



GUTTER SYSTEMS GAMRAT MADE OF PVC

GUTTERS TESTED ON MILLIONS OF ROOFS



Proven plastic...

PVC is a plastic successfully used by the construction industry for decades. The PVC products ensure anti-corrosive properties and exceptional resistance to aggressive weather conditions.



Reliability in extreme temperatures...

The PVC systems maintain high performance parameters both at high and low temperatures.



Do not require painting...

Available in most popular durable colours, the systems do not require painting and offer a high aesthetic value and satisfaction to the users.



High load carrying capacity...

The I-section holders made of high-class PVC provide the system with exceptional resistance to loads, e.g. snow caps and icicles.



Quick assembly...

The system components have been designed to ensure that its assembly is quick and easy – cost-effective for the investor, efficient for the installer.



Deep and capacious gutter...

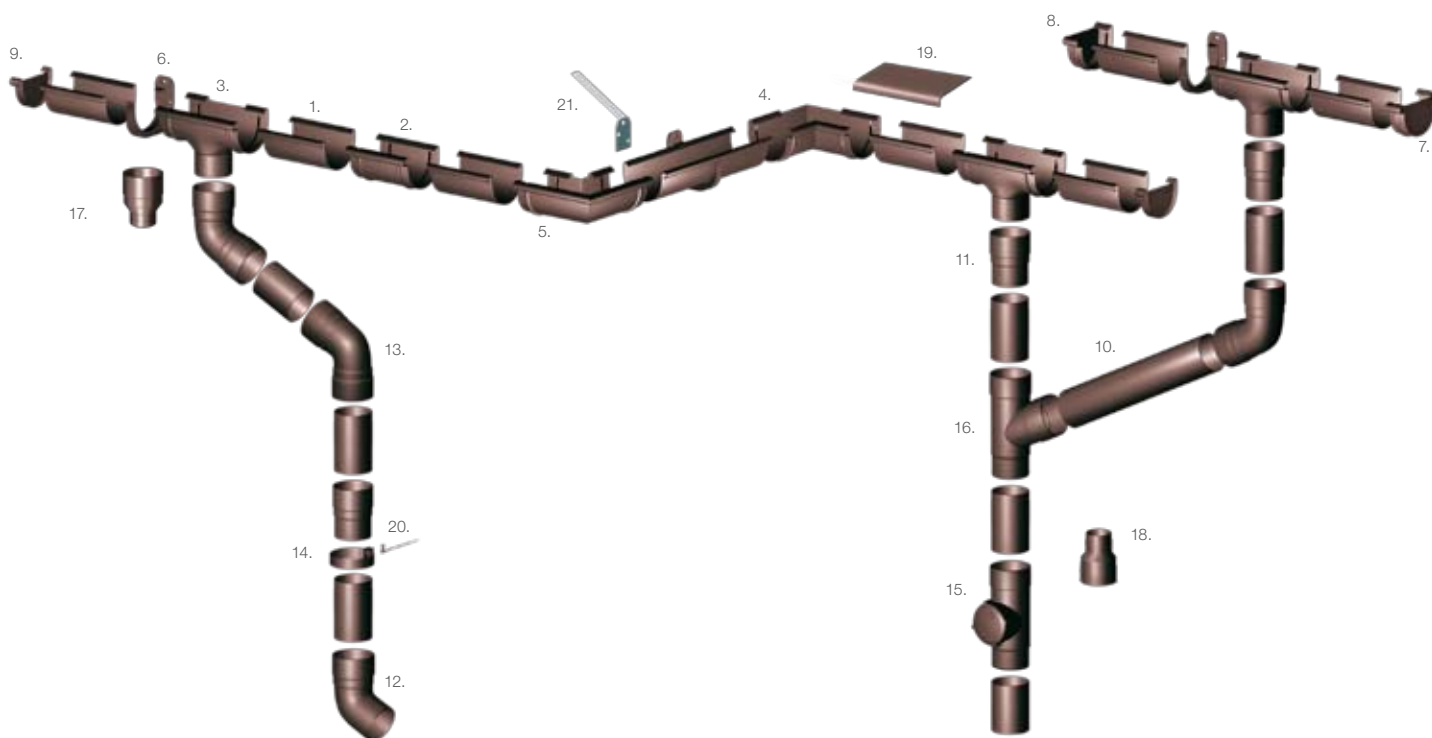
A rare design of a deep gutter guarantees high capacity and throughput of the system. Its traditional shape ensures required rigidity.

