

S.R. 82

Tiling and Slating Code of Practice

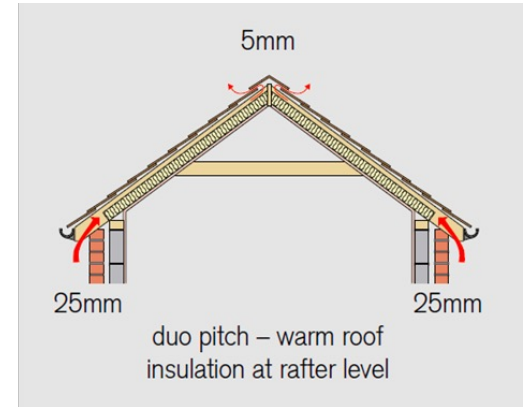
Aidan McCann

Date: May 2024



SR 82 Learning Objectives

- STANDARDS REVISION OF I.C.P. 2:2002 TO SR 82 SLATING & TILING
- DESIGN - TILE SOLUTIONS FOR VARIOUS PITCHES
- VENTILATIONS
- DRY FIXING & ACCESSORIES
- RIDGE DETAILS



I.C.P. 2:2002 TO SR 82 SLATING & TILING – 7YRS NOW

- **Significant technical changes to the Code of Practice:**
 - ◆ Revisions to maps showing exposure of sites to wind-driven rain and wind speeds
 - ◆ Fixing requirements have been significantly increased
 - ◆ Minimum batten sizes and requirements have been changed

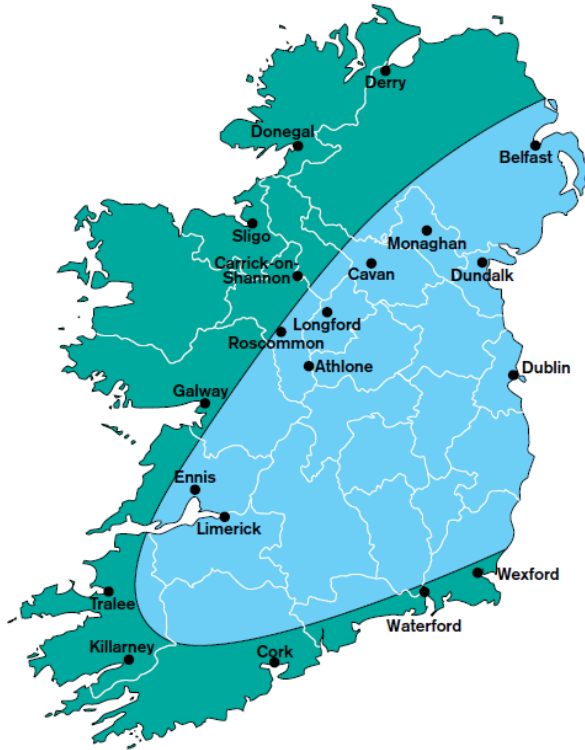


NSAI
Standards

Standard Recommendation
S.R. 82:2017

Slating and Tiling - Code of Practice

ROOFING SYSTEMS NEW MAP ZONES



The map shows Ireland divided into two zones on the basis of wind speed.



Moderate exposure is wind speeds of less than 26 m/s.
Severe exposure is wind speeds greater than 26 m/s.
Which equates to 58 mph

ROOFING SYSTEMS FIXING REQUIREMENTS

THE REQUIREMENTS FOR MECHANICAL FIXING OF ROOF COVERING ELEMENTS ARE DETERMINED BY THE FOLLOWING FACTORS:

- ◆ Exposure conditions
- ◆ Roof pitch / Length
- ◆ Type of element
- ◆ Location on roof of element
- ◆ Height of building



ROOFING SYSTEMS FIXING REQUIREMENTS

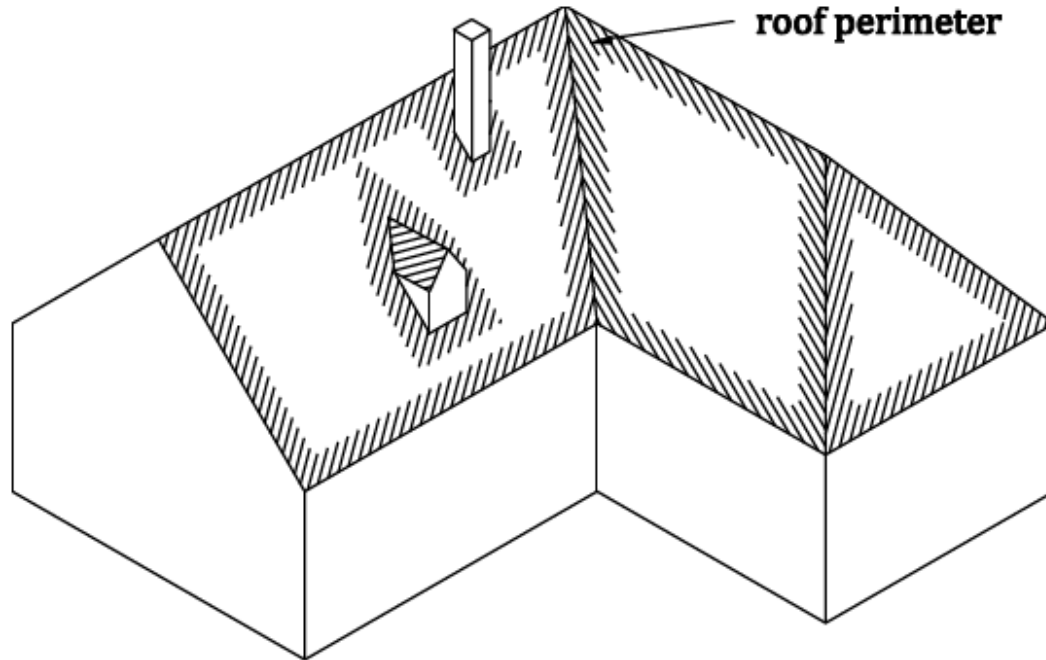
PITCH (DEGREES)	FIXING REQUIREMENTS FOR SINGLE LAP TILES
$\geq 55^\circ$	Every tile head nailed and tail clipped
$> 45^\circ$ and $< 55^\circ$	<ul style="list-style-type: none">A. Normal locations require every tile head nailed or tail clippedB. Exposed or severely exposed locations require every tile head nailed and
<p style="text-align: center;">!! Ridges and hips that are mortar bedded should also be Mechanically fixed !!</p>	
	<ul style="list-style-type: none">B. Roof area excluding perimeter, normal locations require every tile in every alternate course head nailed or tail clippedC. Exposed locations require every tile head nailed or tail clippedD. Severely exposed locations require every tile head nailed and tail clipped

