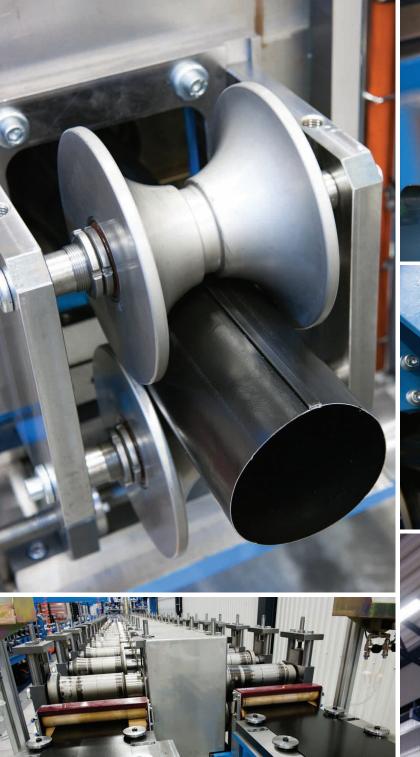
# ROOF DRAINAGE SYSTEM

















# **ULTRA MODERN PRODUCTION**



# CARACOL. A new star in the sky.

CARACOL rainwater system is designed to integrate aesthetically and functionally with the rest of the roof.

CARACOL is a brand new, complete range of roof drainage products. Many years of close collaboration with sheet metal workers and other professionals has given us invaluable knowledge about the expectations and needs of the market. Such as the ability to integrate a roof drainage system with absolutely any type of roof at all, without compromising either aesthetically or functionally. In addition to extreme durability, this system also provides exceptional fitting accuracy, which makes it a delight to install.

These insights and experiences together have helped us to develop a product system that is guaranteed to handle roof drainage simply, effectively and for a very long time...

### **Fully automated process**

In our new fully automated production line for CARACOL products in Malmö, Sweden, you will only find the very latest tools and machines from the world's leading manufacturers. All of our production lines consist of computer-controlled, fully automated machines and industrial robots.

This is to ensure that we can fulfil both the toughest technical specifications and environmental demands.

Our new 10,000 m<sup>2</sup> factory site has been built to handle large volumes with low staffing. In this way we are equipped to meet the toughest competition in Europe.

# Large stocks of finished goods secure our deliveries

All processes are therefore entirely autonomous, from manufacture to packaging and dispatch. The common factors for all the equipment in the facility where CARACOL is manufactured, are high performance and high quality.

For example, our pipe and gutter machine has a capacity of up to 25 metres per minute, with retained high precision.

An importance component in our logistics is stock holding. In order to ensure rapid delivery to our customers, we required the ability to store thousands of transport pallets. We have therefore built a very large storage area directly adjacent to the production facility.



# **CARACOL PRODU**

White AR9002

Brown AR8019

Brick Red AR8004

Red AR3009

Silver Metallic AR9006

Dark Grey AR7011

Black AR9005

Alu-zinc



**GUTTER** Diameter: 125, 150 mm Length: 3, 4, 5, 6 m



**GUTTER JOINT** Diameter: 125, 150 mm



**HOPPER HEAD** Diameter: 125, 150 mm



PIPE BRACKET (WOOD) Diameter: 90, 100 mm



PIPE KNEE **OUTLET SHOE** Diameter: 90, 100 mm



**GUTTER ANGLE INNER** Angle: 90 degree Diameter: 125, 150 mm



**COMPACT BRACKET** Diameter: 125 mm



**HOPPER** Diameter: 90, 100 mm



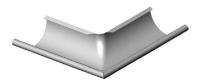
PIPE BRACKET (STONE) Diameter: 90, 100 mm



**CONNECTING DOWNPIPE SHOE** Diameter: 90, 100 mm

Diameter: 90, 100 mm

# **CT ASSORTMENT**



**GUTTER ANGLE OUTER** 

Angle: 90 degree Diameter: 125, 150 mm



ADJUSTABLE BRACKET

Diameter: 125 mm



**INTERMEDIATE PIPE** 

Diameter: 90, 100 mm Length: 1000 mm



**SPIKE (FOR PIPE BRACKET)** 

Length: 175 mm



**SELF-CLEANING LEAF TRAP** 

Diameter: 90, 100 mm (plastic)



**SELF-LOCKING GUTTER END** 

Diameter: 125 mm



**GUTTER BRACKET** 

Diameter: 125, 150 mm Length: 70, 160, 210 mm



**SLIDING PIPE** 

Diameter: 90, 100 mm



TRAP CONNECTOR

Diameter: 90, 100 mm (plastic)



