

SECTION 03: SLIP RESISTANT INTELOK SERRATED CHANNEL

The Intelok steel framing system is a strong, easy to erect support system, ideal for supporting cable tray, cable ladders, trunking, pipes and ducting.



Rapid
Installation
Systems



Withstands
extreme
temperatures
[-50° to +50°C]



Intelok Quickfit
System



Cable Ladder

Cable Tray

Steel Framing

Mounting Frame

Fixings

Bespoke

Engineering

Index

HOW TO ORDER

CODE SYSTEM EXPLAINED

The information given on this page should be used as a guide when ordering channel, fittings, covers and accessories. For more detailed information and examples refer to the relevant page within the catalogue.

Intelok Channel

System Type	Product Group	Channel Type	Slotting Type	Length	Finish & Material	Gauge						
eg. IC	-	CNL	-	D	-	P	-	SL3	-	GA	-	2.5

Intelok® Channel, Deep 41mm x 41mm, Plain, 3000mm Long, Structural Steel, Hot Dip Galvanised, 2.5mm

Intelok Brackets

System Type	Bracket Type	Finish & Material
eq. 325	-	AM13 - SS

Intelok Channel, Heavy Duty Back to Back U-Bolt Beam Clamp, Stainless Steel

Intelok Quickfit Brackets

System Type	Bracket Type	Finish & Material	Quickfit Option			
eg. 325	-	AJ12	-	GA	-	QF10

Intelok Channel, Deep Normal Top Hat Bracket, Hot Dip Galvanised, M10 Quickfit

Concrete Inserts

System Type		Product Group		Channel Type		Length		Finish & Material	
eq.	IC	-	CON	-	D	-	SL3	-	SS

Intelok Channel, Concrete Insert, Deep, 3 metre length, Stainless Steel



System Type (▲)

IC	Intelok Channel
325	Intelok Brackets

Page

148
161

Length

SL3	3m length
SL6	6m length
SL#	# = Add length in mm*

Product Group

CNL	Channel
CON	Concrete Insert
PEC	Protective End Cap
COV	Cover Strip

Page

178
183
188
188

* For Concrete Inserts, the length must be divisible by 200

Bracket Type

Various Use 4 character reference, see bracket section for details for further details

Channel Type

S	Shallow Channel
D	Deep Channel
BBD	Back to Back Deep Channel
BBS	Back to Back Shallow Channel

Page

150
148
152
153

Colour

BLK	Black
WHT	White

Slotting Type

P	Plain
S	Slotted
TS	Triple Slotted

Further Guidance

Please contact our Sales Team for further advice and guidance on the correct ordering details for the full range of Vantrunk Intelok channel and accessories.

Finish & Materials (●)



HOT DIPPED
Galvanised
CARBON STEEL



HOT DIPPED
Galvanised
STRUCTURAL

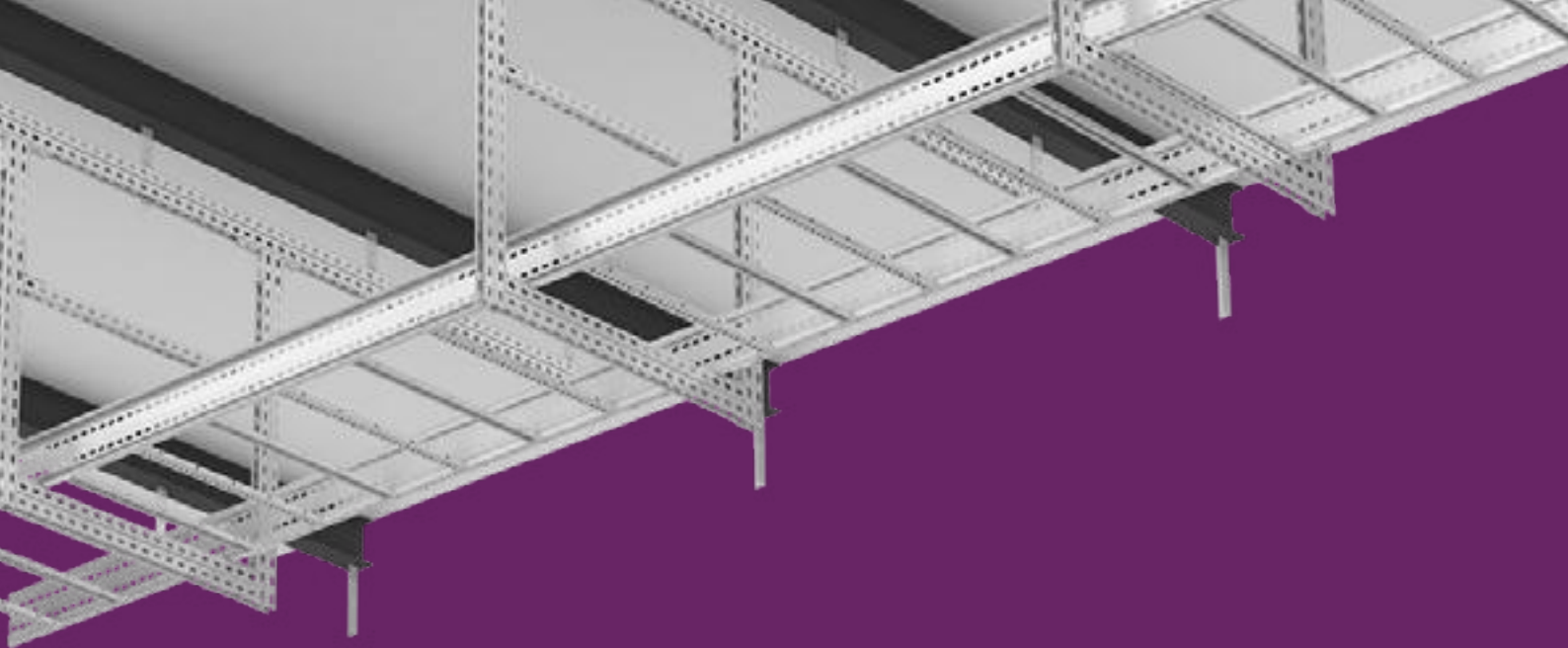


PRE Galvanised
STRUCTURAL
STEEL



MARINE GRADE
STAINLESS STEEL

Details on the full range of standard Finishes and Materials are given in the Finish and Materials section (page 23) and Engineering Data Section (page 210).



UNIQUELY VANTRUNK

Vantrunk's innovation department has further strengthened the Intelok Steel Framing System with the introduction of the Triple Slotted Channel and Welded Starter Brackets.

These products are designed in order to increase flexibility during installation and to remove the

need for on-site drilling when mounting to the existing structure.

When used in conjunction with the Intelok Quickfit bracket range the system can provide substantial cost savings through a reduction in labour, parts and overall topside weight.

Deep Triple Slotted



Back to Back Channel



Welded Starter Brackets



QUICKFIT BRACKETS



Vantrunk's unique Intelok Quickfit system of brackets and cantilevers is a factory assembled, time saving, easy to fit alternative to separate nuts, bolts and washers

WHY QUICKFIT YOUR BRACKETS?

- Quick and simple to assemble, approximate 67% savings on installation time
- Fewer components to order
- Simplified stock control
- Easier estimating

VANTRUNK
INTELOK QF[®]
CHANNEL BRACKETRY



SLIP RESISTANT SERRATED CHANNEL



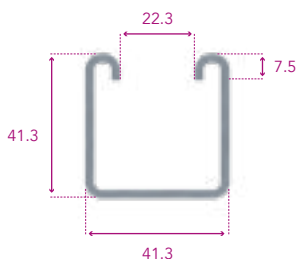
As standard Vantrunk Steel Framing Intelok Channel comes equipped with serrations on the return flange which significantly increases the resistance to slip. The Steel Framing Intelok Channel is tailor made for applications in areas of considerable vibrations such as offshore platforms and power plants.

Deep Channel Plain

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-D-P

Part Number: IC-CNL-D-P-SL□-○



Sectional Properties

CSA (mm ²)	I _{xx} (mm ⁴)	Z _{xx} (mm ³)	Weight (kg/m)	Yield (N/mm ²)
336.25	71450	3071	2.68	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

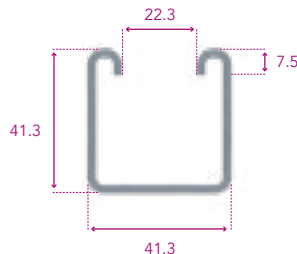
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	840.23	2.92	840.23	638.61	336.09	2.34	336.09	319.31	1,953.12
1	536.89	4.56	536.89	325.69	268.45	3.66	268.45	203.55	1,805.89
1.2	372.12	6.57	339.36	187.37	223.27	5.27	223.27	140.52	1,639.63
1.4	272.77	8.95	212.74	117.02	190.94	7.18	186.14	102.39	1,448.32
1.6	208.28	11.69	141.65	77.52	166.62	9.38	141.65	77.52	1,272.88
1.8	164.07	14.81	98.7	53.66	147.66	11.89	111.04	60.37	1,118.52
2	132.45	18.29	71.24	38.41	132.45	14.7	89.05	48.01	985.47
2.2	109.05	22.13	52.87	28.2	119.95	17.81	72.69	38.78	871.72
2.4	91.25	26.35	40.12	21.12	109.5	21.23	60.18	31.68	774.62
2.6	77.4	30.94	30.99	16.05	100.63	24.96	50.36	26.08	691.56
2.8	66.42	35.91	24.29	12.32	92.98	29	42.51	21.57	620.24
3	57.55	41.24	19.26	9.53	86.32	33.36	36.11	17.87	558.71
3.2	50.29	46.95	15.4	7.39	80.47	38.03	30.81	14.78	505.37
3.4	44.28	53.04	12.4	5.72	75.28	43.03	26.36	12.16	458.87
3.6	39.24	59.5	10.03	4.41	70.63	48.35	22.58	9.91	418.14
3.8	34.98	66.35	8.14	3.35	66.46	54.01	19.33	7.96	382.29
4	31.34	73.57	6.6	2.5	62.67	60	16.51	6.25	350.57
4.2	28.2	81.18	5.34	1.8	59.22	66.33	14.03	4.72	322.39
4.4	25.49	89.17	4.31	1.22	56.07	73	11.84	3.36	297.23
4.6	23.12	97.54	3.44	0.74	53.17	80.03	9.89	2.13	274.69
4.8	21.04	106.3	2.71	0.34	50.49	87.41	8.14	1.01	254.41
5	19.2	115.45	2.1	—	48	95.15	6.55	—	236.1

Deep Channel Slotted

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-D-S

Part Number: IC-CNL-D-S-SL□-○



Slots 26 x 13 @ 50mm Pitch

Sectional Properties

CSA (mm ²)	Ixx (mm ⁴)	Zxx (mm ³)	Weight (kg/m)	Yield (N/mm ²)
248.7	60743	2860	2.59	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

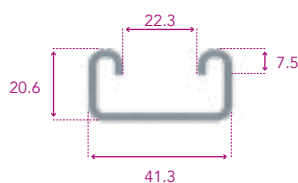
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	781.28	2.96	781.28	585.17	312.51	2.37	312.51	292.59	1608.53
1	499.17	4.63	499.17	298.32	249.58	3.71	249.58	186.45	1488.99
1.2	345.92	6.67	310.86	171.53	207.55	5.35	207.55	128.65	1352.75
1.4	253.52	9.08	194.79	107.05	177.46	7.28	170.44	93.67	1197.92
1.6	193.54	11.87	129.62	70.84	154.83	9.52	129.62	70.84	1055.63
1.8	152.43	15.02	90.26	48.97	137.18	12.07	101.54	55.09	930.01
2	123.01	18.56	65.08	34.99	123.01	14.92	81.35	43.73	821.31
2.2	101.25	22.46	48.24	25.63	111.38	18.08	66.33	35.24	728.01
2.4	84.70	26.74	36.56	19.14	101.64	21.56	54.83	28.71	648.06
2.6	71.82	31.40	28.19	14.49	93.37	25.34	45.81	23.55	579.44
2.8	61.60	36.44	22.05	11.08	86.24	29.45	38.58	19.39	520.34
3	53.36	41.86	17.43	8.51	80.04	33.88	32.68	15.97	469.22
3.2	46.61	47.66	13.90	6.55	74.57	38.63	27.80	13.11	424.79
3.4	41.02	53.84	11.15	5.03	69.73	43.72	23.70	10.68	385.97
3.6	36.33	60.40	8.98	3.82	65.39	49.14	20.20	8.59	351.90
3.8	32.36	67.35	7.24	2.85	61.49	54.89	17.20	6.78	321.85
4	28.98	74.69	5.83	2.07	57.95	60.99	14.58	5.18	295.21
4.2	26.06	82.41	4.68	1.43	54.73	67.44	12.29	3.75	271.51
4.4	23.54	90.53	3.73	0.90	51.78	74.24	10.25	2.48	250.32
4.6	21.33	99.04	2.93	0.46	49.07	81.41	8.43	1.32	231.30
4.8	19.40	107.94	2.27	0.09	46.56	88.93	6.80	0.27	214.17
5	17.69	117.25	1.70	—	44.23	96.83	5.32	—	198.68

