1.805	1.805	2.073	2.368	2.694	3.106	3.106	1.049	1.184	1.333	1.521	1.521	2.750	3.012	3.302	3.669	3.669	2.750	3.012	3.302	3.669	3.669	2.750	3.012	3.302	3.669
2.500	0.1017	97	33	0.1525	1.236	1.504	1.799	2.173	2.173	2.657	2.993	3.363	3.832	3.832	1.430	1.592	1.771	1.997	1.997	3.694	4.001	4.340	4.768	4.768	3.694	4.001	4.340	4.768	4.768	3.694	4.001	4.340	4.768
2.500	0.1017	97	50	0.1525	1.872	2.278	2.726	3.293	3.293	4.025	4.534	5.095	5.806	5.806	2.167	2.412	2.683	3.026	3.026	5.598	6.063	6.575	7.225	7.225	5.598	6.063	6.575	7.225	7.225	5.598	6.063	6.575	7.225
3.500	0.0346	33	33	0.0764	0.166	0.211	0.260	0.323	0.323	0.324	0.382	0.445	0.526	0.526	0.131	0.152	0.175	0.205	0.205	0.384	0.432	0.484	0.551	0.551	0.384	0.432	0.484	0.551	0.551	0.384	0.432	0.484	0.551
3.500	0.0451	43	33	0.0712	0.278	0.349	0.428	0.528	0.528	0.571	0.665	0.768	0.900	0.900	0.240	0.275	0.315	0.365	0.365	0.680	0.757	0.842	0.949	0.949	0.680	0.757	0.842	0.949	0.949	0.680	0.757	0.842	0.949
3.500	0.0566	54	33	0.0849	0.420	0.524	0.638	0.783	0.783	0.879	1.014	1.162	1.351	1.351	0.392	0.447	0.507	0.583	0.583	1.086	1.199	1.324	1.482	1.482	1.086	1.199	1.324	1.482	1.482	1.086	1.199	1.324	1.482
3.500	0.0566	54	50	0.0849	0.637	0.794	0.967	1.186	1.186	1.331	1.536	1.761	2.046	2.046	0.594	0.677	0.768	0.883	0.883	1.645	1.816	2.005	2.245	2.245	1.645	1.816	2.005	2.245	2.245	1.645	1.816	2.005	2.245
3.500	0.0713	68	33	0.1069	0.637	0.786	0.951	1.160	1.160	1.351	1.544	1.756	2.025	2.025	0.640	0.723	0.813	0.928	0.928	1.737	1.902	2.085	2.317	2.317	1.737	1.902	2.085	2.317	2.317	1.737	1.902	2.085	2.317
3.500	0.0713	68	50	0.1069	0.965	1.191	1.441	1.758	1.758	2.047	2.339	2.661	3.068	3.068	0.970	1.095	1.232	1.406	1.406	2.631	2.882	3.159	3.510	3.510	2.631	2.882	3.159	3.510	3.510	2.631	2.882	3.159	3.510
3.500	0.1017	97	33	0.1525	1.209	1.471	1.760	2.126	2.126	2.629	2.961	3.328	3.792	3.792	1.343	1.495	1.663	1.876	1.876	3.562	3.858	4.184	4.597	4.597	3.562	3.858	4.184	4.597	4.597	3.562	3.858	4.184	4.597
3.500	0.1017	97	50	0.1525	1.831	2.228	2.666	3.221	3.221	3.983	4.487	5.042	5.745	5.745	2.035	2.266	2.520	2.842	2.842	5.397	5.845	6.339	6.966	6.966	5.397	5.845	6.339	6.966	6.966	5.397	5.845	6.339	6.966
3.625	0.0346	33	33	0.0764	0.165	0.210	0.259	0.322	0.322	0.323	0.381	0.444	0.525	0.525	0.129	0.149	0.173	0.202	0.202	0.381	0.428	0.480	0.547	0.547	0.381	0.428	0.480	0.547	0.547	0.381	0.428	0.480	0.547
3.625	0.0451	43	33	0.0712	0.277	0.348	0.427	0.526	0.526	0.570	0.664	0.767	0.898	0.898	0.236	0.272	0.311	0.360	0.360	0.675	0.752	0.836	0.943	0.943	0.675	0.752	0.836	0.943	0.943	0.675	0.752	0.836	0.943
3.625	0.0566	54	33	0.0849	0.419	0.522	0.636	0.780	0.780	0.877	1.012	1.160	1.348	1.348	0.388	0.442	0.501	0.577	0.577	1.079	1.192	1.316	1.473	1.473	1.079	1.192	1.316	1.473	1.473	1.079	1.192	1.316	1.473
3.625	0.0566	54	50	0.0849	0.634	0.791	0.963	1.182	1.182	1.329	1.533	1.758	2.043	2.043	0.588	0.670	0.760	0.874	0.874	1.635	1.806	1.994	2.232	2.232	1.635	1.806	1.994	2.232	2.232	1.635	1.806	1.994	2.232
3.625	0.0713	68	33	0.1069	0.635	0.784	0.948	1.157	1.157	1.349	1.542	1.754	2.022	2.022	0.635	0.716	0.806	0.920	0.920	1.728	1.893	2.074	2.305	2.305	1.728	1.893	2.074	2.305	2.305	1.728	1.893	2.074	2.305
3.625	0.0713	68	50	0.1069	0.962	1.188	1.437	1.753	1.753	2.044	2.336	2.657	3.064	3.064	0.961	1.085	1.221	1.393	1.393	2.618	2.868	3.143	3.492	3.492	2.618	2.868	3.143	3.492	3.492	2.618	2.868	3.143	3.492
3.625	0.1017	97	33	0.1525	1.206	1.467	1.755	2.120	2.120	2.626	2.958	3.324	3.787	3.787	1.333	1.484	1.651	1.862	1.862	3.547	3.842	4.166	4.578	4.578	3.547	3.842	4.166	4.578	4.578	3.547	3.842	4.166	4.578
3.625	0.1017	97	50	0.1525	1.827	2.223	2.659	3.212	3.212	3.979	4.481	5.036	5.738	5.738	2.020	2.249	2.501	2.821	2.821	5.374	5.821	6.313	6.936	6.936	5.374	5.821	6.313	6.936	6.936	5.374	5.821	6.313	6.936

TABLE 6A--Allowable Web Crippling Loads for (Studs) S-Members and (Tracks) T-Members, kips

Member Depth-Thickness		EOF, End One Flange												IOF, Interior One Flange						ETF, End Two Flanges						ITF, Interior Two Flanges					
		Ωw = 1.75			Φ = 90			Ωw = 1.65			Φ = 90			Ωw = 1.75			Φ = 90			Ωw = 1.75			Φ = 90								
		C	C <sub>R</sub>	C <sub>N</sub>	Ch	C	C <sub>R</sub>	C <sub>N</sub>	Ch	C	C <sub>R</sub>	C <sub>N</sub>	Ch	C	C <sub>R</sub>	C <sub>N</sub>	Ch	C	C <sub>R</sub>	C <sub>N</sub>	Ch	C	C <sub>R</sub>	C <sub>N</sub>	Ch						
		4	0.14	0.35	0.02	13	0.23	0.14	0.01	7.5	0.08	0.12	0.048	20	0.1	0.08	0.031	N Bearing Length, in.													
Depth	T, in.	mils	Fy	Radius	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00							
4.000	0.0346	33	33	0.0764	0.163	0.207	0.256	0.317	0.322	0.379	0.442	0.522	0.122	0.142	0.164	0.192	0.372	0.418	0.469	0.534											
4.000	0.0451	43	33	0.0712	0.274	0.344	0.422	0.520	0.567	0.660	0.763	0.893	0.227	0.261	0.299	0.346	0.662	0.737	0.819	0.924											
4.000	0.0566	54	33	0.0849	0.415	0.517	0.629	0.772	0.873	1.007	1.155	1.342	0.376	0.428	0.485	0.558	1.061	1.171	1.293	1.448											
4.000	0.0566	54	50	0.0849	0.628	0.783	0.954	1.170	1.323	1.526	1.750	2.034	0.569	0.648	0.735	0.846	1.607	1.775	1.960	2.194											
4.000	0.0713	68	33	0.1069	0.629	0.777	0.940	1.147	1.344	1.535	1.746	2.014	0.617	0.697	0.784	0.895	1.702	1.865	2.044	2.271											
4.000	0.0713	68	50	0.1069	0.953	1.177	1.424	1.737	2.036	2.326	2.646	3.051	0.936	1.056	1.188	1.356	2.579	2.825	3.097	3.441											
4.000	0.1017	97	33	0.1525	1.197	1.456	1.742	2.105	2.617	2.948	3.312	3.774	1.305	1.453	1.616	1.823	3.504	3.795	4.116	4.523											
4.000	0.1017	97	50	0.1525	1.814	2.207	2.640	3.189	3.965	4.466	5.018	5.718	1.978	2.202	2.448	2.761	5.309	5.750	6.236	6.853											
5.500	0.0346	33	33	0.0764	0.155	0.197	0.243	0.302	0.315	0.371	0.432	0.511	0.100	0.116	0.134	0.157	0.339	0.382	0.428	0.487											
5.500	0.0451	43	33	0.0712	0.262	0.330	0.405	0.499	0.556	0.648	0.749	0.877	0.195	0.224	0.256	0.297	0.614	0.684	0.760	0.858											
5.500	0.0566	54	33	0.0849	0.400	0.498	0.607	0.745	0.859	0.991	1.136	1.320	0.331	0.378	0.428	0.493	0.995	1.099	1.213	1.358											
5.500	0.0566	54	50	0.0849	0.606	0.755	0.920	1.128	1.302	1.501	1.722	2.001	0.502	0.572	0.649	0.746	1.508	1.665	1.838	2.058											
5.500	0.0713	68	33	0.1069	0.609	0.753	0.911	1.111	1.324	1.513	1.721	1.985	0.557	0.628	0.707	0.807	1.611	1.765	1.934	2.149											
5.500	0.0713	68	50	0.1069	0.923	1.140	1.380	1.683	2.007	2.293	2.608	3.007	0.844	0.952	1.071	1.223	2.441	2.674	2.931	3.256											
5.500	0.1017	97	33	0.1525	1.166	1.419	1.697	2.050	2.585	2.912	3.272	3.728	1.205	1.342	1.492	1.683	3.352	3.630	3.937	4.326											
5.500	0.1017	97	50	0.1525	1.766	2.149	2.571	3.106	3.917	4.412	4.957	5.649	1.826	2.033	2.261	2.550	5.079	5.500	5.966	6.555											
6.000	0.0346	33	33	0.0764	0.153	0.194	0.240	0.297	0.313	0.368	0.430	0.507	0.093	0.108	0.125	0.146	0.330	0.371	0.416	0.473											
6.000	0.0451	43	33	0.0712	0.259	0.326	0.400	0.493	0.553	0.644	0.745	0.872	0.185	0.213	0.243	0.282	0.600	0.668	0.743	0.838											
6.000	0.0566	54	33	0.0849	0.395	0.493	0.600	0.736	0.855	0.986	1.131	1.314	0.318	0.362	0.411	0.473	0.975	1.077	1.189	1.331											
6.000	0.0566	54	50	0.0849	0.599	0.747	0.909	1.116	1.295	1.494	1.713	1.991	0.482	0.549	0.623	0.716	1.478	1.632	1.802	2.017											
6.000	0.0713	68	33	0.1069	0.604	0.745	0.902	1.100	1.319	1.506	1.714	1.976	0.539	0.608	0.684	0.781	1.584	1.735	1.901	2.113											
6.000	0.0713	68	50	0.1069	0.914	1.129	1.366	1.666	1.998	2.283	2.596	2.994	0.816	0.921	1.036	1.183	2.399	2.628	2.881	3.201											
6.000	0.1017	97	33	0.1525	1.157	1.407	1.684	2.034	2.576	2.901	3.260	3.714	1.175	1.309	1.455	1.641	3.306	3.581	3.884	4.268											
6.000	0.1017	97	50	0.1525	1.752	2.132	2.551	3.081	3.902	4.395	4.939	5.628	1.781	1.983	2.205	2.487	5.010	5.426	5.885	6.466											
6.000	0.1242	118	33	0.1863	1.669	2.013	2.393	2.874	3.760	4.203	4.691	5.310	1.805	1.995	2.204	2.469	4.986	5.368	5.789	6.323											
6.000	0.1242	118	50	0.1863	2.528	3.050	3.625	4.354	5.698	6.369	7.108	8.046	2.734	3.022	3.339	3.741	7.555	8.134	8.772	9.581											





**TABLE 6A--Allowable Web Crippling Loads for (Studs) S-Members and (Tracks) T-Members, kips**

Member Depth-Thickness		EOF, End One Flange				IOF, Interior One Flange				ETF, End Two Flanges				ITF, Interior Two Flanges						
		$\Omega_w = 1.75$		$\phi = 90$		$\Omega_w = 1.65$		$\phi = 90$		$\Omega_w = 1.75$		$\phi = 90$		$\Omega_w = 1.75$		$\phi = 90$				
		C	$C_R$	$C_N$	Ch	C	$C_R$	C	Ch	C	$C_R$	C	Ch	C	$C_R$	C	Ch			
Depth	T, in.	mils	Fy	Radius	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00	1.00	2.00	3.50	6.00
14.000	0.0713	68	33	0.1069	0.531	0.656	0.793	0.968	1.247	1.425	1.621	1.869	0.316	0.356	0.401	0.458	1.249	1.368	1.500	1.666
14.000	0.0713	68	50	0.1069	0.805	0.994	1.202	1.466	1.890	2.159	2.456	2.832	0.479	0.540	0.608	0.694	1.892	2.073	2.272	2.525
14.000	0.1017	97	33	0.1525	1.044	1.270	1.519	1.835	2.460	2.770	3.113	3.547	0.812	0.904	1.005	1.134	2.753	2.982	3.234	3.553
14.000	0.1017	97	50	0.1525	1.581	1.924	2.302	2.780	3.727	4.198	4.717	5.375	1.230	1.370	1.523	1.718	4.171	4.518	4.900	5.384
14.000	0.1242	118	33	0.1863	1.523	1.837	2.183	2.622	3.608	4.032	4.501	5.094	1.324	1.463	1.617	1.811	4.249	4.574	4.933	5.388
14.000	0.1242	118	50	0.1863	2.307	2.783	3.308	3.973	5.466	6.110	6.819	7.719	2.006	2.217	2.449	2.744	6.437	6.931	7.474	8.164
16.000	0.1017	97	33	0.1525	1.021	1.242	1.486	1.796	2.437	2.745	3.084	3.514	0.740	0.824	0.916	1.033	2.644	2.863	3.105	3.412
16.000	0.1017	97	50	0.1525	1.547	1.883	2.252	2.721	3.692	4.159	4.673	5.325	1.121	1.248	1.388	1.566	4.005	4.338	4.705	5.170
16.000	0.1242	118	33	0.1863	1.494	1.802	2.142	2.573	3.577	3.999	4.463	5.052	1.229	1.358	1.501	1.681	4.103	4.418	4.764	5.204
16.000	0.1242	118	50	0.1863	2.263	2.731	3.245	3.898	5.420	6.059	6.762	7.654	1.862	2.058	2.274	2.548	6.217	6.693	7.219	7.884

Notes:

1. The above coefficients apply when  $h/t < 200$ ,  $N/t < 210$ ,  $N/h < 2.0$
2. Coefficient from 2001 NASPEC Table C3.4.1-2, Single Web Channel and C-Sections, Flange Fastened to Support.
3. NASPEC Eq. C3.4.1-1 used to calculate ASD values--Web Crippling Strength of Webs without Holes.
4. When a web hole is within the bearing length, a bearing stiffener shall be added.
5. When web hole is within 10" to end of member use NASPEC Section C3.4.2 for reduction factor.
6. Web Crippling does not have to be checked if Members require Web Stiffeners. See Web Stiffener Details.

## Design Example 1:

Stud height = 20 ft  
 Stud spacing = 16 in  
 Deflection criteria =  $L/600$  Mid span deflection =  $(20 \text{ ft} \times 12 \text{ in/ft})/600 = 0.40 \text{ in}$   
 Lateral loading = 30 psf Wind Load:

From Table 6 the possible choices are as follows:

Member ID	Limiting Height, ft	Weight lbs/ft <sup>2</sup>	Remarks
600S300-118	20.32	3.983	
800S125-118	20.86	3.274	
800S137-097	20.26	2.841	
800S162-097	21.02	3.022	
800S200-097	21.96	3.264	
800S250-068	20.53	2.489	
800S300-068	21.38	2.689	
<b><u>800S350-054</u></b>	<b><u>20.63</u></b>	<b><u>2.335</u></b>	Best choice if member depth limited to 8"
1000S125-068	21.10	2.249	
<b><u>1000S137-054</u></b>	<b><u>20.15</u></b>	<b><u>1.898</u></b>	Least weight & usually least cost
1000S162-054	20.82	1.996	
1000S200-054	21.57	2.104	
1000S250-043*	21.04	1.801	Least weight but Web Stiffener are required.

### Web Crippling Check

Stud height, L = 20 ft  
 Stud spacing = 16 in  
 Lateral loading = 30 psf  
 Uniform Load w = 21.3 lbs/ft

Check for member 1000S137-054

Member depth = 10.0 in  
 Member thickness = 54.0 mils

Calculate reaction for wind load:

Reaction  $R = w \cdot L / 2 = 213 \text{ lbs} = 0.213 \text{ kips} < 0.365 \text{ kips from Table 6A OK}$   
 Track Leg = 1 inch

### Select Member 1000S137-054

**Table 6 Verification Calculations**

Member Identification	Max o, k-in	leff, in 4	Vay, k	Spc o.c. in	Lateral Loading			
					Def. Coef. DC= 0.7			
					L/ 240	L/ 360	L/ 480	
	<b>29.896</b>	<b>8.7354</b>	<b>1.660</b>	<b>12</b>	<b>25.78</b>	<b>25.78</b>	<b>23.89</b>	<b>22.18</b>
			f(Maxo)=		25.78	25.78	25.78	25.78
			f(lxe)=		30.10	26.29	23.89	22.18
			f(Vay)=		110.67	110.67	110.67	110.67
				<b>16</b>	<b>22.32</b>	<b>22.32</b>	<b>21.71</b>	<b>20.15</b>
			f(Maxo)=		22.32	22.32	22.32	22.32
			f(lxe)=		27.35	23.89	21.71	20.15
			f(Vay)=		83.00	83.00	83.00	83.00
				<b>24</b>	<b>18.23</b>	<b>18.23</b>	<b>18.23</b>	<b>17.60</b>
			f(Maxo)=		18.23	18.23	18.23	18.23
			f(lxe)=		23.89	20.87	18.96	17.60
			f(Vay)=		55.33	55.33	55.33	55.33

**1000 S137-054 (33ksi)**

**Input Items marked in Blue**

**Ca lcu l a tio ns f o r T a ble 6**  
 Maxo = 29.896 k-in  $L = (8 * \text{Maxo} / w) \wedge 0.5 = 22.32 \text{ ft}$   
 leff = 8.735 in<sup>4</sup>  $L = [(384 * E * I_{xe}) / (120, 180, 240, 360) * DC * 5 * w] \wedge (1/3) = 20.15 \text{ ft}$   
 Vay = 1.660 k  $L = 2 * V_{ay} / w = 83.00 \text{ ft}$   
 Load = 30 psf  
 Spc = 16 in  
 w = 40.00 plf  
 E = 29500 ksi  
 L/X, X = 600  
 DC = 0.7  
 Note: Code allows wind load to be multiplied by 0.7 for deflection check, but not strength check per 2006 IBC, Table 1604.3, footnote "f".  
 Minimum L = 20.15 ft

**Table 6A Verification Calculations**

**Input items shown in Blue**

<b>End One Flange loading</b>			
N Bearing Length, in.			
<b>1.00</b>	<b>2.00</b>	<b>3.50</b>	<b>6.00</b>
Table C3.4.1-2 Single Web channel and C-Sections			
$\Omega_w =$	<b>1.75</b>	$\Phi =$	<b>90</b>
C	$C_R$	$C_N$	Ch
<b>4</b>	<b>0.14</b>	<b>0.35</b>	<b>0.02</b>

NASPEC: Section C3.4 Web Crippling

C3.4.1 Web Crippling Strength (Resistance) of Webs without Holes

Basic Formula: Eq. C3.4.1-1

$$P_n = C \cdot t^2 \cdot F_y \cdot \sin \Phi \cdot [1 - C_R \cdot (R/t)^{0.5}] \cdot [1 + C_N \cdot (N/t)^{0.5}] \cdot [1 - Ch \cdot (h/t)^{0.5}]$$

<b>Example: Member 1000Sxxx-54</b>			
Depth	Thickness	F <sub>y</sub> , psi	Radius R
<b>10.00</b>	<b>0.0566</b>	<b>33000</b>	<b>0.0849</b>

R/t=	1.5000			
N=	1.00	2.00	3.50	6.00
N/t=	17.668	35.336	61.837	106.007
h=	9.717			
h/t ≤ 200	171.7			
N/t ≤ 210	17.7	35.3	61.8	106.0
N/h ≤ 2.0	0.1	0.2	0.4	0.6
P <sub>n</sub> =	639	796	970	1190
P <sub>n</sub> /Ω <sub>w</sub> =	<b>365</b>	<b>455</b>	<b>554</b>	<b>680</b>

**Checks with Table 6A**

**Table 6A Verification Calculations**

<b>Interior One Flange loading</b>			
N Bearing Length, in.			
1.00	2.00	3.50	6.00
Table C3.4.1-2 Single Web channel and C-Sections			
$\Omega_w =$	1.65	$\Phi =$	90
C	$C_R$	$C_N$	Ch
<b>13</b>	<b>0.23</b>	<b>0.14</b>	<b>0.01</b>

NASPEC: Section C3.4 Web Crippling

C3.4.1 Web Crippling Strength (Resistance) of Webs without Holes

Basic Formula: Eq. C3.4.1-1

$$P_n = C \cdot t^2 \cdot F_y \cdot \sin \Phi \cdot [1 - C_R \cdot (R/t)^{0.5}] \cdot [1 + C_N \cdot (N/t)^{0.5}] \cdot [1 - C_h \cdot (h/t)^{0.5}]$$

<b>Example: Member 1000Sxxx-54</b>			
Depth	Thickness	F <sub>y</sub> , psi	Radius R
10.00	0.0566	33000	0.0849

R/t=	1.5000			
N=	1.00	2.00	3.50	6.00
N/t=	17.668	35.336	61.837	106.007
h=	9.717			
h/t ≤ 200	171.7			
N/t ≤ 210	17.7	35.3	61.8	106.0
N/h ≤ 2.0	0.1	0.2	0.4	0.6
P <sub>n</sub> =	1363	1572	1802	2094
P <sub>n</sub> /Ω <sub>w</sub> =	<b>826</b>	<b>953</b>	<b>1092</b>	<b>1269</b>

