

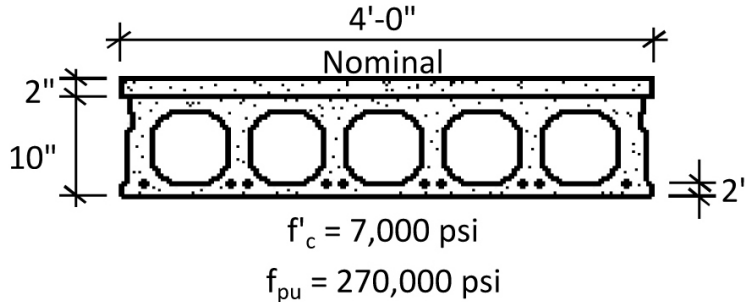
4' X 10" Hollowcore Lightweight - Load Tables

Key

- (1) Safe superimposed service live load (psf)
- (2) Estimated camber at erection (in)
- (3) Estimated long-term camber (in), due to dead load & superimposed sustained live load
- (2),(3) Positive values mean upward camber, negative values mean downward deflection

*Live load can be increased by shear reinforcing
 †Live load limited by 5/8" downward deflection after all loads

Normal Weight Concrete



Section Properties

A= 195.5 in	291.5 in
I= 1587 in	3171 in
Y= 4.09 in	5.71 in
Y= 3.91 in	4.29 in
S= 388 in	555 in
S= 406 in	739 in
wt= 51 psf	76 psf
V/S= 1.76 in	

Notes

- Superimposed dead load of 10 psf and topping weight (if applicable) is included in the design
- 20% of live load shown in the table are assumed to be sustained
- Concrete strength of topping is assumed to be 3,000 psi
- Topped section properties do not take into account topping strength
- Bottom tension is limited to
- Maximum live load deflection of L/360 is satisfied

Table of safe superimposed service live load (psf) and cambers (in)

4HC10

No Topping

Strand	Span (ft)																											
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
4-Strand	(1)	235	210	185	170	145	120	95	80	60	45	30	20	10														
	(2)	0.23	0.24	0.24	0.25	0.24	0.24	0.23	0.21	0.19	0.16	0.12	0.08	0.02														
	(3)	0.22	0.22	0.21	0.19	0.18	0.16	0.14	0.10	0.06	0.02	-0.04	-0.11	-0.20														
6-Strand	(1)	285*	265*	250*	240*	225*	210*	195*	180*	165	150	135	125	115	105	95	80†	60†	45†	30†	15†							
	(2)	0.40	0.43	0.46	0.48	0.50	0.51	0.52	0.53	0.53	0.52	0.50	0.48	0.45	0.41	0.36	0.30	0.23	0.14	0.05								
	(3)	0.47	0.48	0.49	0.49	0.49	0.48	0.46	0.44	0.41	0.38	0.33	0.27	0.19	0.10	0.00	-0.09	-0.16	-0.26	-0.37	-0.48							
8-Strand	(1)	295*	275*	260*	245*	235*	220*	210*	200*	190*	180*	170*	155*	145*	135*	125*	120*	110*	105	90†	75†	55†	40†	30†	15†			
	(2)	0.57	0.61	0.65	0.69	0.73	0.77	0.80	0.83	0.86	0.88	0.89	0.90	0.91	0.90	0.89	0.87	0.84	0.81	0.76	0.70	0.62	0.54	0.44	0.32			
	(3)	0.71	0.75	0.79	0.82	0.84	0.86	0.87	0.87	0.87	0.85	0.82	0.80	0.76	0.70	0.63	0.53	0.44	0.30	0.21	0.11	0.04	-0.06	-0.22	-0.35			
10-Strand	(1)	305*	285*	270*	255*	240*	230*	220*	210*	200*	190*	180*	175*	165*	160*	150*	140*	130*	120*	115*	105*	100*	95†	75†	60†	50†	35†	25†
	(2)	0.72	0.78	0.84	0.90	0.95	1.01	1.06	1.11	1.16	1.21	1.25	1.28	1.31	1.33	1.35	1.36	1.36	1.35	1.33	1.30	1.27	1.21	1.15	1.07	0.97	0.86	0.73
	(3)	0.93	1.00	1.06	1.12	1.17	1.22	1.25	1.28	1.31	1.32	1.33	1.32	1.31	1.27	1.23	1.18	1.12	1.05	0.94	0.84	0.69	0.52	0.46	0.35	0.19	0.06	-0.12

Table of safe superimposed service live load (psf) and cambers (in.)

4HC10 + 2

2" Normal Weight Topping

Strand	Span (ft)																											
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
4-Strand	(1)	285	255	230	205	180	160	145	125	115	100	90	70†	35†														
	(2)	0.23	0.24	0.24	0.25	0.24	0.24	0.23	0.21	0.19	0.16	0.12	0.08	0.02														
	(3)	0.14	0.13	0.11	0.08	0.05	0.01	-0.05	-0.11	-0.19	-0.27	-0.37	-0.47	-0.55														
6-Strand	(1)	350*	330*	310*	295*	275*	255*	230*	215*	195*	180	160	145	135	115	90†	60†	35†	10†									
	(2)	0.40	0.43	0.46	0.48	0.50	0.51	0.52	0.53	0.53	0.52	0.50	0.48	0.45	0.41	0.36	0.30	0.23										
	(3)	0.36	0.37	0.36	0.35	0.34	0.32	0.29	0.25	0.20	0.14	0.08	-0.01	-0.11	-0.21	-0.30	-0.39	-0.49	-0.60									
8-Strand	(1)	360*	340*	320*	305*	285*	270*	260*	245*	235*	220*	200*	185*	170*	160*	145*	135	120	100†	75†	50†	25†						
	(2)	0.57	0.61	0.65	0.69	0.73	0.77	0.80	0.83	0.86	0.88	0.89	0.90	0.91	0.90	0.89	0.87	0.84	0.81	0.76	0.70	0.62						
	(3)	0.58	0.61	0.63	0.65	0.66	0.66	0.65	0.63	0.60	0.57	0.53	0.48	0.41	0.32	0.23	0.12	0.00	-0.12	-0.22	-0.33	-0.45						
10-Strand	(1)	375*	350*	330*	310*	295*	280*	265*	255*	240*	230*	220*	210*	200*	185*	175*	160*	150*	140*	130*	120	100†	75†	55†	35†	15†		
	(2)	0.72	0.78	0.84	0.90	0.95	1.01	1.06	1.11	1.16	1.21	1.25	1.28	1.31	1.33	1.35	1.36	1.36	1.35	1.33	1.30	1.27	1.21	1.15	1.07	0.97		
	(3)	0.78	0.83	0.88	0.92	0.95	0.98	1.00	1.01	1.01	1.00	0.98	0.95	0.90	0.85	0.78	0.71	0.61	0.49	0.36	0.21	0.08	-0.03	-0.17	-0.32	-0.49		

