



Materials

Mild Steel - Plain

A. Hot Rolled Steel Plates, Sheets and Coils **S235 JR**, as per:

EN 10025 -2 / DIN 17100 / BS 4360 / ASTM A 653M / ASTM A 1011 / ASTM A 1011-01a
 JIS 3101 / JIS 3106 / GB 700 / GB / T1591.

ASTM A 907 / ASTM A 1018M.

ASTM A 570M / ASTM A 572M.

B. Cold Rolled Steel **DC 01**, as per:

EN 10130 / DIN 1623, Part 2 / BS 1449:1 / ASTM A366 / ASTM A 1008 / JIS G 3141 / GB 699.

EN 10131 / ASTM A 568M

Mild Steel - Galvanized

C. Continuously Pre- Galvanized Hot-Dip Zinc Coated Steel **DX 51D + Z**, as per:

EN 10327 / DIN 17162 / BS 2989/ ASTM A 527M / ASTM A 653M / JIS G 3302.

EN 10326/ EN 10142 / ASTM A 526, 527, 528/ ASTM A 146

D. Electro Galvanized Steel (Electrolytic Coating) **DC01 + ZE v**, as per:

EN 10152 / DIN 17163 / ASTM A591 / JIS G 3313 / JIS G 3141/BS 1449:1

EN 10131

Aluminum

E. Aluminum **6063 T6**

Stainless Steel

F. Austenitic Stainless Steels **SS 304 & SS 316**, as per:

ASTM A 240 / EN 10088-2/ DIN 17400 / BS 1449:2 / ASTM A480 / ASTM A666 / ISO 3506 / EN 10028-7 / JIS G 4304

F1 Stainless Steel Fasteners EN 3506

F2 Stainless Steel Wire BS 1554 ,ASTM A276

Finishes

1- Hot-DIP Galvanization after Fabrication

as per:

ASTM A 123 / ASTM A 153 / ISO 1461.

BS 729 / DIN 50976

2- Zinc Electroplating after Fabrication

as per:

ASTM B633 / EN 12329 / ISO 4042/ BS 1706 / BS 3382 / DIN 50961

3- Powder Coating

Epoxy / Polyester / Epoxy & Polyester

BS 3900 / ISO 2409 / ISO 1519 / ISO 1520





Channel

SFSP's metal framing channel is cold formed on modern rolling machines from low carbon steel manufactured according to BS 6946:1988. A continuous slot provides the ability to make attachments at any point.

Lengths

Standard length: 3000mm with ± 3.2mm length tolerance.
Custom lengths available upon request.

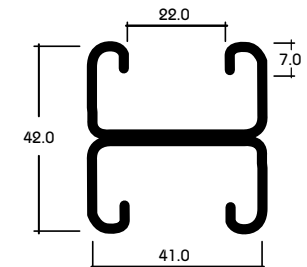
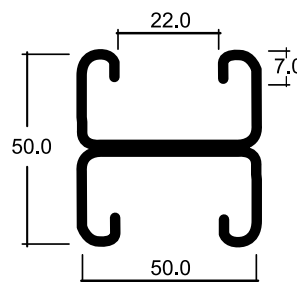
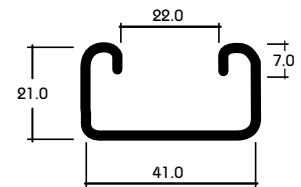
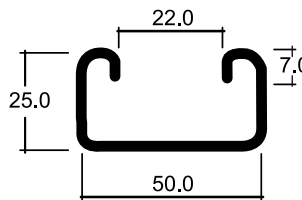
Finishes

Standard Finishes: Pre-Galvanized finish (ASTM A653M coating G90 and G60). Hot Dip Galvanized after fabrication (ASTM A123 or BS EN ISO1461:2009). Other custom coatings are available upon request.

Metal Framing Channels

Selection Chart

Part No	Channel Dimensions		Thickness
	Height "H"	Width "W"	
CCH - 220/221	21.0 mm	41.0 mm	1.5 mm
CCH - 240/241	41.0 mm	41.0 mm	1.5 mm
CCH - 260/261	25.0 mm	50.0 mm	1.5 mm
CCH - 320/321	21.0 mm	41.0 mm	2.0 mm
CCH - 340/341	41.0 mm	41.0 mm	2.0 mm
CCH - 360/361	25.0 mm	50.0 mm	2.0 mm
CCH - 420/421	21.0 mm	41.0 mm	2.5 mm
CCH - 440/441	41.0 mm	41.0 mm	2.5 mm
CCH - 460/461	25.0 mm	50.0 mm	2.5 mm



For Toothed Channel add "T" after the Part no. ex: CCH-220T

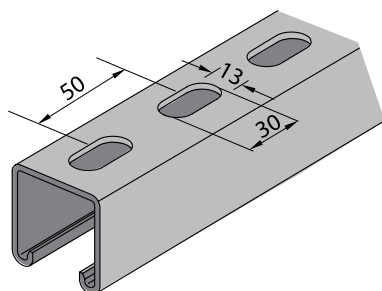
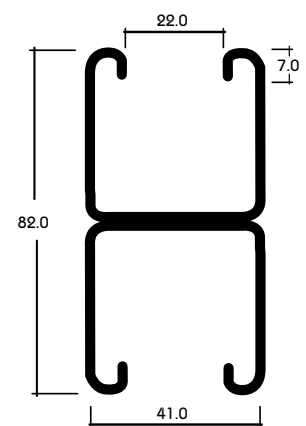
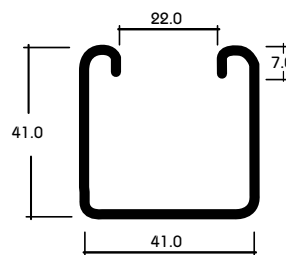
CCH 320

3 Material Thickness
2 for 1.5 mm
3 for 2.0 mm
4 for 2.5 mm

2 Size
2 - 21/41 mm
4 - 41/41 mm
6 - 25/50 mm

0 Channel Patterns
0 - PT
1 - ST
2 - B2B

T Toothed channel





Channel Hole Patterns

PT Type Channel



ST Type Channel



B2B Type Channel



Part No	Thick. mm.	Height "H"
CCH-220	1.5	21.0
CCH-240	1.5	41.0
CCH-260	1.5	25.0
CCH-320	2.0	21.0
CCH-340	2.0	41.0
CCH-360	2.0	25.0
CCH-420	2.5	21.0
CCH-440	2.5	41.0
CCH-460	2.5	25.0

Part No	Thick. mm.	Height "H"
CCH-221	1.5	21.0
CCH-241	1.5	41.0
CCH-261	1.5	25.0
CCH-321	2.0	21.0
CCH-341	2.0	41.0
CCH-361	2.0	25.0
CCH-421	2.5	21.0
CCH-441	2.5	41.0
CCH-461	2.5	25.0

