


Varitile®
weather [p]roof

BOND 7
CLASSIC
MISTRAL
GALLO
SHAKE
VIKSEN
RIVIERA

Installation Guide





This manual provides general guidelines and procedures relating to the estimating and installation of Varitile roof products. It is not a training guide for installers and it does not address the specific requirements of applicable building codes and other laws and regulations of the locale where the Varitile product is being installed. It is the installer's and homeowner's responsibility to ensure that all building codes and other laws are being strictly adhered to.

As well, this manual does not depict every possible roofing situation or technique, or local weather conditions and practices. The installer must choose the most suitable installation method for the location and particular design, construction and quality of the home on which the Varitile roof product is being installed. The installer must ensure that the structure complies with all applicable codes and laws, is sound and of sufficient quality and design to accept the Varitile roof product.

This manual is not a warranty or guarantee. Quality installation is a product of proper technique, attention to detail and ultimately is the responsibility of the installer. For installation questions not covered in this guide, please contact Varitile.

Dissimilar Metals: Use of copper and lead in conjunction with Varitile products will void the Varitile product warranty. This includes direct contact products such as accessories or situations where copper/ lead drains onto a Varitile roof.

Pressure Treated Lumber: Pressure treated lumber products labeled "CCA" (chromium copper arsenate), "ACQ" (alkaline copper quaternary) and "CA-C" (copper azole) treated lumber and/ or any variation thereof are not to be used in conjunction with Varitile products or it will void the Varitile product warranty. Borate or Borax treated lumber does not contribute to the corrosion of Varitile roofing products and their use will not void the warranty. The most proven lumber products utilized are untreated "SPF" (spruce-pine-fir) or "SYP" (southern yellow pine).

Industrial and Agricultural installations: Physical contact or heavy airborne concentrations of any industrial or agricultural corrosive materials should be treated as potentially corrosive to the steel base of Varitile products.

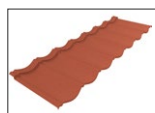
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1 MATERIALS REQUIRED

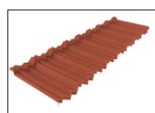
1.1 PANELS

BOND 7 PANEL [1.-...-PA]



Overall size	52.36" x 16.34"	1330 x 415mm
Useful Cover	50.00" x 14.57"	1270 x 370mm
Linear Cover	50.00"	1270 mm
Weight	6.61 lb	3,1 kg

CLASSIC PANEL [5.-...-PA]



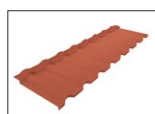
Overall size	52.36" x 16.34"	1330 x 415mm
Useful Cover	49.80" x 14.57"	1265 x 370mm
Linear Cover	49.80"	1265 mm
Weight	6.61 lb	3,1 kg

MISTRAL PANEL [M.-...-PA]



Overall size	51.38" x 16.34"	1305 x 415mm
Useful Cover	48.82" x 14.57"	1240 x 370mm
Linear Cover	48.82"	1240 mm
Weight	6.61 lb	3,1 kg

GALLO PANEL [G.-...-PA]



Overall size	51.77" x 16.46"	1315 x 418mm
Useful Cover	46.65" x 14.57"	1185 x 370mm
Linear Cover	46.65"	1185 mm
Weight	6.61 lb	3,1 kg

SHAKE PANEL [7.-...-PA]



Overall size	52.36" x 16.34"	1320 x 415mm
Useful Cover	49.80" x 14.57"	1255 x 370mm
Linear Cover	49.80"	1255 mm
Weight	6.61 lb	3,1 kg

VIKSEN PANEL [6.-...-PA]



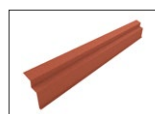
Overall size	52.17" x 16.14"	1320 x 410mm
Useful Cover	49.61" x 14.57"	1255 x 370mm
Linear Cover	49.61"	1255 mm
Weight	6.61 lb	3,1 kg

RIVIERA PANEL [V.-...-PA]



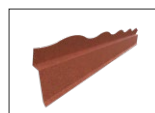
Overall size	50.79" x 16.34"	1290 x 415mm
Useful Cover	48.23" x 14.57"	1225 x 370mm
Linear Cover	48.23"	1225 mm
Weight	6.61 lb	3,1 kg

EAVE [0.-...-EA]



Overall Length	53.15"	1350mm
Useful Length	49.21"	1250mm
Weight	3.527 lb	1,60 kg

EAVE RIVIERA [4.-...-EA]



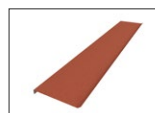
Overall Length	50.20"	1275mm
Useful Length	47.64"	1210mm
Weight	2.315 lb	1,05 kg

FASCIA METAL 80/120 [0.-...-EF.XX.US]



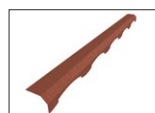
Overall Length	78.74"	2000mm
Useful Length	74.74"	1900mm
Weight	3.53 lb	1,60 kg

COVER FLASHING [0.-...-CF]



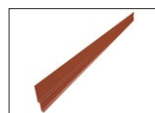
Overall Length	53.15"	1350mm
Useful Length	49.21"	1250mm
Weight	3.968 lb	1,80 kg

COVER FLASHING RIVIERA [4.-...-CF]



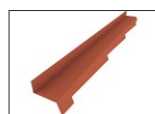
Overall Length	50.20"	1275mm
Useful Length	47.83"	1215mm
Weight	4.188 lb	1,90 kg

Z-FLASHING [0.E...-EF.Z.US]



Overall Length	78.74"	2000mm
Useful Length	74.74"	1900mm
Weight	3.616 lb	1,45 kg

SIDE FLASHING LEFT/RIGHT [0.-...-SWF.L/R]



Overall Length	49.21"	1250mm
Useful Length	43.30"	1100mm
Weight	2.646 lb	1,20 kg

1.2 ACCESSORIES

BARGE COVER LEFT/RIGHT [0.-...-BBC.L/R]



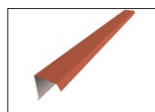
Overall Length	49.21"	1250mm
Useful Length	43.30"	1100mm
Weight	3.84 lb	1,74 kg

Related accessories



0.-...-EC.BBC

BARGE COVER STANDARD [0.-...-BBC.S]



