

Cl/Sfb (52.6) In6  
ALUTEC TRADITIONAL

March 2017



**ALUTEC**  
traditional RAINWATER SYSTEMS

Product guide

# traditional



Prestige new build,  
Hampshire



Menagerie, Coombe Deer  
Park, Warwickshire



Oxney Grange, Peterborough



Temple Grove,  
East Sussex



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Alutec is part of Aliaxis, a multi-national plumbing & drainage products manufacturer. Aliaxis is present in over 40 countries and employs over 14,000 people.

Alutec is the UK leader in innovative aluminium rainwater drainage and eaves solutions. Alutec prides itself in setting industry leading standards in technical support, customer service and sustainable product design.

## Products

Alutec offers solutions for three distinct areas:

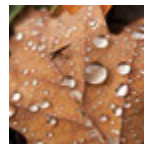
- Eaves rainwater systems
- Fascia, soffit & coping
- Roof and shower outlets

### Eaves rainwater systems

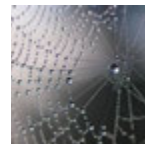
evolve



traditional

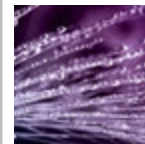


aligator



### Fascia, soffit & coping

evoke



### Outlets

shower



roof



## Life expectancy

The performance, quality and longevity of all product systems are backed by the knowledge that Alutec is a long established and financially sound company and part of a substantial international group ensuring complete peace of mind for specifiers and building owners.

## Standards

All Alutec systems are manufactured to and in excess of the appropriate BS or EN Standards. For a full list, please see BS and EN Standards in the Design and Installation section.

### ISO 14001: 2004

Alutec is committed to continually reducing its environmental impact across all its business activities and is accredited to ISO 14001: 2004.



## Service

Alutec offers a fully integrated project advisory service from the initial design stages, right through to completion, ensuring deadlines and delivery dates are met.

## Product availability

Alutec products are available through all major national or regional building, plumbing and roofing merchants and distributors. Call Alutec for your nearest merchant.



### CPD Service

Alutec is a leading CPD provider for aluminium rainwater, fascia, soffit & coping systems. Alutec's RIBA accredited CPD covers all aspects of eaves design, selection and correct installation. To date, it has been presented to over 5,000 construction industry professionals.

### Alutec Trained Installers

To ensure our products are correctly installed and therefore fulfil their design objectives, Alutec recommends the use of independent trained installers, accredited at Alutec's training centre. A nationwide network of Trained Installers is available on request.

### Technical support

Alutec Technical Services team has many years' experience in helping specifiers with:

- Correct system choice
- Roof drainage design
- Flow rate calculations
- Installation advice

All Alutec technical or product specifications and brochures can be downloaded from the Alutec website [marleyalutec.co.uk](http://marleyalutec.co.uk)

For further technical queries, call the Technical Services Department: 01234 359438

### Sales support

We offer a complete service from enquiry to order point and will deal with all types of enquiries, whether they are related to plans, bill of quantities, tenders or other material.

### Sustainable product design

Alutec is committed to designing the most sustainable, durable and high performance rainwater systems possible.

Sustainable design creates products with a lower carbon footprint, longevity and low maintenance. Alutec eaves solutions lead the market, all have a life expectancy of 50 years or more and require little or no maintenance.



## Aluminium, a sustainable material

For a material to be considered sustainable, it must be recyclable, have a long life expectancy and a low impact on the environment. Aluminium has all these qualities and more.

### Lightweight, strong and long-lasting

Aluminium is a very light metal, about 65% lighter than steel or cast iron. It has a very high strength to weight ratio and excellent corrosion resistance. One of the oldest recorded uses of aluminium is the statue of Eros in London, cast in 1893.

### Highly corrosion resistant

Aluminium naturally generates a protective oxide coating. Should the painted surface be damaged, the aluminium simply oxidises to protect itself. Furthermore, marine grade aluminium, used on all Alutec systems, is better still; used in combination with architectural grade polyester powder coating it provides an attractive, durable and maintenance free finish. This is in contrast to steel, where galvanising only offers limited protection and cast iron, which requires regular repainting.

### Infinitely recyclable

Aluminium can be recycled again and again without loss of quality, in fact 75% of all aluminium ever produced is still in use today. The recycling of aluminium requires little energy. It saves up to 95% of the energy required for primary aluminium production.

### Responsible sourcing

Aluminium is the world's third most abundant element. 97% of all bauxite mines in the world operate rehabilitation projects, returning the land to its original condition after mining is finished. The amount of electrical energy required to produce aluminium has dropped by 70% since the 1880's and 60% of that electricity is provided from renewable green energy.



### Green production power

Hydro-electric or geo-thermal green energy accounts for 60% of global primary aluminium production, minimising aluminium's environmental impact.

For more information visit the European Aluminium Association:  
[www.eaa.net](http://www.eaa.net)



## Colour options

All Alutec eaves rainwater systems are available with a BS 6496 architectural grade polyester powder coat (PPC) paint finish carried out to BS EN 12206-1:2004.

Architectural grade PPC paint finishes are designed for exterior use and maintain their colour and gloss level for longer. The paint's life expectancy is enhanced further by Alutec's choice of aluminium. Alutec only uses the highest quality marine grade aluminium, which greatly increases its durability.

Alutec has 24 standard colours, including Heritage Black, with a textured surface, emulating the appearance of cast iron. For more bespoke projects an infinite number of non standard colours are available.

<b>CAST 98</b> Heritage Black	<b>RAL 9010</b> White	<b>RAL 1013</b> Pearl White	
	<b>RAL 9006</b> Silver	<b>RAL 9005</b> Black	
<b>RAL 7035</b> Light Grey	<b>RAL 7036</b> Platinum Grey	<b>RAL 7037</b> Steel Grey	<b>RAL 7012</b> Basalt Grey
<b>RAL 7015</b> Slate Grey	<b>RAL 7022</b> Umbra Grey	<b>RAL 7016</b> Anthracite Grey	<b>RAL 7021</b> Granite Grey
<b>RAL 5010</b> Flower Blue	<b>RAL 5002</b> Ultramarine	<b>RAL 5003</b> Sapphire Blue	<b>RAL 6002</b> Leaf Green
<b>RAL 6005</b> Moss Green	<b>RAL 1017</b> Saffron Yellow	<b>RAL 3002</b> Signal Red	<b>RAL 3003</b> Ruby Red
<b>RAL 8016</b> Chestnut Brown	<b>RAL 8014</b> Sepia Brown	<b>RAL 8017</b> Chocolate	

Colours are approximate and for general guidance only. For exact colour and finish reference, colour plates are available on request.

Hundreds of additional colours and finishes are available on request. For information on these and the gloss levels of the coating, please contact Alutec.



Traditional Half Round



Traditional Victorian Ogee



Traditional Moulded Ogee

Using marine grade aluminium for ultimate longevity and low maintenance, three distinct bolted gutter systems manufactured to original British Standard cast iron dimensions.

## Features of the Traditional range

**Life expectancy** of 50 years or more

**Near-zero maintenance**, only periodic aesthetic cleaning required

**Marine grade aluminium** – will outlast other grade aluminium systems

**Manufactured to BS 8530:2010**, a new standard for Traditional Half Round, Victorian Ogee and Moulded Ogee aluminium rainwater systems

Each profile available in **three different sizes**

**Durable and strong**, made from heavy grade aluminium

**Fade resistant** architectural grade polyester powder coat paint finish


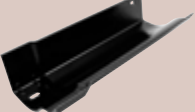
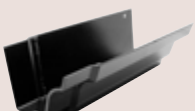
**24 standard colours**

**65% lighter** than equivalent cast iron systems, making it easier and safer to handle and install





## Product Selector

Profile	Size	Compatible downpipes	Maximum flow rate <sup>3</sup>	Maximum roof area (per downpipe) <sup>3</sup>
	100mm	63mm Ø	See page 24 for complete flow rate performance	See page 24 for maximum roof area
	113mm	76mm Ø		
	125mm	102mm Ø <sup>1</sup>		
		72x72mm		
		102x76mm <sup>1</sup>		
	100mm	63mm Ø	See page 24 for complete flow rate performance	See page 24 for maximum roof area
	113mm	76mm Ø		
	125mm	72x72mm		
		102x76mm <sup>1</sup>		
	100x75mm	63mm Ø	See page 24 for complete flow rate performance	See page 24 for maximum roof area
	125x100mm	76mm Ø		
	150x100mm	102mm Ø		
		72x72mm		
		102x102mm <sup>2</sup>		
	102x76mm			

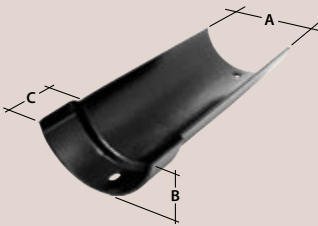
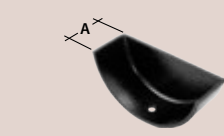
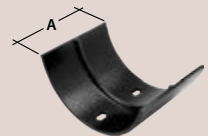
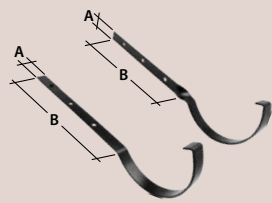
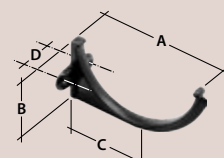
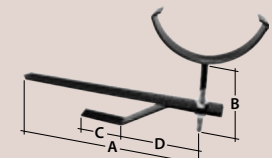

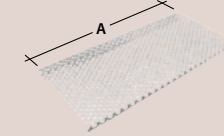
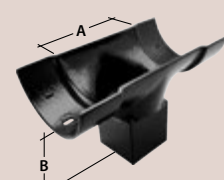

1: Only compatible with 125mm 2: Only compatible with 125x100mm and 150x100mm

3: Please refer to page 24 for more information or contact Marley Alutec Technical Services department for a full roof drainage design.



