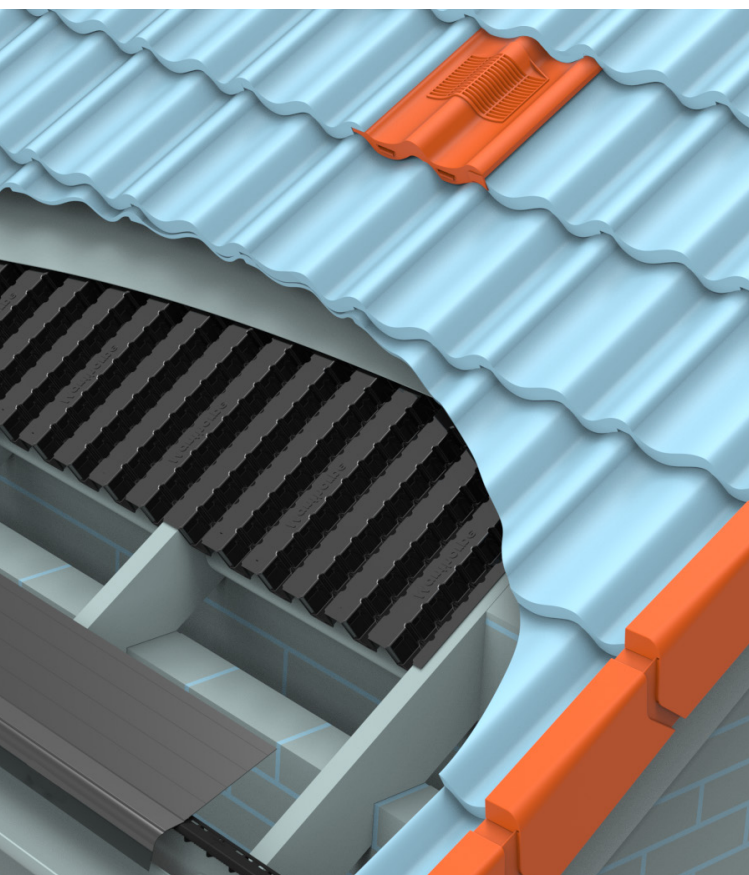


Manthorpe

Roofing Products Guide



Tomorrow's solutions today

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Quality roofing solutions from Manthorpe

Whether it's a new housing development or a single property refurbishment, Manthorpe Building Products provide the building industry with tomorrow's products and solutions today.

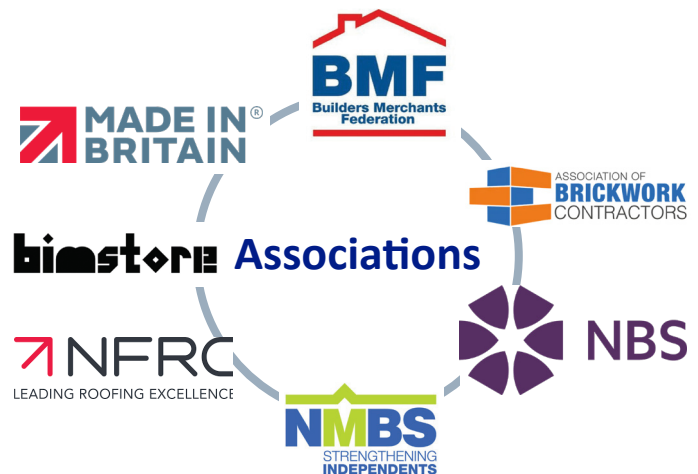
With access to premium raw materials along with rigorous control procedures such as sampling, testing and inspecting we ensure quality parameters are met during manufacture and delivery, so developers and home owners can be secure in the knowledge that they are receiving quality finished product to the highest standards.

With continuous improvement initiatives and on-going product development, our research and development expertise is focussed on delivering new and innovative solutions for the building industry.

Quality

All products manufactured by Manthorpe Building Products are produced in accordance with our ISO 9001 accredited policy and procedures.

We maintain a policy of continuous development of our product range and reserve the right to amend the specifications without prior notice.



BS 8612

Improving standards for dry fix roofing systems



BS 8612
Compliant



All of Manthorpe's dry fix ridge & verge systems are fully BS 8612 compliant!

With so called 'wet' trades having been replaced in modern roof construction a simple way of complying with the most recent installation requirements of BS 5534: 2014+A2: 2018 Code of practice for Slating and tiling for pitched roofs and vertical cladding standard is to use modern dry-fix solutions which offer security, speed, and flexibility of use.

The performance based tests in BS 8612 provide a **Design Resistance** for the product tested. This value can then be compared to the calculated design loads required for the product when used on a particular detail in a specific part of the country to allow specifiers to assess its suitability.

Comparing apples to apples ...

The British Standard was written in response to a shift in the industry toward the use of dry fix systems over traditional mortar bedding and the subsequent rise in competing products within the market. High levels of competition can lead to a dip in quality, and BS 8612 aims to address this by providing specific guidance on a range of performance criteria and a standardised metric in which all systems can be compared.

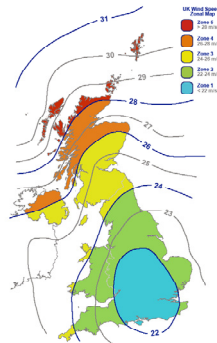
Performance based test results:

Calculated loads take into account a number of factors such as the exposed area of the roof, projected wind speeds, height of the property and other positioning and material safety factors. Wind uplift calculations use a zonal map to calculate the wind loads, the exposure rating of the building increases the risk of wind uplift so, buildings further north, or in coastal or elevated areas are more at risk.

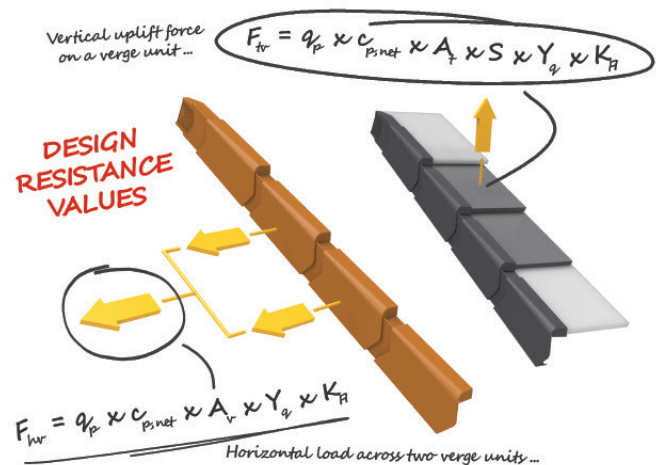
Testing, testing, testing.

The standard contains two key types of testing; those with a simple pass or fail criteria and those that provide a performance value for the product which can be measured against customer requirements. Within the different types of testing there are seven key elements that are carried out to determine the performance of dry-fix products against the requirements of BS 8612:2018.

- Tensile strength*
- Peel adhesion*
- Ridge-roll elongation
- Rain drainage*
- Wind uplift resistance
- Horizontal wind resistance
- Durability (UV aging)*



*Of the seven key tests, only four require a clear-cut pass or fail, others provide a performance based result.



Formulas such as these can be used to calculate a minimum resistance force that the ridge or verge element must withstand. Building designers, can then use these against the tested design resistance values to understand if a product will be suitable for use on their buildings.

Dry fix verge systems

Minimum fitting time, maximum protection

BS 8612: Dry fixed ridge, hip and verge systems for slating and tiling – Specification was introduced to help provide guidance to the roofing industry on the performance and quality of dry fix roofing systems. Our comprehensive range of dry fix ridge, hip and verge solutions have been independently tested to this standard giving you peace of mind.

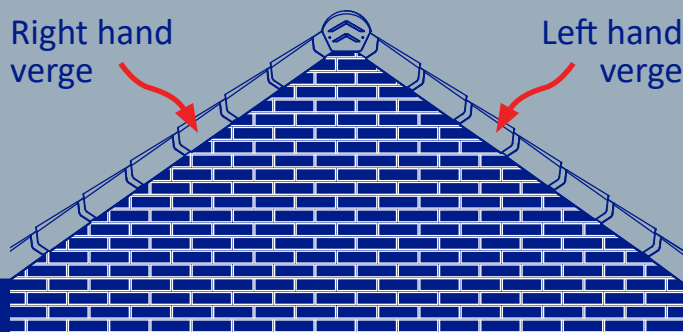


Illustration shows left and right hand verge units as viewed from outside the building. Note: careful attention should be taken when specifying 'left' and 'right.'

Replacing mortar, what's the point?

Experience has shown that when traditional mortar is used to secure verge details it will usually fail during the life of the building leading to costly remedial work to areas of a property which are notoriously difficult to access. These 'wet' trades are also time consuming, labour intensive and are hindered by adverse weather conditions such as rain and cold temperatures.

X Negatives of mortar bedded verges:

- Time consuming and labour intensive
- Prone to failure and expensive to maintain
- Installation hindered by rain and cold

These drawbacks in addition to the 2014 update to BS 5534: Code of Practice for Slating and Tiling advised that all mortar-bedded components should be supplemented by mechanical fixings to secure them to the roof structure. Dry fix systems can offer the installer considerable advantages over traditional methods, providing high performance, easy to fix, maintenance free solutions which not only speed up the job on site, but also offer long term financial benefits.

Manthorpe's range of dry fix verge solutions have been expertly designed to provide an extremely cost-effective alternative to a traditional mortar bedded verge that offers a neat finish and avoids all of the long term maintenance problems associated with wet fix trades.

Say goodbye to wet trades ...

Due to the way in which the systems are fitted, there is no need for the use of mortar, making the task of finishing the verge quick, easy and clean, as well as making it possible during frosts and other adverse weather conditions. The systems are also nailed/screwed into the roof structure, helping to meet the NHBC requirements for mechanically fixed roofing elements.

Manthorpe produces multiple dry verge systems that are compatible with a wide range of roof coverings. The SmartVerge systems are designed for use with various sizes of interlocking concrete tiles, including those with a deep profile. The Linear system is a modular continuous verge and intended for use with slates, interlocking plain tiles and some flat interlocking concrete tiles.

✓ Positives of Manthorpe dry verge systems:

- Fast and easy to fit in all weather conditions
- Weatherproof and maintenance free
- Extremely secure, mechanically fixed in place
- Fully compliant to the BS 8612:2018 standards
- Independently wind tunnel tested by the BRE

With the Manthorpe fast fit dry verge systems you have an alternative that saves you time, increases your efficiency and delivers significant benefits to your customers.

GDV-RH / LH



Right/Left hand
**Dry fix
verge units**
PVCu



Product Features

- The units are manufactured from a robust PVCu material
- Compatible with large format interlocking concrete tiles
- Suitable for batten gauges between 280mm and 345mm
- Suits both new build roofs and refurbishment situations
- Meets BS 5534 requirements for mechanical fixing

The versatile dry fix SmartVerge PVCu system is a fast and effective method for finishing the verge of a roof that has been fitted with large format, interlocking concrete tiles. The individual verge units cap the end of each course of tiles to provide an unobtrusive, weatherproof cover whilst preserving the 'stepped' appearance of the roof tiles.