Part No	Thick. mm.	Height "H"
CCH-222	1.5	42.0
CCH-242	1.5	82.0
CCH-262	1.5	50.0
CCH-322	2.0	42.0
CCH-342	2.0	82.0
CCH-362	2.0	50.0
CCH-422	2.5	42.0
CCH-442	2.5	82.0
CCH-462	2.5	50.0

Toothed channel type

For Toothed Channel add "T" after the Part no. ex: CCH-220T

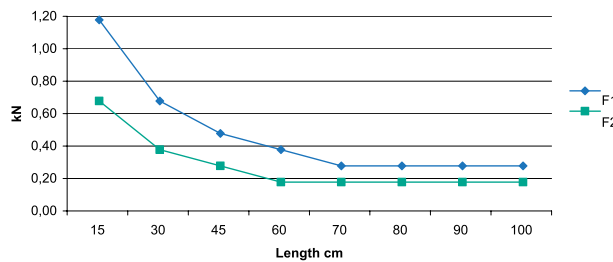
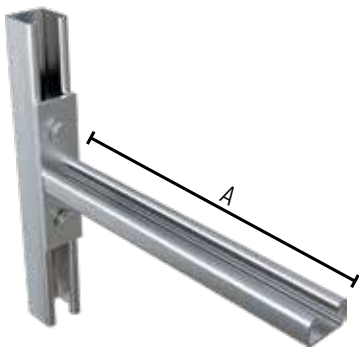




Cantilever Arm Bracket

Cantilever Arm Brackets - SCA

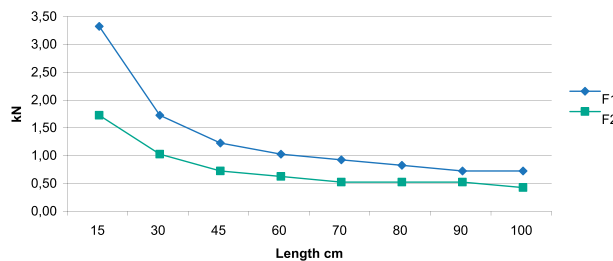
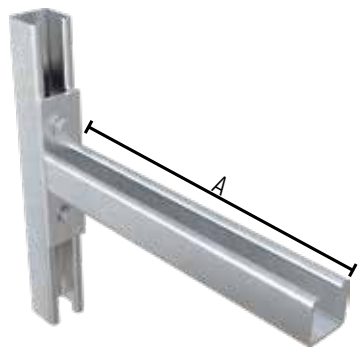
CCH421 41x21x2.5



Length (A (mm))	Allowable Load		
	*F ₁	*F ₂	**F ₂
150	1.10	0.60	3.10
300	0.60	0.30	3.10
450	0.40	0.20	3.10
600	0.30	0.10	3.10
700	0.20	0.10	3.10
800	0.20	0.10	3.10
900	0.20	0.10	3.10
1000	0.20	0.10	3.10

Base plate : height (h) x width (b) x thickness (t)
100 50 8

-In the case of concrete support frame, use anchor M10
-In the case of concrete C-Channel frame, Hex bolt M8.
** Connection force (pull-out force) : 3.10 (kN)

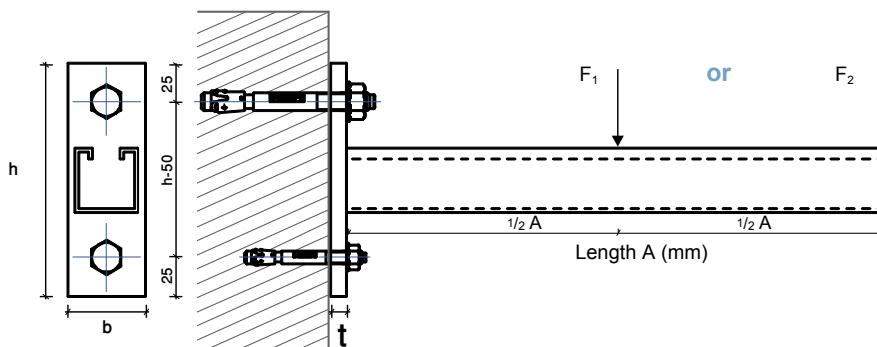


Length (A (mm))	Allowable Load		
	*F ₁	*F ₂	**F ₂
150	3.10	1.50	7.50
300	1.50	0.80	7.50
450	1.00	0.50	7.50
600	0.80	0.40	7.50
700	0.70	0.30	7.50
800	0.60	0.30	7.50
900	0.50	0.30	7.50
1000	0.50	0.20	7.50

Base plate : height (h) x width (b) x thickness (t)
140 50 10

-In the case of concrete support frame, use anchor M16 .
-In the case of concrete C-Channel frame, Hex bolt M8.
** Connection force (pull-out force) : 7.50 (kN)

* Given Loads are always in [kN] " Allowable characteristic live load "

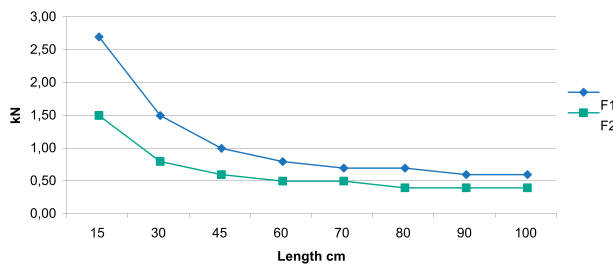
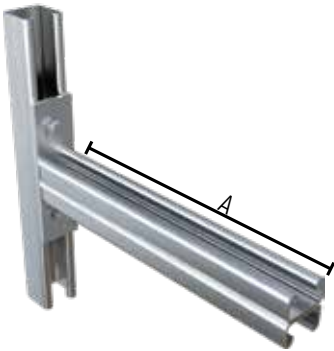




Cantilever Arm Bracket

Cantilever Arm Brackets - SCA

CCH422 41x21x2.5 B2B



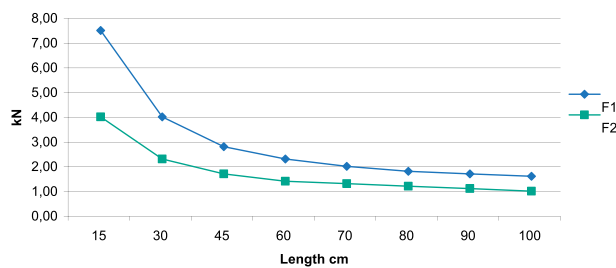
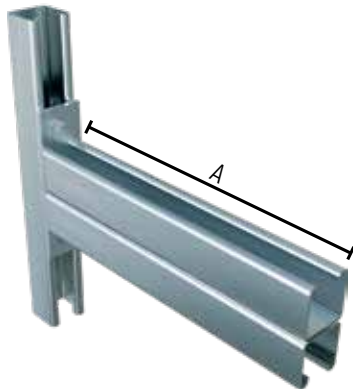
Length (A (mm))	Allowable Load		
	*F ₁	*F ₂	**F ₂
150	2.50	1.30	4.80
300	1.30	0.60	4.80
450	0.80	0.40	4.80
600	0.60	0.30	4.80
700	0.50	0.30	4.80
800	0.50	0.20	4.80
900	0.40	0.20	4.80
1000	0.40	0.20	4.80

Base plate : height (h) x width (b) x thickness (t)
140 50 10

-In the case of concrete support frame, use anchor M12.
-In the case of concrete C-Channel frame, Hexbolt M8.

