

# Q clamp



Qclamp® fittings are a blackheart malleable iron casting manufactured to BS EN 1562:1997 using grade B32-10 material with a hot dipped galvanised finish to BS EN 1461:1999.

All Qclamp® fittings are supplied with stainless steel grub screws. The grub screws can be tightened with an Allen key, however, if fully tightened using a ratchet key to a torque of 4.1kg/m (29ft/lb) the grub screw is capable of withstanding an applied slip load of 900kg.

Qclamp® fittings are available in five standard sizes designated by the suffix 1 to 5 on the Qclamp® reference number. The standard tube sizes are given in the following table.

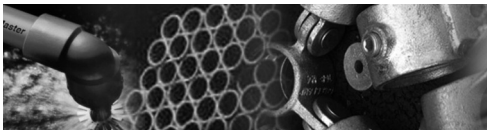
Size reference	Tube diameter (O/D)	Nominal bore
1	26.9mm	3/4"
2	33.7mm	1"
3	42.4mm	1 1/4"
4	48.3mm	1 1/2"
5	60.3mm	2"

*Note: The nominal bore is a discretionary dimension only. The wall thickness can vary depending on the gauge of tube used which will alter the bore measurement.*

All Qclamp® and DDA fittings are tested and approved by TÜV, Europe's leading independent testing house, in sizes 1 to 5.



The technical details in this Product Guide have not been subjected to the TÜV testing process. A copy of the TÜV certificate is available by request. Whilst every effort has been taken to ensure that the information in this Product Guide is correct, Tubetrade plc reserves the right to alter and revise this information as and when required and accepts no liability for errors or omissions. No part of this Product Guide may be reproduced without prior written consent from Tubetrade plc.



# Q clamp

## PRODUCT INDEX

Product No.	Description	Page
101	Short Tee	8
104	Long Tee	9
116	Three Way Through	10
116A	Add on Three Way Through	11
119	Two Socket Cross	12
119A	Add on Two Socket Cross	13
123	Acute Angle Elbow	14
125	90° Two Way Elbow	15
128	90° Three Way Elbow	16
129	Adjustable Tee	17
130	Adjustable Cross	18
131	Wall Plate	19
132	Base Plate	20
133	Plastic Stop Ends	21
134	Ground Socket	22
135	Retro Fit Clamp on Tee Inline	23
136	Add on Tee	24
137	Crossover 90°	25
138	Gate Eye	26
140	Gate Hinge	27
143	Wall Mounted Handrail Bracket	28
144	Structural Offset Side Palm Fixing	29
145	Non Structural Offset Side Palm Fixing	30
146	Structural Flush Side Palm Fixing	31
147	Offset Swivel Tee	32
148	Short Swivel Inline Tee	33
149	Inline External Tube Connector	34
150	Inline Internal Tube Connector	35
158	Four Way Cross	36
158A	Add on Four Way Cross	37
160	Retro Fit Clamp on Tee	38
161	Offset 90° Crossover	39
161U	Crossover Bracket	40
165	Combination Socket	41
170	Single Sided Mesh Panel Clip	42
171	Double Sided Mesh Panel Clip	43

# Q clamp



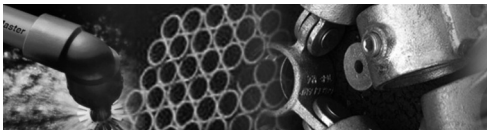
Product No.	Description	Page
176	Three Way Outlet Tee	44
176A	Add on Side Outlet Tee	45
179	Locking Collar	47
182	Hook	48
184	Galvanised Plug	49
185	Eaves Fitting	50
191	Ridge Fitting	51
198	Double Sided Fixed Bracket	52
199	Single-Lugged Bracket	53
224	Variable Angle In Line Connector	54
246	Horizontal Railing Base	55
247	Base Flange with Kick Plate	56
251	Angle Bass Flange	57
300/1	Grub screw	58
AK	Allen key	59
QCGS	QCGS Galvanising Spray	60

## Swivel Range

125H	Swivel Elbow	62
167	Double Inline Swivel Combination	63
167M	Double Male Inline Swivel	64
168	90° Corner Swivel	65
168M	90° Male Corner Swivel	66
169	Swivel Locating Flange	67
169M	Male Swivel Locating Flange	68
173	Single Swivel	69
173F	Female Swivel	70
173M	Single Male Swivel	71

## Slope Range

201	Slope Range Short Tee	73
204	Slope Range Long Tee	74
219	Slope Range Socket Cross	75
225	Slope Range Elbow	76
232	Slope Range Base	77



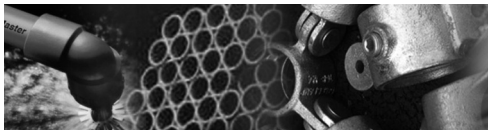
# Q clamp

Product No.	Description	Page
252Z	Slope Base Flange 11° - 29°	78
253Z	Slope Short Tee 11° - 29°	79
255Z	Slope Long Tee 11° - 29°	80
256Z	Slope Cross Middle Rail 11° - 29°	81
<b>DDA Range</b>		
DDA1	Elbow	84
DDA2	End Plate	85
DDA3	Post Connector	86
DDA4	Post End Connector	87
DDA5	Variable Elbow	88
DDA6	Wall Plate	89
<b>Handrail Standards</b>		
QCSMR	Standard Mid-Rail	93
QCSEP	Standard End Post	94
QCSCP	Standard Corner Post	95



# Q clamp



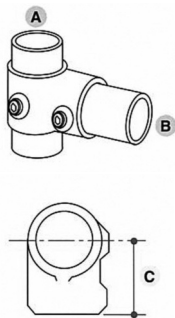
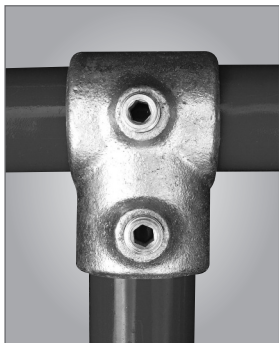


# Q clamp

Product number

# 101

## Short Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
101-1	1	1	41						0.19
101-2	2	2	46						0.30
101-3	3	3	60						0.46
101-4	4	4	68						0.53
101-5	5	5	84						0.85

A 90° tee connection between two tubes. Typical use is on straight and level guardrail to connect the vertical to the top rail or end/mid rail to the vertical. This Q clamp fitting cannot be used to join tubes in the top of the short tee. For this the Q clamp fitting 104 Long Tee should be used.

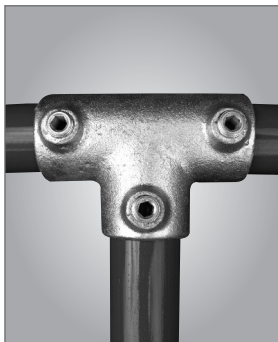
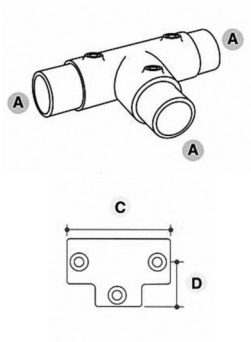
# Q clamp



## Long Tee

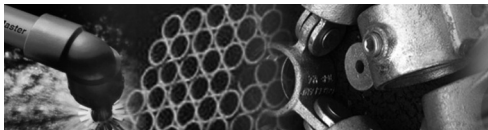
Product number

# 104



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
104-1	1		82	41					0.32
104-2	2		92	46					0.49
104-3	3		120	60					0.79
104-4	4		136	68					0.93
104-5	5		168	84					1.50

A 90° tee connection between two tubes. Typical use is on straight and level guardrail to connect the vertical to the top rail. This Q clamp fitting can be used to join tubes in the top of the twin grubscrew long tee.

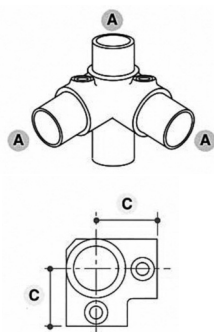


# Q clamp

Product number

## 116

## 3 Way Through



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
116-1	1		40						0.27
116-2	2		48						0.40
116-3	3		60						0.61
116-4	4		68						0.72
116-5	5		86						1.15

A 90° corner joint with the vertical passing through the Q clamp fitting. Typical use is on straight and level guardrail for connecting the mid/lower rail to the vertical at a 90° corner. Can also be used in a similar way on other rectangular structures.

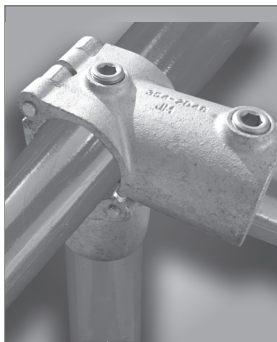
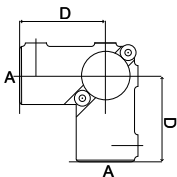
# Q clamp



## Add on 3 Way Through

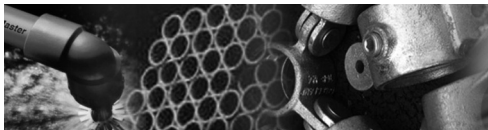
Product number

# 116A



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
116A-4	4			88					1.15

The Add on Three Way Through allows additional work to be carried out without dismantling the existing structure.

