

The Complete System for Draining Roof Water



Reach High, Choose Plannja Quality!

Plannja plans to offer all vital elements—i.e. gutters, downpipes, gutter hooks, and innovative accessories—under the name of its "roof water drainage system." Even a light rain during which one millimeter of water falls for one hour on a roof with a surface area of 100 m² (500 liters over five hours) can cause damage. Torrential rain with 50 mm precipitation signifies 5,000 liters falling on a 100 m² roof. The Plannja Siba gutter system is a safe solution that limits the risk of damage caused by water and dampness to the façade, foundations, and soil to a minimum.

Reliability of Operation and a Look the Catches the Eye

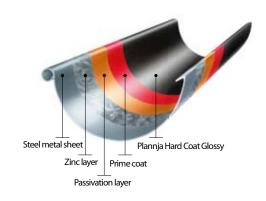
Roof drainage is more than just the collecting of water resulting from rainfall and melting snow. It is very important that the façade have a beautiful frame. This can be achieved thanks to coloured gutters and downpipes. All Plannja Siba system components are made of hot galvanized steel coated in eight colors. Help is available at sale points for designing an appropriate solution that will decorate and protect your building.

Roof Water Drainage Systems

Water has great force:

A drop can penetrate rock. It is for this reason that Plannja roof water drainage systems are made of high quality hot galvanized steel. In order to extend the durability of the products even more, the steel is coated on both sides with a Plannja Hard Coat Glossy coating.

Plannja systems withstand years of exposure to the action of rain, snow, ice, and melting water well. All that is necessary is to keep the gutters clear of leaves and other debris, if necessary, so that the water flows exactly the way you want it to.

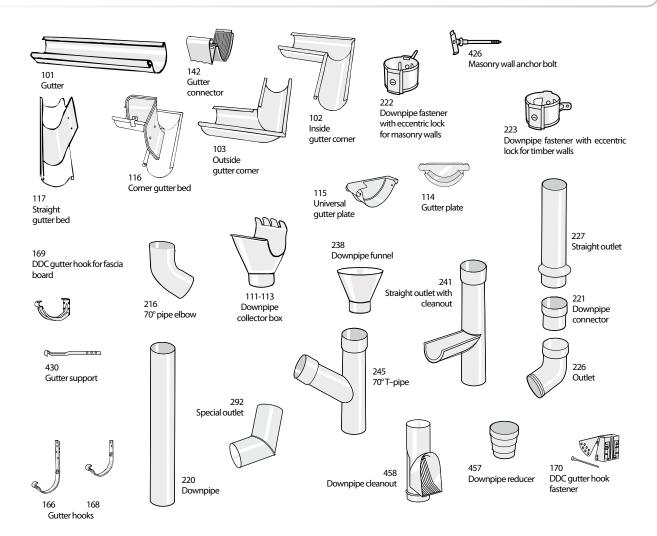


Complete Sets with Complete Solutions

The Plannja gutter system encompasses a complete assortment of everything that is needed to guarantee the efficient drainage of water from a roof. Many components are manufactured in different versions so it is possible to adapt the system to various needs and aesthetic preferences.

Experts who will gladly share their knowledge about our offer are employed at the sales points. You will receive advice from them on your home. You will also be provided with assistance in putting together a set of elements to drain roof water.

