

PRODUCT CATALOGUE

Professional solutions for plumbers and roofers





TABLE OF CONTENT

GRÖMO		Rain barrel	73
Vision since 1888	4	Water distributors	73
Born in Allgäu. Grown in the Allgäu		Leaf catchers	73
bolli ili Aligaa. Glowii ili tile Aligaa	0	Leaf traps	74
		Odour traps	74
Product range		Flat-roof branches	74
Product overview	8	Pipe branches	76
Design	16	Adapter cones	78
Manufactory		Reducers	78
ivialidiactory	10	Sliding sleeves	78
		Connection sleeves	79
Excellence		Standpipe caps	80
GRÖMO - quality that convinces	20	Pipe brackets	83
All-round care with the GRÖMO service	22	Pipe bracket mountings	85
High quality materials		Beads / Halfbeads	87
riigii quanty materiais	27	Downpipe stopgaps	87
		LED downpipe lighting	92
Products			
Gutter corners and gutter accessories		Standpipes	
Gutter corners	29	Rainwater standpipes	97
Gutter end caps	33	Sealing elements	103
Gutter quarter spheres	35	Rainwater standpipe brackets	
Expanders	37	Rainwater standpipe accessories	104
Gutter connectors	39		
Fascia boards	39	Roof and chimney accessories	
Leaf sieves	41	Antenna sockets	108
Leaf grilles	41	Fans	
Other gutter accessories	41	Outlet vents	
		Roof ridge air vents	
Gutter outlets and hoppers		Stud caps	
Plug-in gutter outlets	45	Pigeon guards	
Diagonal gutter outlets	46	Chimney hoods	
Oberstdorfer gutter outlets	47	Chimney flashings	
Soldering gutter outlets	47	Overhang plug-in frames	
Outlets	49	3 7 3 7 3	
Adjustable outlets	49	Further information	
Gutter extensions	49		110
Hoppers	50	Technical specs	
Hopper accessories	59	Material properties	121
		General terms and conditions	126
Elbows		Index	128
Pipe elbows	63	Technical specs	130
Swan necks	65	1001111001 0p000	
Articulated elbows	65		
Pipe accessories			
Rainwater pipe flaps	68		



VISION SINCE 1888



* Welcome to the specialists for roof drainage

Vision and over 135 years of experience in metal processing have had a lasting impact on GRÖMO: Tradition and progress are combined in each of our products, making GRÖMO the premium supplier in the field of roof drainage today.

With our products, we make work on roofs faster, more profitable and more successful. Because our roof drainage components with the original GRÖMO star are characterised by sophisticated product details: quicker to install and more attractive to look at - that's our claim. It also goes without saying that we use high-quality metals that guarantee a long service life and high quality.

Innovative products, speed and partnership-based cooperation: This is exactly what the GRÖMO tinsmith star has stood for over 135 years.

GRÖMO – one step ahead of the rain





A PERFECT MATCH: GRÖMO AND THE ALLGÄU

The Allgäu is not only known for its breathtaking landscapes, fantastic mountain scenery and unspoilt nature — it can also rain heavily here! And where people have always lived with extreme weather phenomena, they know best how to deal with them. So it's no wonder that the gutter outlet was invented here and the Allgäu became the highlands of roof drainage.

The undisputed hotspot here: Marktoberdorf. Plumber Karl Theodor Rösle started a business here in 1888. In 1907, his sons took over and developed the "gutter outlet", setting a milestone in the success story of GRÖMO – today the specialist for roof drainage in Germany and Europe.



Incidentally, many things about GRÖMO are typical of the Allgäu characteristics: the meticulous insistence on quality and durability, the inventive spirit and the courage to try new things without overreaching. GRÖMO has entered into a brand partnership with the Allgäu region under this umbrella of values. The strong tourism and business brand and GRÖMO as a brand that perfectly equips roofers tradesmen for all weathers are two players that are a sustainable match. And because we are and will remain true Marktoberdorf residents, we will continue to invest heavily in the location — another sign of our commitment to the region.

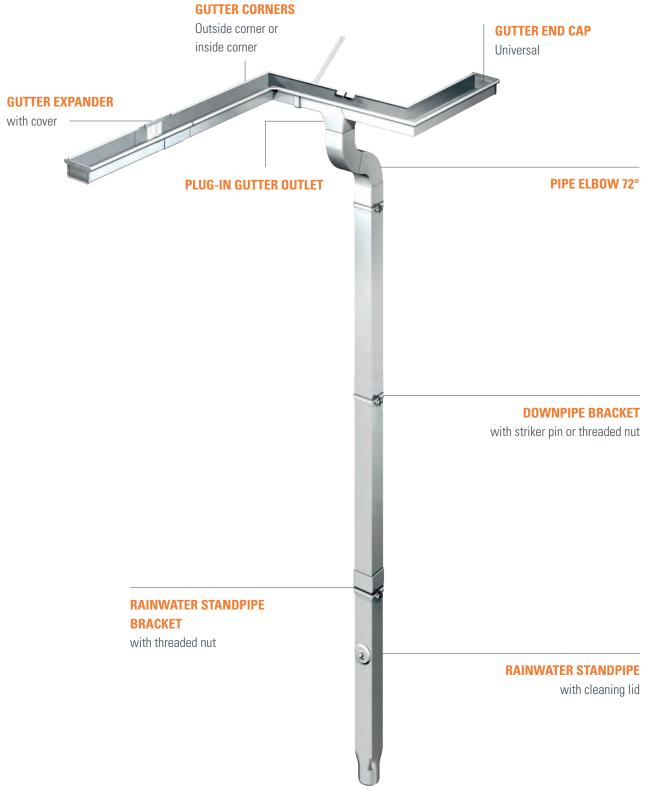




THE GRÖMO ROOF DRAINAGE COMPONENTS IN HALF-ROUND/ROUND



THE GRÖMO ROOF DRAINAGE COMPONENTS IN BOX SHAPE





GUTTER CORNERS/ACCESSORIES

GRÖMO gutter corners are available for gutters cut to size from 200 to 400 mm. Available in deep-drawn or soldered versions.

GRÖMO gutter accessories offer everything you need for standard-compliant gutter installation. Thanks to cuts from 200 to 500 mm in accordance with DIN EN 612, the accessories are suitable for many areas of application.





Gutter end cap



Expander



Leaf sieve

- Gutter corner
- Quadrant
- Fascia board
- Leaf guard
- Gutter connector
- Storm clip

GUTTER OUTLETS/HOPPERS

GRÖMO outlets are available to fit gutters cut to size from 200 to 500 mm and with a drainpipe diameter of 50 to 150 mm. They can be combined with all drainpipes, allowing the greatest possible freedom of design.

GRÖMO also offers a large selection of hoppers: for pitched or flat roofs, for gutter or wall mounting, in classic form or as a design variant. We also manufacture hoppers by hand according to your requirements.





Plug-in gutter outlet



Hopper



Soldering outlet

- Box outlet
- Diagonal outlet
- Adjustable outlet
- Oberstdorfer outlet
- Outlet spout
- Gutter extension

ELBOWS

The GRÖMO elbow range has a suitable variant for every roof overhang. GRÖMO elbows are available in degrees of 40°, 60°, 72°, 85° and 87° and with overhangs of 300 to 1850 mm.





Beaded elbow



Square pipe elbow



Swan neck

- Pipe elbow
- Articulated elbow
- Corner elbow

PIPE ACCESSORIES

GRÖMO pipe accessories support plumbers and roofers in the installation of downpipes and their transitions in many areas of application. Available in diameters from 50 to 150 mm and in accordance with DIN EN 612. The range also offers convenient solutions for water collection and leaf protection.







Water collectors



Flat-roof branch





Pipe bracket

- Rainwater pipe flap
- Water distributors
- Leaf catcher/trap
- Odour trap
- Sliding sleeve
- Pipe branch
- Downpipe cap
- Adapter cone

- Reducer
- Connection sleeve
- Bead/half bead
- Downpipe stopgap
- Pipe bracket fastening
- LED downpipe lighting

RAINWATER STANDPIPES

The rain standpipe range from GRÖMO offers everything you need to connect downpipes and sewer pipes. Made of galvanised steel with an internal coating or copper, the standpipes are corrosion-resistant, durable, stable, functional and suitable for a wide range of applications. GRÖMO offers additional connecting elements, fastenings and seals for special pipe connections.





Rainwater standpipe accessories



Sealing element



Standpipe bracket

ROOF/CHIMNEY ACCESSORIES

GRÖMO roof accessories offer everything you need for a secure and reliable connection to the roof. The chimney protection delivery programme also offers convenient solutions that support the chimney.





Aerial socket



Ventilator ridge unit



Chimney hood

- Outlet vent
- Fan
- Stud caps
- Pigeon guard
- Chimney flashing
- Overhang plug-in frame



CLASSIC

Wide selection for your roof

GRÖMO offers you around 3,500 items from the areas of roof drainage, roof and chimney accessories in five different metals and ten finishes — everything you need for customised roof drainage.

First-class products for a first-class result

All products are manufactured in accordance with the Euro 612 standard and guarantee the highest quality and accuracy of fit. There are neither material deviations nor discrepancies in the product geometry.

All GRÖMO roof drainage components fit together perfectly. This enables quick, easy and safe installation. In addition, sophisticated product details and highly functional millimetre work – a minimal change in geometry, an additional groove, an extra spring or a prepared opening – optimise installation. This saves manpower, equipment and manual labour, in short: effort and time.





DESIGN

Innovative aesthetics

Whether discreetly integrated or as an accentuating design feature, GRÖMO roof drainage components make an enriching contribution to the beautiful appearance of any building. With the design products, roof drainage becomes an eye-catcher and a unique style element on the roof and façade.

Perfectly shaped and functional

The design products are the perfect solution for discerning customers who value the highest quality, maximum functionality and modern design. They score highly with architects thanks to their design, which reflects the design language of modern architecture, and with craftspeople thanks to their simple, quick installation.



All products labelled with this label fulfil the criteria of a GRÖMO design product.



MANUFACTURE

Customised customer solutions

Roof drainage is often not sufficient with standard products. Tinsmiths and roofers have to master unusual requirements and wishes. No problem with GRÖMO – your roof drainage specialist.

Craftsmanship at its finest

GRÖMO manufactures numerous individual, customised accessories that are not available in series in the version you require. This saves you time and money by eliminating the need for time-consuming customisation work and still allows you to fulfil your customers' wishes. Precision and care in manufacturing, combined with high functionality and accuracy of fit, also characterise GRÖMO's handcrafted products.



All products labelled with this label fulfil the criteria of a GRÖMO manufactured product





DETAILS FOR EASY INSTALLATION

Ingenious product details, high accuracy of fit, and highly functional precision work ensure fast, easy, and secure installation of our components. What you get: You need less manpower, less equipment, fewer handholds. In short: You save time and effort.

STANDARD-COMPLIANT COMPONENTS

GRÖMO roof drainage components are manufactured according to the Euro-Norm 612 standard. All specifications required by the standard, such as material thickness or cuts, are fulfilled in every respect and, in some cases, even vastly exceeded. That is what the GRÖMO star stands for as a quality and trademark.



BEST RAW MATERIALS

At GRÖMO, only high-quality raw materials from exclusively European suppliers are used, because high-quality materials are the first prerequisite for high quality and excellent accuracy of fit. GRÖMO offers additional security with agreements on the assumption of liability and material guarantees.





GUARANTEED QUALITY

To ensure that our customers will always be certain to receive the quality we promise, we do not compromise when it comes to selecting our suppliers or in the coating, testing and inspection of our products. Strict controls, complete documentation of all work processes, continuous improvement and regular training of employees form the basis of the GRÖMO quality standard.

"MADE IN GERMANY" DELIVERY BENEFIT

Our production in Germany is the main reason for our high delivery capacity. This means almost every item is available immediately ex warehouse. However, if a product is not in stock, the short production times mean that it can be delivered quickly.



ROUTE PLANNER *



All-round care with the GRÖMO service

Our first-class products are just half of our entrepreneurial success. The other half is based on personalised advice, professional support and a wide range of services that make your roofing work faster, more profitable and more successful.



TECHNICAL ADVICE For questions about the products

Do you have general or technical guestions about our products and their use or about installation in accordance with the relevant technical regulations? Our application engineer, Christian Loderer, will provide you with fast, uncomplicated assistance.

Application technology

Telephone: +49 8342 912-532 Mobile: +49 151 4248-8224 WhatsApp: +49 8342 912-532 E-mail: service@groemo.de

ASSEMBLY INSTRUCTIONS AND VIDEOS

User-friendly information

Instructions for quick and easy installation of GRÖMO products can be downloaded from our website and viewed on our YouTube channel. However, most GRÖMO products are designed to be so user-friendly that instructions are not necessary.





DIMENSIONED PRODUCT DRAW-

For easier planning

We provide dimensional drawings of GRÖMO products on our website. This significantly shortens time-consuming planning phases, as you can continue working with the information immediately. All important product dimensions can be seen at a glance.

ONLINE SEMINARS

Mastering challenges

The industry is facing more and more challenges — extreme weather conditions, new laws, standards, materials, production techniques, etc. At the same time, new opportunities are opening up.

Deepen your knowledge to optimally master the tasks of tomorrow. At GRÖMO, we want to help you stay one step ahead. In our free online seminars, we share our knowledge with you and give you practical tips and support.



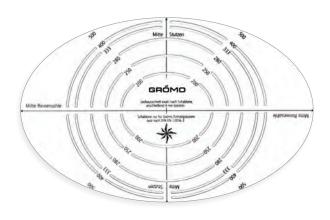


GUTTER CALCULATIONEasy implementation of DIN EN regulations

GRÖMO offers you a comprehensive service for calculating the drainage capacity of suspended gutters. Simply click on www.groemo.de and use our free online programme to calculate the drainage capacity in accordance with EN 12056 - Part 3.

GRÖMO CUTTING TEMPLATEFor the exact gutter section

The combination of GRÖMO outlet and gutter section using the template guarantees correct craftsmanship. This is the only way to achieve the precise drainage capacities calculated. Order your free cutting template for oval plug-in gutter outlets at service@groemo. de. Additional PDF templates are available on the website.

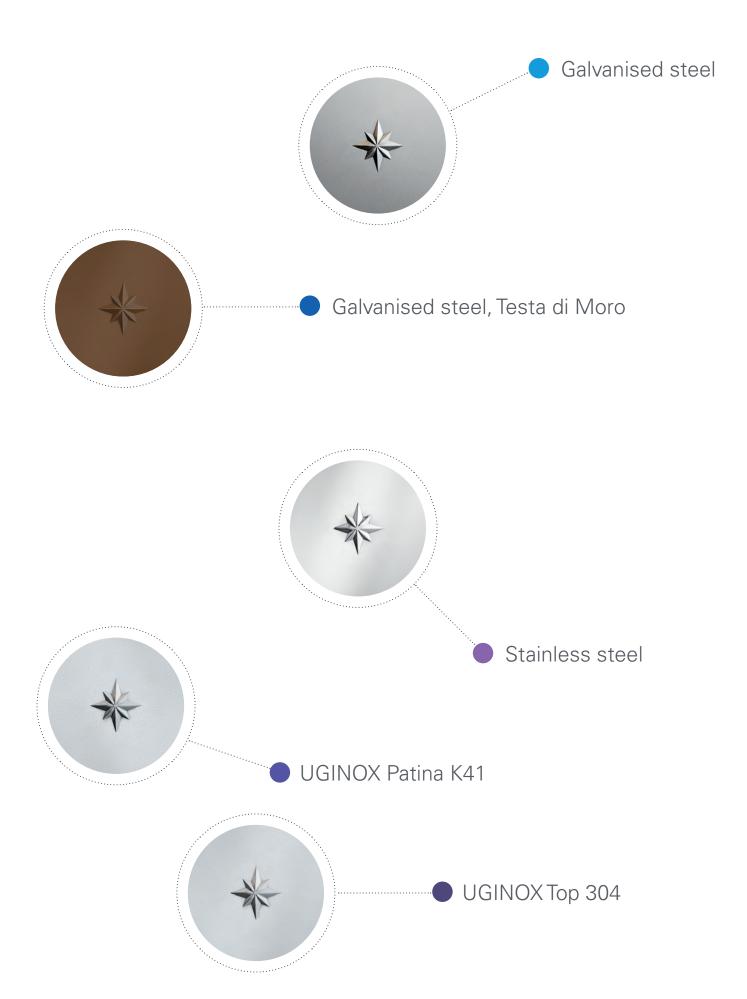


ORIGIN *

The GRÖMO material selection

Whether made of zinc, Quartz-Zinc, Anthra-Zinc, copper, galvanised steel, stainless steel, UGINOX Patina K41, UGINOX Top 304 or aluminium, when it comes to the variety and choice of materials, GRÖMO offers you almost unlimited possibilities. In addition to the usual construction metals, other surfaces are also available by request. Copper Quartz-Zinc Zinc Aluminium Anthra-Zinc

Other surfaces by request



IT ALL COMES DOWN TO THE GUTTER ACCESSORIES

GRÖMO gutter corners are available for gutters cut to size from 200 to 400 mm. Available in deep-drawn or soldered versions.

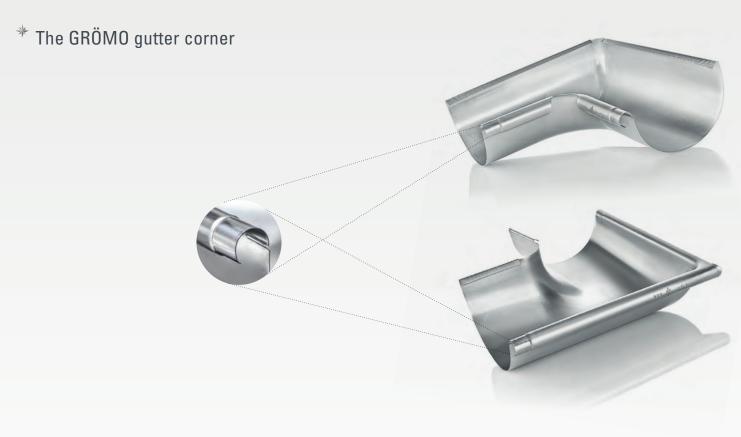
GRÖMO gutter accessories offer everything you need for standard-compliant gutter installation. Thanks to cuts from 200 to 500 mm in accordance with DIN EN 612, the accessories are suitable for many areas of application.



