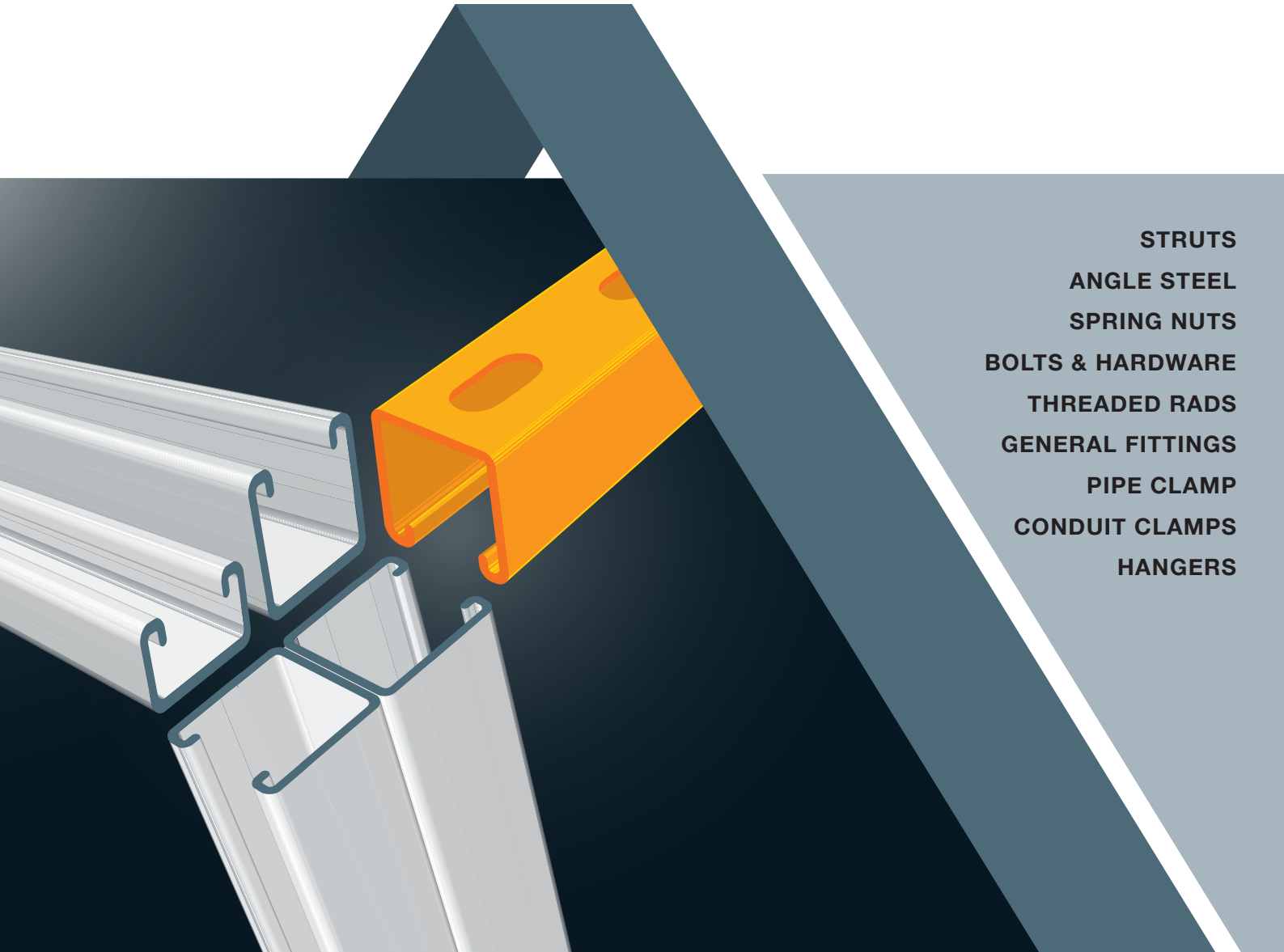


METAL FRAMING

CATALOGUE



STRUTS
ANGLE STEEL
SPRING NUTS
BOLTS & HARDWARE
THREADED RADS
GENERAL FITTINGS
PIPE CLAMP
CONDUIT CLAMPS
HANGERS



SMART[®]

Your Trusted Partner in
Electrical & Mechanical Support

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INTRODUCTION TO **SMARTr**[®]

CONDUITS & ACCESSORIES

We are a major supplier of Steel Conduit Systems, an ISO 9001:2015 Singapore company established since 1996 and has been serving the booming construction industry with its established distributor network worldwide. With the company's motto to maximize cost efficiency and provide fast deliveries.

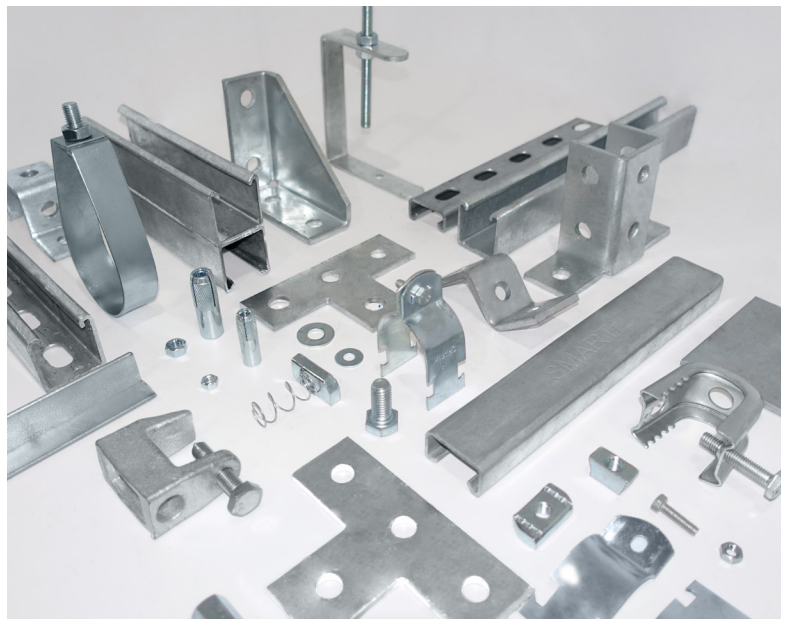


Your Trusted
Partner
in Electrical &
Mechanical Support



METAL FRAMING

SMARTr's extensive product portfolio now includes Metal Framing systems to meet or exceed industry standards for all light, medium and heavy-duty applications that are used in support of equipment for Electrical, Mechanical, Plumbing, HVAC and Data Centres in new and retrofit Commercial and Industrial installation. Our comprehensive product range, which continues to grow through clients need on unique applications that requires specialised fittings for individual project needs.



SUITABLE APPLICATIONS FOR (MEP) MODULAR

SMART[®] Metal Framing system offers a unique and flexible series of metal channels and fittings designed for all (MEP) Mechanical, Electrical and Plumbing applications including (DfMA) Design for Manufacturing and Assembly.

FRAMING MEMBERS

SMART[®] Channels are accurately and carefully cold-formed to size from low carbon strip steel, conforming to BS6946:1988.

SMART[®] Fittings, unless otherwise noted, are punch-press made from hot rolled, pickled and oiled steel plates, strip or coil, and meets the requirement of BS6946. The pickling of the steel produces a smooth surface free from scale.

FINISHES

Standard finish Hot-Dip Galvanized or Zinc Electroplated as appropriate. Other finishes such as Stainless Steel 316, 316L, 304, Pre-galvanized and Epoxy Coated are also available to order.

CUSTOM/SPECIAL ORDER REQUEST

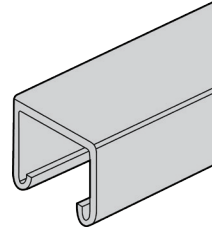
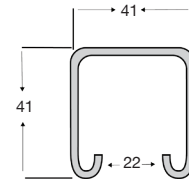
Custom-designed inserts are also available on special order, contact SMART[®] if a unique application requires a special product not included in this catalogue.



SMART^{Tr} STRUT CHANNELS

41 x 41

ITEM CODE	: SS-4141-25 (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 41mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 2.78kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



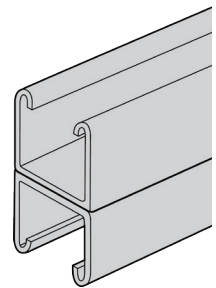
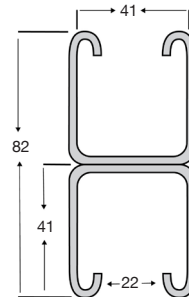
BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	927	1	927	927	2129	34.8
1000	463	4	460	336	1397	21.3
1500	309	9	224	153	1091	13.4
2000	231	15	122	82	887	9.6
2500	185	24	82	51	734	-
3000	154	34	51	40	-	-
3500	133	46	40	31	-	-
4000	122	62	31	20	-	-
4500	101	78	31	20	-	-
5000	91	97	20	NR	-	-
6000	81	136	NR	NR	-	-

Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
3.58	7.68	3.30	1.46	9.80	4.75	1.65

Note:
I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

41 X 41 2PC COMBINATION

ITEM CODE	: SS-4141-25BB (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 82mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 5.5kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	2688	1	2688	2688	2957	97.4
1000	1344	2	1325	1325	2886	83.9
1500	896	5	887	754	2733	56.4
2000	672	9	642	428	2437	33.3
2500	537	14	407	275	2080	21.3
3000	448	20	285	193	-	-
3500	377	26	203	142	-	-
4000	326	34	163	112	-	-
4500	295	44	122	81	-	-
5000	265	53	101	71	-	-
6000	224	78	71	40	-	-

Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
7.16	38.62	9.36	2.32	19.50	9.50	1.65

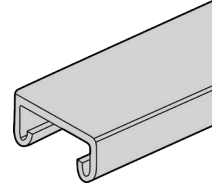
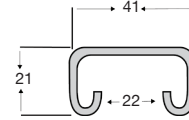
Note:
I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

SMART^{tr} STRUT CHANNELS

41 x 21

ITEM CODE	: SS-4121-25 (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 21mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 1.45kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	302	1.9	270	194	1050	24.4
1000	151	7.0	101	71	924	10.5
1500	100	15.0	41	31	640	-
1750	91	21.0	31	20	520	-
2000	75	26.8	31	20	-	-
2500	60	43.0	20	10	-	-
3000	50	60.0	10	10	-	-

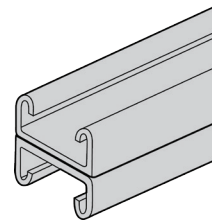
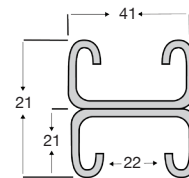
Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
2.55	1.54	1.18	0.78	5.94	2.88	1.53

Note:

I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

41 X 21 2PC COMBINATION

ITEM CODE	: SS-4121-25BB (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 42mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 2.9kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	893	1.4	795.0	795.0	1917	66.0
1000	446	4.3	467.0	326.1	1855	44.8
1500	297	9.6	214.0	142.7	1672	21
1750	245	11.7	163.1	101.0	1529	16
2000	223	16.0	122.2	81.3	1356	-
2500	178	24.0	81.3	50.1	1060	-
3000	148	36.0	50.0	40.2	-	-

Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
5.10	7.33	3.30	1.20	11.87	5.75	1.53

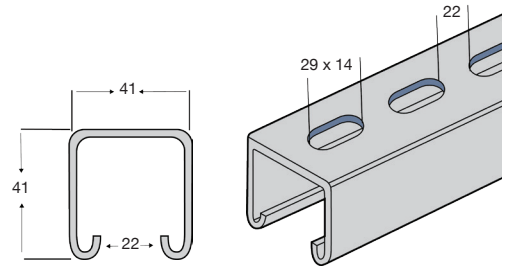
Note:

I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

SMART^{tr} STRUT CHANNELS

41 X 41 SLOTTED

ITEM CODE	: SS-4141-25SL (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 41mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 2.75kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



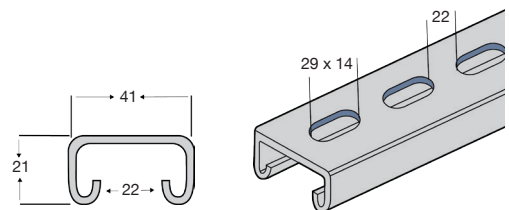
BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	861	1.24	861	861	861	16.0
1000	430	4.37	430	272	272	13.6
1500	287	9.85	218	121	121	10.4
2000	215	17.48	122	67	67	8.8
2500	172	27.32	78	43	43	7.3
3000	143	39.25	54	30	30	-
3500	127	51.1	36	27	27	-
4000	113	69.5	27	18	18	-
4500	99	90.6	23	NR	NR	-
5000	87	114.8	18	NR	NR	-
6000	77	141.7	NR	NR	NR	-

Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
2.90	6.13	3.02	1.46	9.19	4.45	1.78

Note:
I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

41 X 21 SLOTTED

ITEM CODE	: SS-4121-25SL (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 21mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 1.39kg/M
AVAILABLE LENGTH	: 3m / 5.8m / 6m as standard length
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated Stainless Steel 304 / 316 / 316L



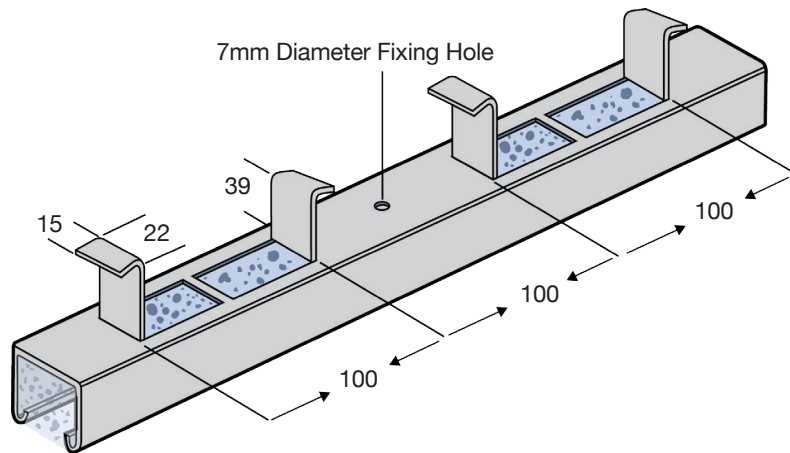
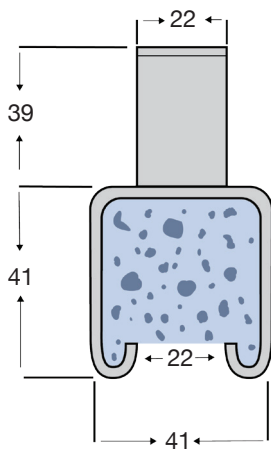
BEAM LOADING (METRIC)					COLUMN LOADING (METRIC)	
Span or Column Effective Length (mm)	Max. Allowable Uniform Load (kg)	Max. Allowable Load Deflection (mm)	Uniform loading at Deflection		Max. Allowable Load At Slot Face (kg)	Max. Column Load Applied at C.G.K = 1.2 (kN)
			Span/240 (kg)	Span/360 (kg)		
500	282	2.22	308.0	177.0	1298	-
1000	141	6.07	79.0	44.0	861	-
1500	94	13.64	35.0	20.0	-	-
1750	75	18.6	27.0	16.3	-	-
2000	64	24.26	20.0	11.0	-	-
2500	56	37.90	13.0	7.0	-	-
3000	47	54.57	9.0	5.0	-	-

Area of Section (cm ²)	AXIS X - X			AXIS Y - Y		
	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)	Moment of Inertia (cm ⁴)	Section Modulus (cm ³)	Radius of Gyration (cm)
1.97	0.99	0.92	0.71	5.31	2.57	1.65

Note:
I - Moment of Inertia
Z - Section Modulus
R - Radius of Gyration

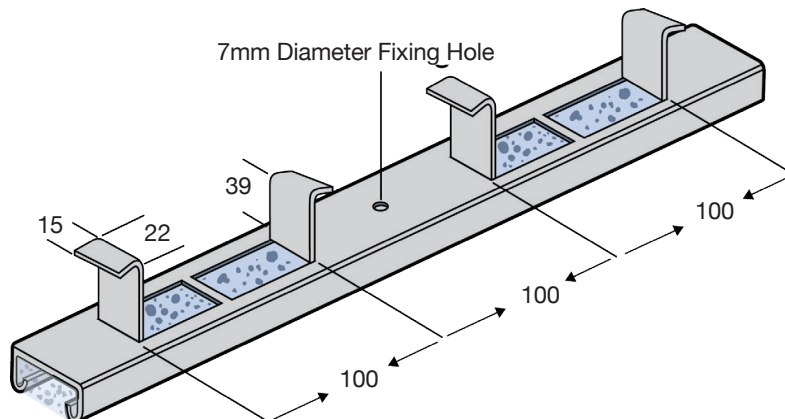
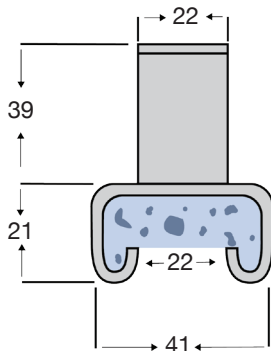
41 x 41 CI

ITEM CODE	: SS-4141-25CI (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 41mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 2.80kg/M
AVAILABLE LENGTH	: As Ordered
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L
LOADING DATA	: The support capacity of any Concrete Insert depends largely on the strength of the concrete used. - We cannot guarantee any particular load.
RECOMMENDED PULLOUT LOADING	: Inserts 300mm and over 8.43kN per 300mm
NOTE	: Exercise care during installation, do not bend lugs.



41 x 21 CI

ITEM CODE	: SS-4121-25CI (For Hot-Dipped Galvanized)
DIMENSION	: 41mm x 21mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel
STD THICKNESS	: 2.5mm (Below 2.5 mm thickness also available on request)
WEIGHT	: 1.90kg/M
AVAILABLE LENGTH	: As Ordered
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L
LOADING DATA	: The support capacity of any Concrete Insert depends largely on the strength of the concrete used. - We cannot guarantee any particular load.
RECOMMENDED PULLOUT LOADING	: Inserts 300mm and over 667kgf per 300mm
NOTE	: Exercise care during installation, do not bend lugs.



