




Danelaw[®]

VENTILATION FOR TILE AND SLATE ROOFS AND OTHER ACCESSORIES

PRODUCT GUIDE

January 2020

www.hambleside-danelaw.co.uk

+44 (0)1327 701 910

Why is there a need for roof ventilation?

As modern construction techniques continue to place more emphasis on energy conservation and minimising the heat loss from buildings, insulation thicknesses have increased and air tightness is constantly improving. Although this is a way of achieving good energy performance certification, there is now far less opportunity for water vapour to be dissipated through fortuitous ventilation in the property, and therefore a higher chance of condensation build up and potential damage.

Few new buildings contain open fireplaces, single glazed windows and solid floor construction has become the norm. The increase in levels of moisture being created has gone hand in hand with more heating and greater insulation levels creating greater temperature differentials within the fabric of the building.

Water vapour in the air causes a vapour pressure, the warmer the air, the greater capacity there is to contain moisture. The greater the moisture content, the higher the vapour pressure becomes. This vapour pressure acts in all directions and will cause the water vapour to pass through the smallest of gaps to anywhere where the vapour pressure is lower until equilibrium is achieved.

Pitched, cold and warm roof ventilation

First of all, what type of construction is the roof? You may have heard of the terms cold roof and warm roof construction, but what do these actually mean?

In pitched roof construction, the insulation can be placed horizontally above the ceiling level forming a 'cold roof'; it can be inclined above, between or below the rafters forming a 'warm' or 'hybrid' roof, or positioned in the roof structure in different ways where a 'room-in-roof' is to be created that can result in a combination of warm and cold roof construction types. Cold roof voids are generally always required to be ventilated; however, where vapour permeable (or Low Resistance, LR) underlays are specified, the

levels required may be reduced.

The enclosed void of a warm pitched roof may not require to be ventilated, but this is usually subject to the requirement to install a fully sealed Air and Vapour Control Layer (AVCL) in conjunction with an air-open roof covering.

Ventilation & Building Regulations

Approved Document C2 requires that roofs be designed and constructed so that their structural and thermal performance are not adversely affected by interstitial condensation. This requirement will be met if the roof is designed and constructed in accordance with Annex H of BS 5250 'Code of practice for control of condensation in buildings' and BS EN ISO13788; 'Hygrothermal performance of building components and building elements. Internal surface temperature to avoid critical surface humidity and interstitial condensation. Calculation methods.' Further guidance is given in BRE Report BR262 'Thermal insulation: avoiding risks'.

To avoid excessive moisture transfer into roof voids, gaps and penetrations for pipes and electrical wiring should be filled and sealed, particularly in areas of high humidity such as kitchens and bathrooms and an effective draught seal should be provided to loft hatches to reduce the inflow of warm air and moisture. Vapour control layers can reduce the amount of vapour entering roof voids but cannot be relied on as an alternative to ventilation. A complete barrier to moisture is needed for this.

Scottish Technical Handbooks section 3.15 requires that dwellings shall be so constructed as to protect the building and its users, so far as may be reasonably practicable, from harmful effects caused by surface and interstitial condensation. Both these requirements are deemed to be satisfied by following the guidance given in BS 5250.

BS 5534; 'Slating and tiling for pitched roofs and vertical cladding – code of practice' recommends that roof ventilation be provided in accordance with BS 5250.

