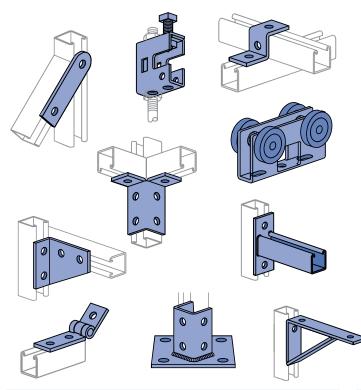
# **GENERAL FITTINGS**



# MATERIAL

Fittings, unless noted, are made from hot-rolled, pickled and oiled steel plates, bar, strip or coil, and conform to one or more of the following specifications: ASTM specifications A575, A576, A635, A1011 SS GR 33, A1011 HSLAS GR 45 or A36. All fittings meet or exceed physical properties of ASTM A1011 GR 33. The pickling of the steel produces a smooth surface free from scale.

Many fittings are also available in stainless steel, aluminum and fiberglass. Consult factory for ordering information.

#### **FINISHES**

Fittings are available in:

Green Powder Coat (GR), conforming to commercial standards for Powder Coating

Electro-galvanized (EG), conforming to ASTM B633 Type III SC1;

Hot-dipped galvanized (HG), conforming to ASTM A123 or A153 and

Plain (PL)

Unistrut Defender (DF), conforming to ASTM A1059 or A1046

### **APPLICATION**

All parts drawings illustrate only one application of each fitting. In most cases many other applications are possible. The channels shown in the illustrations are P1000, 1%" square, except where noted otherwise.

All  $\frac{9}{16}$ " diameter holes use  $\frac{1}{2}$ " x  $\frac{15}{16}$ " hex head cap screws and  $\frac{1}{2}$ " nuts – P1010, P3010, P4010 or P5510 – depending on the channel used. Nuts and bolts are not included with the fitting and must be ordered separately.

Flat Plate Fittings	81 - 82
Ninety Degree Fittings	82 - 85
Angular Fittings	85
"Z" Shape Fittings	
"U" Shape Fittings	87 - 88
Wing Shape Fittings	
Post Bases	90
Brackets	90 - 93
Brace Fittings	94
Beam Clamps	95 - 101
Trolleys	102
Special Application Fittings	103 - 104
Seismic Retrofit Fittings	104 - 106

# **DESIGN BOLT TORQUE**

			-			
BOLT SIZE	1⁄4''-20	⁵∕16 <b>"-18</b>	<b>⅔"-16</b>	1⁄2"-13	<b>%"-11</b>	<sup>3</sup> ⁄4"-10
Rec. Torque	6	11	19	50	100	125
Ft/Lbs (N•m)	(8)	(15)	(26)	(68)	(136)	(170)
Max Torque	7	15	25	70	125	135
Ft/Lbs (N•m)	(9)	(20)	(34)	(95)	(170)	(183)

# SET SCREW TORQUE

BOLT SIZE	1⁄4"-20	<b>¾"-16</b>	½" <b>-13</b>	<b>%"-11</b>	<sup>3</sup> ⁄4"-10	<b>⅔"-9</b>
Set Screw Torque In/Lbs (N•m)	<b>40</b> (4)	60 (7)	125 (14)	250 (28)	<b>400</b> (44.5)	665 (75)

Note: Caution should be taken not to overtighten the set screw

#### **DIMENSIONS**

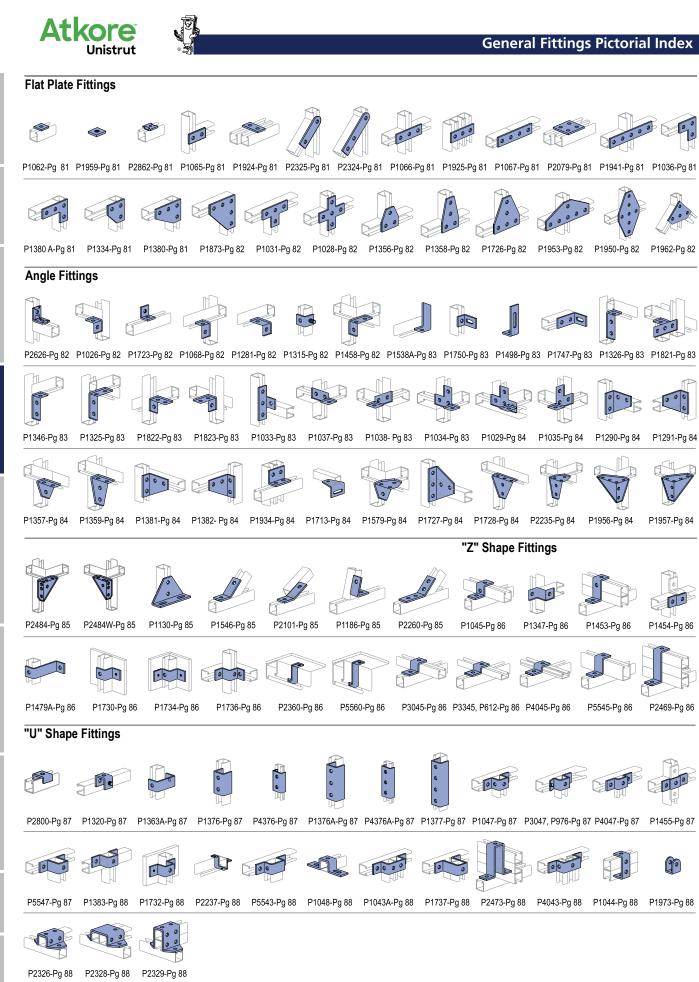
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

#### **DESIGN LOAD**

Design load data, where shown, is based on the ultimate strength of the connection with a safety factor of 2.5, unless otherwise noted.

#### **BEAM CLAMPS**

Clamps are designed to be used with W, M, S and HP Shape beams, Standard C and Miscellaneous MC Channels, Angles and Structural Tees. Clamps must be used in pairs mounted in opposite directions where indicated. For beam clamps with HG finish, standard hardware is EG finish. For optional stainless steel hardware, please contact the factory for availability.



