

BESTIME

(Batten type)

INSTALLATION GUIDE
***- VENETO 2, RIO, RIO EZ, ZISSEN,
WOOD, DIVA, SLATE***



Rio
Rio EZ
Zissen
Diva
Wood

Veneto 2
Slate

INSTALLATION GUIDE

for Batten type

- VENETO 2, RIO, RIO EZ, DIVA, WOOD, ZISSEN, SLATE



Contents

1. Veneto 2, Rio, Rio EZ, Diva, Wood, Zissen, Slate Spec

2. Nailing Position

3. Auxiliary

4. Nailing Technique

5. Steel Roof Tile Spacing

6. The way how to install roof tile on concrete or wooden roof frame

7. Side View

8. The way how to install roof tile on Sandwich panel roof frame.

9. Batten Installation

– The roof tiles can be installed over existing roofs.

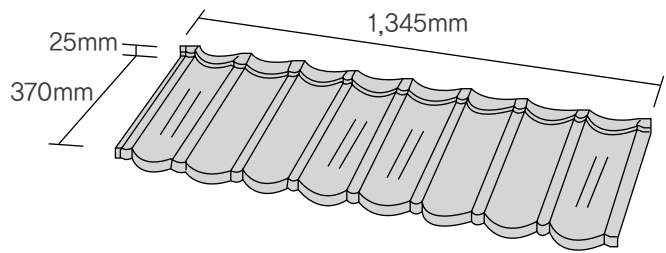
– Minimum Slope is 4/12.

– Battern System can be installed with or without solid sheathing. No Battern System requires Solid Sheathing.

– Some type of underlayment is always required. The underlayment shall be equivalent or superior to a #30 saturated felt or better. In a re-roof application, the existing asphalt shingles can serve as the underlayment.

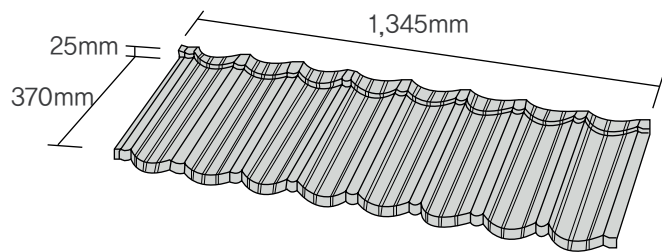
1. Rio Specifications

- Overall length : 1,345mm (± 5 mm)
- length of cover : 1,280mm
- With of cover : 370mm
- Upstand : 25mm
- Roof cover/Tile : 0.473m²
- Tiles : 2.11/m²
- Weight/Tile : 2.6~2.7kg



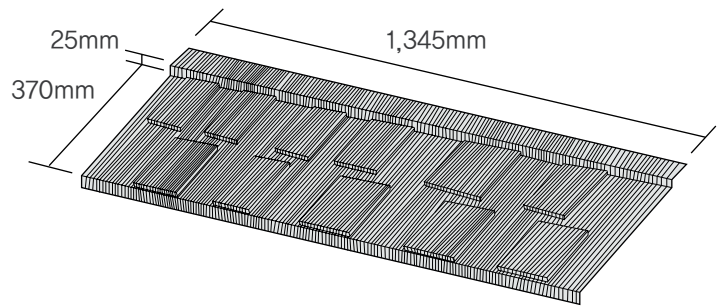
Rio EZ Specifications

- Overall length : 1,345mm (± 5 mm)
- length of cover : 1,280mm
- With of cover : 370mm
- Upstand : 25mm
- Roof cover/Tile : 0.473m²
- Tiles : 2.11/m²
- Weight/Tile : 2.6~2.7kg



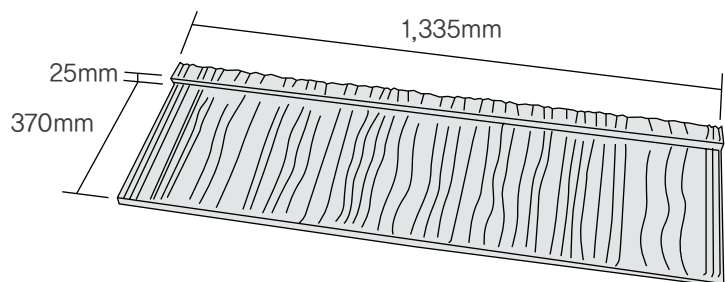
Diva Specifications

- Overall length : 1,345mm (± 5 mm)
- length of cover : 1,280mm
- With of cover : 370mm
- Upstand : 25mm
- Roof cover/Tile : 0.473m²
- Tiles : 2.11/m²
- Weight/Tile : 2.6~2.7kg



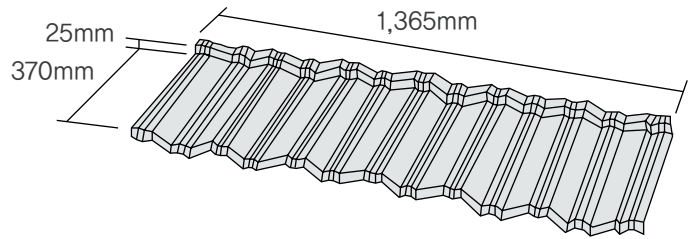
Wood Specifications

- Overall length : 1,335mm (± 5 mm)
- length of cover : 1,280mm
- With of cover : 370mm
- Upstand : 25mm
- Roof cover/Tile : 0.473m²
- Tiles : 2.11/m²
- Weight/Tile : 2.55~2.65kg



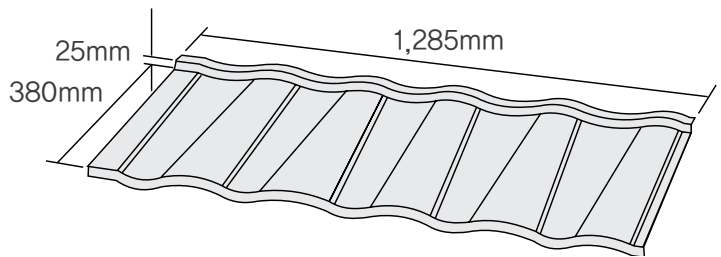
Zissen Specifications

- Overall length : 1,365mm (± 5 mm)
- length of cover : 1,280mm
- With of cover : 370mm
- Upstand : 25mm
- Roof cover/Tile : 0,473m²
- Tiles : 2,11/m²
- Weight/Tile : 2,6~2,7kg



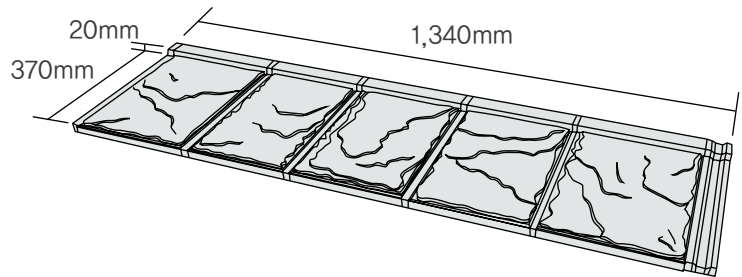
Veneto 2 Specifications

- Overall length : 1,285mm (± 5 mm)
- length of cover : 1,215mm
- With of cover : 380mm
- Upstand : 25mm
- Roof cover/Tile : 0,4617m²
- Tiles : 2,17/m²
- Weight/Tile : 2,5~2,6kg



SLATE Specifications

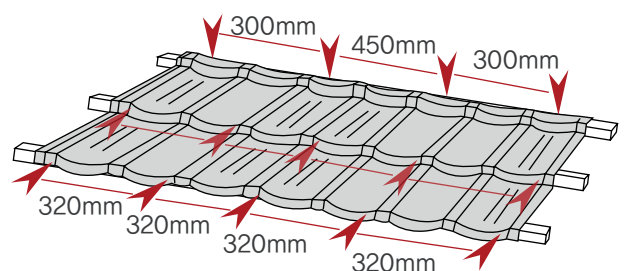
- Overall length : 1,340mm (± 5 mm)
- length of cover : 1,290mm
- With of cover : 370mm
- Upstand : 20mm
- Roof cover/Tile : 0,473m²
- Tiles : 2,11/m²
- Weight/Tile : 2,6~2,7kg



2. Nailing Position

- Warning : Avoid nailing in places with electrical wiring above or below.
- Roof : For each square meter of roof tile, use 1kg of fastener.

When you drive a fastener, fastener up in the first point of upcurve as marked in red.
(There's a risk of water damage when you drive a fastener on downcurve.)

