YOUR GUIDE TO

# Roofing Ventilation



# Klober is the **UK's leading supplier** of roofing ventilation products.

Klober is part of the BMI Group, the largest manufacturer of flat and pitched roofing and waterproofing solutions in Europe.

We operate in a number of countries and are specialists in providing universal solutions. You can rely on us when it comes to quality, availability and choice and will find our products in merchants throughout the UK.

Klober has been proudly supplying roofing materials for over 60 years, which means our products have been tried and tested by installers.



# Your guide to **Roofing Ventilation**



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## Why choose Klober Tile Vents?

Klober has the largest range of tile vents on the market

to suit all ventilation requirements and roof types.

We've been designing vents since 1964 and produce thousands of tile vents and roof outlets in our manufacturing plants across Europe.



#### **DESIGNED TO LAST**

Made from durable plastic, including high-performing ASA material on our market-leading In Line range.





#### **COLOUR MATCH**

Colour matching service and granulation to suit any colour tile for a discreet finish on the roof.



#### A VENT FOR EVERY ROOF

Universal solutions, traditional options and specific vents to suit the most popular manufacturer tiles.



#### **PEACE OF MIND**

All of our tile vents are backed by a 10-year guarantee.



Find the right tile vent for your roof with our compatibility chart on pages 12-14











## **About Ventilation**

#### Why do you need to ventilate a roof space?

The average household can produce up to 14 litres of moisture everyday. This can be built up from everyday activities such as showering, drying clothes inside the home and boiling the kettle. This can result in condensation, which rises from the living air to the roof.



#### What is condensation?

Condensation is a change in the state of water, from gas or vapour into liquid. It usually happens when vapour in warm air encounters a cool surface. One of the most common places to see condensation is when it collects on the glass of a cold drink on a hot day. But it also occurs in the built environment. In roofs, warm air and water vapour rise from the living area, and when the vapour comes into contact with the cooler building envelope, it condenses and turns into water droplets.

#### The two types of condensation:

Surface condensation - This occurs on visible surfaces, such as on a window or wall

Interstitial condensation - This occurs inside wall, roof or other building element. It can be extremely problematic because it is completely hidden from view. Like any condensation, it can lead to mould growth and structural damage, but homeowners may have no idea it's there.

#### **Problems** associated with condensation:

- Cause damp and mould
- Lead to building substrate or structural damage
- Reduce air quality
- Negatively impact the health and wellbeing of occupants

#### **Condensation in roofs**

Condensation can occur in any roof, however new houses appear to be most at risk. This is because they are designed for energy efficiency, which is of course, essential. But the increased air tightness and higher levels of insulation mean that excess moisture cannot escape from the building as effectively. Thermal bridging can also lead to condensation.

The challenge is to ensure that a home has adequate ventilation so that moisture can escape effectively, without compromising the property's thermal efficiency.



Klober's range of ventilation products can help reduce the risk of condensation forming. **See pages 15 - 41** 















**BS 5250:2021** is the code of practice for management of moisture in buildings.

Approved Document C of the Building Regulations says, in effect, that buildings must be designed so that the structure of the building and the health of the occupants are not affected by moisture, and to do this, follow the guidance of BS 5250.

BS 5250 was last updated in July 2021 and renamed from "Code of practice for control of condensation in buildings" to "Management of moisture in buildings."

This new title reflects an overall change in how the standard approaches the issues of moisture and condensation in buildings. It now takes a whole-building approach to various forms of moisture, including condensation.

#### Types of pitched roofs

When considering the required ventilation, the British Standard recognises two main types of pitched roof construction:



#### Cold roofs

These are roofs where the insulation is installed directly above the ceiling - roof spaces not used for habitation and are traditionally the most common type of pitched roof in the UK.



#### Warm roofs

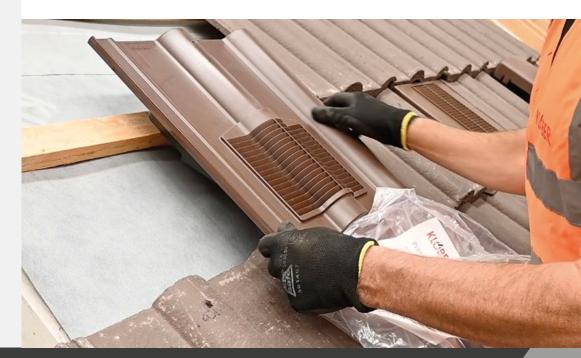
These are roofs with the insulation built into the roof slope. This can be between, over or under the rafters – these are common in loft conversions and and becoming increasingly popular in 3 story town house properties.

Hybrid roofs - these have a combination of habitable and non-habited spaces within the roof. This form of construction is often used in conversions but is less efficient than a standard warm pitched roof, as continuity of insulation is difficult to achieve. Ventilation is also more complicated and must be carefully considered to prevent condensation.

# **Installation Tips**



- If upgrading your loft insulation, then don't forget to make sure airflow can still pass the insulation by using either a loft vent tray, Rafter tray or roll out rafter tray.
- Tile vents can be used not only to ventilate the roof space but to connect to extraction fans from areas such as bathrooms.
- When installing the 6m Roll Out Rafter Tray make sure it remains castellated so an air gap is maintained.
- When using soffit ventilation ensure a suitable gap is maintained between the fascia board and Roll Out Rafter Tray.
- Remember to check the positioning of any tile vent in relation to insulation and timber rafters.