SEVERELY EXPOSED BUILDINGS

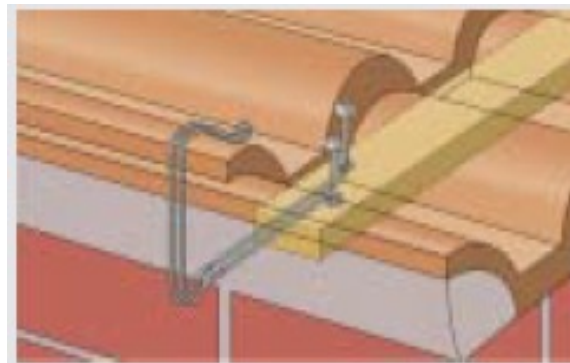
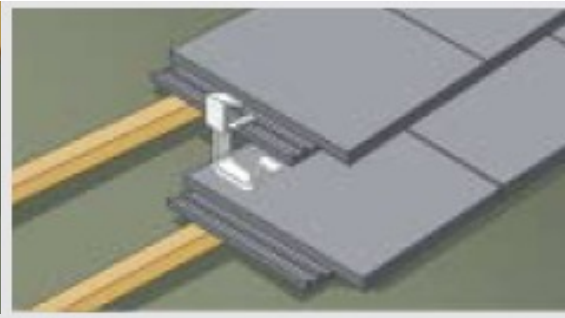
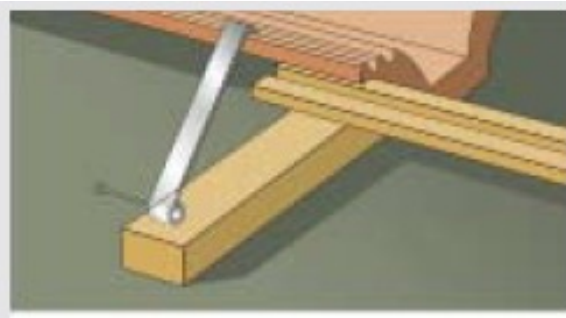
- ◆ Any building which stands above its surroundings or has a ridge height in excess of 12 m above adjoining ground level
- ◆ Any building on a hill slope or hill-top
- ◆ Any building which is subject to adverse wind effects, such as funnelling.



ROOFING SYSTEMS PERIMETER AREAS



ROOFING SYSTEMS CLIPS & NAILING



ROOFING SYSTEMS New Clip



New Clip for Tiles being introduced – No need for nail.

ROOFING SYSTEMS BATTEN SIZES NEW STANDARD



ROOF COVERING	MINIMUM BATTEN SIZE (GAUGE X DEPTH)
Double lap tiles	47 mm x 22 mm
Single lap tiles	47 mm x 35 mm
Fibre cement slates	47 mm x 22 mm
Natural slates	47 mm x 22 mm

Machine graded timber

Battens that are machine strength graded and CE marked should comply with the marking requirements of I.S. EN 14081-1.

47 mm x 35 mm – Minimum Batten Size

Batten marking

Strength graded battens visually graded should be marked with the following:

- a) ID of producer; and
- b) “Graded to S.R. 82”.
- c) Counter battens - same width as the supporting rafter and have a minimum depth of 22 mm.

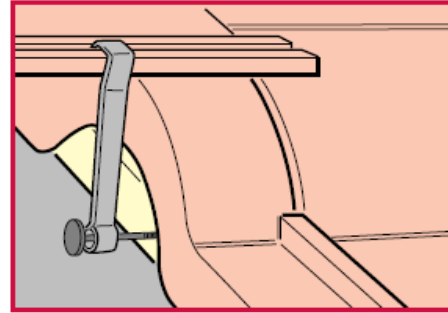
ROOFING SYSTEMS WHAT TYPE OF TILE DESIGN

CONSIDERATIONS TO CONSIDER BEFORE SELECTING THE CORRECT ROOF COVERING:

- ◆ Pitch
- ◆ Location
- ◆ Rafter Length
- ◆ Design of Roof



ROOFING SYSTEMS $\geq 10^\circ$ CENTURION ROOF TILES



Weather Bar

ROOFING SYSTEMS $\geq 22.5^\circ$ CAUSEWAY/DONARD/DERRIE/V2



ROOFING SYSTEMS $\geq 35^\circ$ PLAIN TILE RANGE



ROOFING SYSTEMS IMPORTANCE OF VENTILATION

Ventilation

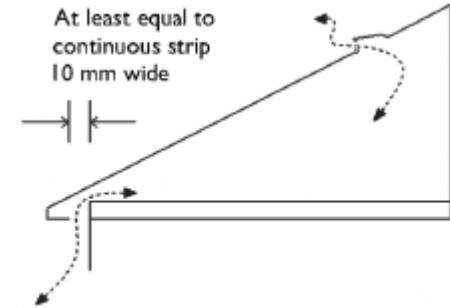
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**Building
Regulations**

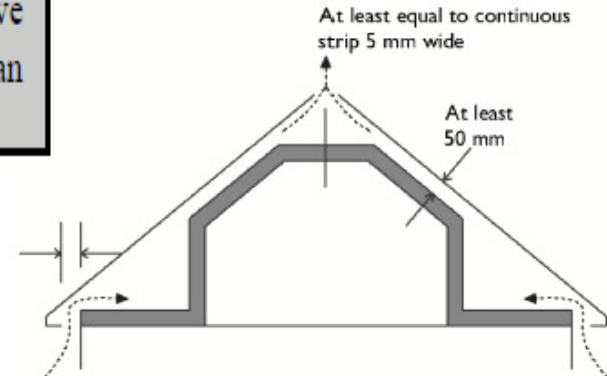
Condensation in
roofs.

