ROOF GUTTERING SYSTEM

ocean®

Ocean
A serene long-term selection

OCEAN means proven and reliable quality, based on experience, modern technologies and the highest class components.

All elements of the system are characterized by low weight, full resistance to weather conditions and colour fastness, confirmed by the laboratory studies and the weathering tests.

10
YEAR
GUARANTEE

Application of OCEAN roof gutter systems

When selecting the size of your roof gutter systems it is appropriate to take into account a roof area which is to be drained.

Here we present the suggestions on the proper selection of the roof gutter systems.

System 75

Roof gutter 75 mm with downspout 63 mm

Small apartment buildings, shelters, garages, balconies and attics.

System 125

Roof gutter 125 mm with downspout 90 mm or 110 mm

Single and multi-family houses, apartment blocks, stores, public utility buildings, commercial and industrial facilities.

System 100

Roof gutter 100 mm with downspout 90 mm or 63 mm

Single family houses, small and medium stores, commercial and industrial facilities, public utility buildings.

System 150

Roof gutter 150 mm with downspout 110 mm

Big housing objects, commercial and industrial facilities.

Ocean
Roof guttering system

The offer contains:

- roof gutters and connectors with semicircular cross-section
  75, 100, 125, 150 mm
- downspouts and fittings with circular cross-section
  63, 90, 110 mm

Classic design, easy installation and a wide colour range make it one of the most interesting offers on the building market.

