



Champion Strut[®]



Champion Strut
High Quality Mechanical Support
Accessory Product Catalogue



TABLE OF CONTENTS

Introduction	2
Specification	3
Channels	4 - 9
Flat Plate Fittings	11 - 12
90 Degree Angle Fittings	13 - 14
Z And U Fittings	15
Wing Fittings	16
Angular Fittings	17
Clevis And Brace Fittings	18
Cantilever Arm	19
Post Base	20
Channels Nuts And Hardware	21 - 22

*This catalogue is not intended to show the complete Champion Strut line of fittings and accessories, but rather to illustrate the most commonly used items.

INTRODUCTION

Company

Chakri Steel Corporation Pte Ltd is one of the leading companies in Southeast Asia that provides a “One-Stop” solution for the import and export of steel.

It is a subsidiary of BLM8 Group of Companies which holds portfolios in *Marine, Oil and Gas, Calibration Lab, Construction, Electrical and Mechanical, Landscaping and F&B* chains.

With over 35 years of undaunting experience in steel business, the directors of **Chakri Steel Corporation Pte Ltd** continues to build on its success as one of the leading steel retailer equipped with extensive network of buyers from Singapore, Malaysia, Indonesia, Myanmar and Philippines.

With operations spanning across the region, the Group has an annual steel stock capacity of 30 thousand tonnes.

As a premier steel stockist, with warehouses measuring 4 acres across in Myanmar's industrial heart, Singapore, Malaysia and Philipines, we offer competitively-priced and extensive product portfolio with a range of steel products for all industries. We provide high grade steel for oil and gas industry and as for medical tool manufacturing.

Chakri Steel Corporation Pte Ltd offers a series of comprehensive distribution-related services including wholesale activity, retailing, trading, sourcing of products for customers and distributing to ASEAN countries. The company has a net worth of US\$60 million and is set on becoming a global steel juggernaut.

Metal Framing

Champion Strut metal framing system, **Chakri Steel Corporation Pte Ltd** iconic product provides continuous channel suspension from the planning stages to the actual construction in less time with less effort.

With **Champion Strut** channel and fittings, light-weight suspension systems can be speedily erected in an unlimited variety of styles to meet all structural requirement, providing a firm anchorage in any type of structure for pipe hangers and supports

SPECIFICATIONS

Channels

Champion Strut Systems are manufactured according to BS6946 : 1988

The load are calculated in accordance with BS5950 Part 5 : 1988

Materials

Material : Hot Rolled Low Carbon Steel using material formed by BS1449 : 1991 or BS EN 10149 - 3 and minimum yield stress FY = 260Mpa

Thickness : 2.0mm ~ 2.5mm

Standard Length : 3.0M / 6.0M (non standart length available upon request).

Standard Finish : Steel Strut channels and fittings are Hot-Dipped-Galvanized after fabrication and conform to BS EN ISO 1461

Others Finish : Pre-Galvanized BS EN 10147 - 1992 / Electro Zinc Plated BS1706 or BS3382 Part 2

Special Coating : Paint, epoxy Powder Coat, Polyurethane Powder Coating can be supplied to your specifications.

Fittings

The fittings, unless noted otherwise, are punch press formed from low carbon steel plates or strip according to BS6946 : 1988

Others

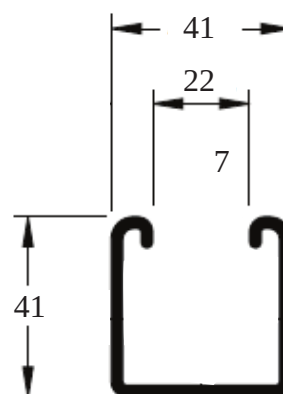
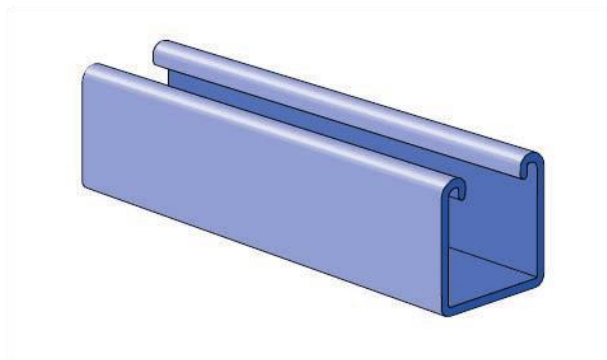
Please take special note to observe the following symbols when specifying the product finish. The symbols should be use on the end of all product codes to determine the precise finish.

ZP : Zinc Plated

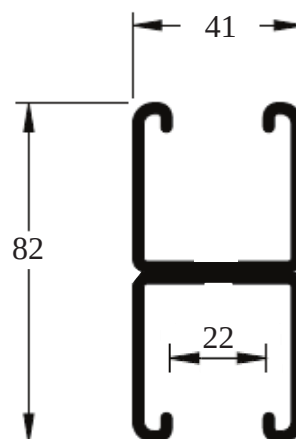
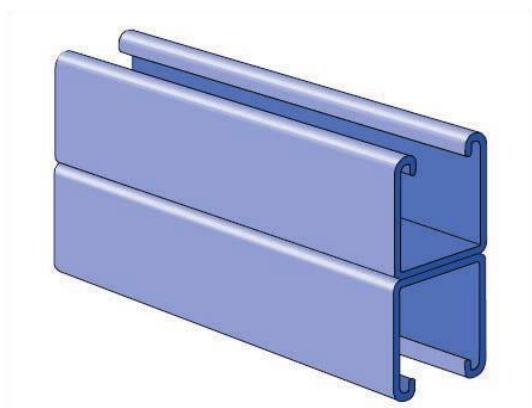
PG : Pre-Galvanised Steed

HDG : Hot Dip Galvanised

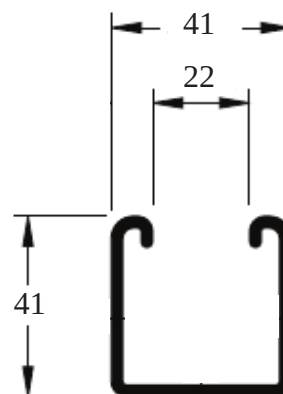
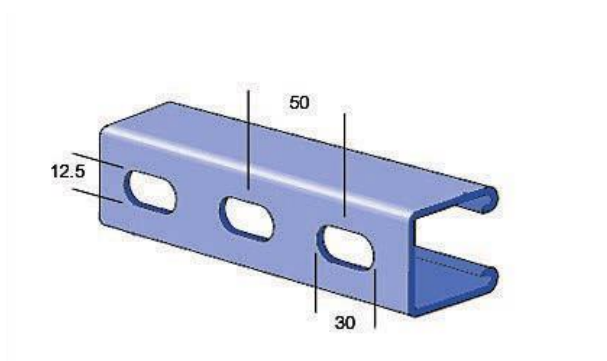
SS : Stainless Steel, specify either grade 304 or 316



CS2541 - Dimension: 41mm x 41mm
Weight: 2.60kg/M Thickness: 2.5mm



CS2541BB - Dimension: 41mm x 82mm
Weight: 5.20kg/M Thickness: 2.5mm

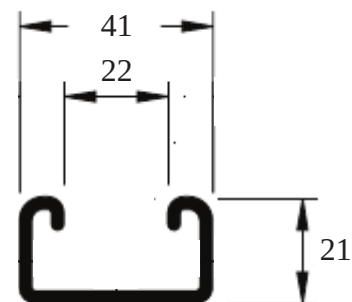
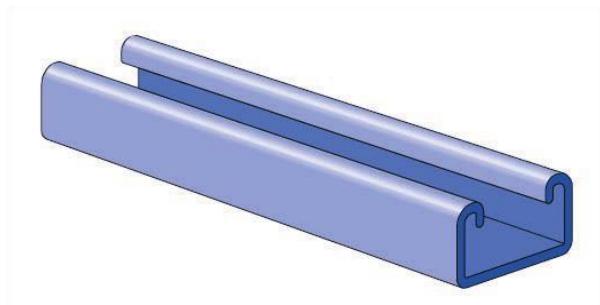


