

**BXUV.X772**  
**Wide Flange Columns**

**GCP APPLIED TECHNOLOGIES INC — Types MK-6/HY, MK-6/HY Extended Set, MK-10 HB, MK-10 HB Extended Set, MK-6/HB, MK-6s, RG, Z-106, Z-106/G, Z-106/HY, Z-146, Z-146PC, Z-146T, Z-156, Z-156T and Z-156PC**

| FULL FLANGE TIP THICKNESS |        |         |         |         | Member     |       | HALF FLANGE TIP THICKNESS |        |        |        |         |
|---------------------------|--------|---------|---------|---------|------------|-------|---------------------------|--------|--------|--------|---------|
| 1 hr                      | 1.5 hr | 2 hr    | 3 hr    | 4 hr    | Size x Wt. | W/D   | 1 hr                      | 1.5 hr | 2 hr   | 3 hr   | 4 hr    |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | W4 x 13    | 0.556 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | W5 x 16    | 0.550 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 3/16 | 1 9/16  | 2 3/8   | 3 1/8   | W5 x 19    | 0.644 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 1 1/16                    | 1 1/2  | 2       | 2 1/2   | 3 13/16 | W6 x 9     | 0.338 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 15/16                     | 1 7/16 | 1 7/8   | 2 1/2   | 3 3/4   | W6 x 12    | 0.448 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 1                         | 1 7/16 | 1 15/16 | 2 1/2   | 3 13/16 | W6 x 15    | 0.431 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | W6 x 16    | 0.584 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 7/8                       | 1 1/4  | 1 11/16 | 2 1/2   | 3 3/8   | W6 x 20    | 0.563 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W6 x 25    | 0.696 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 1 1/16                    | 1 5/8  | 2 1/8   | 3 3/16  | NR      | W8 x 10    | 0.327 | NR                        | NR     | NR     | NR     | NR      |
| 1                         | 1 7/16 | 1 15/16 | 2 1/2   | 3 13/16 | W8 x 13    | 0.421 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | W8 x 15    | 0.481 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 9/16  | W8 x 18    | 0.499 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | W8 x 21    | 0.577 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | W8 x 24    | 0.591 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 3/16 | 1 3/8   | 2       | 2 11/16 | W8 x 28    | 0.688 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 13/16                     | 1 3/16 | 1 9/16  | 2 5/16  | 3 1/16  | W8 x 31    | 0.665 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W8 x 35    | 0.749 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W8 x 40    | 0.849 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W8 x 48    | 1.000 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/8   | 1 5/8   | 2 3/16  | W8 x 58    | 1.200 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W8 x 67    | 1.370 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1 1/16                    | 1 1/2  | 2       | 2 1/2   | 3 13/16 | W10 x 12   | 0.347 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 1                         | 1 7/16 | 1 15/16 | 2 1/2   | 3 13/16 | W10 x 15   | 0.429 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | W10 x 17   | 0.482 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 7/16  | W10 x 19   | 0.538 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 1/2   | W10 x 22   | 0.523 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 1/4  | 1 5/8   | 2 7/16  | 3 1/4   | W10 x 26   | 0.612 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W10 x 30   | 0.699 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 13/16                     | 1 3/16 | 1 9/16  | 2 5/16  | 3 1/8   | W10 x 33   | 0.661 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W10 x 39   | 0.780 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W10 x 45   | 0.888 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W10 x 49   | 0.840 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W10 x 54   | 0.922 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W10 x 60   | 1.010 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W10 x 68   | 1.150 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 9/16  | 2 1/16  | W10 x 77   | 1.280 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 7/16  | 1 15/16 | W10 x 88   | 1.450 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W10 x 100  | 1.640 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 5/8    | 13/16   | 1 1/4   | 1 5/8   | W10 x 112  | 1.810 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1 1/16                    | 1 1/2  | 2       | 2 1/2   | 3 13/16 | W12 x 14   | 0.363 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 1                         | 1 1/2  | 1 15/16 | 2 1/2   | 3 13/16 | W12 x 16   | 0.410 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | W12 x 19   | 0.485 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | W12 x 22   | 0.560 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 7/16  | W12 x 26   | 0.531 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 1/4  | 1 5/8   | 2 7/16  | 3 1/4   | W12 x 30   | 0.607 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W12 x 35   | 0.703 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W12 x 40   | 0.734 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |

