

Composite Design Safe Load Table

hi-stress flexicore®

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

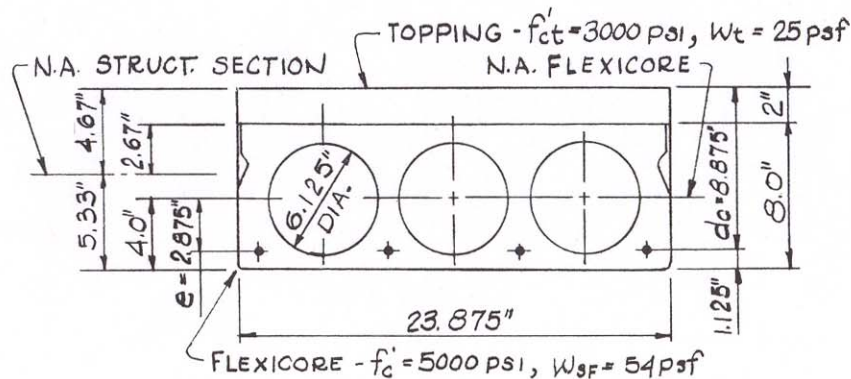
8" x 24" SECTION PLUS 2" STRUCTURAL TOPPING

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 _{C'} in Ft. Lbs. per Unit
				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
T824B-A51	2—1/2 & 2—7/16	.5054	67.61		369	343	321	300	282	265	245	218	195	175	156	140	126	113	101	91	76	65	12537	47517
T824B-A44	4—7/16	.4356	60.05	399	370	344	322	301	268	237	210	186	166	148	132	117	104	93	82	70	59	49	12566	43262
T824B-A38	2—7/16 & 2—3/8	.3776	53.37	390	361	336	300	263	231	203	179	158	140	124	110	97	85	75	66	55	45	35	12307	39547
T824B-A32	4—3/8	.3196	46.32	390	336	290	252	219	191	168	147	129	113	99	86	75	65	57	48	38	29	12331	35598	
T824B-A29	2—1/2	.2876	42.26		301	259	224	194	169	147	128	112	97	84	73	63	54	46	39	29	11683	33412		
T824B-A28	2—3/8 & 2—5/16	.2754	40.68	336	287	247	213	185	160	139	121	105	91	79	68	58	49	42	34	12076	32448			
T824B-A23	4—5/16	.2312	34.81	278	236	202	173	148	128	110	94	80	68	58	49	40	33	26	12119	29180				

* TABULATED LOADS ARE BASED ON $M_U = 1.5 M_D + 1.8 M_L$ AND WITH ALL LOAD SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD. **

PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



$A = 102.6 \text{ in.}^2$	$b' = 5.50 \text{ in.}$	$f'_{CT} = 3000 \text{ psi}$
$f'_{CI} = 3500 \text{ psi}$	$I_s = 811.4 \text{ in.}^4$	$I_{CS} = 1503.6 \text{ in.}^4$
$f'_C = 5000 \text{ psi}$	$\phi_s = 0.85$	$V_A = 2070 \text{ lbs.}$
$f_{SI} = 175.0 \text{ ksi}$	$V_{CI} \text{ min} = 5867 \text{ lbs.}$	$V_{HS} = 10559 \text{ lbs.}$
$f'_s = 250.0 \text{ ksi}$	$\phi_s V_{CI} \text{ min} = 4987 \text{ lbs.}$	$V_{HU} = 20,063 \text{ lbs.}$

Grouted weight of structural unit is 79 lbs. per sq. ft. or 158 lbs. per lin. ft.
 Design is based on ACI 318-63 building code requirements for reinforced concrete.
 NOTE — For longer spans, heavier loads or special conditions consult your local manufacturer.