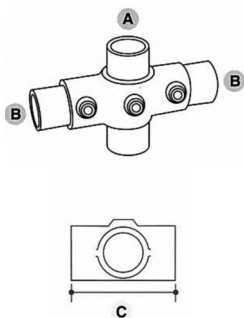
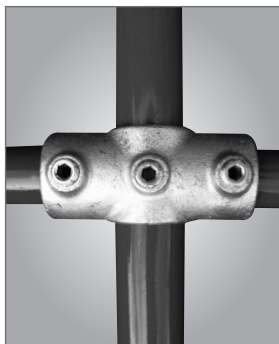


# Q clamp

Product number

# 119

## 2 Socket Cross



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
119-1	1	1	80						0.27
119-2	2	2	96						0.37
119-3	3	3	120						0.62
119-4	4	4	135						0.71
119-5	5	5	168						1.15

A 90° joint between a vertical and two horizontals. Typical use on straight and level guardrail to connect the mid/lower rails to the upright. The vertical must remain continuous with cross rails cut. Normally used in conjunction with the Q clamp fitting 104 Long Tee.

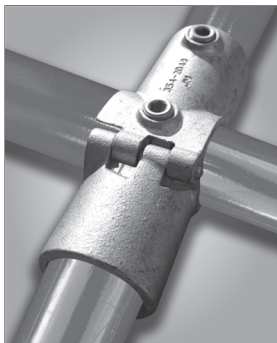
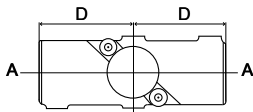
# Q clamp



Add on 2 Socket Cross

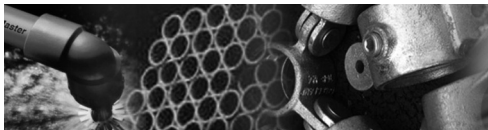
Product number

## 119A



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
119A-4	4			88					1.16

The Add on 2 Socket Cross allows additional work to be carried out without dismantling the existing structure.

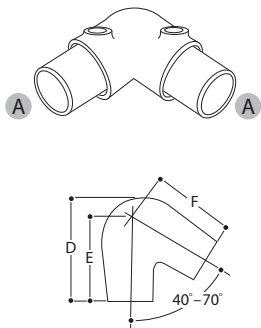
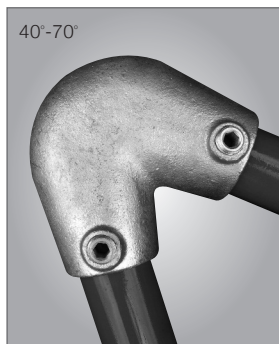


# Q clamp

Product number

## 123

## Acute Angle Elbow



Q CLAMP								HOLE	WEIGHT
REF No.	A	B	C	D	E	F	G	DIA mm	kgs
123-4				134	120	120			1.16

Alternative to bending to form a connection between a sloping tube and an end post.



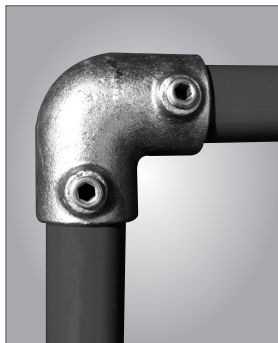
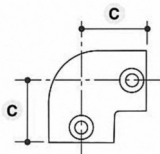
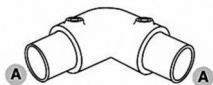
# Q clamp



## 90° 2 Way Elbow

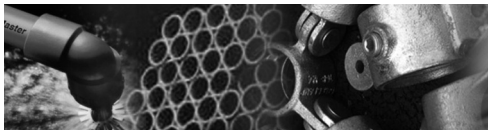
Product number

# 125



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
125-1	1		41						0.24
125-2	2		46						0.36
125-3	3		60						0.59
125-4	4		68						0.69
125-5	5		84						1.12

A 90° elbow. Typical use is to connect the end vertical to the top rail in straight and level guardrail. Can also be used to create a 90 tube bend.

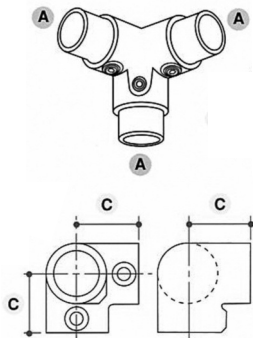


# Q clamp

Product number

# 128

## 3 Way 90° Elbow



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
128-1	1		40						0.35
128-2	2		48						0.50
128-3	3		60						0.80
128-4	4		68						0.98
128-5	5		85						1.67

A 3 way enclosed 90° corner joint. Typical use is on straight and level guardrail at a 90 corner where an upright is in position. This Q clamp fitting can also be used to create enclosed corner joints in other square structures such as benches etc.

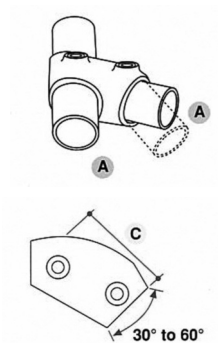
# Q clamp



## Adjustable Tee

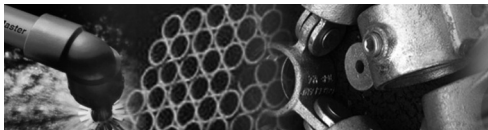
Product number

# 129



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
129-2	2		70						0.40
129-3	3		85						0.65
129-4	4		90						0.75

Freely adjustable tee between 30° and 60°. Typical use is a tee connection on angled top rails on steeper slopes or stairs with the upright remaining vertical. This fitting can also be used for bracing on structures. This fitting has no ability to join tubes. An alternative for this situation is the Q clamp fitting 127.

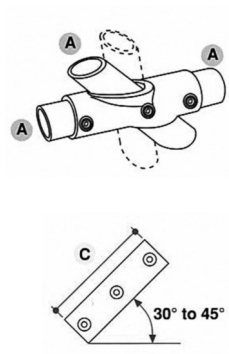


# Q clamp

Product number

## 130

## Adjustable Cross



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
130-2	2		147						0.63
130-3	3		199						1.03
130-4	4		217						1.15

Freely adjustable cross between 30° and 45°. Typical use is as a cross connection on angled mid/lower rails on steeper sloped or stairs with the upright remaining vertical. The upright must remain continuous with the cross rails being cut.

*Not recommended for use on the top of the vertical.*

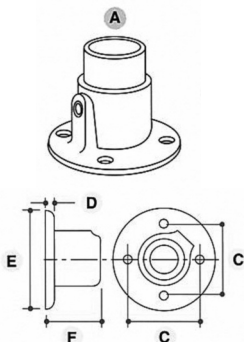
# Q clamp



## Wall Plate

Product number

# 131

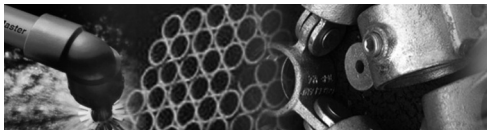


Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
131-1	1		57	6	83	42		8	0.29
131-2	2		65	7	89	48		8	0.44
131-3	3		76	7	102	50		8	0.61
131-4	4		88.5	7	114	59		8	0.84
131-5	5		95	7	127	64		8	0.98

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

*THIS FITTING IS NOT RECOMMENDED FOR USE AS A BASE PLATE FOR GUARDRAILING*

With four countersunk holes, this fitting is ideal as a flange to terminate handrail to a wall or other similar application. This fitting may be used on structures where it is only required as a positional fixing.

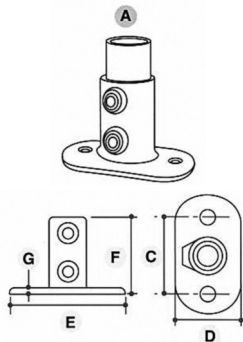


# Q clamp

Product number

# 132

## Base Plate



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
132-1	1		76	52	105	60	7	11	0.40
132-2	2		89	62	127	71	7	14	0.64
132-3	3		101	72	139	84	7	14	0.85
132-4	4		114	86	152	89	10	14	1.15
132-5	5		127	104	165	104	10	17	1.50

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

A structural base plate for all aspects of vertical post support. This fitting when used as a base plate for guardrailing should always be positioned with the holes across the line of the guardrail to give maximum strength. The holes in the base plate are large enough to enable the use of mechanical or chemical anchor fixings.



## Plastic Stop Ends

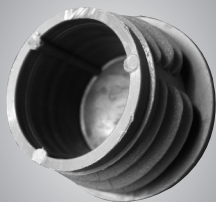
Product number

# 133



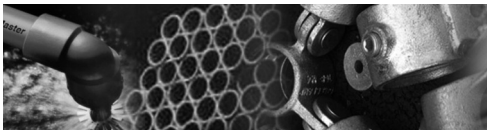
Plastic plug

Plastic



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
133-2	2								0.01
133-3	3								0.01
133-4	4								0.015
133-5	5								0.02

A plastic stop end for use in the end of tubes. This stop end can be used in either medium or heavy gauge tube. This is only a friction fit and for a more permanent fix an adhesive is recommended.

