

Complete Handrail Solutions

















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2012

Intr<mark>oduction</mark>



QuickClamp - A versatile, muti-purpose system using malleable cast iron fittings. The flexibility of the system allows complex structures to be assembled in a quick and efficient manner. Whilst used primarily to construct safety handrail and balustrades, QuickClamp also has many other uses such as providing support structure for canopies, carports and can provide framework for chainlink, mesh or ball stop fencing.

We would point out that the chosen size/combination for any application remains completely the responsibility of the customer and any dead and imposed loads applied must be taken into consideration when designing an installation.

RoofClamp - Has been designed to offer a non-penetrative roof edge protection system. Used specifically for the safety of employees and contractors working on or gaining access via a flat roof at height. The system has been designed to support a person leaning on the guardrail or to provide a hand hold when walking beside. It will stop a person who is walking or falling towards the protective rail.

DDAClamp - A complete system that has been specifically designed to help compliance with the Disability Discrimination Act (DDA) and the Building Regulations Part M:2004

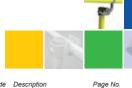
All fittings are hot dip galvanised to BS EN ISO1461 and tubing is galvanised to BS1387 providing long lasting resistance to corrosion. Powder Coat finishes to standard RAL colours are available on request.







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Tube for all systems is available in 3.2m or 6.4m lengths (approx size).

If delivery of 6.4m length tube is required please contact our sales office as special arrangements must be made for transportation.

	Quickclamp Tube												
Code	Size ref	Tube OD/mm	Tube Length										
QC263.2	I	26.9	3.2m										
QC333.2	2	33.7	3.2m										
QC423.2	3	42.4	3.2m										
QC483.2	4	48.3	3.2m										
QC266.4	I	26.9	6.4m										
QC336.4	2	33.7	6.4m										
QC426.4	3	42.4	6.4m										
QC486.4	4	48.3	6.4m										

















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Bracket

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145-Non Structural Side Support

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146 - Structural Side Palm Fixing



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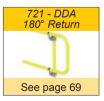


















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750 - DDA







QuickClamp

Modular Handrail







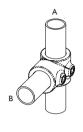












Short Tee

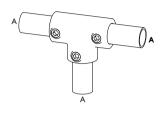


A 90° tee connection between two tubes. To join the top-rail to an inter post or an end post to a mid-rail. This fitting is not suitable for joining two tubes together.

Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC0126	I	I	42						0.23
QC0133	2	2	46						0.29
QC0142	3	3	62						0.45
QC0148	4	4	68						0.62











Long Tee

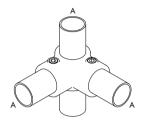
A 90° tee connection between two tubes. Used to join the top-rail to an inter post. This fitting can be used to join two tubes together.

Code	A	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC0426	ı		85	42					0.38
QC0433	2		92	46					0.50
QC0442	3		122	61					0.86
QC0448	4		134	68					1.10









Corner - Centre Tube

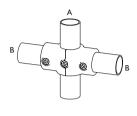
A 90° corner with a vertical tube passing through. Used to connect the mid-rail to a vertical on a 90° corner.



Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC1626	ı		42						0.28
QC1633	2		46						0.41
QC1642	3		60						0.70
QC1648	4		68						0.85











Two Socket Cross

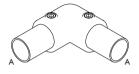
A 90° joint between the vertical tube and the horizontal. Used to connect the mid-rail to the inter posts.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC1926	ı	ı	84						0.28
QC1933	2	2	92						0.40
QC1942	3	3	122						0.65
QC1948	4	4	134	63					0.86









90° Elbow

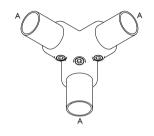
A 90° elbow used to join the end post to the top-rail at 90°.



Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC2526	I		41						0.27
QC2533	2		46						0.38
QC2542	3		58					9	0.68
QC2548	4		65				1	7	0.77













Three Way 90° Elbow

A 90° corner with a vertical tube. Used to connect two top-rails on a 90° corner with a vertical tube.

Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
QC2826	ı		45						0.38
QC2833	2		46			17/			0.48
QC2842	3		60					1 1 3	0.82
QC2848	4		68						1.14

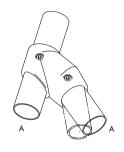


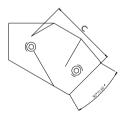






A 30°-60° tee connection between two tubes. To join the top-rail at an angle of between 30°-60° to an inter post.

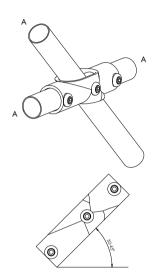




Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC2933	2		86						0.44
QC2942	3		100	10					0.64
QC2948	4		105		7/1				0.97









30°- 45° Adjustable Cross

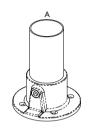
A 30°- 45° two socket cross connection between two tubes. To join the mid-rail at an angle of between 30°- 45° to an inter post.

Code	A	В	_	_	F	F	G	Hole dia/mm	Weight Kgs
	_ ^	ь	C			'	G	ula/IIIIII	ixgs
QC3033	2		162						0.82
QC3042	3		190						1.17
QC3048	4		218						1.50



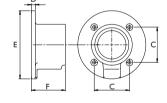






Base Flange

The base flange is used to terminate the tube to a wall or similar.



* Not suitable for use as a base plate for the hand railing system.

Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC3126	ı		57	6	81	40		7mm	0.34
QC3133	2		65	7	88	48		7mm	0.51
QC3142	3		78	7	102	51		7mm	0.63
QC3148	4		89	7	120	60		7mm	0.68













Railing Base Flange

This fitting is used as a base plate for the hand railing system and must always be positioned with the holes across the line of the railing for strength.

Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC3226	ı		76	64	114	76	7	Hmm	0.50
QC3233	2		90	76	130	88	7	I4mm	0.74
QC3242	3		100	80	140	90	7	I4mm	1.06
QC3248	4		114	90	150	90	10	I4mm	1.38









The ground socket is cast into concrete and set flush with the ground. The vertical tube is held in place with the grubscrew but can be easily removed.

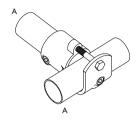




Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC3433	2		123	127					2.33
QC3442	3		130	140					2.52
QC3448	4		130	140					2.26











Clamp on Tee

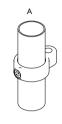
The clamp on tee is used to add additional supports to an existing structure without the need of dismantling.

Code	Α	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC3526	ı		50						0.30
QC3533	2		50						0.33
QC3542	3		67					A	0.59
QC3548	4		70						0.61

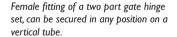


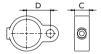






Gate Eye

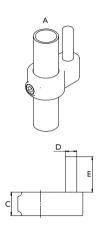




Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC3826	I		25	30				14	0.22
QC3833	2		25	33				14	0.26
QC3842	3		25	38				14	0.27
QC3848	4		25	41				14	0.29











Gate Hinge

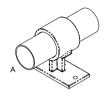
Male fitting of a two part gate hinge set, can be secured in any position on a vertical tube.

Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC4026	ı		25	12	38	30			0.20
QC4033	2		25	12	38	33			0.25
QC4042	3		25	12	38	38			0.30
QC4048	4		25	12	38	41			0.31









Handrail Bracket

C

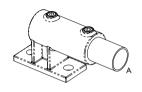


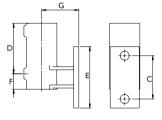
Wall mount bracket for the handrailing system. The tube passes through the bracket and can be secured at any point. Not suitable for use as a structural fitting.

Code	Α	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC4326	ı		58	55	80	45		8	0.36
QC4333	2		63	58	85	45		8	0.45
QC4342	3		77	61	100	45		8	0.57
QC4348	4		89	70	110	50		8	0.78











Structural Side Support

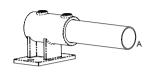
Structural offset side support for securing handrailing to walls, steps, etc. The tube is unable to pass through this fitting helping to add strength to the structure.