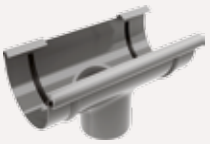
Colours

BROWN

RAL 8019

BLACK

RAL 9005



GRAPHITE

RAL 7037

Advantages

EASY AND QUICK INSTALLATION

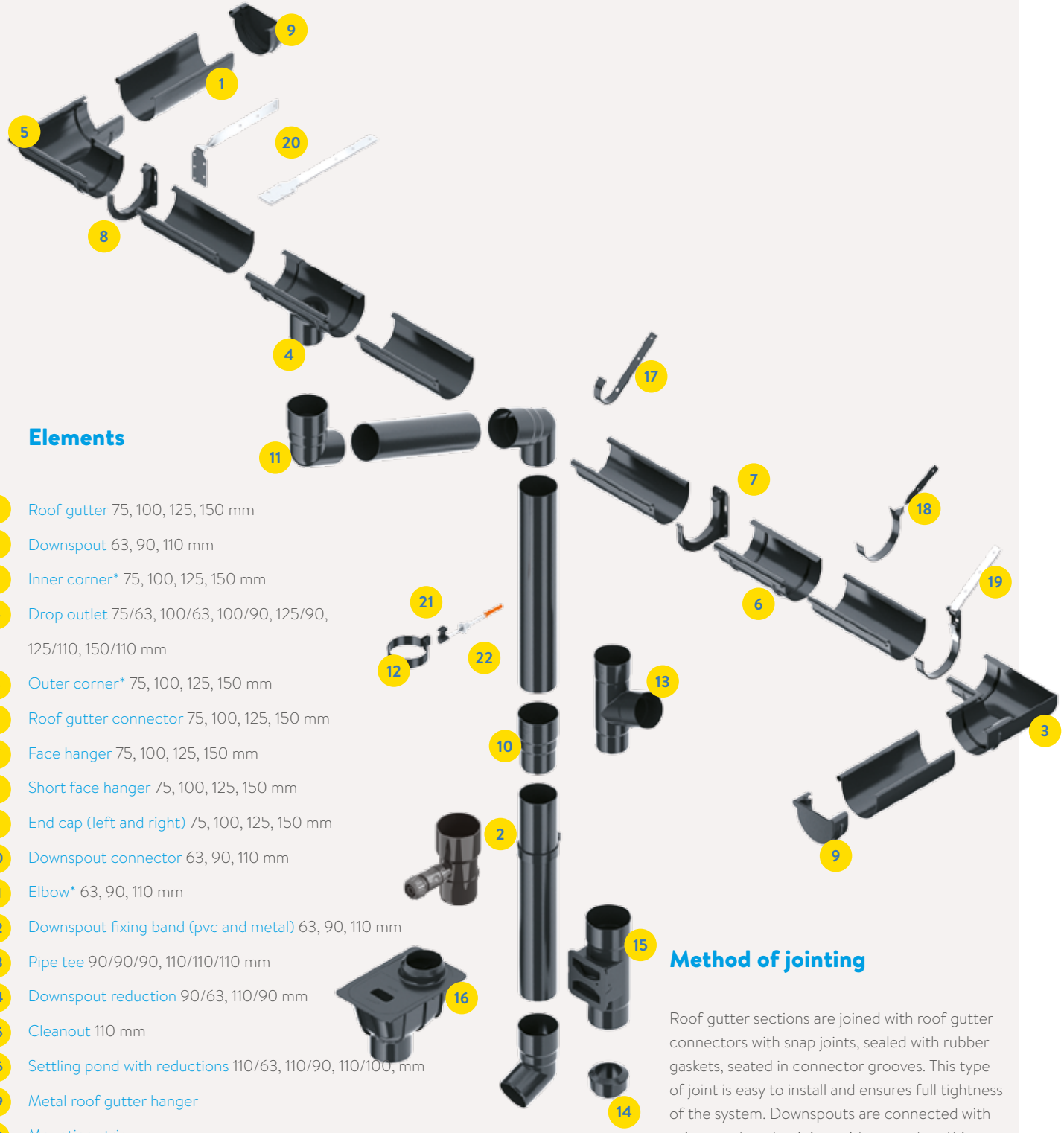
COLOUR FASTNESS

MAINTENANCE -FREE

HIGH MECHANICAL STRENGTH

HIGH RESISTANCE TO CHANGING WEATHER CONDITIONS

DEEP PROFILE OF ROOF GUTTER GREATER OUTFLOW



Elements

1 Roof gutter 75, 100, 125, 150 mm
2 Downspout 63, 90, 110 mm
3 Inner corner* 75, 100, 125, 150 mm
4 Drop outlet 75/63, 100/63, 100/90, 125/90, 125/110, 150/110 mm
5 Outer corner* 75, 100, 125, 150 mm
6 Roof gutter connector 75, 100, 125, 150 mm
7 Face hanger 75, 100, 125, 150 mm
8 Short face hanger 75, 100, 125, 150 mm
9 End cap (left and right) 75, 100, 125, 150 mm
10 Downspout connector 63, 90, 110 mm
11 Elbow* 63, 90, 110 mm
12 Downspout fixing band (pvc and metal) 63, 90, 110 mm
13 Pipe tee 90/90/90, 110/110/110 mm
14 Downspout reduction 90/63, 110/90 mm
15 Cleanout 110 mm
16 Settling pond with reductions 110/63, 110/90, 110/100, mm
17 18 19 Metal roof gutter hanger
20 Mounting strip
21 Hook for fixing band
22 Stabilizing facade flange

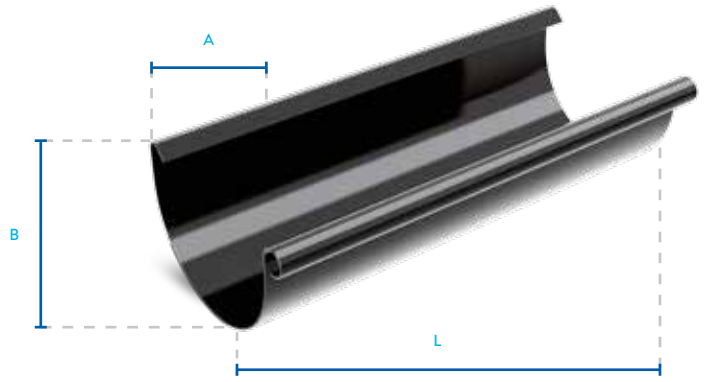
*it is possible to order the elements with any obtuse angle

Method of jointing

Roof gutter sections are joined with roof gutter connectors with snap joints, sealed with rubber gaskets, seated in connector grooves. This type of joint is easy to install and ensures full tightness of the system. Downspouts are connected with spigot-and-socket joints without gasket. This type of joint allows for compensation of thermal expansion of roof gutter system elements.

Roof gutter

1

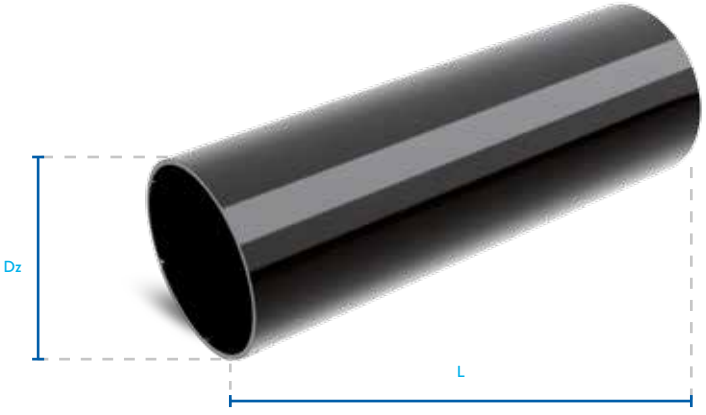


System	A [mm]	B [mm]	L [m]
75	75	57	3 / 4 m
100	100	75,6	3 / 4 m
125	125	94	3 / 4 m
150	150	113,2	3 / 4 m

System	Colour Length	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	4 m	010002	010004	010005	3	252
	3 m	010012	010014	010015	3	252
100	4 m	011002	011004	011005	3	153
	3 m	011012	011014	011015	3	153
125	4 m	012002	012004	012005	5	130
	3 m	012012	012014	012015	5	130
150	4 m	013002	013004	013005	5	110
	3 m	013012	013014	013015	5	110

Downspout

2

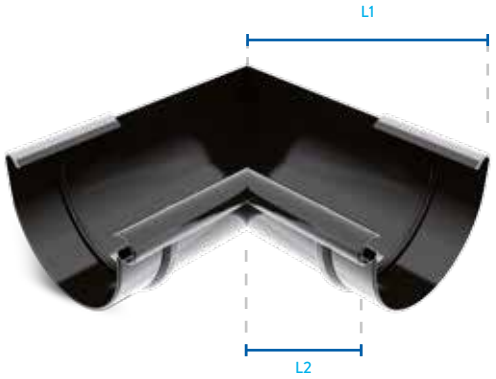


System	Dz [mm]	L [m]
63	63	3 / 4 m
90	90	3 / 4 m
110	110	3 / 4 m

System	Colour Length	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	4 m	010112	010114	010115	5	90
	3 m	010122	010124	010125	5	90
90	4 m	012112	012114	012115	5	60
	3 m	012122	012124	012125	5	60
110	4 m	013112	013114	013115	5	45
	3 m	013122	013124	013125	5	45