Overall Length	53.15"	1350mm
Useful Length	49.21"	1250mm
Weight	3.84 lb	1,74 kg

Related accessories



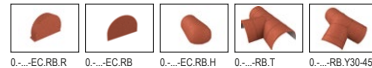
0.-...-EC.BBC

TRIPLE BARREL CAP [0.6...-3RB]



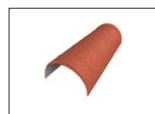
Overall Length	44.81"	1140mm
Useful Length	43.30"	1100mm
Weight	3.31 lb	1,50 kg

Related accessories



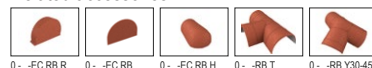
0.-...-EC.RB.R 0.-...-EC.RB 0.-...-EC.RB.H 0.-...-RB.T 0.-...-RB.Y30-45

BARREL CAP [0.6...-1RB]



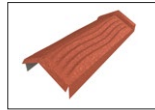
Overall Length	16.00"	410mm
Useful Length	14.56"	370mm
Weight	1.54 lb	0,70 kg

Related accessories



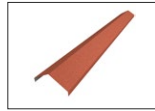
0.-...-EC.RB.R 0.-...-EC.RB 0.-...-EC.RB.H 0.-...-RB.T 0.-...-RB.Y30-45

ANGLED CAP [0-...-1AR]



Overall Length	15.75"	400mm
Useful Length	14.56"	370mm
Width	6.38"	162mm
Weight	1.32 lb	0,6 kg

ANGLED RIDGE [0-...-AR.130.US]

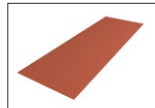


Overall Length	78.74"	2000mm
Useful Length	72.74"	1850mm
Weight	7,45 lb"	3.38 kg

Related accessories



FLAT SHEET [0-...-FS]



Overall Length	53.15"x17.72"	1350x450mm
	78.74"x17.72"	2000x450mm
	118.11"x17.72"	3000x450mm

VALLEY [0-...-VA.US]



Overall Length	78.74"x9.5"	2000x241mm
Useful Length	x6.5"	1848x165mm

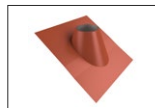
VENTILATION [0-...-RV.75]



REPAIR KIT [0-...-RK]



PLUMBING FLASHING



BENDER



The bending tool makes horizontal, vertical and angled bends.
Floor space 20" x 18" 1070x 600mm
Length 21" 1200mm
Weight 55 lbs. 47 kg

BATTEN SPACER



Designed to space battens accurately and swiftly. Turned sideways it also spaces the valley battens. Batten spacers should be purchased in sets of 2..

OTHER TOOLS



1.3 FASTENERS

Either nails or screws may be used with Varitile panels. Corrosion resistant, minimum 1000 salt spray hours. For coastal and salt water environments, stainless steel fasteners required.

NAILS

Panel to Batten: 2.25" x 0.113 Ring Shank (57mm x 2.87mm)

Batten to Rafter: Must penetrate rafter minimum 1 inch. 3.25" or 3.5" x 0.131 (83mm or 89mm x 3.3mm)

SCREWS

Panel to Batten: #9-10 x 2" with 1/4" Hex Head (#9-10 x 50mm 6.3mm)

1.4 INSTALLATION TOOLS

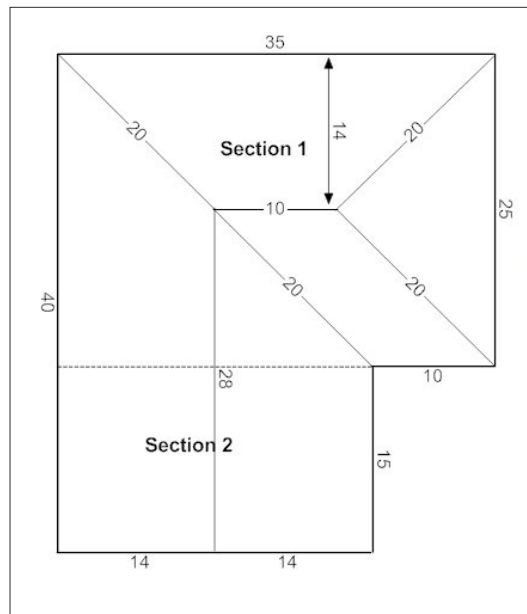
GUILLOTINE



The guillotine shear makes vertical, horizontal, and angled panel cuts.
Floor space 47.24" x 15.75" 1200 x 400mm
Length 28" 700mm
Weight 46 lbs. 21 kg

2 ESTIMATING

2.1 CALCULATION IN IMPERIAL



Profile	Rafter	Eave	Hip/Valley
Bond 7PA	1.2	4.1	0.3
Classic	1.2	4.1	0.3
Gallo	1.2	3.8	0.3
Mistral	1.2	4.0	0.3
Shake	1.2	4.1	0.4
Viksen	1.2	4.1	0.4
Riviera	1.2	4.0	0.3

Based on each profile, use the division factors above to find the amount of tile to cover both width (gable to gable) and height (eave to ridge) of the roof. Make sure to always round up to the next full tile.

The Hip / Valley multipliers are used to convert the lineal feet of hip or valley into full panels needed for cuts / waste.