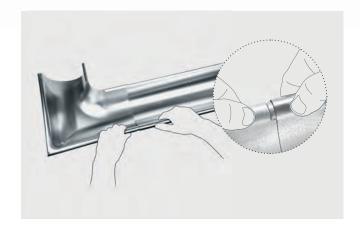
Gutter corners	9
Gutter end caps	3
Gutter quarter spheres	5
Expanders 37	7
Gutter connectors	9
Fascia boards	
Leaf sieves	1
Leaf grilles	1
Other gutter accessories 4	1



SIGNPOST *

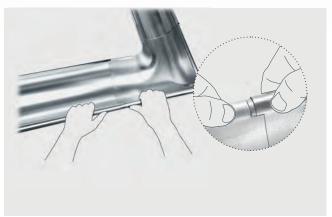


The GRÖMO gutter corner is a functional masterpiece. It makes the work of the craftsman much easier and eliminates the need for laborious screwing. Thanks to the recessed bead with mounting aid, the gutter corner is easy to attach.



Simple for one side

In order to ideally drain the rainwater in the direction of flow through the gutter, the gutter corner is pushed under the gutter on one side by inserting the recessed bead of the corner into the gutter bead. The slot can be ignored.



Simple for the other side

On the other side, the gutter is pushed under the gutter corner by inserting the bead of the gutter into the insertion slot of the recessed corner bead.





GUTTER CORNER - EXTERIOR CORNER - 90° - HALF ROUND

Nominal size	200	250	280	333	400
Zinc	62300 ²	62301 ³	62302 ³	62303 ³	62304 ³
Quartz-Zinc		66301 ³	66302 ³	66303 ³	
Anthra-Zinc		67301 ³	67302 ³	67303 ³	
Copper	60300 ²	60301 ³	60302 ³	60303 ³	60304 ³
Galvanised steel	50300 ²	50301 ³	50302 ³	50303 ³	50304 ³
Testa di Moro		53301 ²	53302 ²	53303 ²	53304 ²
UGINOX Patina K41		56301 ³	56302 ³	56303 ³	56304 ³
UGINOX Top 304		58301 ¹	58302 ¹	58303 ¹	58304 ¹
Aluminium	84300 ²	84301 ²	84302 ²	84303 ²	84304 ²

¹ Soldered

³ Deep-drawn, with insertion slot for easy mounting





GUTTER CORNER - INTERIOR CORNER - 90° - HALF ROUND

lominal size	200	250	280	333	400
Zinc	62305 ²	62306 ³	62307 ³	62308 ³	62309 ³
Quartz-Zinc		66306 ³	66307 ³	66308 ³	
Anthra-Zinc		67306 ³	67307 ³	67308 ³	
Copper	60305 ²	60306 ³	60307 ³	60308 ³	60309 ³
Galvanised steel	50305 ²	50306 ³	50307 ³	50308 ³	50309 ³
Testa di Moro		53306 ²	53307 ²	53308 ²	53309 ²
UGINOX Patina K41		56306 ³	56307 ³	56308 ³	56309 ³
UGINOX Top 304		58306 ¹	58307 ¹	58308 ¹	58309 ¹
Aluminium	84305 ²	84306 ²	84307 ²	84308 ²	84309 ²

¹ Soldered



GUTTER CORNER - EXTERIOR CORNER - 90° - HALF ROUND - SIDE LENGTH 500 MM

Nominal size	200	250	280	333	400
Zinc	63246	63247	63248	63249	63250
Copper			61286	61287	

Soldered

² Deep-drawn

² Deep-drawn

 $^{^{\}scriptsize 3}$ Deep-drawn, with insertion slot for easy mounting



GUTTER CORNER - INTERIOR CORNER - 90° - HALF ROUND - SIDE LENGTH 500 MM

Nominal size	200	250	280	333	400
Zinc	63251	63252	63253	63254	63255
Copper			61296	61297	

Soldered



GUTTER CORNER - EXTERIOR CORNER - 135° (=45°) HALF ROUND - SIDE LENGTH 300 MM



Nominal size	200	250	280	333	400
• Zinc	63480	63481	63482	63483	63484
Copper	61480	61481	61482	61483	61484

Soldered



GUTTER CORNER - INTERIOR CORNER - 135° (=45°) HALF ROUND - SIDE LENGTH 300 MM



Nominal size	200	250	280	333	400
• Zinc	63490	63491	63492	63493	63494
Copper	61590	61591	61592	61593	61594

Soldered



GUTTER CORNER - EXTERIOR CORNER - 90° - BOX SHAPE

Nominal size	200	250	280	333	400
Zinc	62310 ¹	62311 ¹	62312 ¹	62313 ¹	62314 ¹
Quartz-Zinc				66313 ¹	
Copper	60310 ¹	60311 ¹	60312 ¹	60313 ¹	60314 ¹
Galvanised steel	50310 ²	50311 ²	50312 ¹	50313 ²	50314 ¹
UGINOX Patina K41		56311 ¹		56313 ¹	56314 ¹
Aluminium	84310 ¹	84311 ¹	84312 ¹	84313 ¹	84314 ¹

¹ Soldered

² Deep-drawn



GUTTER CORNER - INTERIOR CORNER - 90° - BOX SHAPE

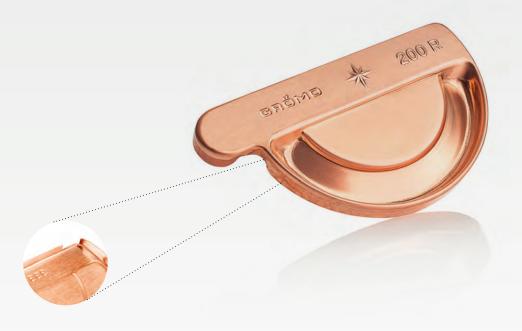
Nominal size	200	250	280	333	400
Zinc	62315 ¹	62316 ¹	62317 ¹	62318 ¹	62319 ¹
Quartz-Zinc				66318 ¹	
Copper	60315 ¹	60316 ¹	60317 ¹	60318 ¹	60319 ¹
Galvanised steel		50316 ²	50317 ¹	50318 ²	50319 ¹
UGINOX Patina K41		56316 ¹		56318 ¹	56319 ¹
Aluminium	84315 ¹	84316 ¹	84317 ¹	84318 ¹	84319 ¹

¹ Soldered

² Deep-drawn



* The GRÖMO plug-in gutter end cap



The GRÖMO plug-in gutter end cap makes things quicker, cleaner and easier. Thanks to the plug groove, it can be easily attached to the gutter and holds itself in place, leaving you a free hand for soldering or gluing. The plug groove prevents it from jumping away — as is possible with other soldering gutter end caps.

Another well thought-out product detail is the additional notch on the gutter hem. This compensates for tolerances in the gutter geometry. This means that the plug-in gutter end cap fits perfectly on half round gutters from a wide range of manufacturers.



The plug groove makes it easySimply plug into the gutter and it holds itself in place thanks to the plug groove.



Free hand for soldering or gluing
No jumping away as is possible with
other gutter end caps.
Solder or glue — and done.





PLUG-IN GUTTER END CAP HALF ROUND LEFT

Nominal size	200	250	280	333	400
Zinc	62650	62651	62652	62653	62654
Quartz-Zinc		66651	66652	66653	
Anthra-Zinc		67651	67652	67653	
Copper	60650	60651	60652	60653	60654
UGINOX Patina K41		56651	56652	56653	
Aluminium		84651	84652	84653	84654

With mortise groove and notch on the gutter hem for easy installation. For adhering or soldering





PLUG-IN GUTTER END CAP HALF ROUND RIGHT

Nominal size	200	250	280	333	400
• Zinc	62660	62661	62662	62663	62664
Quartz-Zinc		66661	66662	66663	
Anthra-Zinc		67661	67662	67663	
Copper	60660	60661	60662	60663	60664
UGINOX Patina K41		56661	56662	56663	
Aluminium		84661	84662	84663	84664

With mortise groove and notch on the gutter hem for easy installation. For adhering or soldering



GUTTER END CAP HALF ROUND UNIVERSAL

Nominal size	200	250	280	333	400
• Zinc	62370	62371	62372	62373	62374
Quartz-Zinc			66372	66373	
Copper	60370	60371	60372	60373	60374
Galvanised steel	50370	50371	50372	50373	50374
Testa di Moro		53371	53372	53373	53374
UGINOX Patina K41		56371	56372	56373	56374
UGINOX Top 304		58371	58372	58373	58374
Aluminium	84370	84371	84372	84373	84374

To hems



GUTTER END CAP HALF ROUND UNIVERSAL - HIGH

Nominal size	250	280	333	400
• Zinc	62375	62376	62377	62378
• Copper	60375	60376	60377	60378
Galvanised steel	50375	50376	50377	50378
UGINOX Patina K41			56377	
UGINOX Top 304	58375		58377	
Aluminium	84378	84379	84380	

To hems



GUTTER END CAP HALF ROUND LEFT

Nominal size	200	250	280	333	400	500
Zinc	62643	62644	62645	62646	62647	62648
Copper	60643	60644	60645	60646	60647	60648

For soldering



GUTTER END CAP HALF ROUND RIGHT

Nominal size	200	250	280	333	400	500
Zinc	62667	62668	62669	62670	62671	62672
Copper	60667	60668	60669	60670	60671	60672

For soldering



GUTTER END CAP BOX SHAPE UNIVERSAL

Nominal size	200	250	280	333	400
• Zinc	62363	62364	62365	62366	62367
Copper	60363	60364	60365	60366	60367
Galvanised steel	50363	50364	50365	50366	50367
UGINOX Patina K41		56364	56365	56366	56367
Aluminium	84363	84364	84365	84366	84367

To hems



GUTTER END CAP BOX SHAPE LEFT

Nominal size	200	250	333	400	500
Zinc	62382	62383	62384	62385	62386
Copper	60382	60383	60384	60385	60386

For soldering



GUTTER END CAP BOX SHAPE RIGHT

Nominal size	200	250	333	400	500
Zinc	62387	62388	62389	62390	62391
Copper	60387	60388	60389	60390	60391

For soldering



ROOFTOP GUTTER END CAP LEFT

Nominal size	400	500
Zinc	62394	62395
Copper	60394	60395

For soldering



ROOFTOP GUTTER END CAP RIGHT

Nominal size	400	500
Zinc	62392	62393
• Copper	60392	60393

For soldering



GUTTER QUARTER SPHERE, UNIVERSAL WITH PIN

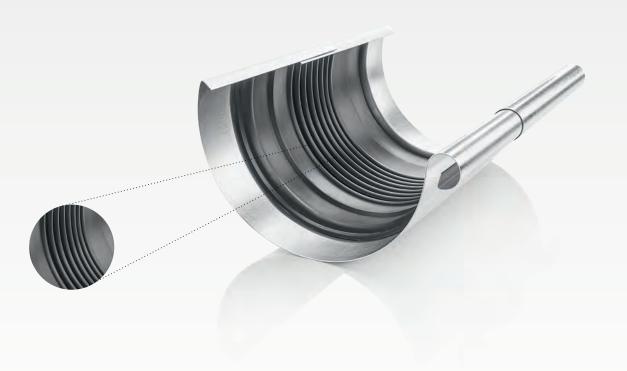
Nominal size	280	333	400
• Zinc	62632	62633	62634
Copper	60632	60633	60634

For soldering

FREEDOM OF FLEXIBILITY *

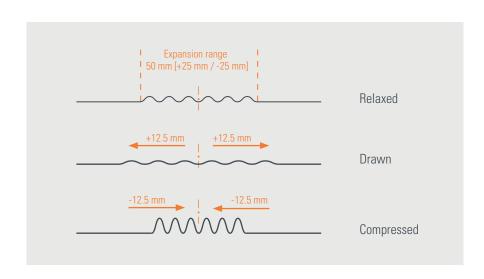


The GRÖMO universal gutter expander



GRÖMO's universal gutter expander is a true all-rounder. Whether initial assembly or repair of old and brittle movement compensations:

With the universal gutter expander, there is no tension in the gutter! The corrugated dilatation area of the EPDM rubber reliably compensates for material expansions of up to 50 mm and prevents the expander from rising up in the watercourse. The universal gutter expander can be easily glued into any half round gutter.





GUTTER QUARTER SPHERE, UNIVERSAL

Nominal size	200	250	280	333	400
• Zinc	62637	62638	62639	62640	62641
Copper	60637	60638	60639	60640	60641

For soldering



UNIVERSAL GUTTER EXPANDER HALF ROUND

Nominal size	250-500
O Other	50946

Comes in a 3m roll, works for half round gutters 250 - 500 Bead trim available separately



BEAD TRIM

Nominal size	250 280	333	400 500
Zinc	63511	63512	63513
Quartz-Zinc	66511	66512	66513
Copper	61511	61512	61513
Galvanised steel	50511	50512	50513
UGINOX Patina K41	56511	56512	56513
Aluminium	84511	84512	84513



GUTTER EXPANDER - WITH COVER - HALF ROUND

Nominal size	250	280	333	400	500
• Zinc	62338	62339	62340	62341	62342
Quartz-Zinc	66338	66339	66340	66341	66342
Anthra-Zinc	67338	67339	67340		
Copper	60338	60339	60340	60341	60342
Galvanised steel	50338	50339	50340	50341	50342
UGINOX Patina K41	56338	56339	56340	56341	56342
Aluminium	84338	84339	84340	84341	84342

Vulcanised on both sides



GUTTER EXPANDER - HALF ROUND

Nominal size	250	280	333	400	500
• Zinc	62332	62333	62334	62335	62336
Copper	60332	60333	60334	60335	60336
UGINOX Patina K41		56333	56334	56335	

Vulcanised on one side



GUTTER EXPANDER - WITH COVER - BOX SHAPE

Nominal size	250	333	400	500
• Zinc	62396	62397	62398	62399
Quartz-Zinc	66346	66348	66349	66350
Galvanised steel	50346	50348	50349	50347
UGINOX Patina K41	56346	56347	56349	56348
Aluminium	84346	84348	84349	84347

Vulcanised on both sides



GUTTER EXPANDER - BOX SHAPE

Nominal size	250	333	400	500
Zinc	62346	62348	62349	62350
Copper	60346	60348	60349	60350

Vulcanised on one side



TAPE EXPANDER

Nominal size	260 3000	390 3000	390 6000
• Zinc	62323	62328	62330
Copper	60323	60328	60330
UGINOX Patina K41	56323	56328	56330

As a roll 3 or 6 metres in length, vulcanised on both sides $\,$



SINGLE-HEAD EXPANDER

Nominal size	390 700	390 800
• Zinc	62325	62326
Copper	60325	60326
UGINOX Patina K41	56325	56326

Vulcanised on both sides



ADHESIVE GUTTER CONNECTOR

Nominal size	250	280	333	400
• Zinc	62266	62267	62268	62269
Quartz-Zinc	66266	66267	66268	66269
Copper	60357	60358	60359	60360
Aluminium	84855	84856	84857	84858

For connecting two gutters and repairing leaky seams or gutters



GUTTER CONNECTOR, HALF ROUND

Nominal size	250	280	333	400
Zinc	62260	62261	62262	62263
Copper	60260	60261	60262	

Does not replace gutter expander for motion compensation!



FASCIA BRACKET HALF ROUND

Nominal size	200	250	280	333	400
Galvanised steel	50350	50351	50352	50353	50354

BOUNDLESS *

* The oval GRÖMO leaf catch



The oval leaf catch effectively prevents leaves from entering the downpipe. Its novel shape ensures that the leaves dry off quickly and then blow away freely with the wind. It is ergonomically shaped and perfectly adapted to the geometry of the oval plug-in outlet: The GRÖMO oval leaf catch is not placed inside the outlet, but in the gutter section. Due to the elevated positioning, the leaves are caught on the grille and blown away by the wind. This also ensures that the plug-in outlet remains free of leaves.

High water permeability, easy installation

The wire construction of the leaf catch ensures high water permeability — even with heavy leaf fall. The leaf catch is quickly placed: Simply insert it into the gutter section and it sits firmly and securely.



LEAF SIEVE OVAL

Nominal size	280	333	400
Stainless steel	54010	54011	54012

For a section in the gutter that fits perfectly, use the GRÖMO gutter section template for the GRÖMO oval plug-in gutter outlet



LEAF SIEVE

Nominal size	60	75-80	85-90	100	120	150
Copper		61004		61006	61007	
Galvanised steel	51003	51004		51006	51007	
Stainless steel		54004	54005	54006	54007	54008



LEAF GUARD HALF ROUND

Nominal size	280	333
Stainless steel	54466	54467

 $Length\ 2\ m.\ For\ nose\ spring\ gutter\ hooks, fastening\ is\ done\ using\ the\ mounting\ clips\ from\ the\ pigeon\ guard\ product\ range$



STORM CLIP

Nominal size	250-400
Galvanised steel	50915

GRÖMO GUTTER OUTLETS AND HOPPERS, A USEFUL COMBINATION

GRÖMO gutter outlets are available for gutters from 200 to 500 mm and a drainpipe diameter of 50 to 150 mm. They can be combined with all drainpipes, allowing the greatest possible freedom of design.

GRÖMO also offers a large selection of hoppers: for pitched or flat roofs, for gutter or wall mounting, in classic form or as a design variant. We also manufacture hoppers by hand according to your requirements.



Plug-in gutter outlets	45
Diagonal gutter outlets	46
Oberstdorfer gutter outlets	47
Soldering gutter outlets	47
Outlets	49
Adjustable outlets	49
Gutter extensions	49
Hoppers	50
Hopper accessories	59



ORIGIN *

* The GRÖMO gutter outlet, the original



Each elbow can be attached to the outlet quickly and easily. Without wires or rivets. Thanks to the new spring clip technology, simply turn the elbow in the desired direction and it will hold reliably in any position. The GRÖMO gutter outlet fits into all standard drainpipe systems and can be easily detached by turning it.



Spring clips replaces tool

Simply insert the elbow. The spring clip technology compensates for tolerances in the elbow diameter.



Turn and done – holds in place!

Without wires or rivets. Simply turn the elbow in the desired direction. Holds reliably in any position.



