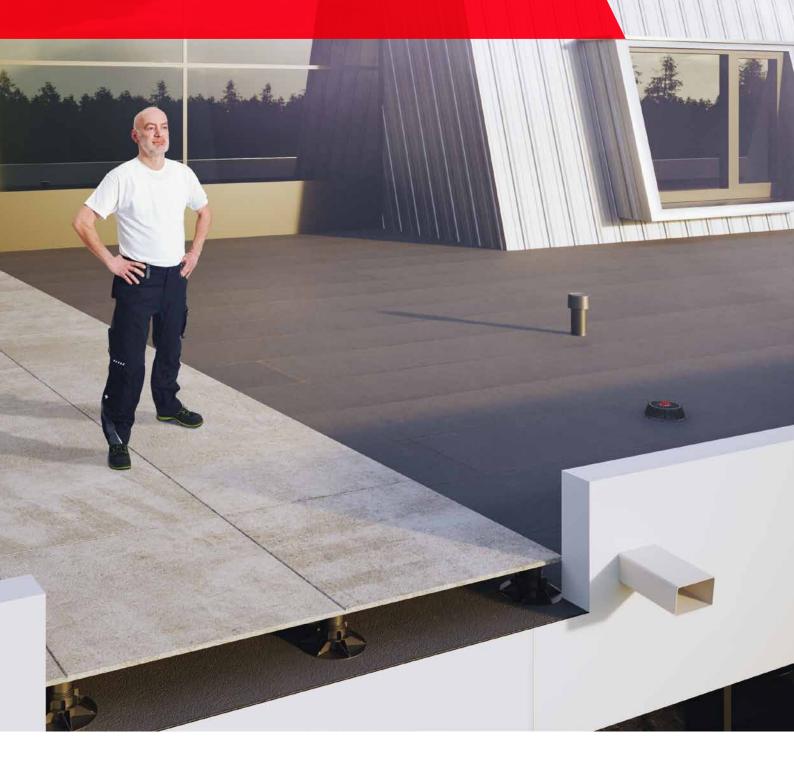


## **Catalogue 2024** flat roofs + terraces.



KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG Am Römerhof 19 D-78727 Oberndorf











# Because your time is valuable.

#### Dear readers,

Welcome! Work should also be fun. This means using the right products. The new KALA catalogue is a great resource for your projects. KALA's solutions and products enable fast, easy work – for rapid advances on the construction site.

What makes our flat roof drainage systems, fans, terrace support systems, grommets and many other products ideal? The fact that we are also experienced users and know the various on-site requirements. We care about continuously improving our products based on practical experience and implementing new ideas in ways that satisfy our users' requirements. Our aim is to be THE benchmark for what you consider useful – from the communication around consulting, ordering and delivery to the suitability and long-term durability of our products under the harshest conditions.

This is important to us for several reasons. We know that your time is very precious. That is why our products must be quick, simple and safe to install, sparing valuable time during assembly and removing the need for laborious modifications and re-works. A proper, durable function of the roof accesories matters. Our products are subjected to the hardest test imaginable: your experiences. And our roof and service teams are also extremely critical, providing us with suggestions and ideas for improvement, to which we quickly react with product adaptations and improvements.

Finally, sustainability is increasingly important to you and your customers. And here's the thing: a product that is made from single materials rather than hard-to-recycle combinations, produced in clever plastic formulations and production processes that preserve resources and protect the environment, and then optimally packaged, is very sustainable. Selecting a product that needs replacement after a few years is the wrong answer to today's problems. So when we confidently say "That's how it's done" when presenting our product range, we have good reasons for this. We believe in the quality of what we are offering. And we are happy to discuss any customisations your projects may require regarding the materials, the dimensions or even your own variants. Because we know how it's done. As do you.

Get in touch!

+49 7423 8687 600 info@kala.de

Or visit our website at www.kala.de.









## Table of contents

## Flat roof systems: That's how it's done.

Smart solutions for flat roofs

- Flat roof drainage you can rely on. Even when it's pouring down. Drains
  - Scupper, round
  - Scupper, rectangular
  - Emergency overflow, round
  - Emergency overflow, rectangular
- Aeration and ventilation systems for flat roofs.
- Flat roof fans for ventilation lines with weather cap
- Flat roof fans for cold roofs with weather cap
- Flat roof refurbishment fans with forced ventilation
- Ventalu forced ventilation DR-S
- Universal weather cap for flat roof fans
- Accumulation ring for drains and scupper
- Flat roof accessories: from seals to lightning protection

#### Novelty: Nexo Fix

Drains Nexo Fix Scupper Nexo Fix, round Scupper Nexo Fix, rectangular Emergency overflow Nexo Fix, round Emergency overflow Nexo Fix, rectangular Flat roof fans Nexo Fix for ventilation lines with weather cap Flat roof fans Nexo Fix for cold roofs with weather cap Flat roof refurbishment fans Nexo Fix with forced ventilation One-piece inspection fitting Nexo Fix for flat roof systems

## KALA systems for terraces: That's how it's do

Professional terrace laying - durable and safe, without damaging sealants o KALA terrace support systems

- Underlayable terrace support system
- Height-adjustable terrace support system H1
- Height-adjustable terrace support system H2
- KALA terrace support system H-MAX
- KALA terrace support system H-MAX MultiLevel
- Accessories for KALA terrace support systems

## Cross/tile spacers

- Cross spacers height: 18 mm
- Tile spacers for ceramic tiles and other slabs with support height: 11 mm

## Roof systems: That's how it's done.

- The original red flexible tube Ventilators for bitumen shingle roofs
- Bird deterrent "bird spikes", transparent

Customer service: That's how it's done. Data sheets



	6
	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	18 18
	10 20
	20
	28
	29
~	30
	31
NEW!	33
	34
	36
	37
	38 39
one.	40
or pressing into the substrate	41
. p	42
	43
	44
	45
	46
	47
	48
	50
	51

56 57 58

52

54

61

64

## Flat roof systems: That's how it's done.



8

14

20

# Smart solutions for flat roofs

#### KALA roof systems: That's how it's done.

Smart products and matching accessories for flat roofs: Learn more about our systems for drainage, ventilation, detailing and lightning protection.

#### Reliable flat roof drainage

Drains, round and rectangular emergency overflows and scuppers as well as matching vapor barrier sheets and drain grates

## Aeration and ventilation systems for flat roofs

Cold roof fans, Flat roof fans, Forced ventilation for aerating and ventilating interiors and roof structures

#### Flat roof accessories

Inspection fittings, Universal grommets, Gravel baskets, lightning protection wire holders and many more products

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Flat roof drainage you can rely on. Even when it's pouring down.

## Drains



Drains <sup>4</sup>				
ltem No.	Material	Technical information		PU
100741	BIT	With bitumen sleeve,	D 50 mm (DN 50)	1
100802		Pipe length 320 mm <sup>1,3</sup>	D 75 mm (DN 70)	
100833	-		D 90 mm	
100857	-		D 95 mm	
100864	-		D 110 mm (DN 100)	
100925	-		D 125 mm (DN 125)	
100987	-		D 160 mm (DN 150)	



ltem No.	Material	Technical information		PU
102998	PVC - similar to RAL 7035.	Basket D 300 mm Pipe length 320 mm <sup>1,3</sup>	D 50 mm (DN 50)	1
103087	Light grey		D 75 mm (DN 70)	
103124	-	Basket D 380 mm Pipe length 320 mm <sup>1,3</sup>	D 90 mm	
103162		Pipe length 320 mm **	D 95 mm	
103209			D 110 mm (DN 100)	
103247			D 125 mm (DN 125)	
103322			D 160 mm (DN 150)	



Drains <sup>4</sup>	
Item No.	Material
100901	FPO/PP <sup>2</sup>
	similar to RAL
101205	Silk grey
101304	
101403	
101502	
101601	
101809	

#### Matching accessories

You can find our suitable retaining ring on page 18.

You can find more flat roof accessories from seals to lightning protection starting on page 20.

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) /<sup>3</sup> other diameter sizes available upon request / <sup>4</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.

Reliable drainage for all structures – from balconies to industrial properties

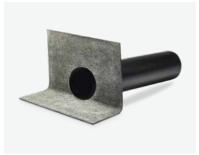
Permanent and emergency drainage solutions to meet all requirements: KALA offers smart, quick and easy-to-install products for all conventional roof membranes.





	Technical information		PU
	Basket D 300 mm	D 50 mm (DN 50)	1
7044,	Pipe length 320 mm <sup>1,3</sup>	D 75 mm (DN 70)	
	Basket D 380 mm	D 90 mm	
	Pipe length 320 mm <sup>13</sup>	D 95 mm	
		D 110 mm (DN 100)	
		D 125 mm (DN 125)	
		D 160 mm (DN 150)	

## Scupper, round



Scupper, round <sup>3</sup>					
Item No.	Material	Technical information		PU	
101113	BIT	With bitumen sleeve,	D 50 mm (DN 50)	1	
100994	_	Pipe length 480 mm <sup>1</sup>	D 63 mm	-	
101083	-		D 75 mm (DN 70)		
101120			D 90 mm		
101144			D 110 mm (DN 100)		
101168			D 125 mm (DN 125)	7	

**Technical information** 

Pipe length 480 mm<sup>1</sup>

PU

1

D 50 mm (DN 50)

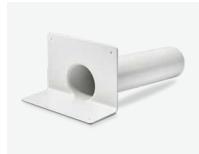
D 75 mm (DN 70)

D 110 mm (DN 100)

D 125 mm (DN 125)

D 63 mm

D 90 mm



Scupper, round <sup>3</sup> Item No.

103346

103360

103407

103445

103483

103520

Material

Light grey

similar to RAL 7035,

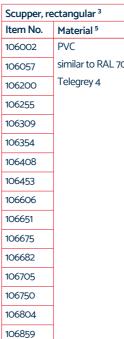
PVC



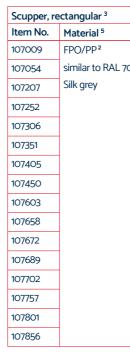
Scupper, r	ound <sup>3</sup>			
ltem No.	Material	Technical information		PU
101861	FPO/PP <sup>2</sup>	Pipe length 480 mm <sup>1</sup>	D 50 mm (DN 50)	1
101908	similar to RAL 7044,		D 63 mm	
102004	Silk grey		D 75 mm (DN 70)	
102103	_		D 90 mm	
102134	_		D 110 mm (DN 100)	
102165	_		D 125 mm (DN 125)	

## Scupper, rectangular









#### Matching accessories

You can find our suitable retaining ring on page 18.

You can find more flat roof accessories from seals to lightning protection starting on page 20.

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) /

<sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



	Duct = W x H x L mm <sup>1,4</sup>	PU
	120 x 60 x L 300	1
047,	120 x 60 x L 600	
	180 x 80 x L 300	
	180 x 80 x L 600	
	300 x 80 x L 300	
	300 x 80 x L 600	
	300 x 100 x L 300	
	300 x 100 x L 600	
	500 x 100 x L 300	
	500 x 100 x L 600	
	600 x 100 x L 300	
	600 x 100 x L 600	
	750 x 100 x L 300	
	750 x 100 x L 600	
	1000 x 100 x L 300	
	1000 x 100 x L 600	

	Duct = W x H x L mm <sup>1,4</sup>	PU
	120 x 60 x L 300	1
44,	120 x 60 x L 600	
	180 x 80 x L 300	
	180 x 80 x L 600	
	300 x 80 x L 300	
	300 x 80 x L 600	
	300 x 100 x L 300	
	300 x 100 x L 600	
	500 x 100 x L 300	
	500 x 100 x L 600	
	600 x 100 x L 300	
	600 x 100 x L 600	
	750 x 100 x L 300	
	750 x 100 x L 600	
	1000 x 100 x L 300	
	1000 x 100 x L 600	

<sup>1</sup>Special sizes available on request /<sup>2</sup> also available in PE (PE-based roof membranes) and BIT (sealed with liquid plastic) / <sup>3</sup> alternatively also available with a retaining ring in the desired height / <sup>4</sup> custom designs are non-returnable /<sup>5</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be

## Emergency overflow, round



Emergency overflow, round				
Item No.	Material <sup>3</sup>	Technical information		PU
101137	BIT	With bitumen sleeve,	D 50 mm (DN 50)	1
101182	-	Pipe length 490 mm <sup>1</sup>	D 63 mm	
101151			D 75 mm (DN 70)	
101199			D 110 mm (DN 100)	
101175	1		D 125 mm (DN 125)	



Item No.	Material <sup>3</sup>	Technical information		PU
103537	PVC	Pipe length 490 mm <sup>1</sup>	D 50 mm (DN 50)	1
103544	similar to RAL 7035,		D 63 mm	
103551	Light grey		D 75 mm (DN 70)	
103575			D 110 mm (DN 100)	
103582	_		D 125 mm (DN 125)	



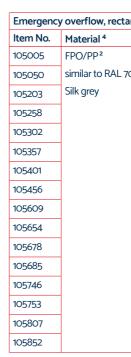
Emergency overflow, round				
ltem No.	Material <sup>3</sup>	Technical information		PU
102141	FPO/PP <sup>2</sup>	Pipe length 490 mm <sup>1</sup>	D 50 mm (DN 50)	1
102202	similar to RAL 7044,		D 63 mm	
102158	Silk grey		D 75 mm (DN 70)	
102127	-		D 110 mm (DN 100)	
102226			D 125 mm (DN 125)	

## **Emergency overflow, rectangular**



Emergenc	y overflow, rectangular		
Item No.	Material <sup>₄</sup>	Duct = W x H x L mm <sup>1,3</sup>	PU
104008	PVC	120 x 60 x L 300	1
104053	similar to RAL 7047,	120 x 60 x L 600	
104206	Telegrey 4	180 x 80 x L 300	
104251		180 x 80 x L 600	
104305		300 x 80 x L 300	
104350		300 x 80 x L 600	
104404	-	300 x 100 x L 300	
104459		300 x 100 x L 600	
104602		500 x 100 x L 300	
104657	-	500 x 100 x L 600	
104671		600 x 100 x L 300	
104688	1	600 x 100 x L 600	
104701		750 x 100 x L 300	
104756		750 x 100 x L 600	
104800		1000 x 100 x L 300	
104855	1	1000 x 100 x L 600	





<sup>1</sup>Special lengths available on request / <sup>2</sup> also available in PE (roofing membranes based on PE) /

<sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



	Duct = W x H x L mm <sup>1,3</sup>	PU
	120 x 60 x L 300	1
044,	120 x 60 x L 600	
	180 x 80 x L 300	
	180 x 80 x L 600	
	300 x 80 x L 300	
	300 x 80 x L 600	
	300 x 100 x L 300	
	300 x 100 x L 600	
	500 x 100 x L 300	
	500 x 100 x L 600	
	600 x 100 x L 300	
	600 x 100 x L 600	
	750 x 100 x L 300	
	750 x 100 x L 600	
	1000 x 100 x L 300	
	1000 x 100 x L 600	

Aeration and ventilation systems for flat roofs

## Flat roof fans for ventilation lines with weather cap



Item No.	Material <sup>3</sup>	Technical information	Height	PU
900013	PVC similar to RAL 7035, Light grey	D 75 mm (DN 70)	654 mm	1
900020		D 110 mm (DN 100)	Pipe length above / below tray	
900037		D 125 mm (DN 125)	300/320 mm <sup>1</sup>	
900044		D 160 mm (DN 150)		



Material <sup>3</sup>	Technical information	Height	PU
FPO/PP <sup>2</sup>	D 75 mm (DN 70)	654 mm	1
similar to BAL 7044 Silk		Pipe length above /	
31111101 to TVAE 7044, 311K	D 110 mm (DN 100)		
grey		below tray	
	D 125 mm (DN 125)	300/320 mm <sup>1</sup>	
	FPO/PP <sup>2</sup> similar to RAL 7044, Silk	FPO/PP <sup>2</sup> D 75 mm (DN 70) similar to RAL 7044, Silk grey	FPO/PP <sup>2</sup> D 75 mm (DN 70)     654 mm       similar to RAL 7044, Silk     D 110 mm (DN 100)     Pipe length above / below tray

Flat roof fans for new builds and refurbishments

Reliable and durable accessories for your house provided by our systems for ventilating interiors and roof structures.



 $^1$ Special lengths available on request / $^2$  also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.

