



Composite Design Safe Load Table

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

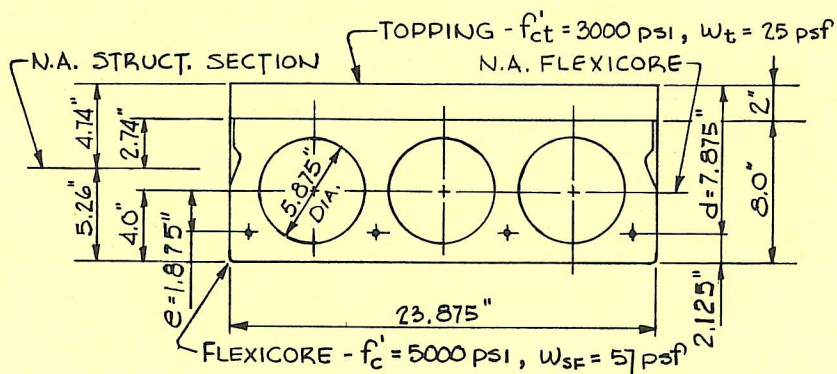
8" x 24" SECTION PLUS 2" STRUCTURAL TOPPING

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 (<i>l</i>)																		
				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				
T824C-CB34	4-3/8	0.340	47.41	428	368	318	277	241	211	180	154	131	111	94	78	64						
T824C-CB31	2-1/2	0.306	43.23				246	214	187	160	136	115	96	79	65							
T824C-CB23	2-7/16	0.230	33.46		240	205	175	150	129	111	95											<i>l/h</i> = 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



$A = 109.7 \text{ in.}^2$	$f_{si} = 189 \text{ ksi}$	$I_g = 843.2 \text{ in.}^4$
$f'_{ci} = 3500 \text{ psi}$	$f_{pu} = 270 \text{ ksi}$	$I_{gc} = 1547.4 \text{ in.}^4$
$f'_c = 5000 \text{ psi}$	$b_w = 6.25 \text{ in.}$	

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