PLUG-IN GUTTER OUTLET OVAL - HALF ROUND GUTTER

Nominal size	200 60	250 60	250 76	250 80	280 76	280 80	280 87	280 100	333 76
• Zinc	62400 ²	62402 ²	62406 ²	62410 ²	62416 ²	62420 ²	62427 ²	62435 ²	62445 ²
Quartz-Zinc				66410 ²		66420 ²			
Anthra-Zinc				67410 ²		67420 ²			
Copper	60400 ²	60402 ²	60406 ²	60410 ²	60416 ²	60420 ²	60427 ²	60435 ²	60445 ²
Galvanised steel	50400 ²	50402 ²		50410 ²		50420 ²		50435 ²	
Testa di Moro				53410 ²		53420 ²		53435 ²	
UGINOX Patina K41				56410 ²		56420 ²		56435 ²	
UGINOX Top 304				58410 ²		58420 ²		58435 ²	
Aluminium	84400 ²	84402 ²	84406 ²	84410 ²		84420 ²	84427 ²	84435 ²	

FORTSETZUNG: PLUG-IN GUTTER OUTLET OVAL - HALF ROUND GUTTER

Nominal size	333 80	333 87	333 100	333 120	400 100	400 120	400 150	500 120	500 150
• Zinc	62446 ²	62448 ²	62450 ²	62462 ²	62470 ²	62472 ²	62473 ¹	62474 ¹	62475 ¹
Quartz-Zinc	66446 ²		66450 ²			66472 ²			
Anthra-Zinc			67450 ²						
Copper	60446 ²	60448 ²	60450 ²	60462 ²	60470 ²	60472 ²	60473 ¹	60474 ¹	60475 ¹
Galvanised steel	50446 ²		50450 ²	50462 ²	50470 ²	50472 ²	50473 ¹	50474 ¹	50475 ¹
Testa di Moro	53446 ²		53450 ²		53470 ²	53472 ²			
UGINOX Patina K41	56446 ²		56450 ²	56462 ²		56472 ²			56475 ¹
UGINOX Top 304	58446 ²		58450 ²	58462 ²		58472 ²			
Aluminium	84446 ²	84448 ²	84450 ²	84462 ²	84470 ²	84472 ²	84474		84475 ¹

¹ Roll seam welded, with loop for hooking in

² Butt welded, with spring clip for easy mounting



PLUG-IN GUTTER OUTLET - ROUND - HALF ROUND GUTTER

Nominal size	280 80	333 100
Zinc	62480	62482
Copper	60480	60482

Roll seam welded, with loop for hooking in



PLUG-IN GUTTER OUTLET - BOX SHAPE GUTTER - ROUND PIPE

Nominal size	200 60	250 76	250 80	280 80	280 87	333 100	400 120	500 150
• Zinc	62500	62506	62510	62520	62527	62550	62552	62554
Quartz-Zinc	66500					66550		
Copper	60500	60506	60510	60520	60527	60550	60552	60554
Galvanised steel	50500		50510	50520		50550	50552	
UGINOX Patina K41			56510			56550	56552	
Aluminium	84500		84510	84520		84550	84552	84554

Roll seam welded, with loop for hooking in



PLUG-IN GUTTER OUTLET - BOX-SHAPED GUTTER - BOX-SHAPED PIPE

Nominal size	250 80x80	333 80x80	333 100x100
Zinc	62484	62485	62486
Aluminium	84528	84529	84530

Soldered



DIAGONAL OUTLET FOR EAVES - HALF ROUND GUTTER

Nominal size	333 100
• Zinc	62608
Aluminium	84477

Can be mounted on façade or eave side. For soldering or gluing. Use template for hole cut-out. Incl. bead trim



DIAGONAL OUTLET - CONICAL OUTLET - HALF ROUND GUTTER

Nominal size	280 118	333 139	400 169
• Zinc	62594	62596	62598
Copper	60594	60596	60598
Galvanised steel	50594	50596	
UGINOX Patina K41	56594	56596	

Angle of inclination 40°, with loop for hooking in, roll seam welded



DIAGONAL OUTLET - CYLINDRICAL OUTLET - HALF ROUND GUTTER

Nominal size	280 80	333 100
Zinc	62584	62586
Copper	60584	60586
Galvanised steel	50584	50586
UGINOX Patina K41	56584	56586

Angle of inclination 40°, with loop for hooking in, roll seam welded



OBERSTDORFER GUTTER OUTLET - HALF ROUND GUTTER

Nominal size	333 139
• Zinc	62606
Copper	60606

Angle of inclination 72°, roll seam welded



SOLDERING OUTLET - HALF ROUND GUTTER

Nominal size	200 50	200 60	250 76	280 76	280 80	280 87	333 100	400 120
• Zinc	62610	62611	62612	62613	62614	62615	62616	62617
Copper	60610	60611	60612	60613	60614	60615	60616	60617

Angle of inclination adjustable



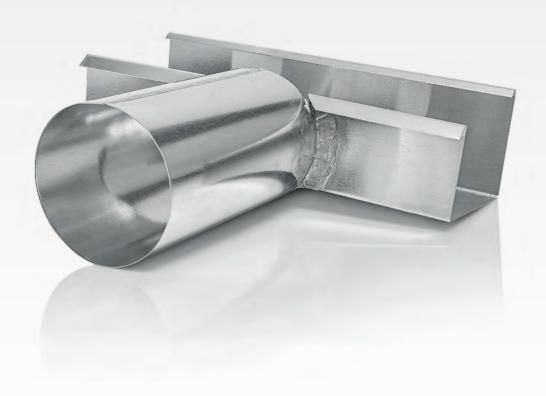
SOLDERING OUTLET SHORT - BOX SHAPE GUTTER

Nominal size	50	60	76	80	87	100	120
• Zinc	62619	62620	62621	62622	62623	62624	62625
Copper	60619	60620	60621	60622	60623	60624	60625

MOUNTAINRIDGE *



The outlet spout for the cornice box gutter



With its extremely low installation height, the outlet spout fits over almost any cornice. The pipe diameter of 75 or 110 mm in conjunction with the maximum free pipe cross-section ensures excellent drainage values.

Effortless assembly

The connection piece is simply soldered in between two cornice gutters and the overlap of the gutter bevelling is concealed by the bead trim supplied.

The connection to the downpipe is ideally made with GRÖMO flat-roof branches for round or box-shaped downpipes. It is attached to the free end of the connecting pipe and connected to the downpipe. The distance from the wall can be individually adjusted by shortening the connecting pipe and thus adapted to the structural conditions.



SOLDERING OUTLET LONG - BOX SHAPE GUTTER

Nominal size	80	100
Zinc	62628	62630



OUTLET SPOUT UNIVERSAL

Nominal size	80	100
• Zinc	62560	62562



OUTLET SPOUT FOR CORNICE BOX GUTTER

Nominal size	280 75	333 110
Zinc	62916	62915



ADJUSTABLE OUTLET - HALF ROUND GUTTER

Nominal size	333 100 500	333 100 750	333 100 1000	333 100 1250
• Zinc	62490	62491	62492	62493
Copper	60490	60491	60492	60493
Galvanised steel	50490	50491	50492	50493

Can be adjusted, with ball joint



GUTTER EXTENSION BASIN SHAPE - HALF ROUND GUTTER

Nominal size	280 80	333 100	400 120
• Zinc	63680	63681	63682
Copper	61680	61681	61682



GUTTER EXTENSION SEGMENTED - HALF ROUND GUTTER



Nominal size	280 80	333 100	400 120
• Zinc	63686	63687	63688
Copper	61686	61687	61688



GUTTER EXTENSION INTERIOR CORNER SHAPE - HALF ROUND GUTTER



Nominal size	280 80	333 100	400 120
Zinc	63683	63684	63685
Copper	61683	61684	61685



FLAT ROOF HOPPER WITHOUT INFLOW

Nominal size	100
• Zinc	63196
Copper	61196
UGINOX Patina K41	56196
Aluminium	85165

Height: 390 mm, width: 242 mm, depth: 150 mm



FLAT ROOF HOPPER WITH INFLOW

Nominal size	75 100	100 100	110 100
• Zinc	63197	63198	63199
Copper	61197	61198	
UGINOX Patina K41	56197	56198	

Includes pre-mounted inflow seal Height: 390 mm, width: 242 mm, depth: 150 mm



FLAT ROOF HOPPER WITHOUT INFLOW

Nominal size	100
• Zinc	63165
UGINOX Patina K41	56165

Height: 280 mm, width: 240 mm, depth: 150 mm

PLATEAU *

* The GRÖMO flat-roof hoppers



The pre-punched inflow opening (NG 75/NG 100/NG 110) and the pre-assembled seal ensure easy installation. Where previously the hoppers had to be laboriously cut out and adapted, they can now be easily inserted through the prepared inflow opening on the pipe and mounted directly on the wall. What's more, the flat-roof hoppers feature aesthetic shapes, created for today's modern architecture.



Open for quick assembly

Pre-punched inflow opening and pre-assembled seal makeit easy: Simply place the hopper on the inlet pipe and it stays in place.



On the wall and ready to go

The hopper can be mounted directly on the wall after levelling.



SMALL FLAT-ROOF HOPPER WITH INFLOW

Nominal size	75 100	100 100	110 100
• Zinc	63166	63167	63168
UGINOX Patina K41	56166	56167	56168

Includes pre-mounted inflow seal

Height: 280 mm, width: 240 mm, depth: 150 mm



FLAT ROOF HOPPER, CUBIC WITH INFLOW

Nominal size	75 100	100 100	110 100
Zinc	63170	63171	63172
UGINOX Patina K41	56170	56171	56172

Includes pre-mounted inflow seal

Height: 200 mm, width: 200 mm, depth: 200 mm



FLAT ROOF HOPPER, CUBIC WITHOUT INFLOW

Nominal size	80	100
Zinc	63174	63173
Anthra-Zinc	67172	67173
Aluminium	85178	85179

Height: 200 mm, width: 200 mm, depth: 200 mm



FLAT ROOF HOPPER, HALF ROUND WITHOUT INFLOW

Nominal size	80	100
• Zinc	63207	63208
Quartz-Zinc	66197	66198
Anthra-Zinc	67187	67188
Aluminium	84617	84618

Height: 185 mm, width: 180 mm, depth: 160 mm



DESIGN FLAT-ROOF HOPPER



Nominal size	76	80	87	100	120
• Zinc	62910	62911	62912	62913	62914
Aluminium		84726		84727	84728

Nominal size 76-80: Height: 210 mm, width: 210 mm, depth: 140 mm Nominal size 87 -100: Height: 300 mm, width: 300 mm, depth: 160 mm Nominal size 120: Height: 360 mm, width: 360 mm, depth: 180 mm

WATERFALL **

* The design flat-roof hopper





Design line

Three identical hoppers for attic drainage in different dimensions — the series of design flat-roof hoppers ensures uniform and visually appealing drainage of all parts of a house. The differently sized hoppers allow the same design to be installed in a scaled size on the roof, garage, annex or balcony.

Reliable emergency overflow

The emergency overflow on the design flat-roof hopper is already designed with cleverly positioned drainage slots. Individual, structural conditions can nevertheless be taken into account, as the position of the inlet can be specified within a defined area.

Guaranteed splash protection

Equipped with an integrated splash guard, the design flat-roof hopper virtually eliminates unplanned water leakage from the drainage slots, even in heavy rain.

HARMONY *

* The GRÖMO design hopper



The design hopper from GRÖMO features high design quality, functionality and simple installation. It also shines with its high-quality workmanship: A soft, discreet bevelled edge closes the hopper at the top; a new process enables production without a soldered seam. The hopper is available with a centric and eccentric drain and can therefore be used flexibly.





DESIGN HOPPER





Nominal size	80	87	100	120
• Zinc	63086	63087	63088	63089
Quartz-Zinc	66986		66988	66989
Anthra-Zinc	67986		67988	67989
Copper	61186	61187	61188	61189
Galvanised steel	50986		50988	50989
UGINOX Patina K41	56986		56988	56989
Aluminium	84986	84987	84988	84989

Gutter connection, nominal size 200 - 400. With spring clip for easy mounting. Other surface variants upon request Height: 337 mm, width: 240 mm, depth: 240 mm. Dimensions may vary slightly depending on the nominal size. Please see technical data sheets at www.groemo.com for detailed dimensions



DESIGN HOPPER, ECCENTRIC





Nominal size	80	100	120
• Zinc	63186	63188	63189
Quartz-Zinc	66186	66188	66189
Copper	61174	61176	61177
Galvanised steel	50186	50188	50189
UGINOX Patina K41	56186	56188	56189
Aluminium	84186	84188	84189

Height: 333 mm, width: 240 mm, depth: 240 mm



HOPPER, CUBIC

lominal size	80	87	100	120	150
Zinc	63178 ²	63179 ²	63180 ²	63181 ²	62724 ¹
Quartz-Zinc	66178 ²		66180 ²	66181 ²	
Copper	61178 ²	61179 ²	61180 ²	61181 ²	60724 ¹
Galvanised steel	50178 ²		50180 ²	50181 ²	50724 ¹
UGINOX Patina K41	56178 ²		56180 ²	56181 ²	
Aluminium	84178 ²	84179 ²	84180 ²	84181 ²	84724 ¹

¹ Folded

Height: 288 mm, width: 240 mm, depth: 240 mm. Dimensions may vary slightly depending on the nominal size. Please see technical data sheets at www.groemo.com for detailed dimensions

² With spring clip for easy installation



HOPPER, CUBIC ECCENTRIC

Nominal size	80	100	120
• Zinc	63182	63184	63185
Quartz-Zinc	66182	66184	66185
Copper	61182	61184	61185
Galvanised steel	50182	50184	50185
UGINOX Patina K41	56182	56184	56185
Aluminium	84182	84184	84185

Height: 283 mm, width: 240 mm, depth: 240 mm



HOPPER, CUBIC ECCENTRIC WITH OVERFLOW PIPE

Nominal size	80	100	120
• Zinc	62732	62733	62734
Copper	60732	60733	60734
Galvanised steel	51691	51701	51702
UGINOX Patina K41	56732	56733	56734
Aluminium	84732	84733	84734

Height: 283 mm, width: 240 mm, depth: 240 mm



HOPPER, SQUARE

Nominal size	76	80	87	100	120	150
● Zinc	63689	63690	63691	63692	63693	63694
Copper	61689	61690	61691	61692	61693	61694
Galvanised steel		51690		51692	51693	

Also available with overflow/without star upon request Nominal size 76-120: Height: 370 mm, width: 250 mm, depth: 250 mm Nominal size 150: Height: 450 mm, width: 300 mm, depth: 300 mm



HOPPER, LONG

Nominal size	76	80	87	100	120
• Zinc	63016	63015	63017	63018	63019
Quartz-Zinc				67018	67019
Copper	61016	61015	61017	61018	61019
UGINOX Patina K41		57015		57018	57019

Gutter connection, nominal size 200-400 Nominal size 76 -87: Height: 345 mm, width: 200 mm, depth: 200 mm Nominal size 100 -120: Height: 395 mm, width: 220 mm, depth: 220 mm



HOPPER, STABILISED



Nominal size	76	80	87	100	120
• Zinc	62727	62728	62729	62730	62731
Copper	60727	60728	60729	60730	60731

Gutter connection, nominal size 200 - 400. Also available with overflow/without star upon request Height: 360 mm, width: 250 mm, depth: 250 mm



HOPPER, CONICAL



Nominal size	80	87	100	120
• Zinc	63500	63501	63502	63503
Copper	61500	61501	61502	61503

Gutter connection, nominal size 200 - 400. Also available with overflow/without star upon request Height: 350 mm, width: 320 mm, depth: 270 mm



HOPPER, CONICAL SMALL

Nominal size	76	80	87	100
• Zinc	63005	63006	63007	63008

Height: 317 mm, width: 230 mm, depth: 185 mm. Dimensions may vary slightly depending on the nominal size. Please see technical data sheets at www.groemo.com for detailed dimensions



HOPPER, HEXAGONAL



Nominal size	100	120
• Zinc	63986	63987
Copper	61986	61987

Gutter connection, nominal size 200 - 333. Also available with overflow upon request Height: 310 mm, width: 325 mm, depth: 290 mm



HOPPER, INTERIOR CORNER



Nominal size	100	120
• Zinc	63984	63985
Copper	61984	61985

Gutter connection, nominal size 200 - 400. Also available with overflow/with star by request Height: 370 mm, width: 340 mm, depth: 260 mm



HOPPER FLUSH - LONG



Nominal size	76	80	87	100	120
• Zinc	63201	63202	63203	63204	63205

Gutter connection, nominal size 200-400 Nominal size 76 -87: Height: 345 mm, width: 200 mm, depth: 200 mm Nominal size 100 -120: Height: 395 mm, width: 220 mm, depth: 220 mm



HOPPER, FLUSH - ANGULAR WITH OVERFLOW



Nominal size	76	80	87	100
• Zinc	63980	63981	63982	63983
Copper	61980	61981	61982	61983

Gutter connection, nominal size 200 - 333. Also available without overflow upon request Height: 330 mm, width: 300 mm, depth: 200 mm



HOPPER FLUSH - HALF ROUND



Nominal size	76	80	87	100
• Zinc	63844	63845	63846	63847
Copper	61844	61845	61846	61847

Also available with overflow upon request Height: 290 mm, width: 320 mm, depth: 220 mm



HOPPER, FUNNEL SHAPE CYLINDRICAL



Nominal size	76	80	87	100
Zinc	63840	63841	63842	63843
Copper	61840	61841	61842	61843

Gutter connection, nominal size 200 - 400. Also available with overflow upon request Height: 313 mm, width: 250 mm, depth: 250 mm. Dimensions may vary slightly depending on the nominal size. Please see technical data sheets at www.groemo.com for detailed dimensions



HOPPER ROUND - CONICAL



Nominal size	80	87	100
• Zinc	63862	63863	63864
Copper	61862	61863	61864

Gutter connection, nominal size 200 - 400. Also available with overflow upon request Height: $370\,\mathrm{mm}$, width: $300\,\mathrm{mm}$, depth: $300\,\mathrm{mm}$



WATERTIGHT INFLOW FOR HOPPER

Nominal size	75	110
Zinc	62757	62758

Includes pre-mounted inflow seal



TPE SEAL

No	ominal size	
0	Other	50945

Seal 3 m length, for installation in hoppers, for safe drainage of rainwater in attic seals

ELBOWS BRING THE PIPE TO THE HOUSE

The GRÖMO elbow range has a suitable variant for every roof overhang. GRÖMO elbows are available in degrees of 40° , 60° , 72° , 85° and 87° and with overhangs of 300 to 1850 mm.



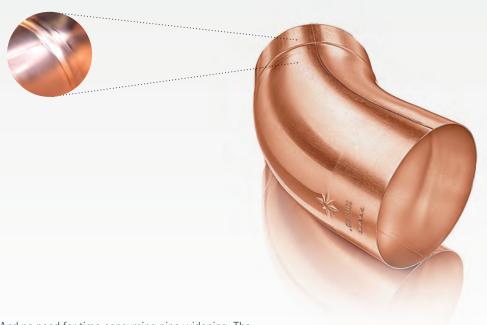
Pipe elbows	63
Swan necks	65
Articulated alhows	65



CIRCULATION *



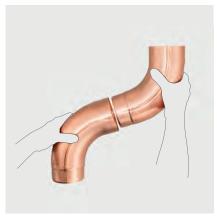
* The conical GRÖMO pipe elbow



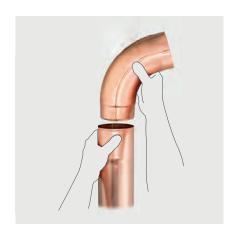
The indent makes the difference. And no need for time-consuming pipe widening. The GRÖMO elbow can be easily inserted into any cut pipe with or without a sleeve. It couldn't be more flexible. And the plug connection is secure.



