COLORSTEEL®

NEW ZEALAND MADE

www.gutterplus.nz

0800 615 615

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Use only the current specification

This publication may be superseded by a new publication. Eaves Manufacturing (NZ) Ltd accepts no liability for reliance upon publications that have been superseded. If you are unsure whether this is the current publication, visit www.gutterplus.nz or call 0800 615 615.
Current specification created: July 2018.

Transport

Generally, the lengths of Eaves Water System guttering are delivered to site by long length trailers and articulated trucks. Therefore, access to and on building sites must be adequate to accommodate these type of vehicles.

Off loading and site storage or cranage onto site is the responsibility of the client and suitable arrangements should be made prior to delivery.

Eaves Water System products are packed and protected against damage but care must be exercised during unloading.

On-site Handling and Storage

Handle Eaves Water System gutter carefully prior to installation. Avoid knocks, bumps and scratches, which may lead to maintenance issues later.

Maintenance & Cleaning

To maximise the life of your colorsteel® gutters and to maintain your warranty, regular washing and maintenance is recommended.
The maintenance information contained in this document is only intended as a guide and is not a warranty or professional advice and should not be construed as such. For more detailed information please visit the colorsteel® website www.colorsteel.co.nz, please refer to the Environmental Categories, Warranty & Product Maintenance Recommendations Brochure.

Installation guidelines

Eaves Water System has been designed as a modular system, making repair and replacement much simpler. There is a technical element to installing Eaves Water System gutters.
If you are unsure we recommend you seek advice from a trade professional.

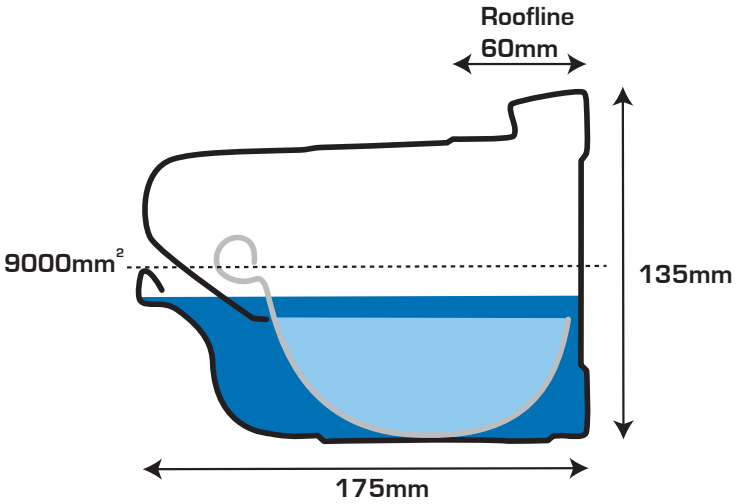
Strippable Film

Eaves Water System gutter will be supplied with a plastic film to provide protection during the manufacturing, handling and transportation.

This film has a very short life when exposed to exterior conditions and must be removed immediately prior to installation. It must not be left lying in the sun or at the site for more than a few hours. Failure to remove the film in a timely manner will lead to difficulties with its removal.

