Form No. T824B-CB July 1, 1976

270k STRAND

Composite Design Safe Load Table

flexicore®

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

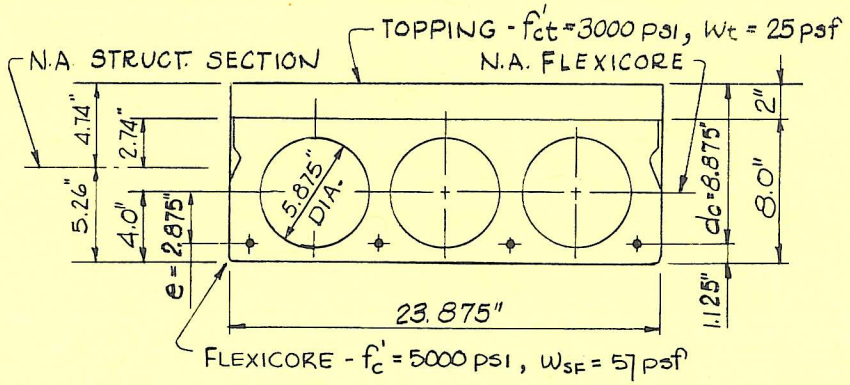
8" x 24" SECTION PLUS 2" STRUCTURAL TOPPING

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

Standard Designation	Combination of 7-Wire Strand	Strand Area Sq. In.	Muc in Ft.-Kips per Unit	SIMPLE SPAN IN FEET—CENTER TO CENTER OF END BEARINGS (l)																			
				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
T824B-CB46	4-7/16	0.460	70.36	497	462	430	403	378	346	308	274	245	220	194	171	150	131	115	100	86	74	63	52	43
T824B-CB40	2-7/16 & 2-3/8	0.400	62.49	485	450	420	386	340	300	266	236	210	186	162	142	123	106	91	78	66	55	44		
T824B-CB34	4-3/8	0.340	54.23	484	431	374	326	286	251	222	196	174	152	131	112	96	81	68	56	45				
T824B-CB31	2-1/2	0.306	49.38	403	361	325	291	254	223	196	172	152	132	113	96	81	67	55	43					
T824B-CB23	2-7/16	0.230	38.09	323	282	242	209	181	156	136	118	102	88	73	59	46							← l/h = 40	

* TABULATED LOADS ARE BASED ON U = 1.4D + 1.7L AND WITH ALL LOAD SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD.**

PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



A =	109.7 in.^{2}	f_{si} =	189 ksi	I_g =	843.2 in.^{4}
f'_{ci} =	3500 psi	f_{pu} =	270 ksi	I_{gc} =	1547.1 in.^{4}
f'_c =	5000 psi	b_w =	6.25 in.		

Grouted weight of structural unit is 82 lbs. per sq. ft. or 164 lbs. per lin. ft.

Design is based on ACI 318-71 building code requirements for reinforced concrete.

Recommended maximum l/h ratio is 40 for floor and 50 for roof as per PCI Design Handbook (1971).

Note — 1. For longer spans, heavier loads or special conditions consult your local manufacturer.

2. Tabulated loads in shaded areas are controlled by bond.