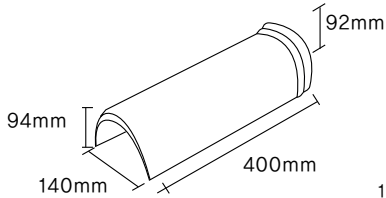


3. Auxiliary *Manufacture with other measurements.*

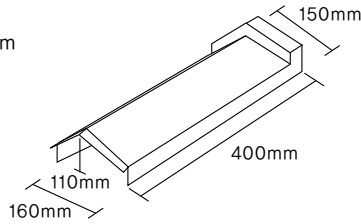
● Ridge/hip

overall length 400mm
length of cover 370mm

– Half round ridge/hip

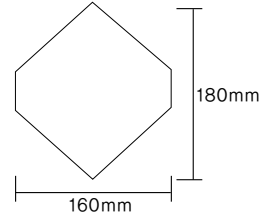


– V-Ridge/hip

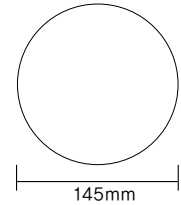


● Ridge/hip cap

– V-Ridge/hip Cap

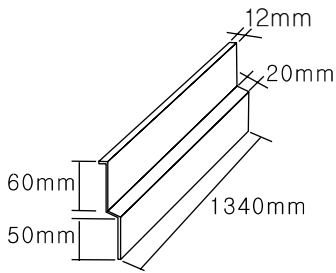


– Half round Ridge/hip Cap



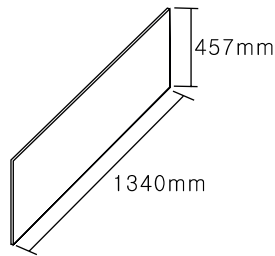
● Side flashing

overall length 1,340mm
length of cover 1,300mm



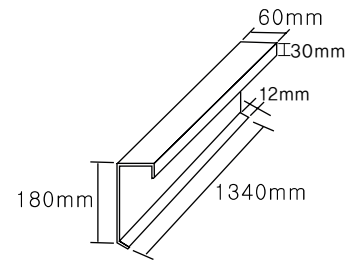
● Flat sheet

overall length 1,340mm (±5mm)



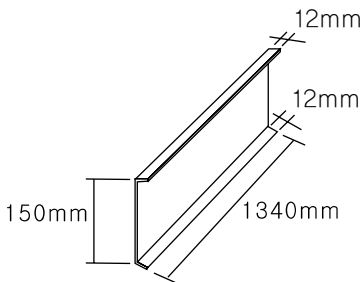
● Barge board flashing

overall length 1,340mm
length of cover 1,300mm



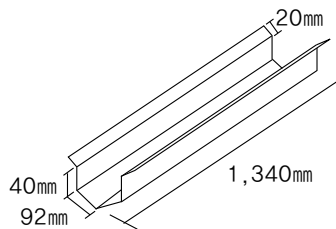
● Fascia flashing

overall length 1,340mm
length of cover 1,300mm



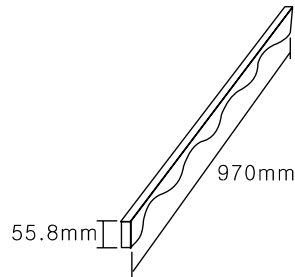
● Valley

overall length 1,340mm



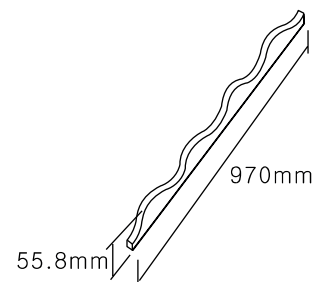
● Shackle

overall length 970mm
height 55.8mm



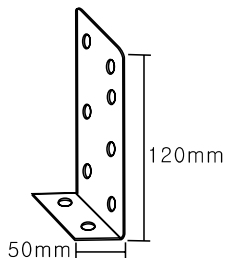
● Closer

overall length 970mm
height 34.8mm



● Angle

overall length 120mm



● Nail

– Screw Nail : 5cm
– Galvanized or heat-plated



– Screw Bolt : 3cm / 5cm

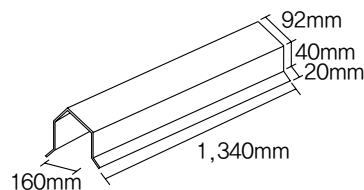
– Galvanized or heat-plated



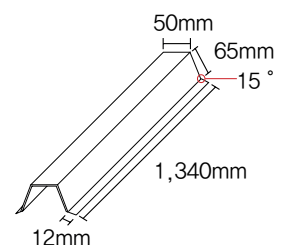
● RG-Ridge/hip , V-Ridge

overall length 1,340mm
length of cover 1,300mm

– RG-Ridge/hip



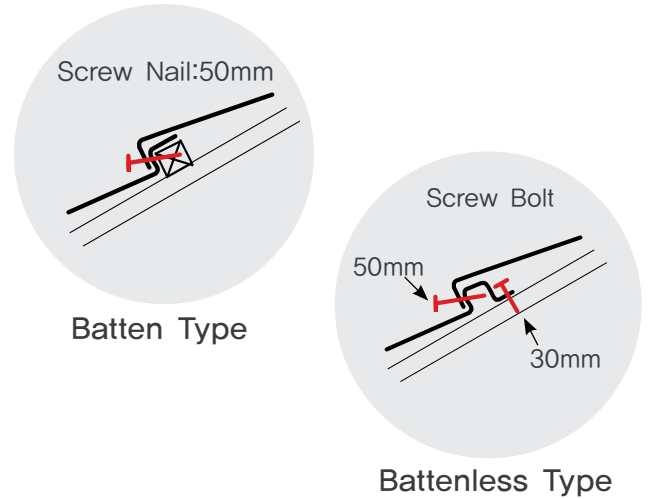
– V-Ridge



- The auxiliary pieces listed above can be custom-made to your measurements.
- Storage method : Always cover with a waterproof material.
- Packing : One pallet is 1,35m × 95m × 1,2m.
- pitch : The roof must be at least 15 degrees.
- in coastal or high-wind areas, use 9-layer galvanized or zinc-coated plates.

4. Nailing Technique

- While pounding in fasteners, always face the eaves while standing on top of the tiles being installed.
- Use 6~8 fasteners for each roof tile.
- In high-wind or coastal regions, use 10 fasteners per tile.
- After nailing, in order to prevent water damage, always use A/S adhesive to finish installation.



Fasteners for panels: No. 8 x 1 1/2" hex head screws or
 No. 9 x 1 1/2" hex head screws or
 1 1/2" to 2 1/2" ring fasteners. (8d)

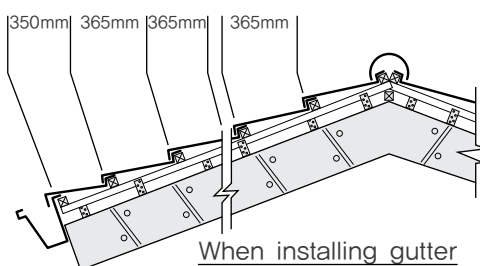
Fasteners for rafters: No. 10 x 3 1/2" hex head screws or
 3 1/2" ring fasteners. (16d)

Fasteners for batten

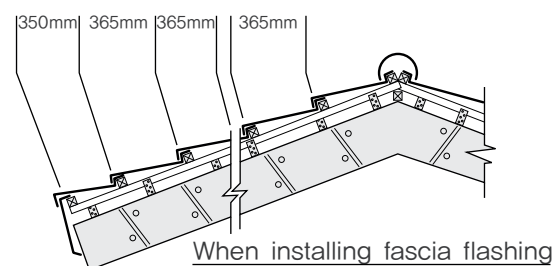
- ==> same fasteners without/with battens
- ==> screw bolt
- ==> length = 50mm or longer
- ==> diameter= 5mm

