

## STRONGWELL® PULTRUDED GRATING

**DURADEK®** and **DURAGRID®** are high-strength pultruded bar type gratings that can be designed and used like traditional metal grates but have the inherent benefits of fiberglass. These problem solving products are ideal replacements for steel or aluminum gratings in corrosive environments or anywhere frequent grating and walkway replacement costs are unacceptable.

**DURADEK®** is a standard product stocked by distributors nationwide. It is available with individual bearing bars in either 1" or 1-1/2" I-shapes or a 2" T-shape. **DURADEK®** is a flame retardant product utilizing a polyester or vinyl ester resin. The bearing bars are assembled into 12 panel sizes: 3-, 4-, and 5-foot widths in each of 8-, 10-, 12- and 20-foot lengths. Standard panels are available with cross-rod spacings of 6" or 12" on center.

**DURAGRID®** custom grid or grating systems are designed to accommodate specific applications that cannot effectively be met by a standard fiberglass grating. **DURAGRID®** offers the customer options such as selection of open space, bar shape, cross-rod placement, custom fabrication, custom resin or color. Why Use **DURADEK®** or **DURAGRID®** Grating?

**DURADEK®** and **DURAGRID®** are lightweight, which saves on freight and makes installation easier. The unique cross-bar construction of **DURADEK®** and **DURAGRID®** allows the grating panels to be easily cut and modified to fit almost any plant requirement. A full listing of features are shown below.

### Features

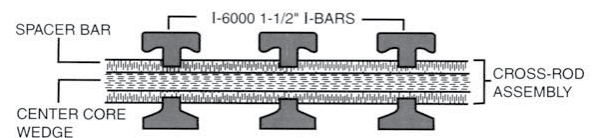
- Corrosion Resistant
- Structurally Strong
- High Impact and Fatigue Strength
- Lightweight
- Fire Retardant
- Easy to Fabricate and Install
- Low Maintenance
- Low Conductivity
- Resistant to Chipping and Cracking
- Aesthetically Pleasing Appearance
- Skid Resistant
- Rigid
- Low Thermal Conductivity
- Non-Sparking



DURADEK® and DURAGRID® fiberglass grating provide safe, corrosion-resistant walkways and work platforms around caustic chemical storage tanks in a broad range of markets and industries.

### Three-Piece Cross-Rod Assembly

The 3-piece cross-rod assembly used in DURADEK® and DURAGRID® grating forms a strong, unified panel that can be cut and fabricated like a solid sheet.



This unique system consists of two continuous, pultruded spacer bars and a center core wedge. The spacers are notched at each bearing bar so that the bars are both mechanically locked and chemically bonded to the web of each bearing bar. This separates and affixes bearing bars firmly in position and distributes concentrated loads to adjacent bars. The resulting panel can be easily fabricated with standard carpenters' tools with abrasive cutting edges.

# STRONGWELL® DURADEK®

## USING THE LOAD/DEFLECTION TABLES

### Typical Bearing Bar Spacings

Strongwell manufactures virtually any non-standard and non-stocked custom grid and grating. However, the following load tables are for the most popular bearing bar configurations. The physical properties are shown for the section.

To determine loading or physical properties for other bar spacings, use the multiplier shown on the tables.

### Series Designation

The series designation indicates the bar size and shape and the percent of open area. For example: T-1800 1" means 1" T-bar spaced to give an 18% open area.

### Cross Rod Spacings

Cross rod spacings must be 2", 4", 6", 8", 10", etc. Our standard spacings are 6" and 12" on center.

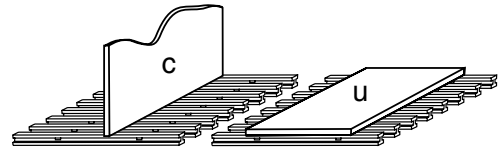
### Load Table Values

All tables show typical values.

### Load Data

Deflection and safe load data were calculated by the Strongwell Test Lab. All tables show typical values.

- c** is Concentrated Load LBS/FT of width
- Δc** is Deflection under Concentrated Load
- u** is Uniform Load LBS/FT<sup>2</sup>
- Δu** is Deflection under Uniform Load



The modulus of elasticity will vary with span length due to the non-homogeneous make-up of composite material.

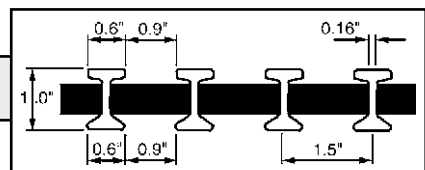
### DURADEK® High Strength Fiberglass Grating

The following load tables are for standard DURADEK® fiberglass grating panels stocked by distributors: DURADEK® I-6000 1", I-6000 1-1/2", and T-5000 2". Standard panels come with cross-rod spacings of 6" or optional 12" on center.

#### DURADEK® I-6000 1" Bearing Bars Spaced 1-1/2" On Center

A = 2.496 IN<sup>2</sup>/FT OF WIDTH    S = 0.656 IN<sup>2</sup>/FT OF WIDTH    I = 0.328 IN<sup>4</sup>/FT OF WIDTH  
60% OPEN AREA    APPROX. WT. = 2.4 LBS/SQ FT

SPAN INCHES		LOAD														SAFE LOAD SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000			
12	Δu	0.001	0.002	0.003	0.004	0.005	0.005	0.007	0.009	0.014	0.018	0.036	0.054	0.073	0.091	10401	0.189	3.78
	Δc	0.001	0.003	0.004	0.006	0.007	0.009	0.012	0.015	0.022	0.029	0.058	0.087	0.116	0.145			
18	Δu	0.004	0.008	0.013	0.017	0.021	0.025	0.033	0.042	0.063	0.084	0.167	0.251	0.335	0.418	4954	0.415	4.15
	Δc	0.004	0.009	0.013	0.018	0.022	0.027	0.036	0.045	0.067	0.089	0.179	0.268	0.357	0.446			
24	Δu	0.012	0.025	0.037	0.050	0.062	0.075	0.100	0.124	0.187	0.249	0.498				2900	0.722	4.41
	Δc	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100	0.149	0.199	0.398	0.597					
30	Δu	0.029	0.058	0.087	0.116	0.145	0.174	0.231	0.289	0.434	0.579					1856	1.074	4.63
	Δc	0.019	0.037	0.056	0.074	0.093	0.111	0.148	0.185	0.278	0.370							
36	Δu	0.058	0.115	0.173	0.230	0.288	0.345	0.460	0.575							1289	1.483	4.83
	Δc	0.031	0.061	0.092	0.123	0.153	0.184	0.245	0.307	0.460	0.614							
42	Δu	0.105	0.211	0.316	0.422	0.527	0.633									943	1.989	4.88
	Δc	0.048	0.096	0.145	0.193	0.241	0.289	0.386	0.482									
48	Δu	0.176	0.353	0.529	0.705											719	2.534	4.98
	Δc	0.071	0.141	0.212	0.282	0.353	0.423	0.564										
54	Δu	0.281	0.563													566	3.184	5.00
	Δc	0.100	0.200	0.300	0.400	0.500	0.600											



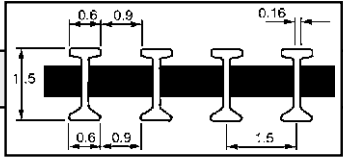
**NOTE:** When a 100 pounds per square foot uniform load is placed upon a 43" simple span, it will produce a deflection of 1/4" at midspan.

# STRONGWELL® DURADEK®

## DURADEK® I-6000 1-1/2" Bearing Bars Spaced 1-1/2" On Center

A = 3.136 IN<sup>2</sup>/FT OF WIDTH S = 1.240 IN<sup>2</sup>/FT OF WIDTH I = 0.928 IN<sup>4</sup>/FT OF WIDTH  
60% OPEN AREA APPROX. WT. = 3.0 LBS/SQ FT

