ROOFING SYSTEM
ACCESSORIES

TAKE A CLOSER LOOK
EVERYTHING YOU NEED UNDER ONE ROOF

From roof tiles and underlay to eaves systems and ridges, we have a comprehensive range of roof products. All elements of our roofs are carefully designed, tested and manufactured to give value, visual appeal and long-lasting weather tight performance.

CONTENTS

About Us  2-3
Our Services  4-5

Underlay
Spartech 400 2S & Underlay Support Tray  6-7

Insulation
Rapid Loft Board Insulation  8-9

Eaves Systems
RedVent Eaves Vent  10-11
RedVent 25 Over-Fascia Vent  12-13
Rapid Eaves Vent System  14-15

Verge Systems
Cloaked Verge  16-17
Ambi Dry Rapid and Slate 10 Dry Verge Systems  18-19

Hip Systems
Dry Hip System  20-21
Continuous Hip System  22-23
Lite Vent Rapid Ridge Hip  40-41
Cambrian Mitered Hip System  24-25
Hip End Cap  62

Valley Systems
125 and Cambrian GRP Valleys  26-27
Dry Valley  28-29
Bonding Gutter  30-31

Abutment Systems
Side Abutment GRP Secret Gutter  32-33
Top Edge Abutment  34-35

Ridge Systems
DryVent Ridge System  36-37
Continuous Ridge System  38-39
Lite Vent Rapid Ridge Hip  40-41
Ridge Vent Terminal  42-43
Gas Line Ridge Terminal  44-45
DryVent Monoridge System  46-47
Ridge End Cap  63

Ventilation Tiles
RedLine Vent Tile  48-49
ThruVent Tile  50-51
Rapid Roof Vent Tile  52-53

Accessories
Walsafe Rapid Focusing  54-55
Rapid Roof Putty  56
Rapid Roof Paint  57
Mortar Bedded Fixing Kit  58-59
Kno Clip  60
Infillex Clip  61
Hip End Cap  62
Ridge End Cap  63
Outlet Adaptors  64-65

Solar Photovoltaic Roofing Systems
InDaX PV System  66-67

Ornamental Tiles, Ridges and Finials  68-69

Product Codes and Fittings Colour Ranges  70-83
NATURALLY REDLAND

“At Redland it is our aim to deliver high-quality roofs that are easy to specify, buy, install and own.”

Redland is a brand of the worldwide Braas Monier Building Group (BMBG). With operations in 50 countries and over 100 production sites, BMBG is the leading worldwide supplier of pitched roofing materials. Our goal is to deliver high-quality roofing solutions that perfectly meet our customers’ expectations.

Redland draws on the expertise and experience gathered from nearly 100 years as an industry leader. Our range of tiles, slates, renewable energy systems, fittings and accessories, combined with market-leading technical support services, enable us to deliver total pitched roofing solutions you can rely on.
Chances are you know someone who has been on one of our courses.

INDUSTRY SUPPORT AND TRAINING

REDLAND TECHNICAL SOLUTIONS SERVICE

SpecMaster is a free roof specification service and guarantee that provides NBS-based specification clauses. Easily integrated into your own working document, a SpecMaster specification will save you time, and comes with the added reassurance of a comprehensive 15-year design liability and roof weathertightness guarantee.

REDLAND TECHNICAL SOLUTIONS

Staffed by industry experts with both the technical and real world knowledge of designing with Redland systems, our Technical Solutions team’s service will help you bring your project to fruition with industry-leading knowledge every step of the way.

CPD AND TRAINING

Our purpose-built Redland National Training Centre at South Cerney in Gloucestershire is where Redland personnel, customers, suppliers and specifiers regularly undertake in-depth classroom and practical training. Since it was established in 1983, more than 45,000 people have been trained at the Centre.

As a member of the RIBA CPD Providers Network, we are also able to deliver training sessions, using accredited materials, at customers’ own premises.

As well as an unrivalled range of roof tiles and systems, Redland has developed a comprehensive range of free technical services to save you time and provide complete peace of mind in your roofing project.

Visit www.redland.co.uk/services for further information on these services.
SPIRTECH 400 2S AND UNDERLAY SUPPORT TRAY

A heavy-duty underlay with a unique glue strip system that provides raintight overlap and passes the BS 5534:2014 wind uplift requirements for use anywhere in the UK. The robust Underlay Support Tray provides both a continuous support for the underlay at the eaves and a UV-resistant drip into the gutter.

FEATURES
• Strong, durable heavy-duty underlay system with grid reinforcement
• Superior abrasion and tear resistance
• Unique 2-strip gluing system for horizontal laps makes joints easy to bond and eliminates need for battens over the horizontal laps
• Glue strips suitable for both high and low outside temperatures
• Provides windtight, sealed roof system for warm and hybrid roofs, improving energy efficiency, as well as for traditional cold roofs
• Can be used without eaves ventilation when used in conjunction with a well-sealed ceiling and ridge or other high level ventilation
• Underlay Support Tray replaces the need for a timber tilting fillet and additional length of UV-resistant underlay
• Complies with BS 5534:2014 wind uplift resistance requirements for underlays everywhere in the UK for all batten gauges up to 345mm

COMPATIBILITY
• Spirtech 400 2S and Underlay Support Tray can be used with the complete Redland range of tiles
• Eaves Clips and Eaves Comb can be easily fixed through the Underlay Support Tray
• Suitable for use with all pitched roofs

PERFORMANCE
• Outstanding protection against falling objects
• Best in class watertightness after abrasion
• Suitable for use in all zones throughout the country under BS 5534:2014
• Awarded British Board of Agrément Certification, certificate number 05/4283

GUIDANCE NOTES
• Not adversely affected by any of the standard construction materials used in the roof or by any of the commonly used timber preservatives.
• Fix Underlay Support Tray to top of fascia board at centres not greater than 300mm with adjacent trays abutting each other and with rear edge resting on the insulation or rafter below the line of the tilting batten.
• Use DivoTape to seal vertical laps to create a windtight system where laps do not occur at a rafter.
• For Cambrian, DuoPlain and Plain Tiles remove section of Underlay Support Tray by cutting along the score line.

COMPONENTS
• SPIRTECH 400 2S
  Roll Size: 1.5 x 50m
  Roll Area: 75m²
  Weight: 240g/m²
  Material: Dark grey, 4-layer, spun bond polypropylene

• UNDERLAY SUPPORT TRAY
  Tray Length: 1.5m
  Material: Recycled PVC
  Pack Quantity: 25

ACCESSORIES
• DivoTape
  Roll Length: 25m
  Material: UV-resistant polyethylene film with mesh reinforcement
RAPID LOFT BOARD INSULATION

A straight-forward and high-performance way to create a loft platform. Rapid Loft Board’s extremely efficient insulating layer and sturdy 8mm OSB facing can turn roof spaces into practical storage areas.

FEATURES
• Conveniently sized to fit through the loft hatch
• Available in two thicknesses: 100mm and 140mm (+8mm board)
• Easy to fit using standard tools and fixings
• Tongue and groove board and shiplap on the foam

COMPATIBILITY
• Suitable for use with cold pitched roofs

PERFORMANCE
• Designed to meet a U-value of 0.16W/m²K or better when laid alone or in conjunction with existing insulations
• Complies with BS EN 13165:2012+A1:2015 Thermal insulation products for buildings, factory-made rigid polyurethane foam products

GUIDANCE NOTES
• Should not be used as a structural floor.
• Low and high level loft ventilation should be used in accordance with BS 5250:2011.
• Where Rapid Loft Board Insulation meets adjoining structures, gaps should be allowed for thermal expansion. These gaps should be filled with breathable insulation material such as mineral fibres.
• In ceilings measuring 20m or more, an expansion joint should be provided in the centre of the platform.
• A gap of 12mm should be left around hot water pipes and 70mm around hot flues.

COMPONENTS
Sold by the pallet
Quantity per pallet: 20 boards (100mm); 16 boards (140mm)
Coverage per pallet: 13.2 m² (100mm); 10.1 m² (140mm)

Property Insulation Description Standard
Material PM (Polyisocyanurate) Rigid Foam Aluminium Film Surface 8mm Chipboard (Class P5)
Thermal Conductivity $\lambda = 0.024$ W/m.K (Declared Value $\lambda = 0.025$ W/m.K Top Rating) BS EN 13165
Dimensions 1170 x 570mm (Outer) 1150 x 550mm (Fitted)
Covers 0.47m² per board (Outer) 0.47m² per board (Fitted)
Thickness 100 or 140mm (+8mm board)
Diffuse 0.01 W/m²K (Class E) BS EN 13165
Compressive Strength >100kPa BS EN 826
Youngs Modulus 6.0 N/mm²
Fire Rating Class E BS EN 13501-1
Interlock Shiplap (PM) Tongue & Groove Connection
The RedVent EavesVent provides continuous over-fascia eaves ventilation. For use when insulation is laid between or on top of the horizontal ceiling joists.

**FEATURES**
- Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
- Suitable for rafter spacing between 350-600mm centres (subject to pack used)
- Removes the need for unsightly grilles in the soffit board which over time could become clogged
- Eliminates the need for a tilting fillet and reduces the required height of the fascia board
- Can be installed with or without a soffit board
- 350-450mm pack is sufficient to cover 6 metres of eaves at 450mm rafter centres and 4.9 metres at 350mm centres
- 450-600mm pack is sufficient to cover 6 metres of eaves at 600mm rafter centres and 4.5 metres at 450mm centres

**COMPATIBILITY**
- Suitable for use with most pitched roofing materials
- Compatible with all of the Redland range of Eaves Clips
- Where Eaves Clips or Eaves Comb are required for use with a particular tile profile, it is acceptable to fix them through the Fascia Grille of the RedVent EavesVent

**PERFORMANCE**
- Minimum pitch will depend on the minimum pitch of the roof covering
- Maximum pitch varies with tile used. Please contact Technical Solutions on 03708 702595
- The effective ventilation area per metre run of eaves is 14,600mm²
- Mechanically fix all tiles at the eaves
- Fit to straight and level softwood fascia

**PRODUCT MEASUREMENTS (mm)**

<table>
<thead>
<tr>
<th>Pack Size</th>
<th>Q</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>450-600mm</td>
<td>485</td>
<td>634</td>
</tr>
<tr>
<td>350-450mm</td>
<td>484</td>
<td>600</td>
</tr>
</tbody>
</table>

**GUIDANCE NOTES**
- Use extension trays where the top of the insulation is greater than 450mm from the fascia when measured up the rafter. Where this distance is greater than 830mm, use two rows of extension trays.

**COMPONENTS**
- Each RedVent EavesVent pack contains:
  - 12 Fascia Grilles with attached apron (PVC – black)
  - 10 Eaves Ventilation Trays in the 450-600mm pack
  - 14 Eaves Ventilation Trays in the 350-450mm pack (PVC – black)
  - Aluminium Alloy nails (45 x 2.35mm)

- Each Extension Tray pack contains:
  - 10 trays in the 450-600mm pack
  - 14 trays in the 350-450mm pack
REDVENT 25 OVER-FASCIA VENT

The RedVent 25 Over-Fascia Vent provides unobtrusive continuous ventilation at the eaves for use where the insulation is installed either between or above the rafters.

FEATURES
- Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
- Used for any combination of rafter spacing
- Can be installed with or without a soffit board
- Eaves closure is achieved for Regent, Grovebury, Landmark Double Pantile, Fenland Pantile, Cathedral Clay Pantile and Old Hollow Clay Pantile by using Eaves Comb

COMPATIBILITY
- Suitable for use with most pitched roofing materials
- Where Eaves Comb, Eaves Cowl or Underlay Support Trays are required, a 25 x 25mm softwood clip batten should be secured through the RedVent 25 Over-Fascia Vent into the fascia board with 100 x 4mm galvanised nails
- Suitable for uPVC fascias with additional timber fillet behind the fascia board

PERFORMANCE
- Minimum pitch will depend on the minimum pitch of the roof covering
- Maximum pitch varies with tile used. Please contact Technical Solutions on 03708 702595
- The effective ventilation area per metre run of eaves is 25,000mm²

GUIDANCE NOTES
- Install a 4mm thick tilting fillet with a positive fall to support underlay over the fascia vent
- Do not extend underlay into the gutter unless 25mm spacer blocks are positioned behind the gutter brackets
- Suitable for softwood fascia boards 25mm thick and above
- No rafter tray is required when underlay is fully supported by insulation
- For fascia board heights contact Technical Solutions on 03708 702595
- The gutter’s size and position will need to be calculated to ensure that rainwater discharges directly into it

COMPONENTS
Each RedVent 25 Over-Fascia Vent pack contains:
- 12 Fascia Grilles (Polypropylene – black) sufficient for 6 metres of eaves
RAPID EAVES VENT SYSTEM

The Rapid Eaves Vent system is designed for use in cold pitched roofs as a means of introducing low-level roof space ventilation.

FEATURES

• 3-part system, sold separately:
  - Rapid 2-in-1 Eaves Tray – provides continuous ventilation over the fascia while supporting the underlay at the eaves to ensure a positive fall of the underlay into the eaves gutter
  - Rafter Roll – a semi-rigid, wide roll-out rafter ventilation tray that maintains an uninterrupted air ventilation gap between the underlay and ceiling-level insulation in the loft space
  - Eaves Comb – used to prevent birds, large insects, rodents etc. from entering the roof space. Eaves Combs are required for the following Redland tiles: Landmark Double Pantile, Grovebury, Regent, Fenland Pantile, Cathedral Clay Pantile, Old Hollow Clay Pantile
• Maintenance-free
• Quick and easy to install
• Can be used with either a non-breather or vapour permeable underlay
• Complies with BS 5250:2011

COMPATIBILITY

• Works with any Redland slate / tile or similar
• Suitable for use with most pitched roofing materials
• Compatible with timber fascias up to 25mm thick
• Suitable for uPVC fascias with an additional timber fillet behind the fascia board
• Suitable for rafter centres up to 600mm

PERFORMANCE

• Rafter pitch range is 15° - 70°
• The effective ventilation area per metre run of eaves is 10,000mm²

GUIDANCE NOTES

• Rafter Roll to be secured to the rafters using 25 x 2.65mm clout nails at every rafter intersection, both at the top and bottom of the roll.
• Lay the 2-in-1 Eaves Tray over the fascia board using the lugs to locate the correct position.
• With a timber fascia, nail the 2-in-1 Eaves Tray into place through the nail louvres with 60 x 3.35mm Aluminium Alloy nails and then fix Eaves Comb if required.
• With a uPVC fascia either nail the 2-in-1 Eaves Tray at every rafter intersection or nail into a timber fillet installed immediately behind the uPVC fascia. Nail with 60 x 3.35mm Aluminium Alloy nails.
• Ensure trays are interlocked correctly before fixing.