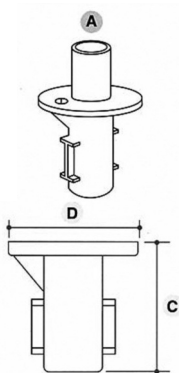


# Q clamp

Product number

## 134

## Ground Socket



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
134-2	2		123	127					1.85
134-3	3		136	140					2.46
134-4	4		136	140					2.47

A ground socket cast into concrete which is flush to the finished ground level.  
The upright is held in place using the grubscrew but can easily be removed without leaving any obstructions.



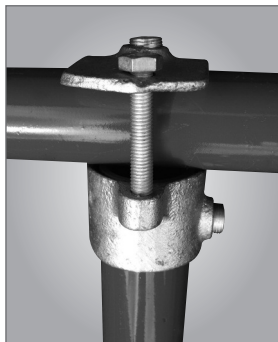
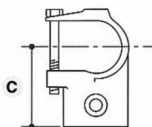
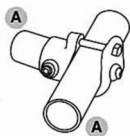
# Q clamp



## Retro Fit Clamp on Tee Inline

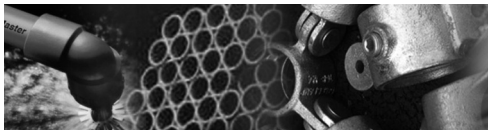
Product number

# 135



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
135-1	1		50						0.27
135-2	2		53						0.32
135-3	3		67						0.50
135-4	4		77						0.55

Inline Add on Tee. Used for making additions to upgrading or modifying an existing structure without having the need to dismantle part or all of that structure.

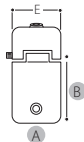
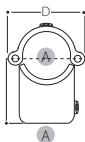


# Q clamp

Product number

# 136

## Add On Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
136-3	3	60	88	76	56				0.605
136-4	4	70	100	83	62				0.778

The add on tee enables a structure to be extended, avoiding the need for dismantling.

**WARNING:** THIS CLAMP SHOULD NOT BE USED TO JOIN LENGTHS OF TUBE.

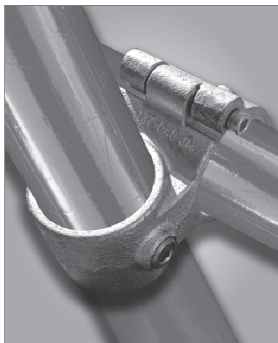
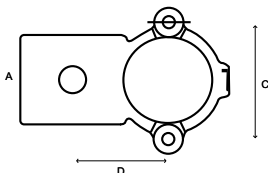
# Q clamp



Crossover 90°

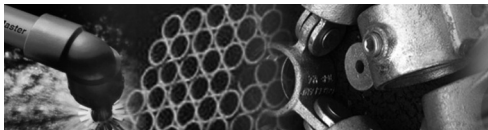
Product number

**137**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
137-4	4		67	55					0.78

A 90° tee connection between two tubes. Typical use is on straight and level guardrail to connect the vertical to the top rail. This Pipeclamp fitting can be used to join tubes in the top of the twin grubscrew long tee.

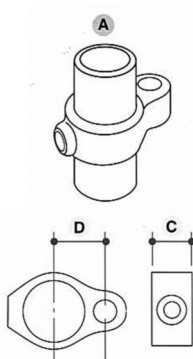


# Q clamp

Product number

## 138

## Gate Eye



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
138-1	1		25	30				14	0.16
138-2	2		25	33				14	0.18
138-3	3		25	38				14	0.21
138-4	4		25	41				14	0.22

Female section of a two part gate hinge.

Used in conjunction with Q clamp fitting reference 140.

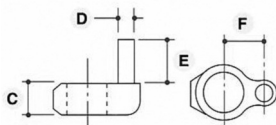
# Q clamp



## Gate Hinge

Product number

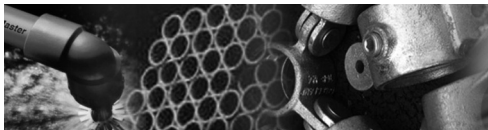
# 140



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
140-1	1		25	13	38	30			0.24
140-2	2		25	13	38	33			0.26
140-3	3		25	12	38	38			0.29
140-4	4		25	12	38	41			0.30

Male section of a two part gate hinge.

Used in conjunction with Q clamp fitting reference 138.

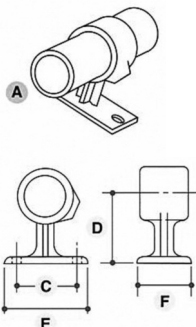


# Q clamp

Product number

# 143

## Wall Mounted Handrail Bracket



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
143-1	1		57	55	80	44		8	0.29
143-2	2		62	57	85	44		8	0.35
143-3	3		76	63	100	44		8	0.45
143-4	4		82.5	67	110	50		8	0.56

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

*THIS FITTING IS NOT RECOMMENDED FOR USE AS A BASE PLATE FOR GUARDRAILING*

With four countersunk holes, this fitting is ideal as a flange to terminate handrail to a wall or other similar application. This fitting may be used on structures where it is only required as a positional fixing.

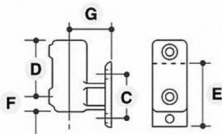
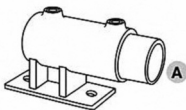
# Q clamp



## Structural Offset Side Palm Fixing

Product number

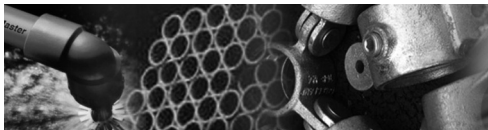
**144**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
144-2	2			104	96		65	14	0.83
144-3	3			112	110		64.5	14	1.16
144-4	4			120	123		65	14	1.31

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

Structural offset side palm base fixing guardrailling to walls, steps, ramps, etc.  
The tube is unable to pass through this fitting as supplied. Should this be required then the base must be reamed out. Access to the top fixing is restricted. It is recommended that a threaded stud is fixed first with a maximum projection of 25mm.

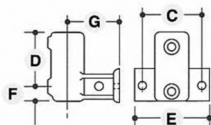
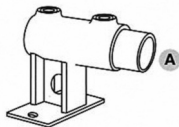


# Q clamp

Product number

## 145

## Non Structural Offset Side Palm Fixing



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
145-2	2		67		102	30	57	14	0.85
145-3	3		73		111	53	64	14.5	1.12
145-4	4		89		119	68	73	14.5	1.44

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

This fitting is designed for palm fixing guardrailing and balustrading to walls, parapets, steps and ramps.



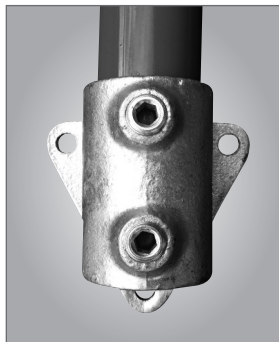
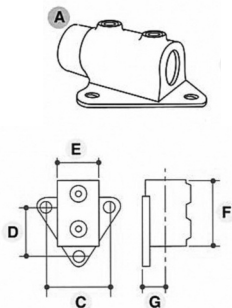
# Q clamp



## Structural Flush Side Palm Fixing

Product number

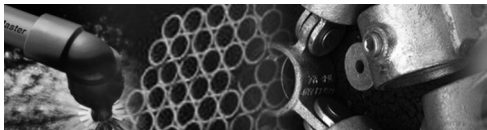
# 146



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
146-2	2		71	63	45	76	24	12	0.55
146-3	3		82	72	56	83	28	12	0.76
146-4	4		86	78	61	89	31	12	0.83

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

Structural flush side palm base fixing guardrail to wall, steps or ramps etc. The flush design enables posts to be tight to the structure. The tube is unable to pass through the fitting. Should this be required then the base must be reamed out. If the base is reamed out the bottom fixing will become redundant.

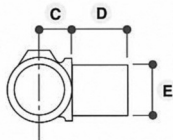


# Q clamp

Product number

## 147

## Offset Swivel Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
147-2	2		23	29	34				0.31
147-3	3		26	37	42				0.43
147-4	4		30	42	48				0.53

An internal swivel tee used in conjunction with other Q clamp fittings in the range to create a 360° swivel joint. Ideal use on handrail or offset guardrailing down variable angled slopes. Eliminates the requirement for specialised angle fittings.

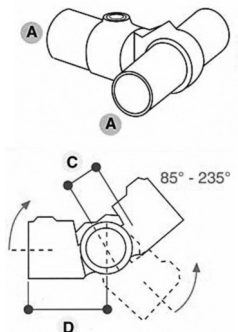
# Q clamp



## Short Swivel Inline Tee

Product number

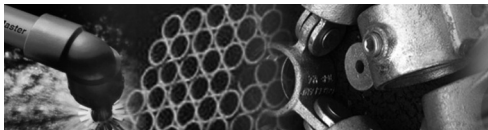
# 148



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
148-1	1		-31	53					0.18
148-2	2		-33	59					0.27
148-3	3		-40	73					0.42
148-4	4		-46	93					0.60

**NOTE:** When using Q clamp 148 fittings for the top rail of a guardrail, the top of the upright must NOT be reduced in length but left at full height. The top of the tube will need to be capped using a Q clamp 133.

