



Table 1-6 (continued)
MC Shapes
Dimensions

PNA

| Shape | Area, A | Depth, d | Web | | | | Flange | | | | Distance | | | r_{ts} | h_o |
|-------------------|------------------|-------------|---------------------|-----------------|-----------------|--------------------------------|--------|-------------------------------|-----------------------|------|--------------------------------|-------------------------------|--|----------|-------|
| | | | Thickness, t_w | $\frac{t_w}{2}$ | Width, b_f | Average Thickness, t_f | k | T | Work- able Gage | | | | | | |
| | in. ² | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | | | |
| MC7×22.7 ×19.1 | 6.67 | 7.00 | 7 | 0.503 | 1/2 | 1/4 | 3.60 | 3 ⁵ / ₈ | 0.500 | 1/2 | 1 ¹ / ₈ | 4 ³ / ₄ | 2 ^g | 1.23 | 6.50 |
| | 5.61 | 7.00 | 7 | 0.352 | 3/8 | 3/16 | 3.45 | 3 ¹ / ₂ | 0.500 | 1/2 | 1 ¹ / ₈ | 4 ³ / ₄ | 2 ^g | 1.18 | 6.50 |
| MC6×18 ×15.3 | 5.29 | 6.00 | 6 | 0.379 | 3/8 | 3/16 | 3.50 | 3 ¹ / ₂ | 0.475 | 1/2 | 1 ¹ / ₁₆ | 3 ⁷ / ₈ | 2 ^g | 1.20 | 5.53 |
| | 4.49 | 6.00 | 6 | 0.340 | 5/16 | 3/16 | 3.50 | 3 ¹ / ₂ | 0.385 | 3/8 | 7/8 | 4 ¹ / ₄ | 2 ^g | 1.20 | 5.62 |
| MC6×16.3 ×15.1 | 4.79 | 6.00 | 6 | 0.375 | 3/8 | 3/16 | 3.00 | 3 | 0.475 | 1/2 | 1 ¹ / ₁₆ | 3 ⁷ / ₈ | 1 ³ / ₄ ^g | 1.03 | 5.53 |
| | 4.44 | 6.00 | 6 | 0.316 | 5/16 | 3/16 | 2.94 | 3 | 0.475 | 1/2 | 1 ¹ / ₁₆ | 3 ⁷ / ₈ | 1 ³ / ₄ ^g | 1.01 | 5.53 |
| MC6×12 | 3.53 | 6.00 | 6 | 0.310 | 5/16 | 3/16 | 2.50 | 2 ¹ / ₂ | 0.375 | 3/8 | 7/8 | 4 ¹ / ₄ | 1 ¹ / ₂ ^g | 0.856 | 5.63 |
| MC6×7 ×6.5 | 2.09 | 6.00 | 6 | 0.179 | 3/16 | 1/8 | 1.88 | 1 ⁷ / ₈ | 0.291 | 5/16 | 3/4 | 4 ¹ / ₂ | — | 0.638 | 5.71 |
| | 1.95 | 6.00 | 6 | 0.155 | 1/8 | 1/16 | 1.85 | 1 ⁷ / ₈ | 0.291 | 5/16 | 3/4 | 4 ¹ / ₂ | — | 0.630 | 5.71 |
| MC4×13.8 | 4.03 | 4.00 | 4 | 0.500 | 1/2 | 1/4 | 2.50 | 2 ¹ / ₂ | 0.500 | 1/2 | 1 | 2 | — | 0.852 | 3.50 |
| MC3×7.1 | 2.11 | 3.00 | 3 | 0.312 | 5/16 | 3/16 | 1.94 | 2 | 0.351 | 3/8 | 1 ³ / ₁₆ | 1 ³ / ₈ | — | 0.657 | 2.65 |

^g The actual size, combination, and orientation of fastener components should be compared with the geometry of the cross-section to ensure compatibility.
— Flange is too narrow to establish a workable gage.

Table 1-6 (continued)
MC Shapes
Properties

MC7-MC3

| Nom- inal Wt. | Shear Ctr, e_o | Axis X-X | | | | Axis Y-Y | | | | | | Torsional Properties | | |
|---------------------|------------------------|------------------|------------------|------|------------------|------------------|------------------|-------|-----------|------------------|-------|----------------------|------------------|-------------|
| | | I | S | r | Z | I | S | r | \bar{x} | Z | x_p | J | C_w | \bar{r}_o |
| | | | | | | | | | | | | | | |
| lb/ft | in. | in. ⁴ | in. ³ | in. | in. ³ | in. ⁴ | in. ³ | in. | in. | in. ³ | in. | in. ⁴ | in. ⁶ | in. |
| 22.7 | 1.01 | 47.4 | 13.5 | 2.67 | 16.4 | 7.24 | 2.83 | 1.04 | 1.04 | 5.38 | 0.477 | 0.625 | 58.3 | 3.53 |
| 19.1 | 1.15 | 43.1 | 12.3 | 2.77 | 14.5 | 6.06 | 2.55 | 1.04 | 1.08 | 4.85 | 0.579 | 0.407 | 49.3 | 3.70 |
| 18 | 1.17 | 29.7 | 9.89 | 2.37 | 11.7 | 5.88 | 2.47 | 1.05 | 1.12 | 4.68 | 0.644 | 0.379 | 34.6 | 3.46 |
| 15.3 | 1.16 | 25.3 | 8.44 | 2.38 | 9.91 | 4.91 | 2.01 | 1.05 | 1.05 | 3.85 | 0.511 | 0.223 | 30.0 | 3.41 |
| 16.3 | 0.930 | 26.0 | 8.66 | 2.33 | 10.4 | 3.77 | 1.82 | 0.887 | 0.927 | 3.47 | 0.465 | 0.336 | 22.1 | 3.11 |
| 15.1 | 0.982 | 24.9 | 8.30 | 2.37 | 9.83 | 3.46 | 1.73 | 0.883 | 0.940 | 3.30 | 0.543 | 0.285 | 20.5 | 3.18 |
| 12 | 0.725 | 18.7 | 6.24 | 2.30 | 7.47 | 1.85 | 1.03 | 0.724 | 0.704 | 1.97 | 0.294 | 0.155 | 11.3 | 2.80 |
| 7 | 0.583 | 11.4 | 3.81 | 2.34 | 4.50 | 0.603 | 0.439 | 0.537 | 0.501 | 0.865 | 0.174 | 0.0464 | 4.00 | 2.63 |
| 6.5 | 0.612 | 11.0 | 3.66 | 2.38 | 4.28 | 0.565 | 0.422 | 0.539 | 0.513 | 0.836 | 0.191 | 0.0412 | 3.75 | 2.68 |
| 13.8 | 0.643 | 8.85 | 4.43 | 1.48 | 5.53 | 2.13 | 1.29 | 0.727 | 0.849 | 2.40 | 0.508 | 0.373 | 4.84 | 2.23 |
| 7.1 | 0.574 | 2.72 | 1.81 | 1.14 | 2.24 | 0.666 | 0.518 | 0.562 | 0.653 | 0.998 | 0.414 | 0.0928 | 0.915 | 1.76 |