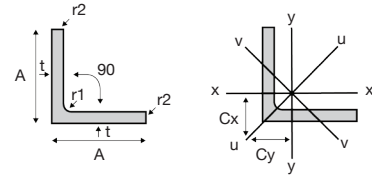
SMART[®] ANGLE BAR AND C-CHANNEL

ANGLE BAR

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Black Uncoated



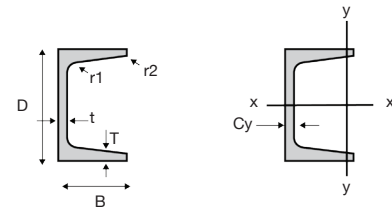
Designation		Weight	Radius		Area of Section	Distance Centre of Gravity Cx and Cy	Second Moment of Area			Radius of Gyration			Elastic Modulus Axis x-x, y-y
Size A x A	Thickness		Root r1	Toe r2			Axis x-x, y-y	Axis u-u	Axis v-v	Axis x-x, y-y	Axis u-u	Axis v-v	
mm	mm	kg/m	mm	mm	cm ²	cm	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm ³
20x20	3	0.885	4	2.4	1.12	0.592	0.381	0.601	0.161	0.583	0.733	0.379	0.271
25x25	3	1.120	4	2.4	1.42	0.716	0.785	1.240	0.328	0.744	0.936	0.481	0.440
	5	1.76	4	2.4	2.26	0.795	1.194	1.87	0.517	0.727	0.91	0.478	0.701
30x30	3	1.36	4	2.4	1.72	0.841	1.41	2.23	0.583	0.905	1.14	0.583	0.652
	5	2.16	4	2.4	2.76	0.921	2.167	3.42	0.918	0.886	1.113	0.577	1.042
40x40	3	1.83	4.5	2.4	2.33	1.09	3.49	5.55	1.44	1.22	1.54	0.787	1.2
	4	2.42	6	2.4	3.09	1.12	4.53	7.18	1.89	1.21	1.52	0.782	1.58
	5	2.95	4.5	2.4	3.77	1.17	5.48	8.68	2.27	1.21	1.52	0.777	1.93
	6	3.52	6	2.4	4.49	1.2	6.37	10.1	2.69	1.19	1.5	0.773	2.28
45x45	4	2.74	6.5	2.4	3.51	1.25	6.58	10.4	2.74	1.37	1.72	0.884	2.02
	5	3.38	6.5	2.4	4.32	1.29	7.98	12.6	3.33	1.36	1.71	0.878	2.49
	6	3.96	6.5	2.4	5.11	1.33	9.3	14.7	3.9	1.35	1.7	0.873	2.93
50x50	3	2.33	7	2.4	2.99	1.32	7.06	11.1	2.97	1.54	1.93	0.997	1.92
	4	3.06	6.5	2.4	3.91	1.37	9.16	14.5	3.81	1.53	1.93	0.987	2.52
	5	3.77	6.5	2.4	4.82	1.41	11.1	17.7	4.63	1.52	1.92	0.98	3.11
	6	4.43	6.5	2.4	5.71	1.45	13	20.6	5.42	1.51	1.9	0.975	3.67
	8	5.78	6.5	2.4	7.43	1.53	16.4	25.9	6.96	1.49	1.87	0.968	4.74

TAPERED FLANGE

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Black Uncoated



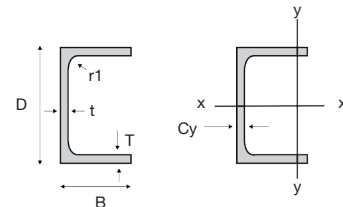
Designation		Weight	Radius		Area of Section	Distance Centre of Gravity Cx and Cy	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus	
Size D x B x T	Thickness T		Root r1	Toe r2			Ix	Iy	rx	ry	Zx	Zy	Sx	Sy
mm	mm	kg/m	mm	mm	cm ²	mm	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³
75 x 40 x 5	7.0	6.9	8	4	8.82	12.7	75.9	12.4	2.93	1.19	20.2	4.5	23.6	8.9
100 x 50 x 5	7.5	9.4	8	4	11.92	15.5	189	26.9	3.98	1.50	37.8	7.8	43.5	15.3
125 x 65 x 6	8.0	13.4	8	4	17.11	19.4	425	65.5	4.99	1.96	68.0	14.4	78.3	28.5
150 x 75 x 6.5	10.0	18.6	10	5	23.71	23.1	864	122.0	6.04	2.27	115.0	23.6	131.8	46.1
150 x 75 x 9	12.5	24.0	15	7.5	30.59	23.1	160	151.0	5.87	2.22	141.0	29.1	163.2	57.5
180 x 75 x 7	10.5	21.4	11	5.5	27.20	21.5	1380	137.0	7.13	2.24	154.0	25.5	176.8	51.6
180 x 90 x 7.5	12.5	27.1	13	6.5	34.57	28.5	1840	258.0	7.29	2.73	204.0	42.0	232.3	80.9
200 x 80 x 7.5	11.0	24.6	12	6	31.33	22.4	1950	177.0	7.89	2.38	195.0	30.8	224.6	62.8
200 x 90 x 8	13.5	30.3	4	7	38.65	27.7	2490	286.0	8.03	2.72	249.0	45.9	285.0	89.7

PARALLEL FLANGE

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Black Uncoated

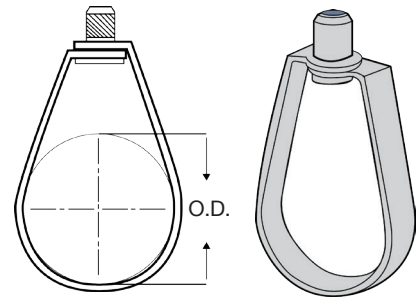


Designation		Thickness		Radius	Area of Section	Distance Centre of Gravity Cx and Cy	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus	
Size D x B	Weight	Web T	Flange T	Root r1			Ix	Iy	rx	ry	Zx	Zy	Sx	Sy
mm	kg/m	mm	mm	mm	cm ²	mm	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³
100 x 50	10.2	5.0	8.5	9	13.00	17.3	208.0	32.3	4.00	1.58	41.5	9.9	48.9	17.5
125 x 65	14.8	5.5	9.5	12	18.80	22.5	483	80.0	5.07	2.06	77.3	18.8	89.9	33.2
150 x 75	17.9	5.5	10.0	12	22.80	25.8	861	131.0	6.15	24.00	115.0	2616.0	132.0	47.8
150 x 90	23.9	6.5	12.0	12	30.4	33	1162	253	6.18	2.89	155	44.4	179	76.9
180 x 75	20.3	6.0	10.5	12	25.90	24.1	1370	146.0	8.28	2.38	152.0	28.8	176.0	51.8
180 x 90	26.1	6.5	12.5	12	33.20	31.7	1817	277.0	7.40	2.89	202.0	47.4	232.0	83.5
200 x 75	23.4	6.0	12.5	12	29.90	24.8	1963	170.0	8.11	2.39	196.0	33.8	227.0	60.6
200 x 90	29.7	7.0	14.0	12	37.90	31.2	2523	314	8.16	2.89	252	53.4	291	94.5

LOOP HANGER

STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG and other finishes available on request.
SIZE RANGE : Large size Loop Hanger also available on request.

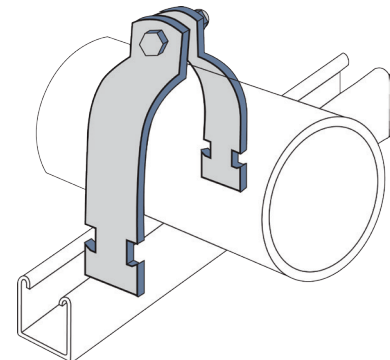
Code No.	Nominal Pipe Size (mm)	Size of Steel	Rod Size	O.D. Size (mm)	Rec Load (kN)
SSA-LH-20	20	1.5x25	M10	26.7	1.2
SSA-LH-25	25	1.5x25	M10	33.4	1.2
SSA-LH-32	32	1.5x25	M10	42.2	1.2
SSA-LH-38	40	1.5x25	M10	48.3	1.2
SSA-LH-50	50	1.5x25	M10	60.3	1.2



2 PC CONDUIT PIPE CLAMP

STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG and other finishes available on request.
SIZE RANGE : Larger size Conduit Pipe Clamp also available on request.

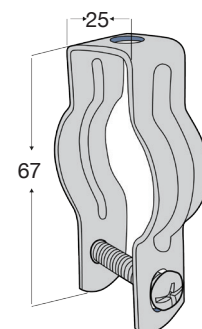
Code No.	Nominal Pipe Size (mm)	O.D Size (mm)	Thickness (mm)	Design Load (kg)
SSA-CONDCLAMP-20	20	26.7	2	272.26
SSA-CONDCLAMP-25	25	33.4	2	272.26
SSA-CONDCLAMP-32	32	42.2	2	272.26
SSA-CONDCLAMP-38	38	48.3	2.5	363.02
SSA-CONDCLAMP-50	50	60.3	2.5	363.02



PIPE HANGER

STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG and other finishes available on request.
NOTE : Pipe Hanger for Rigid Steel Conduit.

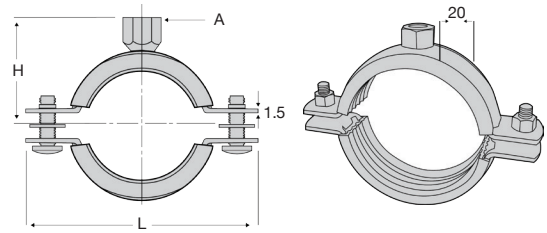
Code No.	Nominal Pipe Size (mm)	A Diameter (mm)	Weight/C (kg)
SSA-PH-20	20	8	8
SSA-PH-25	25	8	9
SSA-PH-32	32	8	11
SSA-PH-38	38	8	19
SSA-PH-50	50	8	27



SMART^{tr} PIPE CLAMPS AND BEAM CLAMPS

STD. PIPE CLAMP WITH RUBBER

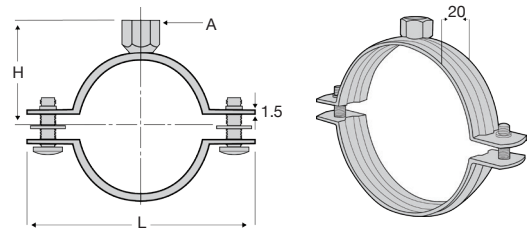
STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG and other finishes available on request.
SIZE RANGE : Larger size Pipe Clamp also available on request.