Shown priced and sold as a single fitting but normally used in pairs to create angles between 85° and 235°. A central tube is required to join the fittings together to create the angle. When working out the correct tube length dimension 'C' should be subtracted.

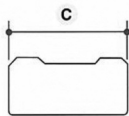
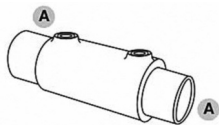


# Q clamp

Product number

## 149

## Inline External Tube Connector



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
149-1	1		76						0.27
149-2	2		89						0.39
149-3	3		102						0.55
149-4	4		102						0.56
149-5	5		120						0.88

An inline external tube connector for joining two tubes of the same diameter. This fitting is not recommended to be used in high load applications. For a smooth inline joint the Q clamp fitting 150 can be used.

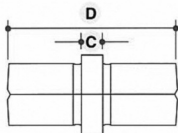
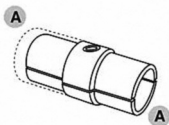
# Q clamp



## Inline Internal Tube Connector

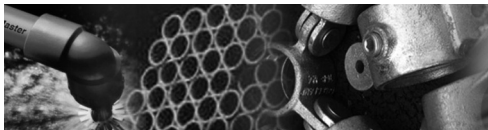
Product number

# 150



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
150-2	2		20	78					0.24
150-3	3		20	78					0.34
150-4	4		20	78					0.41

An inline internal tube connector for joining two tubes of the same diameter. This fitting can only be used with 3.2mm wall thick tube. This fitting is not recommended for high or tensile load applications.

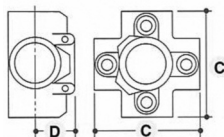
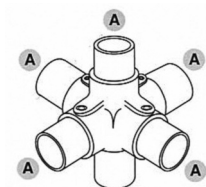
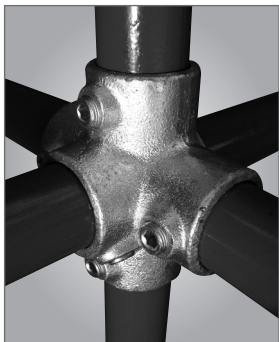


# Q clamp

Product number

# 158

## 4 Way Cross



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
158-1	1			41					0.43
158-2	2			46					0.59
158-3	3			60					0.98
158-4	4			68					1.17

A 4 way cross that enables the vertical to pass through the centre of the fitting with the four horizontal tubes joining at 90° to each other. Ideal for structures with multiple verticals. The vertical must remain either continuous with the cross rails being cut.

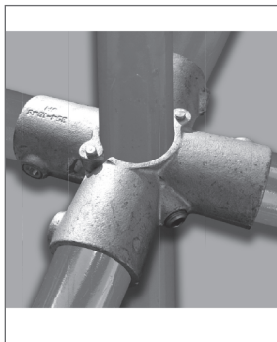
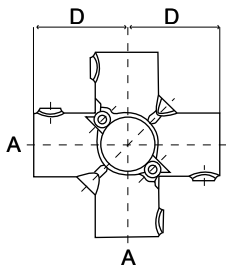
# Q clamp



Add on 4 Way Cross

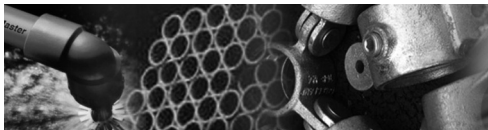
Product number

**158A**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
158A-4	4			88					1.77

The Add on 4 Way Cross allows additional work to be carried out without dismantling existing structure.

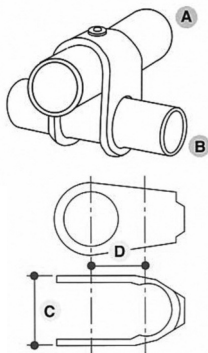


# Q clamp

Product number

## 160

## Retro Fit Clamp on Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
160-2	2	2	35	34					0.25
160-3	3	3	45.4	43					0.38
160-4	4	4	51.6	49					0.50
160-5	5	5	63	61					0.65

Offset add on tee. Used for making additions to, upgrading or modifying an existing structure without having the need to dismantle part or all of that structure.



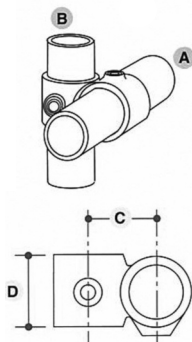
# Q clamp



## Offset 90° Crossover

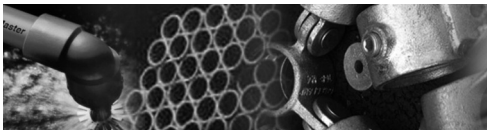
Product number

# 161



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
161-1	1	1	38	31.5					0.20
161-2	2	2	41	38.5					0.29
161-3	3	3	50	45					0.46
161-4	4	4	50	55					0.54
161-4/2	4	2	45	38.5					0.42
161-4/3	4	3	49	45					0.48
161-5	5	5	64	61					0.84

A 90° offset crossover fitting. The tube is unable to be jointed within this fitting. Ideal applications are for racking systems or offset guardrail. Where dimension 'D' indicates two figures, the first figure refers to tube 'A', the second refers to tube 'B'.

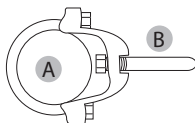


# Q clamp

Product number

## 161U

## Crossover Bracket



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
161U-4	4	4							0.486
161U-5/4	5/4	5/4							0.599

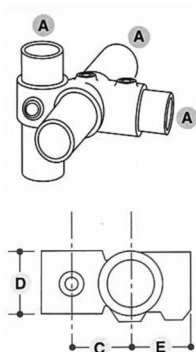
Crossover Bracket for use on 40mm tube or 50mm x 40mm tube.  
To form a solid connection.



## Combination Socket

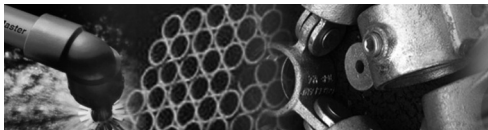
Product number

# 165



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
165-1	1		35		40				0.28
165-2	2		40		48				0.45
165-3	3		50		60				0.66
165-4	4		56		67				0.79

A combination fitting designed for use in the construction of racking systems. The fitting enables the connection of a vertical upright at 90° to two horizontal rails. One being the tie rail, the other being the load rail. On pallet racking the upright normally has the load rail on the inside, whilst for shelved racking the upright normally has the load rail on the outside.

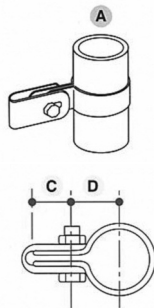


# Q clamp

Product number

## 170

## Single Sided Mesh Panel Clip



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
170-1	1		22	25					0.07
170-2	2		25	28					0.08
170-3	3		25	33					0.08
170-4	4		25	35					0.09
170-5	5		25	40					0.09

*Dimension 'C' can be increased by up to 7mm because of the slotted hole.*

Double location weldmesh panel clip. The slotted design of the panel clip enables adjustment in the location of the mesh panels. Supplied with M6 x 30mm long nut and bolt. This fitting can also be used to locate other materials up to 10mm thick provided the safety saddle is removed.

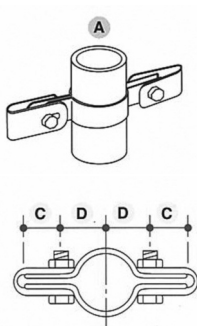
# Q clamp



## Double Sided Mesh Panel Clip

Product number

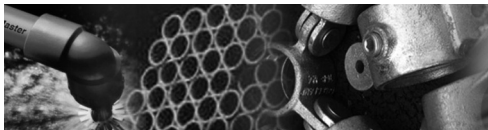
**171**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
171-1	1		22	25					0.10
171-2	2		25	28					0.11
171-3	3		25	33					0.12
171-4	4		25	35					0.12
171-5	5		25	40					0.13

*Dimension 'C' can be increased by up to 7mm because of the slotted hole.*

Double location weldmesh panel clip. The slotted design of the panel clip enables adjustment in the location of the mesh panels. Supplied with M6 x 30mm long nut and bolt. This fitting can also be used to locate other materials up to 10mm thick provided the safety saddle is removed.

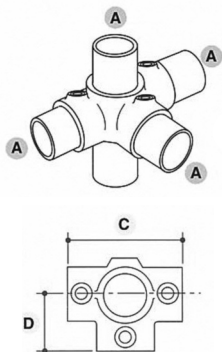


# Q clamp

Product number

## 176

## 3 Way Outlet Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
176-1	1			40					0.34
176-2	2			46					0.48
176-3	3			60					0.73
176-4	4			68					0.90
176-5	5			84.5					1.44

Three way tee used to join 3 tubes at 90° to each other with the vertical passing through the fitting. Typical use would be on structures such as market stall or play frames.