CS2541SL - Dimension: 41mm x 41mm
Weight: 2.50kg/M Thickness: 2.5mm

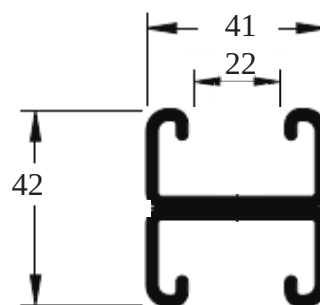
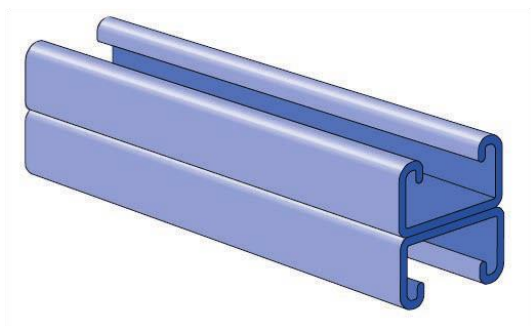
CS2541					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
	Kg	Kn		Kg	Kn
mm			mm		
500	925	9.06	1.00	5000	49.00
1000	460	4.50	4.00	3340	32.73
1500	300	2.94	8.95	2500	24.50
2000	230	2.25	15.90	2000	19.59
2500	185	1.81	24.85	1670	16.36
3000	150	1.47	35.75	-	-

CS2541BB					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
	Kg	Kn		Kg	Kn
mm			mm		
500	2680	26.26	0.60	10000	98.00
1000	1340	13.13	2.30	6680	65.46
1500	890	8.72	5.15	5000	49.00
2000	670	6.56	9.15	4000	39.19
2500	530	5.19	14.30	3350	32.83
3000	440	4.31	20.60	-	-

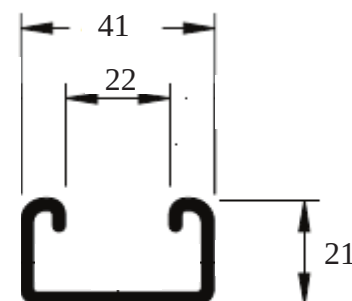
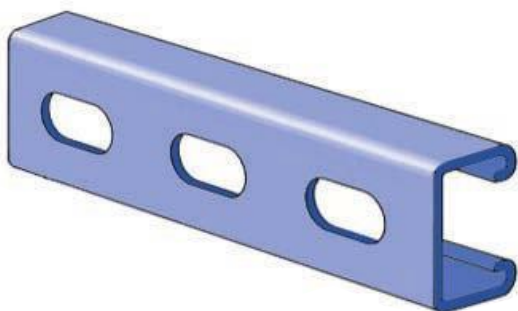
CS2541SL					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
	Kg	Kn		Kg	Kn
mm			mm		
500	860	8.42	1.00	4580	44.88
1000	430	4.21	4.00	3080	30.18
1500	285	2.79	8.95	2320	22.73
2000	215	2.10	15.90	1860	18.22
2500	170	1.66	24.85	1560	15.28
3000	140	1.37	35.75	-	-



CS2521 - Dimension: 41mm x 21mm
Weight: 1.80kg/M Thickness: 2.5mm



CS2521BB - Dimension: 41mm x 42mm
Weight: 3.60kg/M Thickness: 2.5mm

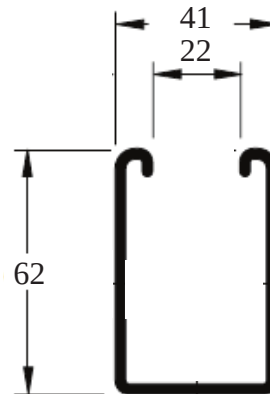
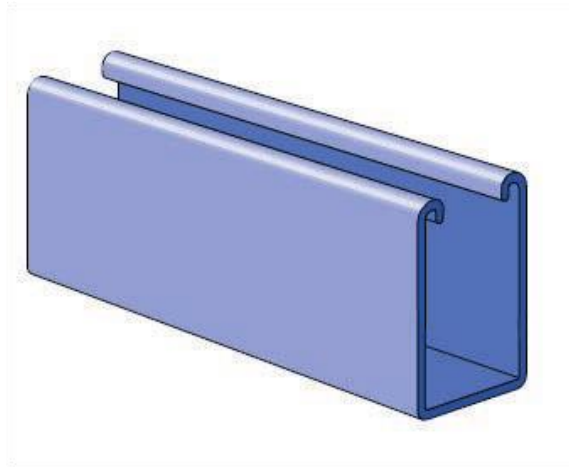


CS2521SL - Dimension: 41mm x 21mm
Weight: 1.70kg/M Thickness: 2.5mm

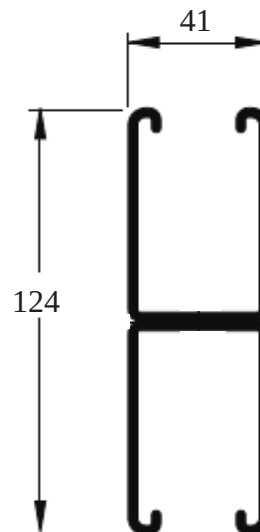
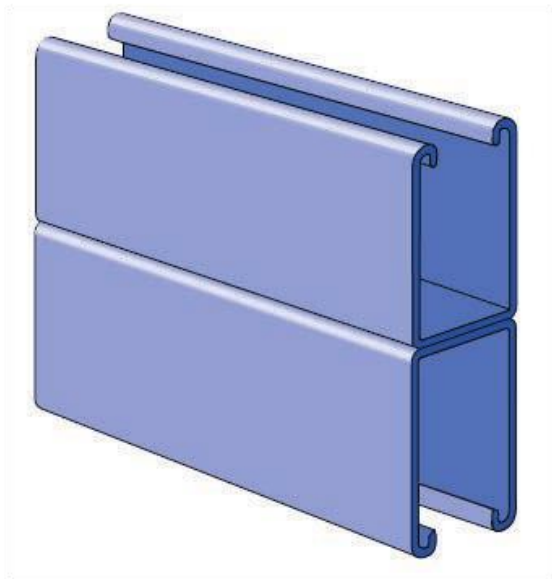
CS2521					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
mm	Kg	Kn	mm	Kg	Kn
500	300	2.94	1.95	3485	34.15
1000	150	1.47	7.85	2295	22.49
1500	100	0.98	17.50	-	-
2000	75	0.73	31.15	-	-
2500	60	0.58	48.90	-	-
3000	50	0.49	70.00	-	-

CS2521BB					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
mm	Kg	Kn	mm	Kg	Kn
500	890	8.72	1.20	6970	68.30
1000	445	4.36	4.90	4590	44.98
1500	295	2.89	11.00	3420	33.51
2000	220	2.15	19.55	2725	26.70
2500	175	1.71	30.50	-	-
3000	145	1.42	40.85	-	-

CS2521SL					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
mm	Kg	Kn	mm	Kg	Kn
500	280	2.74	2.25	3060	29.98
1000	140	1.37	8.85	2040	19.99
1500	95	0.93	19.95	-	-
2000	70	0.68	35.25	-	-
2500	55	0.53	55.05	-	-
3000	45	0.44	79.85	-	-



CS2562 - Dimension: 41mm x 62mm
Weight: 3.40kg/M Thickness: 2.5mm



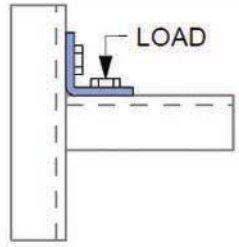
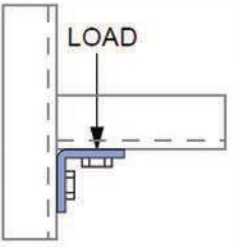
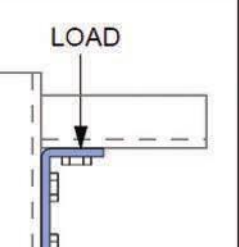
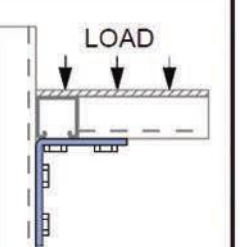
CS2562BB - Dimension: 41mm x 124mm
Weight: 6.80kg/M Thickness: 2.5mm

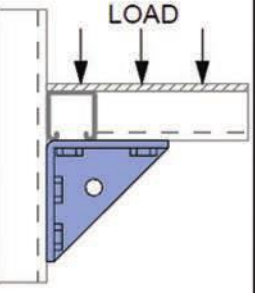
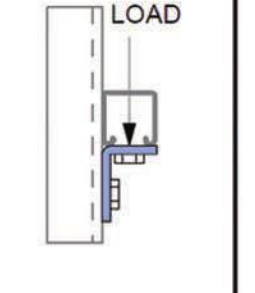
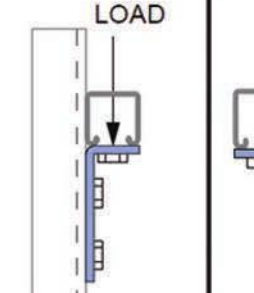
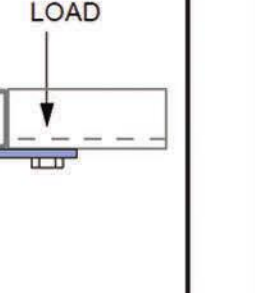
Note:
Channel Material Finished - ZP, PG, HDG, Epoxy Powder Coated

