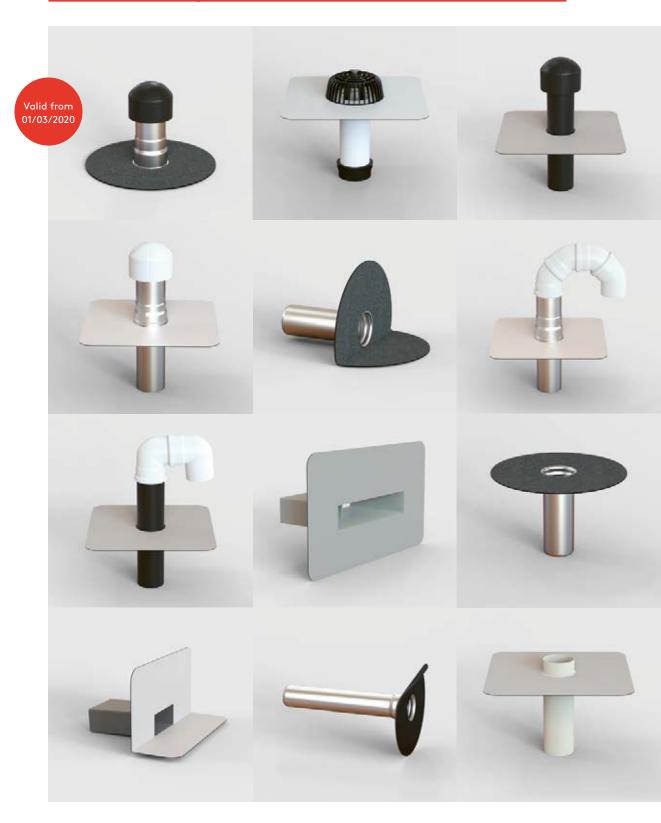
# Product range



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#### Calculation Service

Free calculation service at E-mail technik@bst-gmbh.de

# The Pioneer. Flat roof accessories since 1962.





#### MANUFACTURING

We manufacture the majority of our products, particularly the plastic components, ourselves here at b/s/t.

 $\downarrow$ 

# Three generations and more than 50 years of company history

THE MANAGEMENT TEAM
Hans-Jürgen Koch and his two sons,
Sebastian and Johannes Koch.







FAST AND SECURE
Built-in components from b/s/t
come ready fitted with connecting
sleeves to match the roof sealing.

# b/s/t. The pioneers. Flat roof accessories since 1962.

THE MANAGEMENT TEAM: HANS-JÜRGEN KOCH, JOHANNES AND SEBASTIAN KOCH



HJK In the 1920s, my grandfather made paints, seals and mastics from tar and bitumen. My father set up the business at Rimsting am Chiemsee in 1948. In 1952 we were the first to have the idea of replacing a bitumen roof with PVC roofing strips. We started by testing the seals on railway cars and under various climate conditions; after about 10 years, we found we needed to design accessories for a functioning flat roof too. Our products were simple, technically sound and were proven to work. The foundations of b/s/t were laid.

#### In the 1950s, flat roofs were all the rage ...

JK That's right, flat roofs expressed an avant-garde architectural language of forms. When it came to making accessories for flat roofs, my grandfather was a real pioneer.

#### Do you feel like you're pioneers too?

JK We've always been pioneers – innovation runs in our family. Our great-grandfather originally designed cars. Our grandfather revolutionised the flat roof seal. As well as developing b/s/t further, our father shaped the textile architecture branch with our sister company, Koch Membranen GmbH Kunststofftechnologie. As his sons, our role is to now ensure that this family history continues over the years and generations to come.

#### What is it exactly that accessories do in a building?

HJK Our products may look plain and have little impact on design in most cases, but they are extremely important in terms of their function – that is, solving the critical issues in flat roof sealing. While accessories are only a small part of a building, the consequences for the whole building can be disastrous if they go wrong. Which is why quality is always paramount as far as we're concerned.

#### What does the future hold for b/s/t?

SK The characteristic features of our quality will remain: simple, flexible, individualised, hand-made, high-quality products in tandem with a reliable service in which we strive to meet tight deadlines and strengthen our regional networks. Moreover, we will be integrating the benefits presented by the younger generation: new ways of communicating, cutting-edge technology, optimised procedures and perhaps even the latest innovative product development soon.





† HANS-JÜRGEN KOCH

SEBASTIAN UND JOHANNES
KOCH







# Recognising necessities

SALES

#### What can b/s/t's customers expect from you?

We offer our customers a comprehensive range of accessories for their specific flat roof. Every product is customised. Our clients are based in 24 countries across Europe. We work with local sales partners who speak the relevant language and are conscious of the specific needs of that country.

#### How does your 24-hour service work?

We manufacture the majority of our products in line with the specific requirements of each respective project here in-house. When required and providing it is technically feasible, we deliver within 24 hours. We know that timing can be very critical at construction sites at times. With this in mind, we do our utmost to tailor our production to meet our customers' requirements.

#### Service means ...

... offering customers exactly what they need – not necessarily always what they want. It's our job to ascertain the subtle difference between these two things. It's an important step in guaranteeing quality.



# Simple but functional

TECHNOLOGY

#### What's so special about your products?

Most of our products come about as a result of practical use and are simple but functional. Each fitted part comes with a connecting sleeve, so our customers can work faster and more surely. We're known in the industry for special solutions when it comes to working with plastics. Even our competitors recommend us.

#### What are your customers' technical requirements?

We help them by providing technical support with guidelines for use and standards, calculations for draining flat roofs or holding roof seals safely in place. Dimensioning drainage is an art in itself; getting the results wrong can be dangerous. That's where our expert knowledge really comes in to play.

#### How would you describe your production processes?

We manufacture the majority of our products, above all the plastic components, here in-house. Semi-finished materials are combined to create a completed product. Most are handmade by specialists. Our team is highly versatile and experienced.



→ MICHAEL ZIMMERMANN

#### QUICKLY AND SAFELY

b/s/t built-in parts are already provided with a connecting collar corresponding to the roof sealing.



← MARKUS MAYER

# Mastering craftsmanship

PRODUCTION



#### **CUSTOMISED PRODUCTS**

We take semi-finished materials and combine them to create a customised product.





QUALITY ASSURANCE
We use specialist processing
machines, we are highly
quality-conscious and we put
in place stringent quality
control measures in order to
guarantee the high standards
we place on our products.

# Personal support and service for professional planning and implementation of your Flat Roof solutions



- → DRAINAGE CALCULATIONS
- → SNOW GUARD CALCULATIONS
- → SUCTION SECURING CALCULATIONS
- → SPECIAL SOLUTIONS
- $\rightarrow$  SOLAR SUPPORT CALCULATIONS



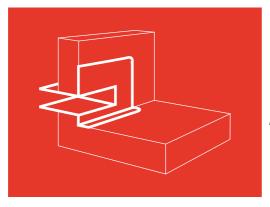
#### Free calculation service

We offer a free calculation service for emergency drainage, suction protection, snow guard systems and much more.



#### Personal technical advice

If you have any technical questions about b/s/t flat roof accessories or if you have any questions about our calculations, our technical team will be happy to assist you.



#### Online calculation tooll

With the online calculation tool you can quickly and easily determine the discharge capacity of round and rectangular b/s/t gargoyles and emergency overflows.

You will find the calculation tool under "Service" at www.bst-gmbh.de

1/	Flat Roof Vents	
2/	Cable Cowls	
3/	Flat Roof Drains	;
4/	Parapet Drains/	<b>Emergency Overflow Drains</b>
5/	<b>Accessory Parts</b>	
6/	Fastening Syste	m
		Fastening System
		Lightning Protection
		Solar Panel Fastening
		System
7/	Fall Protection S	Systems
		Fall Protection
		Pipe Surrounds
8/	<b>Snow Guard Sys</b>	tems
9/	Coated Metal/F	Profiles
		Metal Sheet
		Gravel Stop Rail
		Paving Border Rail
0/	Processing Mate	erial/Aids
11/	Membrane Flan	ge/Other
		Membrane Flange
		General Terms and
		conditions of sale

# Installation Sample: PVC/EVA – Roofing Membrane + Vapour Barrier

Modular system ← can also be combined with ALIT Vent (see page 14–16).



PVC Vent (see page 11)





ALIT Deck Drain Bitumen (see page 63)





or

ALIT Deck Element (see page 64)



<u>or</u>



PVC Deck Drain (see page 62)

### b/s/t PVC Duct Vent WD

Stacking element

Specification ←

Material PVC-U, high impact strength,

UV-stabilised

Special model\*

DN 200, DN 250, DN 300

Maximum pipe length max. 1000 mm

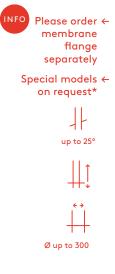
Base plate

Inclination of 25° max. for DN 70 - 150

Inclination of 5° max. for DN 200 - 300

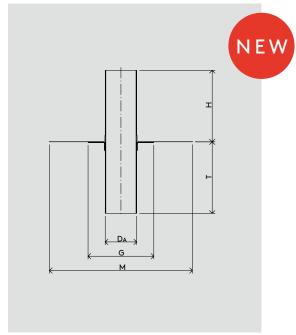
Membrane flange

PVC, EVA (see page 152)



WG 1111 ←





Nominal Width	Product No.	D <sub>A</sub> Ø[mm]	AL** [cm²]	G[mm]	M[mm]	H[mm]	T[mm]
DN 50	110-WD050	50	_17	150	300	250	250
DN 70	110-WD070	75	40	200	350	250	250
DN 100	110-WD100	110	87	230	500	250	250
DN 125	110-WD125	125	113	230	500	250	250
DN 150	110-WD150	160	185	280	500	300	250

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section
Status: 03/20 b/s/t GmbH Kach Kunsts

#### b/s/t PP Duct Vent WD

Stacking element

Specification ←

Material

PP, high impact strength,

**UV-stabilised** 

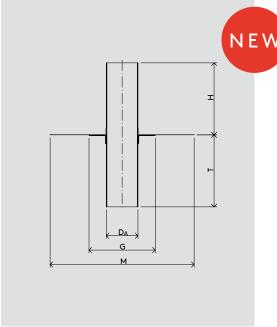
Maximum pipe length max. 1000 mm

Membrane flange PP (see page 153)









WG 2111 ←	Nominal Width	Product No.	$D_A\emptyset[mm]$	AL** [cm <sup>2</sup> ]	G [mm]	M[mm]	H[mm]	T[mm]
	DN 50	PP110-WD050	50	15	200	350	250	250
	DN 70	PP110-WD070	75	39	200	350	250	250
	DN 80	PP110-WD080	90	56	200	350	250	250
	DN 100	PP110-WD100	110	86	270	500	250	250
	DN 125	PP110-WD125	125	111	270	500	250	250
	DN 150	PP110-WD150	160	181	270	500	300	250

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section

#### b/s/t PE Duct Vent WD

Stacking element

Specification ←

Material
PE, high impact strength,

UV-stabilised

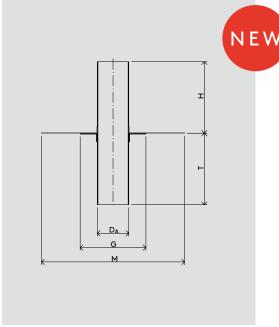
Maximum pipe length max. 1000 mm

Membrane flange PE (see page 153)

Please order ←
membrane
flange
separately







WG 2111 ←	Nominal Width	Product No.	$D_A\emptyset[mm]$	AL** [cm <sup>2</sup> ]	G[mm]	M [mm]	H[mm]	T[mm]
	DN 50	PE110-WD050	50	_15	200	350	250	250
	DN 70	PE110-WD070	75	40	200	350	250	250
	DN 80	PE110-WD080	90	56	200	350	250	250
	DN 100	PE110-WD100	110	86	270	500	250	250
	DN 125	PE110-WD125	125	111	270	500	250	250
	DN 150	PF110-WD150	160	181	270	500	300	250

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t ALIT Duct Vent WD

Stacking element

Specification ← Material

Aluminium

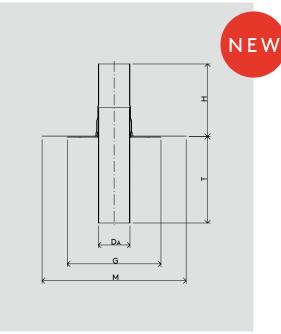
Membrane flange Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)



Special models ← on request\*







WG 1211 ←	Nominal Width	Product No.	$D_AØ[mm]$	AL** [cm <sup>2</sup> ]	G [mm]	M[mm]	H[mm]	T[mm]
	DN 70	A110-WD070	75	39	325	500	250	300
	DN 100	A110-WD100	110	88	325	500	250	300
	DN 125	A110-WD125	125	115	325	500	250	300
	DN 150	A110-WD150	160	191	325	500	300	300

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

<sup>\*\*</sup> AL = ventilation cross-section

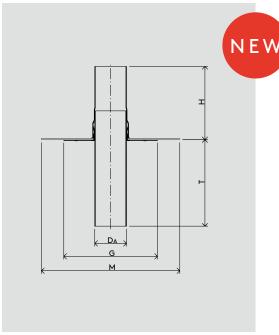
### 010

### b/s/t ALIT Duct Vent WD Bitumen

 $Specification \leftarrow Material$ Aluminium

Membrane flange SBS bitumen roofing membrane





WG 1211 ←	Nominal Width	Product No.	$D_A\emptyset[mm]$	AL* [cm²]	GØ[mm]	MØ[mm]	H[mm]	T[mm]
	DN 70	A110-BWD070	75	39	325	480	250	300
	DN 100	A110-BWD100	110	88	325	480	250	300
	DN 125	A110-BWD125	125	115	325	480	250	300
	DN 150	A110-BWD150	160	191	325	480	300	300

<sup>\*</sup> AL = ventilation cross-section Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC String Ventilator WD

Stacking element

#### Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Including PVC weather cap

(removable)

Special model\*

DN 200, DN 250, DN 300

Maximum pipe length

max. 1000 mm

Base plate

max. 25° geneigt für DN 70–150 max. 5° geneigt für DN 200–300

Membrane flange

PVC, EVA (see page 152)



Special models *e* on request\*

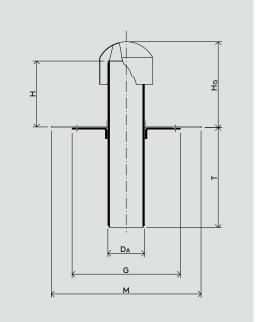






Ø up to 300





#### WG 1111 ← Nominal

Width	Product No.	$D_A\emptyset[mm]$	AL** [cm <sup>2</sup> ]	G[mm]	M[mm]	H[mm]	H <sub>G</sub> [mm]	T[mm]
DN 70	111-WD070	75	40	200	350	250	290	250
DN 100	111-WD100	110	87	230	500	250	310	250
DN 125	111-WD125	125	113	230	500	250	315	250
DN 150	111-WD150	160	185	280	500	300	380	250

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

<sup>\*\*</sup> AL = ventilation cross-section

# b/s/t PP String Ventilator WD

Stacking element

 $\mathsf{Specification} \gets$ 

Material .

PP, high impact strength,

**UV-stabilised** 

Including PVC weather cap (removable), high impact strength, UV-stabilised

Maximum pipe length max. 1000 mm

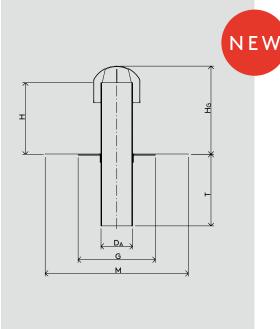
Membrane flange

PP (see page 153)

Please order ← membrane flange separately







WG 2111 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	AL** [cm²]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	T [mm]
	DN 70	PP111-WD070	75	39	200	350	250	290	250
	DN 100	PP111-WD100	110	86	270	500	250	310	250
	DN 125	PP111-WD125	125	111	270	500	250	315	250
	DN 150	PP111-WD150	160	181	270	500	300	380	250

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section

# b/s/t PE String Ventilator WD

Stacking element

Specification ←

Material

PE, high impact strength, UV-stabilised

Including PA (polyamide) weather cap (removable), high impact strength, UV-stabilised

Maximum pipe length

max. 1000 mm

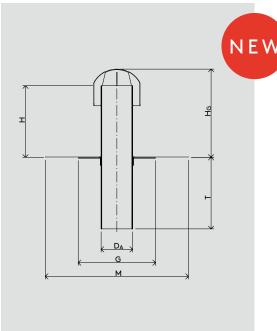
Membrane flange

PE (see page 153)

Please order ←
membrane
flange
separately







WG 2111 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	AL** [cm²]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	T [mm]
	DN 70	PE111-WD070	75	40	200	350	250	290	250
	DN 100	PE111-WD100	110	86	270	500	250	310	250
	DN 125	PE111-WD125	125	111	270	500	250	315	250
	DN 150	PF111-WD150	160	181	270	500	300	380	250

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section

# b/s/t ALIT String Ventilator WD

Stacking element

Specification ← Ma

Material Aluminium

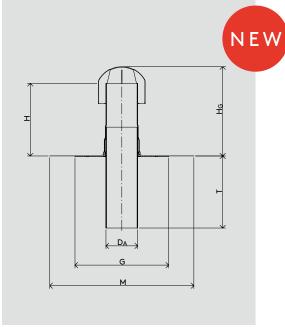
Including PVC or PA (polyamide) weather cap (removable), high impact strength, UV-stabilised

Membrane flange Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)

Please order ← membrane flange separately







WG 1211 ←	<ul> <li>Nomina</li> </ul>

Width	Product No.	$D_A\emptyset[mm]$	AL** [cm²]	GØ[mm]	M[mm]	H[mm]	$H_G[mm]$	T[mm]
DN 70	A111-WD070	75	39	325	500	250	290	300
DN 100	A111-WD100	110	88	325	500	250	310	300
DN 125	A111-WD125	125	115	325	500	250	315	300
DN 150	A111-WD150	160	191	325	500	300	380	300

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section

# b/s/t ALIT String Ventilator WD Premium

Stacking element

#### Specification ←

Material Aluminium

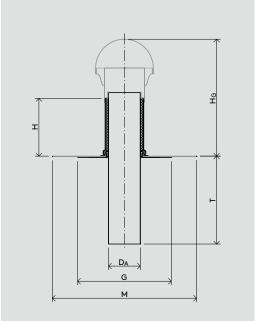
Upper part double-shell, thermally insulated, including PE weather cap (not removable), high impact strength, UV-stabilised, with optimised condensate drainage

#### Membrane flange

Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)







#### WG 1211 ← Nominal

m] T[mm]
300
450
300
450

<sup>\*</sup> AL = ventilation cross-section Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t ALIT String Ventilator WD Bitumen

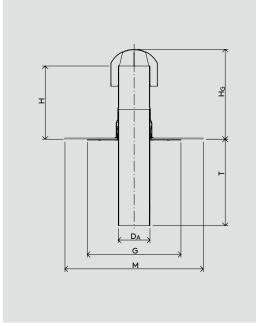
Stacking element

Specification ←

Material Aluminium Membrane flange SBS bitumen roofing membrane

Including PA (polyamide) weather cap (removable), high impact strength, UV-stabilised





WG	1211	$\leftarrow$	Nominal
			VA/* data

Width	Product No.	D <sub>A</sub> Ø[mm]	AL* [cm²]	GØ[mm]	MØ[mm]	H[mm]	H <sub>G</sub> [mm]	T[mm]
DN 70	A111-BWD070	75	39	325	480	250	290	300
DN 100	A111-BWD100	110	88	325	480	250	310	300
DN 125	A111-BWD125	125	115	325	480	250	315	300
DN 150	A111-BWD150	160	191	325	480	300	380	300

<sup>\*</sup> AL = ventilation cross-section
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC Pipe Duct KD

Specification ←

<u>Material</u>

PVC-U, high impact strength,

UV-stabilised

Special model\*

DN 200, DN 250, DN 300

Base plate

Inclination of 25° max. for DN 70 – 150 Inclination of 5° max. for DN 200 – 300

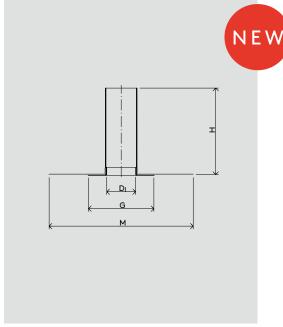
Membrane flange

PVC, EVA (see page 152)



Ø up to 300





WG 1111 ←	Nominal Width	Product No.	D <sub>I</sub> Ø[mm]	G[mm]	<u>M [mm]</u>	H[mm]
	DN 50	110-KD050	43	150	300	300
	DN 70	110-KD070	67	180	350	300
	DN 100	110-KD100	100	230	500	300
	DN 125	110-KD125	110	230	500	300
	DN 150	110-KD150	149	260	500	300

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PP Pipe Duct KD

 ${\color{red}\mathsf{Specification}} \leftarrow {\color{red}\;\;} {\color{blue}\mathsf{Material}}$ 

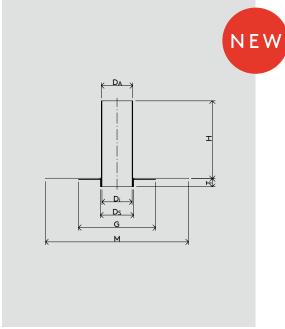
PP, high impact strength, UV-stabilised

Membrane flange PP (see page 153)

Please order ←
membrane
flange
separately







WG 2111 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	D <sub>S</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	T [mm]
	DN 50	PP110-KD050	50	44,2	56	200	350	272	28
	DN 70	PP110-KD070	75	70,4	81	200	350	272	28
	DN 80	PP110-KD080	90	84,4	96	200	350	272	28
	DN 100	PP110-KD100	110	104,6	116	270	500	272	28
	DN 125	PP110-KD125	125	118,8	131	270	500	272	28
	DN 150	PP110-KD150	160	152,0	166	270	500	272	28

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PE Pipe Duct KD

 ${\sf Specification} \leftarrow {\sf \ \underline{Material}}$ 

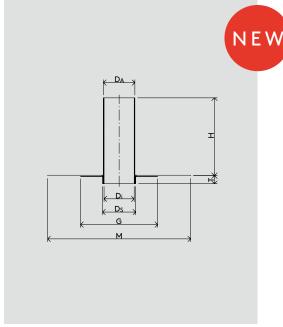
PE, high impact strength, UV-stabilised

Membrane flange PE (see page 153)

Please order ← membrane flange separately







WG 2111 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	DsØ [mm]	G [mm]	M [mm]	H [mm]	T [mm]
	DN 50	PE110-KD050	50	44,0	56	200	350	272	28
	DN 70	PE110-KD070	75	71,2	81	200	350	272	28
	DN 80	PE110-KD080	90	84,4	96	200	350	272	28
	DN 100	PE110-KD100	110	104,6	116	270	500	272	28
	DN 125	PE110-KD125	125	118,8	131	270	500	272	28
	DN 150	PE110-KD150	160	152,0	166	270	500	272	28