# Traditional Half Round

Compatible with Tudor circular, Traditional circular, square and rectangular downpipes (pages 15 – 18)

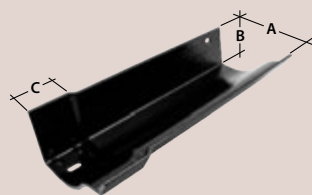
	<h3>Gutter</h3> <table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> <th>Nominal Length(m)</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>GC 406</td> <td>100</td> <td>1.83</td> <td>105</td> <td>46</td> <td>45</td> </tr> <tr> <td>GC 106</td> <td>113</td> <td>1.83</td> <td>119</td> <td>51</td> <td>45</td> </tr> <tr> <td>GC 506</td> <td>125</td> <td>1.83</td> <td>131</td> <td>56</td> <td>45</td> </tr> </tbody> </table>	Code	Size	Nominal Length(m)	A	B	C	GC 406	100	1.83	105	46	45	GC 106	113	1.83	119	51	45	GC 506	125	1.83	131	56	45		<h3>Stop end</h3> <table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>GC 450</td> <td>100</td> <td>Internal</td> <td>45</td> </tr> <tr> <td>GC 455</td> <td>100</td> <td>External</td> <td>45</td> </tr> <tr> <td>GC 150</td> <td>113</td> <td>Internal</td> <td>45</td> </tr> <tr> <td>GC 155</td> <td>113</td> <td>External</td> <td>52</td> </tr> <tr> <td>GC 550</td> <td>125</td> <td>Internal</td> <td>52</td> </tr> <tr> <td>GC 555</td> <td>125</td> <td>External</td> <td>50</td> </tr> </tbody> </table>	Code	Size	A	GC 450	100	Internal	45	GC 455	100	External	45	GC 150	113	Internal	45	GC 155	113	External	52	GC 550	125	Internal	52	GC 555	125	External	50																																			
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	<h3>Outlet</h3> <table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> <th>Outlet Size</th> <th>A</th> <th>B</th> <th>Fascia to Outlet Centre</th> </tr> </thead> <tbody> <tr> <td>GC 422</td> <td>100</td> <td>63ø</td> <td>134</td> <td>80</td> <td>61</td> </tr> <tr> <td>GC 423</td> <td>100</td> <td>76ø</td> <td>134</td> <td>42</td> <td>61</td> </tr> <tr> <td>GC 425</td> <td>100</td> <td>72x72</td> <td>134</td> <td>88</td> <td>61</td> </tr> <tr> <td>GC 122</td> <td>113</td> <td>63ø</td> <td>132</td> <td>83</td> <td>67</td> </tr> <tr> <td>GC 123</td> <td>113</td> <td>76ø</td> <td>132</td> <td>47</td> <td>67</td> </tr> <tr> <td>GC 125</td> <td>113</td> <td>72x72</td> <td>132</td> <td>91</td> <td>67</td> </tr> <tr> <td>GC 522</td> <td>125</td> <td>63ø</td> <td>133</td> <td>98</td> <td>73</td> </tr> <tr> <td>GC 523</td> <td>125</td> <td>76ø</td> <td>133</td> <td>68</td> <td>73</td> </tr> <tr> <td>GC 524</td> <td>125</td> <td>102ø</td> <td>133</td> <td>36</td> <td>73</td> </tr> <tr> <td>GC 525</td> <td>125</td> <td>72x72</td> <td>133</td> <td>103</td> <td>73</td> </tr> <tr> <td>GC 526</td> <td>125</td> <td>102x76</td> <td>133</td> <td>103</td> <td>73</td> </tr> </tbody> </table>	Code	Size	Outlet Size	A	B	Fascia to Outlet Centre	GC 422	100	63ø	134	80	61	GC 423	100	76ø	134	42	61	GC 425	100	72x72	134	88	61	GC 122	113	63ø	132	83	67	GC 123	113	76ø	132	47	67	GC 125	113	72x72	132	91	67	GC 522	125	63ø	133	98	73	GC 523	125	76ø	133	68	73	GC 524	125	102ø	133	36	73	GC 525	125	72x72	133	103	73	GC 526	125	102x76	133	103	73		<h3>Installation sundries</h3> <p>Roundhead fascia bracket screw</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SC201</td> <td>No. 10 x 30mm – Mill Finish</td> </tr> </tbody> </table> <p>Aluminium nuts, bolts and washers For jointing gutters &amp; fittings</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SC501</td> <td>M6 x 20mm aluminium bolt PPC - Pack 25</td> </tr> <tr> <td>SC531</td> <td>M6 Aluminium nut &amp; washer set - pack 100</td> </tr> </tbody> </table> <p>Sealant</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SC101</td> <td>310ml clear</td> </tr> </tbody> </table> <p>Refer to sealant usage table, page 27. Please note sealant shelf life is 12 months.</p>	Code	Description	SC201	No. 10 x 30mm – Mill Finish	Code	Description	SC501	M6 x 20mm aluminium bolt PPC - Pack 25	SC531	M6 Aluminium nut & washer set - pack 100	Code	Description	SC101	310ml clear
Code	Size	Outlet Size	A	B	Fascia to Outlet Centre																																																																																				
GC 422	100	63ø	134	80	61																																																																																				
GC 423	100	76ø	134	42	61																																																																																				
GC 425	100	72x72	134	88	61																																																																																				
GC 122	113	63ø	132	83	67																																																																																				
GC 123	113	76ø	132	47	67																																																																																				
GC 125	113	72x72	132	91	67																																																																																				
GC 522	125	63ø	133	98	73																																																																																				
GC 523	125	76ø	133	68	73																																																																																				
GC 524	125	102ø	133	36	73																																																																																				
GC 525	125	72x72	133	103	73																																																																																				
GC 526	125	102x76	133	103	73																																																																																				
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SC101	310ml clear																																																																																								



Church of St. John  
the Baptist, Midlands

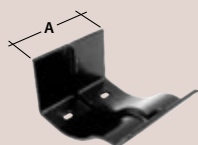
# Traditional Victorian Ogee

Compatible with Tudor circular, Traditional circular, square and rectangular downpipes (pages 15 – 18)



## Gutter

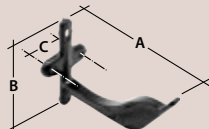
Code	Size	Nominal Length(m)	A	B	C
GV406	100	1.83	109	54	45
GV106	113	1.83	121	61	45
GV506	125	1.83	134	68	45



## Union

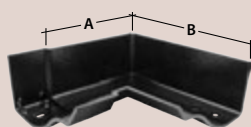
Code	Size	A
GV420	100	96
GV120	113	96
GV520	125	96

External



## Fascia bracket

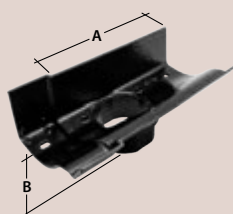
Code	Size	A	B	C
GV480	100	115	97	38
GV180	113	130	97	38
GV580	125	150	105	45



## Angle

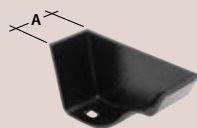
Code	Size	Angle	A	B
GV430	100	90° in.	125	176
GV431	100	90° ex.	68	16
GV435	100	135° in.	75	16
GV436	100	135° ex.	60	114
GV439	100	Non standard	–	–
GV130	113	90° in.	134	186
GV131	113	90° ex.	63	14
GV135	113	135° in.	124	67
GV136	113	135° ex.	70	23
GV139	113	Non standard	–	–
GV530	125	90° in.	152	212
GV531	125	90° ex.	77	18
GV535	125	135° in.	69	125
GV536	125	135° ex.	64	22
GV539	125	Non standard	–	–