CCH442 41x41x2.5 B2B

** Connection force (pull-out force) : 4,8 (kN)



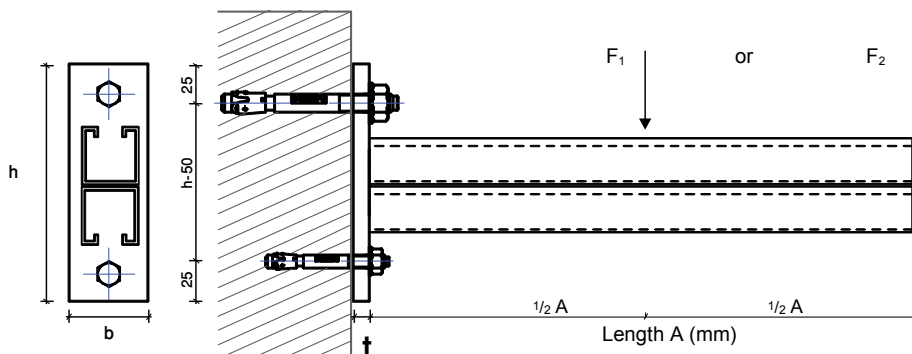
Length (A (mm))	Allowable Load		
	*F ₁	*F ₂	**F ₂
150	7.00	3.50	8.30
300	3.50	1.80	8.30
450	2.30	1.20	8.30
600	1.80	0.90	8.30
700	1.50	0.80	8.30
800	1.30	0.70	8.30
900	1.20	0.60	8.30
1000	1.10	0.50	8.30

Base plate : height (h) x width (b) x thickness (t)
180 60 12

-In the case of concrete support frame, use anchor M16.
-In the case of concrete C-Channel frame, Hex bolt M10 .

** Connection force (pull-out force) : 8,30 (kN)

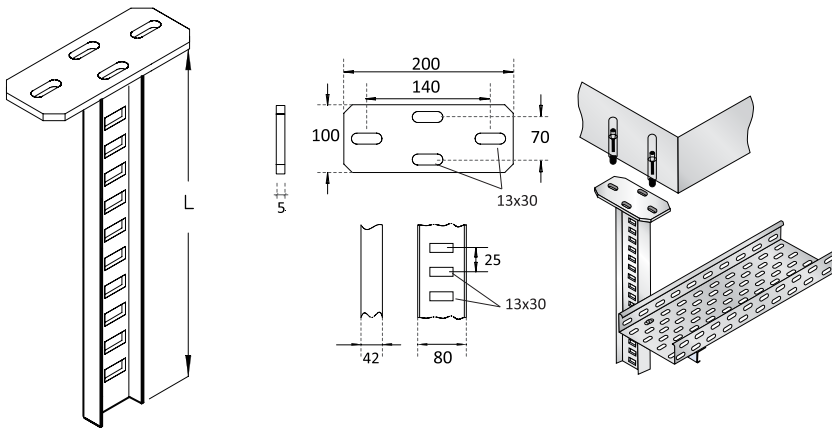
* Given Loads are always in [kN] * Allowable characteristic live load "