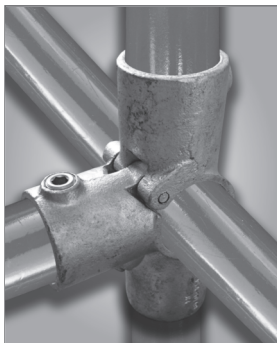
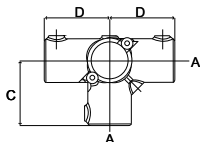
# Q clamp



## Add on Side Outlet Tee

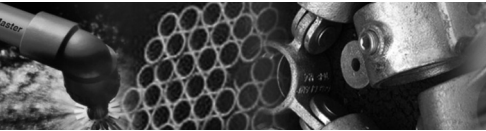
Product number

# 176-A



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
176A-4	4		85	88					1.46

Add on Side Outlet Tee designed to allow additional work to be added without taking existing structure down.



# **Q clamp**





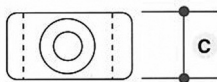
# Q clamp



## Locking Collar

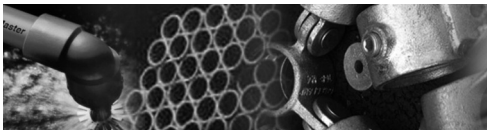
Product number

**179**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
179-1	1		22						0.08
179-2	2		25						0.11
179-3	3		25						0.14
179-4	4		32						0.15

A locking collar used as extra support for a Q clamp fitting on structures where the slip load on the grubscrew may be exceeded i.e. racking.  
Can also be used to support a Q clamp fitting that is required to be left undone, i.e. a gate hinge.

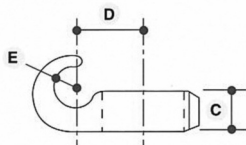


# Q clamp

Product number

## 182

Hook



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
182-1	1		25	32					0.16
182-2	2		25	34					0.18
182-3	3		25	39					0.20
182-4	4		25	41					0.21

Chain hook. Used to locate chains across openings. Not ideal for permanent chain location. Recommended that one end of the chain is fixed using a Q clamp fitting reference 173M and held in place with a nut and bolt.

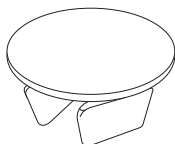
# Q clamp



## Galvanised Plug

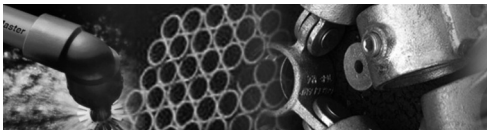
Product number

# 184



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
184-2	2								0.057
184-3	3								0.101
184-4	4								0.144

A galvanised stop end for use in the end of tubes. This stop end can be used in either medium or heavy gauge tube. This is only a friction fit and for a more permanent fix an adhesive is recommended.

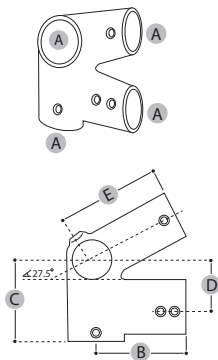


# Q clamp

Product number

## 185

## Eaves Fitting



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
185-4	4	83	93	55	70				1.22

Designed for use in conjunction with the 191 for roofing applications on small structures.

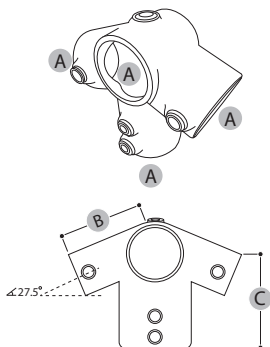
# Q clamp



## Ridge Fitting

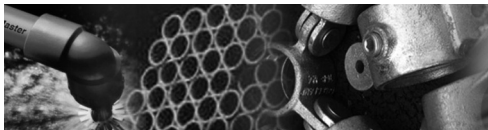
Product number

# 191



Q CLAMP								HOLE	WEIGHT
REF No.	A	B	C	D	E	F	G	DIA mm	kgs
191-4	4	68	95						1.07

Designed for use in conjunction with the 185 for roofing applications on small structures.

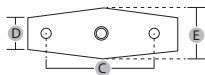
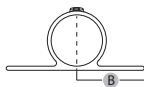
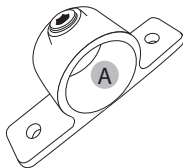
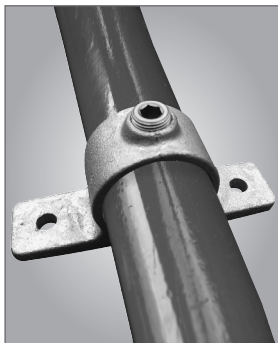


# Q clamp

Product number

## 198

## Double Sided Fixed Bracket



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
198-2	2	60	86	27	30			10mm	0.29
198-3	3	65	95	30	33			10mm	0.37
198-4	4	70	104	32	35			10mm	0.43

Allows for fixing to wooden planking or various panels for flush fitting.

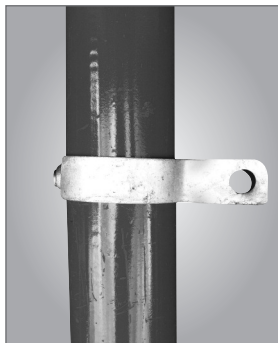
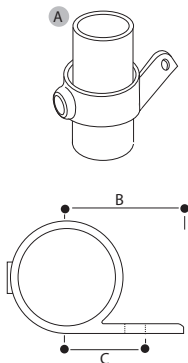
# Q clamp



## Single-Lugged Bracket

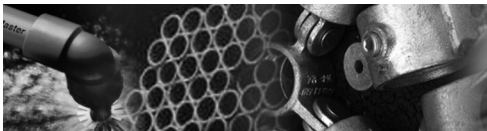
Product number

# 199



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
199-2	2		43						0.22
199-3	3		47.5						0.29
199-4	4		52						0.32

Often used for mounting boards practically flush with tubes. Fixing holes suit a wide range of common mechanical and chemical masonry anchors.  
The tube cannot be joined within the fitting.

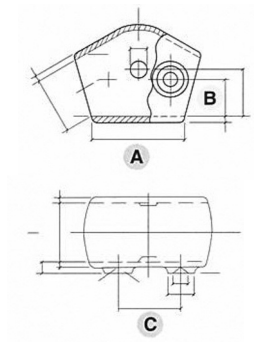


# Q clamp

Product number

## 224

## Variable Angle In Line Connector



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
224-2			40.0						0.38
224-3			47.5						0.62
224-4			54						0.63

A variable angle in line connector (110° - 180°) Ideally suited for use between the vertical end post and sloping top rail on stair guard railing.

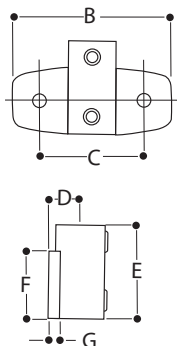




## Horizontal Railing Base

Product number

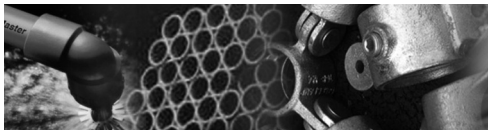
# 246



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
246-2	2	148	100.5		90	64		14	0.96
246-3	3	148	100.5		90	64		14	1.23
246-4	4	145	102		90	75		14	1.07

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

Designed for palm fixing of guardrail and balustrades to walls, parapets, steps and ramps. The upright cannot drop through the socket.

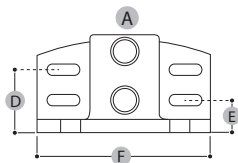
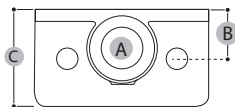


# Q clamp

Product number

## 247

### Base Flange with Kick Plate



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
247-3	3	45	90	58	30	100		14	2.04
247-4	4	45	90	58	30	100		14	2.14

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

The Base Flange with kick plate is ideal for guardrailing and balustrading applications where the addition of a kick plate is required. The slotted holes allow for adjustment and ease of fitting.

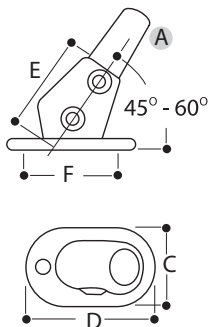
# Q clamp



## Angle Base Flange

Product number

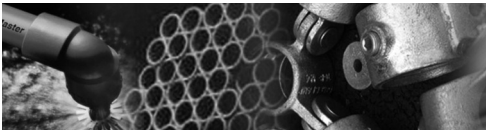
**251**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
251-3	7		76	138	95	106	10	14	0.59

**WARNING:** DUE TO THE NATURE OF THESE GALVANISED CASTINGS THE MEASUREMENTS GIVEN HERE CANNOT BE PRECISE. WE THEREFORE **DO NOT RECOMMEND** THAT ANY BOLT HOLES ARE PRE-DRILLED PRIOR TO INSTALLATION.

Used to set up the upright at an angle between 45° - 60°. This fitting should only be subjected to light loads which cannot be positioned at 90° to the applied load.



# Q clamp

Product number

## 300/1

## Grubscrews



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
300 1-2	1-2		1/4 BSP						
301 3-4-5	3-4-5		3/8 BSP						

Stainless steel 410S grubscrews. These grubscrews are supplied pre fitted into the fittings.