Quickly plugged in thanks to indent Without expanding! Simply insert the pipe elbow with indent into the cut-to-length pipe - and you're done.



Always fits... elbow to elbow...



... and everywhere ... and elbow to pipe with sleeve.





PIPE ELBOW 40°

Nominal size	60	76	80	87	100	120
• Zinc	62006 ³	62009 ¹	62010 ¹	62017 ¹	62020 ¹	62022 ¹
Quartz-Zinc			66010 ¹		66020 ¹	66022 ¹
Anthra-Zinc			67010 ¹		67020 ¹	
• Copper	60006 ³	60009 ¹	60010 ¹	60017 ¹	60020 ¹	60022 1
Galvanised steel			50010 ¹		50020 ¹	50022 ¹
Testa di Moro			53010 ¹		53020 ¹	53022 ¹
UGINOX Patina K41	56006 ³		56010 ³		56020 ³	56022 ³
UGINOX Top 304			58010 ²		58020 ²	
Aluminium	84006 ³		84010 ¹	84017 ¹	84020 ¹	84022 ¹

- ¹ Butt-welded with indent
- ² Butt-welded, without indent
- ³ Roll seam welded, without indent



PIPE ELBOW 60°

Nominal size	50	60	76	80	87	100	120
Zinc	62023 ²	62024 ²	62026 ¹	62028 ¹	62027 ¹	62030 ¹	62032 ¹
Quartz-Zinc				66028 ¹		66030 ¹	
Anthra-Zinc				67029 ¹		67030 ¹	

- ¹ Butt-welded with indent
- ² Roll seam welded, without indent



PIPE ELBOW 72°





Nominal size	50	60	75	76	80	87	100	120	150
• Zinc	62050 ³	62060 ³	62075 ²	62076 ¹	62080 ¹	62087 ¹	62100 ¹	62120 ¹	62150 ³
Quartz-Zinc		66060 ³	66075 ²		66080 ¹		66100 ¹	66120 ¹	
Anthra-Zinc		67060 ³	67075 ²		67080 ¹		67100 ¹	67101 ¹	
• Copper	60050 ³	60060 ³	60075 ²	60076 ¹	60080 ¹	60087 ¹	60100 ¹	60120 ¹	60150 ³
Galvanised steel		50060 ³	50075 ²		50080 ¹		50100 ¹	50120 ¹	50150 ³
Testa di Moro		53060 ³			53080 ¹		53100 ¹	53120 ¹	
UGINOX Patina K41		56060 ³	56075 ³		56080 ³		56100 ³	56120 ³	56150 ³
UGINOX Top 304					58080 ²		58100 ²	58120 ²	
Aluminium		84060 ³		84076 ¹	84080 ¹	84087 ¹	84100 ¹	84120 ¹	84150 ³

- ¹ Butt-welded with indent
- ² Butt-welded, without indent
- ³ Roll seam welded, without indent



PIPE ELBOW 72° WITH BEAD

Nominal size	80	87	100
Zinc	62082	62089	62102
Copper		60089	60102



PIPE ELBOW 85°

Nominal size	60	75	76	80	87	100	120
Zinc	63323 ³	62205 ²	62206 ¹	62207 ¹	62209 ¹	62210 ¹	62211 ¹
Quartz-Zinc		66205 ²		66207 ¹		66210 ¹	
Anthra-Zinc				67207 ¹		67210 ¹	
Copper	61656 ³	60205 ²	60206 ¹	60207 ¹	60209 ¹	60210 ¹	61660 ¹
Galvanised steel	50202 ³	50205 ²		50207 ¹		50210 ¹	
Testa di Moro				53207 ¹		53210 ¹	
UGINOX Patina K41	56201 ³	56205 ³		56207 ³		56210 ³	
Aluminium	84202 ³		84206 ¹	84207 ¹		84210 ¹	

- ¹ Butt-welded with indent
- ² Butt-welded, without indent
- ³ Roll seam welded, without indent



PIPE CORNER ELBOW 87°

Nominal size	60	76	80	87	100	120
• Zinc	62215	62216	62217	62218	62219	62220
Copper	60215	60216	60217	60218	60219	60220
Aluminium			84392		84394	84395

Soldered



SQUARE PIPE ELBOW 72°

Nominal size	80 80	100 100
• Zinc	62160	62161
Quartz-Zinc	66160	66161
Anthra-Zinc	63382	63383
Copper	60160	60161
Aluminium	84084 ¹	84104 ¹

¹ Material thickness 0.6 mm due to production



SWAN NECK

Nominal size	76	80	87	100	120
Zinc	62276	62280	62287	62295 ¹	62297
Quartz-Zinc		66280		66295 ¹	66297
Anthra-Zinc		67280		67295 ¹	
Copper	60276	60280	60287	60295 ¹	60297
Galvanised steel		50280		50295	50297
Testa di Moro		53280		53295	53297
UGINOX Patina K41		56280		56295	56297
Aluminium	84276	84280	84287	84295	84297

¹ Butt welded



ARTICULATED ELBOW Ø 100 SOLDERED



Nominal size	400-495	500-595	600-695	700-795	800-895	900-995	1000-1095	1100-1195	1200-1295
Zinc	62536	62537	62538	62539	62540	62541	62542	62543	62544
Copper	60536	60537	60538	60539	60540	60541	60542	60543	60544

FORTSETZUNG: ARTICULATED ELBOW Ø 100 SOLDERED

Nominal size	1300-1395	1400-1495	1500-1595	1600-1695
Zinc	62545	62546	62547	62548
Copper	60545	60546	60547	60548

On request also available in ø76, ø80, ø87, ø120 mm and other materials, from nominal size 1000 mm 2-piece



ARTICULATED ELBOW Ø 100 PRESSED



Nominal size	400-495	500-595	600-695	700-795	800-895	900-995	1000-1095	1100-1195	1200-1295
Zinc	62186	62187	62188	62189	62190	62191	62192	62193	62194
Copper	60186	60187	60188	60189	60190	60191	60192	60193	60194

FORTSETZUNG: ARTICULATED ELBOW Ø 100 PRESSED

Nominal size	1300-1395	1400-1495	1500-1595	1600-1695
Zinc	62195	62196	62197	62198
Copper	60195	60196	60197	60198

On request also available in \emptyset 76, \emptyset 80, \emptyset 87, \emptyset 120 mm and other materials, from nominal size 1300 mm 2-piece

PIPE ACCESSORIES FROM GRÖMO – YOU CAN'T GO WITHOUT

GRÖMO pipe accessories support tinsmiths and roofers in the installation of downpipes and their transitions in many areas of application. Available in diameters from 50 to 150 mm and in accordance with DIN EN 612. The range also offers convenient solutions for water collection and leaf protection.



	Rainwater pipe flaps	
	Water collectors	
	Rain barrel	
	Water distributors	73
	Leaf catchers	73
	Leaf traps	74
	Odour traps	74
	Flat-roof branches	74
	Pipe branches	76
	Adapter cones	78
GERMAN	Reducers	78
DESIGN	Sliding sleeves	78
WINNER	Connection sleeves	79
2024	Standpipe caps	80
	Pipe brackets	83
	Pipe bracket mountings	
	Beads / Halfbeads	
	Downpipe stopgaps	
	LED downpipe lighting	
GERMAN DESIGN AWARD WINNER 2024		



RAINWATER PIPE FLAP WITH STAINLESS STEEL SIEVE

Nominal size	76	80	87	100	120
• Zinc	63525	63526	63527	63528	63529
Quartz-Zinc		66526		66528	
Anthra-Zinc		67526		67528	
Copper	61525	61526	61527	61528	61529
Galvanised steel		50526		50528	50529
UGINOX Patina K41		56526		56528	56529
UGINOX Top 304		58526		58528	
Aluminium		85526	85527	85528	85529

Regularly clean sieve and remove in winter due to risk of frost!

SPARE PART: SIEVE

Nominal size	76 80	87	100	120
Stainless steel	54220	54221	54222	54223



RAINWATER PIPE FLAP

Nominal size	60	76	80	87	100	120
• Zinc	63534	63535	63530	63531	63532	63533
Copper	61534	61535	61530	61531	61532	61533
Galvanised steel			50530		50532	50533
Testa di Moro			53530		53532	53533
UGINOX Patina K41			56530		56532	56533
Aluminium		85535	85530	85531	85532	85533



RAINWATER PIPE FLAP BALL - AUTOMATIC

Nominal size	76	80	87	100	120
• Zinc	62855	62856	62857	62858	62859
Copper	60855	60856	60857	60858	60859

SPARE PART: BALL WITH CORD

Nominal size

Stainless steel	50940



RAINWATER PIPE FLAP BOX SHAPE

Nominal size	80 80	100 100
Zinc	62823	62824

Clean sieve regularly!

WATER SOURCE **





The design water collector



The design water collector is discreetly integrated into the downpipe. A spiral screw inside ensures a small reduction in the cross-section of the downpipe and therefore scores with a particularly high yield. A connecting hose between the water collector and the rain barrel enables the water level in the barrel to be regulated. This means that the rain barrel fills up to the desired water level and drains excess water directly into the sewage system. All materials are frost-proof. The design water collector is set to winter mode using a slider.





High yield

The spiral screw collects the rainwater. The connected hose directs it into the barrel



Frost-proof through the winter

Simply close the slider and empty the rain barrel





DESIGN WATER COLLECTOR



Nominal size	80	87	100
Zinc	62686	62687	62685
Quartz-Zinc	66683		66685
Anthra-Zinc	67683		67685
Copper	60686	60687	60685
UGINOX Patina K41	56682		56685
Aluminium	85680	85682	85685

Incl. hose set, consisting of 1" hose with a length of 33 cm and barrel connector

SPARE PART: HOSE WITH CONNECTORS FOR DESIGN WATER COLLECTOR

Nominal size	80-100
• Other	50943

SPARE PART: SEALING CAP

Nominal size	1"
O Other	50944



WATER COLLECTOR

Nominal size	76	80	87	100	120
Zinc	62675	62676	62677	62678	62679
Copper	60675	60676	60677	60678	60679
UGINOX Patina K41				56678	
Aluminium		84676	84677	84678	84679

Including hose set consisting of 1" hose (for NG 76-100: Length 33 cm / for NG 120: Length 24 cm) and barrel connector $\frac{1}{2}$

SPARE PART: HOSE WITH CONNECTORS

Nominal size	76-120	
Other	50942	

SPARE PART: CAP WITH CHAIN

Nominal size	76-120
O Other	50941

SPARE PART: SLIDING SLEEVE

Nominal size	76	80	87	100	120
• Zinc	62833	62834	62835	62836	62837
Copper	60909	60910	60911	60912	60913
UGINOX Patina K41				56683	
Aluminium		84685	84686	84687	84688

SPARE PART: SEALING CAP

Nominal size	76-120
O Other	50939

Suitable for aluminium water collectors



HOSE FOR WATER COLLECTOR

No	minal size	1"
0	Other	50948

In a roll with a length of 5 metres. Suitable for all water collectors with 1" hose



DESIGN RAIN BARREL



Nominal size	650x750x860	650x750x860 - set
Anthracite	88761 ²	88781 ¹

- 1 Consisting of side panelling, sliding cover and GRAF square 300 litre plastic rain barrel. Dimensions of designer rain barrel (L x W x H): 770 x 650 x 860 mm
- ² Consisting of side panelling and sliding cover. Suitable for GRAF plastic rain barrel square 300 litres. Dimensions of designer rain barrel (L x W x H): 770 x 650 x 860 mm



WATER DISTRIBUTOR



Nominal size	76	80	87	100	120
Zinc	63091	63092	63093	63094	63095
Copper	61091	61092	61093	61094	61095
Galvanised steel		51092		51094	51095

With reversible turning handle that can be used on either side of the outlet, left or right



LEAF CATCHER



Nominal size	76	80	87	100
• Zinc	62794	62795	62796	62797
Copper	60794	60795	60796	60797

Clean leaf catcher regularly. Remove basket in winter due to risk of frost!

SPARE PART: LEAF GUARD

Nominal size	76	80	87	100
• Zinc	62877	62878	62879	62880
Copper	60877	60878	60879	60880



LEAF TRAP



Nominal size	80	87	100	120
Zinc	63670	63671	63672	63673
• Copper	61670	61671	61672	61673

Clean leaf trap regularly. Remove sieve in winter due to risk of frost!



ODOUR TRAP

Nominal size	100
• Zinc	54204
Quartz-Zinc	54208
• Copper	54202
Stainless steel	54200

Made of stainless steel 1.4301. Coating with material ordered accordingly. Odour-blocking and rodent-proof. For retrofitting when it is no longer possible to install an odour trap at frost depth. Non-compliant according to DIN 1986-100:2016-12



FLAT-ROOF BRANCH

lominal size	75 80	75 100	110 100	110 120
Zinc	63240 ¹	63241 ¹	63244 ¹	63243 ¹
Quartz-Zinc	66820 ²	66821 ²	66822 ²	66823 ²
Anthra-Zinc	67180 ²		67184 ²	
UGINOX Patina K41	56240 ¹	56241 ¹		56243 ¹
Aluminium	84240 ¹	84241 ¹	84244 ¹	84243 ¹

¹ Includes pre-mounted inflow seal

SPARE PART: LIP SEAL RING

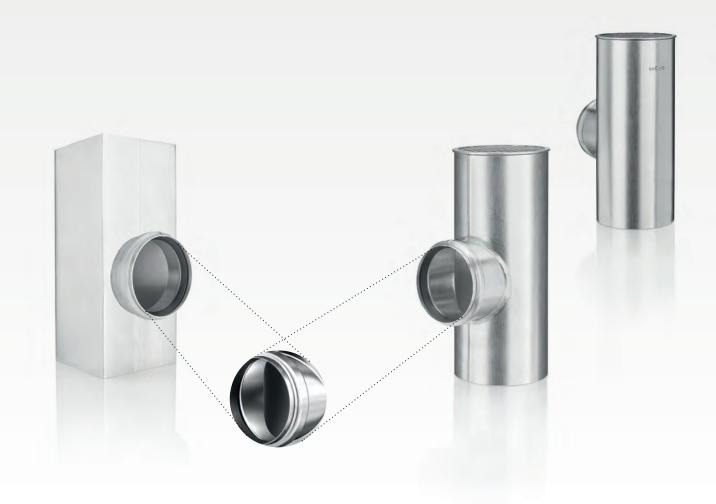
Nominal size	75	110
O Other	50949	50950

Suitable for all flat roof branches except UGINOX Patina K41

 $^{^{\}rm 2}$ $\,$ Includes pre-mounted inflow seal. Inflow pipe made of zinc depending on production

FLOW DIVERTER *

* The GRÖMO flat-roof branches



The GRÖMO flat-roof branches ensure discreet drainage on building façades. Round, square or universal, the branches can be easily combined with all common flat roof drainage systems and creates beautiful accents within the design of the exterior façade.

The pre-mounted gasket guarantees that the attic drainpipe is connected securely. In heavy rain, the perforated plate ensures sufficient ventilation of the downpipe and prevents leaves from entering.



FLAT-ROOF BRANCH UNIVERSAL

Nominal size	75	75	110
	80	100	120
• Zinc	63395	63396	63398

Kit consists of two individual parts: Main pipe with perforated end and inflow pipe with pre-mounted seal. Connect by soldering, position of inflow pipe can be defined individually



FLAT-ROOF BRANCH BOX-SHAPED

Nominal size	75 80x80	75 100x100	110 100x100
Zinc		63336	63338
Aluminium	84234	84236	84238

Includes pre-mounted inflow seal

SPARE PART: LIP SEAL RING

Nominal size	75	110
O Other	50949	50950

For flat-roof branches in zinc, pre-weathered quartz zinc, aluminium



BALCONY BRANCH 87.5° BOX-SHAPED

Nominal size	75 80x80	75 100×100
Aluminium	84235	84237

Includes pre-mounted inflow seal

SPARE PART: LIP SEAL RING

Nominal size	75
O Other	50949

Suitable for all flat roof branches except UGINOX Patina K41



DOWNPIPE BRANCH 60°



Nominal size	50	60	76	76	80	80	87	87	87
	50	60	60	76	60	80	60	76	80
Zinc	62943	62944	62945	63033	62947	62948	62987	62977	62978

FORTSETZUNG: DOWNPIPE BRANCH 60°

Nominal size	87	100	100	100	100	100	120	120
	87	60	76	80	87	100	100	120
Zinc	62979	62980	62981	62982	62983	62984	62985	62986

Also available with other bracket, diameter, double branch, or Y-branch upon request



DOWNPIPE BRANCH 72°



Nominal size	50 50	60 60	76 60	76 76	80 60	80 80	87 60	87 76	87 80
• Zinc	62949	63022	62951	63021	62955	63023	63027	62957	63025
Anthra-Zinc						67088			
Copper	60949	60950	60951	61021	60955	61023	61027	61024	61025
Galvanised steel						50023			
Aluminium		84962	84963	84964	84965	84966	84977	84967	84968

FORTSETZUNG: DOWNPIPE BRANCH 72°

Nominal size	87 87	100 60	100 76	100 80	100 87	100 100	120 100	120 120
• Zinc	63024	62970	62971	62972	62973	62974	62975	62976
Anthra-Zinc				67972		67089		
Copper	61026	60970	60971	60972	60973	60974	60975	60976
Galvanised steel				50972		50974	50975	50976
Aluminium	84969	84970	84971	84972	84973	84974	84975	84976

Also available with other bracket, diameter, double branch, or Y-branch upon request



ADAPTER CONE - UNIVERSAL

Nominal size	100 60	
• Zinc	62825	
• Copper	60825	

Adjust by cutting to ø76, ø80, ø87



REDUCER

Nominal size	76 60	80 60	87 76	100 76	100 80	100 87	120 100	150 100	150 120
• Zinc	62690 ¹	62688 ²	62691 ²	62695 ²	62689 ²	62692 ²	62693 ²	62696 ²	62694 ¹
Copper	60690 ¹	60688 ²	60691 ²	60695 ²	60689 ²	60692 ²	60693 ²	60696 ²	60694 ¹
Aluminium		84690 ²			84691 ²		84692 ²		

¹ Soldered

² Deep-drawn



SLIDING SLEEVE

Nominal size	80	100
• Zinc	62798	62799
Copper	60798	60799
Aluminium	84798	84799



SLIDING SLEEVE WITH STANDPIPE CAP

Nominal size	76	80	87	100	120
• Zinc	62735	62736	62737	62738	62739
Copper	60735	60736	60737	60738	60739

With standpipe cap, flat



CONNECTION SLEEVE (PIPE CONNECTOR)

62746						
02/40	62740	62741	62742	62743	62744	62745
			67742		67744	
	60740	60741	60742	60743	60744	60745
			50742		50744	50745
	84740	84741	84742	84743	84744	84745
	02.7.10	60740	60740 60741	67742 60740 60741 60742 50742	67742 60740 60741 60742 60743 50742	67742 67744 60740 60741 60742 60743 60744 50742 50744