SPAN INCHES	LOAD																SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
	50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000	6000	7000				
12	Δu	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.005	0.006	0.013	0.019	0.026	0.032	0.038	0.045	17601 8800	0.113 0.090	3.79
	Δc	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.005	0.008	0.010	0.020	0.031	0.041	0.051	0.061	0.072			
18	Δu	0.002	0.003	0.005	0.006	0.008	0.009	0.012	0.015	0.023	0.030	0.061	0.091	0.121	0.152	0.182	0.212	7823 5867	0.237 0.190	4.05
	Δc	0.002	0.003	0.005	0.006	0.008	0.010	0.013	0.016	0.024	0.032	0.065	0.097	0.129	0.162	0.194	0.226			
24	Δu	0.005	0.009	0.014	0.018	0.023	0.027	0.037	0.046	0.069	0.091	0.183	0.274	0.366	0.457	0.549	0.640	4400 4400	0.403 0.322	4.24
	Δc	0.004	0.007	0.011	0.015	0.018	0.022	0.029	0.037	0.055	0.073	0.146	0.220	0.293	0.366	0.439	0.512			
30	Δu	0.011	0.022	0.032	0.043	0.054	0.065	0.086	0.108	0.161	0.215	0.430	0.646	2773 3467	0.597 0.478	4.40				
	Δc	0.007	0.014	0.021	0.028	0.034	0.041	0.055	0.069	0.103	0.138	0.276	0.413				0.551			
36	Δu	0.022	0.044	0.065	0.087	0.109	0.131	0.175	0.218	0.327	0.436	1896 2845	0.827 0.662	4.50						
	Δc	0.012	0.023	0.035	0.047	0.058	0.070	0.093	0.116	0.175	0.233				0.466					
42	Δu	0.040	0.079	0.119	0.159	0.198	0.238	0.317	0.396	0.595	1361 2381	1.079 0.863	4.59							
	Δc	0.018	0.036	0.054	0.072	0.091	0.109	0.145	0.181	0.272				0.362						
48	Δu	0.067	0.133	0.200	0.266	0.333	0.400	0.533	0.666	1017 2033	1.354 1.083	4.66								
	Δc	0.027	0.053	0.080	0.107	0.133	0.160	0.213	0.266				0.400	0.533						
54	Δu	0.106	0.211	0.317	0.422	0.528	0.633	777 1748	1.640 1.312	4.71										
	Δc	0.038	0.075	0.113	0.150	0.188	0.225				0.300	0.375	0.563							
60	Δu	0.160	0.320	0.480	0.639	608 1520	1.944 1.555	4.74												
	Δc	0.051	0.102	0.153	0.205				0.256	0.307	0.409	0.512								
66	Δu	0.233	0.466	485 1333	2.259 1.808	4.76														
	Δc	0.068	0.136				0.203	0.271	0.339	0.407	0.542	0.678								

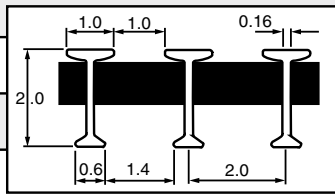


NOTE: When a 100 pounds per square foot uniform load is placed upon a 56" simple span, it will produce a deflection of 1/4" at midspan.

## DURADEK® T-5000 2" Bearing Bars Spaced 2" On Center

A = 3.252 IN<sup>2</sup>/FT OF WIDTH S<sub>1</sub> = 1.906 IN<sup>2</sup>/FT OF WIDTH S<sub>2</sub> = 1.495 IN<sup>2</sup>/FT OF WIDTH I = 1.676 IN<sup>4</sup>/FT OF WIDTH  
50% OPEN AREA APPROX. WT. = 3.1 LBS/SQ FT

SPAN INCHES	LOAD																SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI		
	50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000	6000	7000				8000	
12	Δu	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.004	0.007	0.011	0.014	0.018	0.021	0.025	0.028	11333 5666	0.040 0.032	3.80
	Δc	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.006	0.011	0.017	0.023	0.028	0.034	0.040	0.045			
18	Δu	0.001	0.002	0.003	0.003	0.004	0.005	0.007	0.009	0.013	0.017	0.035	0.052	0.070	0.087	0.104	0.122	0.139	7536 5666	0.131 0.105	3.91
	Δc	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.009	0.014	0.019	0.037	0.056	0.074	0.093	0.111	0.130	0.148			
24	Δu	0.003	0.005	0.008	0.011	0.013	0.016	0.021	0.027	0.040	0.054	0.107	0.161	0.214	0.268	0.321	0.375	0.429	5666 5666	0.304 0.243	4.01
	Δc	0.002	0.004	0.006	0.009	0.011	0.013	0.017	0.021	0.032	0.043	0.086	0.129	0.171	0.214	0.257	0.300	0.343			
30	Δu	0.006	0.013	0.019	0.026	0.032	0.038	0.051	0.064	0.096	0.128	0.256	0.384	0.512	0.640	3626 4534	0.464 0.371	4.10			
	Δc	0.004	0.008	0.012	0.016	0.020	0.025	0.033	0.041	0.061	0.082	0.164	0.246	0.327	0.409				0.491	0.573	0.655
36	Δu	0.013	0.026	0.039	0.052	0.065	0.078	0.104	0.130	0.195	0.260	0.520	2519 3778	0.655 0.524	4.18						
	Δc	0.007	0.014	0.021	0.028	0.035	0.042	0.055	0.069	0.104	0.139	0.277				0.416	0.555	0.694			
42	Δu	0.024	0.047	0.071	0.095	0.119	0.142	0.190	0.237	0.356	0.474	1850 3238	0.877 0.702	4.25							
	Δc	0.011	0.022	0.033	0.043	0.054	0.065	0.087	0.108	0.163	0.217				0.433	0.650					
48	Δu	0.040	0.079	0.119	0.158	0.198	0.238	0.317	0.396	0.594	1417 2834	1.122 0.898	4.34								
	Δc	0.016	0.032	0.048	0.063	0.079	0.095	0.127	0.158	0.238				0.317	0.634						
54	Δu	0.062	0.125	0.187	0.250	0.312	0.374	0.499	0.624	1120 2519	1.398 1.118	4.41									
	Δc	0.022	0.044	0.067	0.089	0.111	0.133	0.178	0.222				0.333	0.444							
60	Δu	0.094	0.188	0.282	0.375	0.469	0.563	0.751	907 2267	1.702 1.361	4.47										
	Δc	0.030	0.060	0.090	0.120	0.150	0.180	0.240				0.300	0.450	0.601							
66	Δu	0.136	0.272	0.408	0.544	0.679	749 2060	2.036 1.629	4.52												
	Δc	0.040	0.079	0.119	0.158	0.198				0.237	0.316	0.395	0.593								
72	Δu	0.190	0.380	0.570	629 1889	2.390 1.914	4.58														
	Δc	0.051	0.101	0.152				0.203	0.253	0.304	0.405	0.507									
78	Δu	0.260	0.520	536 1744	2.788 2.231	4.61															
	Δc	0.064	0.128				0.192	0.256	0.320	0.384	0.512	0.640									
84	Δu	0.347	0.693	463 1619	3.208 2.566	4.65															
	Δc	0.079	0.158				0.238	0.317	0.396	0.475	0.634										



NOTE: When a 100 pounds per square foot uniform load is placed upon a 64" simple span, it will produce a deflection of 1/4" at midspan.

# STRONGWELL® DURAGRID®

**DURAGRID®** - Custom grating systems are made to specific requirements. The following load tables are the most popular.

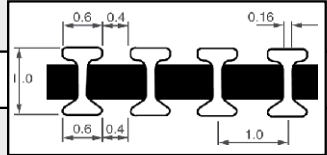
## DURAGRID® I-4000 1" I Bearing Bars Spaced 1" On Center

OTHER COMMON SERIES AND SPACING (X):

SERIES	(X)	(M)*
I-3000	0.850"	1.17
I-5000	1.200"	0.84
I-7000	2.000"	0.50
I-8000	3.000"	0.33
OR MULTIPLES OF ABOVE		

1" I BEARING BARS: VALUES PER FT OF WIDTH  
 A = 3.744 IN<sup>2</sup>/FT OF WIDTH S = 0.984 IN<sup>2</sup>/FT OF WIDTH I = 0.492 IN<sup>2</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .253 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 3.4 LBS/SQ. FT.

SPAN INCHES		LOAD															SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		50	100	150	200	250	300	400	500	750	1000	2000	2500	3000	4000	5000				6000
12	Δu	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.009	0.012	0.024	0.030	0.036	0.048	0.060	0.073	15600	0.189	3.78
	Δc	0.001	0.002	0.003	0.004	0.005	0.006	0.008	0.010	0.015	0.019	0.039	0.048	0.058	0.077	0.097	0.116			
18	Δu	0.003	0.006	0.008	0.011	0.014	0.017	0.022	0.028	0.042	0.056	0.112	0.139	0.167	0.223	0.279	0.335	7431	0.415	4.15
	Δc	0.003	0.006	0.009	0.012	0.015	0.018	0.024	0.030	0.045	0.060	0.119	0.149	0.179	0.238	0.298	0.357			
24	Δu	0.008	0.017	0.025	0.033	0.041	0.050	0.066	0.083	0.124	0.166	0.332	0.415	0.498	0.664	4350	0.722	4.41		
	Δc	0.007	0.013	0.020	0.027	0.033	0.040	0.053	0.066	0.100	0.133	0.265	0.332	0.398	0.531				0.664	4350
30	Δu	0.019	0.039	0.058	0.077	0.096	0.116	0.154	0.193	0.289	0.386	2784	1.074	4.63						
	Δc	0.012	0.025	0.037	0.049	0.062	0.074	0.099	0.123	0.185	0.247				3480	0.859				
36	Δu	0.038	0.077	0.115	0.153	0.192	0.230	0.307	0.383	0.575	1933	1.482	4.83							
	Δc	0.020	0.041	0.061	0.082	0.102	0.123	0.164	0.205	0.307				0.409	2900	1.186				
42	Δu	0.070	0.141	0.211	0.281	0.352	0.422	0.563	0.703	1414	1.988	4.88								
	Δc	0.032	0.064	0.096	0.129	0.161	0.193	0.257	0.321				0.482	0.643	2474	1.590				
48	Δu	0.118	0.235	0.353	0.470	0.588	0.705	1078	2.534	4.98										
	Δc	0.047	0.094	0.141	0.188	0.235	0.282				0.376	0.470	2155	2.026						