COMPONENTS

3-part system sold separately

RAFTER ROLL

Roll Size: 6m x 0.8m
Material: PVC

RAPID 2-IN-1 EAVES TRAY

Tray Length: 1m
Material: Polypropylene

EAVES COMB

Comb Length: 1m
Material: Polypropylene
The Cloaked Verge continues the tiling over the gable end using a one-piece concrete tile. The system has very high resistance to storm damage and, with no mortar required, it removes concerns about mortar failure.

**FEATURES**
- Easy to lay as it interlocks to the next tile
- The quickest and easiest method of installing profiled verge tiles
- Provides a neat finish to the verge
- Complies with BS 5534:2014 requirements for mechanical fixing

**COMPATIBILITY**
- Available for all our profiled tiles in all available colours except Fenland Pantile, Redland 49, Postal Clay Tile and Old Hollow Clay Pantile

**PERFORMANCE**
- There is no maximum pitch on lean-to roofs or where lead roll details are used
- On duo-pitch roofs above 45° the top cloaked verge tiles must be cut to a mitre
- Minimum pitch will depend upon the minimum pitch for the tile profile and surface finish
- Minimum headlap will depend upon tile profile, surface finish and rafter pitch
- Maximum headlap is 125mm (71mm for Cathedral Clay Pantile)

**GUIDANCE NOTES**
- When setting out the roof, the verge overhang should be the same at both verges. The use of Half Tiles (Two Thirds Tile for Cathedral Clay Pantile) in each course will allow the overhang to be reduced to a minimum. Half Tiles and Two Thirds Tiles are available in all colours as the Cloaked Verge. Cloaked Verge tiles are not suitable for raking verges.
- Ever Cloaked Verge Tile must be nail fixed and the integral nylon plug must interlock with the Cloaked Verge Tile in the course below.
- On rafter pitches of 30° and above, a second batten is required to support the main batten. It is essential to secure the second batten over at least two rafters.

**PRODUCT MEASUREMENTS (mm)**

<table>
<thead>
<tr>
<th>Profile</th>
<th>Profile</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Cloaked Verge Left-hand</td>
<td>Concrete Cloaked Verge Right-hand</td>
<td>Concrete Cloaked Verge with Vertical Tiling (Regent)</td>
</tr>
<tr>
<td>Top of batten</td>
<td>Top of batten</td>
<td>Top of batten</td>
</tr>
<tr>
<td>130</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td>260</td>
<td>260</td>
<td>260</td>
</tr>
<tr>
<td>288</td>
<td>288</td>
<td>288</td>
</tr>
<tr>
<td>315</td>
<td>315</td>
<td>315</td>
</tr>
<tr>
<td>342</td>
<td>342</td>
<td>342</td>
</tr>
</tbody>
</table>

**COMPONENTS**
- **CLOAKED VERGE TILE**
  - Length: 418mm (411mm for Cathedral Clay Pantile)
  - Material: Concrete (Clay to match Redland Cathedral Clay Pantile)
  - Plug Material: Nylon

**ACCESSORIES**
- Half-Tile (Concrete tiles)
- Two-Thirds Tile (Cathedral Clay Pantile)
- Block-End Ridge Tile
AMBI-DRY, RAPID AND SLATE 10 DRY VERGE SYSTEMS

These systems provide a neat, maintenance-free verge for most of our slates and profile tiles. With very high resistance to storm damage and with no mortar required, they remove concerns about mortar failure.

FEATURES
• Secure fixing system provides high resistance to wind uplift for both verge tiles and dry verge system
• Quick to install and can be laid at variable gauges to suit the minimum and maximum headlaps of the tiles
• Ambi-Dry and RapidVerge are adapted on site to fit either the left or right-hand verge
• Slate 10 DryVerge is available as dedicated left-hand and right-hand units
• Eliminates the need for an undercloak
• Quick to install and can be laid at variable gauges to suit the minimum and maximum headlaps of the tiles
• Secure fixing system provides high resistance to wind

COMPATIBILITY, PERFORMANCE AND COLOURS
- Eliminates the need for an undercloak
- Quick to install and can be laid at variable gauges to suit the minimum and maximum headlaps of the tiles
- Secure fixing system provides high resistance to wind

AMBI-DRY VERGE SYSTEMS WITH OVERHANG (CAMBRIAN)
- Ridge Comb x 1 (uPVC)
- Eaves Closure Unit x 1 (uPVC) + Eaves Clip (Stainless Steel)

AMBI-DRY VERGE SYSTEM WITH VERTICAL SLATING (CAMBRIAN)
- Narrow pitch slates, with or without interlocking, are suitable for left-hand and right-hand verges
- Use Standard Slates with interlock removed and Left-hand Half Slates alternately on both verges
- Use Standard Slates with interlock removed and Right-hand Half Slates alternately on right-hand verges
- The systems are not suitable for raking verges

AMBI-DRY VERGE SYSTEM (MINI STONEWOLD)
- Mini Stonewold tile with Left-hand interlock removed
- Use Standard Slates with interlock removed and Left-hand Half Slates alternately on both verges
- Use Standard Slates with interlock removed and Right-hand Half Slates alternately on right-hand verges
- The systems are not suitable for raking verges

AMBI-DRY, RAPID AND SLATE 10 DRY VERGE SYSTEMS
DRY HIP SYSTEM

The Dry Hip System has delivered years of trouble-free service on tens of thousands of properties throughout the UK. With very high resistance to storm damage, the Dry Hip System has exceptional durability and is designed to last the lifetime of the roof.

FEATURES
• Provides a neat and attractive finish to the hip line
• Hip Tiles are secured to the appropriate size hip batten using Stainless Steel wood screws, which give exceptional resistance to wind uplift
• Quick to lay and can be used even when bad weather is expected
• Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing

PERFORMANCE
• Pitch range varies according to plan angle and tile profile. Please contact Technical Solutions on 03708 702595
• Minimum and maximum pitch will depend upon the minimum and maximum pitch of the roof tiles
• This system is designed for use where pitches to either side of the hip are equal. Where the roof pitches are uneven please contact Technical Solutions on 03708 702595

COMPATIBILITY
• Suitable for use with the DryVent Ridge System
• Suitable for use with Third Round and Universal Angle Hip Tiles. For Hip Tile colour availability, see Fittings Colour Range tables on pages 73, 77 and 82
• Not suitable for use with Cathedral Clay Pantile, Fenland Pantile, Redland 49, Postel Clay Tile and Old Hollow Clay Pantile

GUIDANCE NOTES
• The Dry Hip System is suitable for traditional timber rafter, timber trussed rafter and rigid sarking constructions at all pitches and plan angles subject to limitations of tile types
• Dry Hip can be adapted to ventilate the batten cavity when used with Spirtech 400 2S underlay. Hip tile support must be fixed to an additional hip batten fixed over the rollable membrane.
• Care must be taken when using timber nailing that the hip rafter is nailed using timber battens to ensure that the wood screw penetrates the hip batten by a minimum of 15mm.
• All profiles require a standard 50 x 50mm hip batten, with the exception of the Slate 10 range when this batten is reduced to 50 x 38mm.
• For Cambrian Slate contact Technical Solutions on 03708 702595.
• The system should start at the eaves with a Block-End Hip Tile.
• For pitches up to 45º (and plan angle > 90º) where two hips intersect with a DryVent Ridge a Hip/Ridge junction should be used.
• For pitches above 45º or where the Dry Hip System does not finish at a conventional ridge intersection with two hips, the Hip/Ridge junction should be completed with a Wakaflex Rapid Flashing saddle.
• Cambrian Double Slates will be required on all courses on either side of each hip below 25º. All pitches greater than this Cambrian Slate-and-a-Halves can be used.

COMPONENTS
Each Dry Hip System pack contains sufficient components to secure 2.7 metres of concrete Hip Tiles. Each pack contains:
• Rollable Weathertight Membrane (grey) – 320mm x 2.75m
• Hip Tile Supports (Polypropylene – black)
• Hip Batten Strips (Stainless Steel)
• Spacer Blocks (PVC – black)
• Head Clips (Stainless Steel)
• Tail Clips (Aluminium)
• 100mm Wood screws (Stainless Steel)
• Butler Nails (Stainless Steel)
• Hip Batten Nails (Stainless Steel)

• In addition, concrete Hip Tiles with nail holes will be required in a colour to suit, with matching Block-End Hip Tiles at the eaves.
• A Hip/Ridge junction will also be required where appropriate.
CONTINUOUS HIP SYSTEM

The Continuous Hip System is an easy and quick-to-fit, maintenance-free hip system with very high resistance to storm damage. With no mortar required it removes concerns about mortar failure. The system also ventilates the batten cavity when used with Spirtech 400 2S underlay.

FEATURES
- Hips are up to a third quicker to complete than when mortar bedded
- Hip Tiles are secured to the appropriate size hip batten using Stainless Steel wood screws, which give exceptional resistance to wind uplift
- Provides a neat and attractive finish to the hip line
- Easy to install and can be used even when bad weather is expected
- Ventilates the batten cavity to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof (when used with Spirtech 400 2S vapour permeable underlay)
- Tried and tested and complies with BS 5534:2014
- Provides a neat and attractive finish to the hip line
- Easy to install and can be used even when bad weather
- Hip Tiles are secured to the appropriate size hip batten using Stainless Steel wood screws, which give exceptional resistance to wind uplift.

PERFORMANCE
- Pitch range varies according to plan angle and tile profile. Please contact Technical Solutions on 03708 702595
- Minimum and maximum pitch will depend upon the minimum and maximum pitch of the roof tiles
- This system is designed for use where pitches to either side of the hip are equal. Where the roof pitches are uneven please contact Technical Solutions on 03708 702595

CONTINUOUS HIP SYSTEM WITH THIRD ROUND HIP TILES (GROVEBURY)
- Suitable for use with the Continuous Ridge System and Uni-Vent Rapid Ridge/Hip
- Suitable for use with Third Round and Universal Angle Hip Tiles. For Hip Tile colour availability see Fitting Colour Range tables on pages 73, 77 and 82
- Suitable for use with the Redland range of tiles and slates

COMPATIBILITY
- Suitable for use with the Continuous Ridge System and Uni-Vent Rapid Ridge/Hip
- Suitable for use with Third Round and Universal Angle Hip Tiles. For Hip Tile colour availability see Fitting Colour Range tables on pages 73, 77 and 82
- Suitable for use with the Redland range of tiles and slates

GUIDANCE NOTES
- The Continuous Hip System is suitable for traditional timber rafters, timber trussed rafter and rigid sarking constructions at all pitches and plan angles subject to limitation of tile types. Continuous Hip ventilates the batten cavity when used with Spirtech 400 2S underlay.
- Care must be taken when using timber sarking that the hip rafter is raised using timber battens to ensure that the wood screw penetrates the hip batten by a minimum of 10mm.
- All profiles require a standard 50 x 35mm hip batten, with the exception of the Slate 10 range where this is reduced to 50 x 30mm for pitches up to 40º and 50 x 25mm above 40º. (Use a 50 x 30mm hip batten for Cambrian Slates above 25º).
- Ensure that the tile overhang at each eave is the same.
- The system should start at the eaves with a Block-End Hip Tile.
- For pitches up to 40º (and plan angle ≤ 90º) where two hips intersect with a ridge, Hip/Ridge Junction should be used.
- For pitches above 40º, plan angles other than 90º or where the Continuous Hip System does not finish at a conventional ridge intersection with two hips, the Hip/Ridge junction should be completed with a Universal Angle Flashing saddle.
- Cambrian Double Slates will be required on all courses on either side of each hip below 25º. All pitches greater than this Cambrian Slate-end and block ends can be used.
- For number of spacer blocks and maximum centres required see fixing instructions.

COMPONENTS
- Each Rapid Hip pack contains sufficient components to secure 5 metres of concrete Hip Tiles:
  - Rollable Weathertight Membrane (grey) – 295mm x 5m
  - S/S Hip Batten Rings (Stainless Steel)
  - Hip Batten Spacing Blocks
  - Hip Batten Fixing Strap (Stainless Steel)
  - Rafter Nails (Stainless Steel)
  - 100mm Woodscrews (Stainless Steel)
  - Tail Clips (Aluminium)
  - Universal Angle Hip Tile (Stainless Steel)
  - Hip Batten Strips (Stainless Steel)

- In addition, concrete Hip Tiles with nail holes will be required in a colour to suit, with matching Block-End Hip Tiles at the eaves. A 50 x 35mm or 50 x 30mm hip batten must be fixed.
- A Hip/Ridge Junction will also be required where appropriate.

Please contact Technical Solutions on 03708 702595 for more information.

CONTINUOUS HIP SYSTEM WITH UNIVERSAL ANGLE HIP TILES (CAMBRIAN)
- Suitable for use with Spirtech 400 2S underlay. Spirtech 400 2S vapour permeable underlay
- Suitable for use with the Continuous Ridge System and Uni-Vent Rapid Ridge/Hip
- Suitable for use with Universal Angle Hip Tiles. For Hip Tile colour availability see Fitting Colour Range tables on pages 73, 77 and 82
- Suitable for use with the Redland range of tiles and slates

CUSTOMER SERVICE: 03705 601000WWW.REDLAND.CO.UK/CONTINUOUSHIP
CAMBRIAN MITRED HIP SYSTEM

Specifically designed for use with Cambrian Slates to achieve a neat mitred hip detail, whilst ensuring very high resistance to storm damage over a wide range of rafter pitches and plan angles.

FEATURES

• Provides a neat and attractive finish to the hip line
• Easy to install and can be used even when bad weather is expected
• Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing

COMPATIBILITY

• Suitable for use with all Cambrian Slate products

PERFORMANCE

• At 90° plan angle, the minimum pitch is 15° and the maximum pitch is 80°. For other plan angles, refer to the table adjacent

PLAN ANGLE AGAINST ROOF PITCH SHOWING APPROVED USAGE

GUILDANCE NOTES

• The Cambrian Mitred Hip System is suitable for traditional timber rafter, timber trussed rafter and rigid sarking constructions.
• Suitable for hips with an equal pitch on both slopes.
• Care must be taken when using timber sarking that the hip rafter is raised using timber batten(s) to ensure that the wood screw penetrates the hip batten by a minimum of 15mm.
• Cambrian Double Slates will be required on all courses on either side of each hip below 45° pitch. At pitches of 45° and above, Cambrian Slate-and-a-Halves can be used. At pitches of 60° and below use a double slate for the top course at the ridge/hip junction.
• At the junction between two mitred hips and a universal angle duo ridge, a Cambrian Mitred Hip Block-End Ridge (product code 7211) should be used.
• Where a hip starts or finishes at a position other than a duo ridge or eaves, a lead or Wakaflex Rapid Flashing saddle will be required.

COMPONENTS

The Cambrian Mitred Hip System contains sufficient components in each pack for ten courses of slates.

Each pack contains:
• Hip Weathering Units (Polypropylene – grey) x 10
• Hip Clips and Screws (Stainless Steel) x 10
125 AND CAMBRIAN GRP VALLEY

Designed as a cost-effective alternative to lead, the 125 and Cambrian GRP Valleys are easy to fix, durable and lightweight. They are ideal for most types of roof design which have a valley junction between two roof slopes.

