





Product & Installation Guide

January 2023



About us

Marley Alutec is the UK leader in innovative aluminium guttering, rainwater drainage and eaves solutions.

Providing a complete service and product solution tailored to the needs of each project, we offer the most sustainable, durable and high-performance systems on the market.

Technical support

Our Technical Services team has many years of experience in all aspects of eaves and roof drainage design for both modern and traditional building methods. We can assist with:

- Correct system choice
- Roof drainage design calculation
- Installation advice
- Bespoke design service
- Scheduling quantities
- Fully itemised estimates

All Alutec product specifications and brochures can be downloaded from **www.marleyalutec.co.uk**

For further technical queries, please call our Technical Services Department on **01234 344108**.

Online calculators

Go to **www.marleyalutec.co.uk/calculators** to take advantage of our innovative online calculators



- Estimating tool Produce instant list value estimates for all your Marley Alutec product requirements
- Rainwater drainage design tool Ensure your pitched and flat roof projects are in full compliance with the rainwater drainage design standard (BS EN12056-3)
- Specification manager Produce specification documents based on Marley Alutec's wide range of innovative aluminium rainwater products and eaves solutions

Building information modelling (BIM)

Marley Alutec is at the forefront of product and service innovation and has a full suite of BIM files for the rainwater and Evoke fascia and soffit ranges; to download them, visit **www.marleyalutec.co.uk**

CPD service



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

Standards

All Alutec systems are manufactured to and in excess of the appropriate BS or EN Standards.

Environmental



Marley Alutec is committed to continually reducing its environmental impact and is accredited to ISO 14001:2015.

Product availability

Our products are available through all major national and regional building, plumbing and roofing merchants, where you will be able to obtain discounts from the list price. Many of our products are delivered in just 2 days to the designated sites.

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About Aluminium



Aluminium - long lasting, low maintenance, sustainable

Made from marine grade aluminium, Alutec's products offer the very best in terms of durability, lasting for many years with minimal maintenance.

The properties of aluminium - a sustainable material

- Low whole life costs compared to other materials
- Infinitely recyclable 75% of all the aluminium produced since 1888 is still in use today
- Green energy hydroelectric or geo-thermal power accounts for 60% of processing requirements

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.

Highly corrosion resistant Aluminium naturally generates a protective oxide coating. Should the surface be damaged, the aluminium simply oxidises again to protect itself. Add a polyester powder coating to provide an attractive and durable finish. This contrasts with steel, where galvanising only offers limited protection and cast iron, which requires regular repainting.

Infinitely recyclable

When the old Wembley Stadium (built in 1923) was demolished, 96% of the aluminium was recovered for recycling. Aluminium can be recycled again and again without loss of quality. The re-melting 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 and two thirds of the employees are from the local community. 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.

Gutters, downpipes and hoppers

Marley Alutec's total eaves solutions are available in a wide variety of aesthetics to suit all styles of property.





- As easy to install as PVC
- Industry leading flow rates reducing number of downpipes required
- Cost effective Heritage Black finish emulates appearance of cast iron



traditional

- Suitable for listed buildings and conservation areas
- Ideal for replacement of old cast iron system or reflect traditional styling of a new building
- Manufactured to original British Standard cast iron dimensions (BS 8530).





- Sleek and modern solution for rainwater disposal
- Snap-Fit boltless jointing systems reduces installation times by up to 40% compared to traditional bolted systems
- Manufactured using marine grade aluminium to withstand corrosion even in the harshest of environments

Fascia and soffit systems



Our Evoke range complements perfectly the long-life expectancy and low maintenance of Marley Alutec aluminium gutter and downpipe systems.

- Suitable for use up to 18m in height
- Installs like PVC, no specialist trades required
- · Various profiles and sizes available
- Can be fixed directly to roof truss ends
- 12 different PVDF paint colour options that will naturally resist the buildup of dust, grime and algae; keeping maintenance costs to a minimum.

Our standard Fascia and Soffit systems are manufactured from 4mm thick aluminium composite material. These products are suitable for use up to a maximum height of 18m.

For installations carried out above 18 metres in height, and for non-standard colour requirements, our solid sheet aluminium products are available.

Coping systems



Marine grade aluminium coping system with a decorative polyester powder coated finish. Ideal for use where exceptional durability and aesthetics are key.

- · Easy to position and fix without damage to panels
- Thickness of panels is 2mm (for up to 400mm wall width) or 3mm (for over 400mm wall width)
- Weathertight butyl adhesive seal will maintain a 100% weathertight seal throughout its lifespan and outlast EPDM compression seals normally used in coping systems
- Fire rating A2-s1, d0 (Unlimited use)
- Choice of 19 architectural grade PPC range of standard RAL colours

Drainage outlets



Our Elite range of roof and balcony drainage outlets are compatible with all waterproofing membranes and build-ups.

- Unrivalled flow performance
- Saves on project costs by reducing overall downpipe numbers
- Prevents cold bridging
- Unique and reliable clamping featureSimple and fast installation
- Anti Vertex demo grate evelle
- Anti-Vortex dome grate available
- Accompanying online roof drainage design software

Colour Options



All Alutec systems are available with an architectural grade polyester powder coat (PPC) paint finish.

Architectural grade PPC paint finishes are designed for exterior use and maintain their colour and gloss level for longer. Paint's life expectancy is enhanced further by Alutec's choice of aluminium. We only use the highest quality marine grade aluminium, greatly increasing durability. The colour range includes Heritage Black, which has a textured surface to accurately replicate the appearance of traditional cast iron gutters and downpipes.

Standard colours for rainwater and coping systems



Additional colours, finishes and gloss levels are available, price on application. This chart is a representation of the actual colours, for exact match please ask for sample plates. **Mill finish is also available on request.**

The standard range of RAL colours are with 30% gloss level (unless otherwise stated).

Standard colours for fascia and soffit systems



PVDF paint system to a 30-40% gloss level.

We are able to supply our Fascia and Soffit in non-standard colours, using aluminium sheet. Please call 01234 321996 for further information or email projects@marleyalutec.co.uk

Gutter / Downpipe Selector Chart



Use the table below to choose the right gutter and downpipe combination.

| | | | | | | DOWNP | IPE SIZE | | |
|----------------|-------------|-----------------|-----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | 63mm Ø | 76mm Ø | 102mm Ø | 72x72mm | 102x76mm | 102x102mm |
| | | Half Round | \bigvee | 1 | 1 | | | | |
| | evolve | Deepflow | \bigcup | | 1 | | | | |
| | | Box | | | 1 | | 1 | | |
| | | Ogee | | | 1 | | 1 | | |
| S | | Half Round* | \smile | \checkmark | \checkmark | 1 | 1 | 1 | |
| GUTTER SYSTEMS | traditional | Victorian Ogee* | | 1 | \ | | \ | 1 | |
| UTTER | | Moulded Ogee* | | \checkmark | 1 | | \ | | \checkmark |
| G | | Classic | | \checkmark | \checkmark | | \checkmark | | |
| | | Deepflow | \bigcup | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| | aligator | Ogee No. 46 | 1_/ | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| | | Boxer* | | \checkmark | \checkmark | | | | \checkmark |
| | | Giant | [] | | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

*Compatibility depends on gutter size chosen.

Gutter Systems



Gutter Systems







| Gutter system profile | eve | olve | /tradi | tional | /ali | gator |
|-----------------------|-----------|----------|-----------|-------------------------|-----------|------------------------------------|
| Half Round | \bigvee | 123x51mm | \bigvee | 100mm 113mm 125mm | | |
| Deepflow | | 128x75mm | | | \bigcup | 130x80mm |
| | | 130x95mm | Victorian | 100mm 113mm 125mm | Classic | 120x75mm |
| Ogee | | | Moulded | 100mm 125mm 150mm | No. 46 | 155x100mm |
| Box | | 130x85mm | | | Boxer | 120x80mm 135x100mm 160x100mm |
| Giant | | | | | | 200x150mm |

A choice of different profiles to suit all types of applications and aesthetic requirements.





Our range of Evolve aluminium guttering systems combine all the benefits of marine grade aluminium with installation as easy as PVC guttering.



Features of the Evolve range

Functional life expectancy of 50 years or more with minimal maintenance, only periodic aesthetic cleaning required.

Concealed fascia brackets on Box and Ogee profiles for a sleek and modern aesthetic.

Unique patented Jurajoint system for quick, simple and secure jointing.

Durable and strong - Marine grade extruded aluminium gutter sections and high pressure castings makes Evolve more corrosion resistant than steel or cast iron systems.

Fade resistant architectural grade polyester powder coat paint finish.

High flow rates reducing the number of downpipes required.

Available in the popular Heritage Black finish, with a textured surface to emulate the appearance of traditional cast iron.

19 standard colours.

Over 65% lighter than cast iron, making Evolve easier and safer to handle and install.

Evolve Gutter Case Studies //evolve/



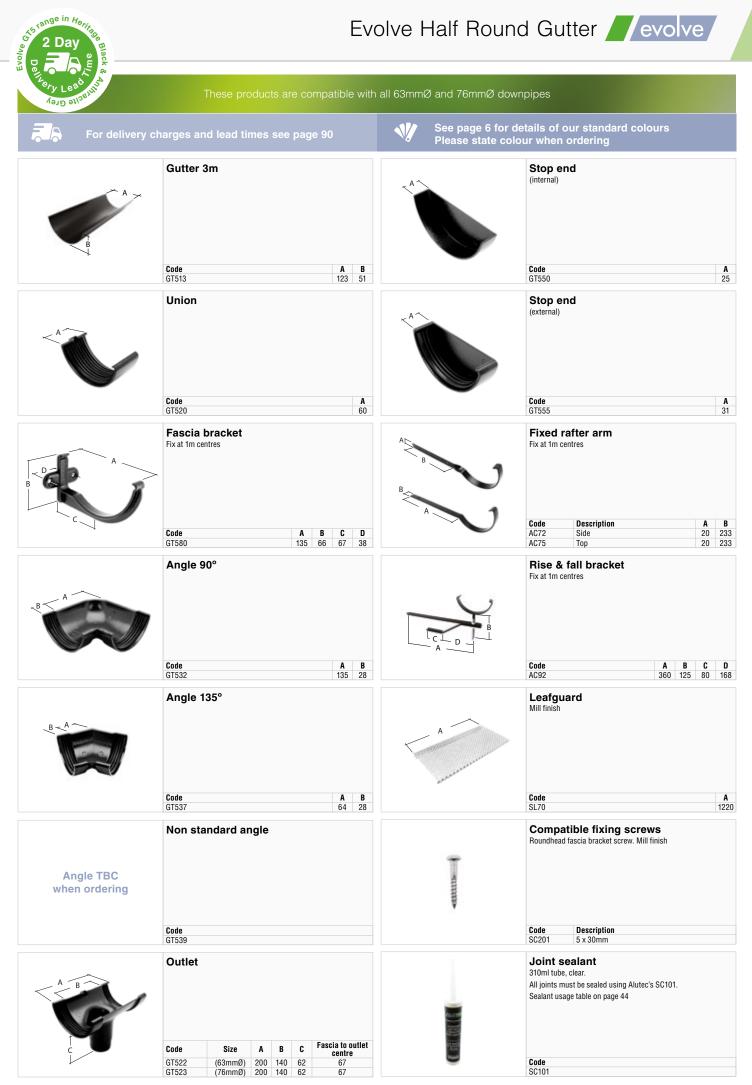


evolve Evolve Gutter Case Studies

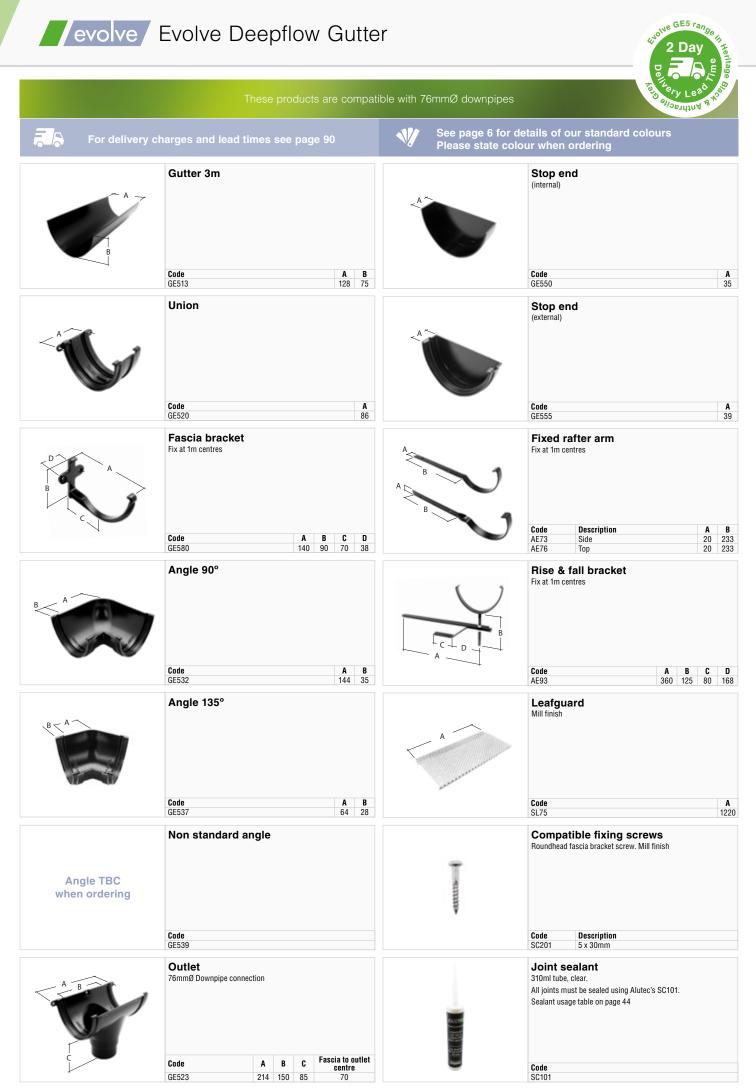


12

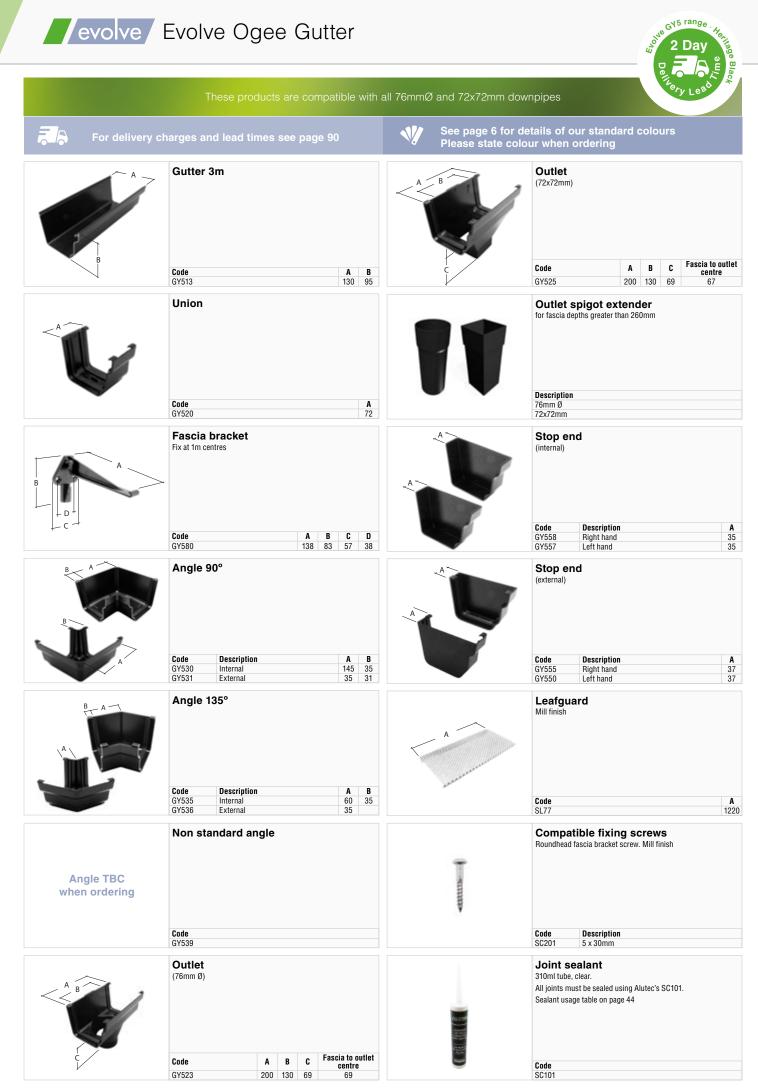




All sizes and dimensions are in mm.



| 2 Day | | Evolve Bo | x Gutter | | |
|----------------------------|---|--|--|--|--|
| Asia silasiling | These products are compatible with a | II 76mmØ and 72x72mm dow | npipes | | |
| | arges and lead times see page 90 | See page 6 for de Please state colo | for details of our standard colours e colour when ordering | | |
| A | Gutter 3m | A B | Outlet 72x72mm | | |
| | Code A B GB513 130 85 | | CodeABCFascia to out centreGB5252001338076 | | |
| | Union | | Outlet spigot extender for fascia depths greater than 260mm | | |
| • | Code A 68520 72 | | Description 76mm Ø 72x72mm | | |
| A | Fascia bracket Fix at 1m centres | A | Stop end (internal) | | |
| [c ⁻¹ | Code A B C D GB580 138 83 57 38 | | Code GB550 | | |
| B | Code A B GB532 138 35 | A | Stop end (external) Code G8555 | | |
| Br A- | Angle 135° Code A B | A | Leafguard Mill finish Code | | |
| Angle TBC when ordering | GB537 55 35 | | SL76 Compatible fixing screws Roundhead fascia bracket screw. Mill finish | | |
| | Code GB539 | | Code Description SC201 5 x 30mm | | |
| A B | Outlet (76mm Ø) Code A B C Fascia to outlet centre | | Joint sealant 310ml tube, clear. All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code | | |



Traditional Gutter Systems //traditional



Using marine grade aluminium for ultimate longevity and low maintenance, three distinct bolted gutter systems manufactured to original British Standard cast iron dimensions BS8530.