Colours palette



Gamrat Magnat jointing and product range

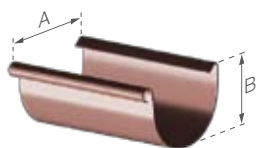
Individual gutter sections and fittings are fixed to each other through snap joints with rubber gaskets. In case of downspouts and pipe connectors spigot-and-socket joints are applied. These types of joints are simple and ensure system tightness. A snap-on joint with a gasket is the most effective solution to compensate thermal expansion of plastic components.



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1. Roof gutter (length 3; 4 m)



	A	B
75 mm	75	55
100 mm	100	74
125 mm	125	89
150 mm	150	108

Product number:

	dark brown	white	graphite	quantity on a pallet
75 mm (dl. 2 m)	315110210	312110210	314110210	165 pcs / 330 mb
75 mm (dl. 3 m)	315110310	312110310	314110310	165 pcs / 495 mb
75 mm (dl. 4 m)	315110410	312110410	314110410	165 pcs / 660 mb
100 mm (dl. 3 m)	315710310	312710310	314710310	120 pcs / 360 mb
100 mm (dl. 4 m)	315710410	312710410	314710410	120 pcs / 480 mb
125 mm (dl. 3 m)	315210310	312210310	314210310	105 pcs / 315 mb
125 mm (dl. 4 m)	315210410	312210410	314210410	105 pcs / 420 mb
150 mm (dl. 3 m)	315310310	312310310	314310310	60 pcs / 180 mb
150 mm (dl. 4 m)	315310410	312310410	314310410	60 pcs / 240 mb

3. Drop outlet

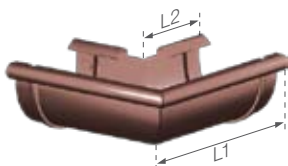


	L	Dz
75/63 mm	160	63
100/90 mm	264	90
125/90 mm	300	90
125/110 mm	300	110
150/110 mm	300	110

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
75/63 mm	315122000	312122000	314122000	9 / 576 pcs
100/90 mm	315722100	312722100	314722100	6 / 192 pcs
125/90 mm	315222100	312222100	314222100	12 / 144 pcs
125/110 mm	315222000	312222000	314222000	12 / 144 pcs
150/110 mm	315322000	312322000	314322000	6 / 72 pcs

5. Outer corner

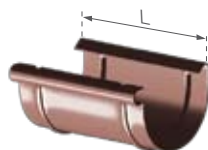


	L1	L2
75 mm	151	59
100 mm	199	75
125 mm	247	96
150 mm	271	92

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
75 mm	315124180	312124180	314124180	6 / 384 pcs
100 mm	315724180	312724180	314724180	6 / 192 pcs
125 mm	315224180	312224180	314224180	10 / 160 pcs
150 mm	315324180	312324180	314324180	8 / 128 pcs

2. Roof gutter connector

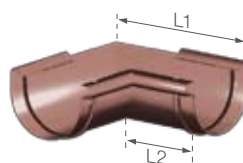


	L
75 mm	120
100 mm	190
125 mm	240
150 mm	240

Product number:

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

4. Inner corner

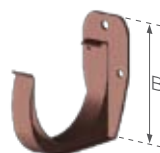


	L1	L2
75 mm	151	59
100 mm	199	75
125 mm	247	96
150 mm	271	92

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
75 mm	315123180	312123180	314123180	6 / 384 pcs
100 mm	315723180	312723180	314723180	6 / 192 pcs
125 mm	315223180	312223180	314223180	10 / 160 pcs
150 mm	315323180	312323180	314323180	8 / 128 pcs