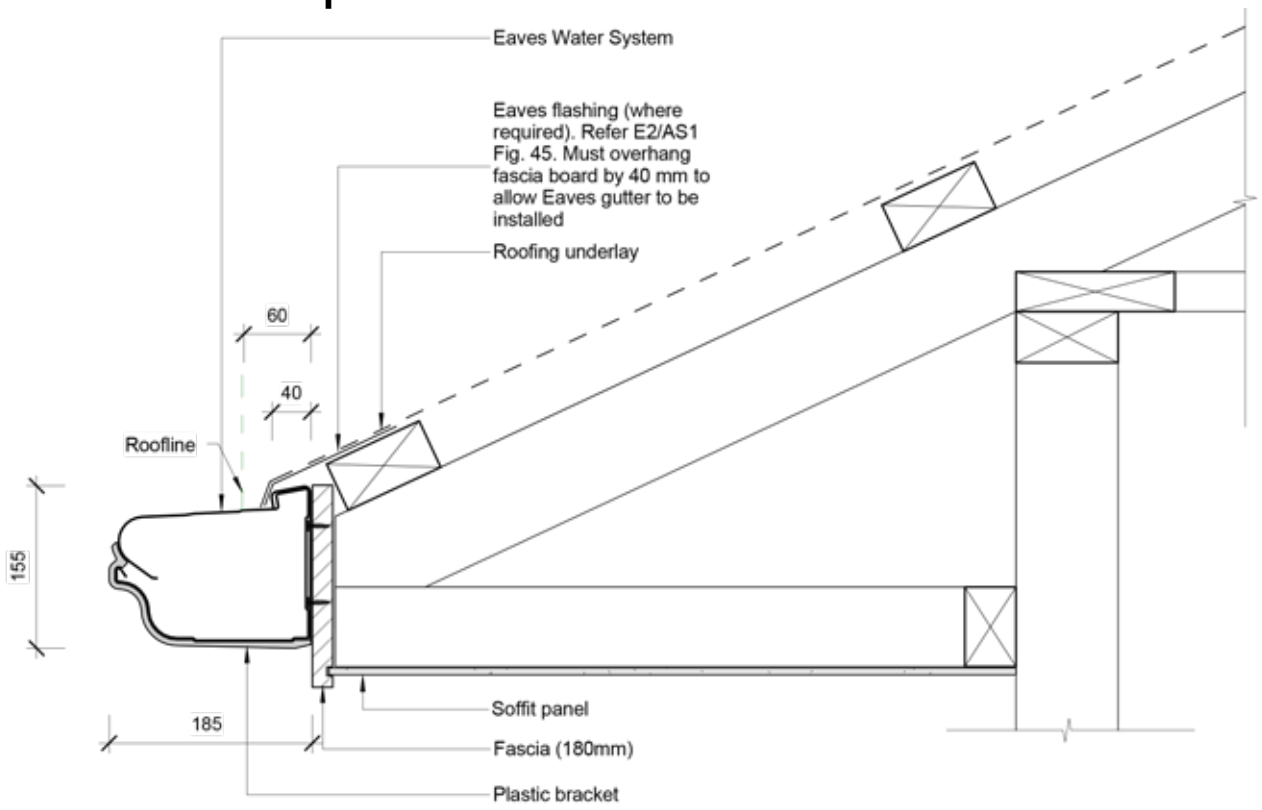
Specifications

Effective Cross Sectional Area = 8000mm
(with 10mm free-board before emergency overflow)
Flow Capacity = 120 Ltrs/min
Minimum Fall = 1:1 (1mm every 1 metre)
Maximum Bracket Spacing- Standard = 1000mm
Maximum Bracket Spacing- Snow = 600mm
Colorsteel thickness- 0.55mm