Wing Shape Fittings



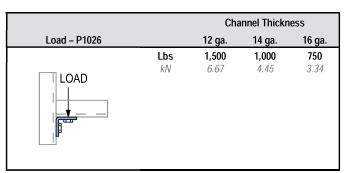






# DESIGN LOAD DATA FOR TYPICAL UNISTRUT CHANNEL CONNECTIONS

 $90^\circ$  Fittings (When used in position shown)



		Ch	annel Thickn	ess
Load – P2484		12 ga.	14 ga.	16 ga.
	Lbs	3,000	2,000	1,500
LOAD	kN	13.34	8.90	6.67

	-	Channel Thickness		
Load – P1026		12 ga.	14 ga.	16 ga.
	Lbs	1,000	650	500
	kN	4.45	2.89	2.22

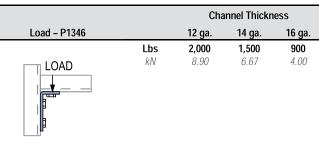
		Channel Thickness			
Load – P1068		12 ga.	14 ga.	16 ga.	
	Lbs	500	500	500	
LOAD	kN	2.22	2.22	2.22	

		Channel Thickness			
Load - P1325, P2235		12 ga.	14 ga.	16 ga.	
	Lbs	2,000	2,000	1,500	
	kN	8.90	8.90	6.67	

		Ch	annel Thickn	ess
Load – P1326	_	12 ga.	14 ga.	16 ga.
	Lbs	500	500	500
	kN	2.22	2.22	2.22

		Cha	nnel Thickn	ess
Load - P1458, P1579		12 ga.	14 ga.	16 ga.
	Lbs kN	<b>1,500</b> 6.67	<b>1,000</b> <i>4.45</i>	<b>1,000</b> <i>4.45</i>

		Channel Thickness			
Load – P1346	_	12 ga.	14 ga.	16 ga.	
LOAD	Lbs kN	<b>1,200</b> 5.34	<b>1,200</b> 5.34	<b>1,000</b> <i>4.45</i>	



	Channel Thickness			
	12 ga.	14 ga.	16 ga.	
Lbs	1,000	800	600	
kN	4.45	3.56	2.67	
		12 ga. Lbs 1,000	12 ga. 14 ga. Lbs 1,000 800	

NULUE:

(1) Both ends of beams supported. (2) Load data is based on P1010 nut and  $\frac{1}{2}$ " bolt.

(3) Safety factor =  $2\frac{1}{2}$  based on ultimate strength of connection.

#### **Atkore Flat Plate Fittings** Unistrut P1062, P1063, P1064, P1964, P1959, P1960, P2862, 2863. P1065 E DF, EG, GR, HG P2471, P2490 DF, EG, GR, HG P1961 EG, GR, HG 2864 🖪 DF, EG, GR, HG 5%" (41.3) 1 1/2" 1 3% 31/2" (34.9) (38.1)(88.9)Wt/100 pcs Part Bolt Hole Tapped Hole Lbs (kg) Size No. Size P1062 11/32' 18 (8.2) 5/16 Wt/100 pcs U.S. Std. 18 (8.2) Part Bolt Hole Wt/100 pcs P1063 3/8' 7/16" Part Lbs (*kg*) Size Number Thd Size Lbs (kg) Size Number P1064 1/2" 9/16" 17 (7.7) <sup>11</sup>/<sub>32</sub>' P1959 3⁄8" - 16 21 (9.5) P2862 5/16 18 (8.2) P1964 5/8' 11/16 16 (7.3) P1960 1⁄2" - 13 20 (9.1) 3/8' P2863 7/16 18 (8.2) 13/16" P2471 3/4" 15 (6.8) 19 (8.6) P1961 5⁄8" - 11 1/2" %16" 17 (7.7) P2864 P2490 1/8" <sup>15</sup>⁄16" 14 (6.4) Wt/100 pcs: 38 Lbs (17.2 kg) Material: 3/8" (9.5 mm) thick EG, GR, HG P2325 EG, GR, HG P2324 P1924 EDF, EG, GR, HG P1066 EDF, EG, GR, HG 5 3% (136.5) 1 5% 5 ¼" (133.4) 3 1/4 (41.3)7 1⁄8" (181.0) 3 <sup>5</sup>/<sub>8</sub>" (92.1) 3 1/8" 0 (92.1)0 Wt/100 pcs: 35 Lbs (15.9 kg) Wt/100 pcs: 55 Lbs (24.9 kg) Wt/100 pcs: 75 Lbs (34.0 kg) Wt/100 pcs: 56 Lbs (25.4 kg) EG, GR, HG P1925 EG, GR, HG P1067 E EG, GR, HG P2079 E EG, GR, HG P1941 4 7/8" (123.8) 9 1/8' 3 ¼" (82.6) 3 ½" (88.9) 1 %" (231.8) 7 1⁄4" (41.3)(184.2)0 0 0 (41.3)0 1 5% (41.3)Wt/100 pcs: 50 Lbs (22.7 kg) Wt/100 pcs: 78 Lbs (35.4 kg) Wt/100 pcs: 73 Lbs (33.1 kg) Wt/100 pcs: 94 Lbs (42.6 kg) P1036 E DF, EG, GR, HG P1380 A E DF, EG, GR, HG P1334 EG, GR, HG P1380 EG, GR, HG 3 1/2" 3<sup>1</sup>/2" (88.9) 5<sup>3</sup>%" (136.5) 5 <sup>3</sup>/8" (88.9) (136.5) 3<sup>1</sup>/<sub>2</sub>" (88.9) 3 1⁄2" 3 ½" 0 3 ½" (88.9) 0 (88.9) 0 0 (88.9)0 0 0 0 0 0 0

Wt/100 pcs: 58 Lbs (26.3 kg)

Wt/100 pcs: 80 Lbs (36.3 kg)

Wt/100 pcs: 70 Lbs (31.8 kg)

Wt/100 pcs: 105 Lbs (47.6 kg)

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

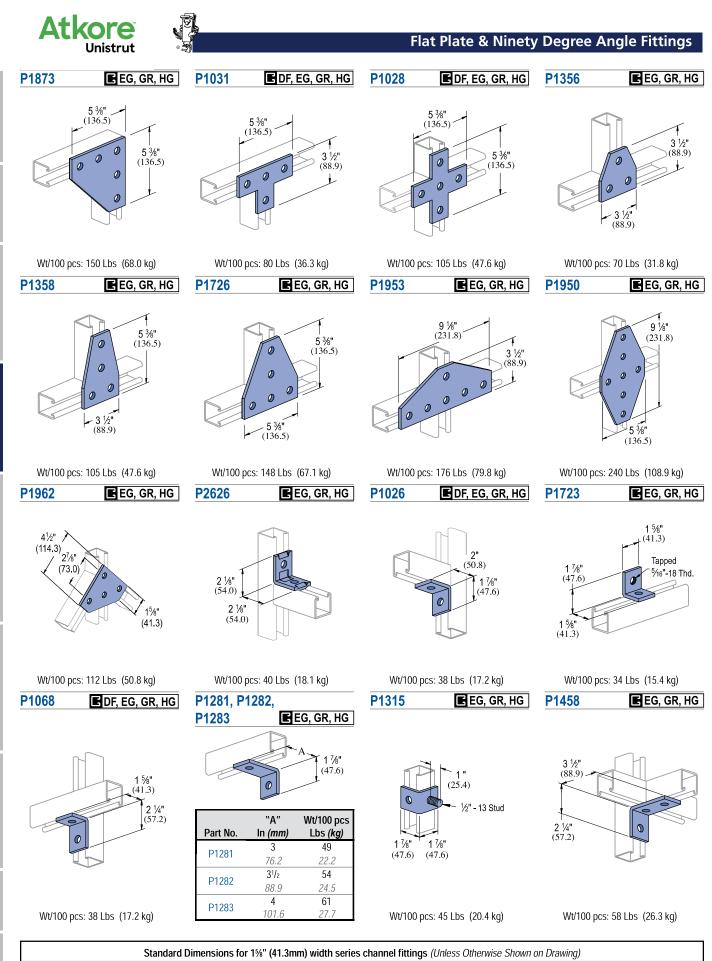
Hole Diameter: <sup>%</sup>/<sub>16</sub>" (14.3mm); Hole Spacing - From End: <sup>1</sup>/<sub>16</sub>" (20.6mm); Hole Spacing - On Center: 1/<sup>6</sup>/<sub>1</sub>" (47.6mm); Width: 1/<sup>6</sup>/<sub>2</sub>" (41.3mm); Thickness: <sup>1</sup>/<sub>4</sub>" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