Shallow Channel Plain

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 1. The max safe working load,
 2. the load to give 1-200 deflection,
 3. load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-S-P

Part Number: IC-CNL-S-P-SL□-○



Sectional Properties

CSA (mm ²)	I _{xx} (mm ⁴)	Z _{xx} (mm ³)	Weight (kg/m)	Yield (N/mm ²)
234.0	11743	956	1.84	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:

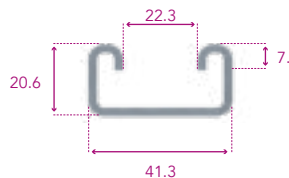


Safe Working Load Table

Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	261.82	5.52	189.16	104.28	104.73	4.43	94.58	52.14	902.13
1	166.98	8.63	95.96	52.50	83.49	6.92	59.98	32.81	691.82
1.2	115.45	12.43	54.77	29.62	69.27	9.99	41.08	22.21	540.46
1.4	84.39	16.93	33.81	17.98	59.07	13.62	29.59	15.73	431.10
1.6	64.23	22.13	22.05	11.44	51.38	17.83	22.05	11.44	350.53
1.8	50.40	28.03	14.95	7.49	45.36	22.62	16.81	8.43	289.84
2	40.51	34.64	10.40	4.97	40.51	28.01	13.00	6.21	243.14
2.2	33.20	41.95	7.36	3.28	36.52	33.99	10.12	4.51	206.50
2.4	27.63	49.97	5.25	2.11	33.16	40.59	7.88	3.16	177.24
2.6	23.30	58.71	3.74	1.27	30.30	47.82	6.08	2.06	153.52
2.8	19.87	68.17	2.63	0.65	27.81	55.68	4.61	1.14	134.02
3	17.10	78.35	1.80	0.19	25.64	64.19	3.38	0.36	117.80

Shallow Channel Slotted

- Steel with a Minimum yield strength 280 N/mm².
 - Beams are assumed to be simply supported.
 - Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
 - Results given are for Pre-galvanised steel
 - Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
 - This also applies to Point and UDL loads.

Fitting Type: IC-CNL-S-S
Part Number: IC-CNL-S-S-SL□-○


Slots 26 x 13 @ 50mm Pitch

Sectional Properties

CSA (mm ²)	Ixx (mm ⁴)	Zxx (mm ³)	Weight (kg/m)	Yield (N/mm ²)
201.5	9669	880	1.72	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

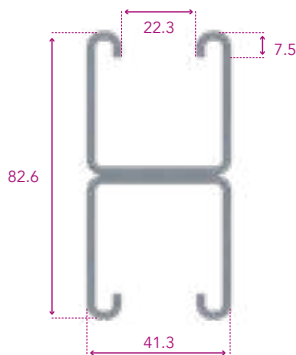
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	241.96	5.63	171.33	94.38	96.78	4.51	85.67	47.19	715.12
1	154.27	8.80	86.83	47.43	77.13	7.06	54.27	29.64	551.98
1.2	106.63	12.68	49.48	26.68	63.98	10.19	37.11	20.01	433.35
1.4	77.90	17.27	30.49	16.13	54.53	13.90	26.68	14.11	346.93
1.6	59.26	22.58	19.82	10.20	47.41	18.20	19.82	10.20	282.85
1.8	46.48	28.60	13.38	6.62	41.83	23.09	15.05	7.45	234.33
2	37.34	35.34	9.26	4.34	37.34	28.60	11.58	5.42	196.84
2.2	30.57	42.80	6.50	2.80	33.63	34.72	8.94	3.86	167.31
2.4	25.43	50.99	4.59	1.74	30.51	41.47	6.89	2.61	143.67
2.6	21.42	59.91	3.22	0.98	27.85	48.87	5.24	1.59	124.45
2.8	18.25	69.57	2.22	0.42	25.55	56.92	3.88	0.74	108.60
3	15.68	79.97	1.46	0.00	23.53	65.64	2.74	0.01	95.39

Deep Back to Back Channel

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-BBD-P

Part Number: IC-CNL-BBD-P-SL□-○



Sectional Properties

CSA (mm ²)	I _{xx} (mm ⁴)	Z _{xx} (mm ³)	Weight (kg/m)	Yield (N/mm ²)
672.5	375152	9083	5.35	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

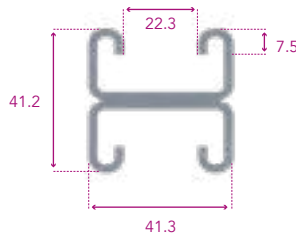
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	2089.79	1.44	2089.79	2089.79	835.91	1.15	835.91	835.91	11796.81
1	1335.76	2.24	1335.76	1335.76	667.88	1.80	667.88	667.88	10406.84
1.2	926.16	3.23	926.16	926.16	555.70	2.59	555.70	555.70	8904.39
1.4	679.19	4.40	679.19	600.01	475.43	3.52	475.43	475.43	7435.66
1.6	518.89	5.75	518.89	400.22	415.12	4.61	415.12	400.22	6123.99
1.8	409.00	7.27	409.00	279.52	368.10	5.84	368.10	314.46	5043.75
2	330.39	8.98	330.39	202.35	330.39	7.21	330.39	252.93	4179.70
2.2	272.22	10.87	272.22	150.72	299.45	8.74	299.45	207.24	3493.94
2.4	227.99	12.94	211.00	114.88	273.59	10.41	273.59	172.32	2948.04
2.6	193.56	15.20	164.83	89.23	251.63	12.24	251.63	145.00	2510.05
2.8	166.24	17.63	130.92	70.40	232.74	14.21	229.12	123.19	2155.20
3	144.21	20.25	105.46	56.25	216.31	16.34	197.74	105.47	1864.79
3.2	126.17	23.05	85.97	45.42	201.87	18.62	171.94	90.84	1624.75
3.4	111.22	26.03	70.80	36.99	189.08	21.06	150.45	78.61	1424.49
3.6	98.70	29.20	58.81	30.33	177.65	23.66	132.33	68.25	1255.96
3.8	88.09	32.56	49.22	25.00	167.38	26.41	116.90	59.39	1113.00
4	79.04	36.10	41.45	20.69	158.09	29.33	103.62	51.72	990.83
4.2	71.25	39.82	35.09	17.15	149.63	32.41	92.11	45.03	885.71
4.4	64.50	43.73	29.83	14.23	141.91	35.65	82.04	39.14	794.69
4.6	58.61	47.83	25.45	11.80	134.81	39.06	73.17	33.92	715.44
4.8	53.44	52.12	21.77	9.75	128.27	42.63	65.31	29.26	646.06
5	48.88	56.60	18.65	8.02	122.21	46.38	58.29	25.07	585.02

Shallow Back to Back Channel

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-BBS-P

Part Number: IC-CNL-BBS-SL□-○



Sectional Properties

□ = Select a Channel Length* ○ = Select a Finish

CSA (mm ²)	Ixx (mm ⁴)	Zxx (mm ³)	Weight (kg/m)	Yield (N/mm ²)
468	55923	2714	3.67	280

Finishes & Materials:



Safe Working Load Table

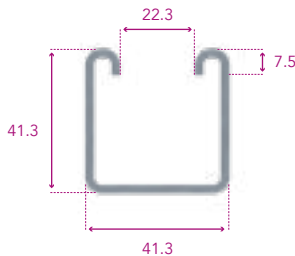
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	645.88	2.87	645.88	499.05	258.35	2.30	258.35	249.53	4246.45
1	412.18	4.49	412.18	253.74	206.09	3.60	206.09	158.59	3319.07
1.2	285.24	6.46	264.46	145.30	171.14	5.19	171.14	108.98	2582.71
1.4	208.69	8.80	165.19	90.15	146.08	7.07	144.54	78.89	2043.29
1.6	159.01	11.50	109.46	59.19	127.21	9.26	109.46	59.19	1648.02
1.8	124.95	14.57	75.80	40.49	112.46	11.74	85.27	45.55	1353.53
2	100.59	18.00	54.27	28.53	100.59	14.52	67.83	35.66	1129.60
2.2	82.56	21.79	39.87	20.53	90.82	17.62	54.82	28.23	955.86
2.4	68.85	25.96	29.87	14.98	82.62	21.03	44.81	22.46	818.55
2.6	58.18	30.49	22.72	11.00	75.64	24.75	36.91	17.88	708.24
2.8	49.71	35.40	17.46	8.08	69.60	28.80	30.56	14.14	618.30
3	42.88	40.67	13.52	5.89	64.33	33.18	25.34	11.04	544.02
3.2	37.29	46.33	10.50	4.21	59.67	37.89	20.99	8.42	481.94
3.4	32.66	52.36	8.14	2.91	55.52	42.94	17.31	6.18	429.53
3.6	28.78	58.77	6.29	1.87	51.80	48.34	14.15	4.22	384.86
3.8	25.49	65.57	4.80	1.05	48.44	54.09	11.40	2.49	346.47
4	22.69	72.75	3.60	0.38	45.38	60.21	8.99	0.95	313.21
4.2	20.27	80.32	2.61	—	42.58	66.70	6.85	—	284.20
4.4	18.18	88.28	1.80	—	40.00	73.57	4.94	—	258.73
4.6	16.36	96.64	1.12	—	37.62	80.83	3.21	—	236.23
4.8	14.75	105.40	0.55	—	35.41	88.49	1.64	—	216.25
5	13.34	114.55	0.06	—	33.35	96.56	0.20	—	198.42

Deep Channel Triple Slotted

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm².
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-D-TS

Part Number: IC-CNL-D-TS-SL□-○



Slots 26 x 13 @ 50mm Pitch

Sectional Properties

CSA (mm ²)	I _{xx} (mm ⁴)	Z _{xx} (mm ³)	Weight (kg/m)	Yield (N/mm ²)
284.55	65922	2843	2.41	280

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

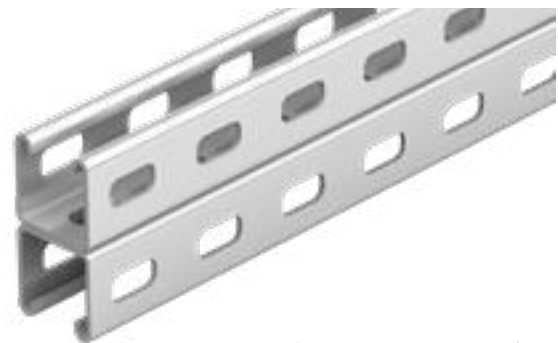
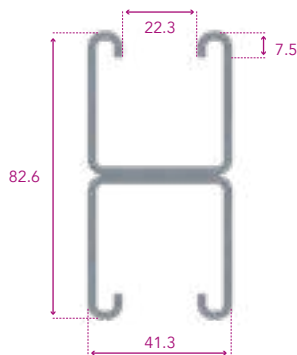
Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	761.90	2.91	761.90	580.95	304.76	2.33	304.76	290.47	1469.60
1	486.76	4.55	486.76	296.16	243.38	3.64	243.38	185.10	1363.38
1.2	337.31	6.55	308.61	170.28	202.38	5.25	202.38	127.71	1244.98
1.4	247.19	8.92	193.37	106.26	173.03	7.16	169.20	92.98	1105.97
1.6	188.70	11.66	128.67	70.32	150.96	9.36	128.67	70.32	974.47
1.8	148.60	14.76	89.59	48.60	133.74	11.86	100.79	54.68	857.69
2	119.91	18.23	64.60	34.72	119.91	14.66	80.75	43.40	756.41
2.2	98.69	22.07	47.88	25.43	108.56	17.77	65.83	34.97	669.47
2.4	82.55	26.27	36.27	18.98	99.06	21.18	54.41	28.47	595.04
2.6	69.99	30.85	27.97	14.37	90.98	24.90	45.45	23.35	531.24
2.8	60.02	35.80	21.87	10.98	84.03	28.94	38.27	19.21	476.38
3	51.98	41.12	17.29	8.43	77.97	33.30	32.41	15.81	428.99
3.2	45.40	46.82	13.78	6.49	72.64	37.97	27.56	12.97	387.85
3.4	39.94	52.89	11.05	4.97	67.90	42.97	23.49	10.56	351.96
3.6	35.37	59.34	8.90	3.77	63.67	48.30	20.02	8.49	320.50
3.8	31.50	66.17	7.17	2.81	59.86	53.96	17.03	6.68	292.77
4	28.20	73.38	5.77	2.04	56.40	59.96	14.43	5.09	268.23
4.2	25.36	80.98	4.63	1.40	53.26	66.30	12.15	3.68	246.40
4.4	22.90	88.95	3.68	0.88	50.37	73.00	10.13	2.41	226.90
4.6	20.75	97.32	2.89	0.44	47.72	80.04	8.32	1.26	209.42
4.8	18.86	106.07	2.23	0.07	45.27	87.45	6.69	0.21	193.68
5	17.20	115.21	1.67	—	42.99	95.23	5.22	—	179.45