Features of the Traditional range

Functional life expectancy of 50 years or more with minimal maintenance, only periodic aesthetic cleaning required Manufactured to BS 8530:2010, the design standard for Traditional Half Round, Victorian Ogee and Moulded Ogee aluminium rainwater systems

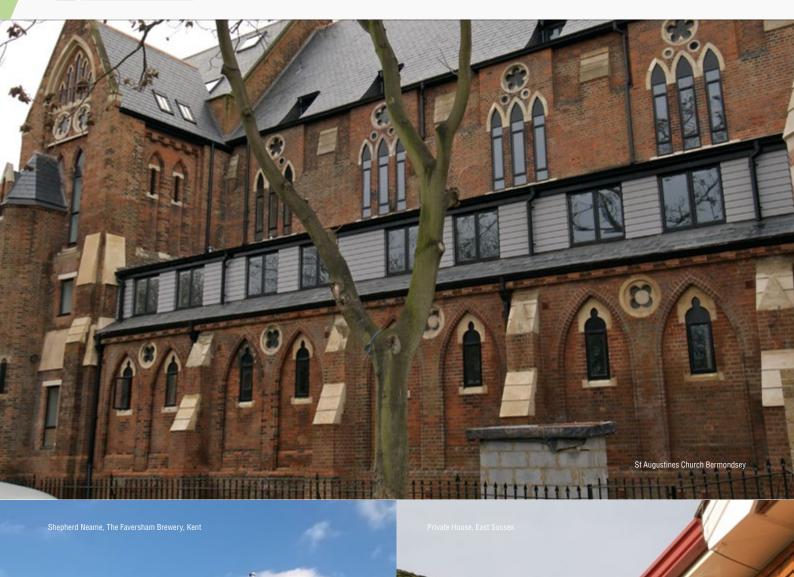
Each profile available in three different sizes

Durable and stong - Manufactured from marine grade aluminium making our Traditional range more corrosion resistant than other grade aluminium systems and cast iron products Fade resistant architectural grade polyester powder coat paint finish

19 standard colours

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

/traditional Traditional Gutter Case Studies





Traditional Gutter Case Studies //traditional

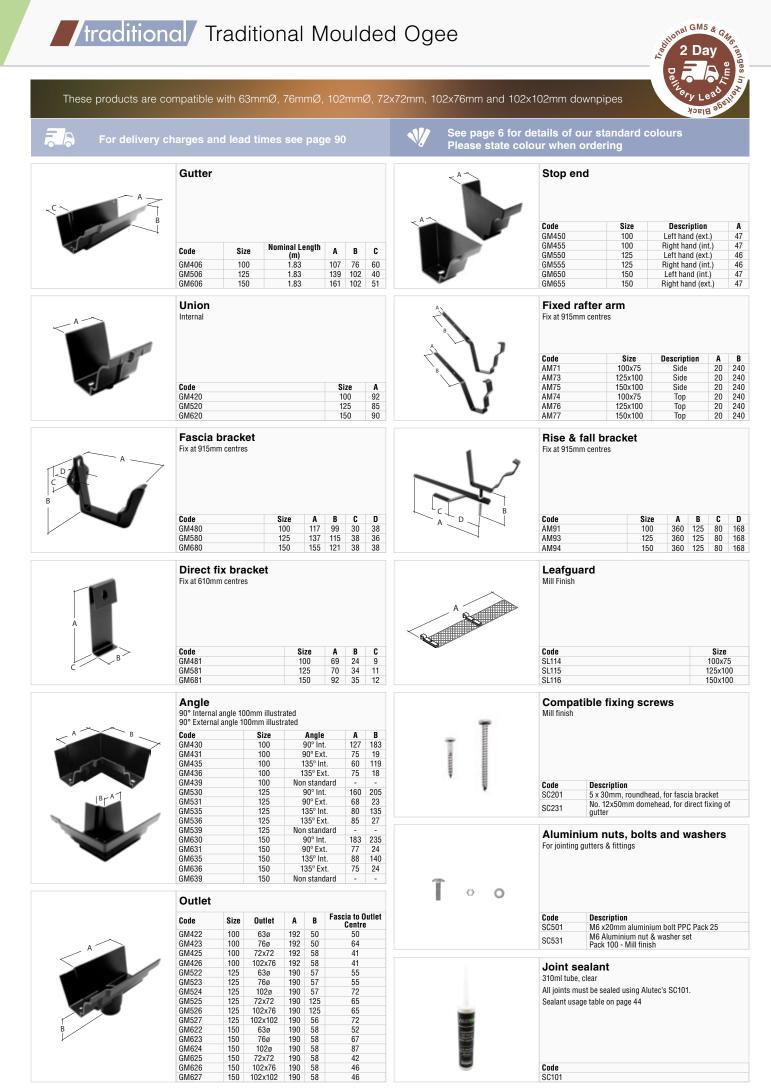


/traditional / Traditional Half Round

| Thes | e products are compatible with 63mmØ, 76mm | nØ, 102mmØ, 72x72mm and 1 | 102x76mm downpipes |
|-----------------|--|---------------------------|---|
| For delivery of | charges and lead times see page 90 | | etails of our standard colours our when ordering |
| | Gutter | | Rise & fall bracket Fix at 915mm centres |
| | Code Size Nominal Length (mm) A B C GC406 100 1.83 105 46 45 GC106 113 1.83 119 51 45 GC506 125 1.83 131 56 45 | | Code Size A B C D AC91 100 360 125 80 168 AC92 113 360 125 80 168 AC93 125 360 125 80 168 |
| A | Union External | A | Leafguard Mill Finish |
| • | Code Size A GC420 100 95 GC120 113 95 GC520 125 95 | a second | Code Size A SL71 100 1220 SL72 113 1220 SL73 125 1220 |
| D B C | Fascia bracket Fix at 915mm centres Code Size A B C D | | Compatible fixing screws Roundhead fascia bracket screw. Mill finish |
| , | GC480 100 112 62 59 38 GC180 113 126 68 66 38 GC580 125 139 74 72 38 | | Code Description SC201 5 x 30mm |
| | Code Size Angle A GC432 100 90° 124 GC437 100 135° 59 GC439 100 Non standard 60132 GC132 113 90° 137 GC137 113 135° 63 GC139 113 Non standard 60532 GC537 125 90° 139 GC539 125 Non standard 55 | Γοο | Code Description SC501 M6 x20mm aluminium bolt PPC Pack 25 SC531 M6 Aluminium nut & washer set Pack 100 - Mill finish |
| A | Gutlet Size Outlet Size A B Fasica to Outlet Centre GC422 100 63ø 134 80 61 GC423 100 76ø 134 42 61 GC425 100 72x72 134 88 61 GC122 113 63ø 132 47 67 GC123 113 72x72 134 88 67 GC522 125 63ø 132 98 73 GC523 125 76ø 133 68 73 GC523 125 102ø 133 36 73 GC524 125 102ø 133 68 73 GC525 125 72x72 134 88 73 GC526 125 102x76 133 103 73 | | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 |
| A^ | Stop end | | |
| | Code Size Description A GC450 100 Internal 45 GC455 100 External 45 GC150 113 Internal 45 GC155 113 External 52 GC550 125 Internal 52 GC555 125 External 50 | | |
| A B B A | Fixed rafter arm Fix at 915mm centres | | L ^{otional GC4, GC, #} |
| | Code Size Description A B AC71 100 Side 20 240 AC72 113 Side 20 240 AC73 125 Side 20 240 AC74 100 Top 20 240 AC75 113 Top 20 240 AC76 125 Top 20 240 | | L ^e 2 Day ^c ρ _c ^c ^c ^c _c ^c ^c ^c _c ^c ^c ^c _c ^c ^c ^c ^c _c ^c |

Traditional Victorian Ogee //traditional/

| | Gutter | | | Fixed rafter arm | n | |
|--------------------|--|--|-------|--|--|---|
| B A | GV406 100 GV106 113 | hal Length (m) A B C 1.83 109 54 45 1.83 121 61 45 1.83 134 68 45 | | Code AV71 AV72 AV73 AV74 AV75 AV76 | 100 Side 2 113 Side 2 125 Side 2 100 Top 2 113 Top 2 | A B 20 24 20 24 20 24 20 24 20 24 20 24 20 24 20 24 20 24 20 24 20 24 |
| A | Union External Code GV420 | Size A 100 96 | | Rise & fall brac Fix at 915mm centres | Size A B (| с Д 30 16 |
| | GV120 GV520 Fascia bracket Fix at 915mm centres | 113 96 125 96 | ~ | AV92 AV93 Leafguard Mill Finish | | 30 16 |
| | Code GV480 GV180 GV580 | Size A B C 100 115 97 38 113 130 97 38 125 150 105 45 | A | Code SL111 SL113 SL125 | Size 100 113 125 | A 122 122 122 |
| | Angle 90° Internal angle 100mm illustrated 90° External angle 100mm illustrated | | T | Compatible fixi Mill Finish | | |
| B _r A 1 | Code Size GV430 100 GV431 100 GV435 100 GV436 100 GV439 100 GV130 113 GV131 113 GV135 113 | Angle A B 90° Int. 125 176 90° Ext. 68 16 135° Int. 60 114 135° Ext. 75 16 Non standard - - 90° Int. 134 186 90° Ext. 63 14 135° Int. 124 67 | | | on , roundhead for fascia bracket Imm, domehead for direct fixin | |
| | GV136 113 GV139 113 GV530 125 GV531 125 GV535 125 GV536 125 GV539 125 | 135° Ext. 70 23 Non standard - - 90° Int. 152 212 90° Ext. 77 18 135° Int. 69 125 135° Ext. 64 22 Non standard - - | Î · o | Aluminium nut: For jointing gutters & fit | ium nuts, bolts and washer gutters & fittings | |
| ~ | Outlet | | | M6 Alumi | on m aluminium bolt PPC Pack 25 nium nut & washer set - Mill finish | i |
| A | Code Size Outlet A GV422 100 63ø 19 GV423 100 76ø 19 GV425 100 72x72 19 GV122 113 63ø 18 GV123 113 76ø 18 GV125 113 72x72 18 GV522 125 63ø 19 GV523 125 76ø 19 GV525 125 72x72 19 GV525 125 72x72 19 GV525 125 72x72 19 GV525 125 72x72 19 | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | Joint sealant 310ml tube, clear All joints must be sealed Sealant usage table on p Code SC101 | | |
| | Stop end | | | 00101 | | |



Aligator[®] Gutter Systems //aligator/





The Aligator range offers two distinctive design solutions:

Aligator Classic profile is a domestic size ogee style gutter system with external unions and brackets. The Deepflow, Ogee No.46, Boxer and Giant profiles with internal joints and concealed brackets, offering a sleek and unobtrusive solution for modern building design.

Features of the Aligator® range

Functional life expectancy of 50 years or more with minimal maintenance, only periodic aesthetic cleaning required

Durable and strong - Manufactured from marine grade aluminium making the Aligator range more corrosion resistant than other grade aluminium systems, steel or cast iron products

Patented Aligator Snap-Fit joint system, proven to reduce installation times by up to 40% compared to traditional bolted systems

Fade resistant architectural grade polyester powder coat paint finish

19 standard colours

Sleek and modern solutions developed with the architects in mind



Aligator Aligator® Gutter Case Studies



Aligator[®] Gutter Case Studies //aligator/



Sissinghurst VA Church of England Primary School, Kent

Aligator Aligator® Classic Snap-Fit Ogee Gutter

| | These products are compatible with 63m | mØ, 76mm Ø and 72x72mm (| downpipes |
|----------------|--|--|--|
| For delivery c | harges and lead times see page 90 | See page 6 for de Please state colo | etails of our standard colours our when ordering |
| A > | Code Nominal Length (m) A B GK413 3 120 75 | A | Leafguard Mill Finish Code A SL101 1220 |
| A | Union External | | Code Description SC201 5 x 30mm roundhead - for gutter fascia bracket SC202 No.10x30mm countersunk - gutter union, angle and outlet screw |
| A B C | GK420 75 Fascia bracket Fix at 1m centres Fix at 1m centres Code A B C D GK480 137 82 96 15 | | SC202 and outlet screw Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 |
| | Code Angle Angle <tha< th=""><th></th><th></th></tha<> | | |
| | Code Angle A GK431 90° 63 GK436 135° 63 GK439 Non standard - | | |
| A | Code Outlet Fascia to Outlet Centre A B GK421 63ø 58 200 70 GK425 72x72 56 200 70 | | |
| A | Grazo T2XTZ So ZOU T0 Stop end (external) (external) Image: Code of the second of the sec | | obsic GK4 range Heritage B |

Aligator® Deepflow Snap-Fit Gutter //aligator/

| For delivery c | harges and lead times see page 90 | See page 6 for d | letails of our standard colours our when ordering |
|--|---|------------------|--|
| A - | Gutter Code Nominal Length A B GD513 3 130 80 | A | Leafguard Mill Finish Code |
| A Contraction of the second se | Union Internal | | SL102 1 Compatible fixing screws Roundhead fascia bracket screw. Mill finish |
| A A | Code A GD520 70 Fascia bracket For linear alignment of brackets use packing shim, SC380 Fix at 750mm centres | | Code Description SC201 5 x 30mm - for gutter fascia bracket Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 |
| | Code A B GD580 25 52 Angle 25 52 90° Internal angle illustrated 90° External angle illustrated 90° External angle illustrated 90° internal 200 GD531 90° external 90535 135° internal 135° external 66 | | Code SC101 |
| A | GD539 Non standard - Outlet 63mm Ø outlet illustrated B Fascia to Outlet Centre GD522 63 Ø 200 70 70 GD523 76 Ø 200 70 70 G0524 102 Ø 200 70 70 GD525 72x72 200 70 70 G0526 102x76 200 70 70 GD527 102x102 200 70 70 G0527 102x102 10 10 10 | | |
| | Stop end Internal Code A GD550 33 | | |
| | Packing shim For use with GD580 fascia bracket Mill finish | | |

Aligator Aligator® Ogee No.46 Snap-Fit Gutter

| For delivery cha | arges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering |
|------------------|---|---|
| A | Gutter | A A Mill Finish |
| | Code Nominal Length (m) A B GG513 3 155 100 | Code SL103 |
| | Union Internal | Compatible fixing screws Roundhead fascia bracket screw. Mill finish |
| | Code A GG520 70 | Code Description SC201 5 x 30mm - for gutter fascia bracket |
| L-A-T | Fascia bracket For linear alignment of brackets use packing shim, SC381 Fix at 750mm centres | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 |
| | Code A B GG580 30 85 | Code SC101 |
| | Code Angle B G6530 90° internal 200 45 G6531 90° external 45 200 G6535 135° internal 135 71 G6536 135° external 71 135 G6539 Non standard - - | |
| A | Outlet | |
| B | Code Outlet Size A B Fascia to Outlet Centre Centre G6522 63 Ø 200 70 73 G6523 76 Ø 200 70 73 G6524 102 Ø 200 70 73 G6525 72x72 200 70 73 G6526 102x76 200 70 73 G6527 102x102 200 70 73 | |
| A | Stop end Internal | |
| | CodeDescriptionAGG550Left hand33GG555Right hand33 | |
| | Packing shim For use with GG580 fascia bracket Mill finish | |

Aligator[®] Boxer Snap-Fit Gutter /aligator

| For delivery cl | narges and lead times see page 90 | | details of our standard colours lour when ordering | | |
|-----------------|---|---------------------------------------|--|--|--|
| | Gutter | | Packing shim Mill finish For use with GF480 and GF080 fascia bracket Code Gutter Size | | |
| В | GF413 3 120 80 GF513 3 135 100 GF613 3 160 100 | | SC382 120x80 SC381 135x100 160x100 | | |
| A | Union Internal Code Size A | A | Leafguard Mill Finish Code Gutter Size A | | |
| | GF420 120 70 GF520 135 70 GF620 160 70 | | SL105 120x80 122 SL106 135x100 122 SL107 160x100 122 | | |
| B | Fascia bracket 'Use with 120x80 Gutter For linear alignment use shim plate SC382 *Use with 135x100 and 160x100 Gutters For linear alignment use shim plate SC381 Fix at 750mm centres Code A B GF4801 30 65 | • • • • • • • • • • • • • • • • • • • | Compatible fixing screws Roundhead fascia bracket screw. Mill finish Code Description | | |
| | GF080 [‡] 30 85 | | SC201 5 x 30mm - for gutter fascia bracket | | |
| | Angle 90° Internal angle illustrated 90° External angle illustrated Code Size Angle A GF430 120 90° internal 185 GF431 120 90° external 65 GF435 120 135° internal 115 GF436 120 135° external 65 GF439 120 Non standard - GF531 135 90° external 65 GF535 135 135° internal 120 GF536 135 90° internal 65 GF536 135 135° internal 120 GF630 160 90° internal 225 GF631 160 90° external 65 GF635 160 135° internal 135 GF636 160 | | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 | | |
| | Outlet | | | | |
| A | Code Size Outlet A B Pascial to outlet Centre Centre GF422 120 63 Ø 200 70 66 GF423 120 76 Ø 200 70 66 GF423 120 76 Ø 200 70 66 GF425 120 72x72 200 70 66 GF522 135 63 Ø 200 70 75 GF523 135 76 Ø 200 70 75 GF524 135 102 Ø 200 70 75 GF525 135 72x72 200 70 75 GF526 135 102 Ø 200 70 75 GF527 135 102x102 200 70 75 GF623 160 76 Ø 200 70 88 GF623 160 76 Ø 200 70 88 GF626 160 102 x76 200 | | | | |
| A | Stop end Internal | | | | |
| | Size Desription A GF450 120 Left hand 33 GF455 120 Right hand 33 GF550 135 Left hand 33 GF555 135 Right hand 33 GF650 135 Left hand 33 GF650 160 Left hand 33 | | | | |

Aligator Aligator® Giant Snap-Fit Gutter

| These are compatible with 76mmØ, 102mmØ, 72x72mm, 102x76mm and 102x102mm downpipes | | | | | | | |
|--|---|-----|--------------------------------------|--|--|--|--|
| For delivery c | harges and lead times see page 90 | S P | ee page 6 for de lease state colo | etails of our standard colours our when ordering | | | |
| A | Gutter Code Nominal Length (m) A B GH813 3 200 150 | | | Compatible fixing screws Mill finish Code Description SC202 No.10x30mm countersunk - gutter union, angle and outlet screw SC231 S0mm x No.12 x 50mm, domehead for use with stiffener bracket GH885 | | | |
| | Union External | (| 0 | Code Description SC521 M6 x 20mm aluminium washer set | | | |
| | Stiffener bracket & spacer assembly 4 stiffener brackets and spacers required to each 3m gutter length Mill finish Fix at 750mm centres Code A GH885 25 | | C.维.维.(音) | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 | | | |
| | Code Angle 0° Internal angle illustrated 90° External angle illustrated Code Angle A GH830 90° internal 250 GH831 90° external 50 GH835 135° internal 135° external 67 GH839 Non standard | | | | | | |
| A B C | Code Outlet Size A B C GH823 76 Ø 100 100 70 GH824 102 Ø 128 128 70 GH825 72x72 120 120 70 GH826 102x76 160 120 70 GH827 102x102 140 140 70 | | | | | | |
| A | Stop end External Code Description A GH850 Left hand 33 GH855 Right hand 33 | | | | | | |
| A | Leafguard Mill Finish Code A SL225 1220 | | | | | | |

evolve Gutter flow rates

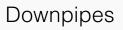
| Gutter Profile | Downpipe Size | End | Outlet | Centre Outlet | |
|------------------------|---------------|--------------|---------------------------------------|---------------|---------------------------------------|
| | | Capacity I/s | Effective Roof Area m ² | Capacity I/s | Effective Roof Area m ² |
| Half Round 123x51mm | 63mm Ø | 0.85 | 41 | 1.8 | 87 |
| Deepflow 128x75mm | 76mm Ø | 2.5 | 120 | 4.9 | 232 |
| Box | 76mm Ø | 3.0 | 142 | 6.0 | 286 |
| 130x85mm | 72x72mm | 3.5 | 167 | 7.0 | 333 |
| Ogee | 76mm Ø | 3.0 | 142 | 6.0 | 286 |
| 130x95mm | 72x72mm | 3.5 | 167 | 7.0 | 333 |

