

Tools

Areco's Rainwater system is constructed so that installation is easy. The tools you will need are: pliers, hammer, screwdriver, hacksaw, tape measure and string. If you need a tool to bend the brackets you can hire one from your builders' yard.

Sawing and cutting

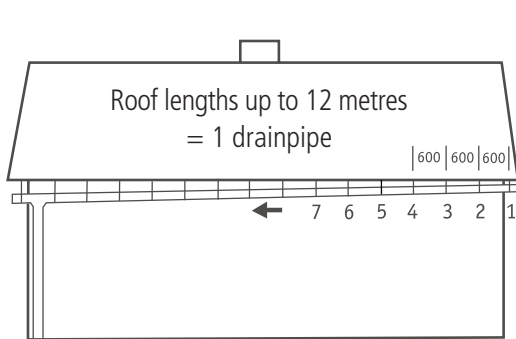
Use a hacksaw when sawing rainwater pipes and guttering. Curve shears must not be used because swarf and the heat from the disc can damage the sheet metal's outer layer and galvanised surface.

Estimating quantities

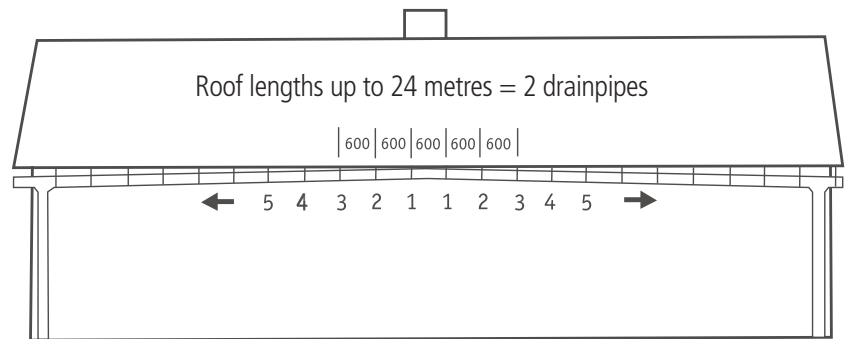
The amount of guttering, rainwater pipes and accessories needed will vary depending on your house. Calculate on the basis that each drainpipe can cope with a maximum gutter length of 12 m. Fascia brackets should be mounted so that the guttering falls towards the drainpipe. Bracket spacings should not exceed 600 mm, with a fall of 5 mm per metre. The dimensions of the guttering and drainpipes should be chosen according to the surface area of the roof.

- Roof size up to c. 50 m² (drainage area): guttering and pipe dimensions 100/75 mm
- Roof size c. 50-100 m² (drainage area): guttering and pipe dimensions 125/90 mm
- For larger surfaces guttering and pipes with dimensions 150/100 mm are available

INSTALLING YOUR GUTTERING



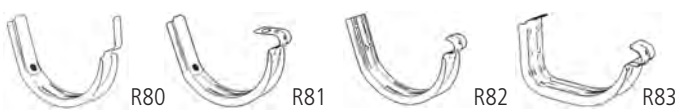
Decide in which direction the gutter is to fall. Choose which bracket you will use. Fix the first and last bracket c. 10 cm from the edge of the roof. Other brackets should be fixed with 600 mm centres (see sketch). Fall 5 mm/metre. Fix the brackets with screws or ring shank nails.



Choose which bracket you will use. Begin to fix the brackets 1-1 c. 300 mm from the middle and fall in both directions. The last bracket should be fixed c. 10 cm from the edge of the roof. The other brackets should be fixed with 600 mm centres (see sketch). Fall 5 mm/metre. Fix the brackets with screws or ring shank nails.