Internal angle illustrated



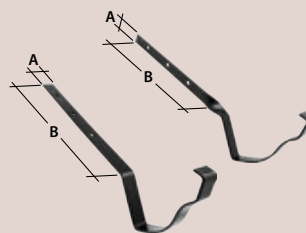
## Outlet

Code	Size	Outlet	outlet centre			
			A	Dr/fix	Brkt/fix	B
GV422	100	63ø	195	54	63	27
GV423	100	76ø	195	54	63	27
GV425	100	72x72	195	54	63	58
GV122	113	63ø	187	54	63	68
GV123	113	76ø	187	54	63	68
GV125	113	72x72	187	54	63	31
GV522	125	63ø	190	54	63	27
GV523	125	76ø	190	54	63	27
GV525	125	72x72	190	54	63	68
GV526	125	102x76	190	54	63	68



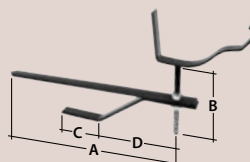
## Stop end

Code	Size	A	
GV450	100	In. left hand	47
GV455	100	Ex. right hand	47
GV150	113	In. left hand	45
GV155	113	Ex. right hand	45
GV550	125	In. left hand	45
GV555	125	Ex. right hand	45



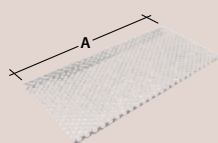
## Fixed rafter arm

Code	Size		A	B
AV71	100	Side	20	240
AV72	113	Side	20	240
AV73	125	Side	20	240
AV74	100	Top	20	240
AV75	113	Top	20	240
AV76	125	Top	20	240



## Rise & fall bracket

Code	Size	A	B	C	D
AV91	100	360	125	80	168
AV92	113	360	125	80	168
AV93	125	360	125	80	168



## Leafguard

Code	Size	A
SL111	100	1220
SL113	113	1220
SL125	125	1220

Mill Finish



## Installation sundries

Compatible fixing screws

Code	Description
SC201	No. 10 x 30mm - for fascia bracket
SC231	No. 12 x 50mm - for gutter direct fixing



Aluminium nuts, bolts and washers  
For jointing gutters & fittings

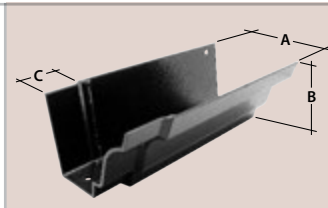
Code	Description
SC501	M6 x 20mm aluminium bolt PPC - Pack 25
SC531	M6 Aluminium nut & washer set - pack 100



Sealant

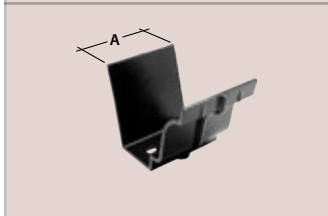
Code	Description
SC101	310ml clear

Refer to sealant usage table, page 27.  
Please note sealant shelf life is 12 months.



## Gutter

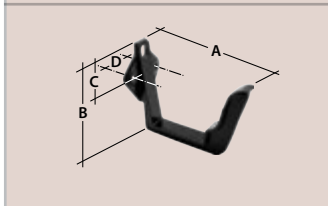
Code	Size	Nominal Length(m)	A	B	C
GM406	100	1.83	107	76	60
GM506	125	1.83	139	102	40
GM606	150	1.83	161	102	51



## Union

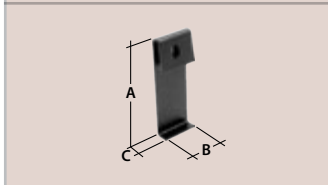
Code	Size	A
GM420	100	92
GM520	125	85
GM620	150	90

Internal



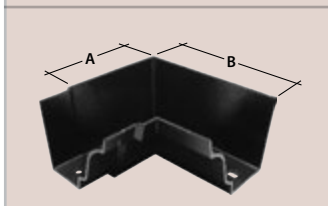
## Fascia bracket

Code	Size	A	B	C	D
GM480	100	117	99	30	38
GM580	125	137	115	38	36
GM680	150	155	121	38	38



## Direct fix bracket

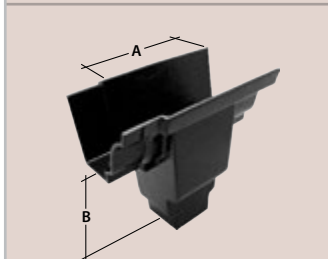
Code	Size	A	B	C
GM481	100	69	24	9
GM581	125	70	35	11
GM681	150	92	35	12



## Angle

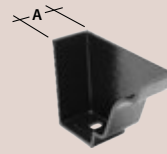
Code	Size	Angle	A	B
GM430	100	90° in.	127	183
GM431	100	90° ex.	75	19
GM435	100	135° in.	60	119
GM436	100	135° ex.	75	18
GM439	100	Non standard	—	—
GM530	125	90° in.	160	205
GM531	125	90° ex.	68	23
GM535	125	135° in.	80	135
GM536	125	135° ex.	85	27
GM539	125	Non standard	—	—
GM630	150	90° in.	183	235
GM631	150	90° ex.	77	24
GM635	150	135° in.	88	140
GM636	150	135° ex.	75	24
GM639	150	Non standard	—	—

Internal angle illustrated  
in. internal ex. external



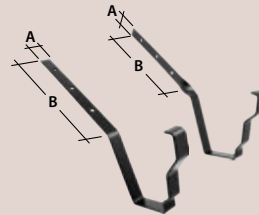
## Outlet

Code	Size	Outlet	A	B	Fascia to Outlet Centre
GM422	100	63ø	192	50	50
GM423	100	76ø	192	50	64
GM425	100	72x72	192	58	41
GM426	100	102x76	192	58	41
GM522	125	63ø	190	57	55
GM523	125	76ø	190	57	55
GM524	125	102ø	190	57	72
GM525	125	72x72	190	125	65
GM526	125	102x76	190	125	65
GM527	125	102x102	190	56	72
GM622	150	63ø	190	58	52
GM623	150	76ø	190	58	67
GM624	150	102ø	190	58	87
GM625	150	72x72	190	58	42
GM626	150	102x76	190	58	46
GM627	150	102x102	190	58	46



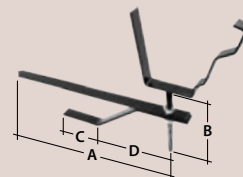
## Stop end

Code	Size		A
GM450	100	Ex. left handed	47
GM455	100	In. right handed	47
GM550	125	Ex. left handed	46
GM555	125	In. right handed	46
GM650	150	In. left handed	47
GM655	150	Ex. right handed	47



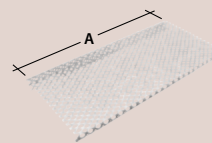
## Fixed rafter arm

Code	Size		A	B
AM71	100x75	Side	20	240
AM73	125x100	Side	20	240
AM75	150x100	Side	20	240
AM74	100x75	Top	20	240
AM76	125x100	Top	20	240
AM77	150x100	Top	20	240



## Rise & fall bracket

Code	Size	A	B	C	D
AM91	100	360	125	80	168
AM93	125	360	125	80	168
AM94	150	360	125	80	168



## Leafguard

Code	Size	A
SL114	100x75	1220
SL115	125x100	1220
SL116	150x100	1220

Mill Finish



## Installation sundries

Compatible fixing screws

Code	Description
SC201	No. 10 x 30mm - for fascia bracket
SC231	No. 12 x 50mm - for gutter direct fixing

Aluminium nuts, bolts and washers

For jointing gutters & fittings

Code	Description
SC501	M6 x 20mm aluminium bolt PPC - Pack 25
SC531	M6 Aluminium nut & washer set - pack 100

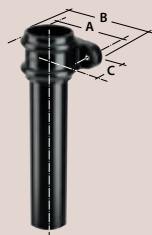
Sealant

Code	Description
SC101	310ml clear

Refer to sealant usage table, page 27.  
Please note sealant shelf life is 12 months.