5. Roof Tile Spacing

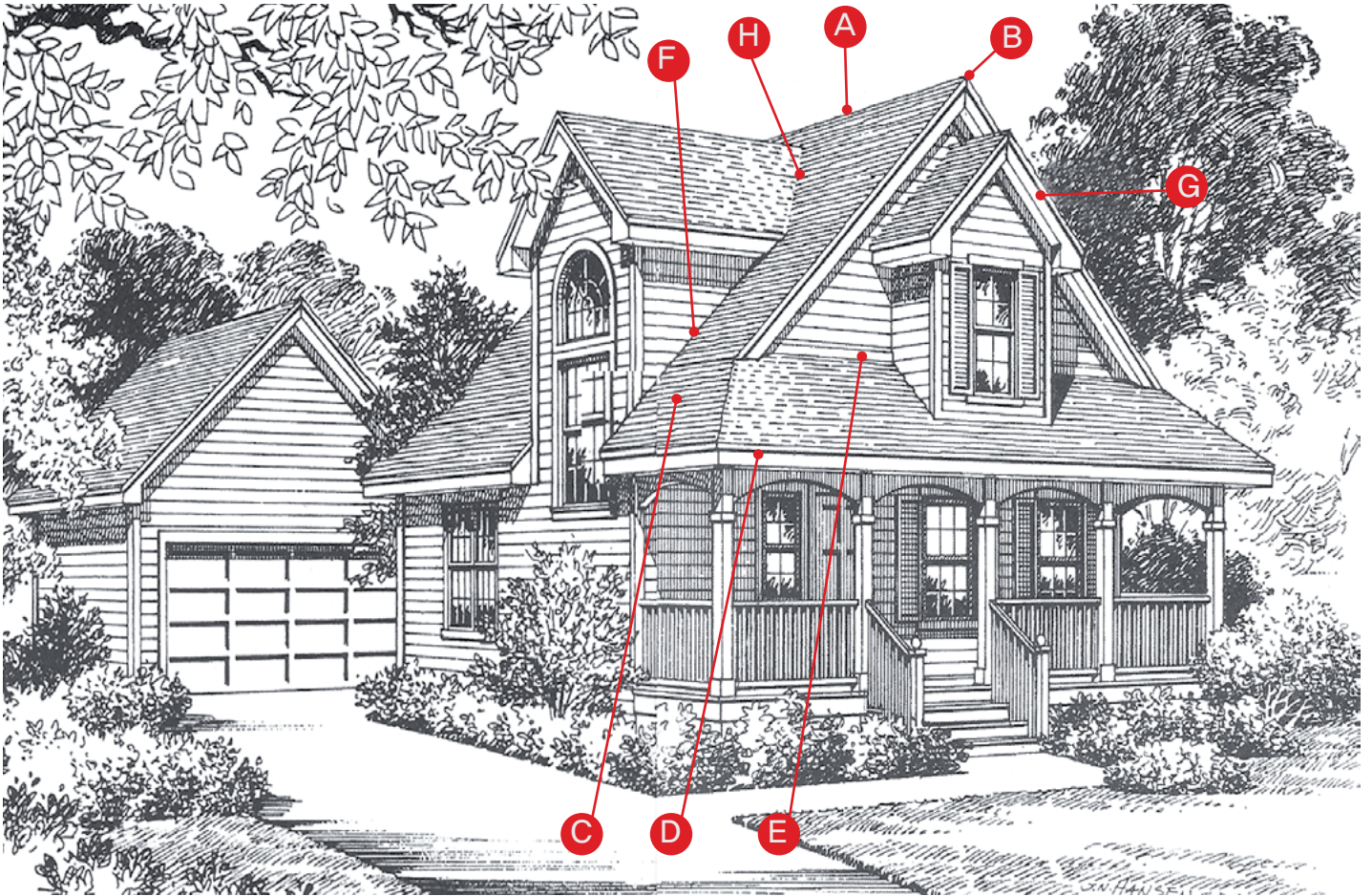
● Space roof tile 365mm apart.



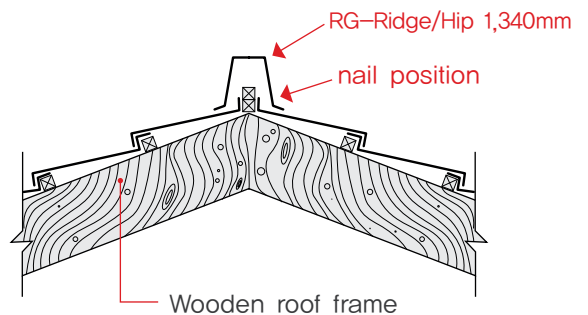
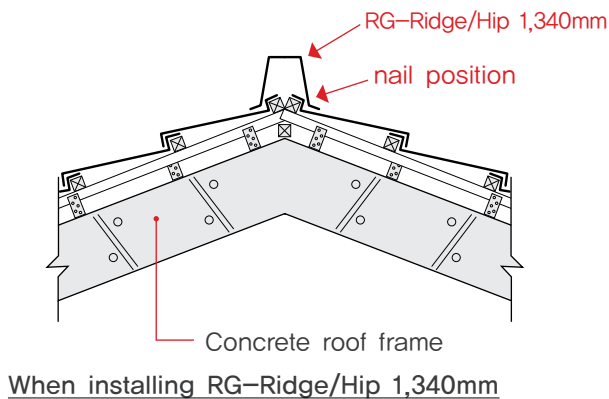
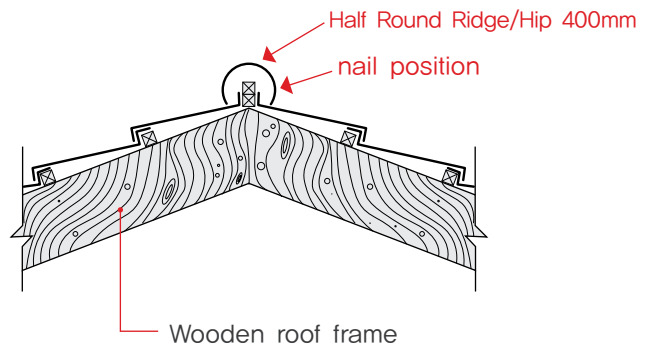
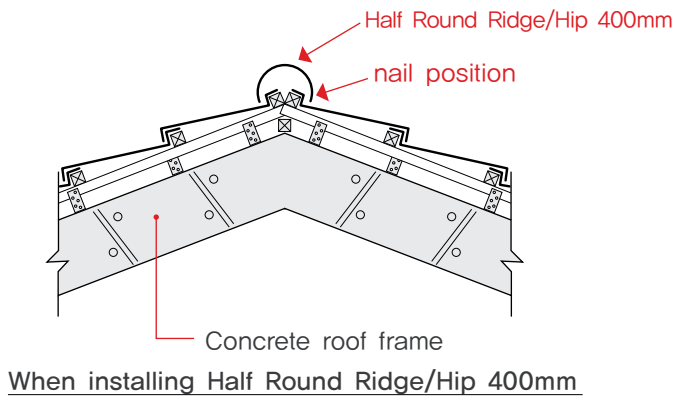
● Space roof tile 365mm apart.



