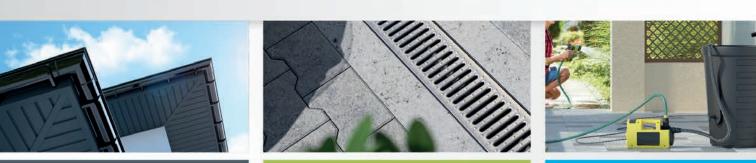
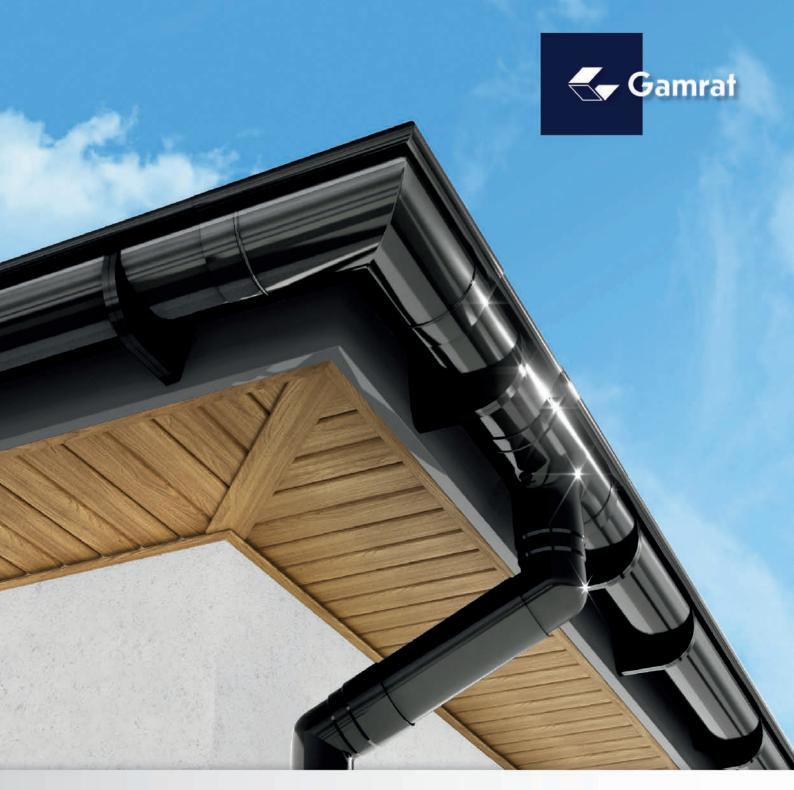
GAMRAT SA PROFILE PRODUCTS CATALOG



GUTTER SYSTEMS | ROOF SOFFITS | LINEAR DRAINAGE | WATER STORAGE SYSTEMS



GAMRAT SA

The origins of Gamrat SA go back to the 1930s. For decades, we have been setting standards in the building materials market. Our extensive range includes PE and PVC pipes, polyvinyl chloride and steel roof gutters as well as PVC soffits and reinforced hoses. DrenGam linear drainage systems, EasyGam water collection systems and WellGam manhole systems have expanded our range of products over the past 10 years. GAMRAT SA's products are used by contractors in the infrastructure and public utilities sectors, as well as by individual customers.



GAMRAT SA OFFER

STEEL GUTTER SYSTEMS STALGAM	6	
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STEEL GUTTER SYSTEMS

-0 -0

StalGam

STALGAM

30-YEAR WARRANTY*

If you are looking for steel gutter systems that combine an elegant appearance with the drainage efficiency and extended service life of double-coated steel, and if you are concerned about the environment in which we live, then StalGam's gutter systems, manufactured from environmentally friendly Swedish GreenCoat® coated steel, will be your best choice.



Deep gutter profile Ensures high water drainage efficiency and protects against water overflow, even during heavy rainfall.



Highest quality steel Made of Swedish steel produced from extremely pure iron ore.



High durability of metal sheets The application of protective layers protects against harmful atmospheric agents.



Advanced technology

The structure of the gutter coating provides colour retention for many years and protection against scratches. The primer coat is in the same colour as the top coat (possible scratches less visible).



Resistance to temperature changes Steel systems guarantee thermal resistance – no deformation at extreme temperatures.



Wide range of accessories

The set of available components creates a fully safe, robust and functional rainwater drainage system.



High mechanical strength Gutters and downpipes are manufactured from rigid steel, extremely resistant to deformation.

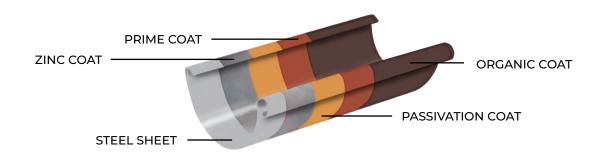


Simple and quick assembly

The system has been designed to be quick and easy to assemble – economical for the investor and efficient for the contractor.

gutter systems made from the highest quality Swedish GreenCoat® sheet metal

11/	



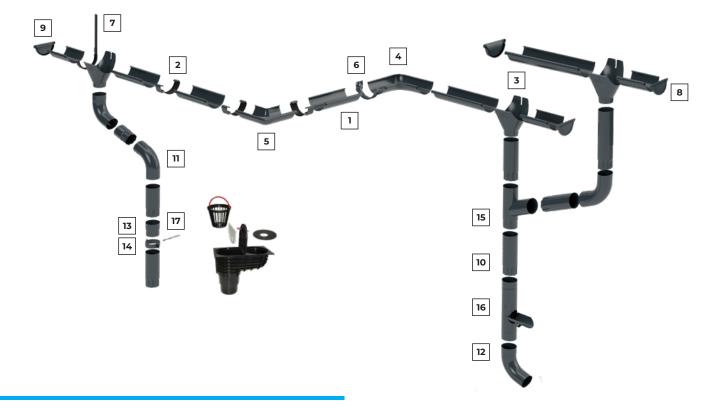


INSTALLATION SCHEME AND ASSORTMENT

The individual gutter sections are overlapped and the joint is secured with additional gutter connectors with gaskets. The downpipes have a factory-made rims and can be connected without pipe connectors.

The STALGAM system is manufactured from high-quality Swedish GreenCoat® steel. GreenCoat® is a trademark of the group of the SSAB companies. We offer three GAMRAT STALGAM gutter systems.





COLOURS

The colour number given is determined by the sheet metal manufacturer SSAB. The nearest RAL colours are shown. The colour range shown is only an approximate representation of the colours.



* The warranty covers gutters, downpipes and gutter and pipe fittings made of sheet metal. The warranty covers the products' resistance to perforation corrosion (details on the warranty form). The warranty does not cover additional accessories.

1. GUTTER

T.	_A					dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
	A Dela	125	А	125	125 (dł. 3 m)	375210319	371210319	374210319	373210319	376210319	377210319	379210319	15 m / 480 mb
		125	н	84	125 (dł. 4 m)	375210419	371210419	374210419	373210419	376210419	377210419	379210419	20 m / 640 mb
		150	Α	150	150 (dł. 3 m)	375310319	371310319	374310319	373310319	376310319	377310319	379310319	15 m / 345 mb
	H] +	150	н	97	150 (dł. 4 m)	375310419	371310419	374310419	373310419	376310419	377310419	379310419	20 m/460 mb

2. GUTTER CONNECTOR

				dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
125	L	55	125	375221009	371221009	374221009	373221009	376221009	377221009	379221009	100 pcs / 4000 pcs
150	L	55	150	375321009	371321009	374321009	373321009	376321009	377321009	379321009	100 pcs/4000 pcs

3. DROP OUTLET

	125/87	L	141		dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
A CONTRACT OF	L 125/87 L 141 125/87 Dz 84 125/100 L 170 125/100 Dz 96 150/100 Dz 96 150/100 Dz 96	125/87	375222109	371222109	374222109	373222109	376222109	377222109	379222109	10/400 pcs		
	125/87 Dz 84 125/100 L 170 125/100 Dz 96 150/100 L 170 150/100 Dz 96	125/100	375222009	371222009	374222009	373222009	376222009	377222009	379222009	10/400 pcs		
	125/87 L 141 brown 125/87 Dz 84 125/87 37522103 125/100 L 170 125/100 37522200 150/100 Dz 96 150/100 37532200 150/100 Dz 96 150/100 37532200	375322009	371322109	374322109	373322109	376322109	377322109	379322109	10/400 pcs			
Dz	125/87 Dz 84 125/100 L 170 125/100 Dz 96 150/100 L 170 150/100 Dz 96											

4. INNER CORNER

L2					dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
u u u	125/90°	ы	96	125/90°	375223189	371223189	374223189	373223189	376223189	377223189	379223189	5/200 pcs
	125/90°	L2	225	125/kąt a	375223279	371223279	374223279	373223279	376223279	377223279	379223279	1/0 pcs
11-12	150/90°	ш	130	150/90°	375323189	371323189	374323189	373323189	376323189	377323189	379323189	5/200 pcs
U	150/90°	L2	280	150/kąt a	375323279	371323279	374323279	373323279	376323279	377323279	379323279	1/0 pcs

corners with opening angle different from 90° available on request

5. OUTER CORNER

U					dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
	125/90°	ы	245	125/90°	375224189	371224189	374224189	373224189	376224189	377224189	379224189	5/200 pcs
	125/90°	L2	103	125/kąt a	375224279	371224279	374224279	373224279	376224279	377224279	379224279	1/0 pcs
-	150/90°	ы	305	150/90°	375324189	371324189	374324189	373324189	376324189	377324189	379324189	5/200 pcs
	150/90°	L2	135	150/kąt a	375324279	371324279	374324279	373324279	376324279	377324279	379324279	1/0 pcs

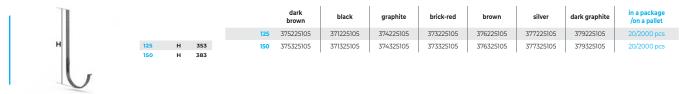
corners with opening angle different from 90° available on request

6. SUPPORT BRACKET

	125 125	н с	113		dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
ALC: NOT	125 150	A	- 130	125	375225009	371225009	374225009	373225009	376225009	377225009	379225009	50/2000 pcs
	150	н с	-	150	375325009	371325009	374325009	373325009	376325009	377325009	379325009	50/2000 pcs
	150	А										