# Tudor circular downpipe

Compatible with Traditional Half Round, Victorian Ogee and Moulded Ogee (pages 11 – 14)



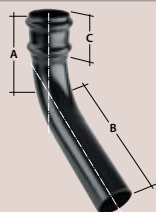
## Downpipe

Code	Size	Nominal Length(m)	A	B	C
TR206	63	1.83	110	145	45
TR212	63	2	110	145	45
TR213	63	3	110	145	45
TR306	76	1.83	115	160	52
TR312	76	2	115	160	52
TR313	76	3	115	160	52
TR406	102	1.83	141	186	65
TR412	102	2	141	186	65
TR413	102	3	141	186	65



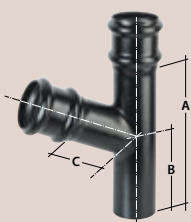
## Pipe socket

Code	Size	A	B	
TR220	63	75	30	eared
TR220NE	63	75	30	non eared
TR320	76	81	30	eared
TR320NE	76	81	30	non eared
TR420	102	94	30	eared
TR420NE	102	94	50	non eared



## Bend

Code	Size	Angle	A	B	C
TR230	63	92.5°	150	240	70
TR232	63	112.5°	190	230	70
TR330	76	92.5°	180	250	70
TR332	76	112.5°	220	250	70
TR430	102	92.5°	290	325	94
TR432	102	112.5°	230	270	94



## Branch

Code	Size	Angle	A	B	C
TR240	63	92.5°	215	115	110
TR242	63	112.5°	215	115	110
TR340	76	92.5°	250	138	112
TR342	76	112.5°	250	119	130
TR440	102	92.5°	260	150	110
TR442	102	112.5°	260	130	130



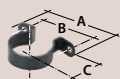
## Shoe

Code	Size	Angle	A	B
TR250	63	112.5°	85	90
TR350	76	112.5°	103	106
TR450	102	112.5°	125	131



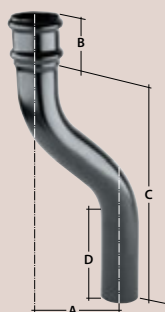
## Access pipe

Code	Size	A	B	C
TR260	63	300	140	105
TR360	76	300	140	105
TR460	102	300	140	105



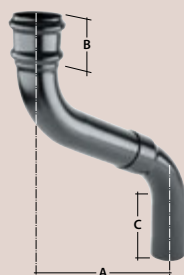
## Pipe clip

Code	Size	A	B	C
TR280	63	105	80	45
TR380	76	118	93	52
TR480	102	138	113	65



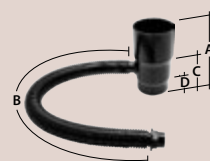
## Fixed offset

Code	Size	A	B	C	D
TR2903	63	75	70	370	100
TR2904	63	100	70	355	100
TR2906	63	150	70	400	100
TR2909	63	225	70	400	100
TR2912	63	300	70	445	100
TR3903	76	75	70	380	130
TR3904	76	100	70	380	130
TR3906	76	150	70	400	130
TR3909	76	225	70	425	130
TR3912	76	300	70	435	130
TR4903	102	75	94	512	150
TR4904	102	100	94	516	150
TR4906	102	150	94	566	150
TR4909	102	225	94	616	150
TR4912	102	300	94	656	150



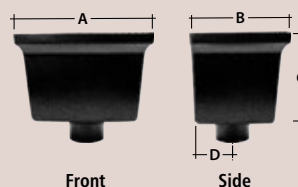
## Adjustable offset

Code	Size	Angle	A min	A max	B	C
TR2945	63	112.5°	150	450	70	100
TR2990	63	112.5°	150	900	70	100
TR3945	76	112.5°	200	450	70	163
TR3990	76	112.5°	200	900	70	163
TR4945	102	112.5°	280	450	94	150
TR4990	102	112.5°	280	900	94	150



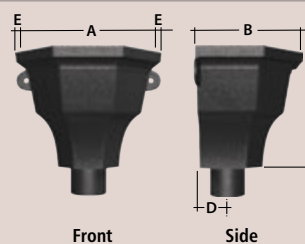
## Rainwater diverter

Code	Size	A	B	C	D
TRD25	63	134	500	74	30
TRD35	76	134	500	74	30



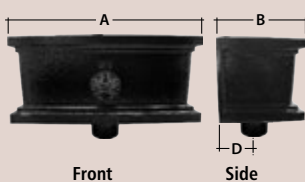
## Hopper head (Standard)

Code	Size	A	B	C	D
TH101	63	250	180	180	45
TH102	76	250	180	180	52
TH103	102	250	180	180	65



## Hopper head (Fluted)

Code	Size	A	B	C	D	E
TH401	63	285	210	225	45	18
TH402	76	285	210	225	52	18



## Hopper head (Ornamental)

Code	Size	A	B	C	D
TH301	63	410	190	185	45
TH302	76	410	190	185	52
TH303	102	410	190	185	65



## Compatible fixings

Code	Description
SC208	No. 12 x 70mm hexagonal - for downpipe & hopper
SC209	No. 12 x 100mm hexagonal - for wall spacer



## Sealant

Code	Description
SC101	310ml clear

Please note sealant shelf life is 12 months.



## Wall spacer

Code	Description
SC712	30mm Per 2

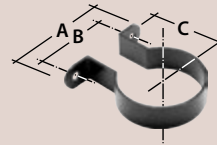
Compatible with Traditional Half Round, Victorian Ogee and Moulded Ogee (pages 11 – 14).



### Downpipe

Code	Size	Nominal Length(m)	A	B	C
RR211	63	1	110	143	59
RR212	63	2	110	143	59
RR213	63	3	110	143	59
RR311	76	1	109	160	70
RR312	76	2	109	160	70
RR313	76	3	109	160	70
RR411	102	1	153	185	91
RR412	102	2	153	185	91
RR413	102	3	153	185	91

Add suffix 'N.E.' for non-eared pipes



### Pipe clip

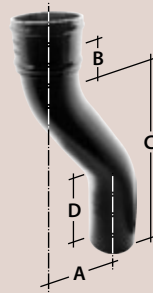
Code	Size	A	B	C
RR280	63	100	75	59
RR380	76	98	72	70
RR480	102	130	104	91



### Pipe socket

Code	Size	A	B	C	D
RR220	63	74	72	59	37
RR320	76	83	85	70	37
RR420	102	99	110	91	48

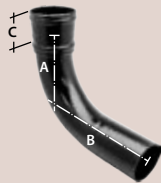
Add suffix 'N.E.' for non-eared socket



### Fixed offset

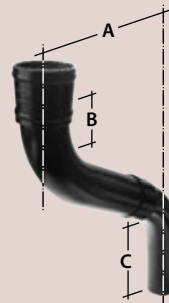
Code	Size	Angle	A	B	C	D
RR2903	63	154°	75	65	300	160
RR2904	63	149°	100	45	330	120
RR2906	63	140°	150	60	360	120
RR2909	63	126°	225	50	345	85
RR2912	63	120°	300	35	365	90
RR3903	76	154°	75	55	345	115
RR3904	76	149°	100	55	365	115
RR3906	76	140°	150	55	395	115
RR3909	76	126°	225	45	410	115
RR3912	76	120°	300	45	420	110
RR4903	102	112.5°	100	15	255	64
RR4904	102	112.5°	100	15	265	64
RR4906	102	112.5°	150	15	280	64
RR4909	102	112.5°	225	15	305	64
RR4912	102	112.5°	300	15	330	64

Other projection offsets available on request



### Bend

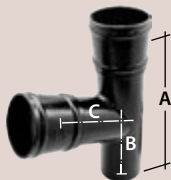
Code	Size	Angle	A	B	C	Socket Depth
RR230	63	92.5°	105	200	37	
RR232	63	112.5°	100	220	37	
RR235	63	135°	100	210	37	
RR330	76	92.5°	110	220	42	
RR332	76	112.5°	110	230	42	
RR335	76	135°	90	245	42	
RR430	102	92.5°	50	170	80	
RR432	102	112.5°	50	235	80	
RR435	102	135°	50	290	80	



### Adjustable offset

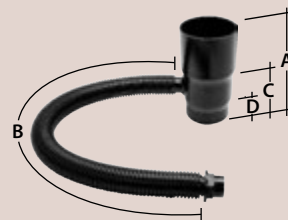
Code	Size	Angle	A min	A max	B	C
RR2945	63	112.5°	150	450	50	90
RR2990	63	112.5°	150	900	50	90
RR3945	76	112.5°	200	450	48	163
RR3990	76	112.5°	200	900	48	163
RR4945	102	112.5°	110	450	15	64
RR4990	102	112.5°	110	900	15	64

Other projection offsets available on request



### Branch

Code	Size	Angle	A	B	C
RR240	63	92.5°	210	112	112
RR242	63	112.5°	210	90	140
RR245	63	135°	210	70	160
RR340	76	92.5°	250	138	112
RR342	76	112.5°	250	119	130
RR345	76	135°	250	65	180
RR440	102	92.5°	310	174	121
RR442	102	112.5°	310	150	150
RR445	102	135°	310	105	195



### Rainwater diverter

Code	Size	A	B	C	D
RRD25	63	150	500	79	25
RRD35	76	150	500	79	25



### Shoe

Code	Size	Angle	A	B
RR250	63	112.5°	95	100
RR350	76	112.5°	103	124
RR450	102	112.5°	125	140

Add suffix 'N.E.' for non-eared shoe



### Access pipe

Code	Size	A	B	C
RR260	63	300	140	105
RR360	76	300	140	105
RR460	102	300	140	105

Add suffix 'N.E.' for non-eared access pipe



### Installation sundries

Compatible fixings

Code	Description
SC208	No. 12 x 70mm hexagonal - (for use with downpipe and hopper)
SC209	No. 12 x 100mm hexagonal - (for use with cast spacer bobbin)

Pipe socket filler

Code	Description
SC911	10m roll foam (for use with traditional circular sockets)

Sealant

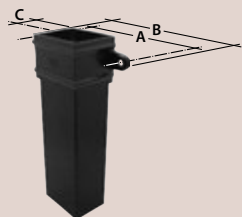
Code	Description
SC101	310ml clear

Refer to sealant usage table, page 27. Please note sealant shelf life is 12 months.