Checks with Table 6A

**Table 6A Verification Calculations**

<b>End Two Flange loading</b>			
N Bearing Length, in.			
1.00	2.00	3.50	6.00
Table C3.4.1-2 Single Web channel and C-Sections			
$\Omega_w =$	1.75	$\Phi =$	90
C	$C_R$	$C_N$	Ch
<b>7.5</b>	<b>0.08</b>	<b>0.12</b>	<b>0.048</b>

NASPEC: Section C3.4 Web Crippling

C3.4.1 Web Crippling Strength (Resistance) of Webs without Holes

Basic Formula: Eq. C3.4.1-1

$$P_n = C \cdot t^2 \cdot F_y \cdot \sin \Phi \cdot [1 - C_R \cdot (R/t)^{0.5}] \cdot [1 + C_N \cdot (N/t)^{0.5}] \cdot [1 - C_h \cdot (h/t)^{0.5}]$$

<b>Example: Member 1000Sxxx-54</b>			
Depth	Thickness	F <sub>y</sub> , psi	Radius R
10.00	0.0566	33000	0.0849

R/t= 1.5000

N=	1.00	2.00	3.50	6.00
N/t=	17.668	35.336	61.837	106.007

h= 9.717

h/t ≤ 200 171.7

N/t ≤ 210 17.7 35.3 61.8 106.0

N/h ≤ 2.0 0.1 0.2 0.4 0.6

P<sub>n</sub>= 399 455 516 593

P<sub>n</sub>/Ω<sub>w</sub>= **228** **260** **295** **339**

**Checks with Table 6A**

**Table 6A Verification Calculations**

<b>Interior Two Flange loading</b>			
N Bearing Length, in.			
1.00	2.00	3.50	6.00
Table C3.4.1-2 Single Web channel and C-Sections			
$\Omega_w =$	1.75	$\Phi =$	90
C	$C_R$	$C_N$	Ch
<b>20</b>	<b>0.1</b>	<b>0.08</b>	<b>0.031</b>

NASPEC: Section C3.4 Web Crippling

C3.4.1 Web Crippling Strength (Resistance) of Webs without Holes

Basic Formula: Eq. C3.4.1-1

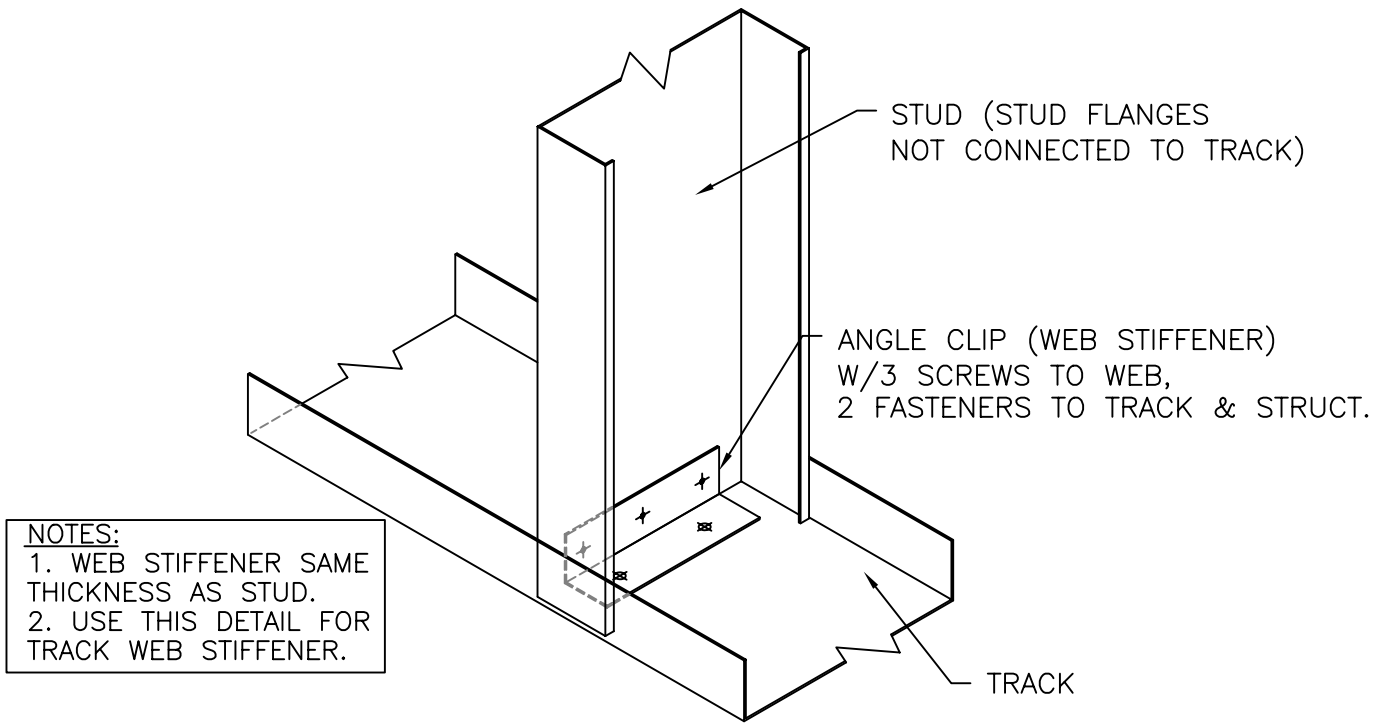
$$P_n = C \cdot t^2 \cdot F_y \cdot \sin \Phi \cdot [1 - C_R \cdot (R/t)^{0.5}] \cdot [1 + C_N \cdot (N/t)^{0.5}] \cdot [1 - C_h \cdot (h/t)^{0.5}]$$

<b>Example: Member 1000Sxxx-54</b>			
Depth	Thickness	$F_y$ , psi	Radius R
10.00	0.0566	33000	0.0849

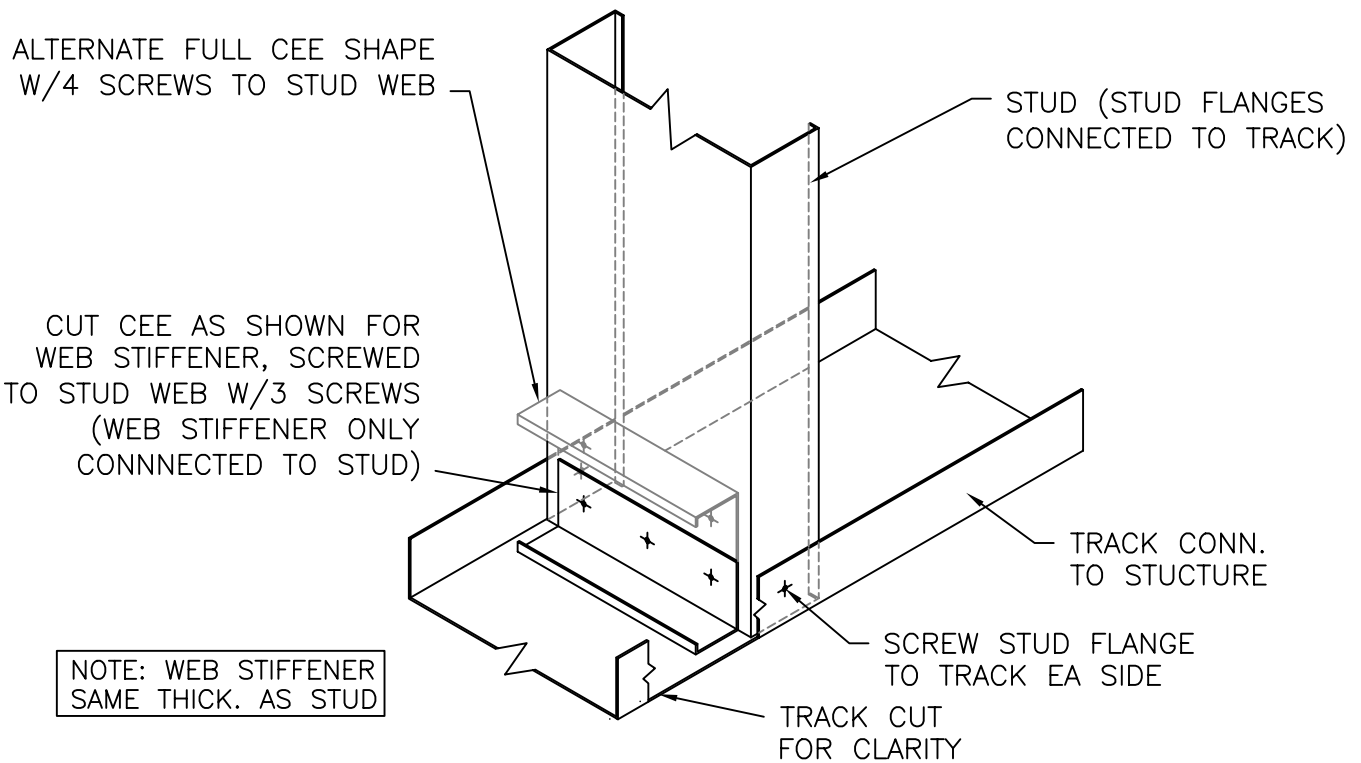
R/t=	1.5000			
N=	1.00	2.00	3.50	6.00
N/t=	17.668	35.336	61.837	106.007
h=	9.717			
$h/t \leq 200$	171.7			
$N/t \leq 210$	17.7	35.3	61.8	106.0
$N/h \leq 2.0$	0.1	0.2	0.4	0.6
$P_n =$	1472	1626	1795	2009
$P_n / \Omega_w =$	<b>841</b>	<b>929</b>	<b>1026</b>	<b>1148</b>

Checks with Table 6A

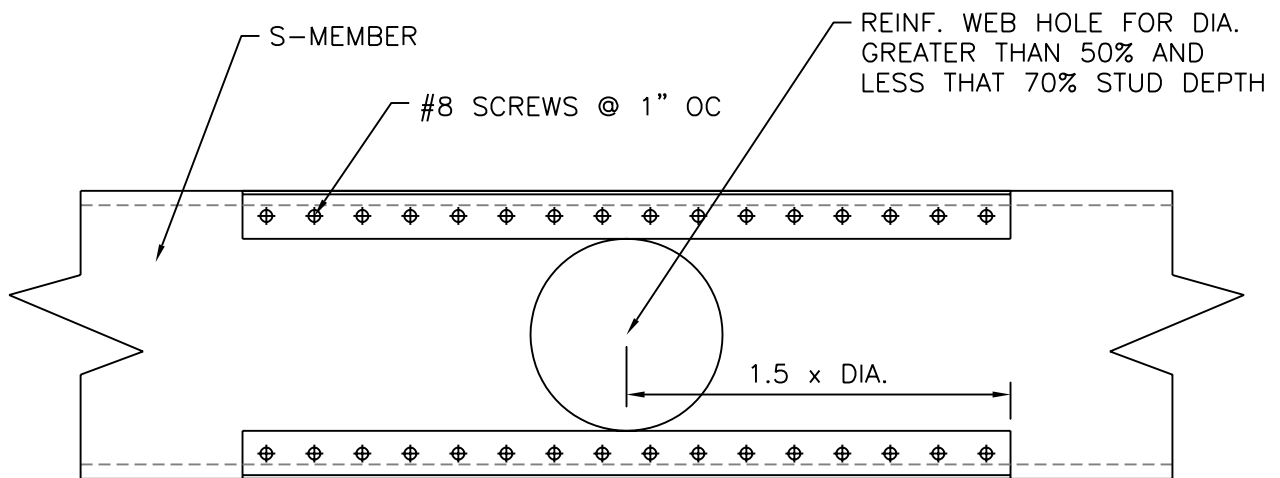
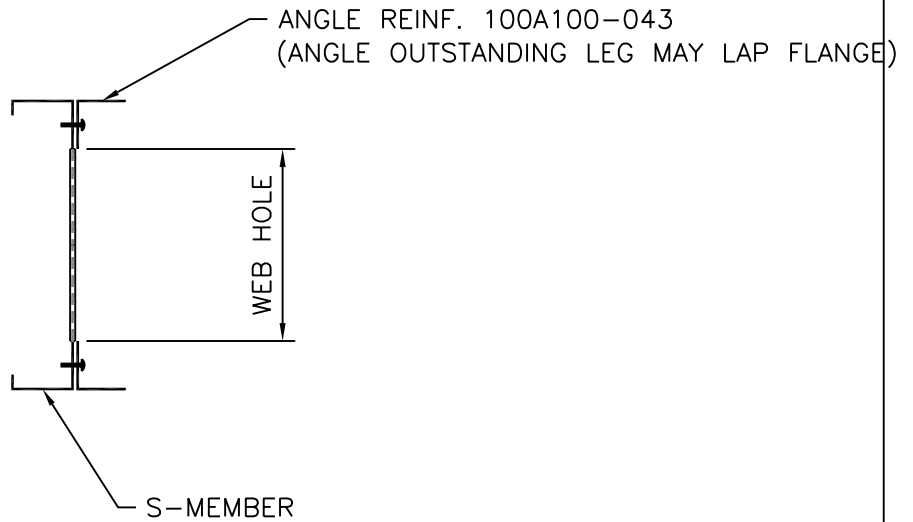




DETAIL A (Angle Clip Web Stiffener)



DETAIL A (Cee or Cut Cee Web Stiffener)



RECOMMENDED WEB HOLE REINFORCING DETAIL

NOTES

1. WEB REINFORCING IS NOT REQUIRED FOR WEB HOLES UP TO 50% OF THE MEMBER DEPTH.
2. WEB HOLES SHALL NOT BE LOCATED WITHIN 10 INCHES OF STANDARD HOLE PUNCHOUTS. PUNCHOUTS SHALL BE REINFORCED WITH A PLATE IF THIS OCCURS.
3. WEB HOLES SHOULD BE LOCATED AT CENTER OF WEB AND THE EDGE OF THE HOLE NO CLOSER THAT 12 INCHES FROM ENDS.
4. WEB HOLES SPACING MINIMUM OF 3 TIMES DIAMETER CL TO CL.

WEB HOLE REINFORCING DETAIL

DATE: 1-13-2011

SHEET: SK-1

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
162 S125-018	0.2742	12	9.18	8.47	7.69	6.72
	0.2056	16	7.95	7.69	6.99	6.11
	0.1371	24	6.49	6.49	6.11	5.33
162 S125-024	0.3671	12	10.91	9.53	8.66	7.56
	0.2753	16	9.89	8.66	7.86	6.87
	0.1836	24	8.08	7.56	6.87	6.00
162 S125-024 (50ksi)	0.3671	12	10.75	9.39	8.53	7.45
	0.2753	16	9.77	8.53	7.75	6.77
	0.1836	24	8.53	7.45	6.77	5.92
162 S125-027	0.4090	12	11.30	9.87	8.97	7.84
	0.3068	16	10.27	8.97	8.15	7.12
	0.2045	24	8.47	7.84	7.12	6.22
162 S125-030	0.4497	12	11.65	10.18	9.25	8.08
	0.3373	16	10.59	9.25	8.40	7.34
	0.2248	24	9.05	8.08	7.34	6.41
162 S125-033	0.4971	12	12.04	10.52	9.55	8.35
	0.3728	16	10.94	9.55	8.68	7.58
	0.2486	24	9.55	8.35	7.58	6.63
162 S137-024	0.3983	12	11.28	9.85	8.95	7.82
	0.2987	16	10.24	8.95	8.13	7.10
	0.1991	24	8.49	7.82	7.10	6.21
162 S137-024 (50ksi)	0.3983	12	11.08	9.68	8.79	7.68
	0.2987	16	10.06	8.79	7.99	6.98
	0.1991	24	8.79	7.68	6.98	6.10
162 S137-027	0.4542	12	11.78	10.29	9.35	8.17
	0.3407	16	10.71	9.35	8.50	7.42
	0.2271	24	9.20	8.17	7.42	6.48
162 S137-030	0.4996	12	12.15	10.61	9.64	8.42
	0.3747	16	11.04	9.64	8.76	7.65
	0.2498	24	9.64	8.42	7.65	6.69
162 S137-033	0.5524	12	12.55	10.96	9.96	8.70
	0.4143	16	11.40	9.96	9.05	7.90
	0.2762	24	9.96	8.70	7.90	6.90
162 S150-024	0.4243	12	11.56	10.10	9.18	8.02
	0.3182	16	10.50	9.18	8.34	7.28
	0.2122	24	8.74	8.02	7.28	6.36
162 S150-024 (50ksi)	0.4243	12	11.34	9.90	9.00	7.86
	0.3182	16	10.30	9.00	8.17	7.14
	0.2122	24	9.00	7.86	7.14	6.24
162 S162-024	0.4454	12	11.70	10.23	9.29	8.12
	0.3340	16	10.63	9.29	8.44	7.37
	0.2227	24	8.80	8.12	7.37	6.44
162 S162-024 (50ksi)	0.4454	12	11.49	10.04	9.12	7.97
	0.3340	16	10.44	9.12	8.29	7.24
	0.2227	24	9.12	7.97	7.24	6.33
162 S162-027	0.5081	12	12.31	10.76	9.77	8.54
	0.3811	16	11.19	9.77	8.88	7.76
	0.2541	24	9.55	8.54	7.76	6.78
162 S162-030	0.5590	12	12.71	11.10	10.08	8.81
	0.4192	16	11.54	10.08	9.16	8.00
	0.2795	24	10.08	8.81	8.00	6.99
162 S162-033	0.6183	12	13.14	11.48	10.43	9.11
	0.4637	16	11.94	10.43	9.47	8.28
	0.3091	24	10.43	9.11	8.28	7.23

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
250 S125-018	0.3301	12	11.76	11.76	10.68	9.33
	0.2476	16	10.18	10.18	9.71	8.48
	0.1650	24	8.31	8.31	8.31	7.41
250 S125-024	0.4407	12	14.78	13.18	11.97	10.46
	0.3305	16	12.80	11.97	10.88	9.50
	0.2204	24	10.45	10.45	9.50	8.30
250 S125-024 (50ksi)	0.4407	12	14.92	13.04	11.84	10.35
	0.3305	16	13.56	11.84	10.76	9.40
	0.2204	24	11.84	10.35	9.40	8.21
250 S125-027	0.4932	12	15.61	13.65	12.40	10.83
	0.3699	16	13.52	12.40	11.27	9.84
	0.2466	24	11.04	10.83	9.84	8.60
250 S125-030	0.5425	12	16.12	14.08	12.79	11.17
	0.4069	16	14.48	12.79	11.62	10.15
	0.2713	24	11.82	11.17	10.15	8.87
250 S125-033	0.6001	12	16.66	14.55	13.22	11.55
	0.4500	16	15.14	13.22	12.01	10.49
	0.3000	24	12.69	11.55	10.49	9.17
250 S137-024	0.4719	12	15.51	13.61	12.37	10.80
	0.3539	16	13.43	12.37	11.24	9.82
	0.2359	24	10.96	10.80	9.82	8.57
250 S137-024 (50ksi)	0.4719	12	15.34	13.40	12.17	10.63
	0.3539	16	13.94	12.17	11.06	9.66
	0.2359	24	12.17	10.63	9.66	8.44
250 S137-027	0.5384	12	16.29	14.23	12.93	11.30
	0.4038	16	14.62	12.93	11.75	10.26
	0.2692	24	11.94	11.30	10.26	8.97
250 S137-030	0.5924	12	16.80	14.68	13.34	11.65
	0.4443	16	15.27	13.34	12.12	10.59
	0.2962	24	12.74	11.65	10.59	9.25
250 S137-033	0.6553	12	17.36	15.17	13.78	12.04
	0.4915	16	15.77	13.78	12.52	10.94
	0.3277	24	13.71	12.04	10.94	9.55
250 S150-024	0.4979	12	15.95	13.93	12.66	11.06
	0.3734	16	13.81	12.66	11.50	10.05
	0.2490	24	11.28	11.06	10.05	8.78
250 S150-024 (50ksi)	0.4979	12	15.68	13.70	12.45	10.87
	0.3734	16	14.25	12.45	11.31	9.88
	0.2490	24	12.45	10.87	9.88	8.63
250 S162-024	0.5190	12	16.04	14.09	12.80	11.18
	0.3892	16	13.89	12.80	11.63	10.16
	0.2595	24	11.34	11.18	10.16	8.88
250 S162-024 (50ksi)	0.5190	12	15.88	13.88	12.61	11.01
	0.3892	16	14.43	12.61	11.45	10.01
	0.2595	24	12.61	11.01	10.01	8.74
250 S162-027	0.5923	12	16.95	14.81	13.46	11.76
	0.4442	16	15.14	13.46	12.23	10.68
	0.2962	24	12.36	11.76	10.68	9.33
250 S162-030	0.6518	12	17.51	15.29	13.89	12.14
	0.4888	16	15.90	13.89	12.62	11.03
	0.3259	24	13.16	12.14	11.03	9.63
250 S162-033	0.7212	12	18.12	15.83	14.38	12.56
	0.5409	16	16.46	14.38	13.06	11.41
	0.3606	24	14.03	12.56	11.41	9.97

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
350 S125-018	0.3940	12	14.20	14.20	13.91	12.15
	0.2955	16	12.30	12.30	12.30	11.04
	0.1970	24	10.04	10.04	10.04	9.64
350 S125-024	0.5249	12	17.95	17.08	15.52	13.55
	0.3936	16	15.54	15.52	14.10	12.32
	0.2624	24	12.69	12.69	12.32	10.76
350 S125-024 (50ksi)	0.5249	12	19.42	16.97	15.42	13.47
	0.3936	16	17.65	15.42	14.01	12.24
	0.2624	24	14.64	13.47	12.24	10.69
350 S125-027	0.5894	12	19.06	17.69	16.07	14.04
	0.4421	16	16.50	16.07	14.60	12.75
	0.2947	24	13.47	13.47	12.75	11.14
350 S125-030	0.6486	12	20.47	18.25	16.58	14.49
	0.4864	16	17.73	16.58	15.07	13.16
	0.3243	24	14.47	14.47	13.16	11.50
350 S125-033	0.7177	12	21.61	18.87	17.15	14.98
	0.5383	16	19.12	17.15	15.58	13.61
	0.3588	24	15.62	14.98	13.61	11.89
350 S137-024	0.5560	12	18.81	17.62	16.01	13.99
	0.4170	16	16.29	16.01	14.55	12.71
	0.2780	24	13.30	13.30	12.71	11.10
350 S137-024 (50ksi)	0.5560	12	19.92	17.40	15.81	13.81
	0.4170	16	18.10	15.81	14.37	12.55
	0.2780	24	15.31	13.81	12.55	10.96
350 S137-027	0.6347	12	20.55	18.41	16.72	14.61
	0.4760	16	17.80	16.72	15.19	13.27
	0.3173	24	14.53	14.53	13.27	11.60
350 S137-030	0.6985	12	21.74	18.99	17.25	15.07
	0.5238	16	19.04	17.25	15.68	13.70
	0.3492	24	15.55	15.07	13.70	11.96
350 S137-033	0.7730	12	22.47	19.63	17.83	15.58
	0.5797	16	20.41	17.83	16.20	14.15
	0.3865	24	16.80	15.58	14.15	12.37
350 S150-024	0.5820	12	19.34	18.01	16.36	14.29
	0.4365	16	16.75	16.36	14.86	12.99
	0.2910	24	13.67	13.67	12.99	11.34
350 S150-024 (50ksi)	0.5820	12	20.32	17.75	16.13	14.09
	0.4365	16	18.46	16.13	14.65	12.80
	0.2910	24	15.70	14.09	12.80	11.18
350 S162-024	0.6031	12	19.44	18.21	16.54	14.45
	0.4523	16	16.83	16.54	15.03	13.13
	0.3015	24	13.74	13.74	13.13	11.47
350 S162-024 (50ksi)	0.6031	12	20.56	17.96	16.32	14.25
	0.4523	16	18.68	16.32	14.83	12.95
	0.3015	24	15.75	14.25	12.95	11.31
350 S162-027	0.6885	12	21.24	19.11	17.36	15.16
	0.5164	16	18.40	17.36	15.77	13.78
	0.3443	24	15.02	15.02	13.78	12.04
350 S162-030	0.7579	12	22.59	19.73	17.93	15.66
	0.5684	16	19.63	17.93	16.29	14.23
	0.3789	24	16.03	15.66	14.23	12.43
350 S162-033	0.8389	12	23.38	20.43	18.56	16.21
	0.6291	16	21.02	18.56	16.86	14.73
	0.4194	24	17.16	16.21	14.73	12.87