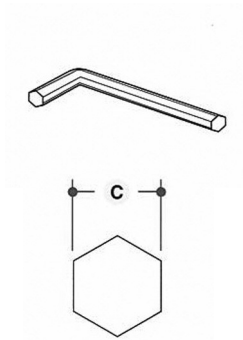
# Q clamp



Allen Key

Product number

**AK**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
AKS 1-2	1-2		1/4						
AKL 3-4-5	3-4-5		5/16						

Hexagonal key. The allen key is the only tool required to tighten up a Q clamp fitting. The use of the dual ratchet Q clamp reference 233 is recommended to achieve the required torque.



# Q clamp

Product number

## QCGS

## QCGS Galvanising Spray



When applied to a clean surface this zinc based galvanising spray provides an anti-corrosion protection and is recommended for use on Q Clamp Grub Screws and thread for outdoor installations.

**PLEASE NOTE:** Always follow directions for use on can



## THE SWIVEL RANGE

The Qclamp® Swivel Range comprises the following fitting reference numbers:

125H, 167, 167M, 168, 168M, 169, 169M, 173, 173F and 173M.

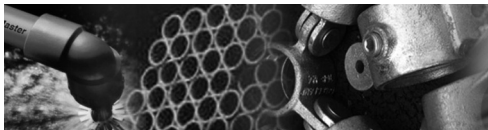
Excluding the use of the stand alone 125H, the Qclamp® Swivel Range is constructed using the relevant male and female fittings. The 173F is common to all such combinations.

The range can be supplied in individual components or as complete units using either a rivet or nut and bolt to join the male and female fittings together.

The lugs have been designed to be of equal dimension regardless of the size of the fitting in order that a swivel connection can be created between different size tubes. *E.g. a 173F-1 can be combined with a 173M-3 to create a connection between 26.9mm OD and 42.4mm OD tubing.*

In addition to being used with the 173F to make the swivel combinations, all of the 'M' male fittings can be used to secure various types of infill in place.

**WARNING:** An entire structure should not be built using only fittings from the Qclamp® Swivel Range as these would not provide sufficient stability or rigidity within the structure due to the free rotation of the fittings.

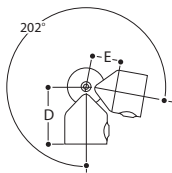
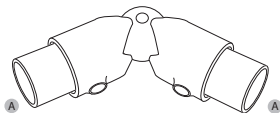


# Q clamp

Product number

## 125H

## Swivel Elbow



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
125H-2	2			62					0.60
125H-3	3			75					0.86
125H-4	4			85					1.05

125H fitting has been designed as a variable angle in-line connection, adjustable through 202°

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.



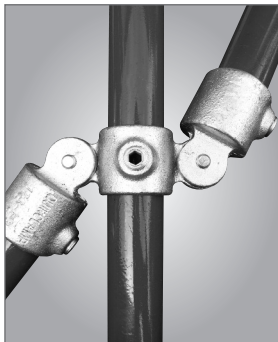
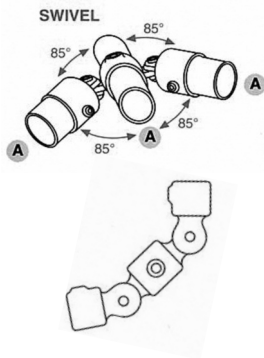
# Q clamp



## Double Inline Swivel Combination

Product number

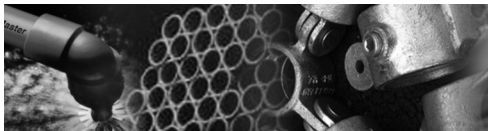
# 167



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
167-1	1								0.67
167-2	2								1.04
167-3	3								1.30
167-4	4								1.49

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

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.

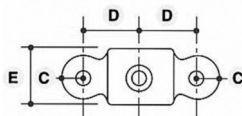
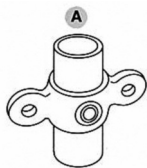
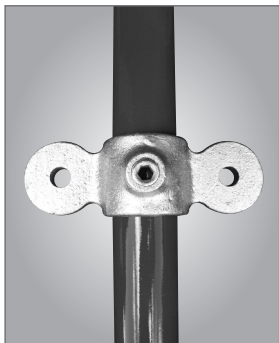


# Q clamp

Product number

## 167M

## Double Male Inline Swivel



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
167M-2	2			86	40			10	0.34
167M-3	3			95	45			10	0.40
167M-4	4			105	48			10	0.44
167M-5	5			124	38			10	0.56

A double male fitting with the lugs at 180° to each other.

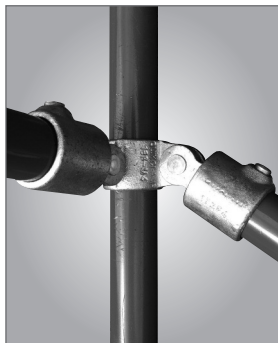
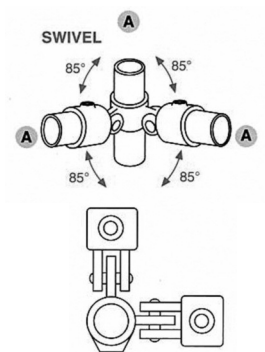
**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.



## 90° Corner Swivel

Product number

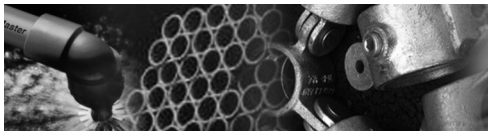
# 168



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
168-1	1								0.66
168-2	2								1.02
168-3	3								1.18
168-4	4								1.49

Complete double swivel with the swivel connectors at 90° to each other. Each swivel has a travel of approximately 85° from the horizontal on both vertical directions.

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.

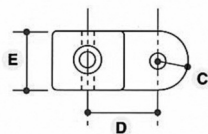
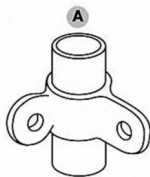
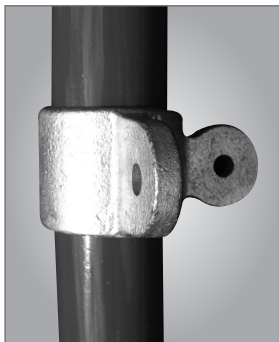


# Q clamp

Product number

## 168M

## 90° Male Corner Swivel



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
168M-2	2			43.5				10	0.32
168M-3	3			48				10	0.28
168M-4	4			53				10	0.45

Double male fitting with the two lugs at 90° to each other.

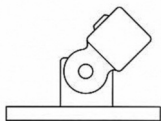
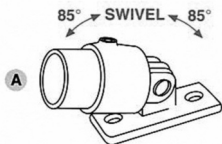
**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.



## Swivel Locating Flange

Product number

# 169



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
169-1	1								0.58
169-2	2								0.71
169-3	3								0.81
169-4	4								0.88

Complete locating swivel. Swivel has a travel of approximately 85° from the vertical in each direction.

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.

**WARNING:** THIS FITTING IS NOT RECOMMENDED FOR USE AS A BASE PLATE FOR GUARDRAILING

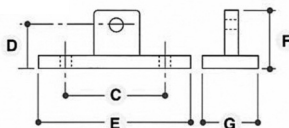
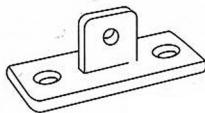


# Q clamp

Product number

## 169M

## Male Swivel Locating Flange



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
169M			85	32	112		52	10	0.36

Non structural male locating flange.

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.

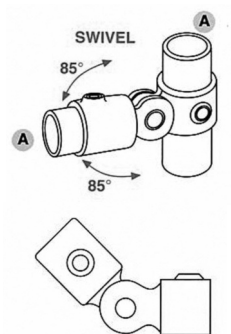
# Q clamp



## Single Swivel

Product number

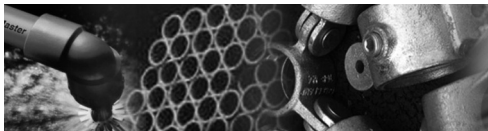
# 173



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
173-1	1								0.38
173-2	2								0.60
173-3	3								0.77
173-4	4								0.86
173-5	5								1.20

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

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.

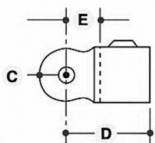
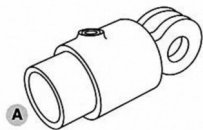


# Q clamp

Product number

## 173F

## Female Swivel



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
173F-1	1			61				10	0.22
173F-2	2			61				10	0.32
173F-3	3			69				10	0.42
173F-4	4			77				10	0.49
173F-5	5			90.5				10	0.72

This fitting is designed to be used in conjunction with the 'M' fittings and is not generally used on its own. This can be connected to the 'M' fitting by either rivet or nut and bolt.

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.



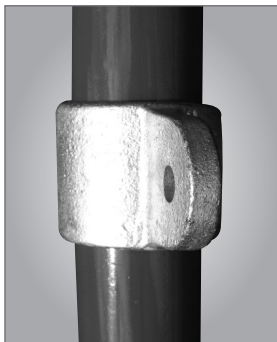
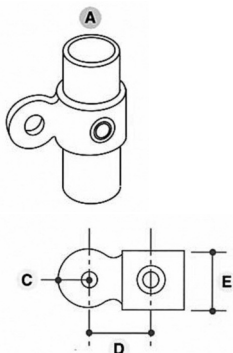
# Q clamp



## Single Male Swivel

Product number

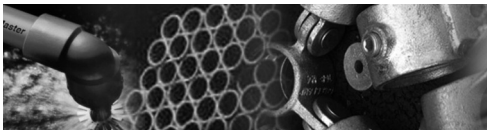
# 173M



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
173M-1	1			40	38			10	0.15
173M-2	2			43.5	38			10	0.25
173M-3	3			48	44.5			10	0.32
173M-4	4			53	44.5			10	0.33
173M-5	5			62	50.5			10	0.47

Single male fitting with only one lug.