| FULL FLANGE TIP THICKNESS |        |         |         |         | Member     |       | HALF FLANGE TIP THICKNESS |        |        |        |         |
|---------------------------|--------|---------|---------|---------|------------|-------|---------------------------|--------|--------|--------|---------|
| 1 hr                      | 1.5 hr | 2 hr    | 3 hr    | 4 hr    | Size x Wt. | W/D   | 1 hr                      | 1.5 hr | 2 hr   | 3 hr   | 4 hr    |
| 11/16                     | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W12 x 45   | 0.829 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W12 x 50   | 0.909 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W12 x 53   | 0.855 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W12 x 58   | 0.925 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W12 x 65   | 0.925 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W12 x 72   | 1.020 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W12 x 79   | 1.110 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W12 x 87   | 1.220 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W12 x 96   | 1.340 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 15/16   | 1 7/16  | 1 7/8   | W12 x 106  | 1.470 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W12 x 120  | 1.650 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 5/8    | 13/16   | 1 3/16  | 1 9/16  | W12 x 136  | 1.860 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/8                       | 9/16   | 3/4     | 1 1/8   | 1 1/2   | W12 x 152  | 2.040 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/8                       | 9/16   | 11/16   | 1 1/16  | 1 3/8   | W12 x 170  | 2.260 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/16                      | 1/2    | 5/8     | 15/16   | 1 1/4   | W12 x 190  | 2.500 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/16                      | 7/16   | 9/16    | 7/8     | 1 3/16  | W12 x 210  | 2.730 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 5/16                      | 7/16   | 9/16    | 13/16   | 1 1/8   | W12 x 230  | 2.960 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 5/16                      | 7/16   | 9/16    | 13/16   | 1 1/16  | W12 x 252  | 3.200 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 3/8    | 1/2     | 3/4     | 15/16   | W12 x 279  | 3.500 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 3/8    | 1/2     | 11/16   | 15/16   | W12 x 305  | 3.760 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 5/16   | 7/16    | 5/8     | 7/8     | W12 x 336  | 4.060 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | W14 x 22   | 0.476 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | W14 x 26   | 0.559 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 7/8                       | 1 1/4  | 1 11/16 | 2 1/2   | 3 3/8   | W14 x 30   | 0.562 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 3/16 | 1 5/8   | 2 3/8   | 3 3/16  | W14 x 34   | 0.633 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W14 x 38   | 0.706 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W14 x 43   | 0.752 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W14 x 48   | 0.835 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W14 x 53   | 0.915 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W14 x 61   | 0.928 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 3/8   | W14 x 68   | 1.040 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W14 x 74   | 1.120 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W14 x 82   | 1.230 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W14 x 90   | 1.080 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/8   | 1 5/8   | 2 3/16  | W14 x 99   | 1.180 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 9/16  | 2 1/16  | W14 x 109  | 1.290 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 7/16  | 1 15/16 | W14 x 120  | 1.420 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 11/16  | 15/16   | 1 3/8   | 1 13/16 | W14 x 132  | 1.560 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W14 x 145  | 1.640 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 5/8    | 13/16   | 1 1/4   | 1 5/8   | W14 x 159  | 1.780 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/8                       | 9/16   | 3/4     | 1 1/8   | 1 1/2   | W14 x 176  | 1.960 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/8                       | 9/16   | 3/4     | 1 1/16  | 1 7/16  | W14 x 193  | 2.140 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/8                       | 1/2    | 11/16   | 1       | 1 3/8   | W14 x 211  | 2.320 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/16                      | 1/2    | 9/16    | 7/8     | 1 1/4   | W14 x 233  | 2.550 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 5/16                      | 7/16   | 9/16    | 7/8     | 1 3/16  | W14 x 257  | 2.780 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 5/16                      | 7/16   | 9/16    | 13/16   | 1 1/16  | W14 x 283  | 3.030 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 3/8    | 1/2     | 3/4     | 1       | W14 x 311  | 3.300 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 3/8    | 1/2     | 11/16   | 15/16   | W14 x 342  | 3.580 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 3/8    | 7/16    | 11/16   | 7/8     | W14 x 370  | 3.840 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 5/16   | 7/16    | 5/8     | 7/8     | W14 x 398  | 4.090 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 5/16   | 7/16    | 5/8     | 13/16   | W14 x 426  | 4.320 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 5/16   | 3/8     | 9/16    | 3/4     | W14 x 455  | 4.590 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 5/16   | 3/8     | 9/16    | 3/4     | W14 x 500  | 4.950 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |

| FULL FLANGE TIP THICKNESS |        |         |         |         | Member     |       | HALF FLANGE TIP THICKNESS |        |        |        |         |
|---------------------------|--------|---------|---------|---------|------------|-------|---------------------------|--------|--------|--------|---------|
| 1 hr                      | 1.5 hr | 2 hr    | 3 hr    | 4 hr    | Size x Wt. | W/D   | 1 hr                      | 1.5 hr | 2 hr   | 3 hr   | 4 hr    |
| 1/4                       | 1/4    | 3/8     | 1/2     | 11/16   | W14 x 550  | 5.340 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 1/4    | 5/16    | 1/2     | 5/8     | W14 x 605  | 5.820 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 1/4    | 5/16    | 7/16    | 9/16    | W14 x 665  | 6.210 | 5/16                      | 1/2    | 11/16  | 1 3/16 | 1 5/8   |
| 1/4                       | 1/4    | 1/4     | 1/4     | 1/4     | W14 x 730  | 6.760 | 5/16                      | 5/16   | 5/16   | 9/16   | 3/4     |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 9/16  | W16 x 26   | 0.499 | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16  |
| 13/16                     | 1 1/4  | 1 5/8   | 2 7/16  | 3 1/4   | W16 x 31   | 0.592 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 13/16                     | 1 1/4  | 1 5/8   | 2 7/16  | 3 3/16  | W16 x 36   | 0.617 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16  | 2 5/16  | 3 1/16  | W16 x 40   | 0.686 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W16 x 45   | 0.767 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W16 x 50   | 0.846 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W16 x 57   | 0.963 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W16 x 67   | 0.936 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W16 x 77   | 1.070 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W16 x 89   | 1.220 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W16 x 100  | 1.370 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 13/16                     | 1 1/4  | 1 5/8   | 2 7/16  | 3 1/4   | W18 x 35   | 0.602 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 3/16 | 1 3/8   | 2       | 2 11/16 | W18 x 40   | 0.688 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W18 x 46   | 0.786 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W18 x 50   | 0.778 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W18 x 55   | 0.850 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W18 x 60   | 0.923 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W18 x 65   | 0.997 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W18 x 71   | 1.080 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W18 x 76   | 0.971 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W18 x 86   | 1.090 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W18 x 97   | 1.220 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W18 x 106  | 1.330 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 15/16   | 1 7/16  | 1 7/8   | W18 x 119  | 1.480 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 13/16                     | 1 3/16 | 1 9/16  | 2 5/16  | 3 1/16  | W21 x 44   | 0.672 | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W21 x 50   | 0.754 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W21 x 57   | 0.857 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W21 x 62   | 0.846 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W21 x 68   | 0.926 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W21 x 73   | 0.989 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W21 x 83   | 1.120 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W21 x 93   | 1.240 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W21 x 101  | 1.130 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W21 x 111  | 1.240 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W21 x 122  | 1.350 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 7/16  | 1 15/16 | W21 x 132  | 1.450 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W21 x 147  | 1.610 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 3/4                       | 1 1/8  | 1 3/8   | 2       | 2 11/16 | W24 x 55   | 0.749 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W24 x 62   | 0.844 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 1 1/16 | 1 3/8   | 2       | 2 11/16 | W24 x 68   | 0.837 | 13/16                     | 1 3/16 | 1 1/2  | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W24 x 76   | 0.933 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W24 x 84   | 1.020 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W24 x 94   | 1.140 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W24 x 104  | 1.070 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/8   | 1 5/8   | 2 3/16  | W24 x 117  | 1.200 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W24 x 131  | 1.330 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 1/2                       | 3/4    | 15/16   | 1 7/16  | 1 7/8   | W24 x 146  | 1.480 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W24 x 162  | 1.630 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8   | 1 11/16 | 2 1/2   | W27 x 84   | 0.921 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4   |