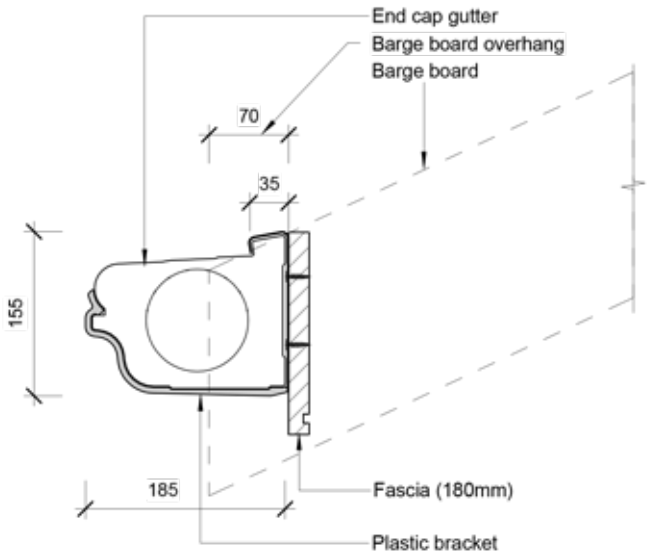


Traditional gutter - 6500mm² Eaves gutter - 9000mm²

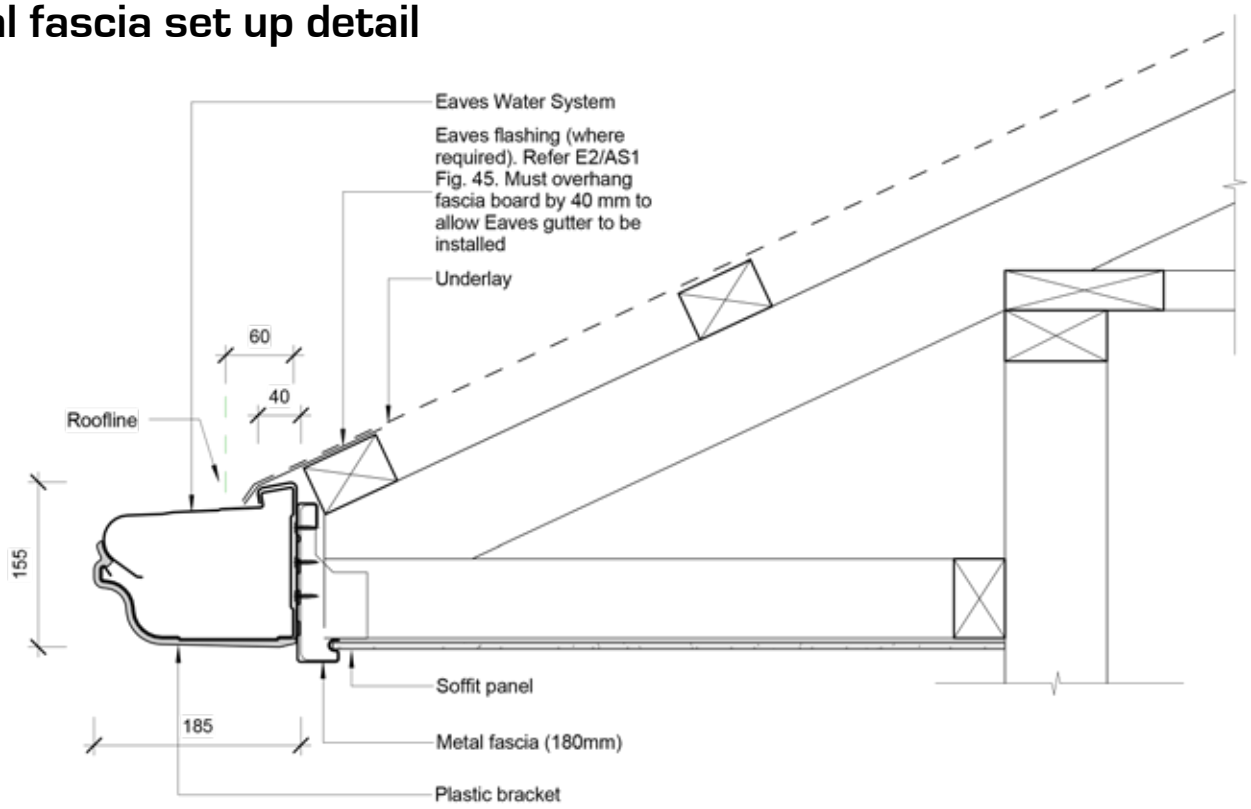
Timber fascia set up detail



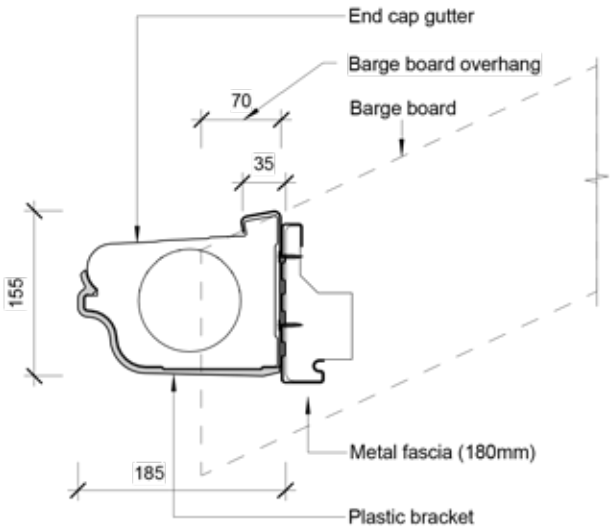
Timber fascia & elevation set up detail



Metal fascia set up detail



Metal fascia & elevation set up detail



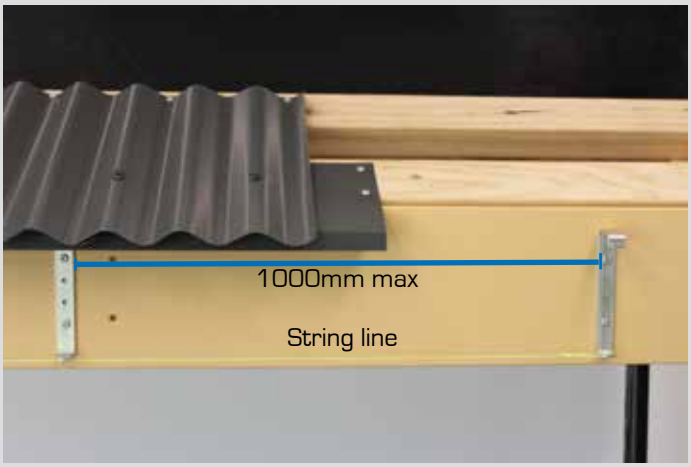
Tools

- String line
- Drill and drill bit for screws (4mm)
- Rivet gun
- Builders level
- Measuring tape
- Hacksaw - fine tooth saw
- Access equipment
  NB: Refer to Worksafe NZ website for best practice guidelines for working at height in New Zealand.
- Marker
- Tin snips
- Silicone- Roof & Gutter (transparent)
- Fine round file
- Set square

Safety Precautions

- Keep tools and materials away from children.
- Read the instructions before beginning your project.
- You may need to seek permission from your local council and power authorities before beginning the project.
  NB: Refer to Worksafe NZ website for best practice guidelines for working with over head power lines in New Zealand.
- Always work from stable platform and only use ladders for access or to carry out low-risk minor or routine work.

Straight run installation

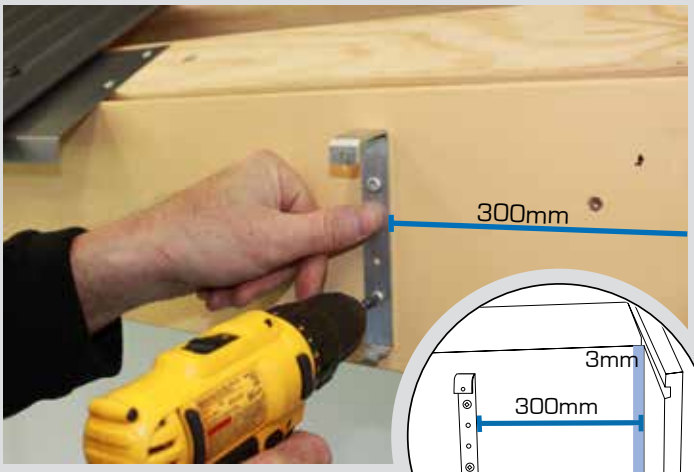


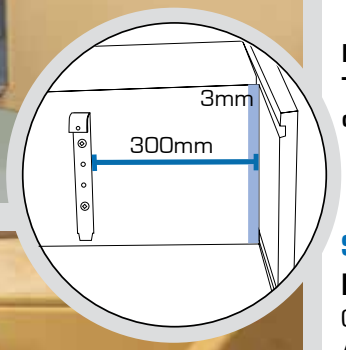
STEP 1

String line.