Deep Back to Back Channel Triple Slotted

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm²
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 - The max safe working load,
 - the load to give 1-200 deflection,
 - load to give 1-360 deflection - the deflection used will depend on the installation designer.
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-BBD-TS

Part Number: IC-CNL-BBD-TS-SL□○



Slots 26 x 13 @ 50mm Pitch

Sectional Properties

CSA (mm ²)	Ixx (mm ⁴)	Zxx (mm ³)	Weight (kg/m)	Yield (N/mm ²)
670.51	331156	8018	4.82	175

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

Span (m)	Uniformly Distributed Load				Point Load				Column Load
	Safe Working Load		Deflection Limit		Safe Working Load		Deflection Limit		Safe Axial Load (kg)
	Load (kg/m)	Def (mm)	Span/200 (kg)	Span/360 (kg)	Load (kg)	Def (mm)	Span/200 (kg)	Span/360 (kg)	
0.8	1759.09	1.33	1759.09	1759.09	703.64	1.06	703.64	703.64	8423.65
1	1124.11	2.08	1124.11	1124.11	562.06	1.66	562.06	562.06	7460.16
1.2	779.19	2.99	779.19	779.19	467.51	2.40	467.51	467.51	6407.77
1.4	571.21	4.07	571.21	544.98	399.85	3.27	399.85	399.85	5370.42
1.6	436.22	5.32	436.22	363.36	348.98	4.27	348.98	348.98	4435.76
1.8	343.67	6.74	343.67	253.63	309.31	5.41	309.31	285.34	3660.46
2	277.48	8.32	277.48	183.47	277.48	6.69	277.48	229.34	3037.14
2.2	228.50	10.07	228.50	136.54	251.35	8.10	251.35	187.74	2540.63
2.4	191.24	11.99	191.24	103.96	229.49	9.66	229.49	155.94	2144.32
2.6	162.25	14.08	149.37	80.64	210.93	11.36	210.93	131.04	1825.69
2.8	139.25	16.34	118.54	63.52	194.95	13.19	194.95	111.16	1567.13
3	120.69	18.77	95.39	50.66	181.04	15.17	178.87	94.98	1355.25
3.2	105.50	21.37	77.68	40.81	168.80	17.30	155.35	81.63	1179.93
3.4	92.91	24.14	63.88	33.15	157.95	19.57	135.75	70.45	1033.54
3.6	82.37	27.08	52.99	27.10	148.26	21.99	119.22	60.97	910.25
3.8	73.44	30.19	44.27	22.25	139.53	24.56	105.13	52.85	805.60
4	65.82	33.48	37.20	18.33	131.63	27.28	93.00	45.82	716.12
4.2	59.26	36.94	31.42	15.12	124.44	30.15	82.48	39.68	639.09
4.4	53.57	40.57	26.64	12.46	117.86	33.18	73.26	34.27	572.36
4.6	48.61	44.38	22.66	10.25	111.81	36.37	65.14	29.46	514.24
4.8	44.26	48.36	19.31	8.39	106.22	39.72	57.93	25.17	463.33
5	40.42	52.53	16.48	6.82	101.04	43.23	51.50	21.30	418.53


Channel Versatility

Due to the versatility of the Vantrunk Steel Framing Channel, a wide range of non-standard channel configurations can be offered. Contact Vantrunk's Sales Team for ordering information.




Fitting Type: IC-CNL-BBSD Back to Back Deep and Shallow 	Fitting Type: IC-CNL-BWD Back to Side Deep Channel 	Fitting Type: IC-CNL-WWD Side to Side Deep Channel 
Fitting Type: IC-CNL-BWSD Back to Side Deep Shallow Channel 	Fitting Type: IC-CNL-WWID Opposite Side to Side Deep Channel 	
Fitting Type: IC-CNL-RI Radial Return Flange Inwards Deep Channel 		
Fitting Type: IC-CNL-RO Radial Return Flange Outwards Deep Channel 		

Vantrunk Channel Nut

The Intelok Channel has serrated return flanges which provide greatly enhanced slip resistance, essential in areas of vibration and where close inspection of completed installations is not possible.




 <p>The Vantrunk Intelok Channel Nut can be supplied in plain, short and long spring configurations to suit the client's application.</p>	 <p>The Vantrunk Intelok Nut is stocked in a number of thread sizes including M6, M8, M10 and M12.</p>	 <p>The Vantrunk Intelok Channel Nut can be supplied in three main material & finishes which are Zinc Plated, Galvanised and Stainless Steel.</p>
--	---	--

Long Spring Channel Nut

CHANNEL NUTS - LONG SPRING				
Thread Size	Part No. 	Part No. 	Part No. 	
M6	IC-NUT-M6-L-ZD	IC-NUT-M6-L-GA	IC-NUT-M6-L-SS	
M8	IC-NUT-M8-L-ZD	IC-NUT-M8-L-GA	IC-NUT-M8-L-SS	
M10	IC-NUT-M10-L-ZD	IC-NUT-M10-L-GA	IC-NUT-M10-L-SS	
M12	IC-NUT-M12-L-ZD	IC-NUT-M12-L-GA	IC-NUT-M12-L-SS	






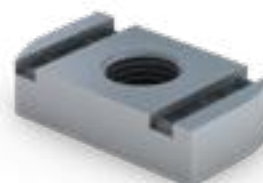
Short Spring Channel Nut

CHANNEL NUTS - SHORT SPRING				
Thread Size	Part No. 	Part No. 	Part No. 	
M6	IC-NUT-M6-S-ZD	IC-NUT-M6-S-GA	IC-NUT-M6-S-SS	
M8	IC-NUT-M8-S-ZD	IC-NUT-M8-S-GA	IC-NUT-M8-S-SS	
M10	IC-NUT-M10-S-ZD	IC-NUT-M10-S-GA	IC-NUT-M10-S-SS	
M12	IC-NUT-M12-S-ZD	IC-NUT-M12-S-GA	IC-NUT-M12-S-SS	



No Spring Channel Nut

CHANNEL NUTS - NO SPRING				
Thread Size	Part No. 	Part No. 	Part No. 	
M6	IC-NUT-M6-N-ZD	IC-NUT-M6-N-GA	IC-NUT-M6-N-SS	
M8	IC-NUT-M8-N-ZD	IC-NUT-M8-N-GA	IC-NUT-M8-N-SS	
M10	IC-NUT-M10-N-ZD	IC-NUT-M10-N-GA	IC-NUT-M10-N-SS	
M12	IC-NUT-M12-N-ZD	IC-NUT-M12-N-GA	IC-NUT-M12-N-SS	



INTELOK BRACKETRY & BEAM CLAMPS

Brackets are primarily designed to be used to provide mechanical strength and reinforcement to a joint when used to connect channel together. The Vantrunk Steel Framing System comes equipped with one of the industry's most comprehensive and versatile range of brackets. The Steel Framing Brackets allow for infinite varieties of permanent and temporary support structures.

Every Bracket in the Vantrunk Steel Framing Range comes complete with a 15.2mm fixing hole to accommodate fixings up to and including M12.

The Steel Framing Range of Brackets are manufactured in either Hot Dip Galvanised Mild Steel or Stainless Steel 316 Marine Grade. Vantrunk Steel Framing Brackets manufactured in Carbon Steel have a material gauge of 6mm and brackets manufactured in Stainless Steel have a material gauge of 5mm.

All Steel Framing Brackets are manufactured out of steel with minimum yield strength of 170N/mm² in accordance with BS 6946.

The seven groups of brackets (see page 160) are all provided within the Steel Framing Brackets Range, which will accommodate all of our user's installation requirements. For more information on the Vantrunk Bracket Range please contact the Vantrunk Technical Team.



Enhanced Option



Vantrunk's unique Intelok Quickfit System of brackets and cantilevers are factory assembled with channel nuts, setscrews, washers & special plastic sleeves. The sleeves ensure that the correct spacing is maintained between the bracket and the channel nut enabling it to be easily located and quickly assembled and also ensures that the channel nut is held captive in transit whilst allowing rotation of the fixing assembly during installation.

To install the Intelok Quickfit system of brackets & cantilevers the nuts are aligned with the open slot of the channel. The assembly is placed in position, the setscrew turned by hand through 90° to locate the channel nut under the return flange of the channel and the setscrew tightened. The channel nuts ensure positive location within the channel. The entire assembly operation takes approximately one third of the time required to fix similar brackets and cantilevers by the conventional spring nut method.

Why Quickfit your Brackets?

- Easier and quicker to assemble.
- Less components to order.
- Approximate 65% savings on installation time.
- Simplified stock control.
- Easier estimating.

Conventional Bracket



- Number of individual components = 10
- Number of order items = 4
- Assembly time = 135 secs

Quickfit Bracket



- Number of individual components = 1
- Number of order items = 1
- Assembly time = 45 secs (**66.6% saving**)

It couldn't be easier to order a Quickfit Bracket with our **NEW** Simplified Ordering System

1. All brackets with the **QF** symbol can be supplied as Quickfit.
2. Select the bracket part number required.
3. Add the suffix (QF10) for standard M10 Quickfit Brackets.

Quick Guide

Starter Brackets



Starter brackets are designed to be welded to the existing steel structure in order to avoid cold working.

Flat Plate Brackets



Flat Plate Brackets provide joint reinforcement between Steel Framing Channel on the same or on different planes.

90° Angle Brackets



90° Angled brackets allow for right angle joints within a channel framework.

Angle Brackets



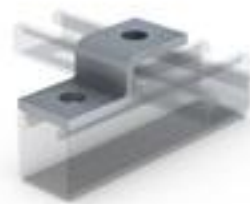
Angled brackets come in a range of angles to provide reinforcement to angular channel joints in a framework.

Support Brackets



Designed to offer support and mechanical strength to channels on many different planes.

Shaped & Top Hat Brackets



A captive fixing bracket used to secure channel side by side on the same plane or channel on a horizontal plane to channel on a vertical plane.

Base Brackets



Base Plates are to be used for securing channel to the floor or wall and will help to distribute the concentrated load over a larger area.

Beam Clamps



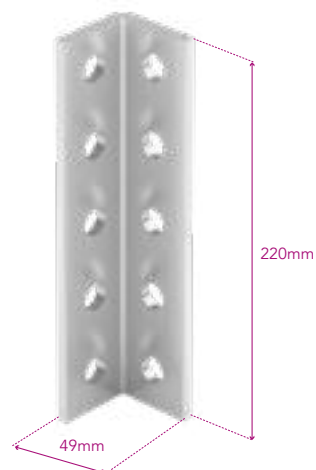
Beam Clamps are designed to secure Steel Framing Intelok Channel to secondary steelwork or building structures.