## Recommended Ventilation Requirements

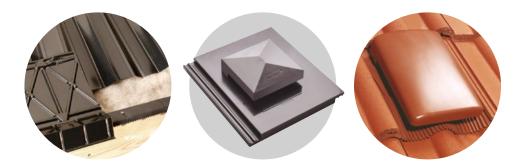
The ventilation requirements detailed opposite are minimum requirements as set out in Building Regulations and BS 5250 for a ventilated roof space.

The typical scenarios cover cold roofs (when the insulation is at ceiling joist level) and warm roofs (when the insulation follows the line of the rafter). When we discuss roof space ventilation, we often refer to low level (eaves) ventilation and high level (ridge) ventilation.

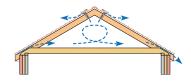
Generally high-level ventilation can be provided by the use of our Roll Fix Dry Ridge systems or vent tiles (page 15-29).



Similarly, low level ventilation can be provided by the use of our range of eaves ventilation products (page 36-41) or vent tiles (page 15-29).



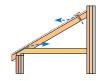
#### Duo Pitch Roof over 15°



The equivalent of a continuous 10mm ventilation opening at low level, combined with the equivalent of a continuous 5mm ventilation opening at high level for roof pitches over  $35^{\circ}$  and spans greater than 10m.

For roof pitches below 15° the low-level ventilation should be increased to the equivalent of a 25mm ventilation opening

#### Mono Pitch Roof over 15°



The equivalent of a continuous 10mm ventilation opening at low level combined with the equivalent of a continuous 5mm ventilation opening at high level.

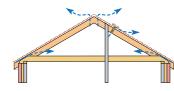
For roof pitches below 15° the low-level ventilation should be increased to the equivalent of a 25mm ventilation opening.

#### Flat Roof with Cold Deck



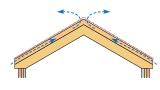


#### Duo Pitch Roof over 15° with Dividing Walls



The equivalent of a continuous 10mm ventilation opening at low level, with the equivalent of a continuous 5mm ventilation opening immediately below and 10mm immediately above each dividing wall, ensuring each void is ventilated.

#### Duo Pitch Warm Roof with Inclined Ceiling and Insulation



The equivalent of a continuous 25mm ventilation opening at low level combined with the equivalent of a continuous 5mm ventilation opening at high level. A 50mm air gap between the insulation and underlay should be maintained.

The choice of roofing membrane combined with the type of construction may influence the amount of additional ventilation required; for further information please refer to **klober.co.uk** 





# Finding the Right Tile Vent

### Tile Manufacturer Compatibility Chart

	MANUFACTURER TIL	.ES	KLOI	KLOBER TILE VENTS				
	Tile Profile	Material	Compatibility	Part No.	Page No.	Universal Tile Vents*		
	Clay Plain Tiles	Clay	Clay Plain Tile Vent	KG4321-3	28	~		
	Delta		Traditional Tile Vent	KG4096-3	23			
	50 Double Roman		Double Roman Tile Vent	KG9857-3	16	~		
	Downland		Uni-Plain Tile Vent	KG9918	29	~		
	Duoplain		Twin Plain Tile Vents	KG9861	19	•		
	Fenland Pantile		Single Pantile Tile Vent	KG9860	17	• • • • • • • • • • • • • • • • • • • •		
	Grovebury		Double Pantile Tile Vent	KG9858-3	16	~		
	Heathland		Uni-Plain Tile Vent	KG9918	29	~		
	Landmark 10		Thin Line Tile Vent	KG9855-3	19	~		
B∧	Landmark Double Pantile		Double Pantile Tile Vent	KG9858-3	16	✓		
BMI Redland	Landmark Double Roman		Double Roman Tile Vent	KG9857-3	16	✓		
е <u>ф</u>	Mini Stonewold	Concrete	Flat Tile Vent	KG9856-3	18	~		
g	Mockbond Mini Stonewold		Flat Tile Vent	KG9856-3	18	~		
	Mockbond Richmond 10		Thin Line Tile Vent	KG9855-3	19	~		
	Norfolk Pantile		Single Pantile Tile Vent	KG9860	17			
	Plain Tile		Uni-Plain Tile Vent	KG9918	29	~		
	Redland 49		15x9 Tile Vent	KG9690	18			
	Regent		Traditional Tile Vent	KG6084-3	23	~		
	Renown		Limarech Tile Vent	KG9859-3	17	~		
	Richmond 10		Thin Line Tile Vent	KG9855-3	19	~		
	Saxon 10		Thin Line Tile Vent	KG9855-3	19	~		
	Stonewold Mk II		Traditional Tile Vent	KG6083-3	23			
71	Centurion		Single Pantile Tile Vent	KG9860	17			
악	Gemini		Twin Plain Tile Vents	KG9861	19			
Forticrete	Mini Slate	Concrete	Twin Plain Tile Vents	KG9861	19			
ē	V2		15x9 Tile Vent	KG9690	18			
	Birkdale		Uni line slate vent	KG9630	25			
覃	Garsdale(Thrutone textured)	Fil C	Uni line slate vent	KG9630	25			
Etex	Rivendale	Fibre Cement	Uni line slate vent	KG9630	25			
	Thrutone		Uni line slate vent	KG9630	25			

<sup>\*</sup>Klober Universal Tile Vents: Uni-Line Tile Vent KG9853. Universal Tile Vent KG9854 & Universal 20k Tile Vent KG9854-20
Tiles and batten will need to be cut when using universal vents with clay and concrete plain tiles. Uni- Line Tile Vent KG9853 not suitable for plain tiles.
Uni plain tile vent may be used for clay plain tiles depending on the camber. Single camber products are better suited to the clay plain tile vent.