The system fully complies to the requirements of BS 8612 and has been independently wind tunnel tested by the BRE.

The system is compatible with large format interlocking concrete tiles from the major UK manufacturers; Marley Eternit, Redland, Sandtoft, Russell and Lagan. Some tile profiles may not have been tested, but may still work in conjunction with the system.

Specification Guide

Product Code	Hand	Pitch Range	Gauge Range	Box Qty
GDV-RH	Right	15° to 55°	280 - 345mm	50
GDV-LH	Left	15° to 55°	280 - 345mm	50

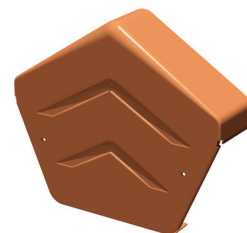
The verge units are available in terracotta, slate grey, brown, white and black.

"In all of the tests the Manthorpe GDV verges resisted the wind tunnel's maximum wind speed of 48m/s (108mph) without showing any signs of distress or damage." - BRE Report Number 224-493.

GDV-END-A / R



Round/Angled
**Ridge
end caps**
PVCu



Product Features

- The units are manufactured from a robust PVCu material
- Compatible with the SmartVerge and Linear Verge systems
- Available to suit both round and angled styles of ridge tile
- Suits both new build roofs and refurbishment situations
- Each cap is supplied with two stainless steel fixing screws

The round and angled ridge end caps work in conjunction with both the SmartVerge dry verge system and Linear dry verge systems to provide a neat and attractive finish at the apex of the verge. The caps can also be used to finish off the end of a roll-out dry fix ridge system.

The caps are designed to accommodate most makes of half and third round concrete or clay ridge tiles, along with most common angled variants as well.

The ridge end caps provide durable protection at each end of the ridge, eliminating problems caused by water penetration whilst preventing the entry of birds and large insects into the roof cavity. Each end cap is supplied with a set of stainless steel fixing screws to allow it to be quickly and easily fixed.

Specification Guide

Product Code	Shape	Fixings Provided	Box Qty
GDV-END-A	Angled	Yes	20
GDV-END-R	Round	Yes	20

The ridge end caps are available in terracotta, slate grey, brown, white and black.



Eaves closure units



Right/Left hand Linear dry verge units



Product Features

- First component of the dry verge system to be installed
- Closures are ambidextrous so can be used on either hand
- Each closure is supplied with two annular shank fixing nails
- Meets BS 5534 requirements for mechanical fixing
- GDV-REC opening allows space for the gutter to fit inside

Product Features

- The units are manufactured from a robust PVCu material
- Compatible with slates, flat and interlocking plain tiles
- Suitable for use with slates fitted on sarking board details
- Suits both new build roofs and refurbishment situations
- Complies with BS 5534 requirements for mechanical fixing

The eaves closure unit is the foundation of the dry verge system onto which the first verge piece is attached. The units neatly close off the end of the first verge piece, providing an aesthetic cap which also prevents the entry of birds and large insects into the building structure through the base of the roof verge.

The closure units can be fixed into a mounted verge timber, or into the end of the fascia or barge board, the first dry verge is then clipped securely over the eaves closure providing a strong foundation for the remainder of the system. The design is ambidextrous in nature and can be used on both verges of the roof. Packed in bags of two units to allow the fitting of a full duo pitch gable verge detail, they are supplied in boxes of 40 units complete with fixings (20 bags of 2 units).

Specification Guide

Product Code	Hand	Rebated	Box Qty
GDV-EC	Both	No	40
GDV-REC	Both	Yes	40

The GDV-EC is available in terracotta, slate grey, brown, white and black.
The GDV-REC is only available in black.

The linear dry verge system provides a mechanically secured, dry fix solution for finishing the verge of a roof laid with a low profile covering such as fibre cement slates, natural slates, interlocking plain tiles and some large format flat concrete tiles.

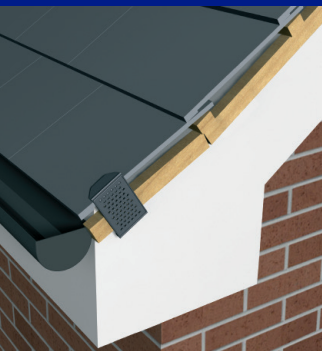
The unique linear verge is Manthorpe's innovative version of a continuous verge but unlike other continuous verge systems, ours is both quick and easy to install. The linear verge units are modular by design and can be handled easily by one person.

The linear dry verge system fully complies to the requirements of BS 8612 and has also been independently wind tunnel tested by the BRE.

Specification Guide

Product Code	Hand	Pitch Range	Max Verge Depth	Box Qty
GLV-RH	Right	15° to 55°	100mm	30
GLV-LH	Left	15° to 55°	100mm	30

The verge units are available in terracotta, slate grey, brown, white and black.



Linear verge Eaves fixing clip



Product Features

- The units are manufactured from a robust PVCu material
- First component of the linear verge system to be installed
- Closures are ambidextrous (can be used on either hand)
- Can be used to secure verge units at changes of pitch
- Each fixing clip is supplied with two annular shank nails

The linear dry verge fixing clip's primary use is to provide a mounting point for the first verge unit at the eaves. It can also be used to provide additional fixing points along the verge length.

The fixing clip can be nailed to an additional batten strip which is fixed to the underside of the verge. The lower end of the first verge unit is then clipped securely over the clip providing a strong fix to the eaves. For roofs where the bottom course tiles are tilted upwards, two fixing clips can be used to secure a cut section of linear verge unit to the verge, a third fixing clip should then be used to start the continuous run.

The ambidextrous design can be used on both the left and right hand verges and is completely concealed after installation of the system.

Specification Guide

Product Code	Hand	Max Verge Depth	Box Qty
GLV-FC	Both	100mm	20

As the fixing clips are not visible once installed, they are only available in black.

"In all of the tests the Manthorpe GLV verges resisted the wind tunnel's maximum wind speed of 48m/s (108mph) without showing any signs of distress or damage." - BRE Report Number 237-548.



Linear verge Verge union



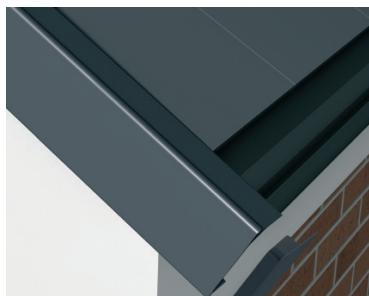
Product Features

- Covers the joint between two verges at a change of pitch
- Simply clips over the verge into position, no fixing required
- Colour range to match the rest of the linear system
- Unions are ambidextrous so can be used on either hand

Specification Guide

Product Code	Hand	Material	Box Qty
GLV-VU	Both	PVCu	20

The verge unions are available in terracotta, slate grey, brown, white and black.



Linear verge Eaves end closer



Product Features

- Can be used to close off the end of the first verge piece
- Securely held in place with adhesive for a discreet fixing
- Closures can be used on right and left hand

Specification Guide

Product Code	Hand	Material	Box Qty
GLV-EE	Both	PVCu	20

The closer units are available in terracotta, slate grey, brown, white and black.



Right/Left hand Dry fix verge units

Polypropylene



Product Features

- The units are manufactured from robust polypropylene
- Compatible with small and large format interlocking concrete tiles (382 x 227mm to 430 x 380mm)
- Suits both new build roofs and refurbishment situations
- Meets BS 5534 requirements for mechanical fixing

The versatile dry fix SmartVerge polypropylene system is a fast and effective method for finishing the verge of a roof that has been fitted with small or large format, interlocking concrete tiles. The individual verge units cap the end of each course of tiles to provide an unobtrusive, weatherproof cover whilst preserving the 'stepped' appearance of the roof tiles.

The verge system fully complies to the requirements of BS 8612 and has also been independently wind tunnel tested by the BRE.

The system is compatible with small and large format interlocking concrete tiles from the major UK manufacturers; Marley Eternit, Redland, Sandtoft, Russell and Lagan. Some tile profiles may not have been tested, but may still work in conjunction with the system.

Specification Guide

Product Code	Hand	Pitch Range	Gauge Range	Box Qty
GPPV-RH	Right	15° to 55°	255 - 345mm	50
GPPV-LH	Left	15° to 55°	255 - 345mm	50

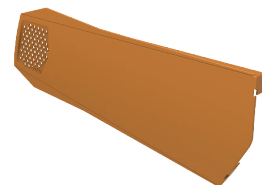
The verge units are available in terracotta, slate grey, brown and black.

"tests on the Manthorpe Ambi and Handed PP SmartVerge systems show that the verges will resist wind speeds of at least 45m/s (100mph) without failing." - BRE Report No. P110111-1000



Ambidextrous Dry fix verge units

Polypropylene



Product Features

- The units are manufactured from robust polypropylene
- Compatible with small and large format interlocking concrete tiles (382 x 227mm to 430 x 380mm)
- Suits both new build roofs and refurbishment situations
- Meets BS 5534 requirements for mechanical fixing

The versatile dry fix SmartVerge ambidextrous system is a fast and effective method for finishing the verge of a roof that has been fitted with small or large format, interlocking concrete tiles. The individual verge units are not handed and so can be fitted to either side of the verge to cap the end of each course of tiles to provide an unobtrusive, weatherproof cover to the roof tiles.

The system is compatible with small and large format interlocking concrete tiles from the major UK manufacturers; Marley Eternit, Redland, Sandtoft, Russell and Lagan. Some tile profiles may not have been tested, but may still work in conjunction with the system.

Like the handed units, the system fully complies to the requirements of BS 8612 and has also been independently wind tunnel tested by the BRE.

Specification Guide

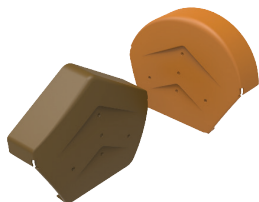
Product Code	Pitch Range	Gauge Range	Box Qty
GPPV-AMBI	15° to 55°	255 - 345mm	50

The verge units are available in terracotta, slate grey, brown and black.

GPPV-END-A / R



Round/Angled
**Ridge
end caps**
Polypropylene



Product Features

- Compatible with the SmartVerge polypropylene (handed) and SmartVerge Ambidextrous systems
- Available to suit both round and angled styles of ridge tile
- Suits both new build roofs and refurbishment situations
- Each cap is supplied with two stainless steel fixing screws

The round and angled ridge end caps work in conjunction with both the SmartVerge polypropylene dry verge system and ambidextrous dry verge systems to provide a neat and attractive finish at the apex of the verge. The caps can also be used to finish off the end of a roll-out dry fix ridge system.