/traditional/ Gutter flow rates

| Gutter Profile | Downpipe Size | End Outlet | | Centre Outlet | |
|------------------------------------|--|--------------|---------------------------------------|---------------|---------------------------------------|
| | | Capacity I/s | Effective Roof Area m ² | Capacity I/s | Effective Roof Area m ² |
| 100mm Half Round 113mm 125mm | 63mmØ, 76mmØ, 72x72mm | 0.70 | 33 | 1.40 | 66 |
| | 63mmØ, 76mmØ, 72x72mm | 0.85 | 40 | 1.70 | 80 |
| | 63mmØ, 76mmØ, 102mmØ, 72x72mm, 102x76mm | 1.27 | 60 | 2.54 | 120 |
| | | | | | |
| 100mm Victorian Ogee | 63mmØ, 76mmØ, 72x72mm | 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 | 63mmØ, 76mmØ, 72x72mm, 102x76mm | 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 |
| | 72x72mm | 2.21 | 105 | 3.53 | 168 |
| | 102x76mm | 2.21 | 105 | 4.49 | 213 |
| | 102x102mm | 2.21 | 105 | 4.51 | 214 |
| 150mm | 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 |

/aligator/ Gutter flow rates

| Gutter Profile | Downpipe Size | | d Outlet | Cent | tre Outlet |
|--|-------------------|--------------|---------------------------------------|--------------|---------------------------------------|
| | | Capacity I/s | Effective Roof Area m ² | Capacity I/s | Effective Roof Area m ² |
| Aligator [®] Classic | 63mm Ø | 2.15 | 102 | 4.13 | 196 |
| 120x75mm | 76mm Ø | 2.15 | 102 | 4.13 | 196 |
| | 72x72mm | 2.15 | 102 | 4.13 | 196 |
| Aligator [®] Deepflow 130x80mm | 63mm Ø, 76mm Ø | 2.10 | 100 | 4.00 | 190 |
| | 102mm Ø, 72x72mm | 2.20 | 104 | 4.20 | 200 |
| () | 102x76mm | 2.20 | 104 | 4.20 | 200 |
| \bigcirc | 102x102mm | 2.30 | 109 | 4.40 | 209 |
| Aligator [®] Ogee No. 46 | 63mm Ø | 3.50 | 166 | 5.90 | 280 |
| 155x100mm | 76mm Ø | 3.80 | 180 | 5.90 | 280 |
| T | 102mm Ø | 4.00 | 190 | 7.60 | 361 |
| | 72x72mm, 102x76mm | 3.90 | 185 | 7.50 | 357 |
| | 102x102mm | 4.10 | 195 | 7.60 | 361 |
| Aligator [®] Boxer | 63mm Ø | 2.27 | 108 | 3.39 | 161 |
| 120x80mm | 76mm Ø | 2.27 | 108 | 3.75 | 178 |
| \] | 72x72mm | 2.27 | 108 | 4.26 | 202 |
| | 102x76mm | 2.27 | 108 | 4.34 | 206 |
| Aligator [®] Boxer | 63mm Ø | 4.17 | 198 | 4.17 | 198 |
| 135x100mm | 76mm Ø | 4.38 | 208 | 5.92 | 281 |
| 1 1 | 102mm Ø | 4.38 | 208 | 5.97 | 284 |
| | 72x72mm | 4.38 | 208 | 6.49 | 309 |
| | 102x76mm | 4.38 | 208 | 7.09 | 337 |
| | 102x102mm | 4.38 | 208 | 7.14 | 340 |
| Aligator [®] Boxer | 63mm Ø | 4.22 | 200 | 4.22 | 200 |
| 160x100mm | 76mm Ø | 5.25 | 249 | 6.06 | 288 |
| | 102mm Ø | 5.25 | 249 | 6.11 | 290 |
| | 72x72mm | 5.25 | 249 | 6.68 | 318 |
| | 102x76mm | 5.25 | 249 | 7.35 | 350 |
| | 102x102mm | 5.25 | 249 | 7.41 | 352 |
| Aligator [®] Giant | 76mm Ø | 7.84 | 373 | 8.67 | 412 |
| 200x150mm | 102mm Ø | 7.91 | 376 | 8.75 | 416 |
| | 7 72x72mm | 7.92 | 377 | 9.59 | 456 |
| | 102x76mm | 7.92 | 377 | 10.60 | 504 |
| | 102x102mm | 7.92 | 377 | 10.76 | 512 |
| | | | | | |





Downpipes

| | To view compatible gutt | er systems, see page 7 |
|---|--|--|
| For delivery charges and lead times see page 90 | | See page 6 for details of our standard colours Please state colour when ordering |
| A | Downpipe Non socketed pipe | Code A B C RT280 94 118 59 |
| | RT213 3000 Pipe socket (eared) | Rainwater diverter |
| | Code A B C D E RT220 82 52 94 116 59 | Code A B C D TRD25 134 500 74 30 |
| | Pipe socket (non eared) Code A B | Compatible fixing screws Image: Code screw for downpipe SC205 No.12 x 50mm domehead screw for downpipe SC208 M6 x 70mm hexagonal coach screw for downpipe SC208 M6 popper |
| Tod AL | RT220NE 82 52 Bend Code Description A B C RT232 Top 112.5° 50 35 46 RT230 92.5° 37 27 46 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 |
| C B A | Code A B C RT242 95 26 115 | |
| A | Code A B RT250 92 104 | |
| | Code A B C RT260 300 140 105 | A Lenge in Herritors Barrier B |

Tudor Circular Downpipe

| | To view compatible gutte | er systems, see page 7 |
|-----------------|---|---|
| For delivery cl | narges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering |
| A B C C C | Code Size Nominal Length (m) A B C TR212 63 2 110 145 45 TR212NE 63 2 - 45 TR213NE 63 3 110 145 45 TR213NE 63 3 - - 45 TR312 76 2 115 160 52 TR313NE 76 3 115 160 52 TR313NE 76 3 15 160 52 TR412 102 2 141 186 65 TR413 102 3 141 186 65 TR413NE 102 3 - 65 | B Code Size A B C D TR2903 63 75 70 370 100 TR2904 63 100 70 355 100 TR2904 63 150 70 400 100 TR3903 76 75 70 380 130 TR3904 76 100 70 380 130 TR3904 76 150 70 400 130 TR3904 76 150 70 400 130 TR4903 102 75 94 512 150 TR4904 102 100 94 516 150 |
| | Code Size A B Description TR220 63 75 30 eared TR220NE 63 75 30 non eared TR320NE 76 81 30 eared TR320NE 76 81 30 eared TR420 102 94 30 eared TR420NE 102 94 50 non eared | Code Size A min A max B C Image: Code Size A min A B C Image: Code Size A min Max B C Image: Code Size A min Max B C Image: Code Size A min Max B C Image: Code Size A for 70 100 Image: Code Image: Code Size 76 200 450 70 163 Image: Code Image: Code Image: Code Image: Code Image: Code 102 280 900 70 163 Image: Code Image: Code </th |
| A | Size Angle A B C TR230 63 92.5° 150 240 70 TR230 63 112.5° 190 230 70 TR330 76 92.5° 180 250 70 TR332 76 112.5° 220 250 70 TR430 102 92.5° 280 325 94 TR432 102 112.5° 230 270 94 | Code Size A B C D TRD25 63 134 500 74 30 TRD35 76 134 500 74 30 |
| C B | Size Angle A B C TR240 63 92.5° 215 138 75 TR240 63 112.5° 215 138 75 TR340 76 92.5° 250 138 70 TR342 76 112.5° 250 138 70 TR440 102 92.5° 260 150 110 TR442 102 112.5° 260 130 130 | Compatible fixings Code Description SC208 M6 x 70mm hexagonal coach screw - for downpipe and hopper SC209 M6 x 100mm hexagonal coach screw - for wall spacer |
| | Shoe Size Angle A B TR250 63 112.5° 85 90 TR250NE 63 non eared 85 - TR350 76 112.5° 103 106 TR350NE 76 non eared 103 - TR450 102 112.5° 125 131 TR450NE 102 non eared 125 - | Code Description SC712 Pack of 2 |
| | Code Size A B C TR260 63 300 140 105 TR260NE 63 300 140 105 TR360NE 76 300 140 105 TR360NE 76 300 140 105 TR360NE 76 300 140 105 TR460 102 300 140 105 TR460NE 102 300 140 105 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 |
| R CONTRACTOR | Code Size A B C TR280 63 117.5 93.5 45 TR380 76 136 111 52 TR480 102 168 143 65 | Audor TR2 & TR3 Files |

| | To view compatible gutte | er systems, see page 7 | |
|----------------|---|---|------------------------------|
| For delivery c | charges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering | |
| A | Code Size A B RE213 63 3000 30 RE313 76 3000 30 RE413 102 3000 50 | Code Size A I RE280 63 94 1 RE380 76 112 13 RE480 102 110 10 | 37 69 |
| A | Code Size A RE220 63 64 RE320 76 69 RE420 102 104 | RE2925 63 90 250 5 RE2950 63 90 500 5 RE29100 63 90 1000 5 RE3925 76 90 250 5 RE3950 76 90 500 5 RE39100 76 90 1000 5 | |
| A | Code Size A RE224 63 50 RE324 76 50 RE424 102 64 | | C D 15 25 15 25 |
| A | Code Size Angle A B RE230 63 92.5° 115 51 RE232 63 112.5° 90 56 RE330 76 92.5° 115 51 RE332 76 112.5° 90 56 RE430 102 92.5° 160 106 RE432 102 112.5° 130 76 | Compatible fixing screws Code Description SC208 M6 x 70mm hexagonal coach screws - for downpipe and hopper | or |
| A | Size A B C Code Size A B C RE242 63 176 65 107 RE342 76 180 180 120 RE442 102 310 150 196 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 | |
| A | Code Size A B RE250 63 167 58 RE350 76 173 62 RE450 102 203 75 | | |
| | Code Size A B C RE260 63 345 140 105 RE360 76 345 138 104 RE460 102 345 140 105 | Eventil RE3 ray | Se amil Se |

| | To view compatible gutte | er systems, see page 7 | | |
|----------------|--|--|--|--|
| For delivery c | harges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering | | |
| A B | Code Size Nominal Length (m) A B C RSR313 72x72 3 125 151 42 RSR313NE 72x72 3 - - 42 RSR113 102x76 3 154 182 44 RSR113NE 102x76 3 - - 44 RSR413 102x102 3 154 182 56 RSR413NE 102x102 3 - - 56 | Gold Barton Fixed offset For 102x76mm size, add suffix R or L to product code if right or left hand projection is required For 102x76mm size, add suffix R or L to product code if right or left hand projection is required Code Size A B C D RSR3903 72x72 75 80 160 60 RSR3904 72x72 150 80 193 60 RSR1906 72x76 75 82 160 60 RSR1906 102x76 75 82 160 60 RSR1906 102x76 150 82 185 60 RSR1906 102x76 150 82 185 60 RSR4903 102x102 75 82 188 60 RSR4904 102x102 150 82 22 60 | | |
| A C D | Code Size A B C D RSR320 72x72 80 83 83 40 RSR320NE 72x72x 80 83 83 40 RSR320NE 72x72x 80 83 83 40 RSR120 102x76 80 87 112 40 RSR420 102x102 80 112 112 40 | Code Size A min A max B C RSR3945 72x72 75 450 82 60 RSR1945 102x76 75 450 82 60 RSR1945 102x76 75 450 82 60 RSR1945 102x76 75 900 82 60 | | |
| A | RSR420NE 102x102 80 112 112 40 Bend For 102x76mm size, add suffix R or L to product code if right or left hand projection is required Code Size 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 RSR135 102x76 135° 55 132 RSR430 102x102 92.5° 198 198 RSR432 102x102 125.5° 755 155 RSR435 102x102 135° 55 140 | A B C D E A B C D E A A B C D E E Code Size A B C D E RSR370 72x72 85 85 65 41 30 RSR470 102x102 115 115 65 41 30 | | |
| A | Branch For 102x76mm size, add suffix R or L to product code if right or left had projection is required Code Size Angle A B C Code Size Angle A B C Code Size Angle A B C Code Size Angle A B C Code Size Angle A B C Size Angle A B C Size Colspan="2">C Size C Size Size <td colspan="2" size<="" t<="" th=""><th>Cast spacer bobbin 30mm projection Code Description SC711 For use with downpipe</th></td> | <th>Cast spacer bobbin 30mm projection Code Description SC711 For use with downpipe</th> | | Cast spacer bobbin 30mm projection Code Description SC711 For use with downpipe |
| B | Shoe Size Angle A B RSR350 72x72 120° 96 100 RSR350NE 72x72 120° 96 100 RSR150 102x76 120° 108 170 RSR150NE 102x76 120° 108 170 RSR150NE 102x76 120° 132 198 RSR450NE 102x102 120° 132 198 | Code Size A B C Code Size A B C RSRD35 72x72 98 30 500 RSRD15 102x76 98 30 500 | | |
| A C | Code Size A B C RSR360 72x72 300 140 105 RSR360NE 72x72 300 140 105 RSR160 102x76 300 140 105 RSR160NE 102x76 300 140 105 RSR160NE 102x102 300 140 105 RSR460 102x102 300 140 105 RSR460NE 102x102 300 140 105 | Compatible fixing screws Image: Code Description SC208 M6 x 70mm hexagonal coach screw - for downpipe and hopper SC209 M6 x 100mm hexagonal coach screw - for cast spacer bobbin | | |
| C A B | Code Size A B C RSR380 72x72mm 103 128 25 RSR180 102x76 134 159 25 RSR480 102x102 134 159 25 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 | | |

Flushfit Square & Rectangular Downpipe

| | To view compatible gutte | er systems, see page 7 |
|--------------|--|---|
| For delivery | charges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering |
| A | Downpipe ^{3m} | Code Size A min A max B C RJ3925 72x72 75 250 75 60 RJ3950 72x72 75 500 75 60 RJ39100 72x72 75 1000 75 60 RJ39100 72x72 75 1000 75 60 RJ39100 72x72 75 1000 75 60 |
| В | Code Size A B RJ313 72x72 3000 30 RJ113 102x76 3000 34 RJ413 102x102 3000 34 | RJ1950 102x76 75 500 83 60 RJ19100 102x76 75 1000 83 60 RJ4925 102x102 75 250 83 60 RJ4925 102x102 75 500 83 60 RJ4950 102x102 75 500 83 60 RJ4950 102x102 75 500 83 60 RJ49100 102x102 75 1000 83 60 |
| | Internal joint spigot | B B B C C C C C C C C C Slip socket) Adapts to 110mm Ø drain pipe socket |
| | Code Size A RJ320 72x72 62 RJ120 102x76 70 RJ420 102x102 70 | Code Size A B C D E RSR370 72x72 85 85 65 41 30 RSR170 102x76 90 116 65 41 30 RSR470 102x102 115 15 65 41 30 |
| A | Code Size Angle A B RJ330 72x72 92.5° 150 150 RJ332 72x72 112.5° 128 128 RJ130 102x76 92.5° 175 175 RJ312 102x76 112.5° 150 150 RJ430 102x102 92.5° 198 198 RJ432 102x102 112.5° 154 154 | Code Size A B C RSRD35 72x72 98 30 500 RSRD15 102x76 98 30 500 |
| A | Code Size A B C RJ342 72x72 260 127 154 RJ42 102x76 280 112 190 RJ442 102x102 280 112 190 | Compatible fixing screws Code Description SC208 M6 x 70mm hexagonal coach screw - for downpipe and hopper |
| B | Code Size A B RJ350 72x72 96 160 RJ150 102x76 104 187 NUCO 1002x76 104 100 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code |
| A C | RJ450 102x102 130 202 Access pipe Size A B C RJ360 72x72 300 140 105 RJ160 102x76 300 140 105 RJ460 102x102 300 140 105 | SC101 |
| C | RJ460 102x102 300 140 105 Pipe clip Size A B C RJ380 72x72 103 128 25 RJ180 102x702 134 159 25 RJ480 102x102 134 159 25 | Fuishfit RJ3 rando II Herita |

Vandal Resistant Downpipe

| | To view compatible gutte | er systems, see page 7 |
|--------------|---|--|
| For delivery | charges and lead times see page 90 | See page 6 for details of our standard colours Please state colour when ordering |
| | Code Size Nominal Length (m) A B C RVR313 72x72 3 100 50 72 RVR113 102x76 3 100 50 102 RVR113 102x76 3 100 50 102 | Code Size A B C RVR380 72x72 150 68 38 RVR480 102x76 150 98 58 |
| | Code Size A RVR320 72x72 70 RVR120 102x76 70 RVR420 102x102 70 | B B B Code Code Provide required dimensions with order Code Code |
| A | Code Size Angle A B RVR330 72x72 92.5° 150 150 RVR330 72x72 92.5° 150 150 RVR332 72x72 112.5° 128 128 RVR335 72x72 135° 110 110 RVR130 102x76 92.5° 150 150 RVR335 72x72 112.5° 150 150 RVR130 102x76 92.5° 150 150 RVR132 102x76 112.5° 150 150 RVR132 102x76 12.5° 150 150 RVR335 102x102 92.5° 154 154 RVR432 102x102 112.5° 154 154 | Adjustable eaves offset Non-standard projections available on request Code Size A min A B C RVR3945 72x72 75 450 82 60 RVR3945 72x72 75 450 82 60 RVR1945 102x76 75 900 82 60 RVR1990 102x76 75 900 82 60 RVR4945 102x102 100 900 82 60 RVR4990 102x102 100 900 82 60 RVR4900 102x102 100 900 82 60 |
| | Branch | 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 |
| A | Code Size Angle A B RVR340 72x72 92.5° 260 114 RVR342 72x72 112.5° 260 130 RVR345 72x72 135° 260 160 RVR140 102x76 92.5° 280 140 RVR145 102x76 112.5° 280 156 RVR145 102x102 92.5° 280 164 RVR440 102x102 92.5° 280 164 RVR442 102x102 12.5° 280 156 RVR445 102x102 135° 280 164 | Code Description SC241 No. 12 X 50mm countersunk screw for fixing plate |
| B | Shoe Size A B RVR350 72x72 101 270 RVR150 102x76 108 270 RVR450 102x102 140 270 | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. Sealant usage table on page 44 Code SC101 |
| | Code Size A B C RVR360 72x72 300 140 105 RVR160 102x76 300 140 105 RVR460 102x102 300 140 105 | |