6. The way how to install roof tile on concrete or wooden roof frame

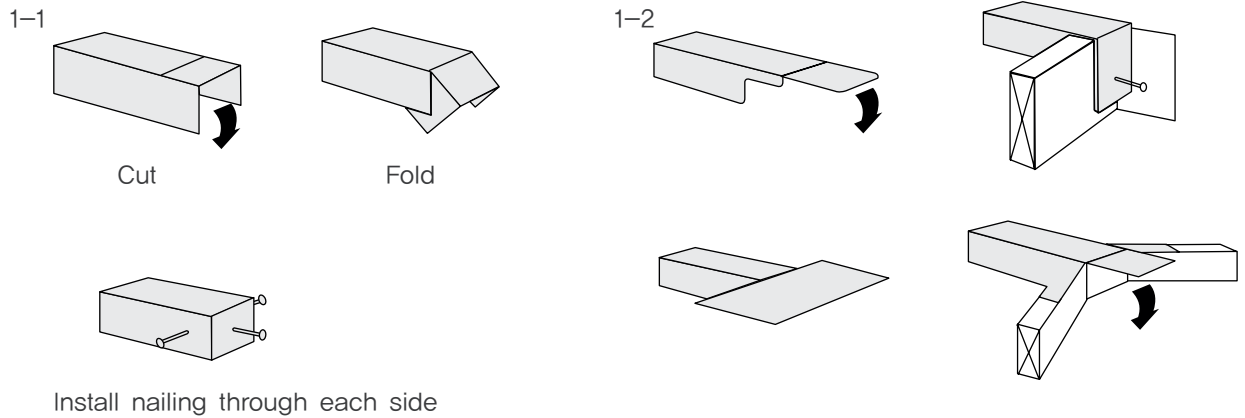


A. Ridge and Ridge Boards

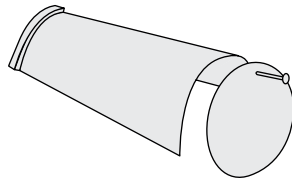


B. Ridge and – Finish

When installing RG-Ridge/Hip 1,340mm

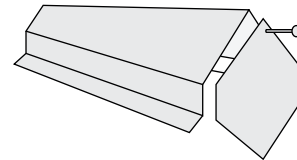


When installing Half Round Ridge/Hip 400mm



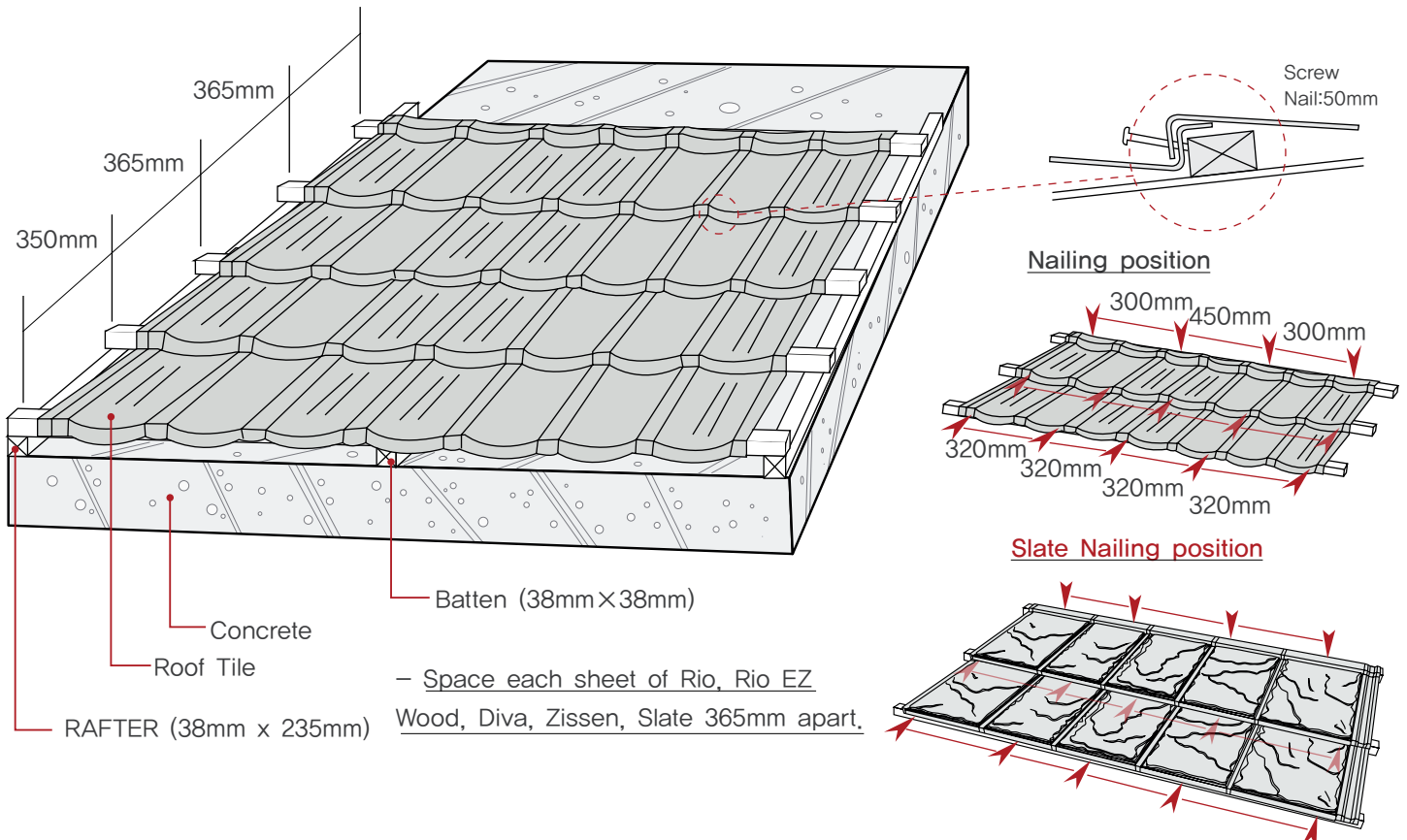
– Finish with the end part with Half Round Ridge/Hip Cap.

When installing V-Ridge 1,340mm

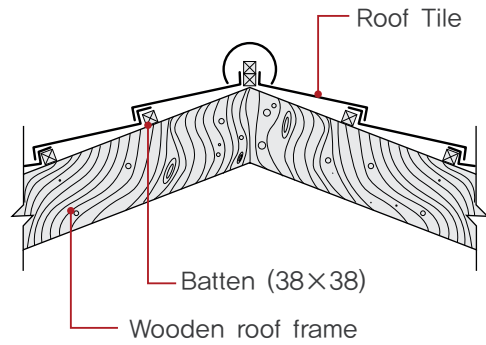
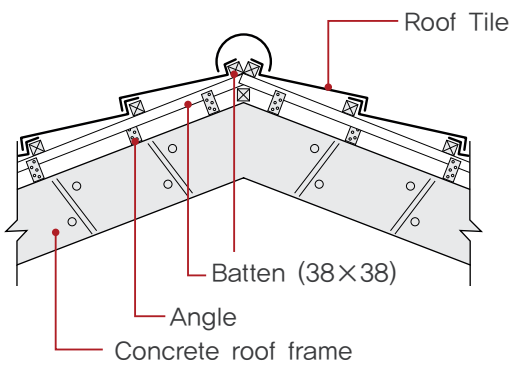
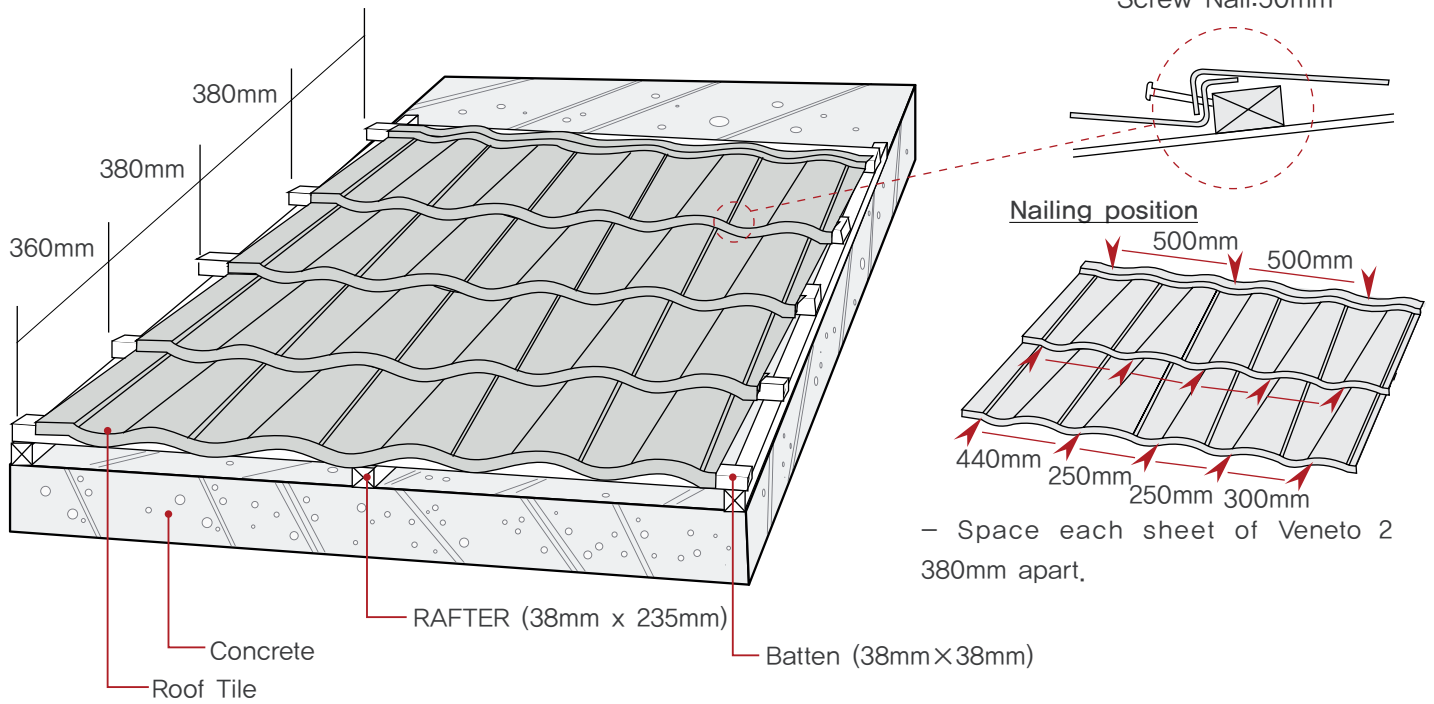


– Finish with the end part with V-Ridge/Hip Cap.