F2

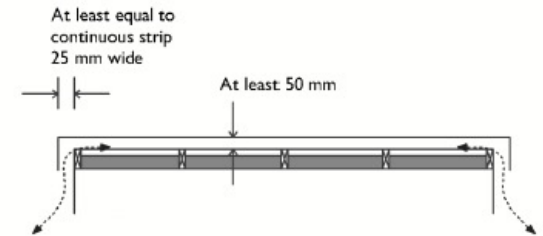
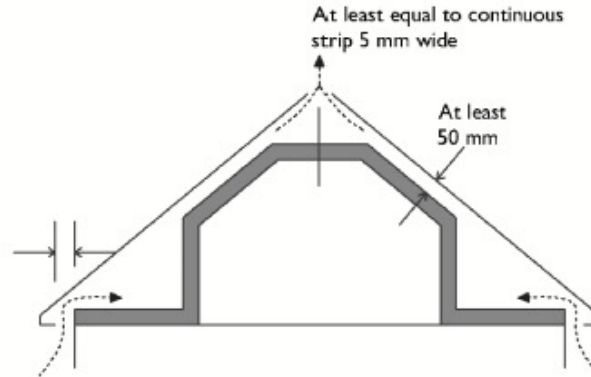
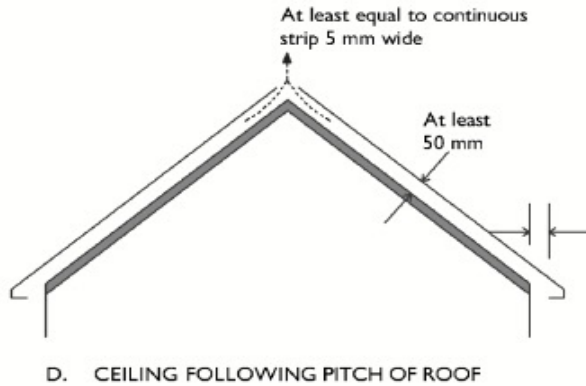
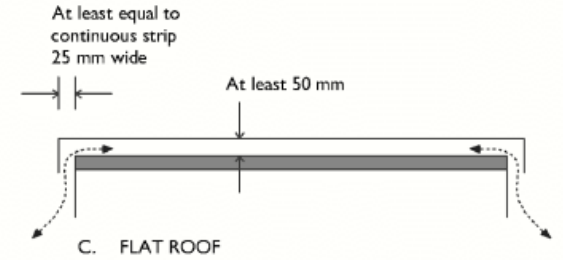
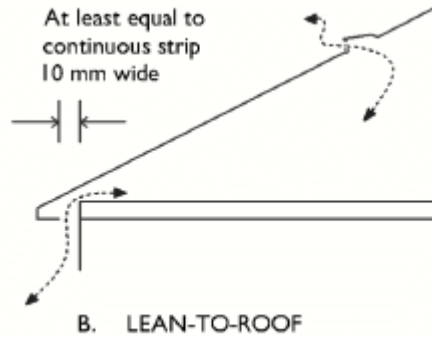
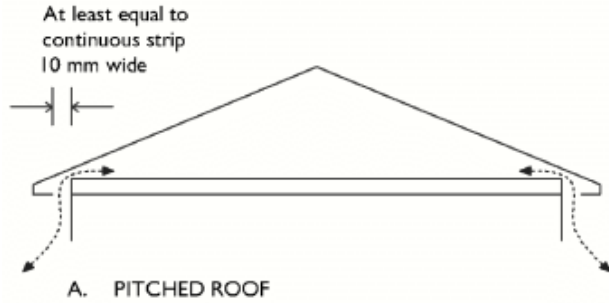
Adequate provision shall be made to prevent excessive condensation in a roof or in a roof void above an insulated ceiling.