6. Hanger

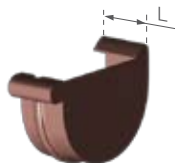


	B
75 mm	83
100 mm	112
125 mm	137
150 mm	158

Product number:

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

7. End cup right

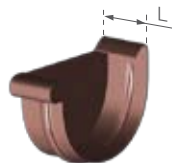


	L
75 mm	30
100 mm	36
125 mm	50
150 mm	50

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
75 mm	315126100	312126100	314126100	20 pcs / 3200 pcs
100 mm	315726100	312726100	314726100	10 pcs / 1600 pcs
125 mm	315226100	312226100	314226100	12 / 768 pcs
150 mm	315326100	312326100	314326100	10 / 640 pcs

8. End cup left

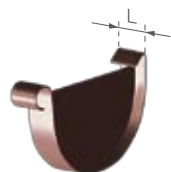


	L
75 mm	30
100 mm	36
125 mm	50
150 mm	50

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
75 mm	315126200	312126200	314126200	20 pcs / 3200 pcs
100 mm	315726200	312726200	314726200	10 pcs / 1600 pcs
125 mm	315226200	312226200	314226200	12 / 768 pcs
150 mm	315326200	312326200	314326200	10 / 640 pcs

9. End cup universal



	L
125 mm	16

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
125 mm	315226300	312226300	314226300	24 pcs / 3840 pcs

10. Downspout (length 3; 4 m)

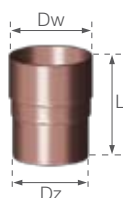


	Dz
63 mm	63
90 mm	90
110 mm	110

Product number:

	dark brown	white	graphite	number on a pallet
63 mm (dl. 2 m)	315410210	312410210	314410210	150 pcs / 300 mb
63 mm (dl. 3 m)	315410310	312410310	314410310	150 pcs / 450 mb
63 mm (dl. 4 m)	315410410	312410410	314410410	150 pcs / 600 mb
90 mm (dl. 3 m)	315610310	312610310	314610310	60 pcs / 180 mb
90 mm (dl. 4 m)	315610410	312610410	314610410	60 pcs / 240 mb
110 mm (dl. 2 m)	315510210	312510210	314510210	45 pcs / 90 mb
110 mm (dl. 3 m)	315510310	312510310	314510310	45 pcs / 135 mb
110 mm (dl. 4 m)	315510410	312510410	314510410	45 pcs / 180 mb

11. Downspout connector

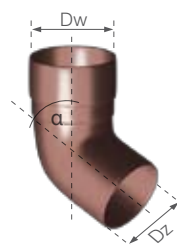


	Dw	Dz	L
63 mm	63,3	57,8	104
90 mm	90,5	84,8	135
110 mm	110,4	104,8	155

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
63 mm	315421000	312421000	314421000	15 pcs / 2400 pcs
90 mm	315621000	312621000	314621000	32 / 1024 pcs
110 mm	315521000	312521000	314521000	32 / 512 pcs

12. Elbow 67,5°



	Dw	Dz	α
63 mm	63,3	59,4	67,5
90 mm	90,4	85,8	67,5
110 mm	110,4	105,3	67,5

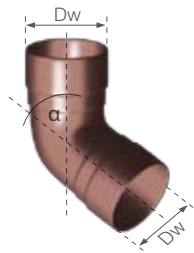
Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
63 mm	315422100	312422100	314422100	12 / 768 pcs
90 mm	315622100	312622100	314622100	18 / 288 pcs
110 mm	315522100	312522100	314522100	18 / 216 pcs

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GUTTERS TESTED ON MILLIONS OF ROOFS

13. Double socket elbow 67,5°

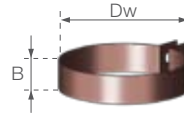


	Dw	α
63 mm	63,3	67,5
90 mm	90,4	67,5
110 mm	110,4	67,5

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
63 mm	315422110	312422110	314422110	8 / 512 pcs
90 mm	315622110	312622110	314622110	18 / 288 pcs
110 mm	315522110	312522110	314522110	12 / 144 pcs