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Valid from 01.04.2024



## Flat roof fans for cold roofs with weather cap



ltem No.	Material <sup>3</sup>	Technical information	Height	PU
901003	BIT	D 75 mm (DN 70)	354 mm <sup>1</sup>	1
901010	-	D 110 mm (DN 100)	_	
901027	-	D 125 mm (DN 125)		
901034	-	D 160 mm (DN 150)	-	



Flat roof fa	ns for cold roofs with weath	er cap		
ltem No.	Material <sup>3</sup>	Technical information	Height	PU
900709	PVC	D 75 mm (DN 70)	354 mm <sup>1</sup>	1
900716	similar to RAL 7035, Light grey	D 110 mm (DN 100)		
900723		D 125 mm (DN 125)		
900730		D 160 mm (DN 150)		

PU

1





Item No.	Material	<b>Technical information</b>	Height	PU
111969	BIT	D 125 mm (DN 125)	518 mm <sup>1</sup>	1
111976		D 160 mm (DN 150)		



Item No.	Material	Technical information	Height	PU
111921	PVC	D 125 mm (DN 125)	518 mm <sup>1</sup>	1
	similar to RAL 7035, Light			
	grey			
111938		D 160 mm (DN 150)		



Flat roof fans for cold roofs with weather cap				
Item No.	Material <sup>3</sup>	Technical information	Height	
900808	FPO/PP <sup>2</sup>	D 75 mm (DN 70)	354 mm <sup>1</sup>	
900815	similar to RAL 7044, Silk grey	D 110 mm (DN 100)		
900822		D 125 mm (DN 125)		
900839		D 160 mm (DN 150)		



Flat roof refurbishment fan				
Item No.	Material			
111945	FPO/PP <sup>2</sup>			
	similar to RAL 70			
	grey			
111952				

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) /

<sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



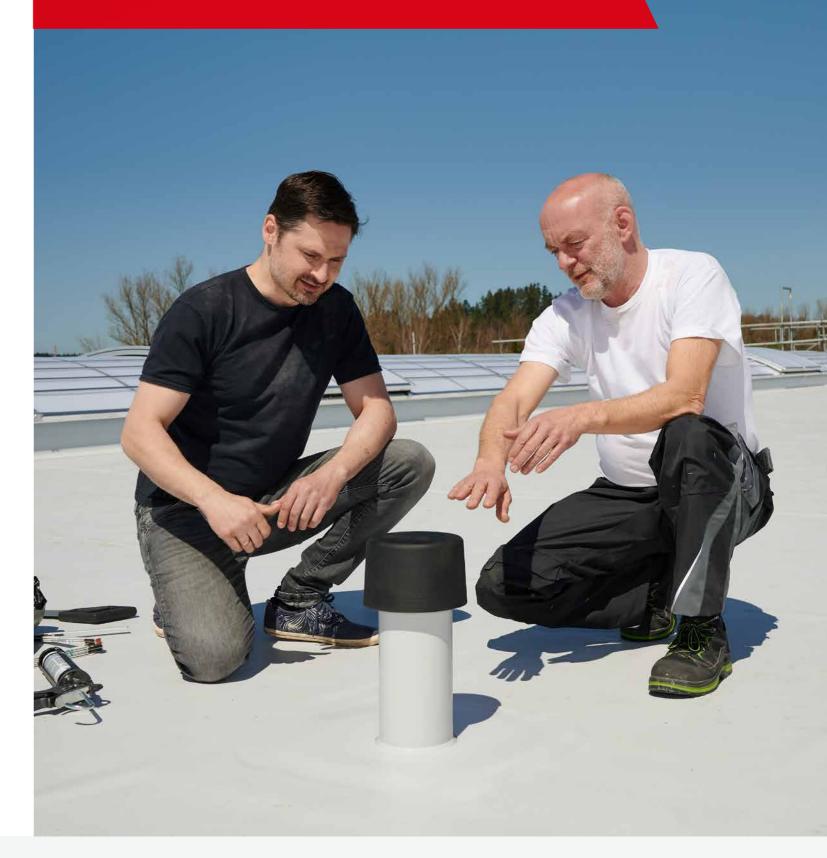
ins with force	ced ventilation <sup>3</sup>				
	Technical information	Height	PU		
	D 125 mm (DN 125)	518 mm <sup>1</sup>	1		
7044, Silk					
	D 160 mm (DN 150)				

## Ventalu forced ventilation DR-S



Item No.	Accessory suitable for	Technical information	PU
112201	Refurbishment fans	D 125 mm (DN 125)	1
112218	-	D 160 mm (DN 150)	

## Flat roof + terrace -That's how it's done.



## Universal weather cap for flat roof fans



Universal weather cap for flat roof fans				
Item No.	Accessory suitable for	Colour	Diameter	PU
111358	Cold roof fans,	Gray	D 75 mm (DN 70)	1
	Flat roof fans			
111693		Black	D 110 mm (DN 100)	
			D 125 mm (DN 125)	
111389		Gray	D 160 mm (DN 150)	

## Accumulation ring for drains and scupper



Accumulat	Accumulation ring for drains <sup>1,2,3</sup>				
Item No.	Accessory suitable for	Material	PU		
109607	Accumulation ring for drains,	The material of the accumulation ring	1		
	Accumulation height: 50 mm,	depends on the base material of the drain.			
	D 50 up to D 125				

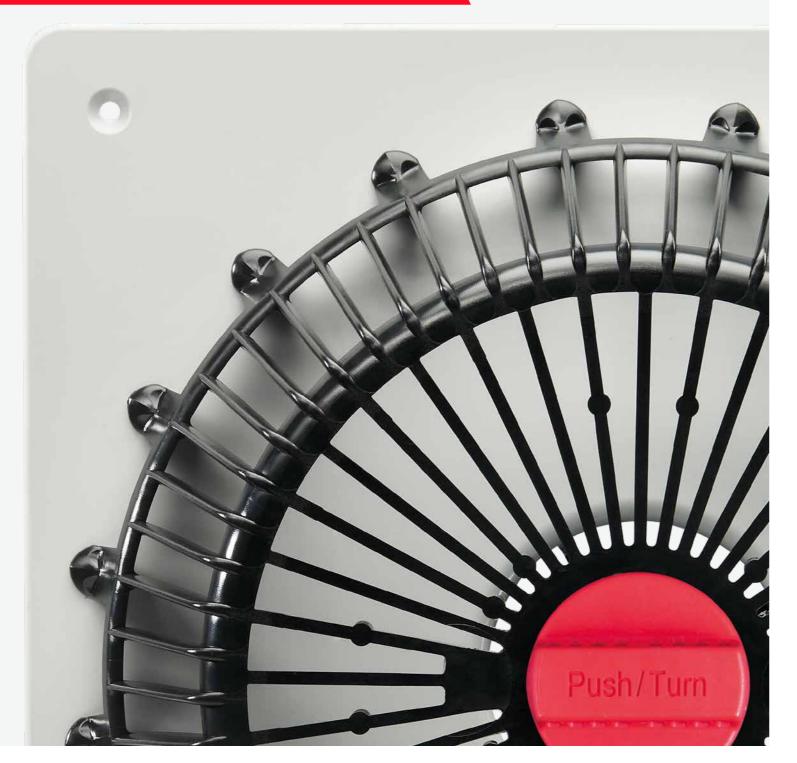


ltem No.	Accessory suitable for	Material	Ρl
109614	Accumulation ring for scupper,	The material of the accumulation ring	1
	Accumulation height: 50 mm,	depends on the base material of the drain.	
	D 50 up to D 125		

<sup>1</sup>Not available for BIT variant /<sup>2</sup>Attention: Additional charge for Accumulation ring /<sup>3</sup>Custom designs are non-returnable



## Flat roof accessories from seals to lightning protection



Practical accessories for all your flat roof needs, whether you require detailing and drainage, or safety and lightning protection. From the right vapour barrier for emergency spillovers and spouts to grommets and inner and outer corners for simple detailing in PP, PVC and bitumen: clever flat roof accessories!

Specifications on p. 64. i

## Smart accessories for durable flat roofs



Gravel basket Vario Fix – infinitely adjustable				
ltem No.	Accessory suitable for	Diameter	PU	
109553	Drains	Basket-D 260 mm	10	
	D 50 mm (DN 50) - D 160 mm (DN 150)	Basket-H 95 mm		
109508	Scupper D 50 mm (DN 50) - D 125 mm (DN 125)			



Gravel bas	ket Classic - with centering cross		
ltem No.	Accessory suitable for	Diameter	PU
109515	Drains	Basket-D 262 mm	10
	D 50 mm (DN 50) - D 160 mm (DN 150)	Basket-H 77,5 mm	
109546	Scupper		
	D 50 mm (DN 50) - D 125 mm (DN 125)		



Gravel guard frame				
ltem No.	Dimensions mm	Material	PU	
120114	Length: 380	PVC	1	
	Width: 380			
	Height: 80			







Lip seal fo	r pipe connections			
ltem No.	suitable for	External dimensions / height	PU	
103865	Drain pipe diameter D 50 mm	73 x 29 mm	1	
103872	Drain pipe diameter D 75 mm	109 x 38 mm		
103889	Drain pipe diameter D 95 mm small	113 x 19 mm		
103919	Drain pipe diameter D 95 mm large	146 x 30 mm		
103926	Drain pipe diameter D 110 mm	126 x 35 mm		
103933	Drain pipe diameter D 125 mm	172 x 32 mm		
103940	Drain pipe diameter D 160 mm	207 x 33 mm		



ım	Material	PU
	PVC	1

## Smart accessories for durable flat roofs



Universal g	rommets				
Item No.	Material <sup>2</sup>	Height mm	Length mm	Inner-D in mm	PU
303906	BIT sanded <sup>1</sup>	300,	80	D 10	10/60
304903		with heat-shrink		D 20	1
305900		tube		D 30	]
306907				D 42	]
307904				D 50	
309601		320,	100	D 68	5
309700		with heat-shrink		D 82	
309809		tube		D 100	
309908				D 115	
309526				D 150	

Universal	Universal grommets						
Item No.	Material <sup>2</sup>	Height mm	Length mm	Inner-D in mm	PU		
303807	PVC Light grey	300, with heat-shrink	80	D 10	40		
304804		tube		D 20	35		
305801				D 30	30		
306808				D 42	25		
307805				D 50	20		



Universal	Universal grommets						
Item No.	Material <sup>2</sup>	Height mm	Length mm	Inner-D in mm	PU		
303302	FPO/PP Gray <sup>1</sup>	300,	80	D 10	40		
304309		with heat-shrink		D 20	35		
305306		tube		D 30	30		
306303				D 42	25		
307300				D 50	20		





Universal grommets						
Item No.	Material <sup>2</sup>	Height mm	Length mm	Inner-D in mm	PU	
303104	FPO/PP White	300,	80	D 10	40	
304101		with heat-shrink		D 20	35	
305108		tube		D 30	30	
306105				D 42	25	
307102				D 50	20	

<sup>1</sup>Also available in PE (roofing membranes based on PE) / <sup>2</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



	Height mm	Length mm	Inner-D in mm	PU
gray	300,	80	D 10	40
	with heat-shrink		D 20	35
	tube		D 30	30
			D 42	25
			D 50	20

	Height mm	Length mm	Inner-D in mm	PU
acite gray	300,	80	D 10	40
	with heat-shrink		D 20	35
	tube		D 30	30
			D 42	25
			D 50	20

## Smart accessories for durable flat roofs

One-piece inspection fitting for flat roof systems



one piece	inspection fitting for	, nacroor systems		
ltem No.	Material <sup>1</sup>	Height	Diameter	PU
120305	BIT	605 mm	D 125 mm (DN 125)	1



	-
as	







Item No.	Material <sup>1</sup>	Height	Diameter	PU
120817	PVC	605 mm	D 125 mm (DN 125)	1
	similar to RAL 7035, Light			
	grey			
One-piece	inspection fitting for flat ro	oof systems	1	1
Item No.	Material <sup>1</sup>	Height	Diameter	PU
120824	FPO/PP	605 mm	D 125 mm (DN 125)	1

One-piece	inspection nutring for hat	spection nating for hat foor systems			
Item No.	Material <sup>1</sup>	Height	Diameter	PU	
120824	FPO/PP	605 mm	D 125 mm (DN 125)	1	
	similar to RAL 7044,				
	Silk grey				

Gooseneck/cable conduit (Supplied without flat roof fan)			
Item No.	Material	Diameter	PU
111402	FPO/PP,	D 75 mm (DN 70)	10
111563	Black	D 110 mm (DN 100)	
111570		D 125 mm (DN 125)	
111587		D 160 mm (DN 150)	

Vapour barrier sheet for Scupper, round and Emergency overflow, round				
Item No.	Material	for Diameter	PU	
108501	Basket PVC sheet	D 50 mm (DN 50)	1	
108556	300 x 300 mm	D 75 mm (DN 70)		
108600	similar to RAL 7047,	D 95 mm		
108655	Telegrey 4	D 110 mm (DN 100)		
108709		D 125 mm (DN 125)		

Vapour barrier sheet for Scupper and Emergency overflow, rectangular			
Item No.	Material	Duct = W x H x L mm	PU
108006	Basket PVC sheet	for 120 x 60	1
108051	similar to RAL 7047,	for 180 x 80	
108105	Telegrey 4	for 300 x 80	
108150		for 300 x 100	
108204		for 500 x 100	
108259		for 600 x 100	
108303		for 750 x 100	
108358		for 1000 x 100	

<sup>1</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



Internal corners for roof	
Item No.	Material <sup>3</sup>
300806	PVC Light grey
300301	FPO/PP Gray <sup>1</sup>
300202	FPO/PP Beige g
300509	FPO/PP Anthra
300103	FPO/PP White



External corners for roof	
Item No.	Material <sup>3</sup>
301803	PVC Light grey
301308	FPO/PP Gray <sup>1</sup>
301209	FPO/PP Beige g
301605	FPO/PP Anthra
301100	FPO/PP White





 $^1 \rm Also$  available in PE (roofing membranes based on PE)  $/^2$  optionally other sizes and lengths available / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to;; Materials and used material compounds may be subject to change.



embranes				
	Technical information	PU		
	Prefab corners,	25		
	weldable to roof membrane			
gray				
cite gray				

embranes				
	Technical information	PU		
	Prefab corners,	25		
	weldable to roof membrane			
jray				
cite gray				

	Diameter ranges	Length mm	PU
	22/6 mm (D 10)	80	10
nodified			
	28/6 mm (D 20)		
	40/12 mm (D 30)		
	40/12 MIN (D 30)		
	55/16 mm (D 42)		
	65/19 mm (D 50)		

## Smart accessories for durable flat roofs



W4 hose clamps (in place of heat-shrink tube)					
Item No. Diameter ranges Metal strip width					
111518	10/16 (D 10)	4 mm	10		
111525	16/27 (D 20)				
111686	25/40 (D 30)				
111532	32/50 (D 42)				
111549	40/60 (D 50)				



ltem No.	Material	For lightning protection wires	PU
109102	Polyamide (PA)	D 8 - 10 mm	50







ltem No.	Material <sup>2</sup>	Technical information	PU
109157	BIT	Accessory for holder,	50
		weldable with roof membrane	
109126	PVC		
109133	FPO/PP1		
109133			

 $^{\rm 1}{\rm Also}$  available in PE (roofing membranes based on PE) /

<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.





# Novelty **Nexo Fix**

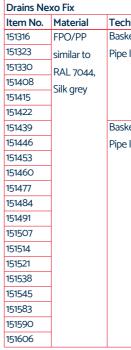


- ✓ Saving time through work already done
- Minimizing vulnerabilities in sealing
- Professional and manufacturer compliant
- Highest quality standard
- Solidly welded no clamping, no sticking

## **Drains Nexo Fix**

NEW





## We are bringing the upgrade to the roof range.

Our scuppers, emergency overflows, drains and flat roof fans are now available with an industrial manufactured, pre-welded foil connection. No clamping, no sticking. The firmly welded foil connection with a width of 20 mm is manufactured professionally and in accordance with standards. This saves you the trouble of manually welding the fixed flange to the soft sealing film on the construction site. Easy to use, perfect results. That's how it's done.

All information at: highlights.kala.de



Matching accessories

You can find our suitable retaining ring on page 18.

You can find more flat roof accessories from seals to lightning protection starting on page 20.

<sup>1</sup>Special lengths available on request / <sup>2</sup> other diameter sizes available upon request / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



Technical information		PU
Basket D 300 mm,	D 50 mm	1
Pipe length 320 mm <sup>1, 2</sup>	(DN 50)	
	D 75 mm	-
	(DN 70)	
Basket D 380 mm,	D 90 mm	_
Pipe length 320 mm <sup>1,2</sup>		
	D 95 mm	
	D 110 mm	_
	(DN 100)	
	D 125 mm	-
	(DN 125)	
	D 160 mm	-
	(DN 150)	

chnical information		Manufacturer <sup>3</sup>	Foil connection	PU	
sket D 300 mm,	D 50 mm	Bauder	Thermoplan T	1	
e length 320 mm <sup>1, 2</sup>	(DN 50)	SIKA	Sarnafil TS77	1	
5		Soprema	FLAGON Premio	1	
	D 75 mm	Bauder	Thermoplan T	1	
	(DN 70)	SIKA	Sarnafil TS77	1	
		Soprema	FLAGON Premio	1	
sket D 380 mm,	D 90 mm	Bauder	Thermoplan T	1	
e length 320 mm <sup>1, 2</sup>		SIKA	Sarnafil TS77	1	
		Soprema	FLAGON Premio	1	
	D 95 mm	Bauder	Thermoplan T	1	
		SIKA	Sarnafil TS77		
		Soprema	FLAGON Premio	1	
	D 110 mm	Bauder	Thermoplan T	1	
	(DN 100)	SIKA	Sarnafil TS77	1	
		Soprema	FLAGON Premio		
	D 125 mm	Bauder	Thermoplan T	1	
	(DN 125)	SIKA	Sarnafil TS77	1	
		Soprema	FLAGON Premio	1	
	D 160 mm	Bauder	Thermoplan T	1	
	(DN 150)	SIKA	Sarnafil TS77	1	
		Soprema	FLAGON Premio	1	

## Scupper Nexo Fix, round



Item No.	Material	Technical information		PU
152009	PVC	Pipe length 480 mm <sup>1</sup>	D 50 mm	1
152016	similar to		(DN 50)	
152023	RAL 7035,			
152030	Light grey		D 63 mm	]
152047				
152054				
152061			D 75 mm	]
152078			(DN 70)	
152085				
152092			D 90 mm	
152108				
152115				
152122			D 110 mm	7
152139			(DN 100)	
152146	]			

Scupper	Nexo	Fix	PVC	_,
---------	------	-----	-----	----

NEW!

Item No.	Material	Duct = W x H x L mm <sup>1,2</sup>	P
160004	PVC	120 x 60 x L 300	1
160011	similar to		
160028	RAL 7047,		
160035	Telegrey 4	120 x 60 x L 600	
160042	]		
160059			
160066		180 x 80 x L 300	
160073			
160080			
160097		180 x 80 x L 600	
160103	1		
160110	1		
160127	1	300 x 80 x L 300	
160134	1		
160141	1		
160158	1	300 x 80 x L 600	
160165	1		
160172	1		
160189	1	300 x 100 x L 300	
160196	1		
160202	1		
160219	1	300 x 100 x L 600	
160226	1		
160233	1		
160240	1	500 x 100 x L 300	
160257	1		
160264	1		
160271	1	500 x 100 x L 600	
160288	1		
160295	1		
160301	1	600 x 100 x L 300	
160318	1		
160325	1		
160332	1	600 x 100 x L 600	
160349	1		
160356	1		



Scupper N	Nexo Fix, rou	nd				
Item No.	Material	Technical information		Manufacturer <sup>2</sup>	Foil connection	PU
152184	FPO/PP	Pipe length 480 mm <sup>1</sup>	D 50 mm	Bauder	Thermoplan T	1
152191	similar to		(DN 50)	SIKA	Sarnafil TS77	1
152207	RAL 7044,			Soprema	FLAGON Premio	]
152214	Silk grey		D 63 mm	Bauder	Thermoplan T	]
152221				SIKA	Sarnafil TS77	]
152238				Soprema	FLAGON Premio	]
152245			D 75 mm	Bauder	Thermoplan T	]
152252			(DN 70)	SIKA	Sarnafil TS77	]
152269				Soprema	FLAGON Premio	1
152276	]		D 90 mm	Bauder	Thermoplan T	]
152283				SIKA	Sarnafil TS77	1
152290				Soprema	FLAGON Premio	1
152306			D 110 mm	Bauder	Thermoplan T	1
152313			(DN 100)	SIKA	Sarnafil TS77	1
152320				Soprema	FLAGON Premio	1

#### Matching accessories

You can find our suitable retaining ring on page 18.

You can find more flat roof accessories from seals to lightning protection starting on page 20.

 $^{\rm 1}{\rm Special}$  lengths available on request /

<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.

<sup>1</sup>Special sizes available on request /<sup>2</sup>custom designs are non-returnable /<sup>3</sup> alternatively also available with a retaining ring in the desired height.