FEATURES
- Easily cut and available in 3 metre lengths
- Tried and tested and complies with BS 5534:2014 requirements for valleys
- Fire tested to BS 476-3:2004
- Manufactured from long-lasting UV-resistant Glass Reinforced Polyester (GRP)

COMPATIBILITY
- 125 Valley is suitable for all of the Redland range of tiles and slates (except Cambrian Slates for which the Cambrian GRP Valley is used)
- A specific version of this valley is available for natural slates

PERFORMANCE
- Minimum pitch 17.5° at 90° plan angle
- Maximum pitch 45° at 90° plan angle
- For pitch range at plan angles other than 90° please contact Technical Solutions on 03708 702595
- Width of valley gutter 125mm
- Where roof plan area discharging into the valley is greater than 25m², minimum rafter pitch is 30°
- Valley can accommodate a 5° pitch variance between slopes

GUIDANCE NOTES
- Lay the 125 or Cambrian GRP Valley on timber support boards, laid between rafters on nogins.
- At ridge/valley intersections, a lead or Wakaflex Rapid Flashing saddle is required.
- At the eaves, cut the GRP Valley to a ‘V’ to allow water to flow into gutters. The fascia board will require cutting to suit.
- Where the valley discharges onto tiling, a lead flashing or Wakaflex Rapid Flashing is required.
- Vapour permeable underlay can be laid either under the GRP Valley or as to the edge of the valley support board.
- Cambrian Double Slates will be required on all courses on both sides of the valley below 25°. At pitches of 25° and above, Cambrian Slate-and-a-Halves can be used.

COMPONENTS

125 GRP VALLEY (FENLAND PANTILE)
- Cement sand mortar (to comply with tensile bond strength in BS 5534) bedding the continuous valley length onto GRP bonded strip
- 25mm thick GRP valley batten
- 125mm width between vertical faces of valley
- Spirtech 400 2S underlay turned up onto GRP support board
- SW batten supported on edge of valley support board

CAMBRIAN GRP VALLEY (CAMBRIAN)
- 125mm width between vertical faces of valley
- Cambrian Slate-and-a-half or Double Slate cut to rake of valley and mechanically fixed
- SW batten supported on edge of valley support board

125 GRP Valley Cambrian GRP Valley

VALLEY SYSTEMS

125 AND CAMBRIAN GRP VALLEY

Customer Service: 03705 601000

www.redland.co.uk/125cambriangrpvalley

Valley Size 3m x 0.4m
Material Glass Reinforced Polyester (GRP)
Dry Valley is a mortar-free, dry-fix system that is fast to install in all weather conditions providing a neat, close cut and mitred finish.

**Features**
- Two products:
  - **Dry Valley High Profile** – with a central upstand of 105mm
  - **Dry Valley Low Profile** – with a central upstand of 80mm
- Available in standard lead grey colour
- Lightweight and flexible
- Safe and easy to cut
- Manufactured from long-lasting UV-resistant Glass Reinforced Polyester (GRP)

**Compatibility**
- Designed to fit directly onto either existing or new valley support boards
- **Dry Valley High Profile** is compatible with Plain Tile, Heathland, Rosemary Clay plain tiles and all Redland profiled tiles
- **Dry Valley Low Profile** is compatible with natural slates, fibre-cement slates, all Redland slate appearance tiles, DuoPlan and Fontenelle Interlocking Clay Plain Tile

**Performance**
- Pitch range is 17.5 - 60° at any plan angle with a maximum difference between the two adjacent roof slopes of 20°
- Roof area on plan draining into valley is maximum 100m²
- No sealing or jointing material is required if the following overlaps and rafter pitches are used:
  - Below 22.5°: 350mm
  - 22.5 - 29.5°: 300mm
  - 30° - 39.5°: 200mm
  - 40° and above: 150mm

**Guidance Notes**
- Lay the Dry Valley on timber support boards laid between rafters or noggins.
- At ridge/valley intersections, a lead or Wakaflex Rapid Flashing saddle is required.
- At the eaves, cut the Dry Valley to a 'V' to allow water to flow into gutters. The fascia board will require cutting to suit.
- Where the valley discharges onto tiling, a lead flashing or Wakaflex Rapid Flashing is required.
- Vapour permeable underlay can be laid either under the Dry Valley or up to the edge of the valley support batten.
- Cambrian Double Slates will be required on all courses on both sides of the valley below 25°. At pitches of 25° and above, Cambrian Slate-and-a-Half can be used.
- At the eaves, the end of Dry Valley central upstand is filled with Kompriband foam filler to prevent bird and insect ingress.

**Components**
- **Dry Valley**
  - Valley Size: 3m x 0.36m
  - Material: Glass Reinforced Polyester (GRP)
- **Guidance Notes**
  - **Compatibility**: Designed to fit directly onto either existing or new valley support boards
  - **Performance**:
    - Pitch range: 17.5 - 60° at any plan angle with a maximum difference between the two adjacent roof slopes of 20°
    - Roof area on plan draining into valley: maximum 100m²
    - No sealing or jointing material is required if the following overlaps and rafter pitches are used:
      - Below 22.5°: 350mm
      - 22.5 - 29.5°: 300mm
      - 30° - 39.5°: 200mm
      - 40° and above: 150mm
BONDING GUTTER

Bonding Gutter is a mortar-free, dry-fix system designed to weatherproof the junction between two adjacent roof coverings. It is quick and easy to install in all weather conditions and provides a neat finish.

FEATURES

- Two products:
  - Bonding Gutter High Profile – with a central upstand of 100mm
  - Bonding Gutter Low Profile – with a central upstand of 70mm
- Available in standard lead grey colour
- Lightweight and flexible
- Safe and easy to cut
- Manufactured from long-lasting UV-resistant Glass Reinforced Polyester (GRP)

COMPATIBILITY

- If one of the roof slopes has high profiled tiles, the Bonding Gutter High Profile will be required
- Bonding Gutter High Profile is compatible with Plain Tile, Heathland Rosemary clay plain tiles and all Redland profiled tiles
- Bonding Gutter Low Profile is compatible with natural slates, fibre-cement slates, all Redland slate appearance tiles, DuoPlain and Fontenelle Interlocking Clay Plain Tile

PERFORMANCE

- No sealing or jointing material is required if the following overlaps and rafter pitches are used:
  - Below 22.5°: 350mm
  - 22.5° - 29.5°: 300mm
  - 30° - 39.5°: 200mm
  - 40° and above: 150mm

GUIDANCE NOTES

- Remove battens over the wall back to rafters either side.
- Lay the Bonding Gutter onto 6mm WBP ply over separating wall, if wall is a firebreak then bed Bonding Gutter onto mortar over wall.
- At ridge, a lead or Wakaflex Rapid Flashing Saddle is required.
- At the eaves, project Bonding Gutter 50mm over the fascia into the gutter and fill end of Bonding Gutter central upstand with Kompriband foam filler to prevent bird and insect ingress.

COMPONENTS

- Gutter Size: 3m x 0.21mm
- Material: Glass Reinforced Polyester (GRP)
SIDE ABUTMENT GRP SECRET GUTTER

The Side Abutment GRP Secret Gutter offers a secondary line of defence against wind-driven rain where a roof slope abuts a vertical wall. Being easy to cut and install makes this product an ideal solution for these otherwise complicated details.

FEATURES
• Lightweight, easy to handle 3 metre lengths
• Fire tested to BS 476-3:2004

COMPATIBILITY
• Suitable for all flat interlocking slates in the Redland range, DuoPlain and Fontenelle Interlocking Clay Plain Tile
• For Cambrian Slates use Standard Slates and Slate-and-a-Halves on alternate courses
• For all other slates use Left-hand/Verge Slates with interlock removed and Left-hand Half Slates alternately on left-hand abutments. Use Standard Slates and Right-hand Half Slates alternately on right-hand abutments
• For DuoPlain use Standard Tiles with interlock removed and Left-hand 3/4 TILES alternately on left-hand abutments. Use Standard TILES and Right-hand 3/4 TILES alternately on right-hand abutments
• For Fontenelle Interlocking Clay Plain Tile use Left-hand Verge TILES and Left-hand Verge Tile-and-a-Halves on left-hand abutments and standard tiles and Tile-and-a-Halves on right-hand abutments
• Gutter Overlap:
  • 150mm overlap for rafter pitch 30º and above
  • 200mm overlap for rafter pitch 22.5 - 29.5º
  • 250mm overlap for rafter pitch 17.5 - 22º
  • 300mm overlap for rafter pitch 15 - 17º

PERFORMANCE
• Minimum pitch 15º
• Maximum pitch 90º

GUIDANCE NOTES
• Fix a timber tilting fillet to support a lead or Wakaflex Rapid Flashing secret gutter outlet at base of secret gutter. Gutter outlet should be spayed out to ensure that water is discharged into gutter at eaves or run over this immediately below side abutment not as a concentrated flow.
• Finish underlay against wall.
• Finish tilting battens 50mm from wall and nail to final rafter.
• Mechanically fix all slates or tiles adjacent to the abutment.
• Where final rafter is less than 50mm from the wall nail a 10 x 50mm batten to the side and flush with the top of the rafter to support ends of the tiling battens.
• Should always be used in conjunction with a step and cover flashing when used with flat interlocking tiles.
• Step and cover flashing can be either lead or Wakaflex Rapid/Flash.

COMPONENTS
Gutter Size: 3m x 0.95m
Material: Glass Reinforced Polyester (GRP)
The Top Edge Abutment Ventilation System provides a continuous, unobtrusive, ventilation path from the roof void to the outside. The innovative design enables the system and cover flashing to be installed far quicker than when traditional methods are used.

FEATURES
- Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
- Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing
- Profile Filler Units bespoke to each tile type
- Ideal for lean-to-extensions

COMPATIBILITY
- Available for all tiles and slates in the Redland range except Cathedral Clay Pantile, Fenland Pantile, Redland 49, Postal Clay Tile and Old Hollow Clay Pantile
- For natural slate contact Technical Solutions on 03708 702595
- Can be used in conjunction with either lead or Wakaflex Rapid Flashing

PERFORMANCE
- Minimum pitch will depend upon the minimum pitch of the roof tiles but must not be less than 15°
- Maximum pitch 60° (except Stonewold II 44°)
- The effective ventilation area per metre run of abutment is 5,000mm²

GUIDANCE NOTES
- Ensure that the air passage from the roof void is not obstructed.
- The Top Edge Abutment Ventilation System is suitable for both traditional timber rafter construction, timber trussed rafter and rigid sarking constructions.
- The system is designed to fit a straight and level abutment wall.
- Full fixing instructions are included with each pack.
- The cover flashing can be either lead or Wakaflex Rapid Flashing; neither are supplied in the pack.
- If using Wakaflex Rapid Flashing in an exposed location please contact Technical Solutions on 03708 702595.
- If using lead collars should be a minimum of 150mm and a maximum sheet length of 1.5m.
- Mechanically fix all tiles on the top course.

COMPONENTS
Each pack contains sufficient components for 3m of abutment:
- Profile Filler Units (uPVC – grey) (tile specific)
- Lead Support Trays (uPVC – grey)
- Rachet Clips and Spacer Blocks (uPVC – grey)
The DryVent Ridge System provides a continuous weathertight ventilation path from the roof void to the outside. The system can also be easily converted when no high-level ventilation is required at the ridge. Both solutions provide an exceptionally durable method of securing ridge tiles. They are maintenance-free and require no mortar, delivering high resistance to storm damage.

**FEATURES**
- Provides a neat and attractive finish to the ridge line
- High resistance to storm damage.
- Suitable for use with concrete Half Round and Universal Angle Ridge Tiles and Rosemary Clay Half Round Ridge Tiles (300mm). For Ridge Tile colour availability, see Fittings Colour Range Tables on pages 73, 77 and 82

**COMPATIBILITY**
- Available for all tiles and slates in the Redland range except Cathedral Clay Pantile, Farland Pantile, Redland 49, Postel Clay Tile and Old Hollow Pantile
- Must not be used at rafter pitches below 15°
- For minimum and maximum pitches, refer to the table

**PERFORMANCE**
- For minimum and maximum pitches, refer to the table on the next page
- Must not be used at rafter pitches below 15°

**DRYVENT RIDGE SYSTEM (CAMBRIAN)**

**PITCH RANGE AND RIDGE BATTEN HEIGHT FOR DRY & DRYVENT RIDGE SYSTEM (8MM WIDE RIDGE BATTEN)**

<table>
<thead>
<tr>
<th>Pitch Range (Degrees)</th>
<th>Half Round</th>
<th>Universal Angle</th>
<th>Rosemary Half Round</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-35</td>
<td>15 37T 5R 32.5 37T 5 31.5 37 40 36 37 45 45.5 50 52.5 57 5 60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RIDGE SYSTEMS**

**CUSTOMER SERVICE:** 03705 601000
WWW.REDLAND.CO.UK/DRYVENTRIDGE
CONTINUOUS RIDGE SYSTEM

The Continuous Ridge System provides both high-level ventilation and mechanically fixed ridge tiles. The system is a genuine alternative to a mortar-bedded ridge with the added advantage of being quicker and requiring less skill to install.

FEATURES
- Uses Ridge-to-Ridge Seals that match the profile of the Redland ridge tiles perfectly to give a guaranteed weathertight seal.
- Traditional appearance
- Up to 33% quicker to fit than a mortar-bedded ridge
- Easy to install and can be laid even when bad weather is expected
- Continuous Ridge Systems ventilate and comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof void.
- Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing

COMPATIBILITY
- Compatible with natural slate, concrete slates, profile tiles and plain tiles.
- Not compatible with Old Hollow Clay Pantile or Fontenelle Interlocking Clay Plain Tile.
- For Ridge Tile colour availability see Fittings Colour Range Tables on pages 73, 77 and 82.
- For Rosemary clay tiles please contact Technical Solutions on 03708 702595.
- Not compatible with Ridge Vent Terminals, Gas Flue Terminals, Clay or Half Round Ridge.

PERFORMANCE
- For minimum and maximum pitches, refer to the table on the next page.