14. Downspout fixing band

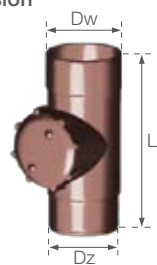


	B	Dw
63 mm	25	63
90 mm	25	90
110 mm	25	110

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
63 mm	315423000	312423000	314423000	30 pcs / 4800 pcs
90 mm	315623000	312623000	314623000	60 / 3840 pcs
110 mm	315523000	312523000	314523000	60 / 3840 pcs

15. Revision

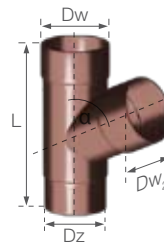


	Dw	Dz	L
110 mm	110,4	104,8	295

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
110 mm	315525100	312525100	314525100	9 / 144 pcs

16. Pipe tee (angle 67,5°)

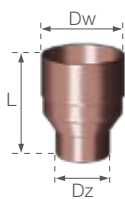


	L	Dw	Dz	Dw ₂
90/90 mm	264	90,4	85,8	90,4
110/63 mm	260	110,4	104,8	63,3
110/110 mm	310	110,4	104,8	110,4

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
90/90/90 mm	315624300	312624300	314624300	12 / 192 pcs
110/110/63 mm	315524200	312524200	314524200	10 / 160 pcs
110/110/110 mm	315524100	312524100	314524100	5 / 80 pcs

17. Reduction

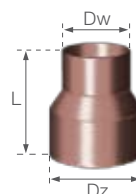


	Dw	Dz	L
110/63 mm	110,4	57,8	165

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
110/63 mm	315526000	312526000	314526000	12 / 384 pcs

18. Reverse reduction

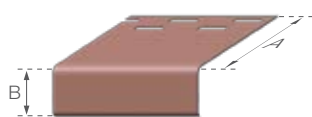


	Dw	Dz	L
63/90 mm	63,4	90,0	120

Product number:

	dark brown	white	graphite	quantity in a package / number on a pallet
63/90 mm	315626100	312626100	314626100	12 / 768 pcs

19. PVC eaves strip

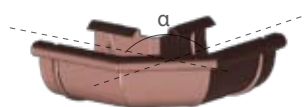


A | B
160 | 55

Product number:

	dark brown	white	graphite	quantity in a package
length 2 m	315800200	312800200	314800200	5 pcs / 10 mb
length 3 m	315800300	312800300	314800300	5 pcs / 15 mb
length 4 m	315800400	312800400	314800400	5 pcs / 20 mb

Inner and outer corners, various angles from 90°



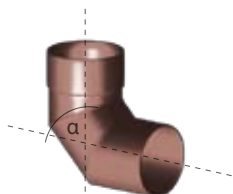
75 mm
100 mm
125 mm
150 mm

Product number:

	dark brown	white	graphite	quantity in a package
75 mm	31512xyz0*	31212xyz0*	31412xyz0*	1 pcs
100 mm	31572xyz0*	31272xyz0*	31472xyz0*	1 pcs
125 mm	31522xyz0*	31222xyz0*	31422xyz0*	1 pcs
150 mm	31532xyz0*	31232xyz0*	31432xyz0*	1 pcs

Asortyment wykonywany ręcznie na zamówienie

Non-typical elbows, various angles from 67,5°



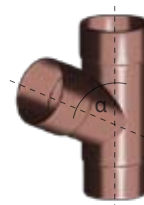
63 mm
90 mm
110 mm

Product number:

	dark brown	white	graphite	quantity in a package
63 mm	315422200	312422200	314422200	1 pcs
90 mm	315622200	312622200	314622200	1 pcs
110 mm	315522200	312522200	314522200	1 pcs

Asortyment wykonywany ręcznie na zamówienie

Non-typical pipe tee, angle 67,5°



63/63/63 mm

Product number:

	dark brown	white	graphite	quantity in a package
63/63/63 mm	315424510	312424510	313424510	1 pcs