## , rectangular

## Scupper Nexo Fix FPO/PP, rectangular

Scupper Nexo Fix FPO/PP, rectangular <sup>3</sup>



ltem No.	Material	Duct = W x H x L mm <sup>1,2</sup>	Manufacturer <sup>4</sup>	Foil connection	PU
160363	FPO/PP	120 x 60 x L 300	Bauder	Thermoplan T	1
160370	similar to		SIKA	Sarnafil TS77	
160387	RAL 7044,		Soprema	FLAGON Premio	
160394	Silk grey	120 x 60 x L 600	Bauder	Thermoplan T	
160400			SIKA	Sarnafil TS77	
160417			Soprema	FLAGON Premio	
160424		180 x 80 x L 300	Bauder	Thermoplan T	
160431			SIKA	Sarnafil TS77	
160448			Soprema	FLAGON Premio	
160455		180 x 80 x L 600	Bauder	Thermoplan T	
160462			SIKA	Sarnafil TS77	
160479			Soprema	FLAGON Premio	
160486		300 x 80 x L 300	Bauder	Thermoplan T	
160493			SIKA	Sarnafil TS77	
160509			Soprema	FLAGON Premio	
160516		300 x 80 x L 600	Bauder	Thermoplan T	
160523	-		SIKA	Sarnafil TS77	
160530			Soprema	FLAGON Premio	
160547		300 x 100 x L 300	Bauder	Thermoplan T	
160554			SIKA	Sarnafil TS77	
160561			Soprema	FLAGON Premio	
160578		300 x 100 x L 600	Bauder	Thermoplan T	
160585			SIKA	Sarnafil TS77	
160592			Soprema	FLAGON Premio	
160608		500 x 100 x L 300	Bauder	Thermoplan T	
160615			SIKA	Sarnafil TS77	
160622			Soprema	FLAGON Premio	
160639		500 x 100 x L 600	Bauder	Thermoplan T	
160646			SIKA	Sarnafil TS77	
160653	-		Soprema	FLAGON Premio	
160660		600 x 100 x L 300	Bauder	Thermoplan T	
160677			SIKA	Sarnafil TS77	1
160684	]		Soprema	FLAGON Premio	7
160691	]	600 x 100 x L 600	Bauder	Thermoplan T	7
160707	]		SIKA	Sarnafil TS77	7
160714			Soprema	FLAGON Premio	1

## **Emergency overflow Nexo Fix, round**



NEW!

NEW

Item No. Material		Technical information		
153006	PVC	Pipe length 490 mm <sup>1</sup>	D 50 mm	1
153013	similar to		(DN 50)	
153020	RAL 7035,			
153037	Light grey		D 63 mm	
153044	]			
153051	]			
153068	]		D 75 mm	
153075	]		(DN 70)	
153082	]			
153099	]		D 110 mm	
153105			(DN 100)	
153112				
153129			D 125 mm	
153136	]		(DN 125)	
153143	]			



Item No.	Material	Technical information		Manufacturer <sup>2</sup>	Foil connection	PU
153150	FPO/PP	Pipe length 490 mm <sup>1</sup>	D 50 mm	Bauder	Thermoplan T	1
153167	similar to		(DN 50)	SIKA	Sarnafil TS77	7
153174	RAL 7044,			Soprema	FLAGON Premio	7
153181	Silk grey		D 63 mm	Bauder	Thermoplan T	7
153198				SIKA	Sarnafil TS77	7
153204				Soprema	FLAGON Premio	7
153211			D 75 mm	Bauder	Thermoplan T	7
153228			(DN 70)	SIKA	Sarnafil TS77	7
153235				Soprema	FLAGON Premio	
153242			D 110 mm	Bauder	Thermoplan T	7
153259			(DN 100)	SIKA	Sarnafil TS77	
153266				Soprema	FLAGON Premio	
153273			D 125 mm	Bauder	Thermoplan T	7
153280			(DN 125)	SIKA	Sarnafil TS77	7
153297	1			Soprema	FLAGON Premio	7

<sup>1</sup>Special sizes available on request / <sup>2</sup>custom designs are non-returnable / <sup>3</sup> alternatively also available with a retaining ring in the desired height / <sup>4</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. <sup>1</sup>Special lengths available on request / <sup>2</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



# Emergency overflow Nexo Fix PVC, rectangular

Emergency overflow Nexo Fix PVC, rectangular



g	.,		
tem No.	Material	Duct = $W \times H \times L \text{ mm}^{1,2}$	PU
65009	PVC	120 x 60 x L 300	1
65016	similar to		
65023	RAL 7047,		
65030	Telegrey 4	120 x 60 x L 600	]
65047			
65054			
65061		180 x 80 x L 300	1
65078			
65085			
65092		180 x 80 x L 600	1
65108			
65115			
65122		300 x 80 x L 300	1
65139			
65146			
65153		300 x 80 x L 600	]
65160			
65177			
65184		300 x 100 x L 300	]
65191			
65207			
65214		300 x 100 x L 600	]
65221			
65238			
65245		500 x 100 x L 300	
65252			
65269			
65276		500 x 100 x L 600	
65283			
65290			
65306		600 x 100 x L 300	
65313			
65320			
65337		600 x 100 x L 600	
65344			
65351			

NEW!

# Emergency overflow Nexo Fix FPO/PP, rectangular

Item No.	Material	Duct = $W \times H \times L mm^{1,2}$	Manufacturer <sup>3</sup>	Foil connection
165368	FPO/PP	120 x 60 x L 300	Bauder	Thermoplan T
165375	similar to		SIKA	Sarnafil TS77
165382	RAL 7044,		Soprema	FLAGON Premie
165399	Silk grey	120 x 60 x L 600	Bauder	Thermoplan T
165405	1		SIKA	Sarnafil TS77
165412	1		Soprema	FLAGON Premie
165429	1	180 x 80 x L 300	Bauder	Thermoplan T
165436	SIKA	Sarnafil TS77		
165443	1		Soprema	FLAGON Premio
165450	1	180 x 80 x L 600	Bauder	Thermoplan T
165467	1		SIKA	Sarnafil TS77
165474 165481 300 x 80 x L 300	Soprema	FLAGON Premi		
	1	300 x 80 x L 300	Bauder	Thermoplan T
165498	5498	SIKA	Sarnafil TS77	
165504 165511	1		Soprema	FLAGON Premi
	1	300 x 80 x L 600	Bauder	Thermoplan T
165528	1		SIKA	Sarnafil TS77
165535	1		Soprema	FLAGON Premi
165542	1	300 x 100 x L 300	Bauder	Thermoplan T
165559	1		SIKA	Sarnafil TS77
165566	1		Soprema	FLAGON Premi
165573	1	300 x 100 x L 600	Bauder	Thermoplan T
165580	1		SIKA	Sarnafil TS77
165597	1		Soprema	FLAGON Premi
165603	1	500 x 100 x L 300	Bauder	Thermoplan T
165610	]		SIKA	Sarnafil TS77
165627	]		Soprema	FLAGON Premi
165634	]	500 x 100 x L 600	Bauder	Thermoplan T
165641	]		SIKA	Sarnafil TS77
165658			Soprema	FLAGON Premic
165665	]	600 x 100 x L 300	Bauder	Thermoplan T
165672	]		SIKA	Sarnafil TS77
165689	]		Soprema	FLAGON Premie
165696	]	600 x 100 x L 600	Bauder	Thermoplan T
165702	]		SIKA	Sarnafil TS77
165719	]		Soprema	FLAGON Premio

<sup>1</sup>Special sizes available on request /<sup>2</sup> custom designs are non-returnable / <sup>3</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.

<sup>1</sup>Special sizes available on request /<sup>2</sup> custom designs are non-returnable.

NEW!



## Flat roof fans Nexo Fix for ventilation lines with weather cap



Flat roof f	Flat roof fans Nexo Fix for ventilation lines with weather cap						
Item No.	Material	Technical information	Height	PU			
972003	PVC	D 75 mm (DN 70)	654 mm Pipe length above /	1			
972010	similar to		below tray 300 / 320 mm <sup>1</sup>				
972027	RAL 7035,						
972034	Light grey	D 110 mm (DN 100)					
972041							
972058							
972065		D 125 mm (DN 125)					
972072							
972089							
972096		D 160 mm (DN 150)					
972102							
972119							

NEW!



Item No.	Material	Technical information	Height	Manufacturer <sup>2</sup>	Foil connection	PU
972126	FPO/PP <sup>2</sup>	D 75 mm (DN 70)	654 mm	Bauder	Thermoplan T	1
972133	similar to		Pipe length	SIKA	Sarnafil TS77	]
972140	RAL 7044,		above /	Soprema	FLAGON Premio	]
972157	Silk grey	D 110 mm (DN 100)	below tray	Bauder	Thermoplan T	]
972164			300 /	SIKA	Sarnafil TS77	1
972171			320 mm <sup>1</sup>	Soprema	FLAGON Premio	1
972188		D 125 mm (DN 125)		Bauder	Thermoplan T	1
972195				SIKA	Sarnafil TS77	1
972201				Soprema	FLAGON Premio	1
972218		D 160 mm (DN 150)		Bauder	Thermoplan T	1
972225				SIKA	Sarnafil TS77	1
972232				Soprema	FLAGON Premio	1

## Flat roof fans Nexo Fix for cold roofs with weather cap



NEW!

Flat roof f	fans Nexo Fi	x for cold roofs with weat	ther cap	
Item No.	Material	Technical information	Height	PU
971006	PVC	D 75 mm (DN 70)	354 mm <sup>1</sup>	1
971013	similar to			
971020	RAL 7035,			
971037	Light grey	D 110 mm (DN 100)		
971044	]			
971051	1			
971068	1	D 125 mm (DN 125)		
971075	1			
971082	1			
971099	1	D 160 mm (DN 150)		
971105	1			
971112	1			



Item No.	Material	Technical information	Height	Manufacturer <sup>2</sup>	Foil connection	PU
971129	FPO/PP	D 75 mm (DN 70)	354 mm <sup>1</sup>	Bauder	Thermoplan T	1
971136	similar to			SIKA	Sarnafil TS77	
971143	RAL 7044,			Soprema	FLAGON Premio	
971150	Silk grey	D 110 mm (DN 100)		Bauder	Thermoplan T	
971167	]			SIKA	Sarnafil TS77	
971174	1			Soprema	FLAGON Premio	
971181	1	D 125 mm (DN 125)		Bauder	Thermoplan T	
971198	1			SIKA	Sarnafil TS77	
971204	]			Soprema	FLAGON Premio	
971242	1	D 160 mm (DN 150)		Bauder	Thermoplan T	1
971259	1			SIKA	Sarnafil TS77	1
971266	1			Soprema	FLAGON Premio	1

<sup>1</sup>Special lengths available on request / <sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



# Flat roof refurbishment fans Nexo Fix with forced ventilation



Flat roof refurbishment fans Nexo Fix with forced ventilation						
ltem No.	Material	Technical information	Height	PU		
156007	PVC	D 125 mm (DN 125)	518 mm <sup>1</sup>	1		
156014	similar to					
156021	RAL 7035,					
156038	Light grey	D 160 mm (DN 150)				
156045						
156052						

NEW!



Flat roof refurbishment fans Nexo Fix with forced ventilation							
ltem No.	Material	Technical information	Height	Manufacturer <sup>2</sup>	Foil connection	PU	
156069	FPO/PP	D 125 mm (DN 125)	518 mm <sup>1</sup>	Bauder	Thermoplan T	1	
156076	similar to			SIKA	Sarnafil TS77		
156083	RAL 7044,			Soprema	FLAGON Premio		
156090	Silk grey	D 160 mm (DN 150)		Bauder	Thermoplan T		
156106				SIKA	Sarnafil TS77		
156113				Soprema	FLAGON Premio		

# One-piece inspection fitting Nexo Fix for flat roof systems



0	

NEW!

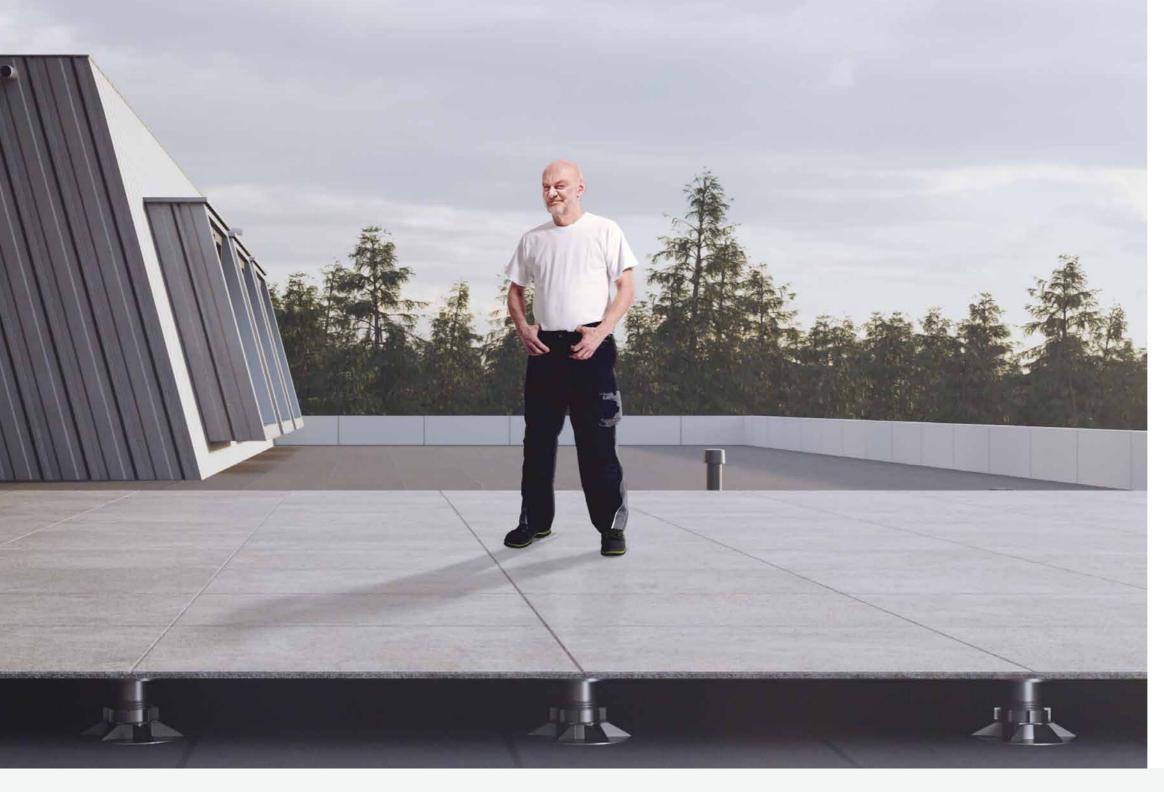
One-piec	e inspection	fitting Nexo Fix for flat r	oof systems			
ltem No.	Material	Technical information	Height	Manufacturer <sup>2</sup>	Foil connection	PL
157035	FPO/PP similar to	D 125 mm (DN 125)	605 mm <sup>1</sup>	Bauder	Thermoplan T	1
157042	RAL 7044, Silk grey			SIKA	Sarnafil TS77	
157059	<i>.</i>			Soprema	FLAGON Premio	

<sup>1</sup>Special lengths available on request / <sup>2</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.



ng Nexo Fix for flat roof systems		
hnical information	Height	PU
25 mm (DN 125)	605 mm <sup>1</sup>	1

## KALA systems for terraces: That's how it's done.





## Professional terrace laying – durable and safe, without damaging sealants or pressing into the substrate

Smart solutions for quick terrace construction and durable protection of the underlying seal: Use KALA terrace support systems to achieve a durable and optimally fitted patio!

Complete underlayable terrace support system	43
Support system for wood, concrete or stone surfaces that can be quickly	
installed free-standing and with incremental height adjustment	
Height-adjustable terrace support system H1	44
Supports adjustable in fine increments for free-standing installation of	
terrace surfaces in wood, concrete and stone	
Height-adjustable terrace support system H2	45
Freely height-adjustable raised floor support for quick and precise	
installation of sealed roof terraces	
KALA terrace support system H-MAX	46
Freely height-adjustable, inclinable raised floor support for quick terrace	
construction and levelling on difficult substrates	
KALA terrace support system H-MAX MultiLevel	47
Discover all KALA terrace supports, including the optimal variant for	
wood sub-structures!	
Accessories for KALA terrace support systems	48
Cross/tile spacers	50

Get in touch!

+49 7423 8687 600 info@kala.de

Or visit our website at www.kala.de.



## KALA terrace support systems

## Underlayable terrace support system



Item No.	Height mm
100093	21
L	1
Solo joint d	livider for under
Item No.	Height mm
100130	3



Solo base e	lement for und
Item No.	Height mm
100178	18

3

100161

1	
 $\sim$	

Equaliser disc, splits into qua		
Item No.	Height mm	
100277	3	



Equaliser ring for underlaya		
Item No.	Height mm	
100307	6	

	Joint dividers solo
Underlayable terrace	Equaliser disc, splits into quarters
support system	Equaliser ring
	Solo base element
Large pressure disc	

Support system for precise and durable terrace construction

The KALA terrace support system for fast and durable terrace constructions - including on sensitive substrates like flat roof sealing liners; can be directly installed on the sealing without protective mats.



With KALA terrace support systems, you can realise professional, durable, and safe solutions for all types of terrace constructions. Whether renovation or new construction, for extremely low or extra high constructions - we have the right solution for your terrace. With KALA's support system, the support stands freely on a pressure disc. Movements and loads are decoupled from the underlying sealing and distributed over a sufficiently large area.





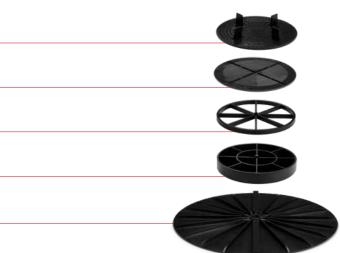
Complete underlayable terrace support system			
Item No.	Height mm	Diameter mm	PU
100093	21	Joint dividers 3 mm, D 120	100

rlayable terrace support systems		
Diameter mm PU		PU
	Joint dividers 3 mm, D 120	300
	Joint dividers 4 mm, D 120	300

erlayable terrace support systems		
Diameter mm PU		PU
	D 120	150

uarters for underlayable terrace support systems		
Diameter mm PU		
	D 120	300

able terrace support systems			
	Diameter mm	PU	
	D 120	300	



## Height-adjustable terrace support system H1

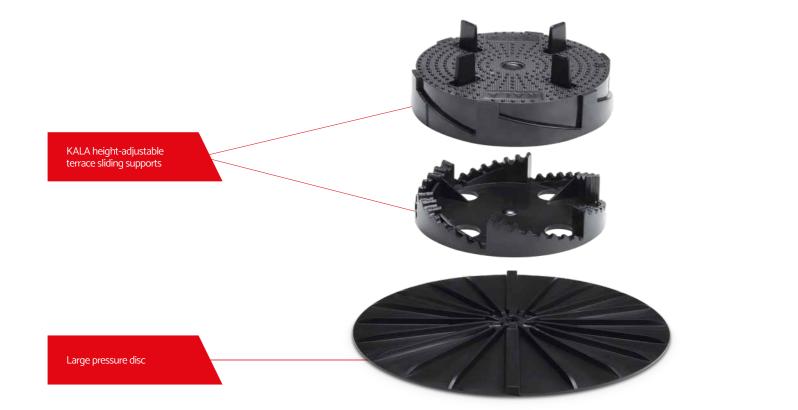


ltem No.	Height mm	Diameter mm	PU
100017	28 - 42	Joint dividers 3 mm, D 120	50
100031	28 - 42	Joint dividers 4 mm, D 120	
100048	28 - 42	Without joint dividers, D 120	

## Height-adjustable terrace support system H2



Item No.	Height mm	Diameter mm	PU
100055	40 - 70	Joint dividers 3 mm, D 120	50
100079	40 - 70	Joint dividers 4 mm, D 120	
100086	40 - 70	Without joint dividers, D 120	



Large pressure disc

KALA height-adjustable

terrace sliding supports

Install terraces on flat roof sealing liners and fine-tune height differences – quickly and easily!