Inner corner

3

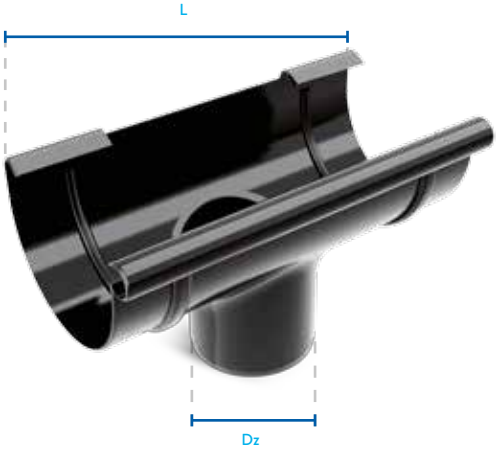


System	L1 [mm]	L2 [mm]
75	145,5	55,5
100	204,5	83,5
125	248,5	97
150	271	91

System	Colour Angle	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	90°	010052	010054	010055	18	1152
	any	010252	010254	010255	18	-
	multiplane	010302	010304	010305	-	-
100	90°	011052	011054	011055	12	480
	any	011252	011254	011255	12	-
	multiplane	011302	011304	011305	-	-
125	90°	012052	012054	012055	10	280
	any	012252	012254	012255	10	-
	multiplane	012302	012304	012305	-	-
150	90°	013052	013054	013055	8	160
	any	013252	013254	013255	8	-
	multiplane	013302	013304	013305	-	-

Drop outlet

4

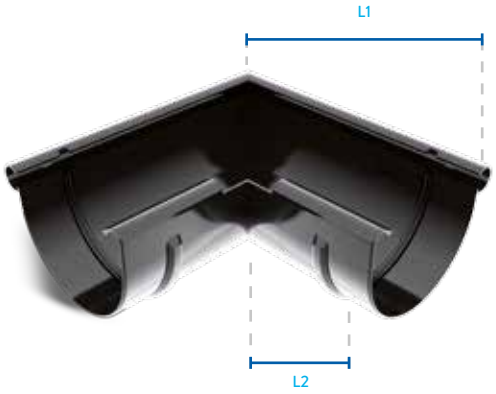


System	Dz [mm]	L [mm]
75	63	160
100	90	240
125	90	280
150	110	300

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	75/63 mm	010042	010044	010045	10	1280
100	100/63 mm	011102	011104	011105	12	480
	100/90 mm	011042	011044	011045	9	360
125	125/90 mm	012042	012044	012045	16	320
	125/110 mm	012102	012104	012105	16	320
150	150/110 mm	013042	013044	013045	10	200

Outer corner

5

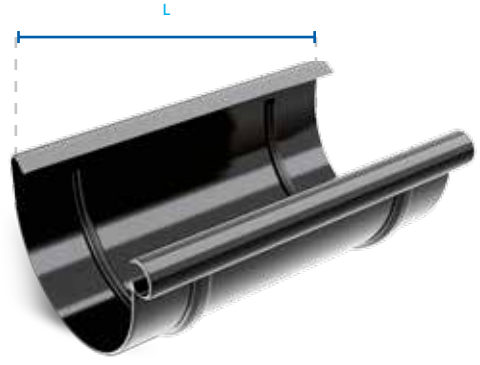


System	L1 [mm]	L2 [mm]
75	155	64,5
100	216,5	96,5
125	264,5	114,5
150	290	111

System	Colour Angle	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	90°	010062	010064	010065	18	1152
	any	010262	010264	010265	18	-
	multiplane	010312	010314	010315	-	-
100	90°	011062	011064	011065	12	480
	any	011262	011264	011265	12	-
	multiplane	011312	011314	011315	-	-
125	90°	012062	012064	012065	10	280
	any	012262	012264	012265	10	-
	multiplane	012312	012314	012315	-	-
	adjustable	012272	012274	012275	12	240
150	90°	013062	013064	013065	8	160
	any	013262	013264	013265	8	-
	multiplane	013312	013314	013315	-	-

Roof gutter connector

6



System	L [mm]
75	129,5
100	200,5
125	240
150	240

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	75 mm	010032	010034	010035	50	3200
100	100 mm	011032	011034	011035	40	1120
125	125 mm	012032	012034	012035	28	672
150	150 mm	013032	013034	013035	20	480

Face hanger

7

System	B [mm]
75	85,3
100	116,7
125	135,3
150	157,7

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	75 mm	010372	010374	010375	64	11264
100	100 mm	011372	011374	011375	44	5632
125	125 mm	012372	012374	012375	65	4160
150	150 mm	013372	013374	013375	50	3200

Short face hanger

8

System	B [mm]
75	70,5
100	101,5
125	120,5
150	143

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	75 mm	010072	010074	010075	64	11264
100	100 mm	011072	011074	011075	44	5632
125	125 mm	012072	012074	012075	65	4160
150	150 mm	013072	013074	013075	50	3200

End cap

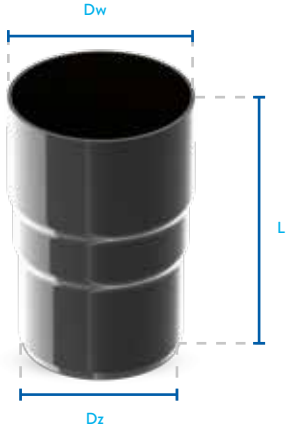
9

System	L [mm]
75	31
100	41,5
125	52,5
150	52,5

System	Colour Type	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	right	010082	010084	010085	54	9504
	left	010092	010094	010095	54	9504
100	right	011082	011084	011085	24	4224
	left	011092	011094	011095	24	4224
125	right	012082	012084	012085	20	2560
	left	012092	012094	012095	20	2560
150	right	013082	013084	013085	10	1760
	left	013092	013094	013095	10	1760