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
350 S200-030	0.8417	12	23.21	20.47	18.59	16.24
	0.6312	16	20.10	18.59	16.89	14.76
	0.4208	24	16.41	16.24	14.76	12.89
350 S200-033	0.9318	12	24.42	21.34	19.39	16.93
	0.6989	16	21.57	19.39	17.61	15.39
	0.4659	24	17.61	16.93	15.39	13.44
362 S125-018	0.4020	12	14.48	14.48	14.30	12.49
	0.3015	16	12.54	12.54	12.54	11.35
	0.2010	24	10.24	10.24	10.24	9.92
362 S125-024	0.5354	12	18.31	17.55	15.95	13.93
	0.4015	16	15.86	15.86	14.49	12.66
	0.2677	24	12.95	12.95	12.66	11.06
362 S125-024 (50ksi)	0.5354	12	19.97	17.45	15.85	13.85
	0.4015	16	18.14	15.85	14.40	12.58
	0.2677	24	14.93	13.85	12.58	10.99
362 S125-027	0.6015	12	19.45	18.18	16.52	14.43
	0.4511	16	16.85	16.52	15.01	13.11
	0.3007	24	13.76	13.76	13.11	11.45
362 S125-030	0.6619	12	20.90	18.76	17.05	14.89
	0.4964	16	18.10	17.05	15.49	13.53
	0.3309	24	14.78	14.78	13.53	11.82
362 S125-033	0.7324	12	22.21	19.40	17.63	15.40
	0.5493	16	19.53	17.63	16.02	13.99
	0.3662	24	15.95	15.40	13.99	12.22
362 S137-024	0.5665	12	19.19	18.11	16.45	14.37
	0.4249	16	16.61	16.45	14.95	13.06
	0.2832	24	13.57	13.57	13.06	11.41
362 S137-024 (50ksi)	0.5665	12	20.48	17.89	16.26	14.20
	0.4249	16	18.61	16.26	14.77	12.90
	0.2832	24	15.61	14.20	12.90	11.27
362 S137-027	0.6467	12	20.97	18.91	17.18	15.01
	0.4850	16	18.16	17.18	15.61	13.64
	0.3233	24	14.83	14.83	13.64	11.91
362 S137-030	0.7117	12	22.34	19.51	17.73	15.49
	0.5338	16	19.44	17.73	16.11	14.07
	0.3559	24	15.87	15.49	14.07	12.29
362 S137-033	0.7877	12	23.09	20.17	18.33	16.01
	0.5908	16	20.98	18.33	16.65	14.55
	0.3938	24	17.15	16.01	14.55	12.71
362 S150-024	0.5926	12	19.73	18.50	16.81	14.68
	0.4444	16	17.08	16.81	15.27	13.34
	0.2963	24	13.95	13.95	13.34	11.66
362 S150-024 (50ksi)	0.5926	12	20.88	18.24	16.57	14.48
	0.4444	16	18.97	16.57	15.06	13.15
	0.2963	24	16.01	14.48	13.15	11.49
362 S162-024	0.6136	12	19.82	18.71	17.00	14.85
	0.4602	16	17.17	17.00	15.45	13.49
	0.3068	24	14.02	14.02	13.49	11.79
362 S162-024 (50ksi)	0.6136	12	21.13	18.46	16.77	14.65
	0.4602	16	19.19	16.77	15.23	13.31
	0.3068	24	16.06	14.65	13.31	11.63
362 S162-027	0.7006	12	21.68	19.63	17.83	15.58
	0.5254	16	18.77	17.83	16.20	14.15
	0.3503	24	15.33	15.33	14.15	12.36

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
362 S162-030	0.7711	12	23.13	20.27	18.42	16.09
	0.5783	16	20.04	18.42	16.73	14.62
	0.3856	24	16.36	16.09	14.62	12.77
362 S162-033	0.8536	12	24.02	20.98	19.07	16.66
	0.6402	16	21.46	19.07	17.32	15.13
	0.4268	24	17.52	16.66	15.13	13.22
362 S200-030	0.8549	12	23.69	21.02	19.10	16.68
	0.6412	16	20.51	19.10	17.35	15.16
	0.4275	24	16.75	16.68	15.16	13.24
362 S200-033	0.9465	12	25.09	21.92	19.91	17.39
	0.7099	16	22.02	19.91	18.09	15.80
	0.4733	24	17.98	17.39	15.80	13.81
400 S125-018*	0.4260	12	15.29	15.29	15.29	13.52
	0.3195	16	13.24	13.24	13.24	12.28
	0.2130	24	10.81	10.81	10.81	10.73
400 S125-024	0.5669	12	19.36	18.97	17.23	15.05
	0.4252	16	16.77	16.77	15.66	13.68
	0.2835	24	13.69	13.69	13.68	11.95
400 S125-024 (50ksi)	0.5669	12	21.60	18.87	17.15	14.98
	0.4252	16	19.32	17.15	15.58	13.61
	0.2835	24	15.78	14.98	13.61	11.89
400 S125-027	0.6352	12	20.60	19.61	17.81	15.56
	0.4764	16	17.84	17.81	16.18	14.14
	0.3176	24	14.56	14.56	14.14	12.35
400 S125-030	0.7016	12	22.15	20.27	18.42	16.09
	0.5262	16	19.18	18.42	16.73	14.62
	0.3508	24	15.66	15.66	14.62	12.77
400 S125-033	0.7765	12	23.93	20.97	19.05	16.64
	0.5824	16	20.72	19.05	17.31	15.12
	0.3883	24	16.92	16.64	15.12	13.21
400 S137-024	0.5980	12	20.28	19.55	17.76	15.52
	0.4485	16	17.56	17.56	16.14	14.10
	0.2990	24	14.34	14.34	14.10	12.32
400 S137-024 (50ksi)	0.5980	12	22.15	19.35	17.58	15.36
	0.4485	16	20.13	17.58	15.97	13.95
	0.2990	24	16.49	15.36	13.95	12.19
400 S137-027	0.6828	12	22.19	20.42	18.55	16.20
	0.5121	16	19.22	18.55	16.85	14.72
	0.3414	24	15.69	15.69	14.72	12.86
400 S137-030	0.7515	12	23.76	21.07	19.14	16.72
	0.5636	16	20.58	19.14	17.39	15.19
	0.3757	24	16.80	16.72	15.19	13.27
400 S137-033	0.8318	12	24.93	21.78	19.79	17.28
	0.6239	16	22.26	19.79	17.98	15.70
	0.4159	24	18.18	17.28	15.70	13.72
400 S150-024	0.6241	12	20.85	19.97	18.14	15.85
	0.4681	16	18.05	18.05	16.49	14.40
	0.3121	24	14.74	14.74	14.40	12.58
400 S150-024 (50ksi)	0.6241	12	22.55	19.70	17.90	15.64
	0.4681	16	20.49	17.90	16.26	14.21
	0.3121	24	16.91	15.64	14.21	12.41
400 S162-024	0.6451	12	20.95	20.21	18.36	16.04
	0.4838	16	18.14	18.14	16.68	14.57
	0.3226	24	14.81	14.81	14.57	12.73

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
400 S162-024 (50ksi)	0.6451	12	22.81	19.93	18.11	15.82
	0.4838	16	20.73	18.11	16.45	14.37
	0.3226	24	16.96	15.82	14.37	12.55
400 S162-027	0.7367	12	22.93	21.17	19.23	16.80
	0.5525	16	19.86	19.23	17.48	15.27
	0.3683	24	16.21	16.21	15.27	13.34
400 S162-030	0.8109	12	24.49	21.87	19.87	17.36
	0.6082	16	21.21	19.87	18.05	15.77
	0.4054	24	17.31	17.31	15.77	13.78
400 S162-033	0.8977	12	25.92	22.64	20.57	17.97
	0.6733	16	22.73	20.57	18.69	16.33
	0.4488	24	18.56	17.97	16.33	14.26
400 S200-030	0.8947	12	25.06	22.67	20.60	17.99
	0.6710	16	21.71	20.60	18.71	16.35
	0.4474	24	17.72	17.72	16.35	14.28
400 S200-033	0.9906	12	26.92	23.62	21.46	18.75
	0.7430	16	23.31	21.46	19.50	17.04
	0.4953	24	19.04	18.75	17.04	14.88
550 S125-024*	0.6931	12	23.65	23.65	21.88	19.12
	0.5198	16	20.48	20.48	19.88	17.37
	0.3466	24	16.72	16.72	16.72	15.17
550 S125-024* (50ksi)	0.6931	12	27.05	23.63	21.47	18.76
	0.5198	16	23.59	21.47	19.51	17.04
	0.3466	24	19.26	18.76	17.04	14.89
550 S125-027	0.7795	12	25.27	25.13	22.83	19.94
	0.5846	16	21.89	21.89	20.74	18.12
	0.3898	24	17.87	17.87	17.87	15.83
550 S125-030	0.8608	12	27.19	26.05	23.67	20.68
	0.6456	16	23.54	23.54	21.51	18.79
	0.4304	24	19.22	19.22	18.79	16.41
550 S125-033	0.9530	12	29.38	27.04	24.57	21.46
	0.7147	16	25.44	24.57	22.32	19.50
	0.4765	24	20.77	20.77	19.50	17.03
550 S137-024*	0.7242	12	24.87	24.87	22.83	19.95
	0.5432	16	21.54	21.54	20.74	18.12
	0.3621	24	17.59	17.59	17.59	15.83
550 S137-024* (50ksi)	0.7242	12	28.38	24.97	22.68	19.82
	0.5432	16	24.58	22.68	20.61	18.00
	0.3621	24	20.07	19.82	18.00	15.73
550 S137-027	0.8271	12	27.98	26.25	23.85	20.83
	0.6203	16	24.24	23.85	21.67	18.93
	0.4135	24	19.79	19.79	18.93	16.54
550 S137-030	0.9106	12	30.74	27.09	24.61	21.50
	0.6830	16	26.62	24.61	22.36	19.54
	0.4553	24	21.74	21.50	19.54	17.07
550 S137-033	1.0083	12	32.06	28.01	25.45	22.23
	0.7562	16	28.96	25.45	23.12	20.20
	0.5042	24	23.65	22.23	20.20	17.65
550 S150-024*	0.7503	12	25.50	25.50	23.28	20.34
	0.5627	16	22.08	22.08	21.15	18.48
	0.3751	24	18.03	18.03	18.03	16.14
550 S150-024* (50ksi)	0.7503	12	29.01	25.34	23.03	20.12
	0.5627	16	25.18	23.03	20.92	18.28
	0.3751	24	20.56	20.12	18.28	15.97

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011



Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
550 S162-024*	0.7713	12	25.49	25.49	23.58	20.60
	0.5785	16	22.07	22.07	21.42	18.71
	0.3857	24	18.02	18.02	18.02	16.35
550 S162-024* (50ksi)	0.7713	12	29.16	25.61	23.27	20.33
	0.5785	16	25.26	23.27	21.14	18.47
	0.3857	24	20.62	20.33	18.47	16.13
550 S162-027*	0.8810	12	28.58	27.11	24.63	21.52
	0.6607	16	24.75	24.63	22.38	19.55
	0.4405	24	20.21	20.21	19.55	17.08
550 S162-030	0.9700	12	31.19	27.97	25.42	22.20
	0.7275	16	27.01	25.42	23.09	20.17
	0.4850	24	22.06	22.06	20.17	17.62
550 S162-033	1.0741	12	33.11	28.93	26.28	22.96
	0.8056	16	29.58	26.28	23.88	20.86
	0.5371	24	24.15	22.96	20.86	18.22
550 S200-030	1.0538	12	31.35	28.89	26.25	22.93
	0.7904	16	27.15	26.25	23.85	20.83
	0.5269	24	22.17	22.17	20.83	18.20
550 S200-033	1.1671	12	34.30	29.96	27.22	23.78
	0.8753	16	29.84	27.22	24.73	21.61
	0.5836	24	24.36	23.78	21.61	18.87
600 S125-024*	0.7352	12	24.79	24.79	23.38	20.42
	0.5514	16	21.47	21.47	21.24	18.55
	0.3676	24	17.53	17.53	17.53	16.21
600 S125-024* (50ksi)	0.7352	12	28.54	25.22	22.92	20.02
	0.5514	16	24.71	22.92	20.82	18.19
	0.3676	24	20.18	20.02	18.19	15.89
600 S125-027*	0.8300	12	26.52	26.52	24.37	21.29
	0.6225	16	22.97	22.97	22.14	19.34
	0.4150	24	18.75	18.75	18.75	16.90
600 S125-030	0.9138	12	28.55	27.78	25.24	22.05
	0.6853	16	24.73	24.73	22.93	20.03
	0.4569	24	20.19	20.19	20.03	17.50
600 S125-033	1.0118	12	30.88	28.84	26.20	22.89
	0.7589	16	26.74	26.20	23.81	20.80
	0.5059	24	21.83	21.83	20.80	18.17
600 S137-024*	0.7663	12	25.88	25.88	24.08	21.03
	0.5747	16	22.42	22.42	21.88	19.11
	0.3832	24	18.30	18.30	18.30	16.69
600 S137-024* (50ksi)	0.7663	12	29.54	25.81	23.45	20.48
	0.5747	16	25.75	23.45	21.30	18.61
	0.3832	24	21.03	20.48	18.61	16.26
600 S137-027*	0.8752	12	28.39	27.82	25.28	22.08
	0.6564	16	24.59	24.59	22.97	20.06
	0.4376	24	20.08	20.08	20.06	17.53
600 S137-030	0.9637	12	30.45	28.80	26.17	22.86
	0.7227	16	26.37	26.17	23.77	20.77
	0.4818	24	21.53	21.53	20.77	18.14
600 S137-033	1.0671	12	32.97	29.86	27.13	23.70
	0.8003	16	28.55	27.13	24.65	21.53
	0.5336	24	23.31	23.31	21.53	18.81
600 S150-024*	0.7923	12	26.57	26.57	24.95	21.80
	0.5942	16	23.01	23.01	22.67	19.80
	0.3962	24	18.79	18.79	18.79	17.30

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs 10-11-2011

Table 7--Limiting Heights: Interior Non-Bearing Wall Studs (ft) <sup>1,2,3</sup>						
Member Identification	Wt/sf	Spc o.c. in	Lateral Loading and Deflection Limits			
			5 psf			
			L/ 120	L/ 180	L/ 240	L/ 360
600 S150-024* (50ksi)	0.7923	12	30.46	27.01	24.54	21.44
	0.5942	16	26.38	24.54	22.30	19.48
	0.3962	24	21.54	21.44	19.48	17.01
600 S162-024*	0.8134	12	26.69	26.69	25.27	22.07
	0.6100	16	23.12	23.12	22.96	20.06
	0.4067	24	18.87	18.87	18.87	17.52
600 S162-024* (50ksi)	0.8134	12	30.55	27.23	24.74	21.61
	0.6100	16	26.46	24.74	22.48	19.64
	0.4067	24	21.60	21.60	19.64	17.16
600 S162-027*	0.9291	12	29.72	29.07	26.41	23.07
	0.6968	16	25.73	25.73	23.99	20.96
	0.4645	24	21.01	21.01	20.96	18.31
600 S162-030	1.0231	12	32.37	30.00	27.26	23.81
	0.7673	16	28.04	27.26	24.77	21.63
	0.5116	24	22.89	22.89	21.63	18.90
600 S162-033	1.1330	12	35.51	31.02	28.18	24.62
	0.8498	16	30.83	28.18	25.61	22.37
	0.5665	24	25.17	24.62	22.37	19.54
600 S200-030	1.1069	12	32.62	30.99	28.15	24.59
	0.8302	16	28.25	28.15	25.58	22.34
	0.5535	24	23.07	23.07	22.34	19.52
600 S200-033	1.2259	12	35.81	32.16	29.22	25.52
	0.9194	16	31.01	29.22	26.55	23.19
	0.6130	24	25.32	25.32	23.19	20.26
800 S125-030*	1.1260	12	33.52	33.52	31.49	27.51
	0.8445	16	29.03	29.03	28.61	24.99
	0.5630	24	23.70	23.70	23.70	21.83
800 S125-033*	1.2471	12	36.32	36.04	32.74	28.60
	0.9353	16	31.46	31.46	29.75	25.99
	0.6236	24	25.68	25.68	25.68	22.70
800 S137-030*	1.1758	12	35.66	35.66	32.59	28.47
	0.8819	16	30.89	30.89	29.61	25.87
	0.5879	24	25.22	25.22	25.22	22.60
800 S137-033*	1.3024	12	38.69	37.24	33.83	29.56
	0.9768	16	33.50	33.50	30.74	26.85
	0.6512	24	27.36	27.36	26.85	23.46
800 S162-030*	1.2352	12	36.66	36.66	33.66	29.40
	0.9264	16	31.75	31.75	30.58	26.71
	0.6176	24	25.92	25.92	25.92	23.34
800 S162-033*	1.3682	12	39.45	38.53	35.01	30.58
	1.0262	16	34.16	34.16	31.81	27.79
	0.6841	24	27.89	27.89	27.79	24.28
800 S200-030*	1.3190	12	37.48	37.48	35.63	31.13
	0.9893	16	32.45	32.45	32.37	28.28
	0.6595	24	26.50	26.50	26.50	24.70
800 S200-033*	1.4612	12	40.79	40.56	36.85	32.20
	1.0959	16	35.33	35.33	33.48	29.25
	0.7306	24	28.84	28.84	28.84	25.55

Notes:

1. No reduction in lateral loading for bending or deflection has been used.
2. Studs have not been checked for web crippling. See Table 7A--Allowable Web Crippling Loads.
3. Members marked with \* indicate (h/t) web height to thickness ratios exceed 200 and less than 260 which require web stiffeners. No holes/punchouts in the web are permitted. See Web Stiffener Details.

Table 7A--Allowable Height and Web Crippling Loads based on Lateral Load of 5 psf and Loading Condition (EOF) End One Flange

S-Member Depth, inches		Track Leg, in = 1.00			Track Leg, in = 1.25			Track Leg, in = 1.50			Track Leg, in = 2.00								
Depth in	T in	t mils	Fy ksi	Radius in	Load kips	Maximum Stud Height, ft	Load kips	Maximum Stud Height, ft	Load kips	Maximum Stud Height, ft	Load kips	Maximum Stud Height, ft							
					12	16	24	12	16	24	12	16	24						
1.625	0.0188	18	33	0.0843	0.055	22.0	11.0	0.060	23.9	17.9	11.9	0.064	25.6	19.2	12.8	0.071	28.6	21.4	14.3
1.625	0.0247	24	33	0.0814	0.094	37.7	28.3	0.102	40.8	30.6	20.4	0.109	43.6	32.7	21.8	0.121	48.5	36.4	24.2
1.625	0.0247	24	50	0.0814	0.143	57.2	42.9	0.155	61.8	46.4	30.9	0.165	66.0	49.5	33.0	0.184	73.5	55.1	36.7
1.625	0.0283	27	33	0.0796	0.122	48.9	36.7	0.132	52.8	39.6	26.4	0.141	56.3	42.3	28.2	0.157	62.6	47.0	31.3
1.625	0.0312	30	33	0.0782	0.148	59.0	44.3	0.159	63.6	47.7	31.8	0.170	67.8	50.9	33.9	0.188	75.3	56.4	37.6
1.625	0.0346	33	33	0.0764	0.180	71.9	53.9	0.194	77.5	58.1	38.7	0.206	82.5	61.9	41.2	0.228	91.4	68.5	45.7
2.500	0.0188	18	33	0.0843	0.052	20.8	15.6	0.056	22.5	16.9	11.3	0.060	24.1	18.1	12.1	0.067	26.9	20.2	13.5
2.500	0.0247	24	33	0.0814	0.090	35.9	26.9	0.097	38.8	29.1	19.4	0.104	41.5	31.1	20.7	0.115	46.1	34.6	23.1
2.500	0.0247	24	50	0.0814	0.136	54.4	40.8	0.147	58.8	44.1	29.4	0.157	62.8	47.1	31.4	0.175	69.9	52.4	35.0
2.500	0.0283	27	33	0.0796	0.117	46.7	35.0	0.126	50.5	37.8	25.2	0.135	53.8	40.4	26.9	0.149	59.8	44.8	29.9
2.500	0.0312	30	33	0.0782	0.141	56.5	42.4	0.152	60.9	45.7	30.5	0.162	64.9	48.7	32.5	0.180	72.1	54.0	36.0
2.500	0.0346	33	33	0.0764	0.173	69.1	51.8	0.186	74.4	55.8	37.2	0.198	79.2	59.4	39.6	0.219	87.7	65.8	43.9
3.500	0.0188	18	33	0.0843	0.049	19.6	14.7	0.053	21.3	15.9	10.6	0.057	22.8	17.1	11.4	0.064	25.4	19.1	12.7
3.500	0.0247	24	33	0.0814	0.085	34.2	25.6	0.092	37.0	27.7	18.5	0.099	39.5	29.6	19.7	0.110	44.0	33.0	22.0
3.500	0.0247	24	50	0.0814	0.130	51.8	38.9	0.140	56.0	42.0	28.0	0.150	59.8	44.9	29.9	0.167	66.6	50.0	33.3
3.500	0.0283	27	33	0.0796	0.112	44.7	33.5	0.121	48.3	36.2	24.1	0.129	51.5	38.6	25.7	0.143	57.2	42.9	28.6
3.500	0.0312	30	33	0.0782	0.135	54.2	40.6	0.146	58.4	43.8	29.2	0.156	62.3	46.7	31.1	0.173	69.1	51.8	34.5
3.500	0.0346	33	33	0.0764	0.166	66.4	49.8	0.179	71.5	53.6	35.8	0.190	76.1	57.1	38.1	0.211	84.3	63.3	42.2
3.625	0.0188	18	33	0.0843	0.049	19.5	14.6	0.053	21.1	15.8	10.6	0.057	22.6	17.0	11.3	0.063	25.3	18.9	12.6
3.625	0.0247	24	33	0.0814	0.085	34.0	25.5	0.092	36.8	27.6	18.4	0.098	39.3	29.5	19.6	0.109	43.7	32.8	21.9
3.625	0.0247	24	50	0.0814	0.129	51.5	38.6	0.139	55.7	41.8	27.9	0.149	59.5	44.6	29.7	0.166	66.2	49.7	33.1
3.625	0.0283	27	33	0.0796	0.111	44.5	33.3	0.120	48.0	36.0	24.0	0.128	51.2	38.4	25.6	0.142	56.9	42.7	28.4
3.625	0.0312	30	33	0.0782	0.135	53.9	40.4	0.145	58.1	43.6	29.1	0.155	62.0	46.5	31.0	0.172	68.8	51.6	34.4
3.625	0.0346	33	33	0.0764	0.165	66.1	49.6	0.178	71.2	53.4	35.6	0.189	75.8	56.8	37.9	0.210	84.0	63.0	42.0
4.000	0.0188	18	33	0.0843	0.048	19.1	14.3	0.052	20.7	15.5	10.3	0.055	22.2	16.6	11.1	0.062	24.8	18.6	12.4
4.000	0.0247	24	33	0.0814	0.084	33.4	25.1	0.090	36.2	27.1	18.1	0.097	38.6	29.0	19.3	0.107	43.0	32.2	21.5
4.000	0.0247	24	50	0.0814	0.127	50.7	38.0	0.137	54.8	41.1	27.4	0.146	58.5	43.9	29.3	0.163	65.1	48.9	32.6
4.000	0.0283	27	33	0.0796	0.109	43.8	32.8	0.118	47.3	36.5	23.6	0.126	50.4	37.8	25.2	0.140	56.0	42.0	28.0
4.000	0.0312	30	33	0.0782	0.133	53.2	39.9	0.143	57.3	43.0	28.7	0.153	61.1	45.8	30.5	0.169	67.8	50.8	33.9
4.000	0.0346	33	33	0.0764	0.163	65.2	48.9	0.176	70.2	52.7	35.1	0.187	74.8	56.1	37.4	0.207	82.8	62.1	41.4