CONTINUOUS RIDGE SYSTEM (MINI STONEWOLD)
- Universal Angle Ridge Tile (sold separately)
- Half Round Ridge Tile (sold separately)
- Ridge Batten Strap
- Clamping Plate
- Rollable Weathertight Membrane

CONTINUOUS RIDGE SYSTEM (38MM WIDE RIDGE BATTEN)
- Universal Angle Ridge Tile
- Half Round Ridge Tile
- Ridge Batten Strap
- Clamping Plate
- Rollable Weathertight Membrane

CONTINUOUS RIDGE SYSTEM (38MM WIDE RIDGE BATTEN)
- Universal Angle Ridge Tile
- Half Round Ridge Tile
- Ridge Batten Strap
- Clamping Plate
- Rollable Weathertight Membrane

CONTINUOUS RIDGE SYSTEM (38MM WIDE RIDGE BATTEN)
- Universal Angle Ridge Tile
- Half Round Ridge Tile
- Ridge Batten Strap
- Clamping Plate
- Rollable Weathertight Membrane

GUIDANCE NOTES
- The Continuous Ridge System is suitable for traditional timber rafters, timber truss and rigid frame constructions.
- The systems are designed to fit a straight and level ridge line.
- When used with traditional timber rafters the height of the ridge board above the apex of the rafters will alter the number of 38 x 25mm tile battens required to construct the ridge line. This ensures that the ridge tile securing screw achieves a minimum 15mm penetration.
- Where timber framing is used and the underlay is left short of apex, some 100mm air gap. Counterbattens are extended to form an apex to support the ridge tile butler.
- Counterbattens on adjacent roof slopes must be aligned and extended to form an apex.
- Topped ridge ends with mortar Black End Ridge Tiles or Ridge End Caps.
- For use with unplastic pitches please contact theSupplementary local supplier.

ACCESSORIES
- In addition, Black End Ridge Tiles or Ridge End Caps will be required for all ridge situations.

COMPONENTS
- Each pack contains sufficient components to secure a 5 metre ridge line.
- 5 metres of Rollable Weathertight Membrane.
- 11 Ridge-to-Ridge Seals (either Universal Angle or Half Round) (Polypropylene – heavy) with Stainless Steel accessories and clamp plates.
- 9 Stainless Steel Ridge Batten Straps with 18 Stainless Steel ring shank nuts.
- 2 Stainless Steel Ridge End Fittings.
UNI-VENT RAPID RIDGE/HIP

Uni-Vent Rapid Ridge/Hip is a simple and quick to install system providing a secure, weatherproof and mortar-free universal solution for the mechanical fixing of ridge and hip tiles.

FEATURES
• Uses a flexible ridge-to-ridge seal to enable use with both Half Round and Universal Angle concrete ridge tiles and similar ridge profiles
• Traditional appearance
• Up to 33% quicker to fit than a mortar bedded ridge
• Easy to install and can be laid even when bad weather is expected
• Uni-Vent Rapid Ridge/Hips ventilate and comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof void
• Complies with BS 5534:2014 requirements for mechanical fixing

COMPATIBILITY
• Compatible with natural slate, concrete slates, profile tiles and plain tiles
• Not compatible with Old Hollow Clay Pantile, Cathedral Clay Pantile or Fontenelle Interlocking Clay Plain Tile
• For Ridge Tile colour availability see Fittings Colour Range Tables on pages 73, 77 and 82
• For Rosemary clay tiles please contact Technical Solutions on 03708 702595
• Not compatible with Ridge Vent Terminals, Gas Flue Terminals, Clay Half Round Ridge or Ornamental Ridge

GUIDANCE NOTES
• The Uni-Vent Rapid Ridge/Hip is suitable for traditional timber rafter, timber trussed rafter and rigid sarking constructions. The systems are designed to fit a straight and level ridge line.
• When used with traditional timber rafters the height of the ridge board above the apex of the rafters will alter the number of 38 x 25mm tile battens required to construct the ridge line. This ensures that the ridge tile securing screws achieve a minimum 15mm penetration.
• Where timber rafters are used seeing and underlay are left short of apex to allow 10mm air gap. Counterbattens are extended to form an apex to support the ridge line batten.
• Counterbattens/rafters on adjacent roof slopes must be aligned and extended to form an apex.
• Finish ridge ends with mortar, Block-End Ridge Tiles or Ridge End Caps.
• For use with unequal pitches please contact Technical Solutions on 03708 702595.
• For use with Natural Slate please contact Technical Solutions on 03708 702595.
• Mechanically fix all tiles on the top course.

COMPONENTS
Each pack contains sufficient components to secure a 10 metre ridge line:
• 10 metres of Rollable Weathertight Membrane.
• 22 Universal Flexi-Seals with Stainless Steel woodscrews and Clamping Plates.
• 17 Stainless Steel Batten Straps with 34 Stainless Steel ring shank nails.

ACCESSORIES
• The following accessories are also available:
  • Hip Support Tray (1.2m)
  • Kro-Clips
The Ridge Vent Terminal can be used for soil pipe, roof space ventilation or mechanical extraction. It can be incorporated into a DryVent Ridge or a mortar bedded ridge.

**Features**
- Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
- Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing
- Complies with BS EN 12056-2:2000 Gravity Drainage Systems Inside Buildings

**Compatibility**
- Available in concrete Half Round and Universal Angle Ridge Tiles and Rosemary clay Half Round Ridge Tiles
- Not suitable for use with Uni-Vent Rapid Ridge-Hip, Continuous Ridge System or on hip details
- Cannot be used as a gas flue
- For available colours, see Fittings Colour Range Tables on pages 73, 77 and 82

**Performance**
- Minimum and maximum pitch will depend on the tile profile and whether ridge tiles are dry fixed or mortar bedded
- The effective ventilation area for each terminal is 8.400 mm²
- To achieve roof space ventilation of 5,000 mm²/m run, they should be spaced at 1.68m centres
- The pressures/air flow resistance characteristics of the terminal are as follows:
  - At 15 litres/sec – 6.5 Pa
  - At 30 litres/sec – 26 Pa
  - At 60 litres/sec – 104 Pa

**Guidance Notes**
- Ridge Vent Terminals are suitable for timber trussed rafter and timber-sarking constructions. Where traditional timber rafter construction is used, trimmers will be required for each terminal position to allow a 300mm section of the ridge board to be removed.
- Where Ridge Vent Terminals are used in conjunction with DryVent Ridge and are required in close proximity, at least one rafter spacing will be required between each terminal to allow adequate fixing of the ridge batten after a section has been removed.
- The position of the Ridge Vent Terminal should not be within 600mm of a gas flue such that foul gases can vent back into the building.
- The Ridge Vent Terminal is not suitable where extracted air exceeds 80ºC. Please use the Gas Flue Ridge Terminal (see next page).
- For soil pipe termination do not install within 3 metres horizontally and 900mm vertically of an opening e.g. roof window and roof space ventilation.
- When connected to pipework or ducting, it is recommended that where water is likely to accumulate, joints are sealed and a condensation trap is fitted.

**Components**
- Each Ridge Vent Terminal is supplied ready assembled from the following:
  - Terminal cap and duct (uPVC – grey)
  - Ridge Ties (concrete/bricks – various)

**Accessories**
- Vent Adaptor
- Flexible Pipe
GAS FLUE RIDGETERMINAL

The Gas Flue Ridge Terminal is designed for use on duo-pitched roofs in conjunction with concrete Half Round or Universal Angle Ridge Tiles on DryVent Ridge or bedded ridges. The Terminal is of low airflow resistance design, to enable flue gases to escape even under high wind speed conditions.

FEATURES
- Not suitable for gas-fired condensing boilers
- Not suitable for use as a ventilation tile. For roof space, mechanical and soil pipe ventilation, please use the Redland Ridge Vent Terminal

COMPATIBILITY
- Available in concrete Half Round and Universal Angle Ridge Tiles
- Available in a limited range of Traditional and Heritage colours only. For available colours, see Fittings Colour Range Tables on pages 73, 77 and 82.
- Gas Flue Blanking Plates packs are required when used in conjunction with DryVent Ridge System
- Not suitable for use with Continuous Ridge Systems or Uni-Vent Rapid Ridge-Hip

PERFORMANCE
- Minimum and maximum pitch will depend on the tile profile and whether ridge tiles are dry fixed or mortar bedded.
- The Terminal is suitable for gas appliances of rated input not exceeding 60kW but it is not suitable for terminating flues from traditional coal or oil burning appliances. Please check suitability with your gas coal effect fire supplier.
- This product is only suitable where the flue can be terminated through a 100mm or 125mm type ‘R’ adaptor (not supplied by Redland)

GUIDANCE NOTES
- Gas Flue Ridge Terminals are suitable for timber trussed rafter and timber sarking constructions. Where traditional timber rafter construction is used, trimmers will be required for each terminal position to allow a 400mm section of the ridge board to be removed.
- Gas Flue Ridge Terminals must have a minimum 600mm of ridge tile between units.
- The top batten should be placed so as to leave a minimum air gap of 25mm to the Extension Adaptor. The underlay and any timber sarking should be cut back to the line of the batten.
- The ‘R’ type adaptor and Extension Adaptor must be connected to the Terminal with the nuts and washers provided. A gasket must be placed between each component to provide an effective seal.
- When fitting Gas Flue Ridge Terminals, a non-vented ridge is required within 600mm on either side of the Gas Flue to comply with Building Regulations. Gas Flue blanking plates are required for this purpose when used with Dryvent Ridge Systems.
DRYVENT MONORIDGE SYSTEM

The DryVent Monoridge System provides a continuous weathertight ventilation path from the roof void to the outside. The mechanically-fixed system complies with the requirements of the Building Regulations.

FEATURES
• Provides a neat and attractive finish
• Profile filler units bespoke to each tile type
• Easy to install and can be laid even when bad weather is expected
• Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
• Tried and tested and complies with BS 5534:2014

COMPATIBILITY
• Available for all tiles and slates in the Redland range except Cathedral Clay Pantile, Fenland Pantile, Redland 49, Postel Clay Tile and Old Hollow Clay Pantile
• Suitable for use with concrete Half Round and Universal Angle Monoridge Tiles
• For Monoridge Tile colour availability, see Fittings Colour Range Tables on pages 73, 77 and 82

PERFORMANCE
• Minimum pitch will depend upon the minimum pitch of the roof tiles but must not be less than 15º
• Maximum pitch for DuoPlain, Landmark Double Pantile, Landmark Double Roman, Grovebury Renown and 50 Double Roman is 47.5º; maximum pitch for Slate 10 range and Mini Stonewold is 52.3º (Stonewold II 44º). For all other interlocking tiles maximum pitch is 45º
• Maximum pitch for Plain Tiles is 55º
• The effective ventilation area per metre run of ridge is 5.000mm²

GUIDANCE NOTES
• The DryVent Monoridge System is suitable for traditional timber rafters, timber trussed rafter and rigid sarking constructions.
• The system is designed to fit a straight and level ridge line.
• When used in association with vertical Plain Tiles a lead flashing or Wakaflex Rapid Flashing should be dressed over the top of the vertical tile to a minimum of 100mm.
• Care must be taken to ensure that the air passage from the roof void is not obstructed. Allow 10mm air gap between top batten and monoridge fixing batten.
• Underlay is left 10mm short of apex.
• Where the system forms the junction with a flat roof the flat roof covering should lap behind the downstand leg of the monoridge. Ensure there is sufficient clearance between the downstand leg and the flat roof tilting fillet.
• The system may be used with both Half Round and Universal Angle Monoridge Tiles.
• When using the system with Rosemary clay plain tiles, use Landmark/Monoridge Tiles.
• Mechanically fix all tiles or tiles on the top course.
• Rosemary Eave/Top tiles do not hang on the final plain tile course. Instead the Eave/Top tile must be twice nailed to an additional batten that is turned on its side (Top and second top batten positions from apex are 10mm and 50mm respectively).
• All gable ends, a Black End Monoridge Tile or Monoridge End Cap should be used.

COMPONENTS
Each pack contains sufficient components to secure 4 concrete Monoridge Tiles. Each pack contains:
• Profile Filler Units (uPVC – grey) (tile specific)
• Monoridge, Ridge-to-Ridge Seal (polypropylene – black)
• Fixing Screws (Stainless Steel) and Washers (neoprene)

ACCESSORIES
• In addition, concrete Monoridge Tiles will be required in a colour to suit with matching Mini Block-End Ridge Tiles, left or right-hand at all gable ends or End Caps.
• A timber batten, 25mm thick, must be fixed vertically to allow monoridge tile fixing.

CUSTOMER SERVICE: 03705 601000
WWW.REDLAND.CO.UK/DRYVENTMONORIDGE
The RedLine Vent Tile provides roof space ventilation through the leading edge of the tile ensuring that the clean lines of the roof are maintained. It is ideal for use where alternative eaves and ridge ventilation systems are not appropriate and can also be used for mechanical extraction and soil pipe ventilation.

**FEATURES**
- Three variants available: Interlocking Plain Tile and DuoPlan
- Minimal visual impact
- Identical interlocks to the tiles ensure a simple and weathertight installation
- Ventilates to comply with BS EN 12056-2:2000, Gravity Drainage
- Tried and tested and complies with BS 5534:2014
- The Underlay Seal must always be installed to maintain the integrity of the roofing underlay
- Each RedLine Vent Tile should be nailed and clipped
- RedLine Vent Tiles are not suitable for hot flue gases, please use the Gas Flue Ridge Terminal
- For soil pipe termination do not install within 3 metres horizontally and 900mm vertically of an opening e.g. roof extract pipe
- When connected to a vent or ducting it is recommended that where water is likely to accumulate joints are sealed and a condensation trap is fitted
- Complete fixing instructions
- Suitable for roof space ventilation and mechanical extraction.

