



Picture: Westpro & Portus

# SOLUTIONS FOR GREEN ROOFS





Green roofs have become popular throughout Europe, as they provide not only beautiful green spaces to often gray environments, but also functionality, such as a silencing effect to the noise of the city. However, green roofs require more effort than conventional roofs, as they place extra demands on proper planning, product selection, construction and maintenance.

The main risk of a green roof is the risk of water damages, making it important to make sure water is effectively removed from the roof. VILPE offers a wide range of products for green roofs to combat problems with water and humidity. In our assortment, you will find Alipai underpressure vents that ventilate the roof and prevents humidity problems as well as high-class roof drains and accessories to make sure water is removed from the roof.

VILPE Sense is our smart system for humidity control and it relies on the latest IoT-technology. The system is designed to do two things. First, it detects hard-to-find leaks before they cause bigger problems on the roof, and second, it automatically monitors and removes moisture from the insulation layer when needed. Using the right roof products and right construction methods – your green roof will remain problem-free and long-lasting.

# UNDERPRESSURE VENTS ALLOW YOUR GREEN ROOF TO BREATHE



# VILPE Alipai low pressure vents dry the insulation layer

Alipai low pressure air vents ventilate the roof structures and ensures efficient removal of moisture. Moisture is typically accumulated in wood, concrete and other building materials during the building phase, but it can also derive from leaks in structures. The function of the Alipai low pressure air vent is based upon the differential air pressure generated by wind. The unique structure of the Alipai generates additional draught in the vent pipe which in turn increases the air flow rate.

If the roof is not ventilated properly, moist air that arises from the building to the roof can condense and cause moisture in the thermal insulation of the roof. Excessive moisture promotes the growth of fungi, moulds and micro-organisms, destroying the structures of the house.



# VILPE® ALIPAI FLOW 110 UNDERPRESSURE AIR VENT

**Description:** Underpressure ventilation pipe for ventilating roof structures of a low-pitched felt roof. Installed with hot bitumen between two felt layers.

**Dimensions:**  $\varnothing$  110 mm, height 476 mm. Width of the flange 150 mm.

Contents: Underpressure ventilation pipe, FLOW-cowl.

Color	Pcs/pack	Pcs/pll.	Delivery	Product No.	
Black	11	88*	Stock	732102	
Dark grey	11	88*	Stock	732107	
Light Grey	11	88*	Stock	732101	•



# VILPE® ALIPAI FLOW 160 UNDERPRESSURE AIR VENT

**Description:** Underpressure ventilation pipe for ventilating roof structures of a low-pitched felt roof. Installed with hot bitumen between two felt layers.

Dimensions: Ø 160 mm, height 509 mm. Width of the flange 150 mm.

Contents: Underpressure ventilation pipe, FLOW-cowl.

2	

730162

## **VILPE® ALIPAI FLOW LOW-PITCHED/INCLINED**

Description: Underpressure air vent for ventilating roof structures of a gently sloping felt roof (with pitch of 0–20 degrees). Dimensions: Height 665/668/1022 mm, stem height 200 mm. Contents: Felt Tall pass-through, underpressure air vent pipe, FLOW-cowl, screws.

Black (Ø160/668) 5 48\* Stock 730172 Black (Ø160/1022) 3 24\* Stock 730202



# VILPE® PVC COLLAR for ALIPAI 110 UNDERPRESSURE AIR VENT

**Description:** For facilitating installation of Alipai underpressure air vent to PVC roofing. Fastened to roofing by welding with hot air. Fastened to Alipai with included clamp.

Dimensions: Ø 110 mm. Contents: PVC collar, clamp. 
 Dark grey
 10
 Stock
 730102

 Light Grey
 10
 Stock
 730103





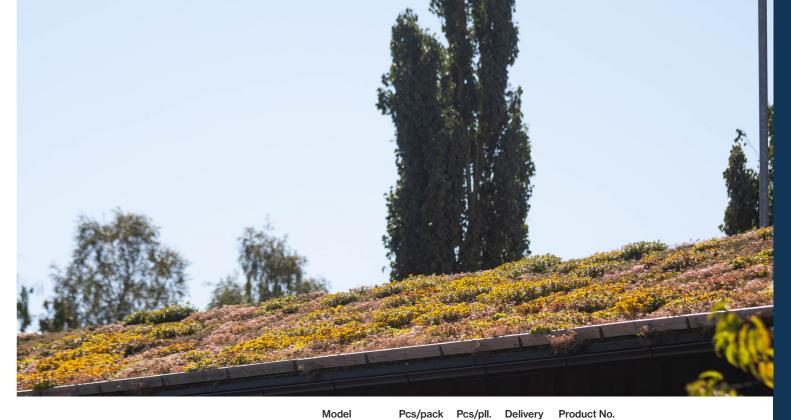
Contents: Seal.