20. Steel hooks for fixing band (with a short dowel)



L-120
L-140
L-160
L-180
L-200
L-220
L-250

Product number:

		quantity 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

20. Steel hooks for fixing band (with a short dowel)



L-120
L-140
L-160
L-180
L-200
L-220
L-250

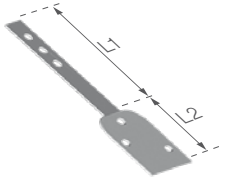
Product number:

		quantity in a package
L-120	310991110	100 pcs
L-140	310991210	100 pcs
L-160	310991310	100 pcs
L-180	310991410	100 pcs
L-200	310991510	100 pcs
L-220	310991610	100 pcs
L-250	310991710	100 pcs

SYSTEMY RYNNOWE GAMRAT Z PVC

GUTTERS TESTED ON MILLIONS OF ROOFS

21. Mounting strip



	L1	L2
75 / 2,5 mm	250	50
100; 125; 150 / 4 mm	256	59
125; 150 / 3 mm	310	90

cena za szt

Product number:

		quantity in a package
75 / 2,5 mm	310992100	40 pcs
100; 125; 150 / 4 mm	310992310	30 pcs
125; 150 / 3 mm	310992200	30 pcs

Aluminium support for fixing band



L	B
43,5	20

cena za szt

Product number:

	quantity in a package
310999010	50 pcs

Adapter (black rubber)



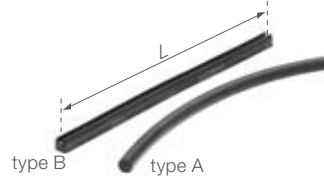
90 / 110 mm	Dw	Dz	L
	91	111	50

price per unit

Product number:

	quantity in a package
90 / 110 mm 310933100	1 pcs

Spare gasket for gutter fittings (type A i type B) **



	L
75 mm	125
100 mm	175
125 mm	216
150 mm	255

cena za szt

Product number:

	typ A (do rowka półokrągłego)	typ B (do rowka prostokątnego)	quantity in a package
75 mm	310932140	310932150	48 pcs
100 mm	nd.	310932450	48 pcs
125 mm	310932240	310932250	48 pcs
150 mm	310932340	nd.	48 pcs

Lubricant „Silpasta R” **



Product number:

	quantity in a package
310931000	1 pcs

* The letters x y z determine the type and the angle of the corner bending. The type: x = 3 – the inner corner; x = 4 – the outer corner

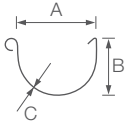
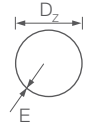
Obtuse angles in degrees	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
y	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
z	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

The corners made to orders each 5 degrees

** assortment marked like this isn't a subject to 10 years guarantee

The roof gutters and pipes are packed in packages on none-returnable pallets.
The packages with fittings are packed on returnable EURO-pallets.

DIMENSIONS AND APPLICATION OF GAMRAT PVC AND GAMRAT MAGNAT GUTTER SYSTEMS

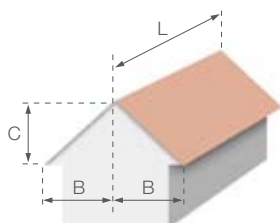
Gutter	Pipe	A	B	C	D _z	E	System	effective cross-section areas	application	
									Gamrat made of PVC	Gamrat Magnat
		75	55	1,2	63	1,6	75/63	33 cm ²	sheds, summer houses, garages	
		100	74	1,4	90	1,8	100/90	58 cm ²	family houses	
		125	89	1,5	63	1,6	125/63	91 cm ²	family houses, blocks of flats, small and medium-sized warehouses, public utility buildings, commercial and industrial facilities	
		125	89	1,5	90	1,8	125/90			
		125	89	1,5	110	2,0	125/110			
		150	108	2,0	110	2,0	150/110	131 cm ²	large residential, commercial and industrial buildings	n.a.