Locate position of down pipe outlet, this will be your low point. On existing houses these are identified by existing down pipes or storm water outlets. Next find your high point. Position the first bracket at determined high point as high as possible on the fascia under the roof overhang.
Secure string line to the first bracket and run under the first bracket to the low point.

Ensure a minimum fall of 1mm for every 1 metre of run, check string line with builders level.





STEP 2

Aluminium Brackets.

Mark and secure brackets no more than 1000mm apart & 300mm from the end of the fascia.
In high wind or snow prone areas reduce spacing to 600mm.
Use a minimum of 2 x galvanised screws per bracket.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used.
There is to be a 2mm clearance between the bottom edge of roofing & gutter.

STEP 3

Plastic Brackets.

Click plastic bracket into aluminium bracket at the base.
Allow 3mm between gutter and barge board at ends.

NB: In cool conditions, place plastic brackets into a bucket of warm water or leave in direct sunlight before installation.

STEP 4

Preparing straight run.

Measure the total distance between barge board to barge board- allow for the plastic end caps.
Using set square measure & mark your cut line.

NB: total length is the measurement from barge board to barge board negative end cap and allowances.

STEP 5

Cutting straight run.

Using a fine tooth hack saw. Cut neatly down marked line. Once cut use small round file to de-burr cut edge.

NB: Use provided touch up paint to seal cut edge. Ensure that all filings are removed from gutter run.

STEP 6

Preparing run to fit end caps.

Using tin snips cut a small v at top of gutter rib, to allow end cap to be installed.

NB: Use provided touch up paint to seal cut edge. Ensure that all filings are removed from gutter run.

STEP 7

End cap Installation.

Ensure silicone is placed under plastic fingers & around plastic inside edge.

NB: Surface area must be clean and dry. Remove any surplus silicone immediately using a damp, clean cloth.

STEP 8

End Cap Installation.

Peel away protective film (dispose of film responsibly) Slide plastic end cap onto cut run.

STEP 9

End cap installation.

Remove bayonet cap. Once end cap is in place, seal inside gutter run using silicone.

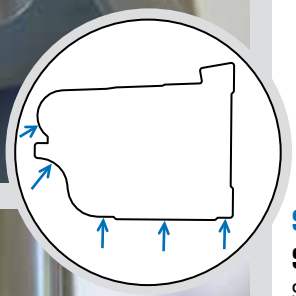
NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 10

End cap sealant.

Silicone bead the underneath end cap profile ends to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.



STEP 11

Securing end cap.

Using a 4mm drill bit, drill through plastic end cap into the gutter run as per marked image- there is a total of 5 holes required in the end caps.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 12

Securing end cap at underside.

Secure with a 4mm colour matched rivet using a rivet gun as per marked image. There is a total of 5 rivets required in the end caps.

NB: Coloured 4mm rivets.

STEP 13

Gutter run installation.

Lay gutter run at angle as per image. Roll run into brackets.

NB: make sure gutter run is clipped into aluminium brackets.

STEP 14

Plastic brackets.

Using a set square ensure plastic brackets are sitting at right angles from fascia.

STEP 15

Securing plastic brackets.

Clip in plastic bracket at front edge.

STEP 16

Securing plastic brackets.

Using a 4mm drill bit, drill through plastic bracket into the gutter run as per guide hole in plastic bracket.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 17

Securing plastic brackets.

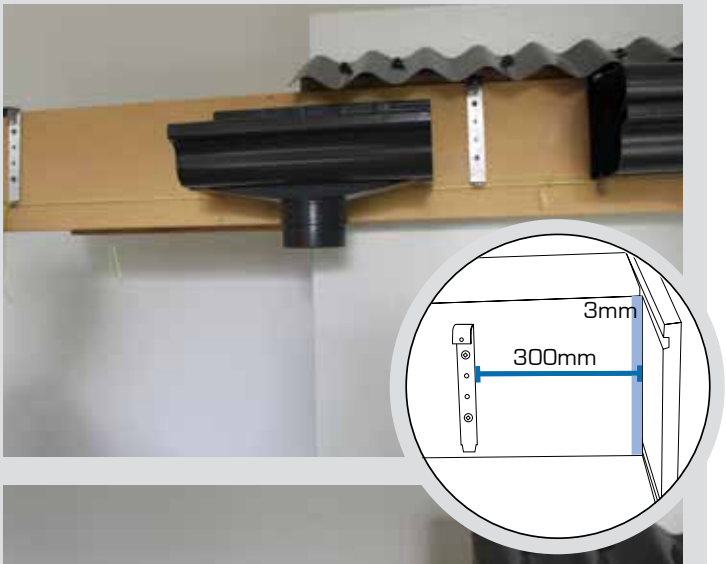
Secure with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 18

Inspection end cap.

Screw in the inspection bayonet end cap.



STEP 1

String line.

Locate position of rainhead, this will be your low point. On existing houses these are identified by existing down pipes or storm water outlets. Next find your high point.
Position the first bracket at determined high point as high as possible on the fascia under the roof overhang.
Secure string line to the first bracket and run under the first bracket to the low point.