Unipier®

15%" Channel

estrut

Te



Hole Diameter: 1/6" (14.3mm); Hole Spacing - From End: 1/6" (20.6mm); Hole Spacing - On Center: 1/6" (47.6mm); Width: 1/6" (41.3mm); Thickness: 1/8" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

# **Ninety Degree Angle Fittings**

#### P1538A THRU P1538D

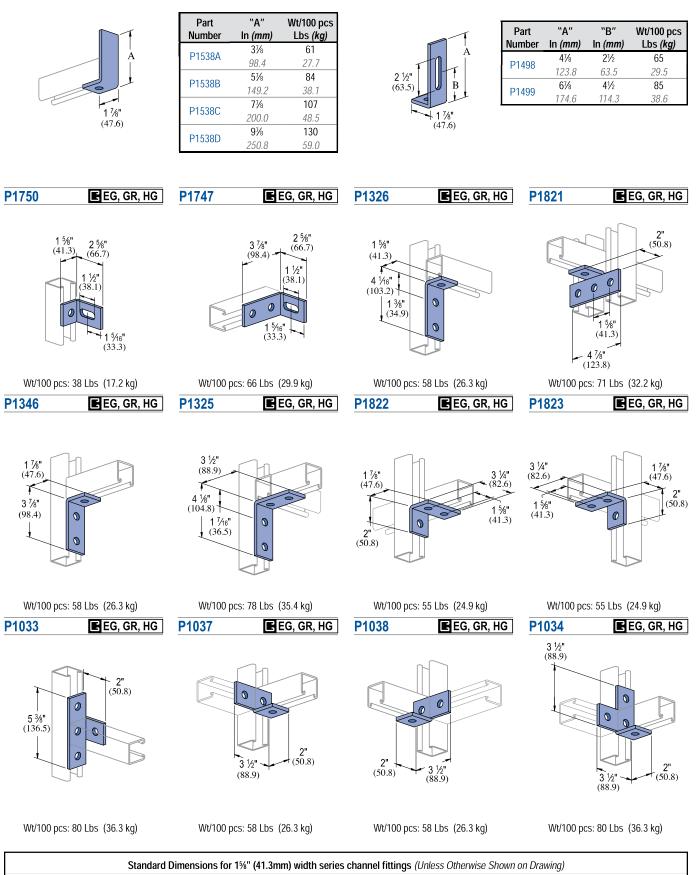
# EG, GR, HG

### P1498, P1499

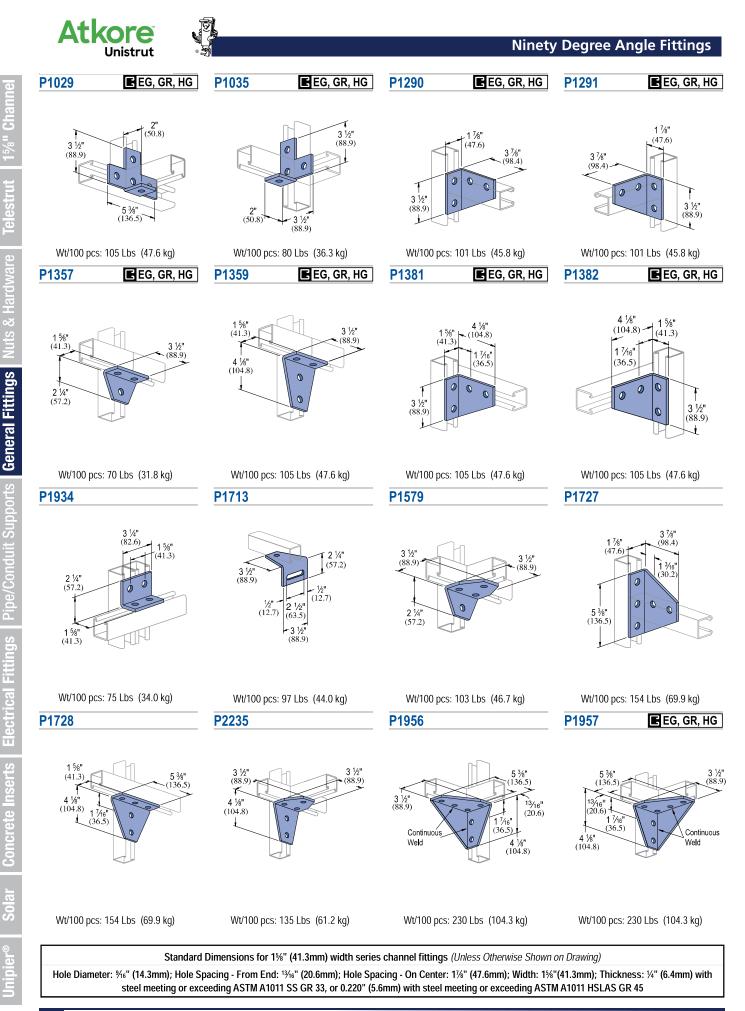
# EDF, EG, GR, HG

Jnistrut

**Atkore** 



Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 13/6" (20.6mm); Hole Spacing - On Center: 17/6" (47.6mm); Width: 13/6" (41.3mm); Thickness: 3/4" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45



# **Ninety Degree Angle & Angular Fittings**



(101.6)

P2484W





Wt/100 pcs

Lbs (**kg**)

190

86.2

242

109.8

Unistrut

**Atkore** 

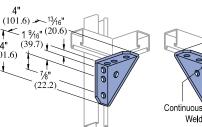
"B″

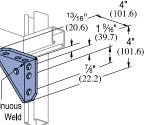
4

101.6

6

152.4





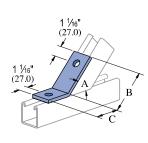
Wt/100 pcs: 134 Lbs (60.8 kg)

