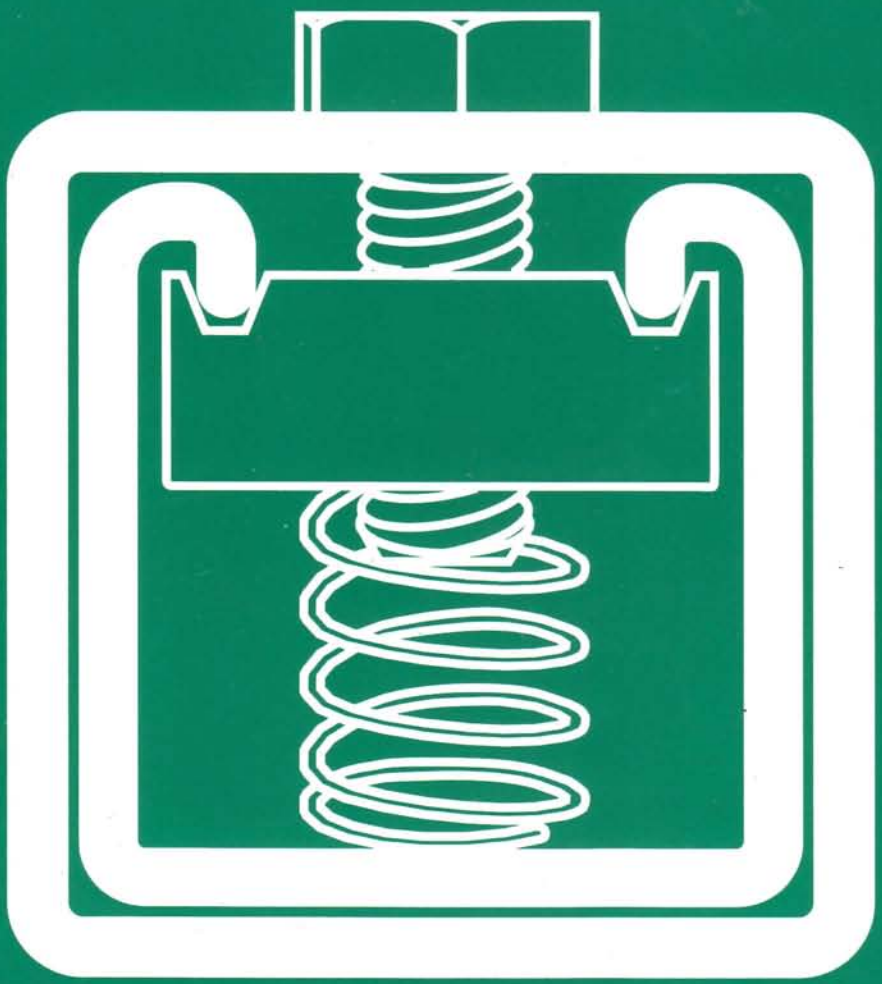
UNISTRUT™

TELESTRUT®

Telescoping Strut

GENERAL ENGINEERING CATALOG



CATALOG TLS-1

UNISTRUT® CORPORATION

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The Telestrut system provides three major features:

- **Telescoping capability**
- **Boltless capability**
- **Wide range of fittings**

These advantages make Telestrut a whole new kind of metal framing – one that delivers *more* adjustability *more* versatility and *more* strength than any other multi-purpose system in its class. That's quite a promise. But then, Telestrut is quite a system.

The following pages describe the complete Telestrut System – square tubing, channels and a host of fittings, fasteners, clamps, post bases and more. Together, they represent a whole new way to expand your building options.

So go ahead. Use this catalog to introduce yourself to a new generation of metal framing. Discover the Telestrut advantage ... *power to build on.*

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Telescoping Strut

I System Introduction

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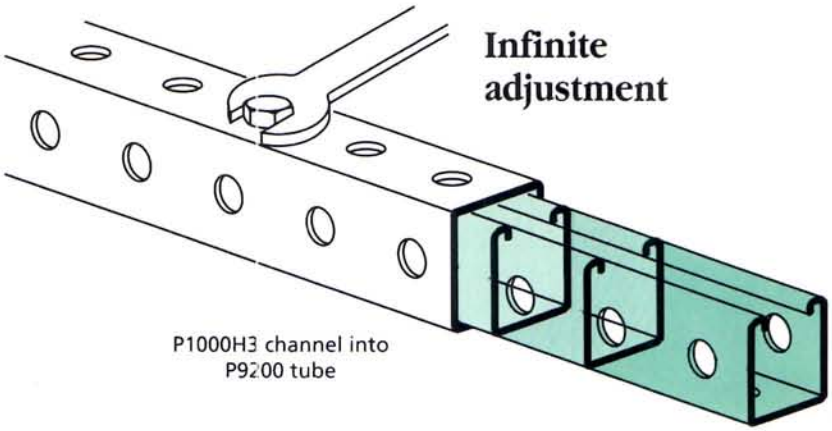
Note: All metric dimensions are shown in millimeters, unless otherwise noted.

Protected under U.S. Patent

TELESCOPING SECTIONS

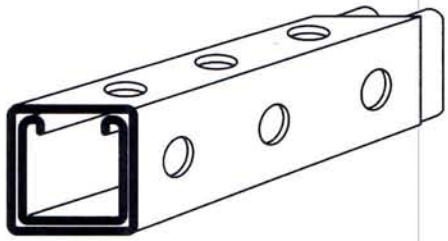
Telestrut adapts to change like no other metal framing system. That's because Telestrut sections telescope together, providing adjustment options unavailable with other systems. And that same telescoping capability provides a simple means for adding extra strength *where* you need it, *when* you need it!

Telescopic



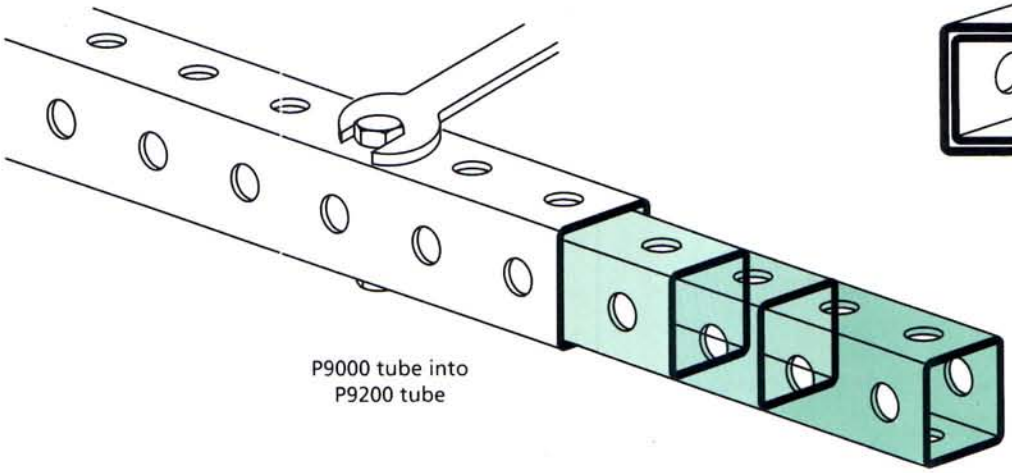
Infinite adjustment

P1000H3 channel into P9200 tube

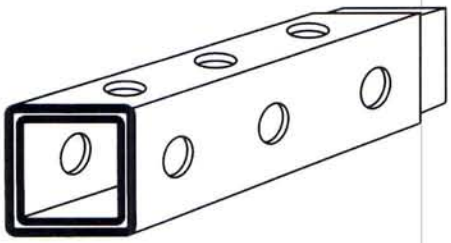


7-sides strong

Incremental adjustment



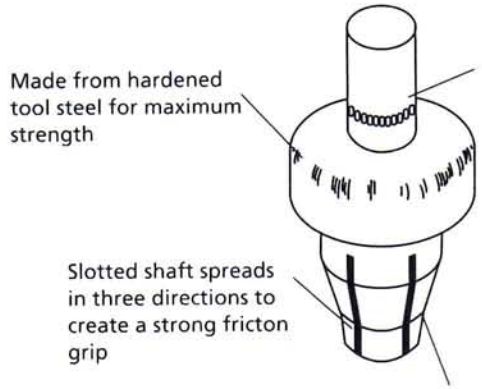
P9000 tube into P9200 tube

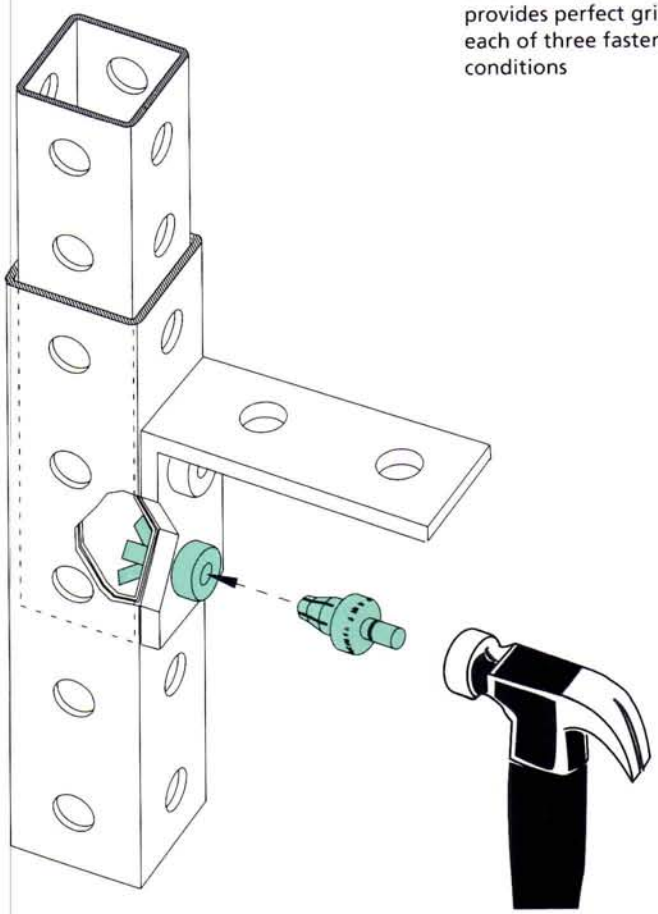


8-sides strong

With the unique Telestrut universal multi-grip drive rivet, components can be connected with a quick hammer blow, which spreads the rivet shaft to create a strong friction grip. This unique "boltless" connection capability cuts assembly time by 50% or more!

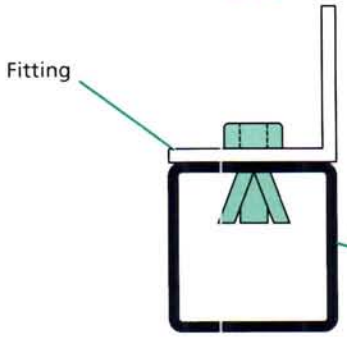
Boltless





***One* multi-grip rivet meets all *three* system fastening needs.**

1



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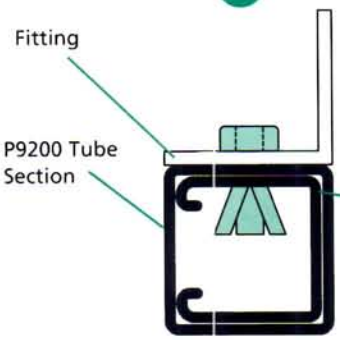

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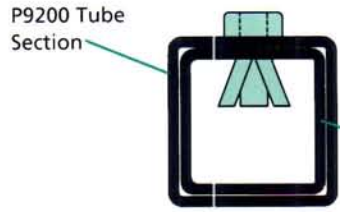
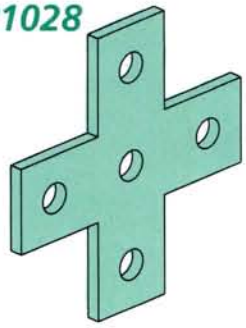


WIDE RANGE OF FITTINGS

Because the Telestrut system includes over a hundred fittings and accessories, it lets you accomplish virtually any metal framing project you can imagine. Whatever turn your needs may take, there's a Telestrut fitting to make it happen quickly and easily. Typical system fittings include:

Flat Plate Fittings

P1028



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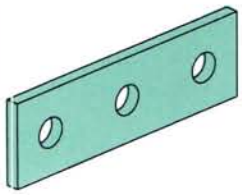

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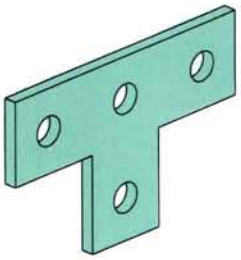

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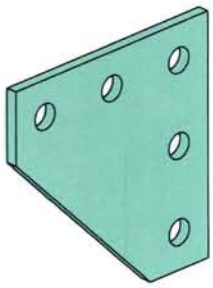

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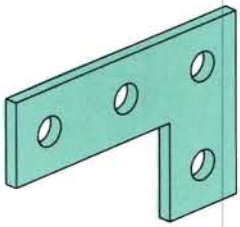
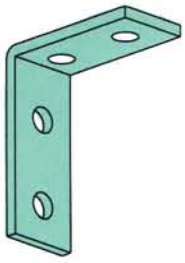


Right Angle Fittings

P9324



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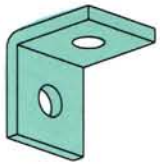

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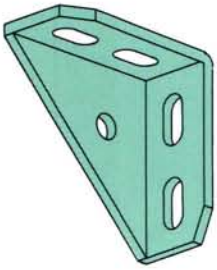

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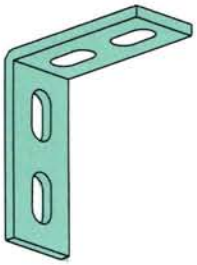

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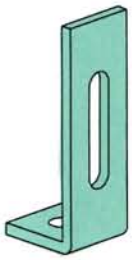
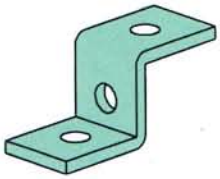


Wing Shape and Other Fittings

P1045



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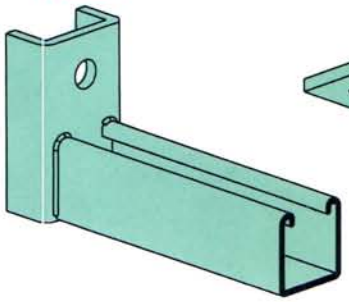

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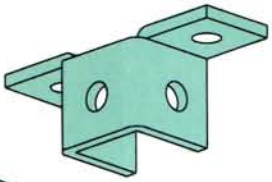

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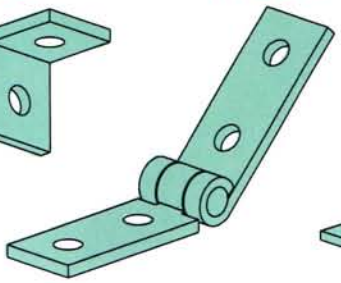

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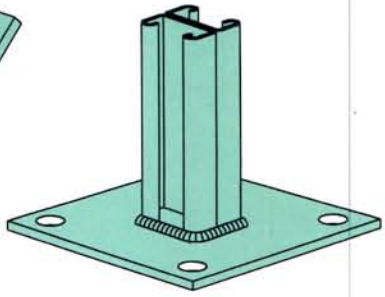
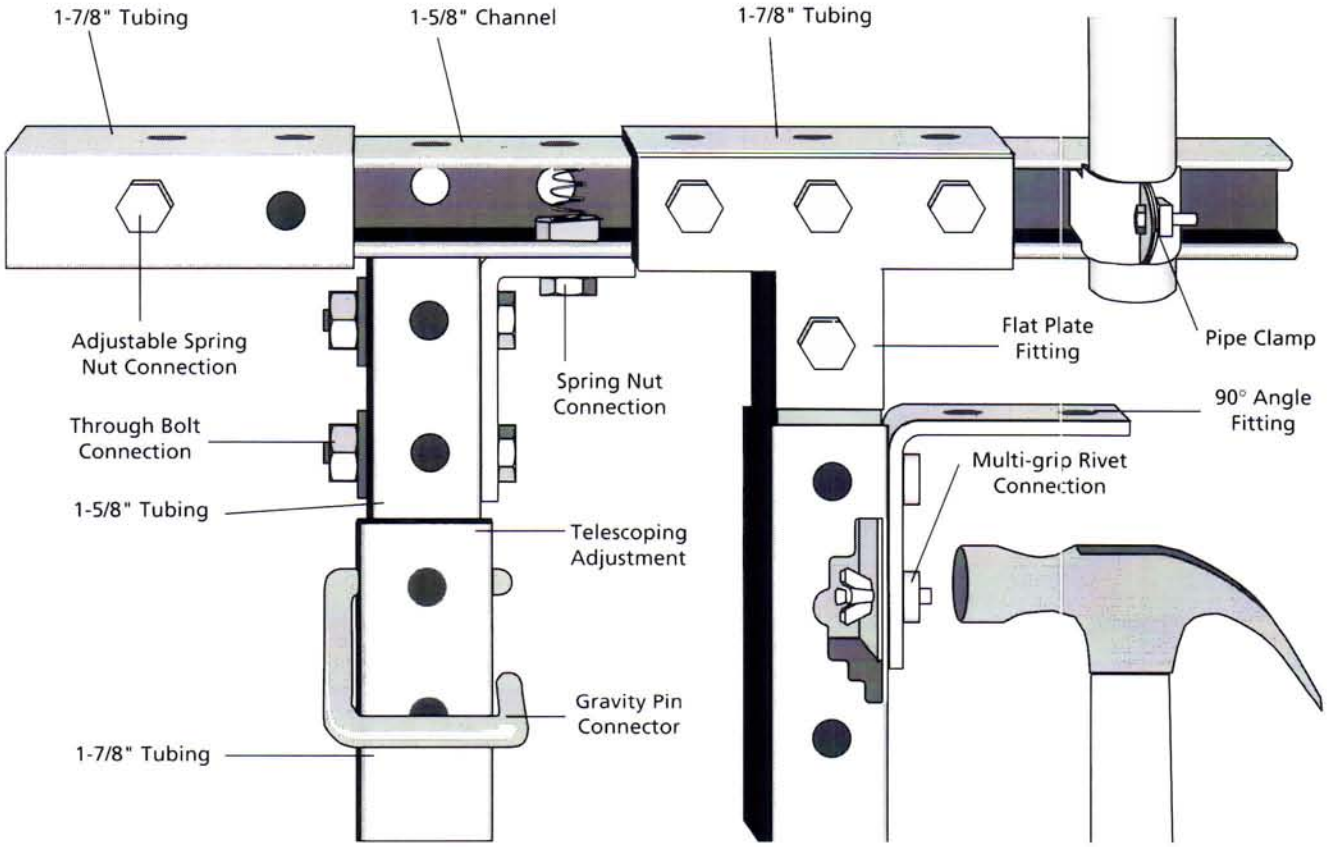


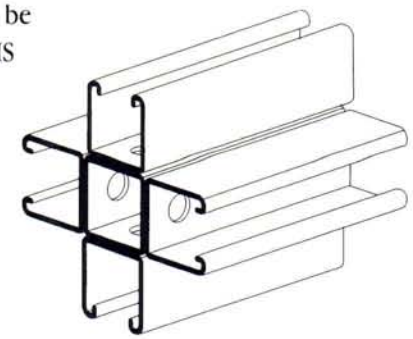
See pages 10 to 14 for complete selection of system fittings.