U - Support / 3000

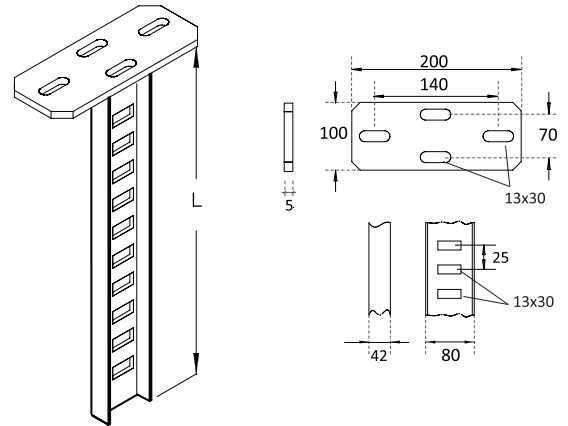
3000



U-Support with welded-on head plate 200 x 100 x 5mm

I - Support / 3050

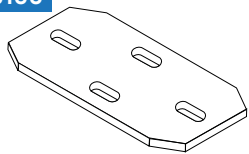
3050



U-Support with welded-on head plate 200 x 100 x 5mm

Head Plate / 3100

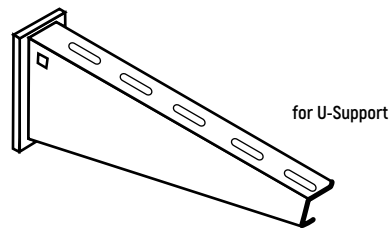
3100



200 x 100 x 5mm

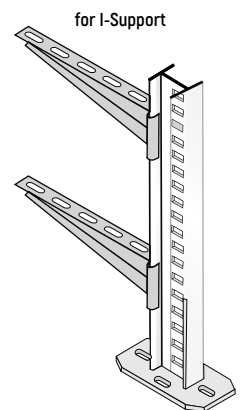
Wall Bracket | 3200 - 3250

3200



5 mm thickness

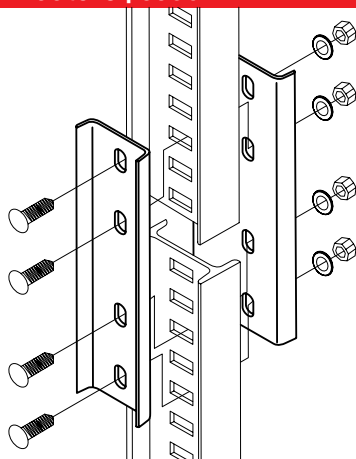
3250





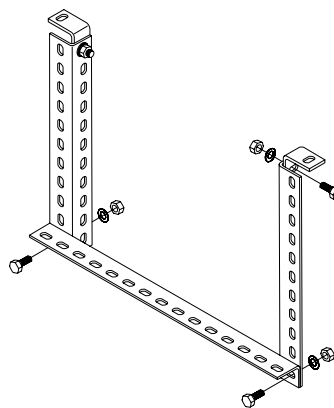
Support connectors | 3300

3300



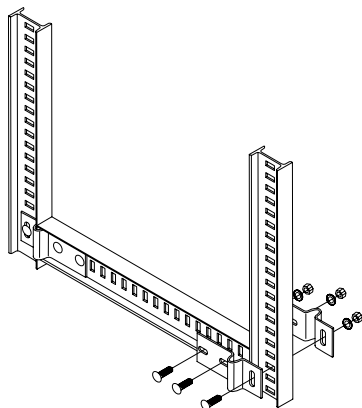
Clamping plates | 3350

3350



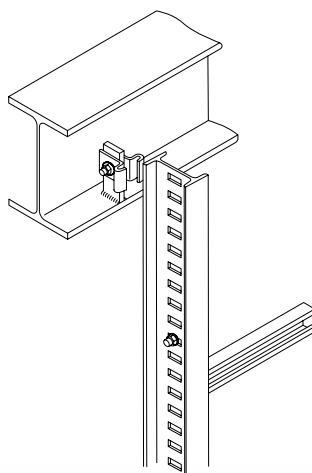
Support plates | 3400

3400



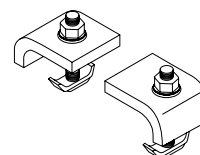
Support clamps | 3450

3450



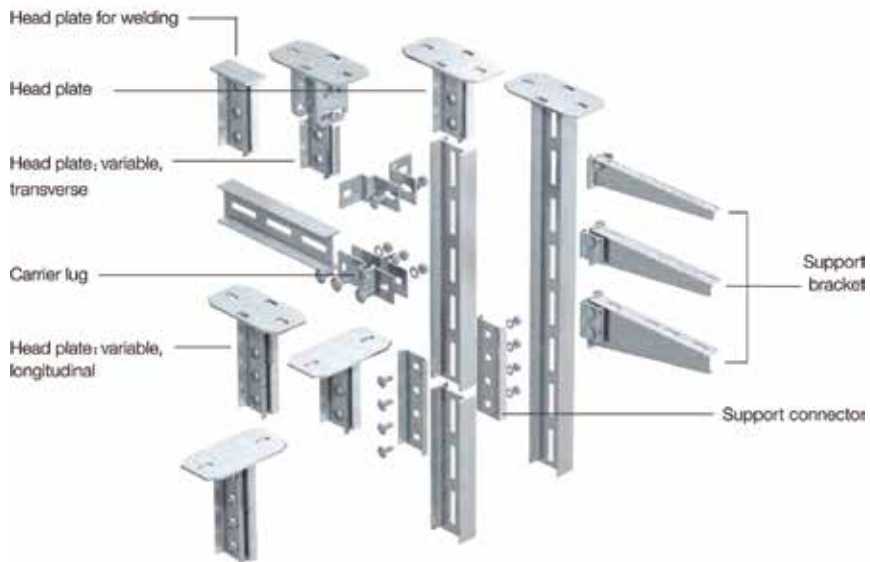
Clamping angles | 3550

3550



Angles | 3600

3600





Framing Systems

Fully Threaded Rods Grade 4.6 DIN 975 ASTM A 36, A193

Threaded Rod (STR) - DIN 975 - ASTM A36

Zinc Plated Thread	Length	Load cap
	(mm)	(kN)
M6	2000/3000	2.2
M8	2000/3000	4.0
M10	2000/3000	6.4
M12	2000/3000	12.9
M16	2000/3000	17.3
M18	2000	22.0
M20	2000	27.0



Square Washers SSW

Square Washers (SSW)

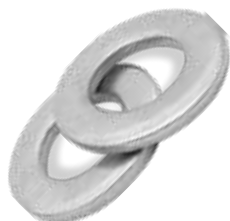
H.D. Galvanized Bolt	Stainless Steel Bolt	a x b x d
		(mm)
M8	M10	(x 40 x (4-5-6 40
M10	M12	(x 40 x (4-5-6 40
M12	M16	(x 40 x (4-5-6 40



ASTM F436

Washers (SRW) | DIN 125 | ASTM F436

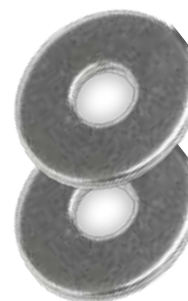
Zinc Plated	Stainless Steel	D	d	S
		(mm)	(mm)	(mm)
M6	M6	12	6.4	1.6
M8	M8	16	8.4	1.6
M10	M10	21	10.5	2
M12	M12	24	13	2.5
M16	M16	30	17	3
M18	M18	34	19	3.2
M20	M20	39	20.5	3.6



Round Washers DIN 440, DIN 9021

Washers (SRW) | DIN 440 | DIN 9021

DIN	Zinc Plated	Stainless Steel	D	d	S
			(mm)	(mm)	(mm)
440	M6		22	6.6	2
9021	M8	M8	24	8.4	2
9021	M10	M10	30	10.5	2.5
440	M12		45	13.5	4
9021	M12	M12	37	13	3
9021	M16	M16	50	17	3



Hexagon Nuts DIN 934, DIN EN 24032

Hexagon nut (SHN) | DIN 934 or ISO 4032
(= DIN EN 24032)

Zinc Plated Thread	S/m DIN	S/m ISO	e
	(mm)	(mm)	(mm)
M6	10/5	10/6	11.5
M8	13/6.5	13/7.5	15.0
M10	17/8	16/9.5	19.6
M12	19/10	18/12	21.9
M16	24/13	24/15.5	27.7



Square Washers SSW

Square Washers (SSW)

H.D. Galvanized Bolt	Stainless Steel Bolt	a x b x d
		(mm)
M8	M10	(x 40 x (4-5-6 40
M10	M12	(x 40 x (4-5-6 40
M12	M16	(x 40 x (4-5-6 40

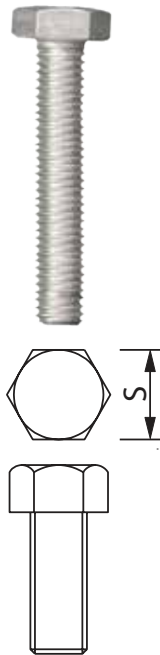




Machine HexHead Bolts DIN 933, DIN 24017

Zinc Plated Dimension	S DIN	S EN
	(mm)	(mm)
M 6 x 12	10	10
M 6 x 25		
M 8 x 25	13	13
M 8 x 40		
M 10 x 20	17	16
M 10 x 30		
M 10 x 45		
M 10 x 60		
M 10 x 70		
M 12 x 22		
M 12 x 25	19	18
M 12 x 30		
M 12 x 40		
M 12 x 50		
M 12 x 60		
M 12 x 80		
M 12 x 90		
M 16 x 40	24	24
M 16 x 60		
M 16 x 90		