Code				D	F	F		Hole	Weight
	Α	В	C	U	E	г	G	dia/mm	Kgs
QC4433	2		70	75	97	30	63	14	0.78
QC4442	3		80	85	110	30	66	14	1.12
QC4448	4		90	90	125	30	66	14	1.55









Non-Structural Side Support

P

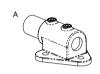


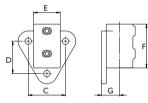
Non-structural offset side support for securing handrailing to walls, steps, etc.

	Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
ĺ	QC4533	2		70	75	100	30	75	14	0.77
	QC4542	3		73	85	113	53	64	14.5	1.08
	QC4548	4		89	90	120	68	73	14.5	1.48











Structural Side Palm Fixing

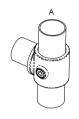
Structural side palm fixing for securing handrailing to walls, steps, etc. The flush design allows the vertical tube to be tight to the structure.

Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
QC4633	2		78	68	45	70	25	12	0.63
QC4642	3		86	75	56	79	28	12	0.81
QC4648	4		96	83	61	86	32	12	0.96









Internal Swivel Tee

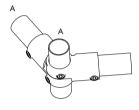
Used with other fittings within the Quickclamp handrailing range this fitting creates a 360° swivel joint.



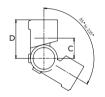
Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC4733	2		22	28	34				0.36
QC4742	3		28	35	42				0.55
QC4748	4		31	42	48				0.65











Short Swivel Tee

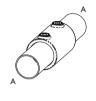
Always sold as pairs this fitting is used to create angles between 85° and 235°. A central vertical tube is required to join the fittings together.

Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC4826	ı		-31	60					0.20
QC4833	2		-33	60					0.30
QC4842	3	- 1	-40	75					0.42
QC4848	4		-46	85					0.54









External Sleeve Joint

This fitting is used to externally join two tubes together of the same diameter.



Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC4926	I		76						0.27
QC4933	2		88						0.40
QC4942	3		100						0.52
QC4948	4		100					·	0.64











Internal Tube Joint

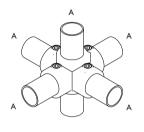
Always sold as pairs this fitting is used to internally join two tubes together of the same diameter.

Code					_	_		Hole	Weight
	Α	В	C	D	Е	F	G	dia/mm	Kgs
QC5033	2		20	80					0.26
QC5042	3		20	80					0.38
QC5048	4		20	80					0.55









Four Way Cross



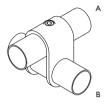


A four way cross that allows a vertical tube to pass through the centre of the fitting with four horizontal tubes joining at 90° to each other.

Code	Α	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC5826	ı		81	32					0.52
QC5833	2		92	37					0.60
QC5842	3		120	40					1.06
QC5848	4		136	53					1.46













Clamp on Crossover

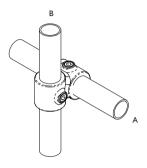
The clamp on crossover is used to add additional supports to an existing structure without the need of dismantling.

Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC6026	ı	I	35	27					0.18
QC6033	2	2	42	34					0.29
QC6042	3	3	50	43					0.47
QC6048	4	4	56	48					0.64









90° Crossover

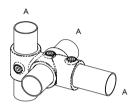
The tube is unable to be jointed within this fitting. Used for racking systems or offset handrailing.



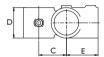
Code	1							Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC6133	2	2	38	40					0.32
QC6142	3	3	46	49					0.48
QC6148	4	4	51	50					0.60











Combination Socket

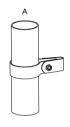
A combination fitting for use in the construction of racking systems. The fitting allows a vertical tube to be connected at 90° to two horizontal tubes

Code	А	В	C	D	E	F	G	Hole dia/mm	Weight Kgs
QC6526	ı		37	34	42		1		0.31
QC6533	2		44	40	46				0.50
QC6542	3		54	49	60				0.70
QC6548	4		61	56	66				0.92









Single Sided Mesh Clip



The single sided clip allows mesh panels to be secured to one side of a vertical or horizontal tube, supplied with M6x30mm long bolt and nut.