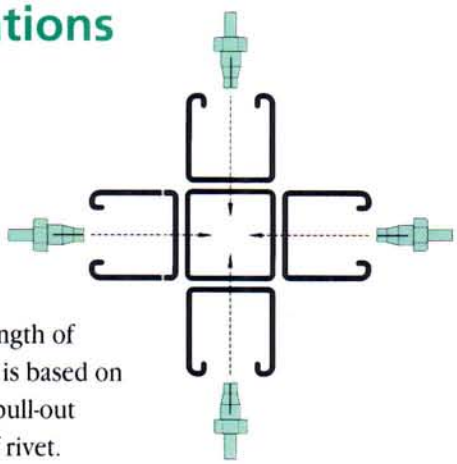
The Telestrut system includes a large variety of inter-connecting components carefully engineered to expand your problem-solving power. The examples shown below take advantage of exclusive system structural qualities, adjustment capabilities and fastening options.



Create Your Own Combinations

Telestrut square tubing sections can be combined with P1000H3 or P1000HS sections to provide channel mounting capabilities on one, two, three, or four sides. This provides additional versatility without the need to buy and stock special sections.

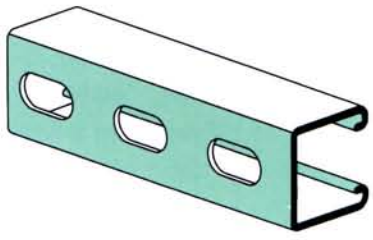


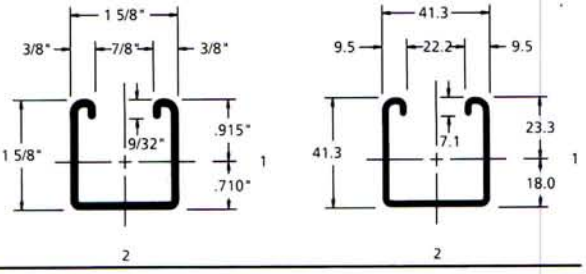


Note: Strength of assemblies is based on shear and pull-out strength of rivet.
See page 30.

P1000T 12 GA. (2.7mm)

9/16" (14.3) x 1-1/8" (28.6) slots
on 2" (51.0) centers





ALL SECTIONS AVAILABLE IN STANDARD LENGTHS OF 10 AND 20 FEET

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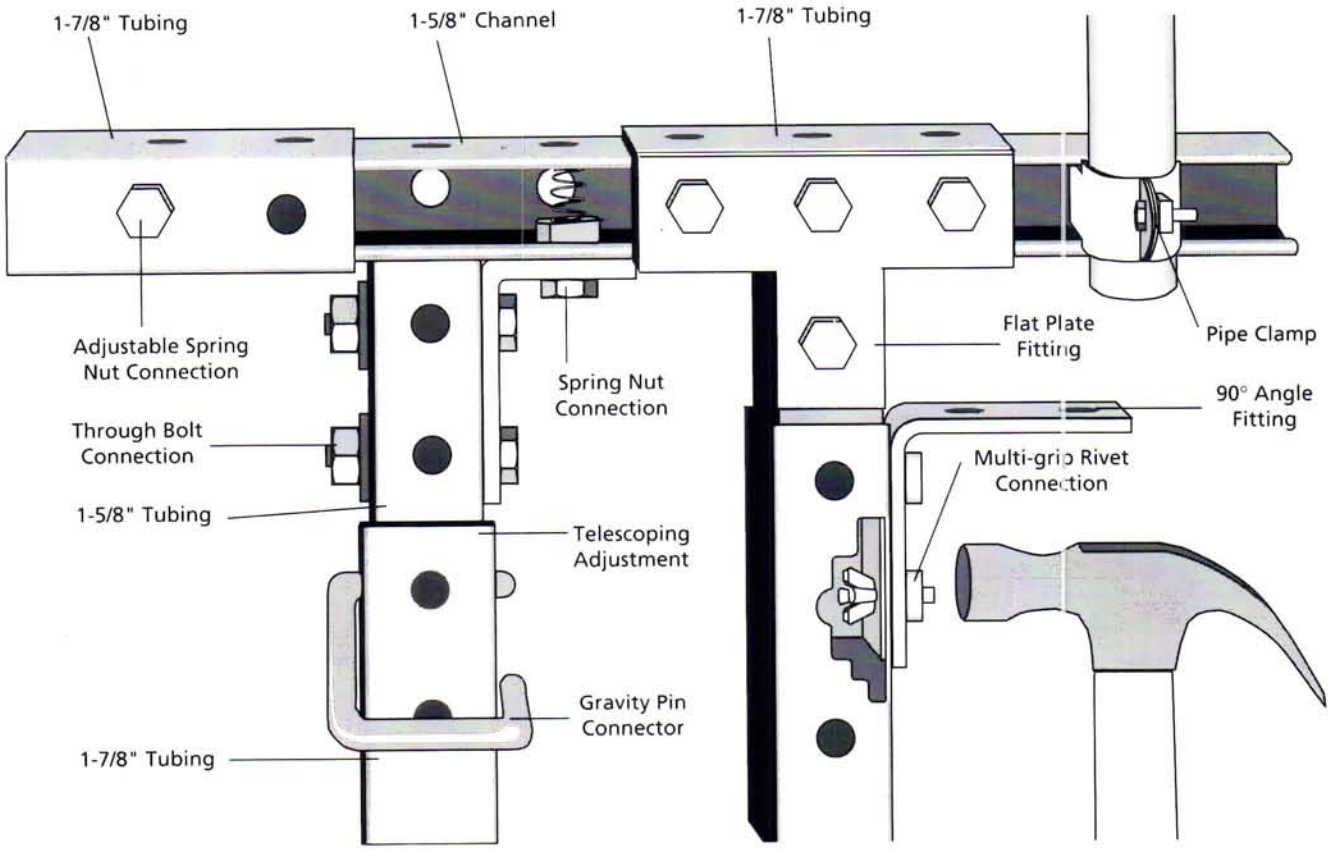

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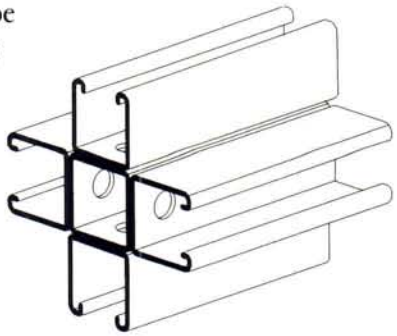
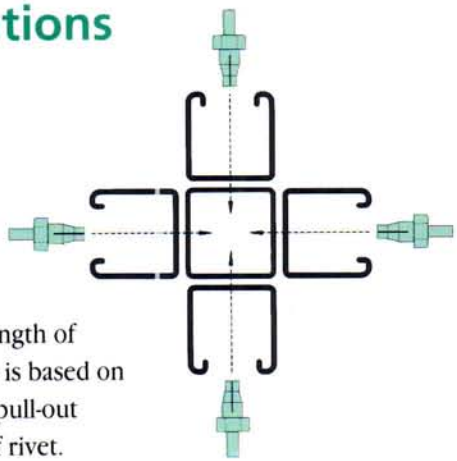


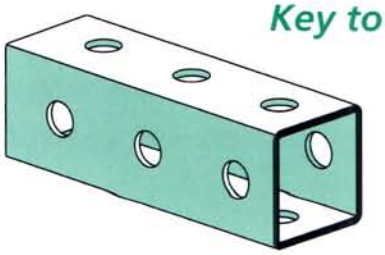


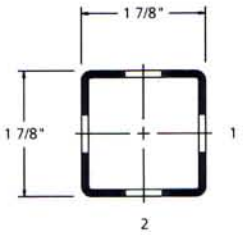
Note: Strength of assemblies is based on shear and pull-out strength of rivet.
See page 30.

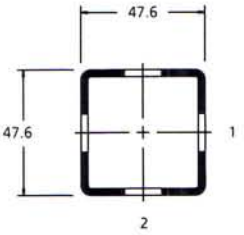
P9200 12 GA. (2.7mm)

9/16" (14.3) holes on 1-7/8" (47.6) centers

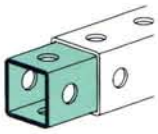
Key to Telestrut's Telescoping Power.



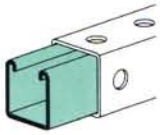




All nine Telestrut 1-5/8" sections telescope into P9200:



P9000



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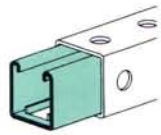
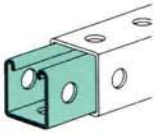
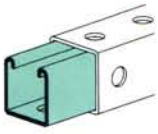


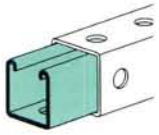
P1000DS



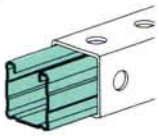
P1000H3



P1000HS



P1000T



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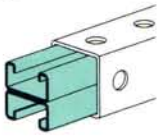

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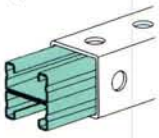
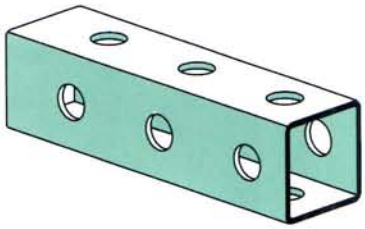
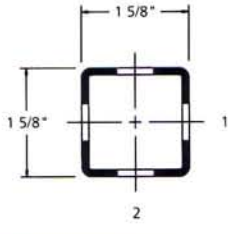


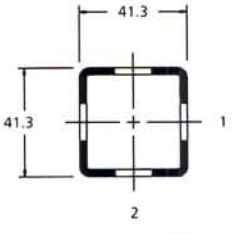
P4001

P9000 12 GA. (2.7mm)

9/16" (14.3) holes on 1-7/8" (47.6) centers

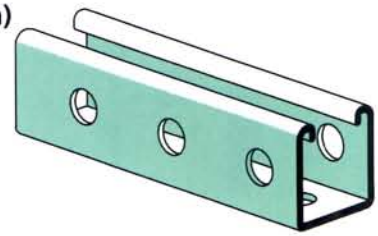


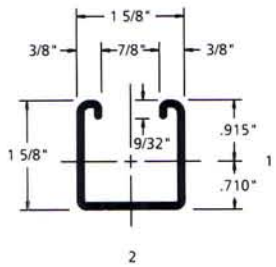


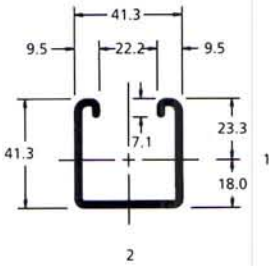


P1000H3 12 GA. (2.7mm)

9/16" (14.3) holes on 1-7/8" (47.6) centers

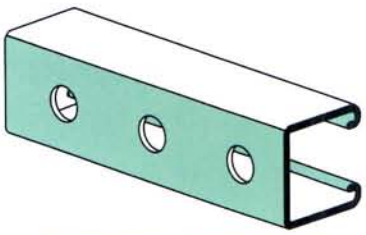


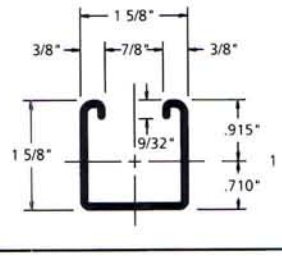


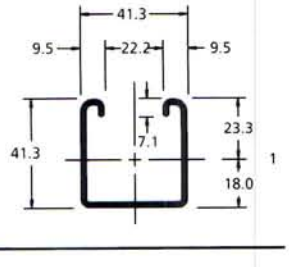


P1000HS 12 GA. (2.7mm)

9/16" (14.3) holes on 1-7/8" (47.6) centers

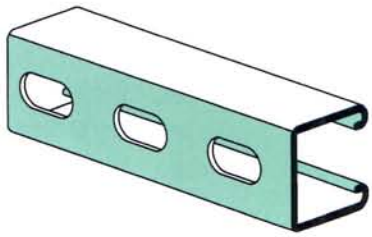


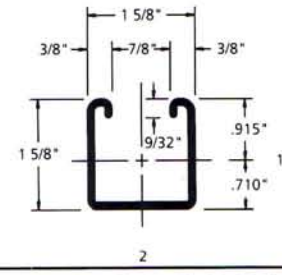


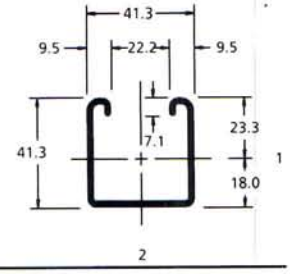


P1000T 12 GA. (2.7mm)

9/16" (14.3) x 1-1/8" (28.6) slots on 2" (51.0) centers





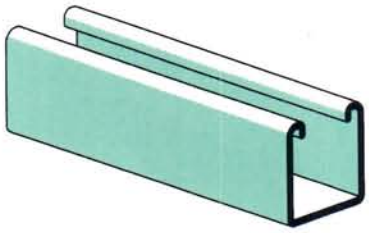


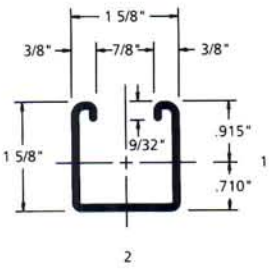
ALL SECTIONS AVAILABLE IN STANDARD LENGTHS OF 10 AND 20 FEET

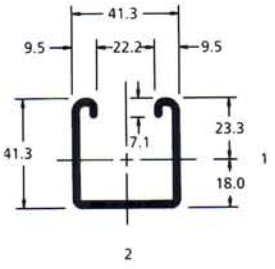
TUBING, CHANNELS & COMBINATIONS

TELESTRUT®
Telescoping Strut

P1000 12 GA. (2.7mm)

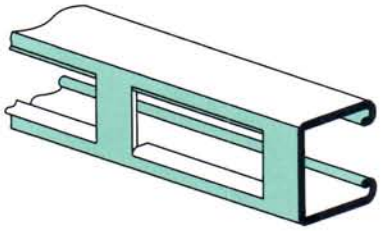


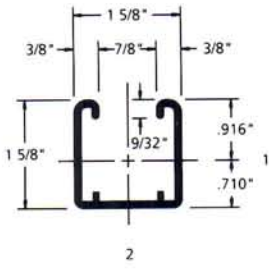


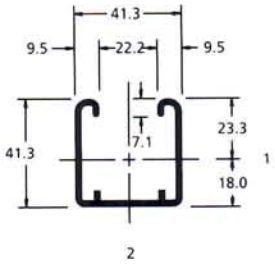


P1000DS 12 GA. (2.7mm)

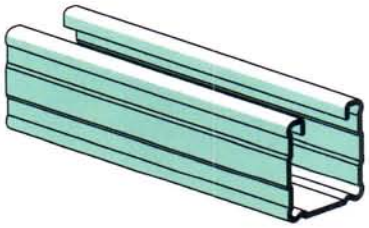
7/8" (22.2) x 2-3/4 (69.9) slots
on 3-1/2" (88.9) centers