Hopper Heads

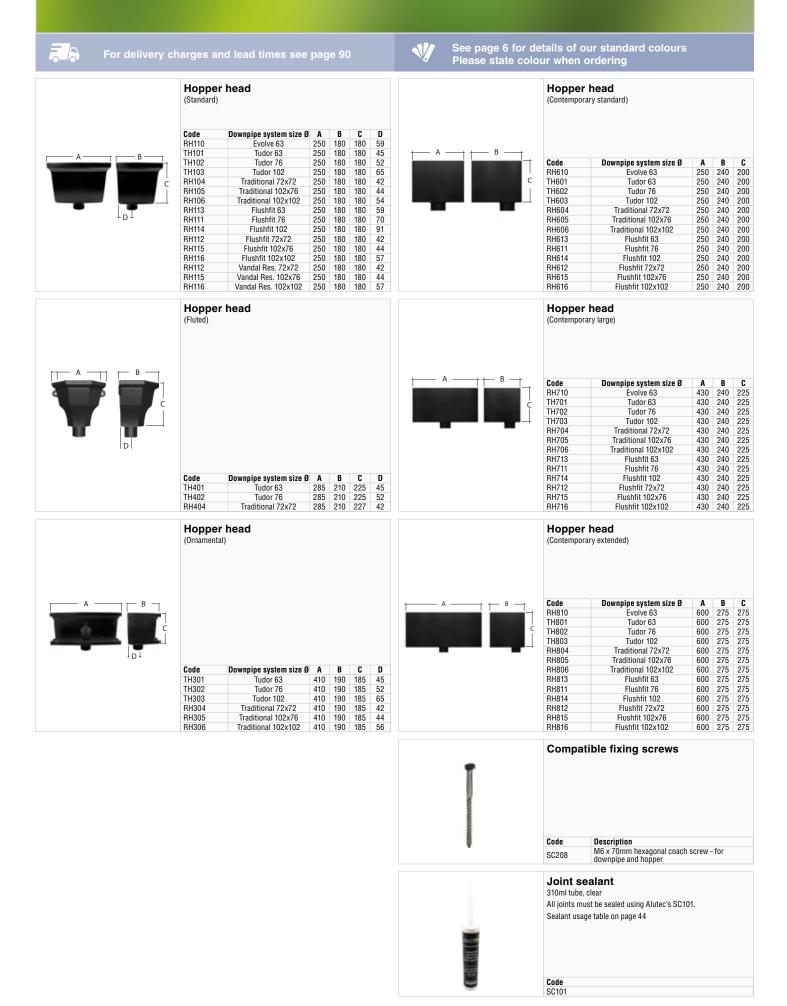


Hopper Heads

Hopper Heads Case Studies



Hopper Heads



Hopper Head Flow Capacity



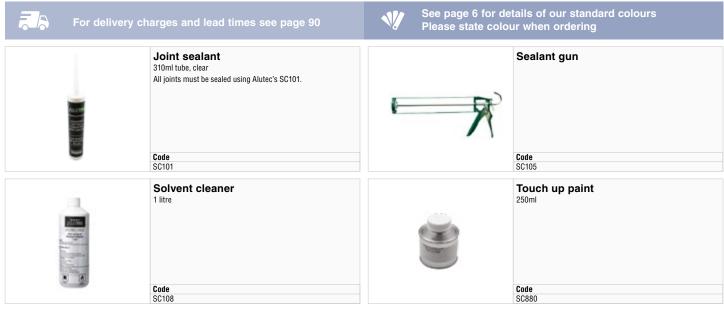
| Hopper Heads | Downpipe Size | Capacity, I/s |
|--------------|---------------|---------------|
| | 63mmØ | 3.01 |
| | 76mmØ | 4.46 |
| Standard | 102mmØ | 7.94 |
| Stanuaru | 72x72mm | 4.37 |
| | 102x76mm | 7.17 |
| | 102x102mm | 9.49 |
| | 63mmØ | 3.01 |
| Fluted | 76mmØ | 4.46 |
| | 72x72mm | 4.37 |
| | 63mmØ | 3.01 |
| | 76mmØ | 4.46 |
| Omerandal | 102mmØ | 7.94 |
| Ornamental | 72x72mm | 4.37 |
| | 102x76mm | 7.17 |
| | 102x102mm | 9.49 |
| | 63mmØ | 3.5 |
| | 76mmØ | 5.1 |
| Contemporary | 102mmØ | 9.3 |
| Standard | 72x72mm | 5.8 |
| | 102x76mm | 8.6 |
| | 102x102mm | 11.6 |

| Hopper Heads | Downpipe Size | Capacity, I/s |
|--------------|---------------|---------------|
| | 63mmØ | 3.8 |
| | 76mmØ | 5.5 |
| Contemporary | 102mmØ | 10 |
| Large | 72x72mm | 6.2 |
| | 102x76mm | 9.3 |
| | 102x102mm | 12.5 |
| | 63mmØ | 4.3 |
| | 76mmØ | 6.2 |
| Contemporary | 102mmØ | 11.2 |
| Extended | 72x72mm | 7 |
| | 102x76mm | 10.5 |
| | 102x102mm | 14.1 |

Non-Standard Hoppers

Individually designed hoppers can be fabricated from sheet aluminium and a variety of decorative cast motifs and embellishments can be added to enhance the appearance if required.

Installation Sundries and Sealant Usage Table



IMPORTANT: ONLY USE ALUTEC SUNDRIES TO ENSURE SYSTEM LIFE EXPECTANCY

Sealant usage table

Approximate number of joints per tube of Alutec sealant



| Evolve Half Round | 30 |
|--|---|
| Evolve Deepflow | 30 |
| Evolve Box | 30 |
| Evolve Ogee | 30 |
| Evolve 63mm Ø pipe | 30 |
| Traditional Half Round 100mm Traditional Half Round 113mm Traditional Half Round 125mm Traditional Victorian Ogee 100mm Traditional Victorian Ogee 113mm Traditional Victorian Ogee 125mm Traditional Moulded Ogee 100mm Traditional Moulded Ogee 125mm Traditional Moulded Ogee 150mm | 16 14 14 12 11 11 . 9 |

| Aligatore Classic Ogee5Aligatore Deepflow6Aligatore Ogee No. 46.4Aligatore Boxer 120x80mm5Aligatore Boxer 135x100mm4Aligatore Boxer 135x100mm4Aligatore Boxer 160x100mm4Aligatore Giant3Tudor 63mm Ø pipe30Tudor 76mm Ø pipe30Tudor 102mm Ø pipe30Traditional 72x72mm pipe17Traditional 102x102mm pipe13Traditional 102x102mm pipe12Flushfit all pipe sizes30Vandal Resistant all pipe sizes30 |
|--|
|--|



Evolve range

Bracket Centres

Gutter brackets must be fixed at maximum of 1m centres.

Jurajoint

Jurajoint is our patented innovative method of jointing aluminium gutter, combining the simplicity of a rubber seal with the security of Alutec Sealant. Sealant SC101 is simply applied in one band into the central channel of the rubber seal. When the joint is snapped together it bonds the rubber seal to the gutter surface achieving a durable, thermally flexible and leak free joint.



Aligator range

Bracket Centres

Gutter brackets must be fixed at a maximum of 750mm centres, except Aligator Classic which should be at a maximum of 1m centres.

Snap-Fit

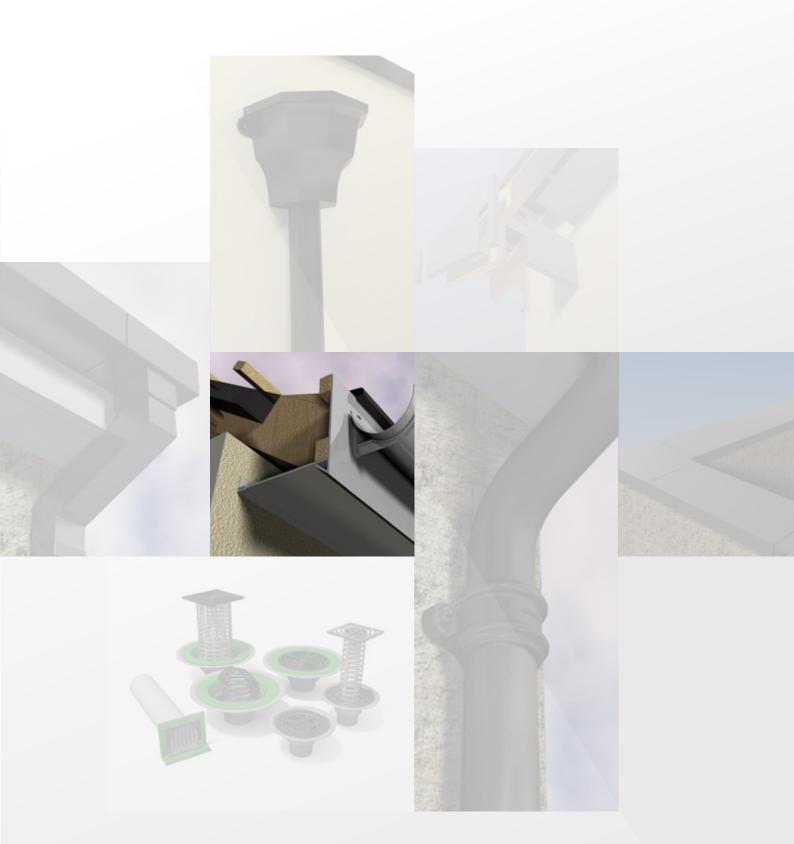
The patented Aligator® Snap-Fit joint system is proven to reduce installation times by up to 40% compared to traditional boited systems. The 'no-bolt' design provides a secure, leak free installation. Each joint is made using four 8mm beads of Alutec sealant.



Traditional range

Bracket Centres

Fascia brackets must be installed at 915mm centres. Direct fix option is only available on Moulded Ogee gutter with fixings at 610mm centres.



Fascia & Soffit Systems



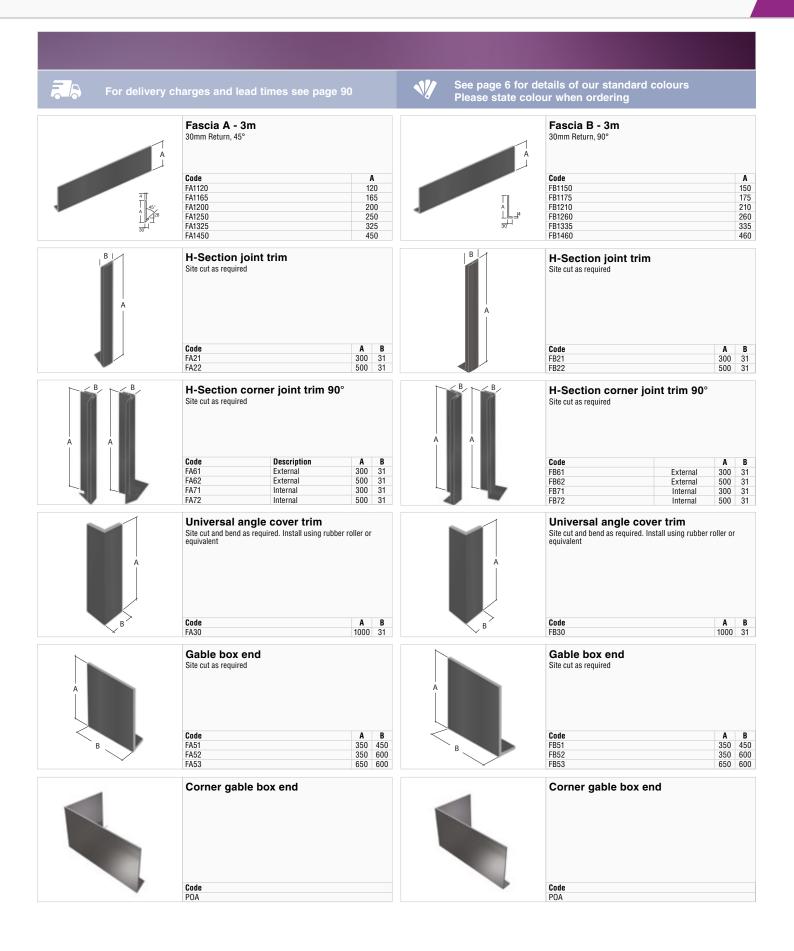
Fascia and Soffit Case Studies



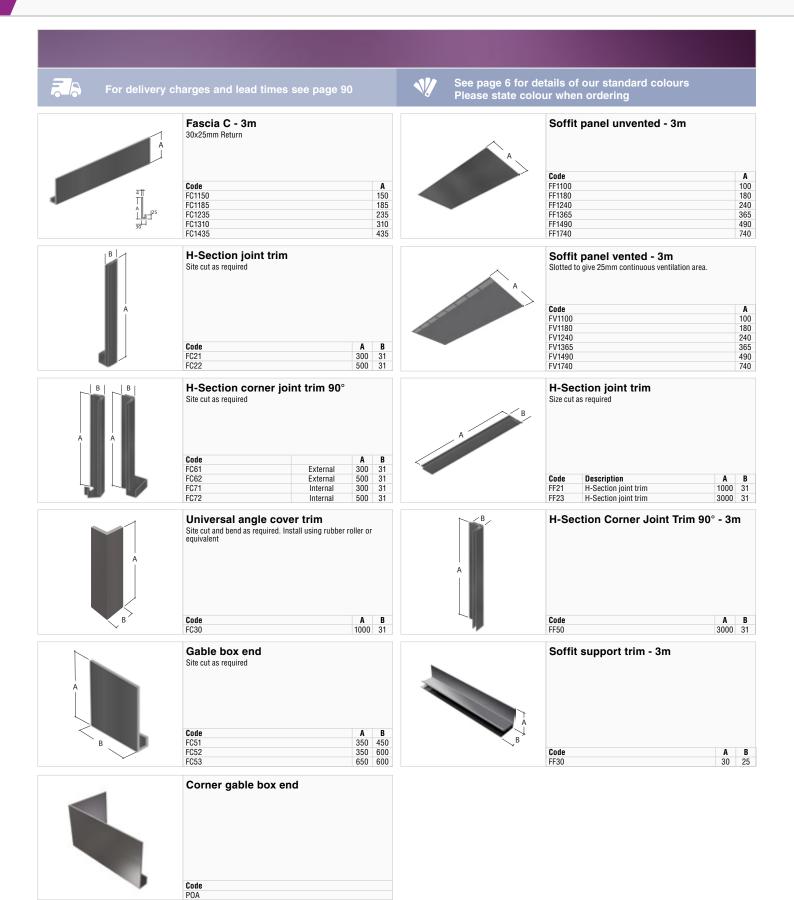


Fascia Type A and Fascia Type B //evoke/





evoke Fascia Type C and Soffit System



Installation Sundries //evoke/



| F | or delivery charges and lead times see page 90 | N/ | See page 6 Please stat | for details of e colour when | our standard colours ordering |
|------------|---|------|---------------------------|---------------------------------|---|
| | Joint sealant 310ml tube, clear All joints must be sealed using Alutec's SC101. | | | Solver 1 litre | nt cleaner |
| | Code SC101 | | | Code SC108 | |
| | Silicone sealant colour matched For use with Fascia and Soffit Systems only | | | Bondi 70mm x 3 | ng back plate m |
| the second | Code SC103 | | | Code FY40 | Description For use with Sikatack™ Panel System - Site cut as required Contact Alutec Technical Services department for further details |
| | Compatible pin fixing Code Description SC670 Polypin 2 x 30mm - colour matched (100 per bag) | | | | |
| 1 | Compatible pin fixing | | | | |
| | Code Description SC280 Poly nail 3 x 50mm - colour matched fixing fa and softic panels to rafter feet (100 per bag) | scia | | | |
| | Compatible fixing screws | | | | |
| | No. 8x25mm flangehead screw - alternative to polypin fixing (colour matched) | | | | |

Coping Systems



Coping Systems



Coping Systems Case Studies



| For delivery c | harges and lead times see page 90 | | details of our standard colours blour when ordering |
|-------------------------|--|---|---|
| | Coping - 3m Code Description CT1160 Coping Length To Fit 100-160mm Wall Width CT1280 Coping Length To Fit 161-220mm Wall Width CT1280 Coping Length To Fit 281-340mm Wall Width CT1400 Coping Length To Fit 281-340mm Wall Width CT1460 Coping Length To Fit 401-460mm Wall Width CT1460 Coping Length To Fit 401-460mm Wall Width | | Stop end upstand - Left hand Code Wall With Ranges CT7160 100-160mm CT7220 161-220mm CT7280 221-280mm CT7340 281-340mm CT7400 341-400mm CT7450 401-460mm CT7520 461-520mm CT7580 521-580mm CT7640 581-640mm CT7760 521-580mm CT7760 701-700mm CT7780 701-760mm CT7780 761-820mm CT780 880-mm |
| nnt ge Wall Width | C11520 Coping Length To Fit 461-520mm Wall Width C11580 Coping Length To Fit 531-580mm Wall Width C11640 Coping Length To Fit 531-640mm Wall Width C11640 Coping Length To Fit 531-640mm Wall Width C11700 Coping Length To Fit 531-640mm Wall Width C11760 Coping Length To Fit 751-760mm Wall Width C11820 Coping Length To Fit 761-820mm Wall Width C11880 Coping Length To Fit 781-820mm Wall Width C11880 Coping Length To Fit 821-880mm Wall Width C11880 Coping Length To Fit 821-880mm Wall Width C11880 Coping Length To Fit 821-880mm Wall Width C12160 100-160mm C12220 161-220mm C12220 161-220mm C12340 221-280mm C12400 341-400mm C12400 341-400mm C12400 341-400mm C12400 401-460mm | | Stop end upstand - Right hand Code Wall Width Ranges C18160 100-160mm C18200 161-220mm C18280 221-280mm C18280 221-280mm C18340 281-340mm C18400 341-400mm C18450 401-460mm C18520 461-520mm C18580 521-580mm C18580 581-640mm C18640 581-640mm C18700 641-700mm C18760 701-760mm C18820 761-820mm C18820 821-880mm |
| | CT2520 461-520mm CT2580 521-580mm CT2640 581-640mm CT2700 641-700mm CT2760 701-760mm CT2820 761-820mm CT2880 821-880mm CT2880 821-880mm | | Fixing bracket Fix at maximum 1.5m centres. Brackets are also used as a jointer to span abutting sections. |
| | Code Wall Width Ranges CT3160 100-160mm CT3220 161-220mm CT3340 221-280mm CT3400 341-400mm CT3460 401-460mm CT3520 461-520mm CT3580 521-580mm CT3640 581-640mm CT3700 641-700mm CT3760 701-760mm CT3760 701-760mm CT3820 761-820mm CT3820 821-880mm | | CT9160 100-160mm CT9220 161-220mm CT9280 221-280mm CT9340 281-340mm CT9400 341-400mm CT9460 401-460mm CT9505 521-580mm CT9640 581-640mm CT9640 581-640mm CT9700 641-700mm CT9700 761-760mm CT9880 821-880mm |
| | Stop end - Left hand Code Wall Width Ranges CT4160 100-160mm CT4220 161-220mm CT4280 221-280mm CT4340 281-340mm CT4320 461-520mm CT4350 461-520mm CT4520 461-520mm CT4520 461-520mm CT4520 461-640mm CT4540 581-640mm CT4700 641-700mm CT4700 701-760mm CT4720 701-760mm CT4700 701-760mm CT4500 701-760mm | P | Corner Angle Half Fixing Bracket Mill finish Code Size CT9070 70 |
| | CT4880 821-880mm Stop end - Right hand Code Wall Width Ranges CT5160 100-160mm CT5220 161-220mm CT5280 221-280mm CT5340 341-400mm CT5460 401-460mm CT5580 521-580mm CT5580 521-580mm CT5640 581-640mm CT5640 581-640mm CT5640 581-640mm CT5700 641-700mm CT5760 761-820mm CT5880 821-880mm | | Code Description SC204 No. 8 x 25mm flangehead screw for use with fixing brackets SC250 No. 8 x 15mm colour matched flangehead screw for fixing copings to fixing brackets |
| | T-Junction 90° Cole Wall Width Ranges CT6160 100-160mm CT6220 161-220mm CT6280 221-280mm CT6340 281-340mm CT6460 341-400mm CT6580 521-580mm CT6580 521-580mm CT6640 581-640mm CT6580 521-580mm CT6640 581-640mm CT6700 641-700mm CT6760 761-820mm CT6760 761-820mm CT6880 821-880mm | | |



Outlets



/elite* Elite Drainage Systems Info



Marley Alutec has developed a revolutionary range of aluminium roof and balcony drainage outlets compatible with all waterproofing membranes and roof build-ups.