The caps are designed to accommodate most makes of half and third round concrete or clay ridge tiles, along with most common angled variants as well.

The ridge end caps provide durable protection at each end of the ridge, eliminating problems caused by water penetration whilst preventing the entry of birds and large insects into the roof cavity. Each end cap is supplied with a set of stainless steel fixing screws to allow it to be quickly and easily fixed.

Specification Guide

Product Code	Shape	Fixings Provided	Box Qty
GPPV-END-A	Angled	Yes	20
GPPV-END-R	Round	Yes	20

The ridge end caps are available in terracotta, slate grey, brown and black.

GPPV-REC



**Rebated
eaves
closure unit**
Polypropylene



Product Features

- Rebated opening allows space for the gutter to fit inside
- First component of the dry verge system to be installed
- Closures are ambidextrous so can be used on either hand
- Each closure is supplied with two annular shank fixing nails
- The units are manufactured from robust polypropylene

The rebated eaves closure is the foundation of the system onto which the first verge unit is attached. The closure allows for adequate clearance for extended guttering and also prevents the entry of birds and large insects into the building structure through the base of the roof verge.

The design is ambidextrous in nature and can be used on both verges of the roof. The closure units can be nailed into a mounted verge timber, or into the end of the fascia or barge board, the first dry verge is then clipped securely over the eaves closure providing a strong foundation for the remainder of the system.

As the units are recessed into the bottom of the verge, they are not coloured like the standard closures and are only available in black. They come bagged in pairs complete with a set of fixings and installation instructions.

Specification Guide

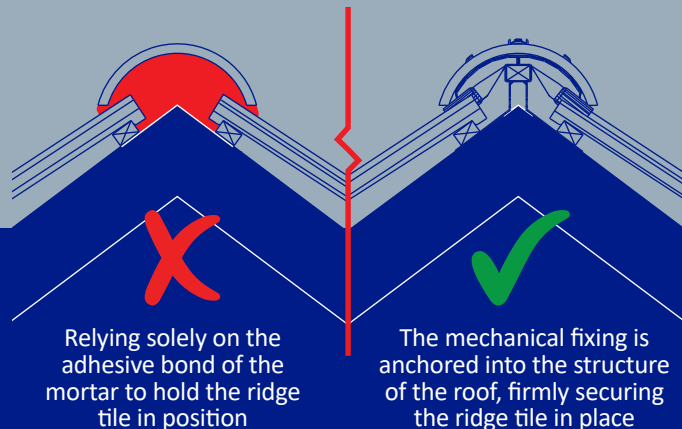
Product Code	Hand	Rebated	Box Qty
GPPV-REC	Both	Yes	40

The rebated eaves closure units are only available in black.

Roll-out ridge & hip

Dry fix roll-out ridge and hip systems from Manthorpe

Mortar is now seen as an insufficient means of securing tiles to the roof and any element secured by this method must also include a mechanical fix. These 'wet' trades are now being replaced in favour of the security and flexibility offered by roll-out dry fix systems.



Mechanical fixing requirements

BS 5534 the Code of Practice for Slating and Tiling, recognises the need for a change in the use of mortar alone to fix roofing elements in place, which had been identified as the single largest cause of roof failures.

In particular this applies to the fixing of ridge and hip tiles, which was identified by the National House Building Council (NHBC) as the number one cause of roof failures that resulted in claims. To this end, BS 5534 now states that even if mortar is used, then the ridge and hip tiles must also be mechanically secured to the roof.



The use of fixings in addition to mortar may require an additional batten to fix to, which itself is mechanically fixed to the rafters. This is often difficult to install and still does not remove the risk of subsequent mortar failure resulting in the roof leaking causing damage to the property.

The simplest and most cost effective way of complying with the standard is to switch to dry fix roofing.

Roll-out the solution ...

Manthorpe dry fix ridge and hip systems can offer the installer considerable advantages over traditional 'wet trade' methods of mortar bedding. The kits provide a high performance, easy to fit and maintenance free solution which not only speeds up the job on site, but also offers long term financial benefits.

Due to the nature in which the products are fitted, there is no need for mortar, making the job of fixing the ridge and hip tiles quick, easy and clean, as well as making it possible during adverse weather conditions.

The systems are compatible with most makes of concrete ridge and hip tiles, both round and angled, that are available from the major tile manufacturers. These can then be fitted onto many different roof coverings including; slates, flat and most profiled concrete and clay tiles.

The dry ridge and hip systems provide all of the components required for a run of 6 metres in length, excluding the ridge/hip tiles (a 3 metre ridge kit is also available).

The roll flashing is available in two different colours (black and dark brown) and can be used in conjunction with Manthorpe's ridge end caps and both their SmartVerge and Linear dry verge systems.

The Manthorpe Roll-Out Dry Fix Ridge and Hip Systems are also fully compliant to the requirements of BS 8612 standard and have also been independently wind tunnel tested by the BRE.

"The tests on the GDRR system show that it will resist wind speeds of at least 48.5m/s (108mph) and under the representative driving rain conditions the system did not leak."
- BRE Report Number 245-269.



Roll-out dry ridge systems



Product Features

- Mechanically secure dry fix system, no need for mortar
- Provides a 5,000mm²/m of ventilation
- 3 or 6 metre roll kits are available for various project sizes
- Compatible with most concrete round and angled ridge tiles
- Suitable for roof pitches between 15 and 45 degrees

The batten support brackets are designed to provide a stable and secure platform to fix a horizontal ridge batten at the apex of a truss rafter roof, onto which the rest of the system can be mounted.

The 3m or 6m long ventilated ridge roll is placed along the length of the apex prior to the ridge tiles being installed. The malleable, corrugated aluminium edges allow the roll to be shaped to the profile of the roof tiles, suiting both high and low profile categories.

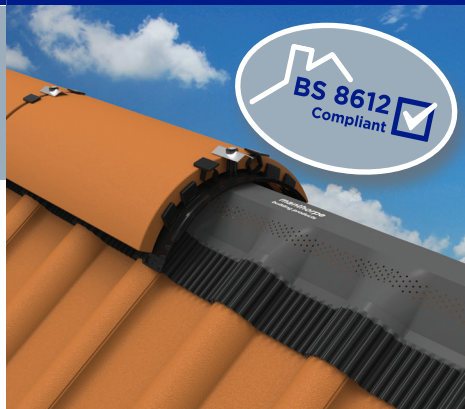
The ridge unions sit in the gaps between each of the ridge tiles, holding adjacent tiles in line and mechanically fixing them to the roof structure. The unions are flexible and can be bent to suit the shape of the tile, whether round or angled.

The GDRR roll-out ridge systems are a dry fix alternative to laying ridge tiles on a wet mortar bed. The ridge tiles are mechanically secured to the structure of the roof protecting them from wind uplift in accordance with BS 5534 requirements. A ridge roll is laid below the ridge tiles, which weatherproofs whilst preventing the entry of large insects into the roofspace.

Specification Guide

Product Code	Roll Length	No. of BSB	No. of Unions	Geometric Free Area
GDRR	6m	10	13	5,000mm ² /m
GDRR-3M	3m	5	7	5,000mm ² /m

The roll edge flashing is available in black and dark brown.



Ultra ridge systems



Product Features

- A mechanically fixed system for securing clay and concrete ridge tiles without the need for mortar and pointing
- Provides a 5,000mm²/m of ventilation
- 3 or 6 metre roll kits are available for various project sizes
- Suitable for roof pitches between 15 and 45 degrees

The Manthorpe Ultra Ridge is a mechanically fitted roll-out system which securely fixes the ridge tiles on to a roof and provides 5,000mm²/m ventilation to the batten void or roof space through the vent roll, which is the equivalent to a continuous 5mm gap.

The system is designed to suit traditionally deeper clay ridge tiles (both round and angled) and is also compatible with concrete ridge tiles and can be fitted onto most roof coverings, including profiled tiles. The system is designed to fit a duo pitch roof which has a pitch between 15 and 45 degrees.

Due to the nature in which the system is fitted, there is no need for mortar, making the job of fixing the ridge quick, easy, and clean, as well as making it possible during adverse weather conditions.

Both the 6m and 3m systems are available in two different colours (black and dark brown) and can be used in conjunction with the ridge end caps from Manthorpe's dry verge systems.

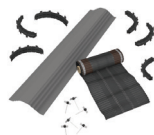
Specification Guide

Product Code	Roll Length	No. of BSB	No. of Unions	Geometric Free Area
GDRR-ULTRA-6M	6m	10	13	5,000mm ² /m
GDRR-ULTRA-3M	3m	5	7	5,000mm ² /m

The roll edge flashing is available in black and dark brown.



Roll-out dry hip systems



Product Features

- Mechanically secure dry fix system, no need for mortar
- Hip support trays keep the run of hip tiles straight and level
- A box supplies enough components for a 6m run of hip
- Quick and easy to fix with no special tool requirements
- Fixings provided to secure the first and the last hip tiles

The GDRH roll-out dry hip system provides a quick, easy and neat solution to the fixing of tiles down the hip of a roof without the need for mortar.

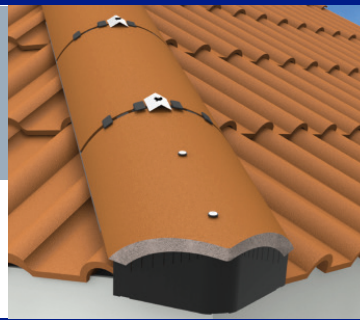
The universal system can be used with most concrete hip tiles and roof coverings, a clay hip system is also available for thicker tiles. It will also work on variable pitches and angles of roof. The hip support trays ensure a straight hip line as well as providing additional weatherproofing down the length of the run.

The hip kit will work in conjunction with the GDRR ridge system to allow the user to create a fully dry fixed roof construction. For best practice on securing the cut tiles or slates at the hip intersection, please refer to the roof covering manufacturer's guidelines for the detail.

Specification Guide

Product Code	Roll Length	No. of Support Trays	No. of Unions
GDRH	6m	6	13
GDRH-CL	6m	6	13

The roll edge flashing is available in black and dark brown.



Universal hip end closer

As part of the Manthorpe extensive dry fix roofing range, the universal hip end closer offers a cost effective dry fix alternative to mortaring in the end of a roll-out hip system.

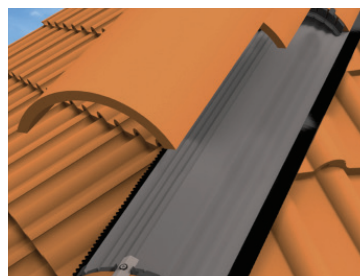
Product Features

- Designed to fit with all major angled or round hip tiles
- Removes the need for mortar when dry fixing a hip detail
- Flexible comb fingers fill up the underside of the tile profile
- No need for a block end hip, a regular hip tile can be used
- Quick and easy to fix with no special tool requirements

Specification Guide

Product Code	Tile Profile Compatibility	Fixing Included	Box Qty
GDRH-HC	Round / Angled	Yes	10

The hip end closer is available in black, terracotta, buff and dark brown.



