

hi-stress flexicore®

8" x 16" SECTION

Safe Load Table

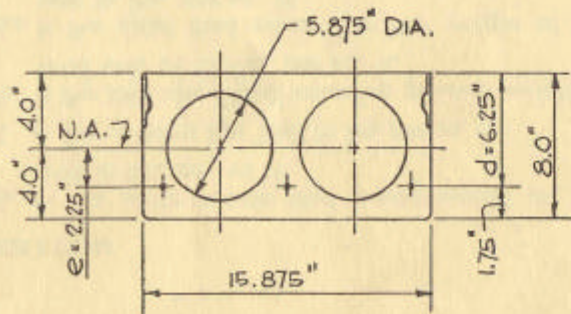
See instructions on back side of sheet for using this table.

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																			$V_{A(UCW)}$ 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		
816A-A36	2—7/16 & 1—1/2	.3616	34.69			308	287	269	252	237	214	191	171	153	137	124	111	100	90	81	73	65	6839	22217
816A-A33	3—7/16	.3267	31.95	363	335	311	290	272	248	219	194	173	154	137	123	110	99	88	79	71	63	57	6902	20792
816A-A30	2—7/16 & 1—3/8	.2977	29.58	357	330	306	285	257	226	199	176	156	139	124	110	98	88	78	70	62	55	49	6798	19590
816A-A27	2—3/8 & 1—7/16	.2687	27.13	350	324	301	265	232	203	179	158	139	123	110	97	86	77	68	60	53	47	41	6693	18353
816A-A24	3—3/8	.2397	24.60	354	317	273	236	206	180	157	138	122	107	95	84	74	65	57	50	44	38	33	6754	17057
816A-A22	2—7/16	.2178	22.62	337	288	247	213	185	161	141	123	108	95	83	73	64	56	49	42	36	31		6499	16077
816A-A16	2—3/8	.1598	17.14	244	206	176	150	129	111	95	82	71	61	52	44	37	31						6385	13322

*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



$A = 72.7 \text{ in}^2$ $f'_s = 250.0 \text{ ksi}$ $V_{C1} \text{ min} = 3099 \text{ lbs.}$
 $f'_{C1} = 3500 \text{ psi}$ $b' = 4.125 \text{ in.}$ $\phi_e V_{C1} \text{ min} = 2634 \text{ lbs.}$
 $f'_c = 5000 \text{ psi}$ $I_g = 560.3 \text{ in}^4$ $V_A = 1093 \text{ lbs.}$
 $f_{S1} = 175.0 \text{ ksi}$ $\phi_s = 0.85$

Grouted weight of structural unit is 57 lbs. per sq. ft. or 76 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.