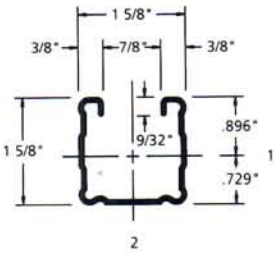


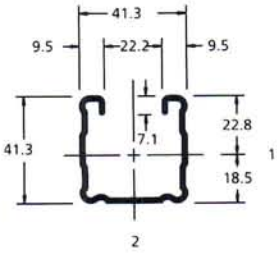




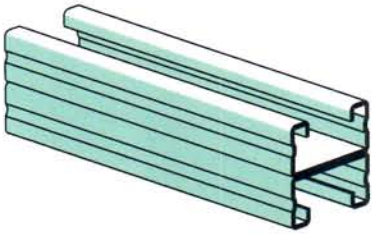
P1100 14 GA. (1.9mm)

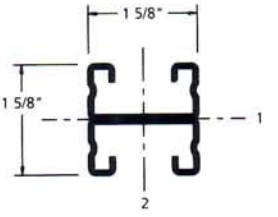


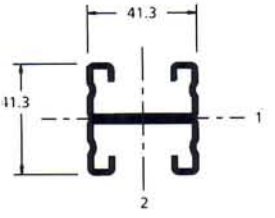




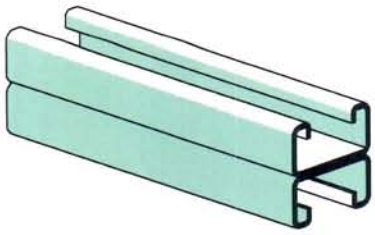
P4001 16 GA. (1.5mm)

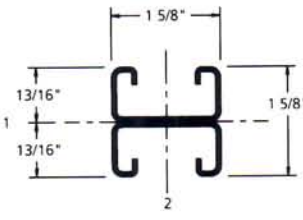


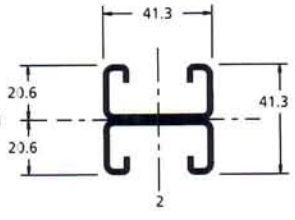




P4101 14 GA. (1.9mm)





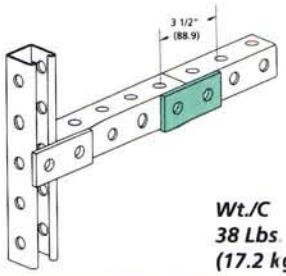


ALL SECTIONS AVAILABLE IN STANDARD LENGTHS OF 10 AND 20 FEET

FITTINGS

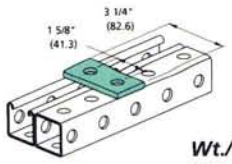
Fittings can be used as shown with any combination of 1-5/8" Telestrut tubing or channel members.

P1065



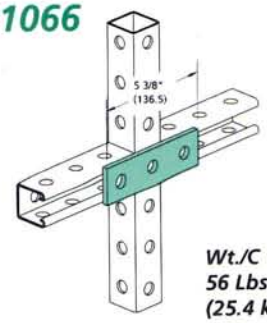
Wt./C
38 Lbs.
(17.2 kg.)

P1924 *Use With 1-5/8" Sections Only*



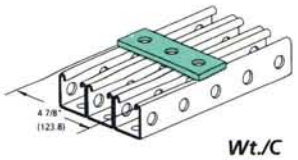
Wt./C
35 Lbs.
(15.9 kg.)

P1066



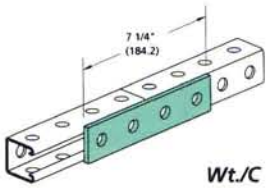
Wt./C
56 Lbs.
(25.4 kg.)

P1925 *Use With 1-5/8" Sections Only*



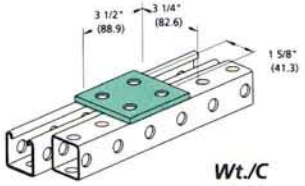
Wt./C
50 Lbs.
(22.7 kg.)

P1067



Wt./C
78 Lbs.
(35.4 kg.)

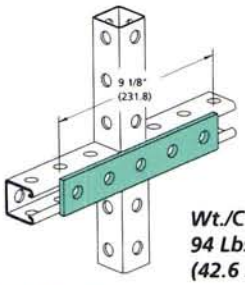
P2079 *Use With 1-5/8" Sections Only*



Rotate For Use With 1-7/8" Tubing Sections

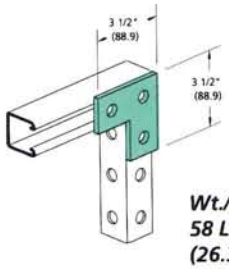
Wt./C
73 Lbs.
(33.1 kg.)

P1941



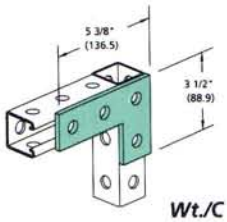
Wt./C
94 Lbs.
(42.6 kg.)

P1036



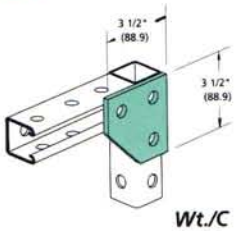
Wt./C
58 Lbs.
(26.3 kg.)

P1380A



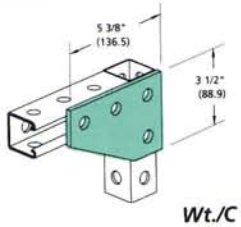
Wt./C
80 Lbs.
(36.3 kg.)

P1334



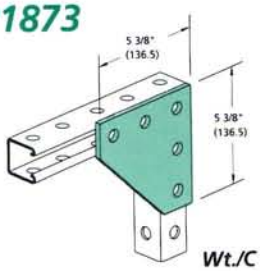
Wt./C
70 Lbs.
(31.8 kg.)

P1380



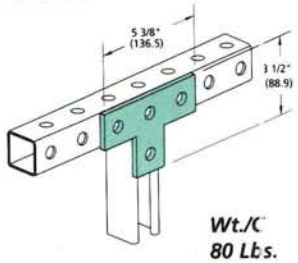
Wt./C
105 Lbs.
(47.6 kg.)

P1873



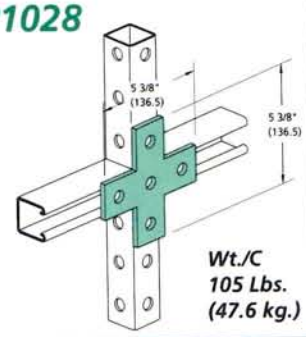
Wt./C
150 Lbs.
(68.0 kg.)

P1031



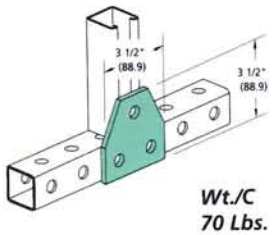
Wt./C
80 Lbs.
(36.3 kg.)

P1028



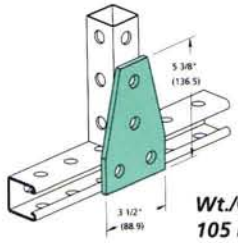
Wt./C
105 Lbs.
(47.6 kg.)

P1356



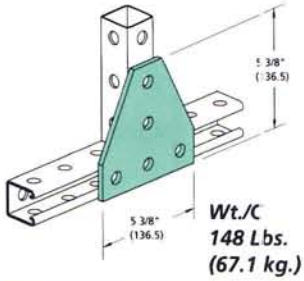
Wt./C
70 Lbs.
(31.8 kg.)

P1358



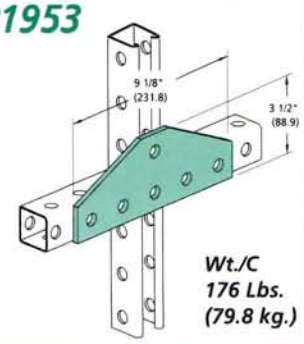
Wt./C
105 Lbs.
(47.6 kg.)

P1726



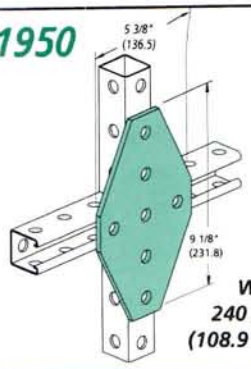
Wt./C
148 Lbs.
(67.1 kg.)

P1953



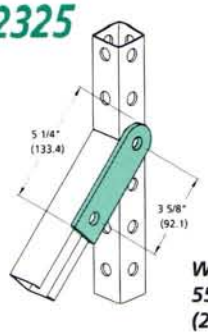
Wt./C
176 Lbs.
(79.8 kg.)

P1950



Wt./C
240 Lbs.
(108.9 kg.)

P2325

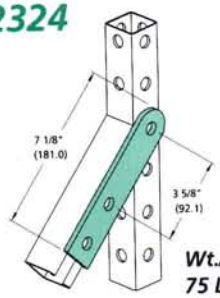


Wt./C
55 Lbs.
(24.9 kg.)

All holes 9/16" (14.3mm) diameter, 13/16" (20.6mm) from end, 1-7/8" (47.6mm) on center and 1/4" (6.4mm) thick unless otherwise noted.

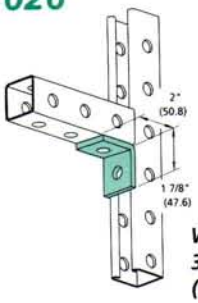
Fittings can be used as shown with any combination of 1-5/8" Telestrut tubing or channel members.

P2324



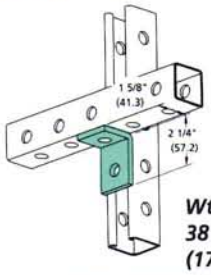
Wt./C
75 Lbs.
(34.0 kg.)

P1026



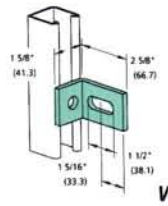
Wt./C
38 Lbs.
(17.2 kg.)

P1068 *Use With 1-5/8" Sections Only*



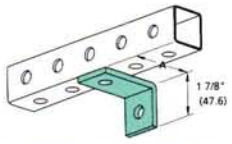
Wt./C
38 Lbs.
(17.2 kg.)

P1750 *Use With 1-5/8" Sections Only*



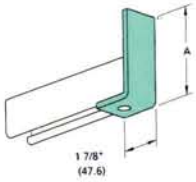
Wt./C
38 Lbs.
(17.2 kg.)

P1281 — P1283



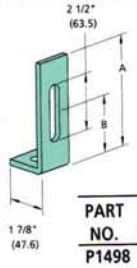
PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C
P1281	3	76.2	49	22.2
P1282	3-1/2	88.9	54	24.5
P1283	4	101.6	61	27.7

P1538A — P1538D



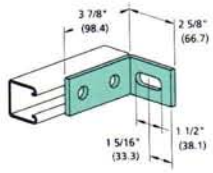
PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C
P1538A	3-7/8	98.4	61	27.7
P1538B	5-7/8	149.2	84	38.1
P1538C	7-7/8	200.0	107	48.5
P1538D	9-7/8	250.8	130	59.0

P1498 & P1499



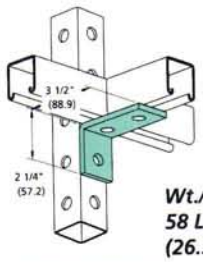
PART NO.	A In	A mm	B In	B mm	WT. Lbs./C	WT. kg./C
P1498	4-7/8	123.8	2-1/2	63.5	65	29.5
P1499	6-7/8	174.6	4-1/2	114.3	85	38.6

P1747



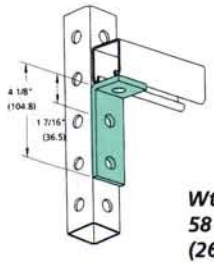
Wt./C
66 Lbs.
(29.9 kg.)

P1458 *Use With 1-5/8" Sections Only*



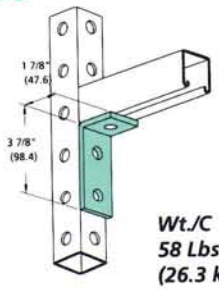
Wt./C
58 Lbs.
(26.3 kg.)

P1326 *Use With 1-5/8" Sections Only*



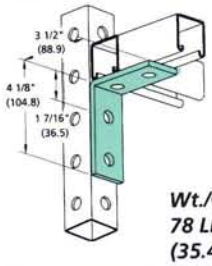
Wt./C
58 Lbs.
(26.3 kg.)

P1346



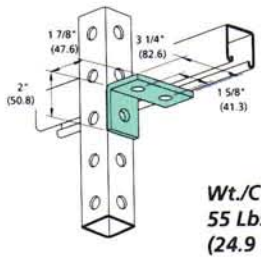
Wt./C
58 Lbs.
(26.3 kg.)

P1325 *Use With 1-5/8" Sections Only*



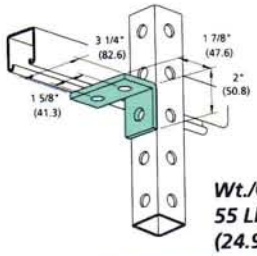
Wt./C
78 Lbs.
(35.4 kg.)

P1822 *Use With 1-5/8" Sections Only*



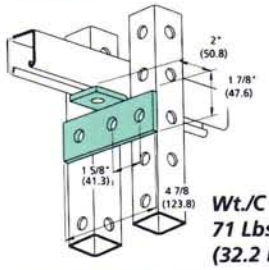
Wt./C
55 Lbs.
(24.9 kg.)

P1823 *Use With 1-5/8" Sections Only*



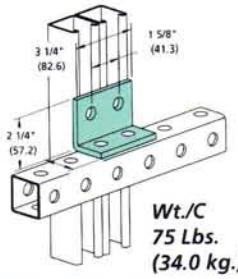
Wt./C
55 Lbs.
(24.9 kg.)

P1821 *Use With 1-5/8" Sections Only*



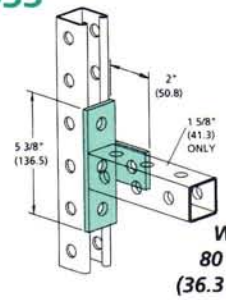
Wt./C
71 Lbs.
(32.2 kg.)

P1934 *Use With 1-5/8" Sections Only*



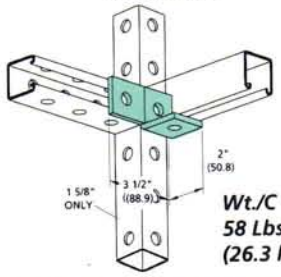
Wt./C
75 Lbs.
(34.0 kg.)

P1033



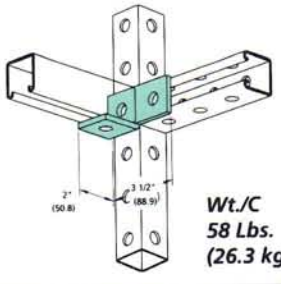
Wt./C
80 Lbs.
(36.3 kg.)

P1037 *Special Cutting Required If Using P9000 or P9200 for Branch Sections*



Wt./C
58 Lbs.
(26.3 kg.)

P1038 *Special Cutting Required If Using P9000 or P9200 for Branch Sections*



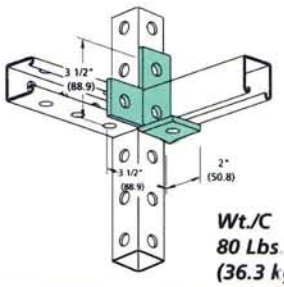
Wt./C
58 Lbs.
(26.3 kg.)

All holes 9/16" (14.3mm) diameter, 13/16" (20.6mm) from end, 1-7/8" (47.6mm) on center and 1/4" (6.4mm) thick unless otherwise noted.

FITTINGS

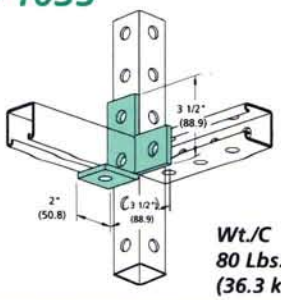
Fittings can be used as shown with any combination of 1-5/8" Telestrut tubing or channel members.

P1034



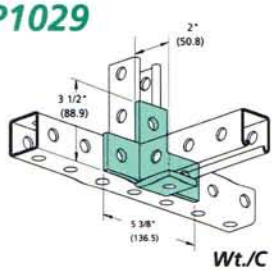
Wt./C
80 Lbs.
(36.3 kg.)

P1035



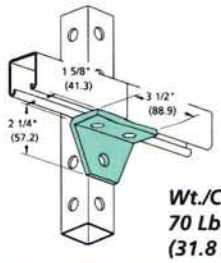
Wt./C
80 Lbs.
(36.3 kg.)

P1029



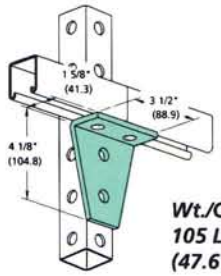
Wt./C
105 Lbs.
(47.6 kg.)

P1357 *Use With 1-5/8" Sections Only*



Wt./C
70 Lbs.
(31.8 kg.)