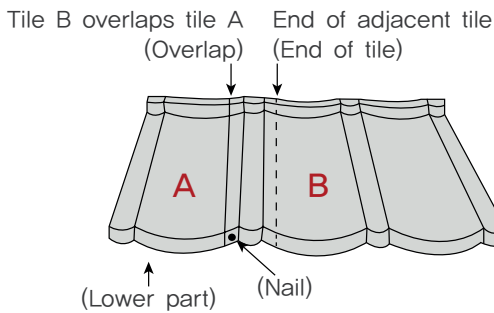
C-1. Install Rio, Rio EZ, Wood, Diva, Zissen, Slate as space



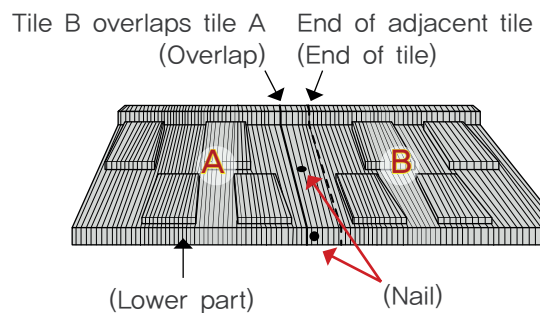
C-2. Install Veneto 2 as space



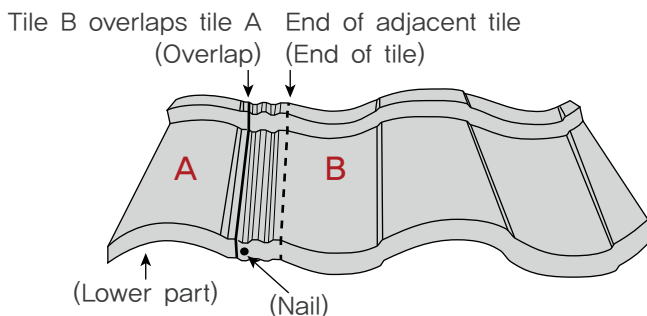
Fasteners



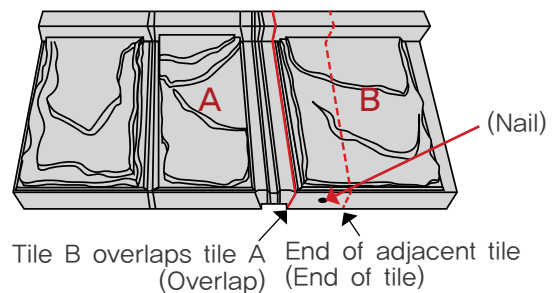
Stitch Screw DIVA Only



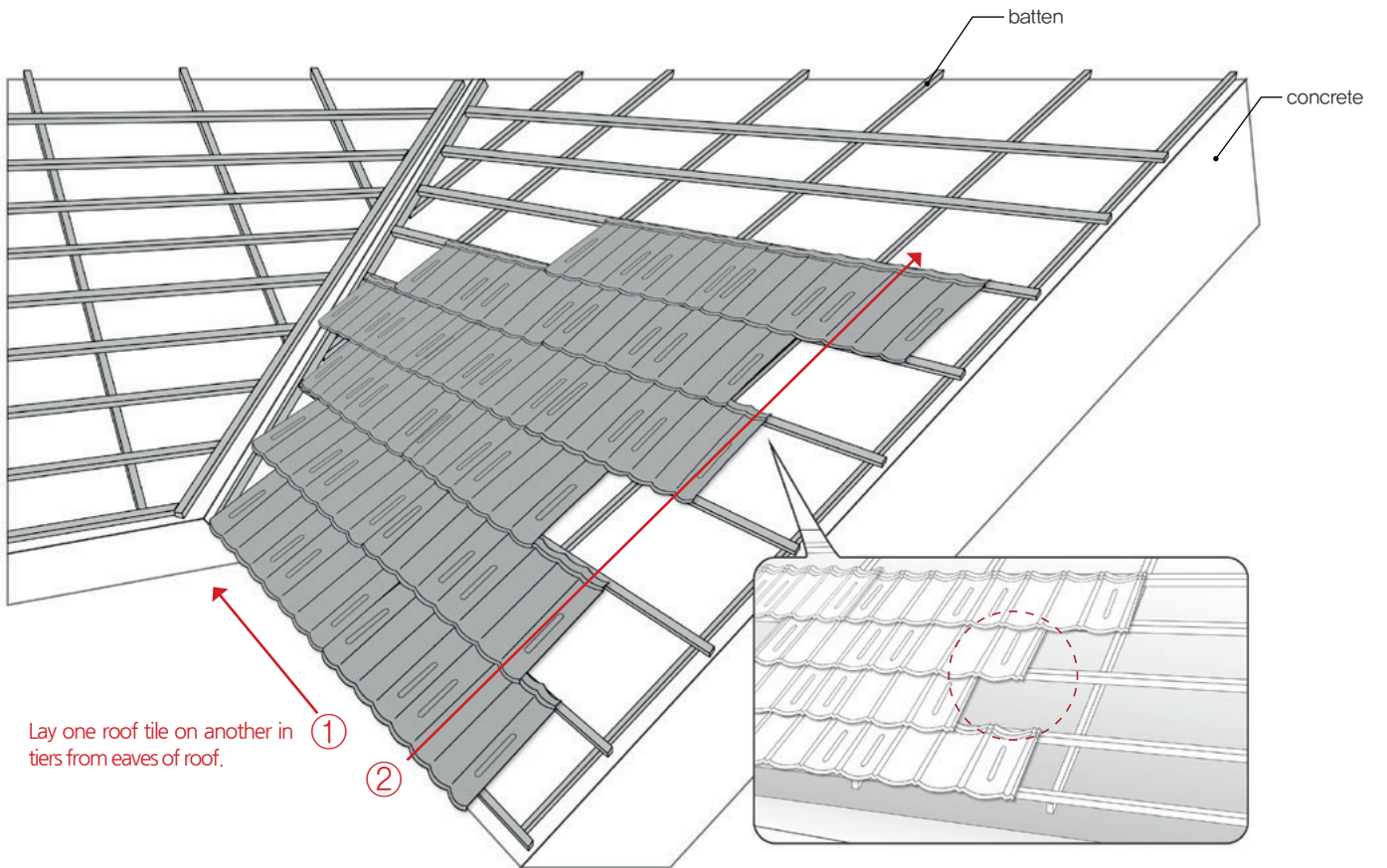
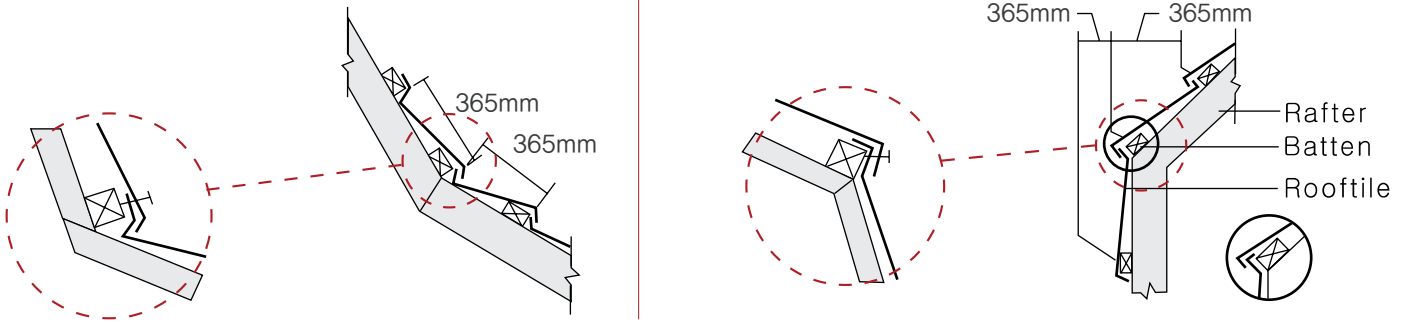
Stitch Screw VENETO 2 Only