EDF, EG, GR, HG

#### 3 <sup>3</sup>⁄4" Part ``A″ (95.3) In *(mm)* In *(mm)* Number 6% 1 ½" (38.1) P1130 168.3 B 8% P1131 1 7/8 219.1 1 ½" (38.1) (47.6)

# P2101 THRU P2104

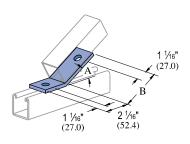
# EG, GR, HG



Wt/100 pcs: 134 Lbs (60.8 kg)

P1546, P2094 THRU P2100

Part	"A"	"B″	"C″
No.	Degree (rad)	In <i>(mm</i> )	In <i>(mm</i> )
P2094	<b>82½</b> °	31/16	<b>1</b> <sup>1</sup> 1⁄ <sub>16</sub>
P2094	1.44	90.5	42.9
P2095	75°	39⁄16	<b>1</b> <sup>1</sup> 1⁄ <sub>16</sub>
P2095	1.31	90.5	42.9
P2096	67½°	31/2	1¾
P2090	1.18	88.9	44.5
P2097	60°	3¾	11⁄/8
P2097	1.05	85.7	47.6
P2098	52½°	31⁄4	21⁄16
P2090	0.92	82.6	52.4
P1546	45°	3	25/16
P1040	0.79	76.2	58.7
P2099	37½°	31⁄2	<b>1</b> <sup>13</sup> ⁄16
P2099	0.65	88.9	46.0
P2100	37½°	2 <sup>1</sup> 1⁄16	25⁄8
F2100	0.65	68.3	66.7



Part	"A″	"B″
No.	Degree (rad)	In <i>(mm</i> )
P2101	30°	31⁄4
P2101	0.52	82.6
P2102	22½°	35⁄16
P2102	0.39	84.1
P2103	15°	35/16
P2103	0.26	84.1
P2104	7½°	35⁄16
P2104	0.13	84.1

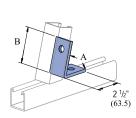
#### Wt/100 pcs: 58 Lbs (26.3 kg)

P1186, P2105 THRU P2110

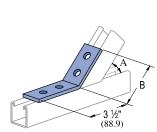
EDF, EG, GR, HG

P2260 THRU P2270

# EDF, EG, GR, HG



Part	"A″	<b>``В</b> ″
Number	Degree (rad)	In <i>(mm</i> )
P2105	821⁄2°	31⁄4
P2103	1.44	82.6
P2106	75°	31⁄4
F2100	1.31	82.6
P2107	67½°	33⁄16
F2107	1.18	81.0
P2108	60°	33⁄16
FZ100	1.05	81.0
P2109	52½°	31⁄8
F2109	0.92	79.4
P1186	45°	31⁄8
F1100	0.79	79.4
P2110	37½°	31⁄16
FZIIU	0.65	77.8



Wt/100 pcs: 58 Lbs (26.3 kg)

Part	"A"	"B″
Number	Degree (rad)	In <i>(mm</i> )
P2270	<b>82</b> ½°	35⁄8
P2270	1.44	92.1
P2269	75°	35/8
PZ209	1.31	92.1
D2200	67½°	35/8
P2268	1.18	92.1
P2267	60°	311/16
PZ207	1.05	93.7
P2266	52½°	311/16
P2200	0.92	93.7
P2265	45°	311/16
F 2203	0.79	93.7
P2264	37½°	311/16
1 2204	0.65	93.7
P2263	30°	311/16
1 2203	0.52	93.7
P2262	<b>22½</b> °	3¾
1 2202	0.39	95.3
P2261	15°	3¾
1 2201	0.26	95.3
P2260	7½°	3¾
. 2200	0.13	95.3

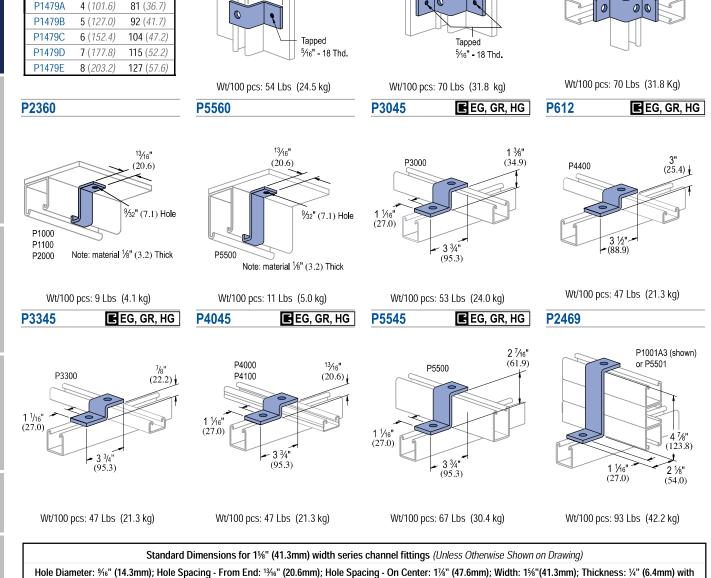
Wt/100 pcs: 58 Lbs (26.3 kg)

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 13/6" (20.6mm); Hole Spacing - On Center: 17/6" (47.6mm); Width: 13/6" (41.3mm); Thickness: 3/4" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45



P1045



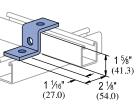
steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

Wt/100 pcs: 55 Lbs (24.9 kg) P1479A THRU P1479E

0

Part

Number



Atkore

Unistrut

🖬 DF, EG, GR, HG

1 5%" (41.3)

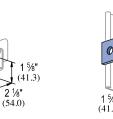
Wt/100 pcs

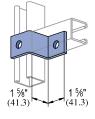
Lbs (kg)

0

``A″

In (mm)

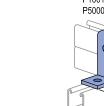




Wt/100 pcs: 55 Lbs (24.9 kg)

1 %" (41.3)

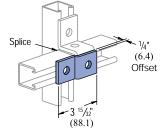
1 <sup>7</sup>/8" (47.6)

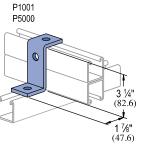


P1453

P1734

1 1/8" (47.6)

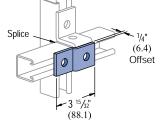


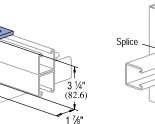


Wt/100 pcs: 70 Lbs (31.8 kg)

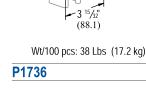
1<sup>5</sup>/<sub>8</sub>" 1<sup>5</sup>/<sub>8</sub>" (41.3)(41.3)

0





1 <sup>7</sup>⁄8" (47.6)



3 ½" (88.9)

1 1/8"

(47.6)

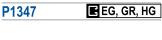
3 ½" (88.9)

1 1/8"

(47.6)

P1730

1 %" (41.3)

