



Section Properties

Untopped      Topped (2")

A	=	290 in <sup>2</sup>	
I	=	5290 in <sup>4</sup>	8132 in <sup>4</sup>
Y <sub>b</sub>	=	6.10 in	7.51 in
Y <sub>t</sub>	=	5.90 in	6.49 in
S <sub>b</sub>	=	867 in <sup>3</sup>	1083 in <sup>3</sup>
S <sub>t</sub>	=	897 in <sup>3</sup>	1253 in <sup>3</sup>
B <sub>w</sub>	=	11.80 in	11.80 in
wt	=	77 psf	102 psf

Key

- 127 - Safe superimposed live load, psf
- 0.3 - Estimated Camber at Erection, in
- 0.4 - Estimated Long-Time Camber, in

- f<sub>c</sub> = 5000 psi
- f<sub>ci</sub> = 3500 psi
- f<sub>ct</sub> = 3000 psi
- f<sub>pu</sub> = 270 ksi

**12" HC (UNTOPPED)**

SPAN (Ft)

Strand Pattern	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
<b>4-1/2</b>	127 0.3 0.4	115 0.3 0.3	104 0.3 0.3	94 0.3 0.3	85 0.3 0.2	76 0.2 0.1	69 0.2 0.1	62 0.1 0	56 0.1 -0.1	50 0 -0.2	44 0 -0.3	39 -0.1 -0.5	35 -0.2 -0.6									
<b>5-1/2</b>	163 0.5 0.6	151 0.5 0.6	137 0.5 0.6	124 0.5 0.6	112 0.5 0.6	102 0.5 0.5	92 0.5 0.5	83 0.4 0.4	75 0.4 0.4	68 0.3 0.2	61 0.3 0.2	55 0.3 0.1	49 0.2 -0.1	43 0.1 -0.2	38 0.1 -0.4							
<b>6-1/2</b>	172 0.7 0.9	163 0.7 0.9	155 0.7 0.9	147 0.7 0.9	140 0.8 0.9	133 0.8 0.9	121 0.8 0.9	111 0.7 0.8	101 0.7 0.8	92 0.7 0.7	84 0.7 0.7	77 0.6 0.6	70 0.6 0.5	63 0.5 0.3	57 0.5 0.2	52 0.4 0.1	46 0.3 -0.1	42 0.2 -0.3				
<b>8-1/2</b>	184 1 1.3	175 1.1 1.1	167 1.1 1.5	159 1.2 1.5	152 1.2 1.5	145 1.2 1.6	138 1.2 1.6	132 1.3 1.6	127 1.3 1.6	121 1.3 1.5	116 1.3 1.5	111 1.3 1.5	110 1.3 1.4	102 1.3 1.3	94 1.3 1.2	87 1.2 1.1	80 1.2 1	73 1.1 0.9	68 1.1 0.7	62 1 0.5	57 0.9 0.3	
<b>10-1/2</b>	220 1 1.3	212 1.1 1.1	204 1.1 1.5	196 1.2 1.5	188 1.2 1.5	181 1.2 1.6	174 1.2 1.6	167 1.3 1.6	161 1.3 1.6	155 1.3 1.5	149 1.3 1.5	137 1.3 1.5	127 1.3 1.4	117 1.3 1.3	108 1.3 1.2	99 1.2 1.1	91 1.2 1	84 1.1 0.9	77 1.1 0.7	71 1 0.5	64 0.9 0.3	

**12" HC (TOPPED)**

SPAN (Ft)

Strand Pattern	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
<b>4-1/2</b>	101 0.3 0.1	89 0.3 0	79 0.3 -0.1	69 0.2 -0.2	60 0.2 -0.3	52 0.1 -0.4	45 0.1 -0.5	38 0 -0.7													
<b>5-1/2</b>	150 0.5 0.4	135 0.5 0.3	121 0.5 0.3	109 0.5 0.2	98 0.5 0.1	88 0.5 0	78 0.4 -0.1	70 0.4 -0.2	62 0.3 -0.3	54 0.3 -0.5	47 0.2 -0.7	41 0.1 -0.9	34 0.1 -1.1								
<b>6-1/2</b>	173 0.7 0.6	163 0.7 0.6	155 0.8 0.6	144 0.8 0.5	131 0.8 0.5	119 0.7 0.4	107 0.7 0.3	97 0.7 0.2	88 0.7 0.1	79 0.6 -0.1	71 0.6 -0.2	64 0.5 -0.4	57 0.5 -0.6	50 0.4 -0.8	42 0.3 -1						
<b>8-1/2</b>	185 1.1 1.1	175 1.2 1.1	167 1.2 1.1	159 1.2 1.1	151 1.3 1.1	144 1.3 1	137 1.3 1	131 1.3 0.9	125 1.3 0.9	119 1.3 0.8	116 1.3 0.7	106 1.3 0.6	97 1.3 0.4	89 1.2 0.3	81 1.2 0.1	74 1.1 -0.1	67 1 -0.2	60 0.9 -0.3	53 0.8 -0.4	45 0.7 -0.4	39 0.6 -0.5
<b>10-1/2</b>	244 1.1 1.1	235 1.2 1.1	227 1.2 1.1	218 1.2 1.1	209 1.3 1.1	199 1.3 1	190 1.3 1	180 1.3 0.9	171 1.3 0.9	158 1.3 0.8	145 1.3 0.7	134 1.3 0.6	124 1 0.2	114 0.9 0	105 0.9 -0.1	97 0.8 -0.3	89 0.7 -0.6	81 0.6 -0.8	74 0.5 -1.1	68 0.3 -1.4	62 0.2 -1.8