TECHNONICOL






Manual

for installation of stone-coated metal roof tiles by TECHNONICOL

KNOWLEDGE. EXPERIENCE. CRAFTSMANSHIP.

TECHNONICOL

We are proud of what we produce and create. We enjoy seeing how new high-quality materials are produced from plain raw components with our up-to-date equipment, our work and efforts. We are continuously improving ourselves and strive to do the same for the environment. We prefer to address the comprehensive energy efficiency of buildings and structures. Our innovative solutions enable us to create high technology and energy-efficient buildings, improve the quality of buildings under construction, cut down operation and construction costs. We are glad to know that our materials are used in the construction of houses, plants, bridges, social infrastructure facilities and other objects, which improve the level and quality of life of people.

Contents

1.

Introduction

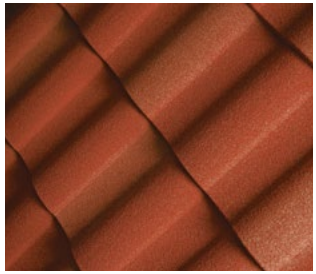
1. Introduction

1.1. General information

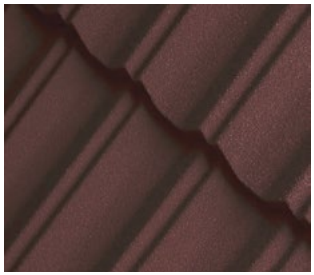
This manual presents recommended instalation methods for stone-coated metal roof tiles (SCMRT) and accessories by TECHNONICOL. The details and information in this document present general roofing practices used. Roofers installing SCMRT should have knowledge of roof structures and be experienced at working on sloped roofs. To obtain high quality roof covering it is necessary to use the recommended equipment.

1.2. About materials

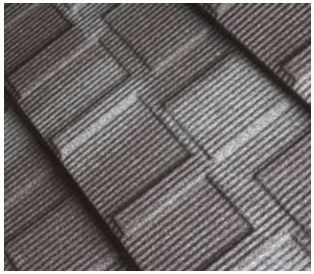
1.2.1. Stone-coated metal roof tiles



Collection ROMAN
Panel size: **1322×425 mm**;
Installed exposure:
1253×370 mm;
Panels per sqm: **2.10 pcs/m^2**;
Installed weight: **5.96 kg/m^2**.



Collection TILE
Panel size: **1340×420 mm**;
Installed exposure:
1265×370 mm;
Panels per sqm: **2.13 pcs/m²**;
Installed weight: **5.96 kg/m²**.

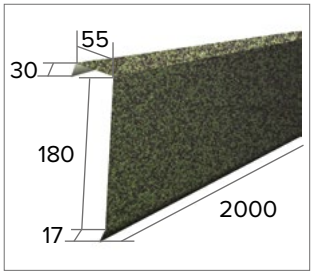


Collection SHINGLE
Panel size: **1360×420 mm**;
Installed exposure:
1330×370 mm;
Panels per sqm: **2.00 pcs/m²**;
Installed weight: **5.60 kg/m²**.

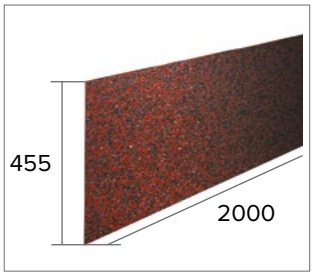
Collection SLATE
Panel size: **1320×420 mm**;
Installed exposure:
1250×370 mm;
Panels per sqm: **2.16 pcs/m²**;
Installed weight: **6.05 kg/m²**.

Collection SHAKE
Panel size: **1370×420 mm**;
Installed exposure:
1330×370 mm;
Panels per sqm: **2.00 pcs/m²**;
Installed weight: **5.60 kg/m²**.