	MANUFACTURER TILE	S	KLOBER TILE VENTS				
	Tile Profile	Material	Compatibility	Part No.	Page No.	Universal Tile Vents	
	Clay Plain Tiles	Clay	Clay Plain Tile Vent	KG4321-3	28	~	
	Anglia		Single Pantile Tile Vent	KG9860	17		
	Ashmore		Twin Plain Tile Vents	KG9861	19	• • • • • • • • • • • • • • • • • • • •	
	Bold Roll		Traditional Tile Vent	KG6085-3	23	~	
	Double Roman		Double Roman Tile Vent	KG9857-3	16	~	
	Duo Edgemere		Thin Line Tile Vent	KG9855-3	19	~	
	Duo Modern		Flat Tile Vent	KG9856-3	18	~	
Mα	Ecologic Ludlow Major		Limarech Tile Vent	KG9859-3	17	~	
Marley	Edgemere	Concrete	Thin Line Tile Vent	KG9855-3	19	~	
	Ludlow Major		Limarech Tile Vent	KG9859-3	17	~	
	Ludlow Plus		15x9 Tile Vent	KG9690	18	• • • • • • • • • • • • • • • • • • • •	
	Mendip		Double Pantile Tile Vent	KG9858-3	16	~	
	Modern		Flat Tile Vent	KG9856-3	18	~	
	Plain Tile		Uni-Plain Tile Vent	KG9918	29	~	
	Riven Edgemere		Thin Line Tile Vent	KG9855-3	19	~	
	Wessex		Traditional Tile Vent	KG6092-3	23	~	
	Clay Plain Tile	Clay	Clay Plain Tile Vent	KG4321-3	28	~	
	Cassuis	Clay	-			~	
	Rivius	Clay	-			~	
	Calderdale		Flat Tile Vent	KG9856-3	18	~	
<	Calderdale Edge		-			~	
/ien	Double Pantile		Double Pantile Tile Vent	KG9858-3	16	~	
erb	Double Roman		Double Roman Tile Vent	KG9857-3	16	~	
erg	Dual Calderdale Edge		-			~	
er (	Dual Calderdale	Concrete	Flat Tile Vent	KG9856-3	18	~	
Sar	Dual TLE	001101010	Thin Line Tile Vent	KG9855-3	19	~	
Wienerberger (Sandtoft)	Lindum		Limarech Tile Vent	KG9859-3	17	~	
£	Plain tile		Uni-Plain Tile Vent	KG9918	29	~	
	Shire Pantile		Single Pantile Tile Vent	KG9860	17		
	Standard pattern		15x9 Tile Vent	KG9860	18		
	TLE		Thin Line Tile Vent	KG9855-3	19	~	
	Britslate	Resin Slate	Uni line slate vent	KG9630	25	• • • • • • • • • • • • • • • • • • • •	

<sup>\*</sup>Klober Universal Tile Vents: Uni-Line Tile Vent KG9853. Universal Tile Vent KG9854 & Universal 20k Tile Vent KG9854-20
Tiles and batten will need to be cut when using universal vents with clay and concrete plain tiles. Uni- Line Tile Vent KG9853 not suitable for plain tiles.
Uni plain tile vent may be used for clay plain tiles depending on the camber. Single camber products are better suited to the clay plain tile vent.

#### Tile Manufacturer Compatibility Chart Continued...

	MANUFACTURER	KLOBER TILE VENTS				
	Tile Profile	Material	Compatibility	Part No.	Page No.	Universal Tile Vents*
	Devonish		Thin Line Tile Vent	KG9855-3	19	~
3	Locherne		Double Pantile Tile Vent	KG9858-3	16	~
Mannok	Rathmore duo	Concrete	Thin Line Tile Vent	KG9855-3	19	~
Š	Rathmore Slate		Thin Line Tile Vent	KG9855-3	19	~
	Western Slate		Flat Tile Vent	KG9856-3	18	~
	Double Roll		Double Roman Tile Vent	KG9857-3	16	~
Bred	Elite		Thin Line Tile Vent	KG9855-3	19	✓
Breedon	Flat	Concrete	Flat Tile Vent	KG9856-3	18	✓
] 3	Square Top		-			~
	Bute		Thin Line Tile Vent	KG9855-3	19	~
	Cheviot		Limarech Tile Vent	KG9859-3	17	~
	Double Roman		Double Roman Tile Vent	KG9857-3	16	✓
	Galloway		Thin Line Tile Vent	KG9855-3	19	✓
	Grampian		Flat Tile Vent	KG9856-3	18	~
200	Highland	_	Flat Tile Vent	KG9856-3	18	~
Russel	Lothian	Concrete	Thin Line Tile Vent	KG9855-3	19	~
-	Moray		Thin Line Tile Vent	KG9855-3	19	~
	Pennine		Double Pantile Tile Vent	KG9858-3	16	✓
	Polden		Thin Line Tile Vent	KG9855-3	19	✓
	Regency		Uni-Plain Tile Vent	KG9918	29	✓
	Traditional Plain		Uni-Plain Tile Vent	KG9918	29	✓
	up to 400 x 250mm	Natural Slate	Mini Uni Line Slate Vent	KG9631	25	
,,	500mm x 250mm	Fibre Cement Slate	Uni Line slate Vent	KG9630	25	
Slates	500mm x 250mm	Natural Slate	Uni Line slate Vent	KG9630	25	
S G	600mm x 300mm	Fibre Cement Slate	Uni Line slate Vent	KG9630	25	
	600mm x 300mm	Natural Slate	Uni Line slate vent	KG9630	25	
z	Causeway		Thin Line Tile Vent	KG9855-3	19	~
9 3	Causeway Riven		Thin Line Tile Vent	KG9855-3	19	~
Northstone	Donard	Concrete	Flat Tile Vent	KG9856-3	18	✓
ne	Dunluce		Thin Line Tile Vent	KG9855-3	19	✓