**PERFORMANCE**
- Tile pitch range for each RedLine Vent Tile will depend upon the minimum and maximum pitch of the relevant tile profile
- Maximum headlap is the same as that for the relevant tile profile
- The effective ventilation area is 6,000mm² (except DuoPlan which is 7,850mm²)
- The pitch range of each RedLine Vent Tile will depend upon the minimum and maximum pitch of the relevant tile profile
- To achieve roof space ventilation of 10,000mm² per metre

**PRESSURE/AIR-FLOW RESISTANCE (Pa)**

<table>
<thead>
<tr>
<th>Air Flow Rate</th>
<th>15 L/sec</th>
<th>30 L/sec</th>
<th>60 L/sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>DuoPlan Underlay Seal</td>
<td>340</td>
<td>350</td>
<td>320</td>
</tr>
<tr>
<td>RedLine Vent Tile (DuoPlan)</td>
<td>295</td>
<td>305</td>
<td>285</td>
</tr>
<tr>
<td>RedLine Vent Tile (Plan Tile)</td>
<td>274</td>
<td>284</td>
<td>264</td>
</tr>
</tbody>
</table>

**COMPATIBILITY**

**REDLINE VENT COLOURS (INTERLOCKING TILES)**

<table>
<thead>
<tr>
<th>Tile Colour</th>
<th>Vent Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Tuscan Red</td>
<td>Red</td>
</tr>
<tr>
<td>13 Antique Red</td>
<td>Red</td>
</tr>
<tr>
<td>02 Brown</td>
<td>02 Brown</td>
</tr>
<tr>
<td>12 Autumnal</td>
<td>Red</td>
</tr>
<tr>
<td>13 Autumnal</td>
<td>Red</td>
</tr>
<tr>
<td>14 Cool Grey</td>
<td>Red</td>
</tr>
<tr>
<td>15 Brown</td>
<td>Brown Brindle</td>
</tr>
<tr>
<td>16 Medium Brown</td>
<td>Brown Brindle</td>
</tr>
<tr>
<td>17 Medium Grey</td>
<td>Brown Brindle</td>
</tr>
<tr>
<td>20 Manor House Tile</td>
<td>Manor House Tile</td>
</tr>
<tr>
<td>22 Weathered Red</td>
<td>03 Antique Red</td>
</tr>
<tr>
<td>23 Autumnal</td>
<td>03 Antique Red</td>
</tr>
<tr>
<td>24 Blaebian</td>
<td>03 Antique Red</td>
</tr>
<tr>
<td>25 Autumnal</td>
<td>03 Antique Red</td>
</tr>
<tr>
<td>26 Blaebian</td>
<td>03 Antique Red</td>
</tr>
<tr>
<td>27 Red</td>
<td>Red</td>
</tr>
<tr>
<td>28 Light Rustic</td>
<td>Red</td>
</tr>
<tr>
<td>29 Medium Rustic</td>
<td>Red</td>
</tr>
<tr>
<td>30 Red</td>
<td>Red</td>
</tr>
<tr>
<td>31 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>32 Red</td>
<td>Red</td>
</tr>
<tr>
<td>33 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>34 Red</td>
<td>Red</td>
</tr>
<tr>
<td>35 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>36 Red</td>
<td>Red</td>
</tr>
<tr>
<td>37 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>38 Red</td>
<td>Red</td>
</tr>
<tr>
<td>39 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>40 Red</td>
<td>Red</td>
</tr>
<tr>
<td>41 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>42 Red</td>
<td>Red</td>
</tr>
<tr>
<td>43 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>44 Red</td>
<td>Red</td>
</tr>
<tr>
<td>45 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>46 Red</td>
<td>Red</td>
</tr>
<tr>
<td>47 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>48 Red</td>
<td>Red</td>
</tr>
<tr>
<td>49 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>50 Red</td>
<td>Red</td>
</tr>
<tr>
<td>51 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>52 Red</td>
<td>Red</td>
</tr>
<tr>
<td>53 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>54 Red</td>
<td>Red</td>
</tr>
<tr>
<td>55 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>56 Red</td>
<td>Red</td>
</tr>
<tr>
<td>57 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>58 Red</td>
<td>Red</td>
</tr>
<tr>
<td>59 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>60 Red</td>
<td>Red</td>
</tr>
<tr>
<td>61 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>62 Red</td>
<td>Red</td>
</tr>
<tr>
<td>63 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>64 Red</td>
<td>Red</td>
</tr>
<tr>
<td>65 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>66 Red</td>
<td>Red</td>
</tr>
<tr>
<td>67 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>68 Red</td>
<td>Red</td>
</tr>
<tr>
<td>69 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>70 Red</td>
<td>Red</td>
</tr>
<tr>
<td>71 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>72 Red</td>
<td>Red</td>
</tr>
<tr>
<td>73 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>74 Red</td>
<td>Red</td>
</tr>
<tr>
<td>75 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>76 Red</td>
<td>Red</td>
</tr>
<tr>
<td>77 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>78 Red</td>
<td>Red</td>
</tr>
<tr>
<td>79 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>80 Red</td>
<td>Red</td>
</tr>
<tr>
<td>81 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>82 Red</td>
<td>Red</td>
</tr>
<tr>
<td>83 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>84 Red</td>
<td>Red</td>
</tr>
<tr>
<td>85 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>86 Red</td>
<td>Red</td>
</tr>
<tr>
<td>87 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>88 Red</td>
<td>Red</td>
</tr>
<tr>
<td>89 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>90 Red</td>
<td>Red</td>
</tr>
<tr>
<td>91 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>92 Red</td>
<td>Red</td>
</tr>
<tr>
<td>93 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>94 Red</td>
<td>Red</td>
</tr>
<tr>
<td>95 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>96 Red</td>
<td>Red</td>
</tr>
<tr>
<td>97 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>98 Red</td>
<td>Red</td>
</tr>
<tr>
<td>99 Medium Grey</td>
<td>Red</td>
</tr>
<tr>
<td>100 Red</td>
<td>Red</td>
</tr>
</tbody>
</table>

**GUIDANCE NOTES**
- Suitable for roof space ventilation and mechanical extraction.
- Suitable for soil vent pipe termination for single and two storey housing.
- Each RedLine Vent Tile should be nailed and clipped except Plan Tile Unit which is secured with 4 nails.
- The Underlay Seal must always be installed to maintain the integrity of the roofing underlay.
- When using the RedLine Vent Tile for roof space ventilation where insulation is between the rafters ensure the gSpirit pipe is clear of the insulation and is necessary.
- RedLine Vent Tiles are not suitable for hot flue gases, please use the Gas Flue Ridge Terminal.
- RedLine Vent Tiles must not be bolted adjacent to one another.
- For soil pipe termination do not install within 3 metres horizontally and 900mm vertically of an opening e.g. roof vent pipe.
- When connected to a vent or ducting it is recommended that where water is likely to accumulate joints are sealed and a condensation trap is fitted.

**COMPONENTS**
- Each pack contains:
  - 1 x Vent (UV protected Medium Density Polyethylene (MDPE) – PVC for Redland DuoPlan)
  - 1 x Underlay Seal
  - Complete fixing instructions

**ACCESSORIES**
- RedLine tile adaptor to connect to a 110mm soil vent or mechanical extraction pipe
- Tile adaptor
THRUVENT TILE

The ThruVent Tile is a means of incorporating ventilation within the roof slope where alternative eaves and ridge ventilation systems are not appropriate. It can also be used for mechanical extraction and soil pipe ventilation.

FEATURES

• Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
• Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing
• Complies with BS EN 12056-2:2000, Gravity Drainage Systems inside Buildings

COMPATIBILITY

• Available for all tiles and slates in the Redland range in all colours (except DuoRain, Rosemary, and Heathland)
• VentTiles are also available for natural slate

PERFORMANCE

• Minimum and maximum pitch will depend on the tile profile
• Minimum and maximum headlap will depend on the tile profile
• To achieve the specified roof space ventilation the ThruVent Tiles should be spaced according to the table below

THRUVENT PERFORMANCE / SPACING

<table>
<thead>
<tr>
<th>Tile Profile</th>
<th>ThruVent</th>
<th>Roof space ventilation (mm²/h)</th>
<th>ThruVent spacing (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5k</td>
<td>5000</td>
<td>0.9</td>
<td>8</td>
</tr>
<tr>
<td>4.5k</td>
<td>1000</td>
<td>0.45</td>
<td>6</td>
</tr>
<tr>
<td>8.8k</td>
<td>5000</td>
<td>1.17</td>
<td>8</td>
</tr>
<tr>
<td>8.8k</td>
<td>1000</td>
<td>0.88</td>
<td>4</td>
</tr>
<tr>
<td>8.8k</td>
<td>2000</td>
<td>0.35</td>
<td>3</td>
</tr>
<tr>
<td>8.8k</td>
<td>25000</td>
<td>0.6</td>
<td>2</td>
</tr>
</tbody>
</table>

Can also be used for:
• Mechanical extraction ventilation
• Soil ventilation: Use 4.5k for low rise building (up to 2 storey). No building height restriction applies to the 8.8k ThruVent Tile or the Hi-Flow ThruVent Tile

THRUVENT'S AIRFLOW RESISTANCE

<table>
<thead>
<tr>
<th>Tile Profile</th>
<th>Pressure/Flow Resistance (Pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>150/60</td>
</tr>
<tr>
<td>Cambrian Slate / Fournielle</td>
<td>22</td>
</tr>
<tr>
<td>Plain Tile</td>
<td>10/40</td>
</tr>
<tr>
<td>4.5k ThruVent</td>
<td>25</td>
</tr>
<tr>
<td>Cathedrial Clay Pantile / Regent Pantile / Old Hollow Clay Pantile</td>
<td>23</td>
</tr>
<tr>
<td>Redland 49 / Redland 49 Pantile Tile</td>
<td>29</td>
</tr>
<tr>
<td>5/10 Range</td>
<td>2</td>
</tr>
<tr>
<td>Stonewold I</td>
<td>3</td>
</tr>
<tr>
<td>Mini Stonewold</td>
<td>4</td>
</tr>
<tr>
<td>Landmark Double Pantile / Grosovery</td>
<td>2</td>
</tr>
<tr>
<td>Landmark Double Roman / 50 Double Roman</td>
<td>2</td>
</tr>
<tr>
<td>Regent</td>
<td>2</td>
</tr>
<tr>
<td>Retainer</td>
<td>3</td>
</tr>
<tr>
<td>Cambrian Slate</td>
<td>3.5</td>
</tr>
</tbody>
</table>

PRODUCT MEASUREMENTS (MM)

<table>
<thead>
<tr>
<th>Tile Profile</th>
<th>5</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5k ThruVent Tile</td>
<td>124</td>
<td>40</td>
</tr>
<tr>
<td>Cambrian Slate</td>
<td>103</td>
<td>9</td>
</tr>
<tr>
<td>Redland 49</td>
<td>107</td>
<td>40</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>122</td>
<td>32</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>110</td>
<td>17</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>177</td>
<td>40</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>114</td>
<td>22</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>85</td>
<td>31</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>98</td>
<td>23</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>85</td>
<td>31</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>98</td>
<td>23</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>86</td>
<td>21</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>103</td>
<td>26</td>
</tr>
<tr>
<td>8.8k ThruVent Tile</td>
<td>119</td>
<td>1</td>
</tr>
</tbody>
</table>

GUIDANCE NOTES

• The Underlay Seal provided should always be installed to maintain the integrity of the roofing underlay.
• Where Plain Tile ThruVent tiles are positioned between each other spigot they should be staggered on alternate courses.
• Where ThruVent Tiles are used in combination with insulation between the rafters ensure that the spigot pipe on the underside is clear of the insulation by cutting the pipe where necessary.
• ThruVent Tiles are not suitable for hot flue gases, please use the Gas Flue Ridge Terminal (see page 44).
• Plain Tile ThruVent tiles are installed to 100mm gauge only.
• For soil pipe terminations do not install within 3 metres horizontally and 150mm vertically of an opening e.g. roof windows and roof space ventilation.
• When connecting to pipework or ducting it is recommended where water is likely to accumulate joints are sealed and a condensation trap is fitted.
• A Hi-Flow ThruVent Tile with an effective ventilation area of 15,000mm² is also available for Cambrian Slate. Suitable for low level ventilation at valleys where insulation is positioned between the rafters (partial-fill). Install one Hi-Flow ThruVent tile per rafter space either side of the valley to provide effective ventilation equivalent to 25,000mm²/m².

COMPONENTS

• The ThruVent Tile is manufactured in concrete with a PVC ventilation unit and cap. The caps are colour coordinated to the colour of the tile base.
• The Plain Tile ThruVent tile consists of a three tile moulded unit, batten support brackets and clips.
• Each Plain Tile is supplied with a Underlay Seal.

Each pack contains:
• 1 x ThruVent Tile (concrete and PVC)
• 1 x Underlay Seal

ACCESSORIES

• A Flexible Pipe is available for connecting to a 110mm soil vent pipe or mechanical ventilation duct.

4.5K THRUVENT TILE CONNECTED TO FLEXIBLE PIPE (REDLAND 49)

50 Ventilation Tiles

THRUVENT TILE

WWW.REDLAND.CO.UK/THRUVENTTILE

CUSTOMER SERVICE: 03705 601000
RAPID ROOF VENT TILE

A range of discreet ventilating tiles suitable for both low and high-level roof space ventilation, to combat condensation, as well as mechanical and soil pipe ventilation. Suitable for use with most popular interlocking concrete tiles and plain tiles.

FEATURES
- Discrete design matches the aesthetics of the roof
- Excellent weather performance
- Rigid construction, high quality
- Ventilates to comply with BS 5250:2011, therefore reducing the risk of harmful condensation in the roof
- Tried and tested and complies with BS 5534:2014 requirements for mechanical fixing
- Complies with BS EN 12056-2:2000, Gravity Drainage Systems Inside Buildings

COMPATIBILITY
- Complies with NHBC guidelines for high-level roof space ventilation, to combat condensation, as well as mechanical and soil pipe ventilation. Suitable for use with most popular interlocking concrete tiles and plain tiles.

PERFORMANCE
- The effective ventilation area is 10,000mm² (except Redland 49 which is 8,600mm²) and Plain Tile which is 6,500mm².

To achieve the specified roof space ventilation, Rapid Roof Vents should be spaced according to the table below.

RAPID ROOF VENT SPACING

<table>
<thead>
<tr>
<th>Rapid Roof Vent</th>
<th>Roof Space Ventilation (mm²/m)</th>
<th>Vent Spacing (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlocking (except Redland 49)</td>
<td>5,000</td>
<td>2</td>
</tr>
<tr>
<td>10,000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>20,000</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Redland 49 (inc Adaptor)</td>
<td>5,000</td>
<td>1.73</td>
</tr>
<tr>
<td>10,000</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>20,000</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Plain Tile</td>
<td>5,000</td>
<td>3.3</td>
</tr>
<tr>
<td>10,000</td>
<td>1.65</td>
<td></td>
</tr>
<tr>
<td>20,000</td>
<td>0.8</td>
<td></td>
</tr>
</tbody>
</table>

RAPID ROOF VENT TILE COLORS

<table>
<thead>
<tr>
<th>Tile Type</th>
<th>Tile Colour</th>
<th>Vent Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Stonewold / Grovebury / Renown / 50 Double Roman</td>
<td>30 Slate Grey</td>
<td>30 Slate Grey</td>
</tr>
<tr>
<td>39 Terracotta</td>
<td>36 Brown</td>
<td></td>
</tr>
<tr>
<td>34 Tuscan Brown</td>
<td>34 Tuscan Brown</td>
<td></td>
</tr>
<tr>
<td>73 Breckland Brown</td>
<td>31 Red</td>
<td></td>
</tr>
<tr>
<td>30 Slate Grey</td>
<td>30 Slate Grey</td>
<td></td>
</tr>
<tr>
<td>30 Slate Grey</td>
<td>78 Rustic Red</td>
<td></td>
</tr>
<tr>
<td>52 Breckland Brown</td>
<td>36 Brown</td>
<td></td>
</tr>
<tr>
<td>39 Farmhouse Red</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>36 Tudor Brown</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>34 Terracotta</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>36 Brown</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>36 Brown</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>34 Terracotta</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>36 Brown</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>34 Terracotta</td>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>30 Slate Grey</td>
<td>30 Slate Grey</td>
<td></td>
</tr>
</tbody>
</table>

REDLAND 49

- Interlocking Tile Pipe Adaptor or Plain Tiles Pipe Adaptor
- Flexible Pipe

GUIDANCE NOTES
- Place the vent tile in position so that the moulded underside lip is located below the interlock of the adjacent tile to prevent the vent tile from lifting.
- Ensure the Underlay Seal fits around the spigot and returns to a flat position against the underlay after fitting.
- When using the adaptor ensure the adaptor lug is located in the appropriate channels in the vent spigot.
- Rapid Roof Vent for Redland 49 tiles must be installed with the Pipe Adaptor supplied.