# Traditional square and rectangular downpipes

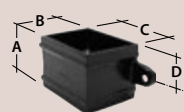
Compatible with Traditional Half Round, Victorian Ogee and Moulded Ogee (pages 11 – 14).



## Downpipe

Code	Size	Nominal Length(m)	A	B	C
RSR311	72x72	1	125	151	42
RSR312	72x72	2	125	151	42
RSR313	72x72	3	125	151	42
RSR111	102x76	1	154	182	44
RSR112	102x76	2	154	182	44
RSR113	102x76	3	154	182	44
RSR411	102x102	1	154	182	56
RSR412	102x102	2	154	182	56
RSR413	102x102	3	154	182	56

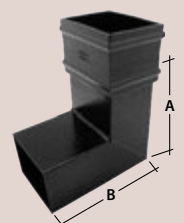
Add suffix 'N.E.' for non-eared pipes



## Pipe socket

Code	Size	A	B	C	D
RSR320	72x72	80	83	83	40
RSR120	102x76	80	87	112	40
RSR420	102x102	80	112	112	40

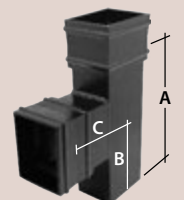
Add suffix 'N.E.' for non-eared socket



## Bend

Code	Size	Angle	A	B
RSR330	72x72	92.5°	150	150
RSR332	72x72	112.5°	60	135
RSR335	72x72	135°	43	110
RSR130	102x76	92.5°	175	175
RSR132	102x76	112.5°	63	140
RSR135	102x76	135°	55	132
RSR430	102x102	92.5°	198	198
RSR432	102x102	112.5°	75	155
RSR435	102x102	135°	55	140

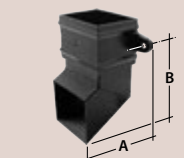
For 102x76mm state if left/right handed or front/rear projection is required



## Branch

Code	Size	Angle	A	B	C
RSR340	72x72	92.5°	260	140	114
RSR342	72x72	112.5°	260	127	130
RSR345	72x72	135°	260	95	160
RSR140	102x76	92.5°	280	130	140
RSR142	102x76	112.5°	280	112	156
RSR145	102x76	135°	280	72	164
RSR440	102x102	92.5°	280	130	140
RSR442	102x102	112.5°	280	112	156
RSR445	102x102	135°	280	72	164

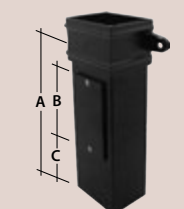
For 102x76mm state if left/right handed or front/rear projection is required



## Shoe

Code	Size	Angle	A	B
RSR350	72x72	120°	96	100
RSR150	102x76	120°	108	170
RSR450	102x102	120°	132	198

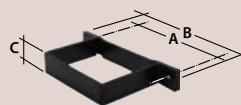
Add suffix 'N.E.' for non-eared shoe



## Access pipe

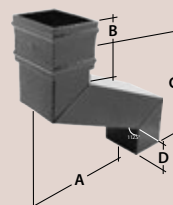
Code	Size	A	B	C
RSR360	72x72	300	140	105
RSR160	102x76	300	140	105
RSR 460	102x102	300	140	105

Add suffix 'N.E.' for non-eared access pipe



## Pipe clip

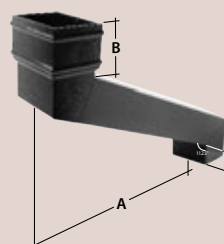
Code	Size	A	B	C
RSR380	72x72	103	128	25
RSR180	102x76	134	159	25
RSR480	102x102	134	159	25



## Fixed offset

Code	Size	Angle	A	B	C	D
RSR3903	72x72	112.5°	75	80	160	60
RSR3904	72x72	112.5°	100	80	173	60
RSR3906	72x72	112.5°	150	80	193	60
RSR3909	72x72	112.5°	225	80	223	60
RSR3912	72x72	112.5°	300	80	255	60
RSR1903	102x76	112.5°	75	82	160	60
RSR1904	102x76	112.5°	100	82	175	60
RSR1906	102x76	112.5°	150	82	185	60
RSR1909	102x76	112.5°	225	82	210	60
RSR1912	102x76	112.5°	300	82	245	60
RSR4903	102x102	112.5°	75	82	180	60
RSR4904	102x102	112.5°	100	82	188	60
RSR4906	102x102	112.5°	150	82	220	60
RSR4909	102x102	112.5°	225	82	250	60
RSR4912	102x102	112.5°	300	82	258	60

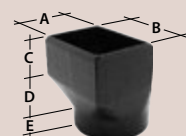
For 102x76mm state if left/right handed or front/rear projection is required



## Adjustable offset

Code	Size	A min	A max	B	C
RSR3945	72x72	75	450	82	60
RSR3990	72x72	75	900	82	60
RSR1945	102x76	75	450	82	60
RSR1990	102x76	75	900	82	60
RSR4945	102x102	100	450	82	60
RSR4990	102x102	100	900	82	60

For 102x76mm state if left/right handed or front/rear projection is required



## Drain connector (slip socket)

Code	Size	A	B	C	D	E
RSR370	72x72	85	85	65	41	30
RSR170	102x76	90	116	65	41	30
RSR470	102x102	115	115	65	41	30

70mm from wall to centre of 110mm drain connection. Adapts to 110mm Ø drain.



## Rainwater diverter

Code	Size	A	B	C
RSRD35	72x72	98	30	500
RSRD15	102x76	98	30	500



## Installation sundries

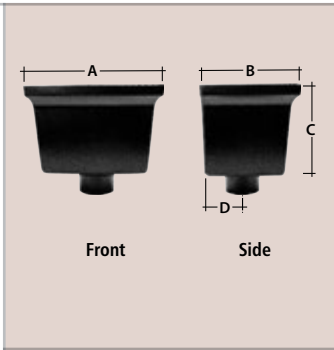
Compatible fixing screw

Code	Description
SC208	No. 12 x 70mm hexagonal - (for use with downpipe and hopper)
SC209	No. 12 x 100mm hexagonal - (for use with spacer bobbin)

Sealant

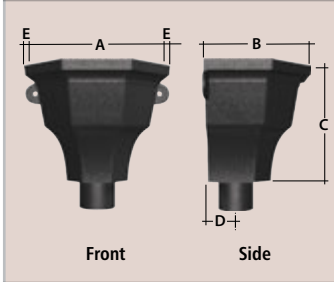
Code	Description
SC101	310ml clear

Refer to sealant usage table, page 27. Please note sealant shelf life is 12 months.



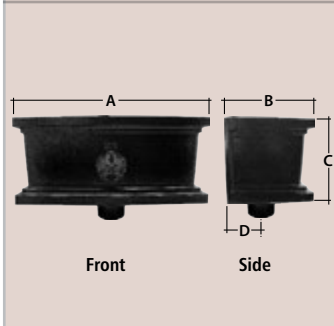
## Hopper head (standard)

Code	Size	A	B	C	D
RH 101	63ø	250	180	180	58
RH 102	76ø	250	180	180	70
RH 103	102ø	250	180	180	91
RH 104	72x72	250	180	180	42
RH 105	102x76	250	180	180	44
RH 106	102x102	250	180	180	56



## Hopper head (fluted)

Code	Size	A	B	C	D	E
RH 401	63ø	285	210	225	45	18
RH 402	76ø	285	210	225	52	18
RH 404	72x72	285	210	225	42	18



## Hopper head (ornamental)

Code	Size	A	B	C	D
RH 301	63ø	410	190	185	59
RH 302	76ø	410	190	185	70
RH 303	102ø	410	190	185	91
RH 304	72x72	410	190	185	42
RH 305	102x76	410	190	185	43
RH 306	102x102	410	190	185	56



## Spacer bobbin

Code	Description
SC711	PPC finish 30mm spacer used to increase pipe distance from wall



## Lightning conductor

Code	Description
SC401	Universal link assembly
For use with all gutter types, where required	



## Oxide inhibitor

Code	Description
SC402	225cc
Applied to joint surfaces of all lightning bonding	



Moreteyne Manor, Bedfordshire



Prestige new build,  
Hampshire



Housing development,  
Whitstable, Kent



Prince's Foundation Natural House,  
BRE, Watford

### Design basis

Alutec gutter flow capacities shown on page 24 in the flow rates table are calculated with the gutters being fixed nominally level. Most metal gutters are installed level for aesthetic purposes. However, if installed to a fall of 1:600 the flow capacity will be marginally improved.