\*(M) - Multiplier for load table loads

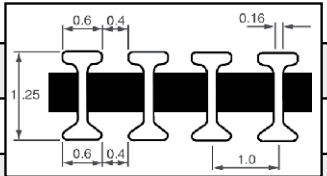
## DURAGRID® I-4000 1-1/4" I Bearing Bars Spaced 1" On Center

OTHER COMMON SERIES AND SPACING (X):

SERIES	(X)	(M)*
I-3000	0.850"	1.17
I-5000	1.200"	0.84
I-6000	1.500"	0.67
I-7000	2.000"	0.50
OR MULTIPLES OF ABOVE		

1-1/4" I BEARING BARS: VALUES PER FT OF WIDTH  
 A = 4.224 IN<sup>2</sup>/FT OF WIDTH S = 1.306 IN<sup>2</sup>/FT OF WIDTH I = 0.816 IN<sup>2</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .290 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 3.9 LBS/SQ. FT.

SPAN INCHES		LOAD															SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000	6000				7000
12	Δu	0.000	0.001	0.001	0.002	0.002	0.002	0.003	0.004	0.006	0.008	0.016	0.023	0.031	0.039	0.047	0.054	21000	0.163	3.55
	Δc	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.009	0.012	0.025	0.037	0.050	0.062	0.075	0.087			
18	Δu	0.002	0.004	0.005	0.007	0.009	0.011	0.015	0.018	0.027	0.037	0.073	0.110	0.146	0.183	0.219	0.256	9582	0.350	3.82
	Δc	0.002	0.004	0.006	0.008	0.010	0.012	0.016	0.019	0.029	0.039	0.078	0.117	0.156	0.195	0.234	0.273			
24	Δu	0.005	0.011	0.016	0.022	0.027	0.033	0.044	0.054	0.082	0.109	0.218	0.327	0.436	0.545	0.654	5475	0.596	4.05	
	Δc	0.004	0.009	0.013	0.017	0.022	0.026	0.035	0.044	0.065	0.087	0.174	0.261	0.349	0.436	0.523				0.610
30	Δu	0.013	0.026	0.038	0.051	0.064	0.077	0.102	0.128	0.192	0.256	0.512	3472	0.888	4.21					
	Δc	0.008	0.016	0.025	0.033	0.041	0.049	0.065	0.082	0.123	0.164	0.327				4340	0.711			
36	Δu	0.026	0.051	0.077	0.103	0.128	0.154	0.205	0.257	0.385	0.513	2388	1.226	4.35						
	Δc	0.014	0.027	0.041	0.055	0.068	0.082	0.110	0.137	0.205	0.274				3583	0.981				
42	Δu	0.046	0.093	0.139	0.186	0.232	0.279	0.372	0.465	0.697	1727	1.606	4.45							
	Δc	0.021	0.043	0.064	0.085	0.106	0.128	0.170	0.213	0.319				0.425	3023	1.285				
48	Δu	0.078	0.155	0.233	0.310	0.388	0.465	0.621	1302	2.020	4.55									
	Δc	0.031	0.062	0.093	0.124	0.155	0.186	0.248				0.310	0.465	0.621	2603	1.615				
54	Δu	0.123	0.245	0.368	0.491	0.613	0.736	1007	2.470	4.61										
	Δc	0.044	0.087	0.131	0.174	0.218	0.262				0.349	0.436	0.654	2267	1.977					
60	Δu	0.185	0.370	0.555	0.740	796	2.944	4.66												
	Δc	0.059	0.118	0.178	0.237				0.296	0.355	0.473	0.592	1990	2.355						



\*(M) - Multiplier for load table loads

# STRONGWELL® DURAGRID®

DURAGRID® - Custom grating systems are made to specific requirements. The following load tables are the most popular.

## DURAGRID® I-4000 1" I Bearing Bars Spaced 1" On Center

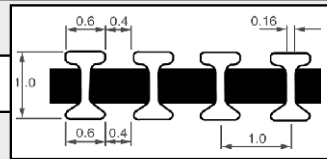
OTHER COMMON SERIES AND SPACING (X):

SERIES	(X)	(M)*
I-3000	0.850"	1.17
I-5000	1.200"	0.84
I-7000	2.000"	0.50
I-8000	3.000"	0.33

OR MULTIPLES OF ABOVE

1" I BEARING BARS: VALUES PER FT OF WIDTH  
 A = 3.744 IN<sup>2</sup>/FT OF WIDTH S = 0.984 IN<sup>2</sup>/FT OF WIDTH I = 0.492 IN<sup>2</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .253 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 3.4 LBS/SQ. FT.

SPAN INCHES	Δu Δc	LOAD														SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI		
		50	100	150	200	250	300	400	500	750	1000	2000	2500	3000	4000				5000	6000
12	Δu	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.009	0.012	0.024	0.030	0.036	0.048	0.060	0.073	15600 7800	0.189 0.151	3.78
	Δc	0.001	0.002	0.003	0.004	0.005	0.006	0.008	0.010	0.015	0.019	0.039	0.048	0.058	0.077	0.097	0.116			
18	Δu	0.003	0.006	0.008	0.011	0.014	0.017	0.022	0.028	0.042	0.056	0.112	0.139	0.167	0.223	0.279	0.335	7431 5573	0.415 0.332	4.15
	Δc	0.003	0.006	0.009	0.012	0.015	0.018	0.024	0.030	0.045	0.060	0.119	0.149	0.179	0.238	0.298	0.357			
24	Δu	0.008	0.017	0.025	0.033	0.041	0.050	0.066	0.083	0.124	0.166	0.332	0.415	0.498	0.664	4350 4350	0.722 0.577	4.41		
	Δc	0.007	0.013	0.020	0.027	0.033	0.040	0.053	0.066	0.100	0.133	0.265	0.332	0.398	0.531				0.664	
30	Δu	0.019	0.039	0.058	0.077	0.096	0.116	0.154	0.193	0.289	0.386	2784 3480	1.074 0.859	4.63						
	Δc	0.012	0.025	0.037	0.049	0.062	0.074	0.099	0.123	0.185	0.247				0.494	0.617				
36	Δu	0.038	0.077	0.115	0.153	0.192	0.230	0.307	0.383	0.575	1933 2900	1.482 1.186	4.83							
	Δc	0.020	0.041	0.061	0.082	0.102	0.123	0.164	0.205	0.307				0.409						
42	Δu	0.070	0.141	0.211	0.281	0.352	0.422	0.563	0.703	1414 2474	1.988 1.590	4.88								
	Δc	0.032	0.064	0.096	0.129	0.161	0.193	0.257	0.321				0.482	0.643						
48	Δu	0.118	0.235	0.353	0.470	0.588	0.705	1078 2155	2.534 2.026	4.98										
	Δc	0.047	0.094	0.141	0.188	0.235	0.282				0.376	0.470								



\*(M) - Multiplier for load table loads

## DURAGRID® I-4000 1-1/4" I Bearing Bars Spaced 1" On Center

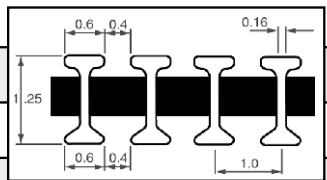
OTHER COMMON SERIES AND SPACING (X):

SERIES	(X)	(M)*
I-3000	0.850"	1.17
I-5000	1.200"	0.84
I-6000	1.500"	0.67
I-7000	2.000"	0.50

OR MULTIPLES OF ABOVE

1-1/4" I BEARING BARS: VALUES PER FT OF WIDTH  
 A = 4.224 IN<sup>2</sup>/FT OF WIDTH S = 1.306 IN<sup>2</sup>/FT OF WIDTH I = 0.816 IN<sup>2</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .290 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 3.9 LBS/SQ. FT.