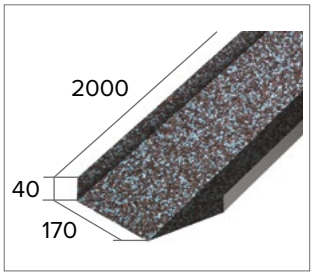
1.2.2. Accessoires



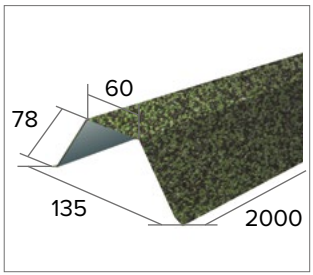
Barge board flashing



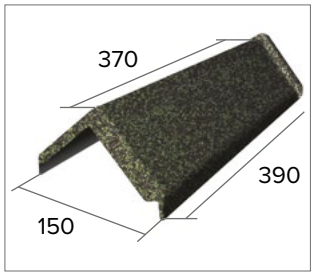
Flat sheet



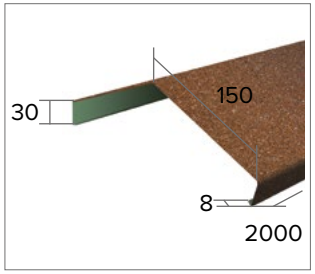
Valley



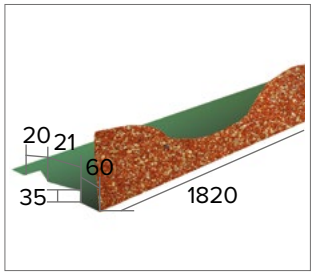
Ridge board flashing



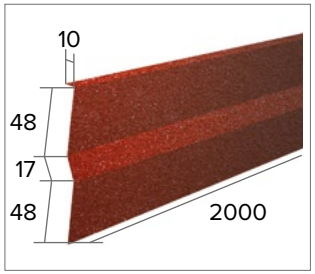
Angle trim



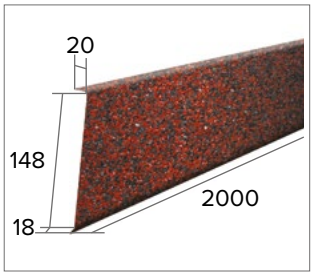
Ridge cap 150



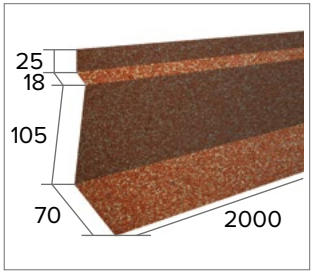
Bird stop



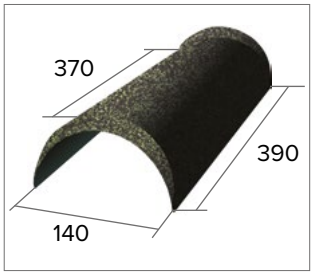
Side flashing



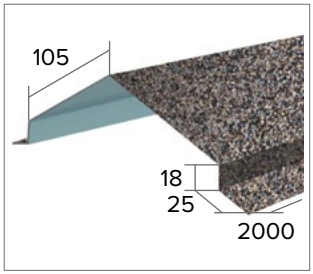
Fascia flashing



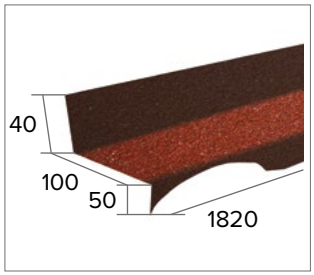
Wall flashing



Barrel cap



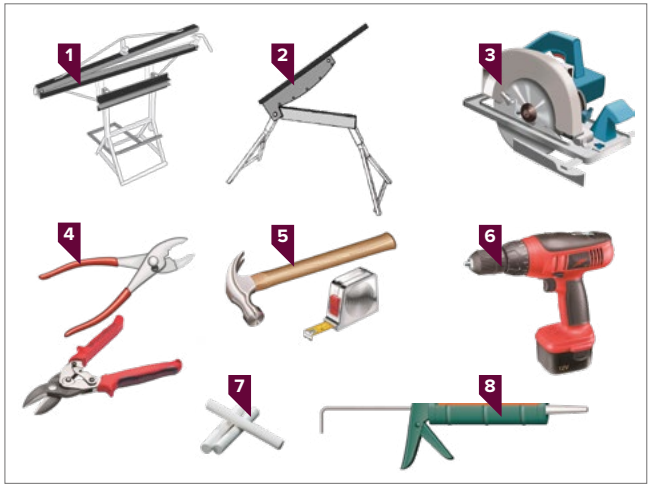
Ridge cap 105



Top course

Touch up kit

1.3. Equipment



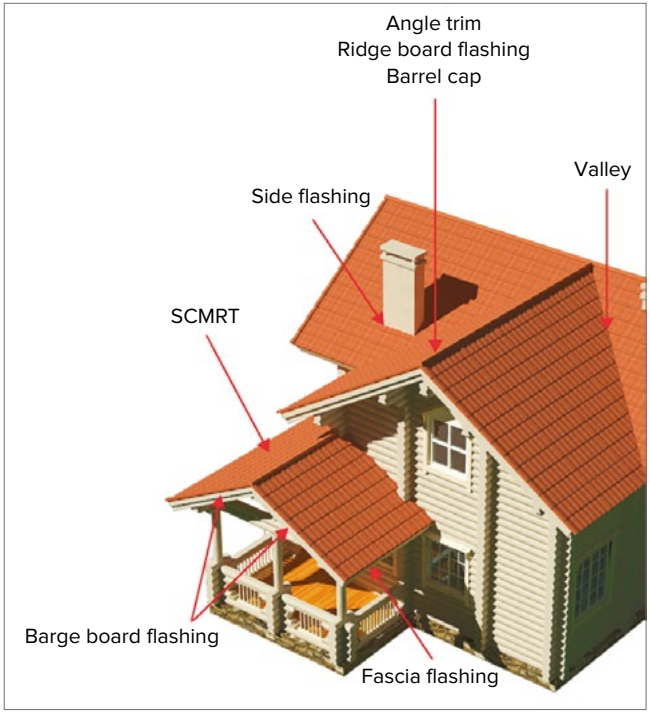
1. Tile bender;