Factors to be considered when designing an eaves drainage system.

1. Rainfall intensity design rate (l/s/m<sup>2</sup>).
2. Effective roof area (ERA) to be drained (m<sup>2</sup>).
3. Gutter flow capacity (l/s).
4. Size, number and position of outlets.
5. Frictional resistances in long gutter runs and the number of corners.

### Rainfall intensity design rate

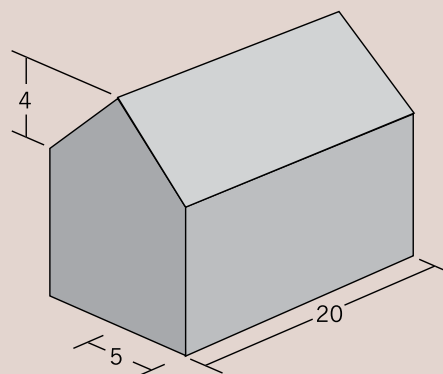
Building Regulations 2000 Document H3 recommend a general design rate of 0.021 l/s/m<sup>2</sup> (which is virtually the same as the traditional design rate of 75mm/hour) for eaves gutters where if overflowing occurs, water overspill will discharge clear of the building without risk of water ingress. If required, alternative rainfall intensity design rates can also be considered. Meteorological data published in the National Annex to EN12056 and Building Regulations 2000 Document H3, show varying rainfall intensities throughout the UK depending on geographical location.

The flow rates table (page 24) indicates maximum flow, the gutter being full to the brim, however EN12056 states the design rate run-off from the roof should not exceed 90% of the gutter capacity. Also shown are the differences between outlet capacities when positioned centrally or at the end of a gutter run.

### Effective roof area

Effective roof area can be determined by calculation as set out in EN12056-3.

The following example shows a basic calculation method that can be used as a guide in establishing the effective roof area (ERA).



$$ERA = \left(\frac{4}{2} + 5\right) \times 20 = 140m^2$$



### Gutter capacity

Assuming the recommended rainfall intensity of 0.021 l/s/m<sup>2</sup> is acceptable, determine if the gutter outlet is to be positioned centrally, or at the end of the gutter run. Refer to the flow rates table (page 24) and find the nearest roof area m<sup>2</sup> in either the 'central' or 'end outlet' options to determine the size/type of gutter/rainwater pipes required.

Should a different rainfall intensity design rate be required, multiply the alternative design rate by the ERA to establish the required gutter capacity (l/s). Then refer to the flow capacities table and select the nearest gutter flow capacity (l/s). Ensure that appropriate proportional allowances for central or end of gutter outlets are made.

Example:

Alternative design rate  
 $0.025 \text{ l/s/m}^2 \times 140m^2 = 3.5 \text{ l/s}$

3.5 l/s into centre outlet =  
 Traditional Moulded Ogee  
 with 72 x 72mm outlet



Prestige new build, Hampshire

## Frictional resistances

Gutter Angles: EN12056-3 recommends that the gutter capacity should be reduced by a factor of 0.85 if the gutter run includes one or more angles greater than 10 degrees and that positioning of outlets adjacent to angles should be avoided.

Long Gutters: Frictional resistance in very long gutter runs will effectively reduce the flow capacity hence reduction factors should be applied in accordance with recommendations detailed in EN12056-3.

Valley Discharges: Where a discharge from long valley occurs, it is prudent to consider a corner hopper or purpose made gutter angle with larger catchment area, to cope with the concentrated volume of rainwater during storm conditions.

## Compatibility

To avoid bi-metallic corrosion, ensure electrolytically incompatible materials do not come in direct contact with un-insulated plain aluminium surfaces. In particular ensure that the recommended compatible screws and fixings are used. Polyester powder coated surfaces will give limited protection, but should not be solely relied upon. If in doubt, please contact the Alutec Technical Services department.

## Durability

Alutec systems are manufactured from marine grade aluminium and under normal UK atmospheric conditions, Alutec systems if correctly installed have a life expectancy of 50 years or more. The life expectancy is likely to be reduced in environmentally aggressive areas.

## Chemical

All products are naturally corrosion resistant under normal atmospheric conditions. Not to be used for chemical drainage or in conjunction with foul waste drainage.

## Fire

In general Alutec rainwater products do not aid combustion and are rated as follows:

Finish rating	Test standard
PPC – 0.1 fire propagation index	BS 476: Part 6
PPC class 1, flame surface spread	BS 476: Part 7

## Thermal

Coefficient for thermal expansion – 0.000026 deg C for cast aluminium and 0.000023 deg C for sheet and extruded aluminium. Melting point approximately 660 deg C.

To accommodate unusual curves or angles, roofs which intersect at different levels or any other feature of an installation not covered by the standard ranges, Alutec offer a bespoke product service to complement any non standard requirements.

An indication of the most common non standard items are shown below, however other items may be possible. For further advice, contact the Technical Services Department.



### True radiused gutters

True radiused gutters can be sand cast to simulate all profiles in the Alutec range. Sand casting involves making a wooden pattern of the gutter profile, to the given radius, from which the sand moulds are made. In view of the pattern cost, this method can be costly for small quantities.

Due to building and foundry tolerances, it is recommended that radiused gutters are made in approximately 1m lengths.



True Radius

### Segmented radiused gutters

Achieved by internally welding together segments of machine mitred gutter to achieve a given radius. Dependent on the radius, the more segments introduced the better the appearance.

This method is less expensive than sand casting and in general the segmentation is not easily noticeable on two storey buildings and above.



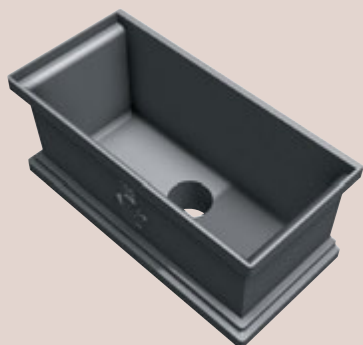
Segmented Radius

### Site dimensions

As theoretical radius dimensions are often subject to extreme building tolerances, we recommend that a rigid 1m long radiused template be cut or marked on site. The template should be offered up to the fascia at 1m intervals to check the fascia has been constructed to a uniform radius. The template should be sent to Alutec Technical Services department for use as a master template.

### Bespoke hopper heads

Alutec offers a variety of traditional hopper designs. Further designs are available to special order; contact Alutec Technical Services department for more information.



Detached house,  
East Sussex

### Compound gutter angles

Any reasonable degree of angle can be fabricated. However, care must be taken in establishing accurate site dimensions and degrees of angle. Experience has proved that theoretical geometry may not be accurate, hence each angle should be site checked and location referenced.

### Special gutter adaptors

Adaptors between different sized rainwater pipes or drain connections can be fabricated to customer requirements, subject to design criteria. Accurate dimensional details are required.

### Special gutter outlets

Standard gutter outlets can be modified to customer requirements subject to design criteria. However it should be noted that this may be detrimental to the flow performance of that outlet.

### Special pipe and gutter brackets

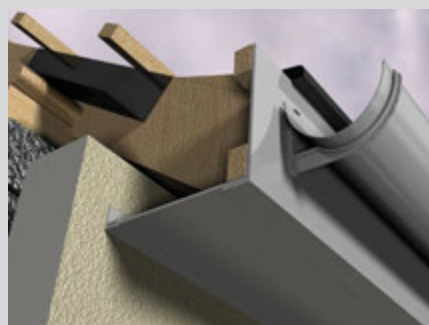
Special support brackets for use in conjunction with standard or bespoke products are available to order subject to design criteria.

### Lightning conductor links

If gutters are to be bonded to a lightning conductor system, a positive electrical continuity bridge across all gutter joints will be necessary. Gutter sealant acts as an insulator between joint union and gutter, hence electrical continuity through the gutter system

cannot be guaranteed. A universal electrical continuity link assembly conforming to BS 6651: 1985 is available as standard, SC401.




