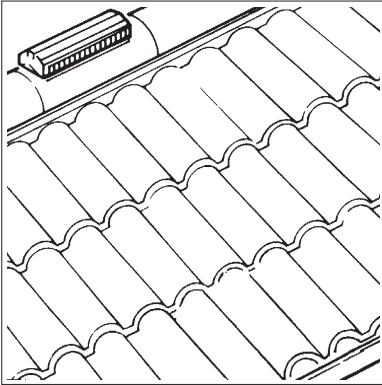


Product



- THIS DETAIL SHEET RELATES TO THE REDLAND REDVENT SOIL PIPE RIDGE VENTILATION TERMINAL FOR USE IN CONJUNCTION WITH THE REDLAND RANGE OF CONCRETE ROOF TILES.
- The ridge ventilation terminal is for use on 100 mm diameter soil/ventilating stacks in drainage systems designed to BS 5572 : 1994.
- The product is installed easily. It is made from durable material and any colour changes that may occur will be uniform over the exposed surfaces of the components.
- It is essential that the RedVent Soil Pipe Ridge Ventilation Terminal is installed in accordance with the manufacturer's instructions and the requirements of this Detail Sheet.

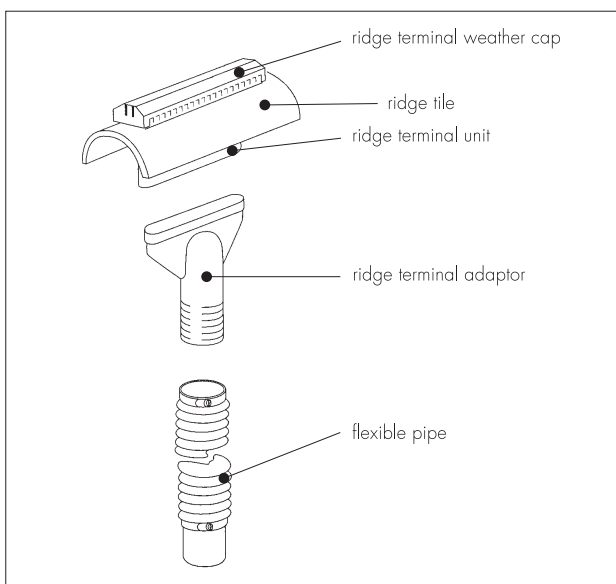
This Detail Sheet must be read in conjunction with the Front Sheet and Detail Sheet 1 which give Conditions of Certification and the product's position regarding the Building Regulations respectively.

Technical Specification

1 Description

1.1 The RedVent Soil Pipe Ridge Ventilation Terminal comprises the following parts (see Figure 1):

Figure 1 RedVent Soil Pipe Ridge Ventilation Terminal



- Ridge tile — concrete ridge tile, available in Universal Angle, Half Round or Delta styles, and clay ridge tile, available in Half Round style, through which the vent is fitted.

- Ridge terminal unit — injection moulded in PVC-U giving an opening area of 8400 mm².
- Ridge terminal weather cap — injection moulded from PVC-U to fit over the top of the ridge terminal unit.
- Ridge terminal adaptor — injection moulded from PVC-U for connection to the ridge terminal unit and flexible pipe.
- Flexible pipe — flexible PVC with fully encased reinforcing wire and clip, moulded PVC cuffs for use with the ridge terminal adaptor.

The product may be used in conjunction with the Redland range of concrete, slate and clay roof tiles.

1.2 Continuous quality control is exercised during manufacture and includes heat reversion tests, impact tests and checks on dimensional accuracy.

2 Delivery and site handling

2.1 The RedVent Soil Pipe Ridge Ventilation Terminal is packaged, complete with installation instructions, in easy-stacking polystyrene blocks. The terminal is ready assembled through the required ridge tile.

2.2 Each package bears the manufacturer's name and the BBA identification mark incorporating the number of this Certificate. They should be stored under cover until ready for use.

Design Data

3 General

Connections to PVC-U soil or vent pipes to BS 4514 : 1983 can easily be made.

4 Strength and stability

4.1 The RedVent Soil Pipe Ridge Ventilation Terminal has adequate strength to resist damage during site handling or installation.

4.2 The product, when installed in accordance with the manufacturer's instructions, has adequate resistance to the wind and snow loadings likely to be encountered in the United Kingdom.

4.3 Care must be exercised in placing roof ladders, for example for maintenance purposes.

5 Properties in relation to fire



The introduction of the RedVent Soil Pipe Ridge Ventilation Terminal to a traditional roof construction, using the range of Redland concrete roof and ridge tiles, does not affect the normal AA rating for such construction.

6 Weathertightness



The weathertightness of a traditionally tiled roof will not be adversely affected by the introduction of RedVent Soil Pipe Ridge Ventilation Terminals.

7 Performance of joints

The joints in the system will remain airtight when correctly made.

8 Ventilation efficiency



The RedVent Soil Pipe Ridge Ventilation Terminal will provide adequate ventilation to prevent the loss of trap seals in drainage systems designed in accordance with BS 5572 : 1994 and contribute to ventilation of the drainage system.

9 Practicability of installation

Installation of the RedVent Soil Pipe Ridge Ventilation Terminal can be easily carried out under normal site conditions.