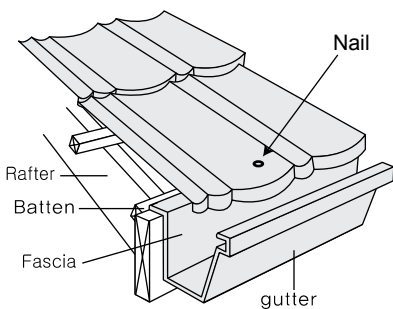
Stitch Screw SLATE Only



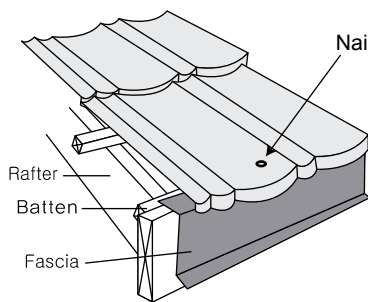
Change of the Pitch



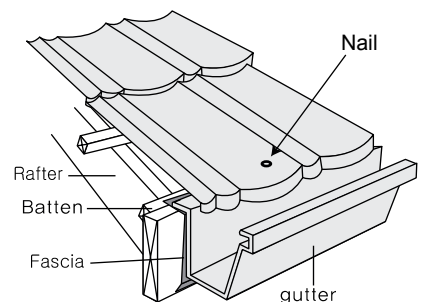
D. Fascia flashing



When installing gutter system



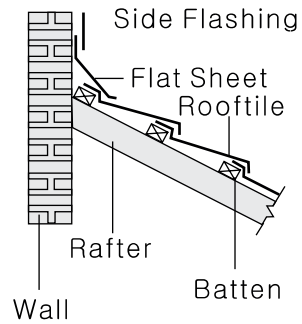
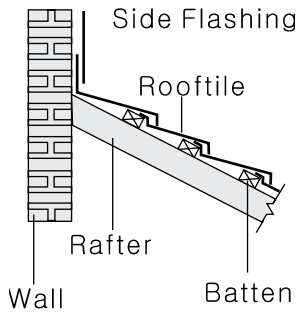
When installing fascia flashing



When installing fascia+gutter flashing

E. Dutch gables

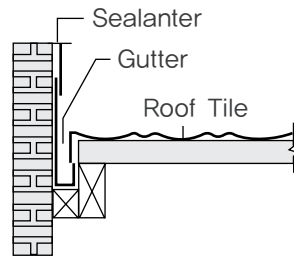
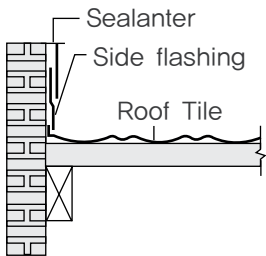
Insert the top edge of the roof tile or a piece of sheet metal inside the side flashing.



F. Junctions with vertical faces

In the case of a side of roof tile at the boundary with vertical wall, connect roof tile with vertical wall and finish vertical wall with Side Flashing.

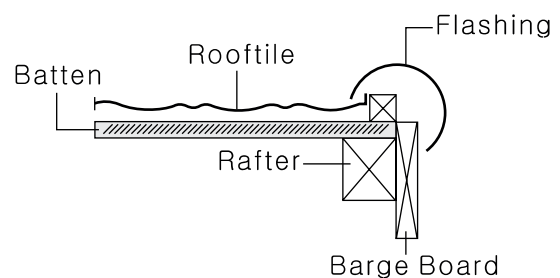
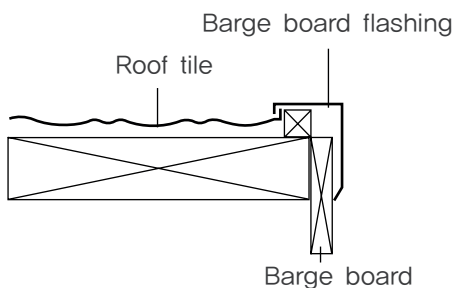
If there's a valley in which water flows at the boundary with vertical wall, install gutter.



G. Barge boards

When using side flashing, install the batten above the rafter and match the top of the barge board to the top of the batten.

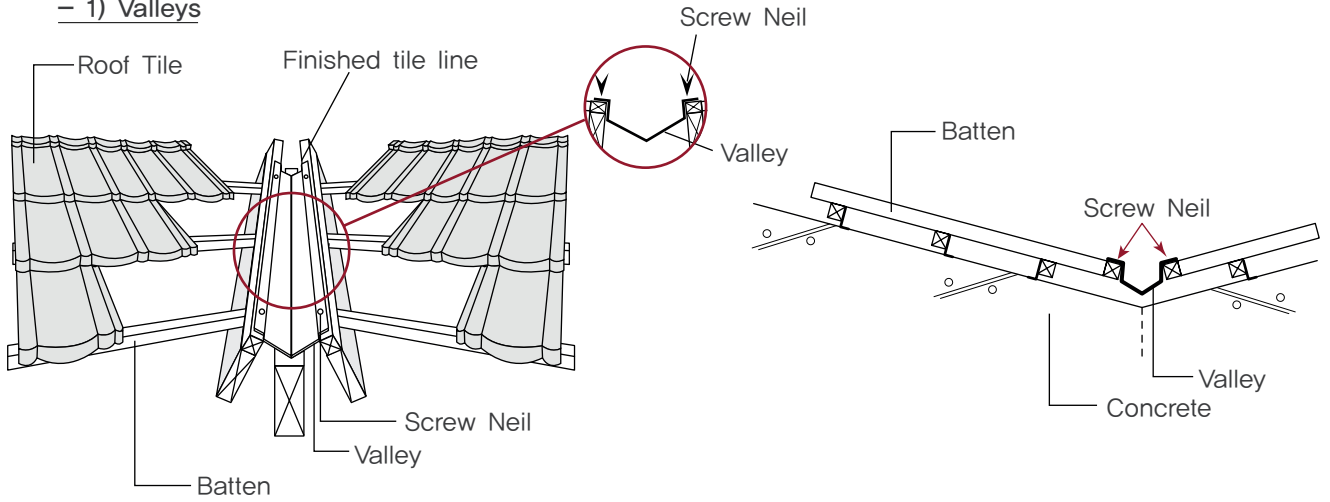
the edge of the steel roof tiles must be bent so that the part tucked into the side flashing is long enough to prevent water damage.



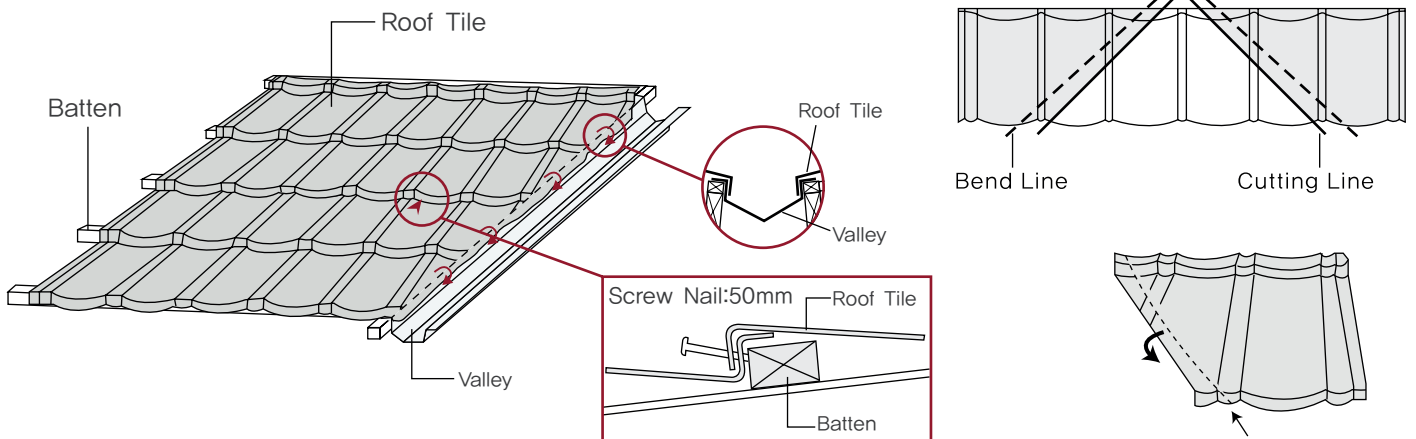
H. Valleys

In the case of Rio, Rio EZ, Diva, Wood, Zissen, Veneto 2, Slate roof, finish valley with not valley flashing but bent flat sheet.