**FOLDING DOWNPIPE SHOE** 

Diameter: 90 mm



**UNIVERSAL GUTTER END** 

Diameter: 125, 150 mm



**OVERFLOW PROTECTION** 

STRAIGHT



**QUICK BRACKET** 

Diameter: 125, 150 mm Length: 146, 196, 336 mm



**OVERFLOW PROTECTION** 

**ANGLED** 



Angle: 70 degree Diameter: 90, 100 mm



Diameter: 90, 100 mm (plastic)



**BRANCH PIPE** 

Diameter: 90, 100 mm



**STAY STRAP** 

Length: 280 mm

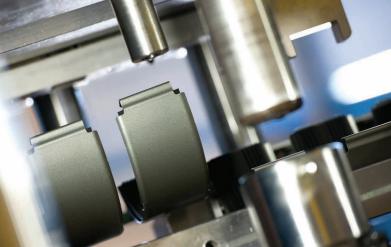


**DOWNPIPE** 

Diameter: 90, 100 mm Length: 2.5, 3, 4, 5, 6 m





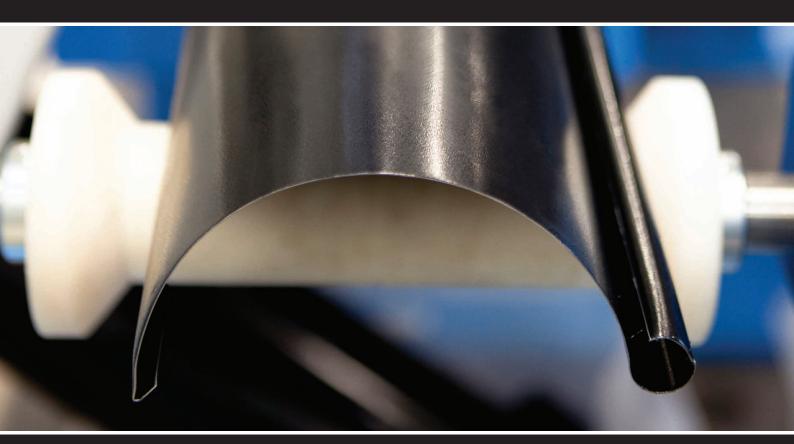


# KARAT. Long lasting with a stylish finish.

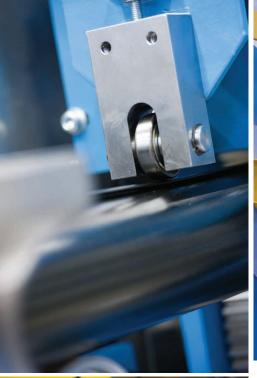
In order to increase the lifetime of CARACOL products even further and increase their aesthetic value, we coat both sides of the product with KARAT, the sharpest painting system on the market.

KARAT is a genuine colour coating system that provides optimal values for good weather and wear resistance while maintaining high gloss and colour retention.

A product that we guarantee for 20 years without hesitation.



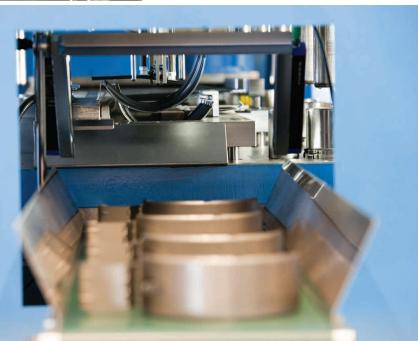








Well designed products that combine functionality with a smart appearance











# **MOUNTING INSTRUCTIONS**

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

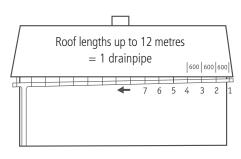
Use a hacksaw when sawing rainwater pipes and guttering. Curve shears must not be used because swarf and the heat from the disc can damage the sheet metal's outer layer and galvanised surface.

#### **Estimating quantities**

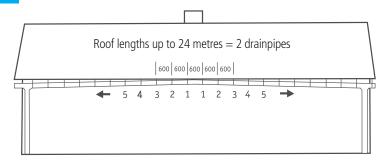
The amount of guttering, rainwater pipes and accessories needed will vary depending on your house. Calculate on the basis that each drainpipe can cope with a maximum gutter length of 12 m. Fascia brackets should be mounted so that the guttering falls towards the drainpipe. Bracket spacings should not 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 m<sup>2</sup> (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**

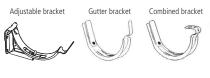


Decide in which direction the gutter is to fall. Choose which bracket you will use. Fix the first and last bracket c. 10 cm from the edge of the roof. Other brackets should be fixed with 600 mm centres (see sketch). Fall 5 mm/metre. Fix the brackets with screws or ring shank nails.



