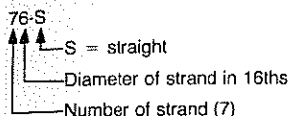


HOLLOW-CORE

Strand Pattern Designation

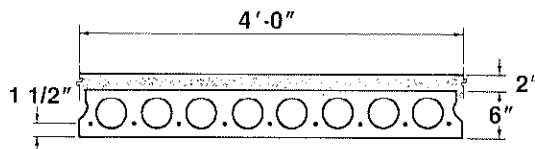


4'-0" x 6"
Normal Weight Concrete

Section Properties

	Untopped	Topped
A =	187 in. ²	—
I =	763 in. ⁴	1640 in. ⁴
Y _b =	3.00 in.	4.14 in.
Y _t =	3.00 in.	3.86 in.
Z _b =	254 in. ³	396 in. ³
Z _t =	254 in. ³	425 in. ³
b _w =	16.00 in.	16.00 in.
wt =	195 plf	295 plf
	49 psf	74 psf
V/S =	1.73 in.	

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.



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

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

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

Low-relaxation strand

Key

257 — Safe superimposed service load, psf

0.2 — Estimated camber at erection, in.

0.2 — Estimated long-time camber, in.

4HC6

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	
66-S	257	224	197	174	154	132	113	98	84	73	63	55	47	40	
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	
76-S	264	233	207	182	157	136	118	102	89	78	68	59	52		
	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1		
96-S				269	235	204	177	155	136	120	106	94	83	73	
				0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	
87-S					278	242	212	186	164	145	129	115	102	91	
					0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	
97-S						267	234	206	183	162	144	129	115	103	
						0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0	0.9	

4HC6 + 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
66-S	278	245	215	184	153	126	102	82	65	49				
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0				
76-S	291	254	219	189	164	142	122	101	82	66				
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1				
96-S				284	247	215	189	166	146	123	104	87	72	
				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	
87-S					292	256	226	199	176	156	136	117	100	85
					0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.6
97-S						283	250	221	196	175	156	137	118	102
						0.8	0.9	0.9	0.9	1.0	1.0	0.9	0.9	0.9

Strength based on strain compatibility; bottom tension limited to $6\sqrt{f'_c}$; see pages 2-3-2-5 for explanation