# Water-proof pass-throughs for green roofs

VILPE offers a range of pass-throughs of EPDM that fit green roofs. The flexible EPDM rubber in the seals allow the best possible adhesion with the roofing, meaning that the product can withstand larger roof and pipe movements.

				_ ,		
	Мо	del	Pcs/pack	Pcs/pll.	Delivery	Product No.
	NO-1 Ø	12/19/25/38	20	480*	Stock	70040
PE® FELT ROOF SEAL	NO-2Ø		20	480*	Stock	70060
ription: Roof pass-through seal for round on felt roof. Made of EPDM rubber.	NO-3 Ø	•	20	480*	Stock	70090
ating temperature -30+90°C. The flange		110/125	20	480*	Stock	70125
led with hot bitumen between two felt		Ø 130/140	20	480*	Stock	70130
ons: Height 150 mm. The opening is		150/175	10	480*	Stock	70175
ording to the pipe diameter. Its: Seal, clamp.		200/250	10	300*	Stock	70250
no. oca, oamp.		275/325		50	Stock	70325
		350/400	20	50	Stock	70400
		500/525/550/575	1	20	Stock	71050
		0 600/625/650/675		20	Stock	71060
	NO-11 Ø	700/725/750/775	1	20	Stock	71070
		800/825/850/875	1	20	Stock	71080
® CLAMP		Ø 24-44		15000	Stock	711601
ption: Screw-on hot galvanized clamp for fix	ina the	Ø 50-145	50	3000	Stock	711714
Felt roof seal.		Ø 50-215	50	3000	Stock	711721
sions: Width 12 mm. Its: Clamp.		Ø 50-370	50	3000	Stock	711737
·		Ø 70-570		3000	Stock	711757
		Ø 630	150	150	Stock	711663
		Ø 730	150	150	Stock	711673
		Ø 830	150	150	Stock	711683
E® R-FELT SET						
		Ø 19-90	1	84	Stock	70510
ption: For sealing roof pass-throughs for rou on felt roof while retrofitting.	ırıd	Ø 110-170	1	48	Stock	70514
nts: Seal, clamp.		Ø 160-250	1	24	Stock	70518
E® RHS SEAL		40x40/50x50/	20	480*	Stock	71090
cription: For sealing pass-throughs for square roof. The clamp is chosen according to the pipe tents: Seal		60x60/70x70 80x80/100x100/	′ 10	480*	Stock	71094

120x120/140x140



	Model	, ,		20,	Product No.	
VILPE® RHS-FELT RETROFIT 80-150						
<b>Description</b> : For sealing roof pass-through for square pipes on felt roof while retrofitting. Patented installation solution. <b>Content</b> : Seal.	Ø 80-150			Stock	71745	S
	40 X 40		1200*	Stock	711198	
VILPE® RHS CLAMP	50 X 50		1200*	Stock	71120	
Description: Hot-dip-galvanized clamp for fixing square	60 X 60		1200*	Stock	71122	
VILPE® RHS Seal. The clamp is chosen according to the	70 X 70		1200*	Stock	71123	
pipe size.  Contents: Two-piece clamp.	80 X 80		1200*	Stock	71124	
	90 X 90		1200*	Stock	71125	*
	100 X 100		1200*	Stock	71126	
	120 X 120		1200*	Stock	71128	
	140 X 140		1200*	Stock	711282	
	150 X 150		1200*	Stock	711284	
VILPE® COLLAR EPDM for FELT TALL PASS-THROUGH Description: For easy installation of Felt Tall pass-through on EPDM roofing. Contents: Collar made of EPDM material.				Stock	75700	
VILPE® VAPOUR BARRIER SEAL	HT-50 Ø 50	20	480*	Stock	71205	
Description: For sealing the vapour barrier.	HT-75 Ø 75	20	480*	Stock	71207	
Dimensions: Height 33 mm.  Contents: Seal made of EPDM rubber.	HT-110 Ø 110	20	480*	Stock	71211	
Contents: Seal Hade Of EPDIN (UDDE).	HT-125 Ø 125	20	480*	Stock	71213	
	HT-160 Ø 160	20	480*	Stock	71216	
VILPE® VAPOUR BARRIER SEAL, TALL						4
Description: For sealing the vapour barrier.  Dimensions: Height 133 mm.  Contents: Seal made of EPDM rubber.	HTH-110 Ø 110	15	480*	Stock	71212	

# **Effective water management** on your green roof

Roof drains must be placed and installed so that they are easy to maintain. Maintenance should be performed at least twice a year. Soil and vegetation on the green roof must be prevented from clogging the roof drains, for instance with protective zone around the roof drains. It is also important to ensure that water is effectively led away from the roof, as excess water can damage the green roof and its structures.