Downspout connector

10

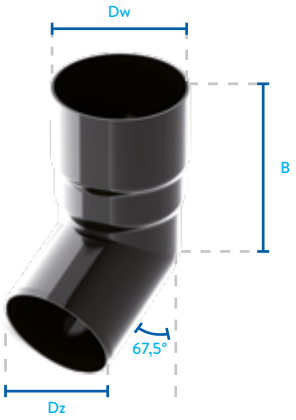


System	Dw [mm]	Dz [mm]	L [m]
63	63,3	57,5	110
90	90,2	84,5	145
110	110,4	104,5	154

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	63 mm	010132	010134	010135	36	4608
90	90 mm	012132	012134	012135	36	1440
110	110 mm	013132	013134	013135	40	1120

Elbow

11

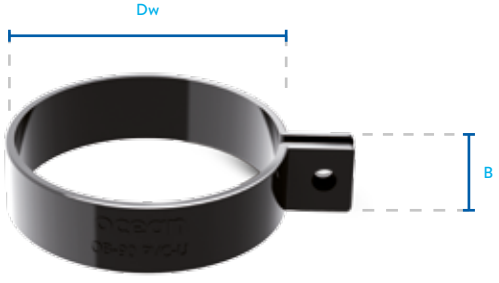


System	Dw [mm]	Dz [mm]	B [m]
63	63,3	57,5	117
90	90,2	84,5	147
110	110,4	104,5	167

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	63 mm	010142	010144	010145	14	1792
	any angle	010322	010324	010325	-	-
90	90 mm	012142	012144	012145	36	720
	any angle	012322	012324	012325	-	-
110	110 mm	013142	013144	013145	16	384
	any angle	013322	013324	013325	-	-

Downspout fixing band PVC

12

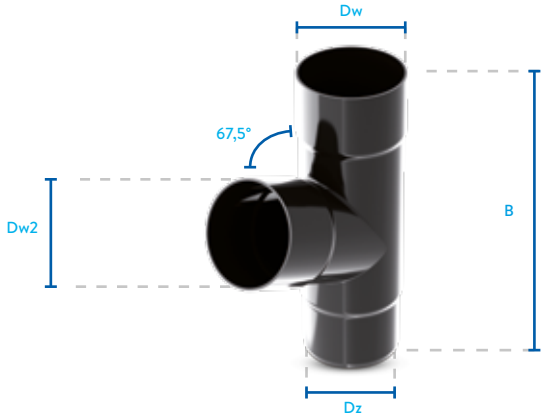


System	Dw [mm]	B [mm]
63	63	25
90	90	25
110	110	25

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	63 mm	010152	010154	010155	84	14784
90	90 mm	012152	012154	012155	50	8800
110	110 mm	013152	013154	013155	96	6144

Pipe tee

13



System	Dw [mm]	Dz [mm]	B [mm]	Dw2 [mm]
90	90,2	84,5	274,5	90,2
110	110,4	104,5	310	110,4

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	63 mm	010172	010174	010175	6	768
90	90 mm	012172	012174	012175	15	300
110	110 mm	013172	013174	013175	8	192

Downspout reduction

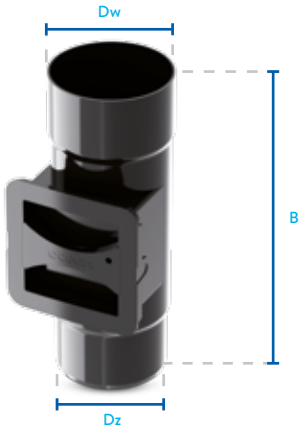
14

System	Dz [mm]	Dw [mm]	L [m]
63/90	90	63,2	55,5
90/110	110	90,2	62

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
90/63	90/63 mm	012162	012164	012165	20	2560
110/90	110/90 mm	013162	013164	013165	24	1536

Cleanout

15



System	Dw [mm]	Dz [mm]	B [mm]
110	110,4	104,5	310

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
Universal	110/110 mm	014002	014004	014005	8	224

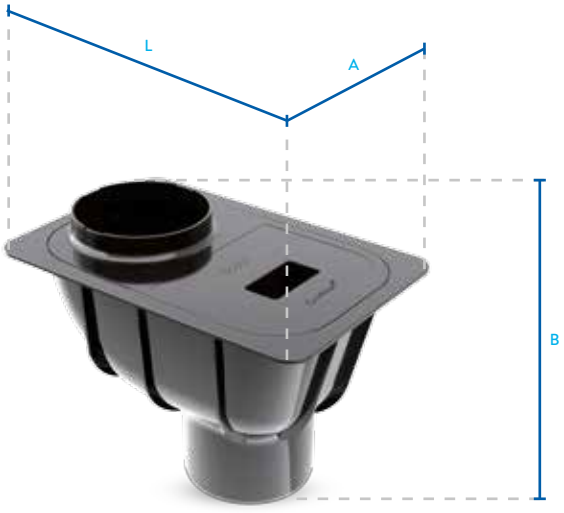
Settling pond with reductions

16

110/100 mm

110/90 mm

110/63 mm



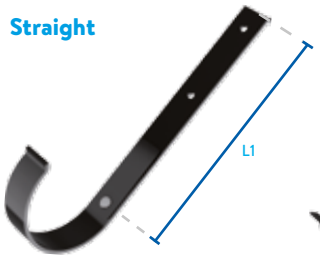
System	L [mm]	A [mm]	B [mm]
Universal	296	196	209