Panels
[PA]



Divide the roof into square / rectangular sections. In this case we have two:

Section 1: 35 feet (eave) by 14 feet (rafter)

$35 / 4 = 8.75$ round up to 9: This is the amount of full panels needed to cover the width

$14 / 1.2 = 11.6$ round up to 12, this is the amount of full panels needed to cover the height

$9 \times 12 = 108 \times 2$ (for both sides of roof) = 216 full Mistral panels

Section 2: 15 feet (eave) by 14 feet (rafter)

$15 / 4 = 3.75$ round up to 4

$14 / 1.2 = 11.6$ round up to 12

$4 \times 12 = 48 \times 2 = 96$ full Mistral panels

Hip and valley: take the total lineal feet of hips and valleys: $80 \times 0.3 = 24$ full Mistral panels

Tally panels from sections 1,2 and hip / valley: $216 + 96 + 24 = 336$ full Mistral panels

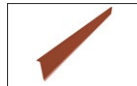
Ridge barrel
[1RB]



Total lineal footage of hip, ridge and rake: $126 / 1.2 = 105$

Add one extra trim cap per termination point and the beginning of each run. In the drawing above we would add 14 additional caps for a total of 119 ridge barrel caps

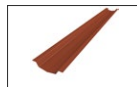
Eave
[EA]



Total lineal footage of eave:

$125 / 6.3 = 19.84$ round up to 20 fascia pieces

Valley
[VA]



Total lineal footage of valley:

$20 / 5.7 = 3.5$ round up to 4 Valley pieces

Battens

Allow 1 lineal foot / roof square footage

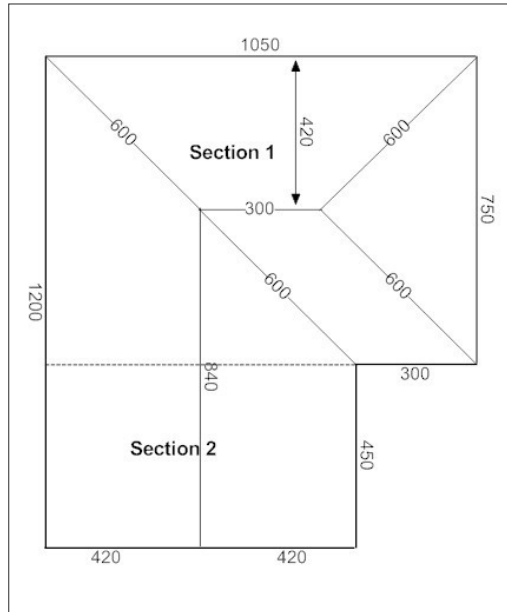
Counter battens

Allow 0.75 lineal feet / roof square foot

Nails / Screws

For standard installation, figure 4 fasteners per Mistral tile, 2 fasteners per Barrel trim cap, 4 fasteners per flashing piece and 10% additional waste.

2.2 CALCULATION IN METRIC



Profile	Rafter	Eave	Hip/Valley
Bond 7PA	37	126	100
Classic	37	126,5	100
Gallo	37	118,5	100
Mistral	37	124	100
Shake	37	126	75
Viksen	37	126	75
Riviera	37	122,5	100

Based on each profile, use the division factors above to find the amount of tile to cover both width (gable to gable) and height (eave to ridge) of the roof. Make sure to always round up to the next full tile.

The Hip / Valley dividers are used to convert the lineal cm of hip or valley into full panels needed for cuts / waste.

Panels
[PA]



Divide the roof into square / rectangular sections. In this case we have two:

Section 1: 1050 cm (eave) by 420 cm (rafter)

$1050 / 124 = 8,46$ round up to 9: This is the amount of full panels needed to cover the width

$420 / 37 = 11,35$ round up to 12, this is the amount of full panels needed to cover the height

$9 \times 12 = 108 \times 2$ (for both sides of roof) = 216 full Mistral panels

Section 2: 450cm (eave) by 420cm (rafter)

$450 / 124 = 3,62$ round up to 4

$420 / 37 = 11,35$ round up to 12

$4 \times 12 = 48 \times 2 = 96$ full Mistral panels

Hip and valley: take the total lineal cm of hips and valleys: $2400 / 100 = 24$ full Mistral panels

Tally panels from sections 1,2 and hip / valley: $216 + 96 + 24 = 336$ full Mistral panels

Ridge barrel
[1RB]



Total lineal cm of hip, ridge and rake: $3780 / 36 = 105$

Add one extra trim cap per termination point and the beginning of each run. In the drawing above we would add 14 additional caps for a total of 119 ridge barrel caps

Eave
[EA]



Total lineal cm of eave:

$3750 / 190 = 19,73$ round up to 20 fascia pieces.

Valley
[VA]



Total lineal cm of valley:

$600 / 177 = 3,4$ round up to 4 Valley pieces

Battens

Allow 3,3 lineal meters / roof m²

Counter battens

Allow 2,5 lineal meters / roof m²

Nails / Screws

For standard installation, figure 4 fasteners per Mistral tile, 2 fasteners per Barrel trim cap, 4 fasteners per flashing piece and 10% additional waste.

3 PREPARATIONS

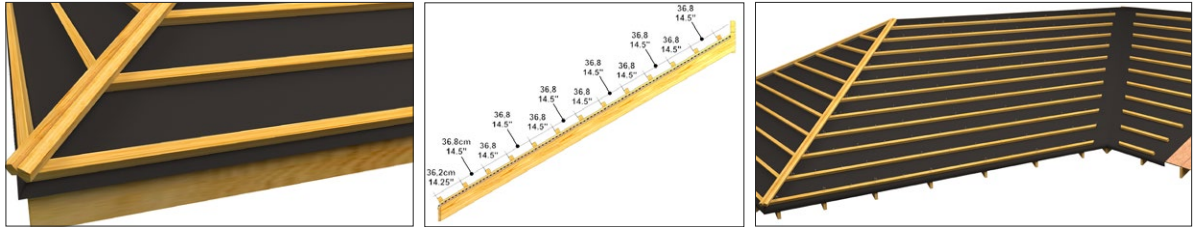
3.1 UNDERLAYMENT

Underlayment should meet or exceed local building code. Our minimum requirement is ASTM D226 type 2 (30#).


Always install underlayment per manufacturer's specifications and instructions.

3.2 BATTEN FRAMING

Battens should be standard or better nominal 2x2's. SPF and SYP are widely available and accepted materials. Measuring upslope from the outside edge of fascia, set a line at 14.25" (36,2 cm). Check along the line measuring back down to the fascia in several areas to confirm measurement from the line to fascia does not exceed 14.25" (36,2 cm). If the fascia is bowed and the distance between the fascia and the line exceeds 14.25" move the entire line toward the fascia until you compensate for the bow.



Once you have an established line, nail the batten on the UPHILL side of the line. Nail the eave batten along the fascia taking care not to exceed 14.25" spacing between the line set batten and the eave batten.

 Depending on pitch and whether there is a plumb cut or square cut eave you may need to adjust these dimensions.