SPAN INCHES	Δu Δc	LOAD														SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI		
		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000				6000	7000
12	Δu	0.000	0.001	0.001	0.002	0.002	0.002	0.003	0.004	0.006	0.008	0.016	0.023	0.031	0.039	0.047	0.054	21000 10500	0.163 0.130	3.55
	Δc	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.009	0.012	0.025	0.037	0.050	0.062	0.075	0.087			
18	Δu	0.002	0.004	0.005	0.007	0.009	0.011	0.015	0.018	0.027	0.037	0.073	0.110	0.146	0.183	0.219	0.256	9582 7187	0.350 0.280	3.82
	Δc	0.002	0.004	0.006	0.008	0.010	0.012	0.016	0.019	0.029	0.039	0.078	0.117	0.156	0.195	0.234	0.273			
24	Δu	0.005	0.011	0.016	0.022	0.027	0.033	0.044	0.054	0.082	0.109	0.218	0.327	0.436	0.545	0.654	5475 5475	0.596 0.477	4.05	
	Δc	0.004	0.009	0.013	0.017	0.022	0.026	0.035	0.044	0.065	0.087	0.174	0.261	0.349	0.436	0.523				0.610
30	Δu	0.013	0.026	0.038	0.051	0.064	0.077	0.102	0.128	0.192	0.256	0.512	3472 4340	0.888 0.711	4.21					
	Δc	0.008	0.016	0.025	0.033	0.041	0.049	0.065	0.082	0.123	0.164	0.327				0.491	0.655			
36	Δu	0.026	0.051	0.077	0.103	0.128	0.154	0.205	0.257	0.385	0.513	2388 3583	1.226 0.981	4.35						
	Δc	0.014	0.027	0.041	0.055	0.068	0.082	0.110	0.137	0.205	0.274				0.548					
42	Δu	0.046	0.093	0.139	0.186	0.232	0.279	0.372	0.465	0.697	1727 3023	1.606 1.285	4.45							
	Δc	0.021	0.043	0.064	0.085	0.106	0.128	0.170	0.213	0.319				0.425						
48	Δu	0.078	0.155	0.233	0.310	0.388	0.465	0.621	1302 2603	2.020 1.615	4.55									
	Δc	0.031	0.062	0.093	0.124	0.155	0.186	0.248				0.310	0.465	0.621						
54	Δu	0.123	0.245	0.368	0.491	0.613	0.736	1007 2267	2.470 1.977	4.61										
	Δc	0.044	0.087	0.131	0.174	0.218	0.262				0.349	0.436	0.654							
60	Δu	0.185	0.370	0.555	0.740	796 1990	2.944 2.355	4.66												
	Δc	0.059	0.118	0.178	0.237				0.296	0.355	0.473	0.592								



\*(M) - Multiplier for load table loads

# STRONGWELL® DURAGRID®

## DURAGRID® I-4000 1-1/2" I Bearing Bars Spaced 1" On Center

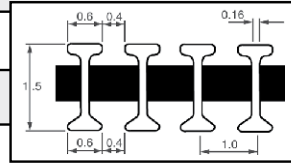
OTHER COMMON SERIES AND SPACING (X):

SERIES	(X)	(M)*
I-3000	0.850"	1.17
I-5000	1.200"	0.84
I-7000	2.000"	0.50
I-8000	3.000"	0.33

OR MULTIPLES OF ABOVE

1-1/2" I BEARING BARS: VALUES PER FT OF WIDTH  
 A = 4.704 IN<sup>2</sup>/FT OF WIDTH    S = 1.860 IN<sup>3</sup>/FT OF WIDTH    I = 1.392 IN<sup>4</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .319 LBS/FT OF BAR    WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 4.2 LBS/SQ. FT.

SPAN INCHES		LOAD																SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI		
		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000	6000	7000				8000	9000
12	Δu	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.009	0.013	0.017	0.021	0.026	0.030	0.034	0.038	26400	0.113	3.79
	Δc	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.005	0.007	0.014	0.020	0.027	0.034	0.041	0.048	0.055	0.061	13200	0.090	
18	Δu	0.001	0.002	0.003	0.004	0.005	0.006	0.008	0.010	0.015	0.020	0.040	0.061	0.081	0.101	0.121	0.141	0.162	0.182	11734	0.237	4.05
	Δc	0.001	0.002	0.003	0.004	0.005	0.006	0.009	0.011	0.016	0.022	0.043	0.065	0.086	0.108	0.129	0.151	0.172	0.194	8800	0.190	
24	Δu	0.003	0.006	0.009	0.012	0.015	0.018	0.024	0.030	0.046	0.061	0.122	0.183	0.244	0.305	0.366	0.427	0.488	0.549	6600	0.403	4.24
	Δc	0.002	0.005	0.007	0.010	0.012	0.015	0.020	0.024	0.037	0.049	0.098	0.146	0.195	0.244	0.293	0.342	0.390	0.439	6600	0.322	
30	Δu	0.007	0.014	0.022	0.029	0.036	0.043	0.057	0.072	0.108	0.143	0.287	0.430	0.574	0.717	4160	0.597	4.40				
	Δc	0.005	0.009	0.014	0.018	0.023	0.028	0.037	0.046	0.069	0.092	0.184	0.276	0.367	0.459	0.551	0.643		5200	0.478		
36	Δu	0.015	0.029	0.044	0.058	0.073	0.087	0.116	0.145	0.218	0.291	0.582	2844	0.827	4.50							
	Δc	0.008	0.016	0.023	0.031	0.039	0.047	0.062	0.078	0.116	0.155	0.310	0.466	0.621		4267	0.662					
42	Δu	0.026	0.053	0.079	0.106	0.132	0.159	0.211	0.264	0.396	0.528	2041	1.079	4.59								
	Δc	0.012	0.024	0.036	0.048	0.060	0.072	0.097	0.121	0.181	0.242	0.483	0.725		3571	0.863						
48	Δu	0.044	0.089	0.133	0.178	0.222	0.266	0.355	0.444	0.666	1525	1.354	4.66									
	Δc	0.018	0.036	0.053	0.071	0.089	0.107	0.142	0.178	0.266	0.355	3050		1.083								
54	Δu	0.070	0.141	0.211	0.281	0.352	0.422	0.563	0.704	1165	1.639	4.71										
	Δc	0.025	0.050	0.075	0.100	0.125	0.150	0.200	0.250	0.375	0.500		2622	1.312								
60	Δu	0.107	0.213	0.320	0.426	0.533	0.639	912	1.944	4.74												
	Δc	0.034	0.068	0.102	0.136	0.171	0.205	0.273	0.341		0.512	0.682	2280	1.555								
66	Δu	0.155	0.311	0.466	0.621	727	2.259	4.76														
	Δc	0.045	0.090	0.136	0.181	0.226	0.271		0.362	0.452	0.678	2000	1.808									



\*(M) - Multiplier for load table loads

## DURAGRID® T-1800 1" T Bearing Bars Spaced 2" On Center

OTHER COMMON SERIES AND SPACING (X):

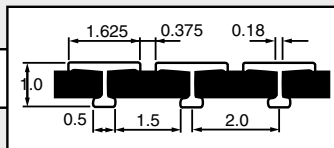
SERIES	(X)	(M)*
T-0000	1.625"	1.23
T-1000	1.800"	1.11
T-1200	1.850"	1.08
T-2500	2.120"	0.94
T-3500	2.400"	0.83
T-3800	2.620"	0.76

OR MULTIPLES OF ABOVE

1" T BEARING BARS: VALUES PER FT OF WIDTH  
 A = 2.850 IN<sup>2</sup>/FT OF WIDTH    S<sub>x</sub> = 0.903 IN<sup>3</sup>/FT OF WIDTH  
 I = 0.306 IN<sup>4</sup>/FT OF WIDTH    S<sub>y</sub> = 0.464 IN<sup>3</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .373 LBS/FT OF BAR    WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 2.6 LBS/SQ. FT.

Now available 1.5" T bar. Call for details.

SPAN INCHES		LOAD																SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		50	100	150	200	250	300	400	500	750	1000	2000	2500	3000	4000					
12	Δu	0.001	0.002	0.003	0.004	0.006	0.007	0.009	0.011	0.017	0.022	0.045	0.056	0.067	0.090	10680	0.240	3.27		
	Δc	0.002	0.004	0.005	0.007	0.009	0.011	0.014	0.018	0.027	0.036	0.072	0.090	0.108	0.144	5340	0.192			
18	Δu	0.005	0.010	0.016	0.021	0.026	0.031	0.041	0.052	0.078	0.104	0.207	0.259	0.311	0.415	4746	0.492	3.59		
	Δc	0.006	0.011	0.017	0.022	0.028	0.033	0.044	0.055	0.083	0.111	0.221	0.277	0.332	0.442	3560	0.394			
24	Δu	0.015	0.031	0.046	0.062	0.077	0.093	0.124	0.155	0.232	0.310	0.619	2670	0.827	3.80					
	Δc	0.012	0.025	0.037	0.050	0.062	0.074	0.099	0.124	0.186	0.248	0.495	0.619	2670		0.661				
30	Δu	0.036	0.072	0.108	0.144	0.180	0.215	0.287	0.359	0.539	0.718	1693	1.216	4.00						
	Δc	0.023	0.046	0.069	0.092	0.115	0.138	0.184	0.230	0.345	0.460	2116	0.972							
36	Δu	0.072	0.145	0.217	0.289	0.361	0.434	0.578	0.723	1157	1.673	4.12								
	Δc	0.039	0.077	0.116	0.154	0.193	0.231	0.308	0.385	0.578	1736		1.338							
42	Δu	0.129	0.257	0.386	0.514	0.643	833	2.143	4.29											
	Δc	0.059	0.118	0.176	0.235	0.294	0.353	0.470		0.588	1458	1.714								
48	Δu	0.215	0.431	0.646	625	2.692	4.37													
	Δc	0.086	0.172	0.258	0.345	0.431		0.517	0.689	1250	2.154									