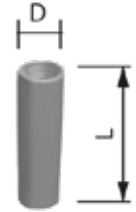
Hex Head Bolt (SHB)
DIN 933 or EN 24017 (without nut)



Coupler Sleeves Rounded

Electroplated Thread	D (mm)	L (mm)	Load cap (KN)
M6	10/10	15	2.2
M8	12/14	20	4.0
M10	13/16	25	6.4
M12	16/20	30	9.3
M16	21/25	40	17.3
M20	26/32	50	27.0

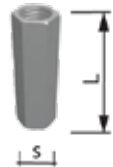
Coupler Sleeves (SCS)



Hexagonal Rod Coupler

Electroplated Thread	D (mm)	L (mm)	Load cap (KN)
M10	13	40	6.4
M12	17	40	9.3
M16	22	50	17.3

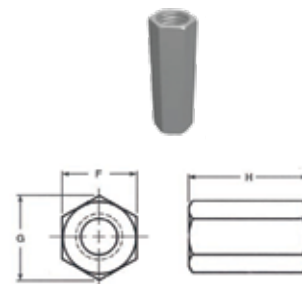
Hexagonal Rod Coupler with view hole (SHR)



Hexagonal Rod Coupler with view hole

Size	G	F		H	
	Min.	Min.	Max.	Min.	Max.
M6	11.05	9.78	10	17.6	18
M8	14.38	12.73	13	23.5	24
M10	18.9	16.73	17	29.5	30
M12	21.1	18.67	19	35.4	36
M16	26.75	23.67	24	47.0	48
M20	32.95	29.16	30	58.1	60
M24	39.55	35.00	36	70.1	72
M30	50.85	45.00	46	87.8	90

Hexagonal Rod Coupler with view hole (SHR)



Finishing Available : Electroplated, HDG, SS AISI 304 & 316

Specification Requirements:

Dimensions: H, F and G - as above

Threads type: 6H

Mechanical Properties: class 6. Proof Load Strength 600MPa

Finish: Electro-plated

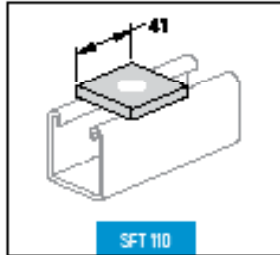
Remarks:

- Above Coupling Nut to be used with Threaded Rod Class 4.6 or less
- Threaded Rod to be extended inside the Coupler with distance equal or greater than the nominal Threaded diameter which is equal to H/2