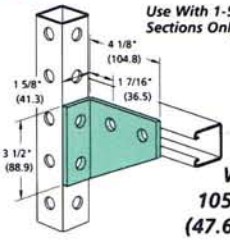
P1359 *Use With 1-5/8" Sections Only*



Wt./C
105 Lbs.
(47.6 kg.)

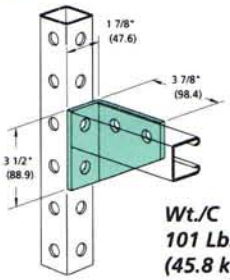
P1381 *As Shown*
P1382 *Opposite Hand*

Use With 1-5/8" Sections Only



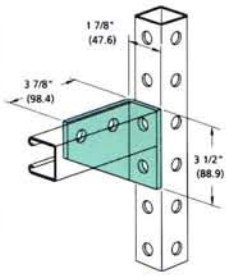
Wt./C
105 Lbs.
(47.6 kg.)

P1290 *Use With 1-5/8" Sections Only*



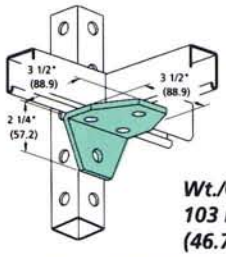
Wt./C
101 Lbs.
(45.8 kg.)

P1291 *Use With 1-5/8" Sections Only*



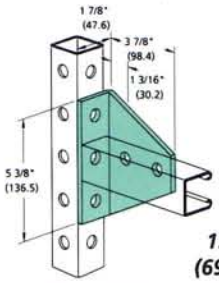
Wt./C
101 Lbs.
(45.8 kg.)

P1579 *Use With 1-5/8" Sections Only*



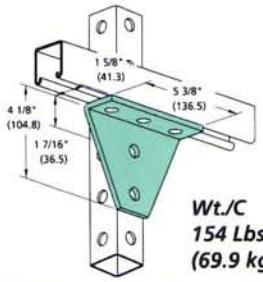
Wt./C
103 Lbs.
(46.7 kg.)

P1727 *Use With 1-5/8" Sections Only*



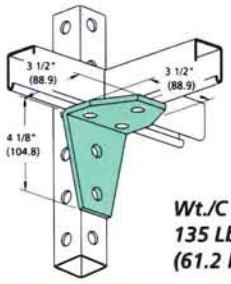
Wt./C
154 Lbs.
(69.9 kg.)

P1728 *Use With 1-5/8" Sections Only*



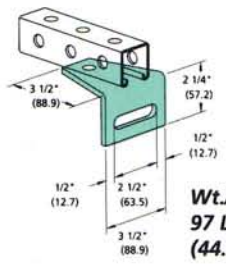
Wt./C
154 Lbs.
(69.9 kg.)

P2235 *Use With 1-5/8" Sections Only*



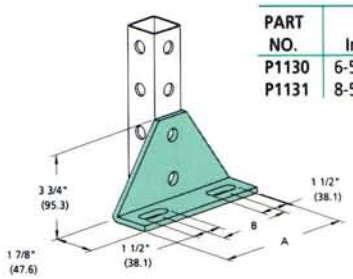
Wt./C
135 Lbs.
(61.2 kg.)

P1713



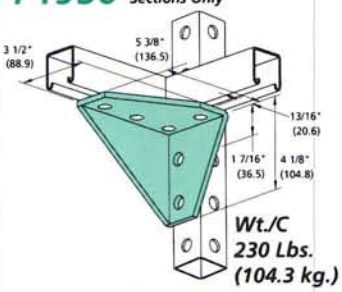
Wt./C
97 Lbs.
(44.0 kg.)

P1130 & P1131



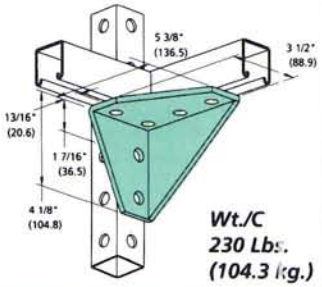
PART NO.	A		B		WT.	
	In	mm	In	mm	Lbs./C	kg./C
P1130	6-5/8	168.3	4	101.6	190	86.2
P1131	8-5/8	219.1	6	152.4	242	109.8

P1956 *Use With 1-5/8" Sections Only*



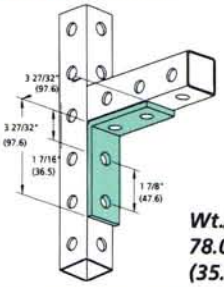
Wt./C
230 Lbs.
(104.3 kg.)

P1957 *Use With 1-5/8" Sections Only*



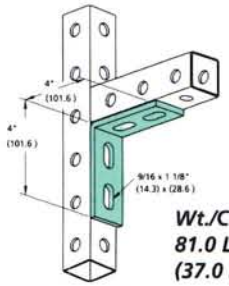
Wt./C
230 Lbs.
(104.3 kg.)

P9324 *Use With 1-5/8" Sections Only*



Wt./C
78.0 Lbs.
(35.0 kg.)

P9325



Wt./C
81.0 Lbs.
(37.0 kg.)

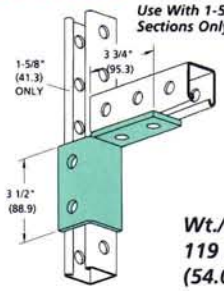
P9484

Wt./C
134.0 Lbs.
(62.0 kg.)

All holes 9/16" (14.3mm) diameter, 13/16" (20.6mm) from end, 1-7/8" (47.6mm) on center and 1/4" (6.4mm) thick unless otherwise noted.

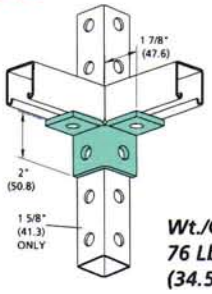
Fittings can be used as shown with any combination of 1-5/8" Telestrut tubing or channel members.

P2343 R-L
Right-As Shown
Left-Opposite Hand
Use With 1-5/8" Sections Only



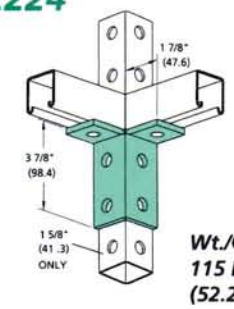
Wt./C 119 Lbs. (54.0 kg.)

P2223



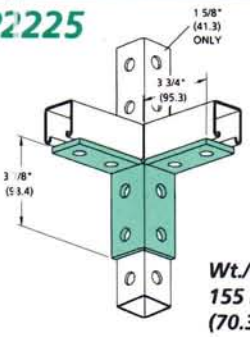
Wt./C 76 Lbs. (34.5 kg.)

P2224



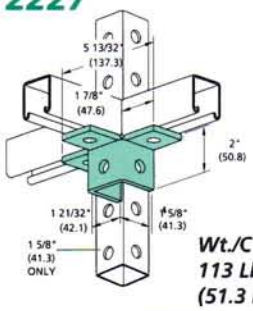
Wt./C 115 Lbs. (52.2 kg.)

P2225



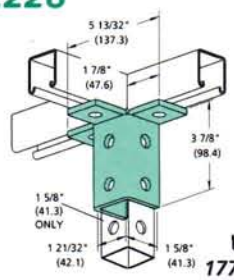
Wt./C 155 Lbs. (70.3 kg.)

P2227



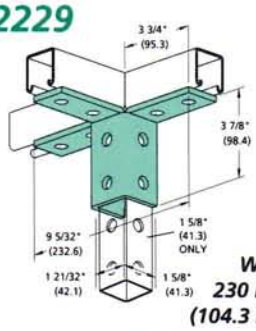
Wt./C 113 Lbs. (51.3 kg.)

P2228



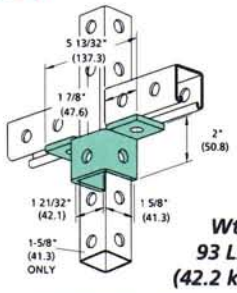
Wt./C 177 Lbs. (80.3 kg.)

P2229



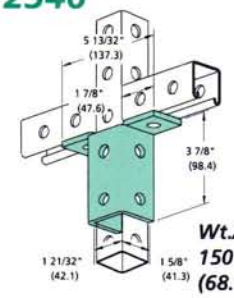
Wt./C 230 Lbs. (104.3 kg.)

P2345



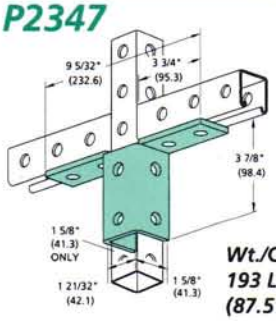
Wt./C 93 Lbs. (42.2 kg.)

P2346



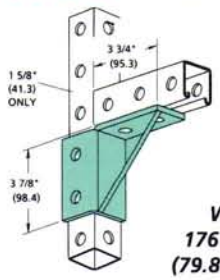
Wt./C 150 Lbs. (68.0 kg.)

P2347



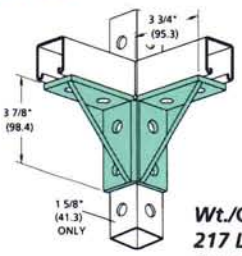
Wt./C 193 Lbs. (87.5 kg.)

P2344 R-L
Right-As Shown
Left-Opposite Hand



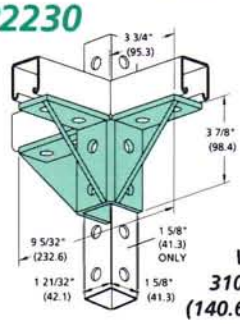
Wt./C 176 Lbs. (79.8 kg.)

P2226



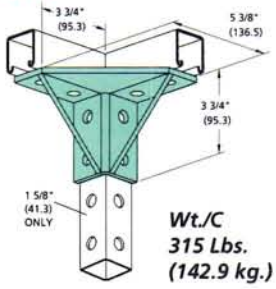
Wt./C 217 Lbs. (98.4 kg.)

P2230



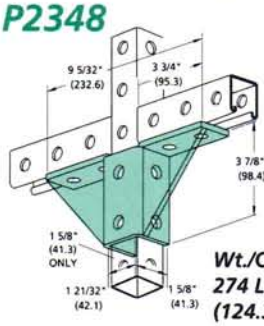
Wt./C 310 Lbs. (140.6 kg.)

P2245



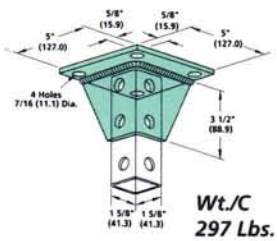
Wt./C 315 Lbs. (142.9 kg.)

P2348



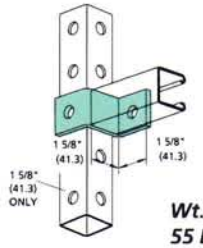
Wt./C 274 Lbs. (124.3 kg.)

P1887
Bench Leg Attachment



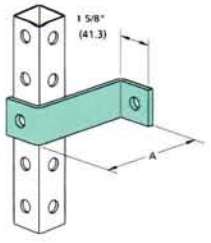
Wt./C 297 Lbs. (134.8 kg.)

P1347



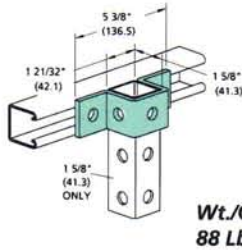
Wt./C 55 Lbs. (24.9 kg.)

P1479A-E
Use With 1-5/8" Sections Only



PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C
P1479A	4	101.6	81	36.7
P1479B	5	127.0	92	41.7
P1479C	6	152.4	104	47.2
P1479D	7	177.8	115	52.2
P1479E	8	203.2	127	57.6

P1047



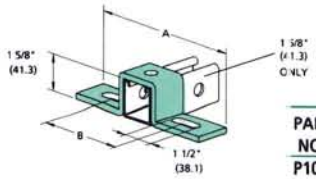
Wt./C 88 Lbs. (39.9 kg.)

All holes 9/16" (14.3mm) diameter, 13/16" (20.6mm) from end, 1-7/8" (47.6mm) on center and 1/4" (6.4mm) thick unless otherwise noted.

FITTINGS

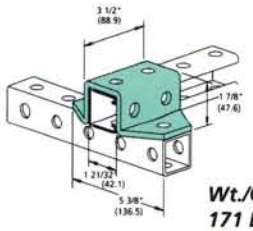
Fittings can be used as shown with any combination of 1-5/8" Telestrut tubing or channel members.

P1048 – P1050



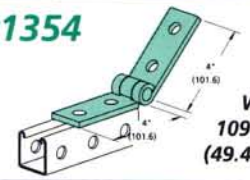
PART NO.	A In	A mm	B In	B mm	WT. Lbs./C	WT. kg./C
P1048	7-1/4	184.2	4-1/8	104.8	105	47.6
P1049	8-1/2	215.9	5-3/8	136.5	120	54.4
P1050	10-3/8	263.5	7-1/4	184.2	130	59.0

P2326 *Use With 1-5/8" Sections Only*



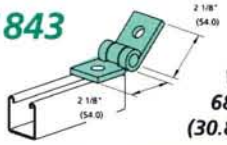
Wt./C 171 Lbs. (77.6 kg.)

P1354



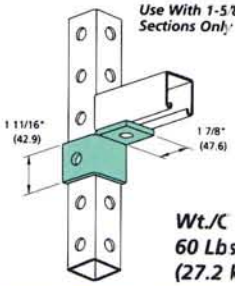
Wt./C 109 Lbs. (49.4 kg.)

P1843



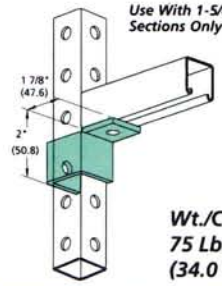
Wt./C 68 Lbs. (30.8 kg.)

P2341 R-L *Right-As Shown Left-Opposite Hand Use With 1-5/8" Sections Only*



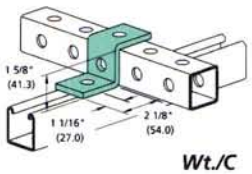
Wt./C 60 Lbs. (27.2 kg.)

P2472 R-L *Right-As Shown Left-Opposite Hand Use With 1-5/8" Sections Only*



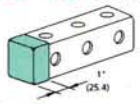
Wt./C 75 Lbs. (34.0 kg.)

P1045 *Use With 1-5/8" Sections Only*



Wt./C 55 Lbs. (24.9 kg.)

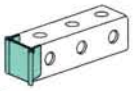
P2860-10 *Use With 1-5/8" Sections Only*



White Plastic End Cap

Wt./C 3.4 Lbs. (1.5 kg.)

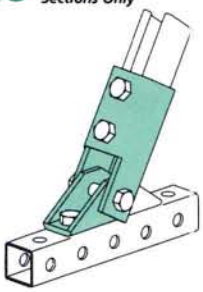
P1280 *Use With 1-5/8" Sections Only*

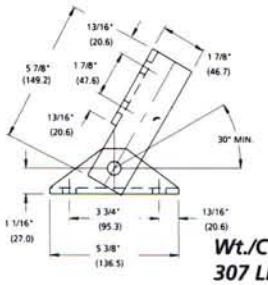


Steel End Cap

Wt./C 11 Lbs. (5.0 kg.)

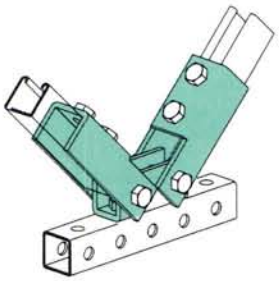
P2815 *Use With 1-5/8" Sections Only*

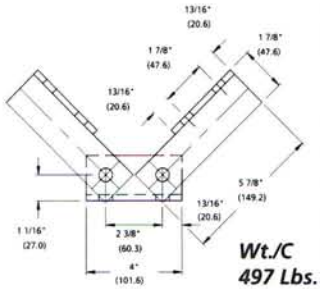




Wt./C 307 Lbs. (139.3 kg.)

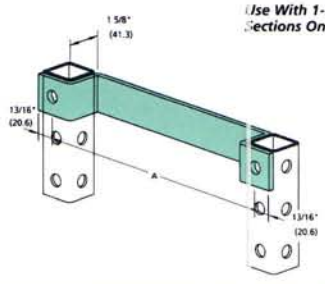
P2815D *Use With 1-5/8" Sections Only*





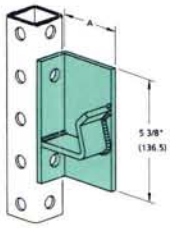
Wt./C 497 Lbs. 225.4 kg.)

P1201 – P1203 *Ladder Rung Use With 1-5/8" Sections Only*



PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C
P1201	12	304.8	186	84.4
P1202	15	381.0	221	100.2
P1203	18	457.2	254	115.2

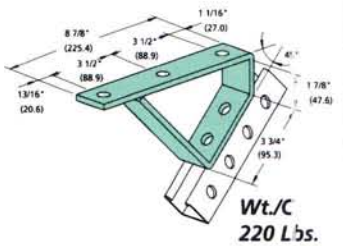
P2354 R-L – P2355 R-L *Reel Rack Axle Support Fittings*



PART NO.	A In	A mm	STD. PIPE SIZE		WT. Lbs./C	WT. kg./C
P2354 R-L	3	76.2	1-1/4	31.8	220	99.8
P2355 R-L	3-5/8	92.1	2	50.8	252	114.3

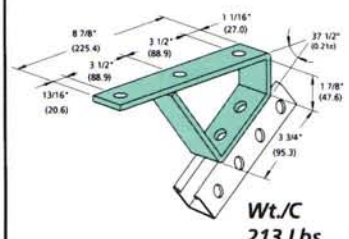
Right-As Shown Left-Opposite Hand

P1944 *Stair Tread Support*



Wt./C 220 Lbs. (99.8 kg.)