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 GUTTER BRACKETS

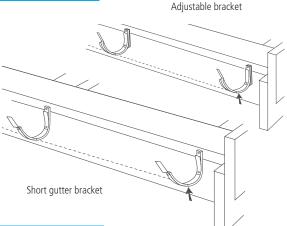


# Quick bracket

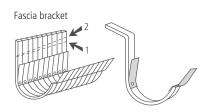


#### Securing to fascia board

Compact brackets or short iron brackets are fixed to the fascia board. If this is angled use adjustable bracket. 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.



# **BENDING GUTTER BRACKETS**



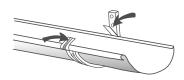
### Securing to lathes

Medium/long brackets must be bent so that the gutter has a fall. Line up all the brackets you will need. Draw a line over across all the brackets where they should be bent (arrow 1). Measure from the line on the last bracket so that the fall will be 5 mm/metre. Mark a new line (arrow 2). Bend the brackets according to this line.



# **MOUNTING INSTRUCTIONS**

### FITTING THE GUTTER

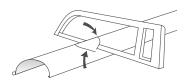


Place the gutter in the brackets, press down the front of the gutter on the brackets and bend the tab over. Then push the gutter down so that it is resting on the bracket and bend the second tab over.

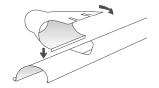


When quick bracket is used the gutter's front edge should be pushed into the hook. Then the gutter should be pressed down so that it locks under the notch in the back of the bracket.

### 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).



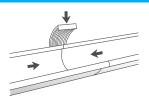


Place joint sealant according to the dotted line. Attach strip sealant on the stopend. Position the stopend in c. 2 cm in the front edge of the gutter, turn it down into the gutter and push it completely in.

### JOINTING WITH UNION CLIPS



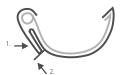
Bend the union clip slightly outwards before fitting. Then place at least two strings of strip sealant along the whole of the rubber seal that is placed in the union clip.



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



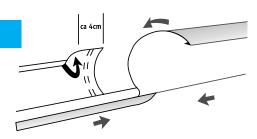
Continue by fastening the union clip over the back edge of the gutter (1) (see previous picture also) and then over the front edge of the gutter (2) (round).



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).

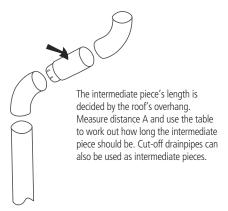
# JOINTING WITHOUT UNION CLIPS

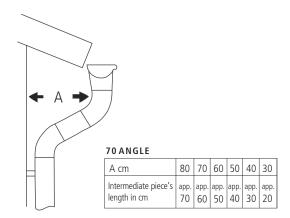
Fold up a c. 4 cm long flap along the back edge of the lower gutter. Place joint sealant according to the dotted lines and push in the upper gutter in the lower according to the picture. Fold down the upper gutter in the lower, fold over the flap and push together so that both gutters are locked in place.



# **MOUNTING INSTRUCTIONS**

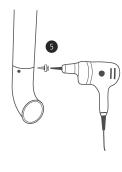
### **ANGLES & INTERMEDIATE PIECES**

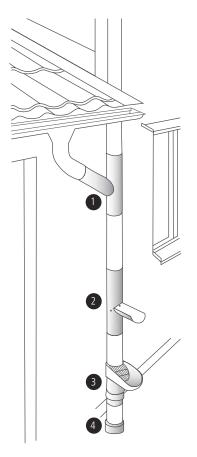


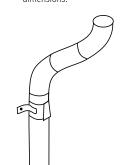


## **USEFUL ACCESSORIES**

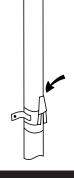
- **1.** Branches are used if, for example, you wish to drain several roofs into the same drainpipe.
- 2. Collapsible spouts are used if you want to be able to collect the rainwater. Fit the collapsible spout into the drainpipe.
- **3.** Leaf guards and leaf filters prevent leaves and debris getting into the ground drains. Sleeves are available for different pipe dimensions
- 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.
- 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.





CARACOL is a brand new, complete range of roof drainage products. The name is inspired by a beautiful waterfall in Brazil. Studies of forces and dynamics in natural water courses have given us completely new insights into key concepts such as functionality and durability.

The Caracol waterfall in Brazil
Length: 130 m | Width: 35 m
GPS-coordinates: 30°11 0 S 53°2 0 W