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
Settling pond	110 mm	014022	014024	014025	2	128
Reduction	110/100 mm	-	014054	-	25	4400
Reduction	110/90 mm	014032	014034	014035	18	3168
Reduction	110/63 mm	014042	014044	014045	18	3168

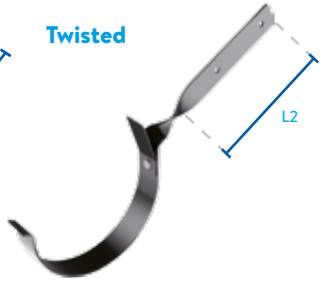
Metal roof gutter hanger

17 18 19

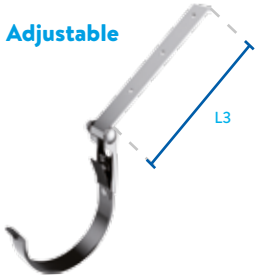
Straight



Twisted



Adjustable

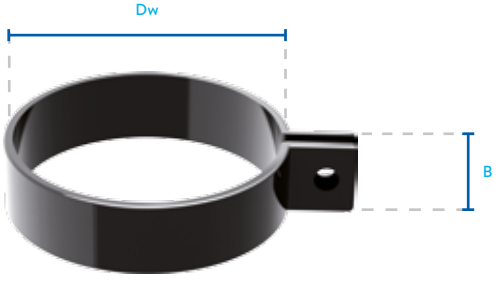


System	L1 [mm]	L2 [mm]	L3 [mm]
75	171	105	180
100	186	113	180
125	240	165	180
150	280	210	180

System	Colour Type	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
75	straight	020021	020321	020421	50	2450
	twisted	020022	020322	020422	50	2450
	adjustable	020023	020323	020423	50	2100
100	straight	020061	020361	020461	50	2450
	twisted	020062	020362	020462	50	2100
125	straight	020001	020301	020401	40	1960
	twisted	020002	020302	020402	30	1470
	adjustable	020003	020303	020403	25	1225
150	straight	020041	020341	020441	30	1470
	twisted	020042	020342	020442	25	1225
	adjustable	020043	020343	020443	25	900

Metal downspout fixing band

12



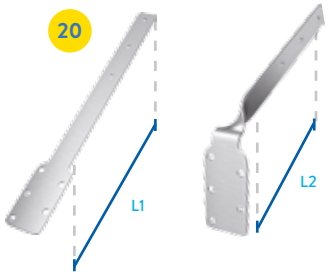
System	Dw [mm]	B [mm]
63	63	25
90	90	25
110	110	25

System	Colour Dimension	Brown Art. code	Black Art. code	Graphite Art. code	Package [pcs]	Pallet [pcs]
63	63 mm	020035	020335	020435	50	2800
90	90 mm	020015	020315	020415	50	2800
110	110 mm	020055	020355	020455	50	2800

Installation accessories

Mounting strip

20



System	L1 [mm]	L2 [mm]
75	168	120
100	170	128
125	300	235
150	300	235

System	Type	Art. code	Package [pcs]
75	straight	020027	30
	twisted	020028	50
100	straight	020037	30
	twisted	020038	30
125	straight	020007	30
	twisted	020008	50
150	straight	020017	30
	twisted	020018	50

Hook for fixing band

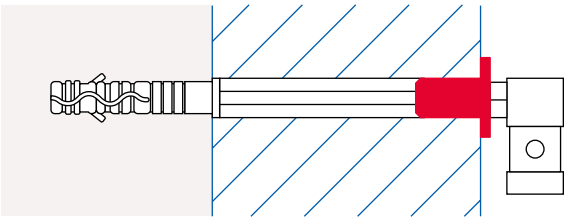
21

System	Dimension [mm]	Art. code	Package [pcs]
Universal	120	020004	100
Universal	160	020005	100
Universal	180	020006	100
Universal	220	020010	100
Universal	250	020019	100
Universal	350	020020	100

Stabilizing facade flange

22

System	Art. code	Package [pcs]
Universal	012100	10



It complements a typical hook for downspout fixing band. Its function is to provide stabilization for a hook for fixing band, particularly when the additional thermal insulation layers are used for the building (expanded polystyrene (EPS), mineral wool).

Settling pond

16

Ocean settling pond acts as an element connecting a roof gutter system with a 110 mm diameter rainwater sewage system.

As a standard it is adapted for 110 mm diameter downspouts, after the application of proper adapters, it is fitted also for 60, 90 and 100 mm diameters.

Available in three colour versions: brown, grey and black.

A primary function of the settling pond is holding impurities flowing down the roof and preventing them from entering the rainwater sewage system. Equipped with a big settling basket with a lift cover, which enables a very easy removal of impurities.

Installation

The settling pond shall be installed in foundation, with facing it with the final ground level in mind. In order to stabilize, concrete should be poured out on a floor of excavation for the settling pond, then sewage pipe should be connected.

Upon determination of the final ground level, the settling pond should be flooded with another layer of the concrete. Then downpipe should be connected.

110/63 mm

110/90 mm

110/100 mm

Operation

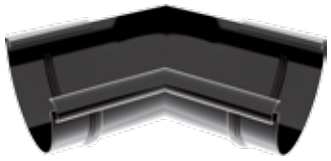
The settling pond is a simple and effective element of the system. Ensure regular removal of impurities collected in it.

