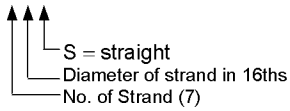


Strand Pattern Designation
76-S



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.

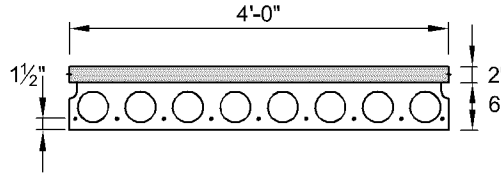
Key

- 444 – Safe superimposed service load, psf
- 0.1 – Estimated camber at erection, in.
- 0.2 – Estimated long-time camber, in.

HOLLOW-CORE

4'-0" x 6"

Normal Weight Concrete



$f'_c = 5,000$ psi
 $f_{pu} = 270,000$ psi

Section Properties
Untopped Topped

A =	187 in. ²	283 in. ²
I =	763 in. ⁴	1,640 in. ⁴
y _b =	3.00 in.	4.14 in.
y _t =	3.00 in.	3.86 in.
S _b =	254 in. ³	396 in. ³
S _t =	254 in. ³	425 in. ³
wt =	195 plf	295 plf
DL =	49 psf	74 psf
V/S =	1.73 in.	

4HC6

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

No Topping

Strand Designation Code	Span, ft																				
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
66-S	444	382	333	282	238	203	175	151	131	114	100	88	77	68	59	52	46	40	33	28	
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.5	-0.7		
	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.3	-0.5	-0.7	-0.9	-1.2	-1.5	-1.9	
76-S	445	388	328	278	238	205	178	155	136	120	105	93	82	73	65	57	49	42	36	31	
	0.2	0.2	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	0.0	-0.1	-0.3	-0.4	-0.6	
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.7	-0.9	-1.2	-1.6	-2.0
96-S	466	421	386	338	292	263	229	201	177	157	139	124	110	99	88	78	68	60	53	46	
	0.3	0.3	0.3	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	0.3	0.1	0.0	-0.1	
	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.1	-0.1	-0.3	-0.6	-0.9	-1.3	
87-S	478	433	398	362	322	290	264	240	212	188	167	149	134	119	107	95	85	76	68	60	
	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.3
	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.3	0.2	0.0	-0.3	-0.6	
97-S	490	445	407	374	346	311	276	242	220	203	186	166	148	133	119	107	96	86	78	70	
	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.8	0.7	0.6	
	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.5	0.3	0.1	-0.2

4HC6 + 2

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

2 in. Normal Weight Topping

Strand Designation Code	Span, ft																			
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
66-S	470	396	335	285	244	210	182	158	136	113	93	75	59	46	34					
	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	-0.2					
	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.9	-1.2					
76-S	461	391	334	287	248	216	188	163	137	115	95	78	63	50	38	27				
	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	-0.0	-0.1	-0.3				
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.2	-0.3	-0.5	-0.7	-0.9	-1.2	-1.5			
96-S	473	424	367	319	279	245	216	186	160	137	116	98	82	68	55	43	33			
	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.1	0.0	-0.1		
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	-0.1	-0.3	-0.5	-0.7	-1.0	-1.4	-1.7		
87-S	485	446	415	377	331	292	258	224	195	169	147	127	109	94	80	67	55			
	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.3			
	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.2	0.1	-0.1	-0.3	-0.5	-0.8	-1.2			
97-S	494	455	421	394	357	327	288	251	219	192	168	146	127	110	95	82	70			
	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.8	0.7	0.6		
	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.2	0.0	-0.2	-0.5	-0.8		

Strength is based on strain compatibility; bottom tension is limited to $7.5\sqrt{f'_c}$; see pages 2-7 through 2-10 for explanation.