

Composite Design Safe Load Table

hi-stress flexicore®

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

8" x 24" SECTION PLUS 2" STRUCTURAL TOPPING

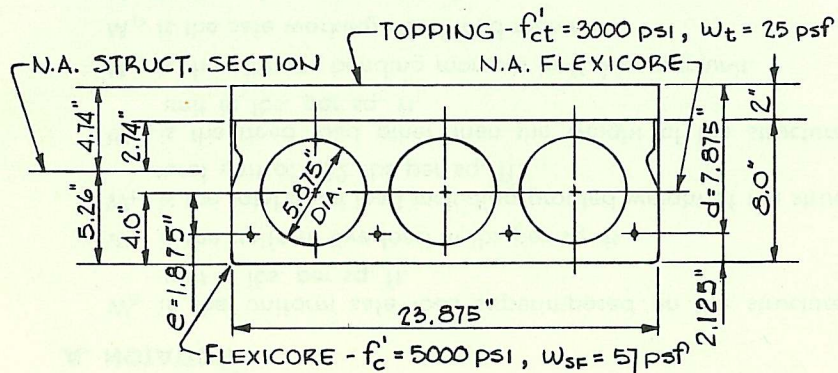
UNIFORMLY DISTRIBUTED SUPERIMPOSED* LOAD IN LBS. PER SQ. FT.

Standard Designation	Combination of 7-Wire Strand	Strand Area Sq. In.	M_u in Ft.-Kips per Unit	SIMPLE SPAN IN FEET — CENTER TO CENTER OF END BEARINGS																		$V_{AU(CW)}$ in Lbs. per Unit	M'_{CR} in. Ft. Lbs. per Unit	
				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			33
T824C-B58	4-1/2	0.576	64.44	432	401	373	349	327	292	254	222	193	168	146	126	109	93	79	66	55	44	35	12751	40672
T824C-B50	2-1/2 & 2-7/16	0.504	58.37	423	392	365	341	301	260	226	195	169	146	125	107	91	77	64	52	42	32	23	12517	37506
T824C-B43	4-7/16	0.432	51.79	423	392	354	307	264	227	195	168	144	123	104	88	73	60	48	37	28			12522	34171
T824C-B38	2-7/16 & 2-3/8	0.376	46.31	414	358	309	269	234	200	171	145	123	104	87	72	58	46	35	25				12293	31459
T824C-B32	4-3/8	0.320	40.49	356	304	262	226	196	171	145	122	102	84	69	55	43	32	22					12312	28640
T824C-B29	2-1/2	0.288	37.00		272	234	201	174	150	130	108	89	73	58	45	33	23						11741	26981
T824C-B28	2-3/8 & 2-5/16	0.276	35.67	305	260	223	191	165	142	123	103	85	68	54	41	30	20						12087	26349

MAX. FLOOR SPAN
L/D RATIO = 40 →

*TABULATED LOADS ARE BASED ON $M_u = 1.4 M_D + 1.7 M_L$ AND WITH ALL LOADS SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD.**

PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



- $A = 109.7 \text{ in.}^2$
- $f'_{CI} = 3500 \text{ psi}$
- $f'_C = 5000 \text{ psi}$
- $f_{SI} = 175.0 \text{ ksi}$
- $f'_{S} = 250.0 \text{ ksi}$
- $b' = 6.25 \text{ in.}$
- $I_S = 843.2 \text{ in.}^4$
- $\phi_S = 0.85$
- $V_{CI} \text{ min} = 6010 \text{ lbs.}$
- $f'_{CT} = 3000 \text{ psi}$
- $I_{CS} = 1547.4 \text{ in.}^4$
- $V_A = 2121 \text{ lbs.}$
- $V_{HU} = 12,785 \text{ lbs.}$

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.
Span-depth ratio limitations are per the requirements of the PCI design handbook.
NOTE — For longer spans, heavier loads or special conditions consult your local manufacturer.