COMPONENTS
- Each pack contains:
  - 1 x Rapid Roof Vent
  - 1 x Underlay Seal
  - 1 x Pipe Adaptor (Redland 49 Vent only)

Available:
- Interlocking Tiles Pipe Adaptor or Plain Tiles Pipe Adaptor
- Flexible Pipe
WAKAFLEX RAPID FLASHING

Wakaflex Rapid Flashing can be used instead of lead for the majority of pitched roof applications. The unrivalled speed and ease of installation enables standard flashing details to be completed twice as quickly as with lead, offering a viable and safer alternative to traditional methods.

FEATURES
- Appearance of lead grey colour
- Lighter weight than lead and easy to use
- Can be moulded quickly and easily, without the need for special tools
- Manufactured from environmentally-friendly materials
- No welding required, thanks to the self-fusing properties of the material
- Inensitive to extremes of cold and heat (-40º to +100ºC)
- No scrap value means Wakaflex Rapid Flashing is not at risk of theft
- 20-year product guarantee
- Low site wastage due to ease of cutting and simple fixing
- Non-toxic

COMPATIBILITY
- Compatible with all Redland tiles and slates
- Suitable for use with most pitched roofing materials

PERFORMANCE
- Awarded British Board of Agrément Certification, certificate number 09/4624

TRADITIONAL STEP AND COVER FLASHING – FLAT INTERLOCKING TILES

CONTINUOUS FLASHING, CHASED – PROFILE TILES

COMPONENTS
- Colourfast plastic with Aluminium rib mesh insert and butyl sealing edge
- Various sizes and weights

ACCESSORIES
- Additional Butyl Strip (20mm x 2m)
- Wakaflex Rapid Flashing Roller
- Wakaflex Rapid Flashing Strip (2m)
- Wakaflex Rapid Flashing Sealing Strip (310ml)
- Wakaflex Rapid Flashing Polyurethane Sealant (290ml)

GUIDANCE NOTES
- Must be installed on dry and clean tiles. If laid on damp surfaces, ensure Wakaflex Rapid Flashing is first fixed to surface using Wakaflex Rapid Flashing Polyurethane Sealant.
- Only a pair of scissors or a Stanley knife is required for cutting
- A roller is recommended for joining pieces. Do not use a hammer to form, the force of your fingers is sufficient coupled with a roller
- Overlap pieces by 30mm
- Where Wakaflex Rapid Flashing is chased into walls or when Wakaflex Rapid Flashing strip is used, seal with Wakaflex Rapid Flashing Sealing Strip

140mm x 5m 2.4kg 2
180mm x 5m 3.1kg 4
280mm x 5m 4.8kg 4
280mm x 10m 9.6kg 2
370mm x 5m 6.3kg 3
560mm x 5m 9.6kg 2

 half slate pair (4263) 50 x 25mm SW batten 50 Double Roman tile 280mm (9955/6) or 370mm (9957) (depending on how tiles are cut, positioned at abutment) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be complete pan and crown of the profile, and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.

Cavity tray
Redland GRP Secret Gutter
38 x 38mm SW Nogging
Underlay

Wakaflex Rapid Flashing (280mm or 370mm wide) (with top edge including built-in strip removed) cover flashing (25mm into brickwork (see detail), into a 25mm x 10mm chased raking slot). Flashing to dress over tiles by not less than 150mm and be properly adhered to tiles with built-in butyl strip. Wakaflex Rapid Flashing to be laid in accordance with Redland Fixing Instructions available at www.redland.co.uk.
RAPID ROOF PUTTY

Rapid Roof Putty is a flexible, fibre-reinforced synthetic mortar. It can be used with all types of concrete tiles and slates as an alternative to traditional concrete mortars, and provides weathertightness against driving rain and drifting snow.

FEATURES
• Available in Black, Brown and Terracotta
• Ready to use straight out of the box
• Lightweight
• Easy to transport onto the roof
• Elastic product flexes naturally with the roof
• Doesn’t crack over time
• Minimal mess and waste
• Can be installed even when bad weather is expected

COMPATIBILITY
• Compatible with Redland’s complete concrete tile range
• Not suitable for use with clay tiles and Cambrian Slate

PERFORMANCE
• Weight is approximately 500g/m²
• Made from linseed and mineral oils combined with micro polystyrene balls
• Drying takes place naturally when exposed to air
• Can be formed with a trowel to give a smooth finish with any excess putty used for the next ridge tile
• Dries to a slightly darker tone than when first taken out of the bag
• All ridge and hip tiles should be mechanically fixed through to the ridge/hip batten to comply with BS 5534:2014. Verge tiles should be fixed with verge clips

GUIDANCE NOTES
• All tiles must be dry and thoroughly cleaned of loose particles before installation begins.
• Should be used immediately after opening airtight bags.
• Disposible plastic gloves should be worn when handling.
• Withstands temperatures from -40°C to +80°C. Works best at 20°C. Store out of direct sunlight and excessive heat.
• Use within one year of production.

Components
Box Coverage Approx 2m ridge or hip (both sides)
Material Linseed and mineral oils with micro polystyrene balls
Pack Quantity 9 individually wrapped strips per box

COMPONENTS
Box Coverage Approx 2m ridge or hip (both sides)
Material Linseed and mineral oils with micro polystyrene balls
Pack Quantity 9 individually wrapped strips per box

RAPID ROOF PAINT

Rapid Roof Paint is an ideal solution for roofers wishing to paint over those tiles which have become scratched or scuffed during distribution or laying, ensuring the whole roof looks its best.

FEATURES
• Conceals scuffs and scratches
• Quick and easy to apply
• Lasts up to eight years
• Can be applied with a standard paint brush
• The same paint used in the tile manufacturing process to give the repainted tiles an exact match to their original colour

COMPATIBILITY
• Available in 3 colours – Black (63), Blue (64) and Charcoal Grey (77)
• Can be used on all Redland colour-coated tiles and fittings
• Not suitable for use on whole roofs or any uncoated tiles and fittings

PERFORMANCE
• Designed for colour touching-up only

GUIDANCE NOTES
• Before use ensure that the tile is dry and clean.
• Stir well before use and apply with a brush.
• Ensure rain is not imminent.
• The temperature should be at least 20°C during application.
• Brushes can be washed with tap water.

Components
Contents (one pot) 2.5 litres
Coverage Approximately 50m²
MORTAR BEDDED FIXING KIT

The Redland Mortar Bedded Fixing Kit is the new way to mechanically fix mortar bedded ridges and hips. It maintains a traditional aesthetic, whilst complying with BS 5534:2014 and NHBC Technical Standards.

FEATURES

• Maintains a traditional look
• Simple to use: Very similar to standard mortar bedding installation
• One system to be used for both ridges and hips
• Complies with BS 5534:2014 requirements for mechanical fixing
• Complies with NHBC Guidelines for mechanical fixing

COMPATIBILITY

• Fully compatible with all Redland tiles
• Compatible with most other tiles and slates
• Suitable for traditional timber rafter, timber trussed rafter and rigid sarking constructions
• Designed to fit a straight and level ridge line with equal pitches on either side of the ridge

COMPONENTS

Each Mortar Bedded Fixing Kit contains sufficient components to secure 5m of concrete ridge or hip tiles or 3.3m of clay ridge or hip tiles. Each pack contains:

• 8 x Batten Straps (Stainless Steel)
• 11 x Universal Angle Clamping Plates (Stainless Steel)
• 16 x Batten Strap Nails (Stainless Steel)
• 11 x 100mm Woodscrews (Stainless Steel)

GUIDANCE NOTES

• When used with traditional timber rafters, the height of ridge board above the apex of the rafters will alter the number of 38mm x 25mm tile battens required to construct the ridge tree. This ensures that the ridge tile securing screw achieves a minimum 15mm penetration.
• Counterbattens/rafters on adjacent roof slopes must be aligned and extended to form an apex.
• End ridges can be finished with a mortar bedded end, Block End Ridge Tile or plastic end cap.
**KRO-CLIP**

Kro-Clip is a versatile clip that allows small roof tile cuts to be mechanically fixed in accordance with BS 5534:2014, particularly at hips and valleys.

**FEATURES**
- Robust solution to the long-standing problem of fixing small cut tiles
- Quick and easy to fit
- Firmly grips the side of the tile
- Suitable for numerous roofing details such as at hips and valleys and around roof windows, dormers and solar PV panels
- Mechanical fixing for consistent results, removing the need for glue which requires optimum conditions for use
- Supplied in convenient boxes of 50 clips
- Universal fit covering a large range of tile types

**COMPATIBILITY**
- Works with any tile from 8-16mm thickness, including Plain Tiles and DuoPlan, or where the cut section of the tile is 8-16mm thick
- Not suitable for Cambrian Slate

**PERFORMANCE**
- The rigid clip is secured to the roof tile using a hammer. The attached wire is then wound around a nail which itself is secured to a convenient structural timber fixing point, e.g. a tiling batten, ridge or hip rafter
- Kro-Clip can be used either on its own or in combination with other clips such as the Redland C-Clip to provide secure head and/or tail fixings for small roof tile cuts and other difficulties to fix roof tiles

**GUIDANCE NOTES**
- Insert the clip onto the cut edge of the tile by pushing the jaws of the clip onto the tile and then use a hammer to gently fully engage the clip
- Wrap the attached wire around a clout nail fixed into either a rafter or batten
- The nail position must be above the clip position with the distance between kept as short as possible with the wire pulled tight

**COMPONENTS**
- Material: Stainless Steel
- Size: 30mm long clip with 380mm attached wire
- Box Quantity: 500

---

**INNOFIX CLIP**

Innofix is the multi award-winning revolutionary new tool-free tile clip. Simple to fix, with less tile breakage and quicker than ever to install. It’s our strongest clip yet, and suitable for all UK exposures under the new BS 5534:2014.

**FEATURES**
- Five sizes available to suit all Redland concrete interlocking tiles
- Tool-free – quick and simple to fix
- Unique clip magazine allowing tangle-free usage
- Colour-coded for error-free identification
- Award-winning design

**COMPATIBILITY**
- Innofix Clips are compatible with the following tiles:
  - Red: Grovebury, Regent, Landmark Double Pantile and Fenland Pantile
  - Light Blue: 50 Double Roman and Landmark Double Roman
  - Light Orange: Redland 49 and Renown
  - Gold: Mini Stonewold and ModBond Mini Stonewold
  - Purple: Richmond 10 Slate, ModBond Richmond 10 Slate, Saxon 10 Slate, Landmark 10 Slate and DuoPlan
- For the tile course immediately above a sprocket, it is necessary to use the next colour up i.e. instead of Purple use Gold, instead of Gold use Light Orange, instead of Light Orange use Light Blue, instead of Light Blue use Red. For sprockets on a roof using the Red clip a special Black clip is available

**PERFORMANCE**
- Up to 40% quicker to install than traditional nailed clips
- Suitable for all exposure zones under BS 5534:2014
- Rust-proof and made to last the lifetime of the roof
- Quickest ever clip to install
- Storm-proof

**GUIDANCE NOTES**
- Hook clip over tile interlock and then push under batten
- Can only be used with 50 x 25mm tiling battens
- When used on roofs with counterbattens they must be 15mm high

**COMPONENTS**
- Material: Stainless Steel
- Box Quantity: 100
HIP END CAP

Hip End Caps are the new way to complete a dry hip installation. Cost-effective and quick-to-install, Hip End Caps are compatible with all Redland dry hip systems providing a neat, colour-matched finish to the hip end.

FEATURES
• Available in both Universal Angle and Third Round profiles
• Available in Black and Terracotta. Third Round additionally available in Brown
• Quick and easy to install
• Lightweight, high-impact construction

COMPATIBILITY
• Third Round Hip End Cap designed for use with Rosemary clay and Redland concrete hip tiles or equivalent hip tile profiles
• Universal Angle Hip End Cap designed for use with both concrete and clay universal angle hip tiles
• Colour matched to suit most hip tiles

RIDGE END CAP

Ridge End Caps are the easy way to complete a dry ridge installation. Cost-effective and quick-to-install, Ridge End Caps are designed to work seamlessly with Redland dry verge systems to give a neat, weathertight, colour-matched aesthetically pleasing finish to a roof system.

FEATURES
• Available in Universal Angle and Half Round designs
• Quick and easy to install
• Maintenance-free
• Complies with NHBC Guidelines for mechanical fixing

COMPATIBILITY
• Colour match to Rapid Verge units (Slate Grey, Rust) and our Clay Universal Angle Ridge Tiles (Black and Terracotta)
• Half Round Ridge End Cap compatible for use with Rosemary clay and Redland concrete half round ridge tiles or equivalent ridge tile profiles
• Universal Angle Ridge End Cap compatible for use with Redland concrete and clay universal angle ridge tiles or equivalent ridge tile profiles

GUIDANCE NOTES
• Note: When the Half Round End Cap (9772) is used with Rosemary Clay Half Round Ridge tiles a small part of the lower edge of the clay ridge tile is left exposed this does not affect the technical performance of the End Cap.
OUTLET ADAPTORS

A range of modular Outlet Adaptors, that can be combined with Redland interlocking concrete tiles to give a great fit and match to the rest of the tiles, giving peace of mind, a tidy look and a weather-tight roof.

FEATURES
• Three-part system comprising of
  • Outlet Base Tile to match the other tiles on the roof
  • Cable Adaptor, Solar Adaptor or Aerial Adaptor depending on application
  • Cable Seal to ensure the integrity of the underlay
  • Fits surrounding tiles perfectly and matches tile colour
  • Easy to use
  • Secure fixing system

COMPATIBILITY
• Outlet Base Tiles are available for the following tiles in all available colours: Landmark Double Pantile, Landmark Double Roman, Grosebury, 50 Double Roman, Regent, Renown, Stonewold, 11 Savin 10 Slate, Landmark 10 Slate, Richmond 10 Slate, MockBond Richmond 10 Slate, Mini Stonewold, and MockBond Mini Stonewold
• Cable, Solar and Aerial Adaptors are available in the following colours: Grey, Terracotta and Brown
• Cable Seals are available in the following sizes: 8-12mm, 15-22mm and 25-32mm

PERFORMANCE
• Cable Outlet Adaptors – the perfect solution for passing cables into the roof space whether they are from solar PV panels, TV aerials or satellite dishes. They can hold up to 8 separate cables with each held securely in place and sealed against water penetration with a foam seal
• Solar Outlet Adaptors – designed for larger cables or pipes, such as those for a solar thermal panel. These cables and pipes are less flexible, so the assembly has plenty of space to allow for this
• Aerial Outlet Adaptors – can be used to allow aerials, satellite dishes and other roof mounted items to be attached through to the roof space for when there is no suitable alternative external fixing point. The adaptor provides a weather-tight seal around the mounting pole and maintains the integrity of the roof covering

COMPONENTS
MATERIAL
Outlet Base
Concrete
Outlet Adaptor
PVC

ACCESSORIES
• Cable Seal

GUIDANCE NOTES
• The Cable Adaptor comes in two sections, with a foam strip to seal the cables and a blanking strip to close any holes that are not used. The assembly is secured with three screws.
• The Solar Adaptor is sealed using the rubber gasket, which can be cut to fit the size of the cable or pipe being used. The adaptor can accommodate up to 70mm diameter cables.
• The Aerial Adaptor comes in two parts. The lower part can be rotated 180° to allow for a different range of roof pitches. The upper part snaps onto the lower part and is adjusted to the vertical. The top of the upper part can be cut to suit different mounting pole diameters.
• Cable Seals should be used wherever the underlay is penetrated. They maintain the integrity of the roof system and prevent any water on the underlay entering the roof space. They are available in a range of sizes to suit different cable/pipe sizes and should always be installed in a diamond orientation.
**INDAX PV SYSTEM**

Based on proven crystalline technology, the fourth generation of InDaX photovoltaic integrated modules fulfils two functions: clean, solar electricity generation and a secure roof covering. The low system height, as the panel sits in line with the surrounding tiles, creates an improved aesthetic and weathertight system.