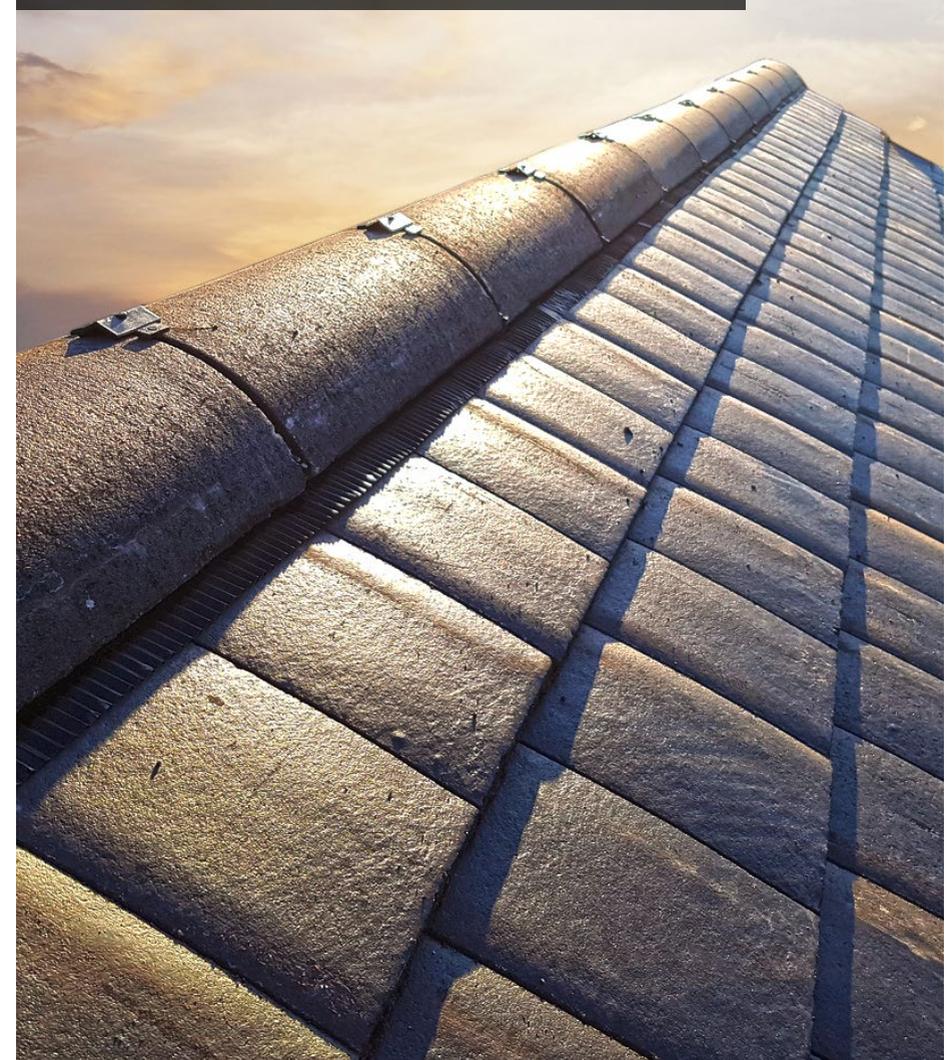
Roof Ventilation Installation

To provide ventilation, opening points can usually be provided on the following areas of a roof:

- Roof surface
- Ridge line
- Eaves, soffits and fascias

For each of these areas, there are numerous products to suit different applications and construction details. They are also vital to meet the appropriate requirements and regulations by providing adequate ventilation levels into the roofs space. Our expansive range of ventilation products can deliver the ideal solution to these common issues.

CON6+ - DRY FIX VENTILATED RIDGE AND HIP SYSTEM



TILE VENTS

A range of discreet flush fitting vents designed to replace tiles to complete an uninterrupted roof scape. Suitable for new build and refurbishment projects.

- Optional adaptor for extractor and soil pipe connection
- Can be used as high or low level roof space ventilation
- Available in Antique Red, Black, Brown, Grey, Terracotta (Black to order only for TV15/4, TV15/7, TV10/6, TV10/5, TV10/9)

Application of a minimum 17.5° rafter pitch and ventilation area of 15,000mm².

TV15 SERIES

HD TV15/1

Tile type compatibility; Lagan flat, Quinn Western Slate, Marley Duo Modern, Marley Modern, Redland Mini Stonewold, Russell Grampian and Highland, Sandtoft Calderdale Slate and Dual Calderdale.

HD TV15/2

Tile type compatibility; Quinn Locherne, Marley Mendip, Redland Grovebury and Landmark Double Pantile, Russell Pennine.

HD TV15/3

Tile type compatibility; Lagan Double Roll, Marley Double Roman, Redland Double Roman, Russell Double Roman, Sandtoft Double Roman

HD TV15/4

Tile type compatibility; Quinn Ludlow Major, Russell Cheviot.

HD TV15/7

Tile type compatibility; Redland Renown

SOIL PIPE ADAPTORS

HD TVSPA

Connects standard 110mm pipework to all HD TV15 series tile roof vents.