FITTING FLEXI BRACKETS/FASCIA BRACKETS

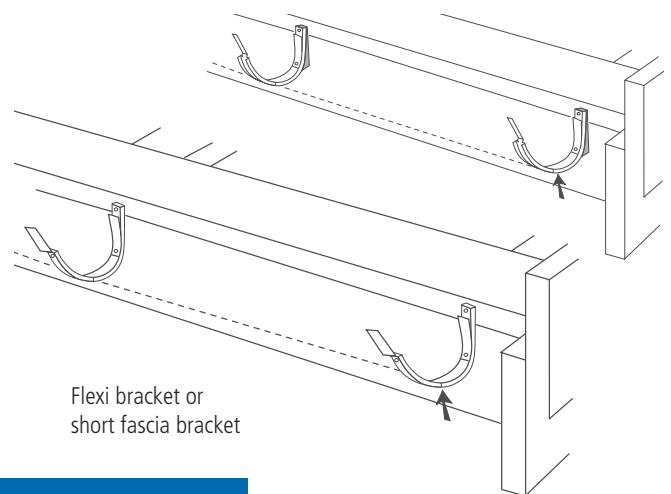
Flexi brackets



Securing to fascia board

Flexi brackets or short iron brackets are fixed to the fascia board. If this is angled use pre-bent 270° iron brackets or flexi brackets with a flexi wedge. With roof lengths up to 12 metres fit the first and last bracket c. 10 cm in from the edge of the roof. Fall 5 mm per metre. Attach a string to the underside of the first bracket (see arrow). Attach the string to the last bracket, check that it's taut and the fall is correct. Use the taut string to help you fix the other brackets with 600 mm centres. With roof lengths longer than 12 metres start fitting from the centre.

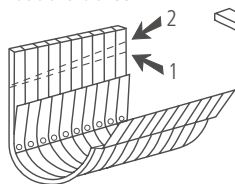
Flexi bracket with flexi wedge on angled fascia board



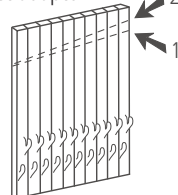
Flexi bracket or short fascia bracket

BENDING BRACKET ADAPTORS/FASCIA BRACKETS

Fascia bracket



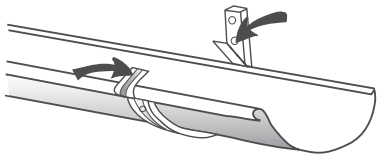
Bracket adaptor



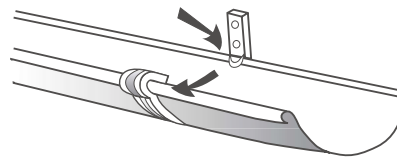
Securing to lathes

Medium/long brackets must be bent so that the gutter has a fall. Line up all the brackets/adaptors you will need. Draw a line over across all the brackets/adaptors where they should be bent (arrow 1). Measure from the line on the last bracket/adaptor so that the fall will be 5 mm/metre. Mark a new line (arrow 2). Bend the brackets/adaptors according to this line. Flexi brackets are to be mounted on the adaptors after the adaptors have been bent and fixed in place. Adaptors are available in two lengths, which are equivalent to medium or long brackets.

FITTING THE GUTTER

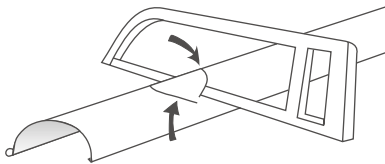


Place the gutter in the brackets, press down the front of the gutter on the brackets and bend the tab over. Then push the gutter down so that it is resting on the bracket and bend the second tab over.

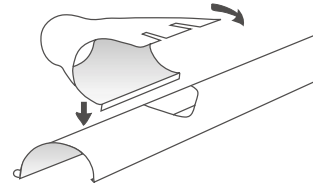


When flexi bracket R82 is used the gutter's front edge should be pushed into the hook. Then the gutter should be pressed down so that it locks under the notch in the back of the bracket.

