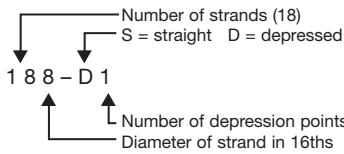


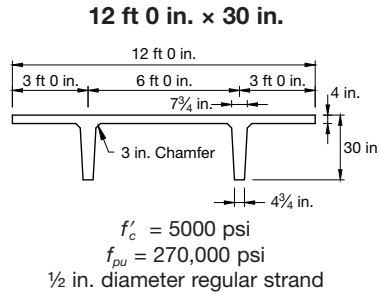
3.5 Pretopped Double-Tee Load Tables (cont.)

Strand Pattern Designation



These components are typically used in parking structures. Loads do not include any superimposed dead loads. Loads shown are live load. Long-term cambers do not include live load.

Key
 158 – Superimposed service load capacity, lb/ft²
 0.8 – Estimated camber at erection, in.
 1.1 – Estimated long-time camber, in.



| | | Section Properties | |
|----------------|---|-------------------------|-------------------------|
| | | Normalweight | Lightweight |
| A | = | 901 in. ² | 901 in. ² |
| I | = | 59,215 in. ⁴ | 59,215 in. ⁴ |
| y _b | = | 22.96 in. | 22.96 in. |
| y _t | = | 7.04 in. | 7.04 in. |
| S _b | = | 2579 in. ³ | 2579 in. ³ |
| S _t | = | 8417 in. ³ | 8417 in. ³ |
| wt | = | 939 lb/ft | 720 lb/ft |
| DL | = | 78 lb/ft ² | 60 lb/ft ² |
| V/S | = | 2.29 in. | 2.29 in. |

Check with regional producers for availability.

12DT30

Table of superimposed service load capacity, lb/ft², and cambers, in.

Normalweight—no topping

| Strand pattern | y _s (end) y _s (center), in. | Span, ft | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|----|----|
| | | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 82 |
| 128-S | 7.00 | 158 | 138 | 120 | 105 | 91 | 79 | 69 | 59 | 51 | 43 | 37 | 30 | | | | | | | | | | |
| | 7.00 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | | | | | | | | | | |
| | | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.8 | 0.6 | 0.4 | | | | | | | | | | |
| 148-S | 8.00 | 182 | 160 | 140 | 123 | 108 | 95 | 83 | 73 | 63 | 55 | 47 | 41 | 34 | 29 | | | | | | | | |
| | 8.00 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.3 | | | | | | | | | |
| | | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.6 | 0.4 | | | | | | | | |
| 168-S | 9.00 | 178 | 157 | 139 | 122 | 108 | 95 | 84 | 74 | 65 | 57 | 49 | 42 | 36 | 31 | | | | | | | | |
| | 9.00 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.9 | 0.8 | 0.6 | 0.4 | | | | | | | | |
| | | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 | 1.3 | 1.2 | 0.0 | 0.7 | 0.4 | | | | | | | | |
| 188-S | 10.00 | 194 | 171 | 152 | 134 | 119 | 106 | 93 | 83 | 73 | 64 | 56 | 49 | 43 | 36 | 29 | | | | | | | |
| | 10.00 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.6 | 0.4 | | | | | | | |
| | | 1.6 | 1.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.4 | 1.2 | 1.0 | 0.7 | 0.4 | | | | | | | |
| 188-D1 | 14.39 | 184 | 165 | 148 | 132 | 119 | 107 | 96 | 86 | 77 | 68 | 61 | 54 | 48 | 42 | 35 | 29 | | | | | | |
| | 4.00 | | | | 1.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.4 | 1.3 | 1.1 | 0.9 | 0.6 | 0.3 | | | | |
| | | | | | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.7 | 1.4 | 1.1 | 0.7 | 0.2 | | | |
| 208-D1 | 15.50 | 166 | 149 | 135 | 121 | 109 | 97 | 86 | 76 | 68 | 61 | 54 | 48 | 43 | 37 | 31 | 26 | | | | | | |
| | 4.25 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.5 | 1.3 | 1.1 | 0.8 | 0.5 | 0.1 | | | | | | |
| | | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.6 | 2.4 | 2.3 | 2.1 | 1.9 | 1.7 | 1.4 | 1.0 | 0.5 | -0.1 | | |

12LDT30

Table of superimposed service load capacity, lb/ft², and cambers, in.