## Design Example:

Wall height = 20 ft  
 Stud spacing = 24 in OC  
 Deflection criteria = L/ 120      Mid span deflection = 2.00 inches  
 Lateral loading = 5 psf      Treated as a live load: no reduction in loading allowed

From Table 7 the possible choices are as follows:

Member ID	Limiting Height, ft	Weight lbs/ft <sup>2</sup>	Remarks
550S125-033	20.77	0.4765	
<b><u>550S137-024*</u></b>	20.07	<b><u>0.3621</u></b>	Least weight requires web stiffeners
<b><u>550S137-030</u></b>	21.74	<b><u>0.4553</u></b>	Least weight with no web stiffeners required
550S150-024*	20.56	0.3751	Requires web stiffeners
550S162-024*	20.62	0.3857	Requires web stiffeners
550S162-027*	20.21	0.4405	Requires web stiffeners
550S162-030	22.06	0.4850	
600S125-024*	20.18	0.3676	Requires web stiffeners
600S125-030	20.19	0.4569	
600S137-024*	21.03	0.3832	Requires web stiffeners
600S150-024*	21.54	0.3962	Requires web stiffeners
600S162-030	22.89	0.5116	

Conclusion: Two members are considered.

1. If the customer is only supplying the material then **550S137-024\*** is the least weight per square foot of wall, with added cost to install web stiffeners.  
 Since web stiffeners are required then there is no need to check web crippling loads.
2. If the customer is supplying and installing the studs then **550S137-030** is the least weight and least cost to install.  
 From Table 7A: Maximum Stud Height = 25.2 ft greater than 20.00 feet, therefore web stiffeners are not required  
 Alternate check: Load 5 psf x 2 ft spacing= 10 pounds per foot x 20 ft/2 = 100 lbs < 0.126 kips = 126 lbs OK

TABLE 7--Limiting Heights - Interior Non-bearing Wall Studs.xls

ID Member	ID			Spc o.c. in	Lateral Loading				
	Part No.	Maxo, k-in	leff, in4		Vay, k	5 psf			
						Def. Coef.	DC=	1.0	L/ 180
	<b>7.088</b>	<b>1.1374</b>	<b>0.512</b>	<b>12</b>	<b>30.74</b>		<b>27.09</b>	<b>24.61</b>	<b>21.50</b>
<b>550 S137-030</b>			f(Maxo)= f(lxe)= f(Vay)=		30.74		30.74	30.74	30.74
					31.01		27.09	24.61	21.50
					204.68		204.68	204.68	204.68
					<b>26.62</b>		<b>24.61</b>	<b>22.36</b>	<b>19.54</b>
			f(Maxo)= f(lxe)= f(Vay)=		26.62		26.62	26.62	26.62
					28.18		24.61	22.36	19.54
					153.51		153.51	153.51	153.51
				<b>24</b>	<b>21.74</b>		<b>21.50</b>	<b>19.54</b>	<b>17.07</b>
			f(Maxo)= f(lxe)= f(Vay)=		21.74		21.74	21.74	21.74
					24.61		21.50	19.54	17.07
					102.34		102.34	102.34	102.34

**Input items shown in blue.**

**Calculations for Table 7**

Maxo = 7.088 k-in  
 lxe = 1.137 in<sup>4</sup>  
 Vay = 0.512 k  
 Load = **5** psf  
 Spc= **24** in  
 w= 10.00 plf  
 E= 29500 ksi  
 L/X, X= **120**  
 DC= **1.0**

$$L = (8 * \text{Maxo} / w) \wedge 0.5 = 21.74 \text{ ft}$$

$$L = [(384 * E * lxe) / (120, 180, 240, 360) * DC * 5 * w] \wedge (1/3) = 24.61 \text{ ft}$$

$$L = 2 * Vay / w = 102.34 \text{ ft}$$

Minimum L = **21.74** ft

## Web Crippling Load Verification Calculations

### Input items shown in Blue

<b>End One Flange loading</b>			
N Bearing Length, in.			
<b>1.00</b>	<b>1.25</b>	<b>1.50</b>	<b>2.00</b>
Table C3.4.1-2 Single Web channel and C-Sections			
$\Omega W =$	<b>1.75</b>	$\Phi =$	<b>90</b>
C	$C_R$	$C_N$	Ch
<b>4</b>	<b>0.14</b>	<b>0.35</b>	<b>0.02</b>

NASPEC: Section C3.4 Web Crippling

C3.4.1 Web Crippling Strength (Resistance) of Webs without Holes

Basic Formula: Eq. C3.4.1-1

$$P_n = C \cdot t^2 \cdot F_y \cdot \sin \Phi \cdot [1 - C_R \cdot (R/t)^{0.5}] \cdot [1 + C_N \cdot (N/t)^{0.5}] \cdot [1 - Ch \cdot (h/t)^{0.5}]$$

<b>Example: Member 550Sxxx-30</b>			
Depth	Thickness	F <sub>y</sub> , psi	Radius R
<b>5.500</b>	<b>0.0312</b>	<b>33000</b>	<b>0.0782</b>

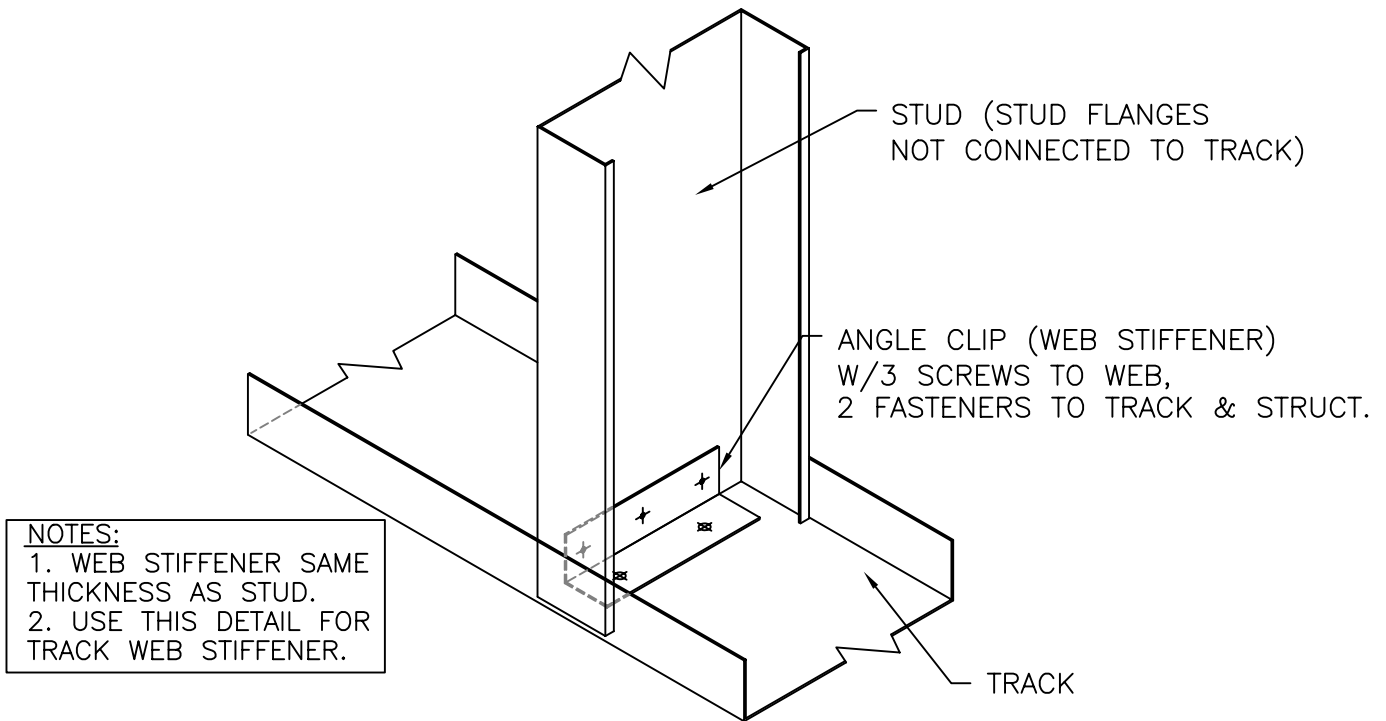
R/t=	2.5064			
N=	1.00	1.25	1.50	2.00
N/t=	32.051	40.064	48.077	64.103
h (in)=	5.281			
h/t ≤ 200	169.3			
N/t ≤ 210	32.1	40.1	48.1	64.1
N/h ≤ 2.0	0.2	0.2	0.3	0.4
P <sub>n</sub> (lbs)=	221	238	254	281
P <sub>n</sub> /Ω <sub>w</sub> (lbs)=	<b>126</b>	<b>136</b>	<b>145</b>	<b>161</b>
P <sub>n</sub> /Ω <sub>w</sub> (kips)=	<b>0.126</b>	<b>0.136</b>	<b>0.145</b>	<b>0.161</b>

### Checks with Table7A

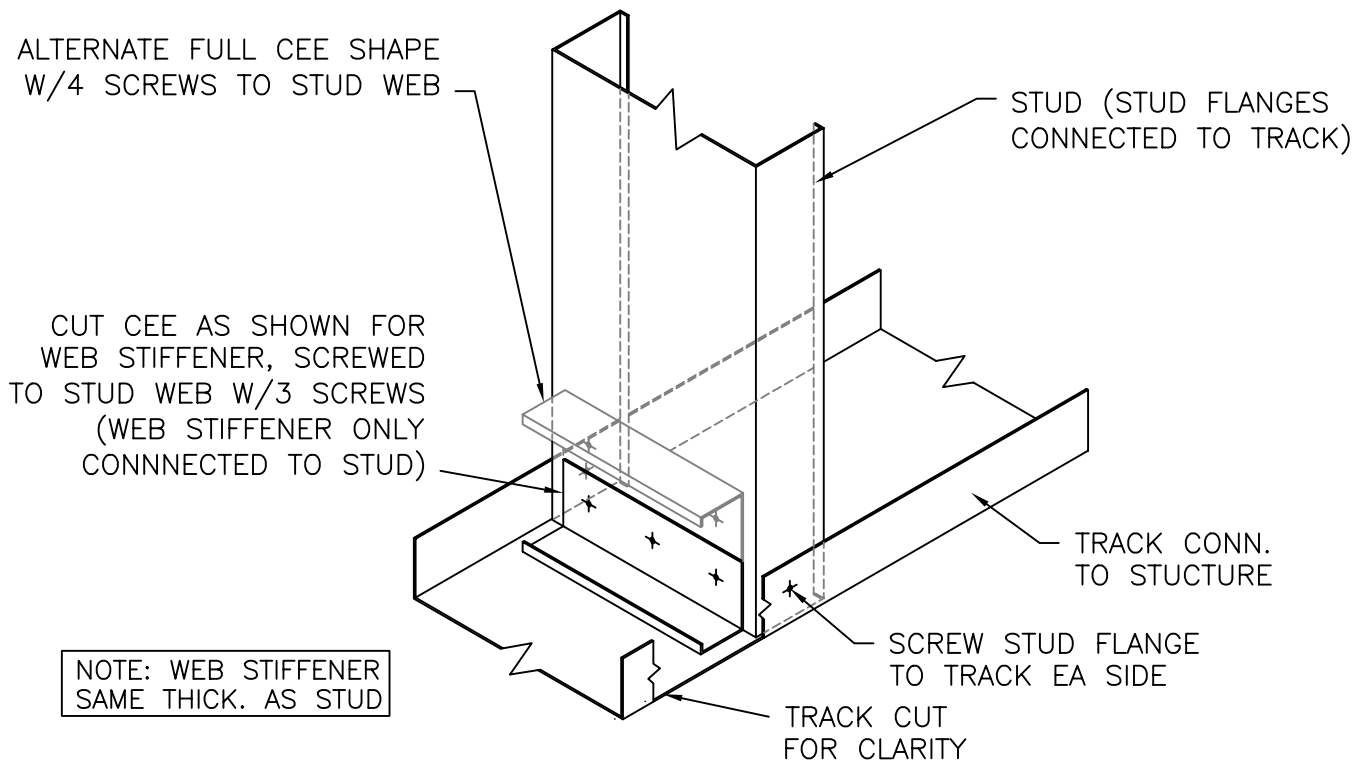
Maximum Height Calculations			
Lateral load (psf) =	5 psf		
Stud spacing (in) =	12	16	24
R <sub>crip</sub> (kips) for 1" track leg =	0.126	0.126	0.126
Maximum Stud Height L (ft) =	<b>50.4</b>	<b>37.8</b>	<b>25.2</b>

### Checks with Table7A

Basic Equation:  $R_{crip} = w \cdot L / 2$ ; Solve for  $L = 2 \cdot R_{crip} / w$

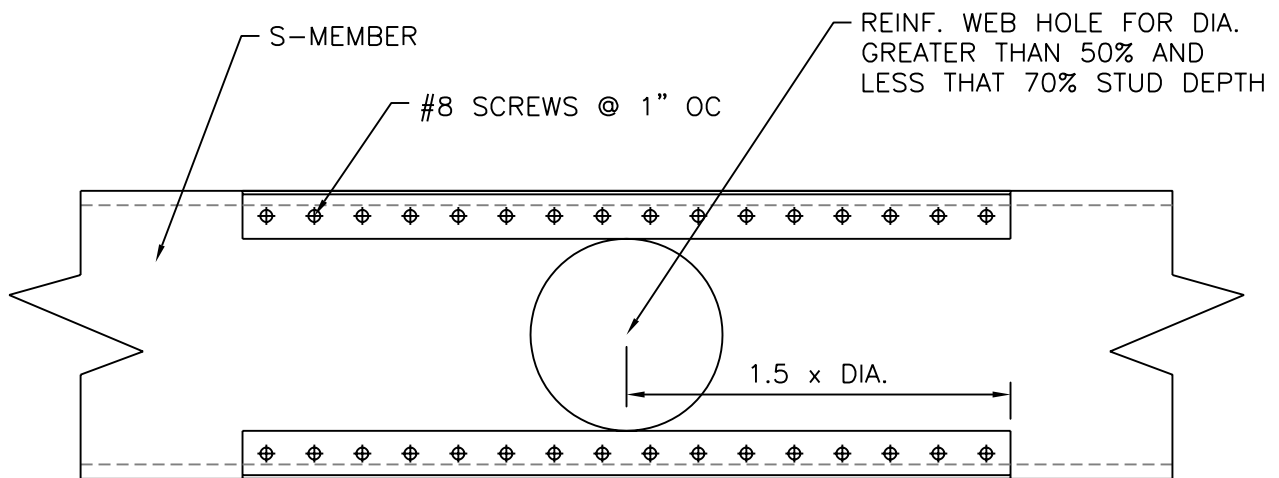
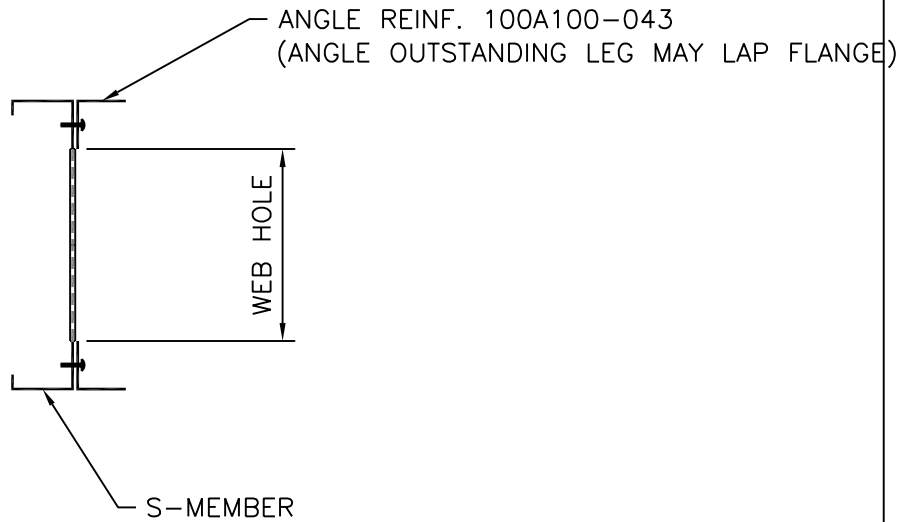


DETAIL A (Angle Clip Web Stiffener)



DETAIL A (Cee or Cut Cee Web Stiffener)





RECOMMENDED WEB HOLE REINFORCING DETAIL

NOTES

1. WEB REINFORCING IS NOT REQUIRED FOR WEB HOLES UP TO 50% OF THE MEMBER DEPTH.
2. WEB HOLES SHALL NOT BE LOCATED WITHIN 10 INCHES OF STANDARD HOLE PUNCHOUTS. PUNCHOUTS SHALL BE REINFORCED WITH A PLATE IF THIS OCCURS.
3. WEB HOLES SHOULD BE LOCATED AT CENTER OF WEB AND THE EDGE OF THE HOLE NO CLOSER THAT 12 INCHES FROM ENDS.
4. WEB HOLES SPACING MINIMUM OF 3 TIMES DIAMETER CL TO CL.