FITTING RUNNING OUTLETS

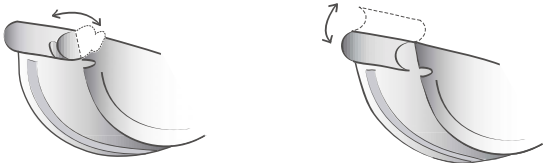


Mark on the gutter where the drainpipe is to be placed. Saw two angled cuts so that you make an opening of c. 10 cm. Bend the edges of the hole down slightly so that the water can run into the drainpipe.

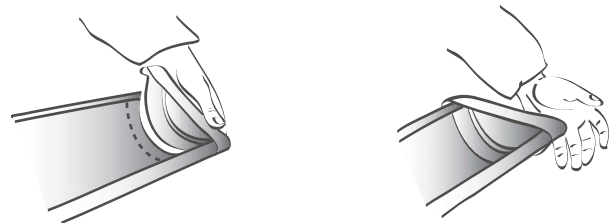


Press the folded edge of the running outlet into the front edge of the gutter. Then move the running outlet down towards the back of the gutter. Bend the outlet's tabs over the back of the gutter so that it locks in place.

FITTING STOPENDS



The stopend is combined, for both left and right attachment. Bend off the ear and round, according to the etched line in the stopend, on the side you are **not** going to fit it (see sketch).

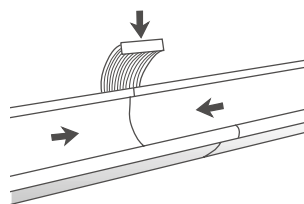


Place joint sealant according to the dotted line. Attach strip sealant on the stopend. Position the stopend in c. 2 cm in the front edge of the gutter, turn it down into the gutter and push it completely in.

JOINTING WITH UNION CLIPS



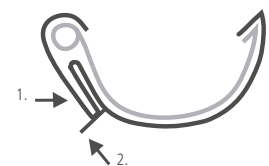
Bend the union clip slightly outwards before fitting. Then place at least two strings of strip sealant along the whole of the rubber seal that is placed in the union clip.



Push the gutters towards each other and put a little joint sealant above and below the joint.



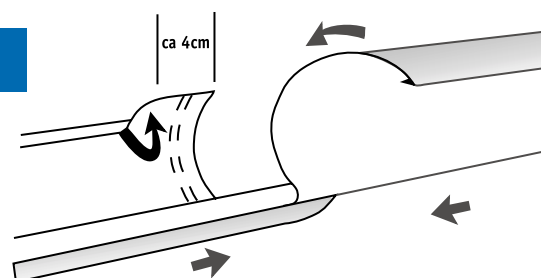
Continue by fastening the union clip over the back edge of the gutter (1) (see previous picture also) and then over the front edge of the gutter (2) (round).



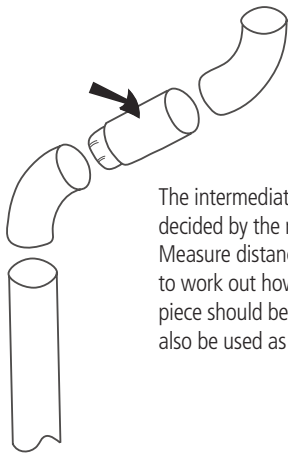
Then push the union clip together with your hand (1) so that it is in contact with the gutter. Then fold over the tab so that it is locked in place (2).

JOINTING WITHOUT UNION CLIPS

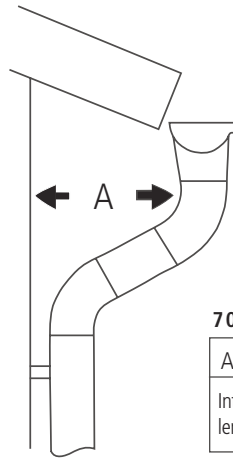
Fold up a c. 4 cm long flap along the back edge of the lower gutter. Place joint sealant according to the dotted lines and push in the upper gutter in the lower according to the picture. Fold down the upper gutter in the lower, fold over the flap and push together so that both gutters are locked in place.