The KALA terrace sliding support system precisely incrementally adjusted to your desired height is capable of more than just enabling the precise installation of terrace slabs on delicate substrates: It also facilitates easy levelling of height differences. Can also be combined with the ProSilent equaliser disc to reduce the impact noise that occurs.





## KALA terrace support system H-MAX

(V)	

KALA terra	ace support system H-MAX		
Item No.	Height mm	Diameter mm	PU
100574	65 - 100	Joint dividers 3 mm,	25
100642	95 - 130	Pressure disc D 205	
100611	125 - 160		
100666	155 - 190		
100659	185 - 220		

# Infinitely height-adjustable basic element

## The precisely adjustable terrace support system from KALA: construct terraces with screw adjustment at a wide range of heights

Permanently raise terrace surfaces to the correct height in a few simple steps with the freely height-adjustable terrace support system H-MAX. The large support surface also protects the delicate seals below against damage and prevents the terrace from sinking into soft surfaces. Learn more about our floor support system!

## KALA terrace support system H-MAX MultiLevel



KALA terrace support system H-MAX MultiLevel			
ltem No.	Height mm	Diameter mm	PU
100598	62-82	Joint dividers 3 mm,	25
100604	77 - 112	Pressure disc D 200	
100635	107 - 142		
100628	137 - 227		

Joint dividers

(Support head with integrated rubber plate for sound insulation and inclinable head up to 5°)

Infinitely height-adjustable basic element

## Seamlessly adjustable terrace support with inclinable head for fast and non-damaging terrace construction on uneven and/or sealed substrates

The KALA freely height-adjustable terrace support system H-MAX MultiLevel features an inclinable head, making it ideal for accurately planning the laying of all kinds of terrace surfaces. Simple levelling of uneven surfaces and slopes thanks to free height adjustment and a head which tilts up to 50 degrees. The large support surface protects the delicate seals below against damage and prevents sinking into soft surfaces.





## Accessories for KALA terrace support systems



Need even more variation? No problem: with our accessory portfolio for our terrace support systems, you can get the most out of your project. Here you will find everything you need to even out surfaces easily, distribute loads or create precise joints simply and quickly.



# Accessories for KALA terrace support systems



50



Large pressure disc		
Item No.	Height mm	
100215	7	



Diameter mm	PU
D 200	100
bt adju	

48 | KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG | Am Römerhof 19 | D-78727 Oberndorf | +49 7423 8687 600 | info@kala.de

Valid from 01.04.2024



	Diameter mm	PU
	D 250	100
t-adjustable or underlava	ble terrace support systems	

Accessory suitable for height-adjustable or underlayable terrace support systems

## Cross/tile spacers

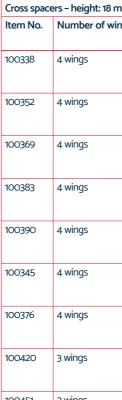


Permanent and secure joint filling for all slab types with KALA spacers, also ideal for staggered and border installation!



## Cross spacers - height: 18 mm







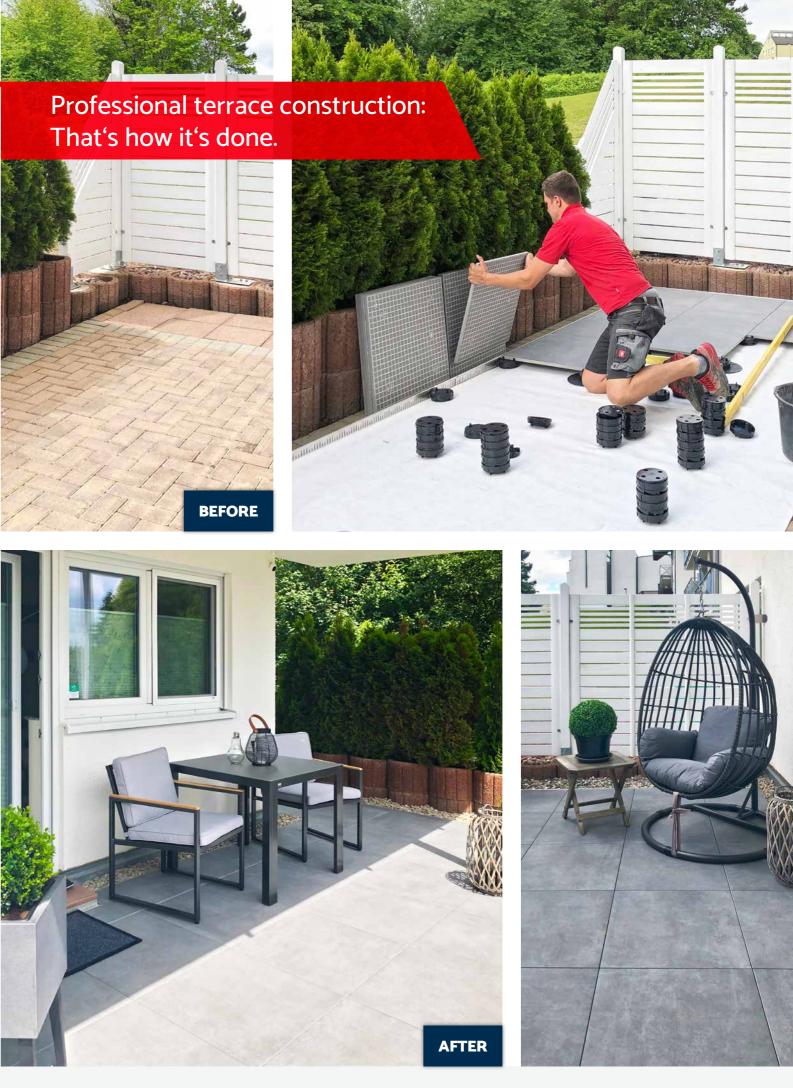
100451 3 wings

Tile spacers for safely laying ceramic tile terraces

A simple way to achieve even and non-moving terrace joints by placing cross spacers in the joints between terrace slabs when laying on grit or gravel beds. The spacers ensure both a uniform appearance and adequate drainage of rainwater in the substrate. The wings can easily be snapped off for staggered or border installation.



nm				
ngs	Cross width	Colour	PU	
	3 mm	Black	300	
	3 mm	Transparent		
	5 mm	Black	_	
	5 mm	Transparent		
	10 mm	Black		
	4 mm	Black with support		
	4 mm	Transparent with support		
	3 mm	Black		
	5 mm	Black		

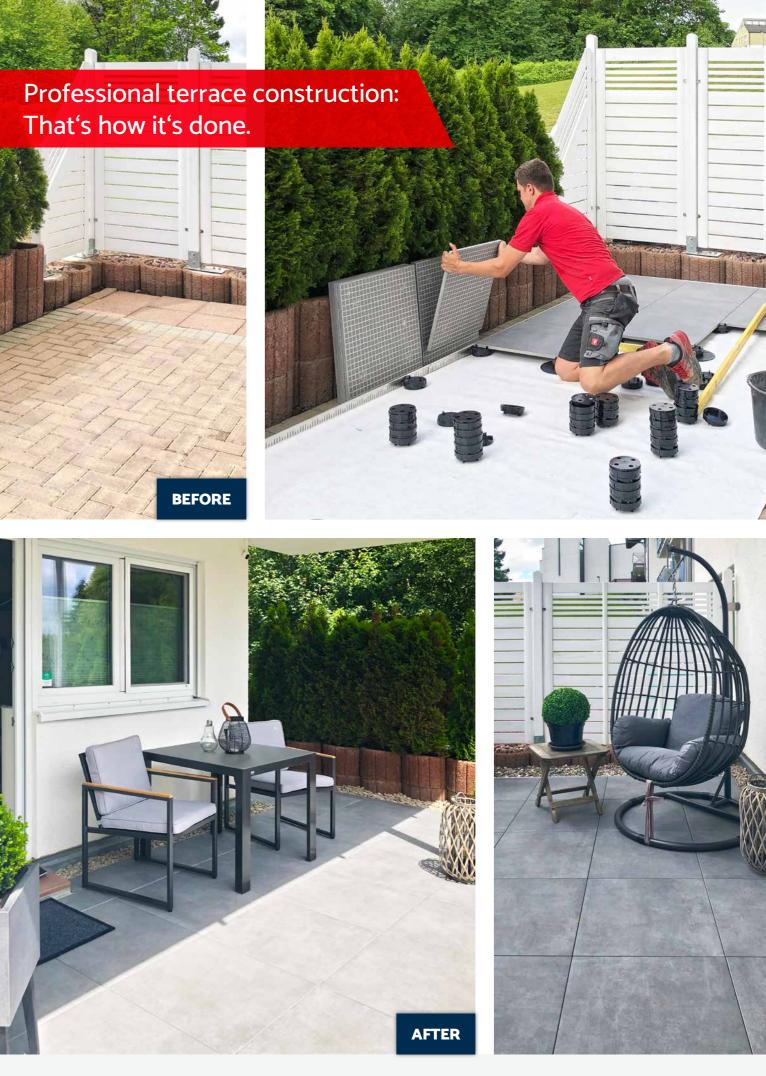


## Tile spacers for ceramic tiles and other slabs with support – height: 11 mm



Item No.	Number of wings	Cross width	Colour	PL
100505	4 wings	3 mm	Black with support	30
100512	4 wings	3 mm	Transparent with support	
100529	4 wings	4 mm	Black with support	
100536	4 wings	4 mm	Transparent with support	
100543	4 wings	5 mm	Black with support	
100550	4 wings	5 mm	Transparent with support	





#### Tile spacers for safely laying ceramic tile terraces

A simple way to achieve even and non-moving terrace joints by placing tile spacers in the joints between ceramic tiles or other thin, light slabs when laying on grit or gravel beds. The tile spacers ensure both a uniform appearance and adequate drainage of rainwater in the substrate. The wings can easily be snapped off for staggered or border installation.

## Roof systems: That's how it's done.



# Quality in every detail.

Flexible outlet vent connection/flexible tube for reliable building ventilation, protection from birds and shingle ventilation.

Solutions for steep roofs Learn more about our ventilator and bird deterrent products for steep roofs.

The original red flexible tube	56
Flexible outlet vent connection for connecting all conventional aeration	
and ventilation systems.	
Ventilators for bitumen shingle roofs	57
Roof structure ventilation	
Bird deterrent "bird spikes", transparent	58

Animal-friendly bird deterrent ledge with rounded spike ends.

Get in touch!

+49 7423 8687 600 info@kala.de

Or visit our website at www.kala.de.



## The original red flexible tube





Item No.	al red flexible tube Material	Technical informatio	n	PU
200014	PVC, UV-resistant	Length 50 cm	DN 70/100	10
200083	-	Length 100 cm	DN 70/100	6
200144	_	Length 60 cm	DN 125	10

## Ventilators for bitumen shingle roofs



ltem No.	Colour	Technical information	PU
200120	Black	180 cm <sup>2</sup> ventilation	10
200151	Brown		
200182	Red		
200212	Gray		

Item No.	Material	Technical information	PL
200243	PVC,	DN 50/70/100	1
	UV-resistant	Length 30 cm	

#### Ready-to-install flexible tube for connection to all standard roof fans

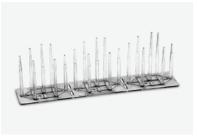
Easy and reliable connection of roof fans and ventilation ducts that end in buildings with the highly flexible tube. Capable of handling heavy conduits whilst maintaining the full cable cross-section. The pre-assembled hose clamps can be used to attach the free hose end to the air duct.

The ideal vent for roof construction or building ventilation, with optional outlet vent connections for shingle roofs

The shingle vent is an easy-to-install element for effective ventilation of steep roof spaces covered with bitumen shingles. The clip-on flexible vapour pipe is capable of diverting exhaust air from the building interior in a simple yet well-sealed manner. The roof's appearance remains uniform thanks to uniform use as a vent or vapour pipe.



## Bird deterrent "bird spikes", transparent



Bird deter	Bird deterrent "bird spikes", transparent				
Item No.	Material	Technical information	n	PU	
200915	PC Polycarbonate, transparent, UV-resistant	L 25 x W 5 cm	Screw-in or glue-on	50	

In order to protect buildings and other structures from bird droppings or nesting, KALA bird spikes offer an animal-friendly alternativelyelye to potentially harmful deterrent ledges with wire tips. The spiked elements prevent approaching birds, particularly pigeons, from landing and force them to fly elsewhere, significantly reducing the pollution and contamination of buildings caused by birds. The bird deterrent is made from transparent polycarbonate and is therefore weatherproof and UV-resistant. The transparent design ensures that the bird spikes have a minimal impact on the structure's overall appearance.







## Customer service – That's how it's done.

Customer service is our number one priority, and not just in terms of quick delivery or instructions for the optimum installation of our products. We are happy to provide advice, instructions and general information!

## Good advice is always free at KALA

Our services don't stop at great products. Are you a planner or project developer looking for the right products for your project? Or do you need some tips on how to select and use our products? Get in touch today.

#### Quick solutions for every issue

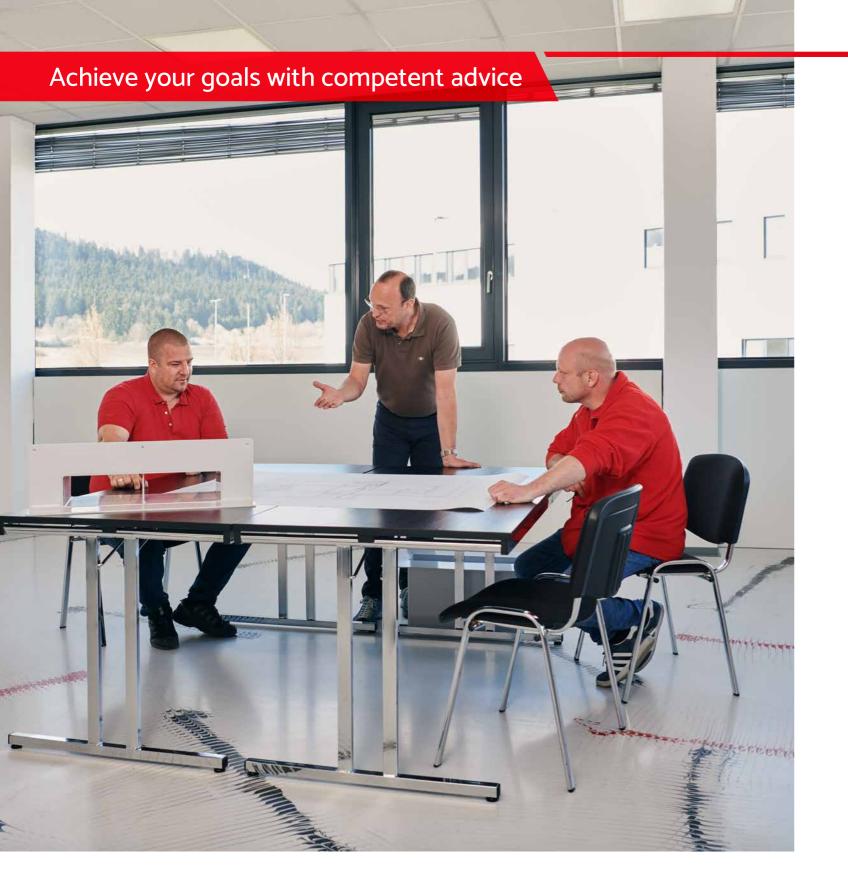
Do you have a question that requires a consultation and quick resolution? Get in touch with us for competent advice. We can also provide quick solutions for minor details such as express delivery, product queries or installation recommendations!

Get in touch!

+49 7423 8687 600 info@kala.de

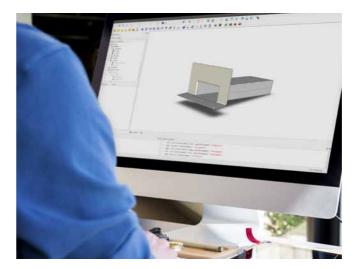
Or visit our website at www.kala.de.





## Customer service: That's how it's done.







KALA offers customers more than just great products: We are a reliable partner from the get go. Contact us to arrange a consultation.

#### Get in touch!

+49 7423 8687 600

info@kala.de

Or visit our website at www.kala.de.





#### Your partner for roof and terrace products

The search for a competent supplier for your roof and terrace product range ends with us: Gain an experienced OEM partner at your side. We can manufacture roof and terrace products for you and your brand from the range found on our website – we can also develop customised solutions to meet your requirements. Always with the top quality that your customers deserve.

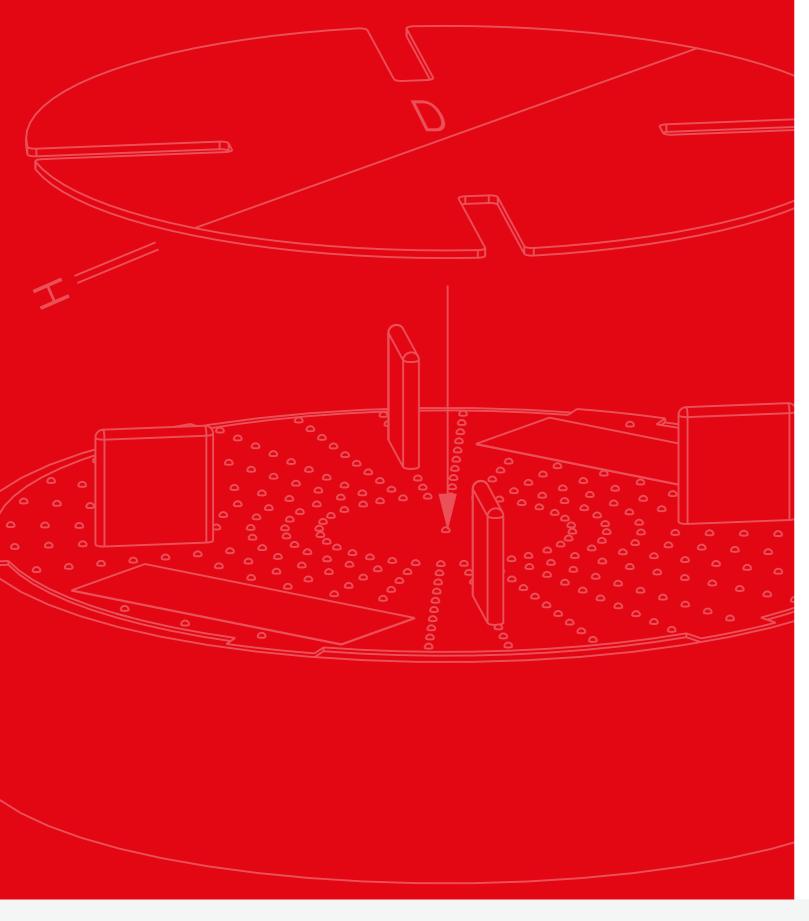
#### Your partner for customised solutions

Are you a planner looking for a partner who not only provides reliable and effective products for flat roofs and terrace construction, but also offers customised solutions for specific requirements? Look no further! We are happy to make modifications to products found in our existing portfolio according to your requirements, or we can use our expertise to design entirely new products for your individual project. Take advantage of our expert advice for architects and planners: get in touch with us today!