Starter Brackets

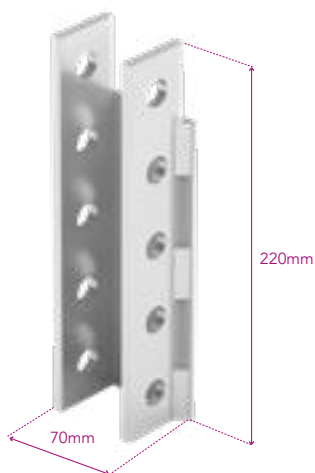

5 Hole Straight Bar

Part No.  325AY10-GAPart No.  325AY10-SS

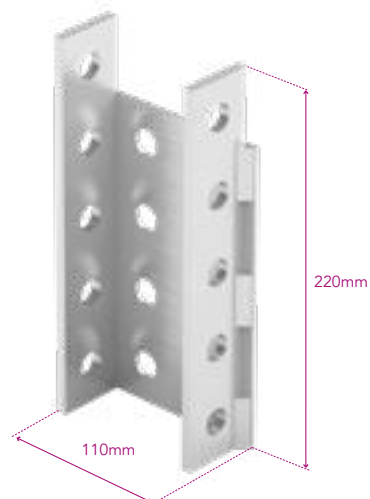
Right Angle Starter Bracket

Part No.  325AB12-GAPart No.  325AB12-SS

Deep Single Starter Bracket

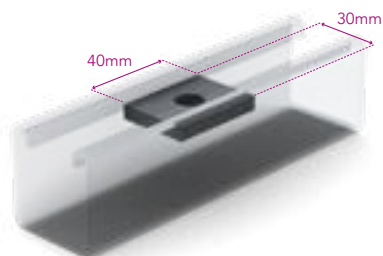
Part No.  325AW05-GAPart No.  325AW05-SS

Back to Back Starter Bracket

Part No.  325AW06-GAPart No.  325AW06-SS

Flat Plate Brackets

Internal Washer



Part No. **GA** 325AJ02-GA

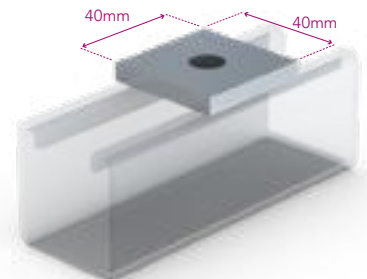
Part No. **SS** 325AJ02-SS

Square Washer

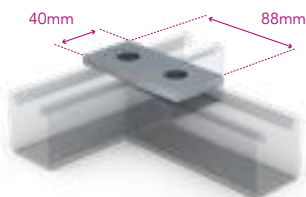
325XAJ10 also available **QF**

Available in: M6, M8, M10 & M12
Amend Code as Applicable.

Part No. GA	Part No. SS	Hole Clearance
325AJ03-GA	325AJ03-SS	M6
325AJ05-GA	325AJ05-SS	M8
325AJ07-GA	325AJ07-SS	M10
325AJ10-GA	325AJ10-SS	M12



2 Hole Straight Bar

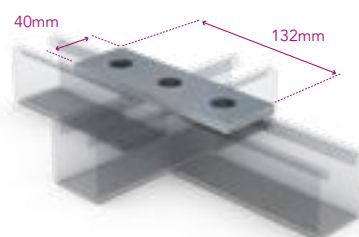


Part No. **GA** 325AD11-GA

Part No. **SS** 325AD11-SS

QF

3 Hole Straight Bar

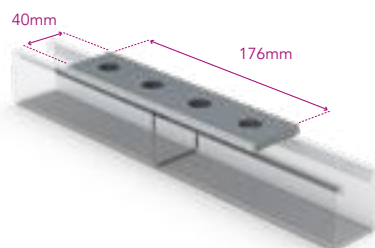


Part No. **GA** 325AC11-GA

Part No. **SS** 325AC11-SS

QF

4 Hole Straight Bar

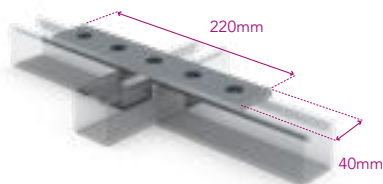


Part No. **GA** 325AC13-GA

Part No. **SS** 325AC13-SS

QF

5 Hole Straight Bar

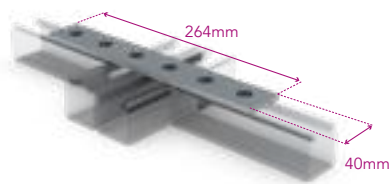


Part No. **GA** 325AY10-GA

Part No. **SS** 325AY10-SS

QF

6 Hole Straight Bar

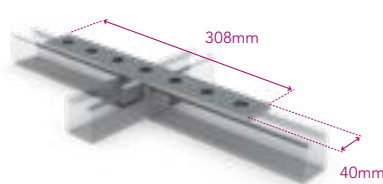


Part No. **GA** 325AY11-GA

Part No. **SS** 325AY11-SS

QF

7 Hole Straight Bar



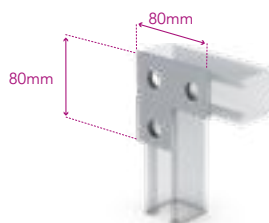
Part No. **GA** 325AY12-GA

Part No. **SS** 325AY12-SS

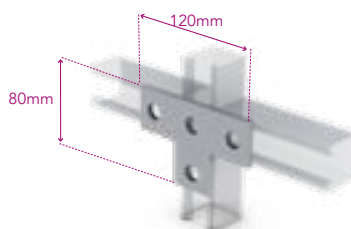
QF

Flat Plate Brackets (cont.)

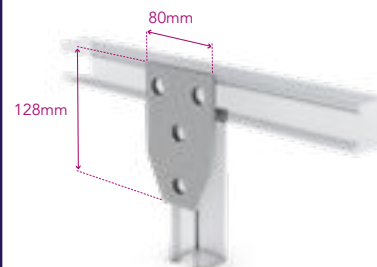
'L' Shaped Bracket

Part No. **GA** 325AG10-GAPart No. **SS** 325AG10-SS

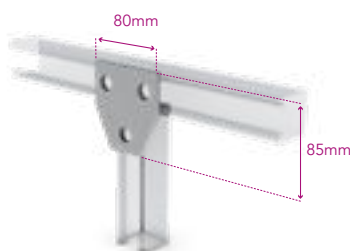
'T' Shaped Bracket

Part No. **GA** 325AF13-GAPart No. **SS** 325AF13-SS

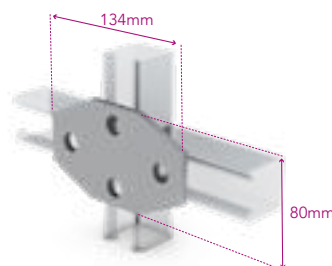
Fish Plate Joiner

Part No. **GA** 325AF15-GAPart No. **SS** 325AF15-SS

3 Hole Straight Bar

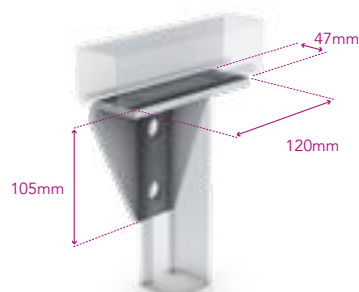
Part No. **GA** 325AF26-GAPart No. **SS** 325AF26-SS

4 Hole Straight Bar

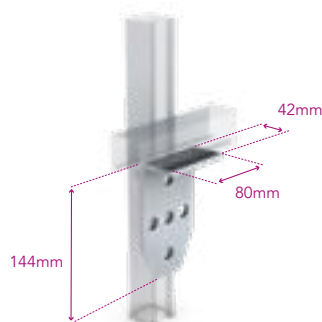
Part No. **GA** 325AF27-GAPart No. **SS** 325AF27-SS

90° Angle Brackets

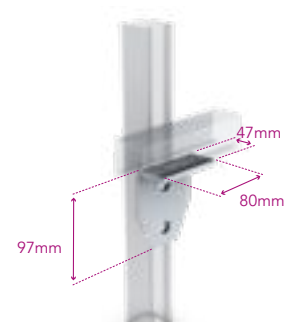
Wing 90° Angle Plate

Part No. **GA** 325AQ10-GAPart No. **SS** 325AQ10-SS

Large 90° Angle Plate

Part No. **GA** 325AQ11-GAPart No. **SS** 325AQ11-SS

Medium 90° Angle Plate

Part No. **GA** 325AQ12-GAPart No. **SS** 325AQ12-SS

90° Angle Brackets (cont.)

<p>Small 90° Angle Plate</p>  <p>Part No. GA 325AQ14-GA Part No. SS 325AQ14-SS</p> <p>UF</p>	<p>Linear Right Angle Bar 1x1</p>  <p>Part No. GA 325AS10-GA Part No. SS 325AS10-SS</p> <p>UF</p>	<p>Perpendicular Right 1x1</p>  <p>Part No. GA 325AD10-GA Part No. SS 325AD10-SS</p> <p>UF</p>
<p>Linear Right Angle Bar 2x1</p>  <p>Part No. GA 325AC10-GA Part No. SS 325AC10-SS</p> <p>UF</p>	<p>Perpendicular Right 2x1</p>  <p>Part No. GA 325AC09-GA Part No. SS 325AC09-SS</p> <p>UF</p>	<p>Linear Right Angle Bar 3x1</p>  <p>Part No. GA 325AE10-GA Part No. SS 325AE10-SS</p> <p>UF</p>
<p>Linear Right Angle Bar 2x2</p>  <p>Part No. GA 325AE11-GA Part No. SS 325AE11-SS</p> <p>UF</p>	<p>Right Angle Shelf Bracket</p>  <p>Part No. GA 325AE12-GA Part No. SS 325AE12-SS</p> <p>UF</p>	

Angle Brackets

Obtuse Angle Bracket

Other angles are available. Please contact our Sales Team.



Part No. **GA** 325AD17-GA

Part No. **SS** 325AD17-SS



Acute Angle Bracket

Other angles are available. Please contact our Sales Team.

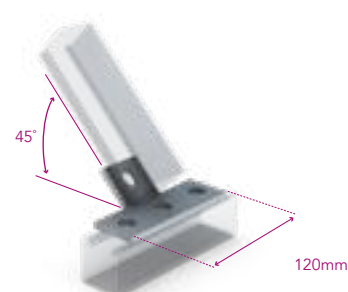


Part No. **GA** 325AH11-GA

Part No. **SS** 325AH11-SS



45° Angle Tee Bracket



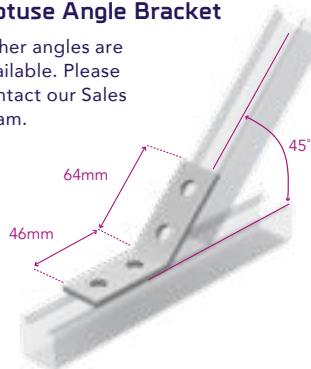
Part No. **GA** 325AF14-GA

Part No. **SS** 325AF14-SS



Obtuse Angle Bracket

Other angles are available. Please contact our Sales Team.

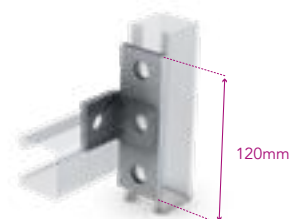


Part No. **GA** 325AC14-GA

Part No. **SS** 325AC14-SS



90° Angle Tee Bracket



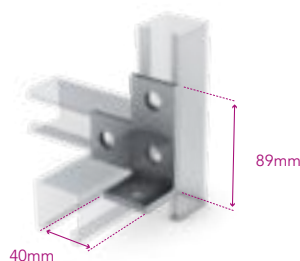
Part No. **GA** 325AF10-GA

Part No. **SS** 325AF10-SS



Support Brackets

Left Handed Tee Support

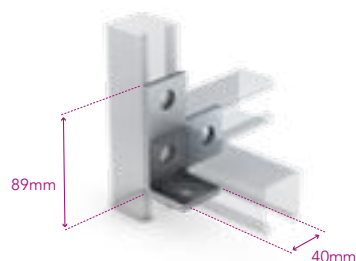


Part No. **GA** 325AF11-GA

Part No. **SS** 325AF11-SS



Right Handed Tee Support

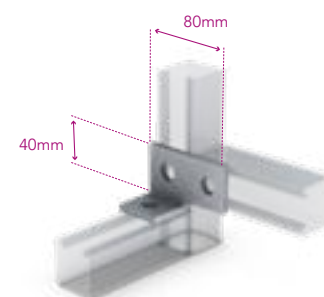


Part No. **GA** 325AF12-GA

Part No. **SS** 325AF12-SS



Left Hand One Bend L Support



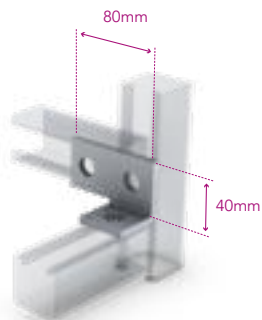
Part No. **GA** 325AG12-GA

Part No. **SS** 325AG12-SS



Support Brackets (cont.)

