



QUEENTILE

TOTAL SUPREMACY

INSTALLATION GUIDE



INTRODUCTION

The QUEENTILE® roofing systems are designed for sloped roofs, and the combination of stone-coated steel roof tiles and accessories is suitable for both traditional and insulated roofs, including those on attic floors.

The stone-coated steel roof tiles are manufactured from cold-rolled structural steel with a protective aluminum-zinc and polymer coating applied through a hot-dip process. The recommended roof pitch is between 15° and 90°. For low-slope roofs (up to 15°), additional waterproofing underlayment must be used to ensure proper water protection. This installation guide provides general recommendations for installation. The roofing contractor is responsible for ensuring compliance with all national standards, regional building codes, and regulations.

The stone-coated steel roof tiles are available in five profiles:

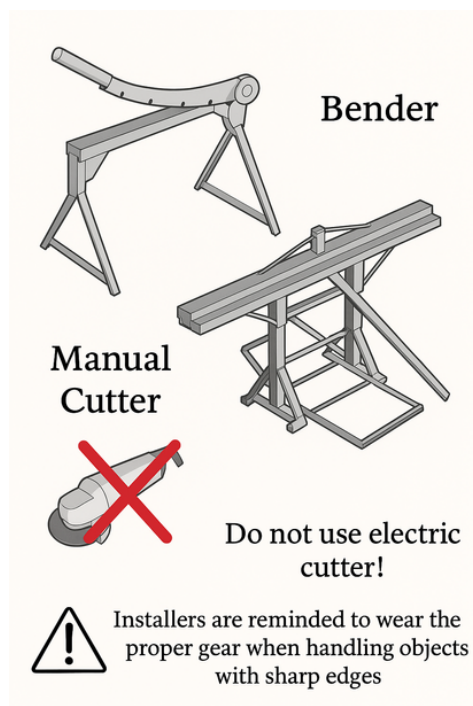
QUEENTILE® STANDARD, QUEENTILE® CLASSIC, QUEENTILE® VERONA, QUEENTILE® SHAKE, and QUEENTILE® SLATE.

Safety Precautions

Roof installation must always be performed in accordance with OSHA and local safety regulations. Installers should:

- Use approved fall-protection systems when working on sloped roofs.
- Wear non-slip shoes and personal protective equipment (gloves, safety glasses, harnesses).
- Ensure that ladders, scaffolding, and tools are properly secured.
- Avoid working in wet, icy, or windy conditions that may increase the risk of falls or accidents.

TOOLS USING DURING INSTALLATION



TOOLS USING DURING INSTALLATION

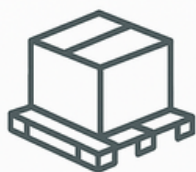


Personal Protective Equipment (PPE)



CONTENTS

1.INTRODUCTION	1
1.1.CONTENTS	1.1
2.COLLECTION	4
3.ACCESSORIES	5
4.MANUFACTURING TECHNOLOGY.....	7
5.STORAGE	8
6.TOOLS USING DURING INSTALLATION	8
7 . ROOF INSULATION AND WATERPROOFING	9
8.ROOF SHEATHING	10
8.1Fastening of the TM "QUEENTILE" RIDGE AND HIP CAP (TRIANGLE RIDGE OR BARREL RIDGE.).....	12
8.2 Installation Direct to Deck	13
9.INSTALLATION OF TILES AND ACCESSORIES	15
9.1. Installation of the TM "QUEENTILE" Eaves Flashing (Small, Big)	
9.2. Installation of the TM "QUEENTILE" TRIANGULAR RIDGE AND HIP CAP	22
9.3. Installation of the TM "QUEENTILE" Valley Flashing	23
9.4. Installation of the TM "QUEENTILE" Barge Board (#1,#2,Left/Right)	23
9.5. Arrangement of adjoining	24
9.6. Treatment with a maintenance kit.....	26
10. CONCLUSION	26



**Store &
Handle**



**Insulation &
Waterproofing**



**Install Queentile®
Roofing**



**Seal &
Flash**

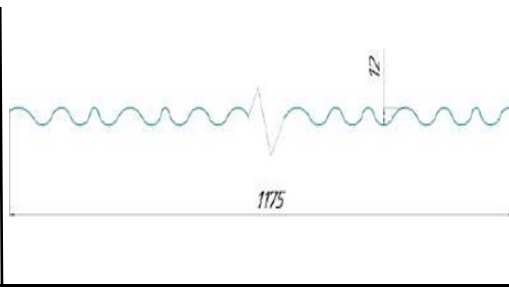
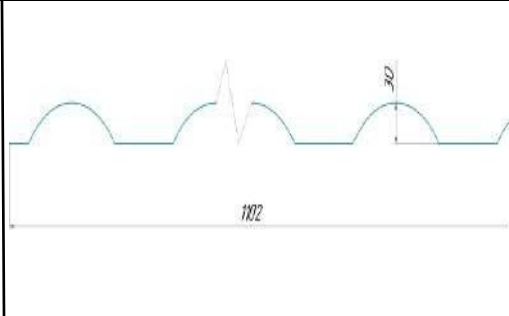
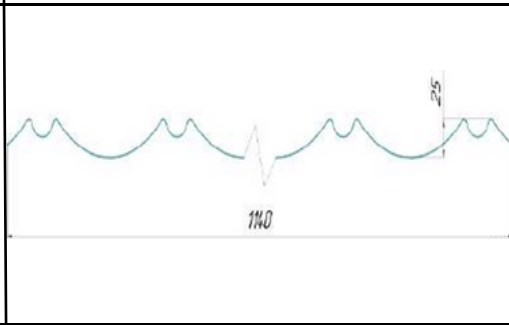
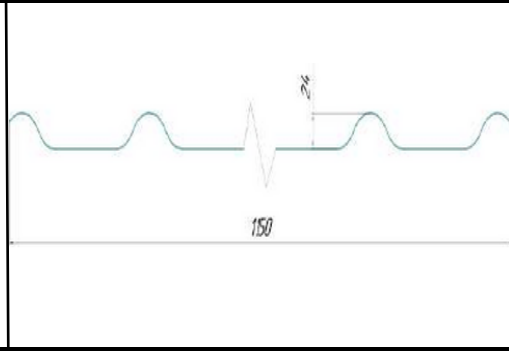
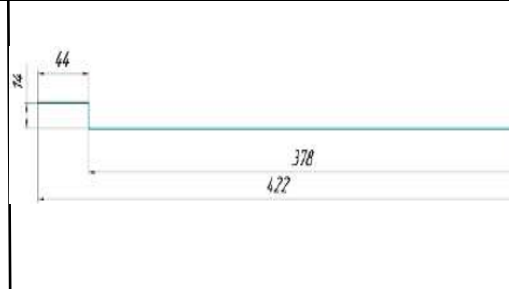


**Treat the
Surface**

2 COLLECTION

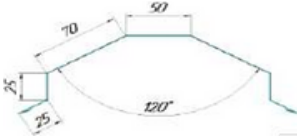
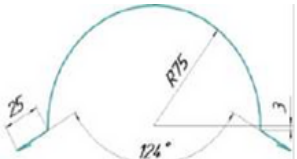
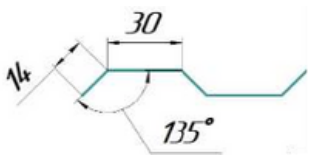
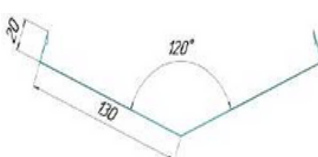
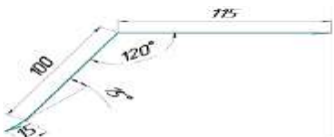
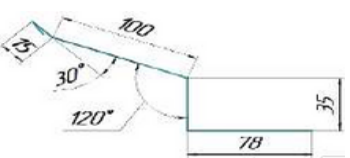
The stone-coated steel roof tiles are available in five profiles:

QUEENTILE® STANDARD, QUEENTILE® CLASSIC, QUEENTILE® VERONA, QUEENTILE® SHAKE, and QUEENTILE® SLATE.

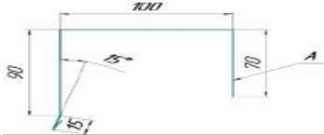
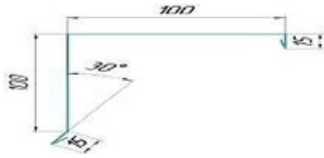
		QUEENTILE SHAKE Dimensions: 16.54" x 46.26" Coverage area: 4.30 sq ft Coverage: 23.23 pcs/sq Weight: 5.95 lbs
		QUEENTILE VERONA Dimensions: 15.35" x 43.39" Coverage area: 3.93 sq ft Coverage : 25.45 pcs/sq Weight: 5.42 lbs
		QUEENTILE CLASSIC Dimensions: 16.14" x 44.88" Coverage Area: 4.00 sq ft Coverage: 24.99 pcs per sq Weight: 5.66 lbs
		QUEENTILE STANDARD Dimensions: 15.75" x 45.28" Coverage Area: 4.14 sq ft Coverage: 24.15 pcs per sq Weight: 6.04 lbs
Not available yet 		QUEENTILE SLATE Dimensions: 16.54" x 48.82" Coverage Area: 4.89 sq ft Coverage: 20.35 pcs per sq Weight: 6.06 lbs

*EFFECTIVE AREA

3 ACCESSORIES

		TRIANGULAR RIDGE AND HIP CAP Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		BARREL RIDGE AND HIP CAP Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		COUNTER-FLASHING(Q-BAR) Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		VERONA CAP FLASHING Overall Length 49.21" Exposed Length(Coverage) – 40.94" Usage Rate: – 0.29 pcs/ft
		VALLEY FLASHING Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		SIDE FLASHING #2 Overall Length 78.74" Exposed Length(Coverage)– 74.8" Usage Rate: – 0.16 pcs/ft
		EAVES FLASHING (LARGE) Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		VERONA EAVES FLASHING Overall Length 49.21" Exposed Length(Coverage) – 40.94" Usage Rate: – 0.29 pcs/ft

3 ACCESSORIES

		BARGE BOARD LEFT/RIGHT Overall Length 49.21" Exposed Length(Coverage) – 41.34" Usage Rate: – 0.29 pcs/ft
		BARGE BOARD #2 Overall Length 78.74" Exposed Length(Coverage) – 74.8" Usage Rate: – 0.16 pcs/ft
		ROOF DECORATION ON ONE SIDE Length – 16.73"
		TRIANGULAR RIDGE END CAP Completes the ridge on both sides. Designed to fit triangular ridge and hip ends. Dimensions: 6.69" x 5.51". Usage Rate – 1 (0,5) pcs per side
		BARREL RIDGE END CAP Completes of the ridge on both sides. Designed to fit barrel ridge and rib ends, Dimensions :R 2.91" Usage Rate: 1 (0,5) pcs per side
		ROOF DECORATION ON ONE SIDE Length: 16.73"
		COATING KIT For fastening and decorative coating. Acrylic adhesive: 3.09 lbs / 1076.4 sq ft Finish Coating: 0.88 lbs / 1076.4 sq ft Natural basalt grit: 2.2 lbs / 1076.4 sq ft

4 STORAGE

Sheets and accessories of QUEENTILE® stone-coated steel roof tiles must be stored on pallets in their original factory packaging in a dry, well-ventilated area.

During installation, if the pallets are kept outdoors, the sheets and accessories must remain on the pallets and be covered with protective film under a waterproof shelter.

IMPORTANT: The repair kit must **NOT** be stored at temperatures below +41°F. Freezing and subsequent thawing can cause the paint and lacquer products to lose their physical and chemical properties.