Elite rainwater drainage outlets, together with ancillary components, are suitable for use with bituminous, hot melt, GRP, single ply, asphalt and cold liquid applied membranes to:

- Cold roofs
- **Balconies**
- Warm roofs
- Inverted roofs Green roofs
- Podiums Walkways
- Terraces
- Paved areas
- Car parks

Unbeatable drainage flow performance

Elite outlets have been engineered for unbeatable drainage flow performance and in most cases are only restricted by the maximum allowed water capacity of the connecting pipework!

Save on project costs by reducing rainwater pipe requirements

Compared to many conventional outlets, Elite performance figures reduce the number of outlets required to drain an area, thereby reducing the rainwater pipe and underground drainage requirements, offering significant savings.

Optimum watertight seal

Elite outlets membrane compression clamp design, combined with a high-performance butyl sealing ring, securely lock the waterproof membrane to the outlet body ensuring a durable watertight seal.

Sustainable material with 50 year life expectancy

All outlet components are manufactured from marine grade aluminium to give an extensive life expectancy of at least 50 years. Aluminium is well known for its durable characteristics and will never corrode or degrade. Marine grade aluminium, together with the 304 grade stainless steel fixings, ensures compatibility and durability.

Tested to extremes!

Typically, within roof drainage design, the peak rainwater design depth at an outlet will not exceed 35mm. To ensure ultimate reliability and confidence, the Elite outlet range has been rigorously tested to withstand water depths surpassing 1m.

Prevents cold bridging

The Elite range incorporates PVCu pipe connectors, providing an air tight seal and thermal break between the outlet body and connecting pipework.

Connects to all common pipe sizes

Our roof outlet range connects to all common PVCu, HDPE and socketless cast iron pipework sizes.

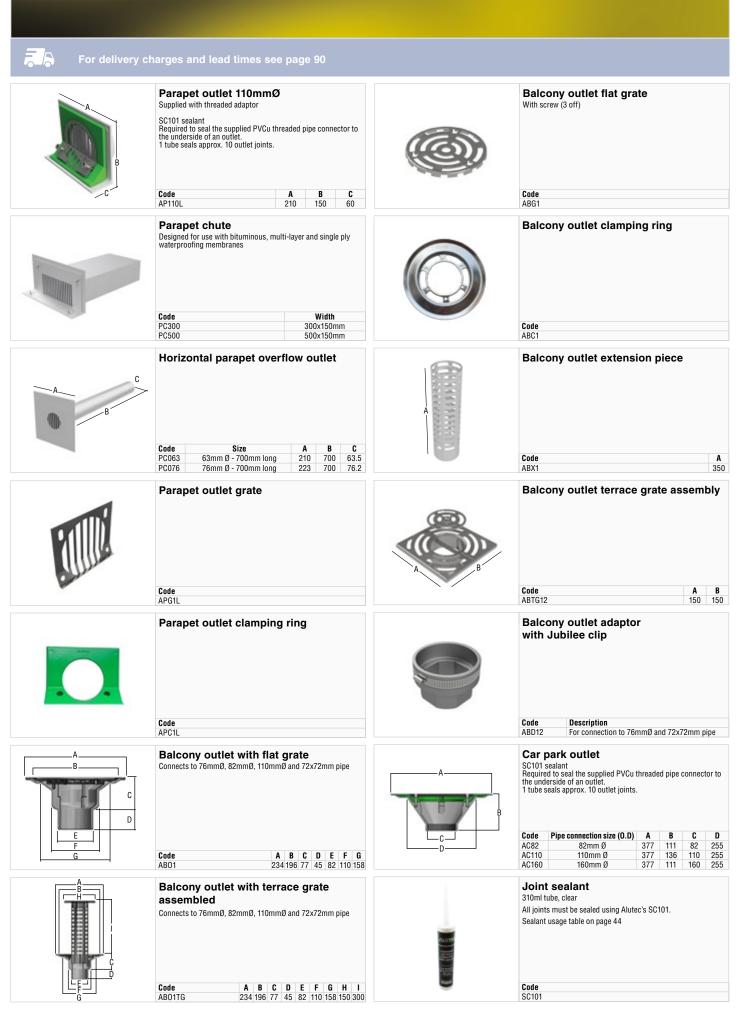
Balcony outlets connect to aluminium (76mmØ & 72x72mm), PVCu (82mmØ & 110mmØ) and socketless cast iron (70mmØ & 100mmØ) pipework.

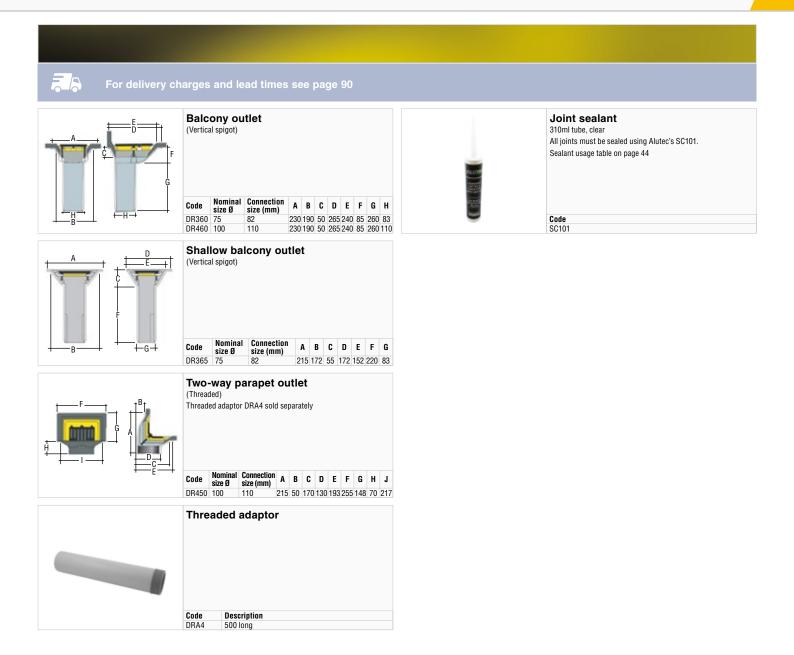
Fire protection

The threaded PVCu pipe connectors are manufactured from BS EN 1329 pipework and are therefore suitable for use with pipe wraps and fire collars









Installation Guides



Installation Guides

evolve traditional aligator evoke elite[®]



Installation Guides

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 Set gutter height by laying a straight batten on the lowest profile of the roof. Place the fascia bracket under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Marley Alutec No. 10 x 32mm roundhead screws, code SC201 or Marley Alutec No. 10 x 15mm countersunk screw, code SC203 if fixing to Marley Alutec aluminium composite fascia. Drilling pilot holes first is recommended.



3. Fix fascia brackets at 1 metre centres. For best flow rate fix to a fall of 1:600 or alternatively nominally level.



 Support all corner angles by fixing fascia brackets a maximum of 150mm from each side.



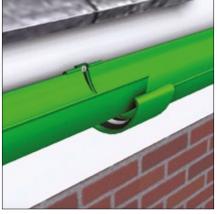
 Prior to assembling gutter joints, apply sealant to the central grooves to both sides of the ribbed rubber gasket. Use only Marley Alutec sealant, code SC101.



6. Place the gutter into the fascia brackets without clipping the front down. Position the union onto the rear of the gutter then snap the gutter fully into the fascia brackets. Finally apply upward pressure to the union clip from the bottom, whilst pulling the front gutter edge into the union clip.



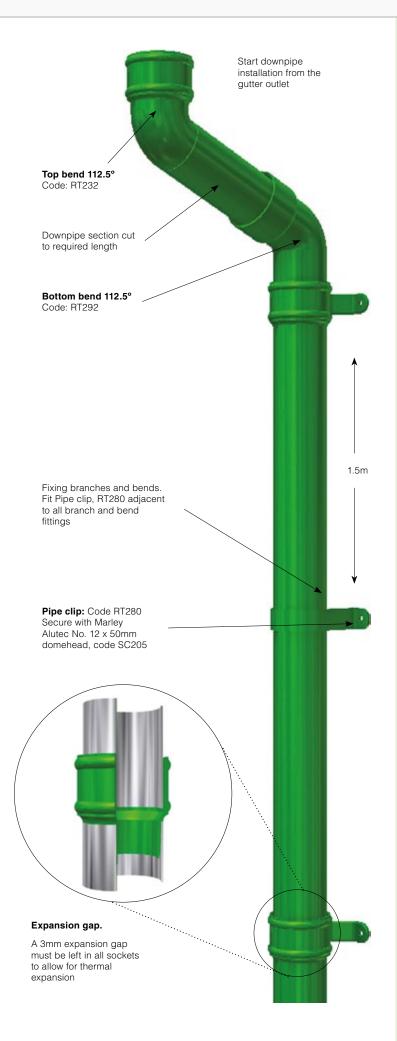
 Anchor joint union to fascia board using Marley Alutec No. 10 x 32mm roundhead screws SC201 or Marley Alutec No. 10 x 15mm countersunk screw, code SC203 if fixing to Marley Alutec aluminium composite fascia. Drilling a pilot hole first is recommended.



8. Repeat stages 5 & 6 and joint the gutter length to the one previously fixed. Ensure a 3mm expansion gap is left between the gutter ends.



 Anchor outlets to fascia board using Marley Alutec No. 10 x 32mm roundhead screws SC201 or Marley Alutec No. 10 x x15mm countersunk screw, code SC203 if fixing to Marley Alutec aluminium composite fascia. Drilling a pilot hole first is recommended.



Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment. The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

Snowloading

Heavy snowfall 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 must 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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint. Only Marley 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.

Fixing

To ensure the long term durability 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 austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

If fixing to fascia boards made of materials other than wood or Marley Alutec aluminium composites, please call the Marley Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.

Fixing gutters to rafters

For top or side rafter fixings, use traditional one piece rafter brackets available for all sizes and profiles of gutters.

Traditional top & side rafter arm brackets are supplied to a $45^{\circ}\, roof$ pitch and if required should be site bent to the required roof pitch prior to fixing.

Bracket centres will be dictated by the rafters, which should not exceed 1m. Internal/external gutter corner angles and outlets should be independently supported. It is recommended that a timber bridge between adjacent rafters should be provided to which a rafter bracket can be fixed to fully support the outlet or angle.

Rise & fall drive in brackets

Fix directly into the brickwork/masonry by drilling out an opening in the mortar, inserting a hardwood or plastic spacer, then hammering the spike into the opening. Care should be taken to ensure that the vertical threaded rods are all in line to achieve the correct line of gutter. Bracket centres should not exceed 1m, with additional brackets either side of each outlet and corner angle. Reduce bracket centres in locations where heavy snow loading is anticipated.

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment. The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

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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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

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.

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If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



 Set gutter height by laying a straight batten on the lowest profile of the roof.

Place the fascia bracket under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Drilling pilot holes first is recommended.



 Fix fascia brackets at 1 metre centres. For best flow rate fix to a fall of 1:600 or alternatively nominally level.



4. Support all corner angles by fixing fascia brackets a maximum of 150mm from each side.



5. Prior to assembling gutter joints, apply sealant to the central grooves to both sides of the ribbed rubber gasket. Use only Alutec sealant, code SC101.



 Place the gutter into the fascia brackets without clipping the front down. Position the union onto the rear of the gutter then snap the gutter fully into the fascia brackets.

Finally apply upward pressure to the union clip from the bottom, whilst pulling the front gutter edge into the union clip.



 Anchor joint union to fascia board using Alutec 32mm x No. 10 roundhead screws SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia.

Drilling a pilot hole first is recommended.



 Repeat stages 5 & 6 and joint the gutter length to the one previously fixed.

Ensure a 3mm expansion gap is left between the gutter ends.

Fixing gutters to rafters

For top or side rafter fixings, use traditional one piece rafter brackets available for all sizes and profiles of gutters.

Traditional top & side rafter arm brackets are supplied to a 45° roof pitch and if required should be site bent to the required roof pitch prior to fixing.

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Rise & fall drive in brackets

Fix directly into the brickwork/masonry by drilling out an opening in the mortar, inserting a hardwood or plastic spacer, then hammering the spike into the opening. Care should be taken to ensure that the vertical threaded rods are all in line to achieve the correct line of gutter. Bracket

centres should not exceed 1m, with additional brackets either side of each outlet and corner angle. Reduce bracket centres in locations where heavy snow loading is anticipated.



 Anchor outlets to fascia board using Alutec 32mm x No. 10 roundhead screws SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Drilling a pilot hole first is recommended.

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment. The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

Snowloading

Heavy snowfall 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 must 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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

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.

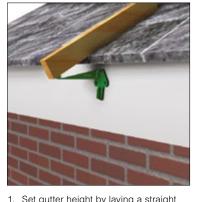
Fixing

To ensure the long term durability 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 austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



Set gutter height by laying a straight batten on the lowest profile of the roof. Place the fascia bracket under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Drilling pilot holes first is recommended.



3. Fix fascia brackets at 1 metre centres. For best flow rate fix to a fall of 1:600 or alternatively nominally level.



4. Hook the front edge of the gutter into the front of the fascia brackets.



5. Swing the rear of the gutter upwards and engage into the fascia brackets.



 Prior to assembling gutter joints, apply sealant to the central grooves. Use only Alutec sealant, code SC101.

Evolve Box and Ogee Gutter Systems Installation Guide



 Push the union from below upwards over the gutter, clipping over the rear first, followed by the front of the gutter. Follow the same fitting process for outlets, angles and stop-ends.



8. Repeat stages 5 & 6 and joint the gutter length to the one previously fixed. Ensure a 3mm expansion gap is left between the gutter ends.



 Anchor all fittings to fascia board using Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia.

Drilling a pilot hole first is recommended.

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment. The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

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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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

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.

Fixing

To ensure the long term durability of aluminium gutter systems, it is vitally important to ensure that the fixing components are equally durable and capable of providing the necessary support.

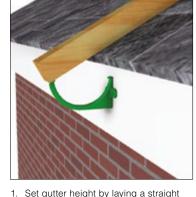
They must therefore be non corrosive, of a compatible material to ensure no electrolytic corrosion occurs and of the appropriate size.

Only the recommended austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



Set gutter height by laying a straight batten on the lowest profile of the roof. Place the fascia bracket under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Drilling pilot holes first is recommended.



 Fix fascia brackets at 915mm centres.
 For best flow rate, fix to a fall of 1:600 or alternatively nominally level.



 Support all corner angles and outlets by fixing fascia brackets a maximum of 150mm from each side.



 Place gutters into the fascia brackets and press down to engage into fascia brackets. Do not slide the gutter into the fascia brackets, as this may result in the gutter surface being marked.



 Clean all joint surfaces using a clean cloth and Alutec solvent cleaner, code SC108. Ensure all surfaces are dry and then apply two 8mm parallel beads of Alutec sealant, code SC101 to the gutter socket and around the bolt hole.



 Nuts and washers can be located inside or outside the gutter. Bolt heads outside the gutter will appear neater, but the internally projecting thread will have a minor effect on flow rate performance. Both options are illustrated.



 Finger tighten nut and bolt only, pull the joint apart sideways to ensure a minimum 3mm expansion gap is achieved. Then tighten one full turn only, with a spanner or screwdriver.

Fixing gutters to rafters

For top or side rafter fixings, use traditional one piece rafter brackets available for all sizes and profiles of gutters.

Bracket centres will be dictated by the rafters which should not exceed 915mm. Internal/external gutter corner angles and outlets should be independently supported. It is recommended that a timber bridge between adjacent rafters should be provided to which a rafter bracket can be fixed to fully support the outlet or angle.

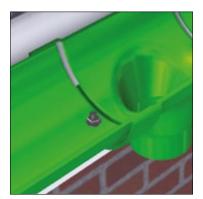
Rise & fall drive in brackets

Fix directly into the brickwork/masonry by drilling out an opening in the mortar, inserting a hardwood or plastic spacer, then hammering the spike into the opening. Care should be taken to ensure that the vertical threaded rods are all in line to achieve the correct line of gutter. Bracket centres should not exceed 915mm, with additional brackets either side of each outlet and corner angle. Reduce bracket centres in locations where heavy snow loading is anticipated.

Direct fixing

Victorian Ogee. Screw to fascia through slots provided to the rear of the gutter, with screws, SC201 and backing washers, SC521.

Moulded Ogee. Screw to fascia through slots provided to the rear of the gutter, with direct fix spacer brackets, GM581, using screws, SC201 and backing washers, SC521.



 Point sealant onto joint gap, adding additional Alutec sealant, code SC101 if required. Clean off any excess with Alutec solvent cleaner, code SC108.

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment.

The fascia should be capable of supporting the gutter when full of water, ice or snow.

Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

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Jointing

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They must therefore be non corrosive, of a compatible material to ensure no electrolytic corrosion occurs and of the appropriate size.

Only the recommended austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



 Set gutter height by laying a straight batten on the lowest profile of the roof.

Place the fascia bracket under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Drilling pilot holes first is recommended.



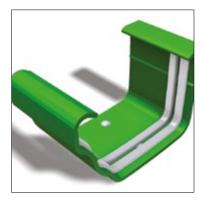
3. Fix fascia brackets at 1m centres. For best flow rate, fix to a fall of 1:600 or alternatively nominally level.



 Fix all gutter angles with 2 no. Alutec 32mm x No. 10 countersunk screw, code SC202 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia.



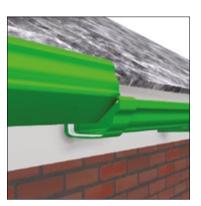
 Position outlets and fix using Alutec 32mm x No. 10 countersunk screw, code SC202 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia.