Right Hand One Bend L Support

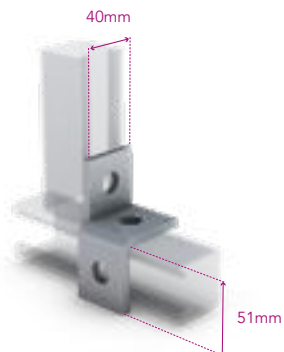


Part No. **GA** 325AG13-GA

Part No. **SS** 325AG13-SS



Left Hand Two Bend L Support

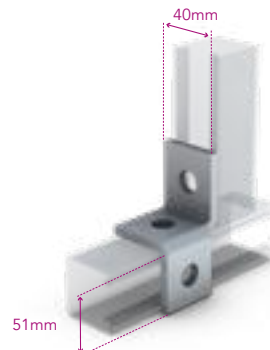


Part No. **GA** 325AG15-GA

Part No. **SS** 325AG15-SS



Right Hand Two Bend L Support

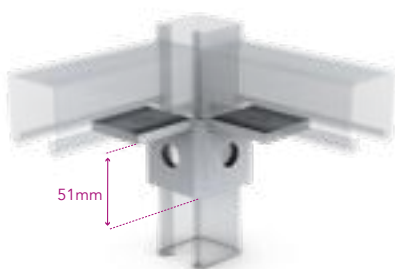


Part No. **GA** 325AG16-GA

Part No. **SS** 325AG16-SS



Three Way Corner

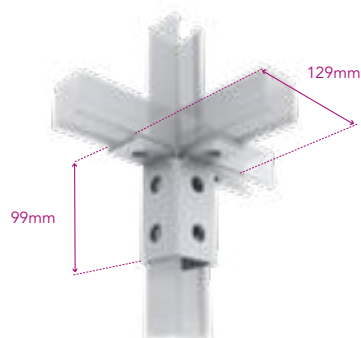


Part No. **GA** 325AV02-GA

Part No. **SS** 325AV02-SS



Three Leg Support

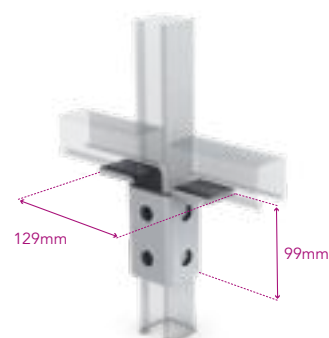


Part No. **GA** 325AV09-GA

Part No. **SS** 325AV09-SS



Two Leg Support

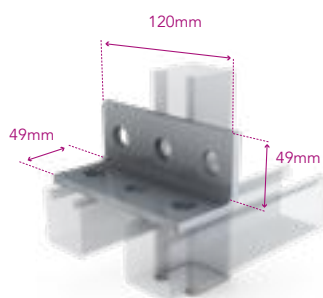


Part No. **GA** 325AV10-GA

Part No. **SS** 325AV10-SS



Cross Support



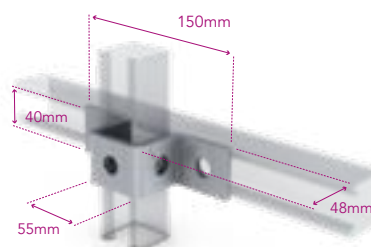
Part No. **GA** 325AB10-GA

Part No. **SS** 325AB10-SS



Shaped Brackets

Deep Normal Top Hat Bracket



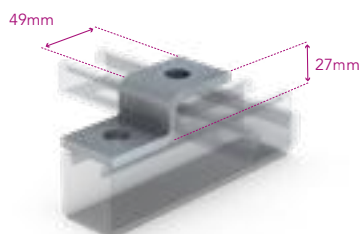
Part No. **GA** 325AJ12-GA

Part No. **SS** 325AJ12-SS



Shaped Brackets (cont.)

Shallow 'Z' Shaped Bracket

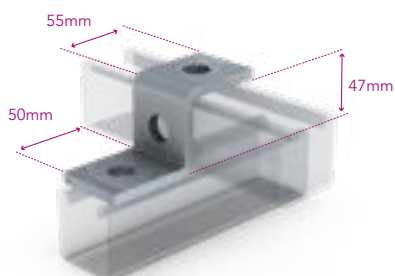


Part No. GA 325AD28-GA

Part No. SS 325AD28-SS



Deep 'Z' Shaped Bracket

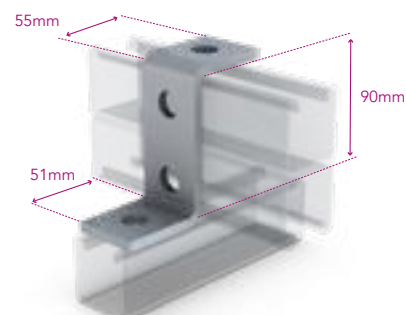


Part No. GA 325AC12-GA

Part No. SS 325AC12-SS



Deep Back to Back 'Z' Shaped Bar

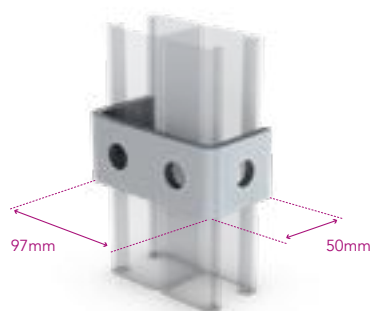


Part No. GA 325AU10-GA

Part No. SS 325AU10-SS



Back to Back Bracket

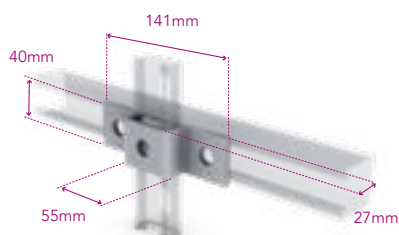


Part No. GA 325AT11-GA

Part No. SS 325AT11-SS



Shallow Normal Top Hat Bracket

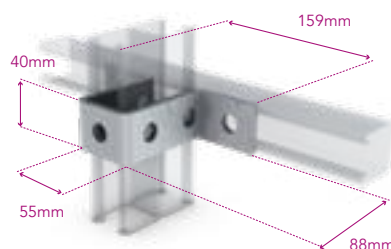


Part No. GA 325AJ13-GA

Part No. SS 325AJ13-SS



Back to Back Normal Top Hat Bracket

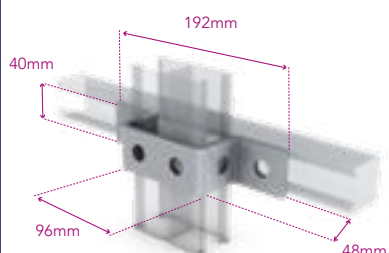


Part No. GA 325AJ14-GA

Part No. SS 325AJ14-SS



Back to Back Flat Top Hat Bracket

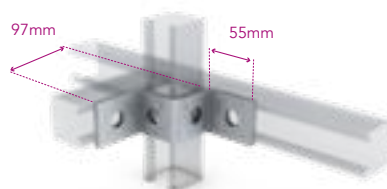


Part No. GA 325AJ11-GA

Part No. SS 325AJ11-SS



'W' Shaped Bracket

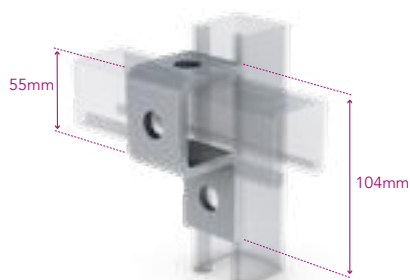


Part No. GA 325AU15-GA

Part No. SS 325AU15-SS



'U' Shaped Bracket



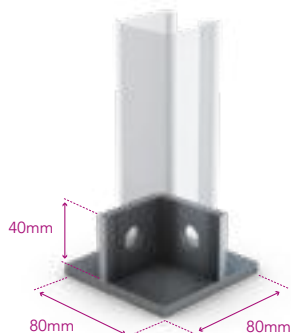
Part No. GA 325AJ15-GA

Part No. SS 325AJ15-SS



Base Plates

Deep Offset Base Plate

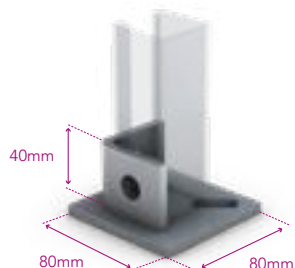


Part No. **GA** 325AR10-GA

Part No. **SS** 325AR10-SS



Deep Central Base Plate

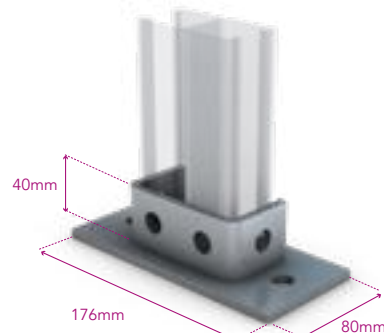


Part No. **GA** 325AN10-GA

Part No. **SS** 325AN10-SS



Back to Back Central Base Plate

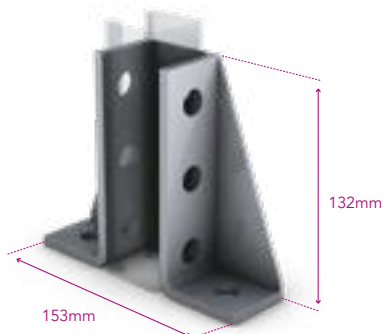


Part No. **GA** 325AT10-GA

Part No. **SS** 325AT10-SS



Deep Tall Gusset Wing Fitting

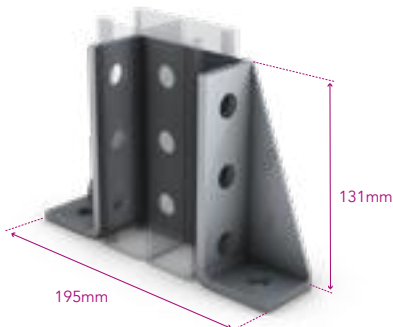


Part No. **GA** 325AW01-GA

Part No. **SS** 325AW01-SS



Back to Back Tall Gusset Wing Fitting

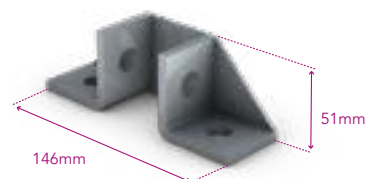


Part No. **GA** 325AW02-GA

Part No. **SS** 325AW02-SS



Deep Short Gusset Wing Fitting

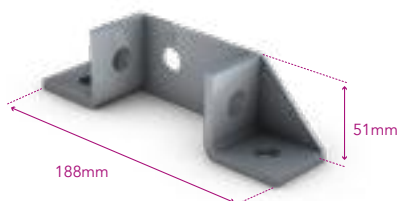


Part No. **GA** 325AW03-GA

Part No. **SS** 325AW03-SS



Back to Back Short Gusset Wing Fitting



Part No. **GA** 325AW04-GA

Part No. **SS** 325AW04-SS



Beam Clamps

Purlin Beam Clamp






Part No.  389AH10-GA

Part No.  389AH10-SS

Beam Clamp



Part No. 	Part No. 	Thread Size 	Max. Load
389AA07-GA	389AA07-SS	M10	114kg
389AA08-GA	389AA08-SS	M12	341kg

'Z' Shaped Beam Clamp



Flange range up to 17mm
Supplied with M10x40 Cone Point Screw

Part No.  325AP10-GA

Part No.  325AP10-SS

Max. Load as pair  300kg



'J' Shaped Beam Clamp



Part No.  325AP11-GA

Part No.  325AP11-SS

Max. Load as pair  300kg

'C' Shaped Flange Beam Clamp



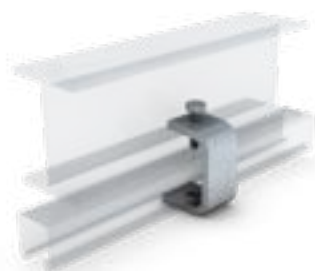
Flange range up to 17mm
Supplied with M10x40 Cone Point Screw

Part No.  325AX11-GA

Part No.  325AX11-SS

Max. Load as pair  250kg

'C' Shaped Base Beam Clamp



Flange range up to 18mm
Supplied with M12x40 Cone Point Screw

Part No.  Part No.   Max. Load as pair

325AX10-GA 325AX10-SS 300kg

Medium Duty 'U' Bolt Beam Clamp



Suitable for both Deep and Shallow Channel Flange range up to 25mm Supplied single and with M10x80 'U' Bolt, 2 x M10 Flat Washers and 2 M10 Hex Nuts

Part No.  Part No.   Max. Load as pair

325AM10-GA 325AM10-SS 300kg

Medium Duty Back to Back 'U' Bolt Beam Clamp



Flange range up to 25mm. Supplied single and with M10x128 'U' Bolt, 2 x M10 Flat Washers and 2 M10 Hex Nuts.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AM12-GA		325AM12-SS			1100kg

Heavy Duty Back to Back 'U' Bolt Beam Clamp



Flange range up to 25mm Supplied single and with M12x126 'U' Bolt, 2 x M12 Flat Washers and 2 M12 Hex Nuts.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AM13-GA		325AM13-SS			300kg

Extra Heavy Duty Back to Back 'U' Bolt Beam Clamp



Flange range 25mm - 40mm Supplied single and with M12x146 'U' Bolt, 2 x M12 Flat Washers and 2 M12 Hex Nuts.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AM14-GA		325AM14-SS			1800kg

Shallow Window Beam Clamp



Flange range up to 15mm
Supplied with M10x40 Cone Point Screw.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AL11-GA		325AL11-SS			500kg

Deep Window Beam Clamp



Flange range up to 15mm
Supplied with M10x40 Cone Point Screw.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AL10-GA		325AL10-SS			500kg

Deep Back to Back Window Beam Clamp



Flange range up to 15mm
Supplied with M10x40 Cone Point Screw.