Ensure a minimum fall of 1mm for every 1 metre of run, check string line with builders level.

STEP 2

Aluminium brackets.

Mark and secure brackets no more than 1000mm apart & 300mm from the end of the fascia.
Allow 3mm between gutter and barge board at ends.
In high wind or snow prone areas reduce spacing to 600mm.
Use a minimum of 2 x galvanised screws per bracket.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used.
There is to be a 2mm clearance between the bottom edge of roofing & gutter.

STEP 3

Plastic brackets.

Click plastic bracket into aluminium bracket at the base.

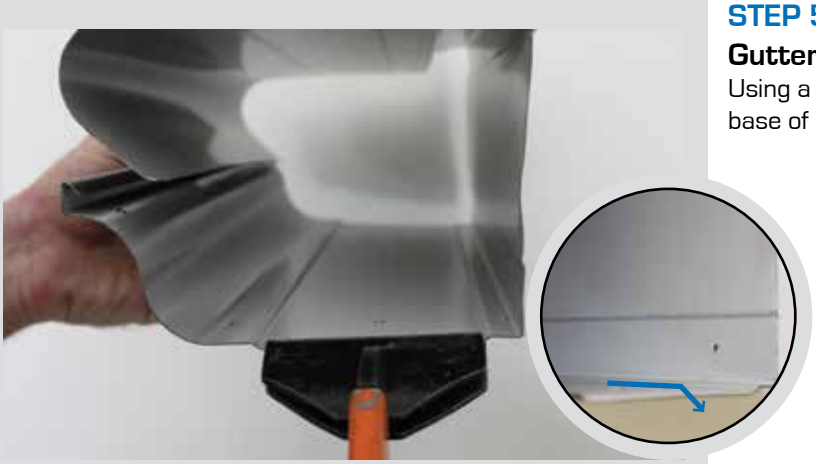
NB: In cool conditions, place plastic brackets into a bucket of warm water or leave in direct sunlight before installation.

STEP 4

Rainhead sealant.

Ensure silicone is placed at rainhead end profiles.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.



STEP 5

Gutter run preparation.

Using a sheet metal folder/vice grip, fold a 3mm lip edge at base of gutter run- at approximately 5 degrees.

STEP 6

Gutter run installation.

Peel away protective film (dispose of film responsibly)
Lay gutter run at angle as per image. Roll run into brackets.

NB: make sure gutter run is clipped into aluminium brackets.

STEP 7

Securing rainhead.

Using a 4mm drill bit, drill through plastic rainhead into the gutter run as per marked image- there is a total of 4 holes required in the rainhead base at each end.

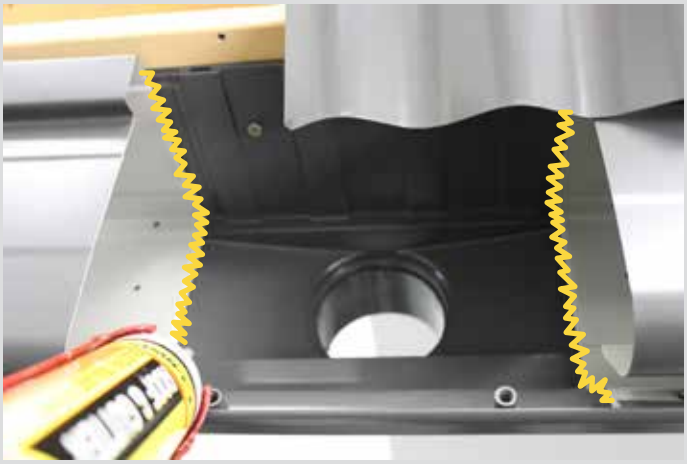
NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 8

Securing rainhead.

Secure with 4mm colour matched rivets using a rivet gun as per marked image. There is a total of 4 rivets required in the rainhead base at each end.

NB: Coloured 4mm rivets.



STEP 9

Rainhead sealant.

Once gutter is installed into rainhead. Ensure silicone is placed at each end of rainhead, smooth silicone out to ensure water runs smoothly and is sealed.

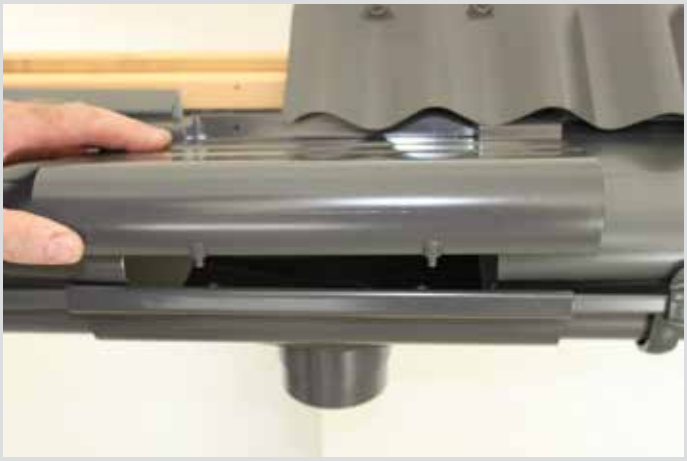
NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 10

Rainhead sealant.

Silicone bead the underneath rainhead profile ends to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.