7. STRAIGHT SUPPORT BRACKET



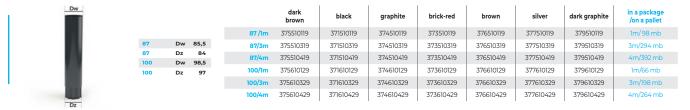
8. NARROW UNIVERSAL STOP END



9. WIDE UNIVERSAL STOP END



10. DOWNPIPE



11. BEND 62°

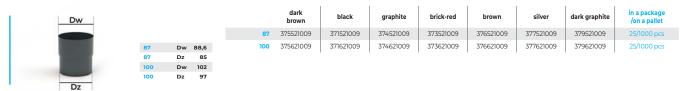


				dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a pack /on a pa
87	Dw	87	87	375522009	371522009	374522009	373522009	376522009	377522009	379522009	10/400
87	Dz	84									
87	a	62°	100	375622009	371622009	374622009	373622009	376622009	377622009	379622009	8/320 p
100	Dw	101									
100	Dz	96									
100	a	62°									

12. SHOE 62°

	87	Dw	87		dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
a	87	a	62°	87	375522509	371522509	374522509	373522509	376522509	377522509	379522509	10/400 pcs
a	100	Dw	101	100	375622509	371622509	374622509	373622509	376622509	377622509	379622509	8/320 pcs
	100	a	62°	100	373622309	3/1622309	374622305	373622305	376622303	377622309	373622303	6/320 pcs

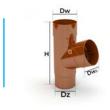
13. DOWNPIPE CONNECTOR



14. PIPE SUPPORT

Dw					dark brown	black	graphite	brick-red	brown	silver	dark graphite	in a package /on a pallet
CD	87	н	29	87	375523005	371523005	374523005	373523005	376523005	377523005	379523005	15/3000 pcs
H	87	Dw	87	100	375623005	371623005	374623005	373623005	376623005	377623005	379623005	10/2000 pcs
. 9	100	н	29									
	100	Dw	101									

15. BRANCH 62°



100/100 a 62°

- 10											
/87 /87	L Dw	320 88		dark brown	black	graphite	brick-red	brown	silver	dark graphite	
87	Dw2	88									ł
7/87	Dz	85	87/87	375524109	371524109	374524109	373524109	376524109	377524109	379524109	
87/87	α	62°	100/100	375624209	371624209	374624209	373624209	376624209	377624209	379624209	
00/100	L	346									ľ
100/100	Dw	102									
100/100	Dw2	102									
100/100	Dz	97									

16. RAIN DIVERTER



				dark brown	black	graphite	brick-red	brown	silver	dark graphite	
37	Dw	88	87	375525009	371525009	374525009	373525009	376525009	377525009	379525009	
87	н	400	100	375625009	371625009	374625009	373625009	376625009	377625009	379625009	
87	Dz	84									
100	Dw	102									
100	н	400									
100	Dz	98									

17. WALL PLUG



		in a package
8/100	370910105	-
8/140	370910305	-
8/180	370910505	
8/220	370910705	-
8/250	370910805	
8/300	370910905	-











MAGNAT

12-YEAR WARRANTY*

Camrat Magnat is a range of gutter systems designed for the most demanding customers looking for original colours and a high quality product. The uniqueness of the systems lies in their nature, as Gamrat Magnat was created by combining traditional PVC with modern acrylic material. The range of colours in this series is undoubtedly one of the widest available on the market. The copper and silver colours use copper and aluminium particles to give them a unique 'metallic' effect. Magnat systems are highly UV-resistant. Thanks to the use of innovative technology, the user can be certain that the colours will not change or fade for fade for many years. This fact is confirmed by the manufacturer's 12-year colour fastness warranty.



Innovative material

The uniqueness of the new system lies in its "nature", as Gamrat Magnat was created by combining traditional PVC and modern acrylic materials.



Resistant to extreme conditions Laboratory tests have shown that these materials have unprecedented high resistance to the effects of aggressive atmospheric factors, so that sunlight, fluctuating and even extreme ambient temperatures, heavy snowfall, or acid rain are no threat to Gamrat Magnat gutters.



Proven shape

Gamrat Magnat combines the benefits of modern plastic with the tried and tested traditional gutter shape. The deep profile and perfectly smooth surface ensure excellent flow capacity. On the other hand, the characteristic curvature of the front and rear edges of the gutter makes the system stronger and more rigid.



Simplicity of installation

The Gamrat Magnat gutter system is extremely easy to install thanks to the snapand-gasket connection method. It should be used in accordance with the installation instructions included in the packaging of the system components.



Colour under control

Gamrat Magnat gutters, thanks to their exceptional resistance to solar radiation maintain a long-lasting and deep colour for many years. This is confirmed by a 12-year manufacturer's warranty*.

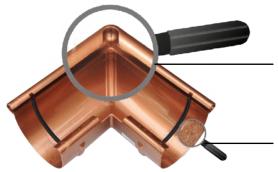


Does not require painting

Gamrat Magnat is a gutter system that is completely corrosion-resistant, does not require painting, is easy to keep clean, and gives many years of satisfaction and safety of use.

The only guttering systems with a 12-year warranty for colour fastness





REINFORCED CORNER

Its unique shape increases the strength of fittings.

METAL PARTICLES

Fittings material contains copper and aluminium particles, which provide the depth of the "metallic" effect.

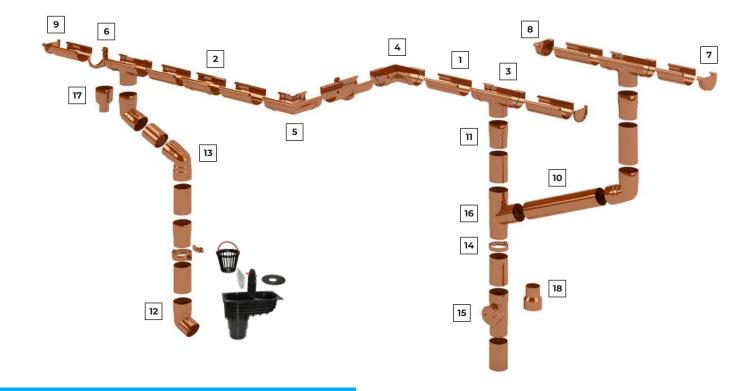


INSTALLATION SCHEME AND ASSORTMENT

The individual gutter sections are connected to the gutter fittings by snap-fitting with a rubber gasket. The connections between the downpipes and fittings are made as socket connections without gaskets. This type of connection meets the basic requirements for ease of installation and tightness. A snap-fit joint with a gasket is the most effective way of compensating for thermal changes in the length of plastic parts.

We offer five GAMRAT MAGNAT gutter systems.





COLOURS

The nearest RAL colours are shown. The colour range shown is only an approximate representation of the colours.



copper



silver ~RAL 9023



brick-red ~RAL 8004



black** ~RAL 9005

* The warranty covers gutters, downpipes and gutter and pipe fittings offered in the colours of the GAMRAT MAGNAT gutter systems. The warranty covers the colourfastness of the products (see the warranty form for details) and does not cover accessories (Page 24-27).

1. GUTTER

100 A 100 100 H 74 100 mm 32670410 32970410 32970410		
100 H 74 100 mm 326710410 329710410 -	100 A 100	75 H
	100 H 74	
	100 H 74	

2. GUTTER CONNECTOR

4			
	75	L	120
	100	L	190
	125	L	240

75/63 L 160 75/63 Dz 63



75/63	в	-
100/63	L	264
100/63	Dz	63
100/63	в	-
100/90	L	264
100/90	Dz	90
100/90	в	-
125/90	L	300
125/90	Dz	90
125/90	в	-
125/110	L	300
125/110	Dz	110
125/110	в	

	copper	silver	brick-red	black	in a package /on a pallet
75/63 mm	326122000	329122000	323122000	-	9/576 pcs
100/63 mm	326722300	329722300	323722300	-	6/192 pcs
100/90 mm	326722100	329722100	323722100	-	6/192 pcs
125/90 mm	326222100	329222100	323222100	321222100	12/144 pcs
125/110 mm	326222000	329222000	323222000	-	12/144 pcs

4. INNER CORNER

 75	LI	151
75	L2	59
100	LI	199
100	L2	75
125	LI	247
125	L2	96

	copper	silver	brick-red	black	in a package /on a pallet
75 mm	326123180	329123180	323123180	-	6/384 pcs
100 mm	326723180	329723180	323723180	-	6/192 pcs
125 mm	326223180	329223180	323223180	321223180	10/160 pcs

5. OUTER CORNER



	copper	silver	brick-red	black	in a package /on a pallet
75 mm	326124180	329124180	323124180	-	6/384 pcs
100 mm	326724180	329724180	323724180	-	6/192 pcs
125 mm	326224180	329224180	323224180	321224180	10/160 pcs

6. SUPPORT BRACKET

11	75	н	83
	75	с	-
12	75	А	-
	100	н	112
H	100	с	-
	100	Α	-
	125	н	137
	125	с	-
	125	Α	-

	copper	silver	brick-red	black	in a package /on a pallet
75 mm	326125000	329125000	323125000	-	60/3840 pcs
100 mm	326725000	329725000	323725000	-	30/1920 pcs
125 mm	326225000	329225000	323225000	321225000	45/1440 pcs



7. GUTTER STOP END RIGHT

323126100 - 323726100 -
323726100 -
020720100
323226100 321226100

8. GUTTER STOP END LEFT



	copper	silver	brick-red	black	in a package /on a pallet
75 mm	326126200	329126200	323126200	-	20 pcs/3200 pcs
100 mm	326726200	329726200	323726200	-	10 pcs/1600 pcs
125 mm	326226200	329226200	323226200	321226200	12/768 pcs

9. UNIVERSAL STOP END



10. DOWNPIPE



	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326410310	329410310	323410310	-	150 pcs/450 mb
90 mm	326610410	329610410	323610410	321610410	48 pcs / 192 mb
110 mm	326510410	329510410	323510410	-	40 pcs/160 mb

11. DOWNPIPE CONNECTOR



	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326421000	329421000	323421000	-	15 pcs/2400 pcs
90 mm	326621000	329621000	323621000	321621000	32/1024 pcs
110 mm	326521000	329521000	323521000	-	32/512 pcs

12.	BEND	67,5°	

UW
u
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6

63 L 104 90 Dw 90,5 90 Dz 84,8 90 L 135 110 Dw 104,8 110 L 155	90 Dw 90,5 90 Dz 84,8 90 L 135 110 Dw 110,4 110 Dz 104,8	90 Dw 90,5 90 Dz 84,8 90 L 135 110 Dw 110,4 110 Dz 104,8
90 Dz 84,8 90 L 135 110 Dw 110,4 110 Dz 104,8	90 Dz 84,8 90 L 135 110 Dw 110,4 110 Dz 104,8	90 Dz 84,8 90 L 135 110 Dw 110,4 110 Dz 104,8
90 L 135 110 Dw 110,4 110 Dz 104,8	90 L 135 110 Dw 110,4 110 Dz 104,8	90 L 135 110 Dw 110,4 110 Dz 104,8
110Dw110,4110Dz104,8	110Dw110,4110Dz104,8	110Dw110,4110Dz104,8
110 Dz 104,8	110 Dz 104,8	110 Dz 104,8
110 L 155	110 L 155	110 L 155