Dragging QUEENTILE® stone-coated steel roof tiles across other sheets or on the ground is strictly prohibited. If minor mechanical damage occurs during loading or unloading, the affected areas must be treated with a repair kit.

Stacking pallets of QUEENTILE® roofing materials is **NOT** allowed.

Factory-packaged products can be stored outdoors for no more than one month, provided they are protected from precipitation and UV radiation. For long-term storage, materials must be kept in dry, ventilated spaces with the transport packaging removed to ensure proper air circulation.

Roofing system components must never be stored directly on the ground, even when indoors.



5 ROOF INSULATION AND WATERPROOFING

Depending on the regulations and requirements in each state.

Depending on state regulations and requirements, effective roof insulation is essential for maintaining a building's thermal efficiency, as a significant portion of heat loss occurs through the roof.

For pitched roofs, **vapor-permeable insulation materials** such as fiberglass, mineral wool, and basalt wool are commonly used. These materials are available in slab or roll form.

⚠ Important: If vapor-proof insulation is used, the roof will no longer be self-ventilating, which may lead to excess moisture buildup in the form of condensation. This can accelerate deterioration of both the insulation and the wooden roof structure.

Methods of Roof Insulation

There are two primary methods for insulating pitched roofs:

- **Horizontal Insulation (Cold Attic Method):**

When the attic space is not intended for use as a living area, horizontal insulation can be applied. This reduces the amount of insulation required because it is installed within the building's ceiling structure, effectively decreasing the heated volume compared to insulation along the rafters. Ensuring proper insulation density is crucial for long-term performance.

- **Rafter Insulation (Warm Roof Method):**

Insulation can be installed either above or below the rafters. A vapor barrier must be applied along the roof contour, wrapped to the top, and securely sealed to prevent moisture infiltration.

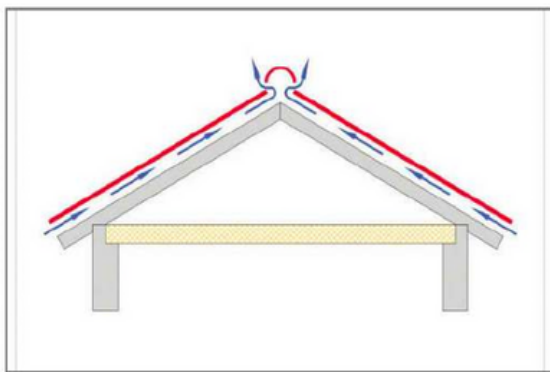


Fig 7.1 Cold roof

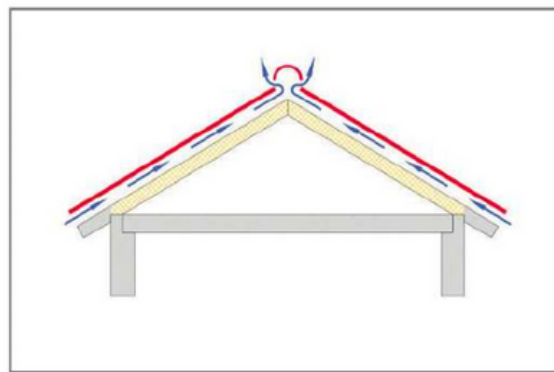


Fig 7.1.2 Warm roof

Installation Best Practices

- Membranes and films should be sealed at junctions using specialized adhesive tape or film sealant.
- Thicker insulation generally reduces heating costs — required thickness should be determined during the design phase.
- Vapor barrier film is not load-bearing; insulation should be placed on wooden or other suitable flooring.
- Maintain proper seam alignment when laying insulation and avoid over-compressing it, so the material remains freely positioned and performs effectively.

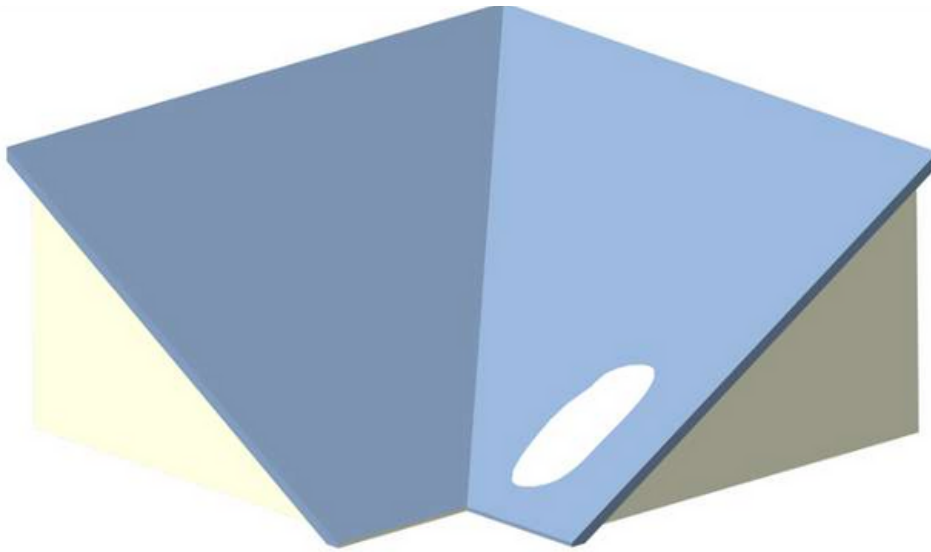
6 ROOF SHEATHING

The battens must be secured to a properly prepared roof surface, ensuring sufficient strength, stability, and waterproofing.

Materials such as OSB sheets or solid planks may be attached to the roof trusses using self-tapping screws or nails.

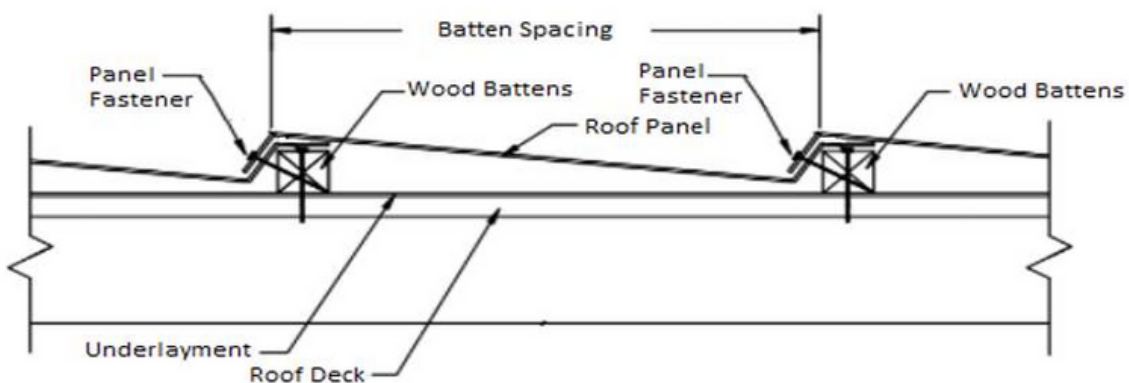
Once the sheathing is in place, a waterproofing layer should be applied over the entire surface and fastened with a stapler or other approved method. Super-diffusion membranes or other waterproofing materials must comply with state building codes and be installed according to local regulations.

⚠ Important: The roof surface must be clean, dry, and free from debris before applying the waterproofing layer to ensure proper adhesion and long-term performance.



Your Options for Batten Installation

(For QUEENTILE® CLASSIC and QUEENTILE® STANDARD profiles)

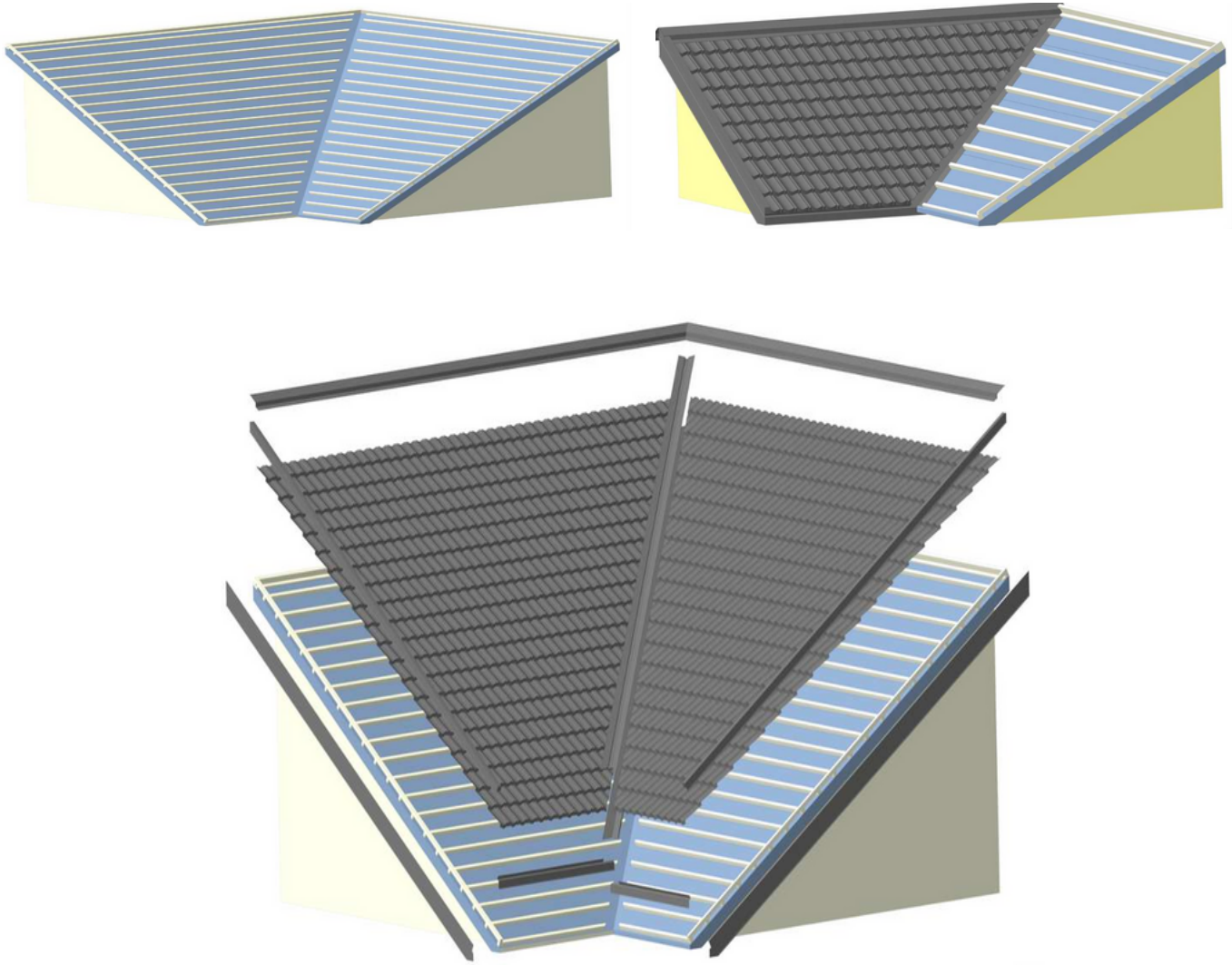


6 ROOF SHEATHING

The battens, with a 2" x 2" cross-section, must be installed with spacing according to the recommended guidelines for the selected QUEENTILE® roof profile.

The position of the first batten row must be determined based on the dimensions and placement of the chosen fascia board to ensure proper panel overhang.