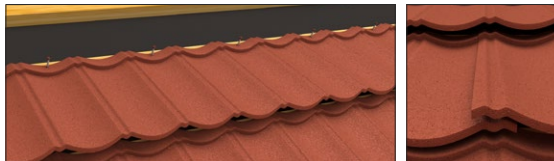
 Check with local building code to ensure proper batten fastening.

The remaining battens are installed at 14.5" (36,8 cm) centers. This spacing is crucial to obtain a tight, proper panel fit. Continue spacing the battens until you reach the ridgeline. Keep in mind the last course may not land exactly at 14.5".

4 INSTALLATION PROCEDURES


4.1 PANEL INSTALLATION AND FASTENING

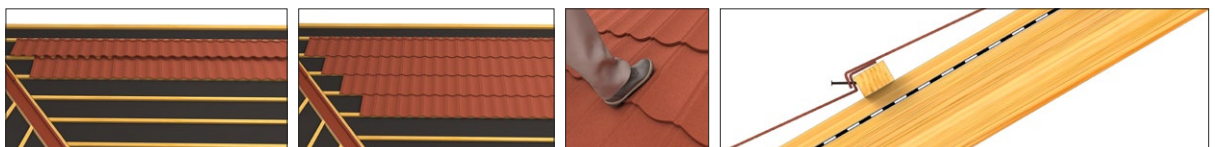
All profiles covered in this manual can be laid from right to left or left to right. Viksen and Riviera are exceptions as they must be laid right to left.




Start at the first full course below the ridge. Lay this course of panels by fastening through the back flange into the top of the batten. Do not install full panels tight to the gable, hip, valley, wall or any protrusion such as a skylight or chimney.


Lay the next two courses by lifting the course above and sliding the panels into position. Now, ensure all three courses are locked together and in proper position. Begin fastening the first course you laid through the nose of the panel, through the back shelf of the panel below, into the batten, all the while applying downward pressure on the panels so they fit tightly. Lay your fourth course then fasten the second course through the nose.

 Bond, Classic, Mistral, Gallo and Riviera panels must be staggered a minimum of one pan/ scallop width. Shake panels are staggered 13"(33 cm) measuring from right to left and 12"(30,5 cm) measuring left to right. These are the only two stagger points for Shake. Viksen panels can be staggered based on installer preference. We recommend a minimum of 7" (18 cm) for maximum performance and visual appeal.



Continue this pattern always maintaining two courses below your most recent nose fastened course. This will allow you to easily slide the panels up and under the previous course.

 Always stand on the nose of the tiles, directly above the batten when walking on the roof. Avoid standing on the middle of the tile or on the raised corrugations.

 We recommend soft soled footwear when installing/ walking on the panels.

Panels are secured by nailing through the front flange (nose) of the panel into the batten. Minimum 4 fasteners per panel. Nails should be positioned outside of water channels and centered in the downturned flange. The correct position for nailing is shown below.

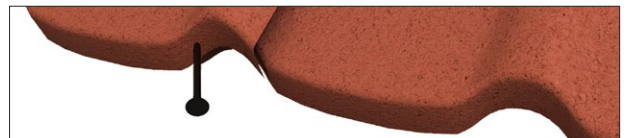
BOND 7 SCALLOP



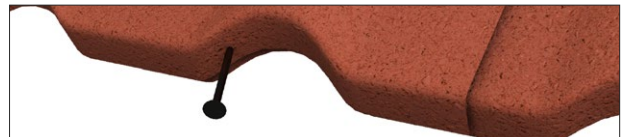
CLASSIC



MISTRAL



GALLO



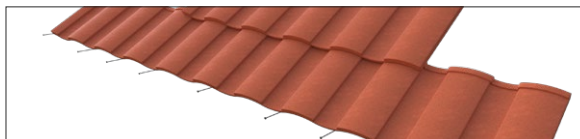
SHAKE



VIKSEN



RIVIERA




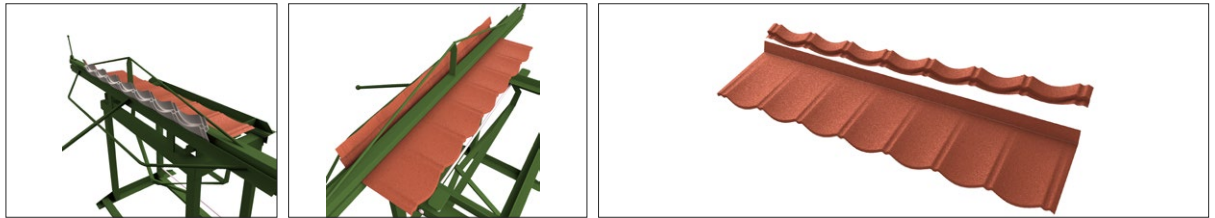
4.2 RIDGE, HIP AND GABLE PANEL INSTALLATION

4.2.1 INSTALLING THE TOP COURSE

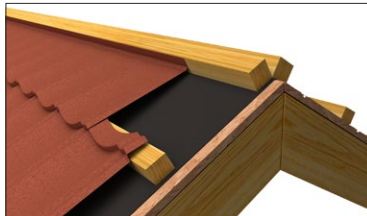
4.2.1.1 NON-VENTED

Measure from the last full course below the ridge up to the ridge batten. Deduct 0.5"(1,27 cm) from this measurement. This number is the bend line. Add a minimum of 1.5"(3,8 cm) to the bend line measurement. This is the cut line. Transfer and mark these measurements on the panel. Place the panel in the long bender along the bending line, lock into position and bend the panel upward. Remove panel from bender and cut along the cut line with the guillotine or shears.


 Always bend top course panels (long bends) before cutting.