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

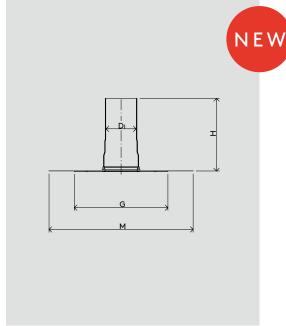
# b/s/t ALIT Pipe Duct KD

 $\begin{array}{c} \text{Specification} \leftarrow & \underline{\text{Material}} \\ & \overline{\text{Aluminium}} \end{array}$ 

Membrane flange Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)







WG 1211 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	GØ[mm]	M[mm]	<u>H [mm]</u>
	DN 70	A110-KD070	71	325	500	250
	DN 100	A110-KD100	106	325	500	250
	DN 125	A110-KD125	121	325	500	250
	DN 150	A110-KD150	156	325	500	300

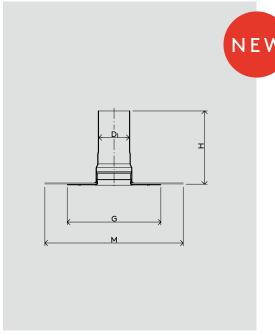
<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t ALIT Pipe Duct KD Bitumen

Specification ← Material Aluminium

Membrane flange SBS bitumen roofing membrane





WG 1211 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	GØ[mm]	MØ [mm]	H [mm]
	DN 100	A110-BKD100	106	325	480	250
	DN 125	A110-BKD125	121	325	480	250
	DN 150	A110-BKD150	156	325	480	300

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC Cold Roof Vent KD

Specification ←

<u>Material</u>

PVC-U, high impact strength,

UV-stabilised

Including PVC weather cap

(removable)

Special model\*

DN 200, DN 250, DN 300

Base plate

Inclination of 25° max. for DN 70 – 150

Inclination of 5° max. for DN 200 – 300  $\,$ 

Membrane flange

PVC, EVA (see page 152)



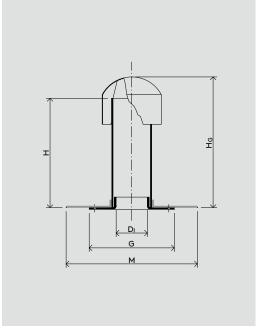
Special models ← on request\*











WG 1111 ← Nominal

Width	Product No.	D <sub>I</sub> Ø[mm]	AL** [cm²]	G[mm]	M [mm]	H[mm]	H <sub>G</sub> [mm]
DN 70	111-KD070	67	35	180	350	300	340
DN 100	111-KD100	100	78	230	500	300	360
DN 125	111-KD125	110	95	230	500	300	365
DN 150	111-KD150	149	174	260	500	300	380

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t PP Cold Roof Vent KD

 ${\sf Specification} \leftarrow {\sf \ \underline{Material}}$ 

PP, high impact strength,

UV-stabilised

Including PVC weather cap

(removable), high impact strength,

UV-stabilised

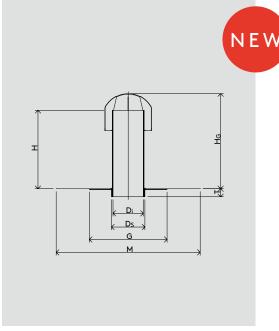
Membrane flange PP (see page 153)



Special models ← on request\*







WG 2111 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	D <sub>S</sub> Ø [mm]	AL** [cm²]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	T [mm]
	DN 70	PP111-KD070	70,4	81	39	200	350	272	312	28
	DN 100	PP111-KD100	104,6	116	86	270	500	272	332	28
	DN 125	PP111-KD125	118,8	131	111	270	500	272	337	28
	DN 150	PP111-KD150	152,0	166	181	270	500	272	352	28

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

<sup>\*\*</sup> AL = ventilation cross-section

### b/s/t PE Cold Roof Vent KD

 $\mathsf{Specification} \gets$ 

<u>Material</u>

PE, high impact strength,

UV-stabilised

Including PA (polyamide) weather cap (removable), high impact strength,

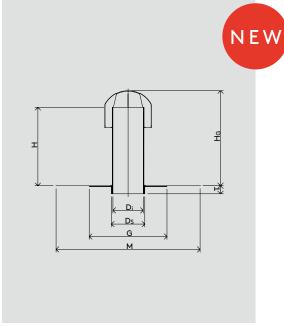
UV-stabilised

Membrane flange PE (see page 153)

Please order ←
membrane
flange
separately







WG 2111 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	DsØ [mm]	AL** [cm²]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	T [mm]
	DN 70	PE111-KD070	71,2	81	40	200	350	272	312	28
	DN 100	PE111-KD100	104,6	116	86	270	500	272	332	28
	DN 125	PE111-KD125	118,8	131	111	270	500	272	337	28
	DN 150	PE111-KD150	152,0	166	181	270	500	272	352	28

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> AL = ventilation cross-section

# b/s/t ALIT Cold Roof Vent KD

 ${\sf Specification} \leftarrow$ 

<u>Material</u> Aluminium

Including PVC or PA (polyamide) weather cap (removable), high impact strength, UV-stabilised

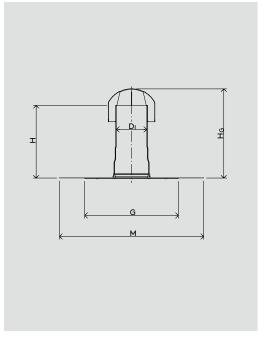
Membrane flange Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)

Please order ← membrane flange separately

Special models ← on request\*







WG 1211 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	AL** [cm²]	GØ [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]
	DN 70	A111-KD070	71	39	325	500	250	290
	DN100	A111-KD100	106	88	325	500	250	310
	DN125	A111-KD125	121	115	325	500	250	315
	DN150	A111-KD150	156	191	325	500	300	380

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

<sup>\*\*</sup> AL = ventilation cross-section

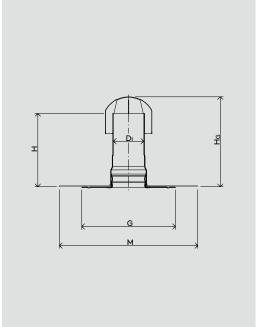
# b/s/t ALIT Cold Roof Vent KD Bitumen

Specification ←

<u>Material</u> Aluminium

Including PA (polyamide) weather cap (removable), high impact strength, UV-stabilised Membrane flange SBS bitumen roofing membrane





#### WG 1211 ← Nominal

Width	Product No.	D <sub>I</sub> Ø[mm]	AL* [cm²]	GØ[mm]	MØ[mm]	H[mm]	H <sub>G</sub> [mm]
DN 100	A111-BKD100	106	88	325	480	250	310
DN 125	A111-BKD125	121	115	325	480	250	315
DN 150	A111-BKD150	156	191	325	480	300	380

<sup>\*</sup> AL = ventilation cross-section
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Installation Sample: PVC/EVA – Roofing Membrane + Vapour Barrier

Modular Sys- ← tem can also be combined with ALIT Cable Cowl WD Bitumen (see page 32).



PVC Cable Cowl WD (see page 28)





ALIT Deck Drain Bitumen (see page 63)





<u>or</u>

ALIT Deck Element (see page 64)



<u>or</u>



PVC Deck Drain (see page 62)

# b/s/t PVC Cable Cowl WD

Stacking element

Specification ←

Material

PVC-U, high impact strength, UV-stabilised.

Special model\*

Maximum base plate inclination of 25° for PVC, EVA (see page 152) DN 50-150

Maximum pipe length max. 1000 mm

Note

All models are built with two 87° elbow pipes.

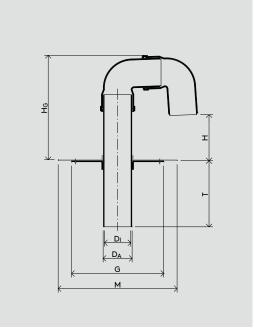
Membrane flange

Please order  $\leftarrow$ membrane flange separately









WG 1117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 50	142-WD050	50	46,4	150	300	250	315	215	250
	DN 70	142-WD070	75	71,4	200	350	250	340	205	250
	DN 100	142-WD100	110	105,4	230	500	250	385	200	250
	DN 125	142-WD125	125	120,0	230	500	250	405	190	250
	DN 150	142-WD150	160	153.6	280	500	300	400	180	250

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Cable Cowl WD

Stacking element

Specification ←

Material

PP, high impact strength, UV-stabilised

Maximum pipe length max. 1000 mm

Note

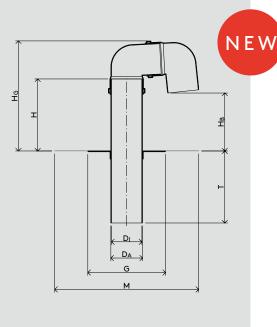
Model with two 87° PVC elbow pipes, high impact strength, UV-stabilised

Membrane flange PP (see page 153)

Please order ←
membrane
flange
separately







WG 2117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 50	PP142-WD050	50	44,2	200	350	250	315	215	250
	DN 70	PP142-WD070	75	70,4	200	350	250	340	205	250
	DN 100	PP142-WD100	110	104,6	270	500	250	385	200	250
	DN 125	PP142-WD125	125	118,8	270	500	250	405	190	250
	DN 150	PP142-WD150	160	152,0	270	500	300	490	180	250

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Cable Cowl WD

Stacking element

Specification ←

Material

PE, high impact strength, UV-stabilised

Maximum pipe length max. 1000 mm

Note

Model with two 87° PVC elbow pipes, UV-stabilised

Membrane flange
PE (see page 153)

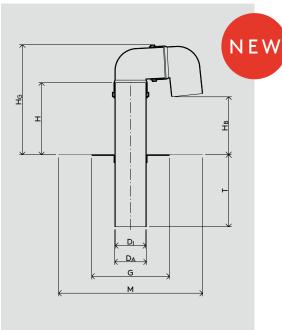
Please order ←
membrane
flange
separately

Special models ← on request\*

WG







5 2117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 50	PE142-WD050	50	44,0	200	350	250	315	215	250
	DN 70	PE142-WD070	75	71,2	200	350	250	340	205	250
	DN 100	PE142-WD100	110	104,6	270	500	250	385	200	250
	DN 125	PE142-WD125	125	118,8	270	500	250	405	190	250
	DN 150	PE142-WD150	160	152,0	270	500	300	490	180	250

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Cable Cowl WD

Stacking element

Specification ← Material

Material Aluminium Note

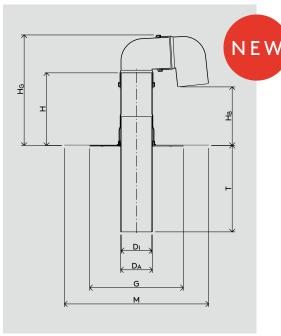
Model with two 87° PVC elbow pipes, high impact strength, UV-stabilised

Membrane flange

Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)

Please order ←
membrane
flange
separately





WG 1215 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	GØ [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 70	A142-WD070	75	71	325	500	250	340	205	300
	DN 100	A142-WD100	110	106	325	500	250	385	200	300
	DN 125	A142-WD125	125	121	325	500	250	405	190	300
	DN 150	Δ142-WD150	160	156	325	500	300	490	180	300

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Cable Cowl WD Bitumen

Stacking element

 $\begin{array}{c} \text{Specification} \leftarrow & \underline{\text{Material}} \\ & \overline{\text{Aluminium}} \end{array}$ 

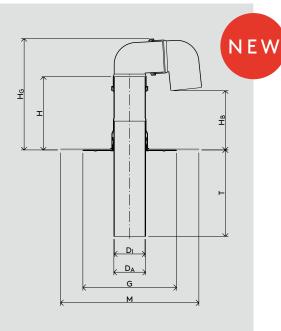
Note

Model with two high impact strength 87° PVC elbow pipes, UV-stabilised

Membrane flange

SBS bitumen roofing membrane





WG 1215 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	GØ [mm]	MØ [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 70	A142-BWD070	75	71	325	480	250	340	205	300
	DN 100	A142-BWD100	110	106	325	480	250	385	200	300
	DN 125	A142-BWD125	125	121	325	480	250	405	190	300
	DN 150	A142-BWD150	160	156	325	480	300	490	180	300

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Cable Cowl WD Bitumen (Aluminium bow)

Stacking element

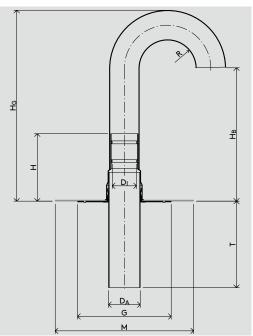
Specification ←

<u>Material</u> Aluminium

With large radius of bending for easier cable installation

Membrane flange SBS bitumen roofing membrane





WG 1215 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	GØ [mm]	MØ [mm]	R [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 70	A141-BWD070	75	65	325	480	120	300	550	356	300
	DN 100	A141-BWD100	110	87	325	480	100	300	550	356	300

## b/s/t PVC Energy Supply WD

Stacking element

Specification ←

- Material

PVC-U, high impact strength, UV-stabi-

lised

Special model\*

Maximum base plate inclination of 25° for

DN 50-150

Maximum pipe length

max. 1000 mm

Note

Model with four 45° PVC elbow pipes

Membrane flange

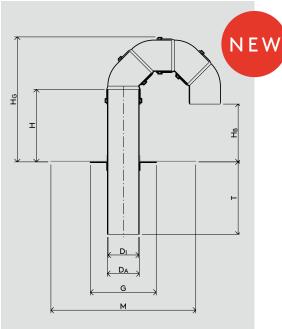
PVC, EVA (see page 152)

Please order ← membrane flange separately

Special models ← on request\*

bis 25°





WG 1117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	143-WD100	110	105,4	230	500	250	420	190	250
	DN 125	143-WD125	125	120,0	230	500	250	450	190	250
	DN 150	143-WD150	160	153,6	280	500	300	540	205	250

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Energy Supply WD

Stacking element

Specification ←

Material

PP, high impact strength, UV-stabilised

Maximum pipe length max. 1000 mm

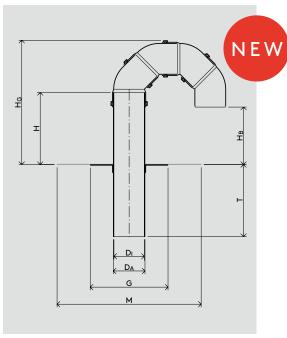
Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange PP (see page 153)

Please order ← membrane flange separately





WG 2117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	PP143-WD100	110	104,6	270	500	250	420	190	250
	DN 125	PP143-WD125	125	118,8	270	500	250	450	190	250
	DN 150	PP143-WD150	160	152.0	270	500	300	540	205	250

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Energy Supply WD

Stacking element

Specification ←

<u>Material</u>

PE, high impact strength, UV-stabilised

Maximum pipe length max. 1000 mm

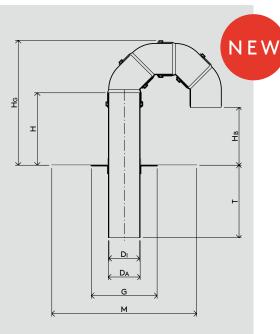
Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange PE (see page 153)

Please order ← membrane flange separately





WG 2117 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	PE143-WD100	110	104,6	270	500	250	420	190	250
	DN 125	PE143-WD125	125	118,8	270	500	250	450	190	250
	DN 150	PE143-WD150	160	152,0	270	500	300	540	205	250

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Energy Supply WD

Specification ←

Material Aluminium Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

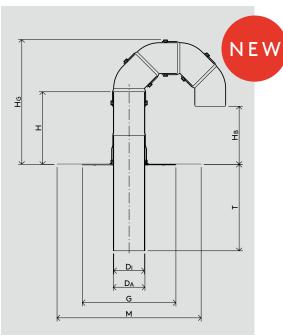
Membrane flange

Polyolefin, EPDM, ECB, PIB, PVC etc.

(see page 152 – 153)

Please order  $\leftarrow$ membrane flange separately





WG 1215 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	GØ [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	A143-WD100	110	106	325	500	250	420	190	300
	DN 125	A143-WD125	125	121	325	500	250	450	190	300
	DN 150	A143-WD150	160	156	325	500	300	540	205	300

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Energy Supply WD Bitumen

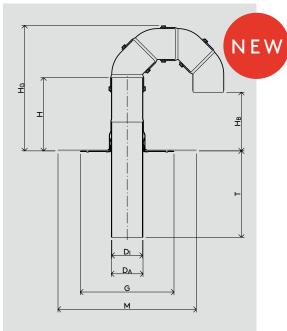
Stacking element

Specification ← <u>Material</u> Aluminium Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange SBS bitumen roofing membrane





WG 1215 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	GØ [mm]	MØ [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	A143-BWD100	110	106	325	480	250	420	190	300
	DN 125	A143-BWD125	125	121	325	480	250	450	190	300
	DN 150	A143-BWD150	160	156	325	480	300	540	205	300

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Cable Cowl KD

Specification ←

Material

PVC-U, shigh impact strength, **UV-stabilised** 

Special model\*

Maximum base plate inclination of 25° for PVC, EVA (see page 152)

DN 50-150

Not

From DN 50 model with two 87° PVC elbow pipes

Membrane flange

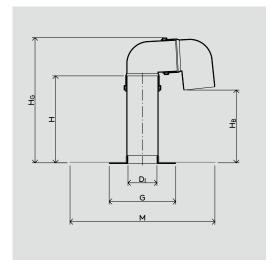
Please order ← membrane flange separately

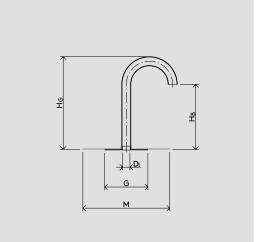
> Special models ← on request\*

> > up to 25°









WG	1117	_
VVO	1117	_

Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	H[mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]
32 mm	142-KD032	24	150	300	220	320	220
DN 50	142-KD050	43	150	300	300	365	265
DN 70	142-KD070	67	180	350	300	390	255
DN 100	142-KD100	100	230	500	300	435	250
DN 125	142-KD125	110	230	500	300	455	240
DN 150	142-KD150	149	260	500	300	490	230

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Cable Cowl KD

 ${\sf Specification} \leftarrow \ \underline{\sf Material}$ 

PP, high impact strength, UV-stabilised

√ote

Model with two high impact strength 87° PVC elbow pipes, UV-stabilised

Membrane flange PP (see page 153)

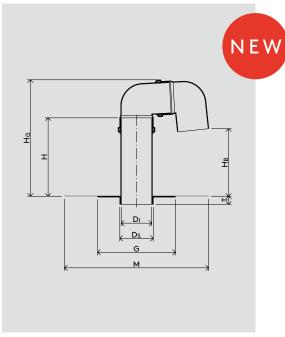
Please order ← membrane flange separately

Special models ← on request\*

WG







9 2117 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	D <sub>S</sub> Ø [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 50	PP142-KD050	44,2	56	200	350	272	337	237	28
	DN 70	PP142-KD070	70,4	81	200	350	272	362	227	28
	DN 100	PP142-KD100	104,6	116	270	500	272	407	222	28
	DN 125	PP142-KD125	118,8	131	270	500	272	427	212	28
	DN 150	PP142-KD150	152,0	166	270	500	272	462	202	28

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Cable Cowl KD

Specification ←

Material

PE, high impact strength, UV-stabilised

Vote

Model with two high impact strength 87° PVC elbow pipes, UV-stabilised

Membrane flange

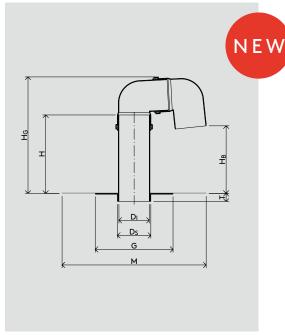
PE (see page 153)



Special models ← on request\*

 $\mathfrak{I}$ 





WG 2117 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	DsØ [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 50	PE142-KD050	44,0	56	200	350	272	337	237	28
	DN 70	PE142-KD070	71,2	81	200	350	272	362	227	28
	DN 100	PE142-KD100	104,6	116	270	500	272	407	222	28
	DN 125	PE142-KD125	118,8	131	270	500	272	427	212	28
	DN 150	PE142-KD150	152,0	166	270	500	272	462	202	28

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Cable Cowl KD

Specification ← <u>Material</u> Aluminium Note

Model with two 87° PVC elbow pipes, high impact strength, UV-stabilised

Membrane flange

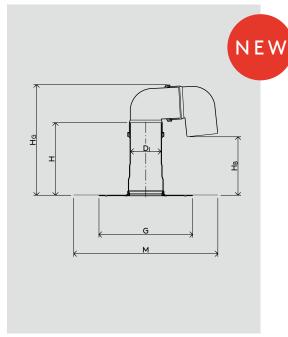
Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)

Please order ← membrane flange separately

Special models ← on request\*

 $\bigcap$ 





WG 1215 ←	Nominal Width	Product No.	D <sub>I</sub> Ø[mm]	GØ[mm]	M[mm]	H[mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]
	DN 70	A142-KD070	71	325	500	250	340	205
	DN 100	A142-KD100	106	325	500	250	385	200
	DN 125	A142-KD125	121	325	500	250	405	190
	DN 150	A142-KD150	156	325	500	300	490	180

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Cable Cowl KD Bitumen

 $\mathsf{Specification} \leftarrow \underline{\mathsf{Material}}$ 

Aluminium

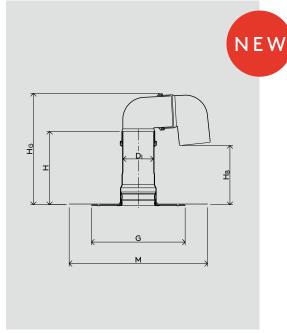
Note

Model with two high impact strength 87° PVC elbow pipes, UV-stabilised

Membrane flange

SBS bitumen roofing membrane





WG 1215 ←	Nominal Width	Product No.	$D_I \emptyset [mm]$	GØ[mm]	MØ[mm]	H[mm]	H <sub>G</sub> [mm]	$H_B[mm]$
	DN 100	A142-BKD100	106	325	480	250	385	200
	DN 125	A142-BKD125	121	325	480	250	405	190
	DN 150	A142-BKD150	156	325	480	300	490	180

## b/s/t PVC Energy Supply KD

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Special model\*

Maximum base plate inclination of 25° for

DN 50-150

Note

Model with four 45° PVC elbow pipes

Membrane flange

PVC, EVA (see page 152)

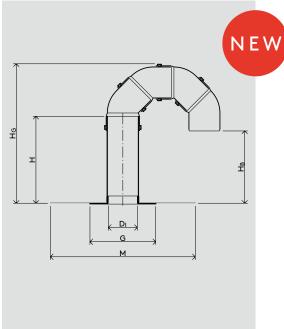
Please order ← membrane flange separately

Special models ← on request\*

bis 25°

 $\bigcap ackslash$ 





WG 1117 ← Nominal

Width	Product No.	D <sub>I</sub> Ø[mm]	G [mm]	M [mm]	H[mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]
DN 100	143-KD100	100	230	500	300	470	240
DN 125	143-KD125	110	230	500	300	500	240
DN 150	143-KD150	149	260	500	300	540	205