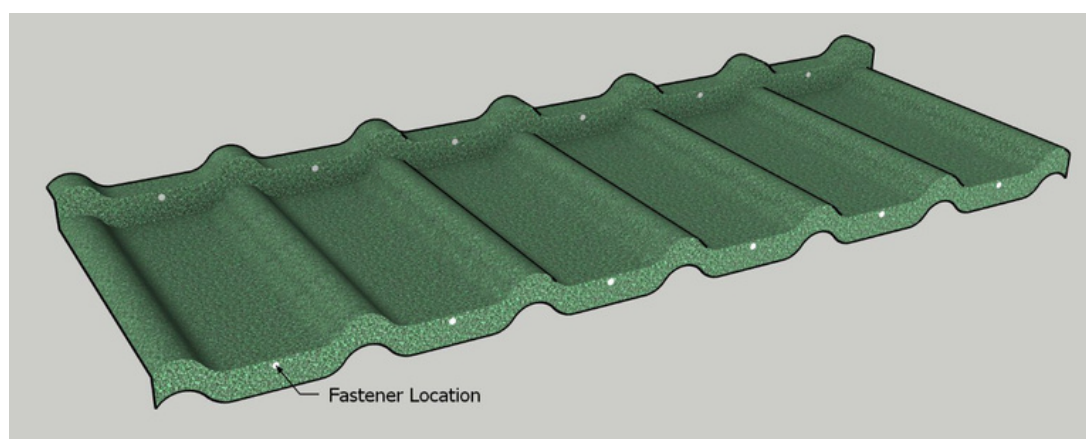
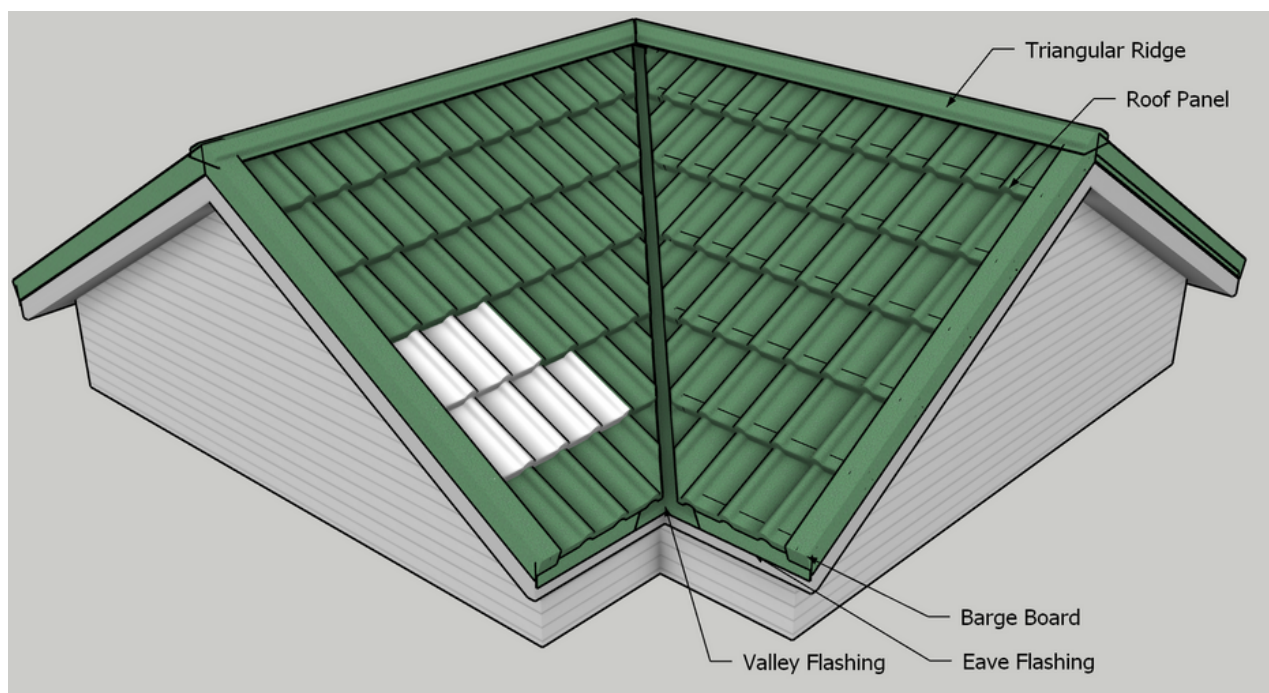
⚠ Important: Incorrect placement of the first batten will result in misalignment of all subsequent rows and may compromise both the appearance and performance of the roof. Always measure and verify the starting point before securing the first batten.



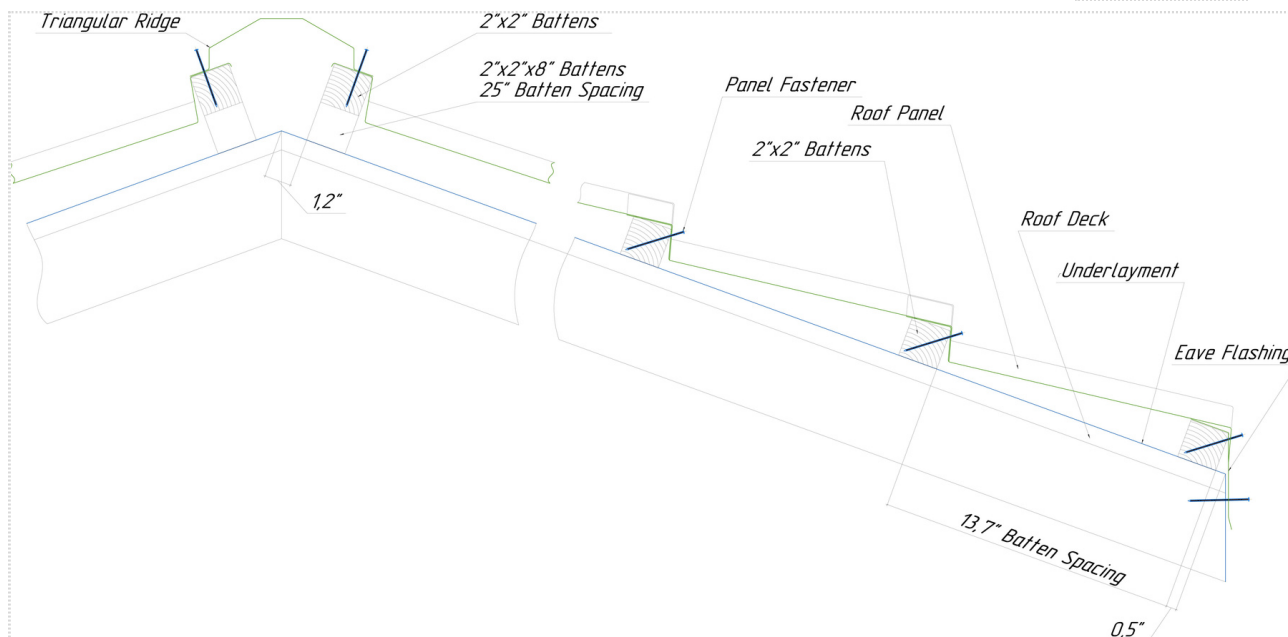
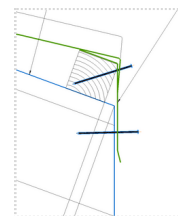
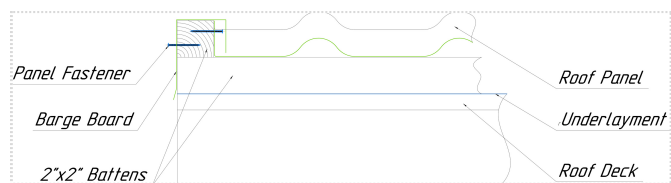
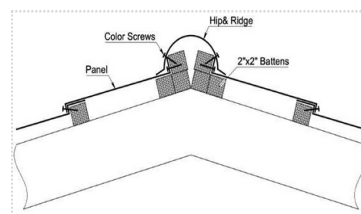
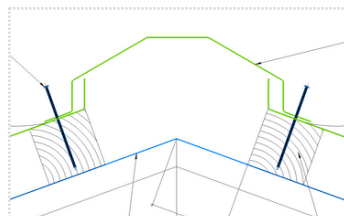
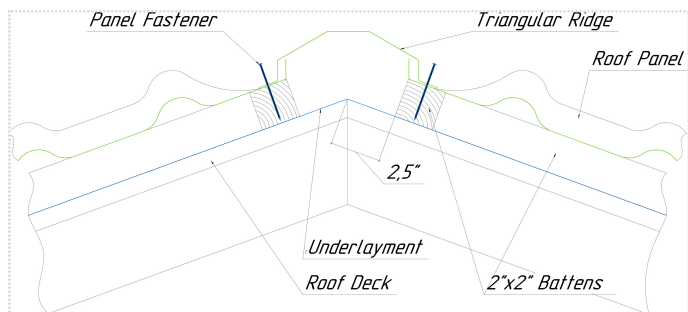
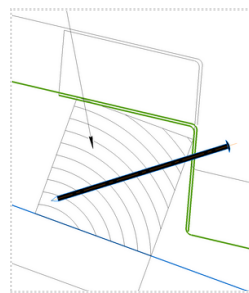
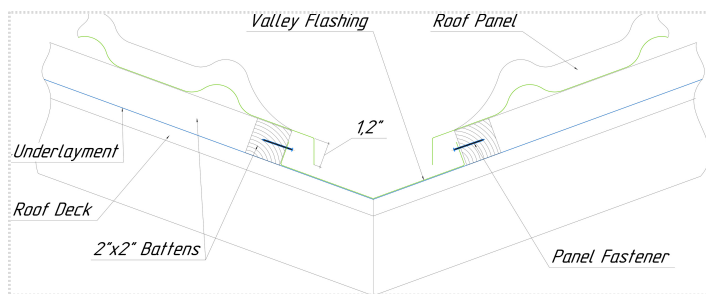
The illustration provides an example of the step-by-step installation process using the following components:

- QUEENTILE® Eaves Flashing (Large)
- QUEENTILE® Deep Valley Flashing
- QUEENTILE® CLASSIC panels
- QUEENTILE® Side Flashing
- QUEENTILE® Barge Board (Left/Right)
- QUEENTILE® Valley Flashing
- QUEENTILE® Triangular Ridge and Hip Cap

7 QUEENTILE® STANDARD – Installation Guide



7 QUEENTILE® STANDARD – Installation Guide



7 QUEENTILE® CLASSIC – Installation Guide

The battens must be made of wooden beams with a cross-section of 2" x 2" and installed with the following spacing:

- 13.8" for QUEENTILE® CLASSIC

The battens must be mounted from the eave upward toward the ridge.



