

hi-stress flexicore®

8" x 24" SECTION

Safe Load Table

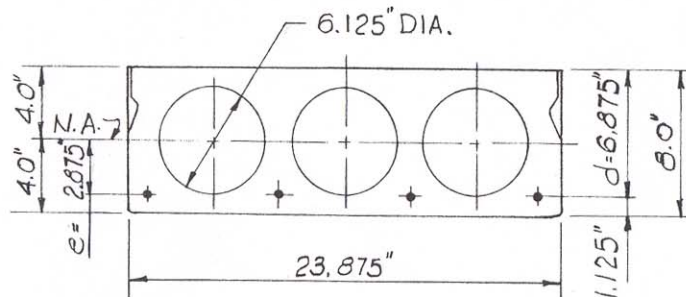
See instructions on back side of sheet for using this table.

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
				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
824B-A51	2—1/2 & 2—7/16	0.5054	55.01		292	272	254	238	224	211	199	181	166	151	136	123	111	100	91	82	74	67	9711	34168	
824B-A44	4—7/16	0.4356	48.53	315	293	273	255	239	224	200	178	159	142	128	115	103	93	83	75	67	60	54	9734	31108	
824B-A38	2—7/16 & 2—3/8	0.3776	42.89	308	286	266	249	219	193	171	152	135	120	108	96	86	77	68	61	54	48	43	9534	28437	
824B-A32	4—3/8	0.3196	37.01	308	276	240	209	183	161	142	125	110	98	87	77	68	60	53	46	41	35	31	9552	25597	
824B-A29	2—1/2	0.2876	33.67		247	214	186	162	142	125	110	96	85	75	66	58	50	44	38	33			9050	24025	
824B-A28	2—3/8 & 2—5/16	0.2754	32.37	275	236	204	177	154	135	118	104	91	80	70	61	54	47	41	35	30			9354	23332	
824B-A23	4—5/16	0.2312	27.58	227	194	167	144	125	108	94	82	71	61	53	46	39	33						9388	20982	
824B-A22	2—7/16	0.2178	26.10	213	182	156	134	116	100	87	75	65	56	48	41	35	29						8929	20272	

*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



$A = 102.6 \text{ in}^2$ $f'_s = 250.0 \text{ ksi}$ $V_{C1} \text{ min} = 4545 \text{ lbs.}$
 $f'_{C1} = 3500 \text{ psi}$ $b' = 5.50 \text{ in.}$ $\phi_s V_{C1} \text{ min} = 3863 \text{ lbs.}$
 $f'_c = 5000 \text{ psi}$ $I_s = 811.4 \text{ in}^4$ $V_A = 1604 \text{ lbs.}$
 $f_{s1} = 175.0 \text{ ksi}$ $\phi_s = 0.85$

Grouted weight of structural unit is 54 lbs. per sq. ft. or 107 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.