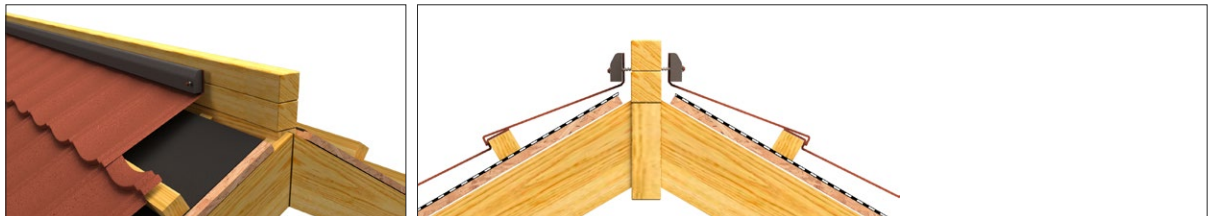
Set panel in place and fasten one side. Pull the center of panel upwards so it bows away from the roof deck and the unfastened end of the panel lines up with the course below; fasten. Press down on the center of the panel and fasten. Panels need to be fastened into the ridge batten through the turn up so they stay in plane with the panels below.



4.2.1.2 VENTED

 Check with local building codes for proper venting calculations and requirements. Ventilation should be equally balanced between intake and exhaust. Failure to follow proper ventilation techniques may result in unsatisfactory performance. Depending on the roof/ attic structure the measurements below may need to be modified.

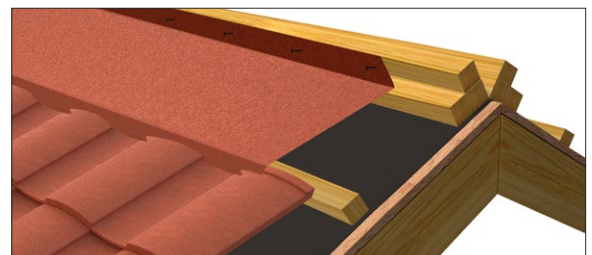
Cut an air gap in the roof sheathing 1"(2,5 cm) on each side of the ridge. Stack and fasten 2x2's or dimensional lumber center of ridge to create a ridge nailer. The height of the ridge nailer should allow for a consistent plane with field panels and the top course panel as well as sufficient air gap between the top course panel and ridge cap. Measure, bend and cut top course panels so they allow for a 1"(2,5 cm) gap between the panel up turn and the ridge nailer. Install venting material over panel turn up and fasten into the ridge nailer. Make sure a 1"(2,5 cm) air gap is maintained between the top course panels and ridge nailer.



4.2.1.3 COVER FLASHING

Cover flashing is an optional piece used to transition from the last full course of Riviera panels to the ridge. It is profiled to match the panel curvature. Measure from the back shelf of the tile to the ridge batten. Transfer these measurements to the cover flashing and bend up a minimum 1.5" (3,8 cm). Place cover flashing so it fits snugly and fasten into the ridge batten and the last panel batten below the ridge.

Overlap cover flashing pieces facing away from prevailing weather and seal the overlap.



4.2.2 HIP AND GABLE

Measure straight along the top and bottom panel battens to the termination point formed by either the gable or hip batten.

Hips: Deduct 0.5"(1,27 cm) from this measurement.

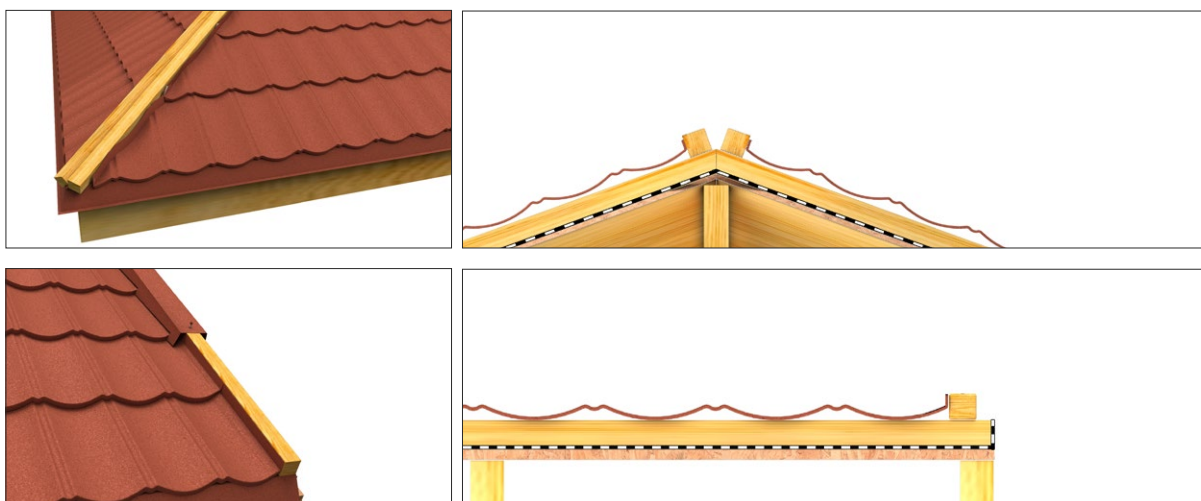
Gables: Deduct 0.25"(6 mm).

Transfer and mark these measurements on the panel. Create the bend line by scribing the panel between the top and bottom points. To create the cut line add a minimum of 1.5"(3,8 cm) to the bend line and scribe.


Use the guillotine or shears and cut along the cut line. After cutting the panels, bend accordingly.



Place the cut and bent panels. Fasteners must penetrate the battens.