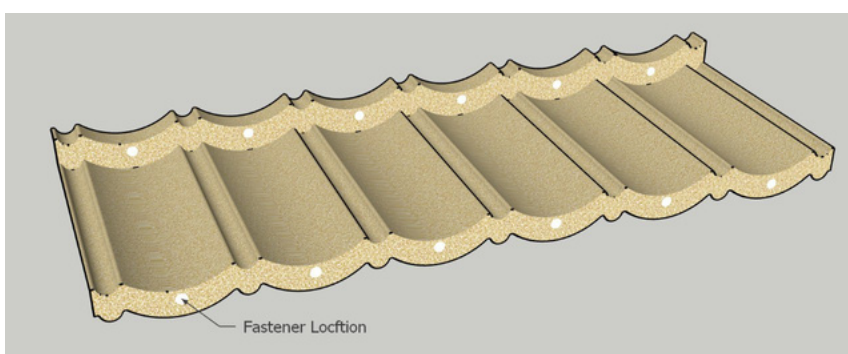
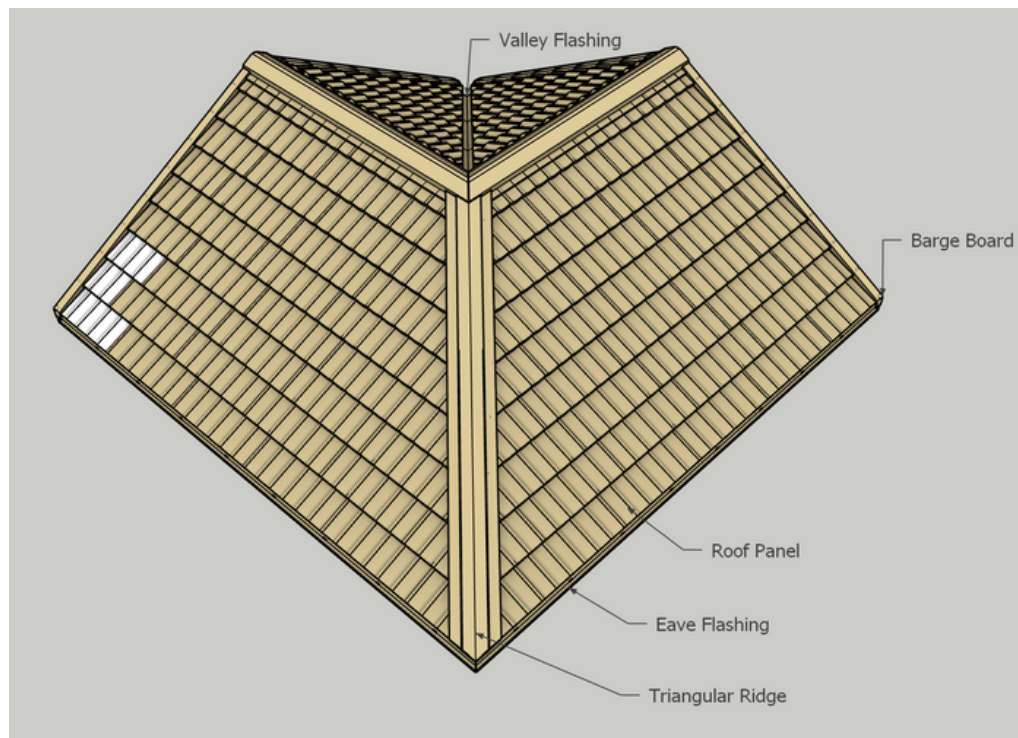
For the installation of QUEENTILE® CLASSIC tiles, it is recommended to start with the second row from the ridge and work downward toward the eave, staggering the tiles in a checkerboard pattern.

The uppermost row should be installed last to accommodate any cut tiles, ensuring proper overlap and a seamless finish.

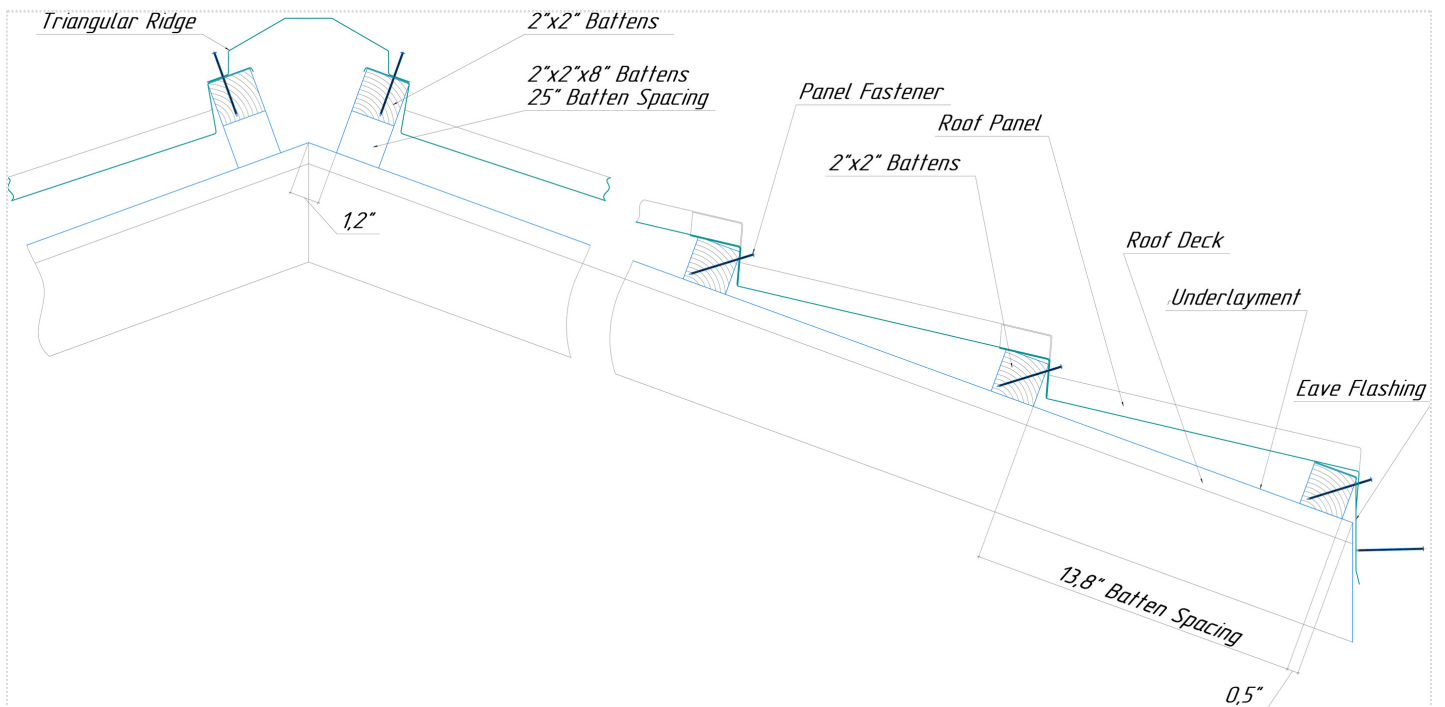
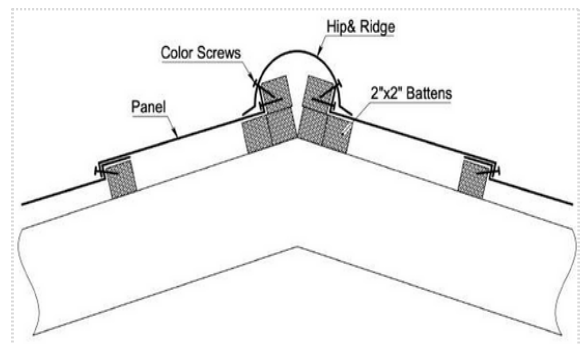
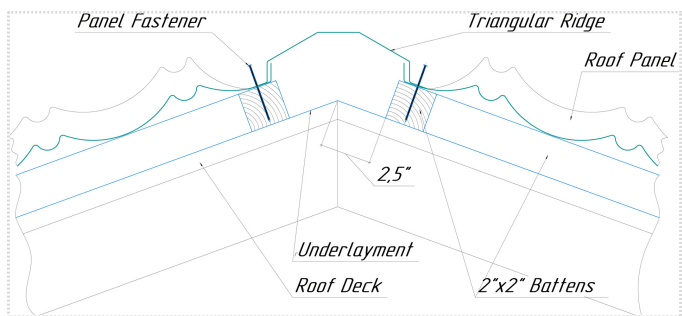
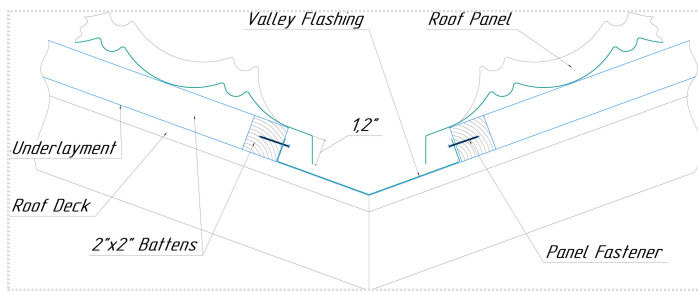
When installing QUEENTILE® CLASSIC shallow-profile tiles, it is essential to bend them at the ridge, along the leading edge, and at all junctions with other roof components.

Tiles may be installed from left to right or from right to left, depending on wind load considerations and aesthetic requirements.

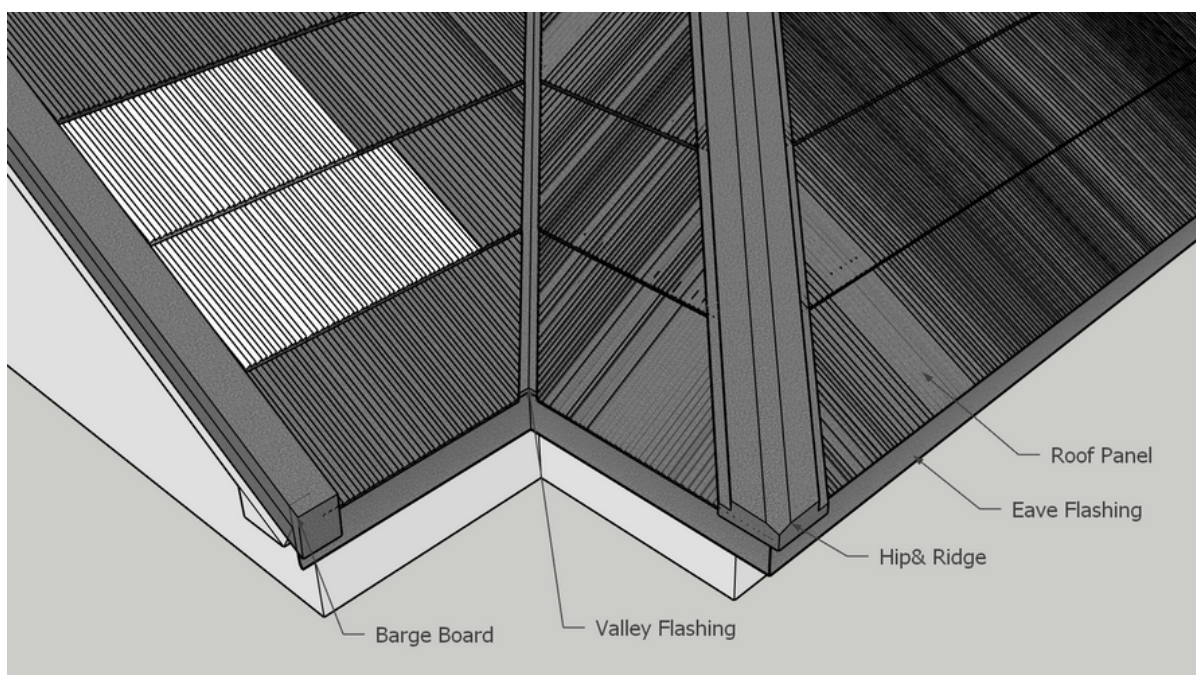
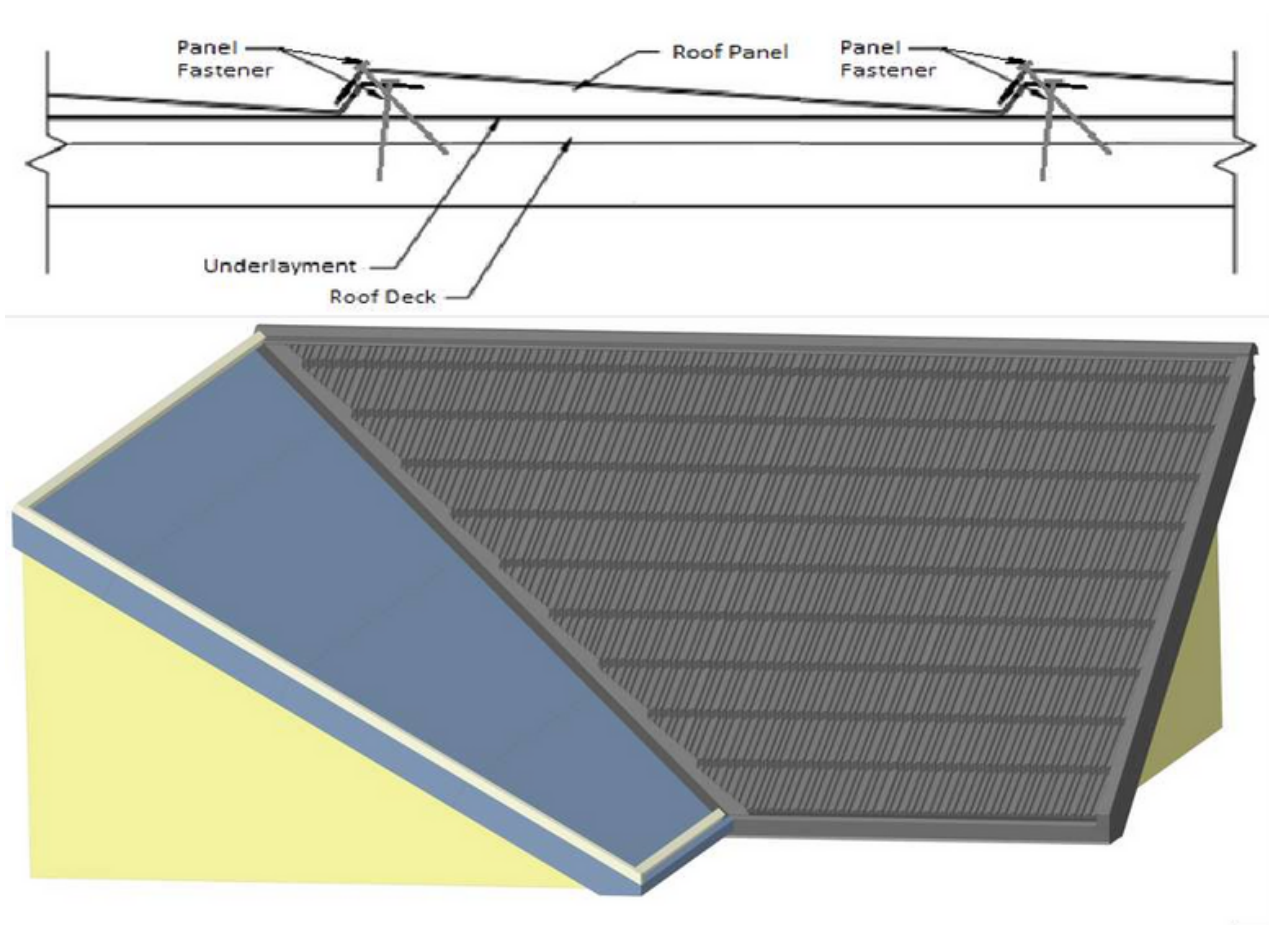
Choosing the optimal installation direction ensures both structural integrity and a visually uniform roof design.