CONNECTION SLEEVE WITH SEAL (PIPE CONNECTOR)

Nominal size	75	75 76	75 80	110	110 100
Zinc	62754	62768	62769	62755	62756
Aluminium			85195		85196

Includes pre-mounted inflow seal

SPARE PART: LIP SEAL RING

Nominal size	75
• Other	50949

Suitable for all flat roof branches except UGINOX Patina K41



CONNECTION SLEEVE (PIPE CONNECTOR) SQUARE SHAPE

Nominal size	80 80	100 100
• Zinc	62747	62748



STANDPIPE CAP FLAT

60 116	76 85	76 116	76 150	80 116	80 150	87 116	87 150	100 116
62700	62699	62701	62710	62702	62711	62703	62712	62704
				67702				67704
60700	60699	60701	60710	60702	60711	60703	60712	60704
				56702				56704
				58702				58704
				84830				84846
	116 62700	116 85 62700 62699	116 85 116 62700 62699 62701	116 85 116 150 62700 62699 62701 62710	116 85 116 150 116 62700 62699 62701 62710 62702 60700 60699 60701 60710 60702 56702 56702 58702	116 85 116 150 116 150 62700 62699 62701 62710 62702 62711 60700 60699 60701 60710 60702 60711 56702 58702 58702 58702 58702	116 85 116 150 116 150 116 62700 62699 62701 62710 62702 62711 62703 60700 60699 60701 60710 60702 60711 60703 56702 58702 58702 58702 58702	116 85 116 150 116 150 116 150 62700 62699 62701 62710 62702 62711 62703 62712 60700 60699 60701 60710 60702 60711 60703 60712 56702 58702

FORTSETZUNG: STANDPIPE CAP FLAT

150	140	120 150	120 180	150 180
62713	62705	62706	62714	62715
60713	60705	60706	60714	60715
84848		84850		
	60713	62713 62705 60713 60705	62713 62705 62706 60713 60705 60706	62713 62705 62706 62714 60713 60705 60706 60714



STANDPIPE CAP HIGH

76 120	80 100	80 120	80 150	87 116	87 120	100 120	100 150	120 150
62828	62829	62830			62838	62846	62848	62850
		66830				66846		
60828	60829 *	60830	60832		60838	60846	60848	60850
		50830	50832			50846	50848	50850
		53830				53846	53848	53850
		54830				54846		
		56830				56846		56850
			84832	84838				
	120 62828	120 100 62828 62829	120 100 120 62828 62829 62830 66830 66830 60828 60829 * 60830 50830 53830 54830 54830	120 100 120 150 62828 62829 62830 66830 60828 60829 * 60830 60832 50830 50832 53830 54830 56830 56830 56830	120 100 120 150 116 62828 62829 62830	120 100 120 150 116 120 62828 62829 62830 62838 60828 60829 * 60830 60832 60838 50830 50832 50832 53830 54830 56830 56830 56830	120 100 120 150 116 120 120 62828 62829 62830 62838 62846 66830 66830 66846 60828 60829 * 60830 60832 60838 60846 50830 50832 50846 53846 54830 54830 54846 56830 56846 56846	120 100 120 150 116 120 120 150 62828 62829 62830 62838 62846 62848 60828 60829 * 60830 60832 60838 60846 60848 50830 50832 50846 50848 53846 53848 54830 54830 54846 56846 56846

^{*} Discontinued item, available only while stocks last

FORTSETZUNG: STANDPIPE CAP HIGH

Nominal size	120 180
• Zinc	62852
Quartz-Zinc	
• Copper	60852
Galvanised steel	50852
Testa di Moro	53852
Stainless steel	
UGINOX Patina K41	
Aluminium	



STANDPIPE CAP HIGH, CLOSED

Nominal size	120
• Zinc	62716

NATURAL BEAUTY





The design downpipe bracket



The attractive appearance of the design downpipe bracket made of brushed stainless steel sets it apart from conventional pipe brackets. A concealed screw integrated into the bracket enables the downpipe to be fastened quickly and reliably. The fitted rubber profile compensates for tolerances in the downpipe, prevents scratches and also serves as sound insulation against dripping and flowing noises. The U-shaped geometry gives the bracket a high level of stability.





Individually adjustable fastener Tighten the concealed screw until the clamp fixes the downpipe in place.



Quick attachment Thanks to the M10 threaded nut, the



DESIGN DOWNPIPE BRACKET



Nominal size	100
Stainless steel	54281



SPARE PART: SCREW WITH LOCK WASHER

Nominal size	100
Stainless steel	54330



DOWNPIPE BRACKET WITH THREADED NUT M10 / M8

Nominal size	50	60	76	80	87	100	120	150
Copper		60223 ²	60224 ²	60225 ²	60226 ²	60227 ²	60228 ²	60229 ²
Galvanised steel	50222 ²	50223 ²	50224 ²	50225 ²	50226 ²	50227 ²	50228 ²	50229 ²
Aluminium		84224 1		84225 ¹		84226 ¹	84227 1	

- 1 Only with M10 thread. For connecting to SPI dowel, hanger bolt, or thermo stop
- ² For connecting to SPI dowel, hanger bolt, or thermo stop. Threaded nut made of galvanised steel for copper design, aluminium or galvanised steel for galvanised steel design.



DOWNPIPE BRACKET WITH 140 MM STRIKER PIN

Nominal size	50	60	76	80	87	100	120	150
Copper		60243	60244	60245	60246	60247	60248	60249
Galvanised steel	50242	50243	50244	50245	50246	50247	50248	50249



DOWNPIPE BRACKET WITH 200 MM STRIKER PIN

Nominal size	60	76	80	87	100	120	150
Copper	60263	60264	60265	60266	60267	60268	60269
Galvanised steel	50263	50264	50265	50266	50267	50268	50269



DOWNPIPE BRACKET SQUARE WITH THREADED NUT M10

Nominal size	60×60		100×100	120x120	
Galvanised steel	51223	51225	51227	51228	

For connecting to SPI dowel, hanger bolt, or thermo stop. Threaded nut, galvanised

SPECIAL EQUIPMENT *



The Thermo Stop



Triply effective and – thanks to very quick and easy installation – particularly efficient. The thermo stop ensures thermal separation between the hanger bolt anchored in the supporting structure and the pipe bracket. By effectively reducing the flow of cold and heat, costly damage to buildings can be effectively prevented. The high-quality sealing ring creates a rainproof and elegant connection to the EWIS façade surface. The thermo stop is mainly used for mounting pipe brackets that can be precisely adjusted with the M10 threaded stud included and mounted quickly.



Quick attachment

The thermo stop is quickly fitted by simply screwing it onto the hanger bolt



Thermal separation

The sealing ring effectively reduces the flow of cold and heat

DOWNPIPE BRACKET SQUARE WITH 140 MM STRIKER PIN

Nominal size	80×80	100×100
Galvanised steel	51245	51246



HANGER BOLT M10

Nominal size	M10 100	M10 140	M10 200	M10 250	M10 290	M10 300
Galvanised steel	50213 ²	50214 ²	50215 ²	50216 ²		50217 ²
Stainless steel	54313 ¹	54314 ¹	54315 ¹	54316 ¹	54317 ¹	

¹ With spanner flat



BASEPLATE WITH THREADED NUT M8/M10

Nominal size	M8 M10
Galvanised steel	50221 ¹
Stainless steel	54219

¹ Galvanised



RING BOLT

Nominal size	M6 20
Stainless steel	50212



THERMO STOP

Nominal size	M10
Stainless steel	50211

Prevents thermal bridge between hanger bolt and pipe bracket

 $^{^{2}}$ With Torx slot and spanner flat, galvanised

CLIMBING HOOKS*

* The GRÖMO fastening solutions



The GRÖMO fastening system for insulated façades put an end to improvised solutions. Whether insulated first and then dowelled or vice versa: With the STG pipe bracket holder or the SPI pipe bracket plug, pipe brackets can be attached to the façade in no time at all thanks to its design details, including thermal and acoustic separation from the façade.



STG PIPE BRACKET SUPPORT

Nominal size	80-120	120-160	160-200	200-240	240-320
Stainless steel	54240 ¹	54241 ¹	54242 ¹	54243 ¹	54244 ²

- 1 Mounting solution for pipe brackets with thermal insulation systems. In Austria, obtainable from Likunet company in Gänserndorf
- ² Mounting solution for pipe brackets with thermal insulation systems, 2 pieces. In Austria, obtainable from Likunet company in Gänserndorf



SPI PIPE BRACKET PLUG

Nominal size	M10	M10	M10
	130	260	330
Stainless steel	50236	50237	50238

Can be used with building height up to 8 m. If building height is over 8 m, follow the accepted rules of technology of the plumber/roofer trade!



BEAD

Nominal size	75 80	85 90	100	120	150
Zinc	62864	62867	62870	62872	62875
Copper	60864	60867	60870	60872	60875



HALF BEAD

Nominal size	60	76	80	87	100	120	150
• Zinc	62881	62884	62885	62887	62890	62892	62893
Copper	60881	60884	60885	60887	60890	60892	60893
Aluminium			84885		84890	84892	



DOWNPIPE STOPGAP

Nominal size	60-120 8	60-120 100
• Other	50921 ¹	50920 ²

- $^{\rm 1}$ $\,$ Roll length 8 m. Compatible with downpipe diameter 120 mm $\,$
- $^{\rm 2}$ $\,$ Roll length 100 m. Compatible with downpipe diameter 120 mm $\,$

SKY LIGHTS*



lighting system. With one supply line, it can be installed up to a maximum height of 11.5 metres, or nearly twice that with two supply lines. Depending on the ballast and control unit, the light sources can be integrated into the house control system and individual accents can be set.





DOWNPIPE BRACKET

The downpipe bracket specially developed for the LED downpipe lighting has a U-shaped extension into which the linear lights and screen are inserted and fastened with a hexagon socket threaded pin. The downpipe bracket thus ensures uninterrupted, visually pleasing and durable fixing of the LED lighting to the downpipe.

COVER

The aluminium profiles of the LED linear lights are mounted in a cover made of a U-shaped metal profile by clipping them into place. The cover fulfils three functions: The profile conceals the technical details and thus ensures the desired appearance. It protects against the weather and serves as a fastener to fix the LED linear lights to the downpipe bracket.





CONNECTING SLEEVE

The connecting sleeve enables a seamless transition between the screens of the individual light lines. Simply pushed over the joints, it fixes the screens in place, ensuring thermally induced length compensation and an appealing continuous look.

LED LINEAR LIGHT

VarioLED™ IP67 are fully encapsulated, linear LED light lines in an aluminium profile with excellent heat dissipation. A clear polyurethane encapsulation protects them from moisture, dust, dirt and UV radiation. They therefore comply with protection class IP67. The light lines are supplied ready to plug in with a mini IP67 connector at both ends. The integrated HYDRA PRO SW LED strips are single-channel, dimmable strips for 24V constant voltage with an output of 4 W/m (380 lumens) and a colour temperature of approx. 6,700 K. The stimulating, cool white light ensures radiant brightness and good colour rendering on the façade. The linear light sources are robust and have an average service life of around 60,000 hours.





CONNECTION CABLE

The LED linear light is connected to the ballast or control unit via the two metre long cable with mini IP67 socket.

SILICONE PROTECTIVE CAP

The top cable plug is sealed with the protective cap to protect it from the weather and as a safety measure.





MOUNTING BRACKETS AND RIVETS

In order to additionally stabilise the LED light lines for individual special lengths, additional mounting brackets can be fixed to the desired position on the screen using rivets.

ORDER INFORMATION

Six different lengths of LED linear lights are available to ensure that the LED lighting encapsulated in the aluminium profile matches the length of the downpipe. The standard version with 2,894 mm is designed for a three metre long downpipe. There are five other length versions for shorter downpipes. Numerous different LED lengths can be implemented by using them individually or in combination.

The following table provides an overview of the possible LED lighting lengths and the required products and quantities that can be implemented with the available standard LED linear lights. If these lengths are not sufficient due to the structural conditions, customised special lengths are available by request.

	VarioLED 207 mm	VarioLED 332 mm	VarioLED 519 mm	VarioLED 957 mm	VarioLED 1,957 mm	VarioLED 2,894 mm	Downpipe bracket	Cover	Connecting sleeve	Connection cable	Protective cap	Mounting bracket	Blind rivet
Lighting length* [mm]	86942	86943	86944	86945	86946	86941	50281 50282 89871 89872	62908 89873	62909 89874	86949	86948	84908	84909
242	1						1	1	1	1	1		
367		1					2	1	1	1	1		
484	2						2	1	1	1	1	1	1
554			1				2	1	1	1	1	1	1
609	1	1					2	1	1	1	1	1	1
734		2					2	1	1	1	1		
796	1		1				2	1	1	1	1	1	1
921		1	1				2	1	1	1	1	2	1
992				1			2	1	1	1	1		
1108			2				2	1	1	1	1	1	1
1234	1			1			2	1	1	1	1	1	
1359		1		1			2	1	1	1	1	1	
1476	2			1			2	1	1	1	1	2	1
1546			1	1			2	1	1	1	1	2	1
1601	1	1		1			2	1	1	1	1	2	1
1726		2		1			2	1	1	1	1	2	1
1788	1		1	1			2	1	1	1	1	2	1
1913		1	1	1			3	1	1	1	1	2	1
1992					1		3	1	1	1	1		
2100			2	1			3	1	1	1	1	3	1
2234	1				1		3	1	1	1	1		
2359		1			1		3	1	1	1	1		
2476	2				1		3	1	1	1	1	1	1
2546			1		1		3	1	1	1	1	1	1
2601	1	1			1		3	1	1	1	1	1	1
2726		2			1		3	1	1	1	1	1	1
2788	1		1		1		3	1	1	1	1	1	1
2929						1	3	1	1	1	1		
3000						1	3	1	1	1	1		

^{*} A distance of 35 mm is provided between the LED linear lights for the plug-in connection to each other and at the end. When planning the lighting lengths, it must be ensured that the linear lights are at least 150 mm away from the water-bearing level (local conditions must be taken into account!).





DOWNPIPE BRACKET WITH M10 THREADED NUT FOR LED DOWNPIPE LIGHTING

Nominal size	100	120
Galvanised steel	50281	50282

SPARE PART: REPLACEMENT SCREWS

Nominal size

Stainless steel 54331

Set consisting of hexagon head screw M8, O-ring, hexagon nut M8 and hexagon socket threaded pins





COVER FOR LED DOWNPIPE LIGHTING

Nominal size	2900
Zinc	62908







CONNECTING SLEEVE FOR LED DOWNPIPE LIGHTING

Nominal size	200
• Zinc	62909





Nominal size	207	332	519	957	1957	2894	Special length
Other	86942	86943	86944	86945	86946	86941	86947





CONNECTION CABLE

Nominal size	
Other	86949



SILICONE PROTECTIVE CAP

Nominal size	
O Other	86948



MOUNTING BRACKET FOR LED LINEAR LIGHT

Nominal size	90	
Other	84908	



BLIND RIVET 4X6 MM FOR MOUNTING BRACKET

Nominal size	4x6
Other	84909



Packet, 100 pcs

RAINWATER STANDPIPES FROM GRÖMO – THEY STAND UP GREAT

The rainwater standpipe range from GRÖMO offers everything you need to connect downpipes and sewer pipes. Made of galvanised steel with an internal coating or copper, the standpipes are corrosion-resistant, durable, stable, functional and suitable for a wide range of applications. GRÖMO offers additional connecting elements, fastenings and seals for special pipe connections.



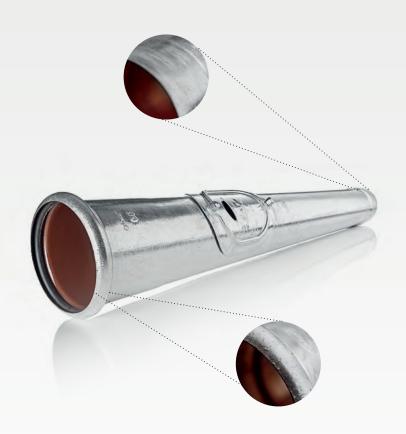
Rainwater standpipes	. 97
Sealing elements	103
Rainwater standpipe brackets	103
Rainwater standning accessories	10/



A LEG TO STAND ON *



* The GRÖMO rainwater standpipe



The GRÖMO rainwater standpipe ensures smooth transitions. As an integral part of the roof drainage system, the standpipe protects against damage in areas prone to impact. Particularly clever: The custom-fit transition from rainwater downpipe to standpipe makes a standpipe cap unnecessary. The integrated seal provides support and ensures that both pipes are perfectly centred. Thanks to the standpipe's large cleaning opening (optional), there is more elbow room for cleaning.



No need for connection pieceInsert the standpipe into the main sewage pipe. Fits directly on all common sewage pipes, no connector necessary



Simply plug inInsert the downpipe into the extended socket of the standpipe.



Mounted quickly without standpipe capNo standpipe cap is required thanks to the precision-fit transition.



GRÖMO RAINWATER STANDPIPE 0.5 M - WITHOUT CLEANING LID

Nominal size	80	100
Galvanised steel	97301	97303

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!



GRÖMO RAINWATER STANDPIPE 0.5 M - WITH CLEANING LID

Nominal size	80	100
Galvanised steel	97311	97313

 $Fits \ directly \ on \ all \ common \ sewage \ pipes. \ No \ additional \ connector \ or \ standpipe \ cap \ necessary!$

SPARE PART: REPLACEMENT CLEANING LID FOR GRÖMO RAINWATER STANDPIPE

Nominal size	100
Galvanised steel	97491



GRÖMO RAINWATER STANDPIPE 0.5 M - WITH SAFETY OVERFLOW IN THE CLEANING LID

Nominal size	80	100
Galvanised steel	97321	97323

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!



GRÖMO RAINWATER STANDPIPE 1.0 M - WITHOUT CLEANING LID

Nominal size	80	100	120
Galvanised steel	97331	97333	97334

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!



GRÖMO RAINWATER STANDPIPE 1.0 M - WITH CLEANING LID

Nominal size	80	100	120
Galvanised steel	97341	97343	97344

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!

SPARE PART: REPLACEMENT CLEANING LID FOR GRÖMO RAINWATER STANDPIPE

Nominal size	100
Galvanised steel	97491



GRÖMO RAINWATER STANDPIPE 1.0 M - WITH SAFETY OVERFLOW
IN THE CLEANING LID

Nominal size	80	100	120
Galvanised steel	97351	97353	97354

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!

GRÖMO RAINWATER STANDPIPE 1.5 M - WITHOUT CLEANING LID

Nominal size	100	120
Galvanised steel	97363	97364

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!