#### Your partner for construction support

Our products may be self-explanatory, but sometimes a quick tip or two on how to use them properly can be a great help. We are happy to provide assistance with technical questions on our products: Give us a call or write an email and let us know about the issue. We'll take care of it, we promise!

## Data sheets



## ... Tender text KALA supports

	Quantity unit	Price per unit	Total amount
Item			
Laying slabs on KALA terrace supports, height-			
adjustable H1 (28 - 42 mm) / H2 (40 - 70 mm) and			
KALA pressure disc Ø 250 mm across the surface	m²	€	€
Sourcing reference: KALA - KUNSTSTOFFE I Karl-Heinz L	.ange GmbH+Co.KG I +49 7423 868	7 600 l info@kala.de	
Item			
Cutting and laying the panels in the edge area	lin. m	€	€

## ... Variants

- No or minimal height differences: Laying on KALA terrace supports that can be placed underneath (height compensation with compensation elements).
- Compensation for greater heights or steep gradients: Laying KALA terrace supports H-MAX (5 variants from 65 - 220 mm) or H-MAX MultiLevel (4 variants from 62 - 227 mm).
- Pressure-resistant substrate, only protection of the seal necessary:

If the substrate is pressure-resistant (concrete, screed, foam glass, PUR rigid foam under the seal), laying with the small Ø 200 mm pressure compensating disc is possible.



Needs assessment			
Panel size:	Number of supports / sqm:		
30 x 30 cm	11,11		
40 x 40 cm	6,25		
40 x 60 cm	4,17		
50 x 50 cm	4,00		
60 x 60 cm	2,78		
70 x 70 cm	2,04		

## **Drains**

#### Function:

Structural part for vertical drainage through the roof system. Connect to a pipe system for water drainage or install as an extension element for a roof gully. It's important to ensure that adequate backwater protection is installed.

#### Material<sup>5</sup>:

Our drains are available in PVC, FPO/PP<sup>2</sup> and BIT for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

• D 95 mm

#### Available sizes <sup>3</sup>:

• D 50 mm (DN 50)	
• D 75 mm (DN 70)	
• D 90 mm	

• D 160 mm (DN 150) • D 110 mm (DN 100) • D 125 mm (DN 125)

#### Package units:

Supplied in cartons, PU 1 unit

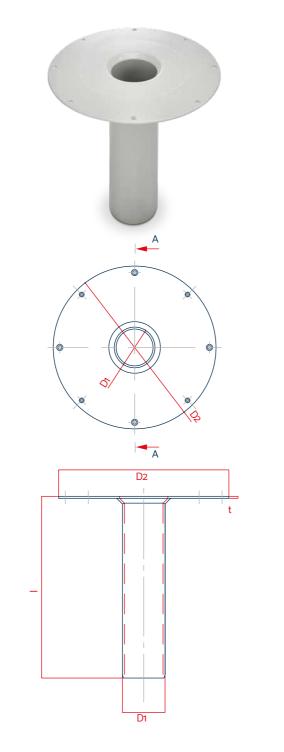
#### Accessories:

- Gravel basket Classic for drains Gravel basket Vario Fix for drains
- · Lip seal for pipe connections
- Roll Ring<sup>4</sup>

## Drainage performance litre/sec.:

LGA-certified characteristics

Diameter	Accumulation height		
	35 mm	65 mm	
D 50 mm (DN 50)	3,70	N/A	
D 75 mm (DN 70)	4,60	13,20	
D 90 mm	5,30	14,60	
D 110 mm (DN 100)	5,55	15,80	
D 125 mm (DN 125)	5,55	16,00	
D 160 mm (DN 150)	5,60	18,60	



	Tech	nical data		
	D1	50 / 56 / 63 / 75	90 / 95 / 110 / 125 / 160	
	D2	300	380	
	I	320 <sup>1</sup>	320 <sup>1</sup>	mm
ſ	t	3,5	3,5	

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) /<sup>3</sup> other diameter sizes available upon request /<sup>4</sup> Attention: We would like to point out that installation with a rolling ring does not conform to the standards. Backflow security is not guaranteed / <sup>5</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

## Scupper, round

#### Function:

Structure part for horizontal drainage through the parapets of flat roofs or terrace. Install by connecting to a pipe system for water drainage, or use for free-flow drainage. When installing the scupper, the precise installation point depends on the water level.

#### Material<sup>3</sup>:

Our scuppers are available in PVC, FPO/PP<sup>2</sup> and BIT for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

#### Available sizes:

• D 50 mm (DN 50)	• D 90 mm
• D 63 mm	• D 110 mm (DN 100)
• D 75 mm (DN 70)	• D 125 mm (DN 125)

#### Package units:

Supplied in cartons, PU 1 unit

#### Accessories:

Gravel basket Classic for scupper

- Gravel basket Vario Fix for scupper
- · Vapour barrier sheet for scupper and emergency overflow, round

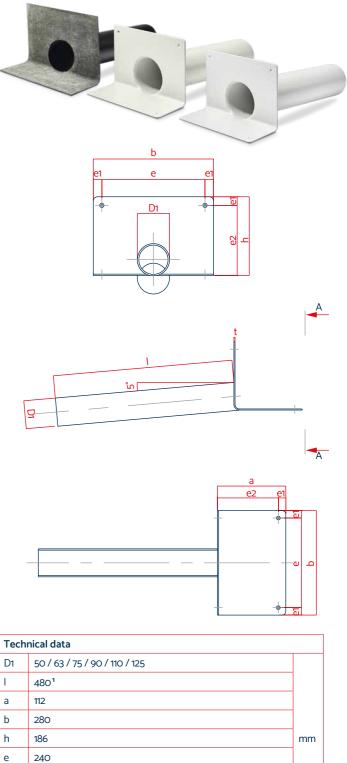
#### Drainage performance litre/sec.:

LGA-certified characteristics

Diameter	Accumulation height		
	35 mm	65 mm	
D 50 mm (DN 50)	0,51	1,31	
D 75 mm (DN 70)	0,65	1,65	
D 90 mm	0,65	1,90	
D 110 mm (DN 100)	1,00	2,65	
D 125 mm (DN 125)	1,00	2,80	

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





20 e2 117 3 Pipe inclination 5°

## Scupper, rectangular

#### Function:

Moulded part for horizontal drainage or emergency drainage through the parapet wall. When installing the emergency overflow, the precise installation point depends on the water level.

#### Material 5:

PVC and FPO/PP<sup>2</sup> models for connection to the respective matching roofing membrane material type. Perform connection for bituminous waterproofing using liquid plastic. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

#### Available sizes (W x H - Internal dimensions) 1:

• 120 x 60 mm	• 300 x 80 mm	• 500 x 100 mm	• 750 x 100 mm
•180 x 80 mm	• 300 x 100 mm	• 600 x 100 mm	• 1000 x 100 mm

#### Available length(I):

•600 mm • 300 mm

#### Colours:

 • PVC similar to RAL 7047, Telegrey 4 • FPO/PP similar to RAL 7044, Silk grey

#### Package units:

Supplied in cartons, PU 1 unit

#### Accessories 3:

Vapour barrier sheet for scupper and emergency overflow, rectangular

#### Drainage performance litre/sec.:

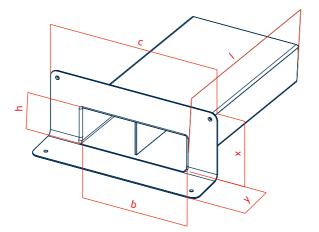
LGA-certified characteristics

Duct = $W \times H^{1,4}$	Accumulation height		
	35 mm	65 mm	
120 x 60	1,30	3,50	
180 x 80	1,90	5,00	
300 x 80	3,00	7,80	
300 x 100	3,00	7,80	
500 x 100	5,50	13,40	
600 x 100	7,20	N/A	
750 x 100	7,50	19,20	
1000 x 100	12,60	29,40	

Technical data <sup>4</sup>						
Duct = W x H	b	h	с	x	у	
120 x 60	120	60	300	153	100	
180 x 80	180	80	360	173	100	
300 x 80	300	80	480	173	100	
300 x 100	300	100	480	193	100	
500 x 100	500	100	680	193	100	mm
600 x 100	600	100	780	193	100	
750 x 100	750	100	930	193	100	
1000 x 100	1000	100	1180	193	100	
Pipe inclination 5° in each case						

<sup>1</sup>Special sizes available on request /<sup>2</sup> also available in PE (PE-based roof membranes) and BIT (sealed with liquid plastic) /<sup>3</sup> alternatively also available with a retaining ring in the desired height / <sup>4</sup> custom designs are non-returnable /<sup>5</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





## Emergency overflow, round

#### Function:

Moulded part for horizontal emergency drainage through the parapet wall. Install by connecting to a pipe system for water drainage, or use for free-flow drainage. When installing the emergency overflow, the precise installation point depends on the water level.

#### Material<sup>3</sup>:

Our emergency overflows are available in PVC, FPO/PP<sup>2</sup> and BIT for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

#### Available sizes:

• D 50 mm (DN 50) • D 63 mm • D 75 mm (DN 70)

• D 110 mm (DN 100) • D 125 mm (DN 125)

#### Package units:

Supplied in cartons, PU 1 unit

#### Accessories:

Vapour barrier sheet for scupper and emergency overflow, round

#### Drainage performance litre/sec.:

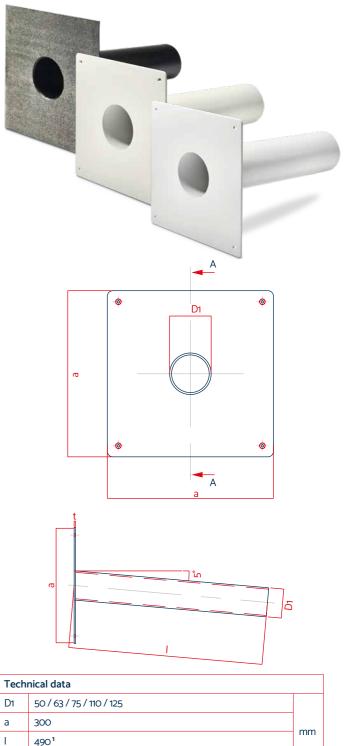
LGA-certified characteristics

Diameter	on height	Тес	
	35 mm	65 mm	D1
D 50 mm (DN 50)	0,51	1,31	а
D 75 mm (DN 70)	0,65	1,65	1
D 110 mm (DN 100)	1,00	2,65	t
D 125 mm (DN 125)	1,00	2,80	Pip

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

3,0 Pipe inclination 5°





# Emergency overflow, rectangular

#### Function:

Moulded part for horizontal drainage or emergency drainage through the parapet wall. When installing the emergency overflow, the precise installation point depends on the water level.

#### Material 4:

PVC and FPO/PP<sup>2</sup> models for connection to the respective matching roofing membrane material type. Perform connection for bituminous waterproofing using liquid plastic. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

#### Available sizes (W x H - Internal dimensions) 1:

 • 120 x 60 mm
 • 300 x 80 mm
 • 500 x 100 mm
 • 750 x 100 mm

 • 180 x 80 mm
 • 300 x 100 mm
 • 600 x 100 mm
 • 1000 x 100 mm

#### Available length (I):

• 300 mm • 600 mm

#### **Colours:**

PVC similar to RAL 7047, Telegrey 4
FPO/PP similar to RAL 7044, Silk grey

#### Package units:

Supplied in cartons, PU 1 unit

#### Accessories:

Vapour barrier sheet for scupper and emergency overflow, rectangular

#### Drainage performance litre/sec.:

LGA-certified characteristics

Duct = W x H <sup>3</sup>	Accu	Accumulation height		
	35 mm	65 mm		
120 x 60	1,30	3,50		
180 x 80	1,90	5,00		
300 x 80	3,00	7,80		
300 x 100	3,00	7,80		
500 x 100	5,50	13,40		
600 x 100	7,20	N/A		
750 x 100	7,50	19,20		
1000 x 100	12,60	29,40		

Technical data <sup>3</sup>					
Duct = W x H	b	h	с	x	
120 x 60	120	60	300	240	
180 x 80	180	80	360	260	
300 x 80	300	80	480	260	
300 x 100	300	100	480	280	
500 x 100	500	100	680	280	mm
600 x 100	600	100	780	280	
750 x 100	750	100	930	280	
1000 x 100	1000	100	1180	280	
Pipe inclination 5° in each case					

<sup>1</sup> Special sizes available on request / <sup>2</sup> also available in PE (PE-based roof membranes) and BIT (sealed with liquid plastic) / <sup>3</sup> custom designs are non-returnable /
 <sup>4</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change.
 KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.



## ... Tender text Drainage / emergency drainage, rectangular

#### Item ...

Rectangular emergency overflow made of **PVC**, with LGA-tested drainage capace section internal dimensions: W mm x H mm, pipe length mm, panel thickness 4 angled tray, pipe inclination 5°: deliver, install and professionally connect to sealin Proof of reference: KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG I +4 Item ...

Rectangular emergency overflow made of **FPO/PP**<sup>1</sup>, with LGA-tested drainage of cross-section internal dimensions: W mm x H mm, pipe length mm, panel thicknes 90° angled tray, pipe inclination 5°: deliver, install and professionally connect to see Proof of reference: KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG I +4 Attention: Please add your internal dimensions to the fields marked with \_\_\_\_\_\_

<sup>1</sup>Also available in PE (roofing membranes based on PE)



	Quantity unit	Price per unit	Total amount		
city, pipe cross-					
- 5 mm with 90°					
ng.	pieces	€	€		
49 7423 8687 600 l info@kala.de					
capacity, pipe					
ness 4 - 5 mm with					
ealing.	pieces	€	€		
49 7423 8687 600 l info@kala.de					

## Installation guide for KALA – drainage and emergency drainage elements

- 1. Position the element in the parapet, opening or ceiling hole provided by the customer and fix into place. Check the gap from the pipe to the wall and fill, if necessary. Make sure to fix the installation holes in place!
- 2. Pre-treating the surface: The tray and membrane to be applied must be clean, dry and free from any residues such as grease or silicones.
- 3. The roof membrane then needs to be correctly connected to the element tray in line with the Flat Roof Directive ["Flachdachrcihtlinien"] and the installation guidelines published by the manufacturer.
- 4. Suitable liquid plastic seals must be used to connect the bituminous seals of rectangular emergency overflows or scuppers.
- 5. The trays with the bitumen connection must be set down horizontally on a flat surface to ensure proper storage of the BIT drains and grommets. We do not assume any liability for damage, e.g. delays, incurred by improper storage.

## Flat roof fans for ventilation lines with weather cap

### Function:

- The flat roof fan is used for ventilation purposes:
- · Ventilation of bathrooms and toilets without outside windows
- · Wastewater aeration and ventilation
- · Ventilation of extractor hoods in kitchens
- Controlled ventilation of the home

### Installation<sup>3</sup>:

Align the fan on the underlay and secure it in position at four points on the underlay using the holes drilled into the edge of the tray. Place the membrane on the tray and join the membrane and the tray with a weld seam at least 20 mm wide.

### Material:

Our fans are available in PVC and FPO/PP<sup>2</sup> for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

### Available sizes1:

• D 75 mm (DN 70) • D 110 mm (DN 100)

• D 125 mm (DN 125) • D 160 mm (DN 150)

Package units:

Supplied in cartons, PU 1 unit

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





			Н
		D2	
:			

٩	Dı	H2
٩		D2

Technical data				
H1 with cap	654 mm			
H2 without cap	620 mm			
D1	DN 70 / DN 100 / DN 125 / DN 150			
D sheet D2	For size DN 70 = 300 mm			
D sheet D2	For all others = 380 mm			
h1 with cap	334 mm			
h2 without cap	300 mm			
h	320 mm			

## Flat roof fans for cold roofs with weather cap

### Function:

 Ventilation and aeration of flat roof structures · For a drenched roof package for moisture removal and drying out

### Installation<sup>3</sup>:

Align the fan on the underlay and secure it in position at four points on the underlay using the holes drilled into the edge of the tray. Place the membrane on the tray and join the membrane and the tray with a weld seam at least 20 mm wide. For the BIT option, incorporate the factory-laminated bitumen connection into the multi-layer waterproofing composite in a workmanlike manner.

### Material:

Our fans are available in PVC. FPO/PP<sup>2</sup> and BIT for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact.

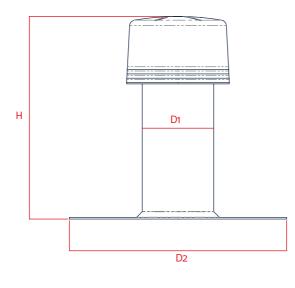
### Available sizes<sup>1</sup>:

• D 75 mm (DN 70) • D 125 mm (DN 125) • D 110 mm (DN 100) • D 160 mm (DN 150)

### Package units:

Supplied in cartons, PU 1 unit





Tech	Technical data		
Н	354 mm <sup>1</sup>		
D1	D 75 mm (DN 70) / D 110 mm (DN 100) / D 125 mm (DN 125) / D 160 mm (DN 150)		
D2 For size DN 70 = 300 mm For all others = 380 mm			

<sup>1</sup>Special lengths available on request /<sup>2</sup> also available in PE (roofing membranes based on PE) / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

### Flat roof refurbishment fans with forced ventilation Function: Moisture removal, forced ventilation of roof structures • For a drenched roof package for moisture removal and drying out In this variant, a maintenance-free suction fan that is driven by the wind (achieves a very high air flow rate) is attached to the base body. The fan is resistant to driving rain and snow and is supplied completely ready for installation and can be welded directly to the roof membrane. Installation<sup>3</sup>:

Align the fan on the underlay and secure it in position at four points on the underlay using the holes drilled into the edge of the tray. Place the membrane on the tray and join the membrane and the tray with a weld seam at least 20 mm wide. For the BIT option, incorporate the factory-laminated bitumen connection into the multi-layer waterproofing composite in a workmanlike manner.

### Material:

Our fans are available in PVC, FPO/PP<sup>2</sup> and BIT for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant: UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact. The suction fan attachment is made of high-quality aluminium.

#### Available sizes<sup>1</sup>:

• D 125 mm (DN 125)

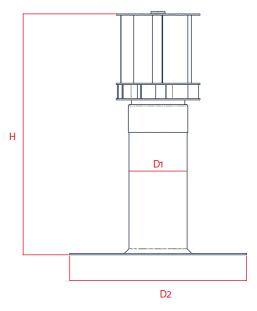
• D 160 mm (DN 150)

### Package units:

Supplied in cartons, PU 1 unit

<sup>1</sup>Special lengths available on request /<sup>2</sup>also available in PE (roofing membranes based on PE) /<sup>3</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





Technical data		
H	518 mm <sup>1</sup>	
D1	D 125 mm (DN 125) / D 160 mm (DN 150)	
D2	2 380 mm	

## Universal weather cap for flat roof fans

### Function:

Weatherproof cover for ventilation ducts. Securing the ventilation duct with the KALA weather protection cap prevents snow and rain from entering. The streamlined cross-section facilitates the exchange of air.