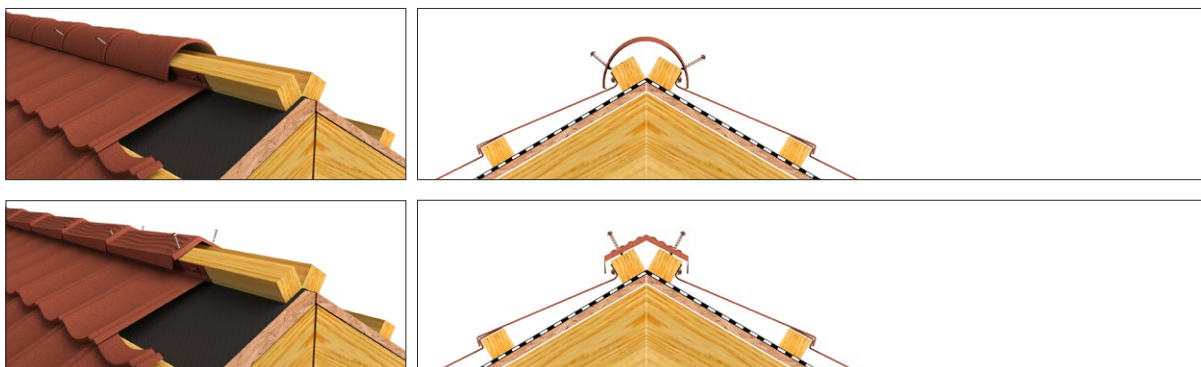
4.3 RIDGE, HIP AND GABLE TRIMS

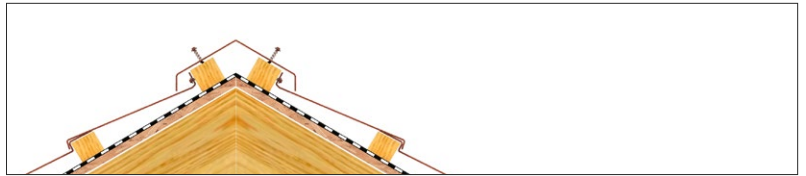
 Install the trim overlaps facing away from prevailing weather.



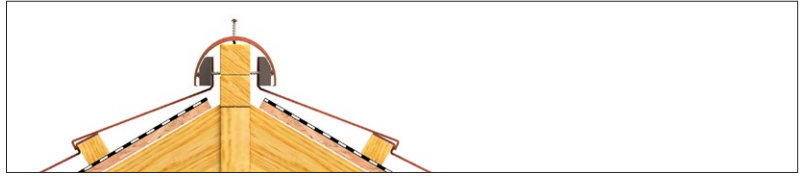
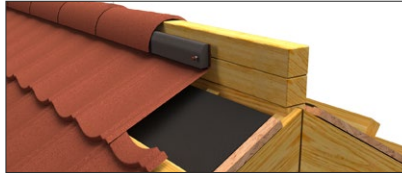
When installing trim pieces, fasten through the overlapping area into battens or nailers. For trim pieces exceeding 14.5"(36,8 cm) exposure, space fasteners a minimum of every 14.5"(36,8 cm).

4.3.1 RIDGE TRIMS



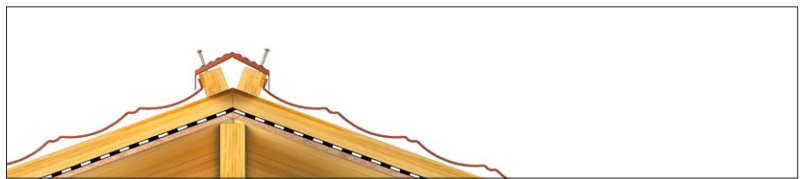
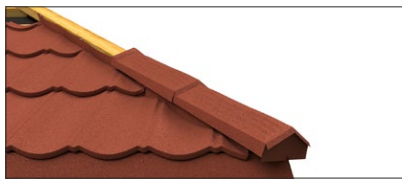
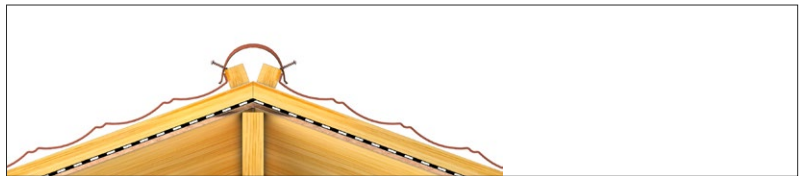


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4.3.2 HIP TRIMS

Beginning at the eave, place trim piece so it fits tightly to the fascia. Insert an end closure into the leading edge of the trim piece and fasten. Continue laying trim from bottom to top.

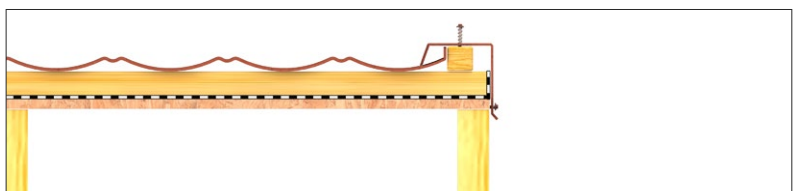
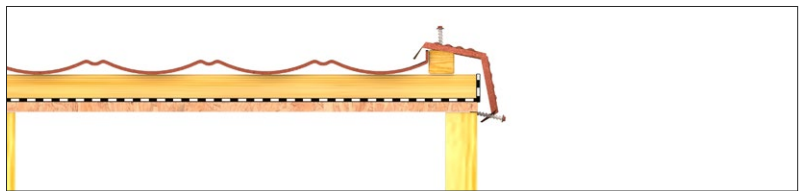
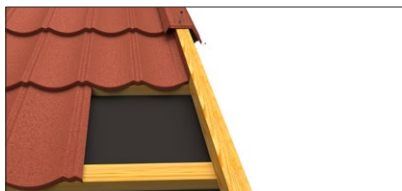
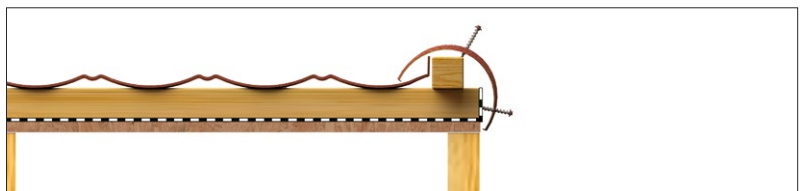


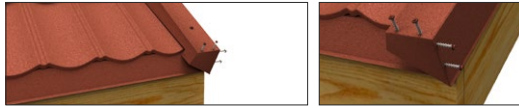
Trim pieces can be cut and mitered at ridges. Alternatively, preformed junction caps are available.



4.3.3 GABLE TRIMS

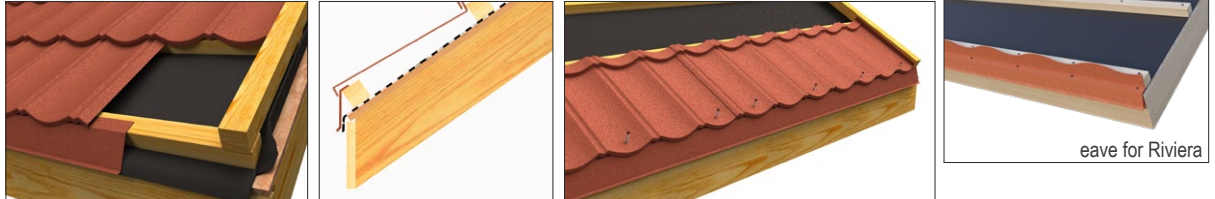
Gable trims are installed from the bottom up, with a closure at the eave.