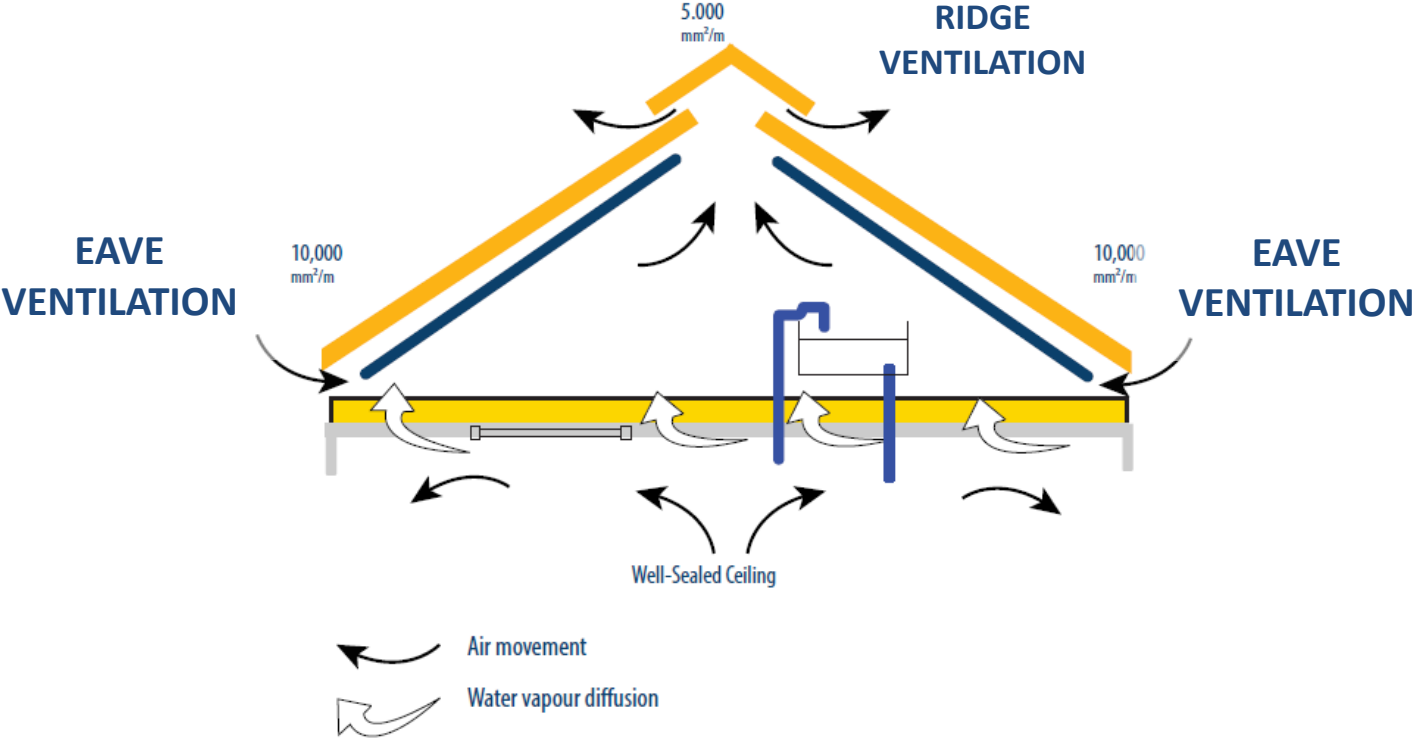
B. LEAN-TO-ROOF



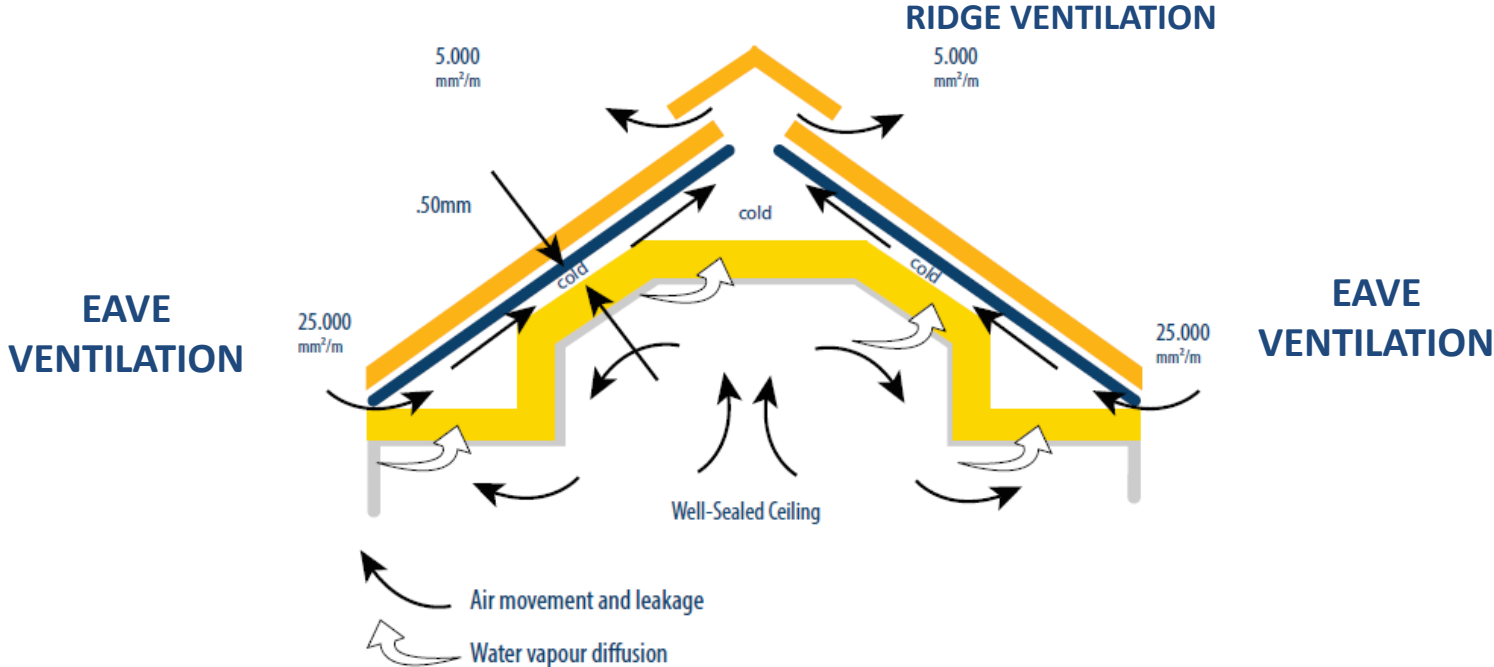
ROOFING SYSTEMS IMPORTANCE OF VENTILATION



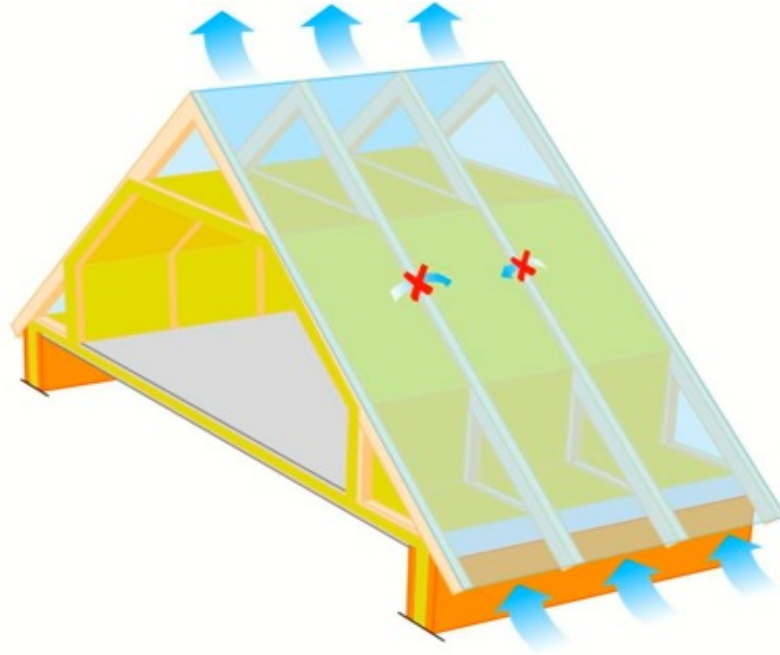
ROOFING SYSTEMS IMPORTANCE OF VENTILATION



ROOFING SYSTEMS IMPORTANCE OF VENTILATION



ROOFING SYSTEMS IMPORTANCE OF VENTILATION



Basic Elements of Efficient Ventilation of the Roof Space...

