

Maximum Uniformly Distributed Service Load (psf)

Strand Pattern	Strand Area(in ²)	Clear Span (Feet)																																			
		15	16	17	18	19	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	47	48	49	50
10HS8.6(28)-1.77	2.042	504	469	438	410	386	364	344	325	309	294	280	267	255	244	233	224	214	206	198	191	183	177	170	164	159	153	148	143	138	129	121	113	106	99	93	87
10HS4.6(48)-1.77	1.480	505	470	439	411	387	364	344	326	309	294	280	267	255	244	234	224	215	205	189	175	162	150	139	129	119	111	102	95	88	81	-	-	-	-	-	-
10HS88-1.77	1.224	507	472	441	413	388	366	346	327	311	295	281	268	252	230	211	193	177	163	150	138	127	117	107	99	91	84	-	-	-	-	-	-	-	-	-	-
10HS68-1.77	0.918	507	472	441	413	388	366	331	296	266	240	217	196	178	161	146	133	121	110	100	91	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Estimated Camber at Time of Erection (inches)

Strand Pattern	Strand Area(in ²)	Clear Span (Feet)																																				
		15	16	17	18	19	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	47	48	49	50	
10HS8.6(28)-1.77	2.042	0.48	0.54	0.60	0.66	0.72	0.79	0.85	0.92	0.98	1.05	1.11	1.17	1.23	1.29	1.34	1.39	1.43	1.47	1.50	1.53	1.55	1.56	1.56	1.55	1.54	1.51	1.47	1.41	1.35	1.27	1.17	1.06	0.93	0.78	0.62	0.43	
10HS4.6(48)-1.77	1.48	0.34	0.37	0.41	0.46	0.50	0.54	0.58	0.61	0.65	0.68	0.72	0.75	0.77	0.79	0.81	0.82	0.83	0.83	0.82	0.80	0.78	0.74	0.70	0.65	0.58	0.50	0.41	0.31	0.19	0.05	-	-	-	-	-	-	
10HS88-1.77	1.224	0.27	0.30	0.33	0.37	0.40	0.42	0.45	0.48	0.50	0.53	0.54	0.56	0.57	0.58	0.58	0.57	0.56	0.54	0.52	0.48	0.44	0.38	0.32	0.24	0.16	0.06	-	-	-	-	-	-	-	-	-	-	
10HS68-1.77	0.918	0.19	0.21	0.23	0.25	0.27	0.28	0.30	0.31	0.32	0.32	0.32	0.32	0.31	0.30	0.28	0.26	0.22	0.18	0.13	0.07	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SECTION PROPERTIES

$A_c = 263.6 \text{ IN.}^2$
 $I_g = 3284 \text{ IN.}^4$
 $Y_b = 4.828 \text{ IN.}$
 $b_w = 13.56 \text{ IN.}$
 $v/s = a/p = 2.30$
 $w_t = 71 \text{ PSF}$
 $W_{\text{COREFILL}} = 43 \text{ PLF}$

CONCRETE

PLANK
 $f'_{ci} = 5000 \text{ psi}$
 $f'_c = 9000 \text{ psi}$
COREFILL
 $f'_c = 5000 \text{ psi}$

STRAND

$f_{pu} = 270 \text{ ksi (LOW LAX)}$
JACKING FORCE:
 TOP = $0.60 f_{pu}$
 BOTTOM = $0.70 f_{pu}$

NOTES:

- TABULATED SAFE UNIFORM DISTRIBUTED LOADS IN THIS TABLE ARE BASED ON ACI 318-11/318R-02.
- ALL CALCULATED LOADS ARE CONSIDERED AS SUPERIMPOSED LIVE LOAD BASED ON 1.2DL + 1.6LL.
- TOPPING WEIGHT IS NOT INCLUDED IN TABULATED VALUES.
- SIZE AND LOCATION OF OPENINGS REDUCE TABLE CAPACITY.
- TABULATED LOADS IN THE SHADED REGION HAVE LIVE LOAD DEFLECTIONS GREATER THAN $L/360$.
- LOADS TO THE LEFT OF THE HEAVY LINE ARE GOVERNED BY SHEAR CAPACITY.
- PLANK IS 1.5 HOUR FIRE RATED PER PCI MNL-124. FOR HIGHER RATINGS PLEASE CONTACT KP.
- FOR LONGER SPANS OR CONDITIONS NOT COVERED BY THIS TABLE PLEASE CONTACT KP.