Dw 63,3 Dz 59,4

a 67,5° L1 -L1 -L2 -Dw 90,4 Dz 85,8 a 67,5° L1 -L2 -L2 -Dw 110,4 Dz 150,3 a 67,5°

ы L1 -L2 -

110 110

	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326422100	329422100	323422100	-	12/768 pcs
90 mm	326622100	329622100	323622100	321622100	18/288 pcs
110 mm	326522100	329522100	323522100	-	18/216 pcs

13. DOUBLE SOCKET BEND 67,5°





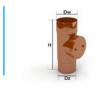
	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326422110	329422110	323422110	-	8/512 pcs
90 mm	326622110	329622110	323622110	321622110	18/288 pcs
110 mm	326522110	329522110	323522110	-	12/144 pcs

14. PIPE SUPPORT

Dw	63	н	25
	63	Dw	63
	90	н	25
H	90	Dw	90
	110	н	25
	110	Dw	110

	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326423000	329423000	323423000	-	30 pcs/4800 pcs
90 mm	326623000	329623000	323623000	321623000	60/3840 pcs
110 mm	326523000	329523000	323523000	-	60/3840 pcs

15. CLEAN-OUT





	copper	silver	brick-red	black	in a package /on a pallet
110 mm	326525100	329525100	323525100	-	9/144 pcs

16. BRANCH 67,5°



90/90	Dw 90,4
90/90	Dz 85,8
90/90	Dw2 90,4
110/63	H 260
110/63	Dw 110,4
110/63	Dz 104,8
110/63	Dw2 63,3
110/110	H 310
110/110	Dw 110,4
110/110	Dz 104,8
110/110	Dw2 110,4

	copper	silver	brick-red	black	in a package /on a pallet
90/90 mm	326624300	329624300	323624300	321624300	12/192 pcs
110/63 mm	326524200	329524200	323524200	-	10/160 pcs
110/110 mm	326524100	329524100	323524100	-	5/80 pcs

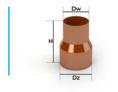
17. REDUCER





	copper	silver	brick-red	black	in a package /on a pallet
110/63 mm	326526000	329526000	323526000	-	12/384 pcs

18. REVERSE REDUCER



63/90	Dw	63,4
63/90	Dz	90
63/90	н	120

	copper	silver	brick-red	black	in a package /on a pallet
63/90 mm	326626100	329626100	323626100	-	12/768 pcs





GUTTER SYSTEMS

18 | www.gamrat.pl



10-YEAR WARRANTY*

Gamrat PVC gutter systems are guaranteed to reliably drain water from any roof. They have been specially designed for the harsh, variable climatic conditions found in Poland and other countries. They have been tried and tested in practice and have been appreciated by contractors and investors. They have found their place on millions of roofs. The essence of the success of the systems is their excellent quality, durability, tightness, exceptional mechanical strength, resistance to changing atmospheric conditions, including temperature changes, industrial pollution or acid rains. Gamrat PVC gutters are distinguished primarily by their deep parabolic shape with characteristic curves, which strengthens and stiffens the gutter and, together with the perfectly smooth surface of the gutter ensures an excellent flow capacity of the system. Gamrat PVC gutter systems have been manufactured by GAMRAT SA for over 25 years. The product is constantly improved to better meet the expectations of users.



A proven material

PVC has been used successfully in the construction industry for decades. Products made from it ensure anti-corrosive properties and exceptional resistance to aggressive atmospheric agents.



High load carrying capacity

Gutter brackets with an I-shaped profile made of high-quality PVC provide the system with exceptional load carrying capacity, e.g. due to the weight of snow caps and icicles.



Reliable in extreme temperatures Gamrat PVC systems maintain their high performance parameters at both high and low temperatures.



Quick and easy installation

The system components have been designed to make the installation of a gutter system quick and easy – cost effective for the investor and efficient for the contractor.



No painting required

Offered in the most popular and durable colours, they do not require painting, giving those who choose them great aesthetics and the satisfaction of knowing they have made the right choice.



Deep, high-capacity gutter Rarely seen, this deep gutter gives the system high capacity and throughput. Its traditional, stiffened shape provides the necessary rigidity.

reliable gutters manufactured for over 25 years





HIGH QUALITY MATERIAL

System components resistant to corrosion and aggressive external conditions

I-SECTION PROFILE

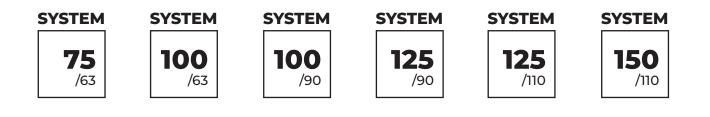
Exceptional load carrying capacity for the entire system



INSTALLATION SCHEME AND ASSORTMENT

The individual gutter sections are connected to the gutter fittings by snap-fitting with a rubber gasket. The connections between the downpipes and fittings are made as socket connections without gaskets.

We offer six GAMRAT PVC gutter systems.





COLOURS

The nearest RAL colours are shown. The colour range shown is only an approximate representation of the colours.



black** ~RAL 9017



dark brown ~RAL 8019



graphite ~RAL 7016



~RAL 9010



grey** ~RAL 7040

* The warranty covers gutters, downpipes and gutter and pipe fittings offered in the colours of the GAMRAT PVC gutter systems. The warranty covers the mechanical durability of the products (see the warranty form for details) and does not cover accessories (Page 24-27). ** Black is not available for the 150/110 system. Grey is only available for the 150/110 system.

1. GUTTER

1	A	75	Α	75
		75	н	55
		100	А	100
		100	н	74
		125	А	125
	н	125	н	89
	1	150	А	150
1		150	н	108

	dark brown	white	graphite	black	grey	in a package /on a pallet
75 mm (2 m)	315110210	312110210	314110210	316110210	-	165 pcs/330 mb
75 mm (3 m)	315110310	312110310	314110310	316110310	-	165 pcs/495 mb
75 mm (4 m)	315110410	312110410	314110410	316110410	-	165 pcs / 660 mb
100 mm (3 m)	315710310	312710310	314710310	316710310	-	120 pcs/360 mb
100 mm (4 m)	315710410	312710410	314710410	316710410	-	120 pcs/480 mb
125 mm (3 m)	315210310	312210310	314210310	316210310	-	105 pcs/315 mb
125 mm (4 m)	315210410	312210410	314210410	316210410	-	105 pcs / 420 mb
150 mm (3 m)	315310310	312310310	314310310	-	317310310	60 pcs/180 mb
150 mm (4 m)	315310410	312310410	314310410	-	317310410	60 pcs/240 mb

2. GUTTER CONNECTOR

1			
-	75	L	125
	100	L	190
	125	L	240
	150	L	240

	dark brown	white	graphite	black	grey	in a package /on a pallet
75 mm	315121000	312121000	314121000	316121000	-	30 pcs/1920 pcs
100 mm	315721000	312721000	314721000	316721000	-	10/640 pcs
125 mm	315221000	312221000	314221000	316221000	-	24/384 pcs
150 mm	315321000	312321000	314321000	-	317321000	22/352 pcs

3. DROP OUTLET



75/63	в	-
100/63	L	264
100/63	Dz	63
100/63	в	-
100/90	L	264
100/90	Dz	90
100/90	в	-
125/90	L	300
125/90	Dz	90
125/90	в	-
125/110	L	300
125/110	Dz	110
125/110	в	-
150/110	L	300
150/110	Dz	110
150/110	в	-

 75/63
 L
 160

 75/63
 Dz
 63

	dark brown	white	graphite	black	grey	in a package /on a pallet
75/63 mm	315122000	312122000	314122000	316122000	-	9/576 pcs
100/63 mm	315722300	312722300	314722300	316722300	-	6/192 pcs
100/90 mm	315722100	312722100	314722100	316722100	-	6/192 pcs
125/90 mm	315222100	312222100	314222100	316222100	-	12/144 pcs
125/110 mm	315222000	312222000	314222000	316222000	-	12/144 pcs
150/110 mm	315322000	312322000	314322000	-	317322000	6/72 pcs

4. INNER CORNER

	75	LI	151
u	75	L2	59
	100	LI	199
E-m	100	L2	75
	125	LI	247
and the	125	L2	96
-12	150	LI	271
	150	L2	92

5. OUTER CORNER

N	75	LI	151
u	75	L2	59
	100	LI	199
	100	L2	75
	125	LI	247
-12	125	L2	96
	150	LI	271
	150	L2	92

6. SUPPORT BRACKET



158 --

	dark brown	white	graphite	black	grey	in a package /on a pallet
75 mm	315125000	312125000	314125000	316125000	-	60/3840 pcs
100 mm	315725000	312725000	314725000	316725000	-	30/1920 pcs
125 mm	315225000	312225000	314225000	316225000	-	45/1440 pcs
150 mm	315325000	312325000	314325000	-	317325000	35/1120 pcs



7. GUTTER STOP END RIGHT

75 L 30 75 mm 315126100 314126100 316126100 - 20 pcs/st 100 L 36 100 mm 315726100 314726100 316726100 316726100 - 10 pcs/st 125 L 50 125 mm 315226100 314226100 316226100 316226100 - 10 pcs/st	5					dark brown	white	graphite	black	grey	in a package /on a pallet
125 L 50 125 mm 315226100 312226100 316226100 - 12/76 150 L 50 12 50 316226100 316226100 316226100 316226100 12/76		75	L	30	75 mm	315126100	312126100	314126100	316126100	-	20 pcs/3200 pc
150 L 50		100	L	36	100 mm	315726100	312726100	314726100	316726100	-	10 pcs/1600 p
150 L 50			L		125 mm	315226100	312226100	314226100	316226100	-	12/768 pcs
150 mm 315326100 312326100 314326100 - 317326100 10/64		150	L	50	150 mm	315326100	312326100	314326100	-	317326100	10/640 pcs

8. GUTTER STOP END LEFT

2	75	L	30		dark brown	white	graphite	black	grey	
0	100	L	36	75 mm	315126200	312126200	314126200	316126200	-	2
	125	L	50	100 mm	315726200	312726200	314726200	316726200	-	
150		L	50	125 mm	315226200	312226200	314226200	316226200	-	
				150 mm	315326200	312326200	314326200	-	317326200	