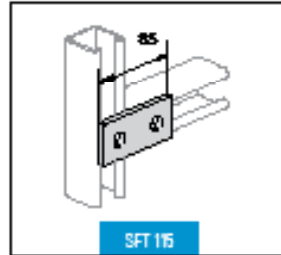


Fittings

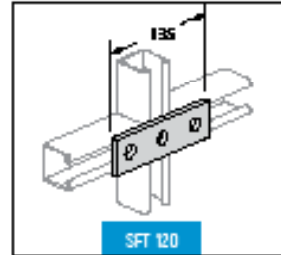
Square Washer



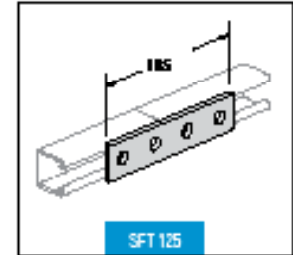
Splice Plate



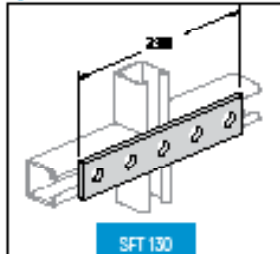
Splice Plate



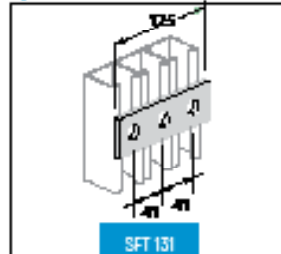
Splice Plate



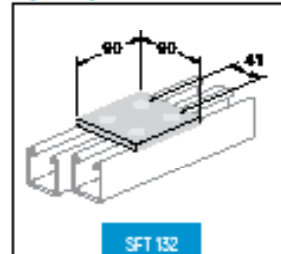
Splice Plate



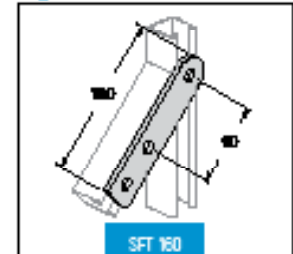
Splice Plate



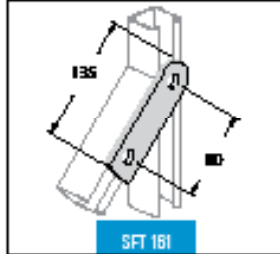
Square Splice Plate



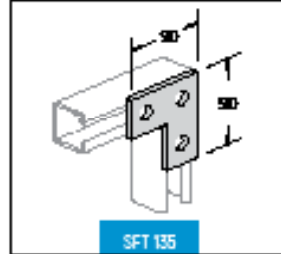
Angle Plate



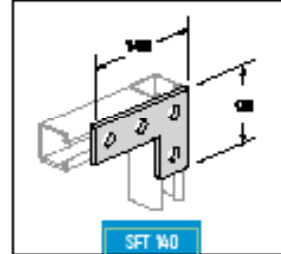
Angle Plate



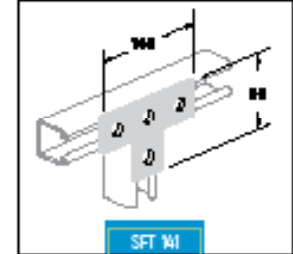
L-Plate



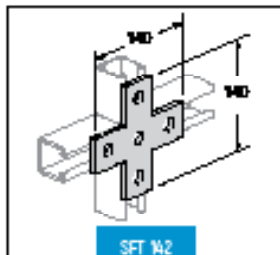
L-Plate



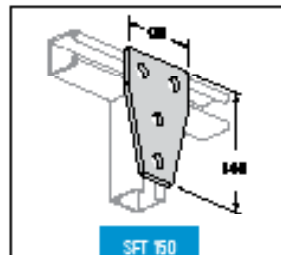
T-Plate



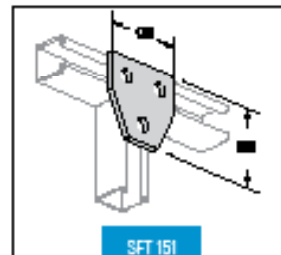
Plus Plate



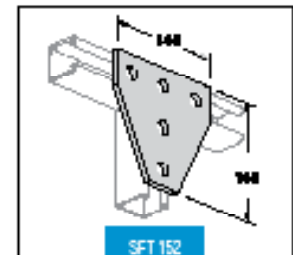
T-Plate



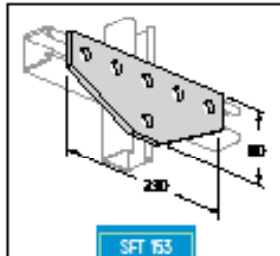
T-Plate



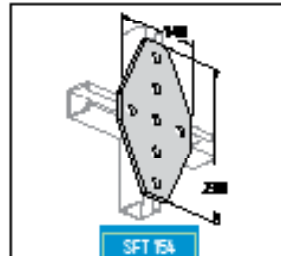
T-Plate



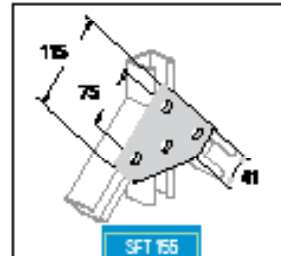
T-Plate



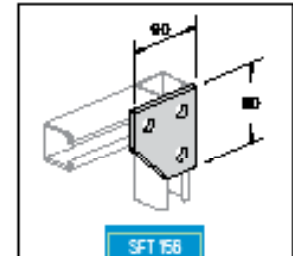
Plus Plate



45° Plate

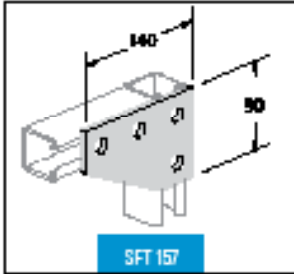


90° Plate



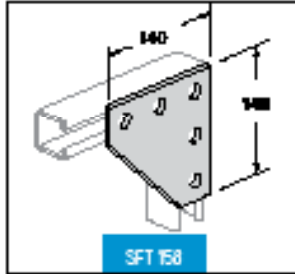


90° Plate



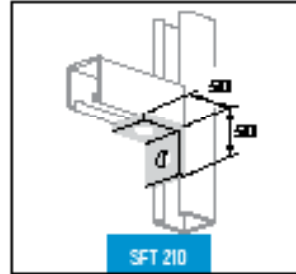
SFT 157

90° Plate



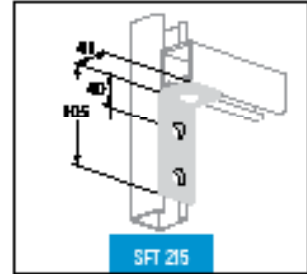
SFT 158

L-Bracket



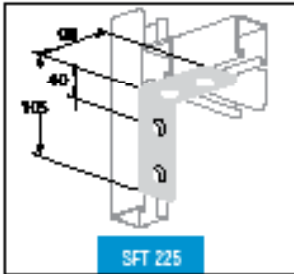
SFT 210

L-Bracket



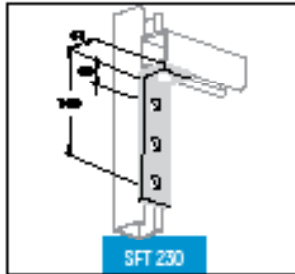
SFT 215

L-Bracket



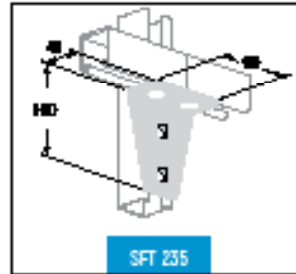
SFT 225

L-Bracket



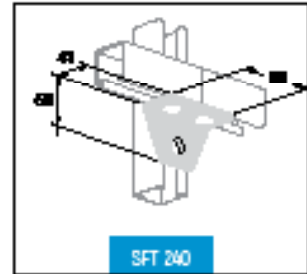
SFT 230

L-Plate



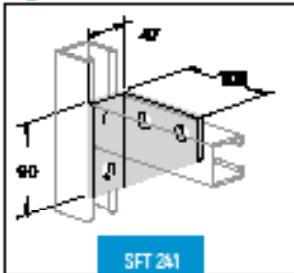
SFT 235

L-Plate



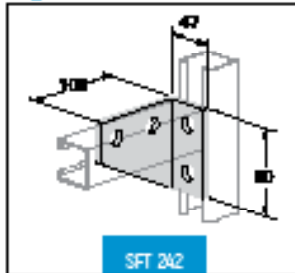
SFT 240

Angle Plate



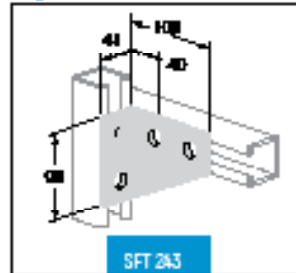
SFT 241

Angle Plate



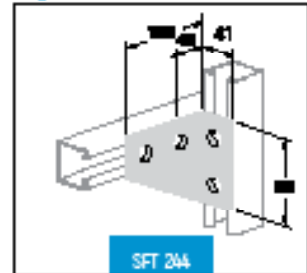