 Ensure the factory fitted rubber compression spacers are attached to the inside of the union. Clean all joint surfaces using a clean cloth and Alutec solvent cleaner, code SC108. Ensure all surfaces are dry and then apply two 8mm parallel beads of Alutec sealant, code SC101 to each side of the union.



7. Fit union to end of gutter as illustrated.



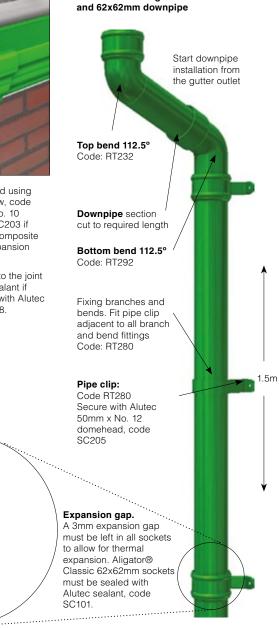
 Fit gutter into fascia brackets by inserting the rear upstand, then snapping down the front. Repeat steps 6, 7 & 8.

Installation of Aligator® 63mm Ø



 Anchor union to fascia board using Alutec 32mm x No. 10 screw, code SC202 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Ensure a 3-4mm expansion gap is left.

Point excess sealant well into the joint edges adding additional sealant if required. Clean off surplus with Alutec solvent cleaner, code SC108.



Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment.

The fascia should be capable of supporting the gutter when full of water, ice or snow. Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

Snowloading

Heavy snowfall 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 must 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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

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.

Fixing

To ensure the long term durability 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 austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed. If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to overflow level and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



1. Set gutter height by laying a straight batten on the lowest profile of the roof.

Place the gutter outlet under the batten so that they are touching and mark the screw holes.



 Fix fascia brackets with Alutec 32mm x No. 10 roundhead screws, code SC201 or Alutec 15mm x No. 10 countersunk screw, code SC203 if fixing to Alutec aluminium composite fascia. Insert screw into lower slot and adjust to the string line.

Drilling pilot holes first is recommended.



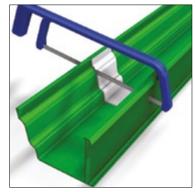
 Fix fascia brackets at 750mm centres. For best flow rate, fix to a fall of 1:600 or alternatively nominally level.



 Fix an additional fascia bracket centrally to one side of each angle and centrally to each outlet.



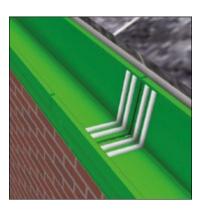
 Check fascia board alignment; if required, shim out brackets using appropriate shim plates. Deepflow: SC380, Ogee No. 46, Boxer 135x100mm and Boxer 160x100mm: SC381, Boxer 120x80mm: SC382.



To achieve a neat cut through the gutter, place a union into the gutter and use as a cutting guide.

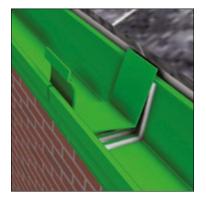


 Hook the rear of the gutter over the top of the fascia brackets and then swing down to secure into the base of the fascia brackets.

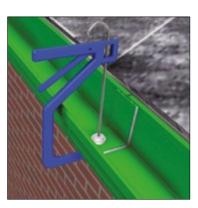


 Clean all joint surfaces using a clean cloth and Alutec solvent cleaner, code SC108. Ensure all surfaces are dry and then apply two 8mm parallel beads of

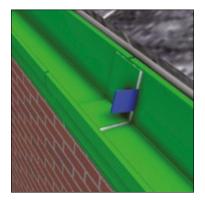
Alutec sealant, code SC101 to each gutter end.



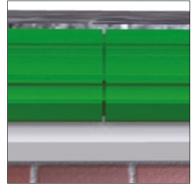
 Check that the factory fitted rubber compression spacers are fitted to the underside of the unions. Insert union, taking care not to remove sealant from the vertical faces.



10. Secure union into gutter by engaging into the rear upstand and then the front using Alutec gutter compression tool, code SC104.



 Point excess sealant well into the joint edges adding additional sealant if required.



12. Clean off any excess sealant to visible surfaces using Alutec solvent cleaner, code SC108 and ensure that all joints have a 3-4mm expansion gap.

Preparation

Fascia boards should be in good condition, level and in linear alignment (straight). If required, packing shim plates should be fixed behind gutter brackets to achieve good alignment. The fascia should be capable of supporting the gutter when full of water, ice or snow.

Where gutter is fixed to PVC-ue cellular fascia board, it is recommended that a timber support framework 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.

Snowloading

Heavy snowfall 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 must 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.

Ensure that the gutter joint sockets/spigots are correctly aligned with each other to ensure free thermal movement within the gutter joint.

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.

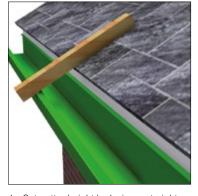
Fixing

To ensure the long term durability 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 austenitic stainless steel screws must be used to fix gutters, whether direct, fascia or rafter bracket fixed.

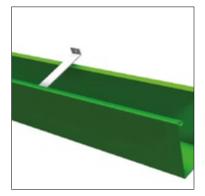
If fixing to fascia boards made of materials other than wood or Alutec aluminium composites, please call the Alutec Technical Services Department.

Testing

On completion of an installation, blank off all gutter outlets. Fill gutter to 34 full and leave for 5 minutes, then check for leakage. Discharging the flood test water into rainwater pipes will identify any leaks in rainwater pipe joints. Any joints that fail should be taken apart, all sealant cleaned off, then re-sealed and re-tested.



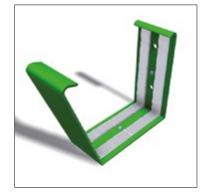
 Set gutter height by laying a straight batten on the lowest profile of the roof. Place the gutter under the batten so that they are touching and mark the top lip. Use a chalk line or equivalent to set level as a reference for fixing gutters.



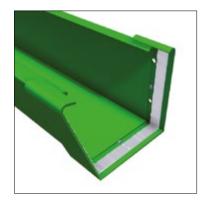
 Secure stiffener brackets into the top front recess of the gutter in line with the pre-drilled holes at 750mm centres.



3. Clean all jointing surfaces with a clean cloth and Alutec solvent cleaner, code SC108.



 Check that factory fitted rubber compression spacers are fitted, then apply two 8mm parallel beads of Alutec sealant, code SC101 to both sides of the union.

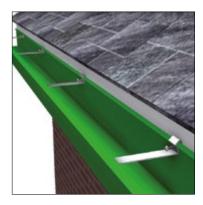


 Fit the union to the end of the gutter by placing it onto the rear gutter edge first, bend in slightly the front face of the gutter and clip the union over the gutter's front edge.



 Hook rear spacer assemblies over rear upstand of gutter in line with pre-drilled holes and stiffener brackets.

Aligator® Giant Gutter System Installation Guide



 Fix the gutter to the fascia through the stiffener bracket fixing holes using Alutec 50mm x No. 12 screw, code SC231 and Alutec washer, code SC521.



 Anchor the unions and angles to the fascia using Alutec 32mm x No. 10 screw, code SC202.



 Repeat steps 2, 3, 4, 5, & 6. Clip next gutter section into place, ensure a 3-4mm expansion gap and then fix gutter as described in step 7.



 Add additional sealant if required and point any excess sealant well into the expansion gap. Dress sealant level with faces of gutter.



11. Fit patch outlet by cutting the appropriate size hole in-situ or prior to gutter fixing. Place patch outlet on the external face of the gutter, mark and drill four 6mm bolt holes. Apply Alutec sealant, code SC101 to joint faces and fix with the four supplied Alutec M6 aluminium bolts, nuts and washers, codes SC502, SC511 & SC521.



 Clean off any excess sealant to visible surfaces using Alutec solvent cleaner, code SC108.

General Guidance

Bending to correct roof angle

Rafter arms are manufactured to suit a roof pitch of 30°. If the site roof pitch is different to this angle the rafter arms will need to be site bent in a similar fashion to the illustration shown above. Do not attempt to install the rafter arms and bend from the formed cradle as this may deform the shape of the bracket.

Rafter arm spacing

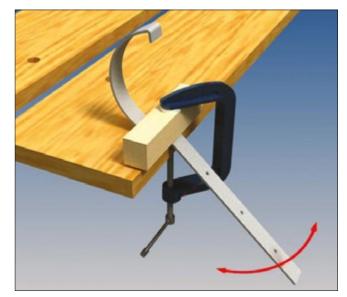
Rafter arms must not exceed 915mm centres. Pilot drill all screw holes prior to inserting 30xNo10

compatible s/steel screw, code SC201. For best flow rate, fix to a fall of 1:600 or alternatively nominally level.

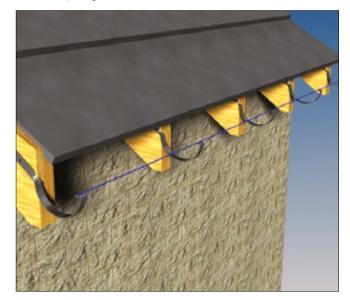
Securing

Apply a small bead of Alutec sealant, code SC101 to the inside face of the rafter arms and place gutter into cradle. The sealant will act as a retaining adhesive.

For areas susceptible to high winds, it is advised that gutters are secured to the rafter arms at every second bracket with a stainless steel self tapping screw. Bending to correct roof angle



Rafter arm spacing



Securing



Gutter outlet / Hopper connection



Fixing



Drain Connection



General Guidance

Gutter outlet / Hopper connection

Connection to the gutter outlet and or hopper is made via a pipe socket. Pipe sockets are supplied with all offsets. Bespoke offsets can be made to order.

Fixing

For fixing to masonry via the cast sockets, use Alutec No. 16 x 70mm hex insert domehead, code SC208 with appropriate wall plugs. Intermediate pipe clips are not required. However, additional pipe clips must be fitted adjacent to inline bends and branches.

Downpipes can be spaced out a further 30mm from the wall by using Alutec Wall spacer, code SC712 with Alutec No. 16 x 100mm hex insert domehead, code SC209 with appropriate wall plugs.

If fixing to a non masonry background, please call Alutec Technical Services Department for advice.

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 Alutec solvent cleaner, code SC108 to remove all traces of dirt or grease, which may not be visible.

All pipe joints, including connection to the gutter outlet, must be sealed with Alutec sealant, code SC101. Ensure to allow a 3-4mm expansion gap between pipe lengths.

Pipe off-cuts can be used by fitting a pipe socket into a square cut end of pipe.

Drain Connection

Unless a shoe is used to terminate the pipe and discharge over an open gully, drain connections should preferably be made using the appropriate adaptor by the drainpipe manufacturer, e.g. connect to vitreous clay or PVCu drainage pipes with a universal EPDM rubber adaptor. For connection to cast iron drainage use a proprietary cast iron step coupling.

Testing

It is good practice to water test the downpipes after installation. If connected to a gutter system, the discharging of flood test water from the gutter should identify any leaks within the downpipe system. For downpipes connected to hoppers or flat roof outlets, discharging water at the top with a hose pipe for a period of 5 minutes under normal mains pressure should suffice. Any leaking joints should be taken apart and re-sealed and re-tested.

Lightning conductors

Under no circumstances should rainwater downpipes be used as a lightning conductor to earth. If pipes are to be bonded to a lightning conductor system, the specialist installer must use an electrolytically compatible external bonding strap and not drill and bolt through the pipe wall.

General Guidance

Gutter outlet / Hopper connection

Connection to the gutter outlet and or hopper is made via a pipe socket. Pipe sockets are supplied with all offsets. Bespoke offsets can be made to order.

Fixing

Traditional downpipes with eared cast sockets For fixing to masonry via the cast sockets, use Alutec No. 16 x 70mm hex insert domehead, code SC208 with appropriate wall plugs. When fixed in this way, intermediate pipe clips are not required. However, additional pipe clips must be fitted adjacent to inline bends and branches.

Traditional downpipes with non eared cast sockets For fixing to masonry, use the standard pipe clips and fix with Alutec No. 16 x 70mm hex insert domehead, code SC208 with appropriate wall plugs. One clip to be located directly under the pipe socket and a further clip 1.5 metres below. Additional pipe clips must be fitted adjacent to inline bends and branches.

Additional spacing from wall

Downpipes can be spaced out a further 30mm from the wall by using Alutec cast spacer bobbins with No. 16 x 100mm hex insert domehead, code SC209 with appropriate wall plugs.

If fixing to a non masonry background, please call Alutec Technical Services Department for advice.

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 Alutec solvent cleaner, code SC108 to remove all traces of dirt or grease, which may not be visible.

All joints to pipes with cast sockets must be sealed, including at the gutter outlet with Alutec sealant, code SC101. Access to seal the rear of the socket can be made easier by attaching a flexible piece of tube to the end of the sealant gun nozzle. Ensure to allow for a 3-4mm expansion gap between pipe lengths.

Pipe off cuts can be utilised by fitting a pipe socket to a square cut end of pipe. Ensure that a bead of Alutec sealant, code SC101 is placed within the internal recess of the pipe socket, prior to driving the socket onto the end of the pipe with a rubber/wooden mallet.

Drain Connection

Unless a shoe is used to terminate the pipe and discharge over an open gully, drain connections should preferably be made using the appropriate size Alutec square to round drain connector. The adaptor push-fits inside a 110mm \emptyset ring sealed drain socket. The deep square connection socket allows for an insert and lift slip connection of the bottom pipe between two fixed points.

Testing

It is good practice to water test the downpipes after installation. If connected to a gutter system the discharging of flood test water from the gutter should identify any leaks within the downpipe system. For downpipes connected to hoppers or flat roof outlets, discharging water at the top with a hose pipe for a period of 5 minutes under normal mains pressure should suffice. Any leaking joints should be taken apart and re-sealed and re-tested.

Lightning Conductors

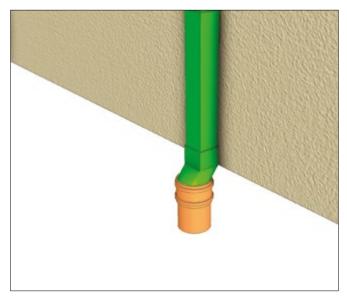
Under no circumstances should rainwater downpipes be used as a lightning conductor to earth. If bonding pipes to a lightning conductor system is required, the specialist installer must use an electrolytically compatible external bonding strap and not drill and bolt through the pipe wall. Gutter outlet / Hopper connection



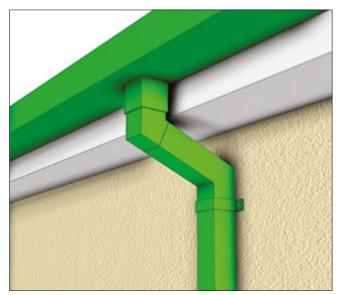
Fixing



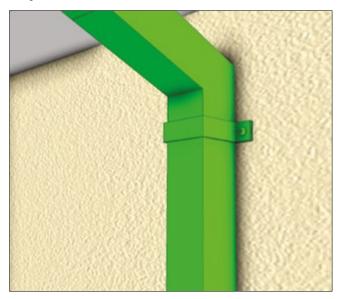
Drain Connection



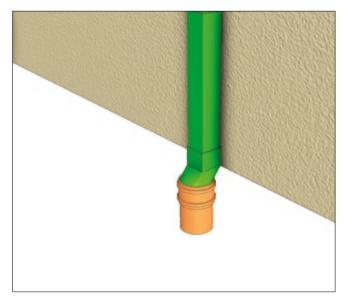
Gutter outlet / Hopper connection



Fixing



Drain Connection



General Guidance

Gutter outlet / Hopper connection

Connection to the gutter outlet and or hopper is made via a pipe socket. Pipe sockets are supplied with all adjustable eaves offsets. Bespoke offsets can be made to order.

Fixing

For fixing to masonry, use the standard pipe clips and fix with Alutec No. 12 x 50mm domehead screw, code SC205 with appropriate wall plugs. One clip to be located over the pipe joint and a further clip 1.5 metres below. Additional pipe clips must be fitted adjacent to inline bends and branches.

Additional spacing from wall

Downpipes can be spaced out a further 30mm from the wall by using Alutec cast spacer bobbins with No. 16 x 100mm hex insert domehead, code SC209 with appropriate wall plugs.

If fixing to a non masonry background, please call Alutec Technical Services Department for advice.

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 Alutec solvent cleaner, code SC108 to remove all traces of dirt or grease, which may not be visible.

Joints to the gutter outlet connection and joints not on a vertical plane should always be sealed with Alutec sealant, code SC101; remaining joints do not require sealing.

Pipe off cuts can be utilised by fitting an internal joint spigot to a square cut end of pipe and sealed with Alutec sealant.

Drain Connection

Circular pipe

Unless a shoe is used to terminate the downpipe and discharge over an open gully, drain connections should preferably be made using an appropriate adaptor by the drain pipe manufacturer, e.g. connect to vitreous clay or PVCu drainage pipes with a universal EPDM rubber adaptor. For connection to cast iron drainage use a proprietary cast iron step coupling.

Square pipe

Unless a shoe is used to terminate the pipe and discharge over an open gully, drain connections should preferably be made using the appropriate size Alutec square to round drain connector. The adaptor push-fits inside a 110mm Ø ring sealed drain socket. The deep square connection socket allows for an insert and lift slip connection of the bottom pipe between two fixed points.

Testing

It is good practice to water test the downpipes after installation. If connected to a gutter system the discharging of flood test water from the gutter should identify any leaks within the downpipe system. For downpipes connected to hoppers or flat roof outlets, discharging water at the top with a hose pipe for a period of 5 minutes under normal mains pressure should suffice. Any leaking joints should be taken apart and re-sealed and re-tested.

Lightning Conductors

Under no circumstances should rainwater downpipes be used as a lightning conductor to earth. If bonding pipes to a lightning conductor system is required, the specialist installer must use an electrolytically compatible external bonding strap and not drill and bolt through the pipe wall.

Vandal Resistant Downpipe Installation Guide

General Guidance

Gutter outlet / Hopper connection

Connection to the gutter outlet and or hopper is made via a pipe socket. Pipe sockets are supplied with all adjustable eaves offsets. Bespoke offsets can be made to order.

Fixing

Unlike other pipes assemblies, this system is designed to be anti-climable and therefore fixed flat against the wall with all support fixings concealed. Install in sequence from top to bottom using Alutec 50mm x No.12 countersunk screw, code SC241 with appropriate wall plugs. Unless used for the aesthetic value of the pipe system, shoes at the bottom of the pipes are not recommended. Bends and branches are supplied with loose fixing plates and fixing kit, to allow the plates to be fitted to the required left/right handing orientation.

If fixing to a non masonry background, please call Alutec Technical Services Department for advice.

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 Alutec solvent cleaner, code SC108 to remove all traces of dirt or grease, which may not be visible.

All pipe joints, including connection to the gutter outlet, must be sealed with Alutec sealant, code SC101. Ensure to allow a 3-4mm expansion gap between pipe lengths.