\*(M) - Multiplier for load table loads



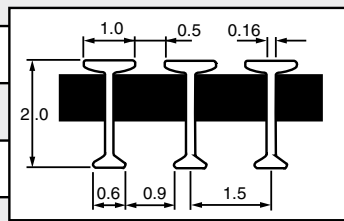
# STRONGWELL® DURAGRID®

## DURAGRID® T-3300 2" T Bearing Bars Spaced 1-1/2" On Center

OTHER COMMON SERIES AND SPACING (X):  
 SERIES (X) (M)\*  
**T-1700 1.200" 1.25**  
 OR MULTIPLES OF ABOVE

2" T BEARING BARS: VALUES PER FT OF WIDTH  
 A = 4.338 IN<sup>2</sup>/FT OF WIDTH S<sub>y</sub> = 2.541 IN<sup>3</sup>/FT OF WIDTH  
 I = 2.234 IN<sup>4</sup>/FT OF WIDTH S<sub>x</sub> = 1.994 IN<sup>3</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .446 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 3.9 LBS/SQ. FT.

SPAN INCHES		LOAD																SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI		
		50	100	150	200	250	300	400	500	750	1000	2000	2500	3000	4000	5000	6000				7000	8000
12	Δu	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.005	0.007	0.008	0.011	0.013	0.016	0.019	0.021	15110 7555	0.040 0.032	3.80
	Δc	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.008	0.011	0.013	0.017	0.021	0.025	0.030	0.034			
18	Δu	0.001	0.001	0.002	0.003	0.003	0.004	0.005	0.007	0.010	0.013	0.026	0.033	0.039	0.052	0.065	0.078	0.091	0.104	10048 7555	0.131 0.105	3.91
	Δc	0.001	0.001	0.002	0.003	0.003	0.004	0.006	0.007	0.010	0.014	0.028	0.035	0.042	0.056	0.070	0.083	0.097	0.111			
24	Δu	0.002	0.004	0.006	0.008	0.010	0.012	0.016	0.020	0.030	0.040	0.080	0.100	0.121	0.161	0.201	0.241	0.281	0.321	7555 7555	0.304 0.243	4.01
	Δc	0.002	0.003	0.005	0.006	0.008	0.010	0.013	0.016	0.024	0.032	0.064	0.080	0.096	0.129	0.161	0.193	0.225	0.257			
30	Δu	0.005	0.010	0.014	0.019	0.024	0.029	0.038	0.048	0.072	0.096	0.192	0.240	0.288	0.384	0.480	0.576	0.672	4835 6045	0.464 0.371	4.10	
	Δc	0.003	0.006	0.009	0.012	0.015	0.018	0.025	0.031	0.046	0.061	0.123	0.154	0.184	0.246	0.307	0.368	0.430				0.491
36	Δu	0.010	0.020	0.029	0.039	0.049	0.059	0.078	0.098	0.146	0.195	0.390	0.488	0.586	3358 5037	0.655 0.524	4.18					
	Δc	0.005	0.010	0.016	0.021	0.026	0.031	0.042	0.052	0.078	0.104	0.208	0.260	0.312				0.416	0.520	0.625		
42	Δu	0.018	0.036	0.053	0.071	0.089	0.107	0.142	0.178	0.267	0.356	2467 4317	0.877 0.702	4.25								
	Δc	0.008	0.016	0.024	0.033	0.041	0.049	0.065	0.081	0.122	0.163				0.325	0.406	0.488	0.650				
48	Δu	0.030	0.059	0.089	0.119	0.149	0.178	0.238	0.297	0.446	0.594	1889 3778	1.122 0.898	4.34								
	Δc	0.012	0.024	0.036	0.048	0.059	0.071	0.095	0.119	0.178	0.238				0.475	0.594						
54	Δu	0.047	0.094	0.140	0.187	0.234	0.281	0.375	0.468	1493 3358	1.398 1.118	4.41										
	Δc	0.017	0.033	0.050	0.067	0.083	0.100	0.133	0.166				0.250	0.333	0.666							
60	Δu	0.070	0.141	0.211	0.282	0.352	0.422	0.563	1209 3022	1.703 1.362	4.47											
	Δc	0.023	0.045	0.068	0.090	0.113	0.135	0.180				0.225	0.338	0.451								
66	Δu	0.102	0.204	0.306	0.408	0.510	0.612	999 2747	2.037 1.629	4.52												
	Δc	0.030	0.059	0.089	0.119	0.148	0.178				0.237	0.297	0.445	0.593								
72	Δu	0.142	0.285	0.427	0.570	839 2519	2.391 1.914	4.58														
	Δc	0.038	0.076	0.114	0.152				0.190	0.228	0.304	0.380	0.570									
78	Δu	0.195	0.390	0.585	715 2325	2.788 2.232	4.61															
	Δc	0.048	0.096	0.144				0.192	0.240	0.288	0.384	0.480										
84	Δu	0.260	0.520	617 2159	3.209 2.566	4.65																
	Δc	0.059	0.119				0.178	0.238	0.297	0.357	0.475	0.594										



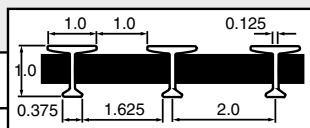
\*(M) - Multiplier for load table loads

## DURAGRID® ECONOMY 5000 1" T Bearing Bars Spaced 2" On Center

OTHER COMMON SERIES AND SPACING (X):  
 SERIES (X) (M)\*  
**ECONOMY 3300 1.500" 1.33**  
 OR MULTIPLES OF ABOVE

1" T BEARING BAR: VALUES PER FT OF WIDTH  
 A = 1.596 IN<sup>2</sup>/FT OF WIDTH S<sub>y</sub> = 0.530 IN<sup>3</sup>/FT OF WIDTH  
 I = 0.197 IN<sup>4</sup>/FT OF WIDTH S<sub>x</sub> = 0.314 IN<sup>3</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .207 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS/FT OF CROSS ROD  
 APPROX. WEIGHT = 1.62 LBS/SQ. FT.

SPAN INCHES		LOAD										SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		50	100	150	200	250	300	400	500	750	1000				2000
12	Δu	0.002	0.004	0.006	0.008	0.010	0.011	0.015	0.019	0.029	0.038	0.076	4766 2383	0.182 0.146	2.99
	Δc	0.003	0.006	0.009	0.012	0.015	0.018	0.024	0.031	0.046	0.061	0.122			
18	Δu	0.009	0.019	0.028	0.037	0.047	0.056	0.075	0.094	0.140	0.187	0.374	2144 1609	0.401 0.321	3.09
	Δc	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100	0.150	0.200	0.399			
24	Δu	0.029	0.057	0.086	0.114	0.143	0.171	0.228	0.286	0.428	0.571	1221 1221	0.697 0.558	3.20	
	Δc	0.023	0.046	0.069	0.091	0.114	0.137	0.183	0.228	0.343	0.457				
30	Δu	0.068	0.135	0.203	0.270	0.338	0.406	0.541	0.676	791 989	1.069 0.856	3.30			
	Δc	0.043	0.087	0.130	0.173	0.216	0.260	0.346	0.433				0.649		
36	Δu	0.136	0.272	0.408	0.544	0.680	556 834	1.513 1.210	3.40						
	Δc	0.073	0.145	0.218	0.290	0.363				0.435	0.580	0.726			
42	Δu	0.244	0.488	0.732	413 723	2.017 1.614	3.51								
	Δc	0.112	0.223	0.335				0.446	0.558	0.670					



\*(M) - Multiplier for load table loads

# STRONGWELL® DURAGRID®

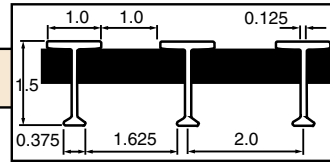
## DURAGRID® ECONOMY 5000 1-1/2" T Bearing Bars Spaced 2" On Center

OTHER COMMON SERIES AND SPACING (X):  
 SERIES (X) (M)\*  
**ECONOMY 3300 1.500" 1.33**  
 OR MULTIPLES OF ABOVE

1-1/2" T BEARING BAR: VALUES PER FT OF WIDTH  
 A = 1.968 IN<sup>2</sup>/FT OF WIDTH S<sub>y</sub> = 0.950 IN<sup>2</sup>/FT OF WIDTH  
 I = 0.557 IN<sup>4</sup>/FT OF WIDTH S<sub>x</sub> = 0.609 IN<sup>2</sup>/FT OF WIDTH  
 WEIGHT/FOOT = .250 LBS/FT OF BAR WEIGHT/FOOT = .186 LBS./FT OF CROSS ROD  
 APPROX. WEIGHT = 1.9 LBS/SQ. FT.