| FULL FLANGE TIP THICKNESS |        |         |         |         | Member     |       | HALF FLANGE TIP THICKNESS |        |        |        |        |
|---------------------------|--------|---------|---------|---------|------------|-------|---------------------------|--------|--------|--------|--------|
| 1 hr                      | 1.5 hr | 2 hr    | 3 hr    | 4 hr    | Size x Wt. | W/D   | 1 hr                      | 1.5 hr | 2 hr   | 3 hr   | 4 hr   |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 3/8   | W27 x 94   | 1.030 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W27 x 102  | 1.110 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W27 x 114  | 1.230 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W27 x 146  | 1.350 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 15/16   | 1 7/16  | 1 7/8   | W27 x 161  | 1.480 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W27 x 178  | 1.630 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 7/16  | W30 x 99   | 1.000 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W30 x 108  | 1.090 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W30 x 116  | 1.160 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/16  | 1 5/8   | 2 1/8   | W30 x 124  | 1.240 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/16  | 1 9/16  | 2 1/16  | W30 x 132  | 1.320 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 15/16   | 1 7/16  | 1 7/8   | W30 x 173  | 1.470 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W30 x 191  | 1.620 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 7/8     | 1 1/4   | 1 11/16 | W30 x 211  | 1.760 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 5/8                       | 7/8    | 1 1/8   | 1 11/16 | 2 5/16  | W33 x 118  | 1.080 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/8   | 1 5/8   | 2 3/16  | W33 x 130  | 1.180 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/16  | 1 9/16  | 2 1/16  | W33 x 141  | 1.280 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W33 x 152  | 1.370 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 11/16  | 15/16   | 1 3/8   | 1 13/16 | W33 x 201  | 1.580 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 7/8     | 1 1/4   | 1 11/16 | W33 x 221  | 1.730 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 13/16   | 1 3/16  | 1 9/16  | W33 x 241  | 1.870 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 7/8    | 1 1/8   | 1 11/16 | 2 1/4   | W36 x 135  | 1.150 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 9/16                      | 13/16  | 1 1/16  | 1 9/16  | 2 1/16  | W36 x 150  | 1.270 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 1       | 1 1/2   | 2       | W36 x 160  | 1.350 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 3/4    | 1       | 1 7/16  | 1 15/16 | W36 x 170  | 1.430 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1/2                       | 11/16  | 15/16   | 1 3/8   | 1 7/8   | W36 x 182  | 1.520 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 3/4   | W36 x 194  | 1.620 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 7/8     | 1 1/4   | 1 11/16 | W36 x 210  | 1.740 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 11/16  | 7/8     | 1 5/16  | 1 11/16 | W36 x 230  | 1.690 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 13/16   | 1 1/4   | 1 5/8   | W36 x 245  | 1.790 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 7/16                      | 5/8    | 13/16   | 1 3/16  | 1 9/16  | W36 x 260  | 1.900 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 3/8                       | 9/16   | 3/4     | 1 1/8   | 1 1/2   | W36 x 280  | 2.030 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 3/8                       | 9/16   | 3/4     | 1 1/16  | 1 7/16  | W36 x 300  | 2.170 | 3/4                       | 1 1/16 | 1 3/8  | 2 1/16 | 2 3/4  |