9. UNIVERSAL STOP END



10. DOWNPIPE

•					dark brown	white	graphite	black	grey	in a package /on a pallet
				63 mm (dł.	315410210	312410210	314410210	316410210	-	150 pcs/300 r
	63	Dz	63	63 mm (dł.	315410310	312410310	314410310	316410310	-	150 pcs/450
	90	Dz	90	63 mm (dł.	315410410	312410410	314410410	316410410	-	150 pcs / 600 r
	110	Dz	110	90 mm (dł.	315610310	312610310	314610310	316610310	-	60 pcs / 180 n
				90 mm (dł.	315610410	312610410	314610410	316610410	-	60 pcs/240 n
Dz				110 mm (dł.	315510210	312510210	314510210	316510210	317510210	45 pcs/90 m
				110 mm (dł.	315510310	312510310	314510310	316510310	317510310	45 pcs/135 n
				110 mm (dł.	315510410	312510410	314510410	316510410	317510410	45 pcs/180 n

11. DOWNPIPE CONNECTOR

		63	Dw	63,3
Dw		63	Dz	57,8
		63	L	104
	1	90	Dw	90,5
		90	Dz	84,8
	L	90	L	135
		110	Dw	110,4
-		110	Dz	104,8
Dz		110	L	155

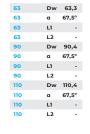
	dark brown	white	graphite	black	grey	in a package /on a pallet
63 mm	315421000	312421000	314421000	316421000	-	15 pcs/2400 pcs
90 mm	315621000	312621000	314621000	316621000	-	32/1024 pcs
110 mm	315521000	312521000	314521000	316521000	317521000	32/512 pcs

	63	Dw	63,3
12. BEND 67,5°	63	Dz	59,4
UW	63	a	67,5°
	63	LI	-
	63	L2	-
	90	Dw	90,4
	90	Dz	85,8
a	90	a	67,5°
	90	LI	-
	90	L2	-
	110	Dw	110,4
	110	Dz	150,3
	110	a	67,5°
	110	L1	-
	110	L2	-

	dark brown	white	graphite	black	grey	in a package /on a pallet
63 mm	315422100	312422100	314422100	316422100	-	12/768 pcs
90 mm	315622100	312622100	314622100	316622100	-	18/288 pcs
110 mm	315522100	312522100	314522100	316522100	317522100	18/216 pcs

13. DOUBLE SOCKET BEND 67,5°





110/110 110

	dark brown	white	graphite	black	grey	in a package /on a pallet
63 mm	315422110	312422110	314422110	316422110	-	8/512 pcs
90 mm	315622110	312622110	314622110	316622110	-	18/288 pcs
110 mm	315522110	312522110	314522110	316522110	317522110	12/144 pcs

14. PIPE SUPPORT

Dw	63	н	25
	63	Dw	63
н	90	н	25
	90	Dw	90
	110	н	25
	110	Dw	110

15. CLEAN-OUT



Dw	110,4
Dz	104,8
н	295

16. BRANCH 67,5°



	dark brown	white	graphite	black	grey	in a package /on a pallet
90/90/90 mm	315624300	312624300	314624300	316624300	-	12/192 pcs
110/110/63 mm	315524200	312524200	314524200	316524200	-	10/160 pcs
110/110/110 mm	315524100	312524100	314524100	316524100	317524100	5/80 pcs

17. REDUCER





0 H 264

Dw 90,4 Dz 85,8 Dw2 90,4 H 260 Dw 110,4 Dz 104,8 Dw2 63,3 H 310 Dw 110,4 Dz 104,8

Dw2 110,4

	dark brown	white	graphite	black	grey	in a package /on a pallet
110/63 mm	315526000	312526000	314526000	316526000	-	12/384 pcs

18. REVERSE REDUCER







CLEAN-OUT SIEVE - SPARE



CLEAN-OUT SPOUT



STEEL HOOK FOR PIPE SUPPORT - LONG PLUG



PVC MAGNAT in a package

PVC		MAGNAT			
	dark brown	graphite	in a package		
do rewizji 110	315525510	314525510	32 pcs		

		in a package
L-120	310991100	100 pcs
L-140	310991200	100 pcs
L-160	310991300	100 pcs
L-180	310991400	100 pcs
L-200	310991500	100 pcs
L-220	310991600	100 pcs
L-250	310991700	100 pcs
L-300	310991800	100 pcs

do rewizji 110 315525410 1 pcs

MAGNAT

		in a package
L-120	310991100	100 pcs
L-140	310991200	100 pcs
L-160	310991300	100 pcs
L-180	310991400	100 pcs
L-200	310991500	100 pcs
L-220	310991600	100 pcs
L-250	310991700	100 pcs
L-300	310991800	100 pcs

PVC MAGNAT

PVC

STEEL HOOK FOR PIPE SUPPORT - SHORT PLUG

ALUMINIUM SUPPORT FOR STEEL HOOK

Accessories for GAMRAT PVC and GAMRAT MAGNAT gutter systems





GAMRAT / ACCESSORIES FOR GUTTER SYSTEMS



PVC MAGNAT

ACCESORIES

CLEAN-OUT SCRE	EWED CAP- SPARE						PVC		M	AGNAT
		dark brown [PVC]	white [PVC]	graphite [PVC]	black [PVC]	copper [MAGNAT]	silver [MAGNAT]	brick-red [MAGNAT]	black [MAGNAT]	in a package
	do rewizji 110	315525300	312525300	314525300	316525300	326525300	329525300	323525300	321525300	1 pcs

SPARE GASKET FOR GUTTER FITTINGS - TYPE A & B

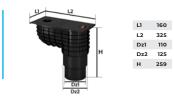


	P	vc	M/	AGNAT
	type A (for semi-circular groove)	type B (for rectang	gular groove)	in a package
75 mm	310932140	3109321	50	48 pcs
100 mm	-	3109324	50	48 pcs
125 mm	310932240	3109322	50	48 pcs
150 mm	310932340	-		48 pcs

PIPE ADAPTOR - BLACK RUBBER



RAINWATER GULLY - FULL SET



GASKET LUBRICANT

PVC		M	AGNAT
black	dark brown	szary	in a package //on a pallet
310940000	310941000	310942000	1/100 pcs

PVC MAGNAT

90/100 mm 310933100 1 pcs

in a package

PVC MAGNAT in a package 310931010 1 pcs

STRAIGHT SUPPORT BRACKET - METAL



PVC

PIPE SUPPORT - METAL						PVC
		dark brown	white	black	graphite	in a package /on a pallet
	90 mm	310912110	310912410	310912210	310912310	40 pcs
	110 mm	310913110	310913410	310913210	310913310	30 pcs

PIPE SUPPORT FOOT FOR LAYER BOARD - METAL

dark brown	white	graphite	black	in a package /on a pallet
310934110	310934410	310934210	310934310	1 pcs

INTERNAL & EXTERNAL CORNERS WITH ANGLES OTHER THAN 90°

	dark brown	white	graphite	black	grey	in a package /on a pallet
75 mm	31512 x y z 0*	31212 x y z 0*	31412 x y z 0*	31612 x y z 0*	-	1 pcs
100 mm	31572 x y z 0*	31272 x y z 0*	31472 x y z 0*	31672 x y z 0*	-	1 pcs
125 mm	31522 x y z 0*	31222 x y z 0*	31422 x y z 0*	31622 x y z 0*	-	1 pcs
150 mm	31532 x y z 0*	31232 x y z 0*	31432 x y z 0*	-	-	1 pcs

NON-STANDARD BENDS WITH ANGLES OTHER THAN 67.5°

	dark brown	white	graphite	black	grey	in a package /on a pallet
63 mm	315422200	312422200	314422200	316422200	-	1 pcs
90 mm	315622200	312622200	314622200	316622200	-	1 pcs
110 mm	315522200	312522200	314522200	316522200	-	1pcs

PVC

PVC

PVC

ON REQUEST

ON REQUEST

NON-STANDARD BRANCHES 67.5°				PVC		ON	REQUEST
		dark brown	white	graphite	black	grey	in a package /on a pallet
	63/63/63 mm	315424510	312424510	313424510	316424510	-	1 pcs

DOWNPIPE REDUCER				PVC		ON	REQUEST
_		dark brown	white	graphite	black	grey	in a package /on a pallet
	110/90 mm	315526200	312526200	314526200	316526200	-	lpcs

GAMRAT / ACCESSORIES FOR GUTTER SYSTEMS

MAGNAT ON REQUEST

INTERNAL & EXTERNAL CORNERS WITH ANGLES OTHER THAN 90°



	copper	silver	brick-red	black	in a package /on a pallet
75 mm	32612xyz0*	32912xyz0*	32312xyz0*	32112xyz0*	1 pcs
100 mm	32672xyz0*	32972xyz0*	32372xyz0*	32172xyz0*	1 pcs
125 mm	32622xyz0*	32922xyz0*	32322xyz0*	32122xyz0*	1 pcs

NON-STANDARD BENDS WITH ANGLES OTHER THAN 67.5°



		MAGN	AT	ON	REQUEST
	copper	silver	brick-red	black	in a package /on a pallet
63 mm	326422200	329422200	323422200	321422200	1 pcs
90 mm	326622200	329622200	323622200	321622200	1 pcs
110 mm	326522200	329522200	323522200	321522200	1 pcs

NON-STANDARD BRANCHES 67.5°



	copper	silver	brick-red	black	in a package /on a pallet
63/63/63 mm	326424510	329424510	323424510	321424510	1 pcs

MAGNAT ON REQUEST

/on a pallet		
/on a pallet		
	silver	copper
200 323526200 321526200 1 pcs		

* The letters x; y; z specify the type and angle of the corner. Type: x = 3 – internal corner; x = 4 – external corner Corner angle in degrees | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 |

Corner angle in degrees	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	
у	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	
Z	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Corners are made on request in increment	s of 5 d	degree	s														



SOFFITS

SOFFITS

25-YEAR WARRANTY*

The roof of a house really starts to look impressive when it is fully finished. Gamrat soffits are an excellent solution for the durable and aesthetic finishing of the eaves, i.e. the elements of the roof structure that extend beyond the outline of the house. Matching the colours of the guttering, roofing as well as windows and doors, they create a cohesive whole, giving the whole building a unique character. GAMRAT PVC soffits provide excellent protection for the building's eaves against rain and other adverse weather conditions. The special construction and perforation used in our products also guarantee proper ventilation of the roof. A well-made soffit prevents insects and animals such as martens or mice from getting under the roof.



Full roof ventilation Special perforated panels allow air to pass through, providing full roof ventilation.



Mould- and fungus-resistant The soffit is completely resistant to moisture, moulds and fungi.