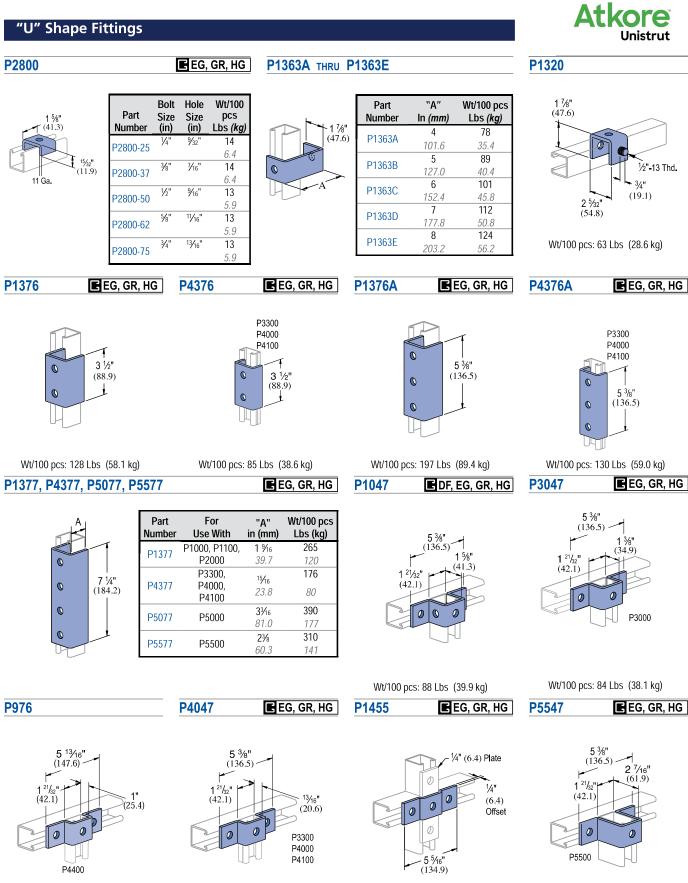


EG, GR, HG P1454

EG, GR, HG

86 CORE PRODUCTS - TYPICALLY AVAILABLE FROM STOCK

# "U" Shape Fittings



Wt/100 pcs: 71 Lbs (32.2 kg)

Wt/100 pcs: 71 Lbs (32.2 kg)

Wt/100 pcs: 58 Lbs (26.3 kg)

Wt/100 pcs: 108 Lbs (49.0 kg)

Standard Dimensions for 15/" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 13/6" (20.6mm); Hole Spacing - On Center: 17/6" (47.6mm); Width: 13/6" (41.3mm); Thickness: 3/4" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

**Electrical Fittings** 

Pipe/Conduit Supports General Fittings



5 3/8"

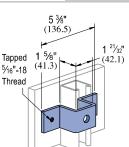
(136.5)

0

1 %" (47.6)

0





EG, GR, HG

P2237

Wt/100 pcs: 95 Lbs (43.1 kg) P1048, P1049, P1050

1 1⁄2"

(38.1)

Wt/100 pcs: 88 Lbs (39.9 kg) EDF, EG, GR, HG

"B"

In (mm)

41/8

104.8

5%

136.5

71/4

184.2

Wt/100 pcs

Lbs (kg)

105

47.6

120

54.4

130

59.0

``A″

In (mm)

71⁄4

184.2

8½

215.9

10¾

263.5

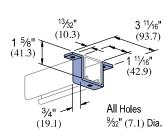
Part

Number

P1048

P1049

P1050



EG, GR, HG

P5543

Material: 1/8" (3.2) thick.

7" (177.8)

0

P1001A

P1044

0 0

Wt/100 pcs: 105 Lbs (47.6 kg)

Wt/100 pcs: 18 Lbs (8.2 kg)

3 %2

(83.3)

#### EG, GR, HG P1043A

(4).3)

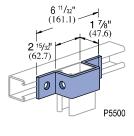
15%" (41.3)

E EG, GR, HG

1 7/8"

(47.6)

3<sup>25</sup>/32' (96.0)

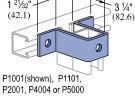


"U" Shape Fittings

EG, GR, HG

P1737 EG, GR, HG 5 <sup>3</sup>/<sub>8</sub>" (136.5) 1<sup>21</sup>/32

Wt/100 pcs: 97 Lbs (44.0 kg)



Wt/100 pcs: 128 Lbs (58.1 kg)

EG, GR, HG

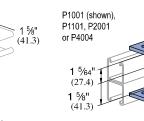
EG, GR, HG

P1973

P1046A

P2473 EG, GR, HG EG, GR, HG P4043 P1001A3 (shown) **7**" (177.8) or P5501 3 <sup>9</sup>/<sub>32</sub>" (83.3) 4 <sup>7</sup>/<sub>8</sub>" (123.8) 0 0 1 55/64 P4004 (shown), P1001, (47.2) P1101, P2001, or P5000 Wt/100 pcs: 106 Lbs (48.1 kg)

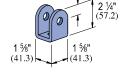
P2328



Wt/100 pcs: 70 Lbs (31.8 kg)

0

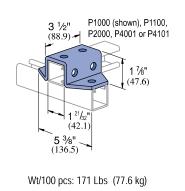
.0

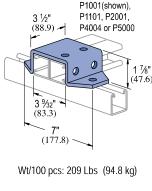


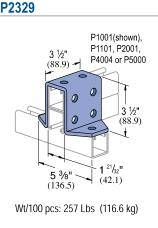
Wt/100 pcs: 53 Lbs (24.0 kg)

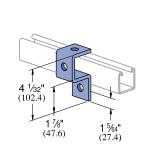
<sup>13</sup>/<sub>16</sub>" (20.6)











Wt/100 pcs: 76 Lbs (34.5 kg)

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 1/6" (14.3mm); Hole Spacing - From End: 1/6" (20.6mm); Hole Spacing - On Center: 1/6" (47.6mm); Width: 1/6" (41.3mm); Thickness: 1/8" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