Elements that Endure All Atmospheric Conditions Well



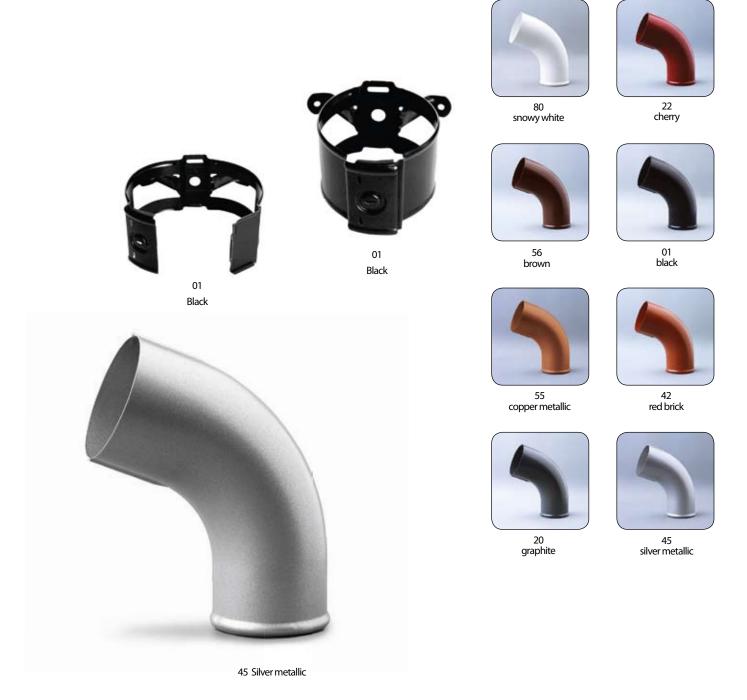
Colour Rainy Days

Plannja systems are available in eight beautiful colours and two types of coatings—Plannja Hard Coat Glossy. The line of colour gutters, downpipes, outlets, and gutter hooks is made of high quality steel that guarantees the elements both a beautiful look and durability. Thanks to the Plannja colour scheme program even rainy days are brighter.

New Downpipe Fastener!

Plannja has developed a completely new fastener that simplifies installation of downpipes on timber and masonry walls. The eccentric lock has a mechanism that is easily locked using a plain screwdriver. Available in all Plannja colours.

Standard Colours





Easy to Calculate, Easy to Install

Plannja roof water drainage products fit all roofs. The size of the roof determines the dimensions of required gutters and downpipes. The greater the roof surface area the wider the gutters.

The instructions on the following pages will help you in calculating the demand for materials and show how to install them. There is also a lucid presentation of all products for leading away water from roofs with illustrations, item numbers, and dimensions.

Good luck!



Installation How To

Measuring the Roof

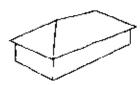
Measure the length and width of each roof plane. If the surface area is less than 50 m^2 then gutters with a width of 100 mm and downpipes with a diameter of 75 mm should be used. If the surface area is from 50 m^2 to 100 m^2 then gutters with a width of 125 mm and downpipes with a diameter of 90 mm should be used. For even greater surface areas gutters with a width of 150 mm and downpipes with a diameter of 100 mm should be used.

Number of Downpipes

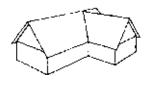
It is assumed that one downpipe drains a gutter that is up to 10 m long. Houses with hip roofs should always be provided with two downpipes for each long side as well as gutters 125 mm wide. Houses with corner roofs should have their downpipes placed in accordance with the illustration. The downpipes should be appropriate for the roof surface area.





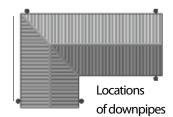


Hip roof



Corner roof house

100 600 600 600 600mm



5

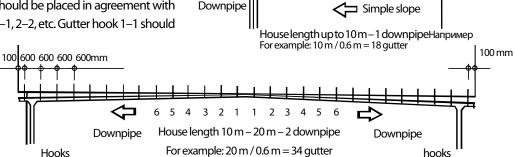
100 mm

Measuring where the gutter hooks will be is the place to start.

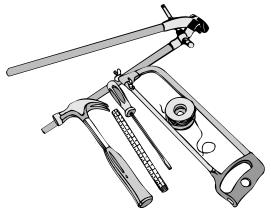
Measurement Method

One downpipe is sufficient for a roof that is up to 10 m long. Gutter hooks should be placed as in the adjacent drawing and marked 1, 2, etc. To start, install the first and last gutter hooks at a distance of 10 cm from the roof edge. In cases of lengths exceeding 10 m, two downpipes are necessary. Gutter hooks should be placed in agreement with the drawing below and marked 1–1, 2–2, etc. Gutter hook 1–1 should

be installed approximately 30 cm from the center, while the last one should be approximately 10 cm from the edge of the roof. Short gutter hooks are attached directly to the fascia board. If the fascia board is not installed vertically then the gutter hook may be bent.



Tools



No special tools are needed to install a Plannja system. All that is necessary is a hammer, pliers, chisel, measure, string, and tools for bending the gutter hooks.

Installation Instructions

The size of the gutters and downpipes is dependent on the surface area of the roof. For surface areas of up to 100 m² we apply gutters with a cross–section of 125 mm and downpipes with a 90 mm cross–section. For greater surface areas, 150 mm gutters and 100 mm downpipes should be used. If the length of the building is less than 12 m then one downpipe is sufficient.