No maintenance or painting required This system requires no additional maintenance or painting, unlike traditional roof finishing methods.



Quick and easy installation

The ease and speed of installation is a result of the soffit's carefully matched components. The light weight allows the soffit to be assembled into lightweight structures.

COLOURS

The nearest RAL colours are shown. The colour range shown is only an approximate representation of the colours.

WOOD-GRAIN SOFFIT









golden oak board**

walnut board**

winchester oak**

mahogany**

TRADITIONAL SOFFIT















white ~RAL 9010

brown** ~RAL 8016

ciemnobrown** ~RAL 8019

black** ~RAL 9005

graphite** ~RAL 7016

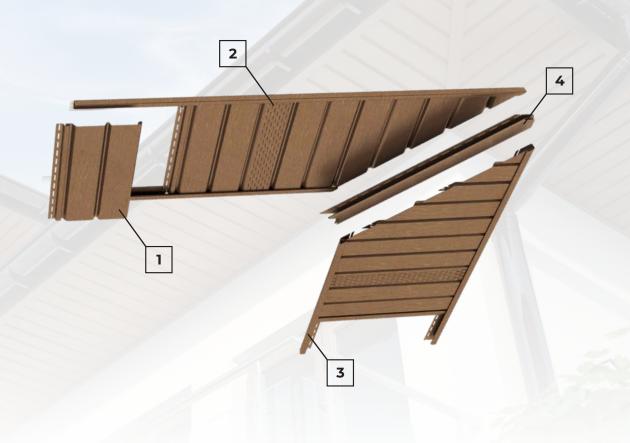
grey** ~RAL 7040

*The warranty covers the boards and trims. The warranty covers the mechanical durability of the products (see warrantyform for details). **Do not use in areas exposed to direct UV radiation.



INSTALLATION SCHEME AND ASSORTMENT

The individual elements of the soffit system are attached to the laths of the grid. The boards are snapped together and the trims are overlapped.



1. FULL PVC SOFFIT TR	ADITIONAL							TRAI	DITIONAL
2	L1 203 L2 3000		white	black	brown	dark brown	graphite	grey	in a package
	H 12	length 3 m	340141133	341141033	340541033	341041033	340841033	341241033	26 pcs/15,38 m2
1. FULL PVC SOFFIT WO	DOD-GRAIN							woo	D-GRAIN
12	LI 203				golden oak	walnut	mahogany	winchester	in a package
	L2 3000 H 12			length 3 m	board 361711133	board 361811133	360311133	oak 362111133	26 pcs/15,38 m2
				iength 3 m	301/11/33	201011122	300311133	302111133	20 pcs/ 15,58 m2

TRADITIONAL 2. PERFORATED PVC SOFFIT TRADITIONAL LI dark brown white black brown graphite grey in a package L1 203 L2 3000 length 3 m 340142133 341142033 340542033 341042033 340842033 341242033 26 pcs/15,83 m2 н 12 2. PERFORATED PVC SOFFIT WOOD-GRAIN golden oak board walnut board winchester oak L1 203 mahogany in a package L2 3000 H 12 length 3 m 361712133 361812133 360312133 362112133 26 pcs/15,83 m2 **3. J-TYPE PVC CHANNEL TRADITIONAL** TRADITIONAL dark L1 38 white black brown graphite in a package grey L2 3000 brown L3 19 length 3 m 340122033 341122033 340522033 341022033 340822033 341222033 50 pcs/150 mb н 19,8 H2 11,8 H2 **3. J-TYPE PVC CHANNEL WOOD-GRAIN** WOOD-GRAIN



LI	38
L2	3000
L3	19
H1	19,8
H2	11,8

	golden oak board	walnut board	mahogany	winchester oak	in a package
length 3 m	361721133	361821133	360321133	362121133	50 pcs/150 mb

4. H-TYPE PVC CHANNEL TRADITIONAL

H I		
	ы	88,9
12	L2	3000
	L3	57
HI	HI	12,7

	white	black	brown	dark brown	graphite	grey	in a package
length 3 m	340124033	341124033	340524033	341024033	340824033	341224033	18 pcs/54 mb

4. H-TYPE PVC CHANNEL WOOD-GRAIN

-		
1	LI	88,9
	L2	3000
	L3	57
	н	12,7
HILLS	1	



TRADITIONAL

WOOD-GRAIN



DRAINAGE SYSTEMS

The DrenGam linear drainage system is an excellent complement to the GAMRAT guttering systems, indispensable wherever rainwater accumulates. Thanks to this system, the foundations and walls of buildings are protected from dampness and the area around them is free of puddles and mud.

DrenGam linear drainage systems are ideal for storm surges and heavy hydraulic loads. It is a perfect solution for customers looking for an economical, aesthetic and durable drainage system around a house, in a park, garden, pavement, car park, driveway and in front of a garage. Among the undoubted advantages of the DrenGam system that speak in favour of its purchase are its resistance to corrosion, chemicals and freezing. The ribbed channel design and numerous side chambers contribute to optimum strength and durability under load and during installation.



High structural strength Wide range of applicable load classes from A15 to C250.



High product quality

The use of channels made from high -quality PP material, which is resistant to corrosion, chemicals and cyclical freezing and thawing.



Quick and easy installation Easy to install without the need for special tools. The light weight of the channels and accessories makes installation easier.



Exceptional mechanical resistance The specially designed structure of the polymer composite channels provides exceptionally high resistance to mechanical shocks at high and low temperatures.



Flexible structure

Allows lateral connection of channels for quick and easy installation



Minimised maintenance Smooth, non-porous channel surface prevents the formation of deposits.



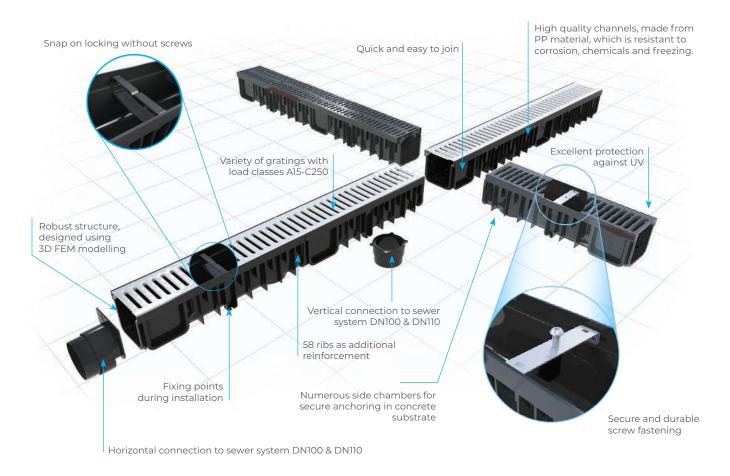
The grate is made of galvanised steel. It has cross ribs and an anti slip system, and is certified for **load class A15.**

PP CHANNEL WITH POLYAMIDE GRATE

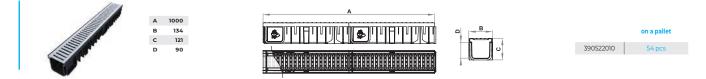
The grating is made of polyamide, which guarantees high rigidity, strength and dimensional stability. It is certified for load class C250



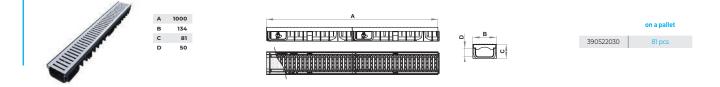
INSTALLATION SCHEME AND ASSORTMENT



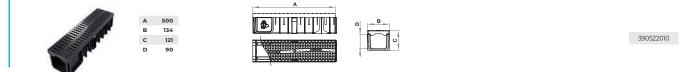
DRENGAM 130/90 - PP CHANNELL WITH GALVANISED STEEL GRATING - 1 M LONG



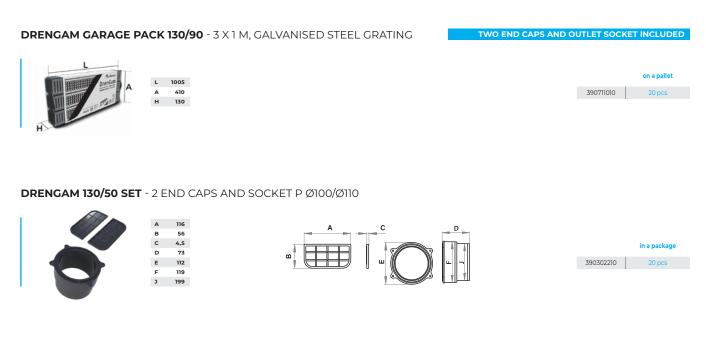
DRENGAM 130/50 - PP CHANNELL WITH GALVANISED STEEL GRATING - 1 M LONG



DRENGAM 130/90 - PP CHANNELL WITH POLYAMIDE GRATING - 0.5 M LONG

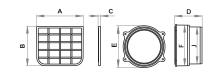


GAMRAT / LINEAR DRAINAGE SYSTEMS



DRENGAM 130/90 SET - 2 END CAPS AND SOCKET P Ø100/Ø110

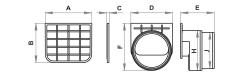




	in a package
390302200	20 pcs

DRENGAM 130/90 SET - END CAP AND END CAP WITH OUTLET PIPE H Ø100/Ø110





	in a package
390302300	16 pcs



Gamrat

RAINWATER COLLECTION SYSTEMS

WATER STORAGE

EasyGam water storage systems are the perfect alternative to unsightly barrels or underground tanks, which are unsuitable for small gardens. EasyGam tanks have a modern design and are connected to the downpipe of an already installed or existing guttering system.

Rainwater is much more beneficial to garden plants than tap water, due to its softness, lack of chlorine and optimal temperature. Among other things, it is softer, chlorine free and has an optimal temperature.



Modern design Highly aesthetic tanks with capacities ranging from 210 to 440 litres. Available in 3 of the most popular colours.



Simple design Innovative and simple design (also available in a fully automatic version). They help to collect rainwater without unnecessary problems.

SYSTEM VERSIONS AND COMPONENTS OFFERED

The rainwater storage system is available in two versions.

DOWNSPOUT OUTLET

The EasyGam system, with a clean-out spout mounted in a 110 mm access pipe, is a very convenient and simple way of collecting rainwater. Its installation and removal is extremely easy and quick. Once the diverter has been removed from the access pipe, the rainwater is drained out through the entire cross-section of the downpipe (no narrowing).