10 Durability



10.1 The RedVent Soil Pipe Ridge Ventilation Terminal will have a life comparable to that of other components of the roofing system. However, in time, the plastic components exposed to the weather will suffer UV degradation causing reduction of surface gloss and impact strength, but this will not affect the performance of the product.

10.2 Care should be exercised to avoid impact damage if any work, for example retiling, is carried out in the vicinity of aged plastics components. Any damaged components can be replaced easily.

Installation

11 General

11.1 Locate the RedVent Soil Pipe Ridge Ventilation Terminal in accordance with the England and Wales Building Regulations (see Figure 2).

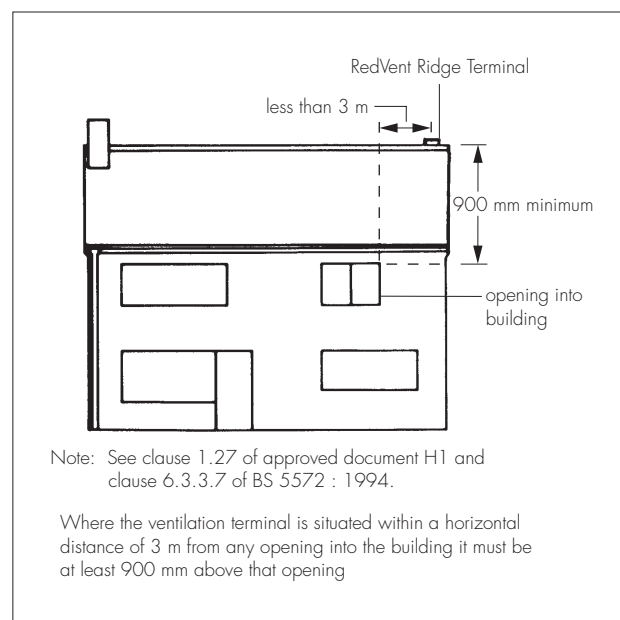
11.2 Installation must be carried out in accordance with the manufacturer's detailed fixing instructions, *Redland Ridge Ventilation Terminal Fixing Instructions*.

12 Procedure

Mortar bedded ridge

12.1 The roof tile underlay should first be marked with chalk lines equidistant between the rafters and cut along the lines with a sharp knife. In the case of rigid sarking or boarding, a suitable wood saw must be used to provide a clear 300 mm by 50 mm path into the roof space.

Figure 2 Location of the RedVent Soil Pipe Ridge Ventilation Terminal



12.2 Strips of mortar must be placed to either side of the ridge (edge bedding) and to the dead bedded end sections. The terminal should be placed through the hole provided. The ridge line is completed in the normal manner, pointing off the excess mortar.

Redland Dry Ridge or DryVent Ridge

12.3 The dry ridge batten should be fixed in the normal manner (see Installation for the DryVent

Ridge System) and a 280 mm section removed equidistant between trussed rafters, taking care not to damage the roofing underlay.

12.4 The roof tiles are laid in the normal manner including the top course.

12.5 The underlay is marked with chalk and cut (see section 12.1).

12.6 The terminal is placed through the hole.

12.7 The correct filler unit is placed beneath the ridge terminal to suit the profile of roof tiles in use. The terminal is secured with the drive screw and damping plate assembly provided in the dry fixing pack.

Completion

12.8 The flexible pipe section should be fixed onto the terminal adaptor ensuring that the clip is tightened with a screwdriver to produce an airtight joint. The worm drive section of the clip should be placed onto the overlapped neoprene cuff area.

12.9 The terminal adaptor is connected to the ridge terminal, ensuring that the four lugs engage into the four holes provided in the terminal adaptor. It is recommended that downward pressure be applied to the ridge terminal at this stage to ensure a satisfactory connection.

Technical Investigations

The following is a summary of the technical investigations carried out on the RedVent Soil Pipe Ridge Ventilation Terminal.

13 Tests

13.1 Tests were carried out on the PVC-U materials used to manufacture the components of the ridge ventilation terminal, in accordance with BS 2782 and BBA MOAT No 8 : 1973 to determine:

- Vicat softening point
- shrinkage on heating
- de-hydrochlorination
- ash content
- density.

13.2 Tests were carried out to confirm airtightness of joints.

13.3 The effective area of ventilation is 8400 mm².

14 Investigations

14.1 The manufacturing process was examined including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

14.2 Visits were made to sites in progress to assess the practicability of installation, and to sites where the ridge ventilation terminal was in use to assess practicability and performance.

14.3 An evaluation was made of the effectiveness of the RedVent Soil Pipe Ridge Ventilation Terminal in providing ventilation to a drainage system.

14.4 Results of tests carried out by, or on behalf of, Redland Roof Tiles Ltd, were examined by the BBA to assess:

- resistance to driving rain and deluge
- resistance to airflow
- durability
- determination of integrity of joints between units.

Bibliography

BS 2782 : *Methods of testing plastics*

BS 4514 : 1983 *Specification for unplasticized PVC soil and ventilating pipes, fittings and accessories*

BS 5572 : 1994 *Code of practice for sanitary pipework*

MOAT No 8 : 1973 *Directive for Rigid PVC Products Used Externally in Building*



On behalf of the British Board of Agrément

Date of Second issue: 3rd September 1999

Chief Executive

**Original Certificate issued, to Redland Roof Tiles Ltd, on 11th January 1989. This amended version issued to include change of name of the Certificate holder.*