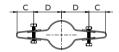
Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
QC7033	2		25	28					0.08
QC7042	3		25	33					0.08
QC7048	4		25	35					0.09











Double Sided Mesh Clip

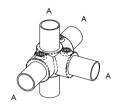
This double sided clip allows mesh panels to be secured either side of a vertical or horizontal tube, supplied with M6x30mm long bolt and nut.

Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC7133	2		25	28					0.13
QC7142	3		25	33					0.14
QC7148	4		25	35					0.15









Side Outlet Tee

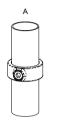
Side outlet tee used to join three horinzontal tubes at 90° to each other with a vertical tube passing through the fitting.



Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC7626	I		82	41					0.35
QC7633	2		92	46					0.46
QC7642	3		124	62					0.78
QC7648	4		136	68					1.20











Locking Collar

The locking collar is used to add extra support to a structure where the slip load on the grubscrew is exceeded.

Code	A	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC7926	1		22						0.15
	2								
QC7933	2		25						0.15
QC7942	3		25						0.18
QC7948	4		25						0.21









Chain Hook



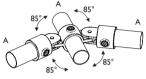
Chain hook used to locate chains across openings. We would recommend that one end of the chain is secured in place to prevent removal.

Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC8226	ı		85	42					0.38
QC8233	2		92	46					0.50
QC8242	3		122	61					0.86
QC8248	4		134	68					1.10

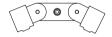












Double Swivel Combination

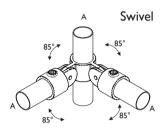
Double swivel combination with the swivel connectors at 180° to each other. Each swivel has a travel of approximately 85° from the vertical in both directions.

Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC6726	ı								0.99
QC6733	2								1.12
QC6742	3							a III	1.36
QC6748	4					K			1.58









90° Corner Swivel

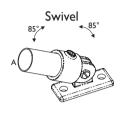
Double swivel combination with the swivel connectors at 90° to each other. Each swivel has a travel of approximately 85° from the vertical in both directions



Code	A	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC6826	I								0.98
QC6833	2								1.13
QC6842	3					0			1.35
QC6848	4								1.57











Swivel Flange

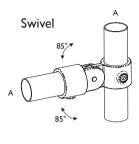
This fitting allows a tube travel of approximately 85° from the vertical in both directions.

Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC6926	ı								0.71
QC6933	2								0.76
QC6942	3								0.84
QC6948	4								0.95









Single Swivel Socket

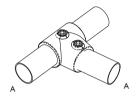


Single swivel combination. The swivel has a travel of approximately 85° from the horizontal in both vertical directions.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC7326	ı								0.57
QC7333	2								0.66
QC7342	3								0.83
QC7348	4								1.01











Angled Single Socket Tee

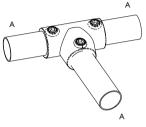
An adjustable tee connection between two tubes. Used on ramps to join the top-rail to an inter post or an end post to a mid-rail. Not suitable for joining two tubes.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC0133A	2		45						0.37
QC0142A	3		60						0.60
QC0148A	4		70						0.76









Angled Long Tee

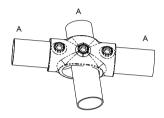


An adjustable tee connection between two tubes. Used on ramps to join the top-rail to an inter post. This fitting can be used to join two tubes together.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC0433A	2		102	49					0.53
QC0442A	3		142	60					1.00
QC0448A	4		157	70					1.28











Angled Two Socket Cross

An adjustable joint between the vertical tube and the horizontal. Used to connect the mid-rail to the inter posts.

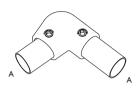
Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
QC1933A	2		112						0.48
QC1942A	3		140						0.73
QC1948A	4		158						0.92











Angled Elbow



An adjustable elbow used to join the end post to the top-rail.

Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
QC2533A	2		46						0.40
QC2542A	3		60						0.62
QC2548A	4		68						0.97













Angled Railing Base Flange

An adjustable base plate for the hand railing system. Used on shallow ramps with a rake of between 4°- 10°.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
QC3233A	2		89	80	127	90	7	14.5	0.86
QC3242A	3		101	90	140	98	7	14.5	1.08
QC3248A	4		113	96	153	99	7	14.5	1.34









Plastic End Cap

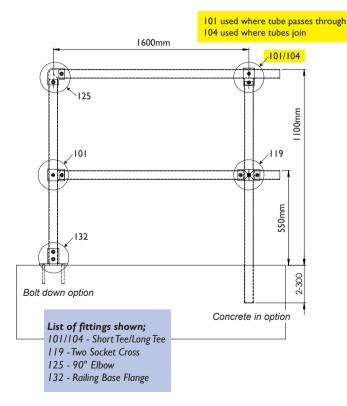
A black plastic end cap used in the end of the tube.

Code	Α	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
QC3326	I								0.01
QC3333	2								0.01
QC3342	3			5					0.01
QC3348	4								0.02





Typical handrail constuction on a level plain

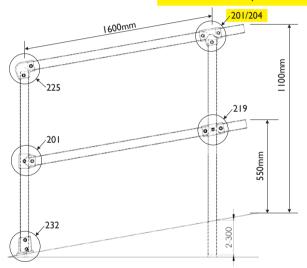






Typical handrail construction on a slope of between 4°-10° 201

201 used where tube passes through 204 used where tubes join



Bolt down option

Concrete in option

List of fittings shown;

201/204 - Angled Short Tee/Long Tee 219 - Angled Two Socket Cross

219 - Angled Iwo Socket Cros

225 - Angled 90° Elbow

232 - Angled Railing Base Flange





Typical handrail constuction on steps

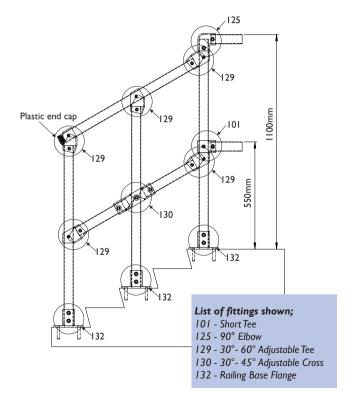






Table showing the equivalent product references used by other handrail suppliers

Our Code	Other Code	Other Code	Other Code		
101	10	C03	A2		
104	25	C04	A4		
116	21	C21	A20		
119	26	C22	A22		
125	15	C02	A6		
128	20	C20	A18		
129	29	C29	A3		
130	30	C28	A23		
131	61	C11	A10		
132	62	C12	A12		
133	84	C65	A68		
134	66	C17	A17		
135	16	C41	A32		
138	78	C31	A60		
140	83	C32	A62		
143	70	C16	A34		
144	64	C13	A14		
145	65	C14	A16		
146	68	C15	A15		
147	114	C06	A31		
148	19	C25	A21		





Table showing the equivalent product references used by other handrail suppliers

Our Code	Other Code	Other Code	Other Code	
149	14	C00	A8	
150	18	C01	A9	
158	40	C24	A26	
160	17	C42	-	
161	45	C40	A28	
165	46	C43	A30	
167	C51	C47	A46	
168	C52	C48	A48	
169	C58	C46	A52	
170	81	C66	A70	
171	82	C67	A72	
173	C50	C45	A44	
176	35	C23	A24	
179	75	C30	A58	
182	76	C33	A64	
201	86	C51	G02	
204	88	C52	G04	
219	89	C54	G22	
225	87	C50	G06	
232	67	C53	G12	





