



# Composite Design Safe Load Table

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

**8" x 24" SECTION PLUS  
2" STRUCTURAL TOPPING**

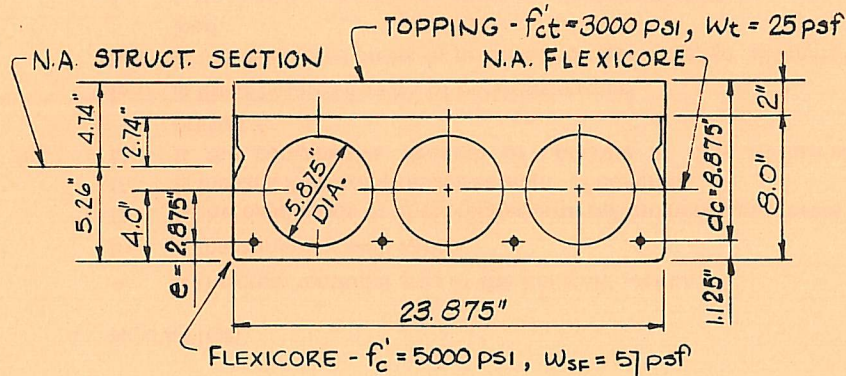
**UNIFORMLY DISTRIBUTED SUPERIMPOSED\* LOAD IN LBS. PER SQ. FT.**

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
T824B-C50	2-1/2 & 2-7/16	0.504	70.94	487	452	422	394	370	348	311	277	248	222	198	174	153	134	117	102	88	76	65
T824B-C43	4-7/16	0.432	62.32	485	450	420	385	339	299	265	235	210	186	162	142	123	106	91	78	66	55	44
T824B-C38	2-7/16 & 2-3/8	0.376	55.29	473	439	383	334	293	258	227	201	178	156	135	116	100	85	71	59	48		
T824B-C32	4-3/8	0.320	47.94	434	373	323	280	245	214	188	165	146	127	108	91	76	63	51	40			
T824B-C29	2-1/2	0.288	43.59		333	287	249	216	189	165	144	126	110	92	77	63	50					
<del>T824B-C28</del>	<del>2-3/8 &amp; 2-5/16</del>	<del>0.276</del>	<del>41.94</del>	<del>371</del>	<del>318</del>	<del>274</del>	<del>237</del>	<del>206</del>	<del>179</del>	<del>156</del>	<del>136</del>	<del>119</del>	<del>104</del>	<del>86</del>	<del>71</del>	<del>58</del>	<del>46</del>					

$l/h = 40 \rightarrow$

\* 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



$A = 109.7 \text{ in.}^2$        $f_{si} = 175 \text{ ksi}$        $I_g = 843.2 \text{ in.}^4$   
 $f_{ci} = 3500 \text{ psi}$        $f_{pu} = 250 \text{ ksi}$        $I_{gc} = 1547.4 \text{ in.}^4$   
 $f'_c = 5000 \text{ psi}$        $b_w = 6.25 \text{ in.}$

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.