#### In Line Tile Vents



A neat, cleverly designed in-line range suitable for the most popular concrete interlocking roof tiles.

#### **Key features**

- Sleek in-line design making it virtually invisible in the roofline.
- Design allows direct ventilation to the roof space.
- Adaptors and Flexipipe available for easy soil ventilation or mechanical extraction.

- Adaptor and Flexipipe KG979200 p32.
- Adaptor KG979100 p32.
- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.





#### Double Roman Tile Vents



#### **Area of application**

- For roof pitches 17.5° and over.
- Double Roman tile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9857-3-0116	332			Antique Red	
KG9857-3-0152			10.000	Terracotta	10
KG9857-3-0247		418	10,000	Brown	10
KG9857-3-0429				Slate Grey	

#### **Double Pantile Tile Vents**



#### **Area of application**

- For roof pitches 17.5° and over.
- Double Pantile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity	
KG9858-3-0116	332	3-3-0116			Antique Red	
KG9858-3-0152		410	10.000	Terracotta	10	
KG9858-3-0247		418	10,000	Brown	10	
KG9858-3-0429				Slate Grey		

### Single Pantile Tile Vents



#### Area of application

- For roof pitches 20° and over.
- Single Pantile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9860-0116				Antique Red	
KG9860-0152	000		10.000	Terracotta	10
KG9860-0247	229	384	10,000	Brown	10
KG9860-0429				Slate Grey	

#### **Limarech Tile Vents**



#### Area of application

- For roof pitches 17.5° and over.
- Limarech Pantile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity			
KG9859-3-0116		410					Antique Red	
KG9859-3-0152	332		10.000	Terracotta	10			
KG9859-3-0247	332	418	10,000	Brown	10			
KG9859-3-0429				Slate Grey				





#### Flat Tile Vents



#### **Area of application**

- For roof pitches 20° and over.
- Flat tile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9856-3-0116				Antique Red	
KG9856-3-0152				Terracotta	
KG9856-3-0247	330	418	10,000	Brown	10
KG9856-3-0429				Slate Grey	
KG9856-3-0450				Slate Black	

#### 15x9 Tile Vents



#### **Area of application**

- For roof pitches 20° and over.
- 15x9 tile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9690-0116				Antique Red	
KG9690-0152	000	20.4	10.000	Terracotta	10
KG9690-0247	229	384	10,000	Brown	10
KG9690-0429				Slate Grey	

#### Twin Plain Tile Vents



#### Area of application

- For roof pitches 22.5° and over.
- When used with Forticrete Gemini we recommend a minimum pitch of 25°.
- Twin plain tile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9861-0116	ĺ			Antique Red	
KG9861-0152	220		7050	Terracotta	10
KG9861-0247	330	273	7,850	Brown	10
KG9861-0429				Slate Grey	

#### Thin Line Tile Vents



#### Area of application

- For roof pitches 17.5° at 100mm headlap and over 22.5° at 75mm headlap.
- Thin leading edge tile profiles.
- High and low level ventilation.



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity			
KG9855-0450							Slate Black	
KG9855-3-0116				Antique Red				
KG9855-3-0152	330	418	10,000	Terracotta	10			
KG9855-3-0247				Brown				
KG9855-3-0429				Slate Grey				







Designed as a discreet, in-line vent making it virtually invisible in the roof line, suiting most interlocking roof tiles.



#### **Key features**

- Sleek in-line design making it virtually invisible in the roofline.
- Built in downpipe, which allows direct ventilation to the roof space.
- Connects directly to the flexipipe, without additional adaptors required, for mechanical extraction systems, soil and ventilation pipes.

#### Area of application

- For roof pitches 20° and over.
- For most popular concrete interlocking tiles.
- High and low level ventilation.

#### Compatible with

- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9853-0116				Antique Red	
KG9853-0152	40.4	45.4	10,000	Terracotta	,
KG9853-0247	424	454		Brown	
KG9853-0429				Grey	



Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9854-20-0247				Brown	
KG9854-20-0429	424	454	20,000	Grey	10
KG9854-20-0152				Terracotta	

#### Offers high levels of ventilation, suiting most concrete interlocking roof tiles.

#### **Key features**

- Ideal solution where high levels of ventilation are required providing 20.000mm<sup>2</sup> ventilation area.
- Universal solution.
- Perfect solution for Heat Recovery Systems with a 150mm adaptor.