Gutter Hooks

In order to maintain the stability of the gutter it is necessary to install gutter hooks with a maximum spacing of 60 cm. Gutters are installed with a slope towards the downpipe. The slope should amount to 5mm/m. It is important for the gutter, at its highest point, to be approximately 25 mm below the slope line of the roof (Figure No. 1).

DDC gutter hooks should be installed using 4.2 x 30 flathead screws (with a minimum of 20 μ m zinc) at spacing distances no greater than 600 mm. Long gutter hooks of flat steel should be bent appropriately to match the roof pitch (this does not apply to compact gutter hooks for mounting on the fascia board) and attached so the gutter has a slope of 5 mm for each 1 m. The gutter hooks should be numbered, after which the first and last should be attached at a distance of 100 mm from the edges of the roof (e.g. the wind beam) (Figure No. 2).

In order to install the remaining gutter hooks it is necessary to stretch a string between the first from the roof edge and the last before the collector box so as to mark the proper installation line guaranteeing an appropriate slope for gutter drainage (Figure No. 3).

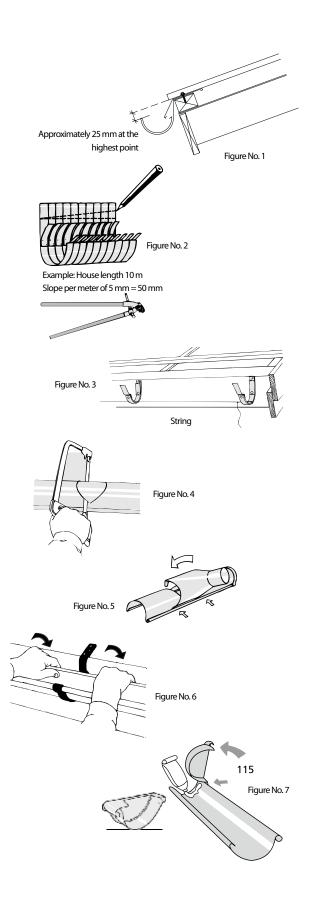
Gutters

The downpipe should be installed at a properly planned point of the gutter. The outlet opening for the collection box should be cut out as in the drawing or in the shape of a circle with a diameter less than the upper inlet of the collection box funnel (Figure No. 4).

The collection box should be installed beneath the curled edge of the gutter (fold lock). The collection box should be pressed against the gutter and the locking lips bent into it (Figure No. 5).

The gutters should be laid on the inside arcs of the gutter hooks and moved to their proper position. In installing the gutters it is necessary to lightly press both edges of the upper section so that the fold lock pops into its proper position in the external end of the gutter hook (Figure No. 6).

The gutter plate 115 should be installed on the gutter fold lock. The contact area of the plate and the gutter should be sealed using roofing silicon compound and pressed into place. The plate should be attached to the gutter through the marked opening in the plate from the inside of the gutter using rivets or farmer screws (Figure No. 7).



The universal gutter plate 114 is always applied to a factory–cut end of a gutter so that its right or left ear covers the opening of the gutter fold lock. The contact between the plate and gutter should be sealed using roofing silicone compound. The other plate ear on the side opposite the fold lock should be bent parallel to the gutter. The connection between the plate and gutter on the inner side should be sealed using roofing silicone compound (Figure No. 8).

The edge of the gutter should be visible on the outside of the gutter plate on both sides of the cutouts. It should be bent so as to secure the plate against sliding out (sealed using roofing silicone compound (Figure No. 9).

Gutter connectors are used to connect the gutters. After sliding the ends of the gutters together, the connector is applied on the rear edge of the gutter after which it is gently spread and slid in front onto the fold lock. A 2–4 mm expansion joint should be left between the gutters (Figure No. 10).

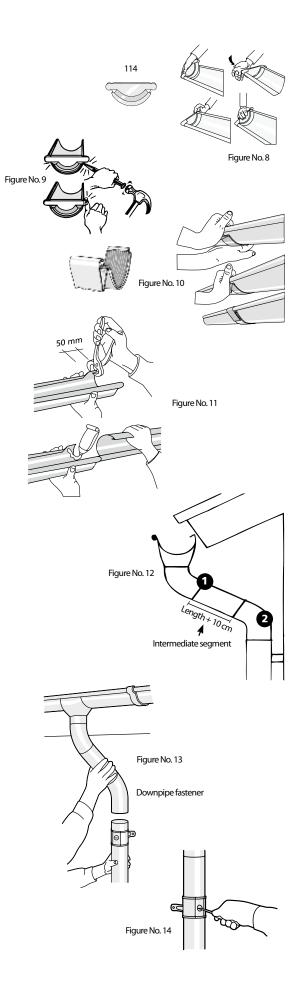
The rear bend in the lower gutter should be stretched. The upper gutter should be slightly squeezed at the point of the fold lock so that it can be slid in to a depth of 50–100 mm into the fold lock of the lower gutter. A layer of roofing silicone compound should be applied at the contact point of the two gutters. The higher gutter should be squeezed to make a seal and the spread bend should be bent back into its initial position (Figure No. 11).