CS2562					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
	Kg	Kn		Kg	Kn
mm			mm		
500	1790	17.54	0.70	6510	63.79
1000	895	8.77	2.70	4375	42.87
1500	595	8.80	60.10	3295	32.29
2000	445	4.36	10.80	2640	25.87
2500	355	3.47	16.85	2205	21.60
3000	295	2.89	24.35	1890	18.52

CS2562BB					
Beam Span Or Unsupported Column Height	Beam Max Allowable Load		Deflection At Max Allowable Load	Column Max Allowable Load	
	Kg	Kn		Kg	Kn
mm			mm		
500	5350	52.43	0.40	13020	127.59
1000	2675	26.21	1.50	8750	85.75
1500	1780	17.44	3.35	6590	64.58
2000	1335	13.08	5.60	5285	51.79
2500	1070	10.48	9.30	4410	43.21
3000	890	8.72	13.45	3785	37.09

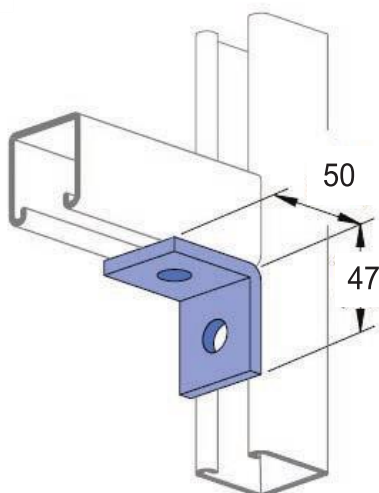
Design Load Data For Typical Channel & Bracket Connection

90° Fittings (When used in position shown)								
Channel Thickness								
	Kg	Kn	Kg	Kn	Kg	Kn	Kg	Kn
2.5mm	450	4.4	680	6.7	905	8.9	905	8.9

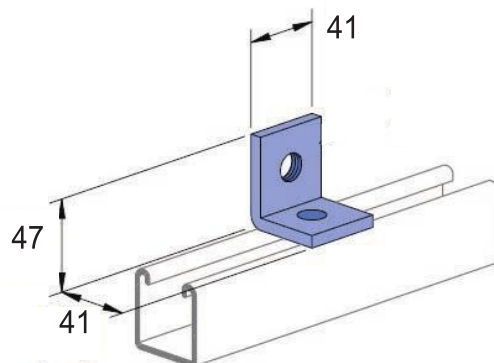
90° Fittings (When used in position shown)							Flat Plate Fittings	
Channel Thickness								
	Kg	Kn	Kg	Kn	Kg	Kn	Kg	Kn
2.5mm	1350	13.3	300	2.2	670	6.2	445	4.4

Note:

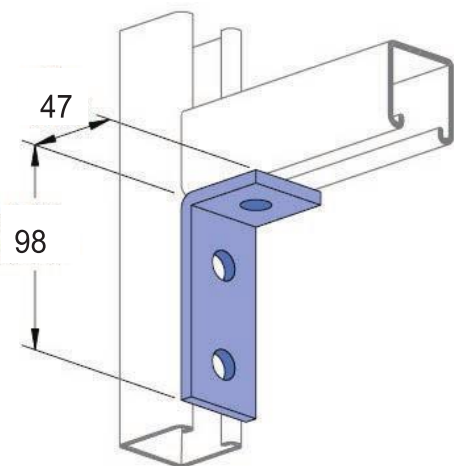
The calculation are base on M12 Bolts and Nuts with Torque = 65NM



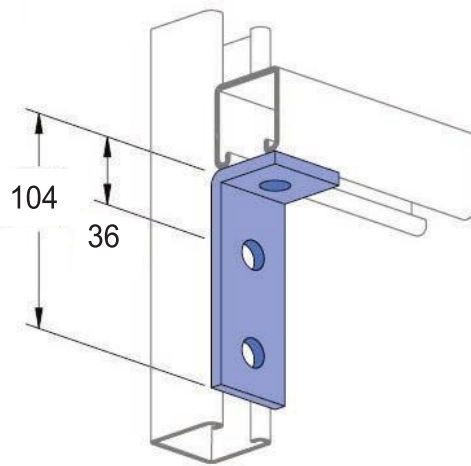
CF601 - Two Hole Corner Angle
Weight: 0.15kg Thickness: 6mm



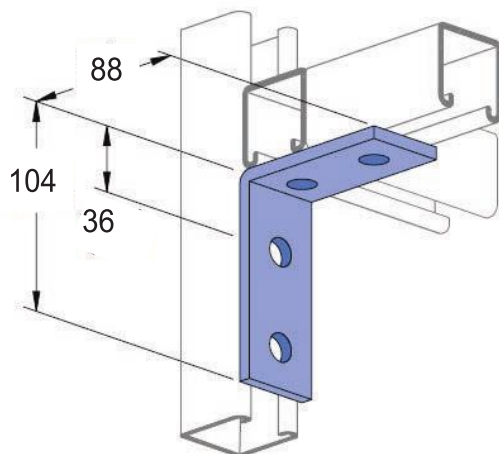
CF601S - Two Hole Corner Angle
Weight: 0.15kg Thickness: 6mm



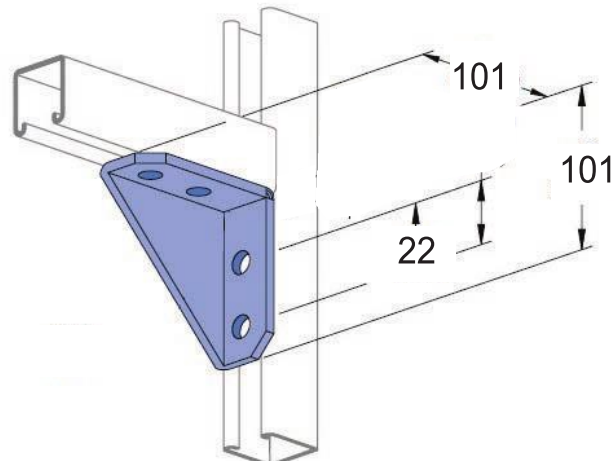
CF602 - Three Hole Corner Angle
Weight: 0.23kg Thickness: 6mm



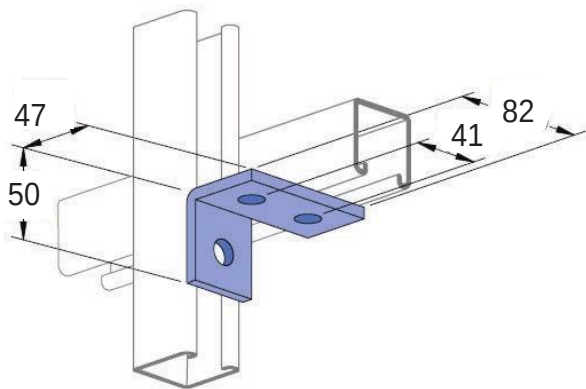
CF602S - Three Hole Corner Angle
Weight: 0.23kg Thickness: 6mm



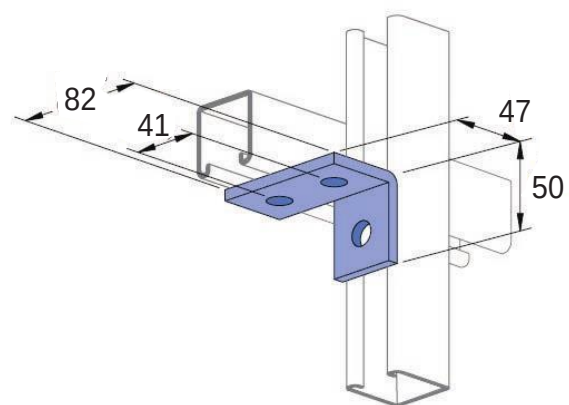
CF603 - Four Hole Corner Angle
Weight: 0.32kg Thickness: 6mm



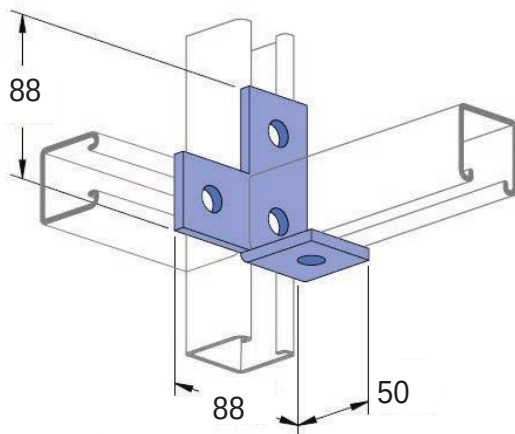
CF604 - Four Hole Universal Shelf Bracket
Weight: 0.51kg Thickness: 6mm