Code No.	Clamping Range	Size of Steel	A	L (mm)	H (mm)	Rec Load (kN)	Quantity / Box Unit	Wt per 100 (kg)
SSA-PCR-12	20-24	1.5x20	M8	62.5	28	1.3	100	5.65
SSA-PCR-34	25-28	1.5x20	M8	68.5	31	1.3	100	6
SSA-PCR-1	32-35	1.5x20	M8	76	34.5	1.3	100	7
SSA-PCR-114	39-46	1.5x20	M8	91.5	39	1.6	50	4.35
SSA-PCR-112	48-53	1.5x20	M8	99	42.5	1.6	50	4.8
SSA-PCR-2	59-66	1.5x20	M8	112	49	1.6	50	5.6

STD. PIPE CLAMP WITHOUT RUBBER

STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG and other finishes available on request.
SIZE RANGE : Larger size Pipe Clamp also available on request.

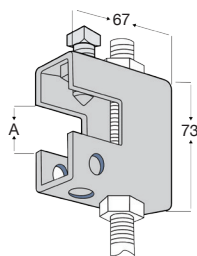


Code No.	Clamping Range	Size of Steel	A	L (mm)	H (mm)	Rec Load (kN)	Quantity / Box Unit	Wt per 100 (kg)
SSA-PC-12	18-23	1.5x20	M8	54.5	24	1.3	100	3.95
SSA-PC-34	27-31	1.5x20	M8	62.5	28	1.3	100	4.66
SSA-PC-1	32-37	1.5x20	M8	68.5	31	1.3	100	5.2
SSA-PC-114	39-44	1.5x20	M8	76	34.5	1.6	100	5.93
SSA-PC-112	46-54	1.5x20	M8	91.5	39	1.6	50	3.55
SSA-PC-2	54-61	1.5x20	M8	99	42.5	1.6	50	3.85

BEAM HANGER

SSA-BC
STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG available on request.

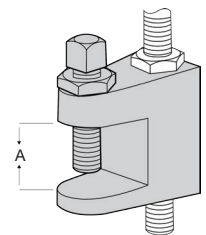
Max. Flange Thickness (mm)
16
22



WEDGE C-CLAMP

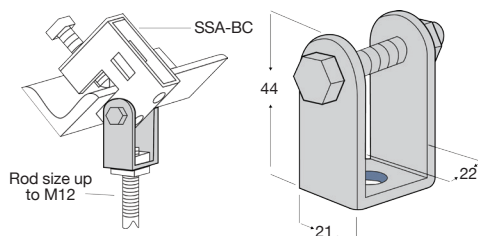
SSA-BC-WCC
STD MATERIAL : Malleable Iron
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG available on request.

Max. Flange Thickness (mm)
25
35
45



BEAM HANGER C/W SWIVEL BRACKET

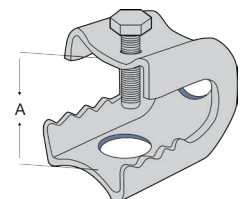
SSA-BC-SW
STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG available on request.



TIGER TOOTH CLAMP

SSA-BC-TTC
STD MATERIAL : Steel
STD FINISH : Pre-Galvanized
AVAILABLE FINISH : HDG available on request.

Max. Flange Thickness (mm)
17
36



SINGLE CHANNEL BRACKET

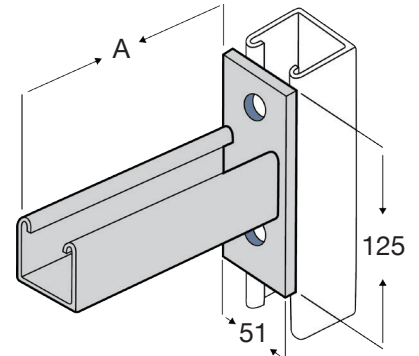
SSA-SCA

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

Code No.	A (mm)	Uniform Load Vertical Channel (kgf)
SSA-SCA-150	150	526
SSA-SCA-300	300	262
SSA-SCA-450	450	175
SSA-SCA-600	600	131
SSA-SCA-750	750	105
SSA-SCA-900	900	88



DOUBLE CHANNEL BRACKET

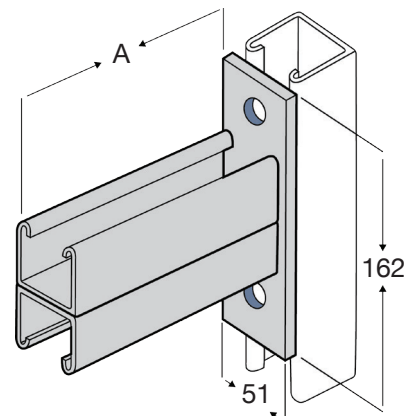
SSA-DCA

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

Code No.	A (mm)	Uniform Load Vertical Channel (kgf)
SSA-DCA-300	300	770
SSA-DCA-450	450	527
SSA-DCA-600	600	400
SSA-DCA-750	750	330
SSA-DCA-900	900	275



BRACED CHANNEL BRACKET

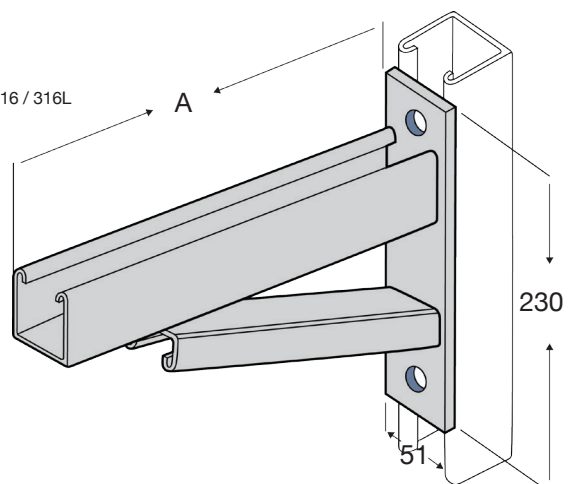
SSA-BCA

STD MATERIAL : Hot-Roll Low-Carbon Steel

STD FINISH : Hot-Dipped Galvanized

AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

Code No.	A (mm)	Uniform Load Vertical Channel (kgf)
SSA-BCA-300	300	1000
SSA-BCA-450	450	350
SSA-BCA-600	600	345
SSA-BCA-750	750	294
SSA-BCA-900	900	150



Note : Non-standard dimensions are available on request.

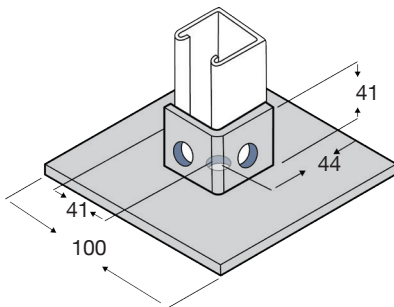
All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

SMART[®] FLOOR BRACKET/POST BASE

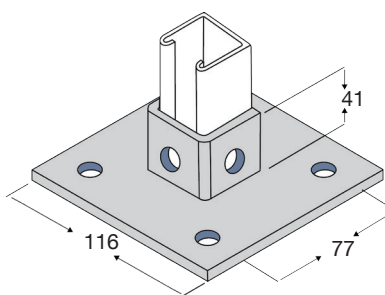
Floor Bracket / Post Base

STD DIMENSIONS : For 41.3mm width series channel fittings.
STD HOLE DIA : 12.5mm
STD MATERIAL : Hot-Roll Low-Carbon Steel
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