GRÖMO RAINWATER STANDPIPE 1.5 M - WITH CLEANING LID

Nominal size	100	120
Galvanised steel	97373	97374

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!

SPARE PART: REPLACEMENT CLEANING LID FOR GRÖMO RAINWATER STANDPIPE

Nominal size	100
Galvanised steel	97491

GRÖMO RAINWATER STANDPIPE 1.5 M - WITH SAFETY OVERFLOW
IN THE CLEANING LID

Nominal size	100	120
Galvanised steel	97383	97384

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!

GRÖMO RAINWATER STANDPIPE 2.0 M - WITHOUT CLEANING LID

Nominal size	100
Galvanised steel	97366

 $Fits \ directly \ on \ all \ common \ sewage \ pipes. \ No \ additional \ connector \ or \ standpipe \ cap \ necessary!$

GRÖMO RAINWATER STANDPIPE 2.0 M - WITH CLEANING LID

Nominal size	100
Galvanised steel	97376

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!

SPARE PART: REPLACEMENT CLEANING LID FOR GRÖMO RAINWATER STANDPIPE

Nominal size	100
Galvanised steel	97491

GRÖMO RAINWATER STANDPIPE 2.0 M - WITH SAFETY OVERFLOW
IN THE CLEANING LID

Nominal size	100
Galvanised steel	97386

Fits directly on all common sewage pipes. No additional connector or standpipe cap necessary!



RAINWATER STANDPIPE 1.0 M - WITHOUT CLEANING LID

Nominal size	70	80	100	125	150
Copper		97609 ²	97610 ¹	97611 ¹	
Galvanised steel	97601 ¹	97602 ²	97603 ¹	97604 ¹	97605 ¹

¹ Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe



RAINWATER STANDPIPE 1.0 M - WITH CLEANING LID

Nominal size	70	80	100	125	150
Copper		97631 ²	97632 ¹	97633 ¹	
Galvanised steel	97623 ¹	97624 ²	97625 ¹	97626 ¹	97627 ¹

¹ Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: REPLACEMENT CLEANING LID FOR RAINWATER STANDPIPE

Nominal size	100	125
Copper	97571	
Galvanised steel	97572	97573



RAINWATER STANDPIPE 1.0 M - WITH SAFETY OVERFLOW IN THE CLEANING LID

Nominal size	70	80	100	125	150
Galvanised steel	97645 ¹	97646 ²	97647 ¹	97648 ¹	97649 ¹

¹ Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: CLEANING LID WITH SAFETY OVERFLOW FOR RAINWATER STANDPIPE

Nominal size	100
Galvanised steel	97574

² Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

² Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

² Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

RAINWATER STANDPIPE 1.5 M - WITHOUT CLEANING LID

Nominal size	70	80	100	125	150
Copper			97621 ¹	97622 ¹	
Galvanised steel	97612 ¹	97613 ²	97614 ¹	97615 ¹	97616 ¹

¹ Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

RAINWATER STANDPIPE 1.5 M - WITH CLEANING LID

Nominal size	70	80	100	125	150
Copper			97643 ¹	97644 ¹	
Galvanised steel	97634 ¹	97635 ²	97636 ¹	97637 ¹	97638 ¹

¹ Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: REPLACEMENT CLEANING LID FOR RAINWATER STANDPIPE

Nominal size	100	125
Copper	97571	
Galvanised steel	97572	97573

RAINWATER STANDPIPE 2.0 M - WITHOUT CLEANING LID

Nominal size	100	125	150
Galvanised steel	97690	97694	97698

Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

² Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

² Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

RAINWATER STANDPIPE 2.0 M - WITH CLEANING LID

Nominal size	100	125	150
Copper	97693		
Galvanised steel	97691	97695	97699

Without seal element. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: REPLACEMENT CLEANING LID FOR RAINWATER STANDPIPE

Nominal size	100	125
Copper	97571	
Galvanised steel	97572	97573

RAINWATER STANDPIPE SQUARE 1.0 M - WITHOUT CLEANING LID

Nominal size	100 100
Galvanised steel	97608

Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

RAINWATER STANDPIPE SQUARE 1.0 M - WITH CLEANING LID

Nominal size	100 100
Galvanised steel	97630

Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: CLAMP CAP FOR HEXAGON NUT M8

Nominal size	
Other	97575

SPARE PART: STANDPIPE COVER FOR SQUARE RAIN STANDPIPE

Nominal size	
Stainless steel	97577

RAINWATER STANDPIPE SQUARE 1.5 M - WITHOUT CLEANING LID

Nominal size	100 100
Galvanised steel	97619

Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

RAINWATER STANDPIPE SQUARE 1.5 M - WITH CLEANING LID

Nominal size	100 100
Galvanised steel	97641

Without seal element, with preformed connector, outer diameter 102 mm. Compatible connectors are available for connecting to sewer pipe and acoustic transmission line cast iron pipe

SPARE PART: CLAMP CAP FOR HEXAGON NUT M8

No	minal size	
0	Other	97575

SPARE PART: STANDPIPE COVER FOR SQUARE RAIN STANDPIPE

Nominal size	
Stainless steel	97577

SEALING ELEMENT

Nominal size	70 76	80	100	125	150
Other	97556	97551	97552	97553	97554

RAINWATER STANDPIPE BRACKET WITH THREADED NUT M10

Nominal size	70	80	82	100	120	125	150
Copper	97595	97596		97597		97598	
Galvanised steel	97590	97591	50260	97592	97584	97593	97594

For connecting to SPI dowel, hanger bolt, or thermo stop. Threaded nut, galvanised







RAINWATER STANDPIPE BRACKET WITH STRIKER PIN

Nominal size	70 140	80 140	82 100	100 140	100 200	120 140	125 140	150 140
Copper	97565	97566		97567			97568	
Galvanised steel	97560	97561	50261	97562	97576	97583	97563	97564



SML CAST-IRON PIPE BRACKET WITH THREADED NUT M10

Nominal size	110	
Galvanised steel	51230	

For connecting to SPI dowel, hanger bolt, or thermo stop. Threaded nut, galvanised



SML CAST-IRON PIPE BRACKET WITH STRIKER PIN 140 MM

Nominal size	110
Galvanised steel	51232



DOWNPIPE TO STANDPIPE ADAPTER BOX SHAPE TO ROUND

Nominal size	80 80	100 100
• Zinc	63701	63700

On nominal size 100



CONNECTOR TO PLASTIC PIPE

Nominal size	70	70	100	100	125	125
	70	100	100	125	125	150
Galvanised steel	97675 ¹	97676 ²	97677 ²	97678 ¹	97679 ¹	97680 ²

¹ Seal element available separately

 $^{^{2}\,\,}$ Seal element available separately, connector also fits TML pipe



CONNECTOR TO ACOUSTIC TRANSMISSION LINE PIPE

Nominal size	100 125
Galvanised steel	97672

Seal element available separately, nominal sizes 70/100, 100/100 and 125/150; see "Connector to plastic pipe"

ROOF/CHIMNEY ACCESSORIES – THE ULTIMATE FOR THE ROOF

GRÖMO roof accessories offer everything you need for a secure and reliable connection to the roof. The chimney protection delivery programme also offers convenient solutions that support the chimney.



ROOF ACCESSORIES

Antenna sockets	108
Fans	108
Outlet vents	109
Roof ridge air vents	110
Stud caps	110
Pigeon guards	110

CHIMNEY ACCESSORIES

Chimney hoods	113
Chimney flashings	114
Overhang plug-in frames	115





ANTENNA SOCKET



Nominal size	50	50-55
Zinc	63410 ¹	51200 ²
Copper	61410 ¹	

^{1 2-}piece, with hem



BULL'S EYE ROOF FAN, HALF ROUND



Nominal size	260 160
	90
Zinc	63300
Copper	61300
UGINOX Patina K41	57300

Also available with snow protection upon request



BULL'S EYE ROOF FAN, HALF ROUND, WITH BASEPLATE



Nominal size	300 400
• Zinc	63303
• Copper	61303

 $With \ double-sided \ hem. \ Also \ available \ with \ pipe \ connector \ supports/snow \ protection \ by \ request$



TRAPEZOID ROOF VENTILATOR



Nominal size	200 170 130 60
• Zinc	63302
Copper	61302

Also available with snow protection upon request



TRAPEZOID ROOF FAN, WITH BASEPLATE



Nominal size	300 400
• Zinc	63305
Copper	61305

With double-sided hem. Also available with pipe connector supports/snow protection by request

 $^{^{2}}$ 2-piece, with hem and baseplate made of lead



PITCHED DORMER VENTILATOR, TRIANGULAR, WITH BASEPLATE



Nominal size	300 400
• Zinc	63304 *
• Copper	61304 *

With double-sided hem. Also available with pipe connector supports/snow protection by request



OUTLET VENT WITH CONDENSATION COLLECTOR

Nominal size	87	100	120
• Zinc	62772	62773	62774



OUTLET VENT WITH VENT CAP



Nominal size	80	87	100	120
Zinc	63610	63611	63612	63613
Copper	61610	61611	61612	61613



OUTLET VENT WITH VENT CAP ON BASEPLATE WITH DOUBLE-SIDED HEM

/		
	09	1
(7-1	1
/	\preceq	/

Nominal size	80	87	100	120
Zinc	63618	63619	63620	63621
Copper	61618	61619	61620	61621

Specify roof angle when ordering

^{*} Discontinued item, available only while stocks last



OUTLET VENT WITH VENT CAP ON BASEPLATE WITHOUT HEM



Nominal size	80	87	100	120
• Zinc	63614	63615	63616	63617
Copper	61614	61615	61616	61617

Specify roof angle when ordering



VENT CAP

Nominal size	50	60	76	80	87	100	120	150
Zinc	62760	62761	62762	62763	62764	62765	62766	62767
Copper	60760	60761	60762	60763	60764	60765	60766	60767



VENTILATOR RIDGE UNIT

Nominal size	
Stainless steel	54035

Length 1905 mm



STUD CAPS

Nominal size	30	35
• Zinc	62903	62902
Copper	60903	60902

Packet, 100 pcs



STAINLESS STEEL PIGEON GUARD, SINGLE ROW

Nominal size	1-row
Stainless steel	54168

Length 500 mm for gutter bead and snow guard



STAINLESS STEEL PIGEON GUARD, DOUBLE ROW

Nominal size	2-row
Stainless steel	54169

Length 1000 mm





Nominal size	4-row
Stainless steel	54170

Length 1000 mm



STAINLESS STEEL FASTENING CLIPS FOR SINGLE-ROW PIGEON GUARD

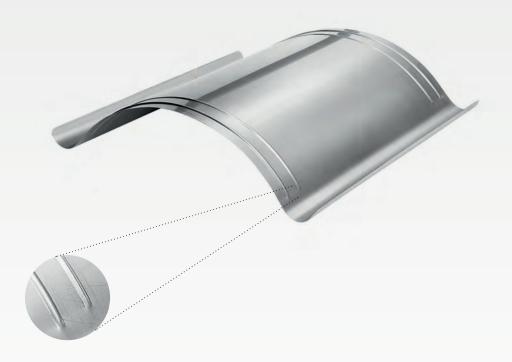
Nominal size	For gutter bead Ø 20	For snow guard
Stainless steel	54167	54166

Use 2 clips per 0.5 m

HEAVEN'S TENT



* The GRÖMO chimney hood



The GRÖMO chimney hood turns every roof into something very special thanks to its elegant, curved shape. The embossed reinforcement beads give the chimney hood an attractive appearance and additional stability. Thanks to the practical fastening set, the hood can be installed quickly and easily. The premium materials used, stainless steel and copper, protect the chimney for a long time.



On the chimney and ready to go

The practical fastening set makes it easy: mark, drill, screw - done.



Joint set replaces tool

The joint set allows the chimney hood to be opened and closed effortlessly.



"NAPOLEON" CHIMNEY HOOD

Nominal size

Stainless ste	el					540	28						
Length	450	500	550	600	650	700	750	800	850	900	950	1000	
450													
500													
550													
600													
650													
700													•
750													
800													•
850													
900													
950													
1000													
1050													•
1100													
1150													
1200													

Metal thickness 1,00 mm

Up to and including 800 mm in length 4 chimney hood feet, from 850 mm length 6 chimney hood feet are required Dimensions are chimney dimensions, the hood is delivered circumferentially about 100 mm larger.



CHIMNEY FEET

Nominal size	Set of 4	Set of 6
Stainless steel	54026	54027

Includes mounting material



JOINT SET

Nominal size

Stainless steel	54025
-----------------	-------

Includes mounting material



CHIMNEY FLASHING

Nominal size	Size 1 320-550	Size 2 500-900	Size 3 800-1400
• Zinc	62775	62776	62777
Copper	60775	60776	60777
Galvanised steel	50775	50776	50777

The measurements given are for the internal dimension's adjustable width. The flashing length can be adjusted for chimneys from 500 to 600 mm (measured at the height of the roof lathing from the bottom to the top of the chimney's edge). The sides of the flashing can also be extended infinitely with the use of extensions



CHIMNEY FLASHING BOTTOM PART (APRON)

Nominal size	Size 1 320-550	Size 2 500-900	Size 3 800-1400
Zinc	62778	62779	62780
Copper	60778	60779	60780
Galvanised steel	50778	50779	50780

The measurements given are for the internal dimension's adjustable width



CHIMNEY FLASHING TOP PART (NECK MOULDING)

Nominal size	Size 1 320-550	Size 2 500-900	Size 3 800-1400
• Zinc	62781	62782	62783
Copper	60781	60782	60783
Galvanised steel	50781	50782	50783

The measurements given are for the internal dimension's adjustable width



RIDGE JOINT

Nominal size	250 250
• Zinc	62784
Copper	60784
Galvanised steel	50784

Compatible with chimney flashing lower part, sizes 1, 2, and 3. Includes: 2 pieces



EXTENSION FOR CHIMNEY FLASHING

Nominal size	500
• Zinc	62786
• Copper	60786
Galvanised steel	50786

Includes: 1 pair. Second piece is identical



OVERHANG PLUG-IN FRAME

Nominal size	Size 1 320-550
• Zinc	62791
Copper	60791

Compatible with chimney flashing size 1. Includes: 2 pairs of corner pieces



EXTENSION/WIDENING FOR OVERHANG PLUG-IN FRAME

Nominal size	600
• Zinc	62785
Copper	60785

For chimney flashings size 2 and 3. Includes: 1 pair

TECHNICAL DATA

OUTLET

DRAINAGE CAPACITY OF THE GRÖMO PLUG-IN GUTTER OUTLET*

Construction	Nominal size	Gutter outlet drainage capacity (I/s):	Pipe drainage capacity (I/s)
	200/60	1.7	2.7
	250/60	3.0	2.7
	250/76	2.9	5.2
	250/80	2.9	5.9
	280/76	4.1	5.2
	280/80	4.1	5.9
	280/87	4.1	7.4
	280/100	4.1	10.7
	333/76	7.4	5.2
Oval	333/80	7.4	5.9
	333/87	7.4	7.4
	333/100	7.4	10.7
	333/120	7.2	17.4
	400/100	14.5	10.7
	400/120	14.5	17.4
	400/150	12.4	31.6
	500/120	17.1	17.4
	500/150	21.1	31.6
	200/60	1.6	2.7
	250/76	2.6	5.2
	250/80	2.4	5.9
	280/80	3.3	5.9
	280/87	3.3	7.4
Box shape	333/100	6.0	10.7
·	400/120	10.8	17.4
	500/150	19.0	31.6
	250/80×80	2.4	8.15
	333/80x80	5.9	8.15
	333/100×100	5.9	14.78
	280/80	3.6	5.9
Diagonal cylindrical	333/100	6.4	10.7
Diagonal conical	280/118	4.0	5.9
	333/139	6.4	10.7
	400/169	13.7	17.4
Oberstdorfer outlet	333/139	7.4	10.7
22.2400. 04.00	280/80	4.3	5.9
Round	333/100	6.9	10.7

^{*} Drainage table for GRÖMO gutter outlets - DIN EN 12056 - Part 3

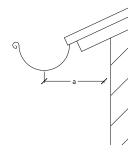
The measurement results were determined by the Technical University of Munich. It has been confirmed that GRÖMO gutter outlets not only fulfil the standard, but exceed it. To guarantee these results, use the gutter section template developed by GRÖMO. You can download these to print out yourself at www.groemo.de or order them free of charge as templates from service@groemo.de.

CUT-TO-SIZE FOR CONICAL DIAGONAL PIPE

	Nominal size	Downpipe connection diameter [mm]	Cut ² wide side [mm]	Cut ² narrow side [mm]
	280	801	395	273
Conical diagonal outlet	333	100	462	335
	400	120	555	398
Oberstdorfer outlet	333	100	462	335

¹ Rainwater downpipes with nominal sizes of 76 and 87 mm are also still common in some regions. The cutting dimensions for the narrow side must be replaced accordingly.

ADJUSTABLE OUTLET LENGTH



Nominal gutter size	Nominal downpipe size	Centre of outlet – centre of downpipe Roof overhang a [mm]	Adjustable outlet length [mm]
		150 – 280	500
200	80	280 – 450	750
280	80	450 – 620	1000
		620 – 800	1250
		150 – 280	50
		280 – 450	750
333	100	450 – 620	1000
		620 – 800	1250
		800 – 980	1500
		150 – 280	500
100	120	280 – 450	750
400	120	450 – 620	1000
		620 – 800	1250

ROOF GUTTERS

MOVEMENT COMPENSATION FOR ROOF GUTTERS

The following constructions or components can be used to compensate for movement in roof gutters:

- Sliding joints at the highest points (high-point sliding joint)
- Rubber elements at every point
- Hoppers or plug-in gutter outlets at the drain point

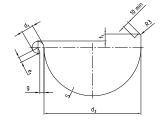
An expansion compensator must be installed every 15 m for suspended gutters up to 500 mm in size. For outside corners or the start of the gutter, half the standard value applies: max. 7.5 m.

For inside corners, a quarter of the standard value applies: max. 3.75 m.

Gutter corners must be designed as fixed points.