STEP 11

Securing rainhead top.

Push rainhead top into place.

NB: Take care not to scratch the top of rainhead against roofing material.

STEP 12

Securing rainhead top.

Using a square drive #2 bit, install an 8g x 25 stainless steel square drive screw through pre-drilled holes in rainhead base to secure rainhead top.

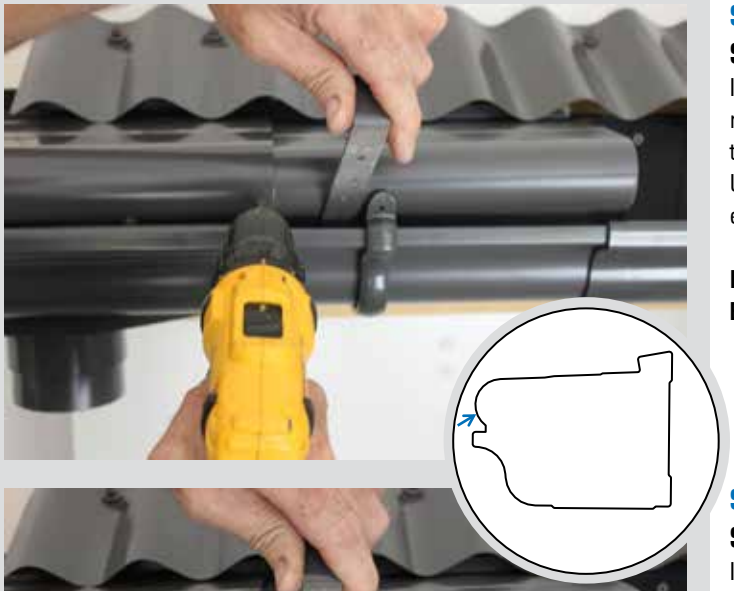
NB: Ensure that screws are NOT over tightened.

STEP 13

Securing rainhead top.

Using a square drive #2 bit, install a 8g x 25 stainless steel square drive screw into rainhead top back upstand into fascia.

NB: Ensure that screws are NOT over tightened.
Also use a drill square drive extension to screw under roof.



STEP 14

Securing rainhead top to gutter run.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards rainhead top, hold firmly.
Using a 4mm drill bit, drill through plastic rainhead top front edge into the gutter run.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 15

Securing rainhead top to gutter run.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards rainhead top, hold firmly.
Secure front rainhead with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 16

Securing plastic brackets.

Using a 4mm drill bit, drill through plastic bracket into the gutter run as per guide hole in plastic bracket.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 17

Securing plastic brackets.

Secure with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 1

Preparing gutter run for dropper.

Peel away protective film (dispose of film responsibly). Using a marker position and mark dropper in correct position.

NB: We recommend using an 80mm down pipe, either uPVC or pre-painted Colorsteel®.

STEP 2

Preparing gutter run for dropper.

Cut hole as marked.

STEP 3

Installing dropper.

Place dropper in hole. Ensure correct sealant is used to seal around the installed dropper.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 1

Setting corner base height.

External corner base height is governed by gutter fall and roof height- set accordingly.
Use a minimum of 2 x galvanised screws per corner base.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used.

STEP 2

String line.

Position the first bracket 150mm away from corner base- refer to image.
Secure string line underneath the external corner base continue stringline to next end height.

Ensure a minimum fall of 1mm for every 1 metre of run, check string line with builders level.

STEP 3

Aluminium brackets.

Mark and secure brackets no more than 1000mm apart & 150mm from the end of the corner.
In high wind or snow prone areas reduce spacing to 600mm.
Use a minimum of 2 x galvanised screws per bracket.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used.
There is to be a 2mm clearance between the bottom edge of roofing & gutter.

STEP 4

Plastic brackets.

Click plastic bracket into aluminium bracket at the base.

NB: In cool conditions, place plastic brackets into a bucket of warm water or leave in direct sunlight before installation.

STEP 5

External corner sealant.

Silicone is placed at the end of external corner to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 6

Gutter run installation into corner.

Peel away protective film (dispose of film responsibly).
Lay gutter run at angle as per image.
Roll run into brackets.

NB: make sure gutter run is clipped into aluminium brackets.

STEP 7

Squaring external corner base.

Adjust external corner base by sight to make sure it's level and square.

NB: use the gutter run for guidance to make sure corners are square.

STEP 8

Securing external corner.

Using a 4mm drill bit, drill through plastic external corner base into the gutter run as per marked image- there is 4 holes required in the base of the external corner at each end.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 9

Securing end cap at underside.

Secure with 4mm colour matched rivets using a rivet gun as per marked image. There is 4 rivets required in the external corner base at each end.

NB: Coloured 4mm rivets.

STEP 10

External corner sealant.

Once gutter is installed into external corner, ensure silicone is placed at gutter run end profile, smooth silicone out to ensure water runs smoothly and is sealed.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 11

External corner sealant.

Silicone bead the underneath external corner ends to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 12

Securing external corner top.

Push external corner top into place.

NB: Take care not to scratch the top of external corner against roofing material.

STEP 13

Securing external corner top.

Using pre drilled holes in external corner base, use a square drive #2 bit, install a 8g x 25 stainless steel square drive screw into external corner base top.