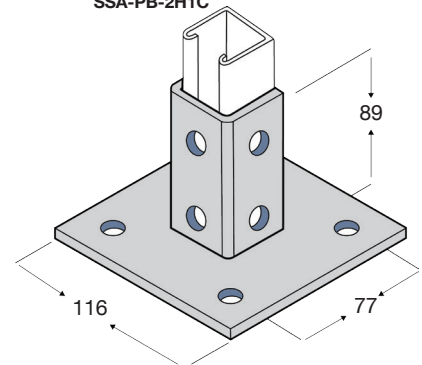
1 HOLE SINGLE ANGLE
SSA-PB-ANGLE



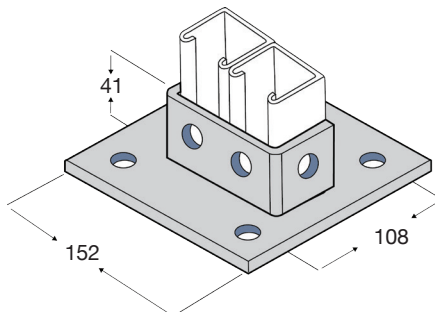
1 HOLE SINGLE CHANNEL
SSA-PB-1H1C



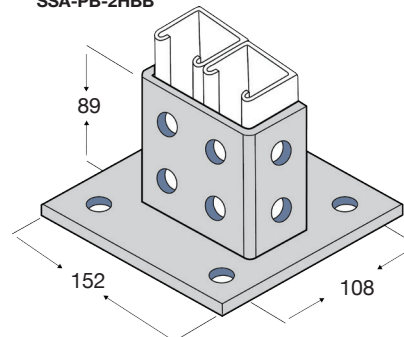
2 HOLE SINGLE CHANNEL
SSA-PB-2H1C



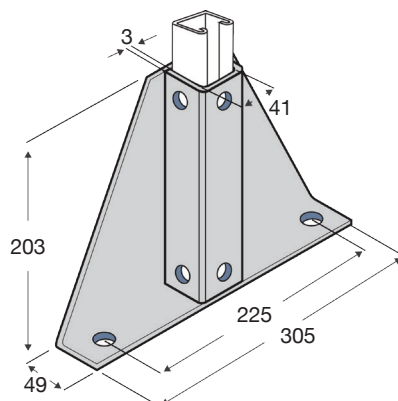
1 HOLE DOUBLE CHANNEL
SSA-PB-1HBB



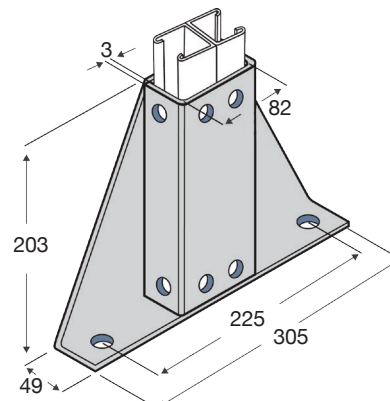
2 HOLE DOUBLE CHANNEL
SSA-PB-2HBB



2 HOLE SINGLE WING CHANNEL
SSA-PB-SW



2 HOLE DOUBLE WING CHANNEL
SSA-PB-SWBB



Note : Stainless Steel dimensions may vary from standard finish. Measurements available on request.

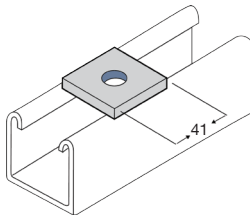
All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

FLAT PLATE FITTINGS

STD DIMENSIONS : For 41.3mm width series channel fittings.
STD HOLE DIA : 10.5, 12.5mm
STD MATERIAL : Hot-Roll Low-Carbon Steel (Stainless Steel 316 available on order)
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

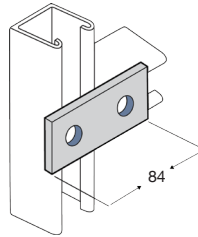
SQUARE CHANNEL WASHER

SSA-SQ-WASHER



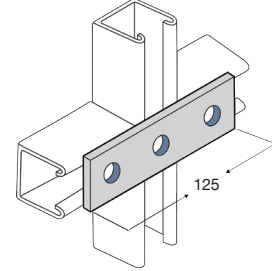
2 HOLE SPLICE PLATE

SSA-FPF-2H



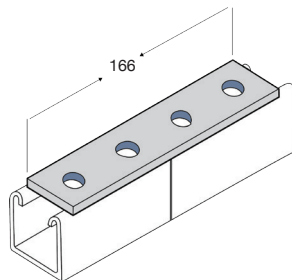
3 HOLE SPLICE PLATE

SSA-FPF-3H



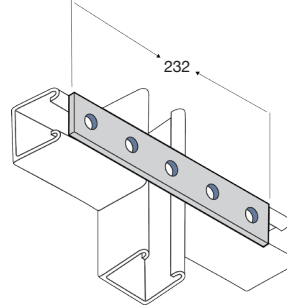
4 HOLE SPLICE PLATE

SSA-FPF-4H



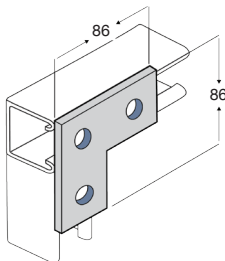
5 HOLE SPLICE PLATE

SSA-FPF-5H



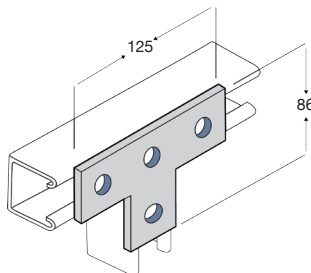
3 HOLE HALF TEE PLATE

SSA-FBF-HT



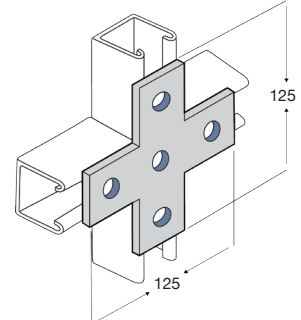
4 HOLE TEE PLATE

SSA-FBF-T



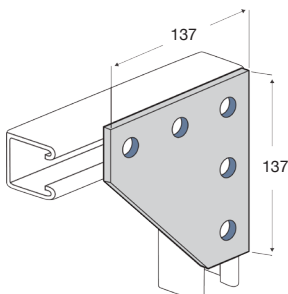
5 HOLE CROSS PLATE

SSA-FPF-CROSS



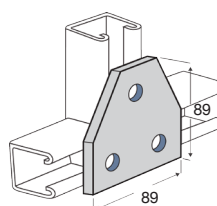
5 HOLE CORNER ANGLED PLATE

SSA-FBF-ANGLE



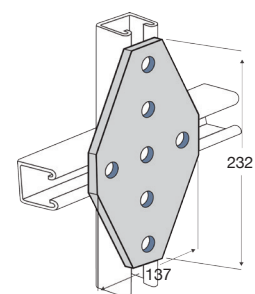
3 HOLE DIAGONAL HALF PLATE

SSA-FBF-DH



7 HOLE DIAGONAL PLATE

SSA-FBF-D



Note : Stainless Steel dimensions may vary from standard finish. Measurements available on request.

All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

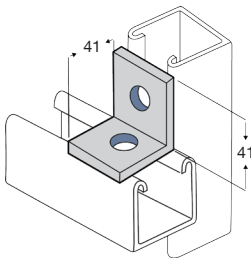
SMART^{tr} STRUT FITTINGS

ANGLE FITTINGS

STD DIMENSIONS : For 41.3mm width series channel fittings.
STD HOLE DIA : 10.5, 12.5mm
STD MATERIAL : Hot-Roll Low-Carbon Steel (Stainless Steel 316 available on order)
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

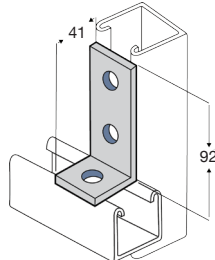
2 HOLE CORNER ANGLE

SSA-AF-CA



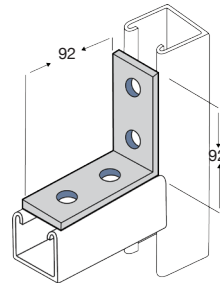
3 HOLE CORNER ANGLE

SSA-AF-3CA



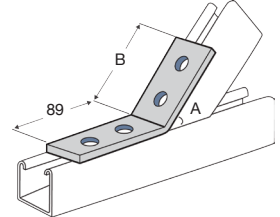
4 HOLE CORNER ANGLE

SSA-AF-4CA



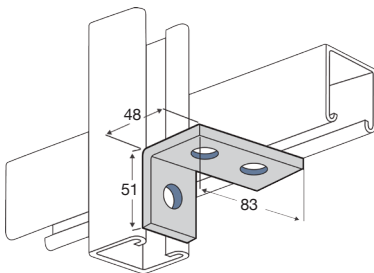
CORNER ANGLE BEND

SSA-AF-D



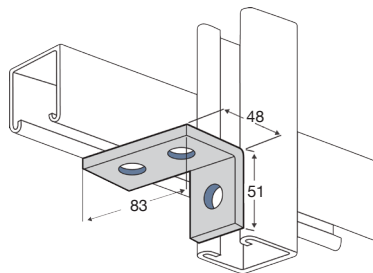
3 HOLE HALF TEE ANGLE PLATE (RIGHT)

SSA-AF-3HTR



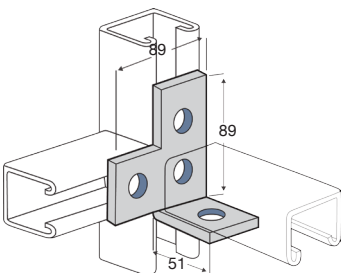
3 HOLE HALF TEE ANGLE PLATE (LEFT)

SSA-AF-3HTL



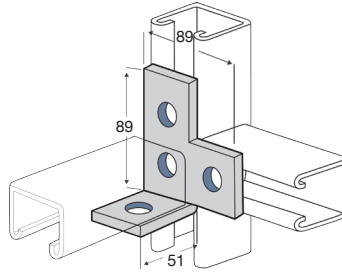
4 HOLE ANGLE PLATE (LEFT)

SSA-AF-4LL



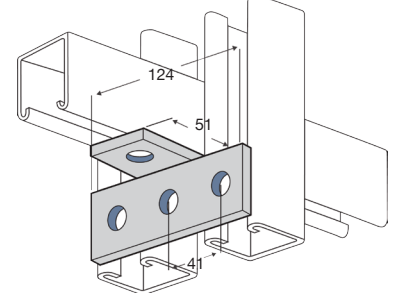
4 HOLE ANGLE PLATE (RIGHT)

SSA-AF-4LR



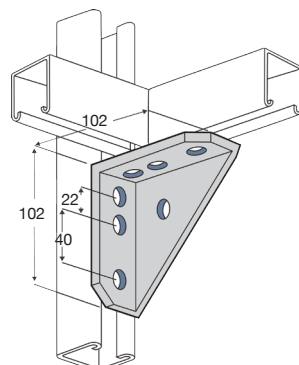
4 HOLE TEE ANGLE PLATE

SSA-AF-4T



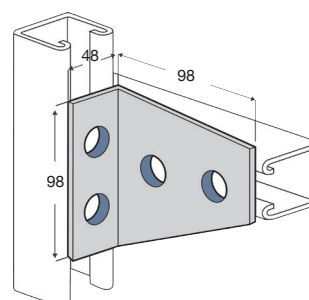
ANGLE CORNER SUPPORT

SSA-ACS



4 HOLE TRI ANGLE PLATE

SSA-AF-4TR



Code No.	A (rad)	B (mm)
SSA-AF-82D	1.44	92
SSA-AF-75D	1.31	
SSA-AF-67D	1.18	
SSA-AF-60D	1.05	
SSA-AF-52	0.92	
SSA-AF-45D	0.79	94
SSA-AF-37D	0.65	
SSA-AF-30D	0.52	
SSA-AF-22D	0.39	
SSA-AF-15D	0.26	96
SSA-AF-7D	0.13	

Note : Stainless Steel dimensions may vary from standard finish. Measurements available on request.