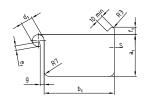
² Cutting dimensions incl. hem allowance for 8 mm hem

ROOF GUTTERS



ROOF GUTTER, HALF ROUND

Nominal size / cutting width	d ₁ [mm]	d ₂ [mm]	e ₁ [mm]	f ₁ [mm]	g [mm]
+1/-2 mm	± 1 mm	+2/-0 mm	± 1 mm	min. [mm]	± 1 mm
200	16	80	5	8	5
250	18	105	7	10	5
280	18	127	7	11	6
333	20	153	9	11	6
400	22	192	9	11	6
500	22	250	9	21	6

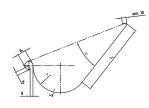


ROOF GUTTER, BOX SHAPE

Nominal size / cutting width	a ₁ [mm]	b ₁ [mm]	d ₁ [mm]	e ₁ [mm]	f ₁ [mm]	g [mm]
+1/-2 mm	± 1 mm	+0/-1 mm	± 1 mm	± 1 mm	min. [mm]	± 1 mm
200	42	70	16	5	8	5
250	55	85	18	7	10	5
280*	-	-	-	-	-	-
333	75	120	20	9	10	6
400	90	150	22	9	10	6
500	110	200	22	-	20	6

^{*} Dimensions not standardised

ROOFTOP GUTTER



Nominal size / cutting width	d ₁ [mm]	e ₁ [mm]	g [mm]	r [mm]	I ₁ [mm]	α [°]
+1/-2 mm	± 1 mm	± 1 mm	± 1 mm	+2/-0 mm	± 2 mm	± 2°
400	20	9	6	63.5	170	31
500	20	9	6	63.5	270	22

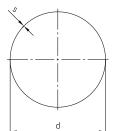
In order to ensure a perfect fit and compatibility with existing gutters and accessories, it is necessary to adhere to the standard shapes and dimensions that go beyond the specifications of DIN EN 612.

MATERIAL THICKNESS (S), HALF-ROUND GUTTER AND BOX SHAPE

Nominal size / Cutting width	Zinc [mm]	Copper [mm]	Galvanised steel [mm]	Stainless steel [mm]	Aluminium [mm]
200	0.65	0.60	0.60	0.40	0.70
250	0.65	0.60	0.60	0.40	0.70
280	0.70 ¹	0.60 ¹	0.60 ¹	0.40 ¹	0.70 ¹
333	0.70	0.60	0.60	0.40	0.70
400	0.80	0.70	0.70	0.50	0.80
500	0.80	0.70	0.70	0.50	0.80

 $^{^{1}}$ Material thickness applies to half round gutter, material thickness for box-shaped gutter not standardised

RAINWATER DOWNPIPE

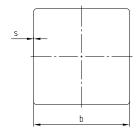


MATERIAL THICKNESS (S), ROUND RAINWATER DOWNPIPES

Nominal size d *	Zinc [mm]	Copper [mm]	Galvanised steel [mm]	Stainless steel [mm]	Aluminium [mm]
60	0.65	0.60	0.60	0.40	0.70
76	0.65	0.60	0.60	0.40	0.70
80	0.65	0.60	0.60	0.40	0.70
87	0.65	0.60	0.60	0.40	0.70
100	0.65	0.60	0.60	0.40	0.70
120	0.70	0.70	0.70	0.50	0.70
150	0.70	0.70	0.70	0.50	0.70

^{*} d = inner pipe diameter, tolerance \pm 1 mm

MATERIAL THICKNESS (S), SQUARE RAINWATER DOWNPIPES



Nominal size b *	Zinc [mm]	Copper [mm]	Galvanised steel [mm]	Stainless steel [mm]	Aluminium [mm]
60	0.65	0.60	0.60	0.40	0.70
80	0.65	0.60	0.60	0.40	0.70
100	0.70	0.70	0.70	0.40	0.70
120	0.80	0.70	0.70	0.50	0.70

^{*} b = inside of square, tolerance $\pm 1 \text{ mm}$

In order to ensure a perfect fit and compatibility with existing rainwater downpipes and accessories, it is necessary to adhere to the standard shapes and dimensions that go beyond the specifications of DIN EN 612.

RAINWATER DOWNPIPE

CONNECTIONS (ACCORDING TO DIN EN 612)

Each manufactured length of rainwater downpipe must be either

- be provided with a wide end (female end) and a narrow end (male end) so that the female and male ends of two manufacturing lengths can be plugged together to form a plug-in connection with an overlap of at least 50 mm, or
- be provided with equally wide ends for connection with loose sleeves.

ACCESSORIES (ACCORDING TO PLUMBING TRADE REGULATIONS ZVSHK)

According to DIN EN 612, accessories must be manufactured in such a way that they fit the associated downpipes and can be inserted approx. 30 mm.

JOINT DESIGNS

Joint design	Zinc	Copper	Galvanised steel	Stainless steel	Aluminium	Joint overlap
Soft soldered	_	*	_	*	_	5
Brazed	-	*		_		3
Folded	*	*	*	*	*	6
Welded	*	*	*	*	*	*

⁼ permitted / - = not permitted
* Depending on the welding process

MATERIALS

ASSEMBLY OF METALS

Metal	Zinc	Copper	Galvanised steel	Stainless steel	Aluminium	• Lead
● Zinc	*	_	*	*	*	*
Copper	_	*	_	*	_	*
Galvanised steel	*	_	*	*	*	*
Stainless steel	*	*	*	*	*	*
Aluminium	*	_	*	*	*	*
● Lead	*	*	*	*	*	*

^{* =} permitted / - = not permitted

METAL WEIGHT BY THICKNESS

Metal	Density [kg/dm³]	0.40 mm [kg/m²]	0.50 mm [kg/m²]	0.60 mm [kg/m²]	0.65 mm [kg/m²]	0.70 mm [kg/m²]	0.80 mm [kg/m²]	1.00 mm [kg/m²]
• Zinc	7.20	_	-	-	4.68	5.04	5.76	7.20
Copper	8.93	-	-	5.35	5.80	6.25	7.14	8.93
Galvanised steel	7.86	-	_	4.71	5.10	5.50	6.28	7.86
Stainless steel	7.90	_	3.95	4.74	5.13	5.53	6.32	7.90
Uginox Patina K41	7.70	3.08	3.85	-	_	-	-	_
Aluminium	2.70	_	-	-	_	1.89	2.16	2.70

ZINC

GRÖMO only uses titanium zinc. This is an alloy of zinc with a proportion of titanium and copper. This alloy composition results in excellent formability, while at the same time giving the material the required strength. Edging, rounding, hemming and profiling — possible without restrictions with titanium zinc. It can also be used to create complex shapes. Titanium zinc is also robust, corrosion-resistant, maintenance-free and sustainable. Titanium zinc has a silvery colour and its texture has the typical zinc structure. Over time, a patina forms, which ensures a maintenance-free surface and long-term protection against weathering.

- Natural material
- Becomes more attractive as it ages due to natural weathering process. The initially silvery, shiny exterior of the titanium zinc transforms into a matt, grey-blue surface over time
- Exceptional durability due to corrosion resistance and the formation of a firmly adhering, non-toxic protective layer under the influence of atmospheric weathering
- Natural erosion very low
- UV-resistant
- Environmentally friendly, 100% recyclable
- High formability, easy to use

Density	Melting point	Length change at 100 K
7.20 kg/dm³	418 °C	2.2 mm/m

According to DIN EN 988

QUARTZ-ZINC

With quartz-zinc, the surface of polished zinc is treated in a chemical process. The result is a pre-weathered zinc surface with a light grey appearance. Its colour resembles the natural patina of polished zinc, its texture is specific to zinc. If you prefer a light grey patina right from the start, install this material in the new build. Quartz-zinc is often used for façade cladding, as patina would form more slowly on polished zinc.

- Harmonises with other mineral building materials
- Particularly suitable for renovations, as quartz-zinc goes well with an older zinc patina
- The colour changes very little over time, but then becomes slightly darker
- Possible staining in areas that are not regularly washed off by rain
- Permanently maintenance-free. Surface is self-repairing in the event of minor scratches
- Natural, very homogeneous surface
- Long service life, simple processing
- Sustainable and environmentally friendly

Density	Melting point	Length change at 100 K
7.20 kg/dm³	418 °C	2.2 mm/m

According to DIN EN 988

ANTHRA-ZINC

With anthra-zinc, the surface of polished zinc is treated in a chemical process. The result is a pre-weathered zinc surface with a dark grey appearance. Its patina is homogeneous, its texture specific to zinc. If you prefer a dark grey patina right from the start, install this material in the new build. Anthra-zinc is often used for façade cladding, as patina would form more slowly on polished zinc.

- Harmonises particularly well with slate and other mineral building materials as well as wood
- Particularly suitable for renovations, as anthra-zinc goes well with an older zinc patina
- May lighten slightly over time. The colour change depends on the type of environment (near the coast, snowy areas, etc.) and application (roofing, façade, roof drainage)
- Possible staining in areas that are not regularly washed off by rain
- Simple processing
- Sustainable and environmentally friendly

DENSITY	Melting point	Length change at 100 K
7.20 kg/dm³	418 °C	2.2 mm/m

According to DIN EN 998

COPPER

Copper impresses with its high corrosion resistance and impressive durability. Over decades, it defies the effects of the weather and develops a protective patina that is both aesthetically pleasing and adds a green elegance to copper buildings. This robust material is ideal for sophisticated roof constructions and blends in with all architectural styles — from modern to classic. As a fully recyclable material, copper offers ecological advantages, as recycling requires only a third of the energy needed for new production. Despite the higher purchase costs, it pays for itself through minimal maintenance and a long service life. However, copper should not be combined with other metals, as this can lead to corrosion.

- Long service life due to corrosion resistance and the formation of a firmly adhering, non-toxic protective layer under the influence of atmospheric weathering
- No corrosion on the back
- Good machinability, even when executing difficult details
- No impairment of formability, even at low temperatures
- Highly cost-effective
- Adapts harmoniously to other building materials thanks to the natural patina surface
- Becomes more attractive as it ages due to natural weathering process

DENSITY	Melting point	Length change at 100 K
8.93 kg/dm³	1083 °C	1.7 mm/m

According to DIN EN 1172

GALVANISED STEEL

Galvanised steel offers a cost-effective and durable solution for roof drainage. The hot-dip galvanising makes it resistant to corrosion and gives it a service life of up to 40 years. The discreet, metallic grey look goes well with modern and functional buildings. For optimum durability, galvanised steel should not be used in contact with copper or aluminium to avoid corrosion. The material is easy to clean, requires only occasional checks for damage and is fully recyclable.

- Good value
- High mechanical stability
- High load capacity
- Can be soldered
- Reusable
- Recyclable
- Low tendency to deformation and wave formation
- · Low susceptibility to installation and construction errors
- Can be coated in many different paints

DENSITY	Melting point	Length change at 100 K
7.86 kg/dm³	≈ 1500 °C	1.2 mm/m

According to DIN EN 10346

TESTA DI MORO

Galvanised steel in "Testa di Moro" combines high functionality with an exclusive look. The elegant, dark brown coating provides additional protection against corrosion and gives gutters and downpipes a long-lasting colour intensity, ideal for Mediterranean, classic and modern architectural styles. This low-maintenance material only requires occasional cleaning and offers an aesthetic alternative to conventional metals — durable, UV-resistant and attractively priced for sophisticated roof drainage systems.

For further properties and advantages, see "Galvanised steel".

Density	Melting point	Length change at 100 K
7.86 kg/dm³	≈ 1500 °C	1.2 mm/m

According to DIN EN 10169

STAINLESS STEEL

Stainless steel is the premium solution for roof drainage systems and impresses with maximum corrosion resistance and extreme durability. The material withstands all weather conditions and remains sturdy and rust-free for decades. Its elegant, silvery-glossy surface blends harmoniously into modern and classic architecture and retains its high-quality appearance for a long time. Stainless steel is also easy to clean: Regular cleaning is sufficient to remove deposits. The material is fully recyclable and therefore an environmentally friendly choice. Investing in stainless steel pays off in the long term, as it requires hardly any maintenance due to its stability and has an outstanding service life.

Processing advantages:

- No coating
- No material abrasion
- High material strength
- Enormous durability
- No cold brittleness
- Maintenance-free
- 100% recyclable
- Environmentally friendly and ecologically safe

Application advantages:

- Can be processed in any weather
- Can be combined with other metals
- No risk of condensation
- Thermal expansion only 1.6 mm/m x 100 K
- Suitable for low roof pitches
- Low weight
- Suitable for warm and cold roof designs
- Algae and root resistant
- Easy to clean with soap and water or just rain outdoors

Density	Melting point	Length change at 100 K
7.90 kg/dm³	≈ 1500 °C	1.6 mm/m

According to DIN EN 10088-1

UGINOX PATINA K41

UGINOX PATINA K41 is an advanced material for roof drainage systems that combines aesthetic design with outstanding functionality. Over time, this special stainless steel surface develops an elegant grey patina that allows it to be harmoniously integrated into various architectural styles. Thanks to its high corrosion resistance, UGINOX PATINA K41 remains sturdy for years and provides reliable protection against the effects of weathering. The material is extremely durable and requires minimal maintenance.

In addition, UGINOX PATINA K41 is fully recyclable and therefore contributes to sustainability in the construction industry.

For more properties and advantages, see "Stainless steel"

Density	Melting point	Length change at 100 K
7.7 kg/dm³	≈ 1500 °C	1.1 mm/m

UGINOX TOP 304

UGINOX TOP 304 is a high-quality stainless steel that is ideal for roof drainage systems. With its excellent corrosion resistance and durability, this material offers reliable protection against the weather and contributes to the long-term functionality of the roof drainage system. The matt surface gives the gutters and downpipes a modern, aesthetic appearance that integrates seamlessly into various architectural styles. In addition, the material is easy to clean and only requires occasional cleaning to maintain its pristine appearance. UGINOX TOP 304 is fully recyclable, making it an environmentally friendly choice for sustainable construction projects. For more properties and advantages, see "Stainless steel"

Density	Melting point	Length change at 100 K
7.9 kg/dm³	≈ 1500 °C	1.6 mm/m

According to DIN EN 10088-1

ALUMINIUM

Aluminium is a versatile and lightweight material that is ideal for roof drainage systems. It impresses with its high corrosion resistance, which can be further enhanced by a special surface treatment. As a result, aluminium remains durable and functional even in adverse weather conditions. The surface of aluminium can be available in different colours and surface textures, allowing aesthetic adaptation to different architectural styles. Aluminium is also extremely easy to clean and only requires occasional cleaning to maintain its attractive appearance.

- Natural material
- Low weight
- High stability
- Easy to use
- High elasticity and excellent formability
- Cost-effective
- Almost infinite colour options thanks to surface finishing (coating or anodising)
- Complex constructions possible with welding, soldering, riveting or gluing
- Durable and rot-proof
- Environmentally friendly
- Shatter-proof
- 100% recyclable without loss of quality and therefore a positive energy balance as a material in the long term

Density	Melting point	Length change at 100 K
2.70 kg/dm³	659 °C	2.4 mm/m

GENERAL TERMS AND CONDITIONS OF SALE OF GRÖMO GMBH & CO. KG

Valid since 01.01.2025

1. Scope, general points

- 1.1. Our General Terms and Conditions for sales (GTC) apply to all our business relationships with our customers where these are enterprises (§ 14 of the German Civil Code BGB), legal entities of bublic law institutions or special asset funds under public law within the meaning of § 310 Chapter 1 BGB. They apply to the sale of movable items (goods) by us, regardless if the goods were manufactured by ourselves or procured from suppliers.
- 1.2. Our GTC apply exclusively to all business transactions between our customers and ourselves. We will not recognise General Terms and Conditions of the customer which contradict or deviate from our GTC unless we have expressly agreed, at least in text form, to their validity. Our GTC will also apply if we should perform without reservation for the customer even though we are aware of General Terms and Conditions of the customer which contradict or deviate from our GTC.
- 1.3. Unless otherwise agreed, our GTC in the version in force at the time of the order will apply as a framework agreement for future equivalent contracts without any requirement on our part to refer to them in every individual case.
- 1.4. Individual agreements made with the customer in individual cases (including collateral agreements, supplements and amendments) will in any case take precedence over these GTC. Subject to proof to the contrary, the content of such agreements will be governed by a contract, at least in text form, or by our confirmation, which must at least be in text form.

2. Conclusion of contract, trademarks, logos

- 2.1. Our offers are subject to confirmation and non-binding. This shall also apply if we have provided the customer with catalogues, technical documentation (e.g. drawings, plans, calculations, costings) and product descriptions or documents in any form whatsoever to which we reserve ownership rights and copyrights.
- **2.2** The order of the goods by the customer represents a binding contractual offer to which the customer is bound for 3 calendar weeks. The purchase contract will become effective only after we have sent an order confirmation in text form. The shipping of the goods or dispatch of the invoice will have the same legal effect in this regard as the dispatch of the order confirmation.
- 2.3. The use of our brand names, logos or photos and representations of Grömo products on the Internet or in other electronic or digital communication networks or in the form of television or radio transmissions or in print media requires an additional agreement with us concerning such use, at least in text form.

3. Prices, price adjustment, minimum order value

- **3.1.** The prices in the current price list apply. The previous price lists will cease to apply with the publication of a new price list. Should we make an offer pursuant to section 2.1 the prices shown therein will apply.
- 3.2. If more than 4 months should elapse between the conclusion of the contract and delivery, and the market prices for raw materials, particularly zinc, copper and aluminium, should increase or decrease in this period, our price lists will apply, taking into consideration the current market prices for raw materials at the point of delivery. If this should result in an increase in the current total price of 20% or more above the original total price, the customer will have the right to withdraw from the contract. This right must be exercised immediately, at least in text form, after notification of the price increase.
- **3.3.** In the case of an order value of less than €200.00 net, an additional processing fee of €30.00 net will be charged.
- 3.4. All prices are quoted "ex works" Marktoberdorf (EXW according to Incoterms 2020).
- **3.5.** VAT at the statutory rate is not included in our prices. It will instead be shown separately on the invoice at the rate in force on the invoice date.

4. Delivery deadlines, impediments to delivery, urgent deliveries, partial deliveries, returning loaned pallets and packaging

- 4.1. Delivery is "ex works" Marktoberdorf (EXW according to Incoterms 2020). At the request and expense of the customer, we will ship the parts to another destination (sale by delivery to a place other than the place of destination). Unless otherwise agreed, we will be entitled to determine for ourselves the method of despatch (in particular the transport company, despatch route, packaging). A transport insurance policy can be concluded at the customer's request and expense.
- **4.2.** Unless the delivery is to be carried out immediately, the delivery deadline will be announced in the order confirmation in accordance with clause 2.1. Should the customer be required to collaborate with us, the delivery period will not begin until the customer has fulfilled its obligations.
- 4.3. If a binding delivery date has been agreed, this deadline will be extended appropriately in the event of force majeure of any kind and of disruption to operations, traffic or dispatch, fire dam-

age, floods, shortages of labour, energy, raw materials or auxiliary materials, lawful strikes and official decrees for which we cannot assume liability, or any other events for which we cannot assume liability which may impair, delay, prevent or render unreasonable production, dispatch or consumption. In such cases, we will inform the customer immediately and, at the same time, provide a new anticipated delivery date. If the disruption should cause the delivery to be delayed by more than eight weeks, both parties will be entitled to withdraw from the contract. We will immediately reimburse the customer for any consideration previously paid by it.

Other reasons for which we are not responsible within the meaning of the previous section include the failure on the part of our suppliers to deliver to us on time.