NB: Ensure that screws are NOT over tightened.

STEP 14

Securing external corner top.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards external corner top, hold firmly.
Using a 4mm drill bit, drill through plastic external corner top front edge into the gutter run.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 15

Securing external corner top to gutter run.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards external corner top, hold firmly.
Secure front external corner with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 16

Securing plastic brackets.

Using a 4mm drill bit, drill through plastic bracket into the gutter run as per guide hole in plastic bracket.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 17

Securing plastic brackets.

Secure with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 18

Inspection bayonet external corner.

Screw in the inspection bayonet at the top of the external corner.

STEP 1

Setting corner base height.

Internal corner base height is governed by gutter fall and roof height- set accordingly.
Use a minimum of 4 x galvanised screws per internal corner base.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used. Use a square drive extension to screw under roof.

STEP 2

String line.

Position the first bracket 150mm away from internal corner base- refer to image.
Secure string line underneath the internal corner base continue string line to next end height.

Ensure a minimum fall of 1mm for every 1 metre of run, check string line with builders level.

STEP 3

Aluminium brackets.

Mark and secure brackets no more than 1000mm apart & 150mm from the end of the corner.
In high wind or snow prone areas reduce spacing to 600mm.
Use a minimum of 2 x galvanised screws per bracket.
Minimum screw is 12g x 30mm coarse thread.

NB: Gib clouts must NOT be used.
There is to be a 2mm clearance between the bottom edge of roofing & gutter.

STEP 4

Plastic brackets.

Click plastic bracket into aluminium bracket at the base.

NB: In cool conditions, place plastic brackets into a bucket of warm water or leave in direct sunlight before installation.

STEP 5

Internal corner sealant.

Silicone is placed at the end of internal corner to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 6

Gutter run installation into corner.

Peel away protective film (dispose of film responsibly).
Lay gutter run at angle as per image.
Roll run into brackets.

NB: make sure gutter run is clipped into aluminium brackets.

STEP 7

Securing Internal corner.

Using a 4mm drill bit, drill through plastic internal corner base into the gutter run as per marked image- there is 4 holes required in the base of the internal corner at each end.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 8

Securing internal corner at underside.

Secure with a 4mm colour matched rivet using a rivet gun as per marked image. There is 4 rivets required in the internal corner base at each end.

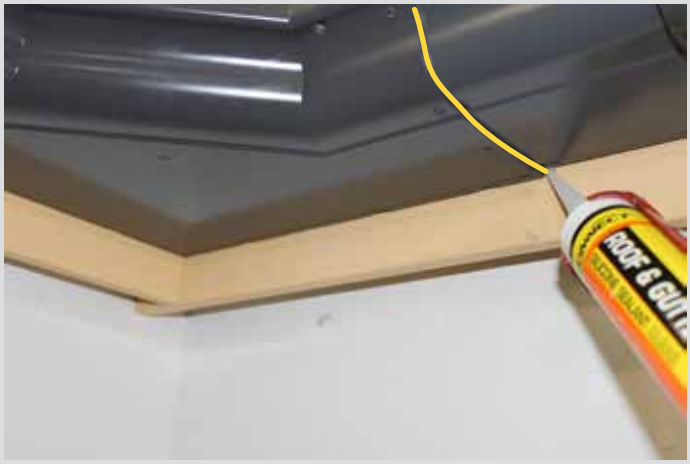
NB: Coloured 4mm rivets.

STEP 9

Internal corner sealant.

Once gutter is installed into internal corner, ensure silicone is placed at gutter run end profile, smooth silicone out to ensure water runs smoothly and is sealed.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.



STEP 10

Internal corner sealant.

Silicone bead the underneath internal corner ends to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 11

Securing internal corner top.

Push internal corner top into place.

NB: Take care not to scratch the top of internal corner against roofing material.

STEP 12

Securing internal corner top.

Using pre drilled holes in internal corner base, use a square drive #2 bit, install a 8g x 25 stainless steel square drive screw into internal corner base top.

NB: Ensure that screws are NOT over tightened.

STEP 13

Securing internal corner top.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards internal corner top, hold firmly.
Using a 4mm drill bit, drill through plastic internal corner top front edge into the gutter run.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 14

Securing internal corner top to gutter run.

Insert an aluminium bracket (small end of bracket into gutter run) Use bracket to hook gutter profile towards internal corner top, hold firmly.
Secure front internal corner with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

STEP 15

Securing plastic brackets.

Using a 4mm drill bit, drill through plastic bracket into the gutter run as per guide hole in plastic bracket.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 16

Securing plastic brackets.

Secure with a 4mm colour matched rivet using a rivet gun.

STEP 19

Inspection bayonet internal corner.

Screw in the inspection bayonet at the top of the internal corner.

STEP 1

Preparing straight run for slip join.

Measure 200mm from end of gutter profile.
Using set square measure & mark your cut line at top gutter rib.

NB: Ensure placement of slip joins matches placement of brackets.

STEP 2

Preparing straight run for slip join.

Measure 200mm from end of gutter profile at front opening.
Start at approx 3mm and angle back creating a triangle.

NB: Ensure placement of slip joins matches placement of brackets.

STEP 3

Cutting straight run for slip join.