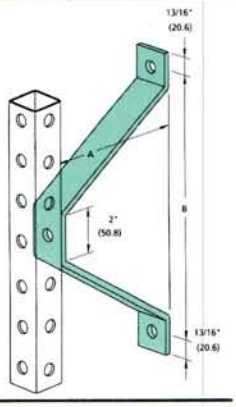
P2655 *Stair Tread Support*



Wt./C 213 Lbs. (96.6 kg.)

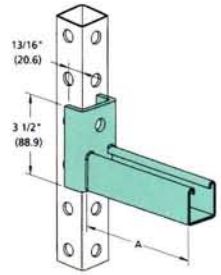
P1204 – P1208 *Wall Ladder Support Bracket*

PART NO.	A In	A mm	B In	B mm	WT. Lbs./C	WT. kg./C
P1204	2-3/8	60.3	6	152.4	113	51.3
P1205	4-3/8	111.1	8	203.2	164	74.4
P1206	6-3/8	161.9	10	254.0	216	98.0
P1207	8-3/8	212.7	12	304.8	267	121.1
P1208	10-3/8	263.5	14	355.6	318	144.2



All holes 9/16" (14.3mm) diameter, 13/16" (20.6mm) from end, 1-7/8" (47.6mm) on center and 1/4" (6.4mm) thick unless otherwise noted.

P2231 & P2232 *Use With 1-5/8" Sections Only*

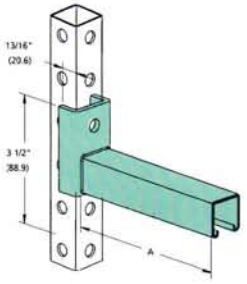


DESIGN UNIFORM LOAD

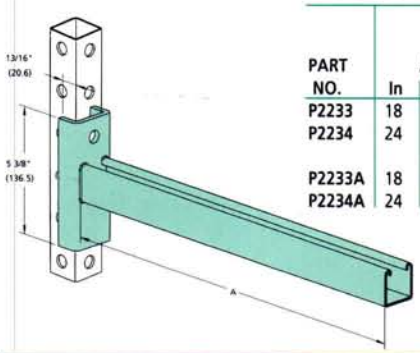
PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C	VERTICAL MEMBERS P1000† 12 GAUGE Lbs.	P1000† 12 GAUGE kN	P1100† 14 GAUGE Lbs.	P1100† 14 GAUGE kN	P9000* 12 GAUGE Lbs.	P9000* 12 GAUGE kN
P2231	6	152.4	191	86.6	1600	7.1	1200	5.3	650	2.9
P2232	12	304.8	292	132.4	800	3.6	600	2.7	325	1.4
P2231A	6	152.4	191	86.6	1600	7.1	1200	5.3	650	2.9
P2232A	12	304.8	292	132.4	800	3.6	600	2.7	325	1.4

† Based on use of P1010 nut and 1/2" bolt.
* Based on use of P9010 rivet.

P2231A & P2232A *Use With 1-5/8" Sections Only*



P2233 & P2234 *Use With 1-5/8" Sections Only*

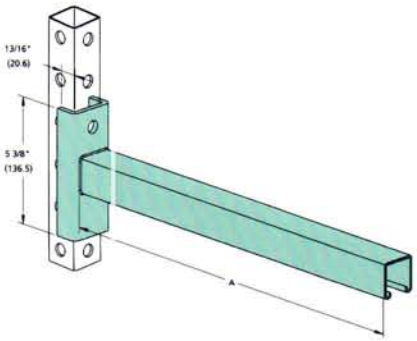


DESIGN UNIFORM LOAD

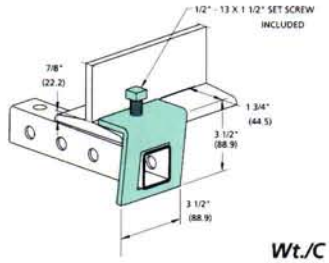
PART NO.	A In	A mm	WT. Lbs./C	WT. kg./C	VERTICAL MEMBERS P1000† 12 GAUGE Lbs.	P1000† 12 GAUGE kN	P1100† 14 GAUGE Lbs.	P1100† 14 GAUGE kN	P9000* 12 GAUGE Lbs.	P9000* 12 GAUGE kN
P2233	18	457.2	436	197.8	600	2.7	450	2.0	375	1.7
P2234	24	609.6	536	243.1	450	2.0	330	1.5	280	1.2
P2233A	18	457.2	436	197.8	600	2.7	450	2.0	375	1.7
P2234A	24	609.6	536	243.1	450	2.0	330	1.5	280	1.2

† Based on use of P1010 nut and 1/2" bolt.
* Based on use of P9010 rivet.

P2233A & P2234A *Use With 1-5/8" Sections Only*

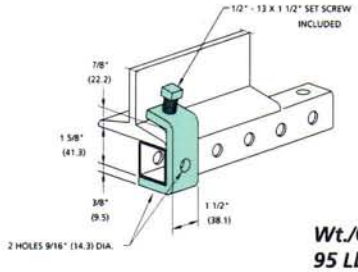


P1796S *Use With 1-5/8" Sections Only*



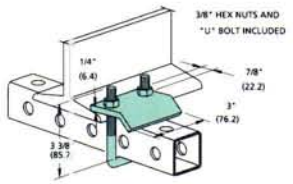
Wt./C 91 Lbs. (41.3 kg.)

P1271S *Use With 1-5/8" Sections Only*



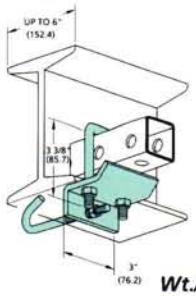
Wt./C 95 Lbs. (43.1 kg.)

P2785 *Use With 1-5/8" Sections Only*



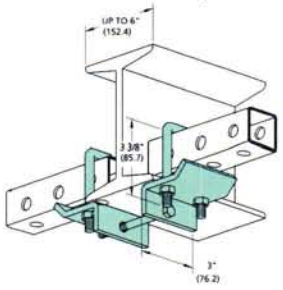
Wt./C 83 Lbs. (37.6 kg.)

P2867 *Use With 1-5/8" Sections Only*



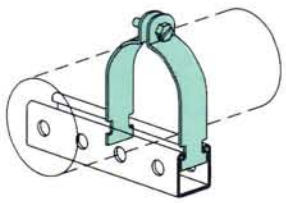
Wt./C 134 Lbs. (60.8 kg.)

P2868 *Use With 1-5/8" Sections Only*



Wt./C 280 Lbs. (127.0 kg.)

Pipe/Conduit Clamps *For Complete Selection Of Pipe Clamps See Unistrut No. 12 General Engineering Catalog*



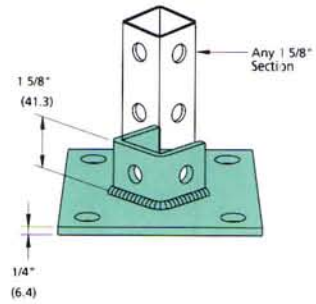
P1100 SERIES
PIPE CLAMPS FOR RIGID STEEL CONDUIT 3/8" THRU 8" DIA.

P1200 SERIES
UNIVERSAL CLAMPS FOR RIGID OR THINWALL CONDUIT 1/2" THRU 2" DIA.

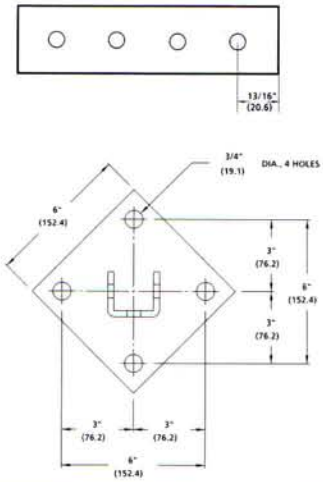
P1400 SERIES
PIPE CLAMPS FOR THIN WALL CONDUIT (E.M.T.) 3/8" THRU 4" DIA.

POST BASES

P2072

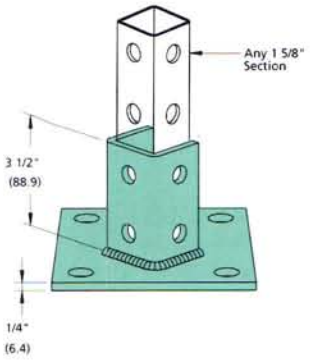


Post cutting dimension for hole alignment.

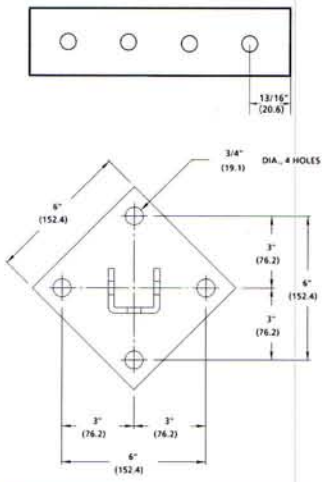


Wt./C
307 Lbs.
(139.3 kg.)

P2072A

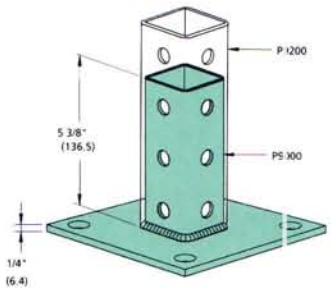


Post cutting dimension for hole alignment.

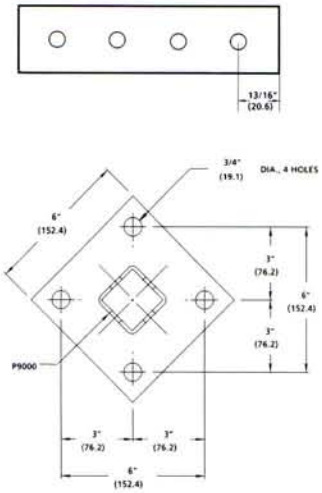


Wt./C
373 Lbs.
(169.2 kg.)

P9011

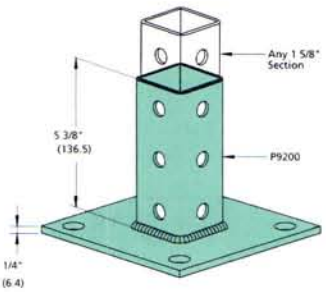


Post cutting dimension for hole alignment.

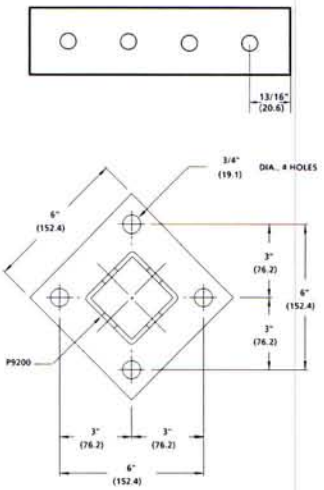


Wt./C
332.3 Lbs.
(150.7 kg.)

P9012

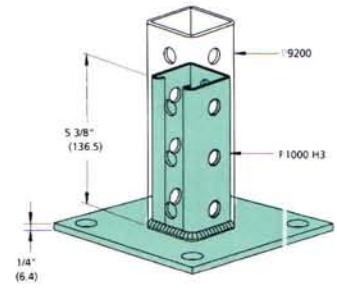


Post cutting dimension for hole alignment.

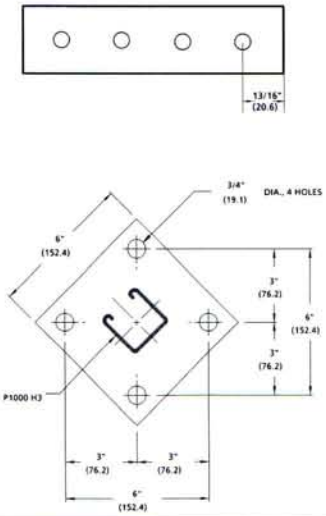


Wt./C
340.4 Lbs.
(154.4 kg.)

P9013

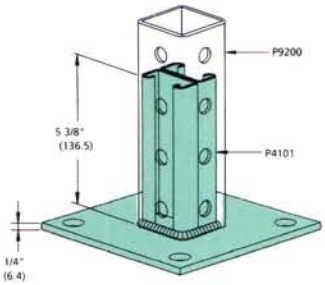


Post cutting dimension for hole alignment.

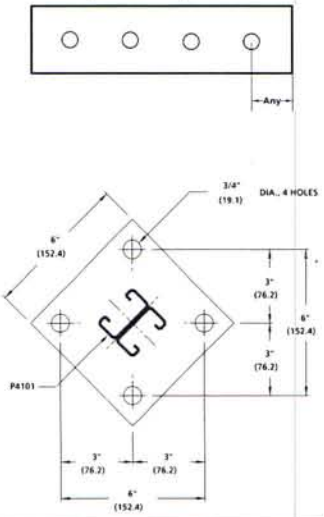


Wt./C
318.4 Lbs.
(144.7 kg.)

P9014



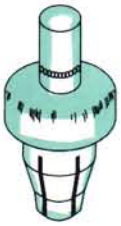
Random cutting dimension - no hole alignment required.



Wt./C
303.2 Lbs.
(137.5 kg.)

P9010 Multi-grip Rivet

See page 30 for load data.



USE WITH:
P9000, P9200 Tubes and P1000H3, P1000HS Channels

Wt./C
10 Lbs.
(4.54 kg.)

P9208 Corner Bolt

USE WITH:
P9000,P9200 Tubes and P1000H3 Channel

Wt./C
0 Lbs.
(0.0 kg.)

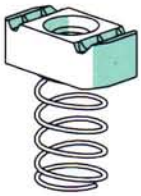
P9209 Gravity Pin

USE WITH:
P9000, P9200 Tubes and P1000H3 Channel

Wt./C
47 Lbs.
(21.3 kg.)

P1010 Spring Nut

1/2" x 13 thread



USE WITH:
P1000HS, P1000T, P1000H3, P1100 Channels

Wt./C
12 Lbs.
(5.4 kg.)

P4010 Spring Nut

1/2" x 13 thread

USE WITH:
P4001, P4101 Channels

Wt./C
8 Lbs.
(3.6 kg.)

P1010T Top Retainer Nut

1/2" x 13 thread

USE WITH:
P1000, P1000DS, P1000H3, P1000HS, P1000T, P1100 Channels

Wt./C
12 Lbs.
(5.4 kg.)

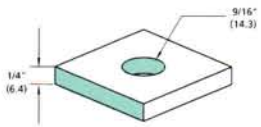
P4010T Top Retainer Nut

1/2" x 13 thread

USE WITH:
P4001, P4100 Channels

Wt./C
8 Lbs.
(3.6 kg.)

P1064 Square Washer



Use to prevent side-wall deformation when applying maximum torque (50 Lbs.) to bolt heads against sides of P9200 tubing sections.

Wt./C
17 Lbs.
(7.7 kg.)

P3013 Without Spring

1/2" x 13 thread

USE WITH:
P4001, P4101 Channel

Wt./C
8 Lbs.
(3.6 kg.)

P3010 Without Spring

1/2" x 13 thread

USE WITH:
P1000, P1000DS, P1000H3, P1000HS, P1000T, P1100 Channels

Wt./C
11 Lbs.
(5.0 kg.)

Hex–Head Cap Screw

Part No.	Size	Wt./C Lbs.	Kg.
HHCS050094EG	1/2" X 15/16"	9.1	4.1
HHCS050119EG	1/2" X 1-3/16"	10.2	4.6
HHCS050150EG	1/2" X 1-1/2"	11.6	5.3
HHCS050175EG	1/2" X 1-3/4"	13.1	5.9
HHCS050200EG	1/2" X 2"	14.6	6.6
HHCS050225EG	1/2" X 2-1/4"	16.0	7.3
HHCS050250EG	1/2" X 2-1/2"	17.5	7.9

HSQN050EG Square Nut

1/2" x 13 thread

Wt./C
5.8 Lbs.
(2.6 kg.)

HHXN050EG Hexagon Nut

1/2" x 13 thread

Wt./C
4.8 Lbs.
(2.2 kg.)

HFLW050EG 1/2" Flat Washer

Wt./C
3.5 Lbs.
(1.6 kg.)

HLKW050EG 1/2" Lock Washer

Wt./C
1.32 Lbs.
(0.6 kg.)