**WARNING:** AN ENTIRE STRUCTURE SHOULD NOT BE CONSTRUCTED FROM SWIVEL FITTINGS ALONE, AS THESE WOULD NOT PROVIDE SUFFICIENT STABILITY OR RIGIDITY IN THE STRUCTURE DUE TO THE FREE ROTATION OF THE FITTING.



## The Slope Range

The Qclamp® Slope Range comprises the following fitting reference numbers:

201, 204, 219, 225 and 232.

The Qclamp® Slope Range fittings are designed for use on access ramps or other shallow gradients between 4° and 10° and enable a guardrail to be constructed along the length of the slope without the need for specially reamed out fittings or bending the tube.

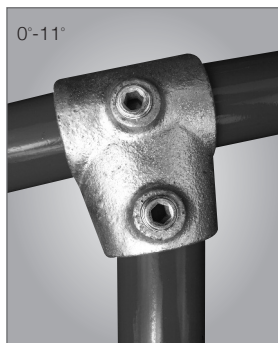
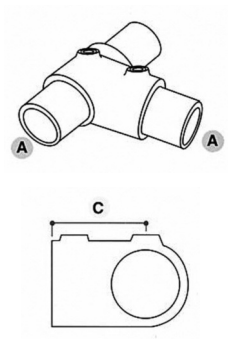
# Q clamp



## Slope Range Short Tee

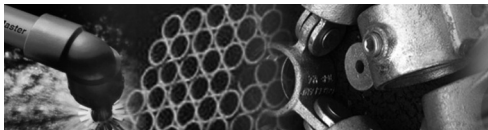
Product number

# 201



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
201-2	46		46						0.36
201-3	59		60						0.54
201-4	68		68						0.65

An adjustable tee connection between two tubes. Used on ramps and shallow gradient guardrail between verticals and top rails or the mid/lower rails to an end vertical. This fitting cannot be used to join tubes in the short tee. For this the Q clamp fitting 204 long tee should be used.

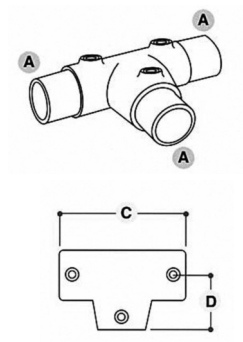


# Q clamp

Product number

## 204

## Slope Range Long Tee



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
204-2	46		104	46					0.52
204-3	60		145	60					0.89
204-4	68		168	68					1.11

An adjustable tee connection between two tubes. Used on ramps and shallow gradient guardrail between verticals and top rails.

This fitting can be used to joint tubes in the long tee.

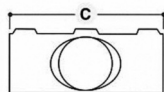
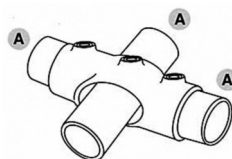
# Q clamp



## Slope Range Socket Cross

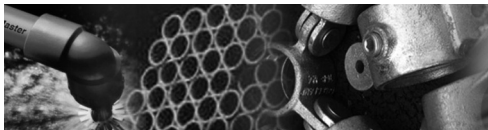
Product number

# 219



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
219-2	2		110						0.45
219-3	3		140						0.70
219-4	4		158						0.83

An adjustable cross for connecting tubes between mid/lower rails and the vertical on ramps or shallow gradients. The vertical must remain continuous with the cross rails being cut.

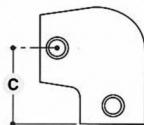
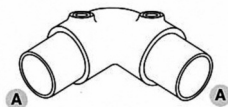


# Q clamp

Product number

## 225

## Slope Range Elbow



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
225-2	2		46						0.40
225-3	3		60						0.63
225-4	4		68						0.80

An adjustable elbow. Used for the connection of the first vertical post at the start of the incline to the top rail. Only one barrel has the ability to take the adjustability, the other is fixed.

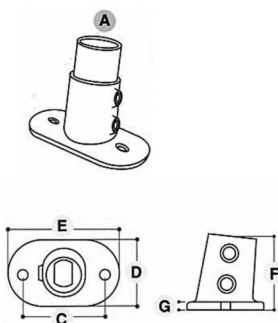
# Q clamp



## Slope Range Base

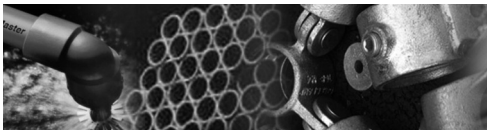
Product number

# 232



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
232-2	2		89	80	127	90	7	14.5	0.83
232-3	3		101	90	140	98	7	14.5	1.06
232-4	4		113	96	153	99	7	14.5	1.3

An adjustable structural base fitting for the vertical. The design of this fitting will only allow it to be installed in the correct plane. For correct orientation see pages 72 and 73.

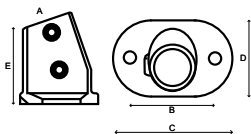
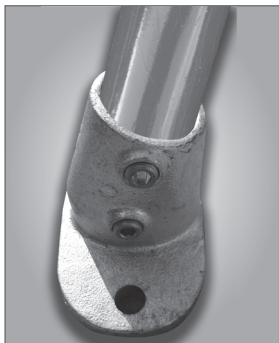


# Q clamp

Product number

## 252Z

Slope Base Flange 11°-29°



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
252Z-4	4	127	165	92	88				1.60

Adjustable slope base between 11°- 29°



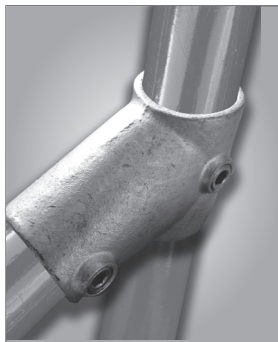
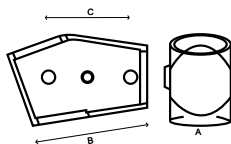
# Q clamp



Slope Short Tee 11°-29°

Product number

**253Z**



Q CLAMP

REF No.

A

B

C

D

E

F

G

HOLE

DIA mm

WEIGHT

kgs

253Z-4

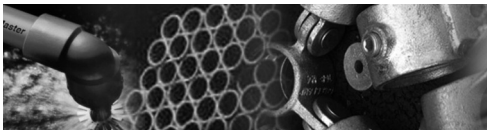
4

115

86

1.60

Adjustable short tee between 11° - 29°

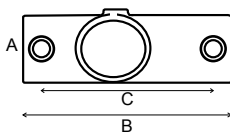
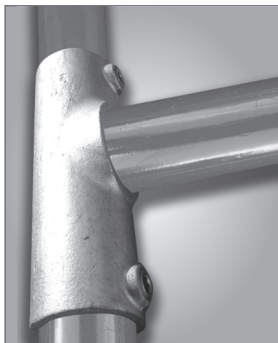


# Q clamp

Product number

## 255Z

Slope Long Tee 11°-29°



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
255Z-4	4	187	154						1.08

Adjustable long tee between 11°- 29°

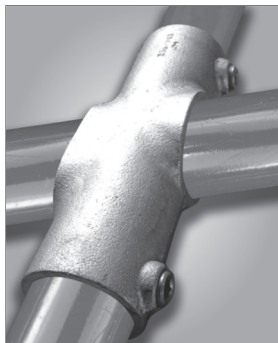
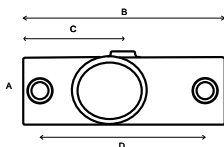
# Q clamp



Slope Cross Middle Rsail  
11° -29°

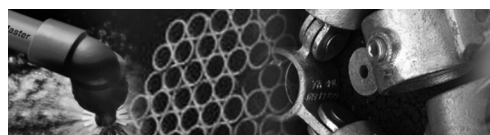
Product number

**256Z**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
256Z-4	4	187	93.5	154					1.06

Adjustable mid rail cross fitting between 11°- 29°



# Q clamp



## THE DDA RANGE

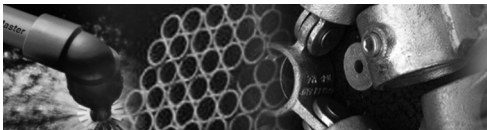
These fittings have been designed to comply with the Equality Act 2010 (Formerly the Disability Discrimination Act (DDA) 1995) and the Buildings Regulations 2010 - Part M: Access to and use of buildings.

Under these regulations, owners of commercial and public buildings are required to provide non-discriminatory access to their buildings. This range of fittings provides a simple cost effective solution to help builders and contractors to satisfy these requirements.

These fittings are used in conjunction with BS EN 10255 medium weight 32mm nominal bore galvanised tube and Qclamp® internal connectors and require no welding or skilled assembly.

