

HOLLOW-CORE

4'-0" x 6"
Normal Weight Concrete

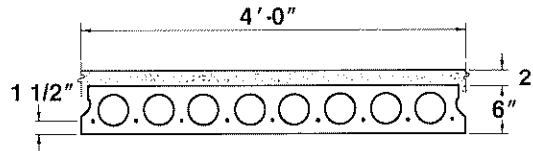
Section Properties

| | 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. | |

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.



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

- 263 — Safe superimposed service load, psf
- 0.1 — 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 |
| 30-S | 263 | 218 | 183 | 154 | 131 | 112 | 95 | 82 | 70 | 60 | 51 | 0.1 | 0.1 | 0.0 |
| | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | -0.1 | -0.2 | -0.3 | | | |
| 40-S | 262 | 231 | 205 | 181 | 156 | 135 | 117 | 100 | 87 | 75 | 64 | 55 | 47 | |
| | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | -0.2 | -0.3 | -0.5 | |
| 50-S | 291 | 259 | 225 | 194 | 168 | 145 | 126 | 110 | 96 | 84 | 73 | 63 | | |
| | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | |
| | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.0 | -0.1 | | |
| 60-S | 266 | 230 | 200 | 174 | 152 | 134 | 118 | 103 | 91 | 80 | | | | |
| | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | |
| | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | | |
| 70-S | 266 | 232 | 203 | 178 | 157 | 139 | 123 | 109 | 97 | | | | | |
| | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | | |
| | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | | |

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 |
| 30-S | 257 | 217 | 184 | 150 | 122 | 97 | 77 | 59 | 43 | | | | | |
| | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | | | | | |
| | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.2 | -0.3 | -0.4 | -0.6 | | | | | |
| 40-S | 289 | 248 | 207 | 172 | 143 | 118 | 96 | 77 | 61 | 47 | | | | |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | | | | |
| | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.7 | | | | |
| 50-S | 263 | 222 | 187 | 158 | 133 | 111 | 91 | 75 | 60 | 47 | | | | |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | | | | |
| | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | -0.1 | -0.2 | -0.4 | -0.6 | -0.9 | | | | |
| 60-S | 272 | 232 | 198 | 169 | 144 | 122 | 103 | 86 | 71 | 57 | | | | |
| | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | | | |
| | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | -0.1 | -0.3 | -0.5 | -0.8 | | | | |
| 70-S | 277 | 239 | 206 | 178 | 153 | 131 | 112 | 95 | 79 | | | | | |
| | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | | | |
| | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.0 | -0.2 | -0.4 | | | | | |

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