| 1 1/16                    | 1 1/2  | 2       | 2 1/2   | 3 13/16 | Other      | 0.37  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 1/2  | 2       | 2 1/2   | 3 13/16 | Other      | 0.38  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 1/2  | 2       | 2 1/2   | 3 13/16 | Other      | 0.39  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 1/2  | 2       | 2 1/2   | 3 13/16 | Other      | 0.40  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 1/2  | 1 15/16 | 2 1/2   | 3 13/16 | Other      | 0.41  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 7/16 | 1 15/16 | 2 1/2   | 3 13/16 | Other      | 0.42  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 1                         | 1 7/16 | 1 15/16 | 2 1/2   | 3 13/16 | Other      | 0.43  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 7/16 | 1 7/8   | 2 1/2   | 3 3/4   | Other      | 0.44  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 7/16 | 1 7/8   | 2 1/2   | 3 3/4   | Other      | 0.45  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 3/8  | 1 7/8   | 2 1/2   | 3 11/16 | Other      | 0.46  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | Other      | 0.47  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 5/8   | Other      | 0.48  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 9/16  | Other      | 0.49  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 15/16                     | 1 3/8  | 1 13/16 | 2 1/2   | 3 9/16  | Other      | 0.50  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 1/2   | Other      | 0.51  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 1/2   | Other      | 0.52  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 7/16  | Other      | 0.53  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 3/4   | 2 1/2   | 3 7/16  | Other      | 0.54  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | Other      | 0.55  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 5/16 | 1 11/16 | 2 1/2   | 3 3/8   | Other      | 0.56  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | Other      | 0.57  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 7/8                       | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | Other      | 0.58  | 1 1/8                     | 1 5/8  | 2 1/16 | 3 1/8  | 4 3/16 |
| 13/16                     | 1 1/4  | 1 11/16 | 2 1/2   | 3 5/16  | Other      | 0.59  | 7/8                       | 1 5/16 | 1 3/4  | 2 9/16 | 3 3/8  |

| FULL FLANGE TIP THICKNESS |        |        |         |         | Member     |      | HALF FLANGE TIP THICKNESS |        |       |        |         |
|---------------------------|--------|--------|---------|---------|------------|------|---------------------------|--------|-------|--------|---------|
| 1 hr                      | 1.5 hr | 2 hr   | 3 hr    | 4 hr    | Size x Wt. | W/D  | 1 hr                      | 1.5 hr | 2 hr  | 3 hr   | 4 hr    |
| 13/16                     | 1 1/4  | 1 5/8  | 2 7/16  | 3 1/4   | Other      | 0.60 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 1/4  | 1 5/8  | 2 7/16  | 3 1/4   | Other      | 0.61 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 1/4  | 1 5/8  | 2 7/16  | 3 3/16  | Other      | 0.62 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 5/8  | 2 3/8   | 3 3/16  | Other      | 0.63 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16 | 2 3/8   | 3 1/8   | Other      | 0.64 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16 | 2 3/8   | 3 1/8   | Other      | 0.65 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16 | 2 5/16  | 3 1/8   | Other      | 0.66 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16 | 2 5/16  | 3 1/16  | Other      | 0.67 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 13/16                     | 1 3/16 | 1 9/16 | 2 5/16  | 3 1/16  | Other      | 0.68 | 7/8                       | 1 5/16 | 1 3/4 | 2 9/16 | 3 3/8   |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.69 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.70 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.71 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.72 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.73 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.74 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.75 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/8  | 1 3/8  | 2       | 2 11/16 | Other      | 0.76 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.77 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.78 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.79 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 3/4                       | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.80 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 11/16                     | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.81 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 11/16                     | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.82 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 11/16                     | 1 1/16 | 1 3/8  | 2       | 2 11/16 | Other      | 0.83 | 13/16                     | 1 3/16 | 1 1/2 | 2 1/4  | 2 15/16 |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.84 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.85 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.86 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.87 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.88 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.89 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.90 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.91 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.92 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.93 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 11/16                     | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.94 