Table showing rise in mm as angle of slope increases over various lengths

Angle	Len	gth in meters s	howing rise in	mm	
of Rake	1000mm	2000mm	3000mm	4000mm	
4°	70mm	140mm	210mm	280mm	
5°	87mm	175mm	262mm	350mm	
(6°)	105mm	(210mm)	315mm	420mm	
70	123mm	246mm	368mm	491mm	
8° \	141mm	281mm	422mm	562mm	
9° \	158mm	/317mm	475mm	634mm	
10°	1 7 6mm	/ 353mm	634mm	705mm	
	\ /	/			

 $y = L \times TAN(x)$

Example; $2000 \times TAN(6) = 210mm$



RoofClamp

Roof Edge Safety











RoofClamp



About the system and how the system works

The use of RoofClamp roof edge protection ensures the safety of employees and contractors working on or gaining access via a flat roof at height. The system has been designed to support a person leaning on the guardrail or to provide a hand hold when walking beside. It will stop a person who is walking or falling towards the protective rail.

The system uses a counterbalance weight made from rubber connected to a freestanding RoofClamp base by 2.0m of 42mm tube. The RoofClamp base supports a 1100mm high 48mm dia post which is connected to the horizontal guardrails by two RoofClamp hooks (see page 61). The system is installed without the need for welding or specialist equipment.

The counterbalance system is a proven method for roof edge protection and provides reliable safety without the need for a fixed penetrative guardrail. Once correctly installed with bays spanning 2.0m and with the top rail at a height of 1100mm the system meets the safety requirements of EN 13374: 2004 and EN 14122 - 3: 2001.

- Meets all safety requirements
- Ease of Installation
- Non penetrative
- Can be used as a temporary or permanent system
- Cost effective
- Suitable for use on all surfacing materials

Roofclamp

Construction



Rubber weight for use in counter weight element of system in conjunction with 2no.RC235 locking collars.
Can be used as a single or double weight with associated fittings.







RoofClamp Hook

Hook fitting for use on the upright to support the top-rail and mid-rail sections of the system.



Code	А	В	С	D	Е	F	G	Hole dia/mm	Weight Kgs
RC234	4								0.81

Roofclamp

Fitting No.235







RoofClamp Locking Collar

Locking collar for use in conjunction with the RC237 rubber weight.

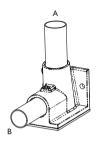
Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
RC235	3								0.27







Base fitting to support upright and counter weight elements of system.

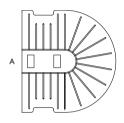


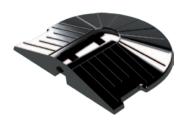


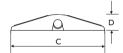
Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
RC236	4	3							2.60

RoofClamp

Fitting No.237







RoofClamp Rubber Weight

Rubber weight for use in counter weight element of system in conjunction with 2no.RC235 locking collars.
Can be used as a single or double weight with associated fittings.

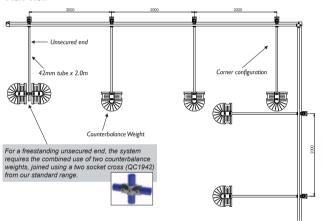
Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
RC237	3		500	85					20.0

Specification



Freestanding configuration for the RoofClamp system showing corner and unsecured end

Plan View



Front view Side Elevation Top rail = 1100mm high Mid rail = 550mm high Alamm tube

DDAClamp

Safe Handrailing

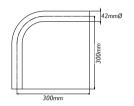












DDA 90° Bend

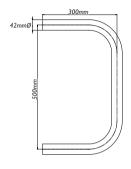
Manufactured from galvanised tube to form 90° corners with minimal parts.



Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
DDA720	3								1.67

DDAClamp

Fitting no. 721







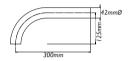
DDA 180° Return

Manufactured from galvanised tube to allow the handrail to return 180° to the mid-rail.

Code	Α	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
DDA721	3								3.00







DDA End Terminal

Designed to terminate the handrail safely and prevent clothing being caught on the end.



Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
DDA723	3								1.12

DDAClamp

Fitting no. 725











This fitting can be used with DDA731 to terminate the handrailing to a wall.