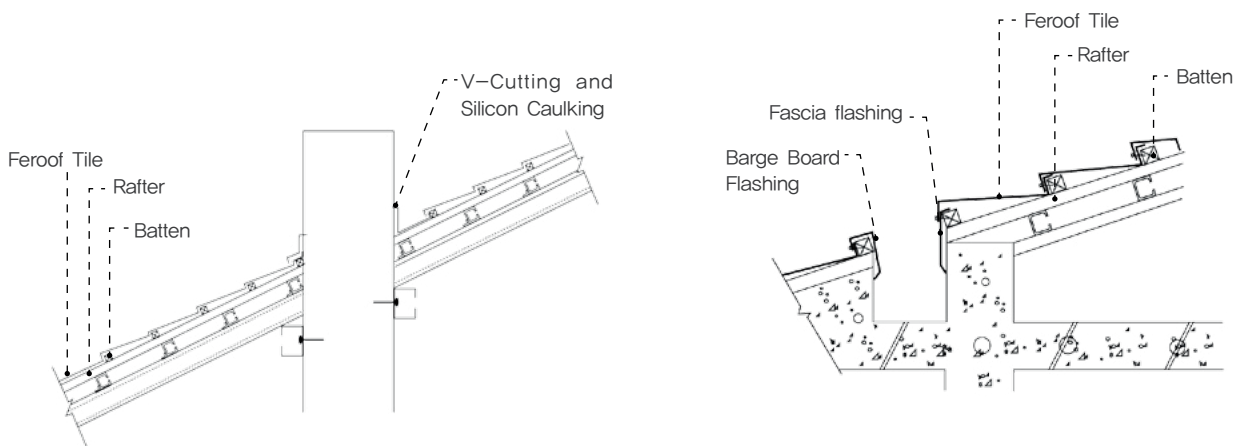
- 1) Valleys

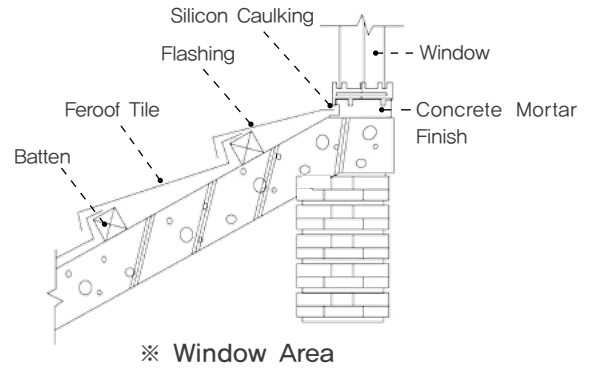
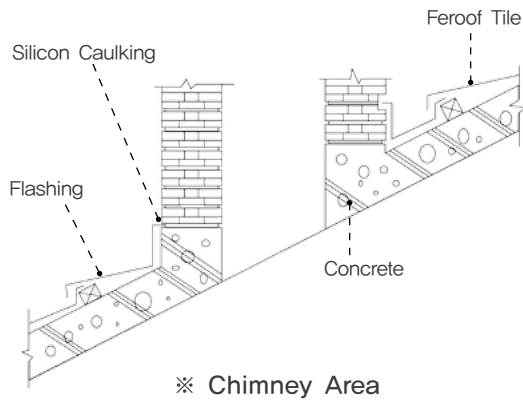


- 2) Roof Tile



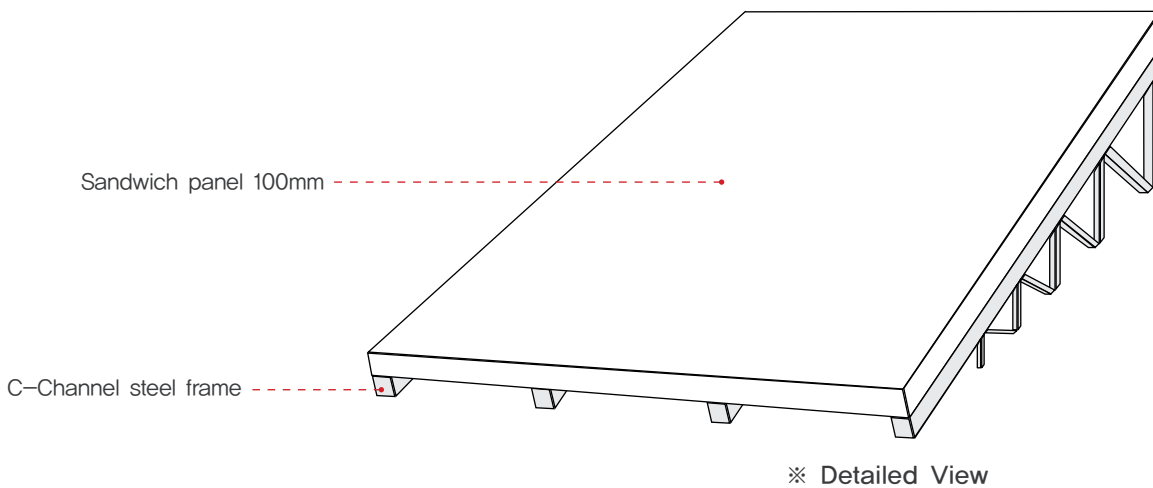
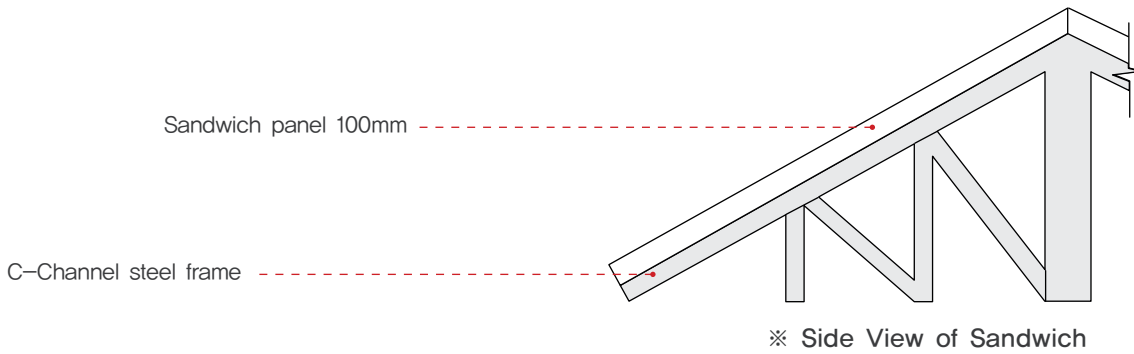
7. Side View



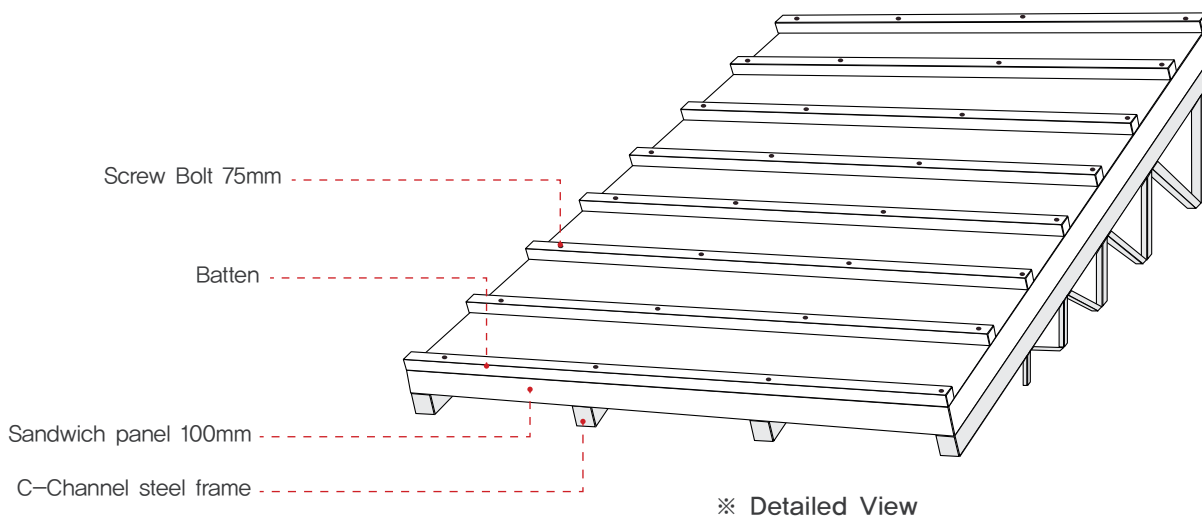
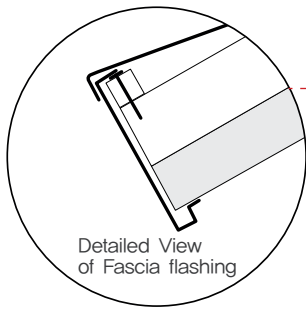
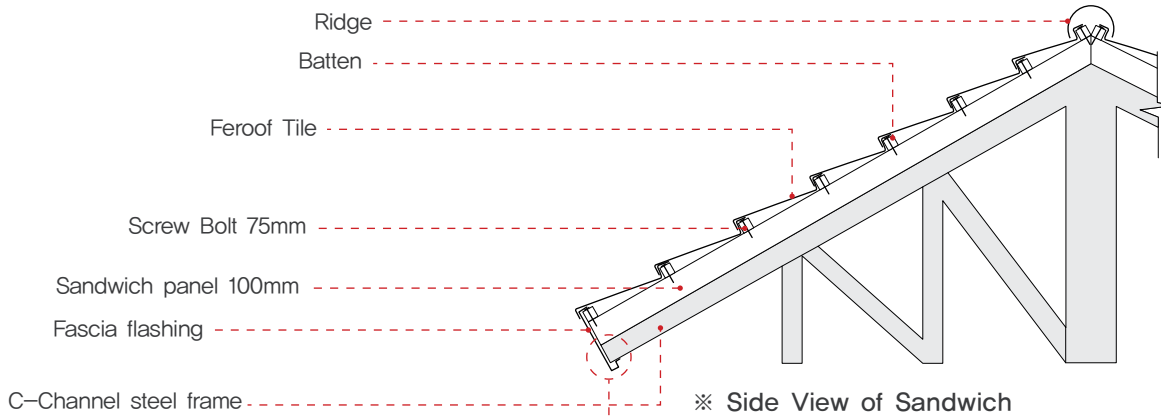