The weather protection cap is simply pushed onto the ventilation duct and pressed tight. The guide pins are designed for connection to DN 100 and DN 125 ventilation ducts. The design provides for a secure hold of the cap on the duct.

### Material:

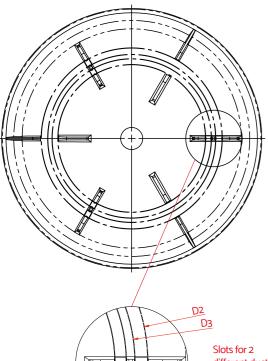
FPO/PP, impact resistant, weatherproof, UV-stabilized

### Versions:

 Suitable for use with DN 100 and DN 125 Colour black, other colors available on request

### Package units:

Supplied in foil bags, PU 1 unit





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D1

## **Gravel basket Vario Fix** variably adjustable for drains and gullies

### Function:

Moulded part as attachment to a drain or gully. Serves to retain coarse dirt particles to stop the drainage system from clogging up. The LGA-certified, flow-optimised design ensures minimal loss of flow and high performance, even during torrential rain.

### Installation:

The delivery is ready for installation. Place the gravel basket centrally on the drain or gully, press the locking button down and turn it to the right to lock - done. The spreading feet can be continuously adjusted to the diameter of the drain or gully with the turning mechanism. For later removal, simply turn the knob to the left again to unlock and pull out. When unlocked, the spreader feet can simply be pressed together again.

### Material:

### • PE Black

Low-temperature impact resistant plastic, weatherproof, UV-stabilized

### Available sizes:

Suitable for all diameters ranging from D 50 mm (DN 50) to D 160 mm (DN 150)

Package units:

Supplied in cartons, PU 10 units

### Fixed in the blink of an eye:



KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

Technical data 118 mm

ø 180 mm

ø 125 mm

ø 116 mm

ø 110 mm

ø 102 mm

h

D1

D2

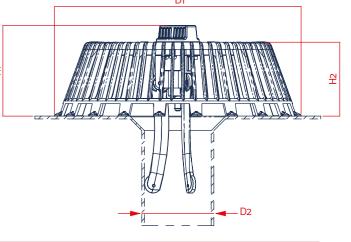
D3

D4

D5







Technical data			
H1	95		
H2	77,50		
D1	260	mm	
D2	D 50 - D 160		

### Press







## **Gravel basket Vario Fix** variably adjustable for scupper

### Function:

Moulded part as an attachment to a spout. Serves to retain coarse dirt particles to stop the drainage system from clogging up. The flow-optimised geometry ensures low levels of loss and a high flow rate even in heavy rain.

### Installation:

The delivery is ready for installation. Place the gravel basket centrally on the scupperpout, press the locking button down and turn to the right to lock - done. The spreading feet can be continuously adjusted to the diameter of the feeder with the turning mechanism. For later removal, simply turn the knob to the left again to unlock and pull out. When unlocked, the spreader feet can simply be pressed together again.

### Material:

• PE Black

Low-temperature impact resistant plastic, weatherproof, UV-stabilized

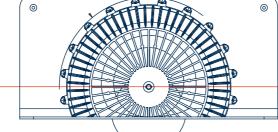
### Available sizes:

Suitable for all diameters ranging from D 50 mm (DN 50) to D 125 mm (DN 125)

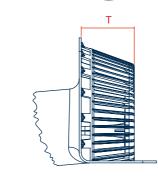
Package units:

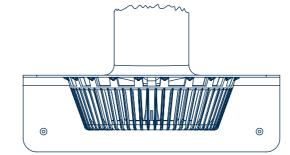
Supplied in cartons, PU 10 units





D





Tech	Technical data			
D	262			
Т	77,5	mm		

## **Gravel basket Classic** with centering cross for drains and gullies

### Function:

Moulded part as attachment to a drain or gully. Serves to retain coarse dirt particles to stop the drainage system from clogging up. The LGA-certified, flow-optimised design ensures minimal loss of flow and high performance, even during torrential rain.

### Installation:

Shorten the four wings on the centring cross to match the inner diameter of the drain or gully, slightly oversize and simply press in. The cutting mark on all four wings makes it easy to cut them exactly to size. Fits all standard drains and gullies up to DN 150.

### Material:

• PE Black

· Low-temperature impact resistant plastic, weatherproof, UV-stabilized

### Available sizes:

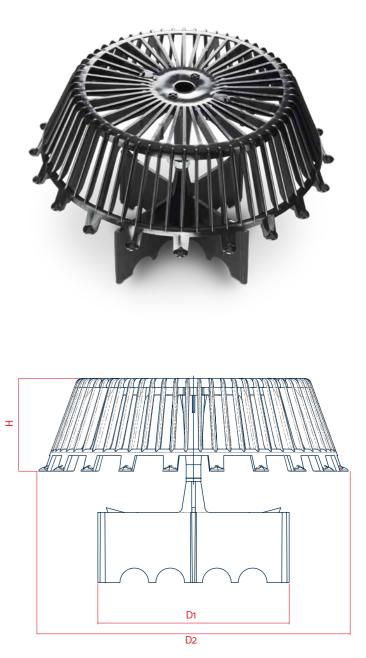
Suitable for all diameters ranging from D 50 mm (DN 50) to D 160 mm (DN 150)

### Package units:

Supplied in cartons, PU 10 units

KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





Technical data		
H	77,5	
D1	160	mm
D2	262	

## **Gravel basket Classic** with centering cross for scupper

### Function:

Moulded part as an attachment to a spout. Serves to retain coarse dirt particles to stop the drainage system from clogging up. The flow-optimised geometry ensures low levels of loss and a high flow rate even in heavy rain.

### Installation:

Simply insert - the centring cross for attaching the spout screen in the pipe is already cut to size.

### Material:

• PE Black

Low-temperature impact resistant plastic, weatherproof, UV-stabilized

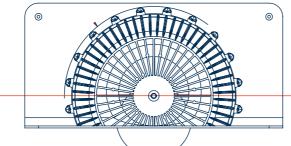
### Available sizes:

Suitable for all diameters ranging from D 50 mm (DN 50) to D 125 mm (DN 125). Simply state your preferred size when ordering.

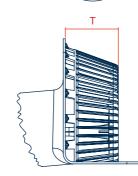
Package units:

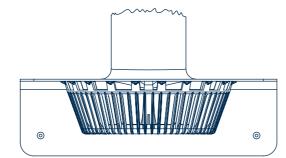
Supplied in cartons, PU 10 units





D





Tech	Technical data		
D	262		
Т	77,5	mm	

## Gravel guard frame

### Function:

The gravel guard frame reliably retains coarse dirt for gravel and other loads, preventing it from accumulating at the drain. Even with significant dirt accumulation, the gravel guard frame ensures the functionality of the drain.

### Installation:

The gravel guard frame is placed centrally on the drainage point above the drain. The drain grate is then inserted into the opening and clamped into place. The gravel is then pushed against the gravel guard frame on all sides to fix it in position.

### Material:

PVC Light grey, low-temperature impact resistant plastic, weatherproof

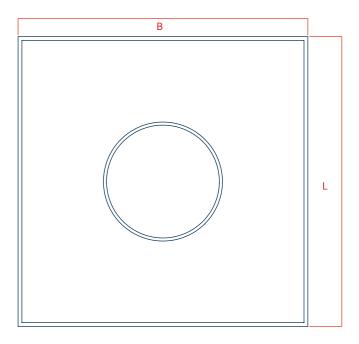
### Delivery unit:

Gravel guard frame in welded design, ready to install, without drainage grating

Versions: Universal size; different dimensions available on request

Package units: Supplied in cartons, PU 1 unit





Technical data			
L	380 mm		
В	380 mm		
Н	80 mm		

## **Inspection chamber**

### Function:

The inspection chamber reliably retains coarse dirt on green roofs, preventing it from accumulating at the drain. Avoids larger dirt deposits while ensuring full drain functionality. The chamber cover can be removed for inspection purposes.

### Installation:

The inspection chamber is placed centrally on the drainage point above the drain. The drain grate is then inserted into the opening and clamped into place. Following this, the chamber cover is placed on top. Gravel is then pushed against the inspection chamber on all sides to fix it into place and provide a filter layer in front of the green roof substrate. Do not fill the substrate directly against the inspection chamber.

### Material:

PVC Light grey, low-temperature impact resistant plastic, weatherproof

### Delivery unit:

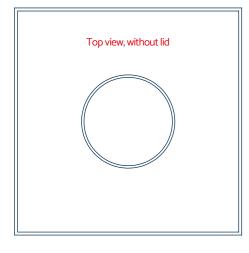
Inspection chamber; welded design with matching chamber cover, ready to install, without drain grate

### Versions:

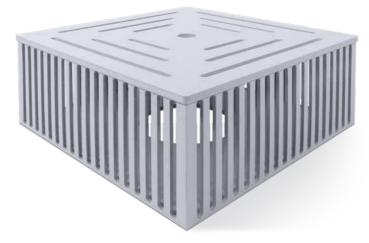
Universal size; different dimensions available on request

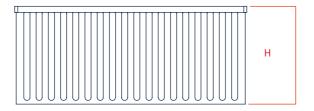
### Package units:

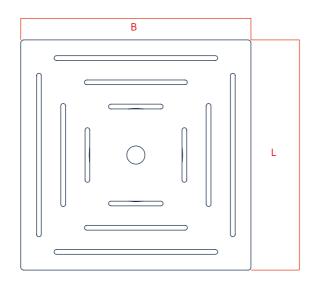
Supplied in cartons, PU 1 unit



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Technical data		
L	380 mm	
В	380 mm	
Н	160 mm	

## Lip seal for pipe connections

### Function:

When connecting gullies to flat roof drains, these leak-tested, backflow-proof and compliant seals for connecting two different pipe diameters are ideal for sealing purposes.

### Material:

• EPDM, rubber black

• UV and ozone resistant

• strong resilience to chemicals, temperature and footsteps

### Available sizes:

• D 50 mm (DN 50) • D 110 mm (DN 100) • D 75 mm (DN 70) • D 95 mm small • D 95 mm large

• D 125 mm (DN 125)

• D 160 mm (DN 150)

### Package units:

Supplied in cartons / foil bags, PU 1 unit





Technical data					
Version lip seal	Size drains	External dimen- sions / height	Suitable for		
D 50 mm (DN 50)	D 50 mm (DN 50)	73 x 29 mm	D 75 mm (DN 70)		
D 75 mm (DN 70)	D 75 mm (DN 70)	109 x 38 mm	D 110 mm (DN 100)		
D 95 mm small	D 95 mm	113 x 19 mm	D 110 mm (DN 100)		
D 95 mm large	D 95 mm	146 x 30 mm	D 125 mm (DN 125)		
D 110 mm (DN 100)	D 110 mm (DN 100)	126 x 35 mm	D 125 mm (DN 125)		
D 125 mm (DN 125)	D 125 mm (DN 125)	172 x 32 mm	D 160 mm (DN 150)		
D 160 mm (DN 150)	D 150 mm (DN 150)	207 x 33 mm	D 165 mm up to D 180 mm		

## **Universal grommets**

### Function<sup>3</sup>:

Serves for feeding pipes, cables and lines, e.g. solar-thermal, photovoltaic and lightning protection systems and fall arresters through the roof package.

### **Connection Method:**

The free upper end needs to be sealed against the line that is fed through, e.g. with the heat-shrink tubing supplied, to prevent water ingress.

### Material:

Our universal grommets are available in PVC, FPO/PP<sup>1</sup> and BIT<sup>2</sup> for connection to the matching material used for the roof membrane. The materials are modified to be weather-resistant; UV-stabilised. against heat degradation and oxidative ageing as well as resistant to cold impact.

- PVC Light grey
- FPO/PP White, Beige gray, Gray, Anthracite gray BIT sanded

### Available sizes:

### PVC, FPO/PP<sup>1</sup>, BIT with surrounding cutting markings and height information

• D 50 mm

• D 42 mm in carton, PU 25 units

• D 50 mm in carton, PU 20 units

• D 30 mm • D 10 mm • D 20 mm • D 42 mm

BIT

```
• D 68 mm
                        • D 100 mm
                                               • D 150 mm
• D 82 mm
                        • D 115 mm
Delivered with heat-shrink tube
```

### Package units:

### PVC, FPO/PP<sup>1</sup>

• D 10 mm in carton, PU 40 units • D 20 mm in carton, PU 35 units • D 30 mm in carton, PU 30 units

BIT

• D 10 mm - D 50 mm in carton, PU 10/60 units

### • D 68 mm - D 150 mm in carton, PU 5 units

### Accessories:

Heat-shrink tube

•W4 hose clamps

Fechnical data D 10 -	D 50	Technical data D 68	- D 150
Height in mm	300	Height in mm	320
Inner diameter in mm	10 20 30 42 50	Inner diameter in mm	68 82 100 115 150
Material thickness of moulded part in mm	3	Material thickness of moulded part in mm	3,5
Connection sleeve in mm (only BIT)	D 430	Connection sleeve in mm (only BIT)	500 x 500
Material thickness of bitumen sleeve in mm	4	Material thickness of bitumen sleeve in mn	4

<sup>1</sup>Also available in PE (roofing membranes based on PE) /<sup>2</sup> optionally also deliverable in slate variant /<sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.



## **One-piece inspection fitting** for flat roof systems The inspection fitting facilitates regular, simple and safe inspection of Installation<sup>2</sup>: The inspection fitting is positioned on the vapour barrier at the lowest point possible for each chosen section. As an option, the position can also be fixed to prevent shifting. Subsequent laying of the insulation and seal with connection of the seal to the pipe on the inspection fitting in a workmanlike manner.

### Function:

flat roofs without requiring any destructive penetration into the roof envelope. This ensures leaks are quickly detected and helps to significantly minimise the amount of damage.

### Material:

PVC similar to RAL 7035, Light grey

• FPO/PP similar to RAL 7044, Silk grey

### Versions

• optionally als available in other pipe lengths <sup>1</sup>, as well as • with bitumen sleeve (on request)

### **Delivery unit:**

Inspection fitting, consisting of a main casing with a cap that can be pulled out in one piece, pre-mounted clamp and insulation core mounted in the cap (over the entire length of the fitting). Also available with bitumen connection sleeve on request.

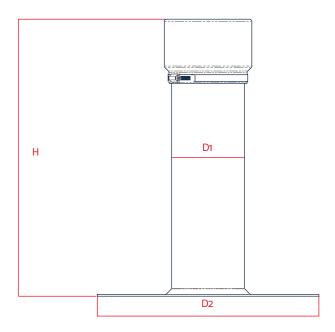
### Available sizes<sup>1</sup>:

D 125 mm (DN 125)

### Package units: Supplied in foil bags, PU 1 unit

<sup>1</sup>Special sizes available on request /<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes





Technical data			
Н	380		
D pipe D1	125	mm	
D sheet D2	380		
The total height including the polystyrene core is 605 mm			

## Gooseneck/ cable conduit

### Function:

For optimal and straightforward energy feedthrough for flat roofs such as pipes or cables. Can be used as a Gooseneck/cable conduit for flat roof fans.

### Material:

FPO/PP Black
 Low-temperature impact resistant plastic, weatherproof

### Available sizes:

• D 75 mm (DN 70) • D 110 mm (DN 100) • D 125 mm (DN 125) • D 160 mm (DN 150)

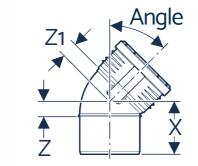
### Package units:

Supplied in cartons, PU 10 units

### Accessories:

EPDM end cap to secure the opening against vermin and for increased weather protection requirements (cut a suitable undersized hole in the base of the cover, the material is elastic and forms a seal against cables or pipes that have been fed through - see detailed illustration).





Technical data				
Diameter	Angle	х	Z	Z1
D 75 mm (DN 70)	45°	7,6 cm	2,0 cm	2,1 cm
D 110 mm (DN 100)	45°	9,7 cm	3,0 cm	2,9 cm
D 125 mm (DN 125)	45°	10,7 cm	3,3 cm	3,3 cm
D 160 mm (DN 150)	45°	12,2 cm	4,2 cm	4,0 cm

# Vapour barrier sheet for round and rectangular scuppers and emergency overflows

### Function:

Emergency overflows or spouts are difficult to feed through the parapet wall. The seal is usually inadequate. The vapour barrier plate is fitted to the parapet wall and guarantees the vapour-tight passage of the pipe through the wall.

### Material:

Base: PVC

• Seal: EPDM

### Available sizes:

round:		
• D 50 mm (DN 50)	• D 95 mm	• D 125 mm (DN 125)
• D 75 mm (DN 70)	• D 110 mm (DN 110)	

#### rectangular:

 • 120 x 60 mm
 • 300 x 100 mm

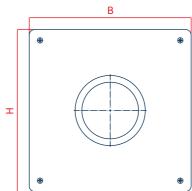
 • 180 x 80 mm
 • 500 x 100 mm

 • 300 x 80 mm
 • 600 x 100 mm

• 750 x 100 mm • 1000 x 100 mm

### Package units:

Supplied in cartons, PU 1 unit

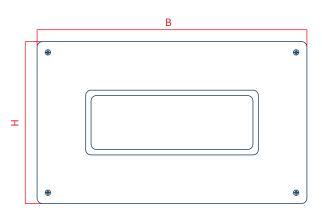


Technical data			
Version	Width B	Height H	
D 50 mm (DN 50)			
D 75 mm (DN 70)			
D 95 mm	300	300	mm
D 110 mm (DN 110)			
D 125 mm (DN 125)			

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Technical data			
Width B	Height H		
320	260		
380	280		
500	280		
500	300	mm	
700	300		
800	300		
950	300		
1200	300		
	320 380 500 500 700 800 950	320         260           380         280           500         280           500         300           700         300           800         300           950         300	

## Internal and external corners for roof membranes

### Function:

Moulded part for connections and terminations in corner formations, can be used on both sides (see illustration).

### Versions:

PVC Light grey, FPO/PP in White, Gray, Beige gray and Anthracite gray for connection to the matching roofing membrane material type. The materials are modified to be weather-resistant; UV-stabilised, against heat degradation and oxidative ageing as well as resistant to cold impact

### **Connection Method:**

Welding, for direct connection to the roof membrane

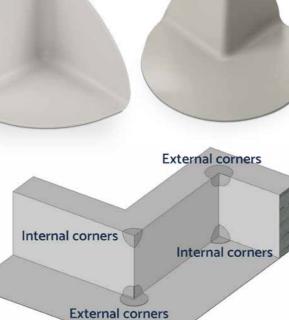
### Material 1:

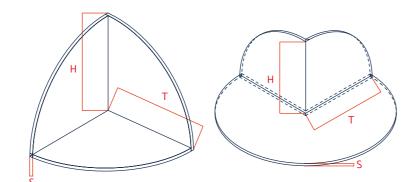
PVC Light grey

• FPO/PP White, Beige gray, Gray, Anthracite gray

### Package units:

Supplied in cartons, PU 25 units





Technical data			
	Interior corner	External corner	
Н	95	102	
Т	85	90	mm
S	2	2	

<sup>1</sup> Also available in PE (roofing membranes based on PE). KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

Heat-shrink tube

### Function:

Heat-shrinkable tubes with adhesive coating on the interior for the reliable sealing of the edging/bushings/solar/PV systems/fall arrest systems/lightning protection/handrail supports/... The shrink tubes can be shrunk directly using a hot air gun.