Pipe off-cuts can be used by fitting a pipe socket into a square cut end of pipe.

Drain Connection

Unless a shoe is used to terminate the pipe and discharge over an open gully, drain connections should preferably be made using the appropriate size Alutec square to round drain connector. The adaptor push-fits inside a 110mm Ø ring sealed drain socket. The deep square connection socket allows for an insert and lift slip connection of the bottom pipe between two fixed points.

Testing

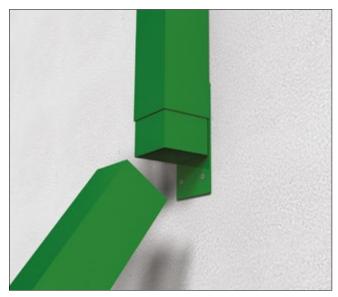
It is good practice to water test the downpipes after installation. If connected to a gutter system the discharging of flood test water from the gutter should identify any leaks within the downpipe system. For downpipes connected to hoppers or flat roof outlets, discharging water at the top with a hose pipe for a period of 5 minutes under normal mains pressure should suffice. Any leaking joints should be taken apart and re-sealed and re-tested.

Lightning Conductors

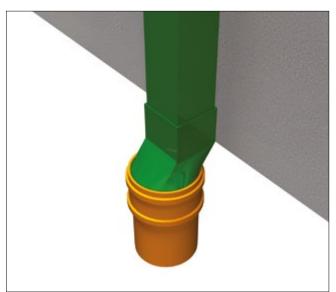
Under no circumstances should rainwater downpipes be used as a lightning conductor to earth. If bonding pipes to a lightning conductor system is required, the specialist installer must use an electrolytically compatible external bonding strap and not drill and bolt through the pipe wall. Gutter outlet / Hopper connection

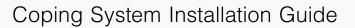


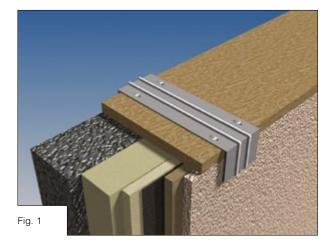
Fixing



Drain Connection

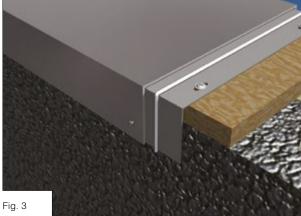




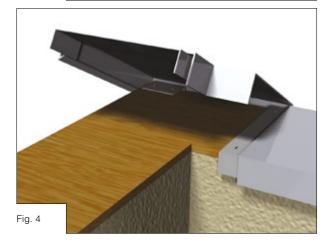












General Guidance

Fixing Backgrounds

To achieve a strong, secure and flat surface onto which the copings can to be fixed, we strongly recommend that the top of the parapet wall is lined with a minimum 22mm thick marine grade plywood backing board. The backing board should be the width of the parapet wall and be securely fixed to withstand wind load forces. Ensure the backing board is fixed level, as any deviations will manifest themselves in the overall appearance of the installed coping.

1. Fig. 1

Fixing brackets must be located centrally at each coping joint abutment and spaced at maximum 1.5m centres. Secure each bracket using 4 no. No. 8 x 25mm flangehead screws, code SC204.

Optional

If required, the coping system can be laid to a fall of 2° or less by placing glazing shims (supplied by others) underneath the Fixing brackets

2. Fig. 2

Offer coping panel into place by hooking the front drip edge over the fixing brackets. Remove butyl tape liner, then rotate panel downwards until in its resting position. Press the coping panel down firmly over entire bracket to ensure full contact is made with the high performance butyl sealing strips

3. Fig. 3

In line with each bracket, on the inside return face pre-drill a 3.5mmØ hole through the coping panel and bracket. Insert No. 8 x 15mm colour matched flangehead screw, code SC250. Before fitting next coping section, repeat steps 1 and 2, then offer coping panel into position ensuring a 3mm expansion gap is left between abutting ends. Fix coping panel into position as step 3

4. Fig. 4

Remove butyl tape and attach one full fixing bracket to one side of the coping angle. A 1/2 fixing bracket must be secured to the fixing background using 2 x SC204 screws as shown in Fig. 4. Position the angle in place ensuring the returns on the downstands engage with the coping length bracket and 1/2 bracket. Fix down remaining exposed full bracket with 2 x SC204 screws. Using SC250 (No.8 x 15mm) colour matched screws, fix through inside return faces into the brackets to anchor into position.

Further information and advice

If you have any queries, please contact The Alutec Technical Services Department on 01234 344108.

Soffit installation:

Step 1:

Each soffit or fascia panel's protective film is printed with directional arrows. Ensure panels are fixed with the arrows pointing in the same direction to ensure a uniform surface appearance. Remove a small area of the protective film from the locations of all fixings to prevent it being trapped underneath the head of the fixing. See Fig. 1

Step 2:

Fix Soffit support trim FF30 to background at 600mm centres and slot soffit panel into Soffit support trim FF30. Pre-drill pilot holes and fix soffit at 600mm centres in rafter / truss ends with colour matched polypins, code SC670 at the front. Polypins should be positioned to be concealed by the bottom front return edge of the fascia. See Fig. 2

Step 3:

Joints between abutting panels are made using 'H' section joint trims. See Fig. 2 $\,$

Step 4:

Install next soffit panel; ensure a 4mm expansion gap between panels. Fix horizontal timber battens between rafters / trusses for support and alignment at joints.

Fascia installation option 1: Mechanical fixing

Step 4.1: Option

Direct fixing to rafters: For fascia panels supporting guttering, fix with two Nr 50mm poly nails SC280 above the gutter line at maximum 600mm centres. For fascia panels not supporting guttering, fix with two Nr 30mm polypins SC670 at maximum 600mm centres. Additional polypin fixings will be required for fascias over 250mm deep.

Step 4.2: Option

Fixing to timber background: Fix fascia panel at maximum 600mm centres with two Nr 30mm polypins SC670 above the gutter line.

Step 5:

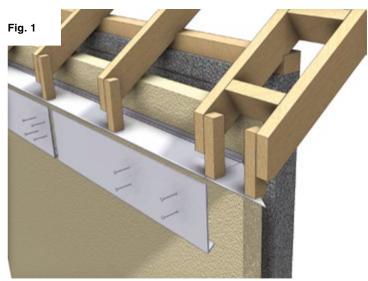
Abutting ends must be jointed with the appropriate H-Section joint trim.

Step 6:

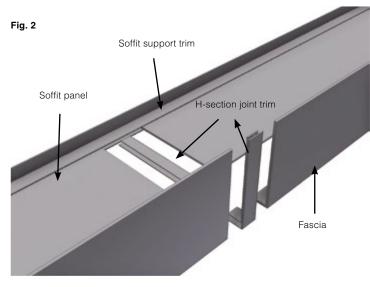
Ensure there is at least a 2mm expansion gap where fascia panel is inserted into the H-section joint trim.

Step 7:

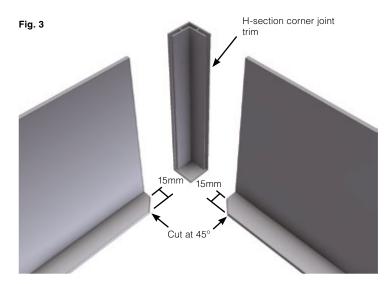
Finally, remove the protective film within 90 days of installation.



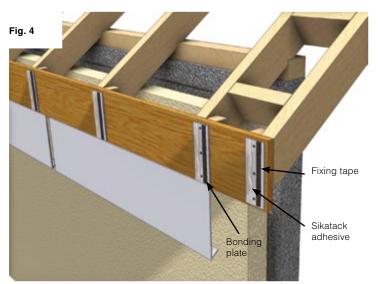
Fixing - Maximum 600mm centres



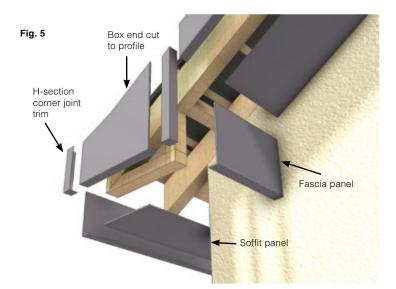
Jointing - Straight sections



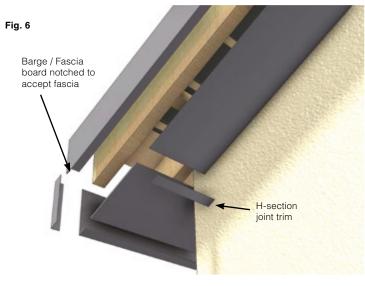
Angle joint - Cut fascia returns 15mm from front face at 45°



Bonding fascia option - Plates at maximum 600mm centres



Typical box end construction



Angled soffit box end construction

Fascia installation option 2: Bonding

Marley Alutec recommends the use of SikaTack Panel Adhesive System when bonding panels.

Not all backgrounds are suitable for a direct secure bond, therefore bonding plates should be mechanically fixed to the background at maximum 600mm centres. Bonding plates are supplied 75mm wide in 3m lengths code FY40 for site cutting to required lengths.

Step 8:

Fix bonding plate FY40 at 600mm centres using minimum 3 Nr stainless steel flat head annular nails or countersunk screws.

Step 9:

Strip off the protective film from the bonding plates and apply one thin coat of SikaTack panel primer to the bonding plates and corresponding areas to the rear of the fascia board. Allow at least 30 minutes for the primer to dry.

Step 10:

Apply the self-adhesive fixing tape vertically to the full length of the bonding plate 5mm in from the edge. This fixing tape is only intended to hold the panel in position until the adhesive is fully cured. See Fig. 4.

Step 11:

Apply Sikatack adhesive to the bonding plate using the triangular nozzle supplied, applying a 10mm high bead at least 5mm from the edge of the plate.

Important Note: Do not apply adhesive in damp/ wet conditions or temperatures below 5°C. We also recommend discreet pinning to the top edge to support the weight of the panels as an additional safety measure.

Step 12:

Remove the foil from the fixing tape, and then carefully offer the fascia panel into the required position to make contact with the beads of adhesive, but without touching the fixing tape. When the panel is in position, press firmly until it makes contact with the fixing tape. We recommend this operation is carried out by two operatives. Fitting the panel must be completed within 10 minutes after application of the adhesive.

Step 13.1: Option

H Section Joints: Abutting ends must be jointed with the appropriate H-Section joint trim.

Step 13.2: Option

Pointed Joints: To achieve a neat silicone joint apply masking tape to both edges, point silicone into the joint, code SC103 and smooth flat. Note: Silicone must make contact with the rear bonding plate. Finally remove masking tape.

Step 14:

Finally, remove the protective film within 90 days of installation.

Soffit installation:

Note:

All adjoining surfaces on Fascia and Soffit to be thoroughly cleaned with solvent cleaner (SC108) prior to silicone sealing

Step 1:

Pre drill 2 parallel rows of 5mm pilot holes in the Soffit at 600mm centres along the panel length. If the Soffit width is greater than 600mm then a minimum 3 rows of screws are required.

Offer up the Soffit and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws (Fig. 1)

If using Type A or Type C Fascia, the front row of screws can be positioned to be concealed by the bottom front return edge of the fascia.

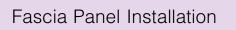
Step 2:

Joints between abutting Soffit panels are made with internal joint trims (Fig. 2).

To fit the the joint trims, apply a bead of silicone sealant along the length of one side of the joint trim and slide into position under the already fitted Soffit panel.

Step 3:

Install the next Soffit panel using the same process as in Step 1. Apply a bead of silicone sealant to the exposed side of the Joint trim before fitting the next soffit. Ensure a 4mm expansion gap between the panels. Continue along the length of the building repeating steps 1 to 3.



Step 4:

Pre drill 2 parallel rows of 5mm pilot holes in the Fascia at 600mm centres. If Fascia width is over 600mm then a minimum 3 rows of screws are required. For Fascia panels supporting guttering the top row should be drilled above the gutter line. Offer up Fascia and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws (Fig. 1.)

Step 5:

Joints between abutting Fascia panels are made with internal joint trims (Fig. 2).

To fit the the joint trims, apply a bead of silicone sealant along the length of one side of the joint trim and slide into position under the already fitted Fascia panel.

Step 6:

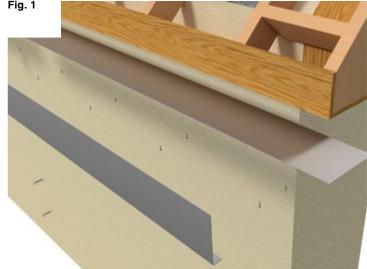
Install next Fascia panel using the same process as in Step 4. Apply a bead of silicone sealant to the exposed length of the Joint trim before fitting the next Fascia. Ensure a 4mm expansion gap between the panels. Continue along the length of the building repeating steps 4 to 6

Step 7:

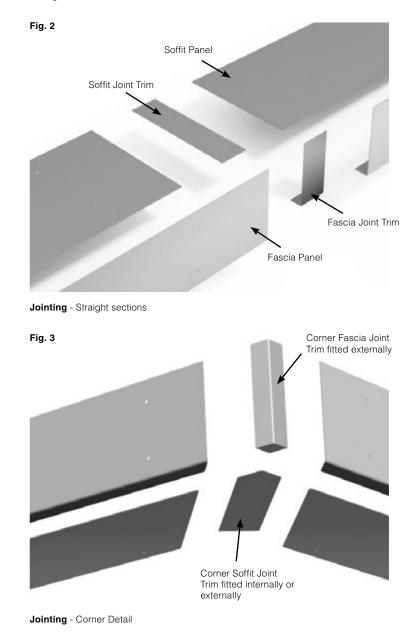
The fascia corner trim is fitted externally. Clean faces using solvent cleaner and cut to size if needed. Apply a bead of silicone sealant to the rear faces of the trim and press into position on the fascia. Temporarily hold in place with low tack masking tape. Remove when sealant has cured (Fig. 3)

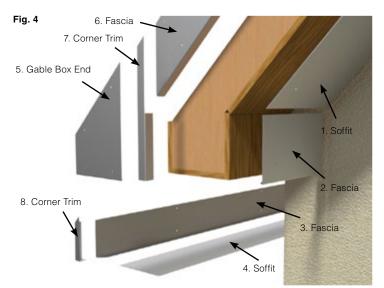
The joint trim for the soffit can be fitted internally or externally

Fig. 1

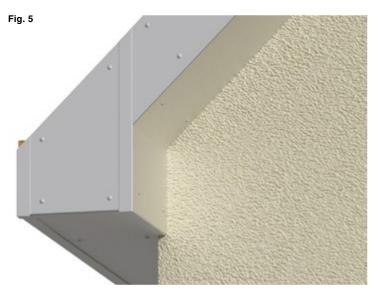


Fixing - Maximum 600mm centres





Typical box end construction



Completed typical box end

Fig. 6



Angled soffit box end construction

Box End Installation

Step 1:

On Fascia (3) cut/mitre the small return fold at 45 degrees. Install Fascia (3) and Soffit (4) as per above Fascia & Soffit installation instructions.

Step 2:

Pre-drill Soffit (1) with 2 parallel rows of 5mm pilot holes at 600mm centres along the panel length. If the Soffit width is greater than 600mm then a minimum 3 rows of screws are required.

Offer up Soffit and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws.

If using Type A or Type C Fascia, the front row of screws can be positioned to be concealed by the bottom front return edge of the fascia.

Step 3:

Measure and cut a piece of Fascia (2) to length. Cut/mitre the small return fold at 45 degrees where it meets the box end (5). Depth of Fascia may also need to be cut to suit. Pre-drill holes as in step 2. Offer up Fascia and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws.

Step 4:

On the gable box end (5) mark the roof angle and cut/ mitre the part to suit. Cut/mitre the small return fold at 45 degrees on both ends where it meets Fascia (2) & (3).

Pre-drill holes as in step 2. Offer up Fascia and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws.

Step 5:

On Fascia (6) mark the roof angle and cut/mitre the end of the panel.

Pre-drill holes as in step 2. Offer up Fascia and screw to pre-fitted 18mm thick marine grade plywood backing board with SC675 screws.

Step 6:

Offer up corner trims (7 & 8), mark the roof angle and lengths. Cut/mitre the trims to size.

Apply a bead of silicone sealant to the insides of the trims and press into position. Temporarily hold in place with low tack masking tape. Remove when sealant has cured.

Step 7:

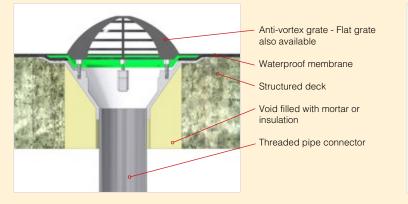
Touch up all cut edges with the supplied touch up paint.

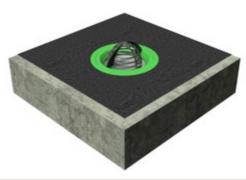
IMPORTANT:

Common installation tasks applicable to all installations

- Fit threaded pipe connector into the outlet body as per the label attached to each threaded pipe connector, using silicone sealant (SC101).
- Fill any structural voids to the underside of the outlet with mortar or insulation as appropriate.
- Fit a fire collar or wrap around the protruding plastic pipe against the underside of the roof structure, if the pipe projects into a building

Cold Roofs and Car Parks





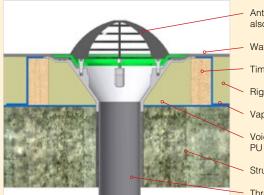
GRP, Cold Liquid, Hotmelt or Asphalt Waterproofing Membranes

- Remove the membrane clamp ring, wax paper ring including butyl seals & three foam transit spacers located within the throat of the outlet and discard.
- Place roof outlet body (with pipe connector fitted) centrally over structural opening.
- Dress/apply waterproofing membrane over the recessed grooves of the outlet body.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 4 Nr male/female insert bolts. (Use the 4 threaded rods and belts supplied for asphalt applications) Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Attach grating.

Sheet Waterproofing Membranes

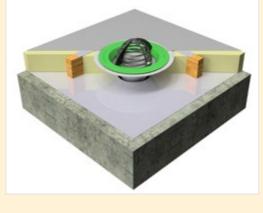
- 1. Remove the dome/flat grate, membrane clamp ring & wax paper ring from the butyl seal rings, including three foam transit spacers located within the throat of the roof outlet.
- Place roof outlet body with pipe connector fitted, centrally over structural opening.
- 3. Cut a 500mm square piece of the waterproofing membrane with a 220mm diameter hole in the centre and place centrally over roof outlet.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Attach grating.

