

Composite Design Safe Load Table



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

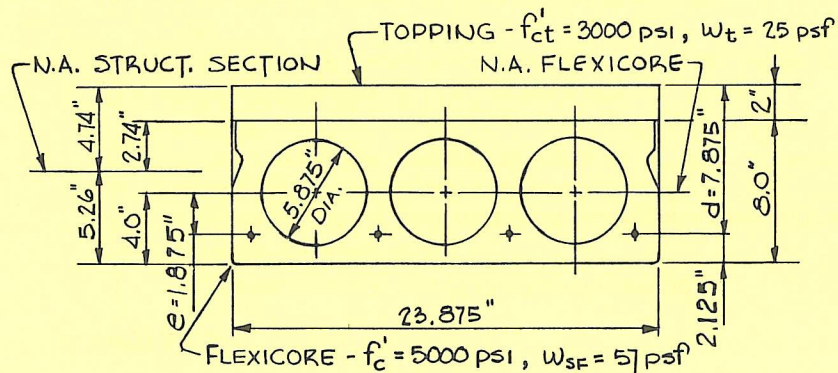
8" x 24" SECTION PLUS 2" STRUCTURAL TOPPING

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
T824C-CB54	2-1/2 & 2-7/16	0.536	68.69	433	402	374	350	328	308	285	256	228	200	175	153	134	116	101	87	74	62	52
T824C-CB46	4-7/16	0.460	61.14	433	402	374	350	320	285	251	219	190	166	144	124	107	91	77	65	53	43	
T824C-CB40	2-7/16 & 2-3/8	0.400	54.47	430	399	371	328	287	250	216	186	161	138	119	101	85	71	59	47			
T824C-CB34	4-3/8	0.340	47.41	428	368	318	277	241	211	180	154	131	111	94	78	64	51	40				
T824C-CB31	2-1/2	0.306	43.23	344	308	276	246	214	187	160	136	115	96	79	65	52	40					
T824C-CB23	2-7/16	0.230	33.46	276	240	205	175	150	129	111	95	77	62	48								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



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

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.