8. The way how to install roof tile on Sandwich panel roof frame

※ No. 1



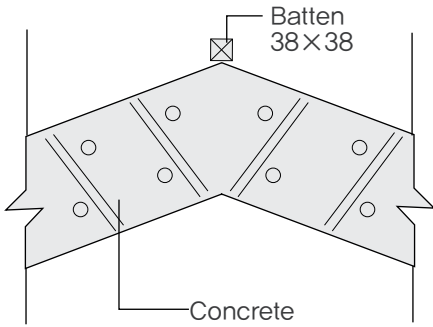
※ No. 2 "Fix the Batten as Screw Bolt (75mm)"



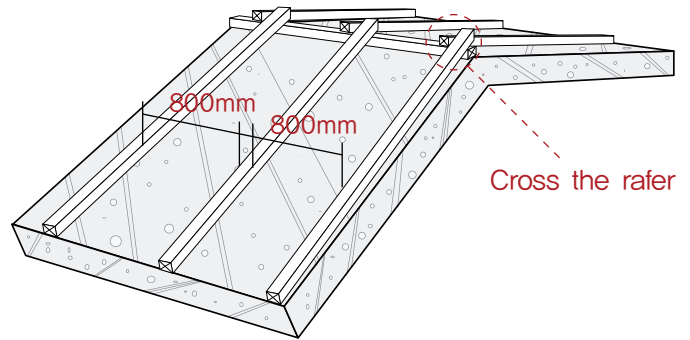
9. Batten Installation

– Batten Installation for Concrete Roof

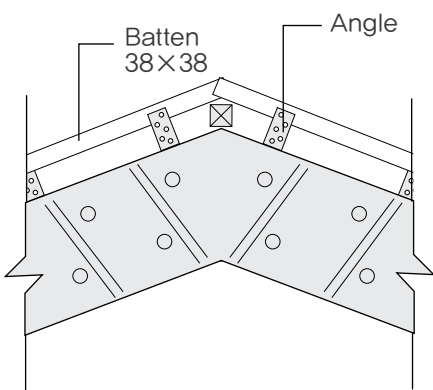
1) Fasten one Batten in the part of ridge



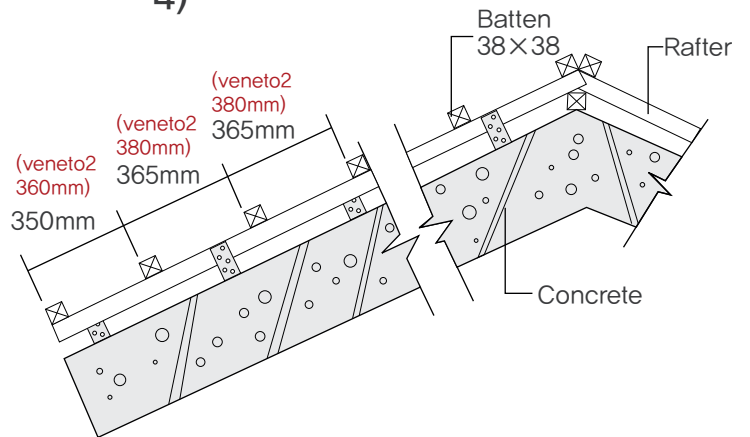
2)



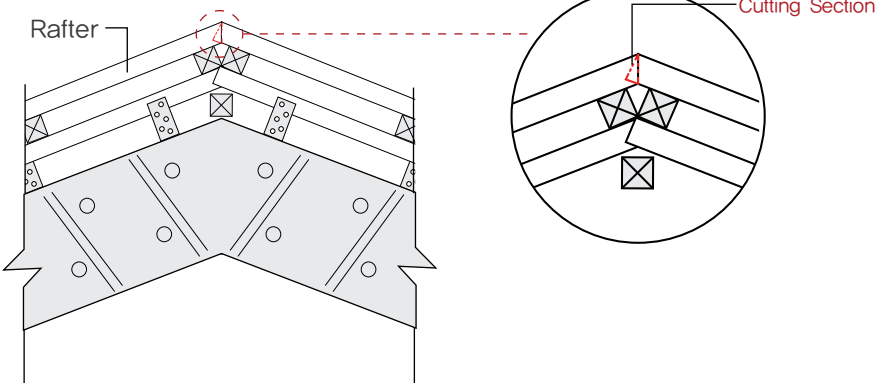
3) In the Case of Uneven Roof Surface.



4)

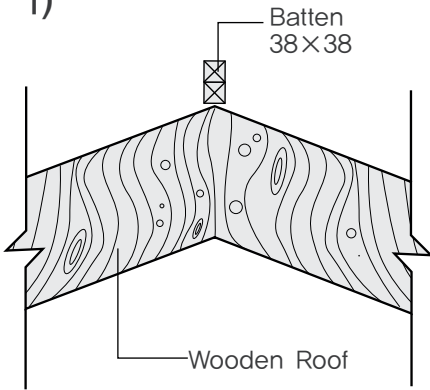


5)

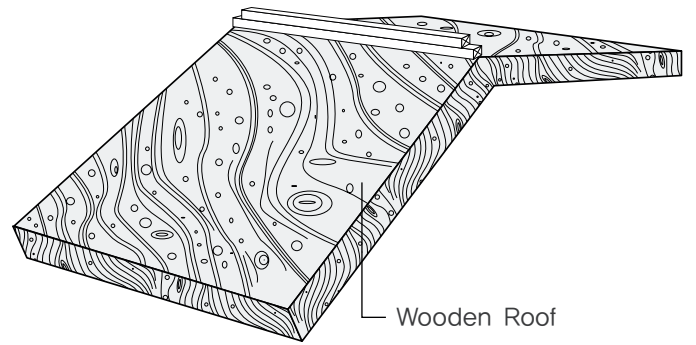


– Batten Installation for Wooden Roof

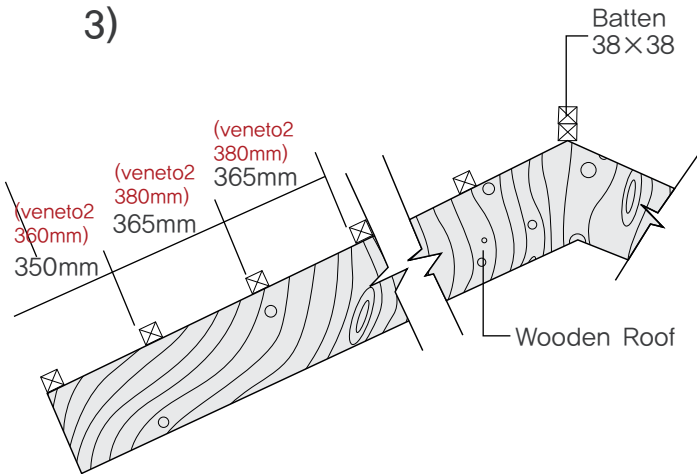
1)



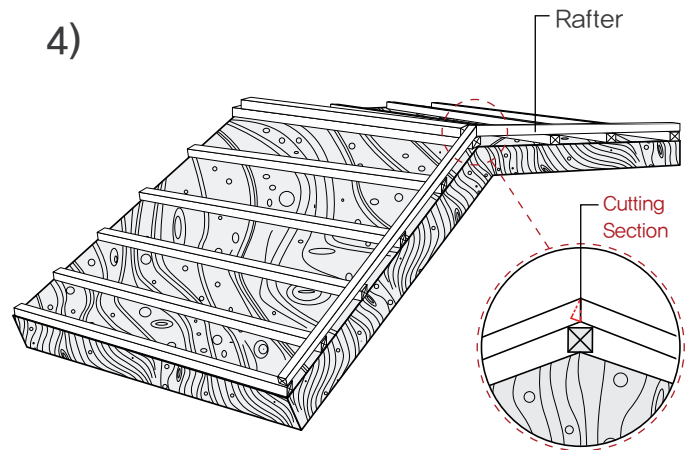
2)



3)



4)



BESTIME

BESTIME ROOF TILE
Batten type
Stepping Zone

