

hi-stress flexicore®

8" x 16" SECTION

Safe Load Table

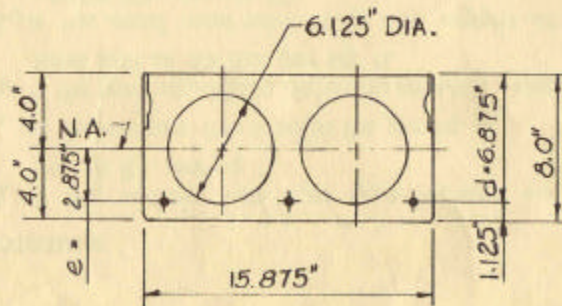
See instructions on back side of sheet for using this table.

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																		$V_{AU(CW)}$ 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
816B-A33	3—7/16	0.3267	35.72	344	318	296	276	258	242	228	215	196	178	163	146	132	119	108	97	88	80	72	6536	22297
816B-A30	2—7/16 & 1—3/8	0.2977	33.03	339	313	291	271	254	238	224	205	183	164	147	132	119	107	96	87	78	70	63	6444	21050
816B-A27	2—3/8 & 1—7/16	0.2687	30.25	333	308	286	266	249	234	208	185	164	146	131	117	105	94	84	76	68	61	54	6346	19736
816B-A24	3—3/8	0.2397	27.38	337	312	289	270	238	209	184	163	144	128	114	102	91	81	72	64	57	51	45	6412	18343
816B-A22	2—7/16	0.2178	25.16	322	298	277	246	215	188	165	146	129	114	101	90	80	71	63	56	49	43	38	6167	17299
816B-A16	2—3/8	0.1598	19.00	279	237	203	175	151	131	114	99	87	76	66	57	50	43	37	31				6061	14289

* 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



$A = 68.0 \text{ in}^2$ $f'_s = 250.0 \text{ ksi}$ $V_{C1} \text{ min} = 2995 \text{ lbs.}$
 $f'_{C1} = 3500 \text{ psi}$ $b' = 3.625 \text{ in.}$ $\phi_b V_{C1} \text{ min} = 2546 \text{ lbs.}$
 $f'_c = 5000 \text{ psi}$ $I_g = 539.1 \text{ in}^4$ $V_A = 1057 \text{ lbs.}$
 $\xi_{s1} = 175.0 \text{ ksi}$ $\phi_s = 0.85$

Grouted weight of structural unit is 53 lbs. per sq. ft. or 71 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.