**FEATURES**

- Low overall system height with modules mounted in attractive black coated aluminium framing
- Safe, flexible and quick assembly
- Wide pitch range capability
- Maximum energy yield
- Weathertight and high wind uplift resistance
- Fully MCS and BBA certified, FIT-compliant
- 25-year power output guarantee

**PERFORMANCE**

- The InDaX PV System can be installed on roofs with pitches between 15° and 65°
- Modules are laid in arrays and mounted in specially designed framing that optimises the ventilation at the rear of each module and thereby maximises the power output. Holes in the eaves profile allows condensate to drain away
- InDaX modules fulfil the same protective functions as roof tiles, i.e. weathertightness and resistance to wind uplift. Modules can withstand loads up to 550kg/m². High quality flashings from the roof window industry are used
- InDaX PV System is certified to MCS 005 and MCS 012 covering wind uplift resistance, weathertightness and external fire resistance
- Redland guarantees that during the first year of operation the module power output will be at least 96.5% of the rated power output. From year 2 to 25, the manufacturer guarantees that the module power output will reduce by no more than 0.6% per year of the rated power output, such that by the end of the 25th year of operation, the modules will still provide a minimum power output of 82% compared to the rated power output

**COMPATIBILITY**

- Compatible with all Redland tiles and slates and similar profiles

**GUIDANCE NOTES**

- Modules can be installed from left to right or right to left and can be installed in either rows or columns. This flexibility along with a minimum number of parts and the low system weight, means the installation can be carried out simply and quickly.
- Modules are installed from top to bottom ensuring maximum safety during installation. Separate drainage channels overcome any unevenness in the roof structure.

**COMPONENTS**

- A Basic Set must always be used. The Basic Set comprises of a 2 x 2 module array and all framings and flashings to fit.
- For larger module arrays, extension sets are used (horizontal and/or vertical) along with additional drainage channels and head clamps as necessary.

**POWER OUTPUT**

- 255Wp

**SOLAR CELLS PER MODULE**

- 60

**CELL TYPE**

- Polycrystalline

**CELL DIMENSIONS**

- 156 x 156mm

**FRONT PANEL**

- Tempered Solar Glass

**BACKSIDE PANEL**

- Laminated Thermoplastic

**FRAMING**

- Black Anodised Aluminium

**OVERALL DIMENSIONS**

- 1999 x 999mm

**INSTALLED DIMENSIONS (VISIBLE)**

- 1705 x 999mm

**THICKNESS**

- 75mm

**WEIGHT**

- 23.1kg (approx)

**Laid Weight**

- 2.1kg/m² (approx)

**APPROVED PRODUCT CERTIFICATE BBA 0019**

**MCS CERTIFICATE BBA 0149**

**CERTIFICATE BBA 0019 MCS**

**CERTIFICATE BBA 0149**
With decorative effects being incorporated more frequently into roof designs, our ornamental tiles come in all our clay and concrete plain tile colours.

**KEY ADVANTAGES**

- Ornamental Ridges and Finials are fully compatible with all our ridge fixing systems
- Club Tiles have a guaranteed performance in all weather conditions down to 40º pitch

---

**ORNAMENTAL TILES, RIDGES AND FINIALS**

Redland offers three concrete ornamental ridges and four finials for both Universal Angle and Half Round Ridges, designed to replicate the most popular ornamental features found within the built environment.

---

**KEY ADVANTAGES**

- Ornamental Ridges and Finials are fully compatible with all our ridge fixing systems
- Club Tiles have a guaranteed performance in all weather conditions down to 40º pitch

---

**ORNAMENTAL TILES, RIDGES AND FINIALS**

With decorative effects being incorporated more frequently into roof designs, our ornamental tiles come in all our clay and concrete plain tile colours.
# PRODUCT CODES – SLATES

<table>
<thead>
<tr>
<th>SLATE</th>
<th>Cambrian</th>
<th>Sawn 10</th>
<th>Landmark 10</th>
<th>Ranked 10</th>
<th>Modulated Ranked 10</th>
<th>Stonewold 10</th>
<th>Modulated Stonewold 10</th>
<th>Natural Stone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambrian</td>
<td>G6199</td>
<td>4991</td>
<td>4671</td>
<td>4671/4681</td>
<td>4676</td>
<td>4681</td>
<td>4676/4677</td>
<td>-</td>
</tr>
<tr>
<td>Cambrian Soft</td>
<td>450 x 450</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cambrian Soft</td>
<td>450 x 450</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cambrian</td>
<td>4703</td>
<td>4992</td>
<td>4722</td>
<td>4721</td>
<td>4704</td>
<td>4263</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Half Slate Pair</td>
<td>4992</td>
<td>4722</td>
<td>4721</td>
<td>4704</td>
<td>4263</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

## VERGE SYSTEMS

- **Cambrian GRP Valley**
- **RedVent Eaves Vent for 350-450mm**
- **Continuous Dry Verge**
- **Slate 10 Eaves/Ridge**
- **Universal Angle Hip/Ridge Junction**
- **Hip Iron**
- **Universal Angle Hip without nail holes**
- **Clay Universal Angle Hip with nail holes**
- **Universal Angle Hip with nail holes**
- **Hip Iron**

## HALF SLATE PAIR

- **Left-hand**
- **Right-hand**

## UNDERLAYS

- **Spiral 40/25 vapour permeable underlay**
  - **1000 x 50m**
  - **1000 x 50m**
  - **1000 x 50m**
  - **1000 x 50m**

## SAWS SYSTEMS

- **Redbrick Eaves Vent for 350-450mm**
- **Redbrick Eaves Vent for 450-600mm**
- **Continuous Dry Verge**
- **Universal Angle Hip/Ridge Junction**
- **Continuous Dry Verge**
- **Universal Angle Hip/Ridge Junction**

## VARIOUS SYSTEMS

- **Anti-Corrosion System**
- **Slate 10 Eaves Vent System 2 x 1 Tyl**
- **Slate 10 Eaves Vent System Roll Poly**
- **Universal Angle Block-End Monoridge Right-hand**

## HIP SYSTEMS

- **Sawn 10 Mobile Hip System**
- **Continuous HIP System**
- **Universal Mobile Hip System**
- **Universal Mobile Hip (HIP)**
- **Universal Angle HIP/Ridge Junction**
- **Hip Iron**

## VALLEY SYSTEMS

- **Cambrian GPR Valley**
- **LOU GPR Valley**
- **Natural Slate GPR Valley**
- **Dry Valley**

## ABUTMENT SYSTEMS

- **Top Edge Alignment Ventilation System**
- **Wakaflex Rapid Flashing (100 x 150 x 240mm)**
- **Wakaflex Rapid Flashing (100 x 175mm)**
- **Wakaflex Rapid Flashing (100 x 160mm)**
- **Wakaflex Rapid Flashing (100 x 140mm)**
- **Wakaflex Rapid Flashing Strip**
- **Wakaflex Rapid Flashing Sealant**
- **Wakaflex Universal Flashing (IRE)**

- **Side Altrum GPR Secret Cather**
  - **Bending Cather – Low Profile (150mm)**
  - **Bending Cather – High Profile (200mm)**

## RIDGE SYSTEMS

- **Dryvent Ridge System**
- **Sawn 10 Universal Ridge Hip System**
- **Continuous Ridge System**

- **Ridge Vent Termeial**
- **Ridge Vent Terminal Adapter**
  - **Double Cather (300 x 150mm)**

- **Gas Blue Ridge Terminal**
- **Gas Blue Extension Adapter**
- **Gas Blue Bending Pipe**

- **Clay Universal Angle Ridge**
- **Hi-Pitch Universal Angle Ridge**

- **Universal Angle Block-End Ridge**

- **Universal Angle Ridge End Caps**

- **Dryvent Manrose System**
- **Universal Manrose**
- **Universal Angle Block-End Monoridge Left-hand**
- **Universal Angle Block-End Monoridge Right-hand**

---

PRODUCT CODES – SLATES

For fittings see range availability table to work on page 79.
### PRODUCT CODES – SLATES

**Fixing**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Dimensions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9134</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy)</td>
</tr>
<tr>
<td>9135</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel)</td>
</tr>
<tr>
<td>9136</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu)</td>
</tr>
<tr>
<td>9137</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy) (inc. nails)</td>
</tr>
<tr>
<td>9138</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel) (inc. nails)</td>
</tr>
<tr>
<td>9139</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu) (inc. nails)</td>
</tr>
<tr>
<td>9140</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy) (inc. nails)</td>
</tr>
<tr>
<td>9141</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel) (inc. nails)</td>
</tr>
<tr>
<td>9142</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu) (inc. nails)</td>
</tr>
<tr>
<td>9143</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy) (inc. nails)</td>
</tr>
<tr>
<td>9144</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel) (inc. nails)</td>
</tr>
<tr>
<td>9145</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu) (inc. nails)</td>
</tr>
<tr>
<td>9146</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy) (inc. nails)</td>
</tr>
<tr>
<td>9147</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel) (inc. nails)</td>
</tr>
<tr>
<td>9148</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu) (inc. nails)</td>
</tr>
<tr>
<td>9149</td>
<td>45 x 3.35</td>
<td>Slate Nail (Alum. Alloy) (inc. nails)</td>
</tr>
<tr>
<td>9150</td>
<td>45 x 3.35</td>
<td>Slate Nail (Stainless Steel) (inc. nails)</td>
</tr>
<tr>
<td>9151</td>
<td>45 x 3.35</td>
<td>Natural Slate Nail (Cu) (inc. nails)</td>
</tr>
</tbody>
</table>

**Ventilation Tiles**

- RedLine Vent Flexible Pipe
- RedLine Vent Tile with Underlay Seal
- Rapid Roof Vent Adaptor
- Rapid Roof Vent Tile
- Flexible Pipe (100 to 100mm)
- ThruVent Tile with Underlay Seal
- Flexible Pipe (75 to 100mm)
- ThruVent Tile with Underlay Seal
- Natural Slate Standard Vent Tile
- Natural Slate Hi-Capacity Vent Tile
- Eaves Clip
- Eaves Clip Nails (Alum. Alloy)
- Eaves Clip
- Slate Clip (Alum. Alloy)
- Slate Clip (Stainless Steel)
- Verge Clip (Stainless Steel)
- Double Battening Clip (Alum. Alloy)
- Storm Clip
- Bow Clip
- Inset Clip

**Bedded Hip and Ridge Mechanical Fixing**

- Mortar Bedded Fixing Kit

**Fittings Colour Range – Slates**

- Cambrian Saxon 10
- Landmark 10
- RedLine 10
- Mortar Bedded Fixing Kit

**Other Accessories**

- Rapid Roof Putty
- Rapid Roof Paint
- Cable Outlet Adaptor
- Air Vent Adaptor
- Aerial Outlet Adaptor

**Bedded Hip and Ridge Mechanical Fixing**

- Mortar Bedded Fixing Kit

* Stainless Steel ring shanked
PRODUCT CODES – PLAIN TILES

**TILES**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>6921</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6921</td>
<td>5945</td>
</tr>
<tr>
<td>4515</td>
<td>200 x 100</td>
<td>200 x 100</td>
<td></td>
<td>200 x 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6923</td>
<td>Rosemary Red</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6925</td>
<td>Rosemary Rustic Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6926</td>
<td>Rosemary Light, Medium Mixed &amp; Blue Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6927</td>
<td>Rosemary Burnt/Black/Antique-Weathered Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6934</td>
<td>200 x 100</td>
<td>200 x 100</td>
<td></td>
<td>200 x 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6936</td>
<td>Rosemary Red</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6937</td>
<td>Rosemary Rustic Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6938</td>
<td>Rosemary Light, Medium Mixed &amp; Blue Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6939</td>
<td>Rosemary Burnt/Black/Antique-Weathered Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6942</td>
<td>200 x 100</td>
<td>200 x 100</td>
<td></td>
<td>200 x 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6944</td>
<td>Rosemary Red</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6945</td>
<td>Rosemary Rustic Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6946</td>
<td>Rosemary Light, Medium Mixed &amp; Blue Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6947</td>
<td>Rosemary Burnt/Black/Antique-Weathered Brindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GAGE SYSTEMS**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>9002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9002</td>
<td>9002</td>
</tr>
<tr>
<td>9003</td>
<td>300 x 256 x 128</td>
<td>300 x 256 x 128</td>
<td></td>
<td>300 x 256</td>
<td></td>
<td>9003</td>
</tr>
<tr>
<td>9004</td>
<td>450 x 256 x 98</td>
<td>450 x 256 x 98</td>
<td></td>
<td>450 x 256</td>
<td></td>
<td>9004</td>
</tr>
</tbody>
</table>

**UNDERSLIPS**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>9180</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9180</td>
<td>9180</td>
</tr>
<tr>
<td>9181</td>
<td>9105</td>
<td>9105</td>
<td></td>
<td>9105</td>
<td></td>
<td>9181</td>
</tr>
</tbody>
</table>

**VALLEY SYSTEMS**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>8450</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8450</td>
<td>8450</td>
</tr>
<tr>
<td>8451</td>
<td>450 x 256 x 180</td>
<td>450 x 256 x 180</td>
<td></td>
<td>450 x 256</td>
<td></td>
<td>8451</td>
</tr>
<tr>
<td>8452</td>
<td>300 x 256 x 128</td>
<td>300 x 256 x 128</td>
<td></td>
<td>300 x 256</td>
<td></td>
<td>8452</td>
</tr>
</tbody>
</table>

**ABUTMENT SYSTEMS**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>9172</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9172</td>
<td>9172</td>
</tr>
<tr>
<td>9175</td>
<td>9172</td>
<td>9172</td>
<td></td>
<td>9172</td>
<td></td>
<td>9175</td>
</tr>
<tr>
<td>9176</td>
<td>9172</td>
<td>9172</td>
<td></td>
<td>9172</td>
<td></td>
<td>9176</td>
</tr>
</tbody>
</table>

**RIDGE SYSTEMS**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Rosemary Classic</th>
<th>Rosemary Craftsman</th>
<th>Heated</th>
<th>Raw Tile</th>
<th>DualPlan</th>
<th>Fortunata</th>
</tr>
</thead>
<tbody>
<tr>
<td>8453</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8453</td>
<td>8453</td>
</tr>
<tr>
<td>8454</td>
<td>300 x 150 x 70</td>
<td>300 x 150 x 70</td>
<td></td>
<td>300 x 150</td>
<td></td>
<td>8454</td>
</tr>
<tr>
<td>8455</td>
<td>9012</td>
<td>9012</td>
<td></td>
<td>9012</td>
<td></td>
<td>8455</td>
</tr>
</tbody>
</table>

**PRODUCT CODES – PLAIN TILES**

**PRODUCT CODES – PLAIN TILES**

**PRODUCT CODES – PLAIN TILES**

**PRODUCT CODES – PLAIN TILES**
PRODUCT CODES – PLAIN TILES

Product codes are given with dimensions below in small text. All dimensions are in mm (unless stated) in the order: length, width and height (where applicable). For fittings colour range availability refer to table on page 77.