SPAN INCHES		LOAD															SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		50	100	150	200	250	300	400	500	750	1000	2000	2500	3000	4000	5000			
12	Δu	0.001	0.001	0.002	0.003	0.003	0.004	0.006	0.007	0.010	0.014	0.028	0.034	0.041	0.055	0.069	10322	0.142	<b>2.93</b>
	Δc	0.001	0.002	0.003	0.004	0.006	0.007	0.009	0.011	0.017	0.022	0.044	0.055	0.066	0.088	0.110	5161	0.114	
18	Δu	0.003	0.007	0.010	0.014	0.017	0.020	0.027	0.034	0.051	0.068	0.136	0.170	0.204	0.273	0.341	4643	0.316	<b>3.00</b>
	Δc	0.004	0.007	0.011	0.015	0.018	0.022	0.029	0.036	0.055	0.073	0.145	0.182	0.218	0.291	0.364	3482	0.253	
24	Δu	0.011	0.021	0.032	0.042	0.053	0.063	0.084	0.105	0.158	0.211	0.421	0.526	0.632	2643	0.556	<b>3.07</b>		
	Δc	0.008	0.017	0.025	0.034	0.042	0.051	0.067	0.084	0.126	0.168	0.337	0.421	0.505	0.674	2643		0.445	
30	Δu	0.025	0.050	0.076	0.101	0.126	0.151	0.202	0.252	0.378	0.504	1712	0.863	<b>3.13</b>					
	Δc	0.016	0.032	0.048	0.065	0.081	0.097	0.129	0.161	0.242	0.323	0.645	2139		0.690				
36	Δu	0.051	0.102	0.153	0.204	0.256	0.307	0.409	0.511	0.767	1202	1.229	<b>3.20</b>						
	Δc	0.027	0.055	0.082	0.109	0.136	0.164	0.218	0.273	0.409	0.545	1804		0.984					
42	Δu	0.093	0.185	0.278	0.371	0.463	0.556	0.742	894	1.657	<b>3.27</b>								
	Δc	0.042	0.085	0.127	0.169	0.212	0.254	0.339	0.424	0.636		1564	1.325						
48	Δu	0.155	0.310	0.464	0.619	692	2.143	<b>3.34</b>											
	Δc	0.062	0.124	0.186	0.248	0.310	0.372		0.495	0.619	1384	1.714							

\*(M) - Multiplier for load table loads



### DURAGRID® Heavy Duty Grating

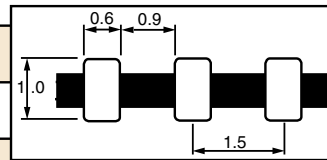
The following load tables are for the solid bar heavy duty grating designed to take heavy wheel traffic such as forklifts, tow motors and truck traffic. Because of the variety of wheel types and loading, it is recommended that you contact Strongwell to determine the series of heavy duty grating needed for your application.



### DURAGRID® HD-6000 1" Bearing Bar

A = 4.8 in<sup>2</sup>/ft. of width I = 0.40 in<sup>4</sup>/ft. of width S = 0.80 in<sup>2</sup>/ft. of width

SPAN INCHES		LOAD								SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		100	200	300	500	1000	2000	3000	4000			
12	Δu	0.001	0.002	0.003	0.006	0.011	0.022	0.033	0.044	4445	0.049	<b>5.08</b>
	Δc	0.002	0.004	0.005	0.009	0.018	0.035	0.053	0.071	4445	0.079	
18	Δu	0.005	0.010	0.015	0.025	0.050	0.099	0.149	0.199	4285	0.213	<b>5.73</b>
	Δc	0.005	0.011	0.016	0.027	0.053	0.106	0.159	3857	0.204		
24	Δu	0.015	0.031	0.046	0.077	0.154	0.309	2948	0.455	<b>5.83</b>		
	Δc	0.012	0.025	0.037	0.062	0.123	0.247	2948	0.364			
30	Δu	0.037	0.074	0.111	0.185	0.369	1543	0.570	<b>5.95</b>			
	Δc	0.024	0.047	0.071	0.118	0.236	1928	0.456				
36	Δu	0.076	0.152	0.228	0.380	1071	0.815	<b>5.99</b>				
	Δc	0.041	0.081	0.122	0.203	0.406	1607		0.652			
42	Δu	0.140	0.280	0.421	787	1.104	<b>6.02</b>					
	Δc	0.064	0.128	0.192	0.320	0.641		1377	0.883			
48	Δu	0.239	0.478	603	1.440	<b>6.03</b>						
	Δc	0.096	0.191	0.287	0.478		1205	1.151				
54	Δu	0.380	476	1.809	<b>6.07</b>							
	Δc	0.135	0.270	0.405		0.676	1071	1.447				



Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>2</sup> /ft. of Width	S-in <sup>2</sup> /ft. of Width
HD 6000	.60	.90	60	4.9	0.40	0.80
HD 5000	.60	.60	50	5.9	0.50	1.00
HD 4000	.60	.40	40	7.0	0.60	1.20

**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67

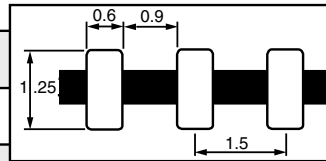


# STRONGWELL® DURAGRID®

## DURAGRID® HD-6000 1-1/4" Bearing Bar

A = 6.0 in<sup>2</sup>/ft. of width    I = 0.781 in<sup>4</sup>/ft. of width    S = 1.24 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD												SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000	8000			
12	Δu	0.001	0.001	0.002	0.003	0.006	0.013	0.019	0.025	0.032	0.038	0.044	0.051	13760	0.087	4.56
	Δc	0.001	0.002	0.003	0.005	0.010	0.020	0.030	0.040	0.051	0.061	0.071	0.081			
18	Δu	0.003	0.005	0.008	0.013	0.027	0.053	0.080	0.107	0.134	0.160	0.187	7684	0.205	5.46	
	Δc	0.003	0.006	0.009	0.014	0.028	0.057	0.085	0.114	0.142	0.171	0.199				7200
24	Δu	0.008	0.016	0.024	0.040	0.080	0.161	0.241	0.322	0.402	0.483	0.563	7032	0.566	5.73	
	Δc	0.006	0.013	0.019	0.032	0.064	0.129	0.193	0.257	0.322	0.386	0.450				7032
30	Δu	0.019	0.038	0.057	0.095	0.190	0.381	0.571	4504	0.858	5.91					
	Δc	0.012	0.024	0.037	0.061	0.122	0.244	0.366				0.487	0.609	5626	0.686	
36	Δu	0.039	0.078	0.117	0.196	0.392	3125	1.224	5.96							
	Δc	0.021	0.042	0.063	0.104	0.209				0.418	0.626	4680	0.977			
42	Δu	0.072	0.144	0.216	0.360	2296	1.652	6.01								
	Δc	0.033	0.066	0.099	0.164				0.329	0.658	4018	1.321				
48	Δu	0.122	0.243	0.365	0.609	1758	2.140	6.06								
	Δc	0.049	0.097	0.146	0.243				0.487	3516	1.712					
54	Δu	0.195	0.390	0.585	1389	2.708	6.06									
	Δc	0.069	0.139	0.208				0.347	3125	2.166						
60	Δu	0.296	0.591	1125	3.326	6.09										
	Δc	0.095	0.189				0.284	0.473	2812	2.660						



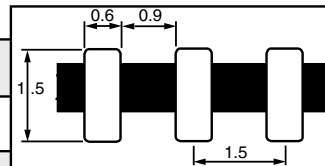
Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>2</sup> /ft. of Width	S-in <sup>3</sup> /ft. of Width
HD 6000	.60	.90	60	5.9	.781	1.25
HD 5000	.60	.60	50	7.2	.977	1.56
HD 4000	.60	.40	40	8.5	1.172	1.88