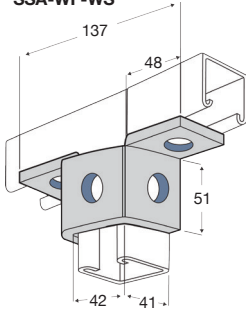
All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

WING FITTINGS

STD DIMENSIONS	: For 41.3mm width series channel fittings.
STD HOLE DIA	: 10.5, 12.5mm
STD MATERIAL	: Hot-Roll Low-Carbon Steel (Stainless Steel 316 available on order)
STD FINISH	: Hot-Dipped Galvanized
AVAILABLE FINISH	: Zinc Plated / Pre-Galvanized / Epoxy Powder Coated / Stainless Steel 304 / 316 / 316L

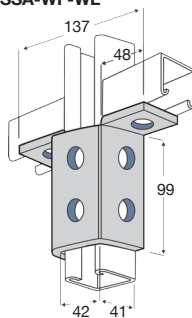
WING SUPPORT SHORT

SSA-WF-WS



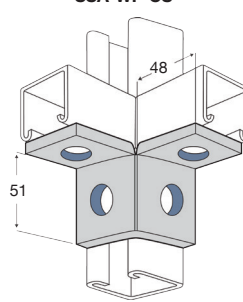
WING SUPPORT LONG

SSA-WF-WL



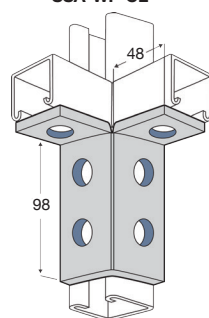
CORNER SUPPORT SHORT

SSA-WF-CS



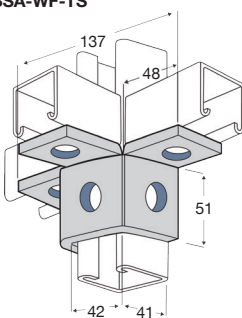
CORNER SUPPORT LONG

SSA-WF-CL



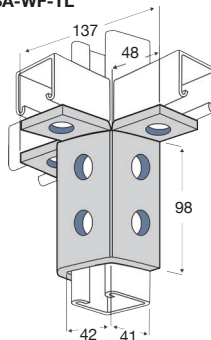
TEE WING SUPPORT SHORT

SSA-WF-TS



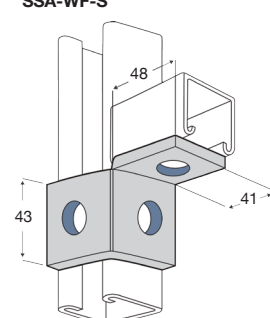
TEE WING SUPPORT LONG

SSA-WF-TL



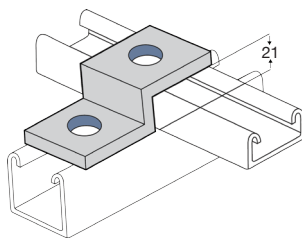
ONE WING SUPPORT

SSA-WF-S



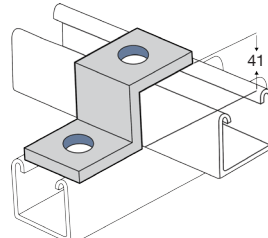
2 HOLE SHALLOW Z SUPPORT

SSA-FZ-2S



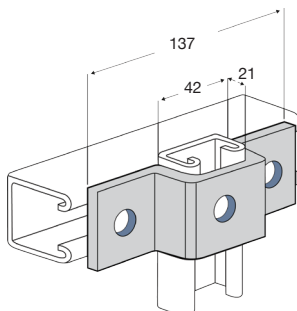
2 HOLE DEEP Z SUPPORT

SSA-ZF-2D



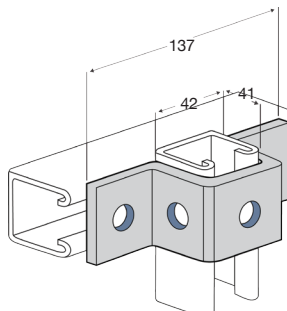
SHALLOW U SUPPORT

SSA-UF-S



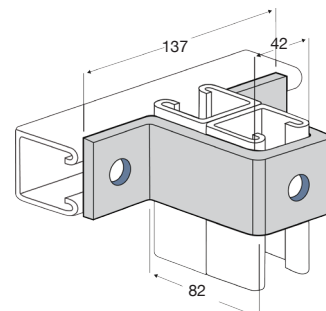
U SUPPORT

SSA-UF-R



DEEP U SUPPORT

SSA-UF-BB



Note : Stainless Steel dimensions may vary from standard finish. Measurements available on request.

All pictures shown are for illustration purposes only. Actual products may vary due to product enhancement.

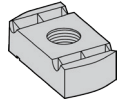
SMART^{tr} CHANNEL NUTS & HARDWARE

SPRING NUTS & WEDGE NUT

STD MATERIAL : Hot-Roll Low-Carbon Steel
STD FINISH : Zinc Plated
AVAILABLE FINISH : Hot Dipped Galvanized and Stainless Steel available on order

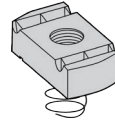
CHANNEL NUT WITHOUT SPRING

Part No.	Thread Size Metric (mm)
SSA-SN-M6-O	6
SSA-SN-M8-O	8
SSA-SN-M10-O	10
SSA-SN-M12-O	12



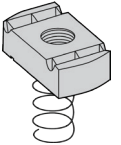
SHORT SPRING NUT

Part No.	Thread Size Metric (mm)
SSA-SN-M6-S	6
SSA-SN-M8-S	8
SSA-SN-M10-S	10
SSA-SN-M12-S	12



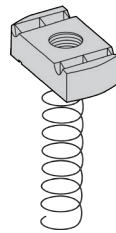
REG. SPRING NUT

Part No.	Thread Size Metric (mm)
SSA-SN-M6	6
SSA-SN-M8	8
SSA-SN-M10	10
SSA-SN-M12	12



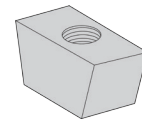
LONG SPRING NUT

Part No.	Thread Size Metric (mm)
SSA-SN-M6-L	6
SSA-SN-M8-L	8
SSA-SN-M10-L	10
SSA-SN-M12-L	12



WEDGE NUT

Part No.	Thread Size Metric (mm)
SSA-WN-M6	6
SSA-WN-M8	8
SSA-WN-M10	10
SSA-WN-M38	10
SSA-WN-M12	12

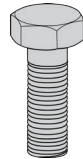


BOLTS, NUTS & WASHER

STD MATERIAL : Hot-Roll Low-Carbon Steel
STD FINISH : Zinc Plated
AVAILABLE FINISH : Hot Dipped Galvanized and Stainless Steel available on order.

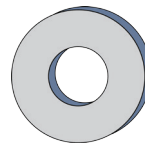
HEX BOLT

Part No.	Thread Size Metric (mm)
SSA-HB-M6	6
SSA-HB-M8	8
SSA-HB-M10	10
SSA-HB-M12	12
SSA-HB-M16	16
SSA-HB-M20	20



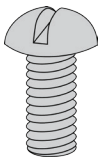
FLAT WASHER

Part No.	Thread Size Metric (mm)
SSA-WASHER-M6	6
SSA-WASHER-M8	8
SSA-WASHER-M10	10
SSA-WASHER-M12	12
SSA-WASHER-M16	16
SSA-WASHER-M20	20



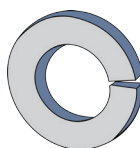
TRUSS HEAD MACHINE SCREW

Part No.	Thread Size Metric (mm)
SSA-ROFFING BOLT-M6	6
SSA-ROFFING BOLT-M8	8
SSA-ROFFING BOLT-M10	10
SSA-ROFFING BOLT-M12	12
SSA-ROFFING BOLT-M16	16
SSA-ROFFING BOLT-M20	20



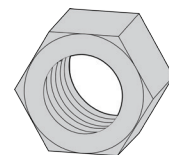
LOCK WASHER

Part No.	Thread Size Metric (mm)
SSA-SW-M6	6
SSA-SW-M8	8
SSA-SW-M10	10
SSA-SW-M12	12
SSA-SW-M16	16
SSA-SW-M20	20