Lightweight—no topping

| Strand pattern | y _s (end) y _s (center), in. | Span, ft | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|
| | | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 82 | 84 | 86 | 88 |
| 128-S | 7.00 | 172 | 152 | 134 | 119 | 105 | 93 | 83 | 73 | 65 | 57 | 51 | 45 | 39 | 34 | 29 | | | | | | | | | | |
| | 7.00 | 1.4 | 1.4 | 1.5 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 | 1.2 | 1.0 | | | | | | | | | | |
| | | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.0 | 1.9 | 1.6 | 1.3 | | | | | | | | | | |
| 148-S | 8.00 | 196 | 174 | 154 | 137 | 122 | 109 | 97 | 87 | 77 | 69 | 61 | 55 | 48 | 43 | 38 | 33 | 29 | | | | | | | | |
| | 8.00 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.4 | 1.1 | | | | | | | | | |
| | | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.6 | 2.5 | 2.3 | 2.1 | 1.8 | 1.4 | | | | | | | | |
| 168-S | 9.00 | 192 | 171 | 153 | 136 | 122 | 109 | 98 | 88 | 79 | 71 | 63 | 57 | 50 | 45 | 40 | 35 | 31 | 27 | | | | | | | |
| | 9.00 | 1.8 | 1.9 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 1.8 | 1.6 | 1.3 | 1.0 | | | | | | | |
| | | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.9 | 2.8 | 2.6 | 2.4 | 2.1 | 1.7 | 1.3 | | | | | | | |
| 188-S | 10.00 | 185 | 166 | 148 | 133 | 120 | 108 | 97 | 87 | 78 | 70 | 63 | 57 | 51 | 45 | 40 | 36 | 31 | 27 | | | | | | | |
| | 10.00 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 1.9 | 1.7 | 1.4 | 1.1 | | | | | | | |
| | | 2.6 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.2 | 3.1 | 3.0 | 2.8 | 2.5 | 2.2 | 1.8 | 1.3 | | | | | | |
| 188-D1 | 14.39 | 179 | 162 | 147 | 133 | 121 | 110 | 100 | 90 | 81 | 73 | 65 | 58 | 52 | 46 | 42 | 38 | 35 | 31 | 28 | | | | | | |
| | 4.00 | 2.8 | 2.9 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.5 | 3.5 | 3.4 | 3.4 | 3.2 | 3.1 | 2.9 | 2.7 | 2.4 | 2.1 | 1.8 | 1.4 | | | | | | |
| | | 3.8 | 4.0 | 4.1 | 4.3 | 4.4 | 4.4 | 4.5 | 4.5 | 4.5 | 4.5 | 4.4 | 4.2 | 4.0 | 3.7 | 3.4 | 3.2 | 2.8 | 2.5 | 2.0 | 1.5 | | | | | |
| 208-D1 | 15.50 | 123 | 111 | 101 | 91 | 82 | 74 | 67 | 60 | 53 | 48 | 42 | 38 | 35 | 31 | 28 | 26 | | | | | | | | | |
| | 4.25 | 3.7 | 3.8 | 3.8 | 3.9 | 3.9 | 3.9 | 3.9 | 3.8 | 3.8 | 3.6 | 3.4 | 3.1 | 2.9 | 2.6 | 2.2 | 1.8 | 1.3 | | | | | | | | |
| | | 4.9 | 5.0 | 5.1 | 5.1 | 5.1 | 5.0 | 4.9 | 4.7 | 4.4 | 4.0 | 3.6 | 3.3 | 2.8 | 2.4 | 1.9 | 1.3 | | | | | | | | | |

Strength is based on strain compatibility; bottom tension is limited to 12 √f'c; see pages 3–8 through 3–11 for explanation.

Shaded values require release strengths higher than 3500 psi.