Hip support tray

The hip support tray provides a straight and level platform to support the tiles up the hip of the roof. Both supplied with the GDRH roll out dry hip system and sold separately.

Product Features

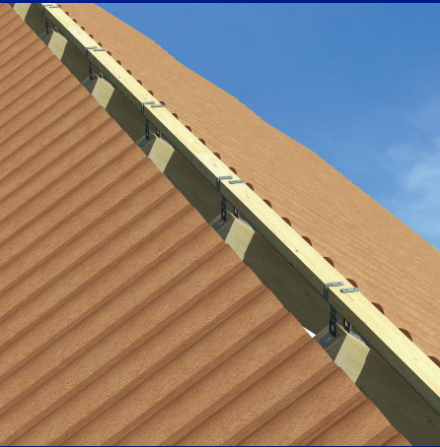
- Hip support trays keep the run of hip tiles straight and level
- 1.1m lengths overlap by 100mm to form a continuous run
- Manufactured from a sturdy and robust PVC material

Specification Guide

Product Code	Tray Length	Coverage Width*	Box Qty
GDRH-ST	1.1m	250mm	10

* Coverage based on uncompressed state, under load a wider lap may be achieved.

GDRR-FIXINGS



'Wet fix' mechanical fixings



Product Features

- Used when a mechanical fix is needed on a wet fix detail
- A 4 inch screw ensures a strong fixing into the ridge batten
- The clamp plate braces over the tile, securing them down
- Quick and easy to fix with no special tool requirements
- Sealing washer to prevent water ingress down fixing hole

The NHBC requirement for mechanically fixed ridge and hip tiles has led to wet trades becoming seldom used on new build sites. However there is an aesthetic to a mortared ridge or hip that cannot be replicated with dry fix systems. To this end some new build and a substantial amount of renovation work is still being done with wet trades.

To comply with the fixing requirements of BS 5534 and the NHBC when using mortar to bed the ridge and hip tiles, an additional mechanical fixing still needs to be used.

The GDRR-FIXING is a screw and clamp assembly which can be used in conjunction with a mortared detail to securely hold the ridge and hip tiles in place even if the mortar fails. A central ridge batten still needs to be installed to provide an anchor for the fixings; this can be achieved by using Manthorpe's GDRR-BS batten support brackets.

Specification Guide

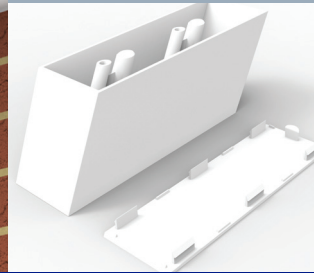
Product Code	Screw Length	Clamp Plate & Seal	Box Qty
GDRR-FIXINGS	100mm	Yes	104*

* 104 individual fixing assemblies, the equivalent of 8 GDRR kits of 13 unions each.

G750



Rafter foot



Product Features

- Mechanically fixed from above or below the soffit
- Supplied finished, no finishing or repainting required
- Designed for a 25° sloping soffit detail
- Quick and easy to fix with no special tool requirements
- Fixings covered once installed

The G750 works in conjunction with a modern sloping soffit construction to simulate the aesthetic of an exposed rafter end with a mechanically fixed cladding dentil. The product is not only quick and easy to fix in position, but it is also suitable for a variety of soffit board materials.

Fitting is possible either from above or below the soffit board depending on the installer's preference using the secure screw mountings, helping to offer a fixing solution no matter the constraints of the detail.

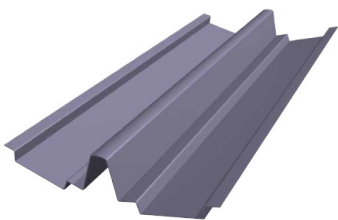
Manufactured from white PVCu the product is smooth in appearance with all fixings being hidden from view, making it durable and suitable for all weather conditions without the need to repaint every few years.

Specification Guide

Product Code	Material	Size	Box Qty
G750	PVC	50x70x150mm	50

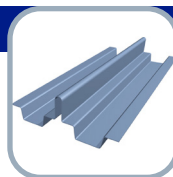
Available in white.

GRP valley troughs



GRP valley troughs

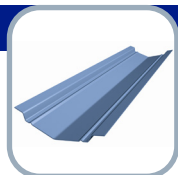
Manufactured from Glass Reinforced Polyester (GRP), to provide a cost-effective alternative to traditional lead roof gutters. The GRP valley troughs can be used with concrete or clay tiles, slate roofs and profiled GRP or metal roofs. Options are available for wet or dry fixing (with or without mortar). Supplied in 3m lengths / 10 per pack .



Dry-fix bonding strip

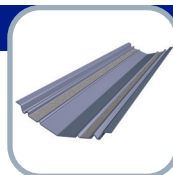
GDFBS70 – 3000mm x 225mm with 70mm high centre upstand. Natural or man-made slates.

GDFBS110 – 3000mm x 225mm x with 110mm high centre upstand. Concrete, clay tiles or slates.



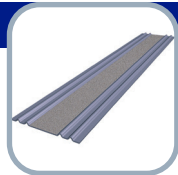
Slate valley trough

GSVT1 – 3000mm x 330mm
Natural or man-made slates.



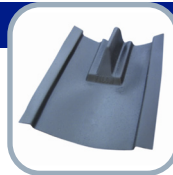
Narrow valley trough

GTB13 – 3000mm x 360mm
Single lap tile over batten fix.



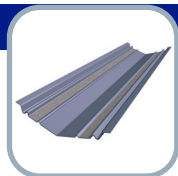
Secret joining strip

GJS1 – 3000mm x 216mm.



Eaves closures

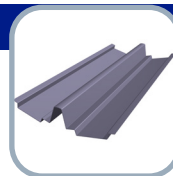
DFVTC110 / DFVTC70 - Eaves closures designed for use with GDFVT70 and GDFVT110 Valley Troughs.



Standard valley trough

GTB14 – 3000mm x 400mm
Single lap tile - over batten fix.

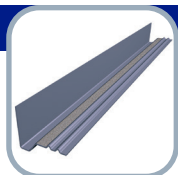
GTF14 – 3000mm x 400mm
Flat fix.



Upstand valley trough

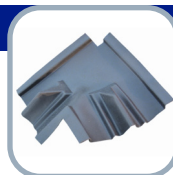
GDFVT110 – 3000mm x 400mm with 110mm high centre upstand. Concrete/clay tiles or slates.

GDFVT70 – 3000mm x 400mm with 70mm high centre upstand. Natural or man-made slates.



Abutment soaker

GAS1 - 3000mm x 140mm
Abutment soaker.



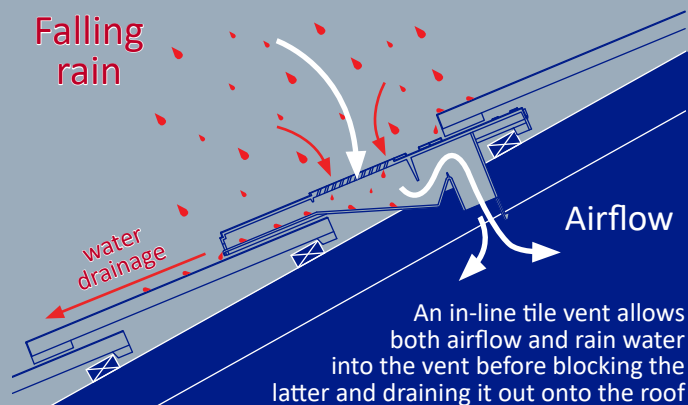
Head closure

DFVTC110 / DFVTC70 - Top closures designed for use with GDFVT70 and GDFVT110 valley troughs. Suitable where the adjacent roofs are of equal pitch.

Tile and slate ventilators

Roofspace ventilation and mechanical extraction solutions

The build up of condensation within the roof space remains an issue as the industry moves towards more energy efficient buildings. This problem can be caused by the lack of adequate ventilation.



Through roof ventilation made easy

The Manthorpe range of tile and slate ventilators is designed to provide roof space ventilation, or an outlet for ventilation ducting, through a large variety of roof coverings. The vent profiles are universal in design and are compatible with the tile ranges from all major UK tile manufacturers.

The in-line design of the tile and slate vents along with the low profile cowl of the hooded slate vents offer a discreet, weather proof airflow path through the roof coverings with the recommended 4mm spaced grille openings to prevent the entry of debris and large nesting insects.

If the tile vent range is to be used with mechanical extraction / vent pipe termination, then the GTV-AD Flexi Pipe Adaptor and one of the GRPA Flexible Pipes can be used. The slate vents, mini castellated, single pantile and CURV vents include a pipe adaptor as standard.

Available in a range of colours to suit most styles and makes of roof tiles on the market:



Illustrative colour swatches. anthracite black colour variant only available with the Non-Profile, Thin Leading Edge and Flat Edge tile vents.

Granulated Plain Tile vents available with different colour options. See pg 41.

Testing times ...

Testing is an integral part of our design process; it helps us to ensure that the products we design are up to the task, and gives our customers the confidence that they have the right product for the job.

Our inline tile and slate ventilator has been tested by the BRE in the wind tunnel to the requirements of BS 5534 and the test standard pr EN 15601. The test simulates deluge and driving rain as expected once in a 50 year worst case storm conditions in the UK.