Part No.	GA	Part No.	SS	GA	Max. Load as pair
325AL09-GA		325AL09-SS			500kg



VANTRUNK

ENGINEERED FOR EXTREME ENVIRONMENTS

GOLDEN EAGLE PROJECT

The Nexen-operated Golden Eagle project produced first oil on October 30, 2014. Upon completion, the project had expended 179 million hours worked. Located 70 km northeast of Aberdeen, Golden Eagle is the second largest oil discovery in the UK North Sea since Buzzard was discovered in 2001.

LOCATION



NORTH SEA, UK
70km northeast of
Aberdeen.

CLIENT

nexen

\$4.8bn
OVERALL COST
OF PROJECT



FACT 1



140 million
barrels of oil equivalent

FACT 2

21

development
wells



15 production
6 water injectors

FACT 3



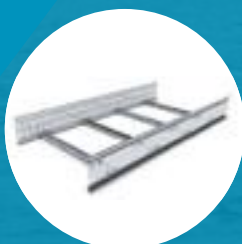
70,000 boe/d
production capacity

FACT 4



Fixed
wellhead platform
structure

PRODUCTS SUPPLIED



SPEEDWAY



HEAVY DUTY CABLE TRAY

VANTRUNK
SPEEDWAY®
EXTREME CABLE LADDER

Vantrunk's Speedway Cable Ladder provides a strong, reliable, easy to install solution providing overall cost savings throughout the project lifespan.

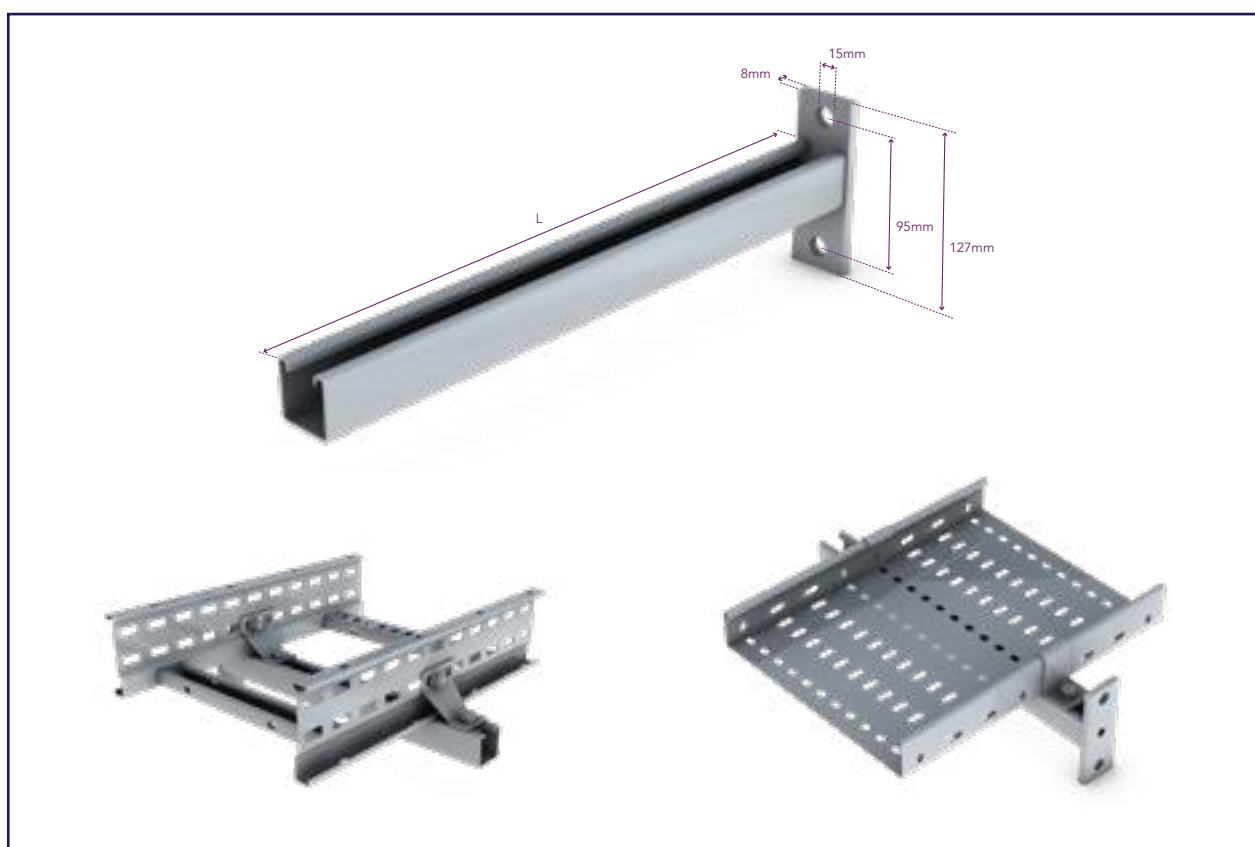
INTELOK SUPPORTS

A range of supports and accessories complement Vantrunk's Cable Management Systems. General purpose single and double channel cantilevers, heavy duty cantilevers, overhead hangers and a comprehensive channel support system manufactured to BS 6946 in conjunction with Intelok Beam Clamps and Brackets offer solutions to suit all particular site requirements.

Single Channel Cantilever Arm (150mm - 900mm)



The Single Channel Cantilever Arm Bracket (IC-CARM-SC) is suitable for supporting light to medium loads. The single channel cantilever arm bracket is available in lengths from 150mm to 900mm for supporting Speedway cable ladder and cable tray. Where heavier load carrying performance is required, the single channel cantilever arm bracket can be reinforced using a cantilever arm prop (IC-PROP-length-#) see page 177. The single channel cantilever arm bracket, based on a conventional strut profile, is suitable for use with both external flange clamps (SW-EFC-#), adaptable fixing brackets (SW-AFB-#) and hold down brackets (SW-HDB-#) for Speedway Cable Ladder and for Cable Tray is suitable for use with the tray hold down bracket (HDB) or for direct fixing through the bed of the cable tray using conventional M6 channel nuts.



Safety Factor of 3.

~ Not recommended without the use of additional support

The loading table below gives the recommended maximum load for each size of single channel cantilever arm bracket for supporting uniformly distributed loads (UDL) such as cable tray or for supporting Speedway cable ladder (which should be uniformly loaded to apply two equal point loads onto the cantilever arm).

Part Number	L (mm)	Max. UDL (kg)
IC-CARM-SC-P-150-O	150	363
IC-CARM-SC-P-300-O	300	182
IC-CARM-SC-P-450-O	450	121
IC-CARM-SC-P-600-O	600	91
IC-CARM-SC-P-750-O	750	59
IC-CARM-SC-P-900-O	900	41


O = Select a Finish & Material

Finishes & Materials:

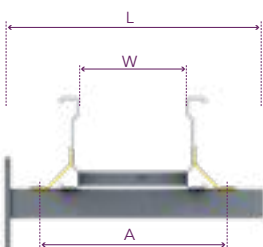


Single Channel Cantilever Arm (Continued)

Longer cantilever arm lengths are available for use as part of a pendant assembly where the single channel cantilever arm is suspended vertically to create a support system in conjunction with cantilever arm brackets as shown. Consult our Design Team for loading information.



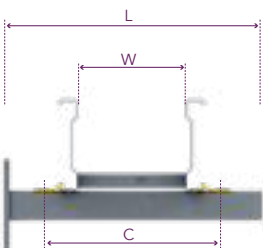
Typical pendant assembly comprising of IC-CARM-SC cantilever arm brackets



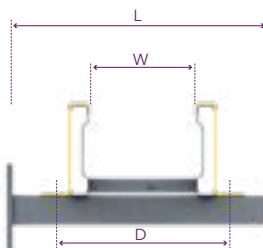
IC-CARM-SC-P Cantilever with Adaptable Fixing Brackets installed externally



IC-CARM-SC-P Cantilever with Adaptable Fixing Brackets installed internally



IC-CARM-SC-P Cantilever with External Flange Clamps



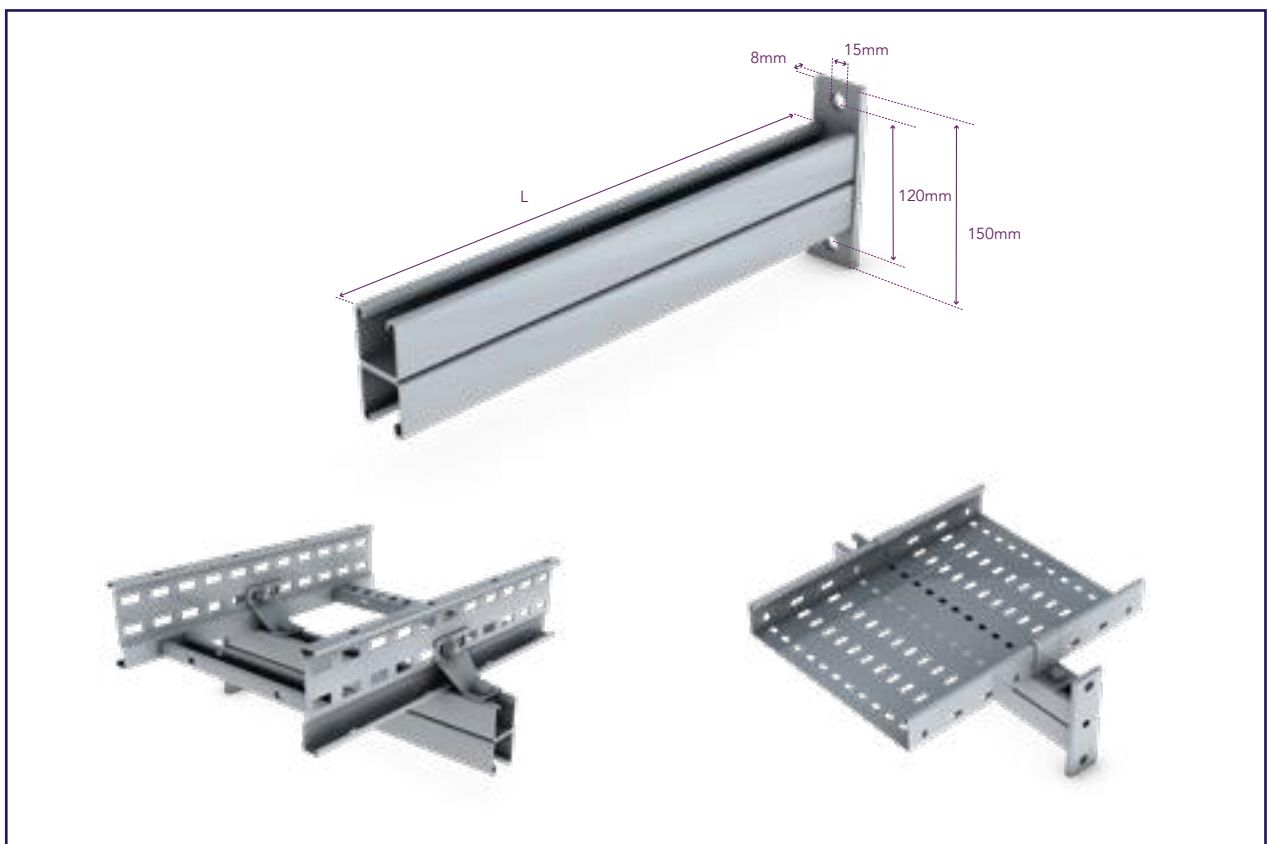
IC-CARM-SC-P Cantilever with Hold Down Brackets

Ladder Type	SW4	SW5	SW6
A	W + 102mm	W + 107mm	
B	W + 83mm	W - 79mm	
C	W + 79mm	W + 89mm	
D	W + 123mm	W + 134mm	
L	W + 150mm		

Back to Back Channel Cantilever Arm



The Double Channel Cantilever Arm Bracket (IC-CARM-BB) is suitable for supporting medium to heavy loads. The double channel cantilever arm bracket is available in lengths from 150mm to 1200mm for supporting Speedway cable ladder and cable tray. Where heavier load carrying performance is required, the double channel cantilever bracket can be reinforced using a cantilever arm prop (IC-CARM-BB). The double channel cantilever arm bracket, based on conventional back to back strut profiles, is suitable for use with Speedway External Flange Clamps (SW-EFC-#), Adaptable Fixing Brackets (SW-AFB-#) and Hold Down Brackets (SW-HDB-#) for Speedway Cable Ladder and for Cable Tray is suitable for use with the tray hold down bracket (HDB) or for direct fixing through the bed of the cable tray using conventional M6 channel nuts.