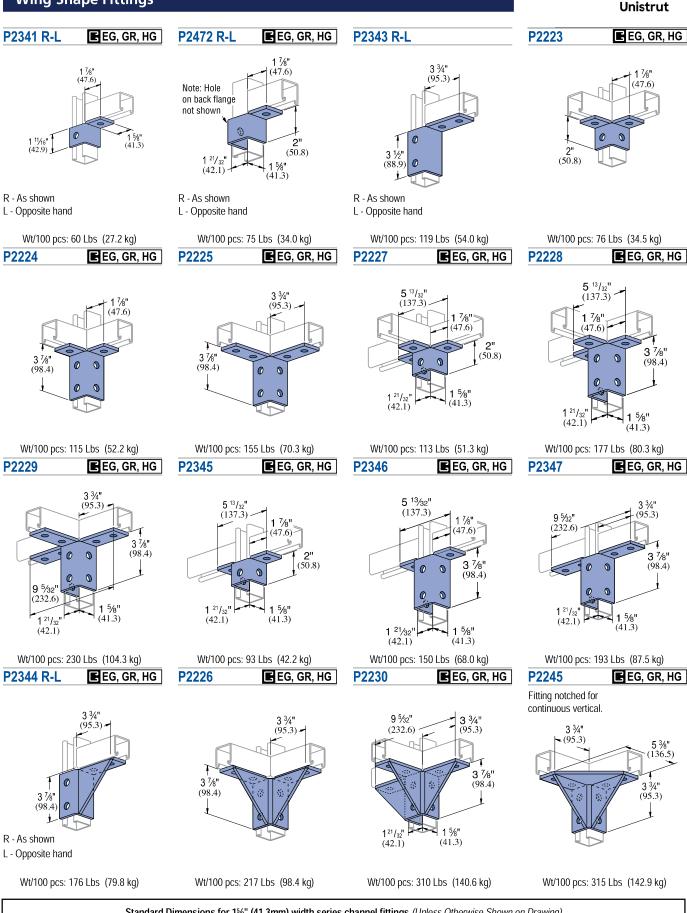
P1383

1<sup>21</sup>/32

(42.1)

(41.3

# Wing Shape Fittings



Standard Dimensions for 15/" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

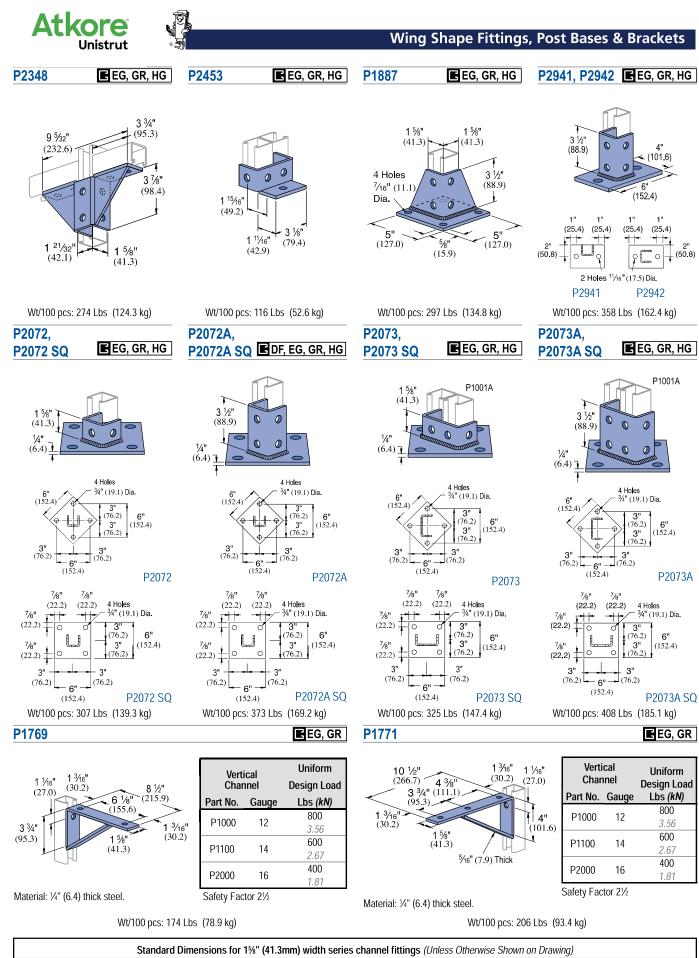
Hole Diameter: ¾" (14.3mm); Hole Spacing - From End: ¼" (20.6mm); Hole Spacing - On Center: 1½" (47.6mm); Width: 1½"(41.3mm); Thickness: ½" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

Concrete Inserts

Sol

Unipier®

**Atkore** 



Hole Diameter: %6" (14.3mm); Hole Spacing - From End: 1%6" (20.6mm); Hole Spacing - On Center: 1%" (47.6mm); Width: 1%"(41.3mm); Thickness: ¼" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

Concrete Inserts | Electrical Fittings | Pipe/Conduit Supports | General Fittings | Nuts & Hardware | Telestrut | 154" Channel

Solar

Unipier

# Atkore Unistrut

15%" Channel

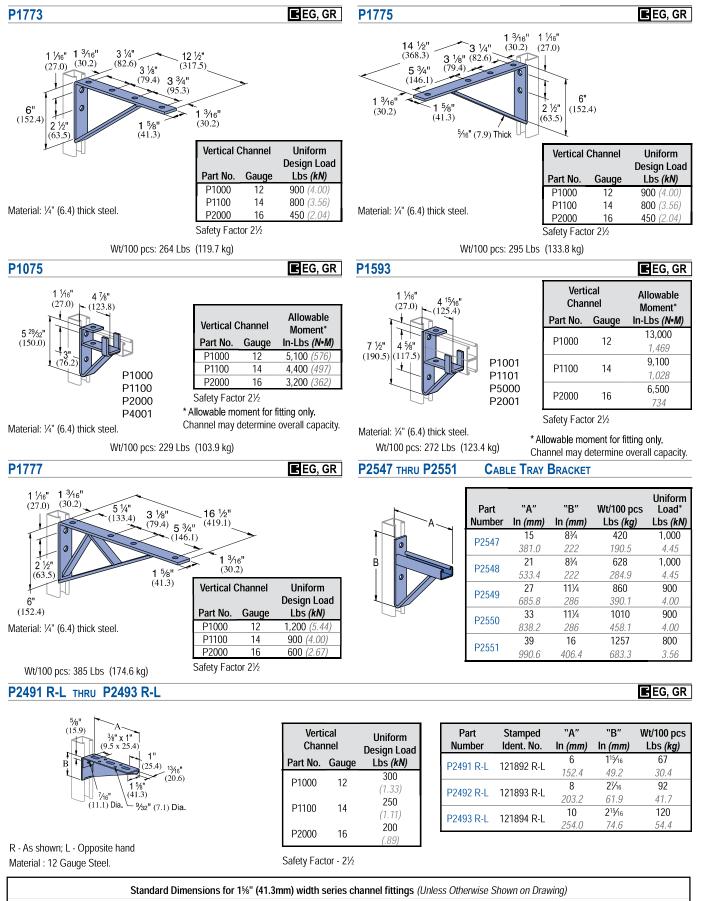
estrut

Ð

Nuts & Hardware

Pipe/Conduit Supports General Fittings

**Electrical Fittings** 



Hole Diameter: %6" (14.3mm); Hole Spacing - From End: 1%6" (20.6mm); Hole Spacing - On Center: 1%" (47.6mm); Width: 1%" (41.3mm); Thickness: %1" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

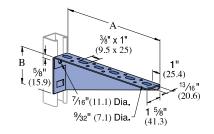
1<sup>5</sup>/<sub>8</sub>" Framing System