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Energy Supply KD

Specification ←

Material

PP, high impact strength, UV-stabilised

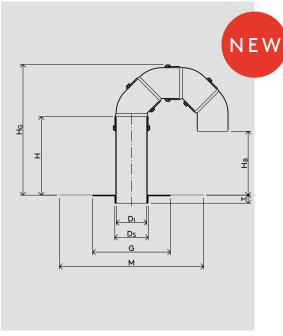
Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange PP (see page 152)

Please order ←
membrane
flange
separately





WG 2117 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	DsØ [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	PP143-KD100	104,6	116	270	500	272	442	212	28
	DN 125	PP143-KD125	118,8	131	270	500	272	472	212	28
	DN 150	PP143-KD150	152.0	166	270	500	272	512	177	28

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Energy Supply KD

Specification ← Ma

<u>Material</u>

PE, high impact strength, UV-stabilised

Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange

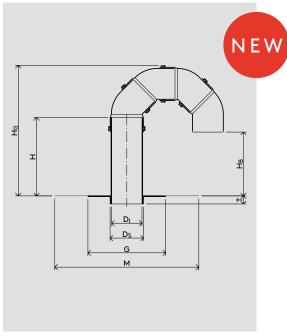
PE (see page 153)

Please order ← membrane flange separately

Special models ← on request\*

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WG 2117 ←	Nominal Width	Product No.	D <sub>I</sub> Ø [mm]	DsØ [mm]	G [mm]	M [mm]	H [mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]	T [mm]
	DN 100	PE143-KD100	104,6	116	270	500	272	442	212	28
	DN 125	PE143-KD125	118,8	131	270	500	272	472	212	28
	DN 150	PE143-KD150	152,0	166	270	500	272	512	177	28

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Energy Supply KD

Specification ←

Material Aluminium Note

Model with four high impact strength 45° PVC elbow pipes, UV-stabilised

Membrane flange

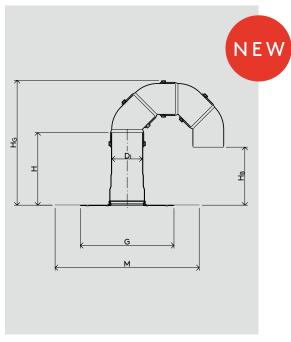
Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)

Please order ← membrane flange separately

Special models ← on request\*

 $\bigcap$ 





WG 1215 ←	Nominal Width	Product No.	D <sub>I</sub> Ø[mm]	GØ[mm]	M[mm]	H[mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]
	DN 100	A143-KD100	106	325	500	250	420	190
	DN 125	A143-KD125	121	325	500	250	450	190
	DN 150	A143-KD150	156	325	500	300	540	205

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Energy Supply KD Bitumen

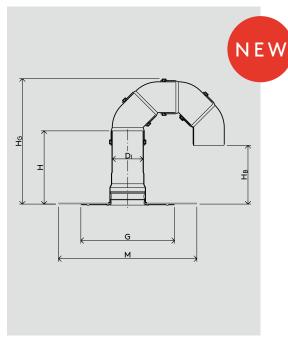
Specification ← <u>Material</u> Aluminium NOte

Model with four 45° PVC elbow pipes, high impact strength, UV-stabilised

Membrane flange

SBS bitumen roofing membrane





WG 1215 ←	Nominal Width	Product No.	$D_I \emptyset [mm]$	GØ[mm]	MØ[mm]	H[mm]	H <sub>G</sub> [mm]	H <sub>B</sub> [mm]
	DN 100	A143-BKD100	106	325	480	250	420	190
	DN 125	A143-BKD125	121	325	480	250	450	190
	DN 150	A143-BKD150	156	325	480	300	540	205

# Installation Sample: PVC/EVA Roofing Membrane + Vapour Barrier

Modular sys- ← tem can also be combined with ALIT Drains(see page 53 – 54).





b/s/t Universal Leaf Guard (see page 98)





PVC Drain (see page 50)





<u>or</u>

ALIT Deck Drain Bitumen (see page 63)





PVC Basic element with horizontal drain (see page 61)



<u>or</u>



PVC Deck Drain (see page 62)

## b/s/t PVC Drain

Stacking element

#### Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Special model\* DN 250, DN 300

Maximum pipe length max. 1000 mm

Base plate

Inclination of 25° max. for DN 50 – 150 Inclination of 5° max. for DN 200 – 300

Membrane flange

PVC, EVA (see page 152)



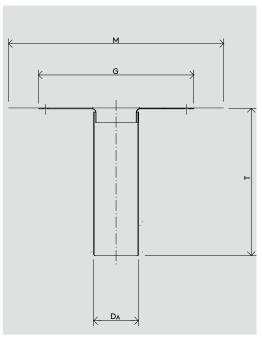
Special models ← on request\*



b/s/t Koch Kunststofftechnologie Nordstraße 1 83253 Rimsting







WG 1112 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	Q** [l/sek]	h <sub>G</sub> *** [mm]
	DN 50	121-050	50	150	300	300	0,90	35
	DN 70	121-070	75	180	350	300	4,40	35
	DN 80	121-080	90	200	350	300	5,00	35
	DN 100	121-100	110	230	500	300	6,00	35
	DN 125	121-125	125	230	500	300	9,00	45
	DN 150	121-150	160	260	500	300	10,60	45
	DN 200	121-200	200	400	580	300	13,00	45

- \* Custom-made products are excluded from exchange.
- \*\* Q [l/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Drain

Stacking element

Specification ←

Material

PP, high impact strength,

**UV-stabilised** 

Maximum pipe length max. 1000 mm

Membrane flange PP (see page 153)

Please order ← membrane flange separately

Special models ← on request\*

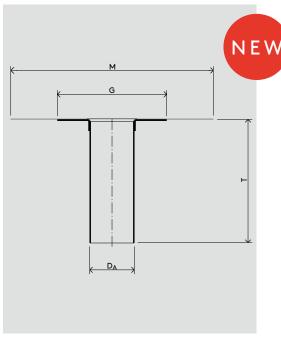


b/s/t
Koch Kunststofftechnologie
Nordstraße 1
83253 Rimsting

5/5/t

DIN EN 1253





WG 2112 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	Q** [l/sek]	hg*** [mm]
	DN 50	PP121-050	50	200	350	300	0,90	35
	DN 70	PP121-070	75	200	350	300	4,40	35
	DN 80	PP121-080	90	200	350	300	5,00	35
	DN 100	PP121-100	110	270	500	300	6,00	35
	DN 125	PP121-125	125	270	500	300	9,00	45
	DN 150	PP121-150	160	270	500	300	10.60	45

<sup>\*</sup> Custom-made products are excluded from exchange.

<sup>\*\*</sup> Q [l/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Drain

Stacking element

Specification ←

Material

PE, high impact strength, UV-stabilised

Membrane flange PE (see page 153)

Maximum pipe length max. 1000 mm

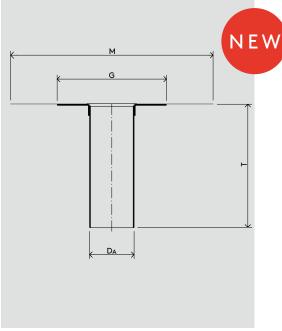
Please order ← membrane flange separately

> Special models ← on request\*



b/s/t Koch Kunststofftechnologie Nordstraße 1 83253 Rimsting **1**5′s′t1 DIN EN 1253





WG 2112 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	Q** [l/sek]	hg*** [mm]
	DN 50	PE121-050	50	200	350	300	0,90	35
	DN 70	PE121-070	75	200	350	300	4,40	35
	DN 80	PE121-080	90	200	350	300	5,00	35
	DN 100	PE121-100	110	270	500	300	6,00	35
	DN 125	PE121-125	125	270	500	300	9,00	45
	DN 150	PE121-150	160	270	500	300	10,60	45

Custom-made products are excluded from exchange.
 Q [I/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Drain

Stacking element

Specification ←

Material Aluminium

Pipe length 300 mm or 450 mm with base plate For connection to the roof sealing sheets

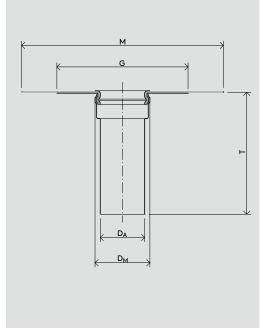
Membrane flange Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)











WG 1212 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	GØ [mm]	M [mm]	T [mm]	Q** [l/sek]	hg*** [mm]
	DN 70	A121-070450	75	90	325	500	450	4,40	35
	DN 80	A121-080450	90	105	325	500	450	5,00	35
	DN 100	A121-100300	110	130	325	500	300	6,00	35
	DN 100	A121-100450	110	130	325	500	450	6,00	35
	DN 125	A121-125300	125	145	325	500	300	9,00	45
	DN 125	A121-125450	125	145	325	500	450	9,00	45
	DN 150	A121-150300	160	175	325	500	300	10,60	45

<sup>\*</sup> Custom-made products are excluded from exchange.

<sup>\*\*</sup> Q [l/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Drain Bitumen

Stacking element

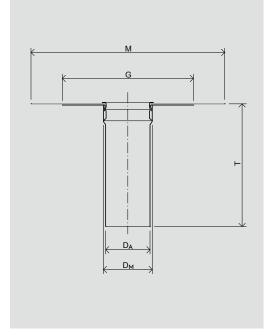
Specification ←

Material Aluminium

Pipe length 300 mm or 450 mm with base plate Membrane flange SBS bitumen roofing membrane







WG 1212 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	GØ [mm]	MØ [mm]	T [mm]	Q* [l/sek]	hg** [mm]
	DN 70	A121-B070450	75	87	325	480	450	4,40	35
	DN 80	A121-B080450	90	102	325	480	450	5,00	35
	DN 100	A121-B100300	110	123	325	480	300	6,00	35
	DN 100	A121-B100450	110	123	325	480	450	6,00	35
	DN 125	A121-B125300	125	138	325	480	300	9,00	45
	DN 125	A121-B125450	125	138	325	480	450	9,00	45

<u>17</u>3

DN 150 A121-B150300 160

<u>32</u>5

<u>4</u>80

<u>3</u>00

10,60

45

<sup>\*</sup> Q [l/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Retrofit Drain

#### Specification ←

Material

PVC-U, high impact strength, UV-stabilised

Including

b/s/t Universal gravel basket high impact strength, UV-stabilised b/s/t Universal Anti Backflow Seal

#### Special model\*

Maximum pipe length 1000 mm

For the safe connection of outlets to downpipes without existing sleeve; verification of fit to existing drain is the responsibility of the installer.

Membrane flange

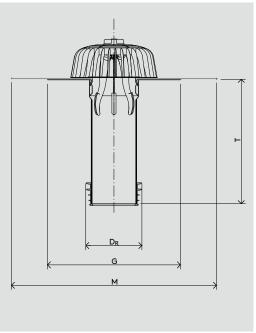
PVC, EVA (see page 152)

Please order ←
membrane
flange
separately









WG 1112 ←	Nominal Width	Product No.	D <sub>R</sub> **Ø [mm]	D <sub>V</sub> ***Ø [mm]	G [mm]	M [mm]	T [mm]	Q**** [l/sek]	h <sub>G</sub> **** [mm]
	DN 70	121-SG070	87 – 108	83 – 106	180	350	300	4,40	35
	DN 80	121-SG080	105 - 111	101-108	200	350	300	5,00	35
	DN 100	121-SG100	120 - 135	116-131	230	500	300	6,00	35
	DN 125	121-SG125	152 – 160	148 – 158	230	500	300	9,00	45
	DN 150	121-SG150	194 – 200	190-195	260	500	300	10,60	45

- \* Custom-made products are excluded from exchange.
- \*\*  $D_R = DR = outer diameter area of the sealing lip$
- \*\*\*  $D_V = inside diameter$ , range calibration of the existing drain pipe
- \*\*\*\* Q [I/sek] Discharge capacity at the water level hG at the gully
- \*\*\*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the drain
  Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Retrofit Drain

#### Specification ←

#### Material

PP, high impact strength, UV-stabilised

#### Including

b/s/t Universal gravel basket high impact strength, UV-stabilised b/s/t Universal Anti Backflow Seal

#### Special model\*

Maximum pipe length 1000 mm

For the safe connection of outlets to downpipes without existing sleeve; verification of fit to existing drain is the responsibility of the installer.

#### Membrane flange

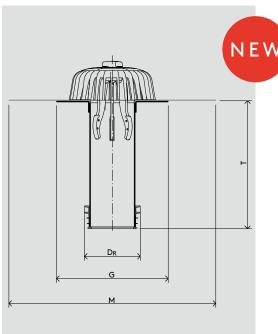
PP (see page 153)

Please order ←
membrane
flange
separately









WG 2112 ←	Nominal Width	Product No.	D <sub>R</sub> **Ø [mm]	D <sub>V</sub> ***Ø [mm]	G [mm]	M [mm]	T [mm]	Q**** [l/sek]	h <sub>G</sub> **** [mm]
	DN 70	PP121-SG070	87 – 108	83 – 106	200	350	300	4,40	35
	DN 80	PP121-SG080	105 – 111	101-108	200	350	300	5,00	35
	DN 100	PP121-SG100	120-135	116-131	270	500	300	6,00	35
	DN 125	PP121-SG125	152 - 160	148-158	270	500	300	9,00	45
	DN 150	PP121-SG150	194-200	190 – 195	270	500	300	10,60	45

- \* Custom-made products are excluded from exchange.
- \*\*  $D_R = DR = outer diameter area of the sealing lip$
- \*\*\*  $D_V$  = inside diameter, range calibration of the existing drain pipe
- \*\*\*\* Q [I/sek] Discharge capacity at the water level hG at the gully
- \*\*\*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the drain
  Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Retrofit Drain

#### Specification ←

#### Material

PE, high impact strength, UV-stabilised

#### Including

b/s/t Universal gravel basket high impact strength, UV-stabilised b/s/t Universal Anti Backflow Seal

#### Special model\*

Maximum pipe length 1000 mm

For the safe connection of outlets to downpipes without existing sleeve; verification of fit to existing drain is the responsibility of the installer.

#### Membrane flange

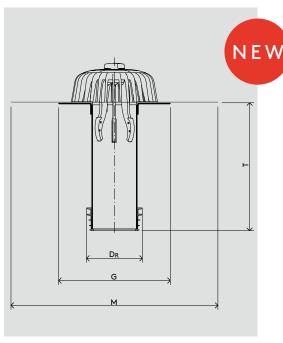
PE (see page 153)











WG 2112 ←	Nominal Width	Product No.	D <sub>R</sub> **Ø [mm]	D <sub>V</sub> ***Ø [mm]	G [mm]	M [mm]	T [mm]	Q**** [l/sek]	h <sub>G</sub> **** [mm]	
	DN 70	PE121-SG070	87 – 108	83 – 106	200	350	300	4,40	35	
	DN 80	PE121-SG080	105 - 111	101 - 108	200	350	300	5,00	35	
	DN 100	PE121-SG100	120 - 135	116 – 131	270	500	300	6,00	35	
	DN 125	PE121-SG125	152 - 160	148 – 158	270	500	300	9,00	45	
	DN 150	PF121-SG150	194 - 200	190 - 195	270	500	300	10.60	45	

- \* Custom-made products are excluded from exchange.
- \*\*  $D_R = DR = outer diameter area of the sealing lip$
- \*\*\*  $D_V$  = inside diameter, range calibration of the existing drain pipe
- \*\*\*\* Q [I/sek] Discharge capacity at the water level hG at the gully
- \*\*\*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the drain
  Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Retrofit Drain

#### Specification ←

Material Aluminium

Including

b/s/t Universal gravel basket high impact strength, UV-stabilised b/s/t Universal Anti Backflow Seal

#### Pipe length

450 mm

For the safe connection of outlets to downpipes without existing sleeve; verification of fit to existing drain is the responsibility of the installer.

#### Membrane flange

Polyolefin, EPDM, ECB, PIB, PVC etc. (see page 152 – 153)



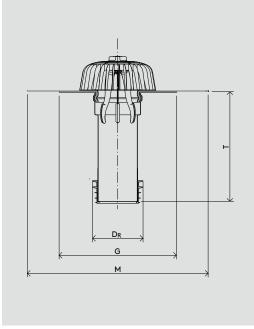
Special models ← on request\*

 $\prod$ 

b/s/t Koch Kunststofftechnologie Nordstraße 1 83253 Rimsting







WG 1212 ←	Nominal Width	Product No.	D <sub>R</sub> **Ø [mm]	D <sub>V</sub> ***Ø [mm]	GØ [mm]	M [mm]	T [mm]	Q**** [I/sek]	h <sub>G</sub> **** [mm]
	DN 70	A121-SG070450	87 – 108	83 – 106	325	500	450	4,40	35
	DN 80	A121-SG080450	105 - 111	101-108	325	500	450	5,00	35
	DN 100	A121-SG100450	120 - 135	116 - 131	325	500	450	6,00	35
	DN 125	A121-SG125450	152 - 160	148 - 158	325	500	450	9,00	45

- \* Custom-made products are excluded from exchange.
- \*\*  $D_R = DR = \text{outer diameter} \text{area of the sealing lip}$
- \*\*\*  $D_V$  = inside diameter, range calibration of the existing drain pipe
- \*\*\*\* Q [I/sek] Discharge capacity at the water level hG at the gully
- \*\*\*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the drain
  Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Retrofit Drain Bitumen

#### ${\sf Specification} \leftarrow$

Material Aluminium

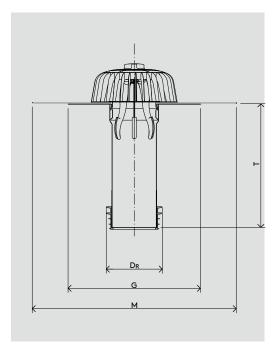
Including b/s/t Universal gravel basket high impact strength, UV-stabilised b/s/t Universal Anti Backflow Seal Pipe length 450 mm

For the safe connection of outlets to downpipes without existing sleeve; verification of fit to existing drain is the responsibility of the installer.

<u>Membrane flange</u> SBS bitumen roofing membrane







WG 1212 ←	Nominal Width	Product No.	D <sub>R</sub> *Ø [mm]	D <sub>V</sub> **Ø [mm]	GØ [mm]	MØ [mm]	T [mm]	Q*** [l/sek]	hg**** [mm]
	DN 70	A121-BSG070450	87 – 108	83 – 106	325	500	450	4,40	35
	DN 80	A121-BSG080450	105 – 111	101-108	325	500	450	5,00	35
	DN 100	A121-BSG100450	120 - 135	116 - 131	325	500	450	6,00	35
	DN 125	A121-BSG125450	152 – 160	148 - 158	325	500	450	9 00	45

- \*  $D_R = DR = outer diameter area of the sealing lip$
- \*\*  $D_V$  = inside diameter, range calibration of the existing drain pipe
- \*\*\* Q [I/sek] Discharge capacity at the water level hG at the gully
- \*\*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the drain Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Side-Outlet Drain

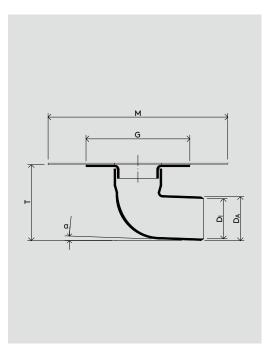
Specification ←

Material PVC-U, high impact strength, UV-stabilised Membrane flange PVC, EVA (see page 152)



WG1





1112 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>I</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	α [°]	Q* [l/sek]	h <sub>G</sub> ** [mm]
	DN 50	127-050	50	46,4	150	300	80	3	0,90	35
	DN 70	127-070	75	71,4	180	350	110	3	4,40	35
	DN 100	127-100	110	105,4	230	500	160	3	6,00	35
	DN 125	127-125	125	120,0	230	500	175	3	9,00	45
	DN 150	127-150	160	153,6	260	500	225	3	10,60	45

<sup>\*</sup> Q [l/sek] Discharge capacity at the water level hG at the gully

<sup>\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the drain
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Basic element with horizontal drain

Specification  $\leftarrow$  N

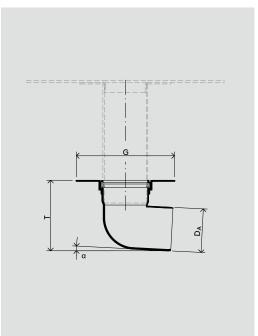
Material

PVC-U, high impact strength,

**UV-stabilised** 

Including a sealing ring, suitable for all stacking elements





WG 1113 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G[mm]	T[mm]	<u>α[°]</u>
	DN 50	120-050	50	150	103	3
	DN 70	120-070	75	200	130	3
	DN 100	120-100	110	250	180	3
	DN 125	120-125	125	250	200	3
	DN 150	120-150	160	300		

## b/s/t PVC Deck Drain

Specification ←

Material

PVC-U, high impact strength,

UV-stabilised

Pipe length 300 mm

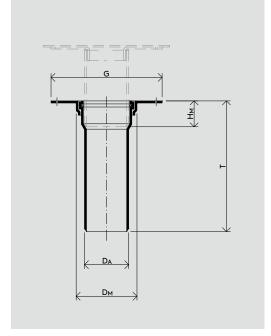
Including a sealing ring,

Special model\* Pipe length 600 mm

suitable for all stacking elements







W	/G '	111	3 ∢	_	Nο	mi	na

Width	Product No.	D <sub>A</sub> Ø[mm]	D <sub>M</sub> [mm]	G [mm]	H <sub>M</sub> [mm]	T[mm]
DN 50	128-050300	50	69,5	200	40	300
DN 70	128-070300	75	93,5	200	50	300
DN 100	128-100300	110	130,0	250	65	300
DN 125	128-125300	125	150,0	260	75	300
DN 150	128-150300	160	185,0	300	90	300
DN 200	128-200300	200	230,0	400	90	300

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Deck Drain Bitumen

 ${\sf Specification} \leftarrow$ 

Material Aluminium

 $\frac{\text{Pipe length}}{300 \text{ mm}}$ 

Including a sealing ring, suitable for all stacking elements

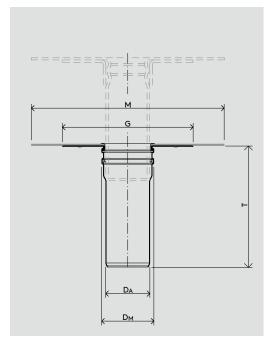
Membrane flange

SBS bitumen roofing membrane

To adjoin the bitumen vapour barrier







WG 1213 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø[mm]	GØ[mm]	MØ[mm]	T[mm]
	DN 70	A128-B070	75	92	325	480	300
	DN 100	A128-B100	110	130	325	480	300
	DN 125	A128-B125	125	142	325	480	300
	DN 150	A128-B150	 160	178	325	480	300

## b/s/t ALIT Deck Element

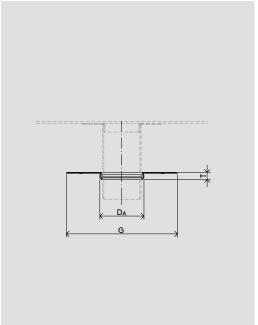
Renovation element

Specification ←

Material Aluminium Membrane flange
Without membrane flange

Including a sealing ring, suitable for all stacking elements and round horizontal outlets





WG 1213 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	GØ[mm]	T[mm]	
	DN 50	A129-050	65	325	61	
	DN 70	A129-070	90	325	21	
	DN 100	A129-100	129	325	21	
	DN 125	A129-125	143	325	23	

 $Status: 03/20\ b/s/t\ GmbH\ Koch\ Kunststoff technologie\ reserves\ the\ right\ to\ make\ technical\ modifications.$ 

### b/s/t ALIT Deck Element Bitumen

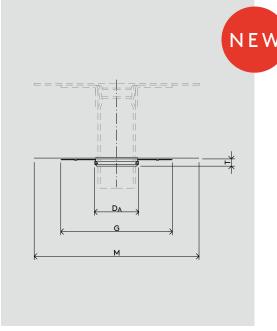
Renovation element

Specification ←

Material Aluminium Membrane flange SBS bitumen roofing membrane

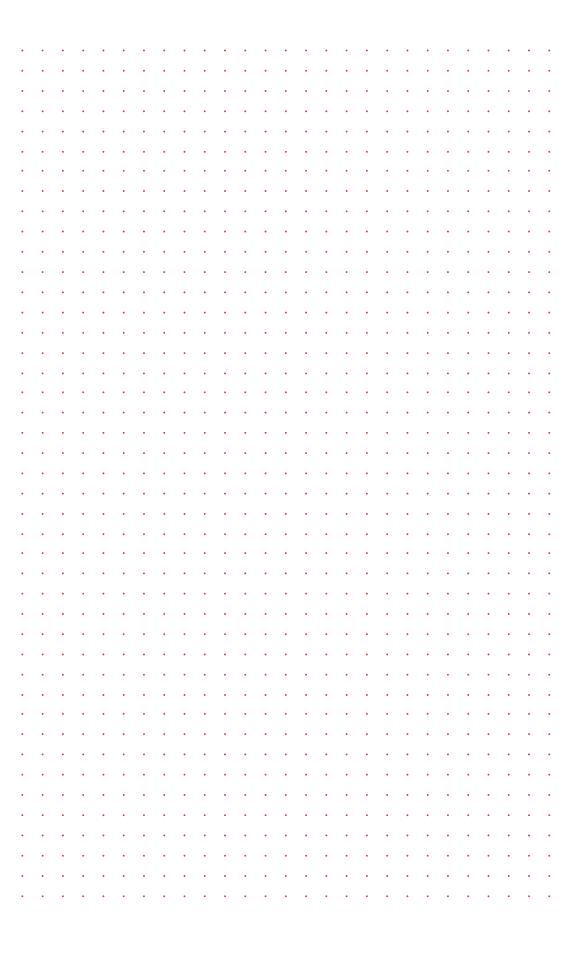
Including a sealing ring, suitable for all stacking elements and round horizontal outlets





WG 1213 ←	Nominal Width	Product No.	$D_AØ[mm]$	GØ[mm]	T[mm]	
	DN 70	A129-B070	90	325	21	
	DN 100	A129-B100	129	325	21	
	DN 125	A129-B125	143	325	23	
	DN 150	Δ120_R150	182	325	27	

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.



