

Composite Design Safe Load Table

hi-stress flexicore®

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

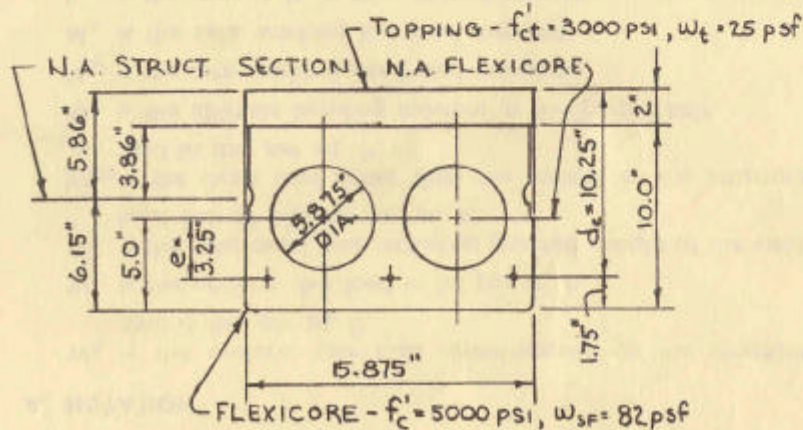
10" x 16" SECTION PLUS 2" STRUCTURAL TOPPING

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
				20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
T1016A-A43	3—1/2	0.4314	65.06	363	341	322	304	287	258	232	208	187	169	152	136	123	110	98	88	78	67	56	10864	47059
T1016A-A40	2—1/2 & 1—7/16	0.3965	60.97	357	336	317	295	264	236	211	190	170	152	137	122	109	97	87	77	68	56	46	10730	44600
T1016A-A36	2—7/16 & 1—1/2	0.3616	56.70	352	331	301	268	239	213	190	170	152	136	121	108	95	84	74	65	57	45	35	10588	42061
T1016A-A33	3—7/16	0.3267	52.24	346	306	271	240	213	189	168	150	133	118	104	92	81	71	61	53	43	33	24	10665	39418
T1016A-A30	2—7/16 & 1—3/8	0.2977	48.39	314	277	244	216	191	169	149	132	117	103	90	79	68	59	50	42	33	24	10527	37194	
T1016A-A27	1—7/16 & 2—3/8	0.2687	44.39	281	246	217	191	168	148	130	114	100	87	75	65	55	47	39	32	10385	34917			
T1016A-A24	3—3/8	0.2397	40.25	246	215	188	164	144	126	109	95	82	70	60	50	42	34	27	10459	32562				
T1016A-A22	2—7/16	0.2178	37.03	219	191	166	144	125	108	93	80	68	58	48	39	31	10125	30782						

* 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



$A = 104.5 \text{ in.}^2$	$b = 4.125 \text{ in.}$	$f'_{CT} = 3000 \text{ psi}$
$f'_{C1} = 3500 \text{ psi}$	$I_s = 1205.9 \text{ in.}^4$	$I_{CS} = 1931.3 \text{ in.}^4$
$f'_C = 5000 \text{ psi}$	$\phi_s = 0.85$	$V_A = 1794 \text{ lbs.}$
$f_{S1} = 175.0 \text{ ksi}$	$V_{C1} \text{ min} = 5083 \text{ lbs.}$	$V_{HS} = 10262 \text{ lbs.}$
$f'_S = 250.0 \text{ ksi}$	$\phi_s V_{C1} \text{ min} = 4321 \text{ lbs.}$	$V_{HU} = 19497 \text{ lbs.}$

Grouted weight of structural unit is 107 lbs. per sq. ft. or 143 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.