**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67

## DURAGRID® HD-6000 1-1/2" Bearing Bar

A = 7.2 in<sup>2</sup>/ft. of width    I = 1.35 in<sup>4</sup>/ft. of width    S = 1.80 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD												SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000	8000			
12	Δu	0.000	0.001	0.001	0.002	0.005	0.009	0.014	0.019	0.023	0.028	0.033	0.037	18880	0.088	3.58
	Δc	0.001	0.001	0.002	0.004	0.007	0.015	0.022	0.030	0.037	0.045	0.052	0.060			
18	Δu	0.002	0.004	0.005	0.009	0.018	0.035	0.053	0.070	0.088	0.106	0.123	0.141	9728	0.171	4.79
	Δc	0.002	0.004	0.006	0.009	0.019	0.038	0.056	0.075	0.094	0.113	0.132	0.150			
24	Δu	0.005	0.010	0.015	0.026	0.051	0.103	0.154	0.205	0.256	0.308	0.359	0.410	9500	0.487	5.20
	Δc	0.004	0.008	0.012	0.021	0.041	0.082	0.123	0.164	0.205	0.246	0.287	0.328			
30	Δu	0.012	0.024	0.036	0.060	0.120	0.240	0.360	0.480	0.599	0.719	6570	0.788	5.43		
	Δc	0.008	0.015	0.023	0.038	0.077	0.153	0.230	0.307	0.384	0.460				0.537	0.614
36	Δu	0.025	0.049	0.074	0.123	0.246	0.492	0.783	4562	1.122	5.49					
	Δc	0.013	0.026	0.039	0.066	0.131	0.262	0.393				0.525	0.656	6843	0.897	
42	Δu	0.045	0.090	0.135	0.225	0.449	3352	1.505	5.57							
	Δc	0.021	0.041	0.062	0.103	0.205				0.411	0.616	5865	1.204			
48	Δu	0.076	0.152	0.228	0.380	2566	1.952	5.61								
	Δc	0.030	0.061	0.091	0.152				0.304	0.608	5132	1.561				
54	Δu	0.121	0.242	0.364	0.606	2027	2.456	5.64								
	Δc	0.043	0.086	0.129	0.215				0.431	4562	1.966					
60	Δu	0.185	0.369	0.554	1642	2.033	5.64									
	Δc	0.059	0.118	0.177				0.296	0.591	4106	2.427					
66	Δu	0.269	0.537	1354	3.636	5.68										
	Δc	0.078	0.156				0.234	0.391	3732	2.915						
72	Δu	0.380	0.761	1140	4.335	5.68										
	Δc	0.101	0.203				0.304	0.507	3422	3.470						



Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>2</sup> /ft. of Width	S-in <sup>3</sup> /ft. of Width
HD 6000	.60	.90	60	7.0	1.35	1.80
HD 5000	.60	.60	50	8.5	1.69	2.25
HD 4000	.60	.40	40	10.1	2.02	2.70

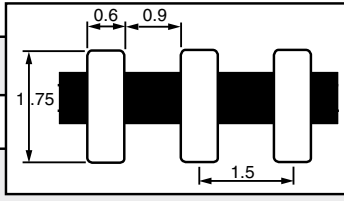
**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67

# STRONGWELL® DURAGRID®

## DURAGRID® HD-6000 1-3/4" Bearing Bar

A = 8.4 in<sup>2</sup>/ft. of width      I = 2.14 in<sup>4</sup>/ft. of width      S = 2.45 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD											SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000				8000
12	Δu	0.000	0.001	0.001	0.002	0.004	0.007	0.011	0.014	0.018	0.021	0.025	0.029	19920	0.071	2.95
	Δc	0.000	0.001	0.002	0.003	0.006	0.011	0.017	0.023	0.029	0.034	0.040	0.046			
18	Δu	0.001	0.002	0.004	0.006	0.012	0.023	0.035	0.047	0.059	0.070	0.082	0.094	15926	0.187	4.53
	Δc	0.001	0.003	0.004	0.006	0.013	0.025	0.038	0.050	0.063	0.075	0.088	0.100			
24	Δu	0.003	0.007	0.010	0.016	0.033	0.065	0.098	0.131	0.164	0.196	0.229	0.262	12400	0.406	5.14
	Δc	0.003	0.005	0.008	0.013	0.026	0.052	0.079	0.105	0.131	0.157	0.183	0.209			
30	Δu	0.007	0.015	0.022	0.037	0.075	0.149	0.224	0.298	0.373	0.447	0.522	0.596	9062	0.675	5.51
	Δc	0.005	0.010	0.014	0.024	0.048	0.095	0.143	0.191	0.239	0.286	0.334	0.382			
36	Δu	0.015	0.030	0.045	0.076	0.151	0.303	0.454	0.605	0.756	0.908			6294	0.952	5.63
	Δc	0.008	0.016	0.024	0.040	0.081	0.161	0.242	0.323	0.403	0.484	0.565	0.645			
42	Δu	0.027	0.055	0.082	0.137	0.275	0.550							4623	1.271	5.74
	Δc	0.013	0.025	0.038	0.063	0.126	0.251	0.377	0.503	0.628						
48	Δu	0.046	0.093	0.139	0.232	0.464								3540	1.643	5.80
	Δc	0.019	0.037	0.056	0.093	0.186	0.371	0.557								
54	Δu	0.074	0.148	0.221	0.369	0.738								2796	2.064	5.84
	Δc	0.026	0.052	0.079	0.131	0.262	0.525									
60	Δu	0.113	0.225	0.338	0.563									2265	2.549	5.84
	Δc	0.036	0.072	0.108	0.180	0.360										
66	Δu	0.164	0.327	0.491										1872	3.063	5.88
	Δc	0.048	0.095	0.143	0.238	0.476										
72	Δu	0.231	0.463	0.694										1573	3.639	5.89
	Δc	0.062	0.123	0.185	0.308	0.617										
78	Δu	0.313	0.626											1340	4.192	6.00
	Δc	0.077	0.154	0.231	0.385											



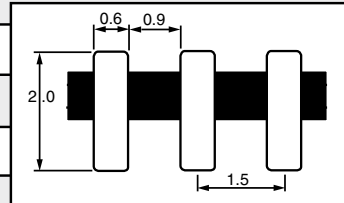
Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>4</sup> /ft. of Width	S-in <sup>3</sup> /ft. of Width
HD 6000	.60	.90	60	8.0	2.14	2.45
HD 5000	.60	.60	50	9.8	2.68	3.06
HD 4000	.60	.40	40	11.6	3.22	3.68

**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67

## DURAGRID® HD-6000 2" Bearing Bar

A = 9.6 in<sup>2</sup>/ft. of width      I = 3.2 in<sup>4</sup>/ft. of width      S = 3.2 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD											SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000				8000
12	Δu	0.000	0.001	0.001	0.002	0.003	0.006	0.009	0.012	0.015	0.018	0.021	0.024	15360	0.047	2.32
	Δc	0.000	0.001	0.001	0.002	0.005	0.010	0.015	0.019	0.024	0.029	0.034	0.039			
18	Δu	0.001	0.002	0.003	0.005	0.009	0.018	0.028	0.037	0.046	0.055	0.064	0.074	13500	0.124	3.87
	Δc	0.001	0.002	0.003	0.005	0.010	0.020	0.029	0.039	0.049	0.059	0.069	0.078			
24	Δu	0.002	0.005	0.007	0.012	0.024	0.049	0.073	0.098	0.122	0.146	0.171	0.195	13000	0.317	4.61
	Δc	0.002	0.004	0.006	0.010	0.020	0.039	0.059	0.078	0.098	0.117	0.137	0.156			
30	Δu	0.005	0.011	0.016	0.027	0.054	0.108	0.162	0.215	0.269	0.323	0.377	0.431	9946	0.536	5.10
	Δc	0.003	0.007	0.010	0.017	0.034	0.069	0.103	0.138	0.172	0.207	0.241	0.276			
36	Δu	0.011	0.022	0.032	0.054	0.108	0.216	0.324	0.431	0.539	0.647			6880	0.742	5.28
	Δc	0.006	0.012	0.017	0.029	0.058	0.115	0.173	0.230	0.288	0.345	0.403	0.460			
42	Δu	0.019	0.039	0.058	0.097	0.194	0.387	0.581	0.774					5112	0.990	5.45
	Δc	0.009	0.018	0.027	0.044	0.089	0.177	0.266	0.354	0.443	0.531	0.620	0.708			
48	Δu	0.033	0.066	0.099	0.164	0.328	0.657							3860	1.268	5.48
	Δc	0.013	0.026	0.039	0.066	0.131	0.263	0.394	0.526	0.657						
54	Δu	0.052	0.104	0.156	0.259	0.519								3070	1.592	5.56
	Δc	0.018	0.037	0.055	0.092	0.184	0.369	0.553								
60	Δu	0.079	0.158	0.236	0.394									2485	1.957	5.58
	Δc	0.025	0.050	0.076	0.126	0.252	0.504									
66	Δu	0.114	0.228	0.342	0.570									2054	2.343	5.64
	Δc	0.033	0.066	0.100	0.166	0.332	0.664									
72	Δu	0.161	0.323	0.484	0.806									1726	2.784	5.65
	Δc	0.043	0.086	0.129	0.215	0.430										
78	Δu	0.221	0.443	0.664										1471	3.256	5.67
	Δc	0.054	0.109	0.163	0.272	0.545										
84	Δu	0.296	0.592											1269	3.758	5.70
	Δc	0.068	0.135	0.203	0.338	0.677										