Testing Certificates:

Large format tile vents: BRE test report number: 267-473

Plain tile vent: BRE test report number: 287-217

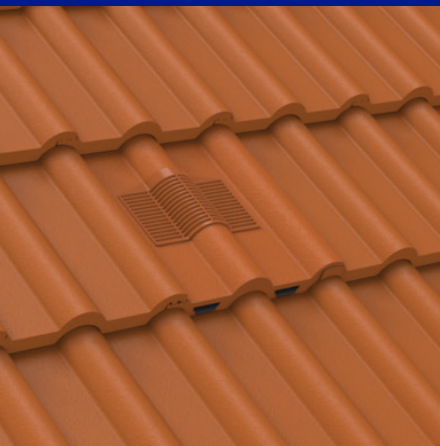
Mini castellated vent: BRE test report number: 295-318

Single pantile vent: BRE test report number: 104-059

Interlocking plain tile vent: BRE test report number: 108-129

Cowled universal roof vent: BRE test report number: P113518-1002

Tile and slate ventilator range, aerodynamic characteristics: P117459-1001



Double roman tile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Independently wind tunnel tested by the BRE

The GTV-DR double roman in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction termination through a double roman tiled roof. The low profile design suits the tiles from the leading manufacturers and is available in a range of colours with a textured finish.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

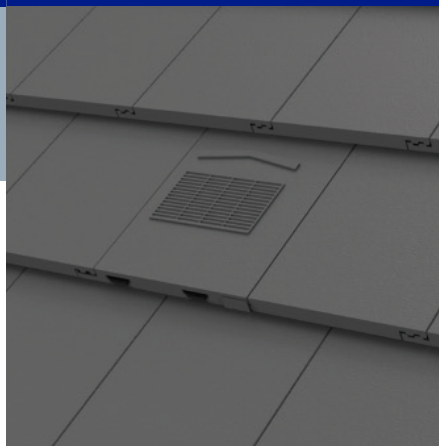
Designed for use with:

- Marley Double Roman
- Redland Double Roman
- Sandtoft Double Roman
- Russell Double Roman
- Lagan Double Roll

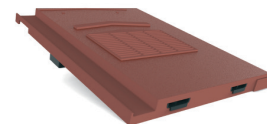
Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-DR	10,000mm ²	418 x 328	4

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Non-profile tile vent



Product Features

- In-line and discreet low profile design in five different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Independently wind tunnel tested by the BRE

The GTV-NP Non-Profile in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction termination through a flat tiled roof. The low profile design suits the tiles from the leading manufacturers and is available in a range of colours with a textured finish.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

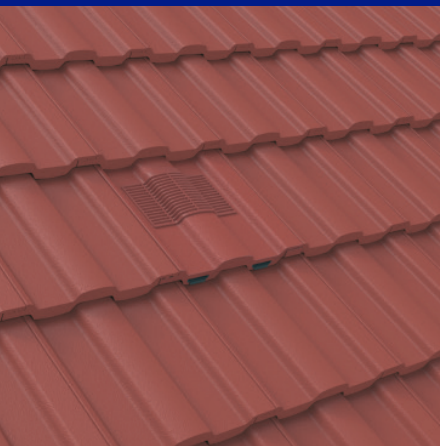
Designed for use with:

- Marley Modern
- Redland Mini Stonewold
- Sandtoft Calderdale
- Russell Grampian
- Lagan Flat Tiles

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-NP	10,000mm ²	418 x 334	4

Colour suffixes are; BL - black, GR - grey, TR - terracotta, AR - antique red and BR - brown.



Castellated tile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Independently wind tunnel tested by the BRE

The GTV-CS Castellated in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a square topped profile tiled roof. The low profile design suits the tiles from the leading manufacturers and is available in a range of colours.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

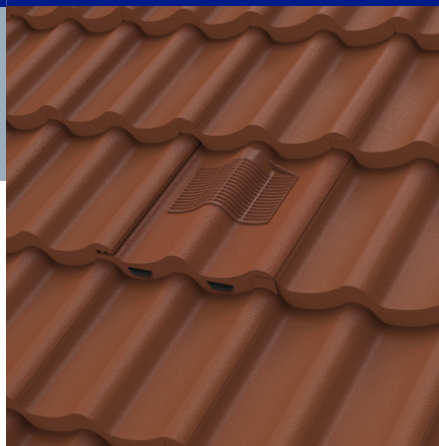
Designed for use with:

- Marley Ludlow Major
- Redland Renown
- Sandtoft Lindum
- Russell Cheviot
- Lagan Square Top Tiles

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-CS	10,000mm ²	418 x 332	4

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Double pantile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Independently wind tunnel tested by the BRE

The GTV-DP Double Pantile in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a double pantile roof covering. The low profile design suits the tiles from the leading manufacturers and is available in a range of colours with a textured finish.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

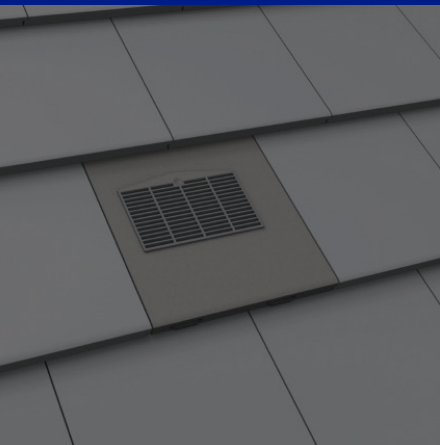
Designed for use with:

- Marley Mendip
- Redland Grovebury
- Sandtoft Double Pantile
- Russell Pennine
- Redland Double Pantile

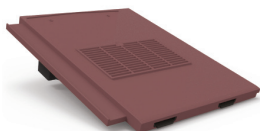
Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-DP	10,000mm ²	418 x 332	4

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Thin leading edge tile vent



Product Features

- In-line and discreet low profile design in five different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Suits most thin leading edge tile profiles

The GTV-TE Thin Edge in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a roof covered with thin leading edge flat tiles. The low profile design suits the tiles from the leading manufacturers and is available in a range of colours.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

Designed for use with:

- Marley Edgemere
- Redland Richmond 10
- Sandtoft TLE
- Russell Galloway
- Lagan Elite

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-TE	10,000mm ²	418 x 332	4

Colour suffixes are; BL - black, GR - grey, TR - terracotta, AR - antique red and BR - brown.



Flat edge tile vent



Product Features

- In-line and discreet low profile design in five different colours
- Provides 10,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Designed for use with the Calderdale Edge tile profile

The GTV-FE Thin Edge in-line tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a roof covered with Calderdale Edge flat tiles. Available in a range of colours.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 100mm

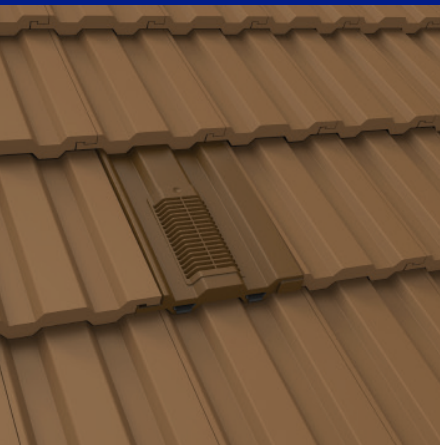
Designed for use with:

- Sandtoft Calderdale Edge

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-FE	10,000mm ²	418 x 335	4

Colour suffixes are; BL - black, GR - grey, TR - terracotta, AR - antique red and BR - brown.



Mini castellated tile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 5,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof space, no adaptor required
- Independently wind tunnel tested by the BRE

The small format GTV-MC mini castellated tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a roof covered with a 15"x9" format tile. The in-line profile helps to maintain an unbroken appearance to the roofline at high or low level. It suits the leading tile makes and is available in a range of colours.

- Can be installed down to a minimum roof pitch of 17.5°
- Can be laid with a maximum headlap of 125mm

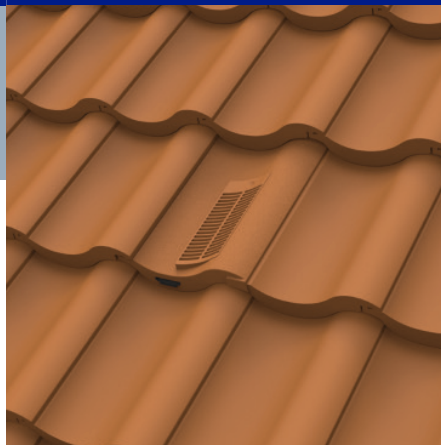
Designed for use with:

- Marley Ludlow Plus
- Redland 49
- Sandtoft Standard Pattern
- Forticrete V2

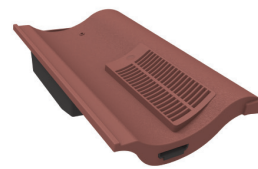
Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-MC	5,000mm ²	390 x 230	6

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Single pantile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 5,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof space, no adaptor required
- Independently wind tunnel tested by the BRE

The small format GTV-SP single pantile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a roof covered with a concrete single pantile. The in-line profile helps to maintain an unbroken appearance to the roofline at high or low level. Designed to suit the leading tile makes, it is available in a range of colours with a moulded textured finish.

- Can be installed down to a minimum roof pitch of 20°
- Can be laid with a maximum headlap of 125mm

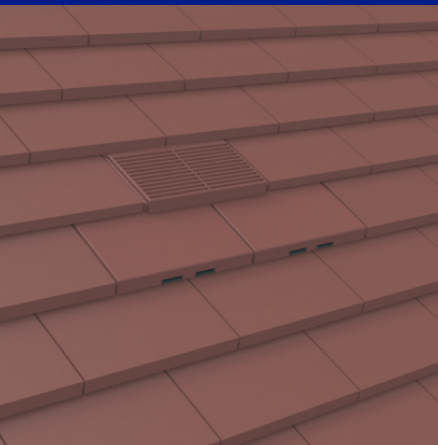
Designed for use with:

- Marley Anglia
- Redland Fenland
- Sandtoft Shire

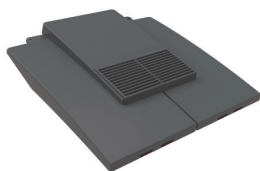
Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-SP	5,000mm ²	395 x 230	6

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Plain tile vent



Product Features

- In-line and discreet low profile design in four different colours
- Provides 6,600mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Independently wind tunnel tested by the BRE

The GTV-PT plain tile ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction or soil stack termination through a plain tiled roof. The in-line profile helps to maintain an unbroken appearance to the roofline whether used at high or low level. It is designed to suit the tiles from the leading manufacturers and is available in a range of colours with a textured finish.

- Can be installed down to a minimum roof pitch of 35°
- Can be laid with a batten gauge of 88 - 100 mm

Designed for use with:

- Traditional clay plain tiles
- Granular concrete plain tiles
- Smooth faced concrete plain tiles

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-PT	6,600mm ²	330 x 331	6

Colour suffixes are; GR - slate grey, TR - terracotta, AR - antique red and BR - dark brown.



Granular finish plain tile vent



In addition to the range of smooth faced ventilators, the plain tile vent is available with a granular finish. This rustic finish is designed to help the vent blend in when it is fitted onto a roof that has been covered with clay or concrete sand faced plain tiles.

The granular finish tiles are available in a range of four colours to suit a wide variety of traditional clay plain tiles with a rough granular finish such as the Acme from Marley Eternit or the classic Redland Rosemary tile, as well as other sand faced concrete plain tiles.

Colour Options:

Antique
Brown

Old
Red

Sand
Red

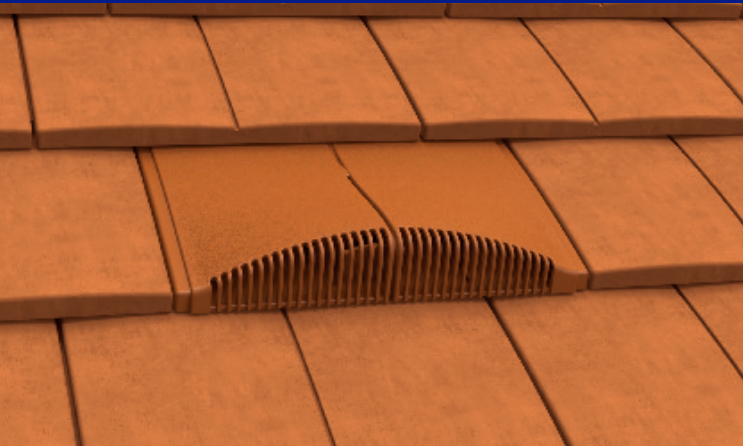
Light
Brown



Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-PT-GRAN	6,600mm ²	330 x 331	6

Colour suffixes; AB - antique brown, OR - old red, SR - sand red and LB - light brown.