Tubetrade's current DDA range is made up of:

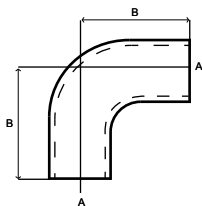
DDA1	DDA4
DDA2	DDA5
DDA3	DDA6



# Q clamp

Product number

**DDA 1** Elbow



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
DDA-1	3	78.2						33.7	0.406

90° bend used in conjunction with two 150-3 internal connectors.

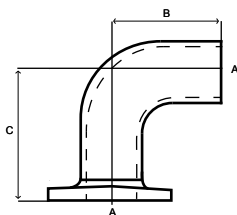
# Q clamp



## End Plate

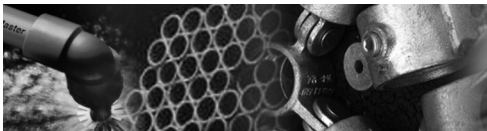
Product number

# DDA 2



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
DDA-2	3	78	86					33.7	0.680

Wall bend. Screw to wall. Use in conjunction with 150-3 internal connectors.

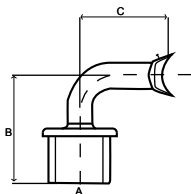


# Q clamp

Product number

## DDA 3

## Post Connector



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
DDA-3	4	85	70						0.565

Mid rail tube support used in conjunction with a 101-4 for 48.3mm upright. Supports a 42.4mm top rail.



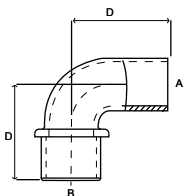
# Q clamp



## Post End Connector

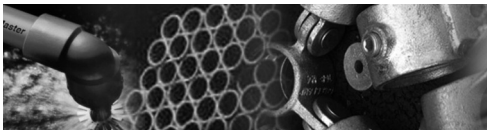
Product number

# DDA 4



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
DDA-4	3	4		78				33.7	0.513

Bend designed to reduce from 48.3mm on tube using 101-4 or 125-4 fitting continuing the rail using 150-3 internal coupling.

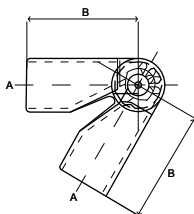


# Q clamp

Product number

## DDA 5

### Variable Ellbow



Q CLAMP								HOLE	WEIGHT
REF No.	A	B	C	D	E	F	G	DIA mm	kgs
DDA-5	3	88						42.4	0.578

Swivel elbow designed to be used in conjunction with two 150-3 internal connectors.

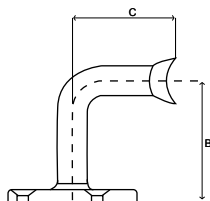
# Q clamp



## Wall Plate

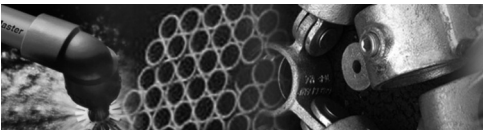
Product number

# DDA 6



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
DDA-6	95	70						6	0.800

Screw to wall flange designed to support a 42.4 top rail.



# Q clamp

## HOW TO CALCULATE CORRECT TUBE LENGTH

### Upright

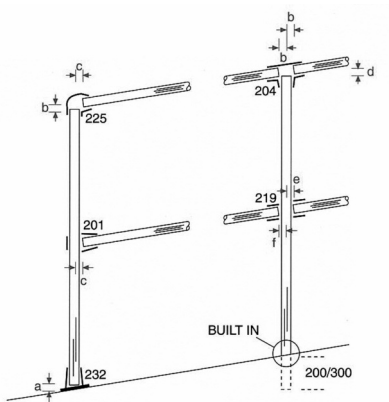
To calculate the upright height select the top post fitting to be used (201, 204, 255). Dim 'd' is the same for the 201 and 204 fitting. Subtract the relevant dimension from the upright length then either add or subtract the dimension for the ground fitting being used.

### Crossrail

To calculate the crossrail length select the fittings being used then subtract the relevant dimension from the upright centres measured on the slope. Note the two different dimensions on fitting 219 depending whether it is up slope or down slope rail.

#### CUTTING CHART

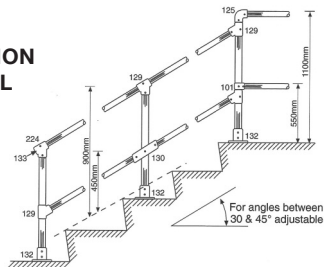
A	B	C	D	E	F
7	25	28	28	28	35



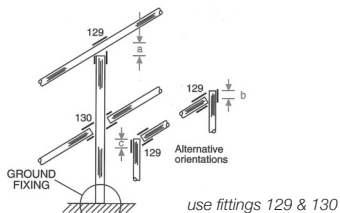
# Q clamp



## UPRIGHT CONSTRUCTION FOR INLINE GUARDRAIL ON A SLOPE



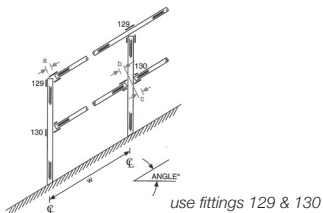
## HOW TO CALCULATE CORRECT TUBE LENGTH - UPRIGHT



ANGLE	30°	35°	40°	45°
1	A -34	-34	-37	-43
2	B +24	+18	+11	+3
	C +36	+42	+49	+58
3	A -40	-44	-48	-54
	B +29	+21	+12	+3
	C +44	+52	+61	+71
4	A -45	-50	-55	-61
	B +33	+24	+14	+3
	C +46	+55	+65	+77

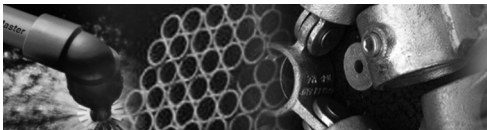
To calculate upright height select the correct orientation for the 129 fitting and then either add or subtract the dimension, + or - ground fixing dimension.

## HOW TO CALCULATE CORRECT TUBE LENGTH - CROSSRAILS



ANGLE	30°	35°	40°	45°
1	A 32	34	37	44
2	B 55	51	48	46
	C 36	40	43	46
3	A 40	45	49	55
	B 64	61	57	54
	C 41	45	49	53
4	A 46	51	56	61
	B 78	74	64	65
	C 55	58	61	66

To calculate the rail length subtract the relevant dimensions from the upright centers measured on the slope.



## Handrail Standards

The Qclamp® Handrail Standards Range comprises the following stock reference codes:

- QCSMR - Standard Mid-Rail
- QCSEP - Standard End Post
- QCSCP - Standard Corner Post

These pre-assembled posts comprise galvanised EN10255 tube and Qclamp® fittings. They are supplied at a standard height of 1100mm with the lower rail fitting being set at approximately 560mm from the base. Both heights can be adjusted to suit the handrail installation. Each post is built using a 1075mm length of tube and is available in a size 3 (32mm) and size 4 (40mm).

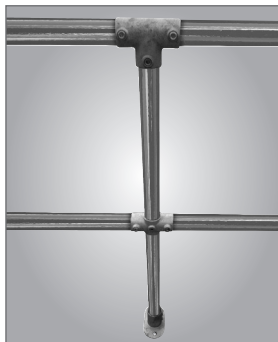
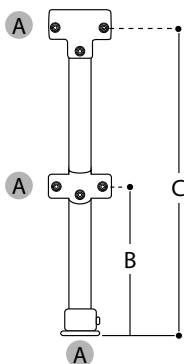
These handrail standards enable easier and faster installation of safety railing, handrails and barriers.

# Q clamp



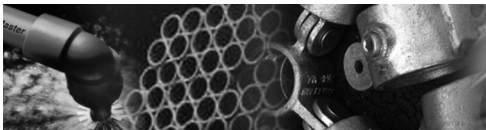
## Standard Mid-Rail

Product number  
**QCSMR**



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
QCSMR-3	3	560	1100						
QCSMR-4	4	560	1100						

Comprising a 1075mm length of galvanised EN10255 tube, a 132 Base Plate, 104 Long Tee and a 119 Two Socket Cross the Standard Mid-Rail is available in size 3 (32mm) and size 4 (40mm).

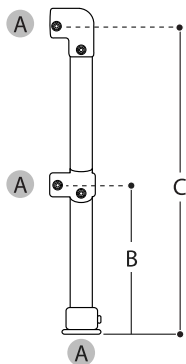
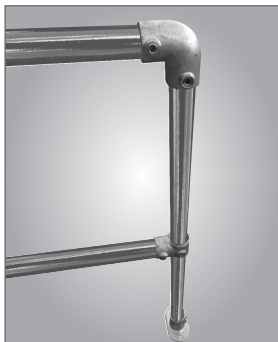


# Q clamp

Product number

**QCSEP**

## Standard End Post



Q CLAMP REF No.	A	B	C	D	E	F	G	HOLE DIA mm	WEIGHT kgs
QCSEP-3	3	560	1100						
QCSEP-4	4	560	1100						

Comprising a 1075mm length of galvanised EN10255 tube, a 132 Base Plate, a 101 Short Tee and a 125 90° Two Way Elbow, the Standard End Post is available in size 3 (32mm) and size 4 (40mm).