	Model P	roduct number
	Widuei P	roduct number
HEATING ELEMENT FOR A MODEL ROOF	A-75 14W	392005
RAINS	A-110 14W	392007
lications: A self-adjusting heating element to prevent	A-160 14W	392008
of drains from freezing.  Intents: Heating element, 1-m connection cable and obtective cup.	A-160 32W	392009
ATING ELEMENT FOR C MODEL ROOF	C-75 14W	392000
AINS	C-110 14W	392002
plications: A self-adjusting heating element to prevent	C-160 14W	392003
of drains from freezing.  Intents: Heating element, 1-m connection cable and obtective cup.	C-160 32W	392004
UMEN FLANGE FOR ROOF DRAIN		
plications: A factory-installed bitumen flange speeds up	75-90	392210
allation on bitumen sheet covering and ensures water- of fastening of the drain.	110	392211
nensions: 500x500 mm nensions: 500x500 mm ntents: Bitumen flange	160/A	392212
TUMEN FLANGE FOR ROOF DRAIN		
olications: A factory-installed bitumen flange speeds up	75-90	392210
Ilation on bitumen sheet covering and ensures water- f fastening of the drain.	110	392211
npatible with a 75–90 HST roof drain.	160/A	392212

# CONDENSATION INSULATION FOR MODEL A ROOF DRAIN

Dimensions: 500x500 mm

Contents: Bitumen flange

Applications: Prevents condensation in roof drains. The insulation material is installed outside the pipe and around the collecting basin. Dimensions: Insulation thickness 13 mm. Contents: Condensation insulation

Model	Product No.
A-75 350	395001
A-75 600	395002
A-75 750	395003
A-75 1000	395004
A-110 350	395021
A-110 600	395022
A-110 750	395023
A-110 1000	395024
A-160 350	395031
A-160 600	395032
A-160 750	395033
A-160 1000	395034
A-100 1000	393034

# CONDENSATION INSULATION FOR MODEL C ROOF DRAIN

Applications: Prevents condensation in roof drains. The insulation material is installed outside the pipe. Dimensions: Insulation thickness 13 mm. Contents: Condensation insulation

Model	Product No.	
C-75 350	395101	
C-75 600	395102	
C-75 750	395103	
C-75 1000	395104	
C-110 350	395121	
C-110 600	395122	_
C-110 750	395123	
C-110 1000	395124	
C-160 350	395131	_
C-160 600	395132	
C-160 750	395133	
C-160 1000	395134	

# PLASTIC LEAF GRATING FOR MODEL A ROOF DRAIN

Applications: Prevents leaves and debris from entering the roof drain. Compatible with 75-160-mm

Contents: Plastic leaf grating

# PLASTIC LEAF GRATING FOR MODEL C ROOF DRAIN

Applications: Prevents leaves and debris from entering the roof drain. Compatible with model C roof

Contents: Plastic leaf grating

# A 75-160 392209

Product number

392205

392206

392207

392208

390021

390022

390023

390024

390031

391001

391002

391003

391004

391011

391021

391022

391023

391024

391031

391032

391033

391034

Length Product number

C-75

C-90

C-110

C-160

350 mm

350 mm

350 mm

600 mm

750 mm

1000 mm

200 mm

350 mm

600 mm

750 mm

1000 mm

350 mm 600 mm

750 mm

1000 mm



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Mod	۵ اما	roof	draine

ACID-RESISTANT STEEL ROOF DRAIN, MODEL A Ø 75 390001 350 mm 600 mm 390002 Applications: A roof drain with primed flanging for gently sloping roofs. Model A roof drains have a collecting 750 mm 390003 basin. A model A leaf grating included. 1000 mm 390004 Contents: Roof drain, plastic leaf grating.





600 mm Applications: A roof drain with primed flanging for gently sloping roofs. Model A roof drains have a 750 mm collecting basin. A model A leaf grating included 1000 mm Contents: Roof drain, plastic leaf grating.