WEB HOLE REINFORCING DETAIL

DATE: 1-13-2011

SHEET: SK-1



TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																																				
			0				5				10				15				20				25				30				40				50				
			12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	
350 S200-033	8	1.90	1.66	1.59	1.44	1.44	1.30	1.03	0.64	1.03	0.77	0.29	0.83	0.52	0.28																								
	10	1.80	1.42	1.31	1.10	1.10	0.90	0.53		0.53																													
	12	1.68	1.15	1.01	0.74	0.74	0.51																																
	14	1.51	0.86	0.70	0.42	0.42																																	
	16	1.31	0.60	0.44																																			
	18	1.13	0.39	0.24																																			
	20	0.96	0.23																																				
	8	3.20	2.94	2.85	2.68	2.68	2.52	2.21	2.44	2.21	1.77	2.21	1.91	1.36	1.99	1.63	0.97	1.77	1.36	0.60	1.36	0.85																	
350 S200-043	10	2.93	2.51	2.38	2.14	2.14	1.91	1.50	1.80	1.50	0.94	1.50	1.12	0.44	1.21	0.77		0.94	0.44																				
	12	2.61	2.03	1.87	1.57	1.57	1.31	0.84	1.18	0.84	0.24	0.84	0.43		0.53			0.24																					
	14	2.25	1.55	1.38	1.07	1.07	0.80	0.33	0.67	0.33		0.33																											
	16	1.86	1.13	0.96	0.66	0.66	0.40		0.28																														
	18	1.55	0.82	0.65	0.37	0.37																																	
	20	1.30	0.58	0.43																																			
	8	4.66	4.43	4.36	4.21	4.21	4.07	3.79	4.00	3.79	3.39	3.79	3.52	3.02	3.59	3.26	2.66	3.39	3.02	2.31	3.02	2.54	1.67	2.66	2.09	1.07													
	350 S200-054 (50ksi)	10	4.06	3.71	3.60	3.38	3.38	3.18	2.81	3.09	2.81	2.30	2.81	2.47	1.84	2.55	2.14	1.42	2.30	1.84	1.02	1.84	1.28	0.30	1.42	0.77													
12		3.39	2.93	2.79	2.54	2.54	2.31	1.90	2.20	1.90	1.36	1.90	1.53	0.89	1.62	1.20	0.46	1.36	0.89	0.06	0.89	0.32																	
14		2.79	2.26	2.11	1.85	1.85	1.61	1.20	1.50	1.20	0.68	1.20	0.84	0.22	0.93	0.52		0.68	0.22																				
16		2.30	1.73	1.58	1.32	1.32	1.09	0.70	0.99	0.70	0.21	0.70	0.36		0.44			0.21																					
18		1.91	1.32	1.18	0.93	0.93	0.72	0.35	0.62	0.35		0.35																											
20		1.61	1.02	0.88	0.65	0.65	0.44		0.35																														
8		6.16	5.95	5.88	5.75	5.75	5.61	5.35	5.55	5.35	4.98	5.35	5.10	4.62	5.16	4.86	4.28	4.98	4.62	3.94	4.62	4.16	3.32	4.28	3.73	2.72													
350 S200-068 (50ksi)		10	5.29	4.97	4.86	4.67	4.67	4.48	4.12	4.39	4.12	3.63	4.12	3.79	3.18	3.87	3.47	2.76	3.63	3.18	2.36	3.18	2.62	1.64	2.76	2.11	0.97												
	12	4.34	3.92	3.79	3.56	3.56	3.34	2.94	3.23	2.94	2.41	2.94	2.58	1.94	2.66	2.25	1.51	2.41	1.94	1.11	1.94	1.37	0.39	1.51	0.86														
	14	3.54	3.05	2.91	2.66	2.66	2.43	2.03	2.33	2.03	1.51	2.03	1.67	1.05	1.76	1.35	0.64	1.51	1.05	0.27	1.05	0.51																	
	16	2.90	2.37	2.23	1.98	1.98	1.76	1.37	1.65	1.37	0.87	1.37	1.03	0.44	1.11	0.72		0.87	0.44																				
	18	2.40	1.86	1.72	1.47	1.47	1.26	0.89	1.16	0.89	0.43	0.89	0.57		0.65	0.29		0.43																					
	20	2.01	1.46	1.33	1.10	1.10	0.90	0.55	0.80	0.55	0.12	0.55	0.26		0.33			0.26																					
	8	9.41	9.18	9.11	8.96	8.96	8.82	8.54	8.75	8.54	8.14	8.54	8.27	7.74	8.34	8.00	7.37	8.14	7.74	7.00	7.74	7.24	6.30	7.37	6.77	5.64													
	350 S200-087 (50ksi)	10	7.87	7.53	7.42	7.21	7.21	7.01	6.62	6.91	6.62	6.09	6.62	6.26	5.59	6.35	5.91	5.12	6.09	5.59	4.68	5.59	4.97	3.87	5.12	4.40	3.12												
12		6.30	5.87	5.74	5.49	5.49	5.26	4.82	5.14	4.82	4.24	4.82	4.43	3.72	4.52	4.06	3.24	4.24	3.72	2.80	3.72	3.09	1.99	3.24	2.52	1.27													
14		5.07	4.57	4.43	4.16	4.16	3.91	3.47	3.80	3.47	2.89	3.47	3.08	2.39	3.17	2.72	1.93	2.89	2.39	1.51	2.39	1.78	0.75	1.93	1.25														
16		4.12	3.58	3.43	3.16	3.16	2.91	2.49	2.80	2.49	1.94	2.49	2.11	1.46	2.20	1.77	1.03	1.94	1.46	0.64	1.46	0.90																	
18		3.39	2.83	2.68	2.41	2.41	2.18	1.77	2.07	1.77	1.26	1.77	1.42	0.82	1.51	1.11	0.42	1.26	0.82																				
20		2.83	2.26	2.11	1.86	1.86	1.64	1.26	1.54	1.26	0.78	1.26	0.93	0.37	1.01	0.64		0.78	0.37																				





TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																																				
			0				5				10				15				20				25				30				40				50				
			12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	
400 S162-033	8	1.93	1.72	1.65	1.52	1.38	1.13	0.78	1.13	0.89	0.44	0.95	0.66	0.44																									
	10	1.84	1.51	1.40	1.21	1.02	0.67	0.67	0.87	0.35		0.43																											
	12	1.73	1.26	1.12	0.86	0.63	0.22	0.22	0.22																														
	14	1.60	0.99	0.83	0.54	0.29																																	
	16	1.42	0.72	0.55	0.26	0.26																																	
	18	1.22	0.49	0.33																																			
	20	1.05	0.32																																				
	20	3.05	2.84	2.77	2.63	2.44	2.24	1.87	2.24	1.99	1.52	2.06	1.75	1.18	1.87	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	0.86	1.52	
400 S162-043	10	2.88	2.54	2.43	2.23	2.03	1.66	1.15	1.66	1.31	0.69	1.40	0.99	0.26	1.15	0.69	0.69																						
	12	2.65	2.16	2.02	1.75	1.50	1.06	0.47	1.06	0.66		0.76	0.30	0.47																									
	14	2.38	1.75	1.58	1.28	1.01	0.53	0.53	0.53			0.22																											
	16	2.09	1.36	1.18	0.87	0.60		0.47																															
	18	1.78	1.02	0.84	0.54	0.28																																	
	20	1.53	0.75	0.59	0.30	0.30																																	
	8	4.70	4.51	4.45	4.32	4.20	3.96	3.61	3.96	3.73	3.28	3.79	3.50	2.96	3.61	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	2.65	3.28	
	10	4.30	3.99	3.89	3.70	3.52	3.17	2.69	3.17	2.84	2.25	2.92	2.54	1.93	2.69	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	1.44	2.25	
400 S162-054 (50ksi)	12	3.78	3.35	3.21	2.97	2.74	2.32	1.77	2.32	1.95	1.28	2.04	1.60	0.93	1.77	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	0.42	1.28	
	14	3.20	2.67	2.52	2.25	2.00	1.57	1.01	1.57	1.19	0.53	1.28	0.84		1.01	0.53																							
	16	2.69	2.10	1.94	1.66	1.42	1.00	0.46	1.00	0.63		0.72	0.30		0.46																								
	18	2.27	1.64	1.49	1.22	1.00	0.58	0.58	0.58	0.23		0.31																											
	20	1.91	1.27	1.13	0.87	0.65	0.27	0.55	0.27			0.27																											
	8	6.19	5.99	5.92	5.79	5.79	5.66	5.41	5.66	5.41	5.04	5.41	5.04	4.35	5.04	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	4.02	4.69	
	10	5.64	5.31	5.20	5.00	5.00	4.80	4.43	4.71	4.43	3.91	4.43	3.91	3.24	3.91	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	2.55	3.42	
	12	4.92	4.46	4.31	4.05	4.05	3.80	3.34	3.68	3.34	2.74	3.34	2.74	2.03	2.74	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	1.25	2.20	
400 S162-068 (50ksi)	14	4.10	3.54	3.38	3.08	3.08	2.82	2.35	2.69	2.35	1.74	2.35	1.74	1.03	1.74	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	0.29	1.21	
	16	3.39	2.77	2.60	2.31	2.31	2.05	1.59	1.92	1.59	1.01	1.59	1.01	0.31	1.59	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	0.50	1.01	
	18	2.81	2.17	2.01	1.72	1.72	1.47	1.03	1.35	1.03	0.49	1.03	0.49	0.31	1.03	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	0.33	0.49	
	20	2.36	1.71	1.55	1.28	1.28	1.04	0.64	0.93	0.64		0.64	0.29		0.64	0.29																							
	8	9.38	9.16	9.09	8.94	8.94	8.80	8.52	8.73	8.52	8.12	8.52	8.12	7.34	8.12	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	6.97	7.72	
	10	8.38	8.03	7.91	7.68	7.68	7.47	7.05	7.36	7.05	6.46	7.05	6.46	5.41	6.46	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	4.92	5.92	
	12	7.16	6.66	6.50	6.21	6.21	5.93	5.42	5.80	5.42	4.74	5.42	4.74	3.91	4.74	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	3.04	4.12	
	14	5.85	5.25	5.08	4.76	4.76	4.46	3.93	4.32	3.93	3.24	3.93	3.24	2.64	3.24	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	1.59	2.64	
400 S162-097 (50ksi)	16	4.78	4.12	3.94	3.62	3.62	3.32	2.81	3.19	2.81	2.15	2.81	2.15	1.07	2.15	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	0.61	1.58	
	18	3.94	3.25	3.08	2.76	2.76	2.48	1.99	2.35	1.99	1.38	1.99	1.38	0.38	1.38	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	0.23	0.85	
	20	3.28	2.59	2.42	2.12	2.12	1.85	1.39	1.73	1.39	0.82	1.39	0.82	0.33	0.82	0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33			
	20	3.28	2.59	2.42	2.12	2.12	1.85	1.39	1.73	1.39	0.82	1.39	0.82	0.33	0.82	0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33		0.33			



TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Lateral Loads, psf

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																														
			5			10			15			20			25			30			40			50									
			12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24							
400 S250-043	8	3.63	3.41	3.33	3.18	3.18	3.04	2.75	2.97	2.75	2.34	2.75	2.48	1.95	2.34	1.57	2.34	1.95	1.20	1.95	1.00	1.00	0.34	1.00	0.50	0.50							
	10	3.47	3.10	2.98	2.75	2.53	2.11	1.53	2.42	2.11	1.53	1.44	0.96	1.08	0.53	0.74																	
	12	3.26	2.72	2.55	2.24	2.24	1.41	0.82	1.82	1.44	0.74	1.44	0.82	0.82	0.31	0.30																	
	14	3.07	2.32	2.12	1.74	1.74	1.41	0.82	1.25	0.82	0.30	0.30																					
	16	2.78	1.87	1.64	1.24	1.24	0.90	0.30	0.74	0.30																							
	18	2.43	1.44	1.21	0.82	0.82	0.48		0.32																								
	20	2.08	1.07	0.86	0.48	0.48																											
	8	5.94	5.72	5.65	5.50	5.36	5.09	5.09	5.29	5.09	4.69	5.09	4.82	4.30	4.89	4.56	3.93	4.69	4.30	3.56	4.30	3.66	3.12	2.13	3.12	2.45	1.24	2.61	1.83	0.43			
	10	5.58	5.22	5.10	4.88	4.66	4.24	3.66	4.55	4.24	3.66	4.24	3.85	3.12	3.94	3.47	2.81	3.66	3.12	2.13	3.12	2.52	1.90	0.82	1.90	1.16	1.34	0.49					
	12	5.00	4.48	4.32	4.01	4.01	3.73	3.21	3.60	3.21	2.52	3.21	2.74	1.90	2.86	2.31	1.34	2.52	1.90	0.82	1.90	1.55	0.92										
14	4.37	3.69	3.50	3.15	3.15	2.83	2.27	2.68	2.27	1.55	2.27	1.78	0.92	1.89	1.33	0.35	1.55	0.92															
16	3.70	2.93	2.72	2.36	2.36	2.05	1.49	1.90	1.49	0.79	1.49	1.01		1.13	0.58		0.79																
18	3.11	2.30	2.10	1.74	1.74	1.44	0.91	1.30	0.91	0.25	0.91	0.46		0.57			0.25																
20	2.63	1.80	1.61	1.27	1.27	0.98	0.49	0.85	0.49		0.49						0.49																
8	8.62	8.39	8.31	8.16	8.16	8.00	7.71	7.71	7.71	7.27	7.71	7.41	6.85	7.49	7.13	6.44	7.27	6.85	6.04	6.85	6.04	5.25	4.16	5.25	4.51	3.18	4.69	3.83	2.28				
10	7.95	7.56	7.43	7.18	7.18	6.94	6.49	6.83	6.49	5.85	6.49	6.05	5.25	6.16	5.64	4.69	5.85	5.25	4.16	5.25	4.16	3.55	2.37	3.55	2.74	1.33	2.94	2.01	0.40				
12	6.90	6.34	6.17	5.84	5.84	5.54	4.98	5.39	4.98	4.23	4.98	4.47	3.55	4.59	3.99	2.94	4.23	3.55	2.37	3.55	2.37	1.90	1.15	1.90	1.15	0.41	1.56	0.66					
14	5.76	5.08	4.88	4.52	4.52	4.18	3.59	4.03	3.59	2.83	3.59	3.07	2.16	3.20	2.60	1.56	2.83	2.16	1.00	2.16	1.00	0.79											
16	4.75	3.99	3.79	3.42	3.42	3.09	2.51	2.94	2.51	1.78	2.51	2.01	1.15	2.13	1.56	0.58	1.78	1.15		1.15	0.45												
18	3.95	3.15	2.95	2.59	2.59	2.27	1.73	2.13	1.73	1.04	1.73	1.26	0.45	1.37	0.83		1.04	0.45															
20	3.32	2.51	2.31	1.97	1.97	1.67	1.15	1.53	1.15	0.51	1.15	0.71		0.82	0.32		0.51																
8	13.39	13.17	13.10	12.96	12.96	12.82	12.54	12.75	12.54	12.14	12.54	12.27	11.74	12.34	12.00	11.35	12.14	11.74	10.97	11.74	10.97	11.74	11.22	10.23	11.35	10.72	9.51						
10	11.85	11.50	11.38	11.16	11.16	10.94	10.52	10.84	10.52	9.92	10.52	10.12	9.35	10.22	9.73	8.81	9.92	9.35	8.29	9.35	8.29	7.60	6.94	6.12	7.60	6.32	5.38	3.72					
12	10.11	9.61	9.46	9.16	9.16	8.87	8.33	8.73	8.33	7.60	8.33	7.84	6.94	7.96	7.37	6.32	7.60	6.94	5.74	6.94	5.74	5.52	4.85	4.04	5.52	4.23	3.31	1.72					
14	8.30	7.70	7.52	7.18	7.18	6.86	6.28	6.71	6.28	5.52	6.28	5.76	4.85	5.89	5.29	4.23	5.52	4.85	3.66	4.85	3.66	3.29	2.18	3.29	2.53	1.22	2.71	1.84	0.37				
16	6.79	6.12	5.92	5.57	5.57	5.25	4.68	5.10	4.68	3.93	4.68	4.17	3.29	4.29	3.71	2.71	3.93	3.29	2.18	3.29	2.18	1.84	1.14	2.18	1.47	0.26	1.64	0.83					
18	5.61	4.90	4.70	4.35	4.35	4.04	3.49	3.89	3.49	2.78	3.49	3.01	2.18	3.12	2.57	1.64	2.78	2.18	1.14	2.18	1.14	0.88	0.42	1.38	0.72								
20	4.70	3.96	3.77	3.43	3.43	3.13	2.60	2.99	2.60	1.94	2.60	2.15	1.38	2.26	1.75	0.88	1.94	1.38	0.42	1.38	0.42	0.56											
8	2.15	2.02	1.97	1.89	1.89	1.80	1.63	1.75	1.63	1.37	1.63	1.46	1.12	1.50	1.29	0.88	1.37	1.12	0.64	1.12	0.64	0.56											
10	2.13	1.91	1.84	1.70	1.70	1.57	1.30	1.50	1.30	0.92	1.30	1.05	0.56	1.11	0.80	0.21	0.92	0.56															
12	2.09	1.77	1.67	1.47	1.47	1.28	0.92	1.19	0.92	0.42	0.92	0.58		0.66	0.26		0.42																
14	2.02	1.58	1.45	1.19	1.19	0.95	0.51	0.84	0.51		0.51			0.21																			
16	1.92	1.36	1.20	0.90	0.90	0.62		0.49																									
18	1.81	1.13	0.94	0.61	0.61	0.32																											
20	1.68	0.90	0.71	0.36	0.36																												



TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																							
			5			10			15			20			25			30			40			50		
			12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
550 S162-043	8	3.48	3.35	3.31	3.22	3.22	3.13	2.96	3.09	2.96	2.70	2.96	2.79	2.45	2.83	2.62	2.21	2.70	2.45	1.96	2.45	2.12	1.49	2.21	1.80	1.02
	10	3.42	3.20	3.13	2.99	2.86	2.59	2.79	2.59	2.40	2.12	2.60	2.32	1.82	2.39	2.07	1.46	2.20	1.82	1.10	1.82	1.34	0.43	1.46	0.88	
	12	3.32	3.00	2.90	2.69	2.69	2.50	2.12	2.40	2.12	1.60	2.12	1.77	1.11	1.86	1.43	0.65	1.60	1.11	0.21	1.11	0.50		0.65		
	14	3.17	2.73	2.59	2.33	2.33	2.08	1.61	1.96	1.61	0.98	1.61	1.18	0.41	1.29	0.78		0.98	0.41							
	16	2.98	2.41	2.24	1.92	1.92	1.63	1.10	1.49	1.10	0.41	1.10	0.63		0.74			0.41								
	18	2.76	2.06	1.87	1.52	1.52	1.20	0.64	1.05	0.64		0.64			0.27											
	20	2.52	1.72	1.51	1.14	1.14	0.82	0.26	0.67	0.26		0.26														
	8	5.70	5.56	5.52	5.43	5.43	5.34	5.16	5.30	5.16	4.90	5.16	4.99	4.64	5.03	4.82	4.39	4.90	4.64	4.14	4.64	4.31	3.65	4.39	3.97	3.17
	10	5.54	5.32	5.24	5.10	5.10	4.96	4.68	4.89	4.68	4.27	4.68	4.40	3.87	4.47	4.14	3.49	4.27	3.87	3.12	3.87	3.37	2.41	3.49	2.88	1.74
	12	5.30	4.96	4.85	4.64	4.64	4.43	4.04	4.33	4.04	3.48	4.04	3.66	2.96	3.76	3.31	2.47	3.48	2.96	2.00	2.96	2.31	1.13	2.47	1.70	0.33
14	4.95	4.48	4.33	4.06	4.06	3.79	3.30	3.66	3.30	2.63	3.30	2.84	2.02	2.95	2.42	1.46	2.63	2.02	0.94	2.02	1.28		1.46	0.61		
16	4.51	3.91	3.73	3.40	3.40	3.09	2.54	2.95	2.54	1.81	2.54	2.04	1.17	2.16	1.59	0.59	1.81	1.17		1.17	0.41		0.59			
18	4.00	3.30	3.10	2.74	2.74	2.42	1.85	2.27	1.85	1.11	1.85	1.35	0.47	1.47	0.89		1.11	0.47		0.47						
20	3.48	2.72	2.52	2.15	2.15	1.83	1.27	1.68	1.27	0.56	1.27	0.78		0.90	0.34		0.56									
8	7.64	7.50	7.45	7.35	7.35	7.26	7.07	7.21	7.07	6.79	7.07	6.88	6.51	6.93	6.70	6.24	6.79	6.51	5.97	6.51	6.15	5.44	6.24	5.79	4.92	
10	7.45	7.21	7.13	6.98	6.98	6.82	6.52	6.74	6.52	6.07	6.52	6.22	5.64	6.29	5.93	5.22	6.07	5.64	4.81	5.64	5.08	4.03	5.22	4.55	3.29	
12	7.12	6.75	6.63	6.40	6.40	6.17	5.74	6.06	5.74	5.12	5.74	5.32	4.54	5.42	4.92	3.99	5.12	4.54	3.47	4.54	3.81	2.49	3.99	3.13	1.58	
14	6.64	6.12	5.96	5.65	5.65	5.35	4.80	5.21	4.80	4.04	4.80	4.29	3.36	4.41	3.81	2.73	4.04	3.36	2.14	3.36	2.53	1.06	2.73	1.76		
16	6.04	5.36	5.16	4.79	4.79	4.44	3.81	4.28	3.81	2.99	3.81	3.25	2.26	3.39	2.74	1.60	2.99	2.26	0.99	2.26	1.39		1.60	0.61		
18	5.36	4.56	4.33	3.92	3.92	3.55	2.90	3.38	2.90	2.06	2.90	2.33	1.33	2.46	1.81	0.68	2.06	1.33		1.33	0.48		0.68			
20	4.66	3.78	3.54	3.13	3.13	2.76	2.12	2.59	2.12	1.31	2.12	1.56	0.61	1.70	1.07		1.31	0.61		0.61						
8	12.37	12.20	12.14	12.03	12.03	11.92	11.71	11.87	11.71	11.38	11.71	11.49	11.06	11.54	11.27	10.74	11.38	11.06	10.43	11.06	10.64	9.81	10.74	10.22	9.20	
10	12.37	12.07	11.98	11.78	11.78	11.59	11.22	11.50	11.22	10.67	11.22	10.85	10.14	10.94	10.50	9.63	10.67	10.14	9.13	10.14	9.46	8.17	9.63	8.80	7.24	
12	11.83	11.36	11.21	10.91	10.91	10.63	10.07	10.49	10.07	9.29	10.07	9.55	8.56	9.55	9.04	7.87	9.29	8.56	7.21	8.56	7.64	5.97	7.87	6.78	4.83	
14	10.93	10.25	10.04	9.64	9.64	9.26	8.55	9.07	8.55	7.58	8.55	7.89	6.71	8.05	7.28	5.91	7.58	6.71	5.16	6.71	5.65	3.79	5.91	4.69	2.56	
16	9.82	8.92	8.66	8.18	8.18	7.73	6.92	7.52	6.92	5.87	6.92	6.21	4.95	6.38	5.55	4.11	5.87	4.95	3.34	4.95	3.85	1.96	4.11	2.86	0.72	
18	8.58	7.52	7.23	6.70	6.70	6.23	5.40	6.01	5.40	4.35	5.40	4.68	3.44	4.86	4.03	2.62	4.35	3.44	1.88	3.44	2.37	0.55	2.62	1.42		
20	7.23	6.12	5.83	5.32	5.32	4.86	4.07	4.65	4.07	3.08	4.07	3.39	2.22	3.55	2.78	1.46	3.08	2.22	0.77	2.22	1.22		1.46	0.34		
8	15.48	15.31	15.26	15.14	15.14	15.03	14.80	14.97	14.80	14.47	14.80	14.58	14.14	14.64	14.36	13.81	14.47	14.14	13.49	14.14	13.70	12.84	13.81	13.27	12.21	
10	15.48	15.18	15.08	14.88	14.88	14.68	14.29	14.58	14.29	13.72	14.29	13.91	13.17	14.00	13.53	12.62	13.72	13.17	12.10	13.17	12.45	11.08	12.62	11.75	10.10	
12	15.11	14.60	14.44	14.11	14.11	13.80	13.20	13.65	13.20	12.35	13.20	12.62	11.54	12.77	12.07	10.78	12.35	11.54	10.06	11.54	10.54	8.70	10.78	9.59	7.44	
14	13.73	13.00	12.77	12.34	12.34	11.93	11.15	11.73	11.15	10.11	11.15	10.44	9.15	10.62	9.78	8.28	10.11	9.15	7.46	9.15	8.00	5.96	8.28	6.94	4.60	
16	12.10	11.16	10.88	10.36	10.36	9.88	9.02	9.66	9.02	7.88	9.02	8.24	6.88	8.43	7.54	5.88	7.88	6.88	5.15	6.88	5.68	3.64	5.88	4.62	2.30	
18	10.38	9.29	8.98	8.43	8.43	7.93	7.06	7.70	7.06	5.83	7.06	6.29	4.95	6.47	5.59	4.08	5.93	4.95	3.28	4.95	3.81	1.85	4.08	2.78	0.57	
20	8.71	7.57	7.27	6.73	6.73	6.24	5.40	6.02	5.40	4.34	5.40	4.68	3.43	4.85	4.02	2.61	4.34	3.43	1.87	3.43	2.35	0.54	2.61	1.40		

TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																																		
			5				10				15				20				25				30				40				50						
			12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36			
550 S200-033	8	2.30	2.17	2.12	2.04	2.04	1.95	1.77	1.52	1.90	1.77	1.64	1.43	1.02	1.52	1.26	0.77	0.68	0.21																		
	10	2.27	2.05	1.98	1.84	1.71	1.44	1.44	1.05	1.64	1.44	1.18	0.93	0.82	0.53																						
	12	2.21	1.90	1.80	1.60	1.41	1.31	1.07	0.62	0.96	0.62	0.21																									
	14	2.14	1.70	1.57	1.31	1.01	0.73	0.22	0.60	0.22																											
	16	2.04	1.48	1.32	1.01	0.73	0.41																														
	18	1.93	1.25	1.06	0.72	0.46																															
	20	1.82	1.03	0.82	0.46																																
	8	3.99	3.83	3.78	3.68	3.68	3.58	3.38	3.38	3.08	3.53	3.38	3.18	2.79	2.51	3.08	2.79	2.22	2.79	2.41	1.67	2.51	2.04	2.04	1.13												
	10	3.91	3.66	3.58	3.42	3.42	3.26	2.95	2.49	2.95	3.18	2.95	2.64	2.06	1.64	2.49	2.06	1.23	2.06	1.50	0.45	1.64	0.97														
	12	3.81	3.44	3.32	3.08	3.08	2.85	2.42	1.81	2.42	2.74	2.42	2.01	1.24	0.71	1.81	1.24		1.24	0.53																	
14	3.68	3.15	2.99	2.68	2.68	2.38	1.84	1.10	1.84	2.24	1.84	1.34	0.44	0.87	1.10	0.44		0.44																			
16	3.44	2.77	2.57	2.20	2.20	1.86	1.24	0.44	1.24	1.69	1.24	0.69		0.82	0.44																						
18	3.18	2.36	2.13	1.72	1.72	1.36	0.71	0.19	0.71	1.19	0.71			0.28																							
20	2.90	1.97	1.72	1.30	1.30	0.92	0.27	0.75	0.27					0.27																							
550 S200-054 (50ksi)	8	6.54	6.39	6.34	6.24	6.24	6.15	5.95	5.66	6.10	5.95	5.76	5.38	5.81	5.57	5.10	5.66	4.82	5.38	5.00	4.27	5.10	4.64	3.74													
	10	6.35	6.11	6.02	5.86	5.71	5.40	5.63	5.40	4.95	5.40	5.09	4.51	5.17	4.80	4.09	4.95	4.51	3.68	4.51	3.95	2.89	4.09	3.41	2.14												
	12	6.08	5.71	5.59	5.35	5.35	5.13	4.69	5.01	4.69	4.07	4.69	4.27	3.49	3.87	2.94	4.07	3.49	2.42	3.49	2.77	1.45	2.94	2.09	0.55												
	14	5.75	5.22	5.05	4.74	4.74	4.44	3.88	4.30	3.88	3.13	3.88	3.37	2.44	3.50	2.89	1.81	3.13	2.44	1.23	2.44	1.61	1.81	0.85													
	16	5.24	4.56	4.36	3.99	3.99	3.64	3.01	3.48	3.01	2.19	3.01	2.45	1.47	2.59	1.94	0.81	2.19	1.47		1.47	0.60	0.81														
	18	4.65	3.85	3.63	3.22	3.22	2.85	2.21	2.68	2.21	1.38	2.21	1.64	0.66	1.78	1.13		1.38	0.66		0.66																
	20	4.04	3.17	2.94	2.53	2.53	2.17	1.53	2.00	1.53	0.73	1.53	0.98		1.12	0.49		0.73																			
	8	9.36	9.21	9.16	9.06	9.06	8.96	8.77	8.91	8.77	8.48	8.77	8.57	8.19	8.62	8.38	7.90	8.48	8.19	7.62	8.19	7.81	7.07	7.90	7.43	6.52											
	10	9.01	8.76	8.68	8.52	8.52	8.36	8.04	8.28	8.04	7.58	8.04	7.73	7.13	7.81	7.43	6.70	7.58	7.13	6.27	7.13	6.55	5.45	6.00	4.67												
	12	8.50	8.13	8.00	7.77	7.77	7.53	7.08	7.42	7.08	6.44	7.08	6.65	5.84	6.76	6.24	5.27	6.44	5.84	4.72	5.84	5.08	3.69	5.27	4.37	2.74											
14	7.85	7.32	7.16	6.84	6.84	6.53	5.96	6.38	5.96	5.18	5.96	5.43	4.46	5.56	4.93	3.80	5.18	4.46	3.18	4.46	3.59	2.05	3.80	2.79	1.01												
16	7.09	6.40	6.20	5.81	5.81	5.46	4.80	5.29	4.80	3.94	4.80	4.22	3.18	4.36	3.68	2.48	3.94	3.18	1.84	3.18	2.26	0.68	2.48	1.44													
18	6.27	5.46	5.22	4.80	4.80	4.42	3.73	4.24	3.73	2.86	3.73	3.13	2.09	3.28	2.59	1.40	2.86	2.09	0.77	2.09	1.19	0.38	1.40	0.38													
20	5.44	4.54	4.30	3.87	3.87	3.48	2.81	3.31	2.81	1.96	2.81	2.23	1.22	2.37	1.70	0.57	1.96	1.22		1.22	0.36																
550 S200-068 (50ksi)	8	15.54	15.37	15.31	15.20	15.20	15.09	14.87	15.03	14.87	14.54	14.87	14.65	14.21	14.70	14.43	13.88	14.54	14.21	13.56	14.21	13.78	12.93	13.88	13.35	12.30											
	10	14.89	14.60	14.50	14.32	14.32	14.13	13.77	14.04	13.77	13.23	13.77	13.41	12.71	13.50	13.05	12.20	13.23	12.71	11.70	12.71	12.03	10.74	12.20	11.38	9.82											
	12	13.96	13.51	13.37	13.09	13.09	12.81	12.27	12.67	12.27	11.51	12.27	11.76	10.79	11.89	11.27	10.10	11.51	10.79	9.44	10.79	9.88	8.21	10.10	9.02	7.06											
	14	12.78	12.14	11.94	11.55	11.55	11.18	10.49	11.01	10.49	9.54	10.49	9.84	8.67	10.00	9.24	7.86	9.54	8.67	7.11	8.67	7.61	5.72	7.86	6.63	4.47											
	16	11.44	10.59	10.34	9.86	9.86	9.42	8.62	9.21	8.62	7.57	8.62	7.90	6.63	8.08	7.24	5.78	7.57	6.63	5.00	6.63	5.51	3.58	5.78	4.51	2.32											
	18	10.01	8.99	8.70	8.18	8.18	7.71	6.87	7.49	6.87	5.82	6.87	6.14	4.86	6.31	5.47	4.03	5.82	4.86	3.26	4.86	3.77	1.89	4.03	2.79	0.67											
	20	8.48	7.39	7.10	6.58	6.58	6.11	5.31	5.90	5.31	4.28	5.31	4.61	3.40	4.77	3.98	2.62	4.28	3.40	1.90	3.40	2.37	0.62	2.62	1.45												







TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc	Lateral Loads, psf																																			
			0				5				10				15				20				25				30				40				50			
			12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36
600 S162-043	8	3.52	3.41	3.37	3.29	3.29	3.21	3.06	2.83	3.17	3.06	2.83	2.61	2.38	2.95	2.76	2.52	2.29	2.06	1.86	2.41	2.26	2.06	1.86	1.40	1.40	1.40	0.81	0.71									
	10	3.51	3.42	3.35	3.13	3.01	2.76	2.41	2.16	1.96	2.94	2.76	2.52	2.29	2.06	1.86	1.40	1.40	1.40	0.81	0.71																	
	12	3.44	3.15	3.06	2.88	2.70	2.35	2.16	1.86	1.66	2.76	2.61	2.35	2.06	1.86	1.40	1.40	1.40	0.81	0.71																		
	14	3.32	2.93	2.80	2.56	2.32	1.88	1.66	1.46	1.26	2.56	2.32	1.88	1.66	1.46	1.26	1.06	0.86	0.66	0.46	0.26	1.88	1.66	1.46	1.26	1.06	0.86	0.66	0.46	0.26								
	16	3.17	2.65	2.49	2.19	1.90	1.38	1.18	0.98	0.78	2.19	1.90	1.38	1.18	0.98	0.78	0.58	0.38	0.18	0.08	0.08	1.38	1.18	0.98	0.78	0.58	0.38	0.18	0.08									
	18	2.98	2.33	2.14	1.80	1.48	0.91	0.71	0.51	0.31	1.80	1.48	0.91	0.71	0.51	0.31	0.11	0.01	0.01	0.01	0.01	0.91	0.71	0.51	0.31	0.11	0.01	0.01										
	20	2.76	2.00	1.79	1.42	1.08	0.49	0.29	0.09	0.09	1.42	1.08	0.49	0.29	0.09	0.09						0.49																
	25	2.17	1.25	1.03	0.64	0.31					0.64	0.31																										
	30	1.64	0.71	0.51																																		
	8	5.73	5.61	5.57	5.50	5.42	5.26	5.03	4.79	4.55	5.38	5.26	5.03	4.79	4.55	4.31	4.07	3.83	3.59	3.35	3.11	4.81	4.69	4.47	4.23	3.99	3.75	3.51	3.27	3.03	2.79	2.55	2.31	2.07	1.83	1.59	1.35	
10	5.73	5.53	5.47	5.34	5.21	4.96	4.72	4.48	4.24	5.15	4.96	4.72	4.48	4.24	4.00	3.76	3.52	3.28	3.04	2.80	4.61	4.43	4.25	4.07	3.89	3.71	3.53	3.35	3.17	2.99	2.81	2.63	2.45	2.27	2.09	1.91	1.73	
12	5.57	5.27	5.17	4.98	4.79	4.43	4.19	3.95	3.71	4.70	4.43	4.19	3.95	3.71	3.47	3.23	2.99	2.75	2.51	2.27	4.31	4.13	3.95	3.77	3.59	3.41	3.23	3.05	2.87	2.69	2.51	2.33	2.15	1.97	1.79	1.61	1.43	
14	5.30	4.88	4.74	4.48	4.23	3.76	3.52	3.28	3.04	4.11	3.76	3.52	3.28	3.04	2.80	2.56	2.32	2.08	1.84	1.60	3.91	3.73	3.55	3.37	3.19	3.01	2.83	2.65	2.47	2.29	2.11	1.93	1.75	1.57	1.39	1.21	1.03	
16	4.93	4.38	4.21	3.89	3.59	3.03	2.79	2.55	2.31	3.44	3.03	2.79	2.55	2.31	2.07	1.83	1.59	1.35	1.11	0.87	3.22	3.04	2.86	2.68	2.50	2.32	2.14	1.96	1.78	1.60	1.42	1.24	1.06	0.88	0.70	0.52	0.34	
18	4.48	3.81	3.61	3.25	2.92	2.32	2.08	1.84	1.60	2.76	2.32	2.08	1.84	1.60	1.36	1.12	0.88	0.64	0.40	0.16	2.92	2.74	2.56	2.38	2.20	2.02	1.84	1.66	1.48	1.30	1.12	0.94	0.76	0.58	0.40	0.22	0.04	
20	3.99	3.23	3.02	2.64	2.29	1.69	1.45	1.21	0.97	2.13	1.69	1.45	1.21	0.97	0.73	0.49	0.25	0.01	0.01	0.01	1.69	1.51	1.33	1.15	0.97	0.79	0.61	0.43	0.25	0.07								
25	2.90	2.04	1.83	1.46	1.13	0.58	0.38	0.18	0.08	0.98	0.58	0.38	0.18	0.08							0.58																	
30	2.19	1.30	1.10	0.76	0.47					0.33																												
8	7.62	7.49	7.45	7.37	7.29	7.12	6.88	6.64	6.40	7.25	7.12	6.88	6.64	6.40	6.16	5.92	5.68	5.44	5.20	4.96	6.64	6.46	6.28	6.10	5.92	5.74	5.56	5.38	5.20	5.02	4.84	4.66	4.48	4.30	4.12	3.94	3.76	
10	7.62	7.41	7.34	7.20	7.06	6.79	6.55	6.31	6.07	7.00	6.79	6.55	6.31	6.07	5.83	5.59	5.35	5.11	4.87	4.63	6.40	6.22	6.04	5.86	5.68	5.50	5.32	5.14	4.96	4.78	4.60	4.42	4.24	4.06	3.88	3.70	3.52	
12	7.50	7.17	7.07	6.86	6.65	6.25	5.98	5.73	5.48	6.55	6.25	5.98	5.73	5.48	5.24	5.00	4.76	4.52	4.28	4.04	5.86	5.68	5.50	5.32	5.14	4.96	4.78	4.60	4.42	4.24	4.06	3.88	3.70	3.52	3.34	3.16	2.98	2.80
14	7.13	6.67	6.52	6.23	5.95	5.43	5.16	4.91	4.66	5.82	5.43	5.16	4.91	4.66	4.42	4.18	3.94	3.70	3.46	3.22	5.43	5.25	5.07	4.89	4.71	4.53	4.35	4.17	3.99	3.81	3.63	3.45	3.27	3.09	2.91	2.73	2.55	
16	6.63	6.01	5.82	5.46	5.12	4.49	4.22	3.97	3.72	4.96	4.49	4.22	3.97	3.72	3.48	3.24	3.00	2.76	2.52	2.28	4.49	4.31	4.13	3.95	3.77	3.59	3.41	3.23	3.05	2.87	2.69	2.51	2.33	2.15	1.97	1.79	1.61	1.43
18	6.02	5.26	5.04	4.62	4.24	3.56	3.29	3.04	2.79	4.06	3.56	3.29	3.04	2.79	2.55	2.31	2.07	1.83	1.59	1.35	3.56	3.38	3.20	3.02	2.84	2.66	2.48	2.30	2.12	1.94	1.76	1.58	1.40	1.22	1.04	0.86	0.68	
20	5.36	4.49	4.24	3.81	3.41	2.72	2.45	2.20	1.95	3.23	2.72	2.45	2.20	1.95	1.71	1.47	1.23	0.99	0.75	0.51	2.72	2.54	2.36	2.18	2.00	1.82	1.64	1.46	1.28	1.10	0.92	0.74	0.56	0.38	0.20	0.02		
25	3.89	2.89	2.65	2.22	2.22	1.85	1.21	0.85	0.49	1.68	1.21	0.85	0.49	0.13	0.01	0.01	0.01	0.01	0.01	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	
30	2.93	1.90	1.67	1.27	1.27	0.94				0.78																												
8	12.63	12.48	12.43	12.34	12.24	12.05	11.76	11.52	11.28	12.19	12.05	11.76	11.52	11.28	11.04	10.80	10.56	10.32	10.08	9.84	11.64	11.46	11.28	11.10	10.92	10.74	10.56	10.38	10.20	10.02	9.84	9.66	9.48	9.30	9.12	8.94	8.76	
10	12.63	12.38	12.29	12.13	12.13	11.96	11.64	11.32	11.00	11.88	11.64	11.32	11.00	10.68	10.44	10.20	9.96	9.72	9.48	9.24	11.04	10.86	10.68	10.50	10.32	10.14	9.96	9.78	9.60	9.42	9.24	9.06	8.88	8.70	8.52	8.34	8.16	7.98
12	12.63	12.21	12.08	11.81	11.55	11.05	10.73	10.41	10.09	11.55	11.05	10.73	10.41	10.09	9.85	9.61	9.37	9.13	8.89	8.65	10.41	10.23	10.05	9.87	9.69	9.51	9.33	9.15	8.97	8.79	8.61	8.43	8.25	8.07	7.89	7.71	7.53	7.35
14	12.06	11.45	11.25	10.87	10.51	9.82	9.54	9.26	8.98	10.51	9.82	9.54	9.26	8.98	8.74	8.50	8.26	8.02	7.78	7.54	9.26	9.08	8.90	8.72	8.54	8.36	8.18	8.00	7.82	7.64	7.46	7.28	7.10	6.92	6.74	6.56	6.38	
16	11.12	10.28	10.02	9.54	9.54	9.09	8.26	7.88	7.50	9.09	8.26	7.88	7.50	7.12	6.74	6.36	5.98	5.60	5.22	4.84	7.12	6.94	6.76	6.58	6.40	6.22	6.04	5.86	5.68	5.50	5.32	5.14	4.96	4.78	4.60	4.42	4.24	4.06
18	10.01	8.95	8.65	8.10	8.10	7.60	6.70	6.32	5.94	7.60	6.70	6.32	5.94	5.56	5.18	4.80	4.42	4.04	3.66	3.28	5.18	5.00	4.82	4.64	4.46	4.28	4.10	3.92	3.74	3.56	3.38	3.20	3.02	2.84	2.66	2.48	2.30	
20	8.82	7.60	7.27	6.69	6.69	6.18	5.28	4.90	4.52	6.18	5.28	4.90	4.52	4.14	3.76	3.38	3.00	2.62	2.24	1.86	4.14	3.96	3.															











TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Lateral Loads, psf

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	5		10		15		20		25		30		40		50							
			Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in							
			12	16	12	16	12	16	12	16	12	16	12	16	12	16	12	16	12	16				
600 S350-054 (50ksi)	8	9.55	9.41	9.36	9.27	9.18	8.99	8.72	8.99	8.81	8.45	8.86	8.63	8.18	8.72	8.45	7.91	8.45	8.09	7.38	8.18	7.73	6.85	
	10	9.28	9.05	8.98	8.83	8.68	8.39	8.61	8.39	7.96	8.39	8.10	7.53	7.81	7.96	7.53	6.70	7.53	6.98	5.90	7.11	6.43	5.12	
	12	8.93	8.59	8.48	8.26	8.05	7.62	7.94	7.62	7.03	7.62	7.21	6.42	6.81	7.01	6.42	5.29	6.52	5.66	4.23	5.85	4.93	3.22	
	14	8.51	8.03	7.88	7.58	7.58	6.73	7.15	6.73	5.93	6.73	6.19	5.19	5.68	4.48	5.93	5.19	3.81	5.19	4.25	2.55	4.48	3.37	1.38
	16	8.03	7.39	7.19	6.81	6.44	5.75	6.26	5.75	4.80	5.75	5.11	3.94	5.27	4.51	4.80	3.94	2.39	3.94	2.89	1.01	3.14	1.92	
	18	7.50	6.69	6.44	5.98	5.55	4.76	5.34	4.76	3.71	4.76	4.05	2.78	4.22	3.39	3.71	2.78	1.15	2.78	1.66		1.93	0.65	
	20	6.93	5.94	5.66	5.14	4.66	3.82	4.44	3.82	2.72	3.82	3.07	1.76	3.25	2.39	3.07	1.76		1.76	0.63		0.90		
	25	5.41	4.12	3.80	3.24	2.75	1.91	2.53	1.91	0.85	1.91	1.18		1.35	0.53									
	30	4.04	2.71	2.41	1.90	1.46	0.70	1.25	0.70		0.70			0.21										
	600 S350-068 (50ksi)	8	12.89	12.74	12.69	12.59	12.50	12.30	12.45	12.30	12.01	12.30	12.11	11.72	12.16	11.91	11.43	12.01	11.72	11.15	10.58	11.43	10.96	10.02
10		12.50	12.26	12.18	12.02	11.87	11.55	11.79	11.55	11.09	11.55	11.24	10.64	11.32	10.94	10.19	11.09	10.64	9.75	10.64	10.04	8.88	10.19	9.45
12		12.00	11.64	11.52	11.29	11.05	10.60	10.94	10.60	9.94	10.60	10.15	9.29	10.26	9.72	8.67	9.94	9.29	8.07	8.67	8.47	6.91	8.67	7.67
14		11.40	10.89	10.72	10.39	10.08	9.47	9.92	9.47	8.60	9.47	8.88	7.78	9.03	8.32	7.00	8.60	7.78	6.25	7.78	6.75	4.86	7.00	5.78
16		10.71	10.02	9.80	9.38	8.98	8.27	8.78	8.22	7.17	8.22	7.51	6.21	7.68	6.84	5.32	7.17	6.21	4.48	6.21	5.03	2.94	5.32	3.95
18		9.95	9.06	8.79	8.28	7.80	6.93	7.56	6.93	5.76	6.93	6.14	4.72	6.33	5.40	3.77	5.76	4.72	2.89	4.72	3.47	1.29	3.77	2.34
20		9.30	8.18	7.86	7.27	6.73	5.77	6.48	5.77	4.53	5.77	4.92	3.44	5.12	4.15	2.46	4.53	3.44	1.56	3.44	2.15		2.46	1.00
25		7.11	5.66	5.30	4.67	4.12	3.17	3.87	3.17	1.98	3.17	2.36	0.97	2.55	1.63		1.98	0.97						
30		5.27	3.79	3.45	2.87	2.38	1.53	2.15	1.53	0.48	1.53	0.81		0.98			0.48							
600 S350-097 (50ksi)		8	22.77	22.59	22.53	22.41	22.41	22.30	22.06	22.24	22.06	21.71	22.06	21.83	21.36	21.88	21.59	21.01	21.71	21.36	20.67	19.78	19.04	19.98
	10	22.08	21.79	21.69	21.49	21.49	21.30	20.91	21.20	20.91	20.34	20.91	19.78	20.63	20.15	19.22	20.34	19.78	18.67	19.78	19.04	17.60	19.22	
	12	20.94	20.48	20.33	20.04	20.04	19.75	19.18	19.60	19.18	18.35	19.18	18.62	17.54	18.07	16.76	18.35	17.54	16.00	17.54	16.50	14.54	16.76	
	14	19.61	18.96	18.75	18.33	18.33	17.93	17.15	17.73	17.15	16.05	17.15	16.41	15.01	16.59	15.69	14.02	16.05	15.01	13.08	15.01	13.70	11.32	
	16	18.18	17.28	17.00	16.45	16.45	15.94	14.96	15.68	14.96	13.62	14.96	14.05	12.40	14.27	13.20	11.27	13.62	12.40	10.22	12.40	10.91	8.28	
	18	16.75	15.55	15.20	14.52	14.52	13.90	12.77	13.61	12.77	11.28	12.77	11.75	9.95	12.00	10.82	8.75	11.28	9.95	7.64	9.95	8.37	5.64	
	20	15.19	13.71	13.29	12.53	12.53	11.85	10.64	11.53	10.64	9.09	10.64	9.58	7.74	9.83	8.62	6.53	9.09	7.74	5.42	7.74	6.15	3.44	
	25	10.74	9.03	8.61	7.87	7.87	7.22	6.10	6.92	6.10	4.71	6.10	5.15	3.52	5.37	4.29	2.46	4.71	3.52	1.50	3.52	2.13		
	30	7.70	6.03	5.65	4.98	4.98	4.42	3.45	4.16	3.45	2.24	3.45	2.62	1.22	2.82	1.89	0.32	2.24	1.22				0.32	
	600 S350-118 (50ksi)	8	29.38	29.20	29.14	29.02	29.02	28.90	28.67	28.84	28.67	28.32	28.67	28.43	27.97	28.49	28.20	27.62	28.32	27.97	27.27	27.97	27.50	26.58
10		28.23	27.94	27.84	27.64	27.64	27.45	27.06	27.35	27.06	26.49	27.06	26.68	25.92	26.78	26.30	25.36	26.49	25.92	24.81	25.92	25.18	23.72	
12		26.82	26.36	26.21	25.91	25.91	25.61	25.03	25.46	25.03	24.18	25.03	24.46	23.35	24.60	23.90	22.54	24.18	23.35	21.76	23.35	22.28	20.25	
14		25.22	24.54	24.32	23.89	23.89	23.47	22.65	23.26	22.65	21.49	22.65	21.87	20.40	22.06	21.12	19.35	21.49	20.40	18.36	20.40	19.02	16.49	
16		23.54	22.57	22.26	21.67	21.67	21.11	20.06	20.84	20.06	18.61	20.06	19.08	17.29	19.32	18.16	16.07	18.61	17.29	14.93	17.29	15.68	12.82	
18		21.13	19.88	19.50	18.79	18.79	18.14	16.94	17.82	16.94	15.35	16.94	15.86	13.94	16.12	14.86	12.66	15.86	13.94	11.48	13.94	12.26	9.34	
20		18.57	17.09	16.67	15.90	15.90	15.20	13.95	14.87	13.95	12.34	13.95	12.85	10.93	13.11	11.85	9.67	12.34	10.93	8.51	10.93	9.27	6.43	
25		12.82	11.17	10.75	10.00	10.00	9.34	8.20	9.04	8.20	6.77	8.20	7.22	5.54	7.45	6.34	4.44	6.77	5.54	3.45	5.54	4.10	1.67	
30		9.18	7.55	7.16	6.49	6.49	5.91	4.91	5.64	4.91	3.66	4.91	4.05	2.60	4.26	3.29	1.67	3.66	2.60	0.81	2.60	1.37		







TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Member Identification	Ht. ft	Pn/Ωc	Lateral Loads, psf																																			
			0				5				10				15				20				25				30				40				50			
			12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in	12	16	24	Spacing, in				
800 S250-068 (50ksi)	8	11.74	11.64	11.61	11.54	11.54	11.48	11.35	11.35	11.45	11.35	11.15	11.15	11.35	11.21	10.95	10.95	11.25	11.08	10.75	10.75	11.15	10.95	10.56	10.56	10.95	10.69	10.16	10.75	10.43	9.78							
	10	11.65	11.49	11.44	11.33	11.33	11.22	11.01	11.01	11.17	11.01	10.69	10.69	10.85	10.38	10.85	10.59	10.06	10.31	9.93	9.17	10.08	9.62	8.72	9.62	9.62	9.84	9.17	8.42	6.99								
	12	11.50	11.26	11.18	11.02	11.02	10.86	10.55	10.55	10.78	10.55	10.08	10.08	10.55	10.23	9.62	10.31	9.93	9.17	10.08	9.62	8.72	9.62	9.62	9.84	9.17	8.42	6.99										
	14	11.24	10.90	10.79	10.56	10.56	10.34	9.91	9.91	10.23	9.91	9.27	9.91	9.48	8.65	9.59	9.06	8.04	9.27	8.65	7.45	8.65	8.65	9.84	9.17	8.42	7.07	5.22										
	16	10.82	10.37	10.22	9.92	9.92	9.63	9.07	9.07	9.49	9.07	8.25	9.07	8.52	7.48	8.66	7.99	6.73	8.25	7.48	6.02	7.48	7.48	9.84	9.17	8.42	7.07	5.22										
	18	10.33	9.74	9.55	9.18	9.18	8.81	8.12	8.12	8.64	8.12	7.15	8.12	7.47	6.24	7.63	6.84	5.38	7.15	6.24	4.57	6.24	6.24	9.84	9.17	8.42	7.07	5.22										
	20	9.79	9.05	8.82	8.37	8.37	7.94	7.13	7.13	7.73	7.13	6.02	7.13	6.38	5.01	6.56	5.68	4.07	6.02	5.01	3.19	5.01	5.01	9.84	9.17	8.42	7.07	5.22										
	25	8.30	7.18	6.85	6.25	6.25	5.71	4.73	4.73	5.45	4.73	3.46	4.73	3.86	2.35	4.07	3.08	1.35	3.46	2.35	0.43	2.35	2.35	9.84	9.17	8.42	7.07	5.22										
	30	6.44	5.15	4.81	4.19	4.19	3.65	2.71	2.71	3.40	2.71	1.51	2.71	1.89	0.48	2.08	1.15	0.48	1.51	0.48	0.48	0.48	0.48	9.84	9.17	8.42	7.07	5.22										
	8	20.75	20.65	20.61	20.54	20.54	20.47	20.34	20.34	20.44	20.34	20.44	20.13	20.34	20.20	19.93	20.24	20.07	19.73	20.13	19.93	19.52	19.93	19.66	19.12	19.73	19.39	18.71										
10	20.45	20.29	20.23	20.12	20.12	20.01	19.79	19.79	19.95	19.79	19.46	19.79	19.57	19.13	18.80	19.62	19.35	18.80	19.46	19.13	18.48	19.13	18.69	17.83	18.80	18.26	17.19											
12	20.00	19.74	19.66	19.49	19.49	19.33	19.00	19.00	19.25	19.00	18.51	19.00	18.67	18.03	17.55	18.75	18.35	17.55	18.51	18.03	17.08	18.03	17.39	16.15	17.55	16.76	15.23											
14	19.34	18.98	18.86	18.63	18.63	18.39	17.93	17.93	18.28	17.93	17.26	17.93	17.48	16.60	17.59	17.04	15.95	17.26	16.60	15.31	16.60	15.74	14.08	15.95	14.90	12.90												
16	18.48	17.99	17.84	17.52	17.52	17.21	16.61	16.61	17.06	16.61	15.73	16.61	16.02	14.88	15.44	14.07	14.07	15.73	14.88	13.28	14.88	13.81	11.78	14.07	12.77	10.36												
18	17.47	16.83	16.63	16.23	16.23	15.83	15.08	15.08	15.64	15.08	14.01	15.08	14.36	13.00	14.54	13.67	12.05	14.01	13.00	11.13	13.00	11.74	9.43	12.05	10.55	7.84												
20	16.35	15.55	15.29	14.80	14.80	14.33	13.44	13.44	14.10	13.44	12.21	13.44	12.61	11.08	12.81	11.82	10.02	12.21	11.08	9.03	11.08	9.43	7.19	10.02	8.40	5.52												
25	13.33	12.12	11.76	11.10	11.10	10.50	9.42	9.42	10.22	9.42	8.00	9.42	8.45	6.75	8.68	7.57	5.82	8.00	6.75	4.59	6.75	5.27	2.72	5.62	3.94	1.06												
30	10.33	8.89	8.51	7.82	7.82	7.20	6.14	6.14	6.92	6.14	4.78	6.14	5.21	3.61	5.43	4.37	2.57	4.78	3.61	1.62	3.61	2.24	0.48	2.57	1.03													
8	28.52	28.41	28.37	28.29	28.29	28.22	28.07	28.07	28.18	28.07	27.84	28.07	27.91	27.61	27.38	27.95	27.76	27.38	27.84	27.61	27.15	27.61	27.30	26.70	27.38	27.00	26.25											
10	28.12	27.93	27.87	27.75	27.75	27.62	27.37	27.37	27.56	27.37	27.00	27.37	27.12	26.63	26.28	27.18	26.87	26.28	27.00	26.63	25.89	26.63	26.13	25.16	26.28	25.65	24.44											
12	27.50	27.21	27.11	26.92	26.92	26.73	26.35	26.35	26.64	26.35	25.79	26.35	25.98	25.24	26.07	25.61	24.69	25.79	25.24	24.15	25.24	24.51	23.09	24.69	23.79	22.04												
14	26.59	26.17	26.04	25.76	25.76	25.49	24.96	24.96	24.96	24.96	24.36	24.96	24.43	23.40	24.56	23.91	22.65	24.43	23.40	21.92	23.40	22.40	20.49	22.65	21.43	19.11												
16	25.41	24.83	24.64	24.27	24.27	23.90	23.19	23.19	23.72	23.19	22.15	23.19	22.49	21.16	22.66	21.82	20.20	22.49	21.16	19.28	21.16	19.89	17.52	20.20	18.68	15.86												
18	24.00	23.23	22.99	22.50	22.50	22.03	21.12	21.12	21.80	21.12	19.85	21.12	20.26	18.65	20.47	19.44	17.52	20.26	18.65	16.44	18.65	17.15	14.43	17.52	15.75	12.57												
20	22.45	21.45	21.14	20.54	20.54	19.96	18.89	18.89	19.69	18.89	17.40	18.89	17.88	16.05	18.13	16.94	14.80	17.88	16.05	13.63	16.05	14.40	11.47	14.80	12.88	9.51												
24	19.09	17.62	17.19	16.40	16.40	15.68	14.38	14.38	15.34	14.38	12.70	14.38	13.24	11.23	13.51	12.19	9.90	13.24	11.23	8.68	11.23	9.48	6.48	9.90	7.91	4.52												
28	15.68	13.85	13.37	12.52	12.52	11.77	10.46	10.46	11.42	10.46	8.81	10.46	9.33	7.39	9.60	8.32	6.13	9.33	7.39	4.98	7.39	5.73	2.92	6.13	4.26	1.10												
8	8.23	8.13	8.10	8.04	8.04	7.97	7.84	7.84	7.94	7.84	7.65	7.84	7.71	7.45	7.74	7.58	7.26	7.74	7.45	7.07	7.45	7.19	6.68	7.26	6.94	6.30												
10	8.14	7.98	7.93	7.83	7.83	7.72	7.52	7.52	7.67	7.52	7.21	7.52	7.31	6.91	7.36	7.11	6.60	7.31	6.91	6.30	6.91	6.50	5.70	6.60	6.10	5.12												
12	8.00	7.77	7.69	7.54	7.54	7.39	7.09	7.09	7.32	7.09	6.65	7.09	6.80	6.21	6.87	6.50	5.78	6.80	6.21	5.35	6.21	5.64	4.52	5.78	5.07	3.71												
14	7.81	7.49	7.38	7.18	7.18	6.97	6.56	6.56	6.87	6.56	5.97	6.56	6.16	5.38	6.26	5.77	4.82	6.16	5.38	4.27	5.38	4.63	3.20	4.82	3.91	2.18												
16	7.57	7.14	7.00	6.73	6.73	6.46	5.94	5.94	6.33	5.94	5.43	5.94	5.43	4.46	5.56	4.94	3.77	5.43	4.46	3.19	4.46	3.55	1.84	3.77	2.67	0.64												
18	7.28	6.74	6.56	6.22	6.22	5.89	5.25	5.25	5.73	5.25	4.35	5.25	4.64	3.51	4.79	4.06	2.71	4.64	3.51	1.95	3.51	2.45	0.53	2.71	1.46													
20	6.96	6.29	6.07	5.66	5.66	5.27	4.53	4.53	5.08	4.53	3.51	4.53	3.84	2.56	4.01	3.18	1.69	3.84	2.56	0.87	2.56	1.41	0.35	1.69	0.35													
25	6.04	5.04	4.74	4.19	4.19	3.69	2.78	2.78	3.45	2.78	1.59	2.78	1.97	0.54	2.16	1.23	0.76	1.97	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54												
30	5.11	3.83	3.49	2.87	2.87	2.33	1.38	1.38	2.08	1.38	0.18	1.38	0.56	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76												





TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Lateral Loads, psf

Member Identification	Ht. ft	Pn/Ωc Ωc=1.8	Lateral Loads, psf																																			
			5				10				15				20				25				30				40				50							
			12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36	12	16	24	36				
800 S350-068 (50ksi)	8	13.83	13.73	13.69	13.62	13.62	13.56	13.42	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42	13.22	13.42			
	10	13.63	13.47	13.41	13.31	13.20	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15	12.98	13.15		
	12	13.35	13.11	13.03	12.88	12.72	12.40	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	12.64	12.40	11.94	
	14	12.99	12.66	12.55	12.33	12.11	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	11.05	11.68	12.00	11.68	
	16	12.56	12.11	11.97	11.68	11.39	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	10.01	10.83	11.25	10.83	
	18	12.07	11.49	11.30	10.93	10.57	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	8.87	9.87	10.39	9.87	
	20	11.52	10.79	10.56	10.10	10.10	9.67	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84	9.46	8.84	7.68	8.84		
	25	9.98	8.84	8.50	7.86	7.86	7.28	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22	7.00	6.22	4.82	6.22		
	30	8.50	6.96	6.54	5.81	5.81	5.15	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02	4.85	4.02	2.57	4.02		
	800 S350-097 (50ksi)	8	23.78	23.66	23.62	23.54	23.54	23.47	23.31	23.43	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	23.08	23.31	
10		23.47	23.28	23.22	23.09	23.09	22.97	22.72	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97	22.72	22.34	22.97		
12		23.04	22.75	22.66	22.47	22.47	22.28	21.91	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	21.35	21.91	
14		22.48	22.07	21.94	21.67	21.67	21.40	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88	20.11	20.88	21.27	20.88
16		21.69	21.13	20.95	20.59	20.59	20.24	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54	18.53	19.54	20.06	19.54
18		20.61	19.88	19.65	19.19	19.19	18.74	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86	16.62	17.86	18.51	17.86
20		19.47	18.55	18.25	17.68	17.68	17.13	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09	14.64	16.09	16.87	16.09
25		16.60	15.10	14.66	13.84	13.84	13.09	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73	9.97	11.73	12.73	11.73
30		13.20	11.32	10.82	9.94	9.94	9.15	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	7.79	6.06	7.79	8.79	
800 S350-118 (50ksi)		8	33.86	33.73	33.68	33.60	33.60	33.51	33.34	33.47	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	33.08	33.34	
	10	33.23	33.02	32.95	32.81	32.81	32.67	32.39	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	31.97	32.67	32.39	
	12	32.36	32.04	31.93	31.72	31.72	31.51	31.09	31.41	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	31.09	30.47	
	14	31.26	30.80	30.65	30.34	30.34	30.05	29.45	29.90	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	29.45	28.58	
	16	29.97	29.33	29.13	28.72	28.72	28.31	27.52	28.11	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	27.52	26.36	
	18	28.55	27.70	27.43	26.89	26.89	26.36	25.35	26.11	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	25.35	23.90	
	20	27.09	25.97	25.62	24.94	24.94	24.28	23.04	23.96	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	23.04	21.33	
	25	22.65	20.77	20.23	19.25	19.25	18.36	16.77	17.94	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	16.77	14.72	
	30	17.64	15.32	14.74	13.71	13.71	12.81	11.25	12.39	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	11.25	9.30	
	1000 S162-054 (50ksi)	8	5.27	5.21	5.19	5.15	5.15	5.11	5.02	5.09	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	4.90	5.02	
10		5.27	5.17	5.14	5.07	5.07	5.01	4.88	4.98	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88	4.68	4.88		
12		5.27	5.13	5.08	4.98	4.98	4.89	4.70	4.84	4.70	4.41																											







TABLE 8--Allowable Axial Load combined with Lateral for Load-Bearing Wall Studs (kips)<sup>1,2,3,4,5,6,7,8</sup>

Lateral Loads, psf

Member Identification	Ht. ft	Pn/Ωc	5		10		15		20		25		30		40		50									
			Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in		Spacing, in									
			12	16	12	16	12	16	12	16	12	16	12	16	12	16	12	16	12	16						
1000 S300-068 (50ksi)	8	12.75	12.67	12.65	12.59	12.54	12.44	12.44	12.29	12.44	12.34	12.14	12.37	12.24	11.99	12.29	12.14	11.84	11.94	11.53	11.99	11.73	11.23			
	10	12.68	12.56	12.52	12.44	12.36	12.19	12.31	11.95	12.03	11.71	12.07	11.87	11.47	11.71	11.95	11.71	11.23	11.71	11.39	10.76	11.47	11.07	10.28		
	12	12.67	12.39	12.33	12.21	12.21	12.09	11.86	11.51	11.86	11.62	11.16	11.68	11.39	10.81	11.51	11.16	10.46	11.16	10.69	9.78	10.81	10.23	9.10		
	14	12.40	12.15	12.07	11.91	11.74	11.42	11.66	11.42	10.94	11.10	10.46	11.18	10.78	9.98	10.94	10.46	9.52	10.46	9.83	8.59	9.98	9.21	7.69		
	16	12.16	11.83	11.73	11.51	11.51	11.29	10.87	11.19	10.87	10.24	10.87	10.44	9.62	10.55	10.03	9.01	10.24	9.62	8.41	9.62	8.81	7.24	9.01	8.02	6.11
	18	11.86	11.44	11.30	11.02	11.02	10.75	10.21	10.61	10.21	9.42	10.21	9.68	8.65	9.81	9.16	7.91	9.42	8.65	7.18	8.65	7.78	7.91	6.71	4.44	
	20	11.51	10.98	10.80	10.46	10.46	10.12	9.47	9.96	9.47	8.52	9.47	8.83	7.61	8.99	8.21	6.73	8.52	7.61	5.89	7.61	6.45	4.29	6.73	5.34	2.77
	25	10.59	9.73	9.46	8.94	8.94	8.43	7.48	8.19	7.48	6.17	7.48	6.60	4.96	6.81	5.76	3.84	6.17	4.96	2.79	4.96	3.48	0.85	3.84	2.12	
	30	9.51	8.28	7.92	7.23	7.23	6.59	5.44	6.29	5.44	3.92	5.44	4.40	2.57	4.65	3.45	1.35	3.92	2.57	0.22	2.57	0.96				
	8	23.17	23.09	23.06	23.01	23.01	22.95	22.84	22.92	22.84	22.67	22.84	22.73	22.50	22.73	22.50	22.34	22.67	22.50	22.17	22.50	22.28	21.84	22.34	22.06	21.50
10	23.02	22.88	22.84	22.75	22.75	22.66	22.48	22.62	22.48	22.22	22.48	22.30	21.95	22.35	22.13	21.68	22.22	21.95	21.42	21.95	21.59	20.89	21.68	21.24	20.36	
12	22.77	22.57	22.51	22.38	22.38	22.24	21.98	21.98	21.59	21.98	21.72	21.20	21.78	21.46	20.81	21.59	21.20	20.42	21.20	20.68	19.65	20.81	20.16	18.88		
14	22.40	22.12	22.03	21.85	21.85	21.66	21.30	21.57	21.30	20.75	21.30	20.93	20.21	21.02	20.57	19.68	20.75	20.21	19.15	20.57	19.50	18.10	19.68	18.79	17.06	
16	21.90	21.52	21.40	21.15	21.15	20.91	20.42	20.79	20.42	19.70	20.42	19.99	18.99	19.46	18.29	19.70	18.99	17.60	18.99	18.06	16.26	18.29	17.15	14.94		
18	21.28	20.79	20.63	20.31	20.31	20.00	19.37	19.84	19.37	18.46	19.37	18.76	17.57	18.91	18.16	16.70	18.46	17.57	15.85	17.57	16.41	14.21	16.70	15.30	12.63	
20	20.58	19.96	19.76	19.36	19.36	18.96	18.19	18.77	18.19	17.07	18.19	17.44	16.00	17.63	16.71	14.97	17.07	16.00	13.97	16.00	14.63	12.06	14.97	13.32	10.25	
25	18.70	17.66	17.33	16.70	16.70	16.09	14.94	15.79	14.94	13.34	14.94	13.86	11.88	14.12	12.84	10.52	13.34	11.88	9.23	11.88	10.08	6.87	10.52	8.42	4.71	
30	15.89	14.46	14.03	13.22	13.22	12.48	11.12	12.12	11.12	9.32	11.12	9.89	7.73	10.19	8.77	6.29	9.32	7.73	4.96	7.73	5.83	2.55	6.29	4.12	0.39	
8	30.75	30.67	30.64	30.59	30.59	30.53	30.42	30.51	30.42	30.26	30.42	30.32	30.10	30.34	30.21	29.93	30.26	30.10	29.77	30.10	29.88	29.44	29.93	29.66	29.12	
10	30.58	30.44	30.40	30.31	30.31	30.22	30.05	30.18	30.05	29.79	30.05	29.87	29.52	29.92	29.70	29.26	29.79	29.52	29.00	29.52	29.17	28.48	29.26	28.82	27.96	
12	30.30	30.10	30.04	29.91	29.91	29.77	29.51	29.71	29.51	29.12	29.51	29.25	28.99	28.35	29.12	28.73	27.96	28.73	28.22	27.96	28.22	27.19	28.35	27.70	26.43	
14	29.89	29.61	29.51	29.33	29.33	29.15	28.78	29.05	28.78	28.23	28.78	28.41	27.69	28.50	28.05	27.15	28.23	27.69	26.61	27.69	26.97	25.56	27.15	26.26	24.51	
16	29.34	28.96	28.83	28.58	28.58	28.33	27.84	28.21	27.84	27.10	27.84	27.35	26.38	27.47	26.86	25.66	27.10	26.38	24.96	26.38	25.43	23.57	25.66	24.49	22.22	
18	28.56	28.06	27.90	27.57	27.57	27.24	26.80	27.08	26.80	25.66	26.80	25.97	24.73	26.13	25.35	23.83	25.66	24.73	22.95	24.73	23.54	21.23	23.83	22.37	19.58	
20	27.40	26.76	26.55	26.14	26.14	25.74	24.94	25.54	24.94	23.78	24.94	24.16	22.67	24.36	23.41	21.59	23.78	22.67	20.54	22.67	21.24	18.54	21.59	19.86	16.64	
25	24.05	23.01	22.68	22.04	22.04	21.42	20.24	21.12	20.24	18.61	20.24	19.14	17.10	19.41	18.09	15.69	18.61	17.10	14.36	17.10	15.24	11.90	15.69	13.51	9.64	
30	20.43	18.95	18.50	17.67	17.67	16.89	15.47	16.52	15.47	13.59	15.47	14.19	11.91	14.50	13.01	10.39	13.59	11.91	8.99	11.91	9.91	6.44	10.39	8.11	4.16	
8	10.41	10.33	10.30	10.24	10.24	10.19	10.08	10.16	10.08	9.91	10.08	9.97	9.75	10.00	9.86	9.58	9.91	9.75	9.42	9.75	9.53	9.09	9.58	9.31	8.76	
10	10.35	10.21	10.17	10.08	10.08	9.99	9.82	9.95	9.82	9.56	9.82	9.64	9.30	9.69	9.47	9.04	9.56	9.30	8.78	9.30	8.95	8.26	9.04	8.60	7.75	
12	10.24	10.05	9.99	9.86	9.86	9.73	9.48	9.67	9.48	9.10	9.48	9.22	8.72	9.29	8.97	8.34	9.10	8.72	7.97	8.72	8.22	7.23	8.34	7.72	6.50	
14	10.10	9.84	9.75	9.57	9.57	9.39	9.05	9.31	9.05	8.53	9.05	8.70	8.01	8.79	8.36	7.51	8.53	8.01	7.01	8.01	7.34	6.03	7.51	6.68	5.06	
16	9.92	9.56	9.45	9.21	9.21	8.98	8.53	8.87	8.53	7.85	8.53	8.08	7.19	8.19	7.63	6.55	7.85	7.05	5.92	7.19	6.34	4.68	6.55	5.50	3.49	
18	9.69	9.24	9.09	8.79	8.79	8.50	7.93	8.36	7.93	7.09	7.93	7.37	6.28	7.51	6.82	5.50	7.09	6.28	4.74	6.28	5.24	3.27	5.50	4.24	1.88	
20	9.43	8.86	8.67	8.31	8.31	7.95	7.26	7.78	7.26	6.29	7.26	6.59	5.31	6.75	5.94	4.40	6.29	5.31	3.52	5.31	4.10	1.86	4.40	2.96	0.30	
25	8.64	7.75	7.47	6.93	6.93	6.41	5.43	6.16	5.43	4.09	5.43	4.53	2.87	4.75	3.67	1.73	4.09	2.87	0.67	2.87	1.37					
30	7.74	6.49	6.12	5.43	5.43	4.79	3.64	4.49	3.64	2.12	3.64	2.60	0.77	2.85	1.65		2.12	0.77								