To determine if lightning links are required, it is recommended you consult with a specialist Lightning Protection Consultant or Installer.




### Gutter / fascia / soffit assemblies

Evoke Fascia and soffit systems are made to standard designs which can be adapted to suit most applications; see the Evoke fascia and soffit brochure for further information.

## Gutter flow rates

Gutter Profile	Outlet / Downpipe size	End Outlet		Centre Outlet		
		Capacity l/s	Effective Roof Area m <sup>2</sup>	Capacity l/s	Effective Roof Area m <sup>2</sup>	
100mm Half Round 	All	0.70	33	1.40	66	
	113mm	0.85	40	1.70	80	
	125mm	1.27	60	2.54	120	
100mm Victorian Ogee 	All	0.54	25	1.08	51	
	113mm	63mm Ø	0.62	29	1.20	57
		76mm Ø, 72x72mm	0.62	29	1.24	59
	125mm	63mm Ø	0.75	35	1.60	76
	76mm Ø, 72x72mm, 102x76mm	0.80	38	1.70	80	
100mm Moulded Ogee 	All	1.15	55	2.25	108	
	125mm	63mm Ø	2.21	105	3.77	179
		76mm Ø	2.21	105	3.77	179
		102mm Ø	2.21	105	4.48	213
	150mm	72x72mm	2.21	105	3.53	168
		102x76mm	2.21	105	4.49	213
		102x102mm	2.21	105	4.51	214
		63mm Ø	2.75	131	4.90	236
		76mm Ø	2.75	131	4.90	236
		102mm Ø	2.75	131	5.50	263
72x72mm		2.75	131	3.60	174	
102x76mm	2.75	131	5.47	263		
	102x102mm	2.75	131	5.47	263	

## Hopper head flow rates

	Outlet size mm	Capacity l/s Effective Roof Area m <sup>2</sup>	
		Capacity l/s	Effective Roof Area m <sup>2</sup>
	63mm Ø	3.01	114.7
	76mm Ø	4.46	214.4
	102mm Ø	7.94	381.7
	72x72mm	4.37	210.1
	102x76mm	7.17	344.7
	102x102mm	9.49	456.3

Figures based on a design rainfall intensity of 0.021 l/s/m<sup>2</sup>



# Alutec specification clauses

NBSPlus

Alutec have a full list of NBS clauses for rainwater gutter and downpipe systems. Below is an example of a typical specification. More detailed specifications are also available online [marleyalutec.co.uk](http://marleyalutec.co.uk).



## R10 rainwater drainage systems

### Manufacturer

Marley Alutec, Unit 1 (G – H),  
Hudson Road,  
Elms Farm Industrial Estate,  
Bedford MK41 0LZ  
Tel: 01234 359438  
Fax: 01234 357199  
Email: [enquiries@marleyalutec.co.uk](mailto:enquiries@marleyalutec.co.uk)  
Web address: [marleyalutec.co.uk](http://marleyalutec.co.uk)

### Product reference

Marley Alutec Aluminium  
Gutter system

### Type/Grade

Traditional Moulded Ogee 100mm,  
150mm  
Cast/Extruded

### Profile

Moulded Ogee

### Nominal size

Traditional Moulded Ogee 100x75mm,  
125x100mm, 150x100mm

### Joining

Traditional spigot and socket bolted  
joints with silicone sealant

### Fixing

Traditional Moulded Ogee Fascia  
brackets / Direct fix brackets

### Product reference

Alutec Aluminium Rainwater  
Downpipe system

### Profile

Circular

### Nominal size

Traditional 63mm Ø,  
76mm Ø, 102mm Ø

### Fixings

Traditional circular  
Eared pipe sockets / Pipe clips

### Accessories

Hopper heads: rectangular, fluted &  
ornamental

Branch, Adjustable offset, Fixed offset,  
Shoe, Access pipe, Rainwater diverter,  
Bend, Outlet, Angle, Stop end

### Finish

Polyester Powder Coated to  
BS EN 12206:2004

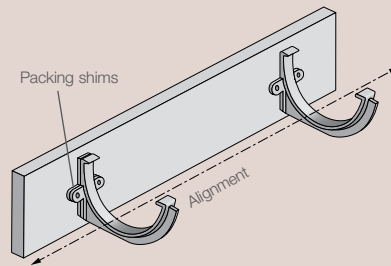
### Colour gutter and downpipe

Heritage Black / RAL 9010 White /  
RAL 1013 Pearl White / RAL 9005  
Black / RAL 7035 Light Grey / RAL  
7036 Platinum Grey / RAL 7037 Steel  
Grey / RAL 7012 Basalt Grey  
RAL 7015 Slate Grey / RAL 7022  
Umbra Grey / RAL 7016 Anthracite  
Grey / RAL 7021 Granite Grey /  
RAL 5010 Flower Blue / RAL 5002  
Ultramarine / RAL 5003 Sapphire  
Blue / RAL 6002 Leaf Green / RAL  
6005 Moss Green / RAL 1017 Saffron  
Yellow / RAL 3002 Signal Red / RAL  
3003 Ruby Red / RAL 8016 Chestnut  
Brown / RAL 8014 Sepia Brown /  
RAL 8017 Chocolate

### Preparation

Fascia boards should be in good condition, level and in linear alignment. If required, lead packing shim plates can be fabricated on site and fixed behind gutter brackets to achieve good alignment. Brackets which are misaligned will cause joint fatigue resulting in eventual joint failure. Where gutter is fixed to cellular fascia board, it is recommended that a timber backing board less than 20mm thick is installed behind the fascia to provide a straight and secure fixing surface.

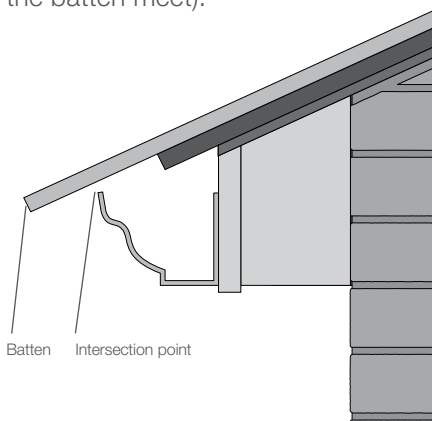
Use standard metal work tools to cut or drill aluminium gutters. Angle grinders are not recommended. Where gutter or fittings are polyester powder coated, cut edges should be deburred and repainted with touch up paint, SC880.



### Gutter position

Gutters must be installed level or to a fall of 1:600. The gutter should not be positioned at a level which causes rainfall to overshoot the gutter, i.e. too low, or where it is damaged by the high velocity impact of sliding snow, i.e. too high.

To establish the recommended gutter position, place a straight batten on the lowest profile of the roof covering, overhanging the eaves. The gutter can then be offered not higher than the intersection point, (where the top front edge of the gutter and the batten meet).



### Bracket centres

To ensure system durability, fascia brackets must be installed at 915mm centres. In areas of heavy snow fall, fascia bracket centres must be reduced. Direct fix option is only available on Moulded Ogee gutter with fixings at 620mm centres.

### Snow loading

Heavy snow fall coupled with highly insulated roofs is causing accumulation of snow on roofs. A sudden thaw will then cause the snow to slide down the roof and rest against the gutters if they are fixed too high. Greater care must be taken to make sure the gutters will not impede sliding snow. However, for the ultimate protection, snow guards should be installed.

### Jointing

Joint sealing must not be carried out in wet weather or in temperatures below 5°C or above 40°C. Joint surfaces must be perfectly clean and dry. Use a clean cloth and solvent cleaner SC108 to remove all traces of dirt or grease, which may not be visible.

Only Alutec high performance low modulus sealant SC101 must be used. Use of other sealants may result in early joint failure. Sealant over nine months old must not be used.

### High wind speed regions

In areas of high wind loading, we advise placing a small amount of Alutec Joint sealant between the fascia brackets, rafter arms or rise & fall brackets and the gutter to prevent noise.



## Fixing

To ensure the secure support of aluminium gutter systems, it is vitally important to ensure that the fixing components are equally durable and capable of providing the necessary support. They must therefore be non corrosive, of a compatible material to ensure no electrolytic corrosion occurs and of the appropriate size. Only the recommended Alutec austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket.

SC201	No. 10 x 30mm roundhead
SC231	No. 12 x 50mm domehead
SC501	M6 x 20mm aluminium bolt
SC531	M6 aluminium nut & washer set
SC208	No. 12 x 70mm hexagonal
SC209	No. 12 x 100mm hexagonal

If fixing to fascia boards made of materials other than wood or Alutec aluminium composite, please contact the Alutec Technical Service Department.