2. Tile cutter;
3. Circular saw;
4. Pliers and tin snips;
5. Hammer and tape measure;
6. Cordless drill-driver;
7. Chalk;
8. Caulking gun.

2.

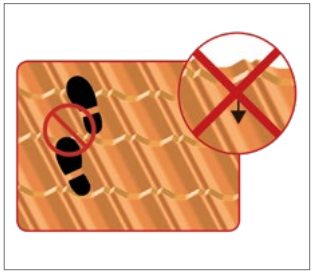
Installation

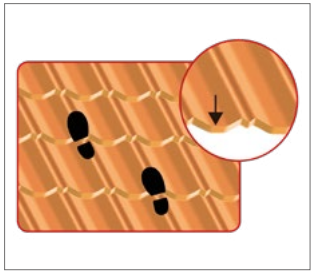
2. Installation

2.1. General information



NOTE: Do not walk on the middle of the tile or on the raised corrugations. When walking on tile your feet should be positioned over the nose or front downturn of the panels over location of a batten. Light weight, soft-soled shoes are recommended.

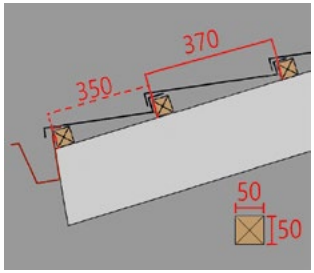


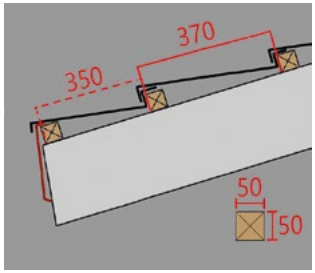


2.2. Installation of battens

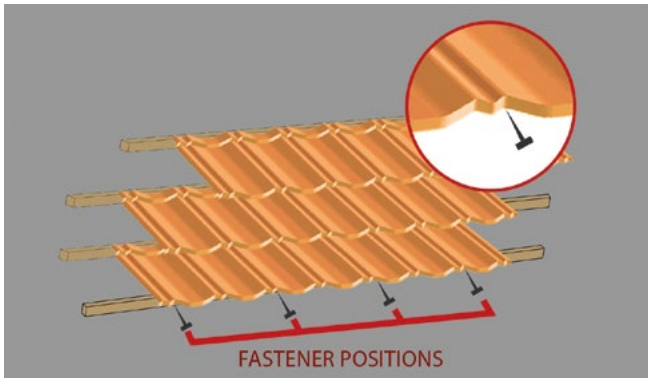
A **50×50 mm** batten is placed directly above the fascia around the entire roof. It will serve as an eave batten.