HD PCSPA

Connects standard 110mm pipework to HD TV10/5 vents in pairs.

HD RSPA

Connects standard 110mm pipework to HD TV10/6 and TV10/8

HD DPCSPA

Connects standard 110mm pipework to HD TV10/9 and TV10/10

Minimum rafter pitch for TV10/6 and TV10/8 of 22.5° and 35° for TV10/5, TV10/9 and TV10/10. Ventilation area varies with type.

TV10 SERIES

HD TV10/6

Tile type compatibility; Marley Ludlow Plus, Redland 49, Sandtoft Standard Pattern. Ventilation area 10,000mm²

HD TV10/8

Tile type compatibility; Marley Anglia Plus, Redland Norfolk Pantile, Sandtoft Shire Pantile. Ventilation area 10,000mm²

HD TV10/5

Tile compatibility; most plain tile types. Ventilation area 2,000mm². Fit 5 per metre to achieve 10,000mm² airflow. SVP connection in pairs only.

HD TV10/9

Designed to replace two tiles. Tile compatibility; most plain tile types. Ventilation area 6,100mm². Granular options: Antique Red, Brown and Cotswold

HD TV10/10

Designed to incorporate two small cuts of tiles. Tile compatibility; all plain tile types. Ventilation area 6,100mm². Black only.

SLATE VENTS

A range of discreet flush fitting and hooded slate vents, suitable for new build and refurbishment projects. Suitable for soil ventilation or mechanical extraction.

Minimum rafter pitch of 22° or 25° depending on head lap. Ventilation area of 10,000mm² for all slate vents, apart from SRV5U has 5,000mm² and SRV680 has 20,000mm²

HD ILSRV10/20 HD ILSRV10/24

HD ILSRV10/20 - Suits 500 x 250mm slates.
HD ILSRV10/24 - Suits 600 x 300mm slates.

HD ILSRV10U

Size to suit either; 600 x 300mm, 500 x 250mm and 450 x 230mm slates.

HD SRV5U

Size to suit either; 600 x 300mm and 500 x 250mm slates when trimmed.

HD SRV10U

Size to suit either; 600 x 300mm and 500 x 250mm slates when trimmed.

HD SRV10/20

Suits 500 x 250mm slates.

HD SRV680

Large base for 'random' and diminishing course slate roofs. Can be trimmed to 600 x 300mm base size.

HD SPA

Connects standard 110mm pipework to SRV10U and SRV10/20

**HD SPA680**

Connects standard 110mm pipework to SRV680

**HD ILSPA**

Connects standard 110mm pipework to ILSRV10/20 and ILSRV10/24

**HD ILSPAU**

Connects standard 110mm pipework to ILSRV10U

**FASCIA, SOFFIT, EAVES AND PANEL VENTS****HD 12000M**

Over the fascia Vent



10,000mm²

HD 12000U

Universal Over Fascia Vent



10,000mm²
25,000mm²

HD 8000

Soffit Vent



10,000mm²

HD 8210

Sloping Soffit Vent



10,000mm²

HD 7000

Circular Soffit Vent



2,500mm²

HD 8310

Corbel Vent



10,000mm²

HD 6000/4500/4000

Universal Panel Vent - no flyscreen

**HD 6050/4550/4050**

Panel Vent - single row flyscreen

**HD 6025/4525/4025**

Panel Vent - double row flyscreen

**HD URT**

Universal Refurb Tray Vent

**HD 5000/5600/5800**

Universal Roll Panel Vent

**HD 3025VP/3000VP**

3 in 1 Ventilation Packs

**WALL AND UNDERFLOOR VENTS****HD 9600M**

Telescopic Underfloor Vent

**HD 9610/2**

Underfloor Vertical Extension Sleeve

**HD 9600T/9660M**

Underfloor Horizontal Extension Sleeves

**HD 9300**

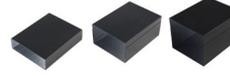
Airbricks

**HD 9620**

Square to Round Adapter

**HD 9350**

Airbrick Vent Sleeves

**HD 9500**

Universal Weep Vents

**HD 9100**

Perp Weeps

**HD 9200**

Perp Weep Extension

**HD 9800**

Lintel Stop End

**ROOF UNDERLAYS**

A low resistance breathable roof underlay range. Intended for use on pitched roofs as a secondary barrier installed beneath tiles and slates.