The Interlocking Plain Tile Ventilator is designed for use with small format interlocking plain tiles. The Manthorpe vent features a unique sliding mechanism to adjust its width to suit the different sizes of tiles available.

The curved, in-line profile helps to maintain an unbroken appearance to the roofline at high or low level with a range of colours available to suit varying roof styles.

- Can be installed down to a minimum roof pitch of 22.5°
- Can be laid with a maximum headlap of 95mm

Thanks to this patented design feature, it is the only vent in the market which suits all three styles of interlocking plain tiles:

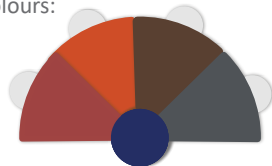
- Marley Ashmore - When set for 300mm coverage
- Redland DuoPlain - When set for 300mm coverage
- Forticrete Gemini - When set for 312mm coverage

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
GTV-IP	6,000mm ²	277 x 330	6

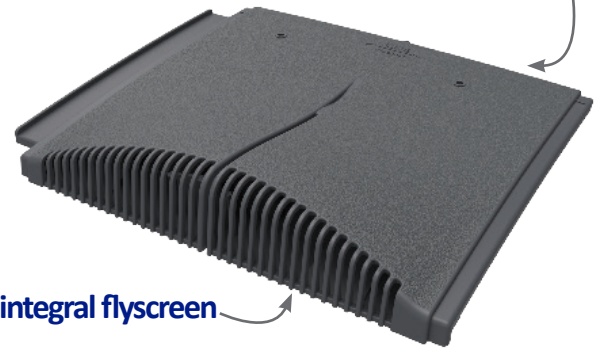
The GTV-IP is available in the following colours:

- GR-grey
- TR-terracotta
- AR-antique red
- BR-brown



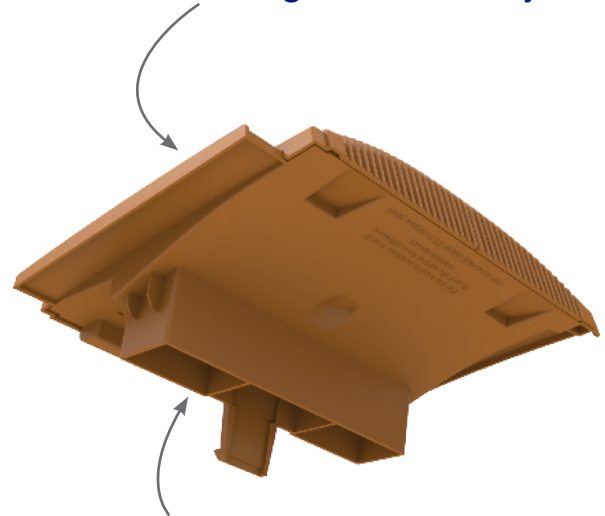
Product Features

Contoured, low profile design



4mm integral flyscreen

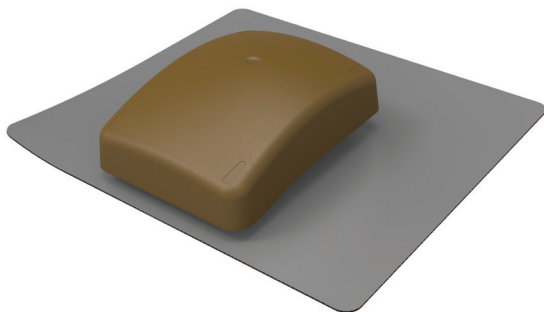
Patented sliding mechanism to adjust width



Base outlet feeds directly into roof space

- Design works with most interlocking concrete plain tiles
- Provides 6,000mm² of geometric free area per tile ventilator
- Outlet feeds into the roof, extraction adaptor available
- Made from durable PVCu, available in four colours
- Independently wind tunnel tested by the BRE

Cowled Universal Roof Vent



Product Features

- Suits a range of flat and profiled interlocking tiles
- A range of hooded cowl colours are available
- No batten cutting required during installation
- Flexible flashing skirt allows for universal fitting
- Independently wind tunnel tested by the BRE

The Cowled Universal Roof Vent is designed to provide a quick and simple solution to the problems of roofspace ventilation and mechanical extraction termination through a wide variety of roof coverings. It is especially useful on jobs where the installer may not know what the roof covering is.

The hooded cowl protects the opening from the elements whilst providing an airflow path into the roofspace. An integral 4mm louvred grill within the cowl prevents the entry of debris and large nesting insects.

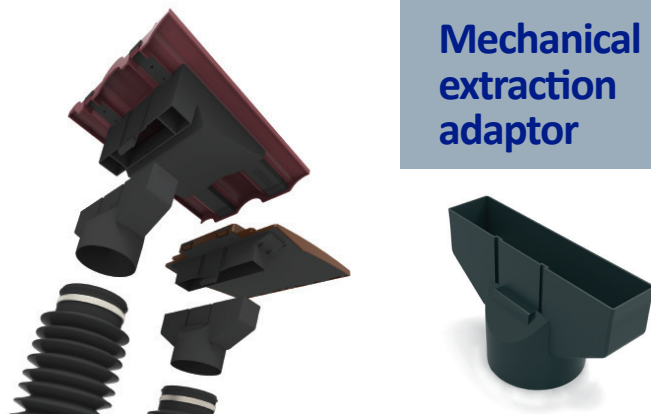
When using the vent for mechanical extraction / vent pipe termination, the lower outlet is stepped to allow for 4", 5" or a 6" oval connection. The 4" connection can be joined to one of the Manthorpe range of GRPA Flexible Pipes to continue the ducting further into the roofspace.

Specification Guide

Product Code	Geometric Free Area	Size (mm)	Box Qty
CURV	4" Round = 8,600mm ²	490 x 545	1
	5" Round = 12,700mm ²		
	6" oval = 13,300mm ²		

Colour suffixes are; BL- black, GR - grey, TR - terracotta, AR - antique red and BR - brown.

Mechanical extraction adaptor



Product Features

- Vent outlet to 4" round adaptor for mechanical extraction
- Can also be used as a ventilation outlet for soil stacks
- Can be fitted quickly and simply from inside the roofspace
- Works with the GRPA range and other generic hoses
- Provides 8,600mm² of geometric free area through the adaptor

In addition to providing ventilation to the roofspace, the Manthorpe range of tile ventilators can also be used as outlet terminals for bathroom/kitchen mechanical extraction fans or soil stack termination.

Whether connecting directly to one of the GRPA flexible pipe range or on to a generic flexible hose, the base outlets of the large format tile ventilators along with the plain tile vents can be converted to a standard 4" diameter pipe opening by using the GTV-AD adaptor.

The adaptor can be installed before the fitting of the vent, but can also be connected quickly and simply from inside the roofspace.

The smaller 15" x 9" format mini castellated and single pantile ventilators do not require an adaptor to convert to a 4" diameter pipe outlet.

Specification Guide

Product Code	Geometric Free Area	Pipe Outlet Size	Box Qty
GTV-AD	8,600mm ²	Ø 4"	10

GTV-AD is needed to convert the large format and plain tile vents to a 4" pipe.

Flexible extraction pipes



Roofspace ventilation and outlet mechanical extraction through natural and man made slates



Product Features

- Flexible ducting pipes for use with ventilation and extraction
- Will connect to Manthorpe's slate and tile vent range
- Oval adaptor connects with the hooded slate ventilators
- Can be used with standard 4" diameter circular outlets
- Can be connected together to create longer pipe runs

Slate roofs have a distinct charm and have been an important part of our country's building aesthetic for thousands of years. However the double lap nature of slates and their thin edge profiles provide a difficult challenge for ventilation.

The GRPA flexible pipe is designed for coupling directly to Manthorpe's hooded slate vent oval spigot, it can also be easily trimmed to fit a circular 110mm diameter connection.

The GRPA1 offers the reverse with an initial 110mm diameter circular connection which can be flexed to suit the oval on the slate vents if required, also has a longer pipe length.

The flexible pipes are supplied with their own metal screw clamp for simple and secure fixing.

The GRPA3 reduction adaptor allows a 4" to 3" reduction along a length of ventilation pipe. Supplied with jubilee clip.

NOTE: The GRPA pipes and other ducting should be fully insulated along its total length in the roof to avoid the risk of internal condensation. To form airtight seals it may be necessary to apply mastic sealant or tape to joints.

Specification Guide

Product Code	Geometric Free Area	Pipe Length	Outlet Size	Box Qty
GRPA	7,500 mm ²	455mm	Ø 4"	10
GRPA1	7,500 mm ²	645mm	Ø 4"	5

The initial oval/round outlets can be trimmed off to suit the secondary outlet below.

Product Code	Geometric Free Area	Inlet Size	Outlet Size	Box Qty
GRPA3	5400 mm ²	Ø 4"	Ø 3"	10

The Manthorpe range of in-line and hooded slate ventilators are designed to provide direct roof space ventilation or act as an outlet for mechanical extraction for ventilation ducting through man-made and natural slate roof coverings. The range of vent styles are universal in design and are compatible with major UK slate makes.

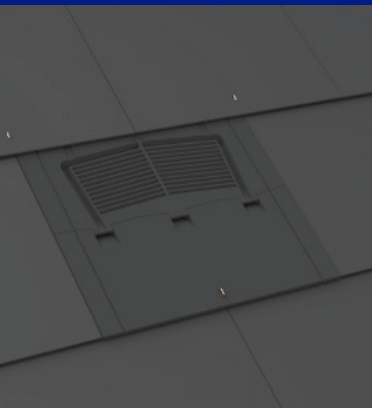
The vents have been wind tunnel tested to the requirements of pr EN 15601.



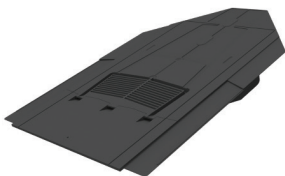
Testing Certificates:

- Large Format In-line slate vent: BRE test report number: 137-758
- Small Format In-line slate vent: BRE test report number: P107103-1000
- Hooded slate vent: Marley test report: 24.10.96

GILSV30-25



Large format slate vent



Product Features

- In-line ventilator with a discreet low profile design
- Provides 8,800mm² of geometric free area per slate vent
- Outlet feeds into the roof space, no adaptor required
- Protective side edging improves vent weatherproofing
- Independently wind tunnel tested by the BRE

The GILSV30-25 in-line slate ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and extraction through a roof covered with natural or man-made slates from 500 x 250mm up to 600 x 300mm.