### **Technical information:**

- · Polyolefin-based heat-shrinkable tubing
- Inner adhesive coating
- 3:1 shrink ratio
- Longitudinal shrinkage < 10%
- $\cdot$  Continuous service temperature: -55° C to 110° C
- Flammability: flame retardant VW-1 flame resistant
- Tensile strength: > 14 Mpa
- Elongation at break: 400%
- Volume resistance: 10<sup>13</sup> ohms/cm
- Water absorption: < 0.5 %
- Fungus and rot resistance test passed
- UV weather resistance test passed
- Colour Black

### Available sizes1:

•22/6	• 55/16	• 115/34
• 28/6	• 65/19	•140/42
• 40/12	·95/25	•180/58

### Package units:

Supplied in cartons / foil bags, PU 10 units





Technical data				
Size	Length in mm	Surround size	Wall thickness in mm after shrinkage	
22/6	80	D 10	2,5	
28/6	80	D 20	2,5	
40/12	80	D 30	2,5	
55/16	80	D 42	2,7	
65/19	80	D 50	2,8	
95/25	100	D 68 / 82 / 88	3,0	
115/34	100	D 110	3,0	
140/42	100	D 115	3,0	
180/58	100	D 160	3,5	

## Lightning protection wire holders

### Function:

For the simple and secure attachment of lightning protection lines on flat roofs

### Material:

### Polyamide Gray

- · Low-temperature impact resistant plastic, weatherproof, UV-stabilized
- $\cdot$  Application temperature is between +50 °C and -10 °C

### Available sizes:

For lightning protection lines 8 - 10 mm

### Package units:

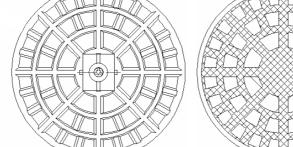
Supplied in cartons, PU 50 units

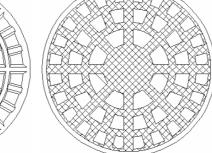
### Accessories:

Metal blank for attachment to the roof sheeting: • PVC • FPO/PP1

• BIT









Technical data		
Н	53	
D1	8 - 10	
D2	110	mm
t	3	]

<sup>1</sup>Also available in PE (roofing membranes based on PE). KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

## **Drains Nexo Fix**

### Function:

Molding for vertical drainage through the roof package. Installation with connection to a pipe system for water drainage or as an extension element for a roof drain. Pay attention to appropriate backflow protection.

### Installation 4:

Position the drains in the opening in the roof structure, if used as an extension element, connect them to the gully underneath, align them with the subsurface and fasten them securely at four points in the subsurface using the holes on the edge of the tray. Weld the connection sleeve to the waterproofing membrane all around professionally and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes 2:

• D 50 mm (DN 50) • D 160 mm (DN 150) • D 95 mm • D 75 mm (DN 70) • D 110 mm (DN 100) • D 90 mm • D 125 mm (DN 125)

### Package units:

Supplied in cartons, PU 1 unit

### Accessories:

Gravel basket Vario Fix for drains, gravel basket Classic for drains, lip seal, Roll Ring<sup>3</sup>

### Drainage performance litre/sec.:

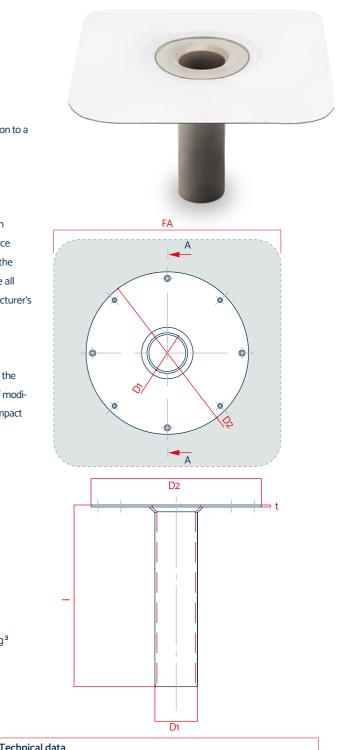
LGA-certified characteristics

Diameter	Accumulatio	n height		
	35 mm	65 mm	Technical data	
)N 50)	3,70	N/A	D1 50 / 75 90 / 95 / 110 / 125 / 160	
(DN 70)	4,60	13,20	D2 300 380	
	5,30	14,60	I 320 <sup>1</sup> 320 <sup>1</sup>	
(DN 100)	5,55	15,80	t 3,5 3,5	
)N 125)	5,55	16,00	Foil connection (FA) D 50 up to D 75 L 500 x B 500	
(DN 150)	5,60	18,60	Foil connection (FA) D 90 up to D 160 L 580 x B 580	

<sup>1</sup>Special lengths available on request /<sup>2</sup> other diameter sizes available upon request / <sup>3</sup> Attention: We would like to point out that installation with a rolling ring does not conform to the standards. Backflow security is not guaranteed / <sup>4</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

D2





## Scupper Nexo Fix, round

### Function:

Molding for horizontal drainage through the parapet. Installation with connection to a pipe system for water drainage or free jet. When installing for emergency drainage, the exact installation point must be taken into account depending on the water height.

### Installation<sup>2</sup>:

Push the scupper through the horizontal opening in the parapet, align it with the subsurface and securely attach it to four points in the subsurface using the holes on the edge of the tray. Weld the connection sleeve to the waterproofing membrane all around professionally and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes:

D 50 mm (DN 50)
 O 90 mm
 D 63 mm
 D 75 mm (DN 70)
 O

### Package units:

Supplied in cartons, PU 1 unit

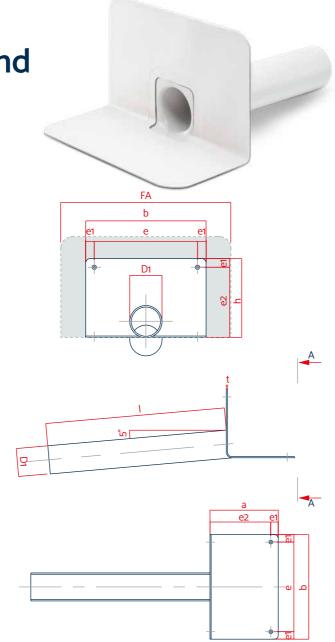
### Accessories:

Gravel basket Classic for scupper, gravel basket Vario Fix for scupper, vapour barrier sheet for scupper and emergency overflow, round

### Drainage performance litre/sec.:

LGA-certified characteristics

Diameter	Accumulation height	
	35 mm	65 mm
D 50 mm (DN 50)	0,51	1,31
D 75 mm (DN 70)	0,65	1,65
D 90 mm	0,65	1,90
D 110 mm (DN 100)	1,00	2,65
D 125 mm (DN 125)	1,00	2,80



Technical data		
D1	50 / 63 / 75 / 90 / 110 / 125	
I	480 <sup>1</sup>	
а	112	
b	280	
h	186	
e	240	mm
e1	20	
e2	117	
t	3	
Foil connection (FA)	L 494 x B 484	
Pipe inclination 5 °		

<sup>1</sup>Special lengths available on request /<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

# Scupper Nexo Fix, rectangular

### Function:

Molding for horizontal drainage or emergency drainage through the parapet. When installing, the exact installation point must be taken into account depending on the water height.

### Installation\*:

Push the scupper through the horizontal opening in the parapet, align it with the subsurface and securely attach it to four points in the subsurface using the holes on the edge of the tray. Weld the connection sleeve to the waterproofing membrane all around professionally and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes (W x H - Internal dimensions) 1:

• 120 x 60 mm • 300 x 100 mm • 600 x 100 mm • 300 x 80 mm • 500 x 100 mm

### Available length (I):

•300 mm •600 mm

### Colours:

Ground body:

PVC similar to RAL 7047, Telegrey 4

FPO/PP similar to RAL 7044, Silk grey

Roof membrane colors are determined by the respective manufacturer.

### Package units:

Supplied in cartons, PU 1 unit

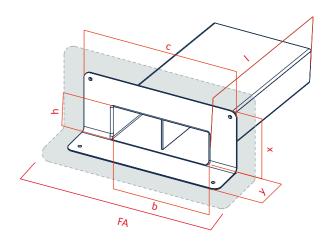
### Accessories 2:

Vapour barrier sheet for scupper and emergency overflow, rectangular

<sup>1</sup>Special sizes available on request / <sup>2</sup> alternatively also available with a retaining ring in the desired height / <sup>3</sup> custom designs are non-returnable / <sup>4</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.







Technical data <sup>3</sup>						
Duct = W x H	b	h	с	x	у	
120 x 60	120	60	300	153	100	
180 x 80	180	80	360	173	100	
300 x 80	300	80	480	173	100	
300 x 100	300	100	480	193	100	mm
500 x 100	500	100	680	193	100	
600 x 100	600	100	780	193	100	
Pipe inclination 5° in each case						

Foil connection (FA)						
Sizes (L x W) in mm	440 x 500	460 x 560	460 x 680	480 x 680	460 x 880	480 x 980
Sizes for	120 x 60 x 300/600	180 x 80 x 300/600	300 x 80 x 300/600	300 x 100 x 300/600	500 x 100 x 300/600	600 x 100 x 300/600

### Drainage performance litre/sec.:

LGA-certified characteristics

Duct = W x H <sup>1,3</sup>	Accumulation height		
	35 mm	65 mm	
120 x 60	1,30	3,50	
180 x 80	1,90	5,00	
300 x 80	3,00	7,80	
300 x 100	3,00	7,80	
500 x 100	5,50	13,40	
600 x 100	7,20	N/A	

## **Emergency overflow** Nexo Fix, round

### Function:

Molding for horizontal emergency drainage through the parapet. Installation with Connection to a pipe system for water drainage or free jet. At the Installation, the exact installation point must be taken into account depending on the water height.

### Installation<sup>2</sup>:

Push the emergency overflow through the horizontal opening in the parapet, align it on the subsurface and securely secure it in position at four points in the subsurface using the holes on the edge of the tray. The connection sleeve with the Sealing membrane all around professionally and according to the manufacturer's specifications of the roofing membrane manufacturer.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes:

• D 50 mm (DN 50) • D 110 mm (DN 100) • D 63 mm • D 125 mm (DN 125) • D 75 mm (DN 70)

### Package units:

Supplied in cartons, PU 1 unit

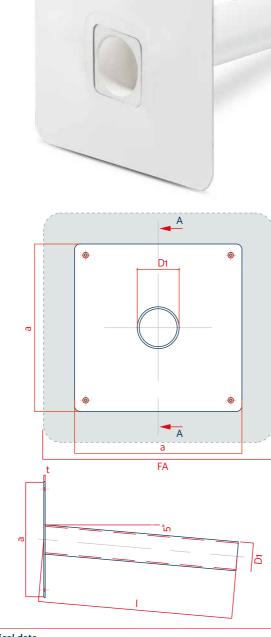
### Accessories:

Vapour barrier sheet for scupper and emergency overflow, round

### Drainage performance litre/sec.:

LGA-certified characteristics

Diameter	Accumulation height		
	35 mm	65 mm	
D 50 mm (DN 50)	0,51	1,31	
D 75 mm (DN 70)	0,65	1,65	
D 110 mm (DN 100)	1,00	2,65	
D 125 mm (DN 125)	1,00	2,80	



Technical data		
D1	50 / 63 / 75 / 110 / 125	
а	300	
I	490 <sup>1</sup>	mm
t	3,0	
Foil connection (FA)	L 500 x B 500	
Pipe inclination 5°		

<sup>1</sup>Special lengths available on request /<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

## **Emergency overflow** Nexo Fix, rectangular

### Function:

Molding for horizontal drainage or emergency drainage through the parapet. When installing, the exact installation point must be taken into account depending on the water height.

### Installation <sup>3</sup>:

Push the emergency overflow through the horizontal opening in the parapet, align it on the subsurface and securely secure it in position at four points in the subsurface using the holes on the edge of the tray. The connection Weld the sleeve to the waterproofing membrane professionally and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes (W x H - Internal dimensions) ::

•120 x 60 mm • 300 x 100 mm • 600 x 100 mm • 300 x 80 mm • 500 x 100 mm

### Available length (I):

• 300 mm •600 mm

### Colours:

Ground body: PVC similar to RAL 7047, Telegrey 4 FPO/PP similar to RAL 7044, Silk grey Roof membrane colors are determined by the respective manufacturer

### Package units:

Supplied in cartons, PU 1 unit

### Accessories:

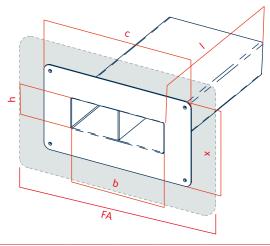
Vapour barrier sheet for scupper and emergency overflow, rectangular

<sup>1</sup>Special sizes available on request /<sup>2</sup> custom designs are non-returnable / <sup>3</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNST-STOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.









Technical data <sup>2</sup>					
Duct = W x H	b	h	с	x	
120 x 60	120	60	300	240	
180 x 80	180	80	360	260	
300 x 80	300	80	480	260	
300 x 100	300	100	480	280	mm
500 x 100	500	100	680	280	
600 x 100	600	100	780	280	
Pipe inclination 5° in each case					

Foil connection (FA)						
Sizes (L x W) in mm	440 x 500	460 x 560	460 x 680	480 x 680	460 x 880	480 x 980
Sizes for	120 x 60 x 300/600	180 x 80 x 300/600	300 x 80 x 300/600	300 x 100 x 300/600	500 x 100 x 300/600	600 x 100 x 300/600

### Drainage performance litre/sec.:

LGA-certified characteristics

Duct = W x H <sup>2</sup>	Accumulation height		
	35 mm	65 mm	
120 x 60	3,00	7,80	
180 x 80	3,00	7,80	
300 x 80	5,50	13,40	
300 x 100	7,20	N/A	
500 x 100	7,50	19,20	
600 x 100	12,60	29,40	

# Flat roof fans Nexo Fix for ventilation lines with weather cap

### Function:

The flat roof fans are used for ventilation: • Ventilation of bathrooms and toilets without outside windows • Dirty water ventilation • Ventilation of extractor hoods in kitchens • Controlled living space ventilation

### Installation 1:

Align the fan on the ground and over the holes on the Fasten the edge of the tray securely at four points in the subsurface. Professionally weld the connection sleeve to the sealing membrane all around and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes<sup>1</sup>:

 • D 75 mm (DN 70)
 • D 125 mm (DN 125)

 • D 110 mm (DN 100)
 • D 160 mm (DN 150)

### Package units:

Supplied in cartons, PU 1 unit

Technical data				
H1 with cap	654 mm			
H2 without cap	620 mm			
D1	DN 70 / DN 100 / [	DN 70 / DN 100 / DN 125 / DN 150		
D sheet D2		For size DN 70 = 300 mm For all others = 380 mm		
h1 with cap	334 mm	334 mm		
h2 without cap	300 mm	300 mm		
h	320 mm	320 mm		
Foil connection (FA)	D 75	D 75 L 500 x B 500 mm		
Foil connection (FA)	D 110 up to D 160	L 580 x B 580 mm		

<sup>1</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

# Flat roof fans Nexo Fix for cold roofs with weather cap

### Function:

Ventilation of roof structures
 In the case of a damp roof package for moisture removal and drying out

### Installation<sup>2</sup>:

Align the fan on the ground and over the holes on the Fasten the edge of the tray securely at four points in the subsurface. Professionally weld the connection sleeve to the sealing membrane all around and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

### Available sizes<sup>1</sup>:

• D 75 mm (DN 70) • D 110 mm (DN 100) • D 125 mm (DN 125) • D 160 mm (DN 150)

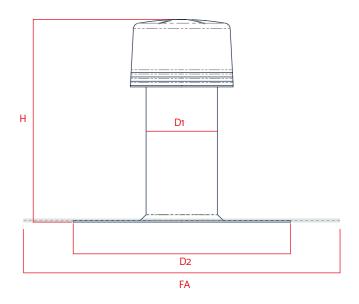
### Package units:

Supplied in cartons, PU 1 unit

<sup>1</sup>Special lengths available on request /<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.







Technical data						
354 mm <sup>1</sup>						
D 75 mm (DN 70) / D 110 mm (DN 100) / D 125 mm (DN 125) / D 160 mm (DN 150)						
D 75 mm = 300 mm D 110 up to D 160 mm = 380 mm						
D 75	L 500 x B 500 mm					
D 110 up to D 160	L 580 x B 580 mm					
	D 75 mm (DN 70) / D 110 m D 125 mm (DN 125) / D 160 D 75 mm = 300 mm D 110 up to D 160 mm = 3 D 75					

# Flat roof refurbishment fans Nexo Fix with forced ventilation

### Function:

Moisture removal, forced ventilation of roof structures
In the case of a damp roof package for moisture removal and drying out

This version has a maintenance-free suction fan that is blown by the wind is driven (achieves a very high air throughput) onto the ground body put on. The fan is resistant to driving rain and snow and is complete Delivered ready to install and can be welded directly to the roofing membrane.

### Installation<sup>2</sup>:

Align the fan on the ground and over the holes on the Fasten the edge of the tray securely at four points in the subsurface. Professionally weld the connection sleeve to the sealing membrane all around and in accordance with the roofing membrane manufacturer's specifications.

### Material:

Versions PVC and FPO/PP with welded connection sleeve for easy connection to the appropriate roofing membrane. The material of the ground body is weatherproof modified: UV-stabilized, against heat degradation and oxidative aging as well as cold impact resistant.

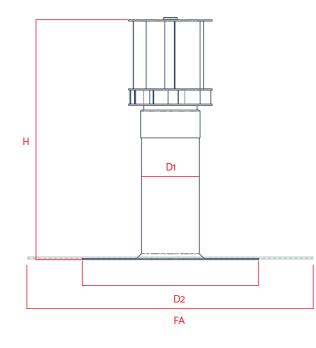
### Available sizes1:

• D 125 mm (DN 125) • D 160 mm (DN 150)

### Package units:

Supplied in cartons, PU 1 unit





Technical data					
Н	518	518 mm <sup>1</sup>			
D1	D1	D 125 mm (DN 125) / D 160 mm (DN 150)			
D2	380	380 mm			
Foil connection	(FA) D1	125 up to D 160	L 580 x B 580 mm		

## One-piece inspection fitting Nexo Fix for flat roof systems

### Function:

The inspection fitting is used for regular, simple and safe inspection of the flat roof without damaging openings. Leaks can therefore be discovered quickly and the extent of the damage can therefore be significantly reduced.

### Installation<sup>2</sup>:

For each selected section, the inspection fitting is placed on the vapor barrier at the lowest point possible. Optionally, the position can be fixed to prevent displacement. Subsequently, laying the insulation and sealing with professional connection of the sealing to the pipe of the inspection fitting.