91





# P2494 R-L THRU P2499 R-L

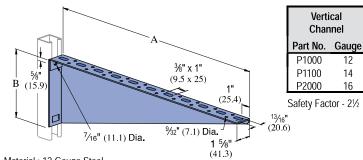


Verti Chan		Uniform Design Load
Part No.	Gauge	Lbs ( <i>kN</i> )
P1000	12	300 (1.33)
P1100	14	250 (1.11)
P2000	16	200 (.89)
Safety Fac	tor - 2½	

Part Number	Stamped Ident. No.	"A″ In <i>(mm</i> )	"B″ In <i>(mm</i> )	Wt/100 pcs Lbs ( <i>kg</i> )
P2494 R-L	121895 R-L	12 304.8	31⁄16 87.3	152 68.9
P2495 R-L	121896 R-L	14 355.6	3 <sup>15</sup> ⁄16 100.0	173 78.5
P2496 R-L	121897 R-L	16 406.4	<b>4</b> ½16 11 <i>2.</i> 7	<b>223</b> 101.2
P2497 R-L	121898 R-L	18 457.2	<b>4</b> <sup>15</sup> ⁄16 125.4	266 120.7
P2498 R-L	121899 R-L	<b>20</b> 508.0	5½16 138.1	<b>308</b> 1 <i>39.7</i>
P2499 R-L	121900 R-L	<b>22</b> 558.8	5 <sup>15</sup> ⁄16 150.8	<b>355</b> 161.0

Material : 12 Gauge Steel. R - As shown; L - Opposite hand

#### P2500 R-L THRU P2503 R-L



Part Number	Stamped Ident. No.	"A″ In <i>(mm</i> )	"B″ In <i>(mm</i> )	Wt/100 pcs Lbs ( <i>kg</i> )
P2500 R-I	121901 R-L	24	67⁄16	400
1 2300 IX-L	121301 K-L	609.6	164	181.4
D2501 D I	121902 R-L	26	6 <sup>15</sup> ⁄16	445
F2301 K-L	121902 R-L	660	176	201.8
D2502 D I	121903 R-L	28	71⁄16	493
P2002 K-L	121903 K-L	711	189	223.6
D2502 D I	121904 R-L	30	7 <sup>15</sup> ⁄16	545
P2003 R-L	121904 K-L	762.0	202	247.2

Material : 12 Gauge Steel. R - As shown; L - Opposite hand

> <sup>11</sup>/16" (17.5)

31/4' 82.6)

(17.

4%" (117.5)

#### P2944, P2945, P2946, P2947

2" (50.8) (9.5)	Part Number	``A″ In <i>(mm</i> )	Wt/100 pcs Lbs ( <b>kg</b> )	Uniform Load <sup>*</sup> Lbs ( <i>kN</i>
9/16"	P2944	6	185	1200
(14.3)	P2944	152.4	84	5.34
r and a second	P2945	12	293	600
	PZ940	304.8	133	2.67
	P2946	18	401	400
" <sup>`A</sup>	P2940	457.2	182	1.78
5)	P2947	24	509	300
	F2947	609.6	231	1 33

EG, GR, HG

Safety Factor 21/2

\* Mounted on 12 Ga. Channel

Uniform

**Design Load** 

Lbs (kN)

300 (1.33)

250 (1.11)

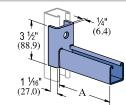
<u>200 (.</u>89)

Р2542 тнги Р2546						E	EG, GR, HG
		Part Number	"A″ In <i>(mm</i> )	Wt/100 pcs Lbs (kg)	Vertical ( Part No.		Uniform Design Load Lbs <i>(kN</i> )
<sup>13</sup> / <sub>16</sub> " 2" (50.8) (20.6) 9/ <sub>16</sub> " A		P2542	12 304.8	502 228	P1000 P1100 P2000	12 14 16	2,000 (8.90) 1,400 (6.23) 1,000 (4.45)
9/16" A (14.3) 45%"		P2543	<b>18</b> 457.2	<b>692</b> <i>314</i>	P1000 P1100 P2000	12 14 16	1,300 (5.78) 900 (4.00) 650 (2.89)
6¼" (117.5) (158.8)		P2544	<b>24</b> 609.6	882 400	P1000 P1100 P2000	12 14 16	1,000 (4.45) 700 (3.11) 500 (2.22)
13/16" $3/6"$ P1001 (20.6) (9.5)		P2545	<b>30</b> 762.0	1,072 486	P1000 P1100 P2000	12 14 16	800 (3.56) 560 (2.49) 400 (1.78)
	Safety Factor - 21/2	P2546	<b>36</b> 914.4	1, <b>262</b> 572	P1000 P1100 P2000	12 14 16	650 (2.89) 450 (2.00) 320 (1.42)

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

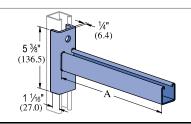
Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 1/16" (20.6mm); Hole Spacing - On Center: 1/2" (47.6mm); Width: 1/2" (41.3mm); Thickness: 1/2" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

# P2231, P2232



Part	"A″	Wt/100 pcs	Vertical (	Channel	Uniform Design Load
Number	In <i>(mm</i> )	Lbs ( <i>kg</i> )	Part No.	Gauge	Lbs (kN)
	6	101	P1000	12	1,600 (7.12)
P2231	152.4	191 86.6	P1100	14	1,200 (5.34)
	192.4	00.0	P2000	16	800 (3.56)
	12	202	P1000	12	800 (3.56)
P2232	1Z 304.8	<b>292</b> 1 <i>32.4</i>	P1100	14	600 (2.67)
	304.0	132.4	P2000	16	400 (1.78)

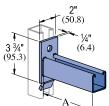
### Safety Factor - 21/2 P2233, P2234



Part Number	``A″ In <i>(mm</i> )	Wt/100 pcs Lbs ( <i>kg</i> )	Vertical C Part No.	Channel Gauge	Uniform Design Load Lbs <i>(kN</i> )
	18	436	P1000	12	600 (2.67)
P2233	457.2	197.8	P1100	14	450 (2.00)
1	737.2	157.0	P2000	16	300 (1.33)
 	24	520	P1000	12	450 (2.00)
P2234	24	536 243.1	P1100	14	330 (1.47)
	609.6	243.1	P2000	16	220 (.98)

Safety Factor - 21/2

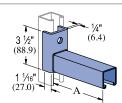
### P2513 THRU P2516



When installed in inverted position use 60% of loads shown.