CAPACITY OF GAMRAT PVC AND GAMRAT MAGNAT GUTTER SYSTEMS

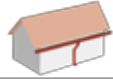
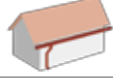

When deciding on your roof gutter system make sure that the gutters and downspouts are capable enough to collect rainwater falling from the roof of the building. To do this calculate an effective roof area to be drained by the system.

Use the following formula:

$$S = (B + 0,5 C) \times L$$



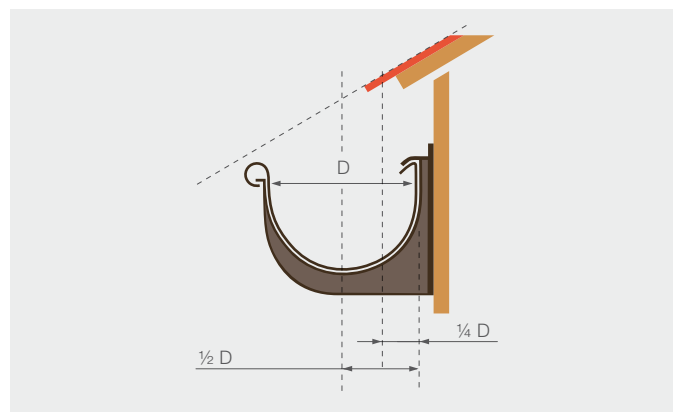
Maximum area drained by the GAMRAT systems in m² of effective roof area (per downspout):

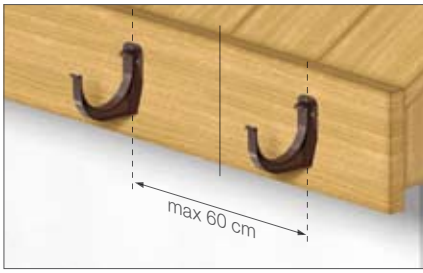
Gutter systems	System 75 mm	System 100 mm	System 125 mm			System 150 mm
	Gutter 75 mm, down-spout 63 mm	Gutter 100 mm, down-spout 90 mm	Gutter 125 mm, down-spout 110 mm	Gutter 125 mm, down-spout 90 mm	Gutter 125 mm, down-spout 63 mm	Gutter 150 mm, down-spout 110 mm
Downspout location						
	95	148	240	205	165	370
	48	74	120	100	82	180
	42	50	95	80	65	145

INSTALLATION OF GAMRAT PVC AND GAMRAT MAGNAT GUTTER SYSTEMS

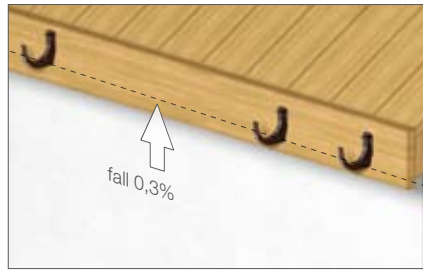
Proper installation is a prerequisite for faultless operation of a plastic roof gutter system. The installation principles for the Gamrat gutter systems differ from those applicable to the traditional systems, which is mainly due to thermal expansion of plastic components. To allow for this effect it is required to use fittings that can compensate variations of the gutter and downspout length. For this purpose gaskets are applied to the joints between the gutter sections and the fittings. Additionally, plastic gutter hangers are used not only to support the gutter but also to ensure proper alignment of an expanding gutter. In case of downspouts special clearance must be provided in the joints between the downspout sections and the fittings to compensate thermal expansion.

The gutters shall be installed in such a way that they are not exposed to the impact of snow sliding off the roof. The recommended positioning of the gutter is presented on the drawing.

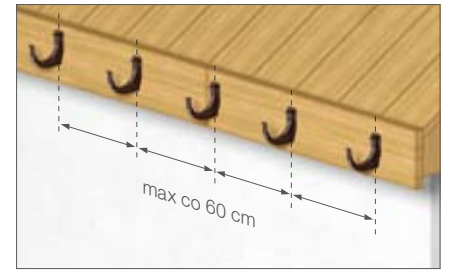




1. Mark the position of the drop outlet on the fascia board. Install gutter hangers at 15-cm from outlet edges on both sides of the outlet. Use at least 3 screws (4x35mm).