### Material:

PVC similar to RAL 7035, Light grey

 $\cdot$  FPO/PP similar to RAL 7044, Silk grey

### Versions

optionally als available in other pipe lengths <sup>1</sup>, as well as
 with bitumen sleeve (on request)

### Delivery unit:

Inspection fitting, consisting of ground body in one piece removable cap, pre-assembled clamp and insulating core mounted in the cap.

Available sizes1:

D 125 mm (DN 125)

### Package units:

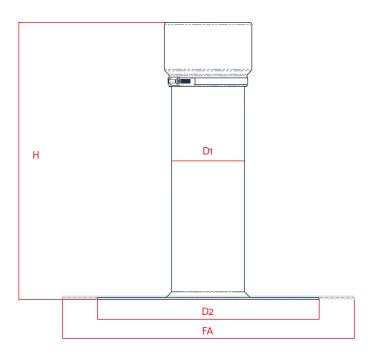
Supplied in foil bags, PU 1 unit

<sup>1</sup>Special lengths available on request /<sup>2</sup> Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

<sup>1</sup>Special sizes available on request /<sup>2</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA – KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.







echnical data				
ł	380			
) pipe D1	125			
) sheet D2	eet D2 380			
oil connection (FA) D125 L 580 x B 580 mm				
he total height including the polystyrene core is 605 mm				

## Release list for roofing membranes

PVC			
Manufacturer	Product		
Alwitra	Evalon		
Bauder	Thermofol		
BMI Wolfin	Cosmofin, Tectofin, Wolfin*		
FDT	Rhenofol		
Georg Börner	Logicroof V		
Icopal	Monarplan PVC		
Mapei	Mapeplan M, Mapeplan Plus		
Protan AS	Protan PVC		
Renolit	Alkorplan		
Sika	Sikaplan		
Soprema	Flagon SR, Flagon SV, Flagon S.150		
Sucoflex	Sucoflex B, Sucolfex M		
* Color deviation! Black roofing membrane, gray molding			
Information valid for Europe, roofing membranes produced for European markets			

## **FPO/PP**

Manufacturer	Product		
Agru	Austroplan		
Bauder	Thermofin, Thermoplan		
BMI Icopal	Monarfin FPO		
BMI Vedag	Vedafin		
BMI Wolfin	EverGuard TPO		
Carlisle C.M.	Sure-Weld TPO		
Firestone	UltraPly		
Мареі	Mapeplan T I		
Sika	Sarnafil AT, Sarnafil T		
Soprema	Flagon Premio, P. Stick; Flagon Eco, Eco F; Flagon EP-S 150		
Sucoflex	Sucoflex TB, TM		
Information valid for Europe, roofing membranes produced for European markets			

## **KALA terrace** support system

### Function:

Terrace support for the installation of all surface types, particularly stone slabs and boardwalk finishes. The height adjustment and equalizing elements permit easy levelling of surfaces and slopes. In combination with the pressure disc, which is available as an accessory, the KALA support forms a sliding support system for direct installation on seals. Additional protective mats must be fitted in areas frequented by the public, such as entrances to public buildings, cafeterias, etc.

### Versions:

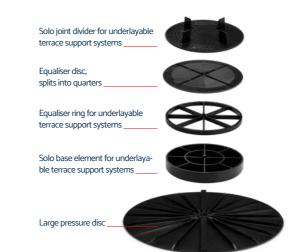
- Tile spacers for joint widths of 3 mm, alternativelyelyely 4 mm, different joint widths available as an option
- Detachable tile spacer for laying in bond or at the edge

### Package units:

- Supplied in cartons, each containing 100 units
- Support system (joint divider and basic element) or joint divider solo, basic element solo

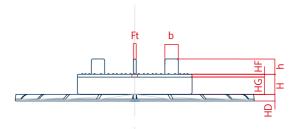
### Accessories:

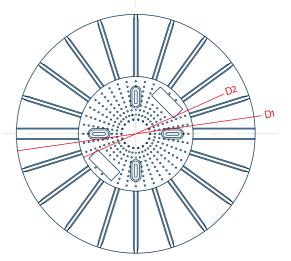
- ProSilent equaliser disc for terrace support systems,
- splits into quarters, D 112 mm
- Equaliser disc, splits into quarters, D 120 mm
- Equaliser ring for underlayable terrace support systems, D 120 mm
- Large pressure disc, D 250 mm
- Small pressure disc, D 200 mm











Technical data		
D1	250	
D2	120	
Ft	3, alternativelyely 4	
Н	21	
HG	18	mm
HF	3	
HD	7	
h	16	
b	14	
Optional equalising elements: Equaliser disc, splits into quarters H=3 mm,		
Equaliser ring for underlayable terrace support systems H=6 mm		

## Height-adjustable terrace support system

### Function:

Terrace support for the installation of all surface types, particularly stone slabs and boardwalk finishes. The height adjustment and optional equalizing elements permit easy levelling of surfaces and slopes. In combination with the pressure disc, which is available as an accessory, the KALA support forms a sliding support system for direct installation on seals.

Additional protective mats must be fitted in areas frequented by the public, such as entrances to public buildings, cafeterias, etc.

### Versions:

- Tile spacers for joint widths of 3 mm, alternatively 4 mm, different joint widths available as an option
- Detachable tile spacer for laying in bond or at the edge
- KALA Wood: Surface without joint dividers for underlaying wooden constructions

### Package units:

Supplied in cartons, PU 50 units

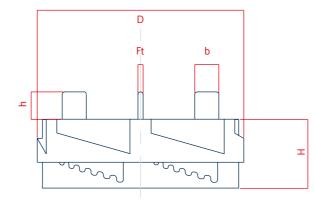
### Accessories:

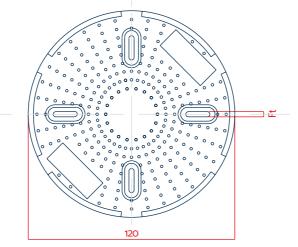
- ProSilent equaliser disc for terrace support systems,
- splits into quarters, D 112 mm
- Large pressure disc, D 250 mm
- Small pressure disc, D 200 mm











Tech	nical data		
	H1	H2	
D	120	120	
Ft	3, alternativelyely 4	3, alternativelyely 4	
Н	28 - 42	40 - 70	mm
h	16	16	
b	14	14	

### 102 | KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG | Am Römerhof 19 | D-78727 Oberndorf | +49 7423 8687 600 | info@kala.de

## **H-MAX terrace** support system

### Function:

Terrace support for the installation of all surface types, particularly stone slabs and boardwalk finishes. The height adjustment and optional equalizing elements permit easy levelling of surfaces and slopes. Additional protective mats must be fitted in areas frequented by the public, such as entrances to public buildings, cafeterias, etc.

### Versions:

• 3 mm wide joint dividers

With snap-off wings

### Package units:

Supplied in cartons, PU 25 units

### Accessories:

 ProSilent equaliser disc for terrace support systems, splits into quarters, D 112 mm



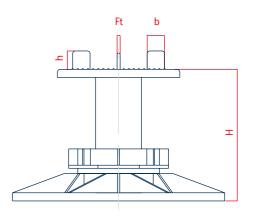


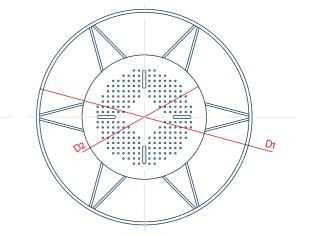












Tech	Technical data					
	65 - 100	95 - 130	125 - 160	155 - 190	185 - 220	
D1	208	208	208	208	208	
D2	120	120	120	120	120	
Н	65 - 100	95 - 130	125 - 160	155 - 190	185 - 220	mm
h	18	18	18	18	18	
b	17	17	17	17	17	
Ft	3	3	3	3	3	

## KALA terrace support system H-MAX MultiLevel

### Function:

The H-MAX MultiLevel is our height-adjustable support system with an additional movable compensating head. It makes laying coverings of all kinds – whether wood, stone or ceramics – easy. The compensation head can also be moved by up to 5° to compensate for steep slopes and unevenness.

For direct installation on seals. Additional protective mats must be fitted in areas frequented by the public, such as entrances to public buildings, cafeterias, etc.

### Versions:

- 3 mm wide joints
- Snap-off wings
- Integrated notch for trimming the base on the border
- Rubber support for sound insulation

### Package units:

Supplied in cartons, PU 25 units

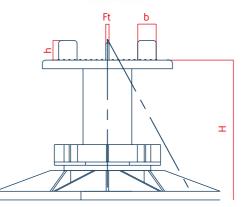


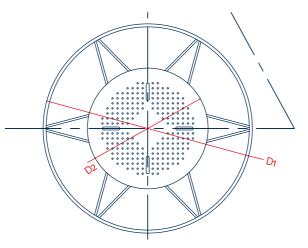












Tech	Technical data					
	62 - 82	77 - 112	107 - 142	137 - 227		
D1	200	200	200	200		
D2	120	120	120	120		
Н	62 - 82	77 - 112	107 - 142	137 - 227	mm	
h	10	10	10	10		
b	13	13	13	13		
Ft	3	3	3	3		

KALA - KUNSTSTOFFE | Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.

# ProSilent equaliser disc for terrace support systems, splits into quarters

### Function:

Made of extra-soft, long-term stabilised PVC, our ProSilent shim reduces impact noise and all other sounds caused by movement. The disc, which is only 1 mm thick, can be divided into quarters, which therefore means it can also be used for compensating for the finest height differences on a support system.

### Material:

PVC

### Version:

Colour Black

### Package units:

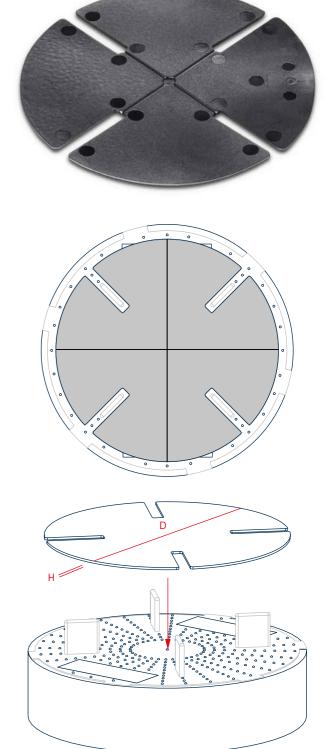
Supplied in cartons / foil bags, PU 50 units

### Accessories:

- Complete underlayable terrace support system
- Terrace support system H1
- Terrace support system H2
- H-MAX terrace support system







D 112 mm H 1	Technical data			
	D	112		
	Н	1	111111	

## **Cross spacers** height: 18 mm

### Function:

For laying slabs in a gravel/grit bed. The tile spacers serve as spacers for forming permanent joints in accordance with the regulations. The three-armed tile spacers mean you can lay flooring cleanly in a bond or at the edge.

### Versions:

• Joint widths 3, 41, 5 and 10 mm

• An arm can be easily broken off at the notch

• Tile spacer with three wings (T-cross) for 3 and 5 mm joint widths

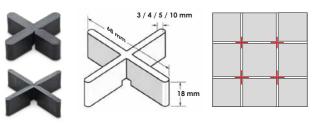
Default color black

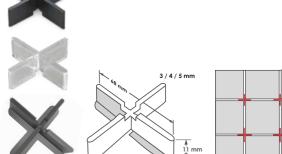
• A transparent model is also available for ultra high-end patios

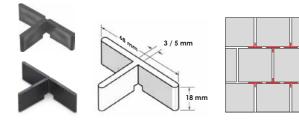
Special colors available on request

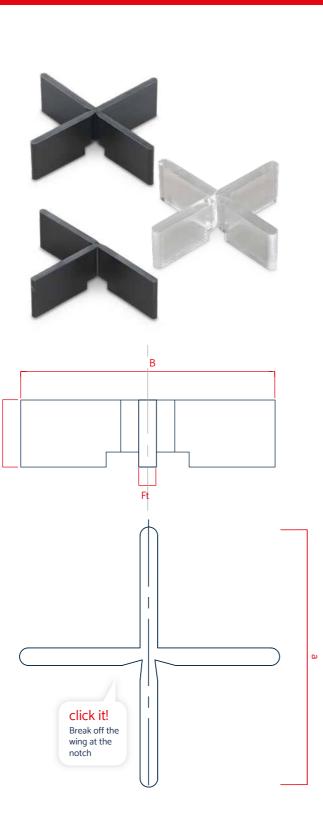
### Package units:

Supplied in cartons, PU 300 units









Н

Tech	nical data	
В	68	
Н	18	mm
Ft	3/4/5/10	

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## **Tile spacers** height: 11 mm

### Function:

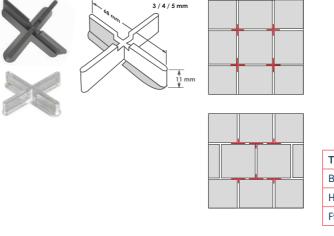
For laying ceramic tiles. The tile spacers serve as spacers for forming permanent joints in accordance with regulations.

### Versions:

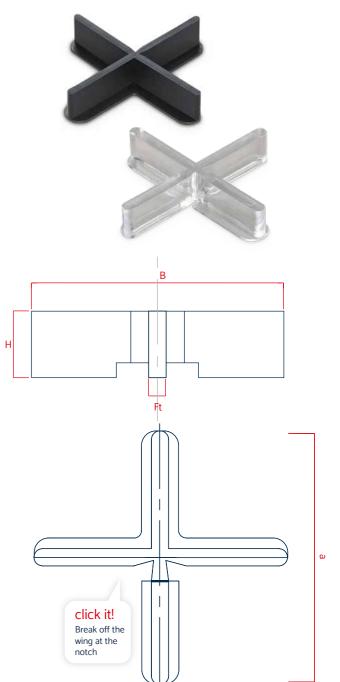
- Joint widths 3, 4 and 5 mm
- An arm can be easily broken off at the notch
- Universal tile spacer with support
- Default color black
- · A transparent model is also available for ultra high-end patios
- Special colors available on request

### Package units:

Supplied in cartons, PU 300 units







Technical data		
В	68	
Н	11	mm
Ft	3/4/5	

# The original red flexible tube 70/100 and 125

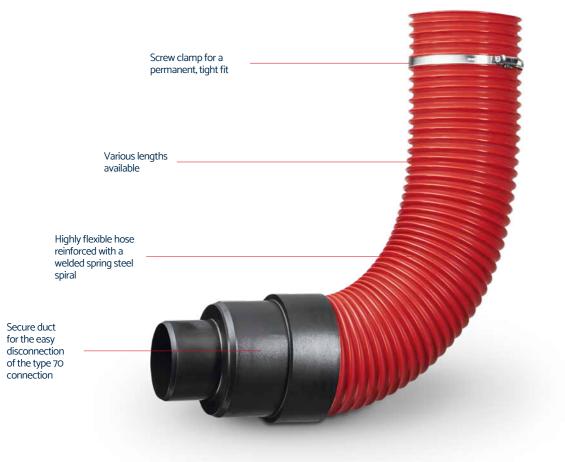
### Function:

The flexible tube for all standard ventilation systems. The free end of the hose is pushed onto the lower end of the ventilator duct and fixed in place with the pre-assembled hose clamp. The connection sleeve is pushed into the underlying connection piece on the ventilation duct. Check that the lip seal inserted is properly seated in the connection piece during installation. Socket position when installed on an incline with a min. of 45°.

### Versions:

- 70/100 flexible hose for connection to DN 70 or DN 100
   ventilation lines
- 125 flexible hose for connection to DN 70 ventilation line
- Hose length: type 70/100 500 mm; type 125 600 mm





## Ventilators for bitumen shingle roofs

### Function<sup>1</sup>:

Ventilator to ensure air exchange on the levels to be back-ventilated for shingle roofs. The element can also be installed as an outlet vent using the flexible outlet vent connection, which is available as an accessory. Thus ensuring that the roofscape remains uniform.

### **Connection Method:**

A 270 x 150 mm opening is cut in the underlay. The lower shingles are brought up to the opening and fitted into place properly. Now align the fan evenly in the centre over the opening and fasten it in place through the holes in the rebate.

Important: Maintain a distance of approx. 30 mm between the shingles and the ventilation duct at the sides and the top to ensure that water drains off freely.

### Technical data vent for shingle roofs:

- Bottom section: length 410 mm, width 325 mm
- Top section: length 300 mm, width 195 mm
- Overall height: 120 mm
- Deck flange widths: 90/100 mm
- Default colors: brown and black
- Special colours (hood): grey and red
- Other colours available on request
- Interchangeable hood

### Package units:

Supplied in cartons, PU 10 units

#### Accessories:

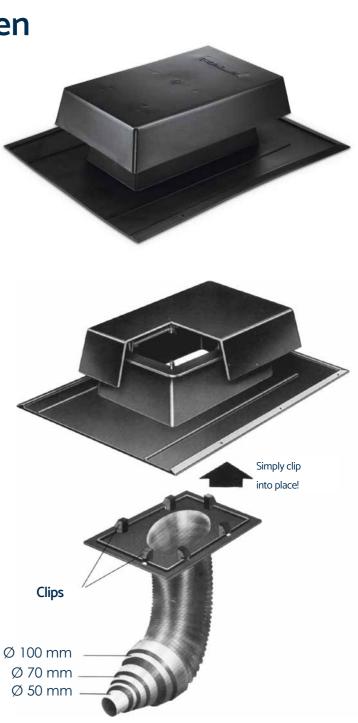
Outlet vent connection

### Technical data Outlet vent connection:

- Length 260 mm
- Width 140 mm
- $\cdot$  Air cross-section, fan: 170  $\text{cm}^2$
- Air cross-section, flexible hose: 80 cm<sup>2</sup>
- Flex hose 0:100 mm
- For 50/70/100 mm hose connection
- Colour black
- All flexible tubes are basically UV-resistant

<sup>1</sup>Attention: The processing instructions of the roofing membrane manufacturer must be adhered to; Materials and used material compounds may be subject to change. KALA - KUNSTSTOFFE I Karl-Heinz Lange GmbH+Co.KG reserves the right to make technical changes.





Outlet vent connection

## Bird deterrent "bird spikes", transparent

### Function:

Bird deterrent, esp. pigeon deterrent. The spiked elements hinder the birds in their search for resting and nesting places and thereby serve to reduce their annoying presence on buildings and the related fouling. The rounded tips ensure that the birds are not injured. The transparent material also fulfils the strictest aesthetic demands and achieves this without any major investment.

### **Connection Method:**

Depending on the surface, the bird repellent is either glued on (e.g. with silicone) or bolted down.

### Material:

Polycarbonate, transparent

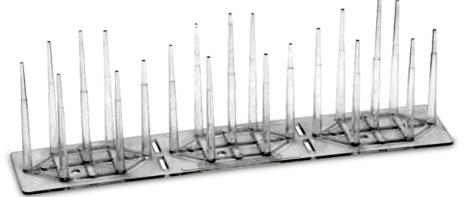
### **Dimensions:**

• Length 250 mm

- Width 50 mm
- Height 85 mm

### Package units:

Supplied in cartons, PU 50 units (corresponding to 12.5 linear metres)





## Flat roof + terrace -That's how it's done.







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