#### Area of application

- For roof pitches 17.5° and over.
- For most popular concrete interlocking tiles.
- High and low level ventilation.

#### Compatible with

• Adaptor KG979700 p33.



# **Universal Tile Vents**

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG985403				Antique Red	
KG985430				Slate Grey	
KG985434	424	454	15,000	Terracotta	10
KG985436				Brown	
KG985476				Black	

The perfect solution for ventilating roof voids as it suits most concrete interlocking roof tiles.

#### **Key features**

- Design allows direct ventilation to the roof space.
- Can be used as a terminal for soil and ventilation pipes and mechanical extraction systems when used with an adaptor and flexipipe.
- Compatible with 100mm and 125mm adaptors.

#### Area of application

- For roof pitches 17.5° and over.
- For most popular concrete interlocking tiles.
- High and low level ventilation.

- Adaptor and Flexipipe KG979800-1 p32.
- Adaptor KG968300-1 / KG979000-1 p33.
- Flexipipe KG979900 / KE8047 p32.
- Pipe Sealing Collar KU8001 p31.











## **Colour Matching** Service

Struggling to find a tile vent that matches your roof colour? Klober offers a colour matching service for all tile vents, so no matter what type of tile vent you need you can be certain it will blend in seamlessly with your roof.

All colour matched tile vents are made to order which means returns cannot be accepted. If you require a unique colour we may request a sample to ensure we get the closest match possible.

- Available on all of our tile vents
- Granulation available in brown, antique red and cotswold colours

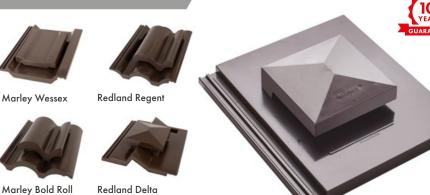
Plain Tile Vents are also available in the standard colours below:



For more information on lead times and pricing, call our internal Sales Team on 013 32 813050

#### **Traditional Tile Vents**

#### **Traditional Tile Vents**



A quality range of high-flow ventilating tiles to suit most traditional interlocking roof tiles.

#### **Key features**

- Ideal solution where high levels of ventilation are required providing 15,000mm<sup>2</sup> ventilation area.
- The vent cap avoids any build up of debris inside the vent and prevents the entry of birds and large insects.
- Can be used as a terminal for soil and ventilation pipes and mechanical extraction systems when used with an adaptor and flexipipe\*.

#### Area of application

• For roof pitches 20° and over.

Redland Stonewold Mark II Profile

- For most traditional concrete interlocking tiles.
- High and low level ventilation.

- Throat Adaptor KG8000-3 p33.
- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.

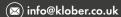
Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG6083-3-0200	380	420		Brown	
KG6083-3-0400	360	430		Grey	
KG6092-3-0200	330			Brown	
KG6084-3-0200		420	15,000	Brown	10
KG6084-3-0400	334	420		Grey	
KG6085-3-0200				Brown	
KG4096-3-0200	385	430		Brown	

<sup>\*</sup>not Redland Delta









# **Small Slate Vents**



Slate vent tile with cap to avoid any build up of debris inside the vent.

#### **Key features**

- The vent cap avoids any build up of debris inside the vent and prevents the entry of birds and large insects.
- Built in downpipe, which allows direct ventilation to the roof space.
- Connects directly to the flexipipe, without additional adaptors required, for mechanical extraction systems, soil and ventilation pipes.

#### Area of application

- For roof pitches 20° 70°.
- For most manmade fibre cement or natural slate tiles.
- High and low level ventilation.

#### Compatible with

- Flexipipe KG972400 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG972200	200	400	4.500	Slate Grey (matt finish)	10
KG972276	300	600	4,500	Slate Black	10



#### **Key features**

- Sleek in-line design making it virtually invisible in the roofline.
- Built in downpipe, which allows direct ventilation to the roof space.
- Connects directly to the flexipipe, without additional adaptors required, for mechanical extraction systems, soil and ventilation pipes.

#### Area of application

- For roof pitches over 22.5°.
- Manmade fibre cement or natural slate tiles.
- High and low level ventilation.

- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity		
	Uni-Line Slate Vents						
KG9630-0403	380	400	4.500	Dark Slate	10		
KG9630-0429	380	600	6,500	Slate Grey	10		
		Mini Uni-Line Slo	ate Vents				
KG9631-0403	300	450	4.500	Dark Slate	10		
KG9631-0429	300	450	6,500	Slate Grey	10		





#### 10k Slate Vents



#### A low profile solution, with a cap to avoid build up of debris inside the vent.

#### **Key features**

- The vent cap avoids any build up of debris inside the vent and prevents the entry of birds and large insects.
- Adaptors and Flexipipe available for easy soil ventilation or mechanical extraction.

#### Area of application

- For roof pitches over 20°.
- Manmade fibre cement or natural slate tiles.
- High and low level ventilation.