The discreet, in-line profile helps to maintain an unbroken appearance to the roofline whether used at high or low level. The integral 4" diameter spigot feeds directly into the roofspace for general ventilation applications, and requires no adaptor for extraction. The tortured path through the 4mm louvred grille and internal geometry is designed to maintain airflow whilst channelling any water out of the vent and onto the roof covering. Product available in black and grey to blend in with various slate colours.

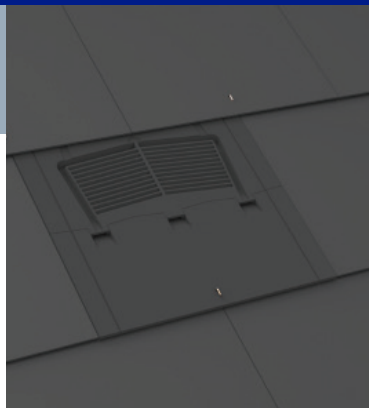
- Can be installed down to a minimum roof pitch of 22.5°
- Can be laid with a max batten gauge of 250mm

Specification Guide

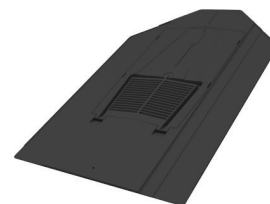
Product Code	Geometric Free Area	Size Format (mm)	Box Qty
GILSV30-25	8,800mm ²	600 x 300*	10

* Vent can be used with 500 x 250mm slates, but it requires trimming of the adjacent slates.

GILSV25-20



Small format slate vent



Product Features

- In-line ventilator with a discreet low profile design
- Provides 6,000mm² of geometric free area per slate vent
- Outlet feeds into the roof space, no adaptor required
- Protective side edging improves vent weatherproofing
- Independently wind tunnel tested by the BRE

The GILSV25-20 small format in-line slate ventilator is designed to provide a quick and simple solution to the problems of roofspace ventilation and extraction through a roof covered with natural or man-made slates from 400 x 200mm up to 500 x 250mm.

The discreet, in-line profile helps to maintain an unbroken appearance to the roofline whether used at high or low level. The integral 4" diameter spigot feeds directly into the roofspace for general ventilation applications, and requires no adaptor for extraction. The tortured path through the 4mm louvred grille and internal geometry is designed to maintain airflow whilst channelling any water ingress out of the vent and on to the roof covering. Product available in black and grey to blend in with various slate colours.

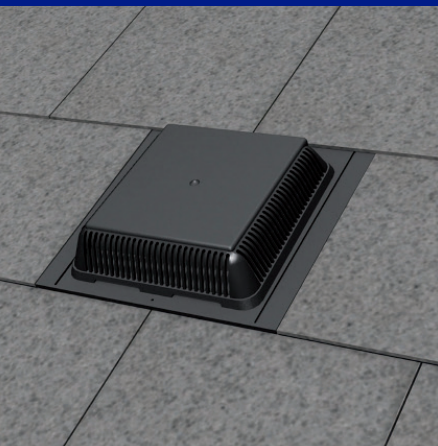
- Can be installed down to a minimum roof pitch of 22.5°
- Can be laid with a max batten gauge of 195mm

Specification Guide

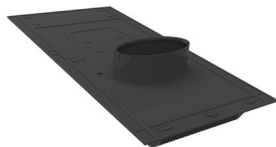
Product Code	Geometric Free Area	Size Format (mm)	Box Qty
GILSV25-20	6,000mm ²	500 x 250*	10

* Vent can also be used with slates down to 400 x 200mm in size.

GRSV30-25 / 45



Hooded slate vent



Product Features

- Slim hooded slate vent design with a fine textured finish
- Provides 10,000mm² of geometric free area per slate ventilator
- Space saving oval outlet feeds directly into the roof space
- Bases can be trimmed to suit various sizes of slates
- Can be fitted with a GRPA flexi pipe for extraction needs

The GRSV30-25 and GRSV45 hooded slate vents are an unobtrusive, economical roofspace ventilator providing 10,000mm² of airflow per unit. Alternatively, they can be used as an outlet terminal for extraction fans or soil stack termination when used in conjunction with a Manthorpe GRPA Flexible Pipe.

The vent, which has proven outstanding in independent performance tests, can be used for both high and low level roof ventilation. They are manufactured from polypropylene and have an integrated insect grill and spigot.

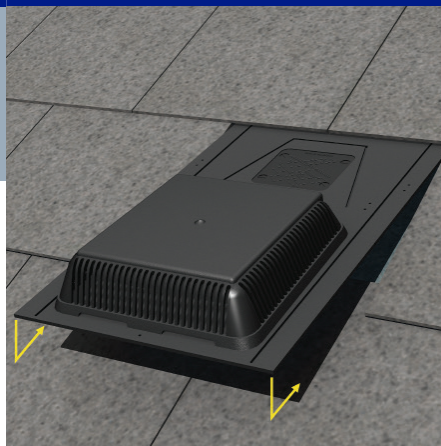
They are designed to replace a single slate in a roofline, with the larger format GRSV45 vent also providing a larger base format for use with random slating.

Specification Guide

Product Code	Geometric Free Area	Size Format (mm)	Min Pitch	Box Qty
GRSV30-25	10,000mm ²	600 x 300	15°	10
GRSV45	10,000mm ²	600 x 450	15°	5

* Both vents can be used with 500 x 250mm slates by trimming down the marked cut lines

GRSV30-25R / 45R



Refurb slate vent



Product Features

- Slim hooded slate vent design with a fine textured finish
- Flush base makes retrofitting into existing roofs easier
- Ideal for providing additional ventilation into the loft space
- Provides 10,000mm² of geometric free area per slate ventilator
- Bases can be trimmed to suit various sizes of slates

The GRSV30-25R and GRSV45R fast fit refurb slate vents, without the original vent spigot mounting on the base, make retro-fitting into existing surrounding slates easier. It is simply slid between natural or man-made slates already in position with no need to cut battens.

With the removal of the outlet spigot, the refurb slates can not be used for mechanical extraction.

The vent, which has proven outstanding independent performance tests, can be used for both high and low level roof ventilation. They are manufactured from polypropylene and have an integrated insect grille, with the GRSV45R offering a larger base format.

Specification Guide

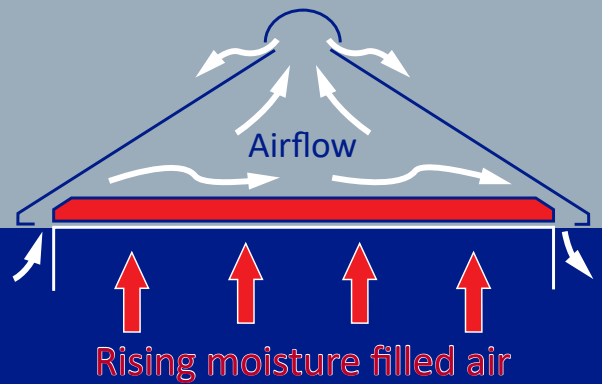
Product Code	Geometric Free Area	Size Format (mm)	Min Pitch	Box Qty
GRSV30-25R	10,000mm ²	600 x 300	15°	20
GRSV45R	10,000mm ²	600 x 450	15°	10

* Both vents can be used with 500 x 250mm slates by trimming down the marked cut lines

Roofspace ventilation

Combating condensation with roofspace ventilation solutions

The build up of condensation within the roof space remains an issue as the industry moves towards more energy efficient buildings. This problem is caused by the lack of adequate ventilation.



Moisture filled air entering the loft will condensate on cold surfaces unless removed by a cross flow of air movement

Condensation problems

Condensation is encouraged by the widespread use of insulating materials, central heating and double glazing. Along with the reduction in natural ventilation, the temperature differential between the living areas and the cold space is increased. This warm air carrying high levels of water vapour is naturally drawn to the cold areas of the building most notably the roof void.

In these areas, if there is insufficient ventilation, condensation occurs which can cause rotting timbers, rusting and weakening of metal fixings, felt damage and mould growth. Items stored in the loft are often rendered useless. The outcome involves significant expenditure to rectify the problems.

To eliminate this unnecessary cost, Manthorpe manufactures a range of quality roof ventilation products which are suitable for new build and refurbishment situations.

The control of condensation

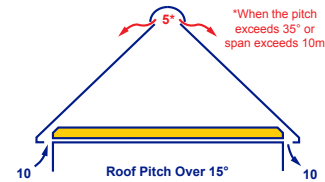
The British Standard BS 5250 'Code of practice for control of condensation in buildings' is now cited as the industry standard regulation throughout the UK concerning roofing ventilation, detailing specific requirements for various roof types.

The diagrams opposite provide some quick guides to the amount of ventilation required for different roof constructions depending on pitch, span and whether there is a traditional cold or "room in a roof" style warm loft space.

Recommended ventilation amounts

For roof pitches of more than 15°

10,000mm²/m is needed at the eaves. Pitches above 35° or with span exceeding 10m, allow an additional 5,000mm²/m at the ridge.



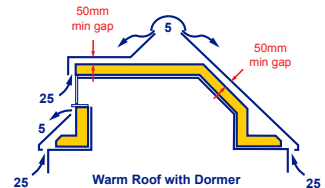
For flat roofs & pitches of 15° or less

25,000mm²/m is required at the eaves or low level to ensure a cross flow of ventilation.



For warm roof details

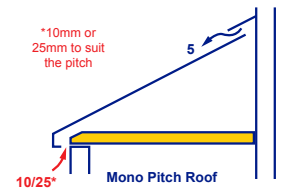
25,000mm²/m is required at the eaves, with 5,000mm²/m at high level and a continuous 50mm gap between the insulation & membrane.



Dormer windows, fire barriers and pitch changes etc., create separate voids within the roof space, ventilation must be maintained to these areas at high and low level.

Mono-pitch roof details

5,000mm²/m ventilation gap at high level, with a 10mm or 25mm gap at low level depending on the roof detail / pitch



For further information on the ventilation requirements for the control of condensation in buildings, refer to BS 5250.

G1200N / G2500N



Over fascia vents



Product Features

- Provides 10,000mm² or 25,000mm² geometric free area /m
- The easy to handle products come in 1 metre lengths
- The vents will fit with all types of roofing tiles and slates
- Fixes simply and easily into the top of the fascia board
- The discreet design is completely hidden once installed

The G1200N and G2500N over fascia ventilators are designed as a discreet entry point for airflow into the eaves of a property. Mounted to the top of the fascia board and sandwiched below the eaves course of tiles, the vents provide 10mm (G1200N) or 25mm (G2500N) of continuous airflow along the length of the eaves.

Both the vents are produced in 1 metre lengths and are robust enough to be used with all types of roof tiles from large format profiled tiles, to small plain tiles or even slates. Designed with clear fixing points both come complete with a built in 4mm flyscreen.