	A~			Sa	afety Factor 21/2
Part Number	"A" In <i>(mm</i> )	Wt/100 pcs Lbs ( <i>kg</i> )	Vertical C Part No.	Channel Gauge	Uniform Design Load Lbs <i>(kN</i> )
	6	161	P1000	12	1,200 (5.34)
P2513	152.4	73.0	P1100	14	800 (3.56)
	102.4	75.0	P2000	16	600 (2.67)
	12	261	P1000	12	600 (2.67)
P2514	304.8	118.4	P1100	14	400 (1.78)
	304.0	110.4	P2000	16	300 (1.33)
	18	361	P1000	12	400 (1.78)
P2515	457.2	163.7	P1100	14	270 (1.20)
	4J7.Z	105.7	P2000	16	200 (.89)
	24	461	P1000	12	300 (1.33)
P2516	<b>24</b> 609.6	209.1	P1100	14	200 (.89)
	009.0	203.1	P2000	16	150 (.67)

# P2231A, P2232A

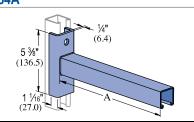


**Atkore** 

Unistrut

Part	"A″	Wt/100 pcs	Vertical Channel		Uniform Design Load
Number	In <i>(mm</i> )	Lbs ( <i>kg</i> )	Part No.	Gauge	Lbs (kN)
	C	191	P1000	12	1,600 (7.12)
P2231A	6 152.4	191 86.6	P1100	14	1,200 (5.34)
	132.4	00.0	P2000	16	800 (3.56)
	12	202	P1000	12	800 (3.56)
P2232A	1Z 304.8	<b>292</b> 1 <i>32.4</i>	P1100	14	600 (2.67)
	504.0	152.4	P2000	16	400 (1.78)

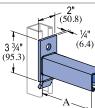
# P2233A, P2234A



Part	"A″	Wt/100 pcs	Vertical (	Channel	Uniform Design Load
Number	In <i>(mm</i> )	Lbs <i>(kg)</i>	Part No.	Gauge	Lbs (kN)
	10	420	P1000	12	<b>600</b> (2.67)
P2233A	18 457.2	436 197.8	P1100	14	450 (2.00)
	437.Z	197.8	P2000	16	300 (1.33)
	24	520	P1000	12	450 (2.00)
P2234A	24 609.6	536 243.1	P1100	14	330 (1.47)
	009.0	243.1	P2000	16	220 (98)

Safety Factor - 21/2

# P2513A THRU P2516A



When installed in inverted position use 60% of loads shown.

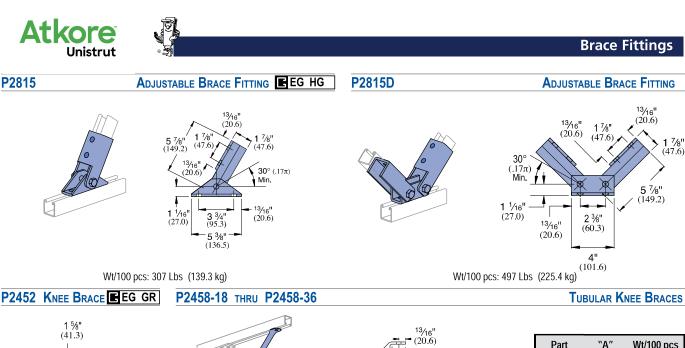
Safety Factor 21/2

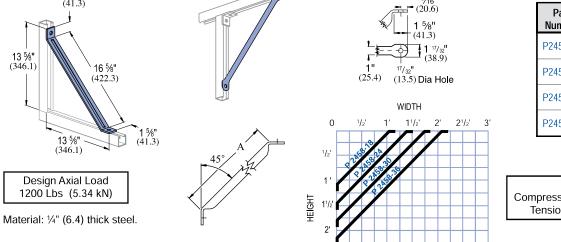
Part	"A″	Wt/100 pcs	Vertical Channel		Uniform Design
Number	In <i>(mm</i> )	Lbs ( <i>kg</i> )	Part No.	Gauge	Lbs (ĸŇ)
	6	161	P1000	12	1,200 (5.34)
P2513A	0 152.4	73.0	P1100	14	800 (3.56)
	132.4	73.0	P2000	16	600 (2.67)
	10	261	P1000	12	600 (2.67)
P2514A	12 304.8	= • ·	P1100	14	400 (1.78)
	304.8	118.4	P2000	16	300 (1.33)
	18	361	P1000	12	400 (1.78)
P2515A	457.2	301 163.7	P1100	14	270 (1.20)
	437.2	103.7	P2000	16	200 (.89)
	24	401	P1000	12	300 (1.33)
P2516A	24 600.6	461 209.1	P1100	14	200 (.89)
	609.6	209.1	P2000	16	150 (.67)
				_	

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

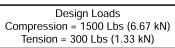
Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 13/6" (20.6mm); Hole Spacing - On Center: 1//" (47.6mm); Width: 1%" (41.3mm); Thickness: 4/" (6.4mm)

GR, HG





Part Number	"A″ In <i>(mm</i> )	Wt/100 pcs Lbs ( <i>kg</i> )		
P2458-18	18	146		
FZ4J0-10	457.2	66.2		
P2458-24	24	186		
F 24J0-24	609.6	84.4		
P2458-30	30	227		
FZ430-30	762.0	103.0		
P2458-36	36	267		
P2400-00	914.4	121.1		



**TUBULAR BACK BRACES** 

E EG GR

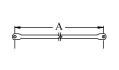
Wt/100 pcs: 277 Lbs (125.6 kg)

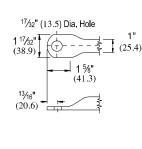
P2459-36 THRU P2459-96

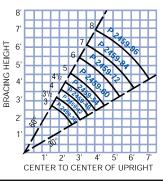
1. The vertical lines of the graph correspond to the center to center line dimension of the uprights.

21/2

- 2. Along this vertical line locate the (maximum usable) horizontal bracing height line.
- 3. The arc line that intersects the point formed by the intersection of the two lines, indicates the brace required.
- 4. 30° 60° maximum, minimum brace angles are indicated for maximum effect.







"A″ Part Wt/100 pcs Lbs (kg) Number In (*mm*) 36 255 P2459-36 914.4 115.7 42 296 P2459-42 1.066.8 134.3 48 336 P2459-48 1,219.2 152.4 54 377 P2459-54 1,371.6 171.0 60 418 P2459-60 1,524.0 189.6 72 499 P2459-72 1,828.8 226.3 84 580 P2459-84 2.133.6 263.1 96 661 P2459-96 299.8 2 438

Standard Dimensions for 1%" (41.3mm) width series channel fittings (Unless Otherwise Shown on Drawing)

Hole Diameter: 3/6" (14.3mm); Hole Spacing - From End: 1/16" (20.6mm); Hole Spacing - On Center: 1/2" (47.6mm); Width: 1/2" (41.3mm); Thickness: 1/2" (6.4mm) with steel meeting or exceeding ASTM A1011 SS GR 33, or 0.220" (5.6mm) with steel meeting or exceeding ASTM A1011 HSLAS GR 45

13 **%**" (346.1)