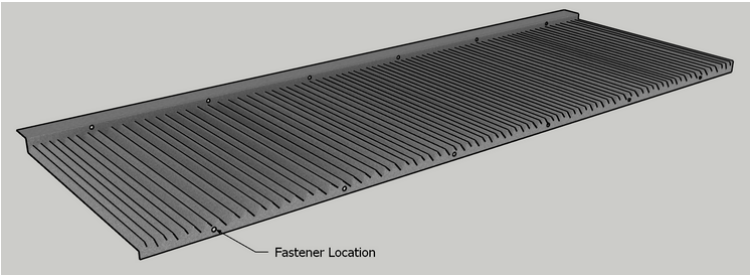
7



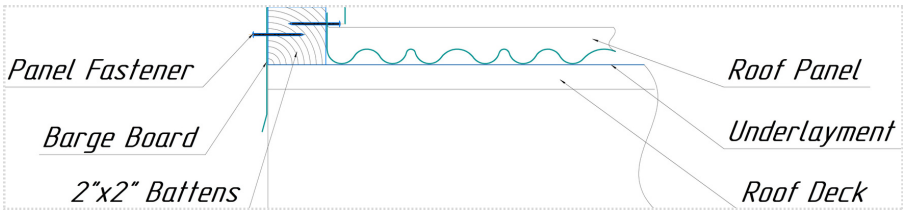
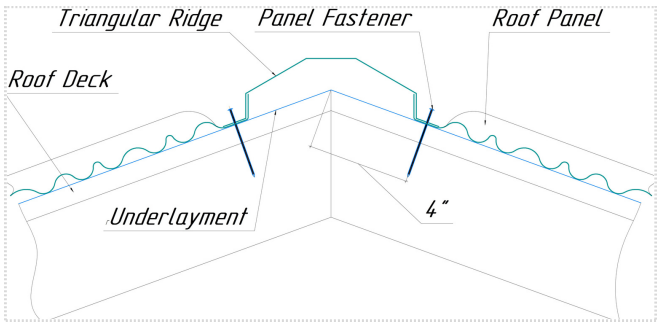
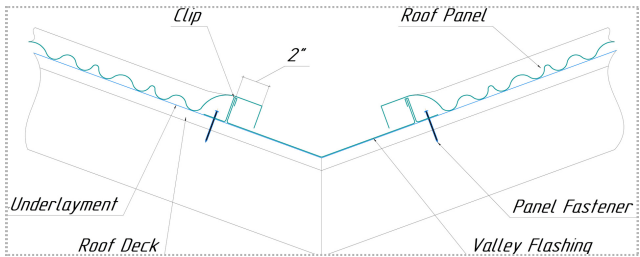
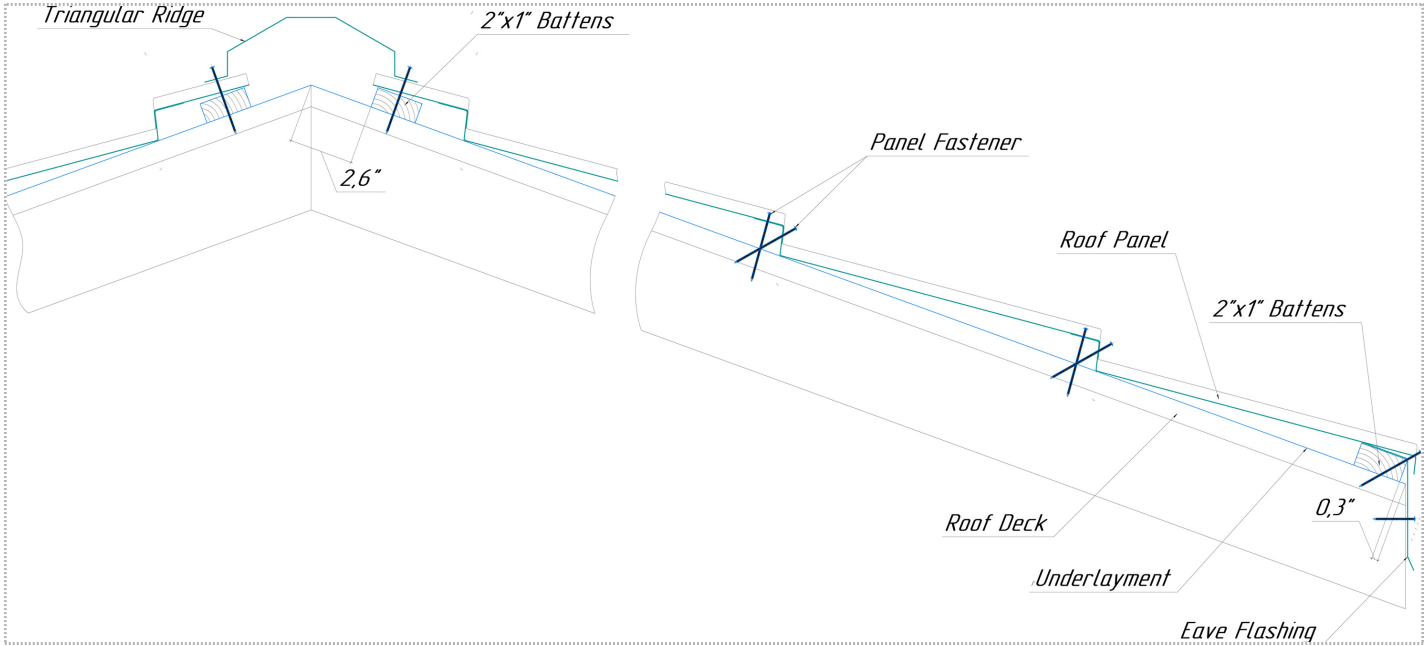
8 Direct-to-Deck Installation for QUEENTILE® SHAKE



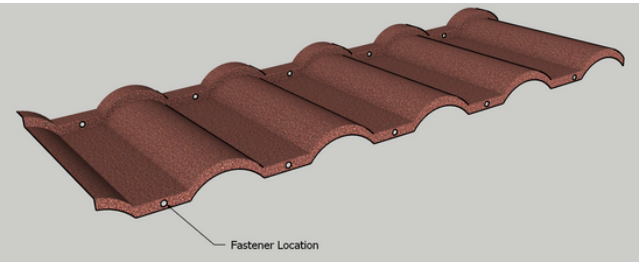
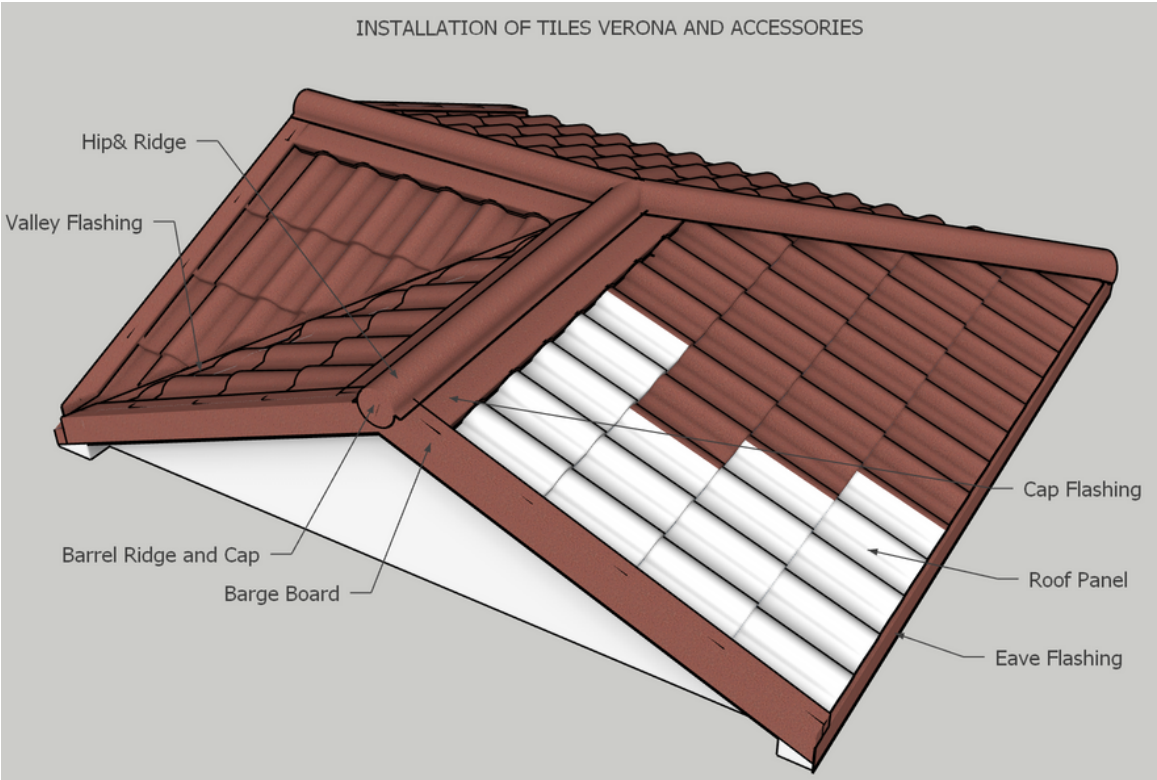
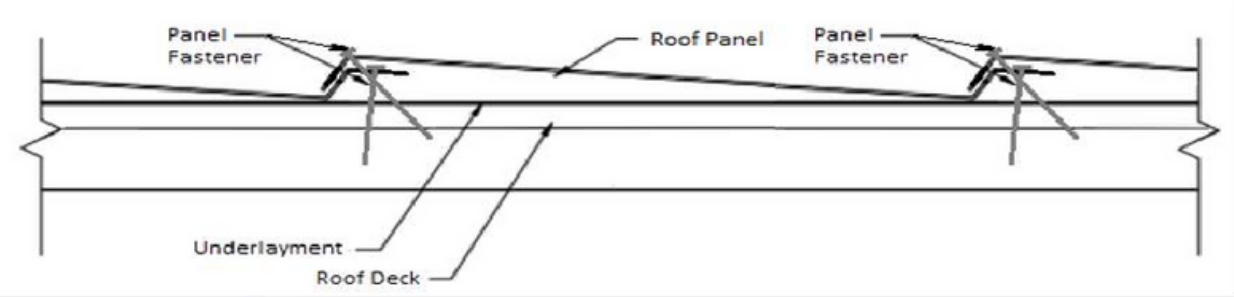
8 Direct-to-Deck Installation for QUEENTILE® SHAKE