Nontypical elements

Elbow with any angle

Multiplane corner

Corner with any angle



Storage and transport

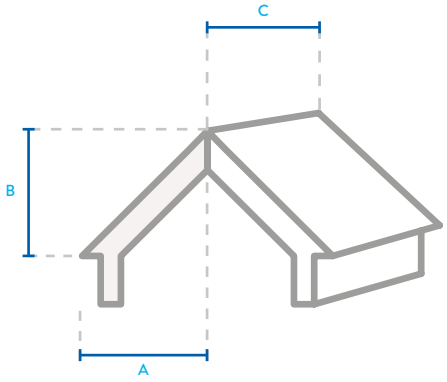
The storage of gutters and pipes shall be on a flat surface, in a horizontal position, on level support, ensuring contact along the entire length. Allowable height of storage pile is up to 1 m. Sharp edges of racks and means of transport, in contact with gutters, should be protected, i.e. with thick card board or boards. The fitting and connectors packed in carton boxes should be stored and transported under the shelter.

During the transport a load should be locked. Manual loading and unloading is recommended. When the mechanical equipment has to be applied, particular attention must be paid, to prevent the elements from local crushing or dropping.

Determination of the proper size of roof gutters

When choosing a roof gutter system make sure, that the gutters and downspouts are capable of collecting rainwater from the roof surface of your building. For that purpose the so-called Effective Roof Area which is to be drained by the system, should be calculated. For the effective roof area calculation, the following formula should be used:

EPD = (A+B/2) x C



A - horizontal distance from corner to roof ridge (m)
B - roof height (m)
C - roof length (m)

Downspout location	System 75 Gutter 75 mm Downspout 63 mm	System 100 Gutter 100 mm Downspout 90 mm	System 125 Gutter 125 mm Downspout 90 mm	System 150 Gutter 150 mm Downspout 110 mm
Drop outlet in a middle	95 m²	132 m²	180 m²	370 m²
Drop outlet at the end	48 m²	66 m²	90 m²	180 m²
Drop outlet behind the corner	42 m²	52 m²	75 m²	145 m²

Application of OCEAN roof gutter systems

When selecting the size of your roof gutter systems it is appropriate to take into account a roof area which is to be drained.

Here we present the suggestions on the proper selection of the roof gutter systems.

System 75

Roof gutter 75 mm with downspout 63 mm

Small apartment buildings, shelters, garages, balconies and attics.

System 100

Roof gutter 100 mm with downspout 63 mm or 90 mm

Single family houses, small and medium stores, commercial and industrial facilities, public utility buildings.

System 125

Roof gutter 125 mm with downspout 90 mm or 110 mm

Single and multi-family houses, apartment blocks, stores, public utility buildings, commercial and industrial facilities.

System 150

Roof gutter 150 mm with downspout 110 mm

Big housing objects, commercial and industrial facilities.

Installation of roof gutter system

Proper installation of PVC roof gutter system guarantees its long term durability and reliability, even under severe weather conditions.

The advantage of construction, contrary to the traditional solutions is due to compensation of thermal expansion of the particular element of the system. This is accomplished by a suitable construction of gutter connectors and pipe fittings.

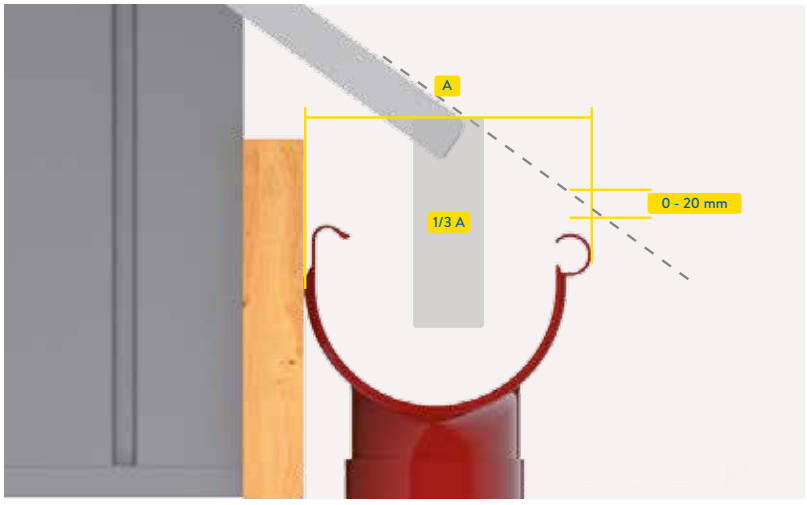
For roof gutters this is possible thanks to the sliding joint in the roof gutter connectors equipped with the elastic gaskets. For downspouts this is possible thanks to installation play in joints with pipe fittings.

Moreover, the elements fixing the roof gutter system to the roof and the walls of the building, such as hangers and downspout fixing bands, in addition to stabilization of the system also provide compensation of the length changes.

In case of the installation of gutters with under-gutter tinned steel sheets, the sheets shall be painted or only coated sheets shall be used.

Proper placement of gutters under eaves

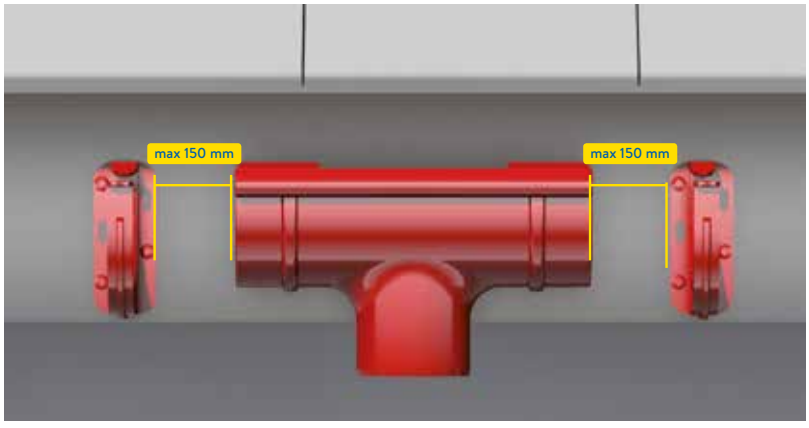
Proper installation should protect the gutter from the impact of snow sliding off the roof. The upper edge of the gutter fold should not extend above the roof slope extension, as presented on the drawing.