Safety Factor of 3.

The loading table below gives the recommended maximum load for each size of double channel cantilever arm bracket for supporting uniformly distributed loads (UDL) such as cable tray or for supporting Speedway Cable Ladder (which should be uniformly loaded to apply two equal point loads onto the cantilever arm).

Part Number	L (mm)	Max. UDL (kg)
IC-CARM-BB-P-150-○	150	398
IC-CARM-BB-P-300-○	300	398
IC-CARM-BB-P-450-○	450	285
IC-CARM-BB-P-600-○	600	221
IC-CARM-BB-P-750-○	750	181
IC-CARM-BB-P-900-○	900	153
IC-CARM-BB-P-1050-○	1050	133
IC-CARM-BB-P-1200-○	1200	117


○ = Select a Finish & Material

Finishes & Materials:

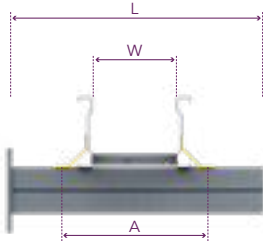


Back to Back Channel Cantilever Arm (Continued)

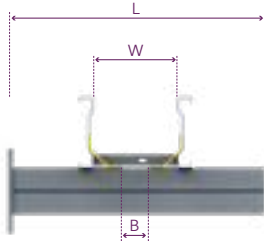
Longer cantilever arm lengths are available for use as part of a pendant assembly where the double channel cantilever arm bracket is suspended vertically to create a support system in conjunction with cantilever arms as shown. Consult our Design Team for loading information.



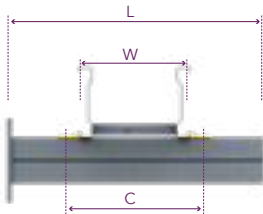
Typical pendant assembly comprising of IC-CARM-BB cantilever arm brackets



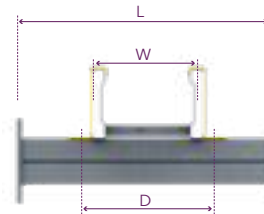
IC-CARM-BB Cantilever with Adaptable Fixing Brackets installed externally



IC-CARM-BB Cantilever with Adaptable Fixing Brackets installed internally



IC-CARM-BB Cantilever with External Flange Clamps



IC-CARM-BB Cantilever with Hold Down Brackets

Ladder Type	SW4	SW5	SW6
A	W + 102mm	W + 107mm	
B	W + 83mm	W - 79mm	
C	W + 79mm	W + 89mm	
D	W + 123mm	W + 134mm	
L	W + 150mm		

Cantilever Arm Prop



A Cantilever Arm Prop (IC-PROP) is used where there is a requirement to increase the effective safe working loads of Single Channel Cantilever Arm Brackets (IC-CARM-SC) and Double Channel Cantilever Arm Brackets (IC-CARM-BB). The Cantilever Arm Prop is particularly effective when used to reinforce cantilever arm brackets carrying heavier duty Speedway Cable Ladders with their correspondingly higher load bearing capabilities.

The Cantilever Arm Prop is available in three sizes:

Cantilever Arm Props

Part Number	Dimensions (mm)		
	L	X	Y
IC-PROP-300-450-O	300	125	216.5
	450	425	736
IC-PROP-600-750-O	600	425	736
	750	725	1259
IC-PROP-900-1200-O	900	725	1259
	1050	725	1259

O = Select a Finish & Material

Finishes & Materials:



The Table below gives the recommended maximum safe working load for each size of cantilever arm prop when supporting Speedway Cable Ladder.

Safe Working Loads with Single Channel Cantilevers

Part Number	Cantilever Type	L (mm)	Max UDL kg
IC-PROP-300-450-O	IC-CARM-SC-P-300	300	748
IC-PROP-300-450-O	IC-CARM-SC-P-450	450	238
IC-PROP-600-750-O	IC-CARM-SC-P-600	600	1587
IC-PROP-600-750-O	IC-CARM-SC-P-750	750	286
IC-PROP-900-1200-O	IC-CARM-SC-P-900	900	369
IC-PROP-900-1200-O	IC-CARM-SC-P-1050	1050	179

O = Select a Finish & Material

Finishes & Materials:



Safe Working Loads with Double Channel Cantilevers

Part Number	Cantilever Type	L (mm)	Max UDL kg
IC-PROP-300-450-O	IC-CARM-BB-P-300	300	2136
IC-PROP-300-450-O	IC-CARM-BB-P-450	450	680
IC-PROP-600-750-O	IC-CARM-BB-P-600	600	4531
IC-PROP-600-750-O	IC-CARM-BB-P-750	750	817
IC-PROP-900-1200-O	IC-CARM-BB-P-900	900	1053
IC-PROP-900-1200-O	IC-CARM-BB-P-1050	1050	512

O = Select a Finish & Material

Finishes & Materials:



Where used with the IC-CARM-SC-P range of single channel cantilever arm brackets, it may be necessary to drill the single channel to accept a fixing for the cantilever arm prop.



Trapeze Support Channel



The Trapeze Support Channel (IC-CNL-D) provides a versatile means of installing Speedway Cable Ladder and Cable Tray using a trapeze support arrangement.

Based on slotted deep channel (strut type) to BS6946, the Trapeze Support Channel has 26 x 13 slots at 50mm pitch and is suited to either M10 or M12 threaded rod hangers. The slotted deep channel is supplied to an exact size to suit each width of Speedway Cable Ladder or Cable Tray and has the slots arranged uniformly along the length of the channel to simplify installation.

The continuous open slot on the trapeze support channel facilitates the use of Speedway External Flange Clamps (SW-EFC), Adaptable Fixing Brackets (SW-AFB) or Hold Down Brackets (SW△-HDB) for securing the Speedway Cable Ladder or for Cable Tray is suitable for use with the tray hold down bracket (HDB) or for direct fixing through the bed of the cable tray using conventional M6 channel nuts.

The tables below give installation details as well as the recommended maximum load for each size of trapeze support channel when used with Speedway Cable Ladder (which should be uniformly loaded to apply two equal point loads onto the ladder trapeze hanger) and Cable Tray (which should also be uniformly loaded).

Consult our Design Team for loading information on non-standard trapeze support channels and non-uniform loading configurations.



For Speedway Cable Ladder



Part Number	Ladder Width (mm)	L	Ladder Load (kg)
IC-CNL-D-S-SL350-O	150	350	658
IC-CNL-D-S-SL500-O	300	500	
IC-CNL-D-S-SL650-O	450	650	
IC-CNL-D-S-SL800-O	600	800	
IC-CNL-D-S-SL950-O	750	950	
IC-CNL-D-S-SL1100-O	900	1100	
IC-CNL-D-S-SL1250-O	1050	1250	

O = Select a Finish & Material

Finishes & Materials:



For Cable Tray



Part Number	Tray Width (mm)	L	Tray Load (kg)
IC-CNL-D-S-SL250-O	50	250	320
	75	250	2038
IC-CNL-D-S-SL300-O	100	300	1560
IC-CNL-D-S-SL350-O	150	350	1103
IC-CNL-D-S-SL400-O	200	400	868
	225	400	800
IC-CNL-D-S-SL500-O	300	500	615
IC-CNL-D-S-SL650-O	450	650	442
IC-CNL-D-S-SL800-O	600	800	348
IC-CNL-D-S-SL950-O	750	950	285
IC-CNL-D-S-SL1100-O	900	1100	244

O = Select a Finish & Material

Finishes & Materials:



Heavy Duty Trapeze Support Channel



The Trapeze Support Channel (IC-CNL-D) provides a versatile means of installing Speedway Cable Ladder and Cable Tray using a trapeze support arrangement.

Based on slotted deep channel (strut type) to BS6946, the Trapeze Support Channel has 26 x 13 slots at 50mm pitch and is suited to either M10 or M12 threaded rod hangers. The slotted deep channel is supplied to an exact size to suit each width of Speedway Cable Ladder or Cable Tray and has the slots arranged uniformly along the length of the channel to simplify installation.

The continuous open slot on the trapeze support channel facilitates the use of Speedway External Flange Clamps (SW-EFC), Adaptable Fixing Brackets (SW-AFB) or Hold Down Brackets (SW△-HDB) for securing the Speedway Cable Ladder or for Cable Tray is suitable for use with the tray hold down bracket (HDB) or for direct fixing through the bed of the cable tray using conventional M6 channel nuts.

The tables below give installation details as well as the recommended maximum load for each size of trapeze support channel when used with Speedway Cable Ladder (which should be uniformly loaded to apply two equal point loads onto the ladder trapeze hanger) and Cable Tray (which should also be uniformly loaded).

Consult our Design Team for loading information on non-standard Heavy Duty Trapeze Support Channels and non-uniform loading configurations. Additional Heavy Duty Trapeze Hangers and alternative fixing slot configurations are available – consult our Design Team for further information.



For Speedway Cable Ladder



Part Number	Ladder Width (mm)	L	Ladder Load (kg)
IC-CNL-BBD-S-SL350-O	150	350	1659
IC-CNL-BBD-S-SL500-O	300	500	
IC-CNL-BBD-S-SL650-O	450	650	
IC-CNL-BBD-S-SL800-O	600	800	
IC-CNL-BBD-S-SL950-O	750	950	
IC-CNL-BBD-S-SL1100-O	900	1100	
IC-CNL-BBD-S-SL1250-O	1050	1250	

O = Select a Finish & Material

Finishes & Materials:



For Cable Tray



Part Number	Tray Width (mm)	L	Tray Load (kg)
IC-CNL-BBD-S-SL350-O	150	350	1659
IC-CNL-BBD-S-SL500-O	300	500	
IC-CNL-BBD-S-SL650-O	450	650	
IC-CNL-BBD-S-SL800-O	600	800	
IC-CNL-BBD-S-SL950-O	750	950	
IC-CNL-BBD-S-SL1100-O	900	1100	
IC-CNL-BBD-S-SL1250-O	1050	1250	

O = Select a Finish & Material

Finishes & Materials:



INTELOK CONCRETE INSERTS

Steel Framing Concrete Inserts are manufactured from Steel Framing Intelok Channel profiles. The back of each channel is pressed out to form specially designed strong anchor lugs.

The channel is then filled with a unique profile manufactured from expanded polystyrene foam which prevents the ingress of concrete during the pouring stage of construction. The infill is simply removed by inserting a knife blade down the two continuous slots formed in the profile enabling rapid removal of the infill.

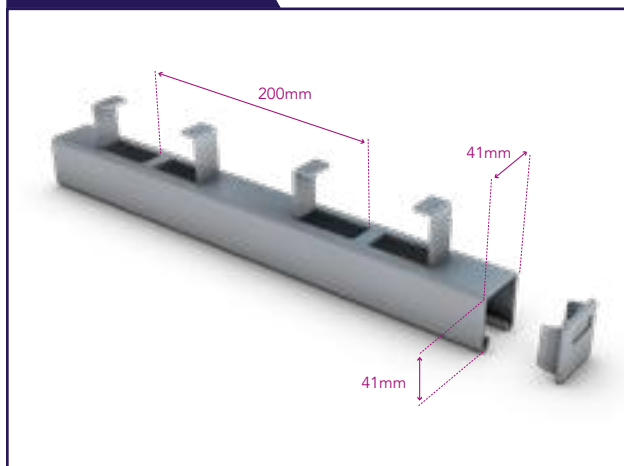
ACCREDITED TO
THE FOLLOWING
STANDARDS



Deep Intelok Concrete Insert

Steel Framing Deep Concrete Inserts are manufactured from 2.5mm, 41 x 41 deep channel with securing lugs at 200mm centres.