HEX NUT

Part No.	Thread Size Metric (mm)
SSA-HN-M6	6
SSA-HN-M8	8
SSA-HN-M10	10
SSA-HN-M12	12
SSA-HN-M16	16
SSA-HN-M20	20



SMART^{tr} THREADED ROD & HARDWARE

3X4X3-3/4 C-BRACKET

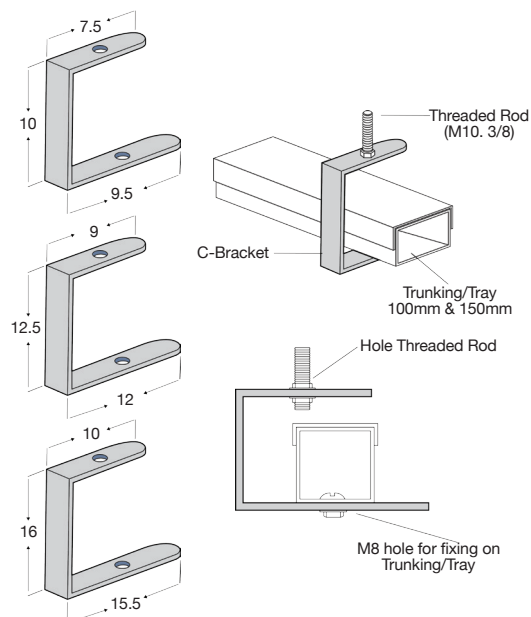
STD MATERIAL : Mild Steel
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated
STD THICKNESS : 4mm
NOTE : Suitable for hanging trunking sizes between 50x50mm
 - Hole size suitable for 10mm or 3/8" Threaded Rods.

3X4X5 C-BRACKET

STD MATERIAL : Mild Steel
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated
STD THICKNESS : 4mm
NOTE : Suitable for hanging trunking sizes between 50x50mm to 100x100mm.
 - Hole size suitable for 10mm or 3/8" Threaded Rods.

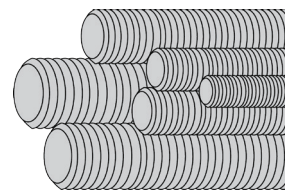
4X6X6 C-BRACKET

STD MATERIAL : Mild Steel
STD FINISH : Hot-Dipped Galvanized
AVAILABLE FINISH : Zinc Plated
STD THICKNESS : 5mm
NOTE : Suitable for hanging trunking sizes between 50x50mm to 100x150mm.
 - Hole size suitable for 12mm or 1/2" Threaded Rods.



THREADED RODS

STD MATERIAL : Hot-Roll Low Carbon Steel
STD FINISH : Zinc-Plated Electro-Galvanized
AVAILABLE FINISH : Stainless Steel / Hot-Dipped Galvanized
RANGE : Standard sizes are available in both metric and imperial threads up to 20mm and 3/4".
 - Larger sizes are available upon special order.
LENGTH : Standard 2 metres for all metric rods. (Other lengths also available upon request)
 - Standard 6 foot lengths for imperial rods.



Part No.	Type of Threading Metric(mm)	Allowable Load (kg)	Std Length
SSA-ROD-M6	6	112.2	2m
SSA-ROD-M8	8	204.0	
SSA-ROD-M10	10	326.3	
SSA-ROD-M12	12	479.3	
SSA-ROD-M16	16	897.4	
SSA-ROD-M20	20	1407.2	

Part No.	Type of Threading Imperial(Inch)	Allowable Load (kn)	Std Length
SSA-ROD-14	1/4"	1.1	6ft
SSA-ROD-516	5/16"	2.0	
SSA-ROD-38	3/8"	3.2	
SSA-ROD-12	1/2"	4.7	
SSA-ROD-58	5/8"	8.8	
SSA-ROD-34	3/4"	13.8	

DROP IN ANCHOR

STD MATERIAL : Hot-Roll Low Carbon Steel
STD FINISH : Electro Galvanized

Part No.	Thread Size Metric(mm)	Allowable Pulling Load (kg)	Allowable Shearing Load(kn)
SSA-DIA-M6	6	2.3	1.9
SSA-DIA-M8	8	3.3	2.9
SSA-DIA-M10	10	4.8	3.4
SSA-DIA-M12	12	7.1	6.6
SSA-DIA-M16	16	10.8	9.7
SSA-DIA-M20	20	14.5	16.1



THREAD ROD COUPLER

STD MATERIAL : Hot-Roll Low Carbon Steel
STD FINISH : Electro Galvanized
AVAILABLE FINISH : Hot-Dipped Galvanized

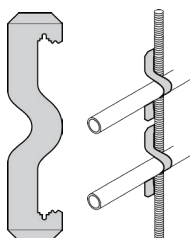
Part No.	Thread Size Metric(mm)	Clearance Hole (mm)
SSA-LN-M6	6	6
SSA-LN-M8	8	8
SSA-LN-M10	10	10
SSA-LN-M12	12	12
SSA-LN-M16	16	16
SSA-LN-M20	20	20



CONDUIT CLIP (KON CLIP)

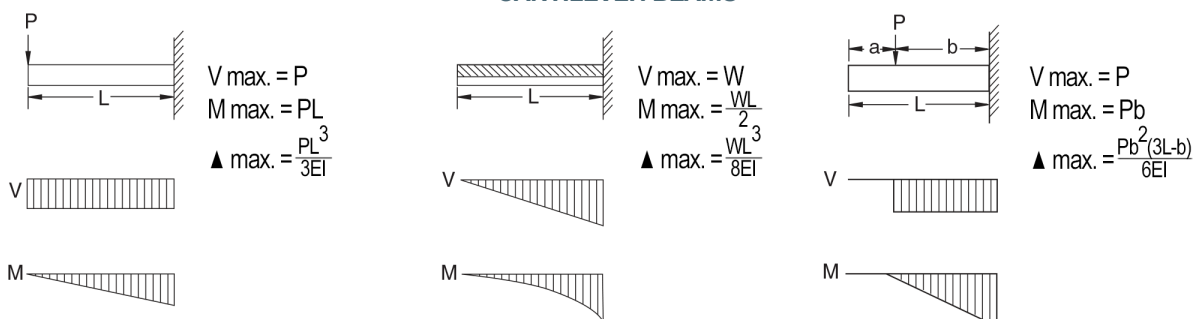
STD MATERIAL : Steel
STD FINISH : Hot-Dipped Galvanized

Part No.	Clip Sizes	Conduit Sizes Metric(mm)
SSA-KC-20	K-12	20
SSA-KC-25	K-16	25
SSA-KC-32	K-20	32