SFT 242

Angle Plate



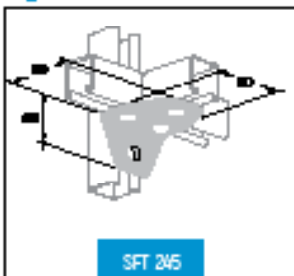
SFT 243

Angle Plate



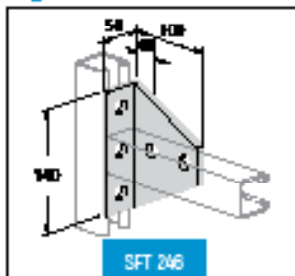
SFT 244

Angle Plate



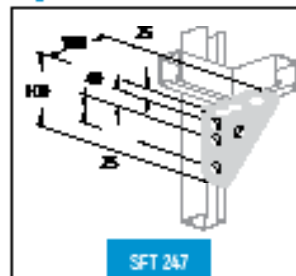
SFT 245

Angle Plate



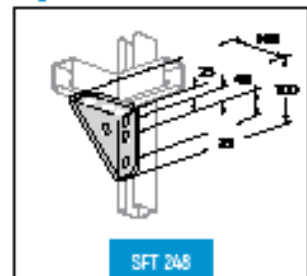
SFT 246

Angle Plate



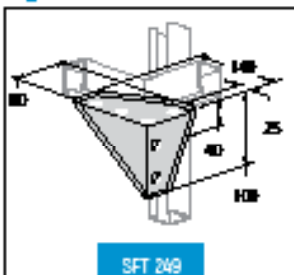
SFT 247

Angle Plate



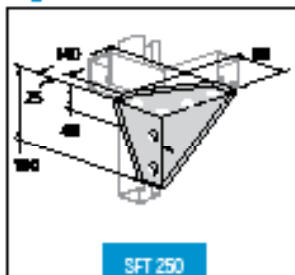
SFT 248

Angle Plate



SFT 249

Angle Plate



SFT 250

Angular Bracket



SFT 510

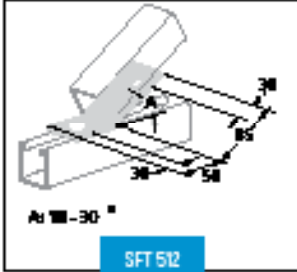
Angular Bracket



SFT 511

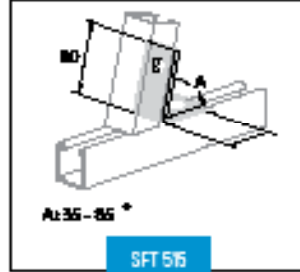


Angular Bracket



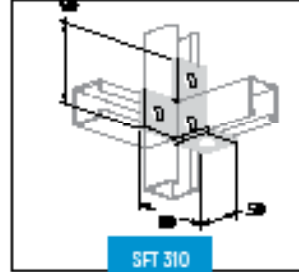
SFT 512

Angular Bracket



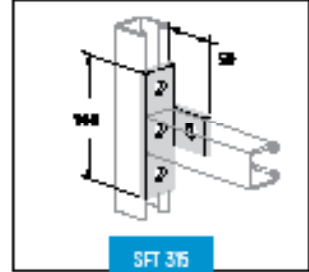
SFT 515

T-Corner Left



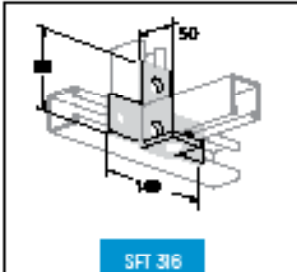
SFT 310

T-Corner Right



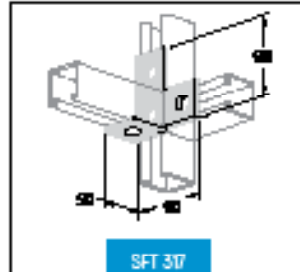
SFT 315

T-Center



SFT 316

T-Corner Right



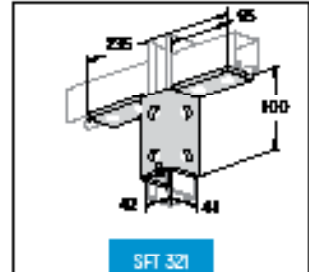
SFT 317

Double Wing Joint



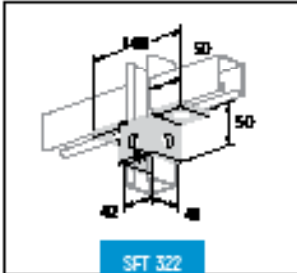
SFT 320

Double Wing Joint



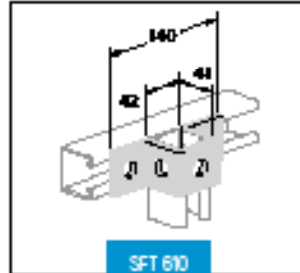
SFT 321

Double Wing Joint



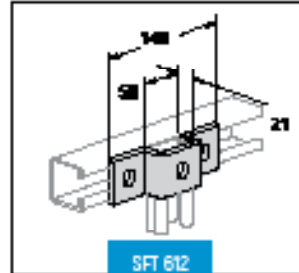
SFT 322

U & Wing Bracket



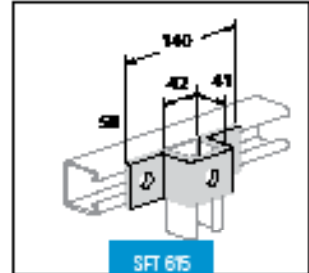
SFT 610

U & Wing Bracket



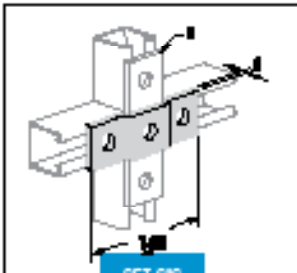
SFT 612

U & Wing Bracket



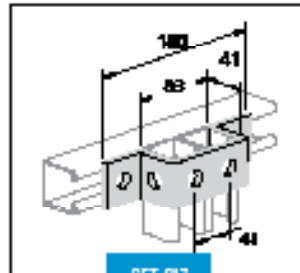
SFT 615

U & Wing Bracket



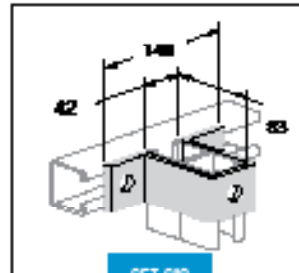
SFT 616

U & Wing Bracket



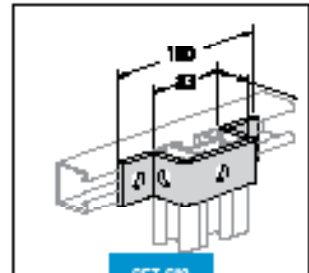
SFT 617

U & Wing Bracket



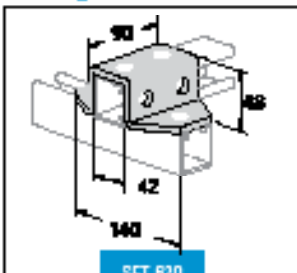
SFT 618

U & Wing Bracket



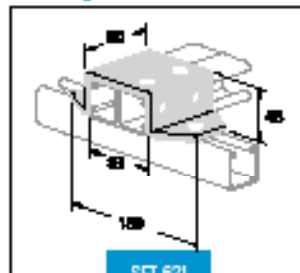
SFT 619

U & Wing Bracket



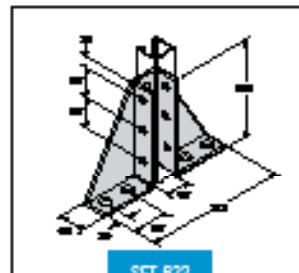
SFT 620

U & Wing Bracket



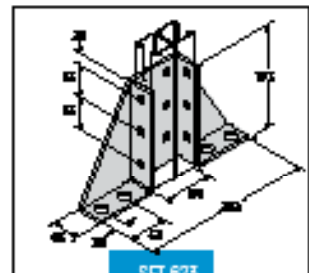