Warm Roofs



Anti-vortex grate - Flat grate also available

- Waterproof membrane
- Timber hard edge
- Rigid insulation
- Vapour control layer
- Void filled with rigid insulation/ PU foam
- Structural deck



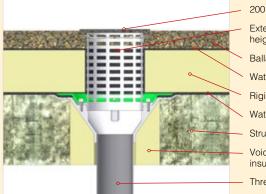
Threaded pipe connector

- The vapour control layer should be cut and sealed around the downpipe hole, within the deck, in accordance with the manufacturer's instructions.
- Create a 340x340mm internal dimension timber or other suitable material kerb around the roof outlet structural opening to the same height as the insulation.
- 3. Flashing pieces of the vapour control layer should be dressed over the timber kerb and sealed to the main vapour control layer.
- Place roof outlet onto the raised kerb, mark and recess the four contact areas so the top of the roof outlet and insulation are at the same height, then secure with 4 Nr A2 stainless steel screws (not supplied).
- 5. Cut rigid sections of insulation to infill the corners of the timber kerb.

- 6. Cut a 500mm square piece of the waterproofing membrane with a 220mm diameter hole centrally.
- Remove the dome/flat grate, membrane clamp ring & wax paper ring from the butyl seal rings, including three foam transit spacers located within the throat of the roof outlet.
- 8. Place the 500mm square piece of waterproofing membrane over the outlet body ensuring the 220mmØ hole is central.
- Place the membrane clamping ring over the waterproofing membrane, then secure to outlet body with 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 10. Attach grating.

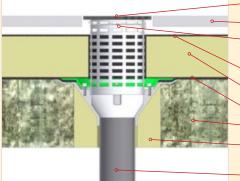
Outlets Typical Applications

Inverted Ballast Roof



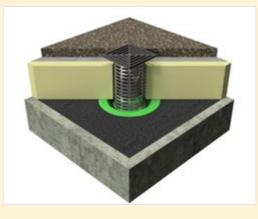
- 200 x 200mm grate
- Extension ring (site cut for height adjustment)
- Ballast
- Water reducing layer
- **Rigid insulation**
- Waterproof membrane
- Structural deck
- Void filled with mortar or insulation
- Threaded pipe connector

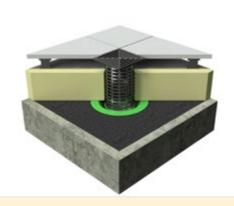
Inverted Paved Roof (Terrace)

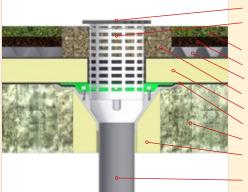


Green Roof

- 200 x 200mm grate
- Pavers on adjustable supports Extension ring (site cut for
- height adjustment) Water reducing layer
- Rigid insulation
- Waterproof membrane Structural deck
- Void filled with mortar or insulation
- Threaded pipe connector







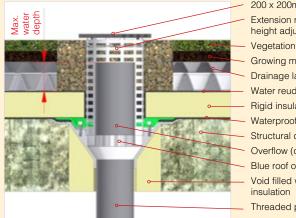
- 200 x 200mm grate Extension ring (site cut for height adjustment)
- Vegetation Growing medium with filter
- Drainage layer
- Water reducing layer
- **Rigid insulation**
- Waterproof membrane
- Structural deck
- Void filled with mortar or
- insulation
- Threaded pipe connector

GRP, Cold Liquid and Hotmelt Waterproofing Membranes

- 1. Remove the membrane clamp ring, wax paper ring including butyl seals & three foam transit spacers located within the throat of the balcony outlet and discard.
- 2. Place roof outlet body with pipe connector fitted centrally over structural opening
- 3. Dress/apply waterproofing membrane over the recessed grooves of the outlet body
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Insert the 160mmØ perforated extension into outlet throat. Place PIR insulation around the perforated extension. Cut the 160mmØ perforated extension to the required height (level with the finish top layer)
- 6. Remove perforated extension ring and dress the water runoff layer into the insulation void, then re-insert the perforated extension ring.
- 7. Insert the grate retaining bar through the uppermost perforations so that the threaded fixing hole is central. Place the 200 x200mm square grating into position and secure with screw provided.
- 8. Apply any further roof build-up components and dress around the outlet extension ring.

- 1. Remove the membrane clamp ring. Remove the wax paper ring from the butyl seal rings including three foam transit spacers located within the throat of the roof outlet, and discard.
- 2. Place roof outlet body with pipe connector fitted centrally over structural opening
- 3. Cut a 500mm square piece of the waterproofing membrane with a 220mm diameter hole in the centre and place centrally over roof outlet.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Insert the 160mmØ perforated extension into outlet throat. Place PIR insulation around the perforated extension. Cut the 160mmØ perforated extension to the required height (level with the finished top layer)
- 6. Remove perforated extension ring and dress the water runoff layer into the insulation void, then re-insert the perforated extension ring.
- 7. Insert the grate retaining bar through the uppermost perforations so that the threaded fixing hole is central. Place the square grating into position and secure with screw provided.
- 8. Apply any further roof build-up components and dress around the outlet extension ring.

Blue Roof



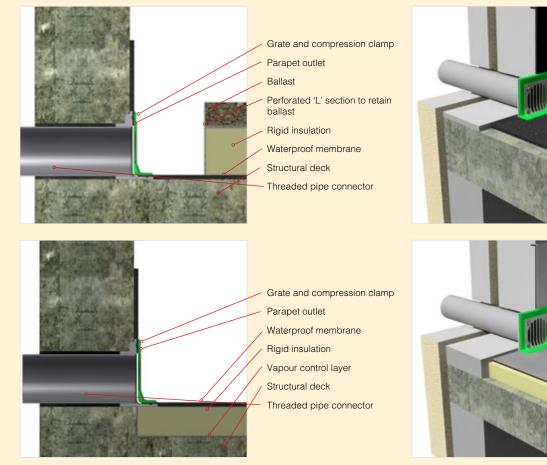
200 x 200mm grate Extension ring (site cut for height adjustment)

- Growing medium with filter
- Drainage layer
- Water reuding layer
- Rigid insulation
- Waterproof membrane
- Structural deck
- Overflow (cut to suit)
- Blue roof outlet restrictor Void filled with mortar or
- Threaded pipe connector

GRP, Cold Liquid, Hotmelt Waterproofing Membranes

- Remove the membrane clamp ring, wax paper ring including butyl 1. seals & three foam transit spacers located within the throat of the outlet and discard.
- Place roof outlet body with pipe connector fitted centrally over 2. structural opening
- Dress/apply waterproofing membrane over the recessed grooves З. of the outlet body.
- Place membrane clamping ring over waterproofing membrane, 4. then secure to outlet body with the 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- Insert the 160mmØ perforated extension into outlet throat. Place 5. PIR insulation around the perforated extension. Cut the 160mmØ perforated extension to the required height.
- 6. Remove perforated extension ring and dress the water runoff layer into the insulation void, then re-insert the perforated extension ring.
- 7. Place Blue Roof restrictor/overflow flange into the throat of the outlet body. Establish the maximum allowable water depth, mark and cut the overflow upstand to correspond accordingly.
- Place and bed the flange of the Blue Roof restrictor onto an 8mm 8. bead of silicone into the throat of the roof outlet.
- Remove correct number of restrictor sealing plugs as instructed 9. within the Blue Roof drainage design.
- 10. Re-insert the perforated extension ring. Insert grate retaining plate and fix square grating into position with screw provided.
- Apply any further roof build-up components and dress around the 11. outlet extension ring

- 1. Remove the membrane clamp ring. Remove the wax paper ring from the butyl seal rings including three foam transit spacers located within the throat of the roof outlet, and discard.
- Place roof outlet body with pipe connector fitted centrally over 2 structural opening.
- Cut a 500mm square piece of the waterproofing membrane with a 3 220mm diameter hole in the centre and place centrally over roof outlet
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with 4 Nr male/female insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- Insert the 160mm perforated extension into outlet throat. Place 5. PIR insulation around the perforated extension. Cut the 160mm perforated extension to the required height.
- Remove the perforated extension ring and dress the water runoff 6. layer into the insulation void.
- Place Blue Roof restrictor/overflow flange into the throat of the 7 outlet body. Establish the maximum allowable water depth, mark and cut the overflow upstand to correspond accordingly.
- Place and bed the flange of the Blue Roof restrictor onto an 8mm 8. bead of silicone into the throat of the roof outlet.
- 9. Remove correct number of restrictor sealing plugs as instructed within the Blue Roof drainage design.
- 10 Re-insert the perforated extension ring. Insert grate retaining plate and fix square grating into position with screw provided.
- 11. Apply any further roof build-up components and dress around the outlet extension ring.



Parapet Outlet - Warm, cold and inverted roofs

GRP, Cold Liquid, Hotmelt Waterproofing Membranes

- Remove the L shaped membrane clamp flange & stainless-steel grate. Remove wax paper ring, butyl seal strips including three foam transit spacers located within the throat of the outlet and discard.
- Insert roof outlet with pipe adaptor fitted, into the structural opening and secure with 2 Nr A2 grade stainless steel screws (not provided) into the vertical background.
- Dress the waterproofing membrane over the recessed grooves of the outlet body.
- 4. Place L shaped membrane clamp flange and grate over waterproofing membrane, then secure to outlet body with the 4 Nr male insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.

- Remove the L shaped membrane clamp flange & stainless-steel grate, wax paper ring from butyl seal ring including three foam transit spacers located within the throat of the roof outlet.
- Insert roof outlet with pipe adaptor fitted, into the structural opening and secure with 2 Nr A2 grade stainless steel screws (not provided) into the vertical background.
- Create a 500mm sq. skirt from the waterproof membrane and cut a 90x112mm rectangular hole in the middle and place over the outlet body & butyl seal strips.
- 4. Place L shaped membrane clamp flange and grate over waterproofing membrane, then secure to outlet body with the 4 Nr male insert bolts. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.

Inverted roofs - A localised sump area/void, adjacent to the outlet, should be left within the insulation of approximately 200x200mm in size. The void area can be left open or backfilled with ballast.

Un-insulated Balconies



Polished steel flate grate and compression clamp

- Waterproof membrane
- Structural deck
- Connecting pipework

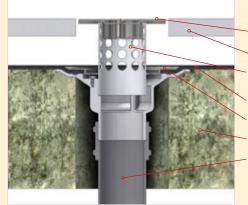
GRP, Cold Liquid and Hotmelt Waterproofing Membranes

- Remove the membrane clamp ring, wax paper ring including butyl seals & three foam transit spacers located within the throat of the balcony outlet and discard.
- Insert balcony outlet into the structural opening and secure with A2 grade stainless steel screws (not supplied).
- 3. Dress the waterproofing membrane over the recessed grooves of the outlet body
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 3Nr bolts provided. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Place circular grate over outlet and secure with screws provided.

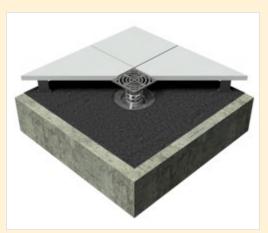


- Remove the membrane clamp ring, wax paper ring, including three foam transit spacers located within the throat of the balcony outlet and discard.
- Insert balcony outlet into the structural opening and secure with A2 grade stainless steel screws (not supplied).
- Create a 500mm sq. skirt from the waterproof membrane and cut a 135mm diameter hole in the middle. Centralise skirt over the outlet body.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 3Nr bolts provided. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Place circular grate over outlet and secure with screws provided.

Paved/Decked Balconies



- Polished steel terrace grate Pavers on adjustable supports
- Extension ring (site cut for height adjustment)
- Waterproof membrane
- Compression clamp
- Structural deck
- Connecting pipework

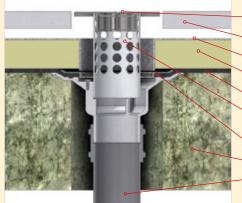


GRP, Cold Liquid and Hotmelt Waterproofing Membranes

- Remove the membrane clamp ring, wax paper ring including butyl seals & three foam transit spacers located within the throat of the balcony outlet and discard.
- 2. Insert balcony outlet into the structural opening and secure with A2 grade stainless steel screws (not supplied).
- 3. Dress the waterproofing membrane over the recessed grooves of the outlet body
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 3Nr bolts provided. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- 5. Insert perforated extension into outlet throat then mark the required height and cut down accordingly (5mm below finished floor level).
- 6. Press square tile grate spigot into the perforated extension.

- Remove the membrane clamp ring, wax paper ring, including three foam transit spacers located within the throat of the balcony outlet and discard.
- 2. Insert balcony outlet into the structural opening and secure with A2 grade stainless steel screws (not supplied).
- Create a 500mm sq. skirt from the waterproof membrane and cut a 135mm diameter hole in the middle. Centralise skirt over the outlet body.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 3Nr bolts provided. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- Insert perforated extension into outlet throat then mark the required height and cut down accordingly (5mm below finished floor level).
- 6. Press square tile grate spigot into the perforated extension.

Inverted Podium/Balconies



GRP, Cold Liquid and Hotmelt Waterproofing Membranes

A2 grade stainless steel screws (not supplied).

balcony outlet and discard.

the outlet body

Remove the membrane clamp ring, wax paper ring including butyl

seals & three foam transit spacers located within the throat of the

Insert balcony outlet into the structural opening and secure with

Dress the waterproofing membrane over the recessed grooves of

Place membrane clamping ring over waterproofing membrane,

then secure to outlet body with the 3Nr bolts provided. Tighten

tightness after 15-30 mins and further tighten if required.

Press square tile grate spigot into the perforated extension.

Place PIR insulation around the perforated extension.

bolts in a diagonal sequence to ensure even compression. Check

Insert perforated extension into outlet throat then mark the required

height and cut down accordingly (5mm below finished floor level).

- Polished steel terrace grate
- Pavers on adjustable supports
- Water reducing layer Rigid insulation
- Waterproof membrane
- Extension ring (site cut for height adjustment)
- Compression clamp
- Structural deck
- Connecting pipework



Sheet Waterproofing Membranes

- Remove the membrane clamp ring, wax paper ring, including three foam transit spacers located within the throat of the balcony outlet and discard.
- Insert balcony outlet into the structural opening and secure with A2 grade stainless steel screws (not supplied).
- Create a 500mm sq. skirt from the waterproof membrane and cut a 135mm diameter hole in the middle. Centralise skirt over the outlet body.
- 4. Place membrane clamping ring over waterproofing membrane, then secure to outlet body with the 3Nr bolts provided. Tighten bolts in a diagonal sequence to ensure even compression. Check tightness after 15-30 mins and further tighten if required.
- Insert perforated extension into outlet throat then mark the required height and cut down accordingly (5mm below finished floor level). Place PIR insulation around the perforated extension.
- 6. Press square tile grate spigot into the perforated extension.

Notes

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General Information

Prices quoted are trade list prices and exclude Value Added Tax (VAT). Customer attention is drawn to the Company's official Terms and Conditions of Sale. Goods are supplied strictly in accordance with these terms and conditions, copies of which are freely available from our website.

Marley Alutec products are manufactured to a constant high standard. Marley Alutec will therefore not accept responsibility for failure of any installation which includes components not supplied by us. Only use Marley Alutec recommended sundries, as other products may be incompatible and impair the life expectancy of the system.

Before placing your order please check that you have ordered the appropriate amount of sealant, solvent cleaner, screws, nuts/bolts/ washers and touch-up paints. Where applicable when ordering, please clearly quote the colour and the RAL code.

Roof outlets are manufactured in aluminium. Grates and clamping rings or flanges are polyester powder coated.

Returns Policy

Returns of polyester powder coated product will be for Heritage Black only, with prior agreement and at the discretion of Marley Alutec. Any agreed returns will incur a 50% re-stocking charge which covers the handling, checking and administration of the returned items.

We are unable to accept the return of any other Polyester Powder Coated or Soffit, Fascia & Coping product.

Cancellation Policy

Most Marley Alutec products are supplied on a "made to order" basis, therefore any non-stocked Polyester Powder Coated (PPC), Evoke fascia, soffit and copings, and bespoke items cannot be amended or cancelled once production has commenced (normally within 24 hours of receipt of order).

Marley Alutec will issue an order acknowledgement confirming our interpretation of your order therefore please ensure this is checked. Any alterations to this order should be notified immediately. Bespoke items will require a drawing approval prior to manufacture commencement.

Delivery Charges

| Product group | Based on list value per delivery | Delivery Charge |
|---|----------------------------------|-----------------|
| Pipe, Gutter, Fascia, Soffit and Coping | Up to £500 net | £75 |
| | £501 - £1,000 net | £50 |
| | Above £1,000 | No Charge |
| Fittings & Outlets | Up to £500 net | £30 |
| | £501 - £1,000 net | £20 |
| | Above £1,000 | No Charge |

For deliveries outside of UK mainland please contact customer services.

Lead Times*

2 day delivery lead times

| Heritage black & Mill finish | | Anthracite Grey (RAL 7016) & Mill finish | |
|---|---|--|--|
| Gutter systems | Downpipe systems | Gutter systems | Downpipe systems |
| Evolve Half Round GT5 range | Evolve 63mm Pipe RT2 range | Evolve Half Round XGT5 range | Evolve 63mm Pipe XRT2 range |
| Evolve Deepflow GE5 range | Tudor (63mm & 76mm) TR2 & TR3 ranges | Evolve Deepflow XGE5 range | Flushfit 76mm dia XRE3 range |
| Evolve Box GB5 range Evolve Ogee GY5 range Aligator Classic GK4 | Flushfit 76mm RE3 range Flushfit 72x72mm RJ3 | • Evolve Box XGB5 range | Flushfit 72x72mm XRJ3 range |
| range | range | | |
| • Traditional Half Round (4", 4.5" & 5") GC4, GC1 & GC5 ranges | | | |
| Traditional Moulded (5" & 6") GM5 & GM6 ranges | | | |

All other standard colour products will be delivered within 10 working days of order except Giant which is 15 working days, for specific enquiries contact **projects@marleyalutec.co.uk**.

Other lead times:

| Soffit & Fascia | . 10 working days |
|-----------------|-------------------|
| Coping | . 20 working days |
| Roof outlets | 2 working days |

All other products in Mill finish will be delivered within 5 working days of order. See page 6 for details of our standard colours.

*Subject to availability on items for 2 day delivery.

Contacts



Contacts

Estimate requests and price enquiries: email: projects@marleyalutec.co.uk Tel: 01234 359438.

Order placement: **orders@marleyalutec.co.uk** Tel: **01234 359438** Fax: **01234 357199** (Orders only accepted by email, post or fax) Order progression: Tel: **01234 359438**.

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Please state colour when ordering.



Orders received by 3.30pm on normal business days will be processed on the day of receipt. Orders received after 3.30pm will be processed the next business day.

Please note that the lead time/due date for the order, will be calculated from the date of processing.

Technical enquiries: technical@marleyalutec.co.uk Tel: 01234 344108.

Free estimating tool available at www.marleyalutec.co.uk/calculators



Head office

For general enquiries, please call **01234 359438** For technical enquiries please call **01234 344108** email: **projects@marleyalutec.co.uk** Fax: **01234 357199**

Unit 1 (G-H), Viking Industrial Park, Hudson Road, Elms Farm Industrial Estate, Bedford MK41 0LZ



/marleyalutec

e @marleyalutec

in /company/marley-alutec

www.marleyalutec.co.uk