Roofing Underlay LR120
High quality roof underlay Integral tape version available and in width options 1.0m or 1.5m in 50m lengths.



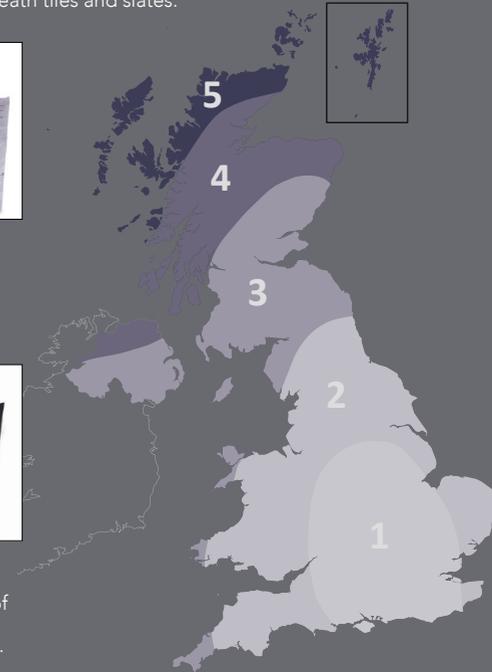
Roofing Underlay LR135
High quality medium weight roof underlay. In in width options 1.0m or 1.5m in 50m lengths.



Roofing Underlay LR150
High quality medium weight roof underlay Integral tape version available and in width options 1.0m or 1.5m in 50m lengths.



Roofing Underlay LR180
Heavier premium weight roof underlay. In in width options 1.0m or 1.5m in 50m lengths.



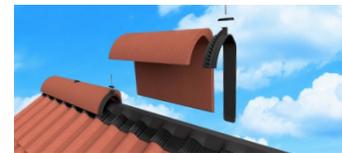
PRODUCTS	250mm batten gauge with lap restraining batten	345mm batten gauge with lap restraining batten	345mm batten gauge with integral tape
DANELAW LR120	Zones 1 to 5	Zones 1 to 3	-
DANELAW LR120TT	-	-	Zones 1 to 5
DANELAW LR135	Zones 1 to 5	Zones 1 to 2	-
DANELAW LR150	Zones 1 to 5	Zones 1 to 3	-
DANELAW LR150TT	-	-	Zones 1 to 5
DANELAW LR180	Zones 1 to 5	Zones 1 to 4	-

RIDGE AND HIP SYSTEMS

Our popular dry-fix ventilated Ridge & Hip systems have all the benefits from our patented gaskets and are compatible with most tile types. Kits include a ventilated membrane with broad corrugated adhesive strips, patented gaskets, stainless steel straps and fixing screws, BS8612 compliant.

NEW PRODUCT HD MONO6+

Unique universal dry fix system for mono ridges, suits most mono ridge tile types.

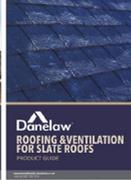
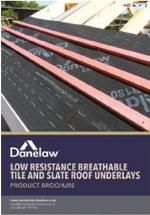
**HD CON6+**

To be used for all commonly available 450mm long ridge & hip tiles.

**HD CLAY6+**

To be used for all commonly available 300mm long clay and baby ridge tiles.





**YOU CAN
DOWNLOAD ALL
OF OUR DANELAW
PRODUCT
BROCHURES FROM
OUR WEBSITE**

Hambleside Danelaw Building Products



Hambleside Danelaw Limited
Long March, Daventry,
Northamptonshire W
NN11 4NR

Tel: +44 (0)1327 701910
Fax: +44 (0)1327 701919
Email: sales@hambleside-danelaw.co.uk
Web: www.hambleside-danelaw.co.uk

Hambleside Danelaw Ltd has a continuing product development programme. With any updates or changes to these products, we will ensure that is communicated to our customers and stakeholders.

In accordance with our policy for continuous improvement we reserve the right, should the need to arise, to amend product specifications without prior notice. Terms and conditions of sales are available upon request.

All content is as recommended by Hambleside Danelaw Ltd. Intellectual property of Hambleside Danelaw Ltd, permission required to reproduce all content of this publication.