2. Fix the gutter hangers furthest from the drop outlet ensuring that the 0.3%-fall (3cm per 10m) is provided.



3a. Fix the remaining gutter hangers to the fascia board. The distance between neighbouring hangers shall not exceed 60 cm. For 75 and 100m gutters the recommended spacing is 50 cm.



3b. It is possible to fix the brackets to the rafter or the eaves directly. To do this use steel rafter arms adapted to the roof pitch. The distance between neighbouring brackets shall not exceed 60 cm. Gutter fall is 0.3%..



4. Plan the arrangement of connectors and corners. Use a hack-saw to cut the gutter, taking into consideration overlaps on gutter section both sides.



5. Install the gutters in the hangers. To do this insert the front edge fold of the gutter onto the front ribs of the hangers. Push the gutter towards the fascia board until its rear edge fold snaps on the rear hanger clip.



6. Apply a thin layer of lubricant (Silpasta R – available in the offer) to the gaskets in the fittings (do not apply this lubricant when installing the caps).



7. Install the drop outlet. Insert the rear edge of the outlet onto the rear gutter fold. Then, turn the outlet until its front edge snaps onto the front gutter edge fold. The outlet shall overlap the gutter fitting as per the designation on the fitting.



8. Use connectors to join the gutter sections (overlap as per the designation on the connector). The distance between the nearest hanger and the edge of the connector shall not exceed 15 cm.



9. Install the corners. Insert the rear edge of the gutter into the rear fold of the corner. Then, turn the angle until its front edge snaps into the front edge fold of the fitting. The distance between the nearest hanger and the edge of the corner shall not exceed 15 cm.



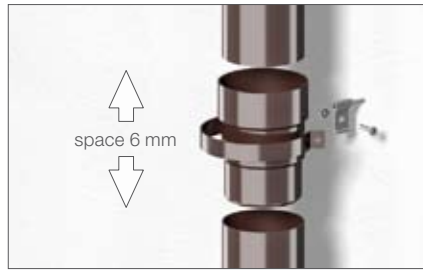
10a. Install left and right end caps. Insert the front edge fold of the end cap into the front gutter edge fold. Then, turn the cap upwards until its rear edge snaps onto the rear gutter edge fold. The caps should preferably be mounted on the gutter prior to the gutter is fixed to the hangers.



10b. A universal end cap can be used both for the left hand and right hand end of the gutter. Insert the front edge fold of the end cap onto the front gutter edge fold. Then, turn the cap down until its rear edge snaps into the rear gutter edge fold.



11. Install the downspout. Use a pipe connector to connect the downspout with the drop outlet. Downspout fixing band shall be mounted to the neck of the connector and fixed to the wall with a hook. The distance between downspout fixing bands shall be 2m.



12. Use pipe connectors to join downspout sections. Downspout fixing bands shall be mounted to the neck of the connector. Allow for an about 6mm-space for the joints between the downspout sections and connectors.



13. If it is necessary to mount the additional downspout fixing band directly on the downspout, allow for a movement of the downspout in the fixing band.



14. In case of projecting eaves a connection of the downspout and the drop outlet shall be done with the use of two elbows and a downspout section. If the connection of the drop outlet and an elbow is loose it should be fixed mechanically (with a screw or a rivet). Double-socket elbows may be used (and should be mounted with the arrow down).



15. A pipe tee or a revision should be fixed to the wall with a fixing band and a hook. The fixing band shall be mounted at the connector. Allow for a 6-mm space.



16. Install an elbow as a downspout shoe. The fixing band shall be mounted at the connector below the joint.



17. Eaves strips shall be hammered to the fascia board. Place the nails in the perforation provided. Allow for a 1mm-clearance between the strip and the nailhead. Strip shall be joint with a 8cm-overlap.