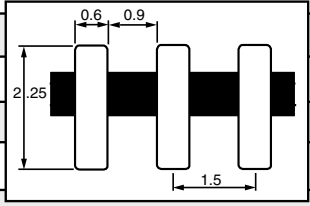


# STRONGWELL® DURAGRID®

## DURAGRID® HD-6000 2-1/4" Bearing Bar

A = 10.8 in<sup>2</sup>/ft. of width    I = 4.56 in<sup>4</sup>/ft. of width    S = 4.05 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD											SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000				8000
12	Δu	0.000	0.000	0.001	0.001	0.002	0.005	0.007	0.010	0.012	0.015	0.017	0.019	20960	0.051	2.03
	Δc	0.000	0.001	0.001	0.002	0.004	0.008	0.012	0.016	0.019	0.023	0.027	0.031			
18	Δu	0.001	0.001	0.002	0.004	0.007	0.014	0.021	0.028	0.035	0.042	0.050	0.057	16640	0.118	3.53
	Δc	0.001	0.002	0.002	0.004	0.008	0.015	0.023	0.030	0.038	0.045	0.053	0.060			
24	Δu	0.002	0.003	0.005	0.009	0.017	0.035	0.052	0.070	0.087	0.105	0.122	0.139	16000	0.279	4.53
	Δc	0.001	0.003	0.004	0.007	0.014	0.028	0.042	0.056	0.070	0.084	0.098	0.112			
30	Δu	0.004	0.008	0.011	0.019	0.038	0.076	0.114	0.152	0.190	0.228	0.266	0.304	12800	0.486	5.08
	Δc	0.002	0.005	0.007	0.012	0.024	0.049	0.073	0.097	0.121	0.146	0.170	0.194			
36	Δu	0.007	0.015	0.022	0.037	0.075	0.149	0.224	0.299	0.374	0.448	0.523	0.598	10720	0.801	5.35
	Δc	0.004	0.008	0.012	0.020	0.040	0.080	0.120	0.159	0.199	0.239	0.279	0.319			
42	Δu	0.013	0.027	0.040	0.067	0.134	0.268	0.402	0.536	0.669	7876	1.055	5.53			
	Δc	0.006	0.012	0.018	0.031	0.061	0.122	0.184	0.245	0.306				0.367	0.428	0.490
48	Δu	0.022	0.045	0.067	0.112	0.224	0.447	0.671	6030	1.348	5.65					
	Δc	0.009	0.018	0.027	0.045	0.089	0.179	0.268				0.358	0.447	0.537	0.626	
54	Δu	0.035	0.070	0.106	0.176	0.352	4764	1.679	5.74							
	Δc	0.013	0.025	0.038	0.063	0.125				0.251	0.376	0.501	0.627			
60	Δu	0.053	0.107	0.160	0.267	0.534	3859	2.063	5.77							
	Δc	0.017	0.034	0.051	0.086	0.171				0.342	0.513	0.684				
66	Δu	0.078	0.155	0.233	0.388	3789	2.939	5.82								
	Δc	0.023	0.045	0.068	0.113				0.226	0.451	0.677					
72	Δu	0.109	0.219	0.328	0.547	2680	2.935	5.84								
	Δc	0.029	0.058	0.088	0.146				0.292	0.584						
78	Δu	0.151	0.301	0.452	2283	3.437	5.85									
	Δc	0.037	0.074	0.111				0.185	0.371							
84	Δu	0.201	0.403	0.604	1954	3.937	5.88									
	Δc	0.046	0.092	0.138				0.230	0.461							
90	Δu	0.265	0.529	1715	4.538	5.90										
	Δc	0.056	0.113				0.169	0.282	0.565							
96	Δu	0.341	0.683	1507	5.145	5.92										
	Δc	0.068	0.137				0.205	0.341	0.683							



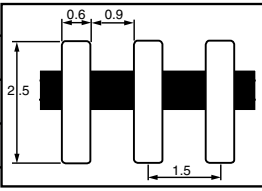
Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>4</sup> /ft. of Width	S-in <sup>3</sup> /ft. of Width
HD 6000	.60	.90	60	10.1	4.56	4.05
HD 5000	.60	.60	50	12.4	5.70	5.06
HD 4000	.60	.40	40	14.7	6.83	6.07

**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67

## DURAGRID® HD-6000 2-1/2" Bearing Bar

A = 12.0 in<sup>2</sup>/ft. of width    I = 6.25 in<sup>4</sup>/ft. of width    S = 5.00 in<sup>3</sup>/ft. of width

SPAN INCHES		LOAD											SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 <sup>6</sup> PSI	
		100	200	300	500	1000	2000	3000	4000	5000	6000	7000				8000
12	Δu	0.000	0.000	0.001	0.001	0.002	0.004	0.007	0.009	0.011	0.013	0.016	0.018	22400	0.050	1.61
	Δc	0.000	0.001	0.001	0.002	0.004	0.007	0.011	0.014	0.018	0.021	0.025	0.029			
18	Δu	0.001	0.001	0.002	0.003	0.006	0.012	0.018	0.023	0.029	0.035	0.041	0.047	17640	0.103	3.11
	Δc	0.001	0.001	0.002	0.003	0.006	0.013	0.019	0.025	0.031	0.038	0.044	0.050			
24	Δu	0.001	0.003	0.004	0.007	0.014	0.029	0.043	0.057	0.071	0.086	0.100	0.114	13716	0.196	4.03
	Δc	0.001	0.002	0.003	0.006	0.011	0.023	0.034	0.046	0.057	0.069	0.080	0.091			
30	Δu	0.003	0.006	0.009	0.015	0.030	0.060	0.091	0.121	0.151	0.181	0.211	0.241	11800	0.356	4.66
	Δc	0.002	0.004	0.006	0.010	0.019	0.039	0.058	0.077	0.097	0.116	0.135	0.155			
36	Δu	0.006	0.012	0.017	0.029	0.058	0.117	0.175	0.233	0.292	0.350	0.408	0.467	9493	0.554	5.00
	Δc	0.003	0.006	0.009	0.016	0.031	0.062	0.093	0.124	0.156	0.187	0.218	0.249			
42	Δu	0.010	0.021	0.031	0.051	0.103	0.206	0.309	0.412	0.515	0.617	6975	0.718	5.25		
	Δc	0.005	0.009	0.014	0.024	0.047	0.094	0.141	0.188	0.235	0.282				0.329	0.376
48	Δu	0.017	0.034	0.052	0.086	0.172	0.344	0.516	0.688	5340	0.918	5.36				
	Δc	0.007	0.014	0.021	0.034	0.069	0.138	0.206	0.275				0.344	0.413	0.481	0.550
54	Δu	0.027	0.054	0.081	0.135	0.270	0.541	4419	1.195	5.46						
	Δc	0.010	0.019	0.029	0.048	0.096	0.192				0.288	0.385	0.481	0.577	0.673	
60	Δu	0.041	0.082	0.123	0.204	0.408	3417	1.395	5.51							
	Δc	0.013	0.026	0.039	0.065	0.131				0.261	0.392	0.523	0.653			
66	Δu	0.059	0.119	0.178	0.297	0.594	2824	1.676	5.55							
	Δc	0.017	0.035	0.052	0.086	0.173				0.345	0.518	0.691				
72	Δu	0.084	0.168	0.252	0.420	2374	1.992	5.56								
	Δc	0.022	0.045	0.067	0.112				0.224	0.448	0.671					
78	Δu	0.115	0.230	0.345	0.575	2022	2.324	5.59								
	Δc	0.028	0.057	0.085	0.141				0.283	0.566	0.849					
84	Δu	0.154	0.308	0.461	1744	2.682	5.62									
	Δc	0.035	0.070	0.105				0.176	0.352	0.703						
90	Δu	0.202	0.404	0.606	1519	3.068	5.64									
	Δc	0.043	0.086	0.129				0.215	0.431							
96	Δu	0.260	0.520	1335	3.472	5.67										
	Δc	0.052	0.104				0.156	0.260	0.520							
102	Δu	0.330	0.659	1182	3.897	5.70										
	Δc	0.062	0.124				0.186	0.310	0.621							



Series	Bar Width	Open Space	% Open Area	Approx. Wt.	I-in <sup>4</sup> /ft. of Width	S-in <sup>3</sup> /ft. of Width
HD 6000	.60	.90	60	11.1	6.25	5.00
HD 5000	.60	.60	50	13.7	7.81	6.25
HD 4000	.60	.40	40	16.3	9.38	7.50

**Multipliers for Series Other Than HD-6000**  
 HD 5000 - Multiply Load Table Deflection by 0.80  
 HD 4000 - Multiply Load Table Deflection by 0.67