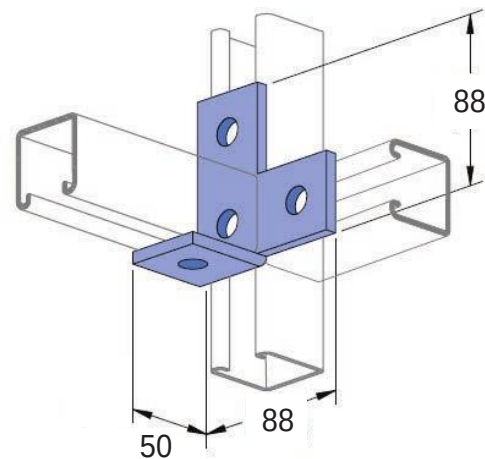
CF605 - Three Hole (Right Hand) Offset Bent Angle
Weight: 0.25kg Thickness: 6mm



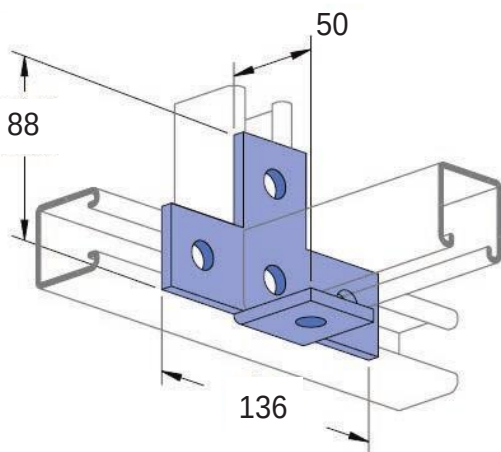
CF606 - Three Hole (Left Hand) Offset Bent Angle
Weight: 0.25kg Thickness: 6mm



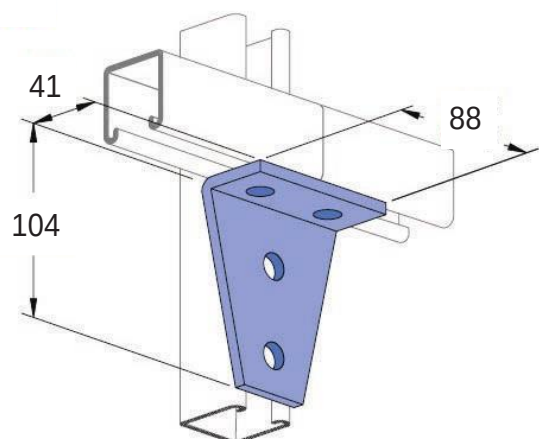
CF607 - Four Hole (Right Hand) Offset Bent Angle
Weight: 0.37kg Thickness: 6mm



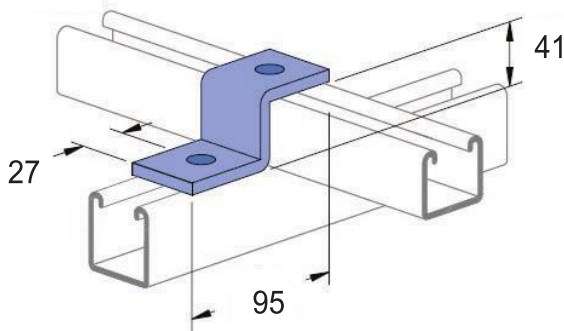
CF608 - Four Hole (Left Hand) Offset Bent Angle
Weight: 0.37kg Thickness: 6mm



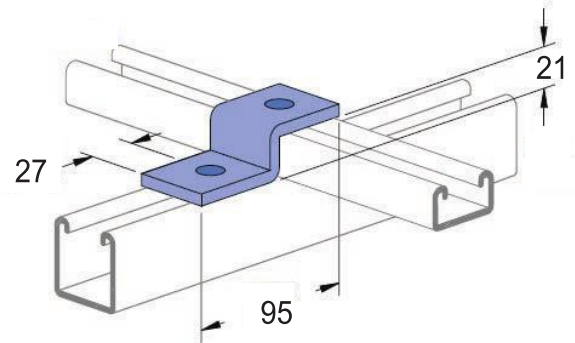
CF609 - Five Hole Offset Bent Tee
Weight: 0.37kg Thickness: 6mm



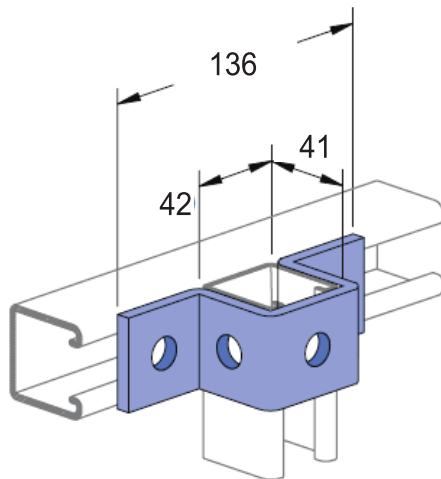
CF610 - Four Hole Gusset Shelf Angle
Weight: 0.42kg Thickness: 6mm



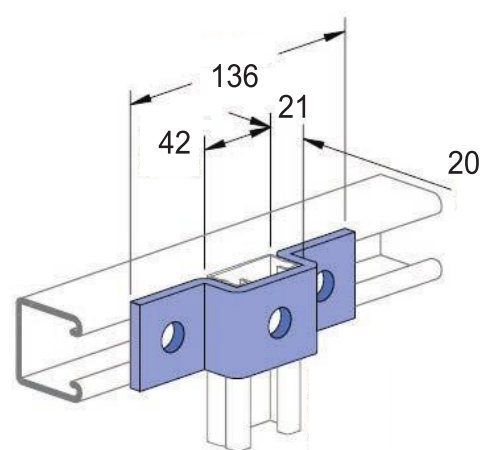
CF611 - Two Hole Offset Z Support
Weight: 0.20kg Thickness: 6mm



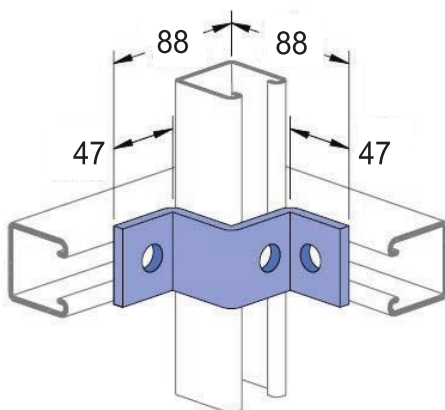
CF612 - Two Hole Offset Z Support
Weight: 0.18kg Thickness: 6mm



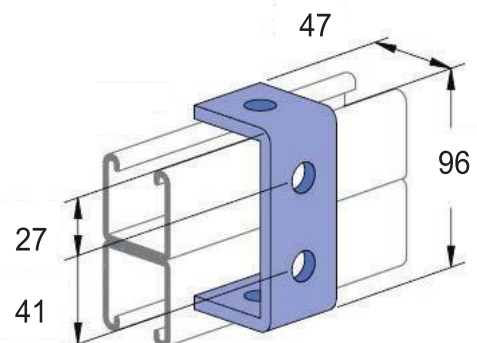
CF613 - Five Hole U Support
Weight: 0.34kg Thickness: 6mm



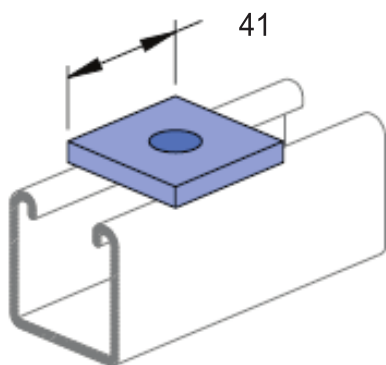
CF614 - Three Hole U Support
Weight: 0.29kg Thickness: 6mm



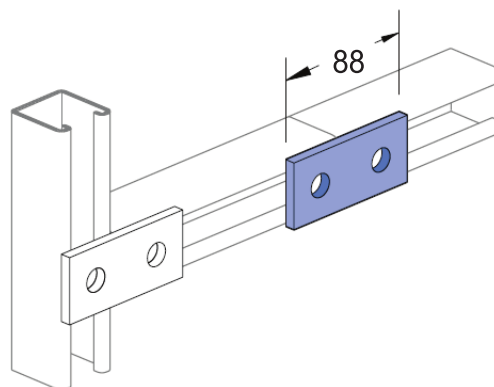
CF615 - Three Hole Sheath Corner Connection
Weight: 0.32kg Thickness: 6mm