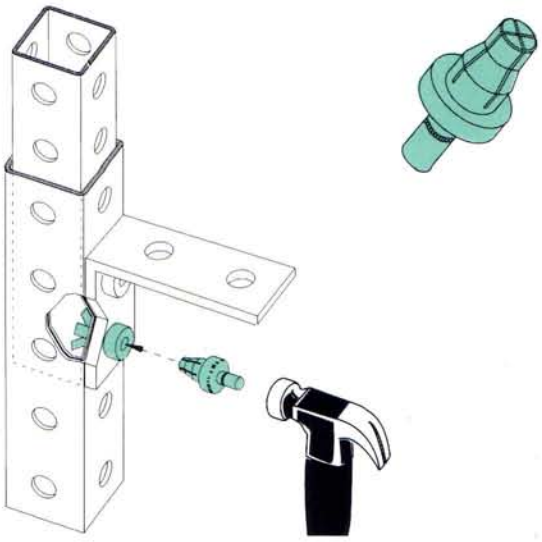
CONNECTION METHODS

Universal Rivet Connection *P9010*

The Telestrut multi-grip rivet was designed specifically for use with the Telestrut system. Rivet fits easily into 9/16" holes and produces a strong, rigid connection in seconds.

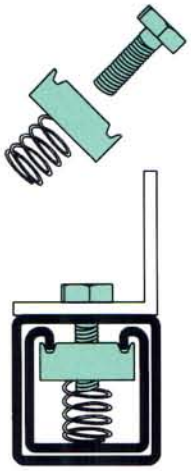
- Multi-grip action—connects two or three pieces.
- Requires just a hammer.
- Allows connection on all four sides of tubing.
- Cuts installation time in half.
- Tamper resistant.
- One-piece design—no separate parts to handle or lose.
- Removable—simply drive pin through rivet and pry out.

Note: Not recommended for use with "slotted" channels or "slotted" fittings.



Unistrut Connection

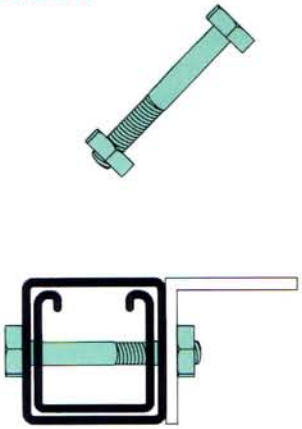
- Insert Unistrut nut anywhere along open channel length.
- Twist nut to align serrated teeth with inturned edges of channel.
- Insert bolt through fitting into nut and tighten for a strong, vise-like connection.



See page 17 for available sizes and styles

Through-Bolt Connection

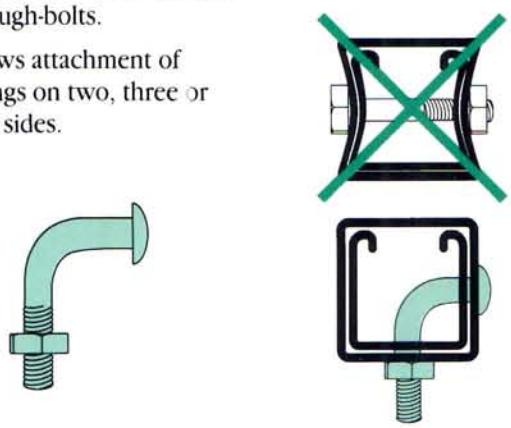
- Uses standard threaded fasteners.
- Connects framing sections and fittings through pre-punched holes.
- Permits true structural connections.



See page 17 for available sizes

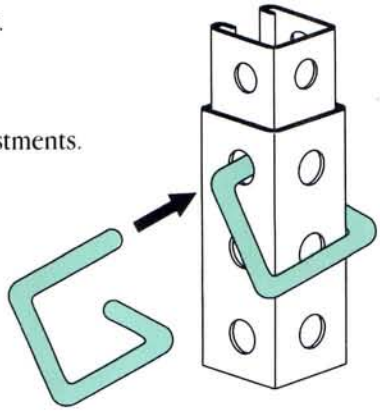
Corner Bolt Connection *P9208*

- Prevents wall-deformation caused by over-torquing of through-bolts.
- Allows attachment of fittings on two, three or four sides.



Gravity Pin Connection *P9209*

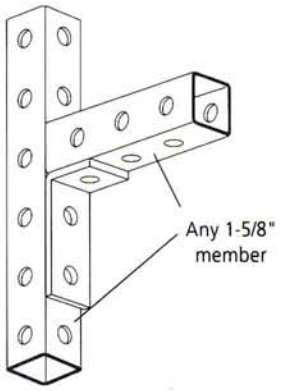
- Fits through aligned holes.
- Locks in place in vertical applications.
- Temporary, secure connections.
- Simple, instant adjustments.



Intersecting Connections

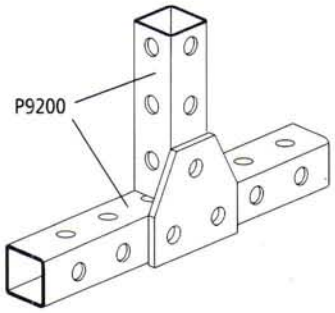
Using 1-5/8" members

Virtually all system fittings are designed to connect a 1-5/8" member to another 1-5/8" member, quickly and easily. **For maximum simplicity and ease of assembly, use 1-5/8" members to form intersecting connections.**



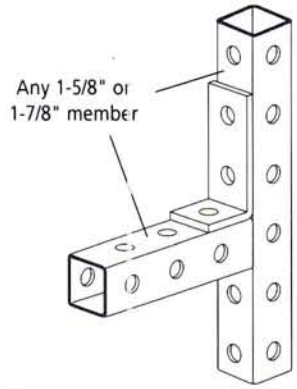
Using 1-7/8" members

There are sixteen fittings designed to facilitate intersecting connections between 1-7/8" tubing members (P9200). **Use 1-7/8" members to form intersecting connections only when 1-5/8" members will not meet specific application requirements.**



Other connections

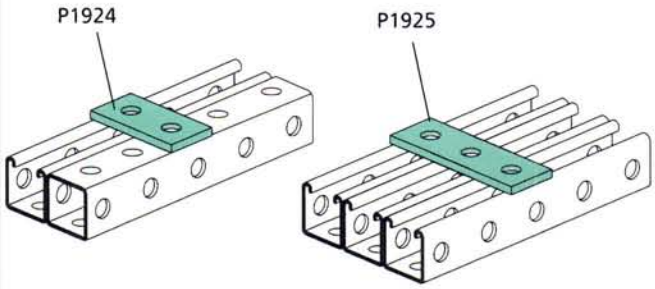
Joining 1-5/8" members to 1-7/8" members is possible. However, cutting requirements will vary considerably, depending on fitting and application. **Careful planning is required when designing intersecting connections incorporating both 1-5/8" and 1-7/8" members.**



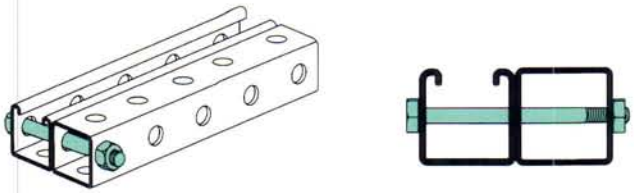
See pages 22 and 23 for complete fitting use and cutting information.

Parallel Connections

Up to three Telestrut 1-5/8" members can be connected side-by-side using the fittings shown below.

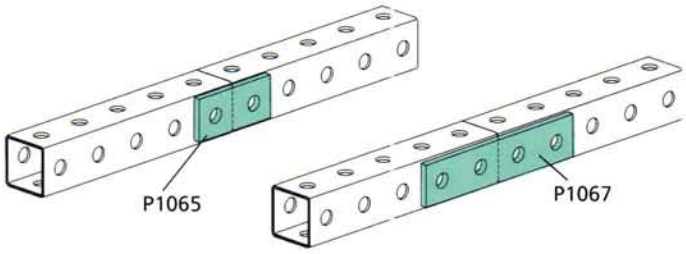


Both 1-5/8" and 1-7/8" sections can also be joined in this way using simple through-bolt connections.

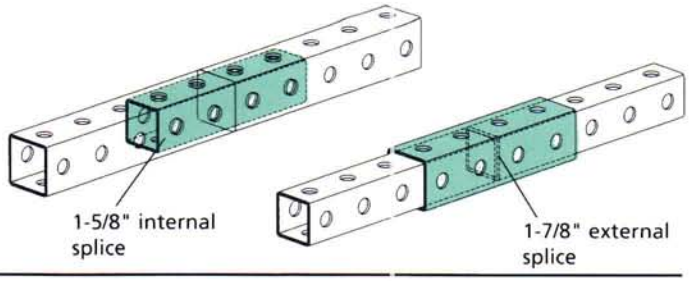


Splice Connections

To splice two same-size sections, use the fittings shown below.

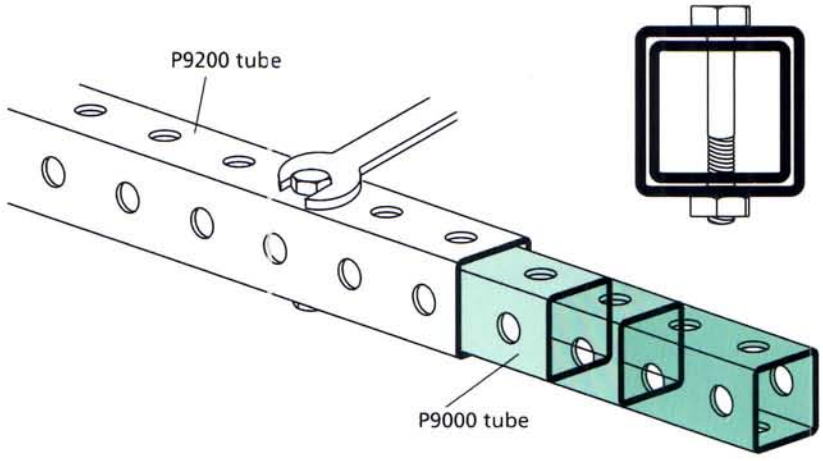


1-7/8" members can also be joined using short sections of 1-5/8" Telestrut material as an internal splice. Similarly, 1-7/8" Telestrut material can be used as an external splice to connect two 1-5/8" members.



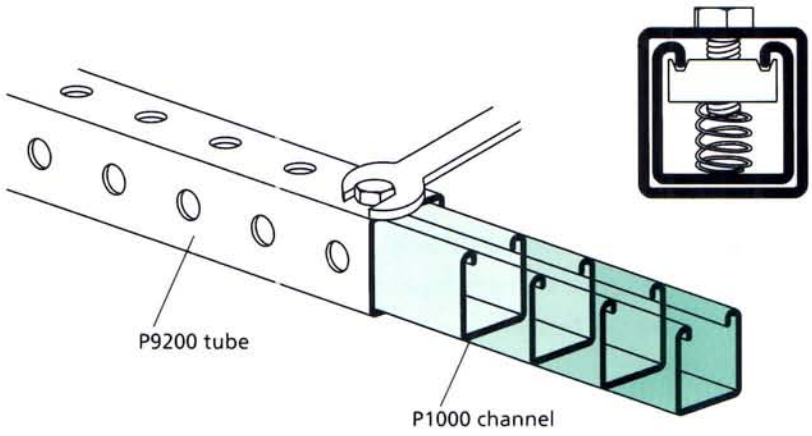
TELESCOPING CONNECTIONS

Accurate Incremental Adjustment



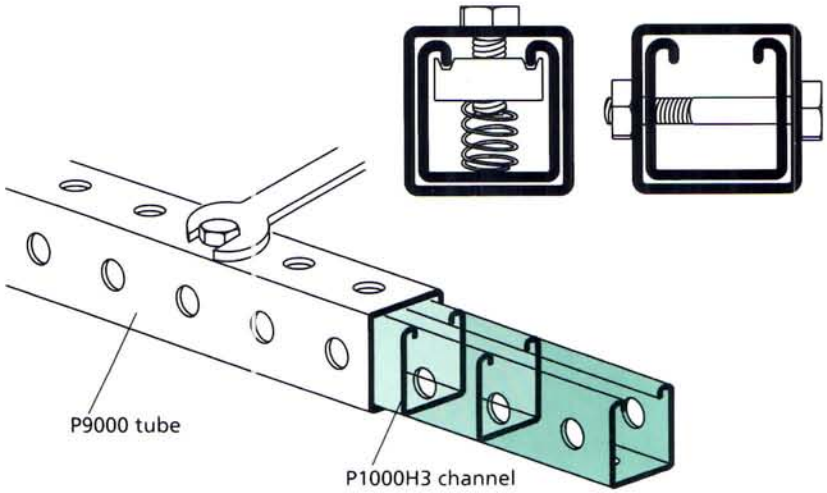
- Just remove nut and bolt, re-align holes to new position and re-connect.

Fast Infinite Adjustment



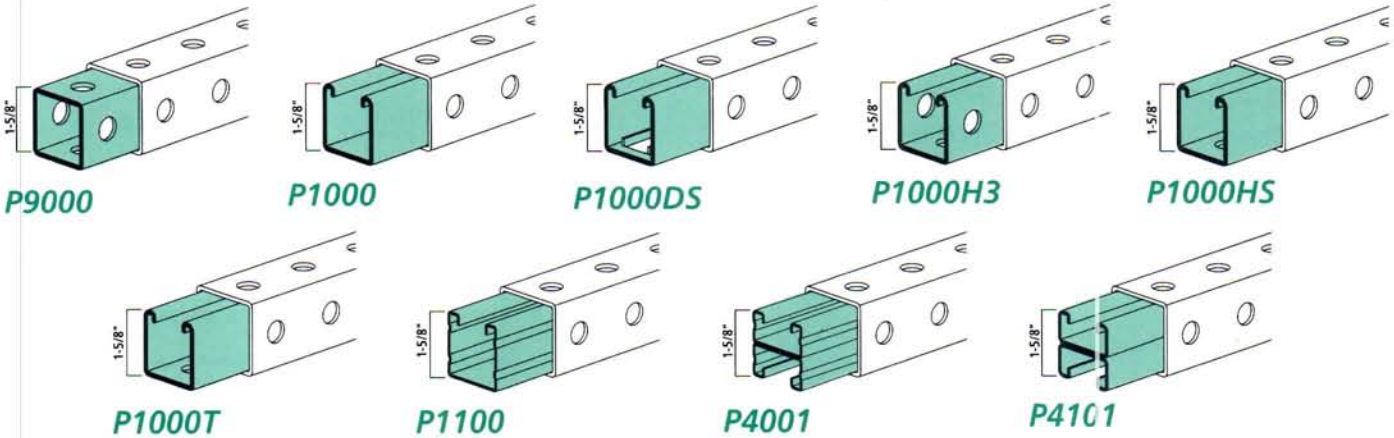
- Simply loosen connection, push bolt down, slide channel to new position and re-tighten.

Combination Incremental and Infinite Adjustment



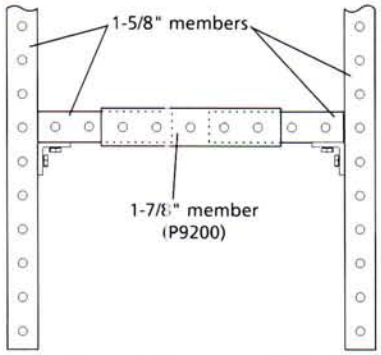
- Using channel with holes as the telescoping member, either incremental or infinite adjustments can be achieved with the same assembly.

Each of the 1-5/8" width sections shown below can be telescoped into P9200 (1-7/8") Telestrut tubing.



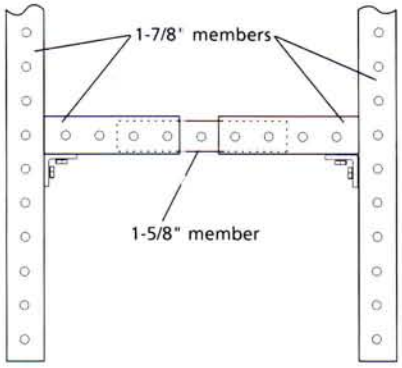
Preferred Three-piece Assembly

In most applications, telescoping assemblies should be made from three sections of Telestrut material. The simplest construction utilizes a center section of 1-7/8" material (P9200) into which a 1-5/8" member is telescoped from each end. In this way, all intersecting verticals and horizontals are formed from 1-5/8" members, assuring maximum compatibility and ease of assembly.



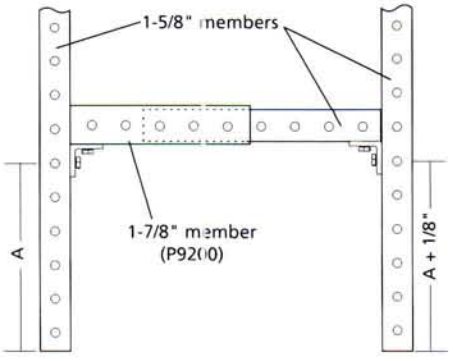
Alternate Three-piece Assembly

Similarly, a center section of 1-5/8" material can be telescoped into 1-7/8" members at both ends. With this method, all intersecting connections should be formed from compatible 1-7/8" members.