ANGLES & INTERMEDIATE PIECES



The intermediate piece's length is decided by the roof's overhang. Measure distance A and use the table to work out how long the intermediate piece should be. Cut-off drainpipes can also be used as intermediate pieces.

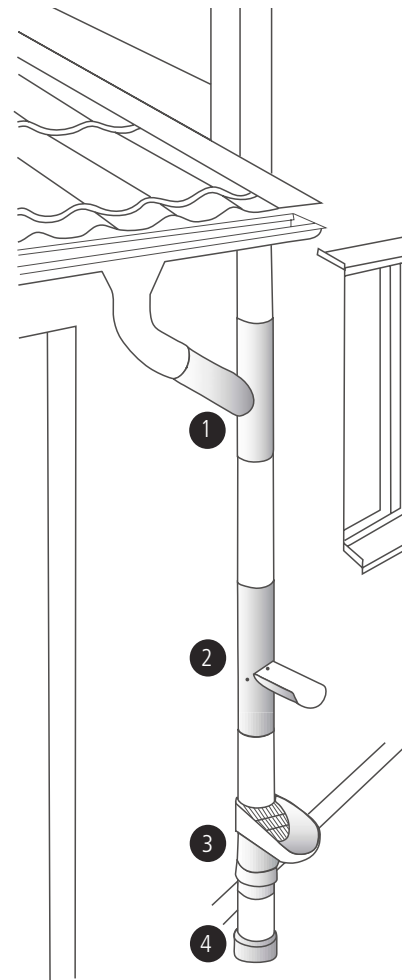
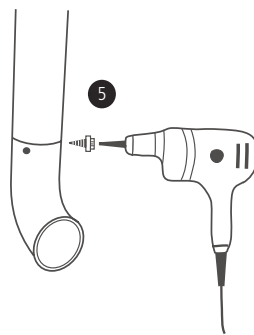
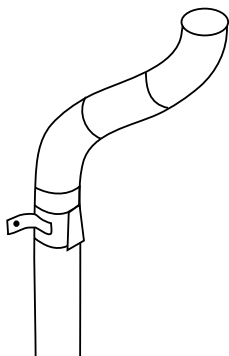


70 ANGLE

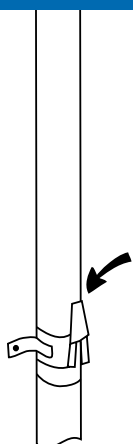
A cm	80	70	60	50	40	30
Intermediate piece's length in cm	app. 70	app. 60	app. 50	app. 40	app. 30	app. 20

USEFUL ACCESSORIES

1. Branches are used if, for example, you wish to drain several roofs into the same drainpipe.
2. Collapsible spouts are used if you want to be able to collect the rainwater. Fit the collapsible spout into the drainpipe.
3. Leaf guards and leaf filters prevent leaves and debris getting into the ground drains. Sleeves are available for different pipe dimensions.
4. A drain cuff is used between the drainpipe and the ground drain. A run-off filter prevents debris in the ground drain and is mounted directly in it.
5. A spout is fitted when the drainpipe is not attached to the drain system. Use screws or rivets when you fit the spout to the drainpipe.

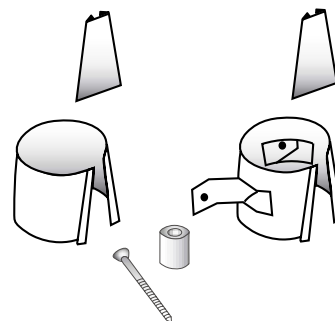


FITTING CLIPS

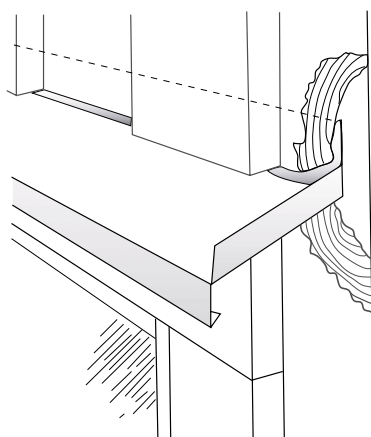


The clip is fitted c. 10 cm under the lower angle. The distance between clips should not be greater than 2 metres. The clip is locked in place with a wedge (wedge's broad side downwards). Hammer the wedge into place with a hammer and wooden block. Clips are available for both timber and stone walls. In stone or brick walls holes should be pre-drilled for attaching the clips (drill in the mortar).