- Inlet at eaves
- Outlet at ridge
- Ventilation of each truss
- Ventilating across trusses is not functional

ROOFING SYSTEMS IMPORTANCE OF VENTILATION

NON-VENTILATED ROOF SPACE



ROOFING SYSTEMS IMPORTANCE OF VENTILATION

NON-VENTILATED ROOF SPACE





**Poor Eave Details
Tilting Fillet**

**No Eaves Tray to carry into
Gutter.**

**Water Ponding
Causing Leaks at Eave and
unsightly staining on outer
walls**

ROOFING SYSTEMS – EAVE VENTILATION SYSTEM



Rafter Tray 6m

Eave Support
1.5m



Over Fascia Vent
1.0m



Prevents insulating materials blocking vent grilles.

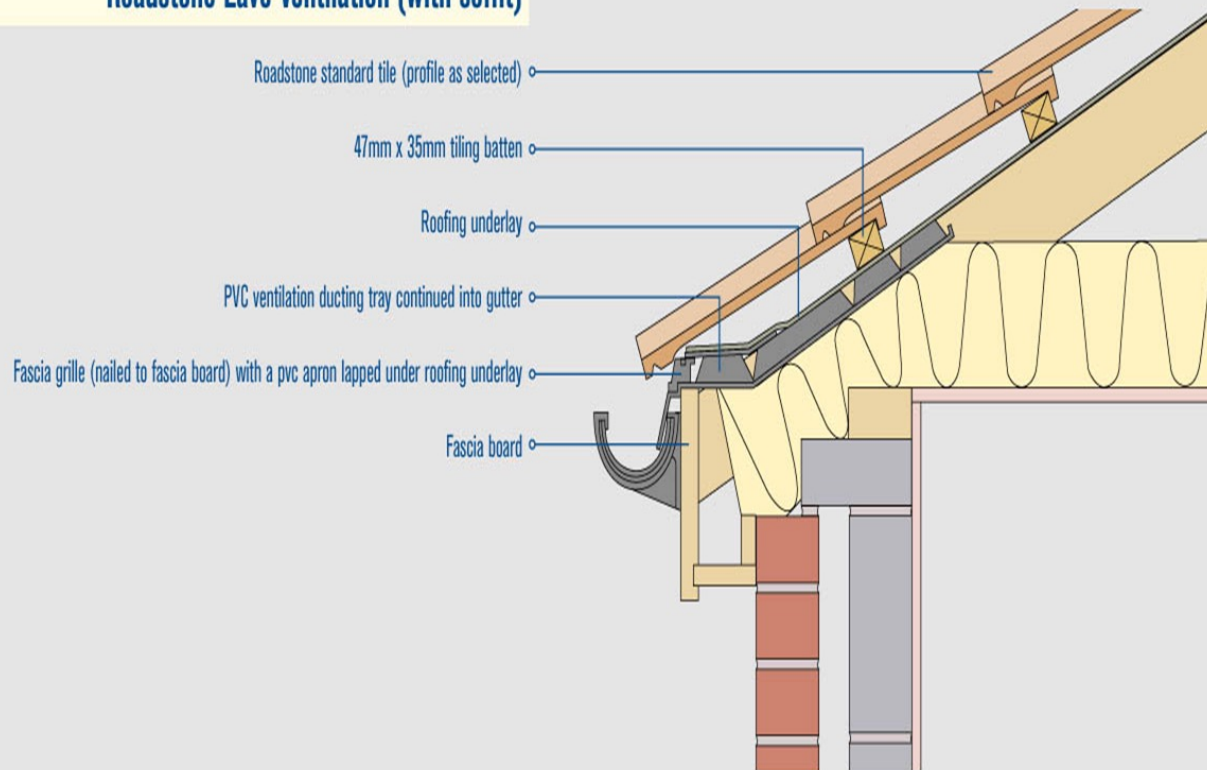
Suitable for use with or without over-hanging soffit.

Effective ventilation area 10,000 or 25,000 mm² per meter run of eaves.

Complies with requirements of Irish Building regulations for roof space ventilation.

ROOFING SYSTEMS – EAVE VENTILATION SYSTEM

Roadstone Eave Ventilation (with soffit)