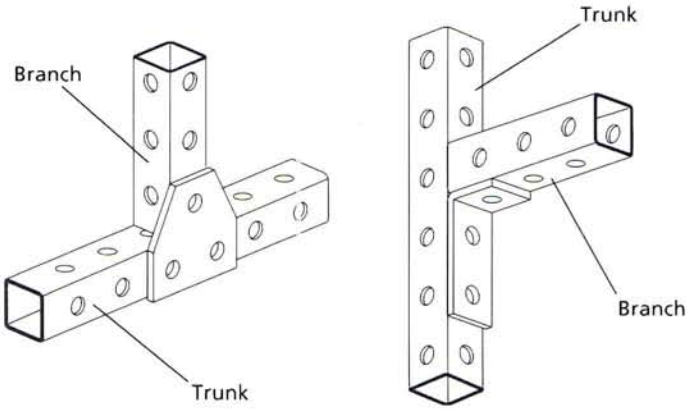
Two Piece Assembly

Two-piece telescoping assemblies can also be used, but special cutting of one or both telescoping members is needed to achieve proper alignment of fittings at intersecting connections. In addition, the right-angle members to which telescoping pieces are attached must be cut according to the illustration at right to assure smooth movement of telescoping members.

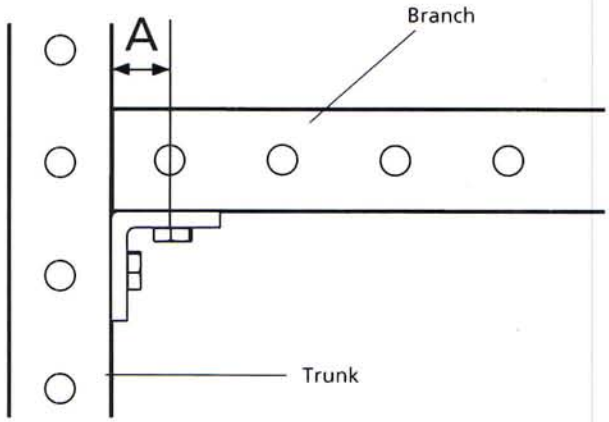


Intersecting Connections

Most system fittings are designed to help you join Telestrut framing members in various intersecting combinations. Any member that terminates into the side of another member is called a "branch." A member to which a "branch" is joined, is called the "trunk."



To connect through holes, fitting and "branch" holes must be aligned by maintaining a specific distance from the "trunk" to the center of the first hole in the "branch." (Dimension "A")

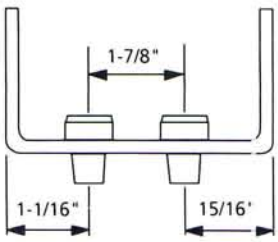


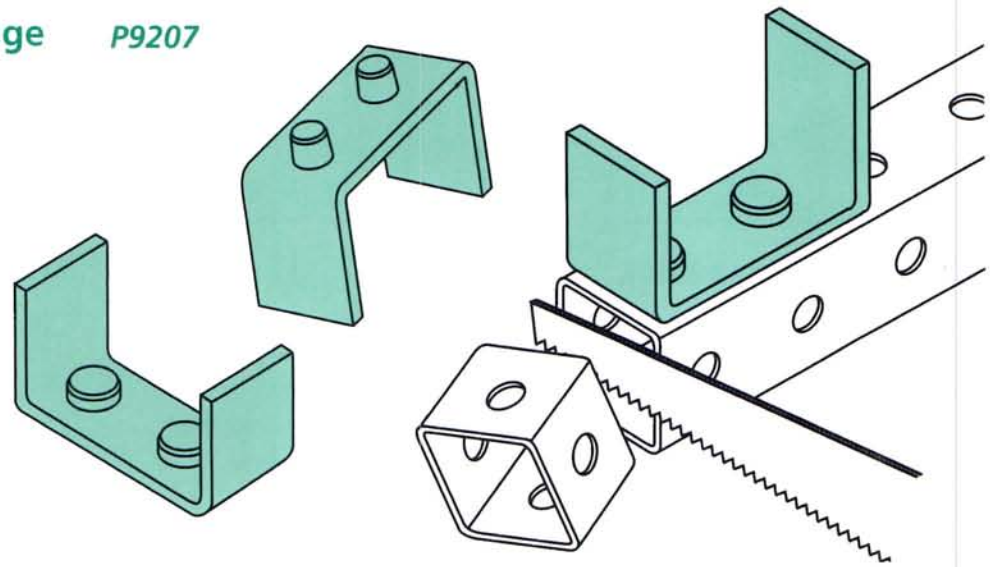
This distance varies, depending on the fitting, as shown in the fitting use and cutting chart on page 23. A simple marking guide, which speeds proper cutting for most fittings, is described below.

When connecting into the open slot of a channel member with a Unistrut spring nut and bolt, no special cutting of the "branch" member is needed.

Cutting Alignment Gauge *P9207*

Assures correct cutting of "branch" members when used with fittings to make connections indicated by shaded areas in chart on page 23.





For fastest, simplest assembly of intersecting connections, use framing members and fittings in combinations indicated by shaded areas. Unshaded areas indicate connections requiring non-standard cutting. NR = NOT RECOMMENDED for this connection. (See fitting application details on pages 10 through 14.)

FITTING NO.	BRANCH CUT DIMENSION "A"* WHEN CONNECTING			
	1⅝" BRANCH TO 1⅝" TRUNK	1⅞" BRANCH TO 1⅝" TRUNK	1⅝" BRANCH TO 1⅞" TRUNK	1⅞" BRANCH TO 1⅞" TRUNK
P1026	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1028	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1029	†	†	†	†
P1031	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1033	15/16" (23.8)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1034	†	†	†	†
P1035	1-1/16" (26.9)	†	†	†
P1036	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1037	†	†	†	†
P1038	†	†	†	†
P1045	†	†	†	†
P1047	†	†	†	†
P1048	†	†	†	†
P1049	†	†	†	†
P1050	†	†	†	†
P1065	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1066	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1068	13/16" (20.6)	NR	NR	NR
P1130	1-1/16" (26.9)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1131	1-1/16" (26.9)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1290	1-1/16" (26.9)	NR	NR	NR
P1291	1-1/16" (26.9)	NR	NR	NR
P1325	1-1/16" (26.9)	NR	NR	NR
P1326	13/16" (20.6)	NR	NR	NR
P1334	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1346	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1347	13/16" (20.6)	NR	NR	NR
P1354	1-1/4" (31.8)	1-1/4" (31.8)	1-1/4" (31.8)	1-1/4" (31.8)
P1356	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1357	1-1/16" (26.9)	NR	NR	NR
P1358	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1359	1-1/16" (26.9)	NR	NR	NR
P1380	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1380 A	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1381	†	†	†	†
P1382	†	†	†	†
P1458	1-1/16" (26.9)	NR	NR	NR
P1498	†	†	†	†
P1499	†	†	†	†
P1538 A	13/16" (20.6)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1538 B	13/16" (20.6)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1538 C	13/16" (20.6)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1538 D	13/16" (20.6)	13/16" (20.6)	1-1/16" (26.9)	1-1/16" (26.9)
P1579	1-1/16" (26.9)	NR	NR	NR

FITTING NO.	BRANCH CUT DIMENSION "A"* WHEN CONNECTING			
	1⅝" BRANCH TO 1⅝" TRUNK	1⅞" BRANCH TO 1⅝" TRUNK	1⅝" BRANCH TO 1⅞" TRUNK	1⅞" BRANCH TO 1⅞" TRUNK
P1713	†	†	†	†
P1726	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1727	15/16" (23.8)	NR	NR	NR
P1728	†	†	†	†
P1747	†	†	†	†
P1750	†	†	†	†
P1821	†	†	†	†
P1822	†	†	†	†
P1823	†	†	†	†
P1843	1-1/4" (31.8)	1-1/4" (31.8)	1-1/4" (31.8)	1-1/4" (31.8)
P1873	†	†	†	†
P1934	†	NR	NR	NR
P1941	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1950	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1953	1-1/16" (26.9)	15/16" (23.8)	1-1/16" (26.9)	1-1/16" (26.9)
P1956	†	†	†	†
P1957	†	†	†	†
P2223	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2224	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2225	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2226	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2227	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2228	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2229	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2230	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2235	1-1/16" (26.9)	NR	NR	NR
P2245	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2324	5/8 on C/L for 45°	7/16 on C/L for 45°	NR	NR
P2325	5/8 on C/L for 45°	7/16 on C/L for 45°	1-1/16" (26.9)	1-1/16" (26.9)
P2326	5/8 on C/L for 45°	7/16 on C/L for 45°	NR	NR
P2341 R-L	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2343 R-L	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2344 R-L	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2345	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2346	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2347	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2348	1-1/16" (26.9)	NR	NR	1-1/16" (26.9)
P2472 R-L	13/16" (20.6)	NR	NR	1-1/16" (26.9)
P2815	13/16" (20.6)	NR	NR	NR
P2815 D	13/16" (20.6)	NR	NR	NR
P9324	1-5/32" (26.6)	1-5/32" (26.6)	1-5/32" (26.6)	1-5/32" (26.6)
P9325	1-1/16" (26.9)	1-1/16" (26.9)	1-1/16" (26.9)	1-1/16" (26.9)
P9484	1-1/16" (26.9)	1-1/16" (26.9)	1-1/16" (26.9)	1-1/16" (26.9)

***Distance required from end of branch section to center of first hole to assure proper hole alignment between fitting and connecting sections.**
† Special cutting required. See individual part drawing.

MATERIALS & FINISHES

Telestrut sections are made from raw steel conforming to the following ASTM specifications:

GAGE	FINISH	ASTM NO.
12	GR & PL	A570 GR 33
	PG	A446 GR A
14	GR & PL	A570 GR 33
	PG	A446 GR A
16	GR & PL	A366
	PG	A446 GR A

SQUARE TUBING TOLERANCE (P9000, P9200)

SIZE TOLERANCE

Nominal Outside Dimension	Outside Tolerance for All Sides at Corners
1 5/8" x 1 5/8"	+/- .008"
1 7/8" x 1 7/8"	+/- .008"

WALL THICKNESS TOLERANCE - Permissible variation in wall thickness is +.011 - .005 inch.

CONVEXITY AND CONCAVITY - Measured in the center of the flat side, tolerance is +/- .010 inch applied to the specific size determined at the corner.

SQUARENESS AND TWIST

Nominal Outside Dimension	Squareness Tolerance*	Twist Permissible In 3 ft.†
1 5/8" x 1 5/8"	+/- .010"	.062"
1 7/8" x 1 7/8"	+/- .012"	.062"

* Tubing may have adjacent sides failing to be 90° to each other by tolerance listed.

† Twist is measured by holding down the edge to one end of a square tube on a surface plate with the bottom side of the tube parallel to the surface plate, and noting the height that either corner on the opposite end of the bottom side is above the surface plate.

STRAIGHTNESS TOLERANCE - Permissible variation in straightness is 1/16" in 3 feet.

CORNER RADII - Standard corner radius is 5/32" +/- 1/64"

TELESCOPING TOLERANCE - Using 12 gauge (.105) channel, sections shall telescope freely for six feet. Tube-to-tube connections shall telescope freely for ten feet.

LENGTH TOLERANCE - To allow for subsequent cutting, standard length members are 3/8" +/- 1/8" longer.

HOLE TOLERANCE - Tolerance on hole size is +/- 1/64" on a 9/16" hole size. Tolerance on hole spacing is +/- 1/8" in 20 feet.

FITTINGS

System fittings, unless noted otherwise, are punch-press made from hot rolled, pickled and oiled steel plates, strip or coil, and conform to ASTM specifications A575, A576, A635 or A36. The fitting steel also meets the physical requirement of ASTM A570 GR 33. The pickling of the steel produces a smooth surface free from scale.

NUTS AND BOLTS

Nuts designed for use in channel sections are made from steel bars. After all machining operations are complete, they are thoroughly case hardened. Nuts are rectangular with ends shaped to permit a quarter turn clockwise in the channel framing member after insertion through the slotted opening. Two toothed grooves in the top of the nut engage the inturned edges of the channel and, after bolting operations are completed, will prevent any movement of the bolt and nut within the framing member. All bolts and nuts have Unified and American coarse screw threads. The standard framing nut is 1/2" and conforms to ASTM Specification A576 GR 1015 (material only). Screws conform to SAE J429 GR 2 (also meets and exceeds ASTM A307).

FINISHES

PERMA-GREEN® II (GR)

The standard finish on Telestrut components is Perma-Green II, a factory-applied, electrodeposition acrylic coating with superior rust protection and fade-resistance. The acrylic coating is a water-base proprietary formulation and is essentially *"heavy-metal"* free. The electrodeposition coating process provides a smooth, hard, durable surface which is completely cured. This inhibits introduction of airborne contaminates which can adversely affect sensitive manufacturing environments. Before the electrodeposition acrylic coating is applied, Unistrut channel and fittings are thoroughly cleaned and coated with iron phosphate conversion coating. Unistrut's unique, custom-designed "prep" process consists of eight separate steps, the most thorough in the industry. The cleaning, phosphating and electrodeposition coating processes are continuous and, unlike "batch" processing, result in a uniform quality coating.

Production samples are tested on a continuous basis for corrosion resistance. Unistrut Perma-Green II exceeds 400 hours salt spray (1/8" creep from scribe) when tested to ASTM B117. Unscribed samples exceed 600 hours salt spray.

ELECTRO-GALVANIZED (EG)

Electro-galvanized parts, screws and nuts are coated with zinc electrolytically to commercial standards (ASTM - B633 Type III SC1).

PLAIN (PL)

Plain finish designation means that the channel or tubing retains the oiled surface applied to the raw steel during the rolling process. The fittings have the original oiled surface of the bar-stock material.

PRE-GALVANIZED (PG)

This finish option means that the material (steel strip) is coated with zinc by hot-dip process prior to roll- forming or press operations. The zinc coating weight is G90 conforming to ASTM Specification A525.

WEIGHTS AND DIMENSIONS

Weights given for all materials are approximate shipping weights. All dimensions subject to commercial tolerance within published specifications. Metric dimensions are shown in millimeters, unless otherwise noted.

WE RESERVE THE RIGHT TO MAKE SPECIFICATION CHANGES WITHOUT NOTICE.

WHILE EVERY EFFORT HAS BEEN MADE TO ASSURE THE ACCURACY OF INFORMATION CONTAINED IN THIS CATALOG AT THE TIME OF PUBLICATION, WE CANNOT ACCEPT RESPONSIBILITY FOR INACCURACIES RESULTING FROM UNDETECTED ERRORS OR OMISSIONS.

Individual members not telescoped

24" (610mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	1690	7.5	0.06	1	1690	7.5	9500	42.3	3400	15.1
P1000DS	1180	5.2	0.06	1	1180	5.3	*	*	*	*
P1000H3	1520	6.8	0.06	1	1520	6.8	*	*	*	*
P1000HS	1520	6.8	0.06	1	1520	6.8	*	*	*	*
P1000T	1440	6.4	0.06	1	1440	6.4	*	*	*	*
P1100	1390	6.2	0.06	1	1390	6.2	7090	31.5	2720	12.1
P4001	690†	3.1	0.04	1	690	3.1	9800	43.6	2650	11.8
P4101	910†	4.0	0.05	1	910	4.0	11720	52.1	3030	13.5
P9000	1690	7.5	0.06	1	1690	7.5	8140	36.2	3420	15.2
P9200	2490	11.1	0.05	1	2490	11.1	10450	46.5	4420	19.7

36" (914mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	1130	5.0	0.13	3	1130	5.0	7400	32.9	3000	13.3
P1000DS	790	3.5	0.13	3	790	3.5	*	*	*	*
P1000H3	1020	4.5	0.13	3	1020	4.5	*	*	*	*
P1000HS	1020	4.5	0.13	3	1020	4.5	*	*	*	*
P1000T	960	4.3	0.13	3	960	4.3	*	*	*	*
P1100	930	4.1	0.13	3	930	4.1	5190	23.1	2330	10.4
P4001	690†	3.1	0.14	4	690	3.1	8980	39.9	2440	10.9
P4101	790	3.5	0.14	4	790	3.5	10680	47.5	2790	12.4
P9000	1120	5.0	0.14	4	1120	5.0	7810	34.7	3240	14.4
P9200	1660	7.4	0.12	3	1660	7.4	10130	45.1	4240	18.9

48" (1219mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	850	3.8	0.22	6	760	3.4	5530	24.6	2570	11.4
P1000DS	590	2.6	0.22	6	530	2.4	*	*	*	*
P1000H3	760	3.4	0.22	6	680	3.0	*	*	*	*
P1000HS	760	3.4	0.22	6	680	3.0	*	*	*	*
P1000T	720	3.2	0.22	6	640	2.8	*	*	*	*
P1100	700	3.1	0.23	6	610	2.7	3540	15.7	1890	8.4
P4001	520	2.3	0.25	6	410	1.8	7830	34.8	2200	9.8
P4101	590	2.6	0.25	6	470	2.1	9210	41.0	2500	11.1
P9000	840	3.7	0.25	6	670	3.0	7350	32.7	3010	13.4
P9200	1240	5.5	0.22	6	1140	5.1	9700	43.1	4010	17.8

* Consult factory

† Load limited by spot weld shear

ENGINEERING DATA

Individual members not telescoped

60" (1524mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	680	3.0	0.35	9	490	2.2	4390	19.5	2230	9.9
P1000DS	470	2.1	0.35	9	340	1.5	*	*	*	*
P1000H3	610	2.7	0.35	9	440	2.0	*	*	*	*
P1000HS	610	2.7	0.35	9	440	2.0	*	*	*	*
P1000T	580	2.6	0.35	9	410	1.8	*	*	*	*
P1100	560	2.5	0.36	9	390	1.7	2690	12.0	1590	7.1
P4001	420	1.9	0.40	10	260	1.2	6350	28.2	1920	8.5
P4101	470	2.1	0.39	10	300	1.3	7330	32.6	2180	9.7
P9000	670	3.0	0.39	10	430	1.9	6760	30.1	2750	12.2
P9200	1000	4.4	0.34	9	730	3.2	9130	40.6	3740	16.6