## Parapet Drains/Emergency Overflow Drains Modular system

## Installation Sample: Vapour Barrier

Modular System ← can be also combined with ALIT Parapet Drain (see page 72), PVC Emergency Overflow Drain (see page 74), ALIT Emergency Overflow Drain and ALIT Emergency Overflow Drain Bitumen (see page 75 - 76).



b/s/t Attika Leaf Guard (see page 98)





PVC Parapet Drain (see page 69)



ALIT Parapet Drain Bitumen (see page 73)

<u>or</u>



PVC Emergency Overflow Drain (see page 74)



<u>or</u>



ALIT Deck Element (see page 64)

## b/s/t PVC Parapet Drain Premium with angled base plate/without leading edge

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Pipe length 300 mm

Maximum pipe length

max. 1000 mm

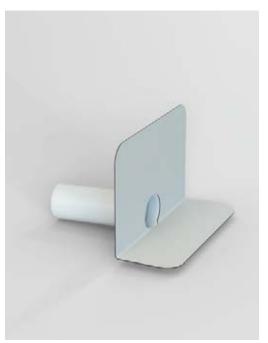
Membrane flange PVC, EVA

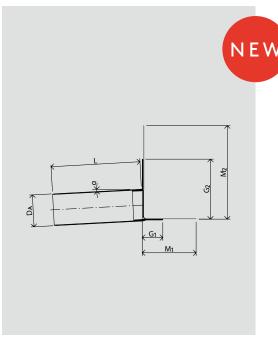
(see page 152)



Free calculation  $\leftarrow$ of quantity and flow rate







WG 1114 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	L [mm]	α [°]
	DN 50	152-050	50	71	141	186	325	300	3
	DN 70	152-070	75	71	141	186	325	300	3
	DN 80	152-080	90	71	141	186	325	300	3
	DN 100	152-100	110	71	210	186	325	300	3
	DN 125	152-125	125	71	210	186	325	300	3
	DN 150	152-150	160	71	210	186	325	300	3

<sup>\*</sup> Custom-made products cannot be returned. See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Parapet Drain

with angled base plate

#### Specification ←

Material

PVC-U, high impact strength, UV-stabilised

 $\frac{\text{Pipe length}}{300 \text{ mm}}$ 

With dam level to use as Emergency Overflow Drain

Special model\* DN 250, DN 300 Maximum pipe length

max. 1000 mm

Drainage pipe

Inclination of 25° max. for DN 50 – 150 Inclination of 5° max. for DN 200 – 300

Membrane flange PVC, EVA (see page 152)



Free calculation ← of quantity and flow rate

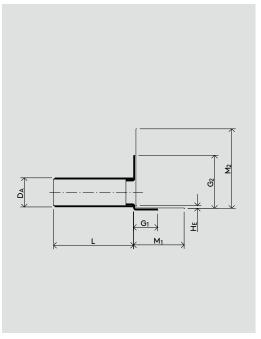












WG 1114 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
	DN 50	132-050	50	47	103	122	178	5	300
	DN 60	132-060	63	66	134	141	209	5	300
	DN 70	132-070	75	49	131	134	216	5	300
	DN 80	132-080	90	53	147	128	222	5	300
	DN 100	132-100	110	57	173	192	308	5	300
	DN 125	132-125	125	50	180	185	315	5	300
	DN 150	132-150	160	47	213	167	333	6	300
	DN 200	132-200	200	- <del></del>	301	 189	 391	- <del></del>	300

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

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## b/s/t PP Parapet Drain

with angled base plate

Specification ←

Material

PP, high impact strength, UV-stabilised

Pipe length 300 mm

With dam level to use as Emergency Overflow Drain

Maximum pipe length max. 1000 mm

Membrane flange

PP (see page 153)

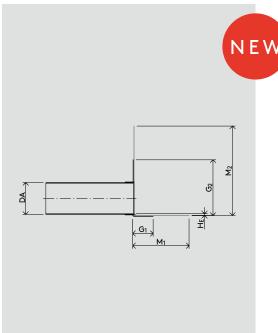


Free calculation ← of quantity and flow rate









WG 2114 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
	DN 50	PP132-050	50	72	128	147	203	6	300
	DN 70	PP132-070	75	59	141	134	216	6	300
	DN 80	PP132-080	90	52	148	127	223	6	300
	DN 100	PP132-100	110	77	193	192	308	6	300
	DN 125	PP132-125	125	69	201	184	316	6	300
	DN 150	PP132-150	160	52	218	167	333	6	300

<sup>\*</sup> Custom-made products cannot be returned. See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Parapet Drain

with angled base plate

 $\mathsf{Specification} \gets$ 

Material

PE, high impact strength, UV-stabilised

 $\frac{\text{Pipe length}}{300 \text{ mm}}$ 

With dam level to use as Emergency Overflow Drain Maximum pipe length

max. 1000 mm

Membrane flange PE (see page 153)

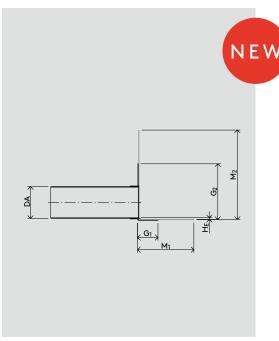


Free calculation ← of quantity and flow rate

Special models ← on request\*

↑ H<sub>E</sub>





W	G	1	1	1	4	$\leftarrow$

Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
DN 50	PE132-050	50	72	128	147	203	6	300
DN 70	PE132-070	75	59	141	134	216	6	300
DN 80	PE132-080	90	52	148	127	223	6	300
DN 100	PE132-100	110	77	193	192	308	6	300
DN 125	PE132-125	125	69	201	184	316	6	300
DN 150	PE132-150	160	52	218	167	333	6	300

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Parapet Drain

with angled base plate

Specification ←

Material Aluminium

Pipe length
300 mm, 450 mm or 600 mm
Non-standard pipe lengths on request\*

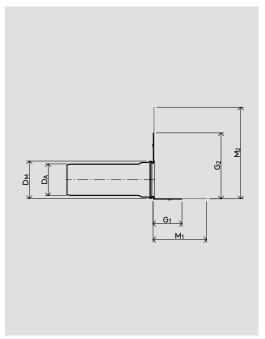
Membrane flange
Polyolefin, EPDM, ECB, PIB, PVC etc.
(see page 152 – 153)



Free calculation ← of quantity and flow rate







WG 1214 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
	DN 70	A132-070450	75	98	125	195	210	290	10	450
	DN 70	A132-070600	75	98	125	195	210	290	10	600
	DN 80	A132-080450	90	117	115	215	200	305	12	450
	DN 80	A132-080600	90	117	115	215	200	305	12	600
	DN 100	A132-100300	110	135	105	225	200	315	12	300
	DN 100	A132-100450	110	135	105	225	200	315	12	450
	DN 100	A132-100600	110	135	105	225	200	315	12	600
	DN 125	A132-125300	125	145	95	230	190	320	12	300
	DN 125	A132-125450	125	145	95	230	190	320	12	450
	DN 125	A132-125600	125	145	95	230	190	320	12	600

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Parapet Drain Bitumen

with angled base plate

Specification ←

Material Aluminium Membrane flange SBS bitumen roofing membrane

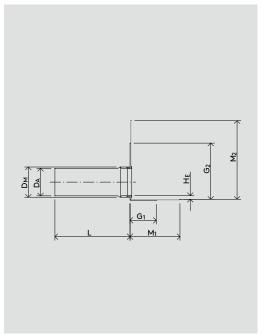
Pipe length

300 mm, 450 mm or 600 mm

Non-standard pipe lengths on request\*







WG 1214 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
	DN 70	A132-B070450	75	98	125	195	200	275	13	450
	DN 70	A132-B070600	75	98	125	195	200	275	13	600
	DN 80	A132-B080450	90	117	115	215	195	295	15	450
	DN 80	A132-B080600	90	117	115	215	195	295	15	600
	DN 100	A132-B100300	110	135	105	225	200	315	15	300
	DN 100	A132-B100450	110	135	105	225	200	315	15	450
	DN 100	A132-B100600	110	135	105	225	200	315	15	600
	DN 125	A132-B125300	125	145	95	230	190	320	15	300
	DN 125	A132-B125450	125	145	95	230	190	320	15	450
	DN 125	A132-B125600	125	145	95	230	190	320	15	600

See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC PVC Emergency Overflow Drain

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Pipe length 300 mm

Without base plate

Special model\* DN 125, DN 150

Maximum pipe length max. 1000 mm

Membrane flange

PVC, EVA (see page 152)

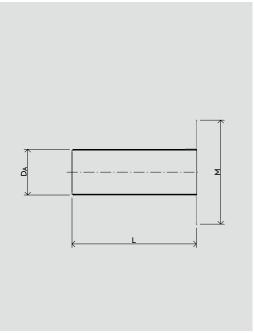


Free calculation ← of quantity and flow rate

Special models ← on request\*







|--|

Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	M [mm]	L[mm]
DN 40	131-040	40	Ø 160	300
DN 50	131-050	50	Ø 160	300
DN 60	131-060	63	Ø 200	300
DN 70	131-070	75	Ø 200	300
DN 80	131-080	90	250 x 250	300
DN 100	131-100	110	250 x 250	300

<sup>\*</sup> Custom-made products cannot be returned.
See calculation tool under "Service" on www.bst-gmbh.de
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Emergency Overflow Drain

 $\mathsf{Specification} \gets$ 

Material Aluminium

Pipe length

450 mm or 600 mm

Without base plate

Membrane flange

Polyolefin, EPDM, ECB, PIB, PVC etc.

(see page 152 – 153)

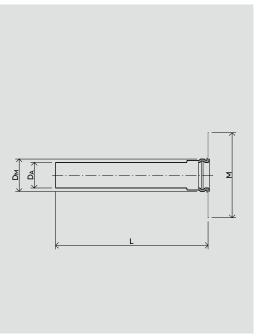


Free calculation ← of quantity and flow rate

Special models ← on request\*







WG 1214 ←

Nominal Width	Product No.	$D_A \emptyset [mm]$	D <sub>M</sub> Ø[mm]	M [mm]	L[mm]
Ø 54	A131-054450	54	64	350	450
Ø 54	A131-054600	54	64	350	600
DN 70	A131-070450	75	90	350	450
DN 70	A131-070600	75	90	350	600
DN 100	A131-100450	110	121	500	450
DN 100	A131-100600	110	121	500	600

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Emergency Overflow Drain Bitumen

 $\mathsf{Specification} \gets$ 

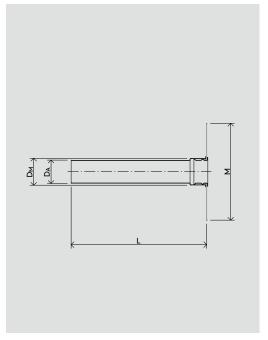
Material Aluminium

Pipe length 450 mm or 600 mm Without base plate Membrane flange

SBS bitumen roofing membrane







W	'G	121	14	<b>(</b>

Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	MØ[mm]	L[mm]
Ø 54	A131-B054450	54	64	300	450
Ø 54	A131-B054600	54	64	300	600
DN 70	A131-B070450	75	86	320	450
DN 70	A131-B070600	75	86	320	600
DN 100	A131-B100450	110	121	360	450
DN 100	A131-B100600	_ 110	121	360	600

## b/s/t PVC Emergency Overflow Drain S

with water dam level

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Water dam level

H<sub>E</sub>: optional

(further dam levels on request)

Special model\* DN 250, DN 300 Pipe length T 300 mm

Membrane flange

PVC, EVA (see page 152)

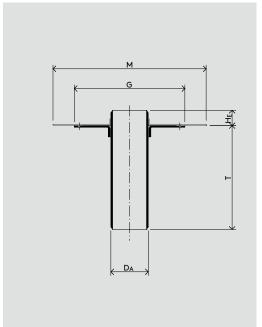


Free calculation ← of quantity and flow rate

Special models ← on request\*







WG 1114 ←

Nominal Width	Product No.	D <sub>A</sub> Ø[mm]	G [mm]	M [mm]	T[mm]	H <sub>E</sub> **[mm]
DN 50	133-050	50	150	300	300	35
DN 70	133-070	75	200	350	300	35
DN 100	133-100	110	230	500	300	35
DN 125	133-125	125	230	500	300	45
DN 150	133-150	160	260	500	300	45
DN 200	133-200	200	400	580	300	45

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

<sup>\*\*</sup>  $H_E$  to customer's specifications

## b/s/t Emergency Overflow Drain S

with water dam level

Specification ←

<u>Material</u>

PP, high impact strength,

**UV-stabilised** 

Water dam level

H<sub>E</sub>: optional

(further dam levels on request)

Pipe length T 300 mm

Membrane flange

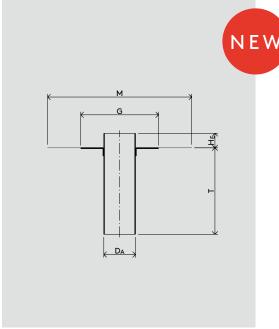
PP (see page 153)



Free ← calculation of quantity and flow rate







WG 2114 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	H <sub>E</sub> ** [mm]
	DN 50	PP133-050	50	200	350	300	35
	DN 70	PP133-070	75	200	350	300	35
	DN 100	PP133-100	110	270	500	300	35
	DN 125	PP133-125	125	270	500	300	45
	DN 150	PP133-150	160	270	500	300	45

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup>  $H_E$  to customer's specifications

## b/s/t PE Emergency Overflow Drain S

with water dam level

 $\mathsf{Specification} \gets$ 

Material

PE, high impact strength,

**UV-stabilised** 

Water dam level

H<sub>E</sub>: optional

(further dam levels on request)

Pipe length T 300 mm

Membrane flange

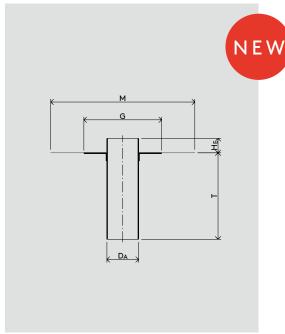
PE (see page 153)



Free ←
calculation of
quantity and
flow rate







WG 2114 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	G [mm]	M [mm]	T [mm]	H <sub>E</sub> ** [mm]
	DN 50	PE133-050	50	200	350	300	35
	DN 70	PE133-070	75	200	350	300	35
	DN 100	PE133-100	110	270	500	300	35
	DN 125	PE133-125	125	270	500	300	45
	DN 150	PE133-150	160	270	500	300	45

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> H<sub>E</sub> to customer's specifications
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t ALIT Emergency Overflow Drain S

with water dam leve

Specification ←

Material Aluminium

Pipe length 300 mm

Complete with water dam pipe, made of aluminium, L = 150 mm

Water dam level

To be cut to dam level, maximum dam level 90 mm

Membrane flange

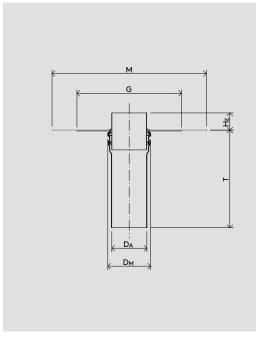
Polyolefin, EPDM, ECB, PIB, PVC etc (see page 152 – 153)



Free ←
calculation of
quantity and
flow rate







WG 1214 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	GØ [mm]	M [mm]	T [mm]	H <sub>E</sub> [mm]
	DN 70	A133-070300	75	92	325	500	300	90
	DN 100	A133-100300	110	130	325	500	300	90
	DN 125	A133-125300	125	142	325	500	300	90

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t ALIT Emergency Overflow Drain S Bitumen

with water dam level

 ${\sf Specification} \leftarrow$ 

Material Aluminium

 $\frac{\text{Pipe length}}{300 \text{ mm}}$ 

Complete with water dam pipe, made of aluminium, L = 150 mm

Water dam level

To be cut to dam level, maximum dam level 90 mm

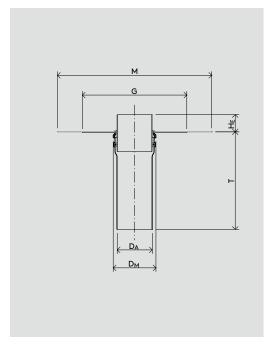
Membrane flange

SBS bitumen roofing membrane









٧	WG 1214 ←	Nominal Width	Product No.	D <sub>A</sub> Ø [mm]	D <sub>M</sub> Ø [mm]	GØ [mm]	MØ [mm]	T [mm]	H <sub>E</sub> [mm]
		DN 70	A133-B070300	75	92	325	500	300	90
		DN 100	A133-B100300	110	130	325	500	300	90
		DN 125	A133-B125300	125	142	325	500	300	90

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Emergency Overflow Drain R

with straight or angled base plate

#### Specification ←

Material

PVC-U, high impact strength, UV-stabilised

Pipe length\*

300 mm (Special length on request)

Design-generated dam level of 15 mm minimum

Water dam level 35 mm, 45 mm (or according to specification) with angled base plate; higher dam levels built with straight base plate (please specify with order)

Membrane flange

PVC, EVA (see page 152)

Custom-made products

Emergency Overflow Drain RS (see page 87)

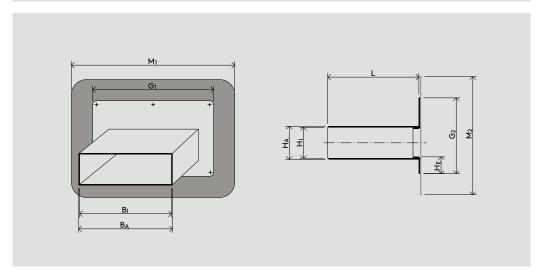


Free ←
calculation of
quantity and
flow rate

Special models ← on request\*







#### WG 1114 ←

Туре	Product No.	H <sub>A</sub> [mm]	H <sub>I</sub> [mm]	B <sub>A</sub> [mm]	B <sub>I</sub> [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	M <sub>1</sub> [mm]	M <sub>2</sub> [mm]	H <sub>E</sub> [mm]	L [mm]
60 x 60 mm	135-060	60	55	60	_55	200	200	350	350	72,5	300
90 x 90 mm	135-090	90	85	90	85	200	200	350	350	57,5	300
110 x 110 mm	135-110	107	102	107	102	250	250	500	500	74,0	300
125 x 80 mm	135-125	75	70	115	110	250	200	500	500	65,0	300
310 x 105 mm	135-310	106	95	310	298	400	250	600	500	55,0	300

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

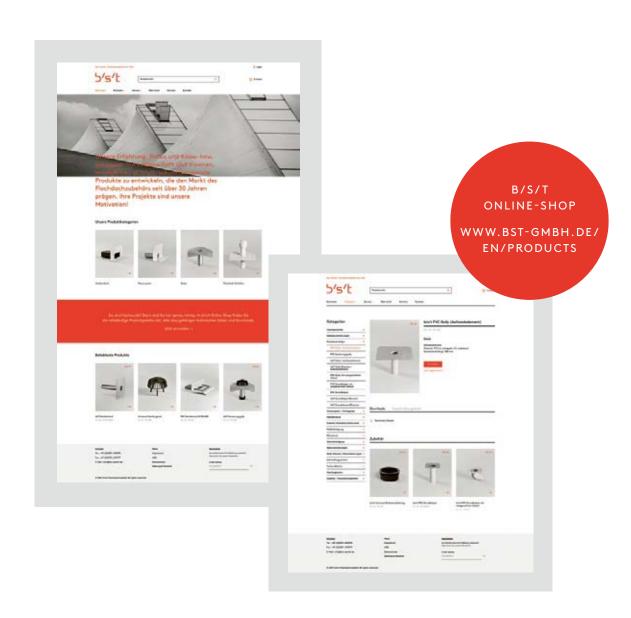
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

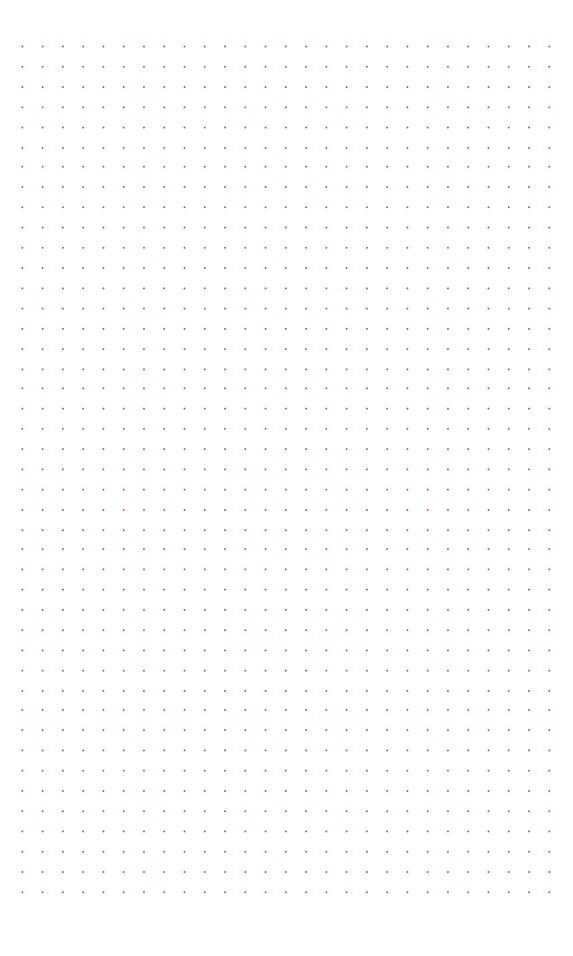
## b/s/t Online-Shop – fast and simple: www.bst-gmbh.de

Now you can send us your order easily and conveniently at any time with the b/s/t -Fast, easy ordering Online Shop. To use all the shop features, we kindly ask you to register before your first visit. After entering your details you will receive an email with your personal login data. You will find plenty of in-depth information and planning information for b/s/t's extensive product range.