4.4 EAVE

Follow the same fastener spacing as the field panels. When setting the eave for Riviera, install the eave apron directly on the deck. Install a 2X2 immediately behind the upturn of the eave apron. (see pic) Fasten through the top of the Riviera panel into the 2x2 as with the other profiles.

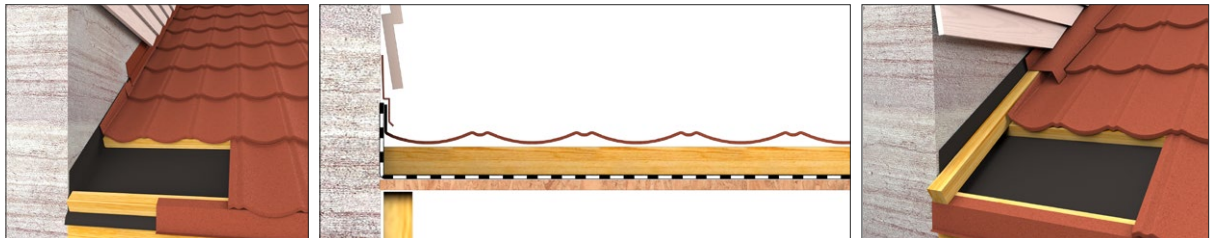


 If using nails, caulk and chip the heads.

4.5 SIDEWALL

Sidewall panels are cut and fit in the same fashion as gable panels. A minimum 2"(5 cm) upturn is recommended.

Z-flashing may be used as a transitional piece between siding and up turned panels. In retrofit situations dealing with stucco or other types of solid cladding, Z-flashing can be used as a termination bar. Bend a slight kick along the top of the Z-flashing, fasten into the wall every 12"(30 cm) and caulk along the top kick with a high quality urethane caulk. In areas of heavy rain, bedding the termination bar in sealant is recommended. Z-flashing should be overlapped a minimum of 4"(10 cm).

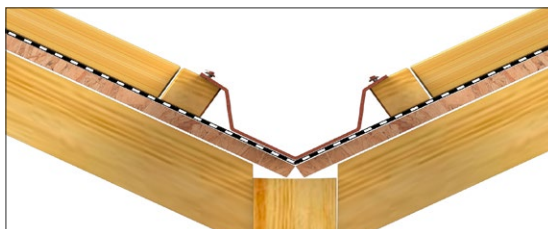


4.6 VALLEY

4.6.1 VALLEY FLASHING

The valley is set between two battens spaced 7"(18 cm) apart and fastened through the top flange every 18"(46 cm). Valley flashing should extend past the fascia a minimum of 1" (2,5 cm). In areas of heavy ice and snow it may be necessary to bed the valley in sealant at the fascia. Valley flashings should be overlapped a minimum of 6"(15,25 cm) and sealed.

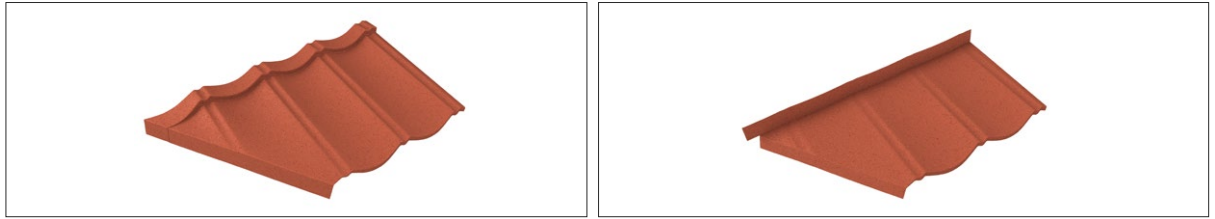
Valleys should be mitered, overlapped and set in sealant when they meet at the top of a dormer (ridge). Any valley that originates at a vertical wall should be turned up the wall a minimum of 2" (5 cm) and sealed.



4.6.2 CUTTING PANELS

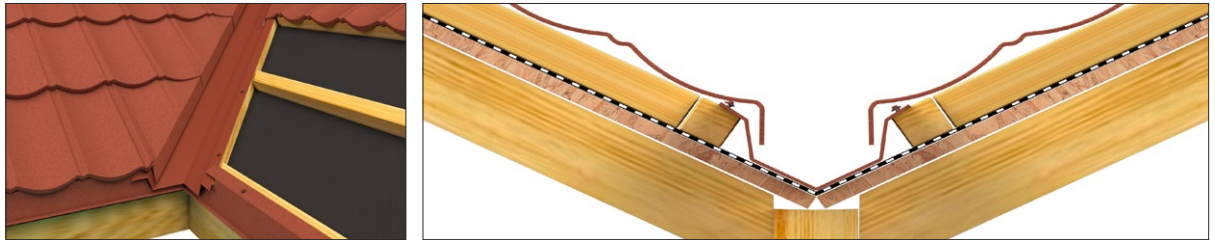
Measure straight along the top and bottom panel battens to the corner of the valley that is formed by the up-stand and top flange. Transfer and mark these two measurements on the panel. Scribe a line between the top and bottom points, this is the bend line. Add 1.25"(3,18 cm) to this mark for your cut line.

Use the guillotine or shears and cut along the cut line. After cutting the panels, bend accordingly.



4.6.3 INSTALLING VALLEY CUTS

Place the cut and bent panels. Fasteners must penetrate the battens.



i Do not fasten panels through the valley upstand.

4.7 CHIMNEY

Panels are bent using the same techniques as ridge and sidewall to create the headwall and sidewall flashings of the chimney. For the saddle, flat stock may be used, or a panel may be cut and bent to fit. Always ensure flashings extend past the edges of the chimney to allow for proper drainage and all corners are sealed.