RAINWATER DIVERTER*

The EasyGam system with a rainwater diverter is designed to collect rainwater from 90 mm and 110 mm downpipes. It has an innovative, simple design and is fully self-acting. Once the tank is full, the excess water is discharged through a downpipe into the sewer or through a shoe onto the ground. The connection between the diverter and the tank is made by means of a flexible hose with a seal.



AQUACAN TANK 440L | 360L | 210L

440 I H 1260 mm н 3601 н 1200 mm 210 I H 1183 mm



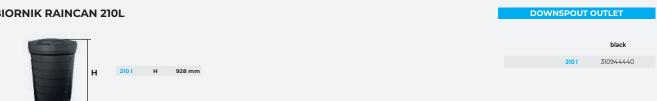






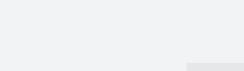
	dark brown	graphite	black	in a package /on a pallet
110	315527000	314527000	316527000	15 m/480 mb
90	315627000	314627000	316627000	20 m / 640 mb

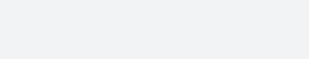
RAINWATER DIVERTER*



ZBIORNIK RAINCAN 210L









		1
	dark brown	antracyt
4401	310945460	310944460

310945410



310944510 50 cm 100 cm 310944520

RAINWATER DIVERTER

310944410

310944400

RAINWATER DIVERTER

3601

210 I 310945400

RAINWATER DIVERTER

black

CLEAN-OUT SPOUT



GAMRAT SA / WATER STORAGE SYSTEMS

	dark brown	graphite	black	white
110	315525100	314525100	316525100	312525100

DOWNSPOUT OUTLET

DOWNSPOUT OUTLET

GAMRAT / WATER STORAGE SYSTEMS

CANYON TANK 310L			RAINWAT	ER DIVER
				grap
H	310	H 1177 mm	310 1	310944

RAINWATER DIVERTER CAP

TAP

TANK BASE

H 230 mm

dark graphite black	
315527500 314527500 316527500	315527500

ADDITIONAL ACCESSORIES

RAINWATER DIVERTER

black 310944530

ADDITIONAL ACCESSORIES

black 310944450





INSTALLATION INSTRUCTIONS

STALGAM - INSTALLATION

DIMENSIONS AND APPLICATION OF STALGAM GUTTER SYSTEMS

Gutter	Downpipe	A	в	с	Dz	E	System	Gutter developed width	Application
A N		125	84	0,6	87	0,6	125/87	280	single-family houses
	E	125	84	0,6	100	0,6	125/100	280	single-family houses
0		150	89	0,6	100	0,6	150/100	333	large residential buildings, industrial and commercial facilities

CAPACITY OF STALGAM GUTTER SYSTEMS

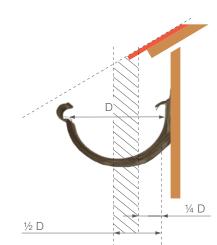
When choosing a gutter system, you need to make sure that the gutters and downpipes will collect water from the surface of your building's roof. To do this, calculate the 'effective roof area' to be drained by the system. Use the following formula to calculate the effective roof area: **S = (B + 0,5 C) x L**

C B B B B

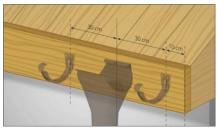
Maximum areas drained by gutter systems in square meters of the effective roof area (per one downpipe):

downpipe ocation	SYSTEM 125/87	SYSTEM 125/100	SYSTEM 150/100	
FT	200	200	350	
-	100	100	175	
	86	86	140	

The recommended position of the gutter in relation to the roof slope and the position of the roof edge is shown on the drawing.



INSTALLATION SEQUENCE FOR STALGAM GUTTER SYSTEMS



1. Mark the position of the drop outlet axis and the nearest brackets on the fascia board. Install the outermost bracket at a distance of approx. 10 cm from the edge of the roof.



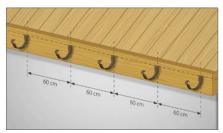
2. Install the lowermost bracket. Install the bracket on the other side of the drop outlet 2 mm higher than the lowermost bracket. The brackets should be located at a distance of at least 20 cm from the joints.



3. Install the brackets furthest away from the drop outlet with a minimum gradient of 3 mm/m (recommended gradient is 5 mm/m).



GAMRAT SA / STALGAM - INSTALLATION



4. Mark the gradient line with a chalk line and install the intermediate brackets (at a spacing of approx. 60 cm). Install the brackets on both sides of the corner at the same height.



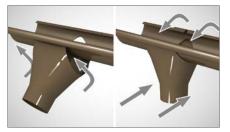
5. Place the gutter on the brackets and mark the position of the drop outlet.



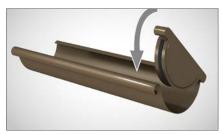
6. Cut a hole in the rain gutter with shears, first cutting a slot with a metal saw (hole diameter approx. 10 cm). Do not use an angle grinder for cutting.



7. In the lower part of the gutter, bend the edge of the hole downwards to provide better draining of water.



8. Place the drop outlet on the gutter. Insert the front edge of the drop outlet onto the front gutter lip. Then, turn the drop outlet up until its rear edge snaps onto the rear gutter lip.



9a. Install a universal stop end by sliding its rear section under the rear gutter lip, turning it down until its front edge snaps into the front gutter lip. Bend the rear tab of the stop end over the gutter. It is recommended that the stop end is additionally sealed with roofing sealant.



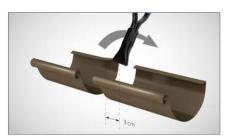
9b. Cut off the excess upper part of the stop end (best done before installation knowing whether the bottom will be on the right or left side of the gutter).



10. Install the gutters onto the brackets. Insert the rear lip of the gutter into the rear folds of the brackets, turn the gutter down and snap it into the brackets.



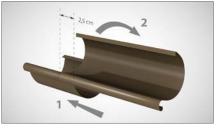
lla. To connect gutter sections and a gutter with gutter connect, use gutter connectors with EPDM gaskets.



11b. It is recommended that the gutters are installed with an overlap (approx. 2.5 cm) in accordance with the direction of the gutter slope. To achieve this, bend up the rear lip of the installed gutter over a distance of approx.3 cm.



12a. The gutter joint is sealed by installing a gutter connector on the gutter overlap. Snap the connector onto the rear edges of the elements connected and turn it upwards.



11c. Insert the front lip of the gutter to be installed into the front lip of the installed gutter to a depth of 2.5 cm, turn the gutter to be installed down into the installed gutter.



11d. Bend down the previously unbent gutter lip. Before joining the gutters, place a gutter connector on the installed gutter – it is difficult to install it on gutters that have already been joined.



12b. Place the clamp on the front lips of the joined gutters. Bend up the locking tab.



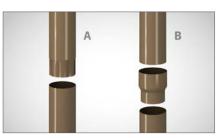
12c. Snap the latch into place and bend down the locking tab.



13. It is recommended that a gutter is connected with a corner in a similar way, overlapping with a gutter connector. In this case, the gutters are inserted into the corner and the joint is sealed with gutter fittings. When installing corners, it is recommended that the overlap is additionally sealed with a thin layer of universal roofing sealant.



14. For overhanging eaves, connect a drop outlet to a downpipe using two bends and a downpipe section.



15. The downpipes have prefabricated crimps so that they can be connected without the need for pipe fittings. However, these fittings are available from us and may be required to join shorter downpipes that have previously been cut off.

It is also possible to crimp a pipe using a crimping tool.



16. A downpipe is fixed to the wall using pipe clips with dowels of different lengths. The maximum distance between clips is 2 m. It is recommended that each downpipe is fixed to the wall with at least of two clips. The first clip is attached approximately 15 cm below the bend.



17. Use a downpipe shoe as an outlet. It is mechanically attached to the back of the downpipe, e.g. with a screw. The height of the shoe above the ground should be at least 20 cm.

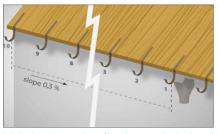


18. Alternatively, the downpipe can be inserted into a plastic settling tank fitted with a strainer and an anti odour flap and the rainwater can be discharged into the sewer system.

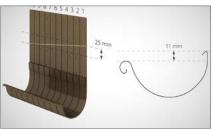




19. A rainwater diverter can be fitted to the downpipe to collect water for further use.



 1. Calculate the number of brackets required to install the gutters (from the highest bracket to the lowest bracket). Ensure that the brackets at the corners are installed at the same height.



2. Mark the bending points of the brackets. Number the brackets calculated in step 1 and mark the size of the slope (for 10 brackets this value is approx. 25 mm). The diagonal line marks the bending points of the brackets. The bracket with the number 1 is the lowest one and the bracket with the number 10 is the highest. Note that the front gutter lip is lower than the rear lip by approx. 11 mm.

PACKAGING

Gutter and pipe fittings are packed in cardboard boxes. Gutters and downpipes are packed individually in plastic bags. Gutters are packed in bundles of 5 pieces. The packs are prepared for dispatch on bulk pallets.

STORAGE AND TRANSPORT INSTRUCTIONS FOR STALGAM SYSTEMS

Outdoor storage of gutters and downpipes made of coated sheet metal should be avoided. If this is unavoidable, temporary outdoor storage of the products in their original packaging is permitted. In this case, the products must be covered (water-proof tarpaulin recommended) so as to ensure free access of air to the stored products. The maximum height of the stored products is 1 m. The products should be stored on a flat surface so that the first layer of products rests on the ground along its entire length. Items packed in cardboard boxes should be stored under a roof in dry rooms to protect the products from rain and moisture. Gutters and pipes should be transported horizontally. Products should be secured against displacement. Special attention should be paid to the area where the products touch each other (the use of cardboard spacers is recommended). Products in cardboard boxes should be transported under cover. Do not allow products to be locally crushed or thrown. When unloading, do not drag the products over the ground or other stored products to avoid damage.

NOTES

- Snow barriers should be used on slippery, steep roofs and when it is not possible to install a gutter below the plane that is an extension of the roof.
- The use of components from other manufacturers may affect the performance
- of the system. Only genuine Gamrat SA products are covered by the warranty.
- Gutters should be regularly cleaned of debris.