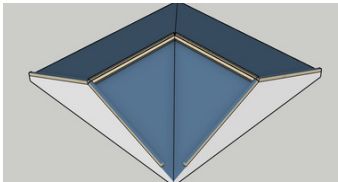
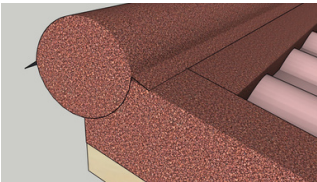
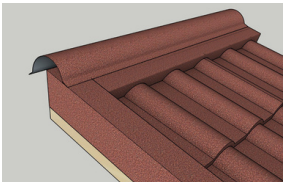
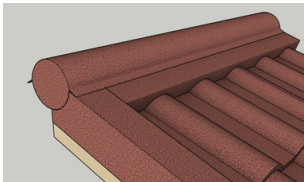
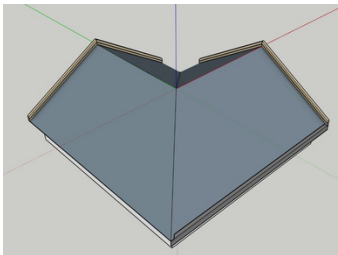
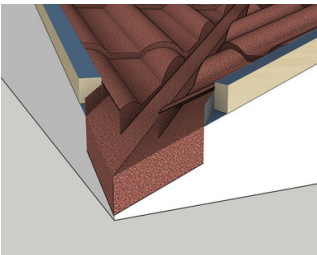
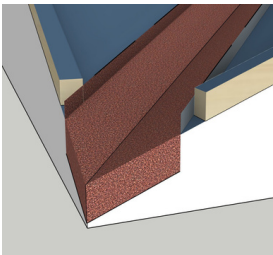
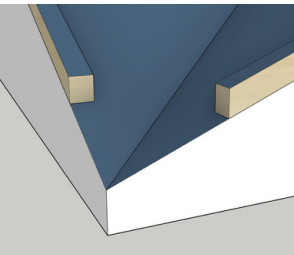
Shake: 12 screws per panel
(Direct-to Deck Installation)



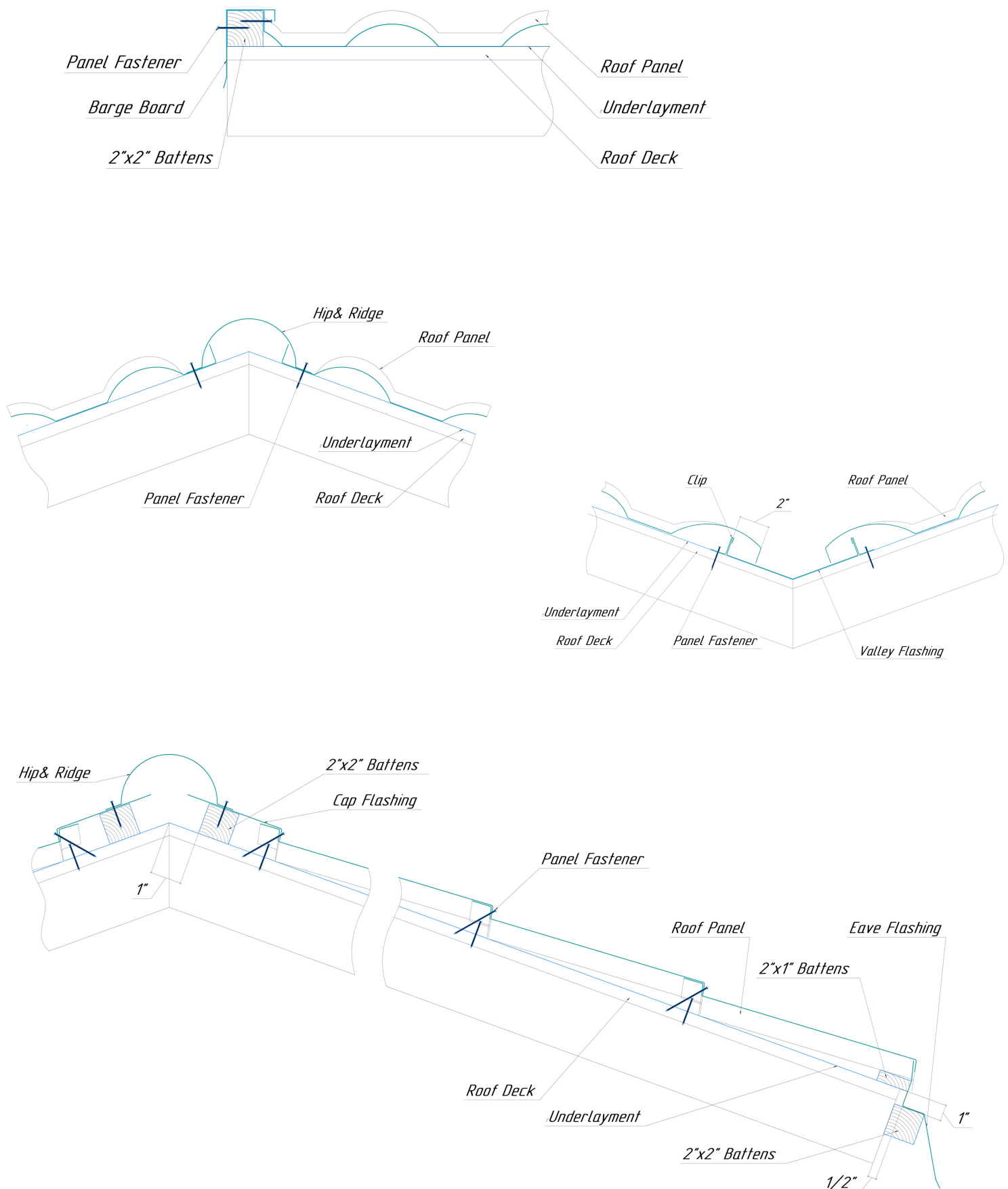
8 Direct-to-Deck Installation for QUEENTILE® VERONA



VERONA: 10 screws per panel
(Direct-to Desk Installation)

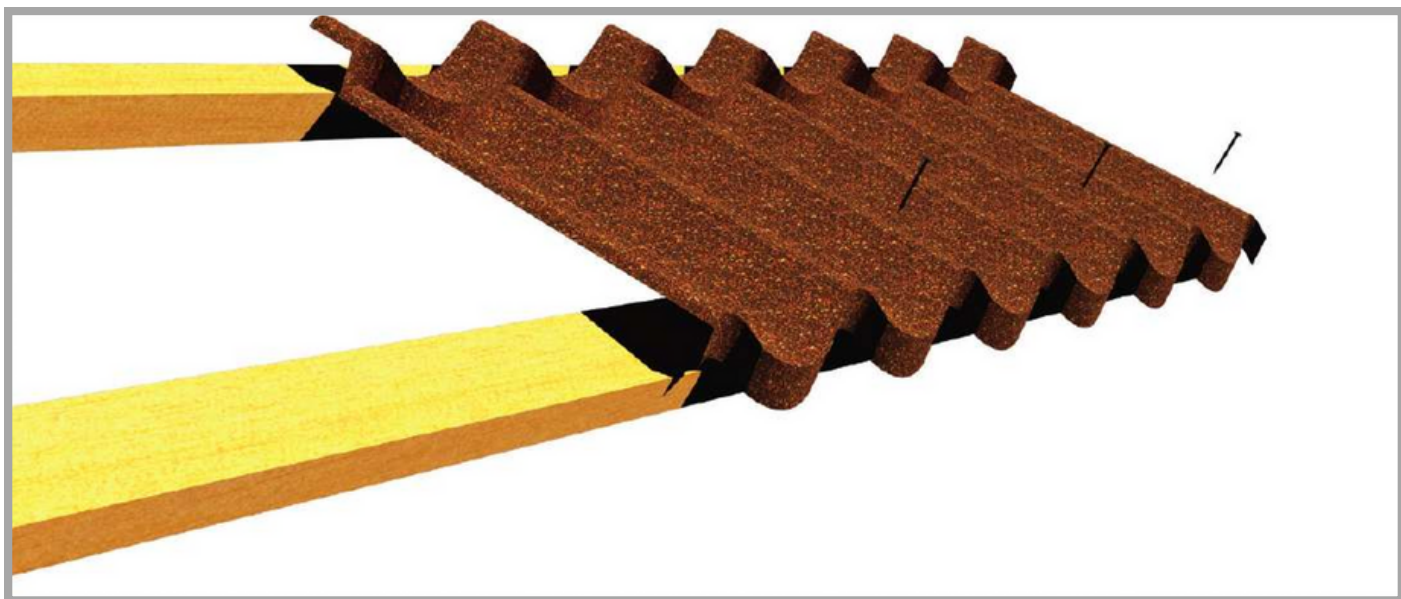


8 Direct-to-Deck Installation for QUEENTILE® VERONA



9 INSTALLATION OF TILES AND ACCESSORIES

The sheets should be securely fastened at the vertical ledge that separates the transverse rows of tiles, with the exception of the first row near the eave and the final row at the top, which are positioned at an incline. Fastening can be performed manually or with the aid of a pneumatic hammer for increased efficiency.



Secure each screw at a 45° angle to the sloped surface of the roof sheathing, ensuring a firm attachment near the edge.

When fastening manually, use a nail punch to ensure accuracy and prevent damage to the coating.

Only corrosion-resistant screws that meet regional building code requirements should be used to guarantee long-term durability.