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.95 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.96 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.97 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 1/2   | Other      | 0.98 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 7/16  | Other      | 0.99 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 7/16  | Other      | 1.00 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 7/16  | Other      | 1.01 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 7/16  | Other      | 1.02 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 3/8   | Other      | 1.03 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 3/8   | Other      | 1.04 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 3/8   | Other      | 1.05 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 3/8   | Other      | 1.06 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 5/16  | Other      | 1.07 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 5/16  | Other      | 1.08 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 5/16  | Other      | 1.09 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 5/16  | Other      | 1.10 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 5/8                       | 7/8    | 1 1/8  | 1 11/16 | 2 5/16  | Other      | 1.11 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 1/4   | Other      | 1.12 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 1/4   | Other      | 1.13 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 1/4   | Other      | 1.14 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 1/4   | Other      | 1.15 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 1/4   | Other      | 1.16 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 7/8    | 1 1/8  | 1 11/16 | 2 3/16  | Other      | 1.17 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/8  | 1 5/8   | 2 3/16  | Other      | 1.18 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |
| 9/16                      | 13/16  | 1 1/8  | 1 5/8   | 2 3/16  | Other      | 1.19 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4   |

| FULL FLANGE TIP THICKNESS |        |        |        |         | Member     |      | HALF FLANGE TIP THICKNESS |        |       |        |       |
|---------------------------|--------|--------|--------|---------|------------|------|---------------------------|--------|-------|--------|-------|
| 1 hr                      | 1.5 hr | 2 hr   | 3 hr   | 4 hr    | Size x Wt. | W/D  | 1 hr                      | 1.5 hr | 2 hr  | 3 hr   | 4 hr  |
| 9/16                      | 13/16  | 1 1/8  | 1 5/8  | 2 3/16  | Other      | 1.20 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/8  | 1 5/8  | 2 3/16  | Other      | 1.21 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 5/8  | 2 1/8   | Other      | 1.22 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 5/8  | 2 1/8   | Other      | 1.23 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 5/8  | 2 1/8   | Other      | 1.24 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/8   | Other      | 1.25 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/8   | Other      | 1.26 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.27 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.28 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.29 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.30 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.31 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 9/16                      | 13/16  | 1 1/16 | 1 9/16 | 2 1/16  | Other      | 1.32 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.33 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.34 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.35 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.36 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.37 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 2       | Other      | 1.38 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 1 15/16 | Other      | 1.39 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 1/2  | 1 15/16 | Other      | 1.40 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 7/16 | 1 15/16 | Other      | 1.41 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 7/16 | 1 15/16 | Other      | 1.42 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 7/16 | 1 15/16 | Other      | 1.43 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 7/16 | 1 15/16 | Other      | 1.44 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 1      | 1 7/16 | 1 15/16 | Other      | 1.45 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 15/16  | 1 7/16 | 1 7/8   | Other      | 1.46 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 15/16  | 1 7/16 | 1 7/8   | Other      | 1.47 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 15/16  | 1 7/16 | 1 7/8   | Other      | 1.48 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 3/4    | 15/16  | 1 7/16 | 1 7/8   | Other      | 1.49 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 7/8   | Other      | 1.50 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 7/8   | Other      | 1.51 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 