72" (1829mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	560	2.5	0.50	13	340	1.5	3680	16.4	1970	8.8
P1000DS	400	1.8	0.50	13	240	1.1	*	*	*	*
P1000H3	500	2.2	0.50	13	300	1.3	*	*	*	*
P1000HS	500	2.2	0.50	13	300	1.3	*	*	*	*
P1000T	480	2.1	0.50	13	290	1.3	*	*	*	*
P1100	460	2.0	0.51	13	270	1.2	2210	9.8	1390	6.2
P4001	350	1.6	0.57	15	180	0.8	4620	20.6	1630	7.3
P4101	390	1.7	0.56	14	210	0.9	5240	23.3	1840	8.2
P9000	560	2.5	0.56	14	300	1.3	6040	26.9	2470	11.0
P9200	830	3.7	0.49	12	510	2.3	8450	37.6	3440	15.3

84" (2134mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	480	2.1	0.68	17	250	1.1	3170	14.1	1760	7.8
P1000DS	340	1.5	0.68	17	170	0.8	*	*	*	*
P1000H3	430	1.9	0.68	17	220	1.0	*	*	*	*
P1000HS	430	1.9	0.68	17	220	1.0	*	*	*	*
P1000T	410	1.8	0.68	17	210	0.9	*	*	*	*
P1100	400	1.8	0.70	18	200	0.9	1890	8.4	1230	5.5
P4001	300	1.3	0.78	20	140	0.6	3400	15.1	1370	6.1
P4101	340	1.5	0.78	20	150	0.7	3850	17.1	1550	6.9
P9000	480	2.1	0.77	19	220	1.0	5190	23.1	2180	9.7
P9200	710	3.2	0.67	17	370	1.6	7630	33.9	3130	13.9

* Consult factory

Individual members not telescoped

96" (2438mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	420	1.9	0.89	23	190	0.8	2270	12.3	1580	7.0
P1000DS	300	1.3	0.89	23	130	0.6	*	*	*	*
P1000H3	380	1.7	0.89	23	170	0.8	*	*	*	*
P1000HS	380	1.7	0.89	23	170	0.8	*	*	*	*
P1000T	360	1.6	0.89	23	160	0.7	*	*	*	*
P1100	350	1.6	0.92	23	150	0.7	1650	7.3	1100	4.9
P4001	260	1.2	1.01	26	100	0.4	2600	11.5	1170	5.2
P4101	300	1.3	1.03	26	120	0.5	2950	13.1	1320	5.9
P9000	420	1.9	1.00	25	170	0.8	4210	18.7	1890	8.4
P9200	620	2.8	0.87	22	280	1.2	6690	29.3	2810	12.5

108" (2743mm) BEAM SPAN OR UNBRACED HEIGHT

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	TOTAL MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	380	1.7	1.14	29	150	0.7	2450	10.9	1430	6.4
P1000DS	260	1.2	1.14	29	100	0.4	*	*	*	*
P1000H3	340	1.5	1.14	29	130	0.6	*	*	*	*
P1000HS	340	1.5	1.14	29	130	0.6	*	*	*	*
P1000T	320	1.4	1.14	29	130	0.6	*	*	*	*
P1100	310	1.4	1.16	29	120	0.5	1470	6.5	1000	4.4
P4001	230	1.0	1.27	32	80	0.4	2050	9.1	1010	4.5
P4101	260	1.2	1.27	32	90	0.4	2330	10.4	1140	5.1
P9000	370	1.6	1.25	32	130	0.6	3300	14.8	1630	7.3
P9200	550	2.4	1.10	28	220	1.0	5630	25.0	2490	11.1

120" (3048mm) BEAM SPAN OR UNBRACED HEIGHT

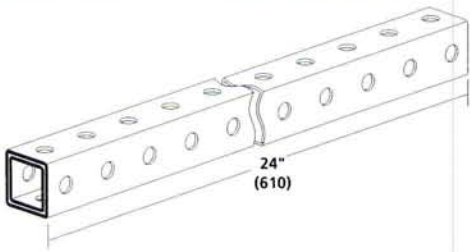
CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ C.G. (Lbs.)	(kN.)	MAX. LOAD OF COLUMN LOADED @ SLOT FACE (Lbs.)	(kN.)
P1000	340	1.5	1.40	36	120	0.5	2180	9.7	1290	5.7
P1000DS	240	1.1	1.40	36	80	0.4	*	*	*	*
P1000H3	300	1.3	1.40	36	110	0.5	*	*	*	*
P1000HS	300	1.3	1.40	36	110	0.5	*	*	*	*
P1000T	290	1.3	1.40	36	100	0.4	*	*	*	*
P1100	280	1.2	1.43	36	100	0.4	1330	5.9	910	4.0
P4001	210	0.9	1.59	40	70	0.3	—	—	—	—
P4101	240	1.1	1.61	41	70	0.3	—	—	—	—
P9000	340	1.5	1.58	40	110	0.5	2690	12.0	1410	6.3
P9200	500	2.2	1.37	35	180	0.8	4570	20.3	2180	9.7

* Consult factory

Members telescoped in combination with P9200

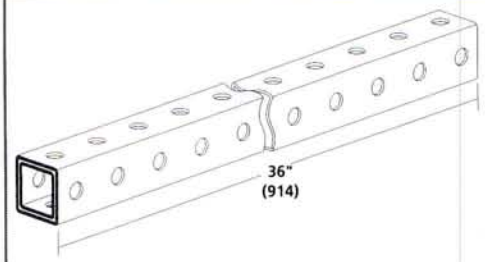
24" (610mm) BEAM SPAN (For Column Loading Data Consult Factory)

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	LOAD DATA BASED ON TELESCOPING MEMBERS OF EQUAL LENGTH, AS SHOWN BELOW
P1000	4150	18.5	0.05	1.3	4150	18.5	
P1000DS	3650	16.2	0.05	1.3	3650	16.2	
P1000H3	3980	17.7	0.05	1.3	3980	17.7	
P1000HS	3980	17.7	0.05	1.3	3980	17.7	
P1000T	3900	17.3	0.05	1.3	3900	17.3	
P1100	3820	17.0	0.05	1.3	3820	17.0	
P4001	3180	14.1	0.04	1.0	3180	14.1	
P4101	3400	15.1	0.05	1.3	3400	15.1	
P9000	3960	17.6	0.05	1.3	3960	17.6	



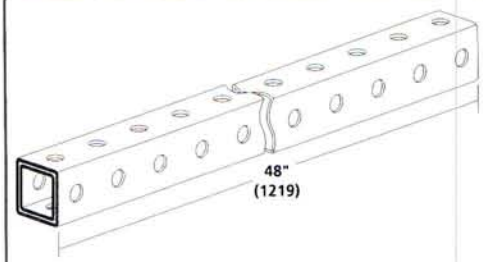
36" (914mm) BEAM SPAN (For Column Loading Data Consult Factory)

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	LOAD DATA BASED ON TELESCOPING MEMBERS OF EQUAL LENGTH, AS SHOWN BELOW
P1000	2760	12.3	0.12	3.0	2760	12.3	
P1000DS	2430	10.8	0.12	3.0	2430	10.8	
P1000H3	2650	11.8	0.12	3.0	2650	11.8	
P1000HS	2650	11.8	0.12	3.0	2650	11.8	
P1000T	2600	11.6	0.12	3.0	2600	11.6	
P1100	2550	11.3	0.12	3.0	2550	11.3	
P4001	2260	10.1	0.12	3.0	2260	10.1	
P4101	2340	10.4	0.12	3.0	2340	10.4	
P9000	2640	11.7	0.12	3.0	2640	11.7	



48" (1219mm) BEAM SPAN (For Column Loading Data Consult Factory)

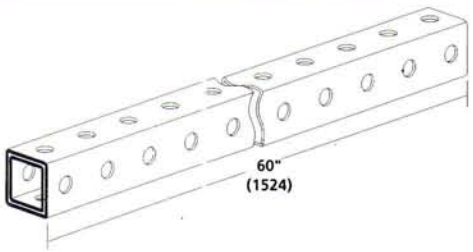
CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	LOAD DATA BASED ON TELESCOPING MEMBERS OF EQUAL LENGTH, AS SHOWN BELOW
P1000	2070	9.2	0.22	5.6	2070	9.2	
P1000DS	1820	8.1	0.22	5.6	1820	8.1	
P1000H3	1990	8.9	0.22	5.6	1990	8.9	
P1000HS	1990	8.9	0.22	5.6	1990	8.9	
P1000T	1950	8.7	0.22	5.6	1950	8.7	
P1100	1910	8.5	0.22	5.6	1910	8.5	
P4001	1700	7.6	0.22	5.6	1700	7.6	
P4101	1760	7.8	0.22	5.6	1760	1.8	
P9000	1980	8.8	0.22	5.6	1980	8.8	



Members telescoped in combination with P9200

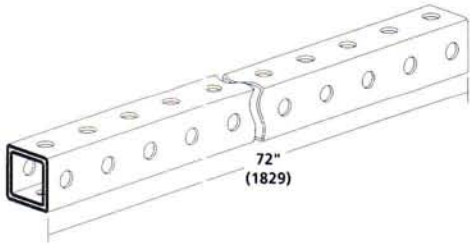
60" (1524mm) BEAM SPAN (For Column Loading Data Consult Factory)

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	LOAD DATA BASED ON TELESCOPING MEMBERS OF EQUAL LENGTH, AS SHOWN BELOW
P1000	1660	7.4	0.34	8.6	1210	5.4	
P1000DS	1460	6.5	0.34	8.6	1070	4.8	
P1000H3	1590	7.1	0.34	8.6	1170	5.2	
P1000HS	1590	7.1	0.34	8.6	1170	5.2	
P1000T	1560	6.9	0.34	8.6	1140	5.1	
P1100	1530	6.8	0.34	8.6	1120	5.0	
P4001	1360	6.0	0.34	8.6	990	4.4	
P4101	1400	6.2	0.34	8.6	1030	4.6	
P9000	1580	7.0	0.34	8.6	1160	5.2	



72" (1829mm) BEAM SPAN (For Column Loading Data Consult Factory)

CHANNEL	MAX. ALLOWABLE UNIFORM LOAD (Lbs.)	(kN.)	DEFLECTION AT UNIFORM LOAD (In.)	(mm)	TOTAL UNIFORM LOAD @ DEFLECTION 1/240 SPAN (Lbs.)	(kN.)	LOAD DATA BASED ON TELESCOPING MEMBERS OF EQUAL LENGTH, AS SHOWN BELOW
P1000	1380	6.1	0.49	12.4	840	3.7	
P1000DS	1220	5.4	0.49	12.4	740	3.3	
P1000H3	1330	5.9	0.49	12.4	810	3.6	
P1000HS	1330	5.9	0.49	12.4	810	3.6	
P1000T	1300	5.8	0.49	12.4	790	3.5	
P1100	1270	5.6	0.49	12.4	780	3.5	
P4001	1130	5.0	0.49	12.4	690	3.1	
P4101	1170	5.2	0.49	12.4	710	3.2	
P9000	1320	5.9	0.49	12.4	800	3.6	



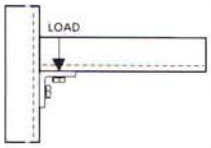
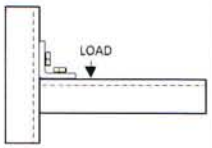
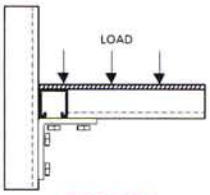
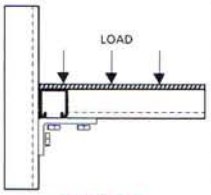
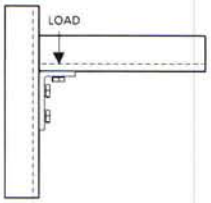
ELEMENTS OF SECTION

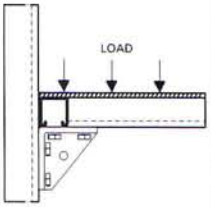
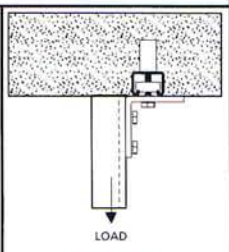
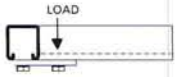
SECTION	WT./FT. Lbs.	Wt./M kN	AREAS OF SECTION Sq. In.	Sq. cm	ALLOWABLE MOVEMENT Sq. In.	Sq.cm	AXIS 1 - 1 I In.⁴	I cm⁴	S In.³	S cm³	r In.	r cm	AXIS 2 - 2 I In.⁴	I cm⁴	S In.³	S cm³	r In.	r cm
P1000	1.90	2.8	0.556	3.6	5080	570	0.185	7.7	0.202	3.3	0.577	1.5	0.236	9.8	0.290	4.7	0.651	1.7
P1000DS	1.33	2.0	0.389	2.5	3556	399	0.129	5.4	0.141	2.3	–	–	–	–	–	–	–	–
P1000H3	1.71	2.5	0.500	3.2	4572	513	0.167	6.9	0.182	3.0	–	–	–	–	–	–	–	–
P1000HS	1.71	2.5	0.500	3.2	4572	513	0.167	6.9	0.182	3.0	–	–	–	–	–	–	–	–
P1000T	1.62	2.4	0.473	3.1	4318	485	0.157	6.5	0.172	2.8	–	–	–	–	–	–	–	–
P1100	1.42	2.1	0.417	2.7	4170	470	0.149	6.2	0.166	2.7	0.597	1.5	0.183	7.6	0.225	3.7	0.662	1.7
P4001	1.64	2.4	0.478	310	3140	350	0.101	4.2	0.125	2.0	0.460	1.2	0.182	7.6	0.224	3.7	0.617	1.6
P4101	.97	1.4	0.574	3.7	1330	150	0.114	4.7	0.141	2.3	0.447	1.1	0.212	8.8	0.261	4.3	0.609	1.5
P9000	2.05	3.1	0.384	2.5	5060	570	0.164	6.8	0.203	3.3	0.653	1.7	0.164	6.8	0.203	3.3	0.653	1.7
P9200	2.23	3.3	0.489	3.2	7470	840	0.278	11.6	0.297	4.9	0.754	1.9	0.278	11.6	0.297	4.9	0.754	1.9

Note: For effective "I" and "S" of telescoped sections, add value for P9200 section to $\left(\frac{\Delta \text{ Pxxx}}{\Delta \text{ P9200}}\right)$ Pxxx value.

DESIGN LOAD DATA

Design load data for 1-5/8" (41mm) channels

90° Fittings (When used in position shown with channel nuts and bolts.)										
Material Thickness	 P1026		 P1026		 P1325 P2235		 P1458 P1579		 P1346	
	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.
12 ga. (2.7)	1500	6.7	1000	4.4	2000	8.9	1500	6.7	2000	8.9
14 ga. (1.9)	1000	4.4	650	2.9	2000	8.9	1000	4.4	1500	6.7
16 ga. (1.5)	750	3.3	500	2.2	1500	6.7	1000	4.4	900	4.0

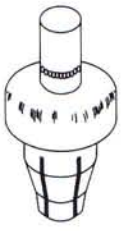
90° Fittings (When used in position shown with channel nuts and bolts.)									Flat Plate Fittings	
Material Thickness	 P2484		 P1068		 P1326		 P1346		 P1065	
	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.	Lbs.	kN.
12 ga. (2.7)	3000	13.3	500	2.2	500	2.2	1200	5.3	1000	4.4
14 ga. (1.9)	2000	8.9	500	2.2	500	2.2	1200	5.3	800	3.6
16 ga. (1.5)	1500	6.7	500	2.2	500	2.2	1000	4.4	600	2.7

Both ends of beams supported.
Load diagrams indicate up to three design loads: one for 12 gauge sections (P1000), one for 14 gauge sections (P1100), one for 16 gauge sections (P4001).
Load data is based on P1010 nut and 1/2" bolt.
Safety factor = 2-1/2 based on ultimate strength of connection.
For loads based on other connection methods, consult factory.

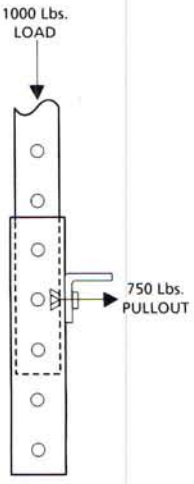
Maximum allowable pull-out and slip loads for 1/2"–13 channel nut

Channel Section	Allowable Pull-Out Strength Lbs.	kN.	Resistance to Slip Lbs.	kN.	Torque Ft. Lbs.	N•m
12 Gauge P1000, P1000DS, P1000H3, P1000HS, P1000T	2000	8.9	1500	6.7	50	70
14 Gauge P1100, P4101	1400	6.2	1000	4.4	50	70
16 Gauge P4001	1000	4.4	1000	4.4	50	70

Shear strength and pull-out for multi-grip rivet



Note: Use in round holes only.



PART NUMBER INDEX

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