Minimal installation temperature 0°C

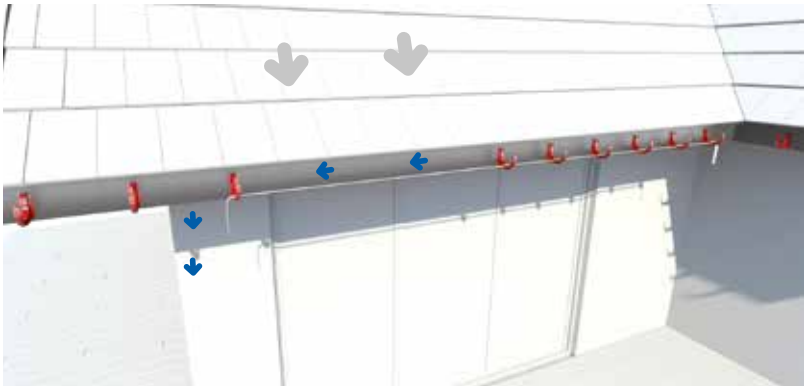
Determination of drop outlet location

The first step of system installation should be the determination of drop outlet location, which shall be the lowest level of the gutter part of the system.



Determination of proper fall for gutters

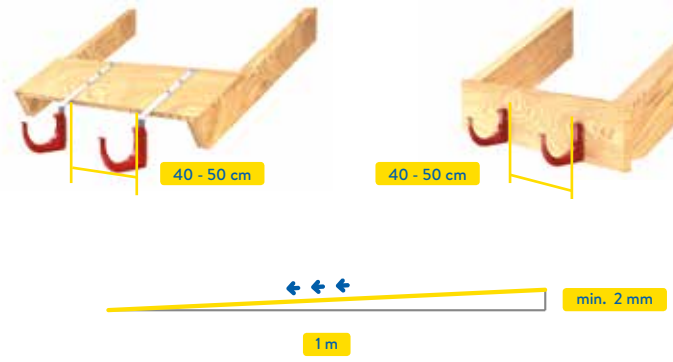
Install the gutter hanger farthest from the drop outlet, then the hanger for drop outlet should be installed. String should be stretched and the proper fall for gutter determined. PVC hangers should be fixed to the fascia board directly.



Fixing the hangers

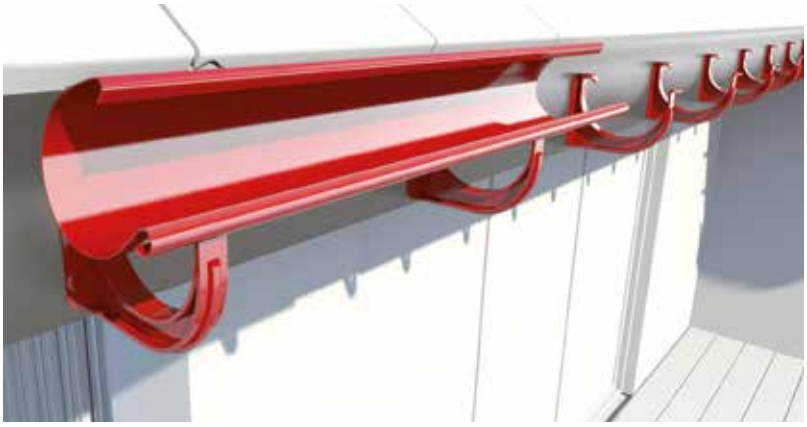
PVC hangers with a straight or twisted mounting strip and the straight or twisted steel hangers should be fixed to the eaves or rafter directly. The distance between the neighboring hangers should be 40-50 cm.

To assure the proper discharge of rainwater the gutter should have a fall, minimum 2 mm for 1 m, in drop outlet direction.



Installation of the gutter in the hangers

Use hack-saw to cut the gutter perpendicularly, for the proper length.
For PVC and metal hangers start with inserting the front edge fold into the front nib of the hanger, then press the internal part of the gutter under the rear nib.

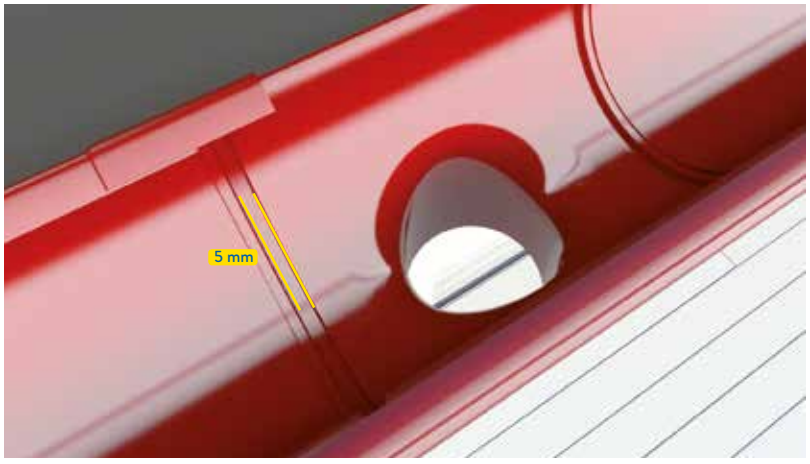


Installation of the corner, drop outlet and gutter connector

The corner, drop outlet and gutter connector should be installed on the gutter by inserting on the gutter front edge fold and then snapping on the rear edge fold. The gutter ends should be placed about 5 mm before the stops.