#### Compatible with

- Adaptor KG979100 p33.
- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG968900	300	600	10,000	Slate Grey	10

#### 20k Slate Vents



#### Offers high levels of ventilation for double lap slates.

#### **Key features**

- Provides 20,000mm<sup>2</sup> ventilation area.
- Perfect solution for Heat Recovery Systems with a 150mm adaptor.

#### Area of application

- For roof pitches over 22.5°.
- Manmade fibre cement or natural slate tiles.
- High and low level ventilation.

#### Compatible with

• Adaptor KG979700 p33.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG9795-0429	200	400	22.22	Slate Grey	10
KG9795-0450	380	600	20,000	Slate Black	10



#### Offers high levels of ventilation for double lap slates.

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#### **Key features**

- The vent cap avoids any build up of debris inside the vent and prevents the entry of birds and large insects.
- 100mm and 125mm Adaptors and Flexipipe available for easy soil ventilation or mechanical extraction.

#### **Area of application**

- For roof pitches over 22.5°.
- Manmade fibre cement or natural slate tiles.
- High and low level ventilation.

- Adaptor and Flexipipe KG979800-1 p32.
- Universal Vent Adaptor KG968300-1 / KG979000-1 p33.
- Flexipipe KG979900 / KE8047 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG979630-1 (Cap)	200	400	14,000		20
KG979400-1(Base)	380	600	14,000	Slate Grey	10





Brown

# **Clay Tile Vents**

#### Discreet ventilating tiles suitable for clay plain tiles.

#### **Key features**

- Sleek in-line design making it virtually invisible in the roofline.
- Can be used as a terminal for soil and ventilation pipes and mechanical extraction systems when used with an adaptor and flexipipe.

#### Area of application

- For roof pitches 30° and over.
- For most popular clay plain tiles.
- High and low level ventilation.

#### Compatible with

- Throat Adaptor KG8003-3 p33.
- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.





Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG4321-3-0200	500	370	9,000	Brown	10
KG4321-3-0100	300	370	9,000	Terracotta	





#### Discreet ventilating tiles suitable for concrete plain tiles.

#### **Key features**

- Sleek in-line design making it virtually invisible in the roofline.
- Can be used as a terminal for soil and ventilation pipes and mechanical extraction systems when used with an adaptor and flexipipe.

#### Area of application

- For roof pitches 35° and over.
- For most popular concrete plain tiles.
- High and low level ventilation.

- Adaptor and Flexi Pipe KG992800 p32.
- Adaptor KG990500 p33.
- Flexipipe KG979900 p32.
- Pipe Sealing Collar KU8001 p31.

Product code	Width mm	Length mm	Vent area mm²	Colour	Box quantity
KG991802				Brown Granular	
KG991803-1				Antique Red	
KG991805				Red Granular	
KG991812				Cotswold	
KG991818	330		6,000	Hedgerow Brown	10
KG991823	330	300		Autumn	
KG991830-1				Slate Grey	
KG991834-1				Terracotta	
KG991836-1				Brown	
KG991878				Rustic Red	





#### Spare Universal Tile Vent Cap













#### A replacement cap for Klober Universal Tile Vents.

#### **Key features**

To be used with Klober Universal Tile Vents.

#### Compatible with

 Universal Tile Vents KG985403 / KG985430 / KG985434 / KG985436 p21.

Product code	Colour	Box quantity
KG985530	Slate Grey	
KG985534	Terracotta	1
KG985536	Brown	'
KG985503	Antique Red	

#### **Pipe Sealing Collar**





The ideal solution for creating airtight and windtight seals around pipes which pass through the roof.

#### **Key features**

- Suits nearly all roof pitches due to the highly flexible ridges in the collar.
- Suitable for areas with adverse weather conditions.
- Can be used for both rigid and flexipipes.

#### Area of application

- For roof pitches between 10 70°.
- Use between the membrane or vapour control layer for pipes which penetrate the roof.
- Suitable for 100 to 125mm diameter pipes.

#### **Related Products**

• Permo Tape KU0121-1.

Product code	Width mm	Length mm	Diameter mm	Height mm	Colour	Box quantity
KU8001	235	310	95	115	Black	20







#### **Adaptors and Flexipipes**

The perfect add-on for vents to allow for soil ventilation and mechanical extraction, by providing quick and simple connection to internal pipework. Choose between a combined adaptor and flexipipe or purchase them individually.

Product code	Length mm	Diameter mm	Box quantity	Tile compatibility	Product		
Adaptor and Flexipipe							
KG979200				10k Slate Vents and In-Line Vents			
KG979800-1		100	10	10	10	Large Slate Vents and Universal Tile Vents	
KG992800				Uni-Plain Tile Vents			
			Flex	ipipe			
KE8047	340	100/125		Universal Tile Vent and Large Slate Vent when used with 125mm Adaptor			
KG972400	280	75/100	10	Small Slate Vent			
KG979900	380	100/100		All Vent Tiles and Adaptors with 100mm connection (excludes 20k and Economy Slate Vent)			



#### **Key features**

- Quick and simple connection to internal pipework.
- Lightweight and durable, while no tile cutting or lead flashing is required.
- Pressure tested to comply with relevant British Standards.