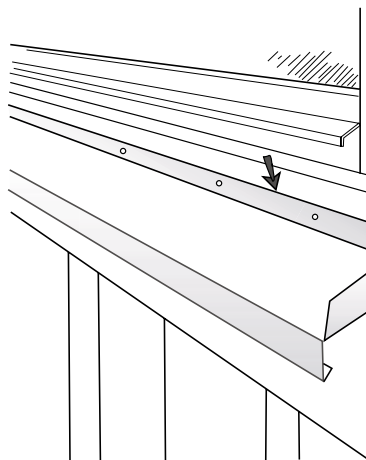
Fit the pipe details on to the drainpipe and attach to the running outlet. Check that the pipe is straight.



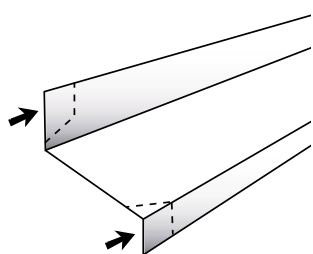
FITTING WINDOW SILLS



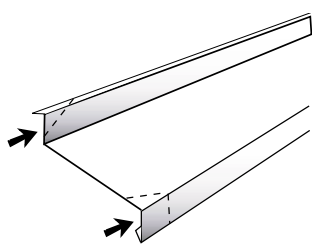
Upper sill
Fitted over the window's architrave. Screwed or nailed every 10 cm.



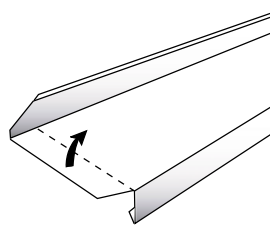
Lower sill
Fitted in the groove in the window frame. Screwed or nailed every 10 cm.



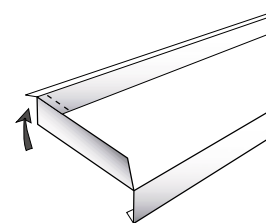
Measure the length of the upper sill and add 30 mm for stopends (15 mm at each end). Cut according to the dotted lines at both ends of the sill. Bend the sill according to the same instructions as the lower sill.



Measure the length of the lower sill and add 20 mm for stopends (10 mm at each end). Cut according to the dotted lines at both ends of the sill.



Bend the sill upwards along the dotted line. A tab will form at the back edge of the sill – bend this backwards.



Then fold this tab around the back edge of the sill. This makes it watertight with no risk of leakage.

Window sills are available in standard lengths 1200 – 1500 – 2000 mm.

Storage and maintenance

Sheet metal is to be stored flat and in a well-ventilated space. Storage over a longer period of time should be indoors at an even temperature and low humidity. There is a risk that the sheets will discolour if they are stored in stacks in a humid environment. Mechanical damage to the coating that has occurred during installation is to be immediately repaired using touch-up paint. Coated sheet metal does not normally demand a high level of maintenance, but with regular checks, maintenance, and an annual inspection, both the

aesthetic and technical life can be notably increased. The technical life is normally considerably longer than the aesthetic. Aesthetic life is a measure of what's acceptable in terms of the discolouration of the coating with regard to the demands placed on it, which can be judged differently depending on which building the sheet metal is mounted or who is making the judgement. Technical life is the period of time until the sheet metal can no longer protect the building's load-bearing construction or underlying material.

Please contact your local sales representant for more info.

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