During installation special attention should be given to the proper orientation of the gaskets placed in the drop outlets, gutter connectors and corners and stops placed on internal surfaces of these elements.

We recommend installation of the additional hangers for gutter-gutter connector, gutter-drop outlet and gutter-corner connections.

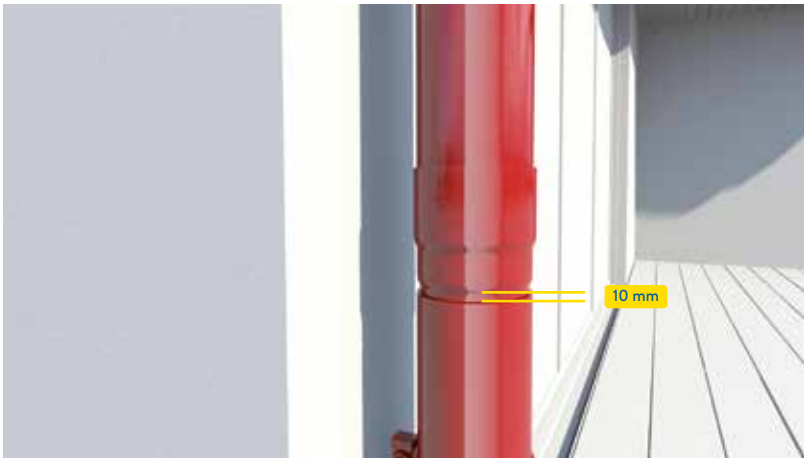


Installation of the gutter cup

Installation of the cap should be started with inserting on the gutter front edge fold and then snapping on the rear edge fold. Special attention should be given to the proper orientation of the gaskets.

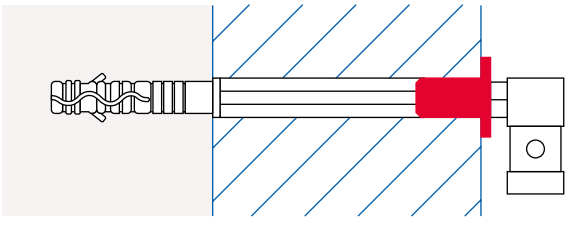
Installation of the downspouts

The downspouts should be connected with drop outlets and pipe fittings with push-on joints. For the eaves protruding more than 10 cm beyond the wall, offset should be lengthened with the downspout section.
Sequence of installation should be as follows:
elbow, pipe, elbow and downspout.
10 mm play should be left for thermal elongation of the pipe.



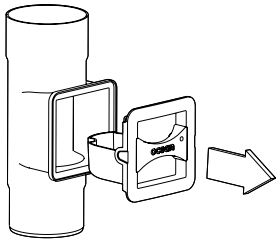
Installation of the downspout fixing band

The fixing band should be installed with hook for fixing band of proper length. If needed, the stabilizing facade flange should be used. The fixing bands on the downspout should be installed not less frequently than every 2 - 2,5 m.



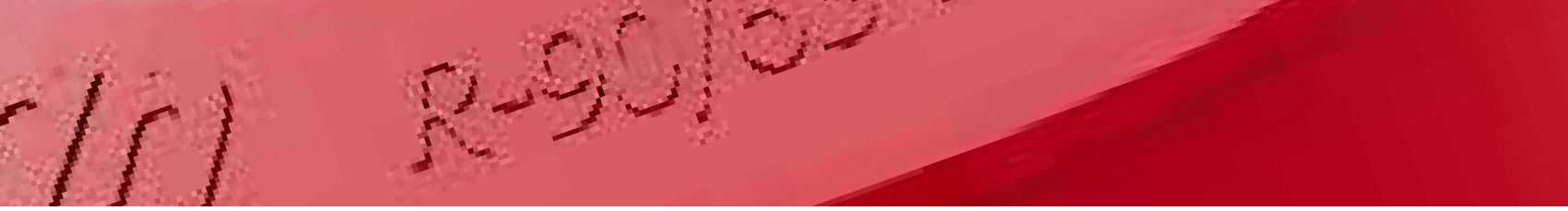
Cleanout

The cleanout should be installed above the ground to prevent impurities from entering the rainwater sewage. Removable waste basket facilitates the impurities removal.



The end of installation/outlet

The end of downspout should be connected with the rainwater sewage via the settling pond or with an elbow the downspout shoe draining the water.



Certificates

ISO 9001:2009 Certificate of Quality Management System

ISO 9001:2009 Certificate of Quality Management System in scope of production and sale of plastic products.

OCEAN roof gutter system

Certificate of Conformity ITB-2384/W

Certificate which confirms compliance of OCEAN Roof Gutter System with requirements of following standards:
PN-EN 607:2005, PN-EN 12200-1:2002. PN-EN 1462:2005

National Declaration of Conformity

Declaration of conformity of OCEAN Roof Gutter System elements with technical specification of following standards:
PN-EN 607:2005, PN-EN 12200-1: 2002, PN-EN 1462:2006

Hygienic Certificate PZH HK/B/0536/03/2015

Certificate which confirms compliance of OCEAN Roof Gutter System elements with hygienic requirements.

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