ROOFING SYSTEMS IMPORTANCE OF VENTILATION

FLEXI PIPES



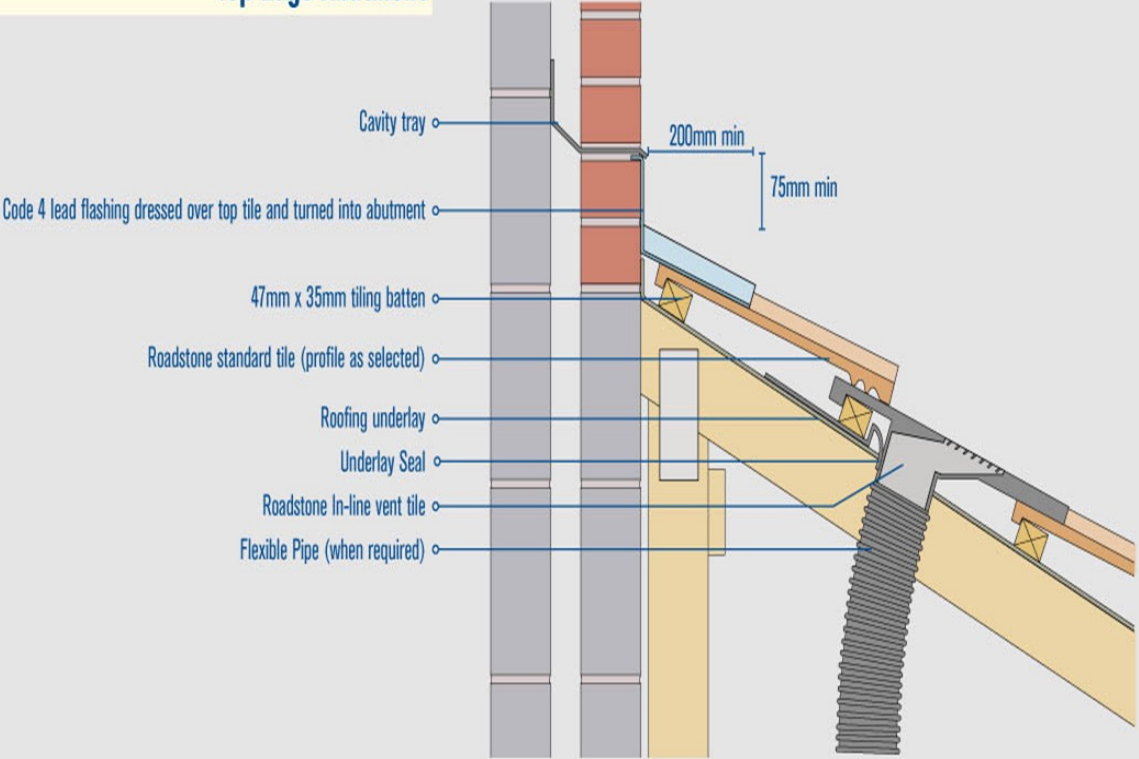
ROOFING SYSTEMS – VENT TILES



ROOFING SYSTEMS – VENT TILES



Top Edge Abutment



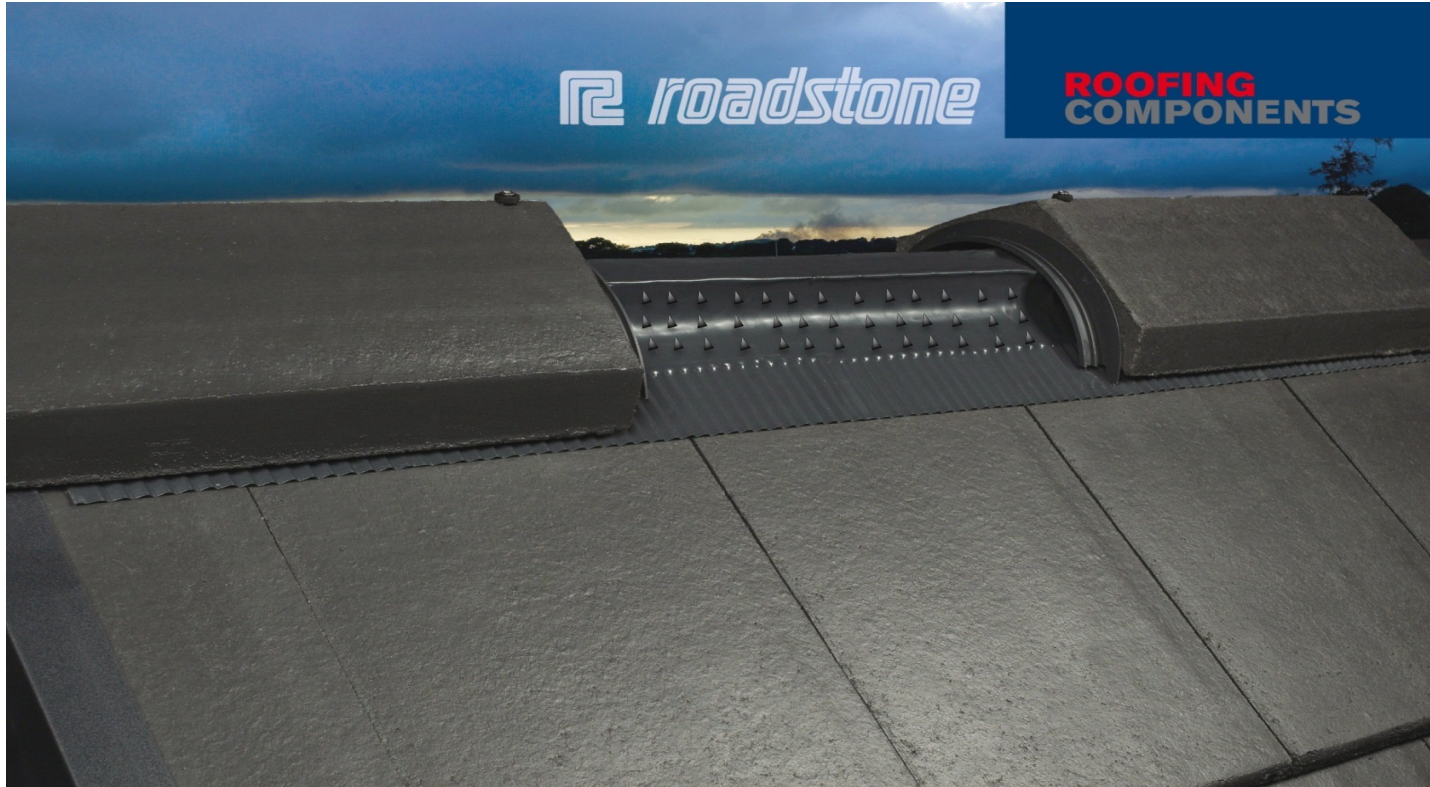


‘Unfortunately, mortar will fail even when the roofer has installed it correctly’

