



# Composite Design Safe Load Table

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

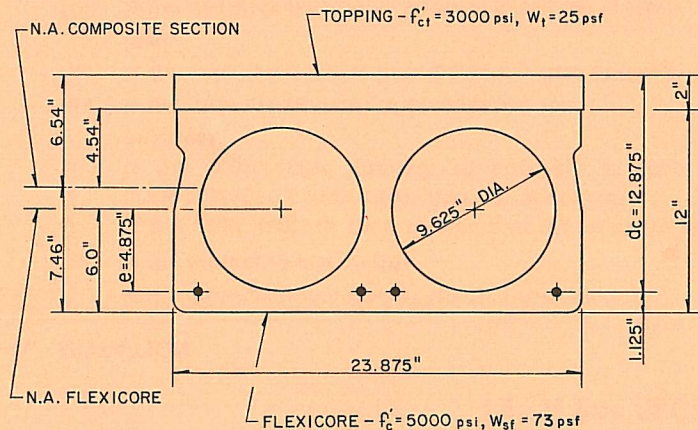
**12" x 24" SECTION PLUS  
2" STRUCTURAL TOPPING**

**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> )																				
				25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
T1224D-C58	4-1/2	0.576	122.00	285	271	258	246	234	224	214	199	183	167	152	137	123	110	99	88	78	68	59	51	43
T1224D-C50	2-1/2 & 2-7/16	0.504	108.56	276	262	249	238	223	203	185	168	153	140	126	112	99	88	77	67	58	50	42		
T1224D-C43	4-7/16	0.432	94.55	275	248	224	203	183	166	150	136	123	111	99	87	76	65	56	47					
T1224D-C40	2-1/2 & 1-7/16	0.396	87.37	248	223	201	181	163	147	133	120	108	97	86	74	64	54	45						
T1224D-C38	2-7/16 & 2-3/8	0.376	83.33	233	209	188	169	152	137	123	110	99	89	78	67	57	48							
T1224D-C36	1-1/2 & 2-7/16	0.360	80.07	220	198	177	159	143	128	115	103	92	82	72	62	52	43							
T1224D-C32	4-3/8	0.320	71.81	189	169	151	134	120	107	95	84	74	65	57	48									

\* 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



$A = 141.0 \text{ in.}^2$      $f_{si} = 175 \text{ ksi}$      $I_g = 2595.4 \text{ in.}^4$   
 $f'_{ci} = 3500 \text{ psi}$      $f_{pu} = 250 \text{ ksi}$      $I_{gc} = 4044.2 \text{ in.}^4$   
 $f'_c = 5000 \text{ psi}$      $b_w = 4.625 \text{ in.}$

Grouted weight of structural unit is 98 lbs. per sq. ft. or 196 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.