NOTES

1. If the rainwater system is installed on a building with under-gutter steel sheets that reflect the sun-rays (e.g. galvanized, aluminium), the sheet shall be painted or only coated sheets shall be used.
2. In case of steep roof pitches and smooth roof surface finishes or when it is not possible to mount the gutter below the line of the roof pitch, the snow barriers shall be used.
3. Using components provided by other manufacturers may affect the properties of the systems. The guarantee covers only genuine GAMRAT SA products.
4. Installation of gutter systems shall be performed at air temperatures of over 5°C.

PACKAGING

Gutter fittings with gaskets are packaged in cardboard boxes. Gutters and downspouts are bundled and wrapped up with packaging film. Packages are shipped on pallets.

STORAGE AND TRANSPORTATION

Gutters and downspouts shall be stored and transported on a flat surface in a horizontal position. The bottom layer of gutters and downspouts shall be placed on a level supporting base and shall be in full contact with the base. Acceptable height of the storage pile is 1m. Any sharp edges of stands or vehicles, which remain in contact with gutters shall be protected, e.g. with wooden boards. Fittings packaged in cardboard boxes, shall be stored and transported under roof. During the transportation the load must be restrained to ensure no load movement. It is recommended to load/unload the boxes by hand. In case of using loading/unloading equipment one should avoid crushing the products and throwing them.

Most fittings are packaged in individual plastic bags. **Avoid leaving it exposed to sunlight for a long time.**

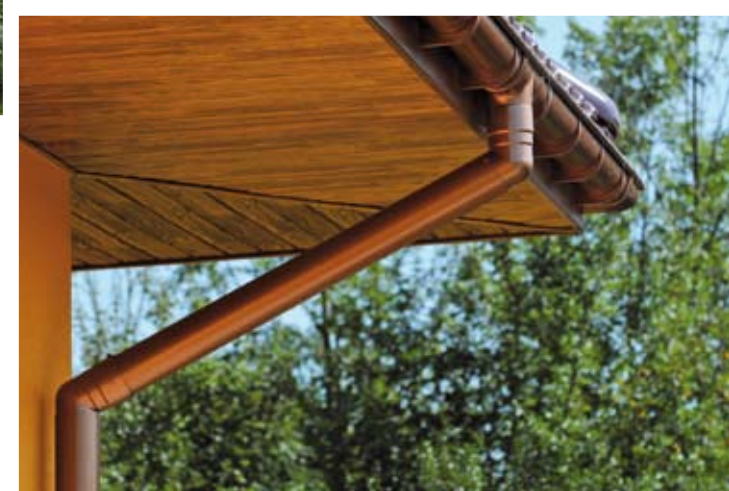
ATESTATION AND STANDARDS

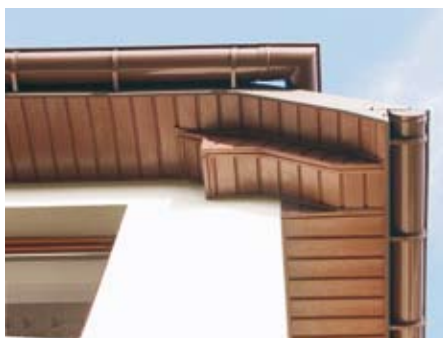
GUTTER SYSTEMS MADE OF PVC:

- PZH nr HK/B/1457/01/2009 attestation
- Certificate of Polish Standard Nr ITB-498/W
- Polish Standard PN-EN 607:2005; PN-EN 12200-1:2002; PN-EN 1462:2006
- Declaration of Conformity

GUTTER SYSTEM GAMRAT MAGNAT:

- PZH nr HK/B/1457/01/2009 attestation
- Technical Recommendation ITB nr RT ITB-1202/2010
- TWT-ZPR 2/2007
- Declaration of Conformity





GUTTER SYSTEMS GAMRAT MAGNAT

GUTTER SYSTEMS GAMRAT MADE OF PVC

SOFFITS GAMRAT

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