

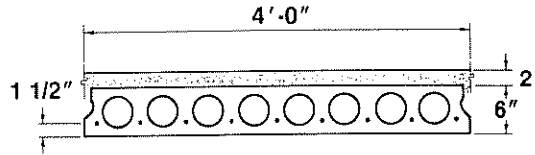
# HOLLOW-CORE

4'-0" x 6"  
Lightweight Concrete

## Strand Patterns

Producer may vary size and strength of strands. See "explanation of load tables"

Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.



## Section Properties

	Untopped	Topped
A =	187 in. <sup>2</sup>	—
I =	763 in. <sup>4</sup>	1915 in. <sup>4</sup>
Y <sub>b</sub> =	3.00 in.	4.49 in.
Y <sub>t</sub> =	3.00 in.	3.51 in.
Z <sub>b</sub> =	254 in. <sup>3</sup>	426 in. <sup>3</sup>
Z <sub>t</sub> =	254 in. <sup>3</sup>	546 in. <sup>3</sup>
b <sub>w</sub> =	16.00 in.	16.00 in.
w <sub>t</sub> =	149 plf	249 plf
	37 psf	62 psf
V/S =	1.73 in.	

Capacity of sections of other configurations are similar. For precise values, see local hollow-core manufacturer.

$$f'_c = 5000 \text{ psi}$$

$$f'_{ci} = 3500 \text{ psi}$$

## Key

- 268 — Safe superimposed service load, psf
- 0.2 — Estimated camber at erection, in.
- 0.3 — Estimated long-time camber, in.

**4LHC6**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Designation Code	Span, ft.													
	12	13	14	15	16	17	18	19	20	21	22	23	24	25
30-S	268	228	192	164	140	121	105	91	79	69	61	53	46	
	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.0	
40-S		267	236	211	189	164	142	123	108	94	83	72	63	56
		0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3
50-S			296	265	228	198	173	151	133	117	103	91	81	72
			0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
60-S				268	233	204	179	158	140	124	110	98	88	
				0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2
70-S					267	234	207	183	162	145	129	116	104	
					1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6

**4LHC6 + 2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Designation Code	Span, ft.													
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
30-S	267	226	193	165	142	118	97	78	62	48				
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1				
40-S		293	263	227	196	165	139	116	97	79	64	51		
		0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3		
50-S			284	248	212	181	154	131	111	94	78	64		
			0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7		
60-S				293	258	223	192	166	143	123	105	89	75	
				0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	
70-S					293	259	230	201	175	152	132	114	98	
					1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6

**Bold type** — Capacity governed by stresses, others governed by flexural or shear strength