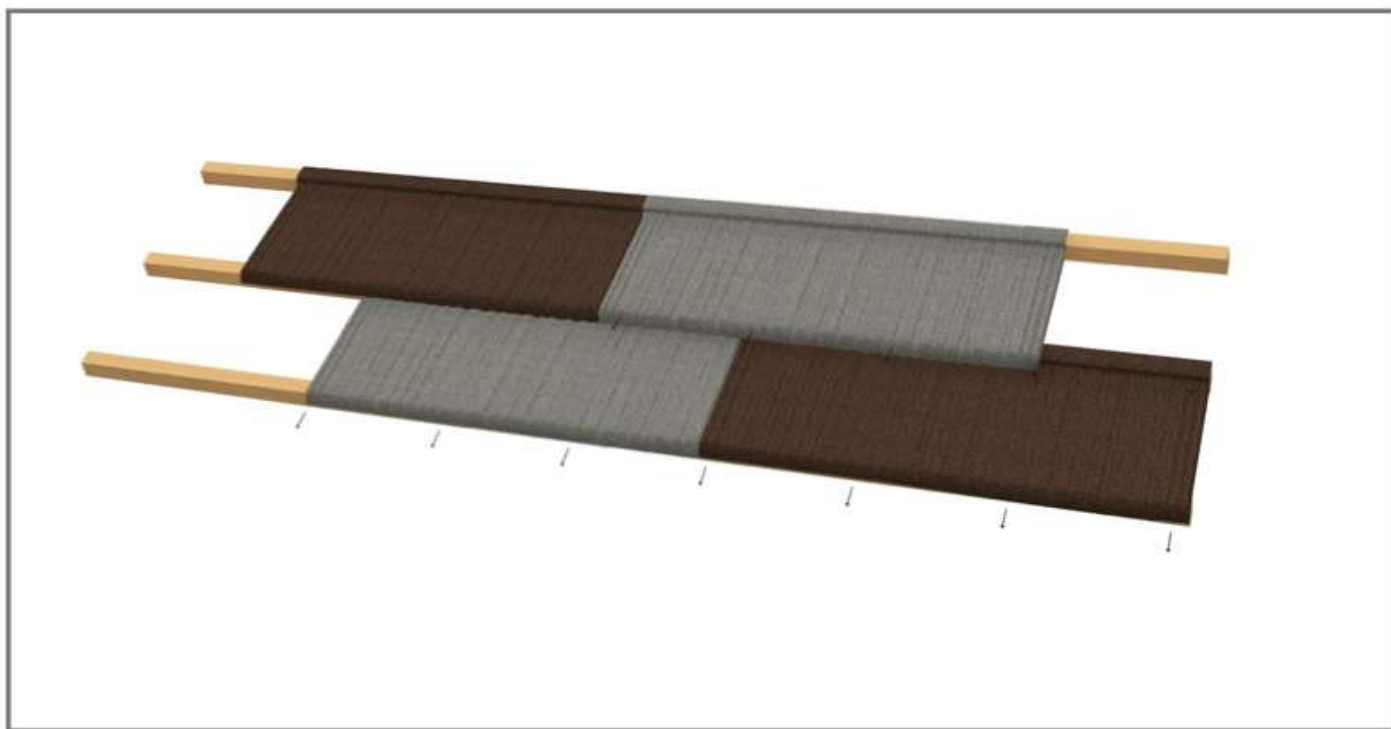
⚠ Important: Only original QUEENTILE® products must be used for installation.

The company is not responsible for the quality, performance, or durability of any components fabricated by the customer from non-standard materials.

Such products are not covered under the QUEENTILE® warranty.

9 INSTALLATION OF TILES AND ACCESSORIES

While the standard installation method begins at the ridge and progresses toward the eave, alternative installation methods may also be used, provided they meet structural and design requirements. Use anticorrosive painted nails to securely fasten the stone-coated steel roofing in place. For the initial tiles, fasten them with 3–4 screws, positioned perpendicular to the slope plane in the upper section. These fastening points will later be concealed beneath the upper tiles or roofing accessories, ensuring a clean and seamless finish. Ensure that the primary fastening points on the slope plane are positioned at the sheet joints, with Shake sheets evenly distributed across the surface. Each sheet must be secured using at least 12 screws to guarantee stability and durability.



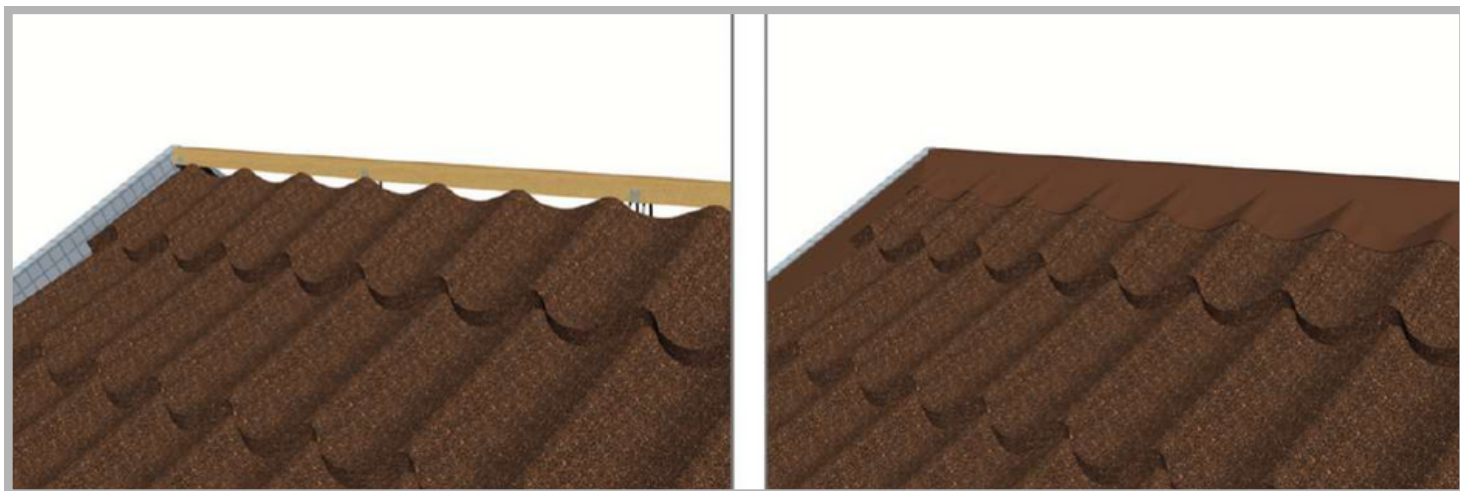
9 INSTALLATION OF TILES AND ACCESSORIES

9.2. Installation of the TM "QUEENTILE" TRIANGULAR RIDGE AND HIP CAP

Optional:

Cover the ridge skid with ventilation tape that is wide enough to ensure complete coverage. Secure the tape with staples and use a roller to press and smooth the edges, ensuring a proper seal (in accordance with local codes and state regulations).

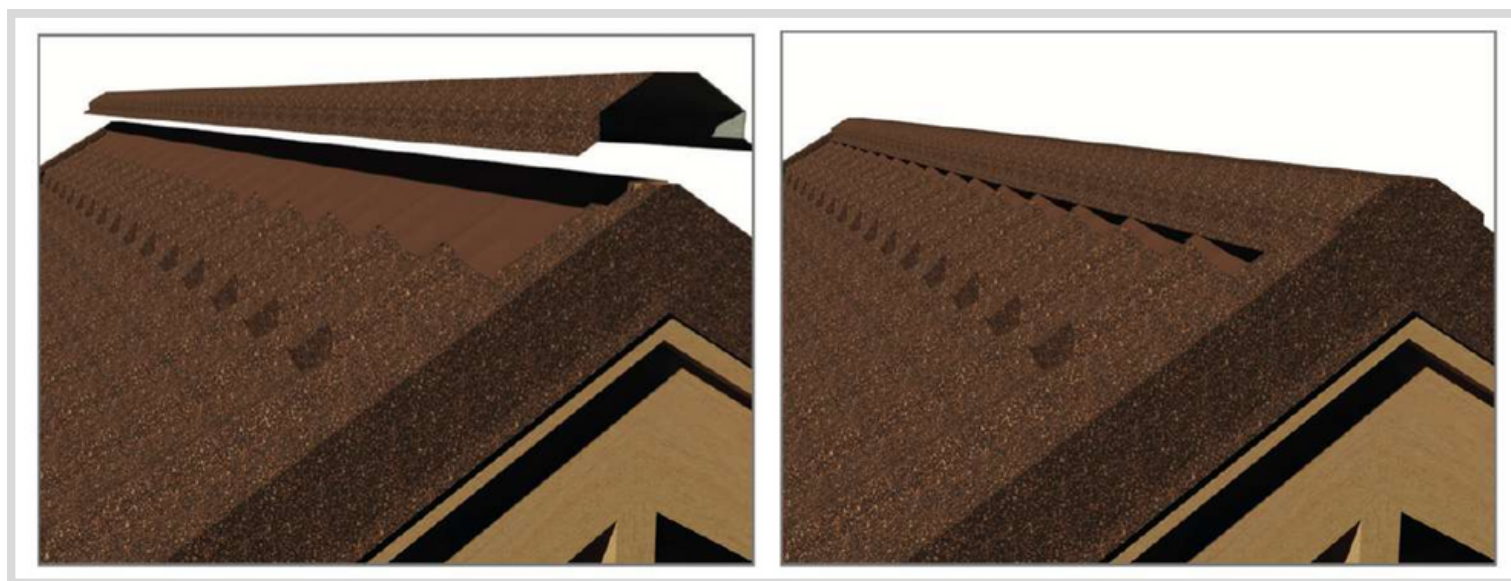
Finally, adhere the edges of the tape firmly to the surface of the stone-coated steel roofing to achieve a secure, weather-resistant finish.



Fasten the ridge flashing securely to the ridge skid at the top, ensuring it is installed in a perfectly straight line.

For optimal accuracy, use a stretched string line as a reference guide.

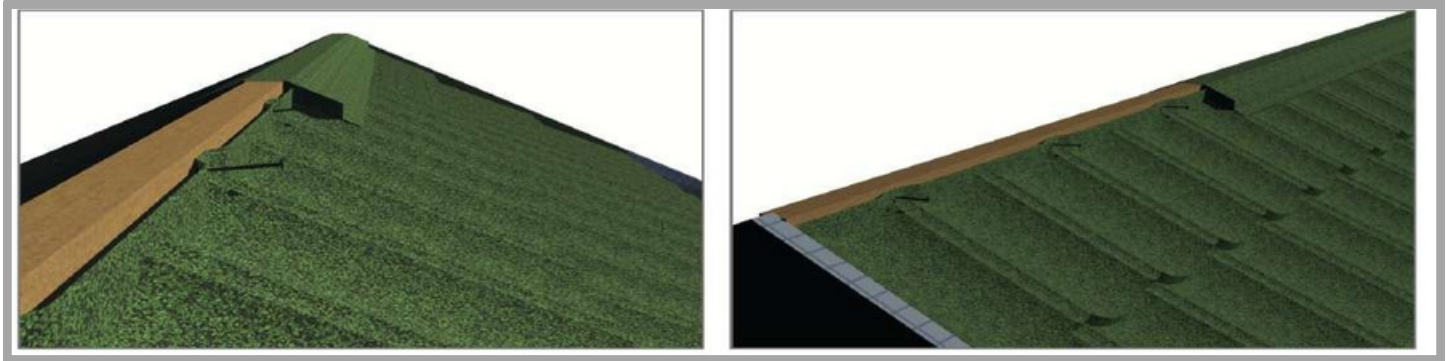
For a more refined and finished appearance, end caps may be installed at the ridge ends.



9 INSTALLATION OF TILES AND ACCESSORIES

For example, cut the strip by 0.4–0.6 inches along the angles of the intersecting planes and bend the resulting tabs inward at 90°.