SFT 621

Single Channel Gussated Bracket



SFT 622

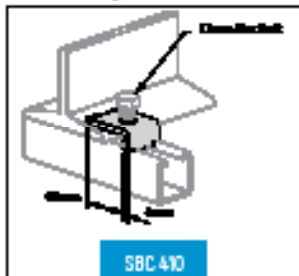
Double Channel Gussated Bracket



SFT 623

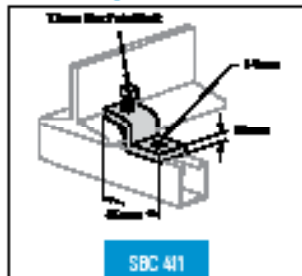


Beam Clamp



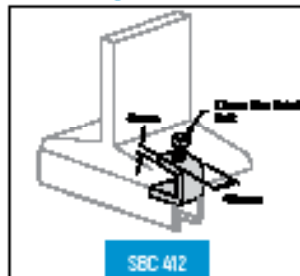
SBC 410

Beam Clamp



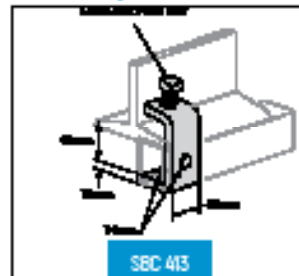
SBC 411

Beam Clamp



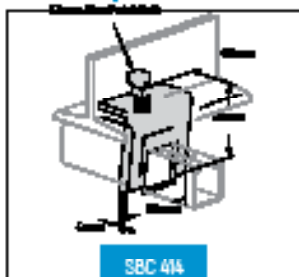
SBC 412

Beam Clamp



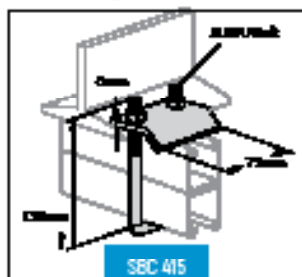
SBC 413

Beam Clamp



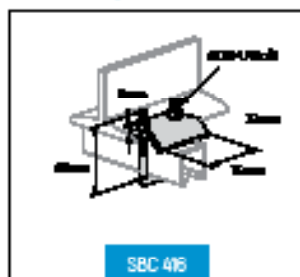
SBC 414

Beam Clamp



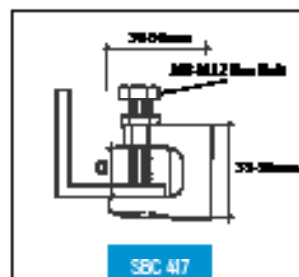
SBC 415

Beam Clamp



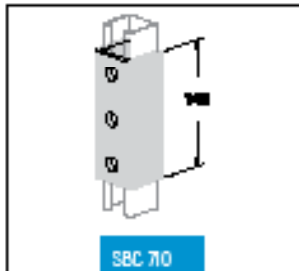
SBC 416

Beam Clamp



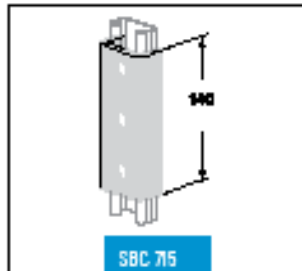
SBC 417

U - Joint Bracket



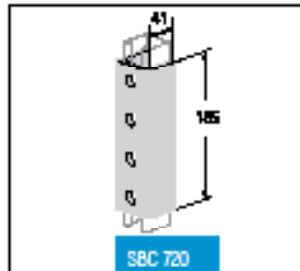
SBC 70

U - Joint Bracket



SBC 75

U - Joint Bracket



SBC 720

Plastic End Caps For Channels



NSP910

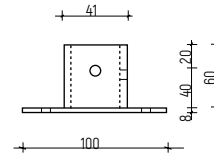
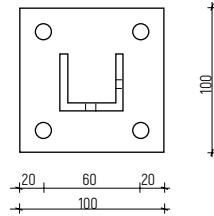
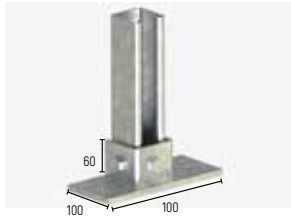
NSP911



Post Base

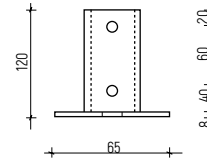
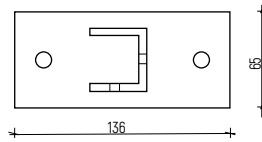
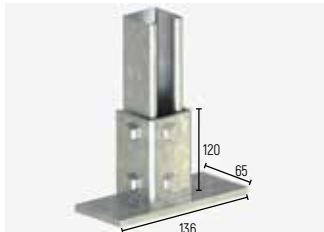
Base Plate with Single Fix

SFT 340



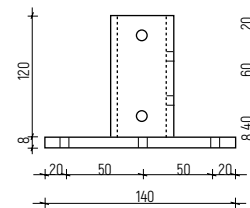
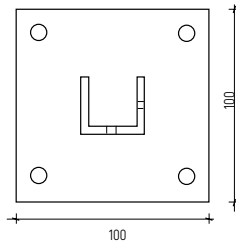
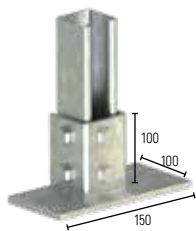
Base Plate with Double Fix

SFT 345



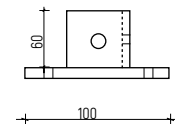
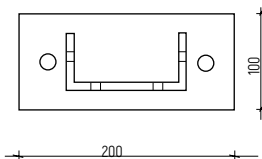
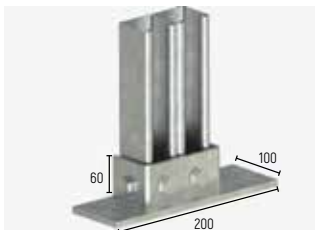
Base Plate with Double Fix

SFT 346



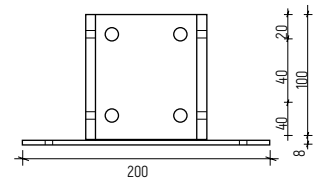
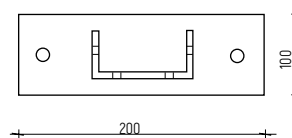
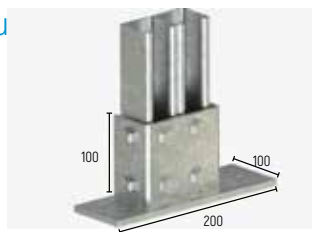
Base Plate with Double Channel

SFT 350



Base Plate with Double Channel Double Fix

SFT 355



Base Plate with Double Channel Double Fix

SFT 356