7/8   | Other      | 1.52 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.53 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.54 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.55 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.56 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.57 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.58 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 1/2                       | 11/16  | 15/16  | 1 3/8  | 1 13/16 | Other      | 1.59 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.60 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.61 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.62 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.63 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.64 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.65 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.66 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 3/4   | Other      | 1.67 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 11/16 | Other      | 1.68 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 11/16 | Other      | 1.69 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 11/16  | 7/8    | 1 5/16 | 1 11/16 | Other      | 1.70 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 5/8    | 7/8    | 1 1/4  | 1 11/16 | Other      | 1.75 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 5/8    | 13/16  | 1 1/4  | 1 5/8   | Other      | 1.80 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 5/8    | 13/16  | 1 3/16 | 1 5/8   | Other      | 1.85 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 5/8    | 13/16  | 1 3/16 | 1 9/16  | Other      | 1.90 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 7/16                      | 5/8    | 13/16  | 1 3/16 | 1 9/16  | Other      | 1.95 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 3/8                       | 9/16   | 3/4    | 1 1/8  | 1 1/2   | Other      | 2.00 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 3/8                       | 9/16   | 11/16  | 1 1/16 | 1 3/8   | Other      | 2.25 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 5/16                      | 1/2    | 5/8    | 15/16  | 1 1/4   | Other      | 2.50 | 3/4                       | 1 1/16 | 1 3/8 | 2 1/16 | 2 3/4 |
| 5/16                      | 7/16   | 9/16   | 7/8    | 1 3/16  | Other      | 2.75 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |

| FULL FLANGE TIP THICKNESS |        |      |       |       | Member     |      | HALF FLANGE TIP THICKNESS |        |       |        |       |
|---------------------------|--------|------|-------|-------|------------|------|---------------------------|--------|-------|--------|-------|
| 1 hr                      | 1.5 hr | 2 hr | 3 hr  | 4 hr  | Size x Wt. | W/D  | 1 hr                      | 1.5 hr | 2 hr  | 3 hr   | 4 hr  |
| 5/16                      | 7/16   | 9/16 | 13/16 | 1 1/8 | Other      | 3.00 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 3/8    | 1/2  | 3/4   | 1     | Other      | 3.25 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 3/8    | 1/2  | 3/4   | 15/16 | Other      | 3.50 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 3/8    | 1/2  | 11/16 | 15/16 | Other      | 3.75 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 5/16   | 7/16 | 5/8   | 7/8   | Other      | 4.00 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 5/16   | 7/16 | 5/8   | 13/16 | Other      | 4.25 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 5/16   | 3/8  | 9/16  | 3/4   | Other      | 4.50 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 5/16   | 3/8  | 9/16  | 3/4   | Other      | 4.75 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 5/16   | 3/8  | 9/16  | 11/16 | Other      | 5.00 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 3/8  | 1/2   | 11/16 | Other      | 5.25 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 3/8  | 1/2   | 11/16 | Other      | 5.50 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 5/16 | 1/2   | 5/8   | Other      | 5.75 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 5/16 | 7/16  | 5/8   | Other      | 6.00 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 5/16 | 7/16  | 9/16  | Other      | 6.25 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 5/16 | 7/16  | 9/16  | Other      | 6.50 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |
| 1/4                       | 1/4    | 5/16 | 7/16  | 9/16  | Other      | 6.62 | 5/16                      | 1/2    | 11/16 | 1 3/16 | 1 5/8 |

The information contained in these tables are provided for the convenience of our Monokote customers and while we have taken care to be as accurate as possible and update as listings are modified, GCP will not be held responsible for errors or inaccuracies. In case of discrepancy, values from the applicable design listings and rules associated with adjustment of thickness shall govern.

This table is intended to be used in conjunction with the specified UL Design BXUV.X772. All required components specified in that UL Design shall remain a required component to achieve the hourly ratings. Only the version of UL Design BXUV.X772 as shown on UL.com is considered current.