Batten spacing is crucial. They should be spaced **370 mm** apart. This applies to all battens except the distance between the first and second batten. The distance between them should be **350 mm** in order to ensure the necessary overhang of the tiles over the gutter or fascia flashing.



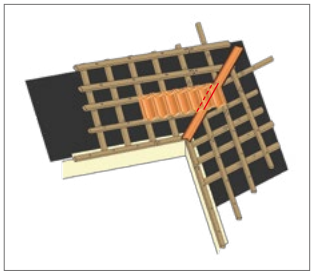


2.3. Installation of SCMRT

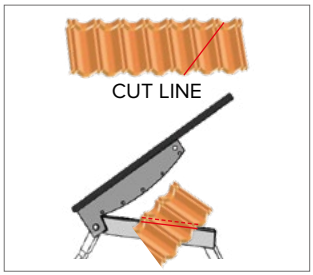


Start instalation from the ridge. Lay the first row of full panels and fasten them along the rear flange. The panels of the next row should be slipped under the panels of the upper row. The overlapping panel must cover the overlap channel. After laying three courses, begin fastening through the nose of the panel, working down the roof.

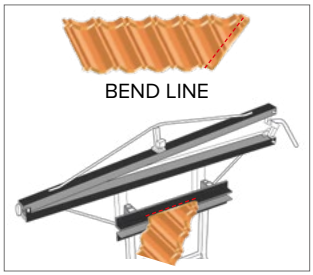
Panels must be fastened to wood battens with a minimum of four corrosion resistant common nails or four corrosion resistant screws (color coordinated). One fastener is placed near the bottom on the downturn of the panel from the overlapped edge. The remaining fasteners are evenly spaced across the panel. Care must be taken while fastening to avoid damage of the finished panel surfaces. Damaged surfaces can be repaired by using a touch-up kit. Apply the acrylic coating to the affected area and then sprinkle with matching stone granules. Touch-Up Kits are available from TECHNONICOL.



To cover areas of the roof remaining after installation of full panels the bending and cutting of tiles is used.



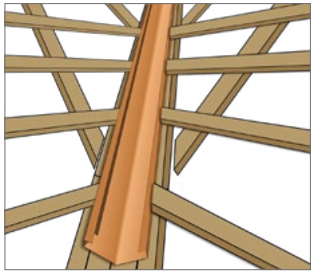
For tile cutter align roof tile with cutter and use force to cut evenly and easily. To make the surface smooth, cut roof tile at once.



For tile bender position the bending machine on a flat surface, and hold the roof tile firmly with controller of under bender and bend freely.

2.4. Installation of accessoires

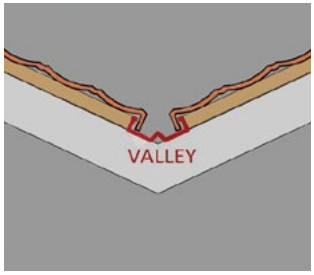
2.4.1. Installation of valley

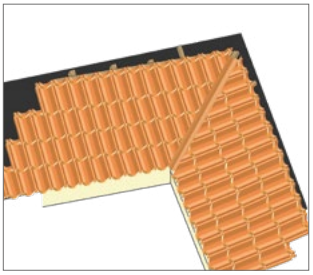


After valley flashing has been fit and secured into the valley area and full panels have been positioned up to the valley, measure for cut panels.

Panels are cut and bent down into valleys forming either an open or completely covered (closed) valley. Using the bending equipment bend the tiles downwards for valleys.

To create an open valley, mark the outline of required opening. Working on one side of the valley at a time measure, cut and bend panels starting at the bottom of the valley and working up. Bend cut edge of panels down against the up-stand of the valley metal as indicated in the drawing.