#### Your benefits at a glance

- -Information on the latest products
- Extensive information on our product range and matching accessories
- All the relevant technical details for professional planning and assembly





# b/s/t Custom Production We supply numerous products made to order

For emergency ← overflow systems on flat roofs. b/s/t pr duces made to order waterspouts including roofing membrane flanges.\*

Please conact ← us for further information Phone: +49 805169 09 70



b/s/t Emergency Overflow Drain RS (see page 87 – 89)



b/s/t Emergency Overflow Drain RV with Water Dam (see page 90 – 92)



b/s/t Spout/Parapet Drain RS (see page 93 – 95)

## b/s/t Special construction\* – from PVC, PP or PE

#### Specification ←

Material

PP (Polypropylene), high impact strength, UV-stabilised

PE (Polyethylene), high impact strength, UV-stabilised

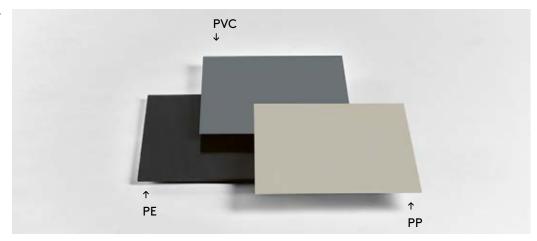
PVC-U high impact strength, UV-stabilised,

#### Attention

Please always ask for the lead time for special constructions!

Special sizes may have differing delivery times and shipping costs!

#### Material ←



The following ←
Parapet Drains /
Emergency
Overflow Drain
can be installed
with the membrane flanges
listed. Please
state the
manufacturer
and product
when ordering.

Manufacturer	Product	Basic	Moul- ded part I**	Emergency Overflow Drain RS	Emergency Overflow Drain RV	Spout/ Parapet Drain RS
Alwitra GmbH & Co.	Evalon	EVA		х	х	x
	Evalastic	EPDM		x		
Bauder GmbH & Co. KG	Thermofol D	PVC		x	x	x
	Thermofin F TL	PP		x	x	x
	Thermoplan T TL	PP		x	x	x
BMI Wolfin Bautechnik GmbH	Cosmofin F	PVC		x	x	x
	Tectofin R	PVC		x	x	x
	Everguard	PP		x	x	x
	Wolfin IB	PVC		x	x	x
SaarGummi Construction GmbH	Novoproof	EPDM		x		x
FDT Flachdachtechnologie	Rhenofol C	PVC		x	x	x
GmbH & Co. KG	Rhepanol HG	PIB		x		x
Firestone Building Products	UltraPly/FPO	PP		x	x	x
Georg Börner GmbH & Co. KG	Logicroof V-SR	PVC		x	x	x
Icopal Synthetic Membranes	Monarplan D	PVC		x	x	x
Köster Bauchemie AG	Köster TPO	PE		x		x
Mapei GmbH	Mapeplan D15	PVC		x	x	x
	Mapeplan TD	PP		x	x	x
Polyfin AG	Polyfin 1020	PE		x	x	x
Renolit AG	Alkorplan F	PVC		x	x	x
	Alkortec D	EVA		x	x	x
	Alkortop D	PP		x	x	x
Schedetal Folien GmbH	ExtruPol M	PE		x	x	x
Sika Deutschland GmbH	Sikaplan S	PVC		x	x	x
	Sarnafil T	PP		x		x
Soprema-Klewa GmbH	Flagon S	PVC		x	x	x
	Flagon EP-S	PP		x	x	x
VAEplan GmbH	VAEplan Typ F	VAE		<u>x</u>	x	x

<sup>\*\*</sup> Moulded part made ■ from PP (colour similar

RAL 7032)

Moulded part made

■ from PE (colour: black)

Moulded part made

■ from PVC (colour similar RAL 7011)

## b/s/t PVC Emergency Overflow Drain RS\*

#### Specification ←

Material

PVC-U, high impact strength, **UV-stabilised** 

#### Special construction\*

Maximum inner width: 1000 mm, Minimum inner height: 60 mm, Material thickness: 5 mm Inner width over 500 mm built with a stabilising bar

Factory built dam level of 15 mm min.

Water dam level 35 mm, 45 mm (or according to instruction) with angled base plate or with a straight base plate on a water dam level of 50 mm or above (please specify with order).

Membrane flange

PVC, EVA (see page 152)



Free ← calculation of quantity and flow rate

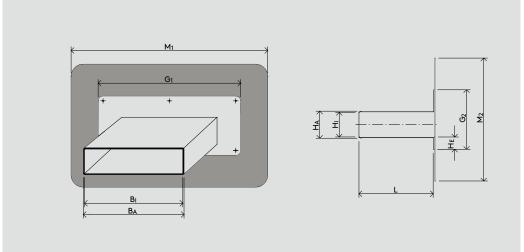












WG 1321 ←	Туре	Product No.	Special construction* – prices on request
	PVC-RS	135-000	Maximum inner width 1000 mm; Minimum inner height 60 mm;
			Material thickness 5 mm. Special models* are built according to submitted drawing only!nung!

<sup>\*</sup> Custom-made products cannot be returned. See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t PP Emergency Overflow Drain RS\*

#### Specification ←

Material

PP (Polypropylene), high impact strength, UV-stabilised

#### Special construction\*

Maximum inner width: 1000 mm, Minimum inner height: 60 mm, Material thickness: 5 mm Inner width over 500 mm built with a stabilising bar Factory built dam level of 15 mm min.

Water dam level 35 mm, 45 mm (or according to instruction) with angled base plate or with a straight base plate on a water dam level of 50 mm or above (please specify with order).

Membrane flange

PP (see page 153)



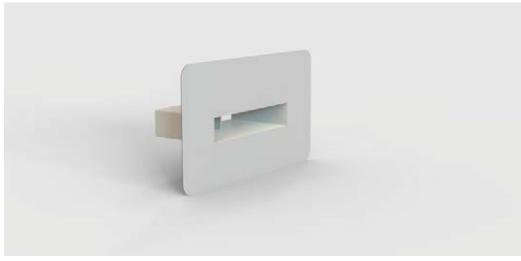
Free ← calculation of quantity and flow rate

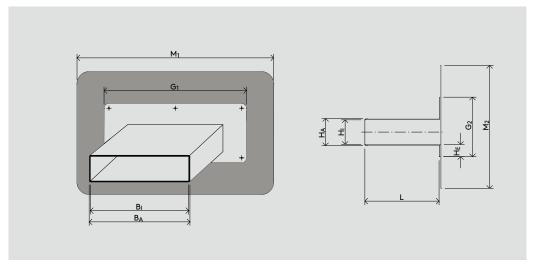












WG 1322 ←	Туре	Product No.	Special construction* – prices on request
	PP-RS	PP135-000	Maximum inner width 1000 mm; Minimum inner height 60 mm; Material thickness 5 mm. Special models* are built according to submitted drawing only!

<sup>\*</sup> Custom-made products cannot be returned.
See calculation tool under "Service" on www.bst-gmbh.de
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t PE Emergency Overflow Drain RS\*

#### ${\sf Specification} \leftarrow {\sf Material}$

PE (Polyethylene), high impact strength, UV-stabilised

#### Special construction\*

Maximum inner width: 1000 mm, Minimum inner height: 60 mm, Material thickness: 5 mm Inner width over 500 mm built with a stabilising bar Factory built dam level of 15 mm min.

Water dam level 35 mm, 45 mm (or according to instruction) with angled base plate or with a straight base plate on a water dam level of 50 mm or above (please specify with order).

Membrane flange PE (see page 153)



Free ← calculation of quantity and flow rate

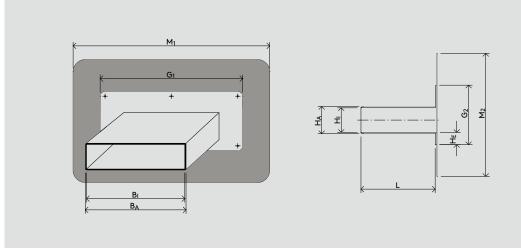












WG 1323 ←	Туре	Product No.	Special construction* – prices on request
	PE-RS	PE135-000	Maximum inner width 1000 mm; Minimum inner height 60 mm; Material thickness 5 mm. Special models* are built according to submitted drawing only!

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Emergency Overflow Drain RV with Water Dam\*

High Flow Rate!

Specification ←

Material

PVC-U, high impact strength,

UV-stabilised

Pipe length

400 mm

Dam levels

35/45/50/55 mm

Special model\*

Complete pipe length 700 mm max

Special model\*

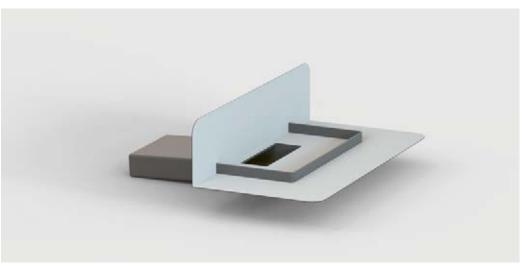
Without water dam; to be used as waterspout or emergency overflow drain

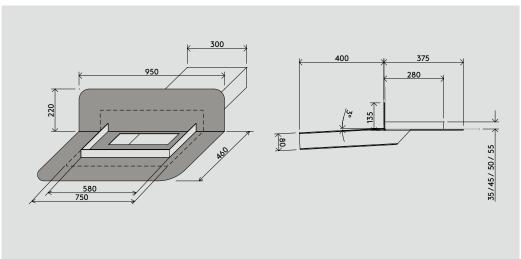
Membrane flange

PVC, EVA (see page 152)



Free ← calculation of quantity and flow rate





WG 1321 ←	Туре	Product No.	Q ** [I/sek]	h <sub>G</sub> *** [mm]	
	300 x 80 mm RV 35	134-30035	13,30	40	
	300 x 80 mm RV 45	134-30045	9,60	30	
	300 x 80 mm RV 50	134-30050	_7,80	25	
	300 x 80 mm RV 55	134-30055	6,00	20	

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> Q [l/sek] Discharge capacity at water level height hG at the emergency overflow; max. permissible water level height 75 mm.

<sup>\*\*\*</sup> hg [mm] Water level height/pressure height at the emergency overflow
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Emergency Overflow Drain RV with Water Dam\*

High Flow Rate!

#### Specification ←

Material

PP, shigh impact strength,

UV-stabilised

Pipe length 400 mm

Dam levels

35/45/50/55 mm

Special model\*

Complete pipe length 700 mm max

Special model\*

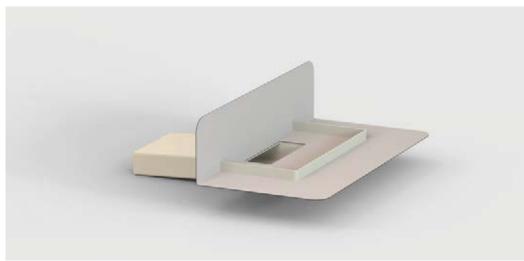
Without water dam; to be used as waterspout or emergency overflow drain

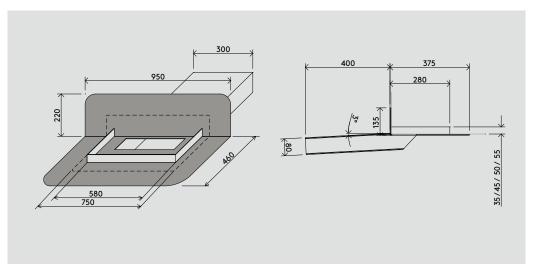
Membrane flange

PP (see page 153)



Free ← calculation of quantity and flow rate





W	'G	1322	$\leftarrow$

Туре	Product No.	Q ** [l/sek]	h <sub>G</sub> *** [mm]
300 x 80 mm RV 35	PP134-30035	13,30	40
300 x 80 mm RV 45	PP134-30045	9,60	30
300 x 80 mm RV 50	PP134-30050	7,80	25
300 x 80 mm RV 55	PP134-30055	6,00	20

<sup>\*</sup> Custom-made products cannot be returned.

<sup>\*\*</sup> Q [I/sek] Discharge capacity at water level height hG at the emergency overflow; max. permissible water level height 75 mm.

<sup>\*\*\*</sup> h<sub>G</sub> [mm] Water level height/pressure height at the emergency overflow
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Emergency Overflow Drain RV with Water Dam\*

High Flow Rate!

#### Specification ←

Material

PE, high impact strength, UV-stabilised

Pipe length 400 mm

Dam levels 35/45/50/55 mm

#### Special model\*

Complete pipe length 700 mm max.

#### Special model\*

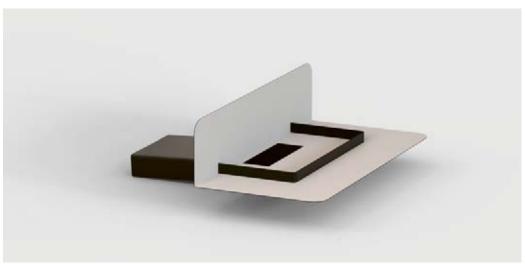
Without water dam; to be used as waterspout or emergency overflow drain

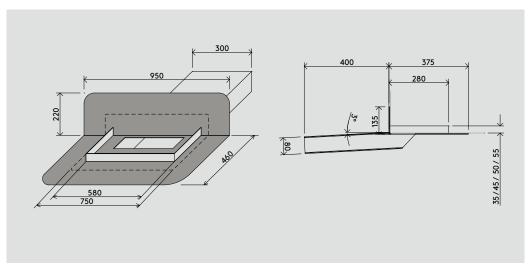
Membrane flange PE (see page 153)



Free ← calculation of quantity and flow rate

Special models ← on request\*





#### WG 1323 ←

Туре	Product No.	Q ** [l/sek]	h <sub>G</sub> *** [mm]
300 x 80 mm RV 35	PE134-30035	13,30	40
300 x 80 mm RV 45	PE134-30045	9,60	30
300 x 80 mm RV 50	PE134-30050	7,80	25
300 x 80 mm RV 55	PE134-30055	6,00	20

- \* Custom-made products cannot be returned.
- \*\* Q [l/sek] Discharge capacity at water level height hG at the emergency overflow; max. permissible water level height 75 mm.
- \*\*\* h<sub>G</sub> [mm] Water level height/pressure height at the emergency overflow Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PVC Spout/Parapet Drain RS

with bent base plate, construction without water backup rim

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Pipe length 300 mm

Special model\*

Complete pipe length 1000 mm max

Drainage pipe

3°

Membrane flange

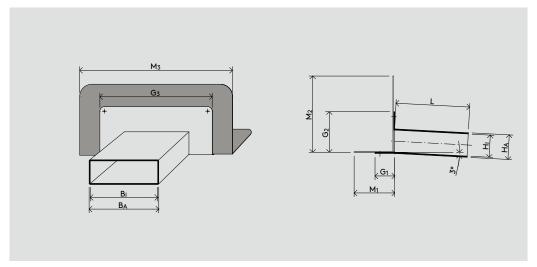
PVC, EVA (see page 152)



Free ← calculation of quantity and flow rate







WG 1321 ←	Type [mm]	Product No.	H <sub>A</sub> [mm]	H <sub>I</sub> [mm]	B <sub>A</sub> [mm]	B <sub>I</sub> [mm]	G <sub>1</sub> [mm]	G <sub>2</sub> [mm]	G <sub>3</sub> [mm]	M <sub>1</sub> [mm]		M <sub>3</sub> [mm]	L [mm]
	100 x 100	150-100	100	90	100	90	80	170	240	190	310	500	300
	150 x 100	150-150	100	90	150	140	80	170	290	190	310	550	300
	200 x 100	150-200	100	90	200	190	80	170	340	190	310	600	300

<sup>\*</sup> Custom-made products cannot be returned.

See calculation tool under "Service" on www.bst-gmbh.de

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PP Spout/Parapet Drain RS with bent base plate, construction without water backup rim

Specification ←

Material

PP, high impact strength,

**UV-stabilised** 

Pipe length 300 mm

Special model\*

Maximum pipe length: 1000 mm

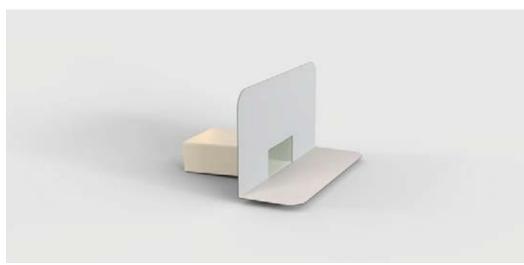
Drainage pipe

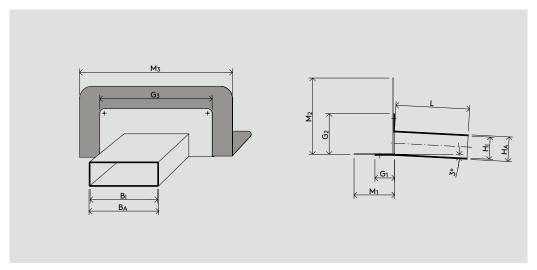
Membrane flange PP (see page 153)



Free ← calculation of quantity and flow rate







WG 1322 ←	Type [mm]	Product No.							G₃ [mm]			M <sub>3</sub> [mm]	L [mm]
	100 x 100	PP150-100	100	90	100	90	80	170	240	190	310	500	300
	150 x 100	PP150-150	100	90	150	140	80	170	290	190	310	550	300
	200 x 100	PP150-200	100	90	200	190	80	170	340	190	310	600	300

<sup>\*</sup> Custom-made products cannot be returned. See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t PE Spout/Parapet Drain RS with bent base plate, construction without water backup rim

Specification ←

Material

PE, high impact strength,

**UV-stabilised** 

Pipe length 300 mm

Special model\*

Maximum pipe length: 1000 mm

Drainage pipe

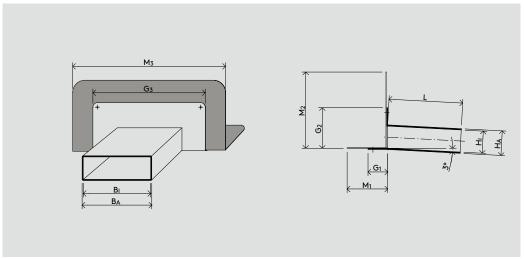
Membrane flange PE (see page 153)



Free ← calculation of quantity and flow rate







WG 1323 ←	Type [mm]	Product No.	H <sub>A</sub> [mm]				G <sub>1</sub> [mm]					M <sub>3</sub> [mm]	L [mm]
	100 x 100	PE150-100	100	90	100	90	80	170	240	190	310	500	300
	150 x 100	PE150-150	100	90	150	140	80	170	290	190	310	550	300
	200 x 100	PF150-200	100	90	200	190	80	170	340	190	310	600	300

<sup>\*</sup> Custom-made products cannot be returned. See calculation tool under "Service" on www.bst-gmbh.de Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### b/s/t Special construction\* - available also in RAL colours

In addition to functionality, the b/s/t products now also impress with their appearance and inconspicuousness. From now on we can offer you b/s/t products painted in RAL-colours.

You can order the colours individually according to RAL. Hide your emergency overflow in the house wall or complete the colour concept with a striking paint.

Your advantages at a glance

- Individual production
- Paint according to your imagination
- -Tone-in-tone with your colour concept
- Painting of emergency overflows, waterspouts, fans or ducts possible

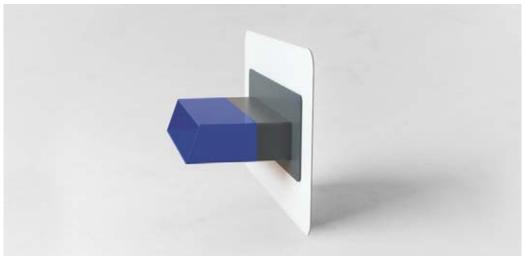


Colour ← example

Delivery times ← and prices on request

Required trans- ← port packaging will be charged additionally if required





<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications

### b/s/t Universal Leaf Guard

Specification ←

PA (polyamide), high impact strength, **UV-stabilised** 

Suitable for DN 70 - DN 200





WG 1311 ← Type

Product No.

DN 70 - 200

210-000

### b/s/t Attica Leaf Guard

Specification ←

Material

PA (polyamide), high impact strength, **UV-stabilised** 

Adjustable in height, suitable for DN 70 - DN 200



WG 1311 ← Type

Product No.

DN 70 - 200

210-001

### b/s/t Universal Anti Backflow Seal

Specification ←

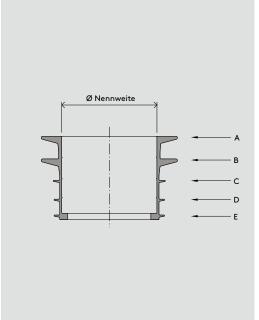
Material EPDM

Pack size

Diameter 50 mm, 75 mm, 90 mm, 110 mm 4 units / box, incl. lubricant

Diameter 125 mm, 160 mm 1 unit/box, incl. lubricant For the safe connection of outlet and vent pipes to existing downpipes without pipe coupling.





