

Composite Design Safe Load Table

hi-stress flexicore®

**8" x 16" SECTION PLUS
2" STRUCTURAL TOPPING**
UL RATING

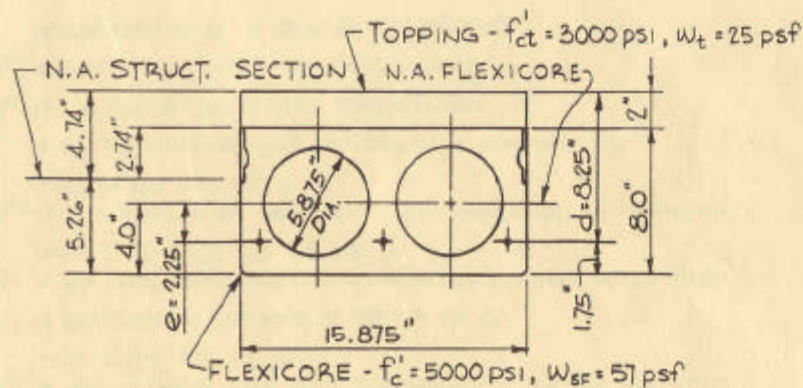
See instructions on back side of sheet for using this table.

UNIFORMLY DISTRIBUTED SUPERIMPOSED* LOAD IN LBS. PER SQ. FT.

Standard Designation	Combination of 7-Wire Strand	Strand Area Sq. In.	M _u in Ft.-Kips per Unit	SIMPLE SPAN IN FEET — CENTER TO CENTER OF END BEARINGS																	V _{AU(CW)} in Lbs. per Unit	M'' _{Cr} in Ft. Lbs. per Unit		
				14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			31	32
T816A-A36	2—7/16 & 1—1/2	.3616	43.45			390	363	339	318	294	260	231	205	183	163	146	130	116	104	92	79	67	8816	31003
T816A-A33	3—7/16	.3267	40.22	461	425	395	367	343	303	267	236	209	185	164	146	130	116	103	91	79	67	56	8897	29016
T816A-A30	2—7/16 & 1—3/8	.2977	37.40	453	418	388	361	316	277	243	214	189	167	148	131	116	103	91	80	68	56	46	8764	27338
T816A-A27	2—3/8 & 1—7/16	.2687	34.45	445	410	380	329	286	250	219	192	169	149	131	115	102	89	78	68	56	46	36	8627	25612
T816A-A24	3—3/8	.2397	31.36	449	396	340	293	254	221	193	169	148	129	113	99	86	75	65	55	44	34		8707	23689
T816A-A22	2—7/16	.2178	28.93	424	360	308	265	229	199	173	150	131	114	99	86	74	64	55	46	35			8378	22435
T816A-A16	2—3/8	.1598	22.10	308	259	219	187	159	136	116	99	84	71	60	50	41	33						8231	18591

*TABULATED LOADS ARE BASED ON M_u=1.5 M_D+1.8 M_L AND WITH ALL LOAD SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD.**

PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



- A = 72.7 in²
- $f'_{ct} = 3500$ psi
- $f'_c = 5000$ psi
- $f_{st} = 175.0$ ksi
- $f'_s = 250.0$ ksi
- b' = 4.125 in.
- $I_s = 560.3$ in⁴
- $\phi_s = 0.85$
- $V_{Cr} \min = 4090$ lbs.
- $\phi_s V_{Cr} \min = 3477$ lbs.
- $f'_{CT} = 3000$ psi
- $I_{CS} = 1028.2$ in⁴
- $V_A = 1443$ lbs.
- $V_{fcs} = 7102$ lbs.
- $V_{tu} = 13,494$ lbs.

Grouted weight of structural unit is 82 lbs. per sq. ft. or 109 lbs. per lin. ft.

Design is based on ACI 318-63 building code requirements for reinforced concrete.

Note — For longer spans, heavier loads or special conditions consult your local manufacturer.