The versatile products can be placed between rafter bays to ventilate an open eaves detail and are also suitable for use in flat roof abutment situations.

Specification Guide

Product Code	Geometric Free Area	Flyscreen	Length	Box Qty
G1200N	10,000mm ² /m	Yes	1m	20
G2500N	25,000mm ² /m	Yes	1m	20

Products are only available in black.

G1280 / G1281



Felt support trays



G1280 (above), G1281 (left)

Product Features

- Supports the roofing felt or membrane down at the eaves
- Prevents sagging which can lead to the pooling of water
- Available in designs to suit new build and refurb details

The G1280 and G1281 felt support trays help to prevent the roofing felt sagging at the eaves, supporting the area where water could otherwise collect, causing the felt to rot and split, leading to damage to the fascia / soffit area.

The G1280 is quick and simple to fit in new build applications, with the slimmer G1281 suitable for both new build and refurbishment situations where it eliminates the need to strip a large section of the roof to replace old felt.

The support trays should be positioned on top of the fascia boards and secured to the roof trusses, overlapped to weather the joint. It should be pushed under existing felt in refurbishment situations or in new build situations felt should be dressed over the tray.

Specification Guide

Product Code	Length	Suitable for Refurb	Box Qty
G1280	625mm	No	50
G1281	1500mm	Yes	10

Products are only available in black.

Continous soffit strips



Product Features

- Continous soffit strips ventilating through the soffit board
- Products available to accomodate a number of soffit details
- Available in a variety of colours to match the soffit board
- Either 10,000mm²/m or 25,000mm²/m of geometric free area

The G800/G825 continuous soffit ventilators are designed for use with a traditional soffit and fascia board construction.

Specification Guide

Product Code	Geometric Free Area	Length	For Soffit Thickness	Box Qty
G800	10,000mm ² /m	2.44m	4 to 12mm	10
G825	25,000mm ² /m	2.44m	4 to 12mm	10

G800 soffit strips are available in white, brown and black.
G825 soffit strips are available in white and brown.

The G826 flat roof soffit ventilator is designed for flat roof applications where there is no soffit board to attach to and an upright fixing is required into the back of the fascia board.

Specification Guide

Product Code	Geometric Free Area	Length	Width	Box Qty
G826	25,000mm ² /m	3.1m	79.5mm	10

G826 soffit strips are available in brown only.

G700 / G1275

Circular soffit vent



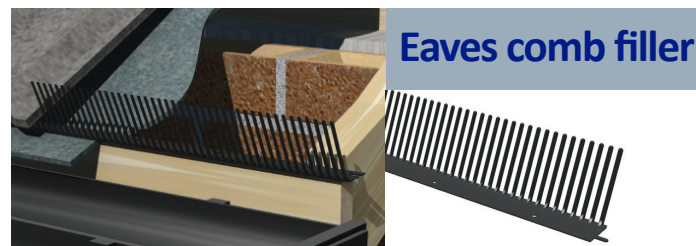
Product Features

- Circular opening for periodical ventilation through the soffit
- Simple to install, and is ideal for refurbishment applications
- A simple push fit up into a 70mm diameter hole in the soffit
- Available in a variety of colours to match the soffit board

Specification Guide

Product Code	Geometric Free Area	Fitting Hole	Flyscreen	Box Qty
G700	2,150mm ²	ø 70mm	Yes	50

G700 circular soffit vents are available in white, brown, golden oak, black, blue/black (Close match to anthracite grey).



Eaves comb filler

Product Features

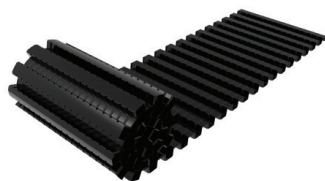
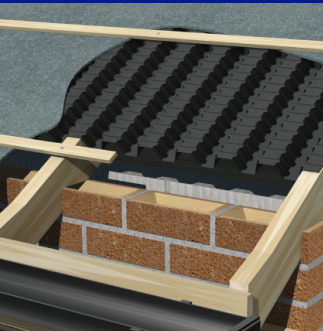
- Flexible comb fingers fill in the gaps below profiled tiles
- Prevents the ingress of birds and insects into the roof
- Universal design works with any style of profiled roof tile
- Fast and simple to install, mounts easily onto the fascia

Specification Guide

Product Code	Length	Finger Length	Fixing Centres	Box Qty
G1275	1m	62mm	100mm	50

The G1275 eaves comb filler is only available in black.

Roll panel vents



Product Features

- The roll out nature of the product is ideal for new builds
- Can compress to align with various truss rafter centres
- Provides 25,000mm² of airflow per metre of the product
- Available in various widths to suit different insulation levels
- Fast and easy to fit, 1 roll will cover 6 metres of the eaves

The G500, G502, G503 and G504 roll panel vents are designed to space off and maintain a constant air gap between the underside of the roofing membrane or sarking board and loft insulation at the eaves, providing a continuous flow of air into the roof space.

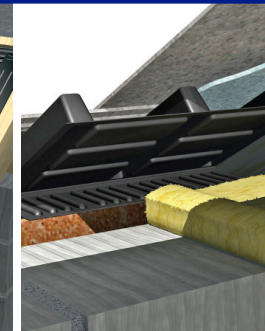
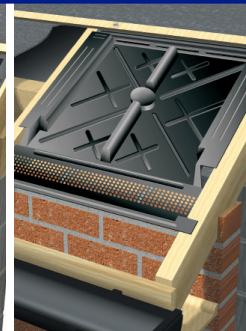
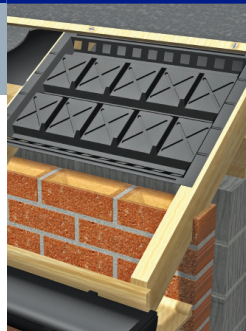
The castellated profile of the vent panel is highly versatile and is suitable for either 400, 450 and 600mm rafter centres. The rolls are ideal for new build applications owing to the ease and speed of installation, but is also useful in refurbishment details where rafter centres are not consistent or unknown.

The extra width of the G503 and G504 panels allows for better coverage when low pitch roofs and deep insulation details are encountered.

Specification Guide

Product Code	Airflow	Roll Width	Materials	Box Qty*
G500	25,000mm ² /m	325mm	PET	12m
G502	25,000mm ² /m	650mm	PET	12m
G503	25,000mm ² /m	800mm	PET	12m
G504	25,000mm ² /m	1.25m	PET	12m

*Each full box contains 2 individual rolls of 6 metres in length.



Product Features

- Panels offer 10,000mm² or 25,000mm² of airflow per metre
- Spaces a gap to the insulation layer to allow a flow of air
- Trays available to suit 400, 450 and 600mm rafter centres
- Trays with integral flyscreen for use in open eaves details
- Trays for installing retrospectively from inside the roof space

Specification Guide - Cross Flow Eaves Vent

Product Code	Airflow	Rafter Width	Material	Box Qty
G400	10,000mm ² /m	400mm	PVC	50
G450	10,000mm ² /m	450mm	PVC	50
G600	10,000mm ² /m	600mm	PVC	50
G620	25,000mm ² /m	600mm	PVC	50

Design of the G600 and G620 differs from that of the G400 and G450 panels.

Specification Guide - Cross Flow Flyscreen Eaves Vent

Product Code	Airflow	Rafter Width	Material	Box Qty
G405	10,000mm ² /m	400mm	PVC	50
G455	10,000mm ² /m	450mm	PVC	50
G605	10,000mm ² /m	600mm	PVC	50
G625	25,000mm ² /m	600mm	PVC	50

Design of the G605 and G625 differs from that of the G405 and G455 panels.

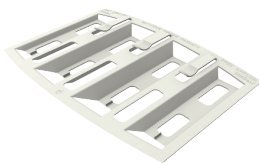
Specification Guide - Refurbishment Eaves Vent

Product Code	Airflow	Rafter Width	Material	Box Qty
G435	25,000mm ² /m	400mm	PVC	50
G645	25,000mm ² /m	600mm	PVC	50

At an average pitch of 35°, a single panel will accommodate 150mm of insulation.



Felt lap vent



Product Features

- Provides extra airflow into lofts with condensation issues
- Each lap vent provides 3,000mm² of geometric free area
- Easily installed into rafter openings from 350 to 600mm
- Tapered lead in helps to slot the vent between the laps
- Three clips secure the vent in place

The G630 felt lap ventilator is a refurbishment product which has been designed as a remedial solution to help overcome the build-up of condensation in the roof space, however like all products that open the felt lap to provide ventilation it does not meet the code of practice BS 5534:2014+A2:2018 6.2.1.1.

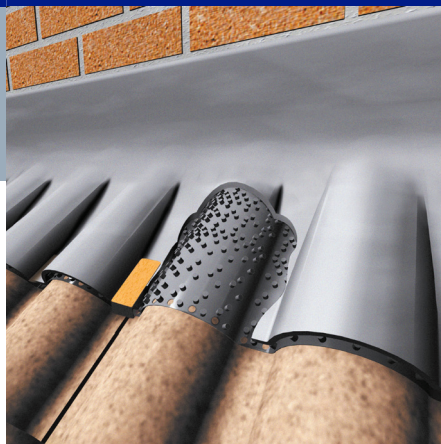
The specifier or user should be aware that the opening of felt laps on the roof may adversely affect the driving rain resistance of the slates, tiles or shingles, as well as increase the wind uplift forces acting on them.

The product can be easily installed by one person in rafter openings from 350mm to 600mm wide to provide 3,000mm² of geometric free area per unit. Please see fitting instructions and technical sheets regarding the specific roof ventilation requirements for the product.

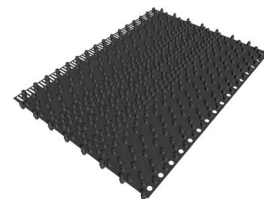
Specification Guide

Product Code	Geometric Free Area	Min Rafter Bay	Box Qty
G630	3,000mm ²	350mm	50

The felt lap vent is only available in white.



Abutment flash vent



Product Features

- A versatile ventilator for use above a pitched roof abutment
- Provides 5,000mm²/m at the high level of an abutting roof
- Flexible design contours to both flat and profile tile coverings
- Works down to 15° (2nd roll needed for pitches below 20°)
- Practically invisible below the leadwork once installed

Manthorpe have developed a revolutionary method for venting abutment roof details which takes the fuss out of fixing. The G1105 flash vent is a simple roll-out flexible sheet system which provides a weather-tight solution to the need for a continuous 5,000mm²/m of ventilation at roof abutment details.

The flexible nature of the design allows it to work on flat slate or profile tile without the need for profile fillers.

The G1105 flash vent is economical and easy to install as it is formed from just one main component.

Specification Guide

Product Code	Geometric Free Area	Roll Width	Min Pitch	Box Qty
G1105	5,000mm ² /m	235mm	15°	3m

Rolls can be joined together to suit longer lead laps for roof pitches below 20°.

Manthorpe

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