WG 4995 ← Nominal Width AØ[mm] BØ[mm] CØ[mm] DØ[mm] E[mm] Product No. 77 74 DN 50 (Ø 50 mm) 210-U050 66 64 61 DN 70 (Ø 75 mm) 210-U075 108 108 91 89 87 DN 80 (Ø 90 mm) 210-U090 111 108 105 110 106 135 124 120 DN 100 (Ø 110 mm) 210-U110 133 122 DN 125 (Ø 125 mm) 210-U125 154 154 152 160 160 DN 150 (Ø 160 mm) 210-U160 200 196 194 194 196

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## b/s/t Thermal Insulation Tube

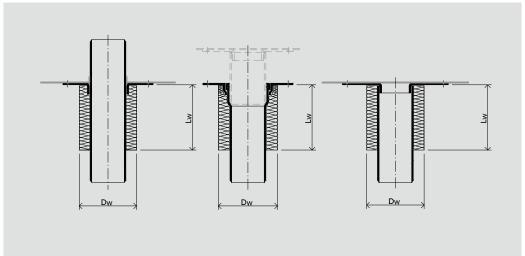
Specification ←

<u>Material</u> Microcellular rubber\*

Length 200 mm Suitable for

Pipelines with outside diameters DA according to table





WG 4995 ←	Nominal Width	Product No.	D <sub>W</sub> Ø[mm]	Lw [mm]	D <sub>A</sub> [mm]	
	DN 70	210-WD070	98	200	75	
	DN 100	210-WD100	145	200	110	
	DN 125	210-WD125	152	200	125	
	DN 150	210-WD150	190	200	160	

<sup>\*</sup> Closed-cell foam based on synthetic rubber Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Universal Heater Band

Specification ←

Material

Silicone/glass, polyamide

For universal use on pipes from DN 70 to DN 200. Suitable for retrofitting.

Length 200 mm

230 VAC/8 watts

Certified following

EN 60335-1

EN 55014-1A1

EN 61000-3-2

EN 61000-3-3



WG 4995 ← Type Product No.

DN 70 - 200 210-010

# b/s/t PVC Weather Cap

Specification ←

Material DVC II high income

PVC-U, high impact strength, UV-stabilised

Suitable for

Pipelines with outside diameters DA according to table



WG 1111 ←	Nominal Width	Product No.	D <sub>A</sub> [mm]
	DN 70	113-070	75
	DN 100	113-100	110
	DN 125	113-125	125
	DN 150	113-150	160

# b/s/t PA Weather Cap

Specification ←

<u>Material</u>

PA (polyamide), high impact strength, UV-stabilised

Suitable for

Pipelines with outside diameters DA according to table



WG 1211 ←	Nominal Width	Product No.	D <sub>A</sub> [mm]	
	DN 70	PA113-070	75	
	DN 100	PA113-100	110	
	DN 125	PA113-125	125	
	DN 150	PA113-150	160	

# b/s/t PVC Renovation cover

Specification ←

<u>Material</u>

PVC-U, high impact strength, UV-stabilised, incl. sealing ring

<u>Suitable for</u> Pipelines with outside diameters

DA according to table



WG 1111 ←	Nominal Width	Product No.	D <sub>A</sub> [mm]	
	DN 70	113-S070	75	
	DN 100	113-S100	110	
	DN 125	113-S125	125	
	DN 150	113-S150	160	

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC Pipe Bend 87°

#### Specification ←

<u>Material</u>

PVC-U, high impact strength, UV-stabilised, incl. sealing ring

Suitable for

Pipelines with outside diameters DA according to table



#### WG 4995 ←

Nominal Width	Product No.	D <sub>A</sub> [mm]
DN 50	199-87050	50
DN 70	199-87070	_ 75
DN 100	199-87100	110
DN 125	199-87125	125
DN 150	199-87150	160

# b/s/t PVC Pipe Bend 45°

#### Specification ←

Material

PVC-U, high impact strength, UV-stabilised, incl. sealing ring

Suitable for

Pipelines with outside diameters DA according to table



Nominal Width	Product No.	D <sub>A</sub> [mm]
DN 100	199-45100	110
DN 125	199-45125	125
DN 150	199-45150	160

# b/s/t PVC Socket Pipe (L=300/600)

Specification ←

Material

PVC-U, high impact strength, UV-stabilised, incl. sealing ring

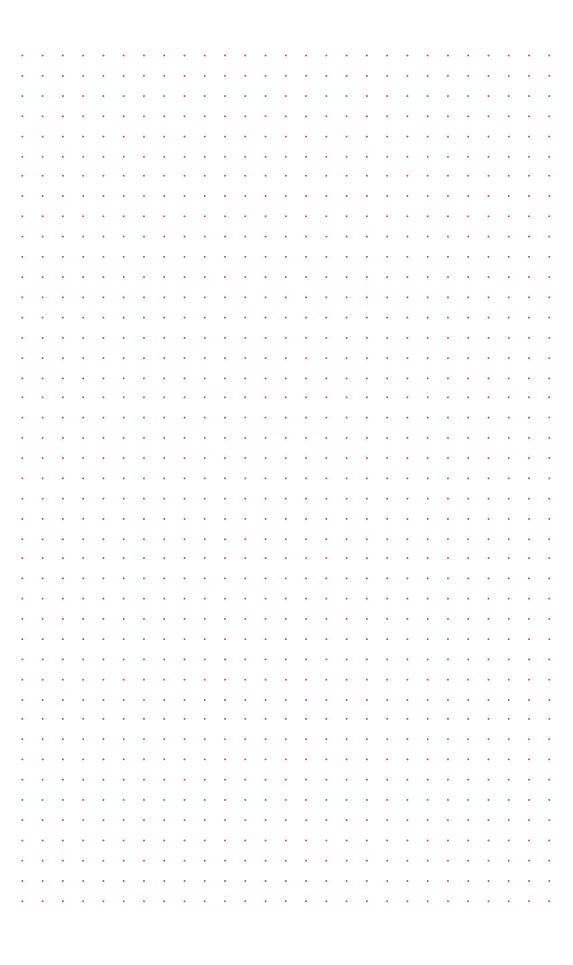
Suitable for Pipelines with outside diameters DA according to table



WG 4995 ←

Nominal Width	Product No.	D <sub>A</sub> [mm]	Length [mm]
DN 50	199-M050300	50	300
DN 70	199-M070300	75	300
DN 100	199-M100300	110	300
DN 125	199-M125300	125	300
DN 150	199-M150300	160	300
DN 200	199-M200300	200	300
DN 250	199-M250300	250	300

Nominal Width	Product No.	D <sub>A</sub> [mm]	Lenght [mm]
DN 50	199-M050600	50	600
DN 70	199-M070600	75	600
DN 100	199-M100600	110	600
DN 125	199-M125600	125	600
DN 150	199-M150600	160	600
DN 200	199-M200600	200	600
DN 250	199-M250600	250	600



# b/s/t Fastening System for the safe fixing of roofing membranes

# b/s/t PVC Disc

for PVC, EVA and VAE roof sheeting

Specification ←
Free ←
calculation of
quantity

Material PVC-U, high impact strength, UV-stabilised

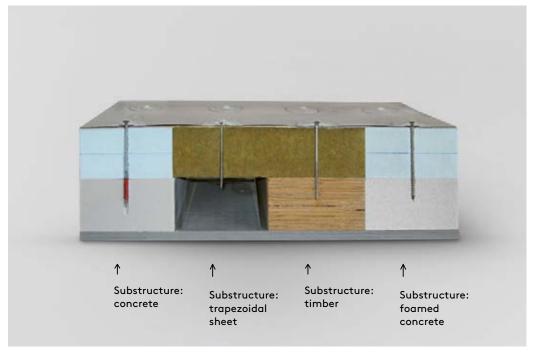
Special model\*
Colours on request

Minimum order quantity 100 units

WG 511 ←	Туре	Product No.
	light grey	521-GR1
	squirrel grey	521-GR2
	stone grey	521-GR3
	slate grey	521-GR4
	white	521-WE1



Installation ← example



<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Universal Screw BHS

Specification ←

Metal deck

Screw length =

Roof structure + 25 mm screw-in length

Timber deck

Screw length =

Roof structure + 35 mm screw-in length

Concrete deck

Screw length =

Roof structure + 50 mm screw-in length

Minimum order quantity

100 units



WG 512 ←	Туре	Product No.	<u>T</u>
	BHS M6 x 45	552-045	В
	BHS M6 x 65	552-065	В
	BHS M6 x 85	552-085	В
	BHS M6 x 105	552-105	В
	BHS M6 x 125	552-125	B
	BHS M6 v 145	552_145	

Туре	Product No.
BHS M6 x 165	552-165
BHS M6 x 185	552-185
BHS M6 x 205	552-205
BHS M6 x 225	552-225
BHS M6 x 245	552-245

# b/s/t Lightweight Concrete Screw Stainless Steel A2

Specification ← Screw length =

Roof structure + 60 mm screw-in length

Minimum order quantity

100 units



WG 512 ←

Туре	Product No.	
GB M6 x 80	554-080	
GB M6 x 130	554-130	

# b/s/t Extension Element, Galvanised

Specification  $\leftarrow$  Threaded bolt M6 x 100 Threaded sleeve M6 x 20

Minimum order quantity 100 units



WG 512 ←	Туре	Product No.	
	BHS M6 x 20	561-Z020	
	BHS M6 x 100	561-Z100	

# b/s/t Sealing Washer

Specification ← Required for polystyrene thermal insulation

Minimum order quantity

Attention Screws not supplied

100 units



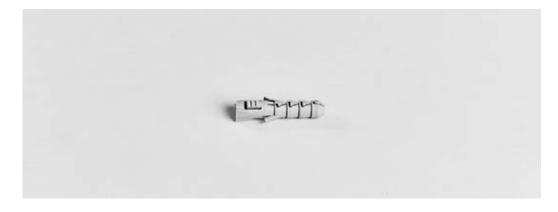
Product No WG 513 ←

531-100

# b/s/t Dowel

 ${\color{red}\mathsf{Specification}} \leftarrow \quad \mathsf{Required} \; \mathsf{for} \; \mathsf{concrete} \; \mathsf{deck}$ 

Minimum order quantity 100 units



WG 513 ← Type

Product No.

Dowel 8 x 40 571-008

# b/s/t Installation Adapter for Fastening <a href="System">System</a>

Specification ← Required for installation of b/s/t discs.Fits power screwdrivers with jaw chuck



WG 513 ← Product No.

511-ES6

# b/s/t Lightning Conductor Holder BSH

#### Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Coloui

Light grey (further colours on request\*)

For wire gauge 8 mm

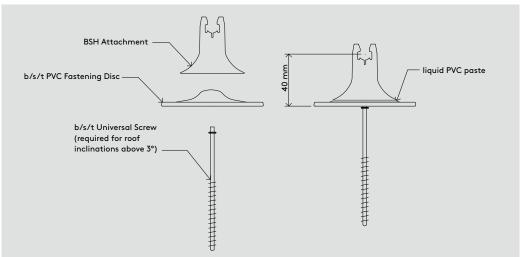
Minimum order quantity

100 units

Note

Only in connection with b/s/t PVC fastening disc. The holder can be fixed to the roof deck using the b/s/t disc fastener with additional screw (see page 109).





WG 511 ←	Туре	Product No.	
	BSH Attachment	541-GR1	
	b/s/t PVC Fastening Disc	521-GR1	
	Universal Screw	Various lengths and designs	

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC Lightning Conductor Flashing

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

For wire gauge 8 – 10 mm Incl. elastic sealing plug

Membrane flange

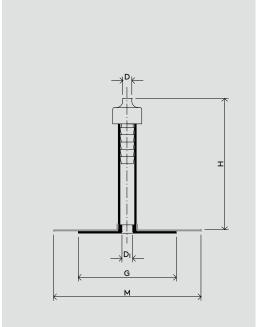
PVC, EVA (see page 152)



Special models ← on request\*







WG 1116 ←	Туре	Product No.	D <sub>I</sub> Ø [mm]	DØ [mm]	GØ[mm]	MØ[mm]	H [mm]
	with base plate	141-002	13	8-10	100	195	230

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

#### b/s/t Solar Panel Fastener

Connecting Bracket SB2

#### Specification ← Components:

b/s/t solar fastener, material PVC-U, high impact strength, UV-stabilised

Connecting bracket SB2, material Aluminium

The b/s/t Solar Fastener has a M8 stainless steel stud on the top, which is used to mount the connecting bracket.

The solar fastener can be used on PVC, EVA or VAE roofing membranes. The solar fastener is fixed to the roof deck using the b/s/t BHS Universal Screw and liquid PVC welding paste.

The connecting bracket SB2 is fixed around the bottom assembly rail of the solar panel support. Two solar fasteners per bracket take the vertical loads caused by wind forces.





WG 521 ← Product No.

615-SB2

# b/s/t Mounting Tool for Solar Panel Fastener

Specification ← With hexagon wrench key insert, to be used with power screwdriver



WG 521 ← Product No.

610-S70

# b/s/t Universal Screw SA

#### Specification ←

Material

Steel, galvanised

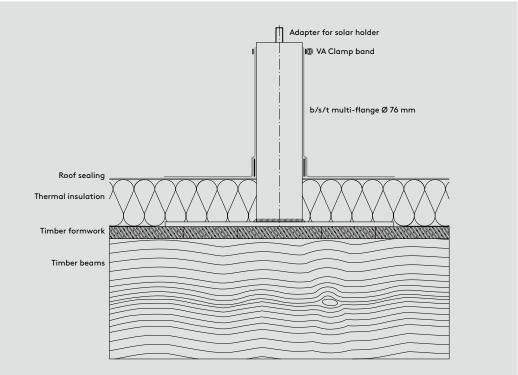
The b/s/t Universal Post SA can be installed directly on concrete decks, steel girders or timber decks. The post height and base plate dimensions are built to individual specifications (custom order\*).

The post can be used to mount solar panels, snow retaining systems, air-conditioning elements, advertising hoardings and much more.

A fast and secure water seal can be achieved by using the b/s/t PVC  $\emptyset$  76 mm Multi-Flange.



# Installation ← example\*\*



WG 1124 ← Type Product No.

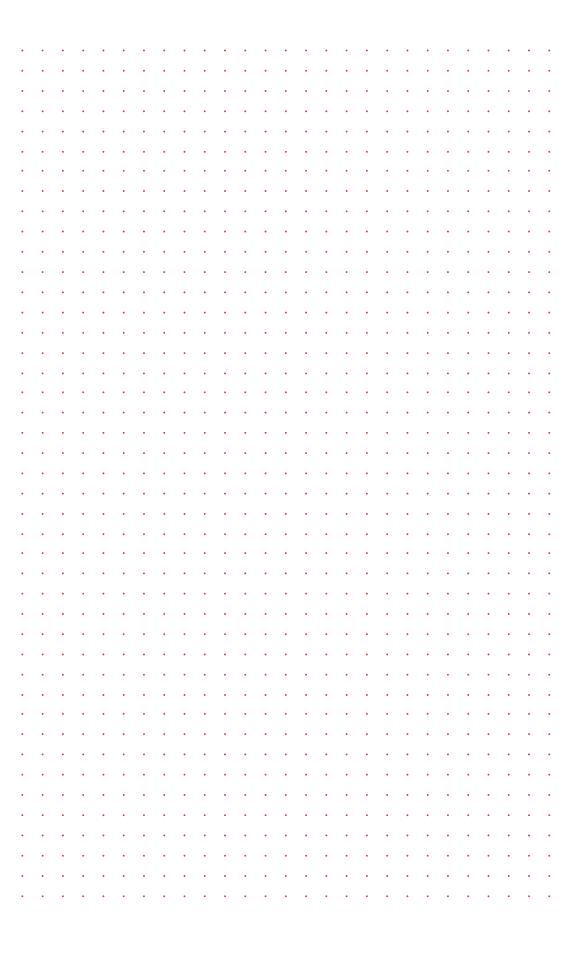
Universal Post SA

\* Custom-made products cannot be returned.

680-002

<sup>\*\*</sup> Fastening material is not included in the scope of delivery.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.



# b/s/t Fall Protection Systems – for maximum safety on flat roofs

- 118-119 Barrial® Roof Safety Railing System
- Panorama® Self Supporting
- 122-125 Primo Anchor Points
- Personal Safety Equipment

# Barrial® self-supporting\* Aluminium safety railing system for flat roofs inaccessible to the public



Manufacturer certification according to DIN EN 1090-1

The production control guarantees consistent quality and compliance of the products with applicable standards.











Abb. Barrial® self-supporting standard

Image: premium

Side protection system according to	Handrail [mm]	Intermediate rail [mm]	Contres [mm]	Skirting [mm]
DIN EN ISO 14122-3	Ø 45	Ø 35	max. 1.500	100**
DIN EN 13374 – Klasse A	Ø 35	Ø 35	max. 2.000	150***

#### Base fitting is compatible with the following railing types



Folding Image: premium



Straight



Angled 15°/30°/45°



Curved

- \* Fall Protection Systems cannot be returned.
- \*\* Skirting is required if the parapet wall is low or absent (< 100 mm) .
- \*\*\* Skirting is required if the parapet wall is low or absent (<150 mm). Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Barrial® Corridor escape, rescue and maintenance corridors

A suitable solution for practically any roof design

#### Tested and ← certified DIN 14094-2

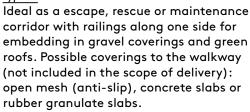
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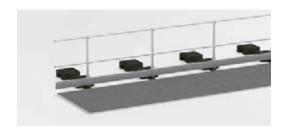
#### Note

Length and minimum width of escape, rescue and maintenance corridors are defined in workplace health and safety regulations.

The version with eaves-sided or (in the absence of an adjoining roof area) double-sided railing is regulated in DIN 14094-2.

#### Type 1\*





#### Specification ←

#### Type 2a und 2b\*

Ideal as a rescue or maintenance corridor with railings along one or both sides for embedding in gravel coverings and green roofs. Possible coverings to the walkway (not included in the scope of delivery): open mesh (anti-slip) or concrete slabs on gravel bed.





#### Specification ←

#### Type 3a und 3b\*

Rescue or maintenance corridor with floor slabs as superimposed load with railings along one side or both sides. No additional weights are needed as the floor slabs also act as superimposed load. Width of the walkway and grid pattern are adjusted to common panel sizes.





<sup>\*</sup> Fall Protection Systems cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Panorama® self-supporting

We see the flat roof as an economic factor and offer attractive complete solutions for new buildings and existing properties. Flat roof areas designed as living space create additional free space for private and public Use - For terraces. For Urban Gardening. For recreation and relaxation.

In short: an increase in value of the property.

- Type statics up to 1.0 kN/m horizontal impact load
- Modular, ballast supported modular system
- No penetration of the seal
- No thermal bridges and sound transmission
- Light, stable, weather and corrosion resistant
- No warranty problems
- Various fillings and colouring in RAL colour
- Additional feel-good rooms for new buildings and renovation



## Requirements for the railing system

areas are divided into different cateaories according to DIN 1991-1 Eurocode 1 and other country-specific standards Depending on the category of use, the specified impact loads must be observed and fulfilled.

The Panorama self-supporting railing system allows installation without penetrating the sealing of a flat roof surface. Stability and tilt resistance is guaranteed by external ballast.

A covering structure is applied to the substructure of the railing system (cantilever rail + load-bearing plates), taking into account the required ballast per m<sup>2</sup>.

The requirements for the railing system are directly influenced by various factors. A categorisation is made on the basis of the following parameters:

- Usage category of the flat roof surface (private/public) and required impact load
- selected covering (type) and construction height (weight) - e.g. gravel, greenery or floor slabs
- Required height of the railing from the level of the flooring (according to buil ding regulations)
- freely available installation area for positioning the load support plates
- Height of the building and geographical location (wind load zone & overlay)

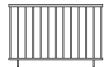
# Verification by type statics

The Panorama self-supporting railing system is covered by a type statics. With the construction of this type statics on the basis of European standards and additional, country-specific requirements,

the stability can be verified by calculation – an individual verification per construction project is no longer necessary! The proven performance of the system is made up as follows:

Panorama
self-supporting
railing system
is available in
Classic and
Premium
versions according to performance requirements

#### Panorama C-ST



#### Basic requirements

Initial configuration with optimum requirements

- horizontal impact load up to 0.5 kN/m
- -Version with lattice bar filling
- geographical position up to wind zone 3 with wind speeds up to 27.5 m/s
- Required load in the area of the load support plates: 120 kg/m²

#### Panorama P-ST



#### Maximum requirement

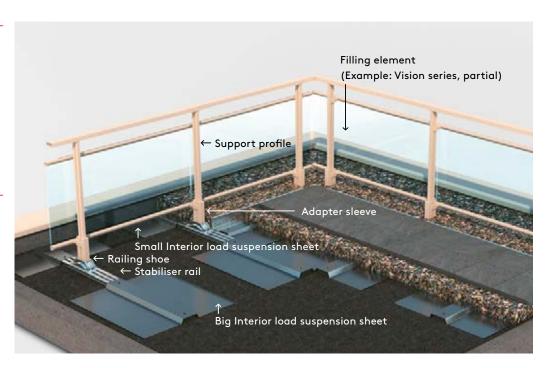
Static complete utilization of the system

- horizontal impact load up to 1.0 kN/m
- Design with lattice bar filling as well as partial and full glass filling
- geographical location up to wind zone 3 with wind speeds up to 27.5 m/s. (others on request)
- Required load in the area of the load support plates: 160 kg/m²

## The components of the system

INFO If you are ← interested, please order our detailed chel list giving further type options and a survey of the necessary parameters to ensure safety in your specific situation.

The freely ← available installation area for the substructure should be 2 m.



#### Fall Protection Primo 6 AD\*

Single Attachment Anchor Point for concrete deck

- Specification ← -Stainless steel stop device
  - For dowelling onto min. C20/25 concrete
  - -concrete min. 140 mm
  - -Single hole mounting
  - Mounting with heavy-duty dowels (included in delivery)
  - -Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795 Class A/B and has DIBt general building certification. Safe and fast lining with the b/s/t PVC multi-flange Ø 22 mm possible.

A fast and secure water seal can be achieved by using the b/s/t Multi-Flange Ø 22 mm.



	-	4	40		
W	'G	-1	12	4	$\leftarrow$

Product No.	Height [mm]	Extending upwards [mm]
760-BS6AD-400	400	100 – 200
760-BS6AD-500	500	200 – 300
760-BS6AD-600	600	300 – 400

## Fall Protection Primo 2 AD\*

Single Attachment Anchor Point for concrete deck

- Specification ← Stainless steel stop device
  - For dowelling onto min. C20/C25 concrete
  - concrete min. 120 mm
  - Fastening with 2 concrete dowels (Included)
  - Base plate 100 mm x 200 mm
  - Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795 Class A/B and has DIBt general building certification.

A fast and secure water seal can be achieved by using the b/s/t Multi-Flange Ø 22 mm.