To make bending easier, the cuts can be made at a 45° angle toward the point of intersection. Place the ridge end cap into the sealant bead and secure it with pop rivets or self-drilling screws to ensure a tight, weatherproof fit.



Alternatively, the ridge end cap can be secured by attaching it to separately prepared cutting-waste corners.

Once the end cap is in place, seal the joints between the end cap and the ridge using a sealant and maintenance kit, if necessary.

If connecting three or more ridge flashings, or attaching them to gable boards, ensure that all connections are properly aligned and adjusted before sealing.

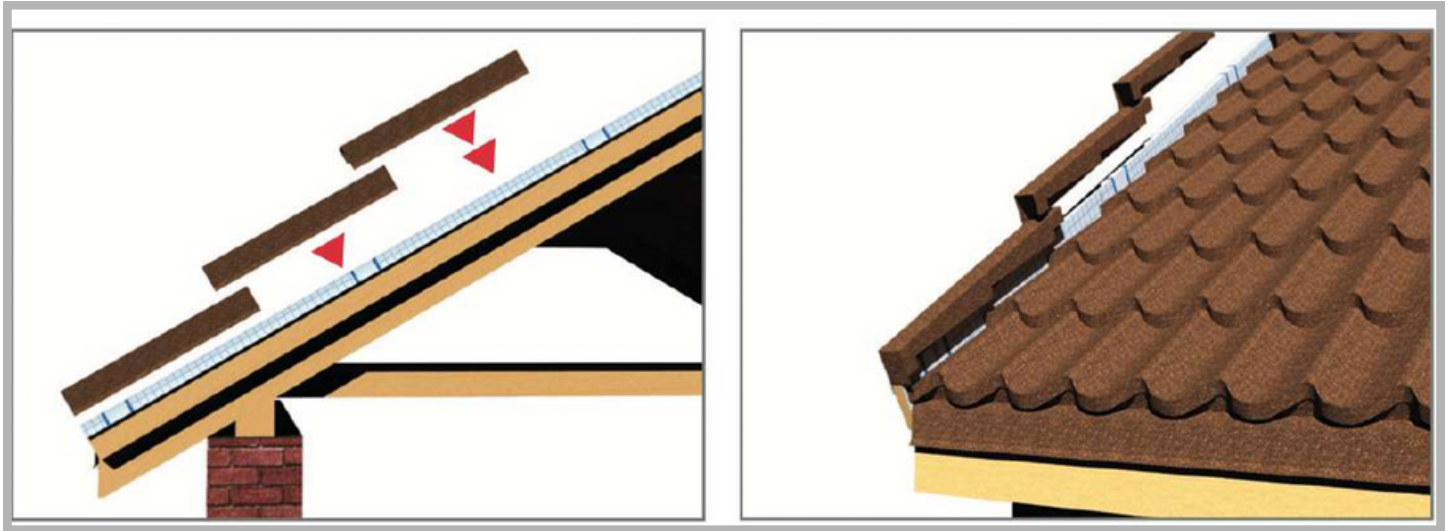
After adjustment, treat the connections with a sealant and QUEENTILE® Coating Kit to ensure a weatherproof and durable finish.

9 INSTALLATION OF TILES AND ACCESSORIES

9.4. Installation of the QUEENTILE® Barge Board (#1, #2, Left/Right)

There are four types of gable flashing finishes: Left Barge Board, Right Barge Board, Barge Board #1, and Barge Board #2.

Both barge board options are specifically designed to align seamlessly with the pitch of the tile wave, ensuring a precise and visually consistent finish along the gable.



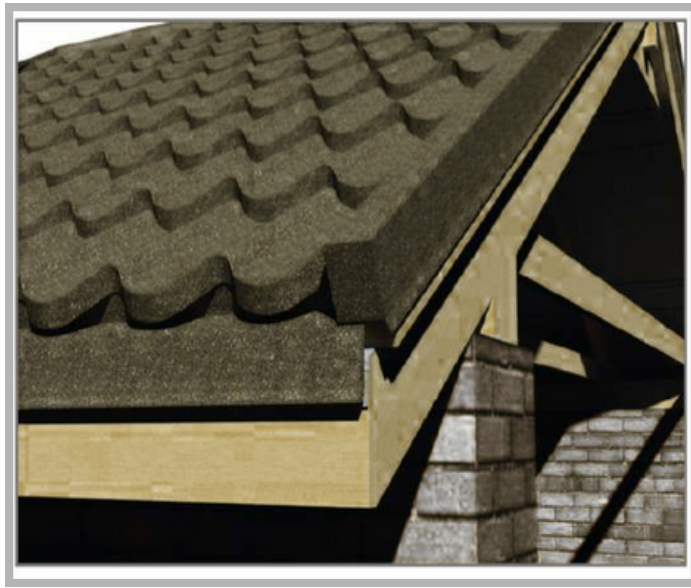
9 INSTALLATION OF TILES AND ACCESSORIES

When installing the gable flashing, position it on the upper section, leaving space for the underlying elements of the gable overhang to be installed afterward.

Begin installation from the bottom and work upward toward the ridge.

If there is a protruding end that needs to be closed, follow these steps:

1. Prepare the Corners: Cut four corner pieces from leftover material and attach them to the edge of the gable board.
2. Cut the Cover Plate: From a flat sheet, cut a rectangle with sides 2 inches smaller than the inner cavity of the board.
3. Fasten the Cover Plate: Secure the rectangle to the corner pieces using rivets or screws.
4. Finish the Joint: Treat the area with a QUEENTILE® Coating Kit to protect against corrosion and ensure a neat finish.



9.5. Arrangement of Adjoining Elements (Wall and Pipe Connections)

Proper installation of the waterproofing membrane at adjoining points is essential.

Before applying the tape, ensure that the surface of the wall or pipe is clean, dry, and properly prepared according to the material type.

Optional Step – Apply the Tape: Lay the adjoining tape from the bottom upward, rolling it out smoothly with a metal roller to ensure proper adhesion.

Install the Flashing: Cover the tape (or install the flashing directly if tape is not used) and secure it using fastening elements appropriate for the wall or pipe material.

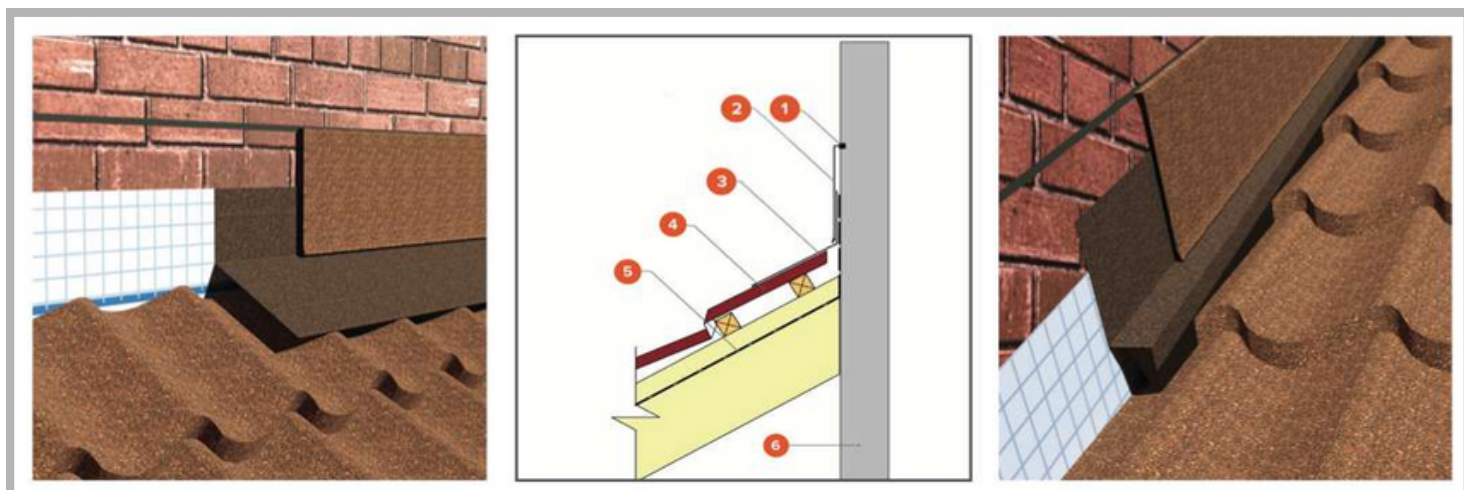
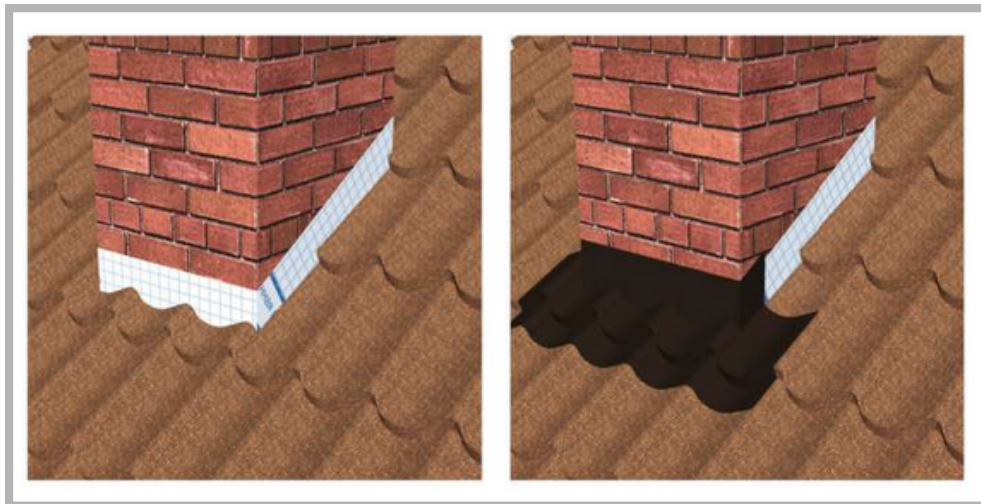
If no tape is used, apply a continuous bead of sealant under the flashing to prevent water leakage.

Seal the Edges: Apply sealant along the upper edge of the flashing and at all connections to create a watertight joint.

⚠ Important: Avoid cutting, grooving, or performing any abrasive work directly on the stone-coated steel roofing, as this can produce fine dust that is difficult to remove and may damage the surface coating.

💡 Tip: In areas with heavy rain or snow, using both tape and sealant is recommended for maximum protection and durability.

9 INSTALLATION OF TILES AND ACCESSORIES



9 INSTALLATION OF TILES AND ACCESSORIES

9.6. Treatment with a QUEENTILE® Coating Kit

Once the roofing panels and accessories are installed, it is essential to repair any damage to the decorative coating or fastening elements (nails, screws, rivets).

A standard QUEENTILE® Coating Kit is available and includes the following items (coverage: 1076.4 sq ft):

- Acrylic adhesive: 3.09 lbs
- Finish coating: 0.88 lbs
- Natural basalt grit: 2.2 lbs

Application Instructions:

1. Ensure the roof surface is dry and the ambient temperature is above 5°C (41°F).
2. Apply the binder drop by drop to cover all damaged areas and fastening points of the QUEENTILE® stone-coated steel roofing.
3. Sprinkle the basalt granulate into the binder to ensure full coverage.
4. Apply the finish glaze immediately after embedding the granulate, ensuring even coverage.
5. Use brushes for precise application of both binder and glaze.

Treating the roof with the QUEENTILE® Coating Kit is the final step of installation, ensuring long-term durability, corrosion protection, and a consistent aesthetic appearance.