4.8 PIPE FLASHING

Waterproof underlayment to pipe using a base flashing. Mark and cut the field panel to fit over pipe. Place panel over pipe. Seal panel to pipe. Install boot flashing over pipe. Mark and cut a partial panel (enough to fully cover the pipe flashing from side to side) and install over the pipe flashing. Seal the partial panel to the pipe flashing.

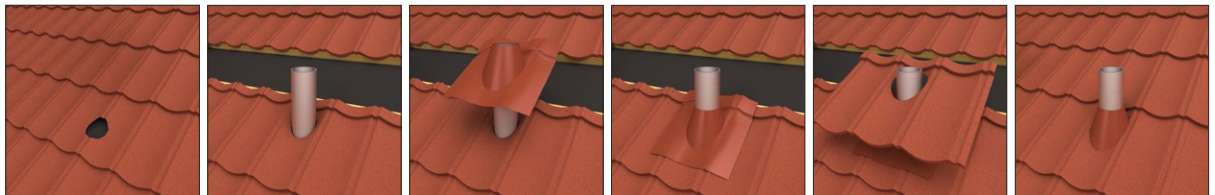
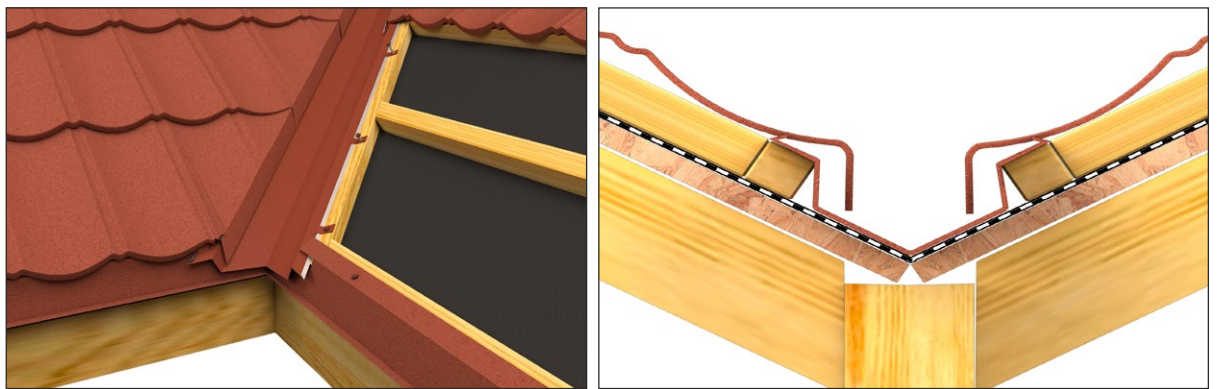
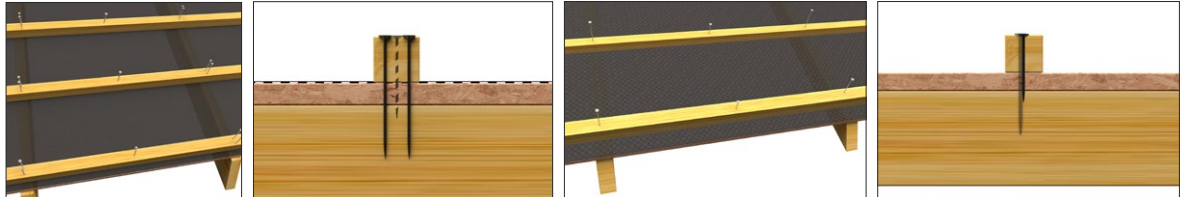


EXHIBIT 01

High velocity and hurricane zone (HVHZ) instructions



FIELD INSTALLATION

Component:	Description	Attachment	Additional Detail
Deck:	15/32-inch thick CDX plywood APA Span-Rated over nominal No. 2 wood joists at 24in o.c.	0.113 x 2-3/8in ring shank nails 6in o.c. at ends 6in o.c. along intermediates	none
Underlayment:	ASTM D226 Type II	32ga, 1-5/8in Ø tin caps with 12ga, 1-1/4in ring shank nails Fasteners installed at 6in o.c. in laps with two additional rows in the field at 12in o.c.	4in Side Laps
Battens:	nominal 1-1/2in x 1-1/2in wood batten bars	one (1) #10 x 3-1/2in Phillips, bugle head screw installed 24in o.c. into joist intersections one (1) #9 x 2-1/2in Star, bugle head screw installed 24in o.c. into sheathing; mid-span between joist intersections	14-1/2in o.c. batten spacing
Roof Covering:	stone-coated metal panel Varitile Classic Varitile Bond 7 scallop Varitile Viksen Varitile Mistral Varitile Shake Varitile Gallo	11.5ga, 2-1/4in coated fastener (Varitile NailScrew) Fasteners installed at five (5) per panel located into panel nose through headlap of preceding course and into batten	Panels applied with 14-1/2in exposure Adjacent panels overlapped approximately 2-1/2in



CORNER INSTALLATION

Component:	Description	Attachment	Additional Detail
Deck:	15/32-inch thick CDX plywood APA Span-Rated over nominal No. 2 wood joists at 24in o.c.	0.113 x 2-3/8in ring shank nails 6in o.c. at ends 6in o.c. along intermediates	none
Underlayment:	ASTM D226 Type II	32ga, 1-5/8in Ø tin caps with 12ga, 1-1/4in ring shank nails Fasteners installed at 6in o.c. in laps with two additional rows in the field at 12in o.c.	4in Side Laps
Battens:	nominal 1-1/2in x 1-1/2in wood batten bars	two (2) #10 x 3-1/2in Phillips, bugle head screw installed 24in o.c. into joist intersections one (1) #9 x 2-1/2in Star, bugle head screw installed 24in o.c. into sheathing; mid-span between joist intersections	14-1/2in o.c. batten spacing
Roof Covering:	stone-coated metal panel Varitile Classic Varitile Bond 7 scallop Varitile Viksen Varitile Mistral Varitile Shake Varitile Gallo	11.5ga, 2-1/4in coated fastener (Varitile NailScrew) Fasteners installed at seven (7) per panel located into panel nose through headlap of preceding course and into batten	Panels applied with 14-1/2in exposure. Adjacent panels overlapped approximately 2-1/2in