Ref. IC-CON-D



Loading Data - Concrete Inserts

Loading Condition	Deep Channel
Safe Working Load per 200mm module	670kg
Safe Working Load per metre length	3350kg
Safe pull-out load on channel lips	1000kg
Safe shear load - M10 fixings	1392kg
Safe shear load - M12 fixings	2023kg

Part Number
IC-CON-D-□-○

Finishes & Materials:



□ = Select a Channel Length* ○ = Select a Finish

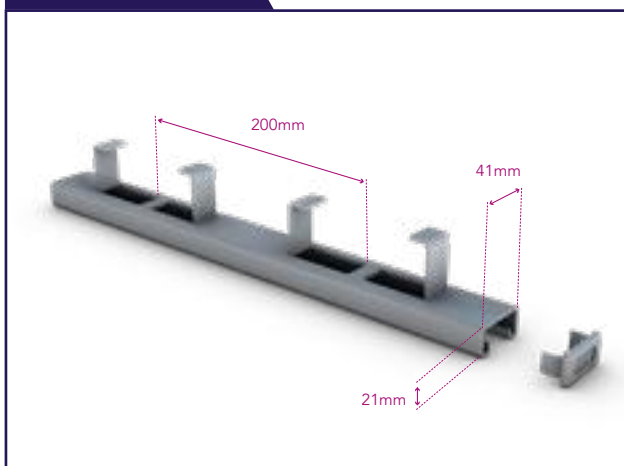
Loading data is based on concrete with a crushing strength of 33N/mm² and a factor safety of 2.

Steel Framing Deep Concrete Inserts are available in standard lengths of 3m. For lengths other than the standard 3 metres, quote the required length in mm up to 3m (must be divisible by 200).

Intelok Shallow Concrete Insert

Steel Framing Shallow Concrete Inserts are manufactured from 2.5mm, 41 x 21 shallow channel with securing lugs at 200mm centres.

Ref. IC-CON-S



Loading Data - Concrete Inserts

Loading Condition	Deep Channel
Safe Working Load per 200mm module	400kg
Safe Working Load per metre length	2000kg
Safe pull-out load on channel lips	1000kg
Safe shear load - M10 fixings	1392kg
Safe shear load - M12 fixings	2023kg

Part Number
IC-CON-S-□-○

Finishes & Materials:



□ = Select a Channel Length* ○ = Select a Finish

Loading data is based on concrete with a crushing strength of 33N/mm² and a factor safety of 2.

Steel Framing Shallow Concrete Inserts are available in standard lengths of 3m. For lengths other than the standard 3 metres, quote the required length in mm up to 3m (must be divisible by 200).

The Concrete Insert above is shown with Protective End Caps. Vantrunk highly recommends the use of Protective End Caps as the cap prevents the ingress of concrete slurry into the insert during installation. (Order Separately for End Caps Page 188).

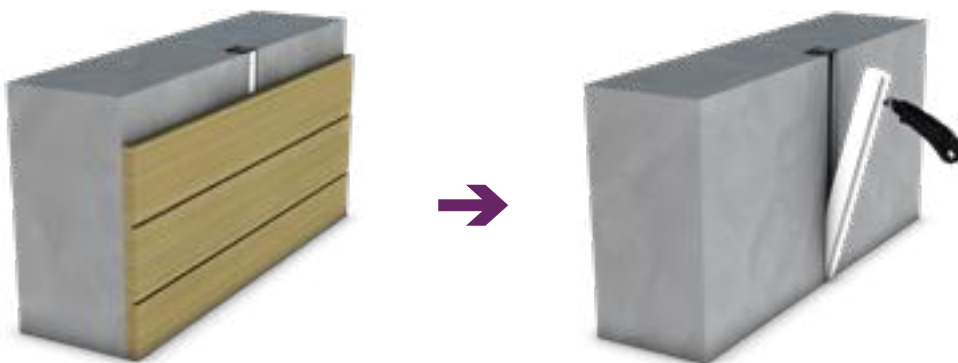
Intelok Steel Framing Concrete Insert Installation Instructions:

STEP 1: FIXING TO SHUTTERING



Fix the Concrete Insert to the shuttering by nailing through the slots created by the anchor lugs. Fit end caps as necessary to the open ends of the concrete insert. The anchor lugs can be wired onto reinforcement mesh as required to increase the strength of the finished assembly.

STEP 2: REMOVING THE INFILL



After pouring of concrete & removal of the shuttering, remove the polystyrene infill using a knife to cut through the two continuous grooves in the infill. Remove the nails.

STEP 3: INSERTING THE QUICKFIT ASSEMBLY

Vantrunk Quickfit Brackets-Cantilevers are simply inserted into the channel. When the hexagon set screw is rotated through 90° degrees the channel nuts turn into the correct position, it is then easily tightened by a spanner. This saves approximately two thirds of the time taken when using the conventional method of spring channel nuts etc.

The Quickfit assembly can be adjusted along the channel to the desired position before tightening the fixing bolt.

The Vantrunk Intelok Concrete Inserts are also compatible with the conventional style of spring channel nuts.

STEP 4: FINISHED INSTALLATION

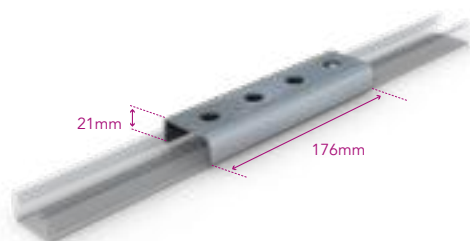


INTELOK ACCESSORIES

The Vantrunk Steel Framing System is complemented by a range of accessories.

From a selection of pipe clamps and connectors to end caps and cover strips, the following ancillary items represent cost-effective and practical solutions to most requirements.

Shallow External Connector

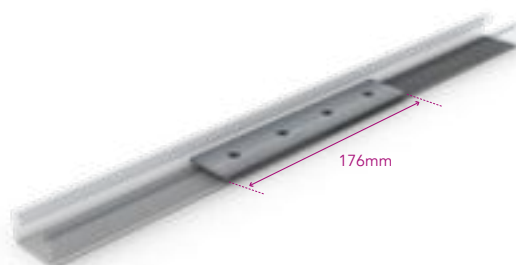


Part No. **GA** 325AK11-GA

Part No. **SS** 325AK11-SS



Shallow Internal Connector

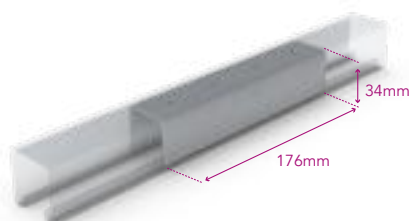


Part No. **GA** 325AK13-GA

Part No. **SS** 325AK13-SS

Comes complete with necessary fixings. Not structural.

Light Duty Internal Connector

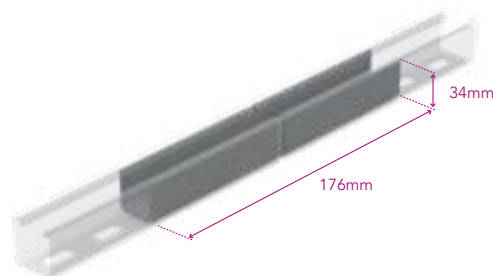


Part No. **QQ** 336AB08-QQ

Part No. **SS** 336AB08-SS

Comes complete with necessary fixings. Not structural. Not suitable for slotted channel.

Light Duty Internal Connector (for Slotted Channel)



Part No. **QQ** 336AB12-QQ

Part No. **SS** 336AB12-SS

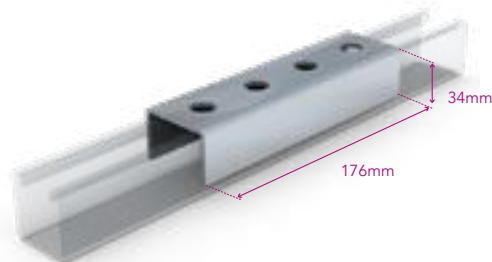
Comes complete with necessary fixings. Not structural. Suitable for slotted channel.

Pipe Clamps



A Range of Pipe Clamps are available in a zinc plated finish, please contact the Vantrunk Sales Team for more information. Please note that a minimum order quantity applies for this range of products.

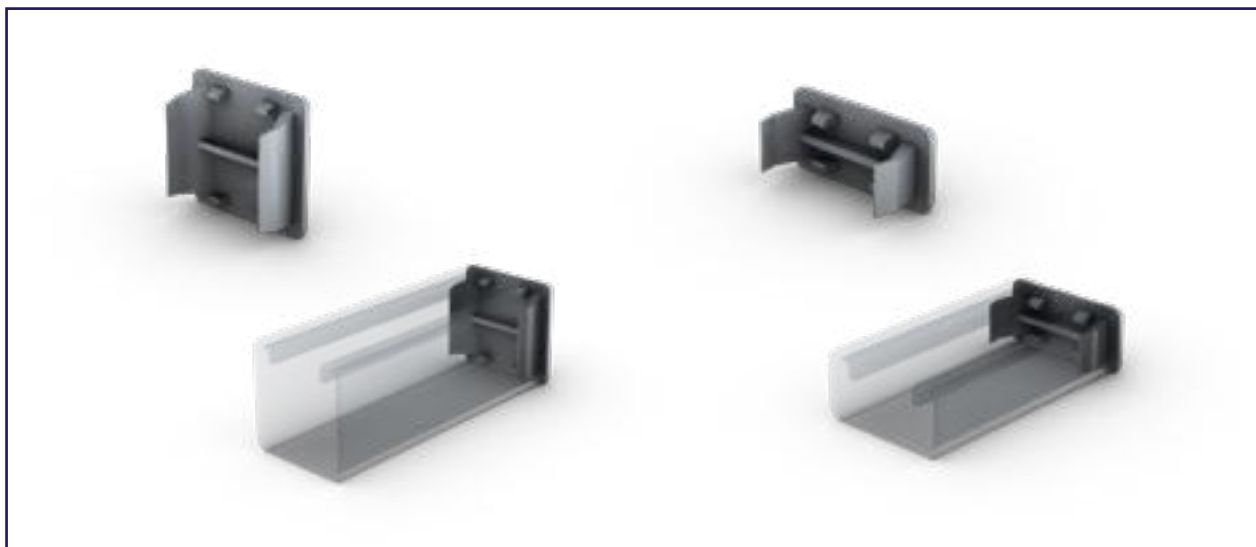
Deep External Connector



Part No. **GA** 325AK10-GA

Part No. **SS** 325AK10-SS

Protective End Cap



Protective End Caps are designed to close off the open ends of Intelok Deep and Shallow Channel Profiles. End caps are also used with Intelok Concrete Inserts to prevent the ingress of concrete slurry during the pouring process. Manufactured from injection moulded PVC, end caps are available in black or white colours.

Part Number	Channel Type
325AA10-NY	Deep Channel (Black)
325AA11-NY	Shallow Channel (Black)
325AA12-NY	Deep Channel (White)
325AA13-NY	Shallow Channel (White)

Cover Strip



Cover Strips are designed to close off the continuous open slots of Intelok Channel Profiles, particularly for decorative purposes or where the channel is used as trunking for the routing of secondary cables. Cover strips are supplied in 3m lengths and are available in extruded white PVC and roll-formed pre-galvanised mild steel or stainless steel material.

Part Number	Cover Strip Type
339AA10-NY	3 Mtr Long (PVC)
339AB10-QQ	3 Mtr Long (Pre-Galv)
339AA10-SS	3 Mtr Long (SS)



VANTRUNK

ENGINEERED FOR EXTREME ENVIRONMENTS

SHAH DENIZ & SOUTH CAUCASUS PIPELINE EXPANSION

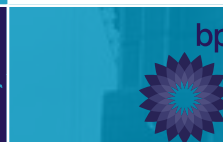
Shah Deniz Stage 2 Full Field Development is a giant project that will add a further 16 billion cubic metres per year (bcma) of gas production to the approximately 9 bcma produced by Shah Deniz Stage 1.

LOCATION



CASPIAN SEA
Azerbaijan & Georgia.

CLIENT



\$28bn
INVESTMENT



FACT 1



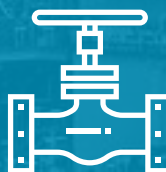
\$28 billion
Investment for gas
production & transportation

FACT 2



Expansion of
the existing
Sangachal
terminal and
the addition of
two new bridge
linked offshore
platforms

FACT 3



Construction of the
South Caucasus Pipeline
expansion scheme

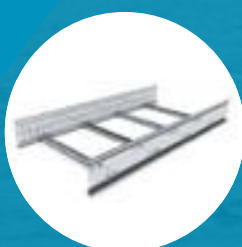
FACT 4



European energy security
will be increased by
Caspian gas in European
markets for first time



PRODUCTS SUPPLIED



SPEEDWAY



HEAVY DUTY CABLE TRAY

VANTRUNK
SPEEDWAY®
EXTREME CABLE LADDER

Vantrunk stainless Speedway cable ladder systems, cable tray systems and Intelok secondary support system. Vantrunk have supplied all five phases of the BP Azeri developments from 2002 to 2017.