APPROVALS AND CERTIFICATIONS

Polish Standard -PN-EN 612:2006; PN-EN 1462:2006 - Declaration of performance



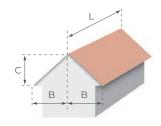
PVC & MAGNAT - INSTALLATION

DIMENSIONS AND APPLICATION OF PVC AND MAGNAT GUTTER SYSTEMS

Gutter	Downpipe	A	в	с	Dz	Е	System	Effective cross-section	Application	
		75	55	1,2	63	1,6	75/63	33 cm ²	sheds, arbours, garages, terraces, balconies	
		100	74	1,4	63	1,6	100/63	50 3	sheds, arbours, terraces, balconies	
		100	74	1,4	90	1,8	100/90	58 cm ²	single-family houses	
		125	89	1,5	63	1,6	125/63		single-family houses, blocks of flats, small	
В		1:	125	89	1,5	90	1,8	125/90	91 cm ²	and medium-sized warehouses, public
C E		125	89	1,5	110	2,0	125/110		buildings, commercial and industrial facilities	
		150	108	2,0	110	2,0	150/110	131 cm²	large residential buildings, industrial and commercial facilities	

CAPACITY OF PVC AND MAGNAT GUTTER SYSTEMS

When choosing a gutter system, you need to make sure that the gutters and downpipes will collect water from the surface of your building's roof. To do this, calculate the 'effective roof area' to be drained by the system. Use the following formula to calculate the effective roof area: **S** = (**B** + 0,5 C) × L

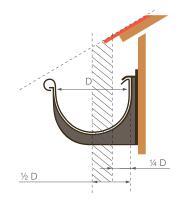


Maximum areas drained by gutter systems in square meters of the effective roof area (per one downpipe):

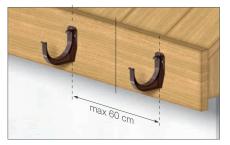
downpipe location	SYSTEM 75/63	SYSTEM 100/63	SYSTEM 100/90	SYSTEM 125/90	SYSTEM 125/110	SYSTEM 150/110
	95	110	148	205	240	370
T	48	55	74	100	120	180
	42	46	50	80	95	145

INSTALLATION SEQUENCE FOR PVC AND MAGNAT GUTTER SYSTEMS

The basis for the effective functioning of a plastic gutter system is the correct installation. Gamrat gutter systems are installed according to different principles than traditional systems. The main difference is the phenomenon of thermal changes in the length of plastic elements. When installing gutter systems, this phenomenon must be taken into account by using fittings to compensate for changes in the length of gutters and pipes. In the case of gutters, freedom of movement is achieved in the connections between the gutter and the gutter fittings, which are designed as gasket joints. In addition to supporting the gutter, plastic gutter brackets are used to guide the elongated gutter along its length. In the case of downpipes, compensation is provided by the clearance in the pipe-to-pipe fitting joint. Gutters should be installed so that they are not affected by snow sliding off the roof. The recommended position of the gutter in relation to the pitch of the roof and the position of the eaves is shown in the diagram to the right.



GAMRAT SA / PVC & MAGNAT - INSTALLATION



 Mark the position of the drop outlet on the fascia board. Install gutter brackets on both sides of the drop outlet at a distance of 15 cm from the edge of the drop outlet. Fasten the brackets using a minimum of 3 M4x35 screws.



2. Install the gutter brackets located in the furthest position from the drop outlet. The slope of the gutter towards the drop outlet should be 0.3% (3 cm per 10 m).



3. Install intermediate gutter brackets. The distance between the brackets should not exceed 60 cm. For 75 mm and 100 mm gutters, a spacing of 50 cm is recommended.



4. Determine the positions of the fittings and corners. Use a hacksaw to cut the required gutter length allowing for the necessary gutter overlap in the fitting on either side of the gutter.



5. Install the gutters onto the brackets. Insert the front nose of the bracket into the front lip of the gutter, turn the gutter backwards and snap it into the rear nose of the bracket.



6. Apply a thin layer of slip paste – available from our offer, to gutter fitting gaskets (not to be used when installing stop ends).



7. Place the drop outlet on the gutters. Insert the rear edge of the drop outlet onto the rear gutter lip. Then, turn the drop outlet up until its front edge snaps onto the front gutter lip.



8. Connect the gutter sections using fittings. Adjust the length of the gutter overlap in the connector according to the marking. The distance from the bracket to the edge of the connector should not exceed 15 cm.



 Install corners on the gutter. Insert the rear gutter lip into the rear corner lip and snap the front gutter lip into the front corner lip. The distance from the bracket to the edge of the corner should not exceed 15 cm.



10a. Fit the right and left stop ends. Install a stop end by sliding its front section under the front gutter lip, turning it up until its rear edge snaps into the rear gutter lip. It is best to install the gutter stop ends on the gutter before fitting the gutter on the brackets.



10b. The universal stop end fits both left and right gutter end. Slide its front section under the front gutter lip and turn it down until its rear edge snaps into the rear gutter lip.



 Install a downpipe by connecting it to the drop outlet with a pipe connector. Fix pipe clips onto the pipe connector reducer and secure them to the wall using hangers and screws. The distance between the pipe clip hangers should be every 2 m.



GAMRAT SA / PVC & MAGNAT - INSTALLATION



12. Connect the downpipe sections with a pipe connector. Fix pipe clips onto the pipe connector reducer. Leave a clearance of approximately 6 mm between the downpipe and the pipe connector.



13. If it is necessary to fit a downpipe clip directly onto the downpipe, it must be fitted so that the pipe can slide in the pipe clip.



14. For overhanging eaves, make the connection between the drop outlet and the downpipe using two bends and a downpipe section. If the connection between the drop outlet and the bend is loose, connect them mechanically (with a screw or rivet). Double-socket bends can be used (install them with the arrow pointing downwards).



15. When installing a branch or access pipe, it should be fixed to the building walls using a clip with a hanger. Fit the clip on the fitting. Allow approx. 6 mm clearance in the connection.



16. Install the bend as the outlet of the downpipe. Install the clip on the fitting under the socket.

PACKAGING

Gutter and pipe fittings with gaskets are packed in cardboard boxes. Gutters and downpipes are packed in bundles and plastic bags. The packs are prepared for dispatch on bulk pallets.

NOTES

- If the gutter system is installed on eaves with under-gutter strips made of highly reflective sheet metal (e.g. galvanised, aluminium), it is necessary to paint the strips or use coated sheets.
- Snow barriers should be used on slippery, steep roofs and when it is not possible to install a gutter below the plane that is an extension of the roof.
- The use of components from other manufacturers may affect the performance of the system. Only genuine Gamrat SA products are covered by the warranty.
- Gutter systems should only be installed when the ambient temperature is above 5°C.
- Do not push gutter fittings onto the gutters this may damage the gaskets.
- Gutters should be regularly cleaned of debris. If there is a leak, remove the fitting and clean the connection. You can also replace the gasket in the fitting with a new one.

STORAGE AND TRANSPORT

The gutters and downpipes must be stored and transported on a flat surface in a horizontally. The first layer of gutters and downpipes should rest on level sleepers and be in contact with them over their entire length. The permissible storage height is 1 m. The sharp edges of the stands and means of transportation that come into contact with the gutters should be protected e.g. with boards. Fittings packed in cardboard boxes should be stored and transported under cover. During transport, the goods must be secured against displacement. It is recommended that loading and unloading should be carried out by hand and, if mechanical equipment is used, there should be no local crushing or throwing of the elements. Most fittings are packed in are packed in individual plastic bags. It is important that fittings packed in this way are not to exposed to prolonged sunlight.

APPROVALS AND CERTIFICATIONS

[PVC] Polish standard PN-EN 607:2005; PN-EN 12200-1:2016; PN-EN 1462:2006 [PVC] Declaration of Performance

[MAGNAT] National Technical Assessment ITB-KOT-2020/1476 [MAGNAT] TWT-ZPR 2/2007 [MAGNAT] Declaration of Conformity

Removed, to be discarded and damaged PVC gutters and soffits, PVC linear drainage systems, PP linear drainage systems, steel gutters and accessories must be recycled and disposed of at waste collection points (as construction waste).

SOFFITS - INSTALLATION

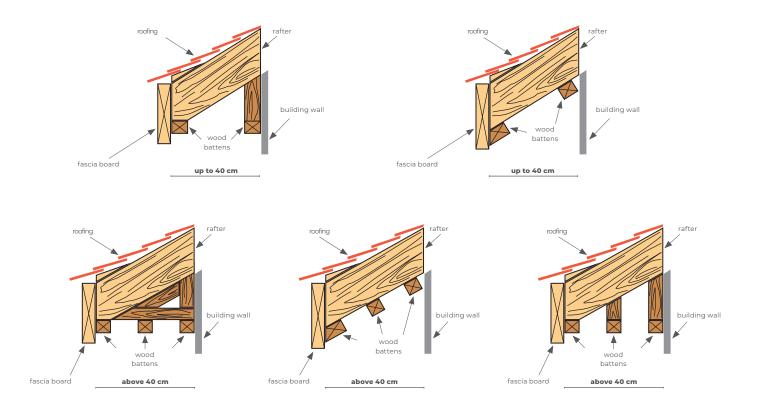
INSTALLATION OF ROOF SOFFIT

The soffit shall be fixed to the timber grid in such a way as to allow for thermal movement, which is caused by changes in ambient temperature. Do not install at temperatures below 0°C.

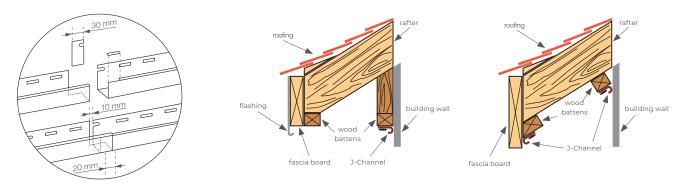
Do not use soffits for installation on building facades.

INSTALLATION SEQUENCE

1. The wood battens to which the soffit is to be fixed must be thoroughly dried, treated, and levelled. Use wood battens at least 25 mm x 50 mm. **Examples of supporting structures for different eaves overhangs:**



2. Fit the flashing profiles – J-channels – to the levelled and impregnated battens. Install these channels around the entire perimeter of the eaves to be fitted. The jointing of the J-channels is carried out as shown in **Figure A**. To finish the soffit on the eaves front, the properly prepared flashing of the fascia board can be used. J-channels should be nailed every 40 cm maximum. **Examples of J-channel fixing:**



Gamrat | 47

Figure A

GAMRAT SA / SOFFITS - INSTALLATION

3. Bend the cut boards in the middle and slide them into the J-channels. Nail to the battens. Join the boards by snapping the edge of the next board into the lock of the previous board. It is recommended that the boards are laid perpendicular to the eaves. It is also permissible to lay them horizontally or diagonally. Fasten the boards 30 cm apart. Do not tighten the boards. **Examples of soffit board fixing:**

roofing

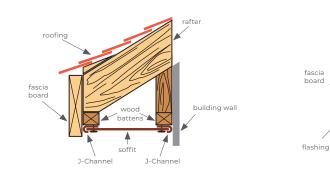
raftei

1-Channel

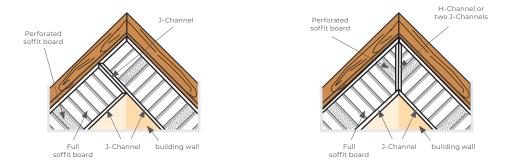
building wall

wood

coffit



4. Eaves corners can be made using two methods:



NOTES

• For installation, use aluminium or stainless steel nails with a minimum length of 20 mm and a minimum head width of 8 mm.