Product code	Length mm	Diameter mm	Box quantity	Tile compatibility	Product				
				Adaptor					
KG968300-1		100		Universal Tile Vents and	121 (2)				
KG979000-1		125			Large Slate Vent				
KG979100		100		10k Slate Vents and In-Line Vents	8				
KG979700		150	10	10	10	20k Tile and Slate Vents			
KG990500								Uni plain Tile Vents	
KG8003-3		100						Clay Plain Tile Vents	0
KG8000-3				Traditional Vents	49				





#### **Solar Outlet**



Product code	Width mm	Length mm	Depth mm	Colour	Box quantity
KE8070-3-0429	424	454		Anthracite	
KE8070-3-0200	424	454	197	Brown	1
KE8071-0450 (Slate Base Kit)	400	400	.,,	Black	

Allows cables and water pipes for solar panels to pass through the roof without compromising the watertightness of the roof covering.

#### **Key features**

- Universal tile and slate bases available.
- Easy installation.
- Kit contains base tile, adaptor and nozzle.

#### Area of application

- For roof pitches between 16° 65°.
- For slate roof pitches over 20°.
- Nozzle can accommodate pipe/ cables with diameters between 10mm and 70mm.

#### **Duo Solar Outlet Kit**



The ideal solution for allowing solar twin cables to pass through the roof while fully protected from rain and wind.

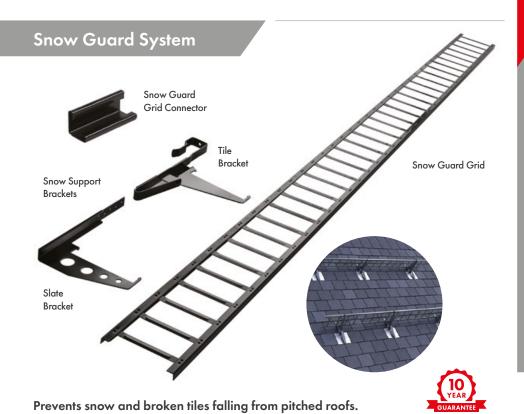
#### **Key features**

- Easy installation.
- Rotatable cap.
- Universal tile base.

#### Area of application

- For roof pitches between 16° 65°.
- Can be used for twin cables with a diameter of 10 to 55 mm.

Product code	Width mm	Length mm	Depth mm	Colour	Box quantity
KE8270-3-0100	424	454	131	Red	1
KE8270-3-0429	424	434	131	Anthracite	1



#### **Key features**

- Lightweight and easy to fit.
- No need for additional batten support.
- Galvanised and powder coated.

#### Area of application

- For roof pitches 10° 70°.
- Slate, clay and concrete interlocking tiles with battens between 24 - 40mm deep.
- Five snow support brackets required per grid.

Product code	Description	Width mm	Length mm	Weight kg	Colour	Box quantity
KS9210-1-9905	Snow Guard Grid	200	3000	3.75		1
KS9220-2-9905	Snow Support Brackets for clay and concrete interlocking tiles	30	411	1.2	Black	16
KS9221-1-9905	Snow Support Brackets for slate		349	0.6		20
KS9216-1-9905	Snow Guard Grid Connector	23	64	0.031		50







# Eaves

#### **Loft Vent Tray**





Product	Width	Length	Depth	Colour	Box
code	mm	mm	mm		quantity
KP965000	315	700	30	Black	50

#### A barrier between the insulation and roof to provide a ventilation path.

#### **Key features**

- Can easily be installed from inside the loft, without disturbing the roof covering.
- Easily adjustable to pitch of roof.
- The perfect solution when upgrading loft insulation.

#### Area of application

Suitable for all roofs.

#### Related products

- Vented Eaves Protector KP3005 / KP3006 p40.
- Over Fascia Vent KP964300 / KP965200 p41.
- Underlay Support Tray KP973910 p36.
- Circular Soffit Vent KP9642 p41.

# **Rafter Tray**

Product code	Width mm	Length mm	Depth mm	Colour	Box quantity
KP964800	430	450	18	Black	100
KP964900	430	620	10	Didek	100

#### A barrier and ventilation path between the insulation and roof, while preventing the entry of birds and insects.

#### **Key features**

- Protects against birds and insects, whilst allowing airflow into the roof space.
- Quick and easy to install.
- Lightweight and durable.

#### Area of application

- For roofs with a pitch over 15°.
- Closed and open rafters at 450mm and 600mm rafter centres.

#### Related products

- Over Fascia Vent KP965200 p41.
- Circular Soffit Vent KP9642 p41.
- Underlay Support Tray KP973910 p36.
- Vented Eaves Protector KP3005 / KP3006 p40.

#### **Underlay Support Tray**



Product	Width	Length	Colour	Box
code	mm	m		quantity
KP973910	245	1.5	Black	20

#### Increases the longevity of the roofing membrane at the eaves.

#### **Key features**

- 55mm overhang provides drainage into the gutter, directing water away from the underlay.
- Prevents ponding behind the fascia and the underlay sagging between rafters.
- An economic replacement for rotting underlay at eaves, whilst protecting it from UV degradation.

#### **Area of application**

Suitable for all roofs.