- **4.4.** Express shipments will be made only if expressly requested by the customer, who will bear the costs of said shipments. This also applies to all other types of shipping expressly requested by the customer.
- **4.5.** We are entitled to dispatch partial shipments. Any subsequent shipments will be sent carriage-free and without charge for packaging materials.
- **4.6.** Loaned pallets will be taken back free of charge by the commissioned haulage companies. The disposal of packaging material will be carried out by INTERSEROH Dienstleistungs GmbH. This company assumes responsibility on our behalf in Germany and Austria for the sorting and marketing of packaging for the purpose of recycling pursuant to statutory packaging laws.

5. Warranty, complaints, planning services and returns

- **5.1.** In the event of material defects and defects of title (including wrong and short delivery as well as improper assembly or faulty assembly instructions), the rights of the customer will be governed by the statutory provisions, unless otherwise stipulated below: In all cases, the special statutory provisions on the sale of consumer goods (§§ 474 ff BGB) and the customer's rights arising from separately issued guarantees remain unaffected.
- 5.2. The basis of our liability for defects is above all the agreement reached on the quality of the goods. All product descriptions and details which are the subject of the individual contract or which were made public by us (in particular in catalogues or on our Internet homepage) at the time of the conclusion of the contract will be deemed to be an agreement on the quality of the goods.

Insofar as the quality has not been agreed, the legal regulation will be used to assess whether or not a defect exists (§ 434 (3) BGB). However, we do not assume any liability for public statements made by the manufacturer or other third parties (e.g. advertising statements) which the customer has not pointed out to us as being decisive for its purchase.

- 5.3. Subject to clause 5.4., the customer's claims for defects presuppose that it has complied with its statutory obligations to inspect and give notice of defects (§§ 377, 381 HGB). Complaints on the grounds of recognisable defects, incorrect shipments or deviations from the agreed quantify must be reported to us immediately, at least in text form, and, at the latest, within fourteen calendar days of receipt of the goods. In the case of building materials and other goods intended for installation or further processing of some other kind, an inspection must always be carried out immediately prior to such installation or further processing. Concealed defects must be reported to us immediately, at least in text form, within fourteen calendar days of their discovery. If the customer should fail to properly inspect the goods and/or give notice of defects, our liability for any defect which has not been reported at all or in a timely manner or in the due form will be excluded in accordance with the statutory provisions. In the case of goods intended for assembly, mounting or installation, this shall also apply if the defect only became apparent after the corresponding processing as a result of the breach of one of these obligations; in this case, in particular, the customer shall have no claims for reimbursement of corresponding costs ("removal and installation costs"). Clause 5.5 remains unaffected.
- 5.4. For special productions, the customer must declare acceptance to us, at least in text form, immediately after delivery; in such a case, section 5.3 will not apply. We reserve the right to set the customer a suitable deadline for acceptance. If it is not possible for the customer to adhere to this deadline for reasons for which it is not responsible, a suitable subsequent deadline must be set. Failure by the customer to accept the goods within the aforementioned deadlines will be deemed equivalent to acceptance. Acceptance cannot be refused on the grounds of insignificant defects, particularly industry-standard deviations in respect of colour, weight and quantity. Submit complains at the point of acceptance, it will no longer be entitled to submit complaints concerning defects which would have been recognisable at the point of acceptance.
- 5.5. The customer is not permitted to further process, install or sell goods in respect of which a defect complaint has been submitted or goods which have not been accepted until the complaint has been clarified or acceptance has taken place. We must be given the opportunity to choose either to inspect the affected goods on site or to have them returned to us. Clause 5.3 remains unaffected.
- 5.6. Excluded from warranty are any defects/damage resulting from normal wear and tear, improper handling or use, misuse, faulty assembly or repair. The same applies to defects which only negligibly reduce the value of the goods or impair their suitability for use. In particular, tolerances customary in the industry, deviations in colour, weight and quantity as well as the consequences of natural weather influences do not constitute a defect. If we carry out planning or calculation services at the customer's request, especially for gutters, or make recommendations or offer advice, these will be non-binding and subject to correction. These must in any case be verified by an expert (architect, engineer, etc.).

Furthermore, we are generally not liable for defects that the customer is aware of or is grossly negligent in not being aware of when the contract is concluded (§ 442 BGB).

- 5.7. In the event of justified and timely complaints, we will, at our discretion, either remedy the defect (rectification of defects) or deliver a defect-free item (replacement delivery) within the scope of subsequent performance. Subsequent performance does not include the dismantling, removal or disassembly of the defective item or the installation, attachment or assembly of a defect-free item if we were not originally obliged to perform these services; the customer's claims for reimbursement of corresponding costs ("dismantling and assembly costs") remain unaffected, subject to other provisions in these GTC (in particular 5.3). Our right to refuse subsequent fulfilment under the statutory conditions remains unaffected.
- 5.8. The customer must give us the time and opportunity necessary for the subsequent performance owed and, in particular, hand over the rejected goods for inspection purposes. In the event of a replacement delivery, the customer must return the defective item to us in accordance with the statutory provisions.
- 5.9. If a customer actually has a claim for defects, we will, in accordance with the statutory provisions, bear or reimburse the costs necessary for the purpose of inspection and subsequent performance, in particular transport, travel, labour and material costs as well as any dismantling and installation costs. Otherwise, we will be entitled to claim from the customer compensation for any costs arising from the unjustified request to remedy the defect (in particular inspection and transport costs), unless the absence of a defect was not apparent to the customer. 5.7. sentence 2 remains unaffected.
- **5.10.** If subsequent performance should fail or a reasonable period to be set by the customer for subsequent performance expire fruitlessly or not be mandatory pursuant to the statutory provisions, the customer may withdraw from the contract or reduce the purchase price. In the case of an insignificant defect (cf. section 5.6.), however, there is no right of withdrawal.
- **5.11.** Claims of the customer for reimbursement of expenses in accordance with § 445a (1) BGB are excluded, unless it is a sale of consumer goods (§§ 478, 474 BGB). Claims of the customer for damages or reimbursement of futile expenses (§ 284 BGB) shall only exist in accordance with the following clause 6, even in the event of defects in the goods.
- **5.12.** Warranty claims expire in five years; for specially marked products, the date of expiry is 12 months from receipt or acceptance of the goods.
- **5.13.** The return of goods must be coordinated with us in advance for the purpose of efficient handling. Freight collect shipments and shipments of which we have not been notified in advance and to which we have not agreed will not be accepted.

6. Liability

- **6.1.** Unless otherwise stated in these GTC and the following provisions, we shall only be liable for damages, irrespective of the legal grounds, in the event of wilful intent or gross negligence, including wilful intent or gross negligence on the part of our representatives or vicarious agents.
- 6.2. However, we will be liable in accordance with the statutory provisions if we culpably violate an essential contractual obligation (an obligation whose fulfilment makes the proper execution of the contract possible in the first place and on whose compliance the contractual partner regularly relies and should be able to rely); in this case, however, the liability for damages will be limited to the foreseeable, tvoically occurring damage.
- **6.3.** Liability for culpable damage to life, limb and health is unaffected in all cases; the same applies also to mandatory liability pursuant to the German Product Liability Act and to the extent that a defect was maliciously concealed or a warranty offered for the condition of the goods.

7. Payment, offset payments, right of retention, interest

- 7.1. In principal, payment is due immediately upon receipt of the invoice without any deductions. We reserve the right initially to require payment in advance or COD for shipments to unknown customers.
- 7.2. Payment by cheque is conditionally acceptable subject to the successful redemption thereof. Bills of exchange are not acceptable as means of payment.
- **7.3.** The customer may offset payments to us against receivables owed to it only in the case of undisputed debts or debts which have been upheld by a final and absolute court ruling or in whose case a ruling is expected imminently. The same applies to the customer's right of retention. The reciprocal rights of the buyer in the event of defects to the goods are unaffected.
- **7.4.** Late payment by the customer will entitle us in accordance with \S 247 BGB to charge default interest in the amount of 9 % above the applicable base rate.

8. Retention of title

- **8.1.** Items purchased will remain our property until all payments arising from the business relationship between Grömo GmbH & Co. KG and the customer have been received.
- **8.2.** In the event of a breach of contract by the customer, especially default on payment, and after having set a reasonable deadline for payment, we will be entitled to take back the goods subject to retention of title. Taking back the goods will constitute our withdrawal from the contract. After the recovery of the goods, we will be permitted to dispose thereof, and the proceeds resulting

from that disposal, less reasonable disposal expenses, will be offset against the customer's liability. The expense involved in returning the goods to us will be borne by the customer.

- **8.3.** The customer must handle with care the goods subject to retention of title. It must sufficiently insure said goods at replacement value against fire and water damage and theft.
- 8.4. The customer has the right to resell the goods subject to retention of title in the course of its normal business activities, provided that it meets the obligations arising out of the business relationship with us in due time. However, it may not pledge the goods subject to retention of title or assign them by way of security.

The customer hereby assigns to us here and now all of its claims and rights arising from the resale of the goods subject to retention of title, as well as those claims of the customer with respect to the goods subject to retention of title which may for other legal reasons be asserted against its own customers or third parties (especially claims from unauthorised actions or for insurance payments), including all balance claims from current accounts. We hereby accept the assignment. The customer may on its own account and in its own name collect for us the receivables assigned to us until such time as we revoke its authorisation to do so.

Our right to collect these receivables ourselves is not affected by this; however, we will not assert the claims ourselves or revoke the direct debit authorisation as long as the customer duly meets its payment obligations. However, if the customer acts in breach of contract, we can require it to inform us of the assigned claims and the respective debtors, to notify the respective debtors of the assignment and to hand over to us all documents and provide us with all the information we need to assert the claims.

- 8.5. In the event of seizure of the goods subject to retention of title or other actions by third parties, the customer must inform those third parties of our ownership of those goods and notify us immediately, at least in text form, so that we can enforce our rights of ownership. Should the third party not be capable of reimbursing us for the court or out-of-court costs incurred in this context, the customer will be liable for any losses we sustain.
- **8.6.** We hereby commit at the request of the customer to releasing the collateral due to us pursuant to the above provisions as and when the realisable value of the collateral held by us exceeds that of the receivables to be secured by more than 10%. The choice over the collateral to be released remains with us.

9. Place of fulfilment, place of jurisdiction, contractual language, partial invalidity

- 9.1. The place of fulfilment for all duties resulting from the contractual relationship is Marktoberdorf.
- 9.2. If the customer is a merchant within the meaning of the German Commercial Code, a legal entity under public law or a special asset fund under public law, the exclusive and international place of jurisdiction is Marktoberdorf, where our headquarters are located, for all disputes resulting directly or indirectly from the contractual relationship. We also have the right to open proceedings at the place of general jurisdiction of the customer. Overriding statutory provisions, in particular regarding exclusive responsibilities, remain unaffected.
- $\textbf{9.3.} \ \ \text{The law of the Federal Republic of Germany applies. German international private law and the UN Convention on Contracts for the International Sale of Goods (CISG) are excluded.}$
- **9.4.** Even if the customer is in possession of a non-binding translation of these GTC into another language, the German version alone will be authoritative.
- 9.5. Should the customer supply us with data related to persons, the data required to process the business transaction will be collected, processed, stored and passed on to other affiliated companies in the context of order processing and, if necessary, to partner and service companies. With regard to the detailed rules for processing data, we refer to our data protection regulations at www.groemo.com/de/footer/datenschutz.
- 9.6. If individual provisions of these GTC or the business transaction should be or become invalid, the remainder of the provisions will be unaffected. Any invalid provision is to be replaced by that valid and permissible provision which most closely corresponds with the invalid provision in terms of its meaning and purpose.

Grömo GmbH & Co. KG Johann-Georg-Fendt-Strasse 38 D-87616 Marktoberdorf, Germany

INDEX

A					
Adapter cone	78	F		M	
Adjustable outlet	49	Fan	108	Mounting bracket	93
Antenna socket	108	Fascia bracket	39	- for LED downpipe lighting	93
Articulated elbow	65	Flat-roof branch	74		
		Flat roof hopper	50	0	
В				Oberstdorfer outlet	47
Balcony branch	76	G		Odour trap	74
Baseplate		Gutter connector	39	Outlet spout	49
Bead		Gutter corner	29	Outlet vent	109
Bead trim	37	Gutter end cap	33	Overhang plug-in frame	115
Blind rivet	93	Gutter expander	37		
- for LED mounting bracket	93	Gutter extension	49	P	
-		Gutter quarter sphere	35	Pigeon guard	110
C				Pipe bracket	
Chimney feet	113	Н		Pipe branch	
Chimney flashing		Halfbead	87	Pipe connector	
Chimney hood		Hanger bolt		Pipe corner elbow	
Connecting sleeve		Hopper		Pipe elbow	63
- for LED downpipe lighting		- conical		Plug-in gutter end cap	
- for LED downpipe lighting		-Design	55	Plug-in gutter outlet	
Connection cable		- Flat roof	50	0 0	
- for LED downpipe lighting	93	- Flat roof cubic	52	R	
Connection sleeve		- Flat roof design	52	Rain barrel	73
Connector	104	- Flat roof half round	52	Rainwater pipe flap	
- to plastic pipe	104	- Flat roof small	50	Rainwater standpipe	
Cornice box gutter	49	- flush	58	Reducer	
- for cornice box gutter	49	- Funnel shape	58	Ridge joint	
Cover	92	- hexagonal	57	Ring bolt	
- for LED downpipe lighting	92	- Interior corner	58	Rooftop gutter end cap	
		- long	57	ricortop gattor ona cap	
D		- round	59	S	
Diagonal outlet for eaves	46	- square		Sealing element	102
Downpipe bracket		- stabilised	57	Silicone protective cap	
- for LED downpipe lighting	92				
Downpipe branch		L		- for LED downpipe lighting Sliding sleeve	
Downpipe lighting		Leaf catcher	73	SML cast-iron pipe bracket	
Downpipe stopgap		Leaf guard	41	Soldering outlet	
		Leaf sieve	41	=	
E		Leaf trap	74	SPI pipe bracket plug	
Elbow	63	LED downpipe lighting	92	Square pipe elbow	
Extension		Linear light	92	Standpipe	
- for chimney flashing		-for LED downpipe lighting	92	- GRÖMO	
Extension/Widening				- square	
Excellently * videling	110			- Standard	100

Standpipe bracket	103
Standpipe cap	80
STG pipe bracket support	87
Storm clip	41
Stud cap	110
Swan neck	65
T	
Thermo stop	85
TPE-Seal	
V	
Vent cap	110
Ventilator ridge unit	
W	
Water collector	7´
Water distributor	73
Watertight inflow	

IN GOOD SHAPE *



* DUOFALZ sheet metal strips and cut plates

NOW IN 4 NEW COLOURS!

	SURFACE	TX/SX
	Anthracite (RAL 7016)	*
NEW	Jet black (-RAL 9005)	*
NEW	Dark grey (-DB 703)	* 1
NEW	Grey aluminium (-RAL 9007)	*
	Light grey (-RAL 7005)	*
NEW	Silver metallic (-RAL 9006)	*
1	O White (-RAL 9002)	*
	Testa di Moro (-RAL 8019)	*
	Moss green (BAL 6005)	*
	Brick red (-RAL 8004)	*
	Oxide red (RAL 3009)	*
		CARL STATE STATE OF

FRONT

TX coating, 30 µm

BACK

Same colour SX coating, 25 µm

CARRIER MATERIAL

Aluminium 0.7 mm





The DUOFALZ aluminium sheet metal strips and cut plates have been specially developed for use on roofs and facades. Alloying, coating and elasticity are optimised for use in sheet metal technology and guarantee the best possible processing results.

DUOFALZ can be used on both sides and combines the two surfaces, SX and TX, in one product. DUOFALZ thus offers the greatest possible flexibility as well as a wide range of applications!



HIGHLY FLEXIBLE



EXTREMELY WEATHER-RESISTANT



LIGHTWEIGHT



EASY PROCESSING



STRIP WIDTH 500, 650, 1000 mm



SHEET SIZES 1000 x 2000/3000 mm

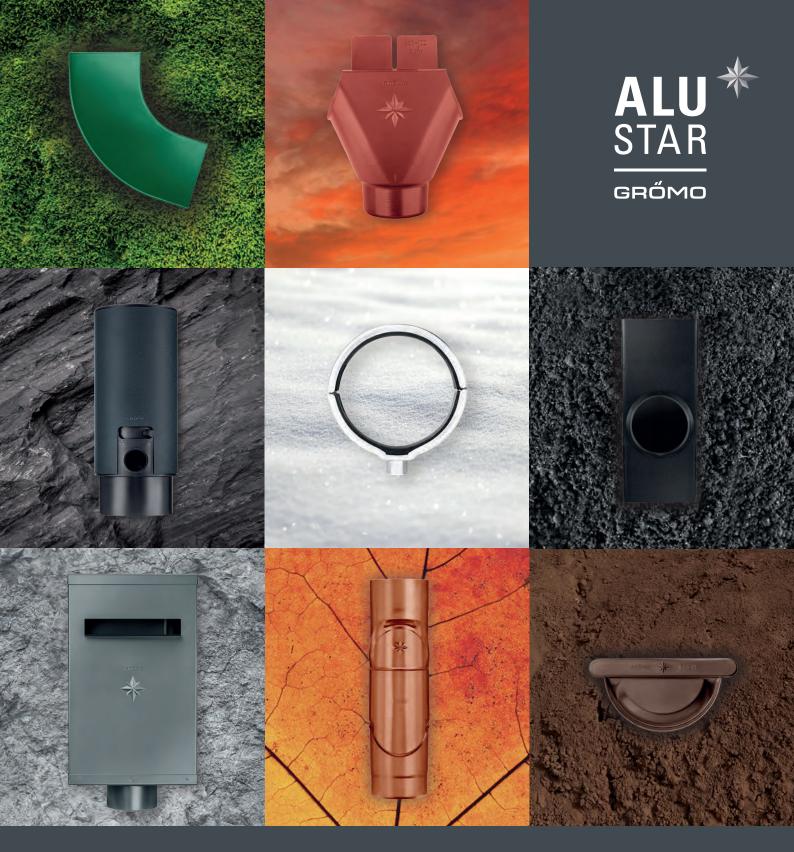


MATERIAL QUALITY EN AW 3005 H41 (fold quality)



WEIGHT 1,89 kg/m²

Detailed warranty conditions can be found on our website at www.groemo.com.



INSPIRED BY NATURE *



The coloured aluminium roof drainage system

Nature in the Allgäu inspires us to great creative freedom. With GRÖMO ALUSTAR, you can choose between eight beautiful natural colours or an additional 206 RAL custom colours. The surfaces are matt textured or silk gloss. GRÖMO ALUSTAR features the highest quality and accuracy of fit; it is durable and lightweight.