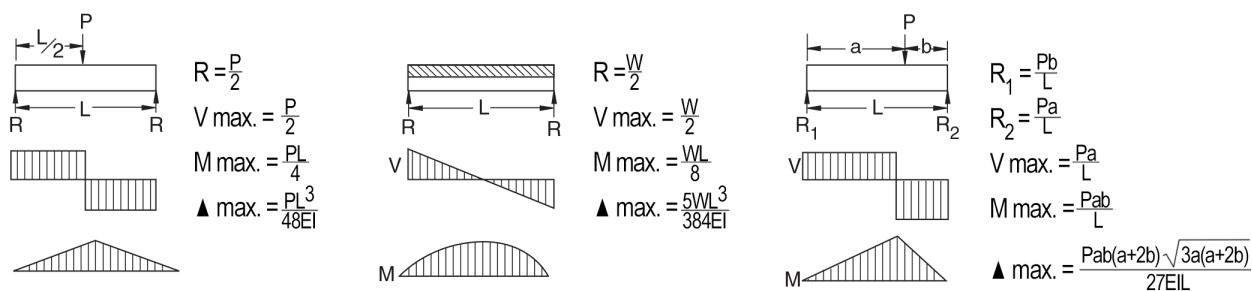


BEAM SUPPORT CONDITIONS

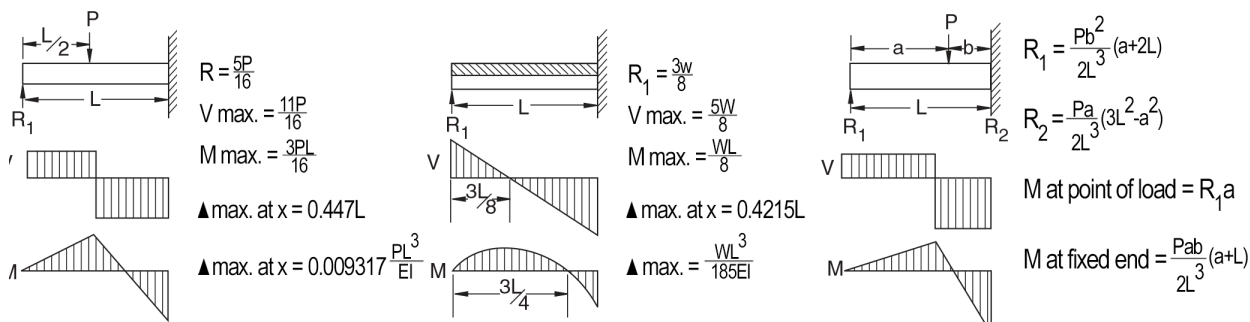
CANTILEVER BEAMS



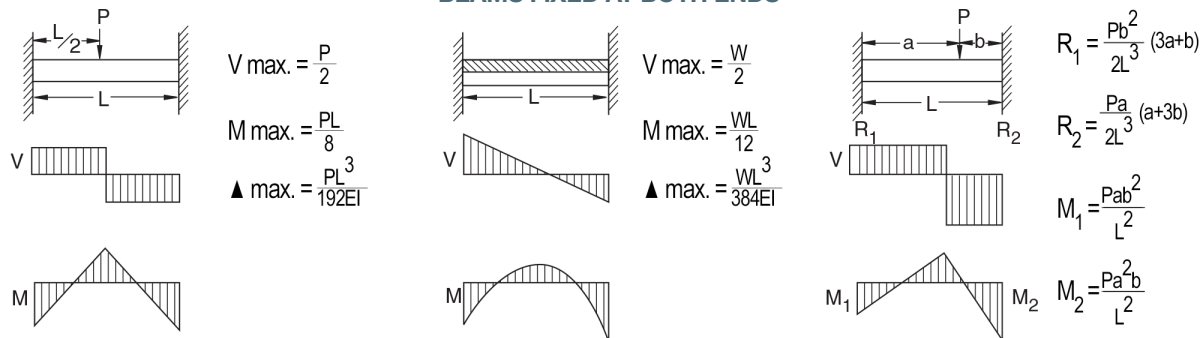
SIMPLE BEAMS



BEAMS FIXED AT ONE END & SUPPORTED AT THE OTHER



BEAMS FIXED AT BOTH ENDS



R - Reaction
 M - Moment
 P - Concentrated Load

W - Total Uniform Load
 V - Shear
 L - Length

Δ - Deflection
 E - Modulus of Elasticity
 I - Moment of Inertia

ENGLISH TO METRIC

TO CONVERT FROM TO MULTIPLY BY

LENGTH

Inch (in)	Millimeter (mm)	24.400 000
Foot (ft)	Meter (m)	0.304 800
Yard (yd)	Meter (m)	0.914 400
Mile (mi) (U.S. Statute)	Kilometer (km)	1.609 347

AREA

Square Inch (in ²)	Square Millimeter (mm ²)	645.16
Square Foot (ft ²)	Square Meter (m ²)	0.092 903
Square Yard (yd ²)	Square Meter (m ²)	0.836 127
Square Mile (mi ²) (U.S. Statute)	Square Kilometer (km ²)	2.589 998
Acre	Square Meter (m ²)	4046.873
Acre	Hectare	0.404 687

VOLUME

Cubic Inch (in ³)	Cubic Millimeter (mm ³)	16387.06
Cubic Foot (ft ³)	Cubic Meter (m ³)	0.028 317
Cubic Yard (yd ³)	Cubic Meter (m ³)	0.764 555
Gallon (gal) (U.S. Liquid)	Litre (l)	3.785 412
Quart (qt) (U.S. Liquid)	Litre (l)	0.945 353

MASS

Ounce (Avoirdupois) (oz)	Gram (g)	28.349520
Pound (Avoirdupois) (lb)	Kilogram (kg)	0.453 592
Short Ton	Kilogram (kg)	907.185

FORCE

Ounce-Force	Newton (N)	0.278 014
Pound-Force (lbf)	Newton (N)	4.448 222

BENDING MOMENT

Ounce-Force-Inch (lbf-in)	Newton-Meter (N-m)	0.112 985
Pound-Force-Foot (lbf-ft)	Newton-Meter (N-m)	1.355 818

PRESSURE, STRESS

Pound-Force per Square Inch (lbf/in ²)	Kilopascal (kPa)	6.894 757
Foot of Water (39.2 F)	Kilopascal (kPa)	2.988 980
Inch of Mercury (32 F)	Kilopascal (kPa)	3.386 380

ENERGY, WORK, HEAT

Foot-Pound-Force (ft-lbf)	Joule (J)	1.355 818
British Thermal Unit (Btu)	Joule (J)	1055.056
Calorie (cal)	Joule (J)	4.186 800
Kilowatt Hour (kW-h)	Joule (J)	3.600,000

POWER

Foot-Pound-Force /Second (ft-lbs/s)	Watt (W)	1.355 818
British Thermal Unit /Hour (Btu/h)	Watt (W)	0.293 071
Horsepower (hp) (550 Ft. Lbf/s)	Kilowatt (kW)	0.745 700

POWER

Degree	Radian (rad)	0.017 453
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TEMPERATURE

Degree Fahrenheit (°F)	Degree Celsius (°C)	(°F -32)/1.8
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METRIC TO ENGLISH

TO CONVERT FROM TO MULTIPLY BY

LENGTH

Millimeter (mm)	Inch (in)	0.039 370
Meter (m)	Foot (ft)	3.280 840
Meter (m)	Yard (yd)	1.093 613
Kilometer (km)	Mile (mi) (U.S. Statute)	0.621 370

AREA

Square Millimeter (mm ²)	Square Inch (in ²)	0.001550
Square Meter (m ²)	Square Foot (ft ²)	10.763 915
Square Meter (m ²)	Square Yard (yd ²)	1.195 991
Square Kilometer (km ²)	Square Mile (mi ²) (U.S. Statute)	0.386 101
Square Meter (m ²)	Acre	0.000 247
Hectare	Acre	2.471 046

VOLUME

Cubic Millimeter (mm ³)	Cubic Inch (in ³)	0.000061
Cubic Meter (m ³)	Cubic Foot (ft ³)	35.314 662
Cubic Meter (m ³)	Cubic Yard (yd ³)	1.307 950
Litre (l)	Gallon (gal) (U.S. Liquid)	0.264 172
Litre (l)	Quart (qt) (U.S. Liquid)	1.056 688

MASS

Gram (g)	Ounce (Avoirdupois) (oz)	0.035 274
Kilogram (kg)	Pound (Avoirdupois) (lb)	2.204 624
Kilogram (kg)	Short Ton	0.00110

FORCE

Newton (N)	Ounce-Force	3.596 941
Newton (N)	Pound-Force (lbf)	0.224 809

BENDING MOMENT

Newton-Meter (N-m)	Ounce-Force-Inch (lbf-in)	8.850 732
Newton-Meter (N-m)	Pound-Force-Foot (lbf-ft)	0.737 562

PRESSURE, STRESS

Kilopascal (kPa)	Pound-Force per Square Inch (lbf/in ²)	0.145 038
Kilopascal (kPa)	Foot of Water (39.2 F)	0.334 562
Kilopascal (kPa)	Inch of Mercury (32 F)	0.295 301

ENERGY, WORK, HEAT

Joule (J)	Foot-Pound-Force (ft-lbf)	0.737 563
Joule (J)	British Thermal Unit (Btu)	0.000948
Joule (J)	Calorie (cal)	0.238 846
Joule (J)	Kilowatt Hour (kW-h)	2.78 ⁻⁷

POWER

Watt (W)	Foot-Pound-Force /Second (ft-lbs/s)	0.737 562
Watt (W)	British Thermal Unit /Hour (Btu/h)	3.4212 142
Kilowatt (kW)	Horsepower (hp) (550 Ft. Lbf/s)	1.341 022

POWER

Radian (rad)	Degree	57.295 788
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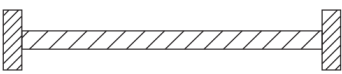
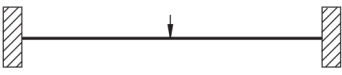
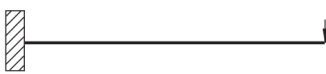
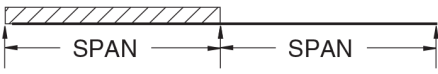
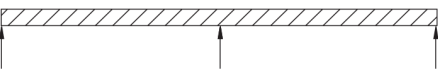
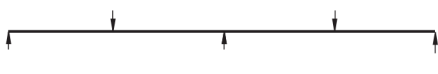
TEMPERATURE

Degree Celsius (°C)	Degree Fahrenheit (°F)	1.8x°C+32
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CONVERSION FACTORS FOR BEAMS WITH VARIOUS STATIC

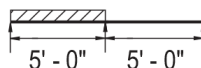
All Beam Load tables are for single-span (simple) beams supported at the ends. These can be used in majority of the cases. However, there are times when it is necessary to know what happens with other loading and support conditions. Some common arrangements are shown below. Simply multiply the values from the Beam Load tables by factors given below.

REFERENCE TABLES AND DATA

Load and Support Condition		Load Factor	Deflection Factor
1. Simple Beam, Uniform Load		1.00	1.00
2. Simple Beam, Concentrated Load at Center		.50	.80
3. Simple Beam, Two Equal Concentrated Loads at 1/4 pts		1.00	1.10
4. Beam Fixed at Both Ends, Uniform Load		1.50	1.10
5. Beam Fixed at Both Ends, Concentrated Load at Center		1.00	1.10
6. Cantilever Beams, Uniform Load		.25	2.40
7. Cantilever Beams, Concentrated Load at End		.12	3.20
8. Continuous Beam, Two Equal Spans, Uniform Load on One Span		1.30	.92
9. Continuous Beam, Two Equal Spans, Uniform Load on Both Ends		1.00	.42
10. Continuous Beam, Two Equal Spans, Concentrated Load at Center of One Span		.62	.71
11. Continuous Beam, Two Equal Spans, Concentrated Load at Center of Each Span		.67	.48

Example:

Determine load and deflection of a SS-4141-25 beam continuous over one support and loaded uniformly on one span.



A. From load table for SS-4141-25, load for a 1500mm span is 309kg and deflection is 15mm.

B. Multiply by factors from Table above.

Load = 309kg x 1.30 = 401.7

Deflection = 15mm x 0.92 = 13.8



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