#### WG 1121 ←

Product No.	Height [mm]	Extending upwards [mm]
760-BS2AD-400	400	100 – 200
760-BS2AD-500	500	200 – 300
760-BS2AD-600	600	300 – 400

<sup>\*</sup> Fall Protection Systems cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

#### Fall Protection Primo 2 AH\*

Single Attachment Anchor Point for timber deck

- Specification ← Stainless steel stop device
  - -For screwing onto wooden beams (strength class C24)
  - -Beam dimensions min. 120 mm x 120 mm
  - -Fastening by means of disc head wood screw 8 x 100/80 T40 A2
  - -Base plate 100 mm x 200 mm
  - -Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795 Class A/B and has DIBt general building certification.

A fast and secure water seal can be achieved by using the b/s/t Multi-Flange Ø 22 mm.



WG 1121 ←	Product No.	Height [mm]	Extending upwards [mm]
	760-BS2AH-400	400	100 – 200
	760-BS2AH-500	500	200 – 300
	760-BS2AH-600	600	300 – 400

#### Fall Protection Primo 7 OSB\*

Single Attachment Anchor Point for timber deck

- Specification ← Stainless steel stop device
  - -For screwing onto OSB board (min. 22 mm thick, strength class min. C24)
  - -Fastening by means of 12 x round-head wood screws 6.0 x 100 mm TX25 A2
  - -Beam dimensions min. 80 mm x 100 mm
  - -Base plate 300 mm x 120 mm
  - -Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795 Class A/B and has DIBt general building certification.

A fast and secure water seal can be achieved by using the b/s/t Multi-Flange Ø 22 mm.



WG 1121 ←	Product No.	Height [mm]	Extending upwards [mm]
	760-BS7OSB-400	400	100 – 200
	760-BS7OSB-500	500	200 – 300
	760-BS7OSB-600	600	300 – 400

<sup>\*</sup> Fall Protection Systems cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

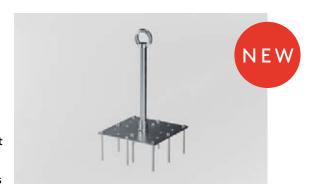
#### Fall Protection Primo 7 HS\*

Single attachment anchor point for timber

- -Stop device made of stainless steel (Ø 20 mm)
- For screwing onto wooden formwork min.24 mm (strength class min. C24)
- Beam dimensions min. 60 mm x 120 mm
- Mounting with 20 x round-head wood screw 6.0 x 100 mm TX25 A2
- Base plate 200 mm x 200 mm
- Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795, Class A/B and has a general building approval from the DIBt.

Safe and fast lining with the b/s/t PVC multi-flange Ø 22 mm possible.



WG 1121 ←	Product No.	Height [mm]	Extending upwards [mm]
	760-BS7HS-400	400	100 – 200
	760-BS7HS-500	500	200 – 300
	760-BS7HS-600	600	300 – 400

## Fall Protection Primo 17 AG 1\*

Load retained anchor point

- Load retained anchor points stainless steel
- -Weighting with 16-20 concrete plates depending on version (not included in delivery)
- Resilience: 1 person

Tested on bitumen and PVC as well as on concrete, wood, sheet metal. Attachment point is tested according to DIN EN 795, Class A/B.



WG 1121 ←	Product No.	Height [mm]	Extending upwards [mm]
	760-BS17AG	400	100 – 200

\* Fall Protection Systems cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Fall Protection Primo 4 TP 2 Trapezoid\*

Single attachment anchor point for trapezoid

- Stop device made of stainless steel (Ø 20 mm)
- For screwing onto trapezoidal sheet metal (min. 0.75 mm)
- Mounting by means of 4 tilt dowels (Included)
- -Base plate 214 mm x 300 mm
- Load capacity: 3 persons per anchor point

The anchor point is approved and CE-tested according to DIN EN 795 Class A/B and has DIBt general building certification.

A fast and secure water seal can be achieved by using the b/s/t Multi-Flange  $\emptyset$  22 mm.



WG 1121 ←	Product No.	Height [mm]	Extending upwards [mm]
	760-BS4TP2-400	400	100 – 200
	760-BS4TP2-500	500	200 – 300
	760-BS4TP2-600	600	300 – 400

# Primo Thermal Insulation Hood\*

Specification ← For 3 or Single Attachment Anchor Points made of stainless steel

Height 400 mm



WG 1121 ← Type	Product No.
Primo Thermal Insulation Hood	760-BSWDH

<sup>\*</sup> Fall Protection Systems cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Self-Retracting Lifeline\*

To DIN EN 360:2002



Specification ← The retractable lifeline offers a high degree of mobility and flexibility of use. The quick-action braking system works similar to a car safety belt. The mechanism keeps the cable, connected to the anchor point, under tension and guarantees an immediate stop function when necessary.

- Durable and low-maintenance retractable lifeline with galvanised steel cable
- Rotary swivel prevents twisting of the cable
- Lightweight and durable high-impact plastic housing
- Including karabiner double action hook and Ø 16 mm swivel eye, to connect the unit to the anchor post or anchorage line with a karabiner to DIN EN 362
- -Approved for vertical or horizontal use, tested for fall over edge



WG 1122 ←	Туре	Cable Length Housing W		Weight	Dimensions [mm]	Product No.
	Retractable Lifeline HWPS 4,5	4,5 m cable	Plastic	2,1 kg	400 x 130 x 78	768-IKHWPS45
	Retractable Lifeline HWPS 6	6,0 m cable	Plastic	2,5 kg	420 x 145 x 80	768-IKHWPS6
	Retractable Lifeline HWPS 12	12,0 m cable	Plastic	4,9 kg	500 x 195 x 95	768-IKHWPS12

## Equipment Bag\*

# **Equipment Cabinet\***

Specification ←

For the safe storage and transport of safety equipment, ropes, lanyards and harnesses. Made of sturdy fabric.

Dimensions: Ø 30 cm, height 60 cm

For the safe storage of safety equipment.

- Made of steel sheet metal
- For wall fastening, two mounting rods included
- Lockable
- Dimensions: 50 x 35 x 22 cm





WG 1122 ←

Product No. 768-IKBG **Equipment Bag** 

Product No. 768-ARGS **Equipment Cabinet** 

<sup>\*</sup> Fall Protection Systems cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

## Rescue Kit\*

#### Specification ←

Controlled descent rescue system with casualty lifting and remote reach capabil- - Steel IKV 13 screw-gate karabiner a ities; tested and certified in Germany to conform to the relevant European Standards. Designed for workers using full body fall arrest harnesses in conjunction with energy-absorbing lanyards or retractable-type devices. The Rescue Kit offers a compact, fully assembled and easily transported rescue unit. Using a lifting and releasing rescue action, the ABS3WH Rescue Kits are "NO CUT" rescue systems.

#### The kit contains

- ABS3WH controlled descent device with rescue lifting facility or automatic speed regulation for lowering off

- -1.0 m webbing anchorage sling
- connection device
- -Remote reach pole 307 x 2.5 x 2.5 cm (extended), 81 x 2.5 x 2.5 cm (retracted), with clamp to keep the rope karabiner hook in open position
- 10 mm diameter kernmantle rope with small double-action hooks at each end
- Available in two lengths of rope: 20.0 m or 40.0 m
- Edge rope protection plate for rescue application over roof edge
- Purpose-made rescue tackle bag
- Detailed information/instruction card
- -Weight only 6.2 kg

Rescue distance up to 5.0 m



WG 1122 ←	Туре	Product No.	
	Rescue Kit 20 m	768-IKRS20	
	Rescue Kit 40 m	768-IKRS40	

<sup>\*</sup> Fall Protection Systems cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Safety Bundles\*

#### Specification ← Set 1\* to DIN EN 363:2008

#### The bundle contains

- -Safety Harness IK G1
- Adjustable Fall Arrest Lanyard AG01
- 12 mm diameter kernmantle horizontal safety rope, length 10.0 m
- -Small equipment bag

#### Set 2\* to DIN EN 363:2008

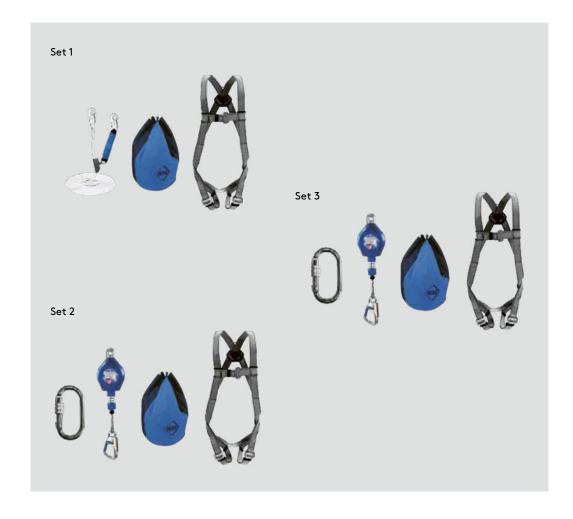
#### The bundle contains

- Safety Harness IK G1
- Retractable Lifeline HWPS 4.5, length of steel cable 4.5 m
- -Standard karabiner hook IKV 13
- -Small equipment bag

#### Set 3\* to DIN EN 363:2008

#### The bundle contains

- -Safety Harness IK G1
- Retractable Lifeline HWPS 6, length of steel cable 6.0 m
- -Standard karabiner hook IKV 13
- -Small equipment bag



#### WG 1122 ← <u>Type</u> Product No. 768-IKSS1 Set 1 768-IKSS2 Set 2 768-IKSS3 Set 3

<sup>\*</sup> Fall Protection Systems cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t PVC Multi-Flange

 $\mathsf{Specification} \gets$ 

 $\frac{\mathsf{Material}}{\mathsf{PVC-P}}$ 

Pre-fabricated flashing for fall arrest posts or cylindrical pipes, including stainless steel hose clamp. For available diameters see table below. Standard construction height

150 mm

Except Multi-Flange 12 mm and 50 mm Standard construction height 200 mm

Membrane flange

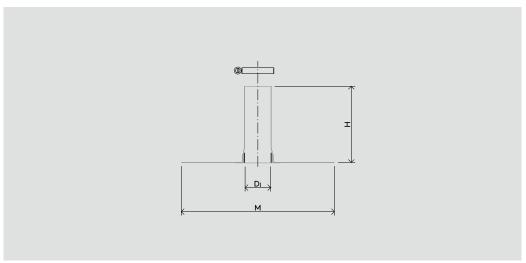
PVC, EVA (see page 152)



Special models ← on request\*

 $\prod$ 





WG 1116 ←

Туре	Product No.	D <sub>I</sub> Ø[mm]	M [mm]	H [mm]
Multi-Flange 12 mm	171-MF012	10-12	Ø 200	200
Multi-Flange 18 mm	171-MF018	18	Ø 200	150
Multi-Flange 22 mm	171-MF022	22	Ø 200	150
Multi-Flange 25 mm	171-MF025	27	Ø 200	150
Multi-Flange 50 mm	171-MF050	50	300 x 300	200
Multi-Flange 76 mm	171-MF076	76	350 x 350	150
Multi-Flange 90 mm	171-MF090	90	350 x 350	150
Multi-Flange 102 mm	171-MF102	102	350 x 350	150
Multi-Flange 115 mm	171-MF115	115	350 x 350	150

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Multi-Flange

Sonderlösungen

Specification ← b/s/t also offers custom made\* pipe flashings. The flashings can be made of flexible PVC-P, EVA or FPO material.

Please conact ← us for further information Phone: +49 8051 69 09 70





Туре	Product No.
PVC-Special Solutions	2912
PE-Special Solutions	2913
PP-Special Solutions	2914

<sup>\*</sup> Custom-made products cannot be returned. Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Snow Guard System

#### Specification ←

#### Material

The b/s/t Snow Guard System consists of the following components: galvanised base plate with fixing material (optional) and bracket for snow guard pipes (stainless steel A 1.4301). The snow guard pipes are not included in scope of delivery. A standard galvanised steel pipe (Ø 33.7 mm, gauge 2.0 mm) – in combination with pipe connectors can be used as a snow guard

pipe.

The specific alignment of the snow guard system is calculated by b/s/t for every single project.

The forces on the roof substructure caused by the Snow Guard System must be verified by the responsible structural designer of the building project.

The b/s/t ← Snow Guard
System can
be set directly
on the roofing
membrane and
is fixed to the
deck of the roof
(trapezoidal
metal, timber or
concrete).

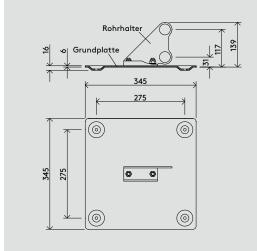
The Type 1 system is independent of the position and existence of girders or binders.

Free calculation ← of quantity

Please ask for e prices and delivery times!



Please ask for ← Type 1: for trapezoidal metal decks





Type 2: for timber decks

Rohrhalter 123
Grundplatte
20 70 20
8 0 0 0 0
300

WG 1125 ←	Туре	Product No.		
	Snow guard system Type 1	821-000		
	Snow guard system Type 2	822-000		

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Snow Stop Device

Specification ←

Material

PVC-U, high impact strength,

**UV-stabilised** 

Height 30 mm

For welding onto the roof membrane using liquid PVC paste

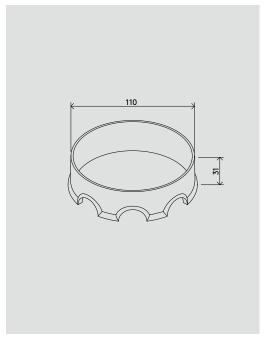
<u>Colour</u> Light grey

Special model\*

Special colours on request







WG 1115 ← Type Product No.

Ø 110 mm light grey 850-GR1

# b/s/t Metal Sheet (table ware)

Specification ←

Material

PVC-P, Metal Sheet

**Thickness** 

1,4 mm (coating: 0,8 mm)

b/s/t Metal Sheet 1 m x 2 m

50 panels per pack or 100 panels per

pallet

b/s/t Metal Sheet 1 m x 3 m

30 panels per pack or 60 panels per pallet



WG 311 ←

Туре	Product No.
50 panels 1 m x 2 m	311-050
100 panels 1 m x 2 m	311-100
30 panels 1 m x 3 m	311-030
60 panels 1 m x 3 m	311-060

# b/s/t Metal Sheet Baby Coils

Specification ←

<u>Material</u>

PVC-P, Metal Sheet

1,0 m

Thickness

1,4 mm (coating: 0,8 mm)

Pack size

Width

4 coils at 30 running metres per pallet



WG 311 ← Type Product No.
4 coils, 30 m x 1 m 3114

# b/s/t Metal Sheet Jumbo Coil

Specification ← 1

<u>Material</u>

PVC-P, Metal Sheet

<u>Thickness</u>

1,4 mm (coating: 0,8 mm)

 $\frac{\text{Width}}{\text{1,0 m}}$ 

Pack size

1 coil at 225 running metres per pallet



WG 311 ← Type Product No.
1 coil, 225 m x 1 m 3114.1

# b/s/t Aluminium Gravel Stop Rail

Specification ←

Material

Aluminium,

PVC light grey or PVC anthracite

Thickness

1,8 mm (coated: 0,8 mm)

Top coat

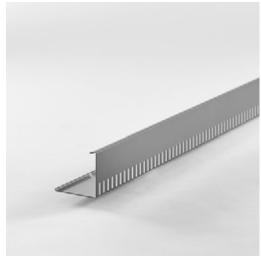
PVC light grey or PVC anthracite

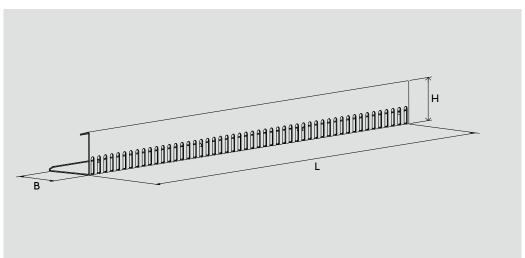
2 running metres/unit, including sheet

metal connector

To be welded to roofing membranes using liquid PVC paste.







W	G	3	17	$\leftarrow$	b
					_

/s/t Aluminium Gravel Stop Rail

PVC light grey	Product No.	<u>L[mm]</u>	B[mm]	H[mm]	
Height: 65 mm	321-V06	2000	80	65	
Height: 90 mm	321-V09	2000	90	90	

WG 317 ← b/s/t Aluminium Gravel Stop Rail

PVC anthracite	Product No.	L[mm]	B [mm]	<u>H [mm]</u>	
Height: 65 mm	321-V06.1	2000	80	65	
Height: 90 mm	321-V09.1	2000	90	90	

# b/s/t Universal Gravel Stop Rail

### Specification ←

Material Aluminium

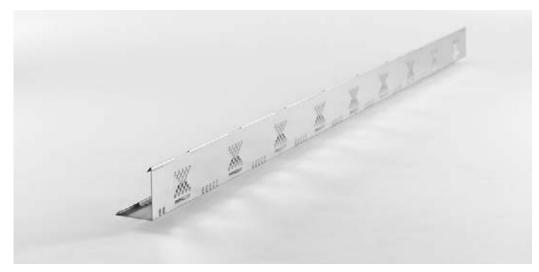
 $\frac{\text{Thickness}}{\text{1,5 mm}}$ 

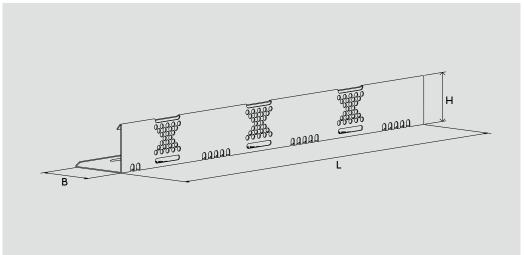
Length

2 running metres/unit, including sheet metal connector

Can be used with single-ply membranes or bitumen sheeting. The rail is fixed with membrane strips or hot air/gas torch (with bitumen).

Two different side lengths (100 mm and 80 mm) allow for profiles of variable height.





WG 318 ←	Туре	Product No.
	Universal Gravel Stop Rail	321-V80-100

### b/s/t Stainless Steel Paving Border Rail 90 PVC light grey

Specification ←

Material

Stainless steel 1.4404 PVC-P light grey

Height of profile 90 mm

Thickness

1,4 mm (coated: 0,8 mm)

Surface

PVC light grey

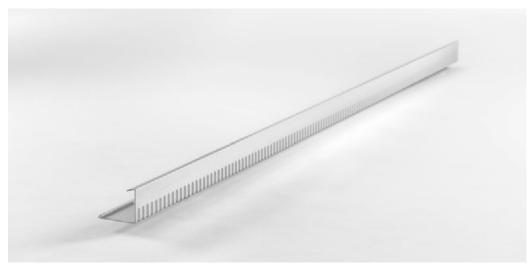
Length

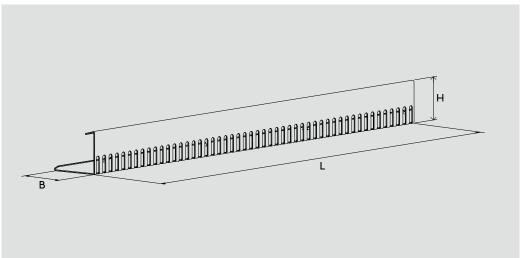
2 running metres/unit, including stainles

steel rail connector

To be welded to roofing membranes using

liquid PVC past





 WG 315 ←
 Type
 Product No.

 Paving Border Rail
 324-GR09

# b/s/t Universal Stainless Steel Paving Border Rail 80/100

### $\mathsf{Specification} \gets$

Material

Stainless steel 1.4404

Height of profile

80/100 mm

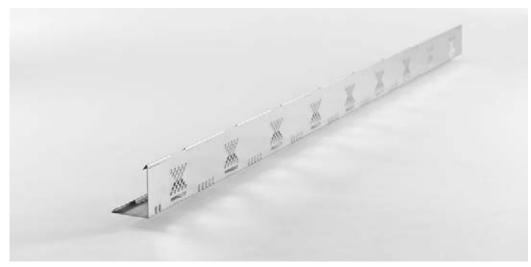
Two different side lengths (100 mm and 80 mm) allow for profiles of variable height.

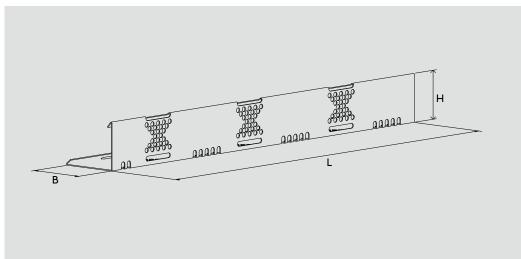
Thickness 0,8 mm

### Length

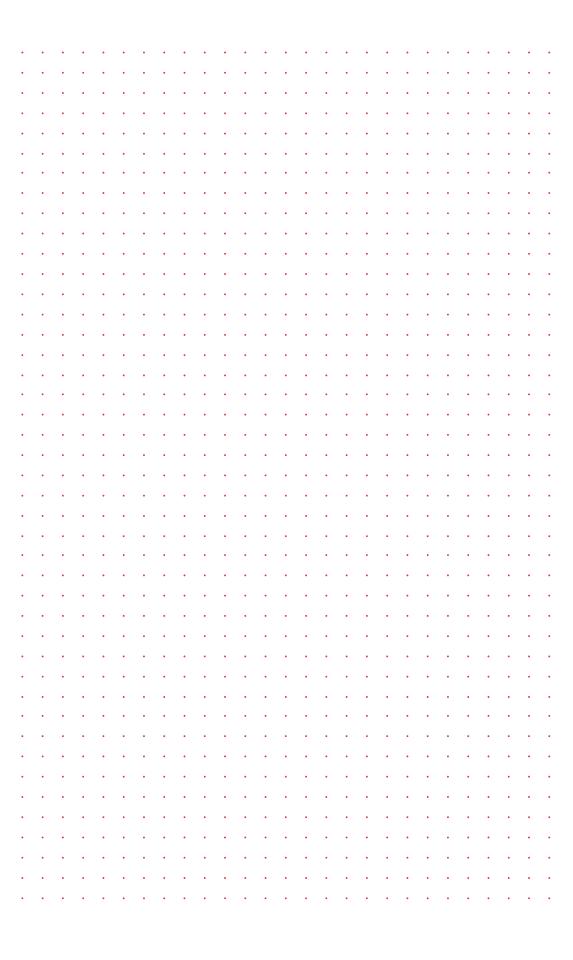
2 running metres/unit, including stainlesssteel rail connector

Can be used with single-ply membranes or bitumen sheeting. The rail is fixed with membrane strips or hot air/gas torch (with bitumen).





WG 315 ← Type Product No.
Universal Paving Border Rail 324-V80-100



# b/s/t PVC Liquid PVC Paste

### Specification ←

Colour Light grey

Dangerous good\*

UN 2056, tetrahydrofuran stabilised, class 3, II, (D/E)

Please pay attention to the safety instructions on the product sticker and in the product safety document.