## Table 8 Design Example:

Wall height = 10 ft  
Stud spacing = 16 in OC  
Deflection limits = L/ 600       $\Delta = (10\text{ft} \cdot 12\text{"/ft})/600 =$  0.20 in., deflection at mid-span  
Stud size = 3.625 in

Information needed Floor Framing Plan and Design Loads:

Floor joist span = 20 ft  
Design Loads for office:  
Live = 50 psf  
Partition = 20 psf  
Dead = 15 psf  
Total Load = 85 psf  
Lateral Load = 10 psf  
 $w = 10\text{psf} \cdot 16\text{"/oc} / 12 = 13.3 \text{ lbs/ft} = 0.0133 \text{ kip/ft}$

### Calculations:

Uniform load from floor joist =  $(85 \text{ psf} \cdot 20 \text{ ft})/2 = 850 \text{ lbs/ft} = 0.85 \text{ kips/ft}$

Joist Reaction =  $(0.85 \text{ kips/ft}) \cdot (16\text{"/oc} / 12\text{"/ft}) = 1.13 \text{ kips}$

From Table 8 362S162-043 for 10 height and 10 psf lateral load:

Allowable Axial Load = 1.738 kips > 1.13 kips therefore OK

### Check Lateral Deflection:

From Table 1 Member 362S162-043 the Effective Moment of Inertia,  $I_{eff} = 0.7099 \text{ in}^4$

Deflection eq:  $\Delta = (5 \cdot w \cdot L^4) / (384 \cdot E \cdot I) = (5 \cdot 0.0133 \cdot 10^4 \cdot 1.728) / (384 \cdot 29.5 \cdot 0.7099) = 0.143 \text{ in} = L / 840$  OK L/600 req'd

### Check Web Crippling:

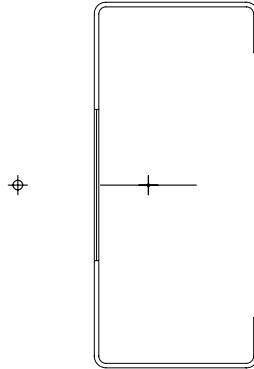
Reaction from lateral 10 psf load =  $(0.0133 \text{ kip/ft}) \cdot (10 \text{ ft} / 2) = 0.067 \text{ kips}$

Track leg = 1.0 inches

From Table 11: Allowable Web Crippling Load = 0.277 kips > 0.067 kips      Web Crippling OK

### Additional design considerations:

Combined Bending and Web Crippling Eq. C3.5.1-1



**Section Inputs**

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Material: A653 SS Grade 33  
 Apply strength increase from cold work of forming.  
 Modulus of Elasticity, E            29500 ksi  
 Yield Strength, Fy                    33 ksi  
 Tensile Strength, Fu                 45 ksi  
 Warping Constant Override, Cw      0 in<sup>6</sup>  
 Torsion Constant Override, J        0 in<sup>4</sup>

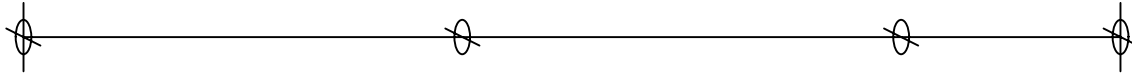
Stiffened Channel, Thickness 0.0451 in (43 mils)  
 Placement of Part from Origin:  
 X to center of gravity                0 in  
 Y to center of gravity                0 in

Outside dimensions, Open shape

	Length (in)	Angle (deg)	Radius (in)	Web	k Coef.	Hole Size (in)	Distance (in)
1	0.5000	270.000	0.071200	None	0.000	0.0000	0.2500
2	1.6250	180.000	0.071200	Single	0.000	0.0000	0.8125
3	3.6250	90.000	0.071200	Single	0.000	1.5000	1.8125
4	1.6250	0.000	0.071200	Single	0.000	0.0000	0.8125
5	0.5000	-90.000	0.071200	None	0.000	0.0000	0.2500



Rev. Date: 1/13/2011 9:27:57 AM  
 By: David Jeter, P.E. S.E.



### Analysis Inputs

#### Members

Section File	Revision Date and Time
1 0362S162-043.sct	2/17/2009 10:21:58 AM

	Start Loc. (ft)	End Loc. (ft)	Braced Flange	R	$k\phi$ (k)	ex (in)	ey (in)
1	0.0000	10.0000	None	0.0000	0.0000	0.0000	0.0000

#### Supports

Type	Location (ft)	Bearing (in)	Fastened	K
1 XYT	0.0000	2.000	Yes	1.0000
2 XT	4.0000	1.000	No	1.0000
3 XT	8.0000	1.000	No	1.0000
4 XYT	10.0000	2.000	Yes	1.0000

#### Loading: Dead Load

Type	Angle (deg)	Start Loc. (ft)	End Loc. (ft)	Start Magnitude	End Magnitude
1 Axial	NA	0.0000	10.0000	1.7380	1.7380 k

#### Loading: Wind Load

Type	Angle (deg)	Start Loc. (ft)	End Loc. (ft)	Start Magnitude	End Magnitude
1 Distributed	90.000	0.0000	10.0000	-0.013330	-0.013330 k/ft

#### Load Combination: D

Specification: 2004 North American Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	1.0000

#### Load Combination: D+W

Specification: 2004 North American Specification - US (ASD)

Inflection Point Bracing: Yes

Loading	Factor
1 Dead Load	1.0000
2 Wind Load	1.0000

Member Check - 2004 North American Specification - US (ASD)

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Load Combination: D+W

Design Parameters at 5.0000 ft:

Lx	10.0000 ft	Ly	4.0000 ft	Lt	4.0000 ft
Kx	1.0000	Ky	1.0000	Kt	1.0000

Section: 0362S162-043.sct

Material Type: A653 SS Grade 33, Fy=33 ksi

Cbx	1.0540	Cby	1.0000	ex	0.0000 in
Cmx	1.0000	Cmy	1.0000	ey	0.0000 in

Braced Flange: None      Red. Factor, R: 0      Stiffness, k $\phi$ : 0 k

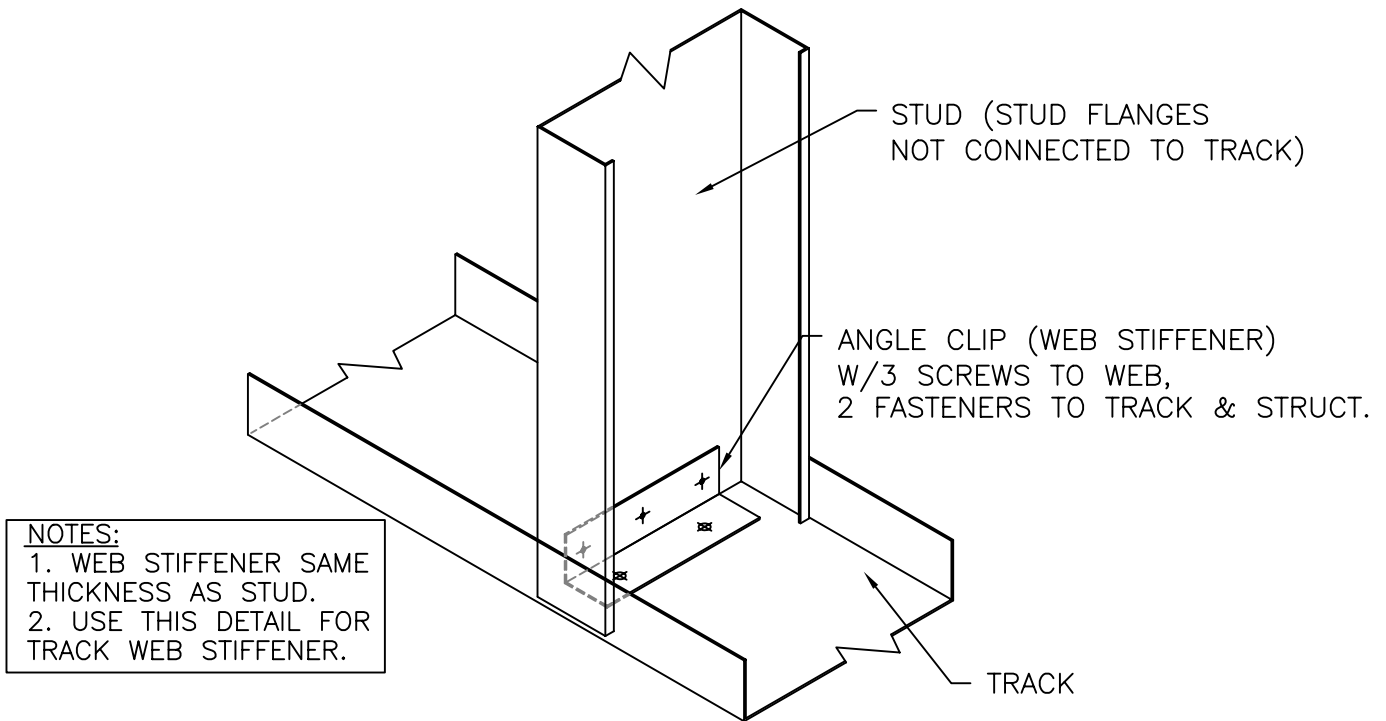
Loads:	P	Mx	Vy	My	Vx
	(k)	(k-in)	(k)	(k-in)	(k)
Total	1.7380	1.9995	0.0000	0.0000	0.0000
Applied	1.7380	1.9995	0.0000	0.0000	0.0000
Strength	2.6372	7.5034	0.6757	2.4939	1.5542

Effective section properties at applied loads:

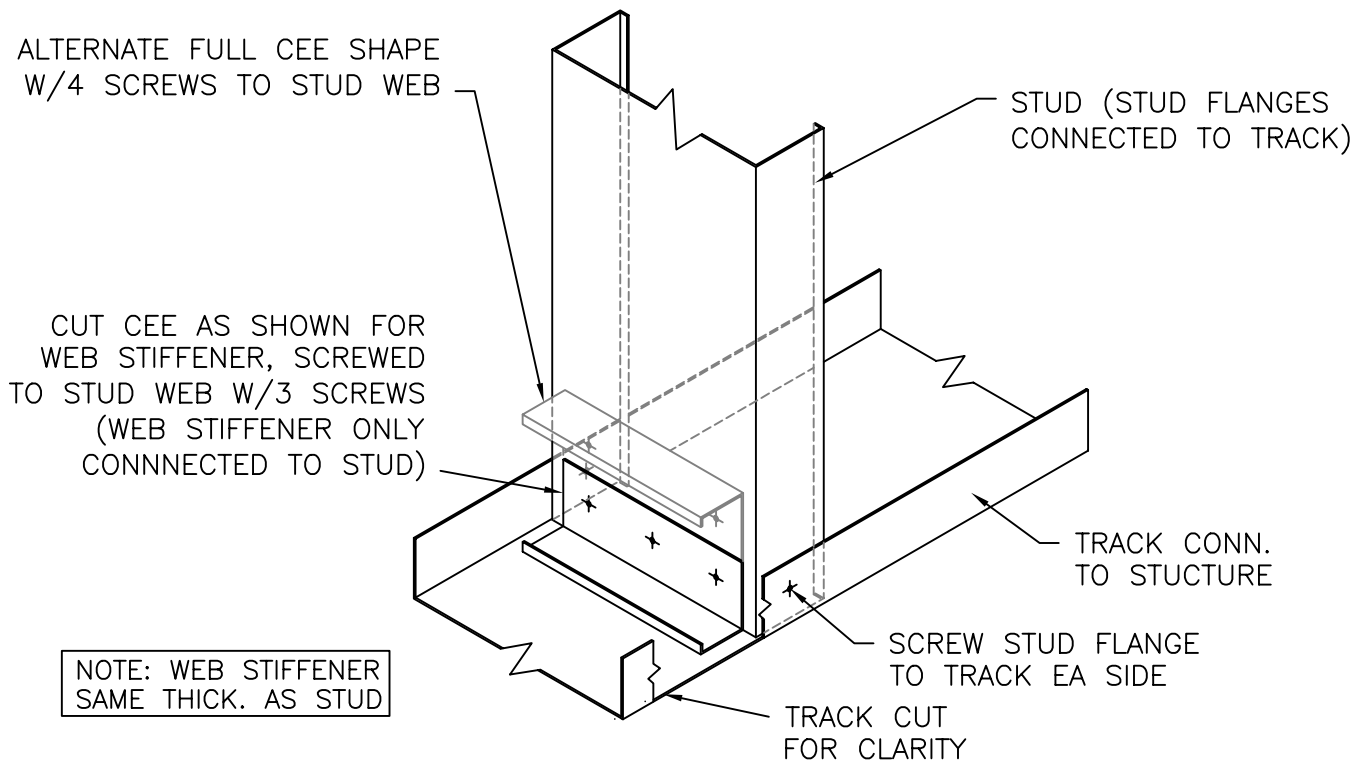
Ae	0.33977 in <sup>2</sup>	Ixe	0.70993 in <sup>4</sup>	Iye	0.12690 in <sup>4</sup>
		Sxe(t)	0.39169 in <sup>3</sup>	Sye(l)	0.23621 in <sup>3</sup>
		Sxe(b)	0.39169 in <sup>3</sup>	Sye(r)	0.11667 in <sup>3</sup>

Interaction Equations

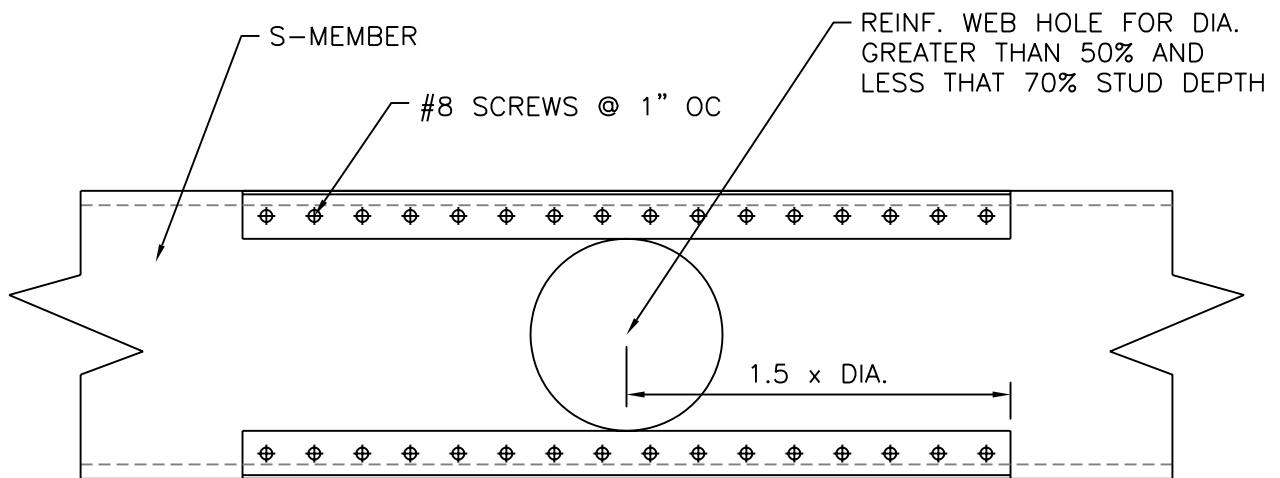
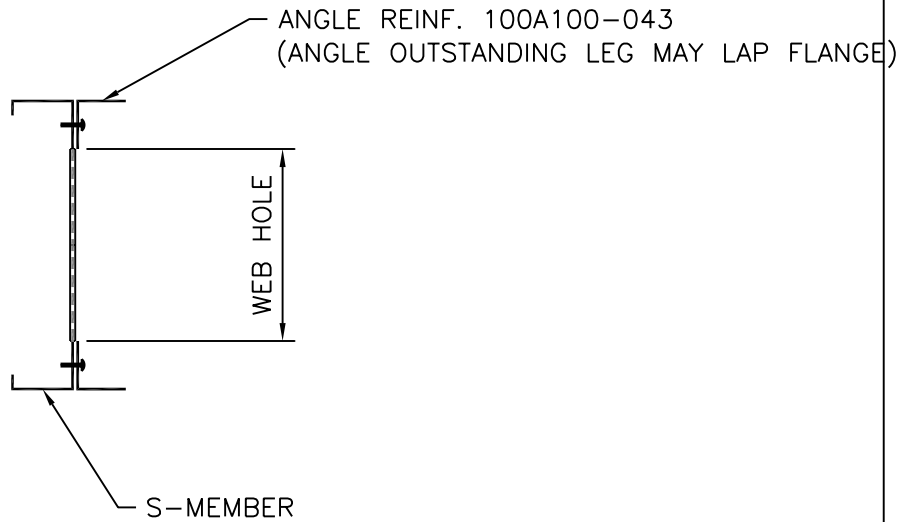
NAS Eq. C5.2.1-1	(P, Mx, My)	0.659 + 0.341 + 0.000 = 1.000 <= 1.0
NAS Eq. C5.2.1-2	(P, Mx, My)	0.383 + 0.266 + 0.000 = 0.649 <= 1.0
NAS Eq. C3.3.1-1	(Mx, Vy)	Sqrt(0.071 + 0.000) = 0.266 <= 1.0
NAS Eq. C3.3.1-1	(My, Vx)	Sqrt(0.000 + 0.000) = 0.000 <= 1.0



DETAIL A (Angle Clip Web Stiffener)



DETAIL A (Cee or Cut Cee Web Stiffener)



RECOMMENDED WEB HOLE REINFORCING DETAIL

NOTES

1. WEB REINFORCING IS NOT REQUIRED FOR WEB HOLES UP TO 50% OF THE MEMBER DEPTH.
2. WEB HOLES SHALL NOT BE LOCATED WITHIN 10 INCHES OF STANDARD HOLE PUNCHOUTS. PUNCHOUTS SHALL BE REINFORCED WITH A PLATE IF THIS OCCURS.
3. WEB HOLES SHOULD BE LOCATED AT CENTER OF WEB AND THE EDGE OF THE HOLE NO CLOSER THAT 12 INCHES FROM ENDS.
4. WEB HOLES SPACING MINIMUM OF 3 TIMES DIAMETER CL TO CL.

WEB HOLE REINFORCING DETAIL

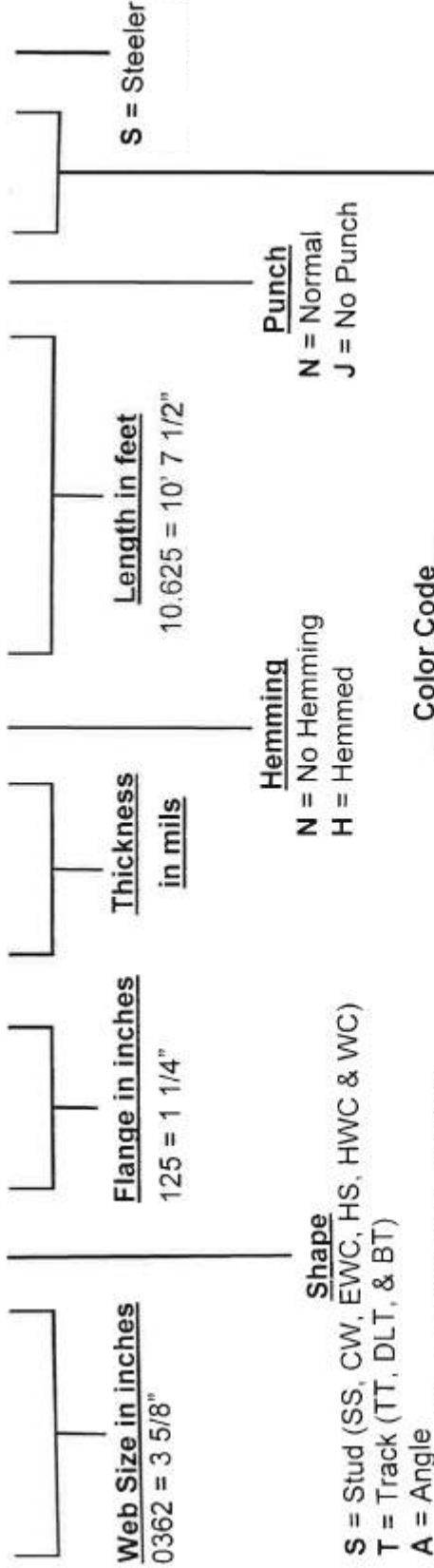
DATE: 1-13-2011

SHEET: SK-1



PART NUMBER SPECIFICATION

# 0362S125-030N10.625JG4S



- Shape**
- S = Stud (SS, CW, EWC, HS, HWC & WC)
  - T = Track (TT, DLT, & BT)
  - A = Angle
  - F = Furring Channel (DWC & DWCX)
  - H = Shaft Wall Stud (SWS)
  - J = J Track (JT)
  - L = Slip Track (ST)
  - N = Slotted Stud (NS)
  - R = Sound Resilient Channel (SRC)
  - U = Cold Rolled Channel (CRC)
  - Z = Z Furring (ZF)
  - D = Deflection Track (DFT)
  - P = Pony Wall Studs (PWS)
  - C = Slotted Track (CC)
  - I = Steeler Floor Joist

**Color Code**

Non-Structural			Structural		
Gage	Mil	Color	Gage	Mil	Color
25-TI	016	Clear / White Stripe	33 ES	028	Purple
25 Ga	018	Clear / (No Paint)	20 Ga	033	White
20-TI	019	Clear / Red Stripe	43 ES	038	Brown
30 ED1	021	Red	18 Ga	043	Yellow
30 ED2	022	Blue	54 ES	048	Lite Blue
30 ED4	024	Orange	16 Ga	054	Green
22 Ga	027	Black	14 Ga	068	Orange
21 Ga	030	Pink	12 Ga	097	Red
			10 Ga	118	Blue

- Finish**
- G4 = G40 Galvanization
  - G6 = G60 Galvanization
  - G9 = G90 Galvanization
  - A4 = A40 Galvanization
  - A6 = A60 Galvanization
  - P4 = G40 Painted Steel
  - P6 = G60 Painted Steel
  - BP = G40 Black Paint

B\* = Brake Shape (BS)  
 K\* = Flat Stock (FS)  
 \* use existing part numbers

# STEELER

CONSTRUCTION SUPPLY



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