Using a fine tooth hack saw.
Cut neatly down marked lines.

NB: Ensure that all filings are removed from gutter run.

STEP 4

Preparing straight run for slip join.

Peel away protective film (dispose of film responsibly).
Use a small round file to de-burr cut edges.

NB: Ensure that all filings are removed from gutter run.

STEP 5

Preparing straight run for slip join.

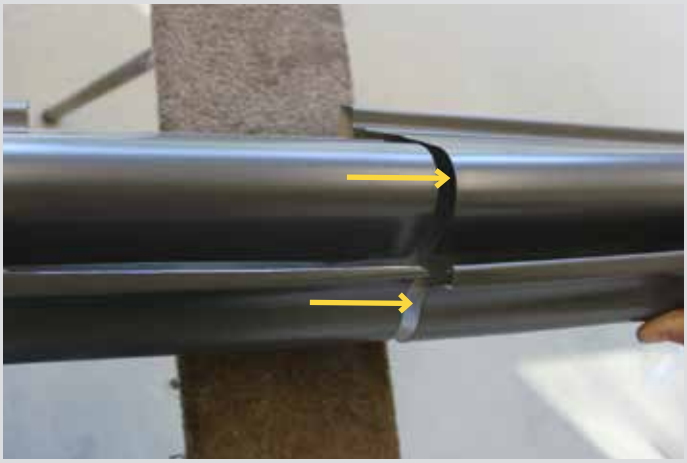
Use touch up paint to seal all cut edges.

STEP 6

Slip join sealant.

On female side ensure 4 rows of silicone is placed at end of gutter run.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

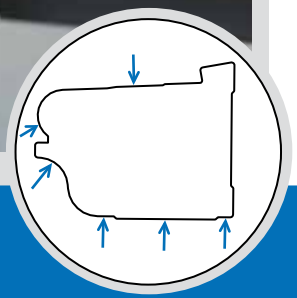


STEP 7

Securing slip join.

Slide the male side into the female side.

NB: Remove any surplus silicone immediately using a damp, clean cloth.

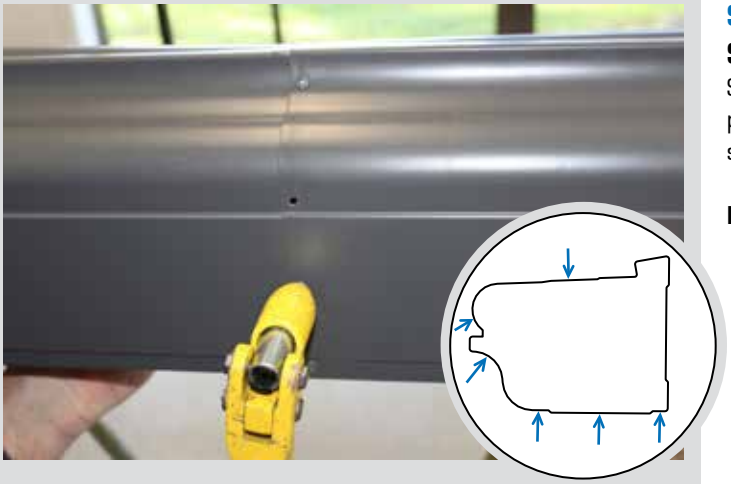


STEP 8

Securing slip join.

Using a 4mm drill bit, drill through the gutter run as per marked image- there is a total of 6 holes required in the slip joins.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.



STEP 9

Securing slip join.

Secure with 4mm colour matched rivets using a rivet gun as per marked image. There is a total of 6 rivets required in the slip joins.

NB: Coloured 4mm rivets.

STEP 11

Securing slip join over lap.

Using a 4mm drill bit, drill through the back of the gutter run as per marked image- carefully open the gutter and drill one hole on the inside as per marked image.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 12

Securing slip join over lap.

Secure with a 4mm colour matched rivet using a rivet gun as per marked image.

NB: Coloured 4mm rivets.

STEP 13

Securing slip join over lap.

Measure & mark 180mm from gutter run edge. Using a 4mm drill bit, drill through the gutter run as per marked image- there is a total of 3 holes required in the securing the slip join over lap.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 14

Securing slip join over lap.

Secure with 4mm colour matched rivets using a rivet gun as per marked image. There is a total of 3 rivets required in securing the slip join over lap.

STEP 15

Internal slip join sealant.

Once gutter is slip joined, ensure silicone is placed at gutter run end profile, smooth silicone out to ensure water runs smoothly and is sealed.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 16

Internal slip join sealant.

Once gutter is Slip joined, ensure silicone is placed at all internal rivet points, smooth silicone out to ensure water runs smoothly.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 14

Slip join sealant.

Silicone bead the underneath slip join profile to seal.

NB: Surface area must be clean and dry.
Remove any surplus silicone immediately using a damp, clean cloth.

STEP 15

Securing plastic brackets over slip join.

Using a 4mm drill bit, drill through plastic bracket into the gutter run as per guide hole in plastic bracket.

NB: Use a 4mm drill bit.
Ensure that all filings are removed from gutter run.

STEP 16

Securing plastic brackets over slip join.

Secure with a 4mm colour matched rivet using a rivet gun.

NB: Coloured 4mm rivets.

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