Flat-head washer screws can also be used for installation.

• Fixings must be made in the centre of the pre-drilled holes and must not be overnailed/overtightened (leave a 1 mm gap) in order to allow for thermal movement of the soffit due to changes in length.

- Use a perforated product every third soffit board to ensure proper ventilation of the roof and eaves.
- The width of the soffit covering is 20.3 cm.
- Check the quality of the boards before fixing. Minor colour variations between production batches are acceptable.

DETERMINING THE LENGTH OF THE ELEMENTS DEPENDING ON THE INSTALLATION TEMPERATURE

Soffit boards up to 1 m in length should be cut to a length 4 mm shorter than the spacing of the inner edges of the J-channels. For boards longer than 1 m, the length of the board should be adjusted according to the installation temperature and the length of the element. Changes in soffit board length ΔL , due to temperature changes, can be calculated using the following formula.

 $\Delta L = L \times \Delta t \times \alpha$

 α - linear expansion coefficient – for PVC α = 0.08 mm / m°C

L - length of the soffit board

 Δt - temperature difference between the extreme minimum temperature (t min. = - 30°C) or maximum temperature (t max. = + 40°C) and the installation temperature (inst. t.).

Example:

Soffit board is 2 m long, installation takes place at +20°C.

 Δ Ll = L × (t max. – inst. t.) × α

 Δ L1 = 2 m × (40°C – 20°C) × 0.08 = 3.2 mm – this is the maximum length by which the board will get longer. Δ L2 = L × (t min. – inst. t.) × α

 Δ L2 = 2m × (-30°C - 20°C) × 0.08 = - 8 mm – this is the maximum length by which the board will get shorter. The calculation shows that the soffit board must be cut to a length of 1.996 m. The panel shortening Δ L2 will be invisible (the depth of the J-channel is approximately 18 mm).

STORAGE AND TRANSPORT

To avoid deformation, all elements should be stored and transported flat under cover and supported along their entire length. The storage height should not exceed 1 m. The temperature in the rooms where the soffit elements are stored should not exceed 50°C. Products packed in foil and without protective packaging should not be stored in areas exposed to direct sunlight. During transport, the load should be secured. Do not allow items to be locally crushed or thrown.

PACKAGING

The soffit elements are packed in cardboard boxes. The packaging is adapted to the length of the boards and channels.

APPROVALS AND CERTIFICATIONS

- National Technical Assessment ITB-KOT-2017/0302 Issue 1
- Declaration of Performance



DRAINAGE - INSTALLATION

SELECTING THE LOAD CLASS OF THE CHANNEL

Select the most appropriate product for your specific application. Drainage capacity and load class are key parameters when selecting a product for linear drainage. The design of the channel must be carried out by a qualified professional.



CONCRETE SUBSTRATE PREPARATION

The installation of the channels requires a concrete substrate with the minimum dimensions S and H as shown in the drawing.

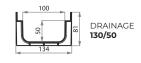
Minimum height (H)	100	100	200
	mm	mm	mm
Minimum thickness (S)	100	100	200
	mm	mm	mm
Load class (PN-EN 1433)	A15	B125	C250
Applied load (PN-EN 1433)	15 kN	125 kN	250 kN
	1500	12500	25000
	kg	kg	kg
Concrete class (PN-EN 206)	C20/25	C25	5/30
Concrete class *(PN-EN 206)		C30/37 XF4	4

*when concrete is exposed to cyclic freezing and thawing

POSITIONING THE SOCKET



VERTICAL OUTLET



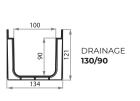
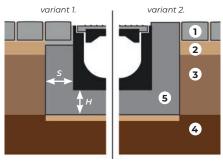


Diagram 1.



Install a cap with

outlet and con-

nect the drain

pipe.

1. Paving; 2. Levelling course; 3. Base course; 4. Sub-base; 5. Concrete







Make a hole at the marked point on the

channel to form an

outlet and install the

bottom-outlet using

the supplied screws

The use of silicone is recommended for joining the individual elements.

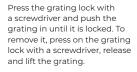


HORIZONTAL OUTLET

INSTALLATION AND REMOVAL OF GRATINGS



GALVANISED STEEL GRATING





POLYAMIDE GRATING

Tighten the screw with a spanner until the grating is installed in the channel.

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INSTALLATION



1. Dig the trench. The depth of the trench depends on the anticipated load class and the height of the channel – see **Diagram 1**. Pull a string along the trench to mark the height at which the channel is to be laid and to level the ground surface. The top of the trench should be 3 to 5 mm below the ground surface.



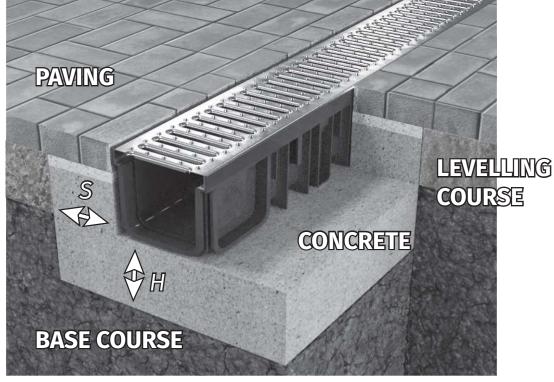
2. Pour and level the concrete in the trench, creating a slope towards the outlet. The recommended concrete grade is C25/30, or C30/37 XF4 if the concrete is subject to cyclical freezing and thawing, the recommended concrete class is. Lay the first channel and insert the outlet pipe into the sewer socket.



3. Join the remaining channels. Install the gratings before pouring the concrete to avoid deformation of the channel. Cover the gratings with plastic sheeting to prevent them from getting dirty with the concrete.



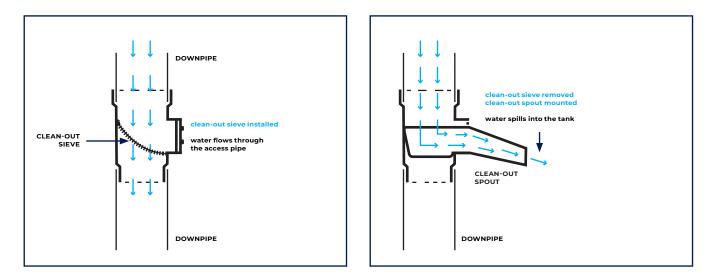
4. Pour a layer of concrete on both sides of the channels and level them. The height of the layer depends on the height of the paving. The top of the channel should be 3 to 5 mm below the ground surface.





WATER STORAGE - INSTALLATION

PRINCIPLE OPERATING OF THE DOWNSPOUT OUTLET



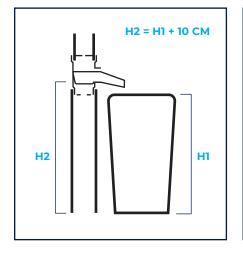
PRINCIPLE OF INSTALLING OF THE DOWNSPOUT OUTLET

The access pipe should be installed at such a height that allows water to flow into the standing tankonce the rainwater diverter is in place.

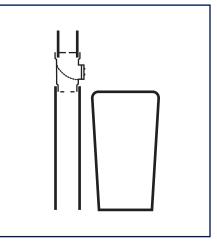
1. Remove the screen from the access pipe and insert the rainwater diverter in its place (you will need to press it slightly with your hand) until it snaps into place. The rainwater diverter is ready for use – all rainwater will be directed to the tank.

2. In late autumn, it is necessary to remove the rainwater diverter so as not to obstruct the flow of water during the winter and to avoid the formation of ice jams (this is done in a similar way to its installation – press the element slightly, lift it slightly upwards and slide it out of the access pipe).

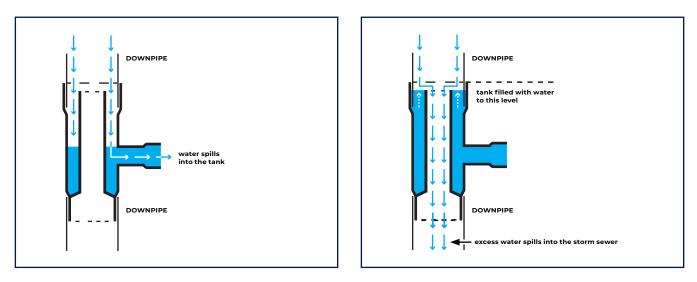
1. Rainwater diverter installed



2. Rainwater diverter removed



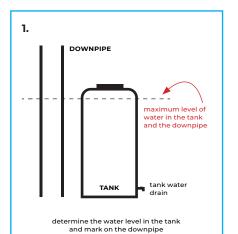
PRINCIPLE OPERATING OF THE RAINWATER DIVERTER

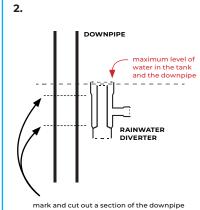


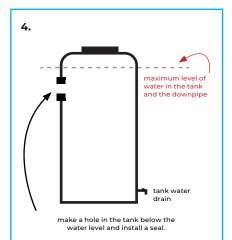
PRINCIPLE OF INSTALLING THE RAINWARE DIVETER ON THE EXISTING DOWNPIPE

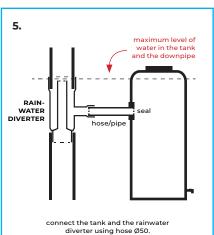
Place the tank on a flat and level ground. Determine the maximum height of the water level in the tank to prevent overflow.

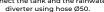
- 1. Put and mark the height of the water level in the tank on the downpipe.
- 2. Mark and cut out a piece of the downpipe as show in drawing No. 2 and grind the cut edges.
- 3. Install the rainwater diverter into the downpipe.
- 4. Make a hole in the tank below the expected water level and fit the gasket.
- 5. Connect the rainwater diverter horizontally and tightly to the tank using a Ø50 hose and install a protective basket in the drop outlet to prevent leaves from entering.
- 6. In winter remove the Ø50 hose from the rainwater diverter and plug the outlet with a cap.

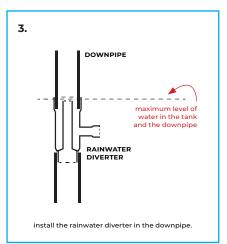
















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