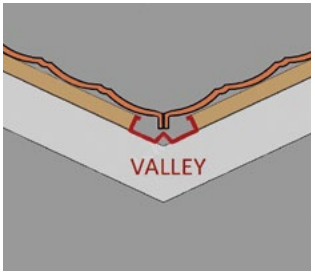


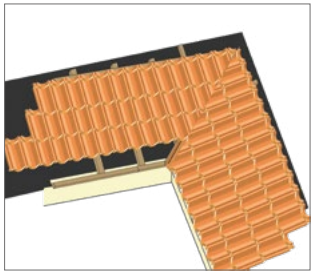


NOTE: Make sure the ends of the valley metal extend beyond the fascia or onto a lower roof area.

To create a closed valley, find and establish the center of the valley by either marking a line or following existing center rib. After valley flashing has been fit and secured into the valley area, start on one side of the valley by measuring, cutting, bending and installing panels as accurately as possible to create a clean straight line. Next, measure, cut and bend panels to fill in the other side of the valley. Make sure these panels meet the pannels from the opposing side of the valley.

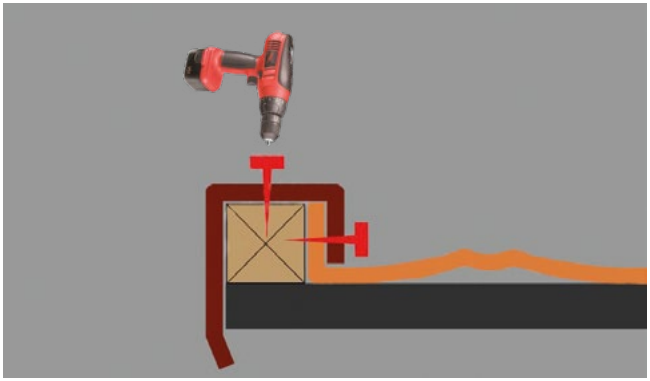
The panels from the two sides of the valley should fit as closely as possible and the line between them should run straight up the valley.





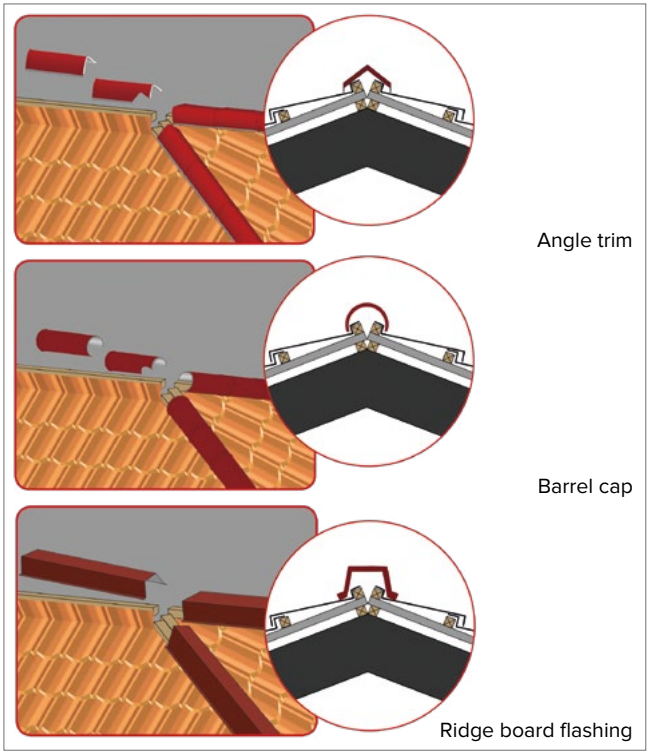
2.4.2. Installation of barge board flashing

When using barge board flashing, install the batten above the rafter and match the top of the barge board to the top of the batten. Note that the edge of the tile is bent up under the barge cover to ensure complete weather security. Nail barge board flashing to barge board as shown nailing points for barge board covers.



NOTE: The edge of the tile is bent up under the barge cover to ensure complete weather security.

2.4.3. Installation of angle trim, barrel cap and ridge board flashing



NOTE: The edge of the tile is bent up under the ridge cover to ensure complete weather security.

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