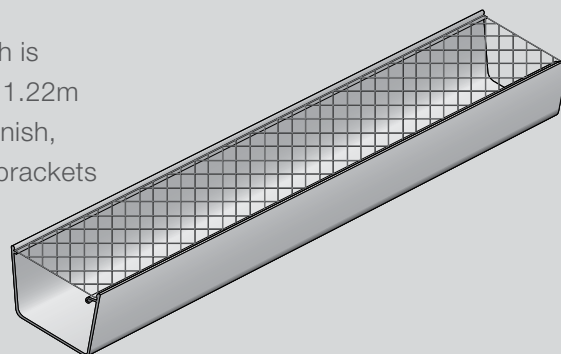
## Sealant usage table

Approximate number of joints per tube of Alutec sealant.

Gutter system	Joints per tube of sealant	Downpipe system	Joints per tube of sealant
Half Round 100mm gutter	18	Tudor 63mm Ø pipe	30
Half Round 113mm gutter	16	Tudor 76mm Ø pipe	30
Half Round 125mm gutter	14	Tudor 102mm Ø pipe	30
Victorian Ogee 100mm gutter	14	Traditional 63mm Ø pipe	30
Victorian Ogee 113mm gutter	12	Traditional 76mm Ø pipe	20
Victorian Ogee 125mm gutter	11	Traditional 102mm Ø pipe	15
Moulded Ogee 100mm gutter	11	Traditional 72x72mm pipe	17
Moulded Ogee 125mm gutter	9	Traditional 102x76mm pipe	13
Moulded Ogee 150mm gutter	7	Traditional 102x102mm pipe	12

## Leafguards

Aluminium leafguard mesh is available for all profiles in 1.22m lengths. Supplied in mill finish, leafguards either require brackets (supplied) or simply sit inside the gutter.



Detailed installation instructions are supplied with every consignment of goods and are available separately on request or at [marleyalutec.co.uk](http://marleyalutec.co.uk).



## Site painting

When site painting rainwater systems, it is recommended that all components are individually painted prior to installation to make sure all surfaces are uniformly coated.

Prior to painting polyester powder coated surfaces, clean components using a clean cloth and solvent cleaner, SC108. Prime mill finish surfaces with an “aluminium etch primer” or zinc phosphate; rub down polyester powder coated components with a light abrasive scotch (not steel) wool to achieve a good key.

Two-part synthetic or polyurethane paints are recommended for maximum durability. Ensure the paint is fully dry prior to contact with joint sealant. Partially dry paint may react with sealant, affecting reliability of gutter joint.

## Handling & storage

Gutters and pipes should be handled with care and should preferably be stored under cover on racks to prevent scratching or denting. All polyester powder coated gutter and pipe lengths are supplied in protective polythene sleeving and components packed in cardboard boxes.

If polyester powder coated products are stored outside, cover with a tarpaulin to guard against water ingress into the protective polythene tubing. If water becomes trapped within the polythene wrapping and left exposed to warm sunlight, it may leave permanent water stains on the paint finish.

Sealants should not be stored in temperatures below 0°C and kept away from any direct heat source. Solvent cleaners must be stored away from any direct heat or combustible source, preferably in an appropriate fire resistant storage cabinet.

Mill finished goods to be installed in their natural state should also be stored undercover, to prevent uneven oxidization to visible surfaces. Once installed the surface will mature uniformly.

## Safety

The relevant safety regulations are outlined in the Health and Safety at Work Act 1974 and should be followed. Refer to the Approved Code of Practice (ACOP) Construction (Design and Communications) Regulations 2007.

Handling mill finished or polyester powder coated aluminium products does not pose any known health hazard, however it is recommended to wear protective gloves when handling mill finish aluminium.

Hazard instructions relating to sealant, solvent cleaner and touch up paint are printed on their respective containers and COSHH sheets are supplied with each consignment of goods and are available on request.

## Maintenance

Gutters should be periodically cleaned out to maintain the design flow rate and to prevent build up of debris blocking downpipes. Check all fixings are secure and take any remedial action to rectify if necessary.

Leafguards are available as standard to fit each gutter system and are recommended for buildings close to trees, with restricted access, or areas susceptible to airborne debris.

Installed gutters and pipes with polyester powder coated finishes should be periodically washed down with water and non-toxic detergent, this will remove built up grime to reveal the true colour. Under no circumstances should abrasive cleaners be used.



## Standards

All Alutec systems are manufactured in accordance with the appropriate British or European Standard, including:

### BS 8530:2010

Traditional-style half round, beaded half round, Victorian ogee and moulded ogee aluminium rainwater systems.

### BS EN ISO 9227:2006

Corrosion tests in artificial atmospheres – salt spray tests.

### BS EN 12056-3:2000

Gravity drainage systems inside buildings, Part 3 Roof drainage layout and calculation.

### BS EN 755-2:2008

Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles.

### BS EN 1706:2010

Aluminium and aluminium alloys – Castings – Chemical composition and mechanical properties.

### BS EN 1559-2:2000

Founding – Technical conditions of delivery.

### BS EN 1462:2004

Brackets for eaves gutters – Requirements and testing.

### BS EN 12206-1:2004

Paints and varnishes – Coating of aluminium and aluminium alloys for architectural purposes.

# traditional



Prestige new build,  
Hampshire



Social Housing refurbishment,  
Manchester



Church of St. John the Baptist,  
Midlands

## Alutec range overview



### Evolve

Gutter range specifically developed to meet the demands of both the building owner and installer. Evolve systems combine high flow rate performance with fast and easy installation. Evolve systems use the latest manufacturing technologies to reduce its carbon footprint.



### Aligator®

Two distinctive design solutions: Aligator Classic, a domestic size ogee style gutter system with external unions and brackets; ideal for community or local authority housing.

Deepflow, Ogee and Boxer profiles with internal joints and concealed brackets, offering a sleek and unobtrusive solution for modern building design.



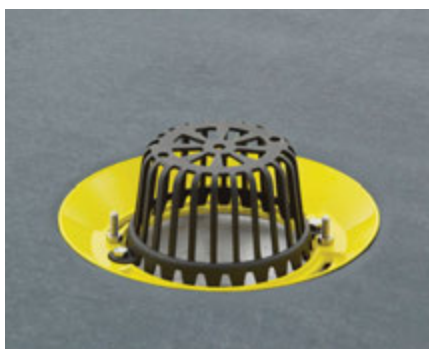
### Traditional

A range of BS 8530:2010 traditional style bolted gutter systems for replacement of cast iron on period, listed or traditional style new builds, combining aluminium's inherent benefits of longevity and low maintenance. Manufactured to original British Standard cast iron dimensions; available in Half Round, Victorian Ogee and Moulded Ogee profiles with matching round, square and rectangular downpipe options.



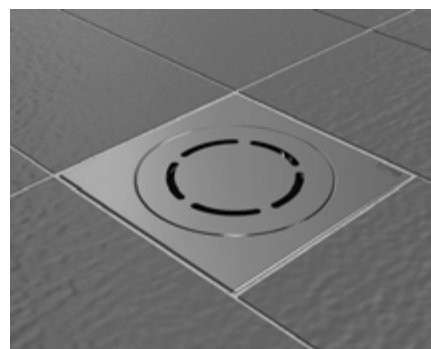
### Evoke fascia, soffit & coping

A new and innovative concept in roofline solutions. Evoke fascia, soffit & coping systems are manufactured from composite aluminium, a material used on some of the world's most prestigious developments, including high rise buildings, where exceptional durability and aesthetic appearance are key. Evoke systems have a life expectancy of 50 years or more.



### Roof outlets

A comprehensive range of aluminium roof outlets for a wide range of applications. Each component has been engineered to achieve design flexibility and the highest performance specification to give complete confidence to the specifier.



### Shower outlets

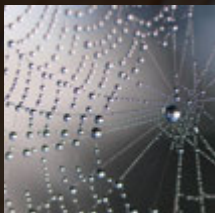
A comprehensive range of shower outlets with modern stainless steel grates for both tiled and sheet flooring applications.



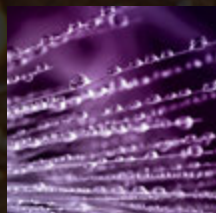
**evolve** RAINWATER SYSTEMS



**traditional** RAINWATER SYSTEMS



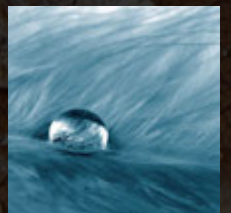
**alligator** RAINWATER SYSTEMS



**evolve** FASCIA, SOFFIT & COPING



**roof** OUTLET SYSTEMS



**shower** OUTLET SYSTEMS

# ALUTEC

ALUMINIUM RAINWATER SYSTEMS

## Head office

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For technical enquiries please call **01234 344108**  
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