Code								Hole	Weight
	Α	В	С	D	Е	F	G	dia/mm	Kgs
DDA725	3		72						0.81

Fitting no.73 I







DDA Wall Flange

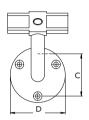
Used with fitting DDA725 to terminate the handrailing system to a wall.

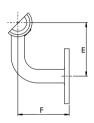




Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
DDA731	3		63	82			V		0.33

Fitting no. 745







DDA Wall Bracket

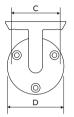
This fitting is used to attach the handrail system to the wall at any angle.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
DDA745	3		63	82	80	77			1.00

Fitting no.746

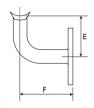






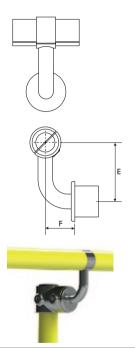
DDA - Rivet Wall Bracket

To attach the handrail to a wall at any angle. The bracket is riveted to the handrailing. Rivets are supplied separately at extra cost.



Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
DDA746	3		63	82	60	77			0.63

Fitting no.747





DDA Internal Swivel

To attach handrail to an upright at any angle when used in conjunction with type 101 or 125 for a single rail or type 104 for a double rail.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
DDA747	3				80	40			0.88

Fitting no.748







DDA - Rivet Internal Swivel

To attach handrail to an upright at any angle when used in conjunction with type 101 or 125 for a single rail or type 104 for a double rail. Rivets are supplied separately at extra cost.



Code	А	В	С	D	E	F	G	Hole dia/mm	Weight Kgs
DDA748	3				60	40	M		0.51

Fitting no.750









DDA Male Lug

Designed to attach a freestanding handrail to an upright at any angle when used in conjunction with type 173.

Code								Hole	Weight
	Α	В	С	D	E	F	G	dia/mm	Kgs
DDA750	3		25						0.50

Fitting no.75 l







DDA - Rivet Male Lug

Designed to attach a freestanding handrail to an upright at any angle when used in conjunction with type 173F. Rivets, nuts and bolts are supplied separately at extra cost.

	Qu	To suit	Weight			
Code	Α	В	С	D	tube dia	/kg
DDA751					42.4mm	0.14

Fitting no.797



DDA O-Ring

An optional extra to be fitted to each end of the expanding DDA fittings, to attain the best finish.

	Qu	To suit	Weight			
Code	Α	В	С	D	tube dia	/kg
DDA797					42.4mm	0.00

Fitting no.701







DDA - Short Tee Reducing

Used with fitting DDA725 to attach the handrail to an upright at any angle



	Qu	iickclam	p dims/r	To suit	Weight	
Code	Α	В	С	D	tube dia	/kg
DDA701					42/34mm	0.45

Combinations

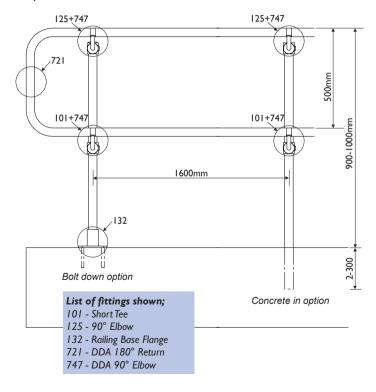
These illustrations show various combinations of the AssistClamp and QuickClamp fittings



Construction

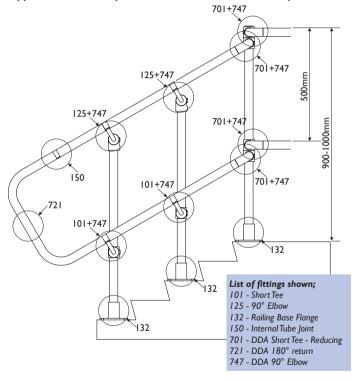


Typical DDAClamp handrail constuction on a level plain



Construction

Typical DDAClamp handrail constuction on steps





Complete Handrail Solutions



2012

















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