Intermediate Segment

The length of an intermediate segment of downpipe between two elbows is measured in the following manner. Squeeze the upper elbow (1) onto the gutter collection box directing it towards the assumed point of installation of the downpipe. Hold the lower elbow (2) in the air aiming it at the upper one. The distance between the elbows and the wall should amount to 35 mm. Arrange the elbows so they are in a single line. Use a measure as a straightedge. Measure the distance between the elbows and add 10 cm. Intermediate elements come in 0.5 m segments with narrowed ends. A cut off downpipe may be used in houses with large eaves (Figure No. 12).

Downpipe Fasteners

Downpipe fasteners are available in two versions—for timber walls (attached using screws) and for masonry walls with insulation (with a screwed anchor bolt) and uninsulated (with a hammered anchor bolt). The upper fastener should be installed immediately below the elbow. The distance between fasteners should amount to 2 m. It should be made certain that the downpipe is set vertically (Figure No. 13). The fastener should be locked as in the drawing, by rotating the lock 180° (Figure No. 14).



Water Drainage and Roof Flashing Systems

Gutters and Accessories		Item No.
Gutter L=2.4 m D=100, 125, 150		101
Inside corner gutter D=100, 125, 150 mm Available in atypical angles		102
Outside corner gutter D=100, 125, 150 mm Available in atypical angles		103
Universal gutter plate D=150 mm	ET)	115
Gutter plate D=100, 125 mm		114
Gutter connector D=100, 125, 150 mm		142
Gutter collection box Fits all combinations of gutters and downpipes	Time .	111 112 113
Corner gutter bed		116
Straight gutter bed	E)	117
Gutters Hooks		Item No.
Gutter hook with lock L=210 mm D=100, 125, 150 mm		166
Gutter hook with lock L=70 mm D=100, 125, 150 mm		168

ltem	Item No.
DDC gutter hook D=100, 125, 150 mm	169
DDC gutter hook Slope adjustment range: 8°–45° Fits DDC gutter hook	170
Gutter hook bending tool	480
Downpipes and Accessories	ltem No.
70° pipe elbow D=75, 90, 100 mm	216
Downpipe L=1, 3 m D=75, 90, 100, 120 mm	220
Downpipe connector D=75, 90, 100 mm	221
Eccentric fastener for timber walls D=75, 90, 100, 120 mm	223
Eccentric fastener for masonry walls D=75, 90, 100, 120 mm	222
Hammered anchor bolt for masonry walls L=125, 175, 250 mm	427
Screw anchor bolt for masonry walls L=125, 175, 250 mm	426 W
Outlet D=75, 90, 100, 120 mm	226
Special outlet	292

Downpipes and Accessories (cont'd)		Item No.
Straight outlet D=75, 90, 100, 120 mm		227
Downpipe funnel D=75, 90, 100, 120 mm		238
T-pipe D=75, 90, 100 mm		245
Outlet with cleanout D=75, 90, 100 mm		241
Downpipe cleanout		458
Screen reducer and self-cleaning screen		457

Flashing	Item No.
Above–gutter apron strip L=2000 mm	OD2000210
Below-gutter bed strip L=2000 mm	OD2000250
Low deflector (Regola, Rapid, Regent) L=2000 mm	OD2000220
High deflector (Royal)	OD2000230
Universal valley gutter (Regola, Rapid, Regent) L=2000 mm	OD2000260
R-type valley gutter (Regola) L=2000 mm	OD2000270
Expansion joint section L=2000 mm	OD2000290
Ridge tile L=1800 mm	AP1800050
Plate	AP0050
Combination batten	AM0000002700

L = length, D = dimension, color scheme – see page 5



 $Roof \ flashing \ is \ available \ in \ all \ standard \ colors.$





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