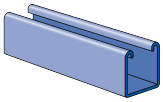
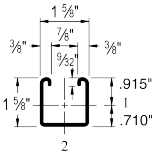
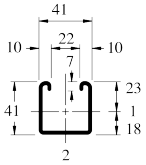
# UNISTRUT®

## P1000






**Materials & Finishes** - Standard:

- **Pregalvanized (PG):** Conforms to ASTM A653 SS GR 33, G90.
- **Unistrut Defender (DF):** Conforms to ASTM A1046 SS GR 33
- **Hot Dip Galvanized (HG):** Steel conforms to ASTM A1011 SS GR 33, Finish conforms to ASTM A123
- **Perma-Green (GR):** Steel conforms to ASTM A1011 SS GR 33, E-Coat finish
- **Perma-Gold (ZD):** Steel conforms to ASTM A1011 SS GR 33, Finish conforms to ASTM B633, Type II SC3
- **Plain (PL):** Conforms to ASTM A1011 SS GR 33

**Materials & Finishes** - Special Metals:

- **Stainless Steel, Type 304 (SS):** ASTM A240, Type 304 *
- **Stainless Steel, Type 316 (ST):** ASTM A240, Type 316 *
- **Aluminum (EA):** ASTM B221, Type 6063-T6 (Extruded) *

* These materials have different physical properties and performance characteristics. Please contact us for design support.

| Part No. | Length (ft) | Finish | Product Weight / Ft (lbs/ft) |
|---|---|---|---|
| P1000 | 20 | PG | 1.89 |
| P1000 | 10 | PG | 1.89 |
| P1000 | 20 | DF | 2.014 |
| P1000 | 10 | DF | 2.014 |
| P1000 | 20 | HG | 2.014 |
| P1000 | 10 | HG | 2.014 |
| P1000 | 10 | GR | 1.89 |
| P1000 | 20 | GR | 1.89 |
| P1000 | 20 | PL | 1.89 |
| P1000 | 10 | PL | 1.89 |
| P1000 | 10 | ZD | 1.89 |
| P1000 | 20 | ZD | 1.89 |
| P1000 | 10 | SS | 1.89 |
| P1000 | 20 | SS | 1.89 |
| P1000 | 20 | ST | 1.89 |
| P1000 | 10 | ST | 1.89 |
| P1000 | 20 | EA | 0.733 |
| P1000 | 10 | EA | 0.733 |

**Project:**

**Architect / Engineer:**

**Date:** **Phone:**

**Contractor:**

**Address:**

**Notes:**

**Approval Stamp:**

**Beam Loading - P1000**

| Span (in) | Max Allow. Uniform Load (lbs) | Deflection at Uniform Load (in) | Uniform Loading at Deflection | | | Lateral Bracing Reduction Factor |
|---|---|---|---|---|---|---|
| | | | Span/180 (lbs) | Span/240 (lbs) | Span/360 (lbs) | |
| 24 | 1,690 | 0.06 | 1,690 | 1,690 | 1,690 | 1.00 |
| 36 | 1,130 | 0.13 | 1,130 | 1,130 | 900 | 0.94 |
| 48 | 850 | 0.22 | 850 | 760 | 500 | 0.88 |
| 60 | 680 | 0.35 | 650 | 480 | 320 | 0.82 |
| 72 | 560 | 0.5 | 450 | 340 | 220 | 0.78 |
| 84 | 480 | 0.68 | 330 | 250 | 160 | 0.75 |
| 96 | 420 | 0.89 | 250 | 190 | 130 | 0.71 |
| 108 | 380 | 1.14 | 200 | 150 | 100 | 0.69 |
| 120 | 340 | 1.40 | 160 | 120 | 80 | 0.66 |
| 144 | 280 | 2.00 | 110 | 80 | 60 | 0.61 |
| 168 | 240 | 2.72 | 80 | 60 | 40 | 0.55 |
| 192 | 210 | 3.55 | 60 | 50 | NR | 0.51 |
| 216 | 190 | 4.58 | 50 | 40 | NR | 0.47 |
| 240 | 170 | 5.62 | 40 | NR | NR | 0.44 |
| Note | NR - Not Recommended | | | | | |

Refer to the General Specifications for loading information.

**Column Loading - P1000**

| Unbraced Height (in) | Allowable Load at Slot Face (lbs) | Max Column Load Applied at C.G. | | | |
|---|---|---|---|---|---|
| | | K=0.65 (lbs) | K=0.80 (lbs) | K=1.0 (lbs) | K=1.2 (lbs) |
| 24 | 3,550 | 10,740 | 9,890 | 8,770 | 7,740 |
| 36 | 3,190 | 8,910 | 7,740 | 6,390 | 5,310 |
| 48 | 2,770 | 7,260 | 6,010 | 4,690 | 3,800 |
| 60 | 2,380 | 5,910 | 4,690 | 3,630 | 2,960 |
| 72 | 2,080 | 4,840 | 3,800 | 2,960 | 2,400 |
| 84 | 1,860 | 4,040 | 3,200 | 2,480 | 1,980 |
| 96 | 1,670 | 3,480 | 2,750 | 2,110 | 1,660 |
| 108 | 1,510 | 3,050 | 2,400 | 1,810 | KL/r>200 |
| 120 | 1,380 | 2,700 | 2,110 | KL/r>200 | KL/r>200 |
| 144 | 1,150 | 2,180 | 1,660 | KL/r>200 | KL/r>200 |

Refer to the General Specifications for loading information.