### WG 411 ←

Туре	Product No.	
1 l can	411-LQ1	
6 x 1 l can/box	411-LQ1VE6	
5 I canister	411-K05	

### b/s/t Welding Solvent THF

### Specification ←

<u>Dangerous good\*</u> UN 2056, tetrahydrofuran stabilised, class 3, II, (D/E) Please pay attention to the safety instructions on the product sticker and in the product safety document.







### WG 414 ←

Туре	Product No.		
1 l can	421-LQ1		
6 x 1   can/box	421-LQ1VE6		
5 I canister	421-K05		
200 l barrel	421-200		

<sup>\*</sup> Dangerous goods and Gravel Bonding Adhesive cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Gravel Bonding Adhesive

Specification ← Dispersion basis, colourless

Protect against frost!\*
Please use product data sheet for handling instructions.





WG 4992 ←

Туре	Product No.		
5 kg canister	232-K05		
33 kg canister	232-K33		

### b/s/t PVC Cleaner

For PVC roofing membranes

Dangerous good\*
UN 1993, flammable liquid, N.A.G., class 3, II (D/E)

Please follow the safety instructions on the product sticker and on the safety data sheet.



WG 413 ←	Туре	Product No.
	5 I canister	223-K05

<sup>\*</sup> Dangerous goods and Gravel Bonding Adhesive cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# b/s/t Welding Brush

Specification ←

Width 40 mm

With PE 500 ml bottle



WG 4993 ←

Туре	Produc	t No.
500 ml	252-F5	

# b/s/t Wash Bottle PE

### $\begin{array}{ll} \textbf{Specification} \leftarrow & \textbf{For liquid PVC paste} \end{array}$



WG 4993 ←

• ]	Гуре	Product No.
	500 ml	251-500

# b/s/t PVC Internal Corner 90° b/s/t PVC External Corner 270° b/s/t PVC Skylight Corner 53°/73°

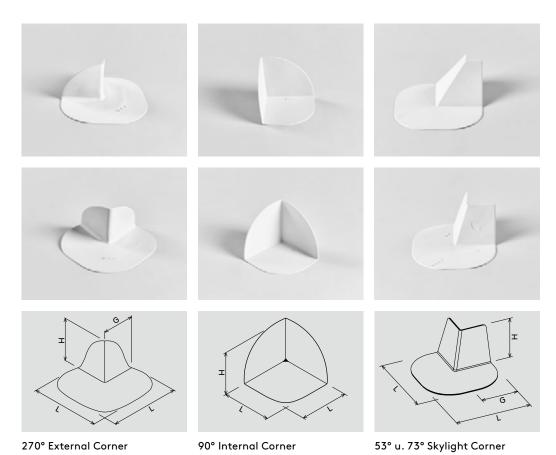
Specification ←

<u>Material</u>

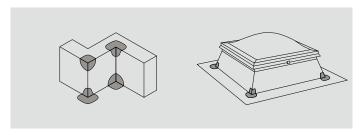
PVC-P, UV-stabilised

Colour Light grey

Pack size 25 units/box



Installation ← example



W	/G	49	91	4

Туре	Product No.	[mm]	L[mm]	H[mm]	G [mm]	on on
Internal Corner 90°	241-101001	1,50	90,0	80		
External Corner 270°	242-101001	1,50	155,0	75	75	
Skylight Corner 53°	242-201001	2,00	167,5	75	90	53°
Skylight Corner 73°	242-201002	2,00	155,0	75	77,5	73°

# b/s/t Butyl Tape DS

Specification ←

Material

Double-sided adhesive tape

For PE foils, moisture barriers etc.

Colour black
Thickness 1,5 mm
Roll length 30 running metres
Pack size 18 rolls/box



WG 4994 ←	Туре	Product No.	
	15 mm	261-015	

### b/s/t Aluminium/Butyl Tape

 $\mathsf{Specification} \gets$ 

Material

Universal sealing tape coated with aluminium foil

High adhesive strength, tearproof

Thickness 0,8 mm

Roll length 10 running metres

Pack size

50 mm: 20 rolls/box 75/100 mm: 10 rolls/box (further types on request\*)

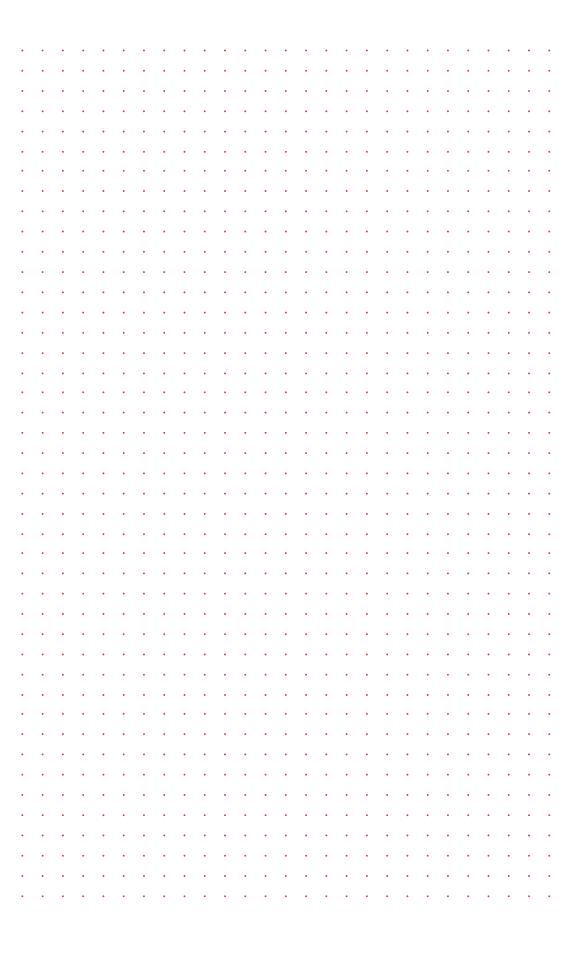


WG 4994 ← Type	Product No.
50 mm	262-050
75 mm	262-075
100 mm	262-100

<sup>\*</sup> Custom-made products cannot be returned.
Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# No.: +49 (0)8051 69 09 79

O Order  Sender		O Enquiry  Customer No.				
			Phone	e No		
			Order No.			
			Order	Date		
(if differing from billing address)		dress)	Contact Person (Delivery Address) Phone No. (Delivery Address)			
Order Please ch	oose the requi	red membrane				
	r mounting pa Seite 152 – 153					
Number	Product No.	Description/Type		Membrane Flange	Price (net)	
				-		
Total amo	ount (net) _ alue below 250.0	0 €: Minimum quar	ntity surchar	ge of 20.00 € for small o	rders	
Fixed date	e delivery on*	xtra freight charge				
Express options* Express surcharges will be invoiced and on the invoice shown separately.		<i>O</i> to 1:	2.00 noon			
		O in the course of the day				
	of sale, delivery of sale, products.	and payment apply	in the lates	t version. No right of retu	ırn for	



# Membrane Flanges for b/s/t PVC and ALIT Mounting Parts

Manufacturer	Product	Basic	Material thickness
Alwitra GmbH & Co.	Evalon grey	EVA	1,5 mm
	Evalon white*	EVA	1,5 mm
	Evalon slate grey*	EVA	1,5 mm
Bauder GmbH & Co. KG	Thermofol D light grey	PVC	1,8 mm
	Thermofol D anthracite*	PVC	1,8 mm
	Thermofol D blue grey*	PVC	1,8 mm
BMI Wolfin Bautechnik	Cosmofin F light grey*	PVC	1,5 mm
GmbH	Tectofin R grey*	PVC	1,5 mm
	Tectofin R titanium grey*	PVC	1,5 mm
	Wolfin IB black* PVC		1,5 mm
FDT	Rhenofol C light grey	PVC	1,5 mm
Flachdachtechnologie GmbH & Co. KG	Rhenofol C anthracite*	PVC	1,5 mm
Georg Börner GmbH & Co.KG	Logicroof V-SR light grey*	PVC	1,5 mm
Icopal Synthetic	Monarplan D silvergrey*	PVC	1,5 mm
Membranes	Monarplan D anthracite*	PVC	1,5 mm
Mapei GmbH	Mapeplan D15 light grey	PVC	1,5 mm
Renolit AG	Alkorplan F light grey*	PVC	1,5 mm
	Alkortec D slate grey*	EVA	1,5 mm
Sika Deutschland	Sikaplan S light grey	PVC	1,5 mm
GmbH	Sikaplan S anthracite*	PVC	1,5 mm
	Sikaplan SgmA beige*	PVC	1,5 mm
Soprema GmbH	Flagon S light grey*		1,5 mm
VAEplan GmbH	VAEplan Typ F grey	VAE	1,5 mm
	VAEplan Typ F white*	VAE	1,5 mm

<sup>\*</sup> Custom-made products cannot be returned.

Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

# Membrane Flanges for b/s/t PP/PE and ALIT Mounting Parts

Manufacturer	Product	Basic	Material thickness
Alwitra GmbH & Co.	Evalastic grey*	EPDM	1,5 mm
Bauder GmbH & Co. KG	Thermofin F TL silvergrey*/FPO	PP	1,8 mm
	Thermoplan TTL pearl white*/FPO	PP	1,8 mm
BMI Wolfin Bautechnik GmbH	TPO Everguard light grey*	PP	1,5 mm
Carlisle Construction Materials GmbH	Resitrix SK W black*	EPDM	2,5 mm
Duraproof technologies GmbH	Novoproof black with full thermofast coating*	EPDM	1,3 mm
FDT Flachdachtechnologie GmbH & Co. KG	Rhepanol HG 15 grey*	PIB	1,5 mm
Firestone Building	UltraPly grey*/FPO	PP	1,5 mm
Products	FS Quickseam SA Flashing black*	EPDM	1,5 mm
Köster Bauchemie AG	Köster TPO 2.0 U light grey*	PE	2,0 mm
Mapei GmbH	Mapeplan TD 15 traffic white*/FPO	PP	1,5 mm
Polyfin AG	Polyfin 1020 light grey*/FPO	PE	2,0 mm
Renolit AG	Alkortop D light grey*/FPO	PP	1,5 mm
Schedetal Folien GmbH	ExtruPol M light grey*/FPO	PE	2,0 mm
Sika Deutschland GmbH	Sarnafil T 66 D beige*/FPO	PP	1,5 mm
	Sarnafil T 66 D window grey*/FPO	PP	1,5 mm
Soprema GmbH	Flagon EP-S sandgrau*/FPO	PP	1,5 mm

 <sup>\*</sup> Custom-made products cannot be returned.
 Status: 03/20 b/s/t GmbH Koch Kunststofftechnologie reserves the right to make technical modifications.

### General terms and conditions of sale 154 and delivery

- 1. GENERAL SCOPE OF APPLICATION a) The present general terms and conditions of sale and delivery are valid for all business relations with our customers (hereinafter referred to as "purchasers' or "purchaser"). The terms and conditions of sale and delivery apply only to a purchaser, being an official businessman / contractor (§ 14 of the German Civil Code, hereinafter referred to as "BGB") or a corporate body of public law or a separate estate under public law.
- separate estate under paint law.

  b) Our terms and conditions of sale and delivery shall be applicable exclusively. We shall not acknowledge contradictory conditions or conditions deviating from our terms and conditions of sale and delivery, unless, we have explicitly approved of the validity of your conditions in writing. The terms and conditions of sale and delivery shall also be applicable if we deliver the goods to the purchaser knowing
- the contradictory or deviating conditions.
  c) The terms and conditions of sale and delivery shall also be applicable for all future transactions with the purchaser.

- CONCLUSION OF A CONTRACT
   a) If the order qualifies as an offer as defined under § 145 BGB, we can accept this offer within 14 days with a confirmation as defined under lit. b).
   b) The sales contract shall come about only through a written confirmation of the order from us. Our invoice shall also be applicable as order confirmation if no written order confirmation has been submitted previously.

- 3. OFFERS AND PRICES a) Unless otherwise explicitly agreed upon for individual cases in writing, our offers are provisional and not binding. Our prices, valid on the day of delivery, shall be applicable if prices have not been agreed upon while concluding the contract.
- obplication in piece have not been agreed upon white contracts.

  b) Documents like figures, drawings, weight and dimension specifications relevant to our offer must be considered only as approximate. They do not represent any agreed characteristics, guarantees or agreed qualities within the meaning of §§ 434(1) 1,633(2) 1 BGB.

  c) We reserve all rights to property and copyright of cost estimates, drawings and
- other documents. These should not be accessible to any third party. These must be returned immediately at the cost of the purchaser if a contract is not formed
- be returned immediately at the cost of the purchaser in a contract is not formed of). Our prices shall be applicable ex works, exclusive of customs duty, additional import duty plus the legal turnover tax.

  e) A minimum quantity surcharge of € 20.00 shall be calculated for orders of goods below € 250.00 (exclusive of the legal turnover tax).

  f) If a delivery takes place only four months after contract conclusion for reasons
- within the purchaser's control, we shall reserve the right to an increase in price in case our purchase prices increase or the fabrication or the sales and marketing costs increase due to circumstances that are not under our control.

### DELIVERY, DELAYED DELIVERY OR ACCEPTANCE, PASSING THE RISK

- Delivery time or deadlines shall be binding to us only if we have confirmed it writing and if the necessary approvals or documents are available and all technical queries have been clarified. The time is extended by an appropriate period if this is not done. The delivery deadline is considered as met if the delivery goods have left the warehouse before the expiry of this date or if the purchaser has been informed of its readiness for shipment status. Contracts
- purchaser nuts been informed on its redunders for simplifier status. Contacts where time is of the essence are not concluded.

  b) We shall always and without specifying any reasons be authorised to demand delivery of payment step by step or in advance, irrespective of other rights.

  c) Incase offorce majeure, we shall be entitled to postpone the delivery for the duration
- of the hindrance and an appropriate start-up period or withdraw entirely or partially due to the unfulfilled part of the contract. Force majeure acts could also be strikes, lockouts or unforeseeable and unavoidable circumstances that do not allow us to meet delivery deadlines despite efforts within reason. We must give proof for the same.
- d) If we have agreed upon with the purchaser in writing that we shall deliver the
- a) It we have agreed upon with the purchaser in writing that we shall deliver the goods on his/her call, the purchaser must call the total goods within 6 months after contract conclusion.
  e) If the purchaser causes default in acceptance or culpablyviolates other cooperation obligations, for instance the recalling obligation as per lit. d), then we shall be entitled to demand reimbursement for the damages occurred as far as that is concerned, including all extra costs. The due date for demanding the purchase price in this case is the date on which the ready for shipment status is informed. Further claims shall remain unaffected.

  f) The risk of incidental downfall or incidental deterioration of the purchased product
- shall be passed over to the purchaser, when it is subject to acceptance or debtor's default, provided that the conditions in lit. e) exist
  g) The risk shall be passed to the purchaser at the latest with the transfer of goods to the forwarding agent or carrier and also if the goods are being transported by our employees or in case of part deliveries.
  h) Part deliveries are permissible, provided that they are reasonable for the receivery
- Part deliveries shall be reasonable if they amount to 30 % or more of the respective

- 5. PAYMENT AND DELAY IN PAYMENT a) Payments should be made within 10 days with 3 % cash discount or within 30 days without any deduction, in each case after issuing the invoice, unless otherwise
- agreed upon in writing.

  b) We shall be entitled to calculate the amount for interest on arrears at the statutory rate if the payment deadline is exceeded. All granted cash discounts shall be inapplicable in this case.
- c) We shall be entitled to demand immediate payment of all pending invoices and cancel the granted credit period if the purchaser delays the payment of the invoice amount or the purchaser's ability to pay becomes doubtful or his or her inability to pay becomes known.

  d) In case of bank credits, the purchaser shall bear all the arising expenses and costs
- a) In case of bank credits, the purchaser shall bear all the arising expenses and costs excluding the credit operation fees charged by the German banks.
  e) The purchaser may only set off with claims that are undisputed or have been established as final or absolute. Offsettling with claims other than undisputed claims or claims that have been established as final or absolute shall only be possible with our consent. This shall also be applicable for the assertion of a right
- f) In case of non-acceptance of ordered goods, we shall be entitled to demand 15% of the goods value for costs already incurred by us. We shall allow the purchaser to prove that the damage caused to us is lesser than this lump sum amount or no damage has been caused.

- 6. RETENTION OF TITLE
  a) The delivered goods shall continue to be our property until complete payment of all our present and future claims which are made during the contractual relationship with the purchaser.
  b) The purchaser mustimmediately inform us about any seizures or other interventions
- by a third party in writing, so that we can file a suit as per § 771 of the German Code of Civil Procedure (hereinafter referred to as "ZPO"). The purchaser shall be responsible for the loss incurred by us if the third party is not in a position to reimburse the legal and out-of-court expenses for the suit as per § 771 ZPO.

  c) The purchaser shall be entitled to resell the purchased product as per the proper
- business procedures. However, he/she shall assign to us already now all payments up to the final invoice amount (including statutory turnover tax) incurred by him/her during resale to his/her customer or a third party, irrespective of whether the purchased product has been resold without or after processing. The purchasershallbeauthorisedtocollectthis paymentevenaftercession. Ourauthority to collect the payment remains unaffected by this. We shall however commit

- ourselves not to collect the payment as long as the purchaser fulfils his/her payment liabilities, does not delay the payment and particularly if no application for adjudication of insolvency proceedings has been filed or payments have not been ceded. In such a case, we can demand that the purchaser discloses the assigned claims and therespective debtors, provides us with all information necessary for collection, hands over the relevant documents and informs the debtors (third parties) of the assignment.
- (thing parties) or the assignment.

  4) The processing or remodelling of the purchased product shall always be carried out by the purchaser on our behalf. If the purchased product is processed using articles that do not belong to us, then we shall acquire joint ownership of the new product in the ratio of the purchased product value (final invoicing amount, including legal turnover tax) to the other processed articles at the time of processing.
- Apart from this, for the product being created through processing the same shall apply as for the goods subject to retention of title. e) If the purchased product is mixed inseparably with other articles that do not belong to us, then we shall acquire joint ownership of the new product in the ratio of the purchased part value (final invoice amount, including legal turnover tax) to the purchased part value (man invoice amount, including legal trainvoice tax) to the other mixed articles at the time of mixing, if it is mixed in such a manner that the product of the purchaser is considered as the main product, then it is agreed upon that the purchaser shall transfer the joint ownership rights proportionately to us. The purchaser shall safeguard such sole or joint ownership for us. f) We shall commit ourselves to release our securities on the demand of the purcha-
- ser insofar as the realisable value of our securities exceeds the claims to be secured by more than 10%; the selection of the securities to be released is incumbent

dard products can be exchanged within 10 working days after their receipt, provided that they are unused and free of defects, we have been informed about the exchange in writing along with the reasons and the return is reasonable to us. The purchase price is credited to the purchoser against the return of the undamaged goods after deducting the incurred freight charges and 15 % of the list price as processing fees. The purchaser shall bear the cost and risk of return transport. Special models cannot be exchanged.

- 8. LIABILITY
  a) Defect claims of the purchaser assume that these adhere to his/her obligations of examination and notification of defects as per § 377 of the German Commercial Code (hereinafter: HGB) within seven days of receipt of the goods. This shall Code (nereinative: 10b) within seven adys or receipt or the goods. Inis snail only be applicable if the transaction is a commercial transaction for the purchaser. The timely dispatch shall be sufficient for observance of the deadline. The same shall apply to later detected later hidden defects as of the time of their discovery. In the event the obligation to inspect and give notice of defects is violated, the assertion of any warranty claims shall be excluded.
- b) We shall be authorised to rectify the defects or the delivery of products that are free from defects (supplementary performance) as far as a material defect is present. If one of the two types of this supplementary performance is not possible or unreasonable, we shall be entitled to refuse it. We can also refuse re-fulfillment as long as the purchaser does not fulfill his/her payment liability for the defect-free part towards us.
- c) If supplementary performance is not possible or fails, then the purchaser shall have the option to either reduce the purchase price or withdraw from the contract pursuant to the statutory provisions.

  d) Unless otherwise specified under lit. e), other purchaser claims irrespective of
- a) Unless otherwise specimea under lit. e), other purchaser claims irrespective or what legal reasons are excluded. This is in particular applicable for claims to damages beyond the purchased product as well as for lost profits and for claims that are not related to defective goods. e) The exclusion of liability under lit. d) is inapplicable, provided that an exclusion or a restriction of the liability for damages due to loss of life, physical or health
- or a restriction or the liability for damages due to loss or life, physical or health injuries has been agreed upon based on deliberate or negligent breach of duty of a legal representative or assistant of the user. The exclusion of liability shall also be inapplicable, provided that exclusion or restriction of liability for other damages has been agreed upon based on a deliberate or grossly negligent breach of duty by the user or a deliberate or grossly negligent breach of duty by the legal representative or assistant of the user. If we violate a significant contractual obligation culpably, the liability shall not be excluded, but restricted to the predictable damages typical for the contract. It is otherwise excluded as per the provisions specified under lit. d). The exclusion of liability is also inapplicable in case of a guarantee and warranted quality if a defect covered thereby gives rise to our liability. The above conditions are applicable, mutatis mutandis, in case of cost reimbursement.
- f) The limitation period for defect claims shall be one year and shall commence with the delivery of the goods to the purchaser. The one year warranty period shall not be applicable to damages culpably caused and attributable to us arising from any injury to the life, body or health of an individual, and/or damages caused intentionally or with gross negligence or malice on our part, or rights of recourse in accordance with § 479 BGB. For the rest, the statutory warranty periods shall
- apply.
  g) As long as we advise our customers as regards the technical application, we do so to the best of our knowledge and belief, however we shall not undertake any liability for the same. The advice does not exempt the purchaser from the obligation to check our products for their suitability for the intended application at his/her own risk.

### PROTECTION RIGHTS OF A THIRD PARTY

9. PROTECTION RIGHTS OF A THIRD PARTY In case of special designs as per the requests or demand of the purchaser, the purchaser shall be responsible for the fact that the working drawings provided by him/her do not encroach upon the rights of a third party and the implementation does not violate any copyrights, industrial property rights or other rights of a third party. If claims are made against us due to any violation of such rights, the purchaser must indemnify us from any and all claims in this respect.

- 10. PLACE OF PERFORMANCE, JURISDICTION AND GOVERNING LAWS
  a) The place of performance is Rimsting.
  b) If the purchaser is an entrepreneur, then the place of jurisdiction for all, present and future, claims from the business transactions including currency e and cheques shall be Rosenheim as per our choice or the registered office of
- the purchaser.

  c) The same place of jurisdiction is applicable for an entrepreneur if the purchaser does not have a general domestic jurisdiction or has shifted his/her residence
- out of the country.
  d) The business relationship is subject to the German law and German jurisdiction exclusively. The UN purchase law (CISG) is explicitly inapplicable.

# 11. SHOULD INDIVIDUAL PROVISIONS OF THIS AGREEMENT BE OR BECOME

invalid, the validity of the remaining provisions shall not be affected thereby. The invalid provision shall be replaced with a valid provision coming closest to the economic intent of the invalid or impracticable provision. The foregoing provision shall apply, mutatis mutandis, in the event of any contractual gaps.

### **Contact**

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