# ACID-RESISTANT STEEL ROOF DRAIN, MODEL A Ø 160

390032 600 mm Applications: A roof drain with primed flanging for gently sloping roofs. Model A roof drains have a 390033 750 mm collecting basin. A model A leaf grating included. 1000 mm 390034 Contents: Roof drain, plastic leaf grating.



# Model C roof drains

ACID-RESISTANT STEEL ROOF DRAIN, MODEL C Ø 75
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Applications: A roof drain with primed flanging for gently sloping roofs. A model C leaf grating included. Contents: Roof drain, plastic leaf grating



## ACID-RESISTANT STEEL ROOF DRAIN, MODEL C Ø 90

Applications: A roof drain with primed flanging for gently sloping roofs. A model C leaf grating included. Contents: Roof drain, plastic leaf grating



# ACID-RESISTANT STEEL ROOF DRAIN, MODEL C Ø 110

Applications: A roof drain with primed flanging for gently sloping roofs. A model C leaf grating included. Contents: Roof drain, plastic leaf grating



# ACID-RESISTANT STEEL ROOF DRAIN, MODEL C Ø 160

Applications: A roof drain with primed flanging for gently sloping roofs. A model C leaf grating included. Contents: Roof drain, plastic leaf grating









# A smart system for humidity control



# AUTOMATIC ALERT OF POTENTIAL LEAKS AUTOMATIC DEMAND-BASED DRYING OF THE INSULATION LAYER



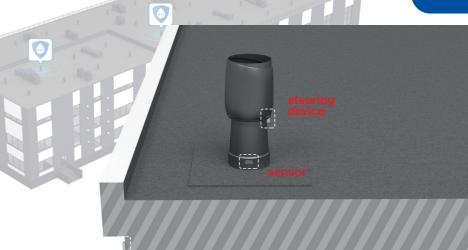
The VILPE Sense system is based upon the latest IoT-technology and combines two functions - humidity monitoring and humidity damage prevention. The system will find and alert you to even the smallest hard-to-find leaks, so that these can be fixed before they grow into bigger and more expensive problems. The VILPE Sense system also dries the insulation layer when necessary: for instance, after rain or during humid autumns that can cause humidity damages even though there are no leakages in the roof.

The VILPE Sense basic kit consists of two sensors and a control unit which are linked to an energy-efficient ECo Roof fan. One sensor monitors the temperature and relative humidity in the insulation layer, whilst the other measures that of the outdoor air. The system can be installed under pressure ventilation pipes so that the structures remain intact. The data is sent to the control unit and ends up on the VILPE cloud service, where it is analysed. If the system detects excess humidity in the insulation layer, the roof fan is automatically activated to work at a higher speed until the structure is dry.



Follow the condition of your roof in the VILPE

Sense application



Through the VILPE Sense application, the condition of your building can be checked at any time, and the system will automatically alert you in cases of potential leakage. This data can also be safely exported to any complete home automation system.

# > VILPE.COM/EN/SENSE

# VILPE® SENSE

**Description:** Consists of two sensors and a control unit which are linked to an ECo Roof fan. This smart system detects and alerts you to potential leakages and other humidity problems, for instance on the roof or underfloor. The system also dries the insulation layer when necessary. Through the VILPE Sense application, you can check the condition of one or several buildings at any time. **Contents:** Steering device, two sensors.

Со	Basic kit	1	Stock	73504
ier	Sensor	1	Stock	73504
an				

Pcs/pack Delivery Product No.





# **Guaranteed excellent quality**

The VILPE products create better indoor air, improve energy efficiency and prolong the lifetime of buildings. The products are manufactured by a Finnish family business VILPE which is the leading manufacturer and developer of ventilation and special roofing products in Finland, Baltics, Russia and Scandinavia.

The products are of excellent quality and are durable, which is why we offer a 20-year warranty of technical parts and 10-year colour warranty. The management system of VILPE Oy has been granted both the ISO 9001:2015 quality certificate the ISO 14001:2015 environmental certificate. These certificates cover product development, manufacturing and sales of VILPE products.

# Responsibility for environment and people

We at VILPE take concrete actions to support environmentally sustainable production. The largest green energy investment in our history has been replacing oil with geothermal heat. This reduces the CO2 emissions of the factory by 330 tons annually. We also design energy efficient products. Our goal is to increase the plastics recycling possibilities during the whole lifetime of the product. Environmental sustainability is also a part of our machine investments.

Another important aspect is promoting social responsibility. Yearly, we invest 0.3 % of our turnover to support local welfare, such as, education, sports and disadvantaged children.