Structural movement is a common cause of the failure of mortar

Weather conditions are also a key factor in mortar failure

ROOFING SYSTEMS – VENT ROLL RIDGE SYSTEM



 roadstone

ROOFING
COMPONENTS

ROOFING SYSTEMS – PROFILE RIDGE SYSTEM



Eliminate the Mortar

**Mechanically Fixed
Ridge System Increase
Security against Storm
Conditions**

**Provides Continuous
Ventilation along the
Ridge Length**

**Eliminating Mortar
Staining Provides**

ROOFING SYSTEMS MORTAR FAILURE



ROOFING SYSTEMS – DRY HIP RIDGE SYSTEM



Eliminate the Mortar

**Mechanically Fixed
Ridge System Increase
Security against Storm
Conditions**

**Mechanically fixed
Clips for Hips/Valleys**

**Maintenance Free
System**

ROOFING SYSTEMS VERGE - MORTAR FAILURE



ROOFING SYSTEMS – DRY VERGE SYSTEM

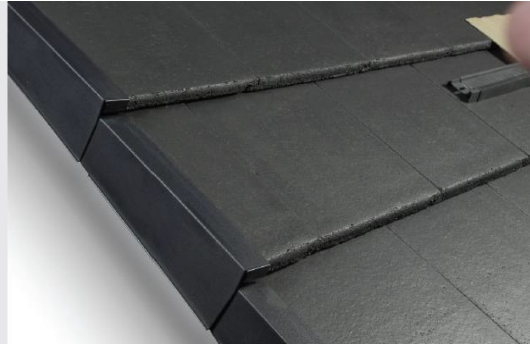


Dry Roofing Stepped Dry Verge

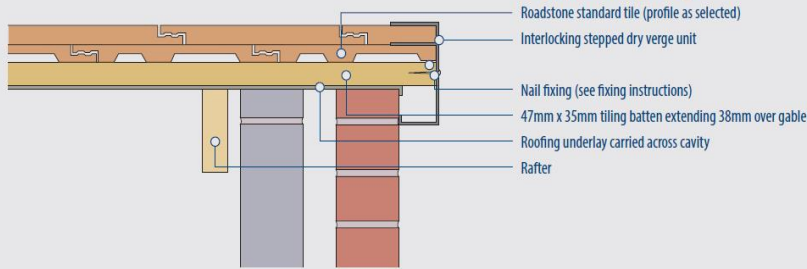
The Roadstone Stepped Dry Interlocking Verge System provides a neat, mortar-free verge that eliminates the need for an undercloak. Mechanical fixing provides high resistance against wind uplift for both verge tiles and stepped verge units.

Stepped Dry Verge is available in two sizes to suit:

- (a) Causeway
- (b) Donard, and Derrie tiles tiles. All units are close fitting whilst allowing for variations in headlap.



Stepped Dry Verge



Verge Unit



Blanking Plate



Starter





ROOFING SYSTEMS – DRY VERGE SYSTEM



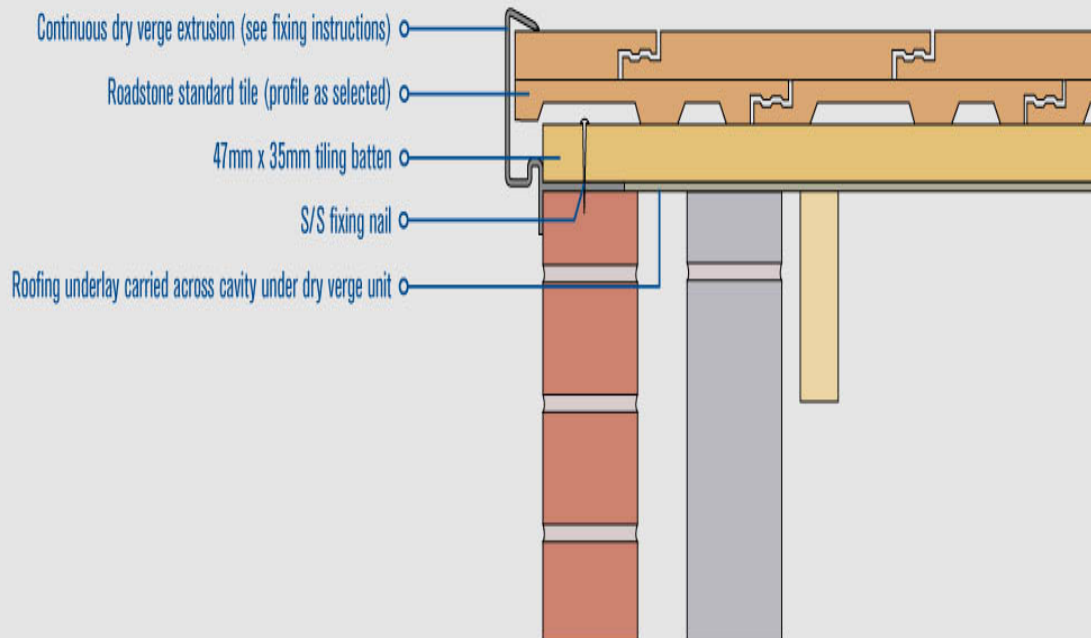
Provides continuous cover and clean visual line to verge in 3mtr lengths

Provides increased strength against storm conditions

No need for mortar bedding or slate undercloak

No verge clips needed

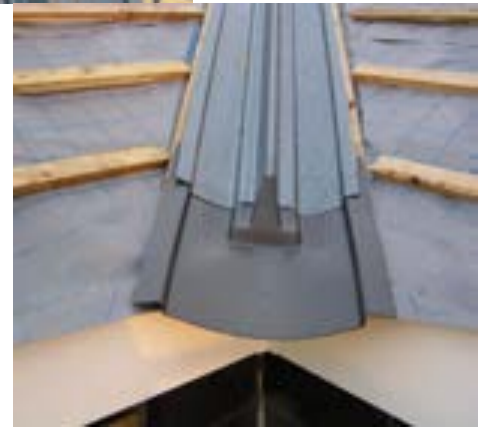
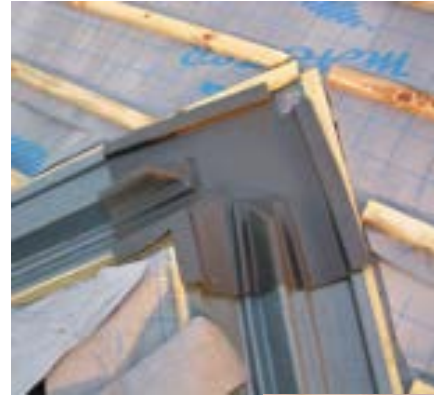
Roadstone Continuous Dry Verge