#### Related products

- Over Fascia Vent, all sizes p41.
- Roll Out Rafter Tray, all sizes p37.
- Rafter Tray KP964900 / KP964800 p37.
- Klober Membranes range

#### **Roll Out Rafter Tray**



Product code	Width mm	Length m	Depth mm	Colour	Box quantity
KP971500	300				
KP975700	400		35	Black	10
KP971600	600	6			10
KP971700	800				
KP971900	1000				5

#### A barrier and ventilation path between the insulation and roof.

#### **Key features**

- Available in five widths.
- Quick and easy to install.
- Lightweight and durable.

#### Area of application

- For roofs with a pitch over 12.5°.
- Suitable for all rafter centres.

#### Related products

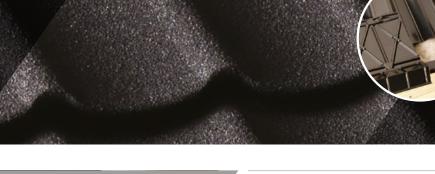
- Vented Eaves Protector KP3005 / KP3006 p40.
- Over Fascia Vent KP964300 / KP965200 p41.
- Underlay Support Tray KP973910 p36.
- Circular Soffit Vent KP9642 p41.







**EVERYTHING YOU NEED** FOR EAVES VENTILATION.





Product code	Length m	Height mm	Depth mm	Colour	Box quantity
KR0065-0402	1	60	27	Black	300

Prevents birds and larger insects from entering the batten cavity.

#### **Key features**

- Protects against birds and larger insects, whilst allowing airflow into the batten
- The integral fixing slots allow for quick and easy installation.
- Adjustable to suit any tile profile.

#### Area of application

Suitable for profile tiles.

#### **Related products**

- Over Fascia Vent KP965200 / KP964300 p41.
- Underlay Support Tray KP973910 p36.

#### **Eaves Ventilation**



A 3-in-1 pack to cover 6m of eaves.

#### **Key features**

- Everything you need in one pack.
- Quick and easy to install.
- Prevents ponding behind the fascia board.

#### Area of application

450 - 600mm rafter centres.

Product code	Size	Colour	Box contents
KP990200	10mm Vent and 300mm Rafter Tray		
KP990400	10mm Vent and 400mm Rafter Tray		
KP990600	10mm Vent and 600mm Rafter Tray		<b>6 Fascia Vents</b> 10mm - 1m x 42mm x 25mm
KP990800	10mm Vent and 800mm Rafter Tray	Black	25mm - 1m x 48mm x 38mm
KP966700	25mm Vent and 300mm Rafter Tray	Віаск	10 Underlay Support Trays 265mm x 600mm
KP966400	25mm Vent and 400mm Rafter Tray		1 Roll Out Rafter Tray 6m x 35mm x 300/400/600/800mm
KP966600	25mm Vent and 600mm Rafter Tray		
KP966800	25mm Vent and 800mm Rafter Tray		

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#### **Vented Eaves Protector**





Product code	Description	Length m	Height mm	Colour	Box quantity
KP3005-0450	Without comb	1	220	Black	40
KP3006-0450	With comb			220 Black	20

**Eaves Closer** 

#### A faster and easier method of ventilating and protecting at the eaves.

#### **Key features**

- A 10mm fascia vent, underlay support tray and optional bird comb in one unit.
- Split drip section allows for quick and easy fixing of gutter brackets.
- Available in practical 1m lengths.

#### Area of application

- For roof pitches 15° 60°.
- Option for flat and profiled tiles.

#### Related products

- Loft Vent Tray KP965000 p36.
- Roll Out Rafter Tray, all sizes p37.
- Rafter Tray KP964800 / KP964900 p37.

#### An eaves perimeter detail for counter battened roof systems.

#### **Key features**

- Prevents the entry of birds and insects into the counter batten cavity.
- Allows air movement into the counterbatten cavity.
- Lightweight and durable.

#### Area of application

All counter batterned roofs.

#### Related products

Underlay Support Tray KP973910 p36.

#### **Over Fascia Vent**



Product code	Opening mm	Width mm	Length m	Depth mm	Colour	Box quantity
KP965200	10	42	1	25	Black	50
KP964300	25	48		38		

#### Discreet eaves ventilation to the roof void.

#### **Key features**

- Protects against birds and insects, whilst allowing airflow into the roof space.
- Discreet method of roof void ventilation.
- Lightweight and durable.

#### Area of application

- Conventional cold roofs (10mm vent).
- Warm roofs, flat roofs and pitched roofs below 15° (25mm vent).

#### Related products

- Roll Out Rafter Tray, all sizes p37.
- Rafter Tray KP964800 / KP964900 p37.
- Underlay Support Tray KP973910 p36.
- Loft Vent Tray KP965000 p36.

#### Circular Soffit Vent



Product code	Depth mm	Diameter mm	Colour	Box quantity	
KP9642-0450	13	75	Black	50	
KP9642-0900	13	75	White	50	

#### Provides eaves ventilation through the soffit.

#### **Key features**

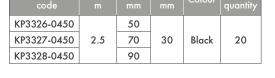
- Available in two colours to match painted or stained soffits.
- Easy circular fixing that fits any thickness soffit board.
- Lightweight and durable.

#### Area of application

Suitable for installation in soffit boards on new build and refurbishments.

#### Related products

- Rafter Tray KP964800 / KP964900 p37.
- Roll Out Rafter Tray, all sizes p37.
- Loft Vent Tray KP965000 p36.









Product

# Why choose Klober?



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