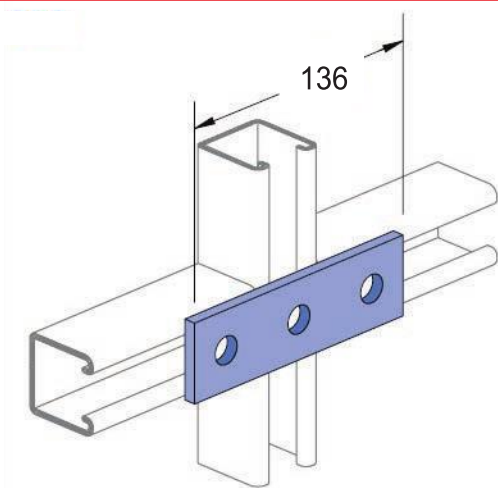
CF616 - Four Hole Clevis
Weight: 0.31kg Thickness: 6mm



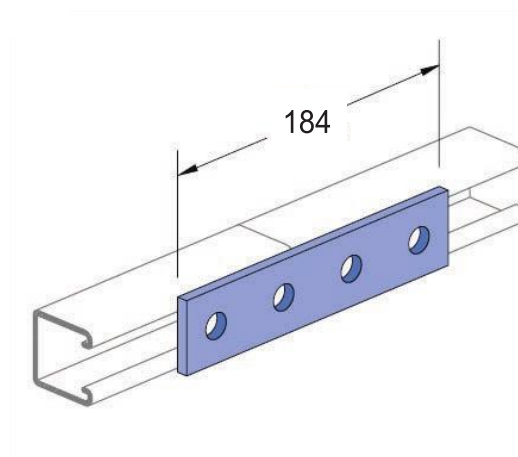
CF617 - Square Washer
Weight : 0.07Kg Thickness : 6mm



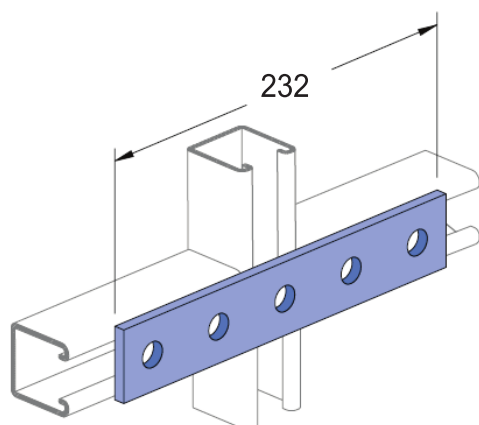
CF618 - Two Hole Splice Plate
Weight : 0.15Kg Thickness : 6mm



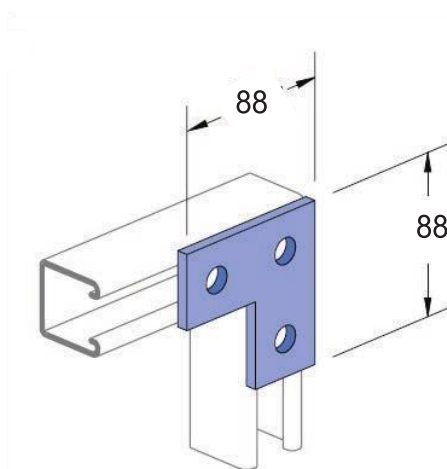
CF619 - Three Hole Splice Plate
Weight : 0.23Kg Thickness : 6mm



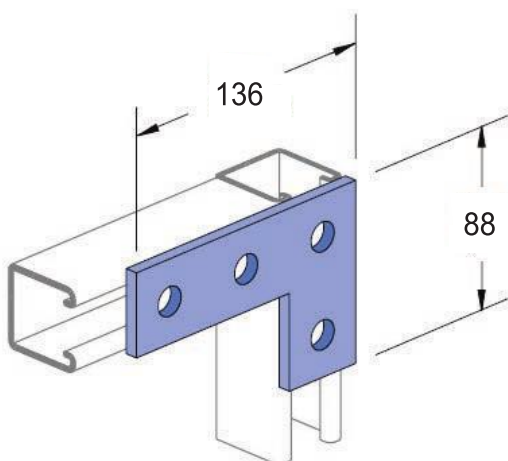
CF620 - Four Hole Splice Plate
Weight : 0.32Kg Thickness : 6mm



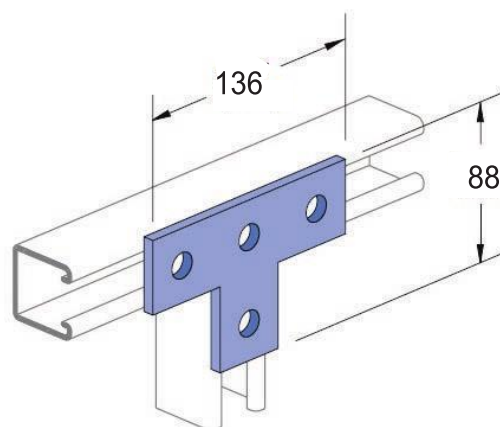
CF621 - Five Hole Splice Plate
Weight : 0.39Kg Thickness : 6mm



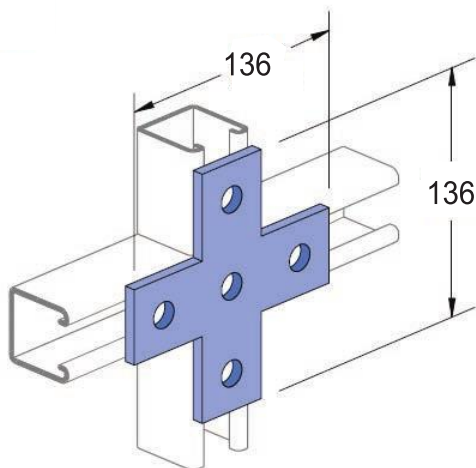
CF622 - Three Hole Corner Plate
Weight : 0.24Kg Thickness : 6mm



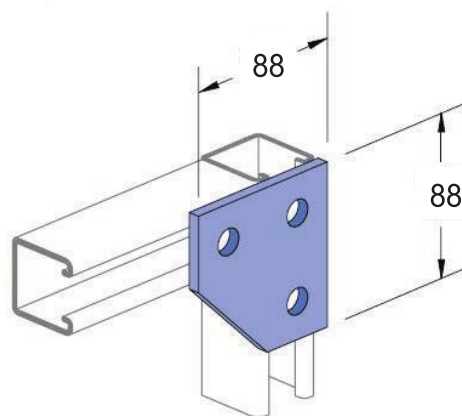
CF623 - Four Hole Corner Plate
Weight: 0.32kg Thickness: 6mm



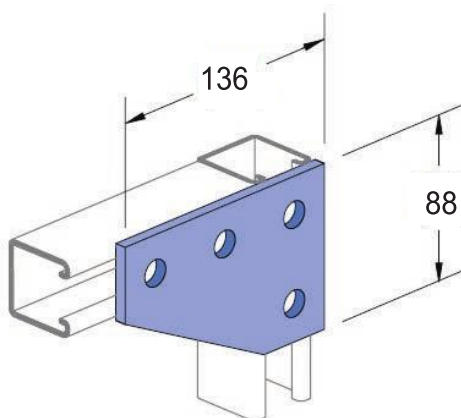
CF624 - Four Hole Tee Plate
Weight: 0.32kg Thickness: 6mm



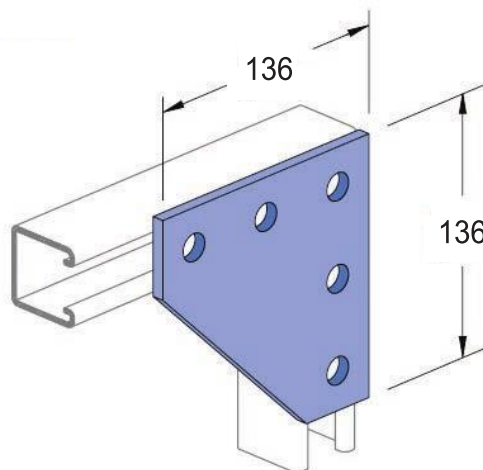
CF625 - Five Hole Cross Plate
Weight: 0.42kg Thickness: 6mm



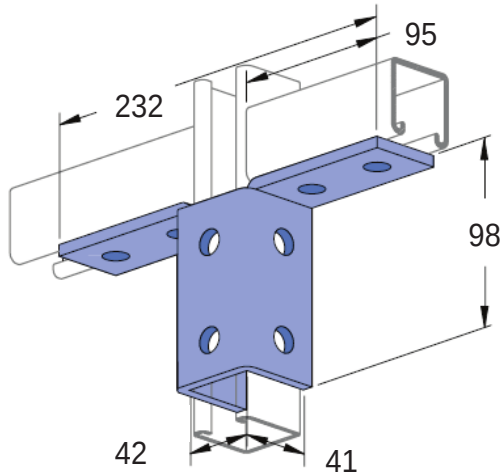
CF626 - Three Hole Corner Gusset Plate
Weight: 0.37kg Thickness: 6mm