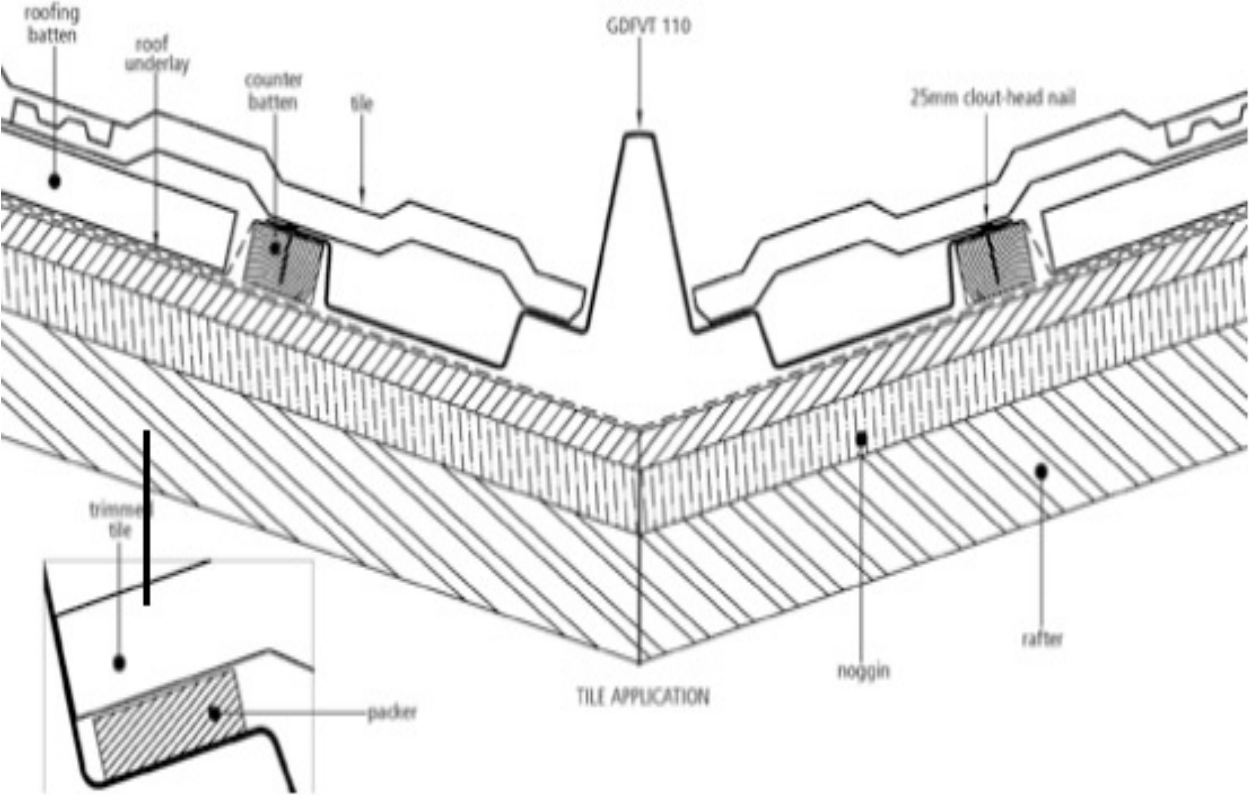
ROOFING SYSTEMS VERGE - MORTAR FAILURE



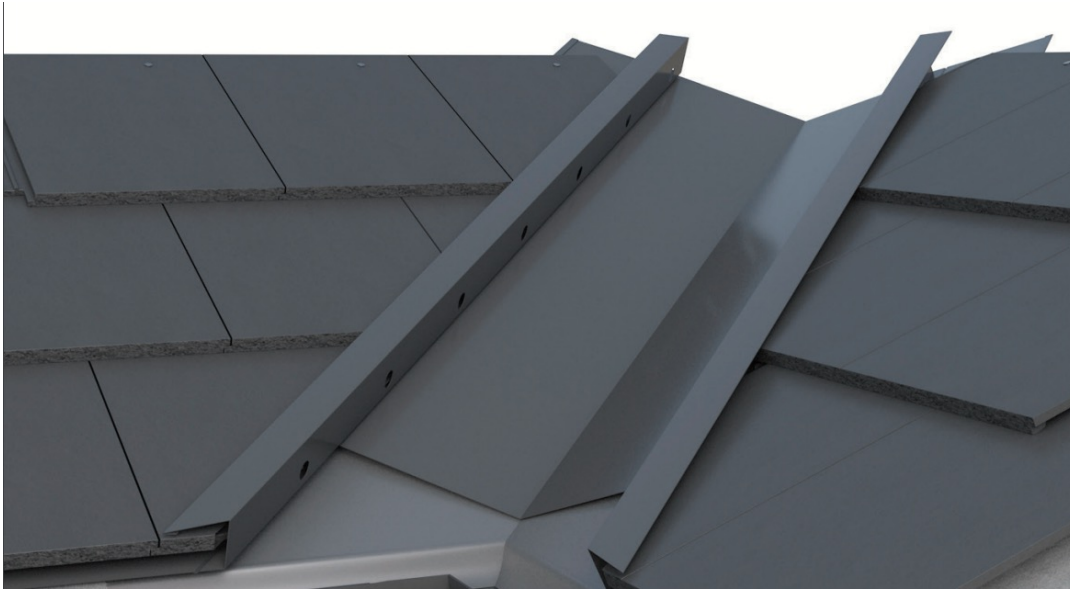
ROOFING SYSTEMS – DRY VALLEY SYSTEM



ROOFING SYSTEMS – DRY VALLEY SYSTEM



ROOFING SYSTEMS – VALLEY TRIM ALUMINIUM



‘Drip System’ which allows for self-drainage of rainwater into the Valley.

Extremely easy and quick to install.

Requires no maintenance once installed.

Removes the need to point the tiles with mortar.



ROADSTONE ROOFING SYSTEMS

1. Roof tiles
2. Eave vent system
3. Dry verge system
4. Dry hip system
5. Top abutment system
6. Ridge systems
7. Vent Tiles
8. Ornamental ridges
9. Fixing methods
10. Valley Systems

Carrying out regular visual inspections of the roof, usually twice a year, in the Spring and Autumn.

Remove leaves and debris from valleys and gutters together with any moss or lichen growths that restrict the flow of water off the roof slope.

Check the condition and security of roof tiles, accessories, and flashings particularly at the more vulnerable perimeter areas of the roof at the ridge, hip, verge and valley and any abutments to walls or rooflights.

Check the function of any roof space ventilation components and clear any grilles to ensure adequate air flow within the roof void.

Roadstone offer a 60 year Structural Guarantee. Carry DOP CE Certs

All roof tiles are manufactured to the latest European Standard EN 490.

Products are manufactured to; ISO 9001, 14001 and 50001 quality, environmental and energy management systems.

Fix in accordance with the Irish code of practice for Slating & Tiling SR 82.

A full range of roofing accessories has been designed tested my Manufacture and is available to match our full range of Roof Tiles.



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DECLARATION OF PERFORMANCE
CAUSEWAY CONCRETE ROOF TILE

1. Unique identification code of the product type:

Description
CAUSEWAY, BLACK
CAUSEWAY, RIVEN BLACK
CAUSEWAY, BROWN
CAUSEWAY, SLATE GREY
CAUSEWAY, TERRACOTTA
CAUSEWAY, FARMHOUSE RED



Thank You

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