

# hi-stress flexicore®

8" x 24" SECTION

## Safe Load Table

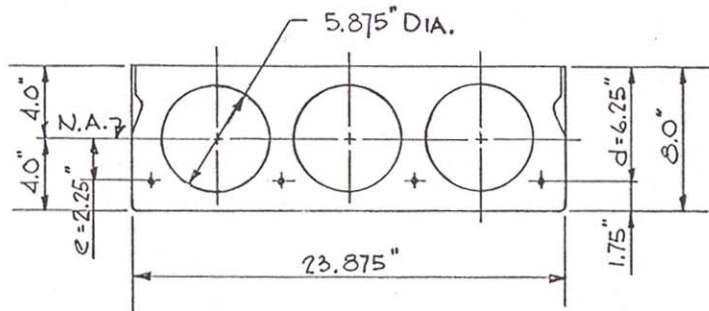
See instructions on back side of sheet for using this table.

### 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		
824A-A58	4—1/2	.5752	54.55		315	294	275	258	242	222	202	182	163	146	132	119	107	97	87	79	71	64	10450	34628
824A-A51	2—1/2 & 2—7/16	.5054	49.17		308	287	268	251	226	200	178	159	142	127	114	102	92	82	74	66	59	53	10242	31888
824A-A44	4—7/16	.4356	43.48	332	308	287	251	220	194	172	152	135	120	107	95	85	76	67	60	53	47	41	10252	28954
824A-A38	2—7/16 & 2—3/8	.3776	38.50	324	287	249	217	190	166	147	129	114	101	89	79	70	62	54	48	42	36	31	10036	26425
824A-A32	4—3/8	.3196	33.29	281	241	208	181	157	137	120	105	92	81	71	62	54	47	40	35	29			10044	23790
824A-A29	2—1/2	.2876	30.31		216	186	160	139	121	105	92	80	69	60	52	45	38	33					9528	22332
824A-A28	2—3/8 & 2—5/16	.2754	29.16	240	206	177	152	132	114	99	86	75	65	56	48	41	35	30					9838	21717
824A-A23	4—5/16	.2312	24.88	198	168	144	123	106	91	78	67	57	48	41	34	28							9867	19591
824A-A22	2—7/16	.2178	23.56	185	157	134	114	97	83	71	61	51	43	36	30								9397	18959

\*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



$$\begin{aligned}
 A &= 109.6 \text{ in}^2 & f'_s &= 250.0 \text{ ksi} & V_{C1} \text{ min} &= 4695 \text{ lbs.} \\
 f'_{C1} &= 3500 \text{ psi} & b' &= 6.25 \text{ in.} & \phi_s V_{C1} \text{ min} &= 3991 \text{ lbs.} \\
 f'_C &= 5000 \text{ psi} & I_s &= 843.2 \text{ in}^4 & V_A &= 1657 \text{ lbs.} \\
 f_{s1} &= 175.0 \text{ ksi} & \phi_s &= 0.85 & &
 \end{aligned}$$

Grouted weight of structural unit is 57 lbs. per sq. ft. or 114 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.