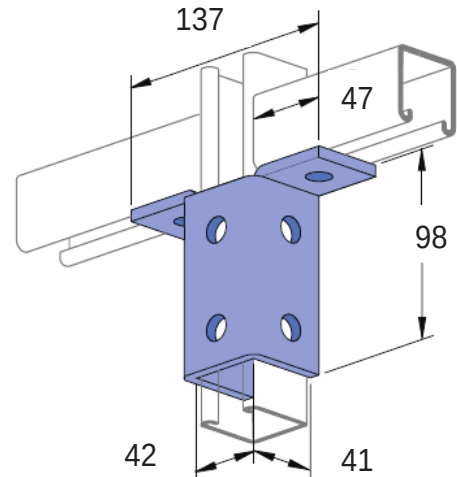
CF627 - Four Hole Corner Gusset Plate
Weight: 0.43kg Thickness: 6mm



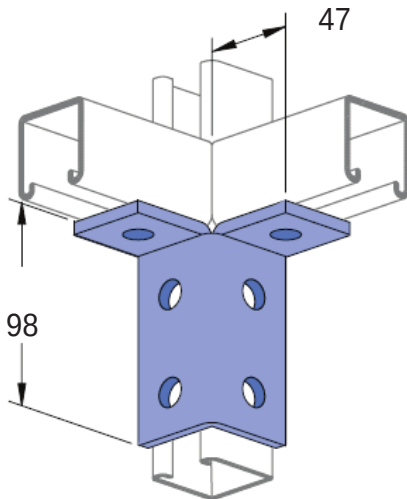
CF628 - Five Hole Corner Gusset Plate
Weight: 0.49kg Thickness: 6mm



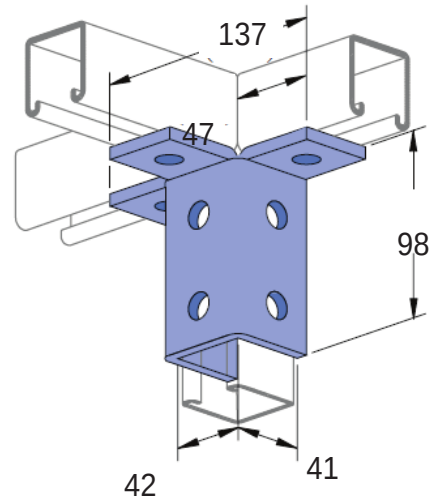
CF629 - Ten Hole Double Wing Bracket
Weight: 0.86kg Thickness: 6mm



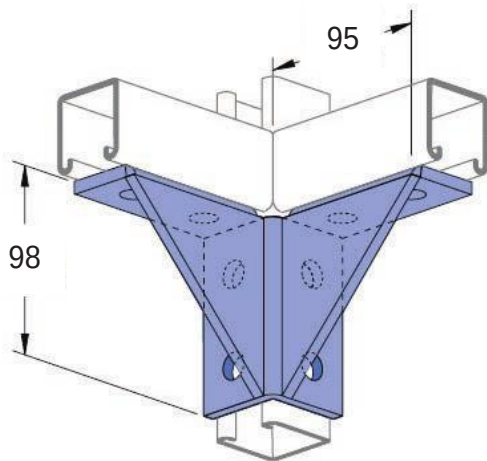
CF630 - Eight Hole Double Wing Connection
Weight: 0.74kg Thickness: 6mm



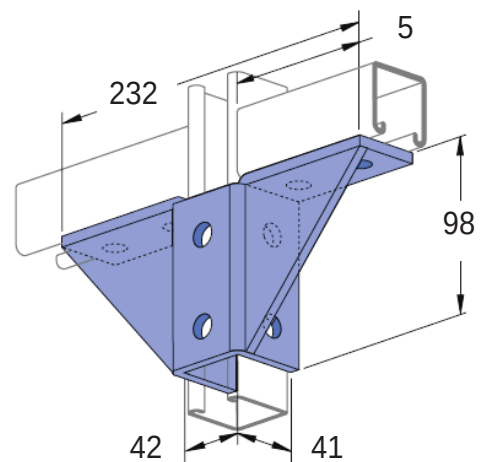
CF631 - Six Hole Double Corner Connection
Weight: 0.64kg Thickness: 6mm



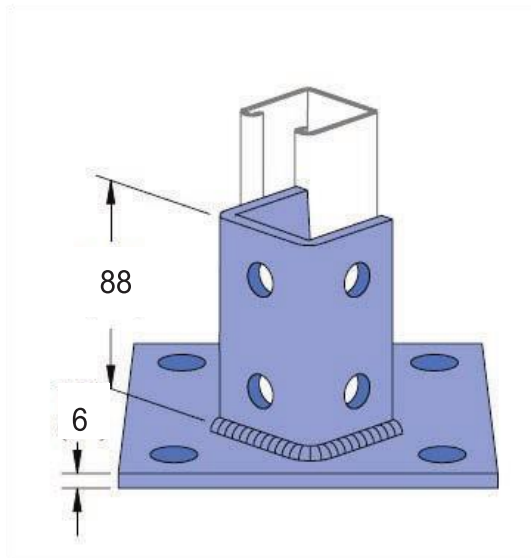
CF632 - Nine Hole Triple Wing Connection
Weight: 0.80kg Thickness: 6mm



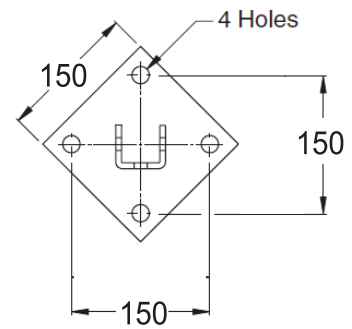
CF633 - Eight Hole Double Corner Gusset Connection
Weight: 1.05kg Thickness: 6mm



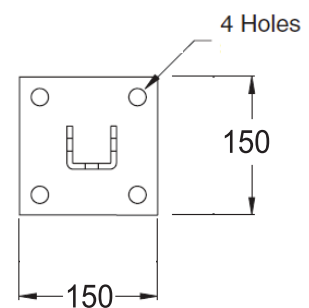
CF634 - Ten Hole Double Wing Gusset Connection
Weight: 1.30kg Thickness: 6mm



