

hi-stress flexicore®

10" x 16" SECTION

Safe Load Table

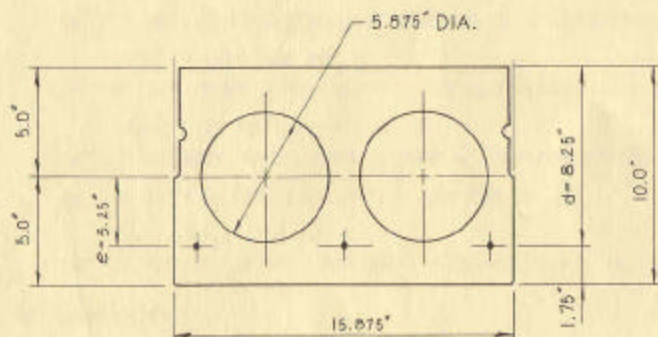
See instructions on back side of sheet for using this table.

UNIFORMLY DISTRIBUTED SUPERIMPOSED* LOAD IN LBS. PER SQ. FT.

| Standard Designation | Combination of 7-Wire Strand | Strand Area Sq. In. | M_u in Ft.-Kips Per Unit | SIMPLE SPAN IN FEET — CENTER TO CENTER OF END BEARINGS | | | | | | | | | | | | | | | | | | V_{AU} (cw) in Lbs. per Unit | M'_{cr} in Ft. Lbs. per Unit | |
|----------------------|------------------------------|---------------------|----------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|--------------------------------|--------------------------------|-------|
| | | | | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | | | 38 |
| 1016A-A43 | 3—1/2 | 0.4314 | 55.68 | 295 | 278 | 262 | 248 | 235 | 223 | 206 | 186 | 168 | 152 | 138 | 125 | 113 | 102 | 92 | 83 | 75 | 67 | 60 | 8741 | 36142 |
| 1016A-A40 | 2—1/2 & 1—7/16 | 0.3965 | 51.93 | 291 | 274 | 258 | 244 | 231 | 209 | 188 | 169 | 152 | 138 | 124 | 112 | 101 | 91 | 81 | 73 | 65 | 58 | 52 | 8633 | 34253 |
| 1016A-A36 | 2—7/16 & 1—1/2 | 0.3616 | 48.06 | 286 | 269 | 254 | 234 | 210 | 188 | 169 | 151 | 136 | 122 | 110 | 98 | 88 | 79 | 70 | 62 | 55 | 49 | 43 | 8522 | 32303 |
| 1016A-A33 | 3—7/16 | 0.3267 | 44.06 | 289 | 265 | 235 | 209 | 187 | 167 | 149 | 133 | 119 | 106 | 95 | 84 | 75 | 67 | 59 | 52 | 45 | 39 | 33 | 8583 | 30273 |
| 1016A-A30 | 2—7/16 & 1—3/8 | 0.2977 | 40.64 | 270 | 239 | 212 | 188 | 167 | 148 | 132 | 117 | 104 | 93 | 82 | 73 | 64 | 56 | 49 | 42 | 36 | 31 | | 8472 | 28565 |
| 1016A-A27 | 1—7/16 & 2—3/8 | 0.2687 | 37.13 | 241 | 212 | 187 | 166 | 147 | 130 | 115 | 101 | 90 | 79 | 69 | 60 | 53 | 45 | 39 | 33 | | | | 8355 | 26796 |
| 1016A-A24 | 3—3/8 | 0.2397 | 33.53 | 211 | 185 | 163 | 143 | 126 | 110 | 97 | 85 | 74 | 65 | 56 | 48 | 41 | 34 | 28 | | | | | 8417 | 24988 |
| 1016A-A22 | 2—7/16 | 0.2178 | 30.75 | 188 | 164 | 143 | 125 | 110 | 96 | 83 | 72 | 62 | 54 | 46 | 38 | 32 | | | | | | | 8149 | 23621 |
| 1016A-A16 | 2—3/8 | 0.1598 | 23.12 | 124 | 106 | 91 | 77 | 65 | 55 | 46 | 37 | 30 | | | | | | | | | | | 8021 | 19822 |

* TABULATED LOADS ARE BASED ON $M_u = 1.5 M_D + 1.8 M_L$ AND WITH ALL LOAD SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD **

PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



$$\begin{aligned}
 A &= 104.5 \text{ in.}^2 & f'_s &= 250.0 \text{ ksi} & V_{C1} \text{ min} &= 4090 \text{ lbs.} \\
 f'_{C1} &= 3500 \text{ psi} & b' &= 4.125 \text{ in.} & \phi_s V_{C1} \text{ min} &= 3476 \text{ lbs.} \\
 f'_C &= 5000 \text{ psi} & I_s &= 1205.9 \text{ in.}^4 & V_A &= 1443 \text{ lbs.} \\
 f_{s1} &= 175.0 \text{ ksi} & \phi_s &= 0.85 & &
 \end{aligned}$$

Grouted weight of structural unit is 82 lbs. per sq. ft. or 109 lbs. per lin. ft.

Design is based on ACI 318-63 building code requirements for reinforced concrete.

NOTE — For longer spans, heavier loads or special conditions consult your local manufacturer.