### VENTILATION TILES

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducer Plain Tile Vent with Underlay Seal</td>
<td>9119</td>
</tr>
<tr>
<td>Reducer Vent Adaptor</td>
<td>9175</td>
</tr>
<tr>
<td>Flexible Pipe (100 to 150mm)</td>
<td>9172</td>
</tr>
<tr>
<td>Internal Angle 90˚ (left/right-hand)</td>
<td></td>
</tr>
<tr>
<td>External Angle 90˚</td>
<td></td>
</tr>
<tr>
<td>Internal Angle RH 90°</td>
<td>8441</td>
</tr>
<tr>
<td>Internal Angle LH 90°</td>
<td>8442</td>
</tr>
<tr>
<td>Flexible Pipe (100 to 150mm)</td>
<td></td>
</tr>
<tr>
<td>ThruVent Flexible Pipe (75 to 100mm)</td>
<td></td>
</tr>
<tr>
<td>4.5k ThruVent Tile with Underlay Seal</td>
<td></td>
</tr>
<tr>
<td>Rapid Roof Vent Flexible Pipe</td>
<td></td>
</tr>
<tr>
<td>Rapid Roof Vent Flexible Pipe</td>
<td></td>
</tr>
</tbody>
</table>

### FIXING

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Tile Clip</td>
<td>9314</td>
</tr>
<tr>
<td>Kiw Clip</td>
<td>9442</td>
</tr>
<tr>
<td>Inodile Clip</td>
<td></td>
</tr>
</tbody>
</table>

### BEDDED HIP AND RIDGE MECHANICAL FIXING

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortar Bedded Fixing Kit</td>
<td>9314</td>
</tr>
</tbody>
</table>

### OTHER ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Roof Putty</td>
<td>9115</td>
</tr>
<tr>
<td>Rapid Roof Felt</td>
<td>9255</td>
</tr>
</tbody>
</table>

### INNODBANDS

- **Craftsman**
  - Rosemary
  - 40 x 2.65 mm
  - 164 x 83 mm

- **Classic Heathland Plain Tile**
  - Fontenelle
  - 40 x 2.65 mm
  - 164 x 83 mm

- **7673/7674**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **7347**
  - 45 x 3.35 mm
  - 45 x 3 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

### Fittings Colour Range – Plain Tiles

<table>
<thead>
<tr>
<th>Colour</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 Brown</td>
<td></td>
</tr>
<tr>
<td>03 Antique Red</td>
<td></td>
</tr>
<tr>
<td>11 Red</td>
<td></td>
</tr>
<tr>
<td>22 Autumn</td>
<td></td>
</tr>
<tr>
<td>25 Ember</td>
<td></td>
</tr>
<tr>
<td>27 Natural Red</td>
<td></td>
</tr>
<tr>
<td>34 Terracotta</td>
<td></td>
</tr>
<tr>
<td>36 Tudor Brown</td>
<td></td>
</tr>
<tr>
<td>39 Farmhouse Red</td>
<td></td>
</tr>
<tr>
<td>45 Rustic Black</td>
<td></td>
</tr>
<tr>
<td>52 Breckland Brown</td>
<td></td>
</tr>
<tr>
<td>53 Breckland Black</td>
<td></td>
</tr>
<tr>
<td>63 Black</td>
<td></td>
</tr>
<tr>
<td>79 Black</td>
<td></td>
</tr>
<tr>
<td>83 Heather Brindle</td>
<td></td>
</tr>
<tr>
<td>84 Hawkhurst</td>
<td></td>
</tr>
<tr>
<td>85 Albury</td>
<td></td>
</tr>
<tr>
<td>87 Blue Brindle</td>
<td></td>
</tr>
<tr>
<td>91 Burnt Blend</td>
<td></td>
</tr>
<tr>
<td>92 Victorian</td>
<td></td>
</tr>
<tr>
<td>98 Victorian</td>
<td></td>
</tr>
</tbody>
</table>

### Internal Angle RH 90°

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

- **9255**
  - 9255 x 9255 mm

- **9314**
  - 9314 x 9314 mm

### External Angle RH 90°

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

- **9255**
  - 9255 x 9255 mm

- **9314**
  - 9314 x 9314 mm

### Internal Angle LH 90°

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

- **9255**
  - 9255 x 9255 mm

- **9314**
  - 9314 x 9314 mm

### External Angle LH 90°

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

- **9255**
  - 9255 x 9255 mm

- **9314**
  - 9314 x 9314 mm

### External Angle RH 135°

- **9331**
  - 40 x 2.65 mm
  - 165 x 83 mm

- **9232**
  - 55 x 2.65 mm
  - 55 x 2.65 mm

- **9205**
  - 9205 x 9205 mm

- **9255**
  - 9255 x 9255 mm

- **9314**
  - 9314 x 9314 mm
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Code/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eaves Systems</strong></td>
<td></td>
</tr>
<tr>
<td>RedVent Eaves Ventilation System 150-400mm</td>
<td>9149</td>
</tr>
<tr>
<td>RedVent Eaves Ventilation System 450-800mm</td>
<td>9148</td>
</tr>
<tr>
<td>Extension Tries 150-400mm</td>
<td>9149</td>
</tr>
<tr>
<td>Extension Tries 450-800mm</td>
<td>9148</td>
</tr>
<tr>
<td>Rapid Eaves Vent 2-in-1 Tray</td>
<td>9190</td>
</tr>
<tr>
<td>Rapid Eaves Vent Mother Roll</td>
<td>9190</td>
</tr>
<tr>
<td>Eave Corn Filler</td>
<td>9942</td>
</tr>
<tr>
<td><strong>Underlay</strong></td>
<td></td>
</tr>
<tr>
<td>RedVent 25 Over Fascia Vent</td>
<td>9993</td>
</tr>
<tr>
<td>Underlay Support Tray</td>
<td>9774</td>
</tr>
<tr>
<td><strong>Flashings</strong></td>
<td></td>
</tr>
<tr>
<td>Flashing System</td>
<td>8336</td>
</tr>
<tr>
<td>Half Tiled/Thick Tiled</td>
<td>8340</td>
</tr>
<tr>
<td>Half Tiled/Thick Tiled</td>
<td>8341</td>
</tr>
<tr>
<td>Half Tiled/Thick Tiled</td>
<td>8341</td>
</tr>
<tr>
<td>Half Tiled/Thick Tiled</td>
<td>8341</td>
</tr>
<tr>
<td><strong>Hips</strong></td>
<td></td>
</tr>
<tr>
<td>Dry Hip System</td>
<td>9946</td>
</tr>
<tr>
<td>Conventional Hip System</td>
<td>9948</td>
</tr>
<tr>
<td>Traditional Hip/Ridge Combination</td>
<td>9947</td>
</tr>
<tr>
<td>Universal Ridge/Hip System</td>
<td>9947</td>
</tr>
<tr>
<td>Traditional Hip System</td>
<td>9947</td>
</tr>
<tr>
<td>Traditional Hip System</td>
<td>9947</td>
</tr>
<tr>
<td>Hip Iron</td>
<td>9948</td>
</tr>
<tr>
<td><strong>Risers</strong></td>
<td></td>
</tr>
<tr>
<td>Third Round Hip (without slate holes) - Concrete</td>
<td>8130/8211</td>
</tr>
<tr>
<td>Third Round Hip (without slate holes) - Clay</td>
<td>8130/8211</td>
</tr>
<tr>
<td><strong>Valleys</strong></td>
<td></td>
</tr>
<tr>
<td>ICS GRP Valley</td>
<td>9956</td>
</tr>
<tr>
<td>Dry Valley</td>
<td>9974</td>
</tr>
<tr>
<td><strong>Abutments</strong></td>
<td></td>
</tr>
<tr>
<td>Top Edge Abutment/Ventilation System</td>
<td>9541</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 70mm x 20mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 130mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 180mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 240mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 300mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 360mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 420mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 480mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 540mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td>Valleys Rapid Flashing (5m x 600mm)</td>
<td>9955/9956</td>
</tr>
<tr>
<td><strong>Edges</strong></td>
<td></td>
</tr>
<tr>
<td>Bent Edging - High Profile</td>
<td>9778</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td>Standard Tile (shown above)</td>
<td>5901</td>
</tr>
<tr>
<td>Standard Tile (shown above)</td>
<td>5902</td>
</tr>
<tr>
<td>Standard Tile (shown above)</td>
<td>5903</td>
</tr>
<tr>
<td>Standard Tile (shown above)</td>
<td>5904</td>
</tr>
<tr>
<td>Standard Tile (shown above)</td>
<td>5905</td>
</tr>
<tr>
<td>Underlay Support Tray</td>
<td>9776</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>ROOF SYSTEMS</strong></td>
<td></td>
</tr>
<tr>
<td>Dryrot Ridge System</td>
<td>9084</td>
</tr>
<tr>
<td>Ucico/Continental Ridge System</td>
<td>9133</td>
</tr>
<tr>
<td>Ridgevent Terminal</td>
<td>8191</td>
</tr>
<tr>
<td>Ridgevent Terminal Adaptor</td>
<td>9173</td>
</tr>
<tr>
<td>Gas Flue Extension Adaptor</td>
<td>9172</td>
</tr>
<tr>
<td>Gas Flue Extension Adaptor</td>
<td>-</td>
</tr>
<tr>
<td>Gas Flue Extension Adaptor</td>
<td>-</td>
</tr>
<tr>
<td>Half Round Ridge</td>
<td>8192</td>
</tr>
<tr>
<td>Capped Half Round Ridge</td>
<td>-</td>
</tr>
<tr>
<td>Half Round Ridge Block End</td>
<td>8192</td>
</tr>
<tr>
<td>Capped Half Round Ridge Block End</td>
<td>-</td>
</tr>
<tr>
<td>Dryrot Monoridge</td>
<td>9083</td>
</tr>
<tr>
<td>Half Round Block End Monoridge</td>
<td>-</td>
</tr>
<tr>
<td>Dovetail Roof</td>
<td>9173</td>
</tr>
<tr>
<td><strong>VENTILATION TILES</strong></td>
<td></td>
</tr>
<tr>
<td>Redrot vent tile with Underside Seal</td>
<td>9114</td>
</tr>
<tr>
<td>450 Thruster Vent with Underside Seal</td>
<td>-</td>
</tr>
<tr>
<td>900 Thruster Vent with Underside Seal</td>
<td>-</td>
</tr>
<tr>
<td>RoofVent Flexible Pipe</td>
<td>9172</td>
</tr>
<tr>
<td>RoofVent Flexible Pipe</td>
<td>-</td>
</tr>
<tr>
<td>Rapid Roofvent</td>
<td>-</td>
</tr>
<tr>
<td>Rapid Roofvent Adaptar</td>
<td>-</td>
</tr>
<tr>
<td><strong>FIXING</strong></td>
<td></td>
</tr>
<tr>
<td>Tile Nails</td>
<td>9326</td>
</tr>
<tr>
<td>Easy Clip</td>
<td>9287</td>
</tr>
<tr>
<td>Easy Clip (Mark Alloy)</td>
<td>-</td>
</tr>
<tr>
<td>Tile Clip</td>
<td>9344</td>
</tr>
<tr>
<td>Tile Clip Nail (Mark Alloy)</td>
<td>-</td>
</tr>
<tr>
<td>Verge Clip (zeitheist Style)</td>
<td>9110/9380</td>
</tr>
<tr>
<td>Kris Clip</td>
<td>9140</td>
</tr>
<tr>
<td>Traveller Clip</td>
<td>9021</td>
</tr>
</tbody>
</table>

* Stainless Steel ring shaded
PRODUCT CODES – PROFILE TILES

Product codes are given with dimensions below in small text. All dimensions are in mm (unless stated) in the order: length, width and height (where applicable). For fittings colour range availability refer to table below.

<table>
<thead>
<tr>
<th>Mortar Bedded Fixing Kit</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
<th>9216</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Outer Adaptor</td>
<td>R204/9262</td>
<td>9237/9262</td>
<td>R205/9262</td>
<td>9327/9262</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
</tr>
<tr>
<td>Solar Outlet Adaptor</td>
<td>R206/9262</td>
<td>9327/9262</td>
<td>R207/9262</td>
<td>9327/9262</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
</tr>
<tr>
<td>Aerial Outlet Adaptor</td>
<td>R208/9262</td>
<td>9327/9262</td>
<td>R209/9262</td>
<td>9327/9262</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
<td>9327/9264</td>
</tr>
</tbody>
</table>

FITTINGS COLOUR RANGE – PROFILE TILES

|---------|----------|------|----------|----------|----------|----------|----------|----------|----------|-------|--------|--------|--------|

Where standards are referenced, compliance is always with the latest version. Drawings shown are diagrammatic and should not be scaled. Refer to CAD drawings in DesignMaster CAD library for specific dimensions. The limitations of printing may mean a slight variation in colour. Please refer to a sample tile for best colour reference. We are committed to continually enhancing and improving our product range. We reserve the right to change product specifications. For the latest information please contact customer services.

Trademarks: The following are United Kingdom trademarks and are registered in the name of Monier Redland Limited or other business units of BMBG: Ambi-Dry, Cambrian, ColourFusion, Craftsman, Duo Plain, Farmhouse, FixMaster, Fontenelle, Grovebury, Heather, Heathland, InDaX, Landmark, Langdale, QuantMaster, Redland, Redland Cambrian, Redland Richmond, Redland Technical Solutions, Redline, Redline Authors, Regent, Rosemary, Savoy, SpotMaster, Sprach, Stonewold, Vivaldi.