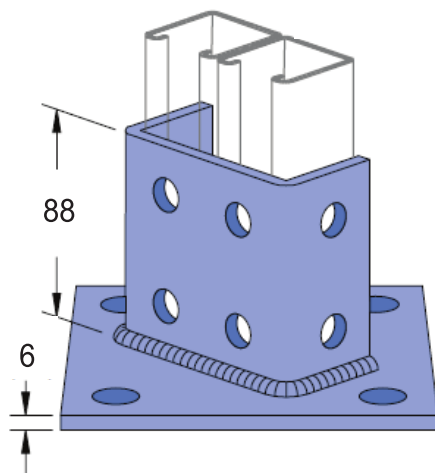
Single Column Post Base



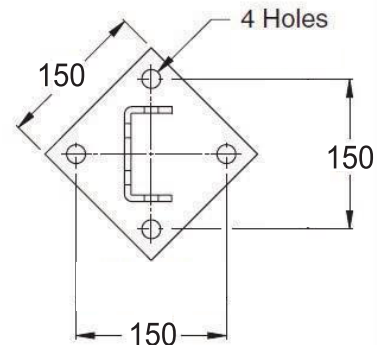
CF635
Weight: 0.69kg Thickness: 6mm



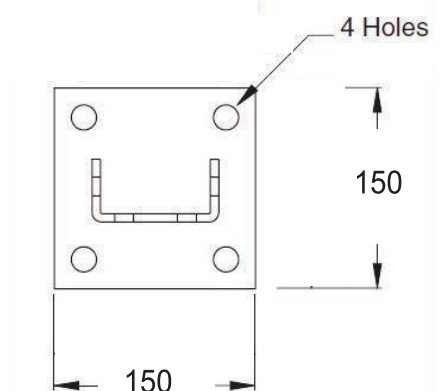
CF636
Weight: 0.69kg Thickness: 6mm



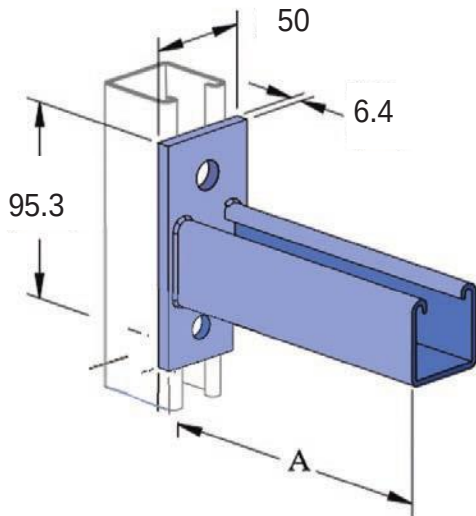
Double Column Post Base



CF637
Weight: 0.97kg Thickness: 6mm



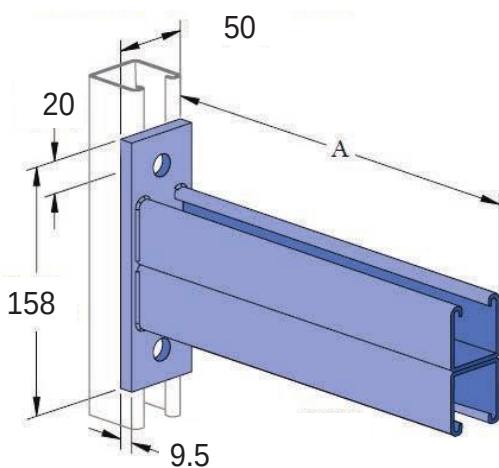
CF638
Weight: 0.97kg Thickness: 6mm



Channel Clevis Bracket

Part Number	A (mm)	Channel Thickness	Weight (Kg)	Uniform Design Load (Kg)
CF639 - 200	200	2.5mm	0.95	480
CF639 - 350	350	2.5mm	1.35	330
CF639 - 500	500	2.5mm	1.8	230
CF639 - 650	650	2.5mm	2.20	170
CF639 - 800	800	2.5mm	2.60	140

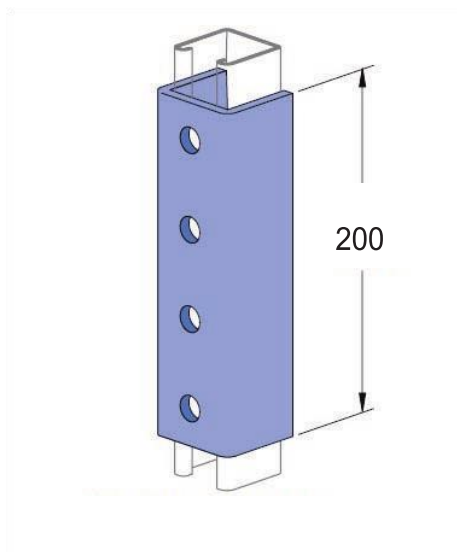
CF639 - Channel Clevis



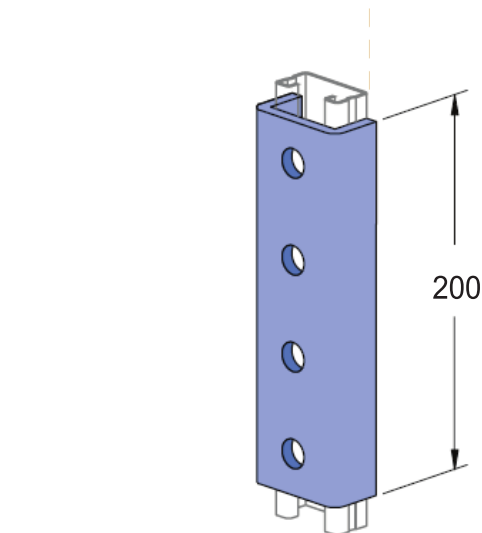
Channel Clevis Bracket

Part Number	A (mm)	Channel Thickness	Weight (Kg)	Uniform Design Load (Kg)
CF640 - 200	200	2.5mm	1.75	620
CF640 - 350	350	2.5mm	2.60	480
CF640 - 500	500	2.5mm	3.45	390
CF640 - 650	650	2.5mm	4.30	320
CF640 - 800	800	2.5mm	5.10	260
CF640 - 900	900	2.5mm	5.90	230

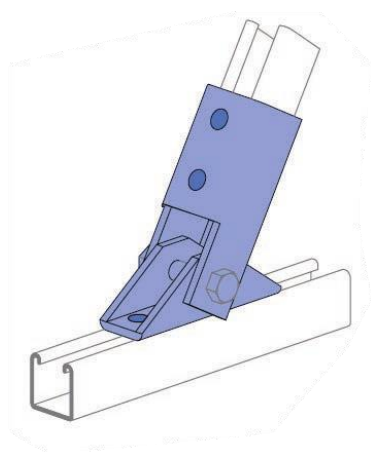
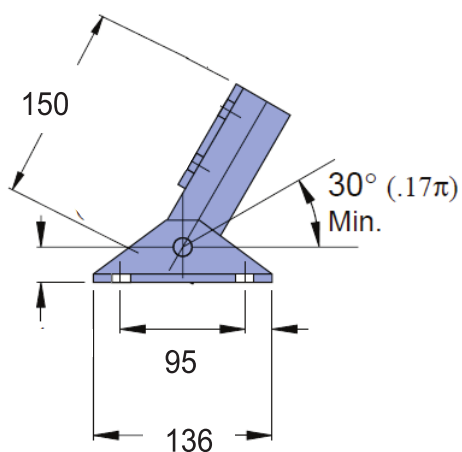
CF640 - Double Channel Clevis Bracket



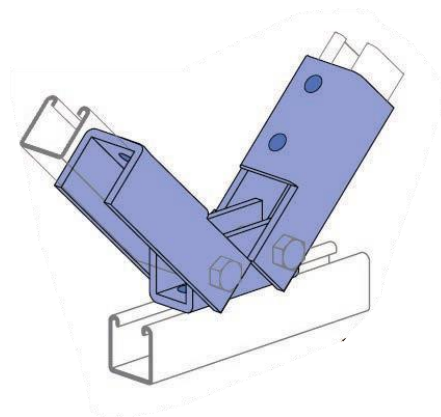
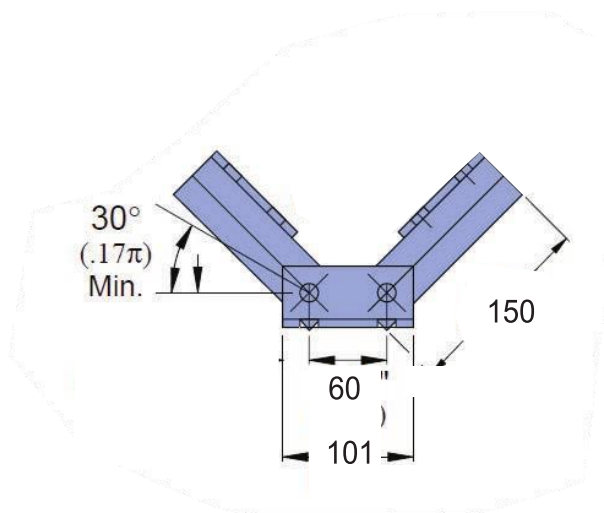
CF641 - Four Hole Splice Clevis
Weight: 1.50kg Thickness: 6mm



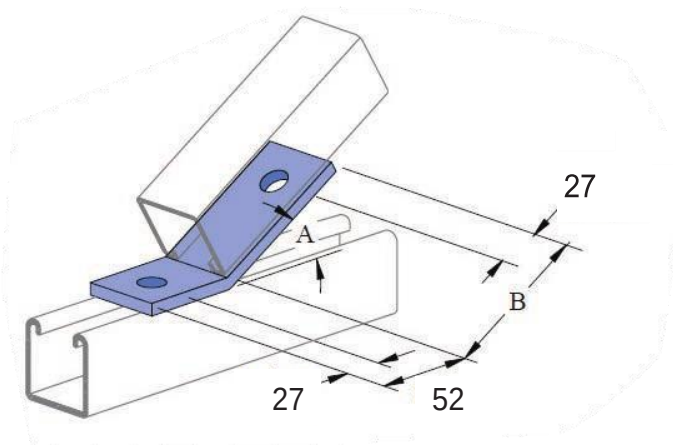
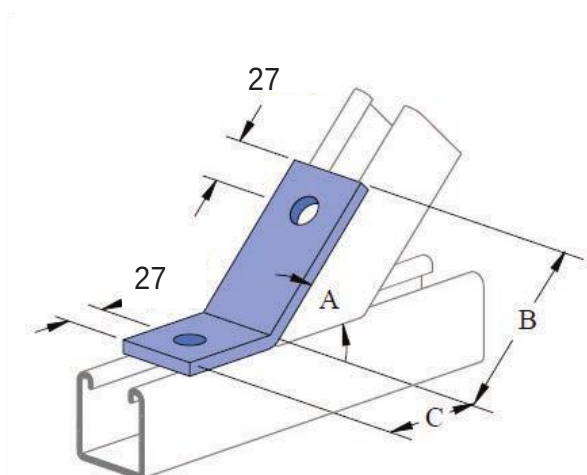
CF642 - Four Hole Splice Clevis
Weight: 0.80kg Thickness: 6mm



CF643 - Single Channel Adjustable Brace

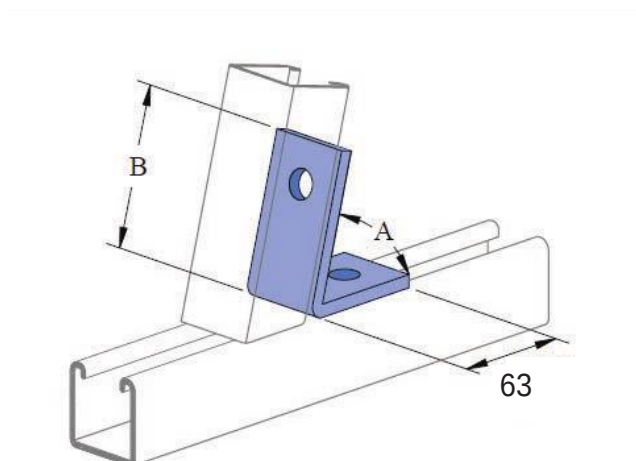


CF644 - Double Channel Adjustable Brace



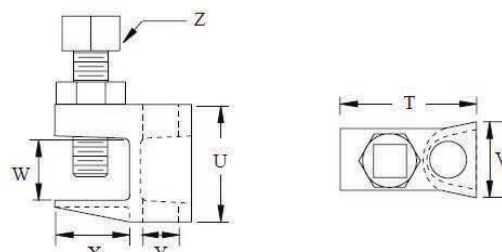
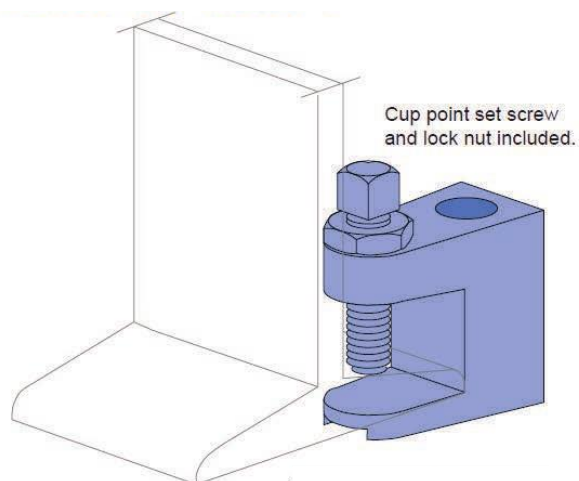
CF645 - Two Hole Open Angle
Weight: 0.23kg Thickness: 6mm

Part Number	A (Degree)	B	C
CF645/75	75	91	43
CF645/60	60	86	48
CF645/45	45	76	60



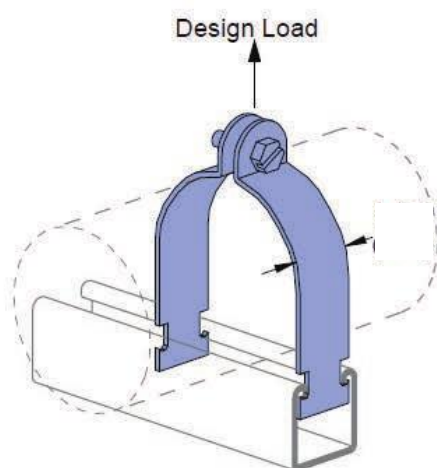
CF646 - Two Hole Open Angle
Weight: 0.23kg Thickness: 6mm

Part Number	A (Degree)
CF645/75	75
CF645/60	60
CF645/45	45



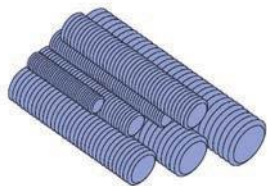
Wedge C-Clamp	
Part Number	Drop Rod Size
CF648 - 8	M8
CF648 - 10	M10
CF648 - 12	M12

CF648 - Wedge C-Clamp



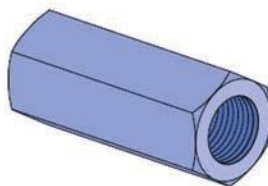
Pipe and Conduit Clamps	
Part Number	Pipe O/D (mm)
CF649 - 5	20
CF649 - 6	25
CF649 - 7	32
CF649 - 8	38

CF649 - Pipe and Conduit Clamps



Threaded Rod

Threaded Rod	
Part Number	Size
CH103	M8
CH104	M10
CH105	M12



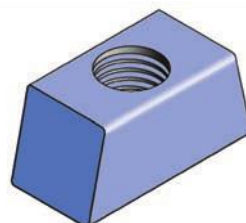
Threaded Rod Couplers

Threaded Rod Couplers	
Part Number	Size
CH203	M8
CH204	M10
CH205	M12



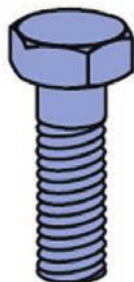
Drop in Anchor

Drop In Anchor	
Part Number	Size
CH233	M8
CH234	M10
CH235	M12



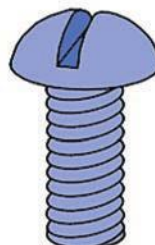
Wedge Nut

Wedge Nut	
Part Number	Size
CH223	M8
CH224	M10
CH225	M12



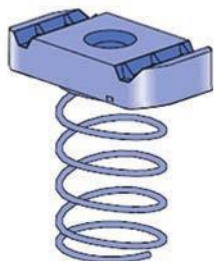
Hexagon Head Set Screws

Hexagon Head Set Screws	
Part Number	Size
CH113	M8
CH114	M10
CH115	M12



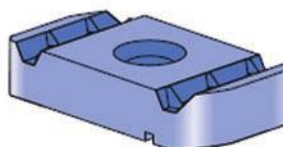
Round Head Machine Screws

Round Head Machine Screws	
Part Number	Size
CH123	M8
CH124	M10
CH125	M12



Channel Spring Nuts

Channel Spring Nuts	
Part Number	Size
CH403	M8
CH404	M10
CH405	M12



Plain Channel Nuts

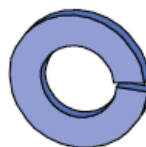
Plain Channel Nut	
Part Number	Size
CH413	M8
CH414	M10
CH415	M12



Flat Washer

Flat Washer	
Part Number	Size
CH303	M8
CH304	M10
CH305	M12

Flat Washer



Spring Washer

Spring Washer	
Part Number	Size
CH313	M8
CH314	M10
CH315	M12

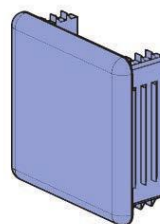
Spring Washer



Hexagon Nut

Hexagon Nut	
Part Number	Size
CH213	M8
CH214	M10
CH215	M12

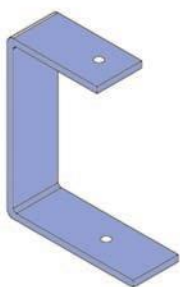
Hexagon Nuts



Plastic End Cap

Plastic End Cap	
Part Number	Size
CH003	41 x 41
CH004	41 x 21
-	-

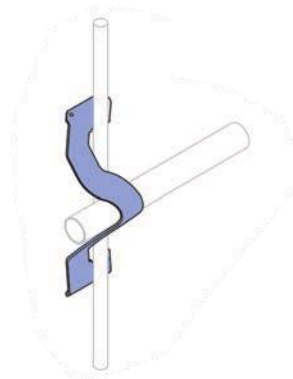
Plastic End Cap



C Bracket

C Bracket	
Part Number	Size
CH503	3 x 4 x 4
CH504	3 x 4 x 5
CH505	4 x 6 x 6

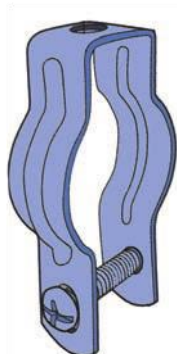
C Bracket



Kon Clip

Kon Clip	
Part Number	Size
CH513	20mm
CH514	25mm
CH515	32mm

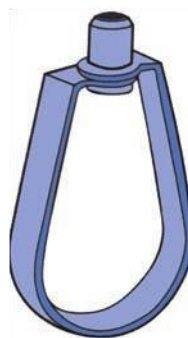
Kon Clip



Pipe Hanger

Pipe Hanger	
Part Number	Size
CH523	20mm
CH524	25mm
CH525	32mm

Pipe Hanger



Loop Hanger

Loop Hanger	
Part Number	Size
CH533	25mm
CH534	32mm
CH535	40mm

Loop Hanger

Handwriting practice lines consisting of 20 horizontal lines.



CHAKRI STEEL CORPORATION PTE LTD