

ready»slate
by CUP4GROUP

TECHNICAL INSTALLATION GUIDE



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IMPORTANT INFORMATION

Please **consider the following aspects** in order to ensure the correct installation of READYSLATE® panels:

- Before installation check you local building codes for roof requirements.
- Membrane temperature should not exceed 122 °F (50°C) during installation.
- Do not install on pitch less than 18.5 degrees (32%). *For installation under that level, please contact our Technical Department.*
- The substrate must be properly prepared before starting any roofing job (see below).
- Remember to consider any possible interactions between READYSLATE® waterproof SBS membrane and any other waterproofing elements used, if any.”



RECEIVING AND CHECKING GOODS

Upon delivery, **please examine** the product for any possible damage.

Exhaustive quality controls are performed as we inspect each and every one of our READYSLATE® panels when they leave our factory. However, despite the protective wrapping, damages may be caused to READYSLATE® panels during transport. Problems should be documented and reported immediately to the freight carrier or transport company.

CUPA PIZARRAS declines all liability for damage caused during transport unless notified within 48 hours of delivery.



HANDLING AND STORAGE INSTRUCTIONS

Outdoor storage **is not recommended**.

When no other option is available, READYSLATE® panels must be completely covered and protected by a waterproof canvas.

Store at a maximum temperature of 110 °F (43°C). Place the panels on a flat area, preventing them from bending, and with slates facing upwards at all times. Do not remove the packaging until they are about to be installed.

READYSLATE® panels must be stored in a dry place, protected from rain and extreme temperatures. This product is neither flammable nor toxic.

Before the installation, the self-adhesive membrane shouldn't be exposed to sun, to protect it against ultraviolet rays. Once the installation is completed, READYSLATE® panels are ready to withstand the sun's heat and powerful rays.



It is not possible to walk on READYSLATE®, so foot traffic must be avoided if possible, especially on hot days. If it's absolutely necessary to walk on a READYSLATE® roof, please follow these recommendations:

- Wear soft-soled shoes or foam rubber sole boots to prevent damage.
- Step along the bottom of the panels, avoiding the middle and tops.
- Don't jump or move quickly to avoid additional pressure as you step that could break the slates.
- Walk on the balls of your feet to reduce the pressure.
- Distribute your weight evenly to prevent breaking any slates.

However, if any slates do break, they should remain strongly attached to the bituminous membrane.



*Acceptable measurements for the panels with slate pieces of 300x200mm.

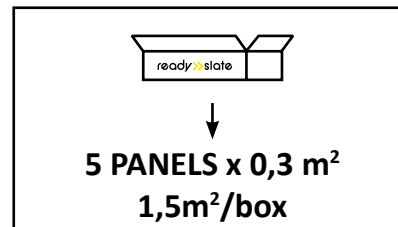
READYSLATE® panels are composed of two layers:

- **Support layer:** Waterproofing bituminous self-adhesive membrane composed of a non-woven polyester felt reinforcement and covered with SBS modified bitumen mastic.

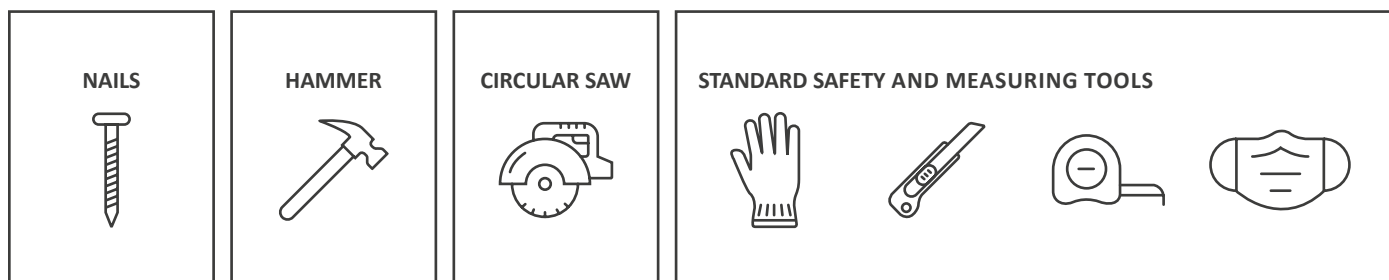
- **Visible layer:** High quality 3-4mm thick hand-quarried natural slates with a density of 2850 Kg/m³. Individual slates are predrilled and marked with an overlapping reference in order to simplify the installation process.

DESCRIPTION

Panel	2-layer construction	1300 x 330 x 6mm
Toplayer	6 x natural slates	300 x 200 x 3,5mm
Bottomlayer	SBS waterproofing membrane	2,5 mm thickness
Natural slate	Tectonic natural slate	Ø3,5 mm predrilled holes
Weight	17,96 kg/m ²	27 kg/box



INSTRUMENTS AND ACCESSORIES



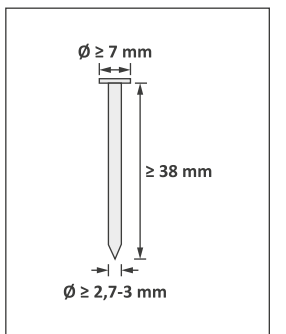
i Slate is a natural product and as such there are not two identical pieces. It's created by natural forces and it's composed of many different minerals that is impossible to recreate the same slate twice. Even in the same quarry, it can be variations in color and texture. Each slate is handcrafted and goes through a rigorous classification process. In some cases, the top corners may be damaged or cut off but this does not affect the finished look for the roof or its its waterproof properties.

STANDARD FASTENERS: STAINLESS STEEL NAILS

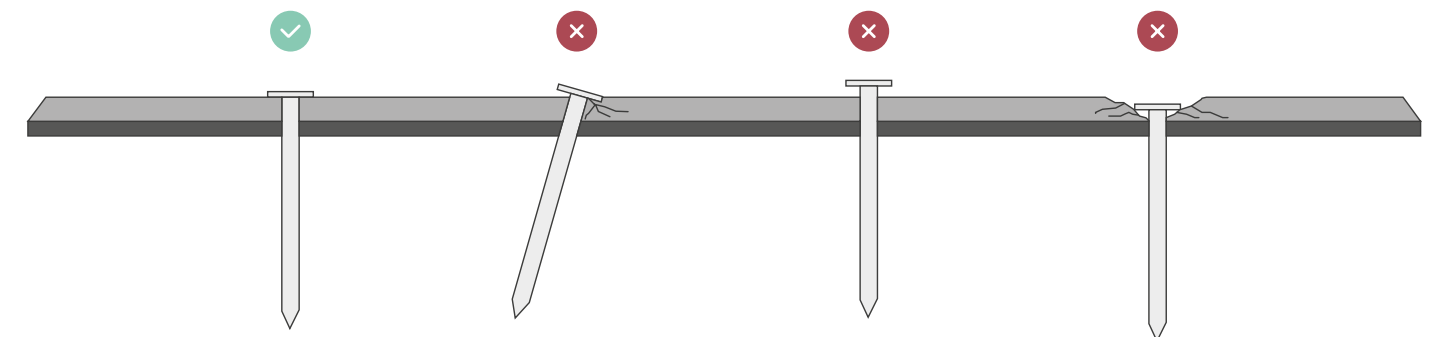
READYSLATE® panels must be installed with (at least) 7mm flat head stainless steel, copper, aluminium or galvanised nails, with 2,7mm diameter and minimum 38mm long. Stainless steel twist nails are recommended.

Aluminium and galvanised nails are not recommended for use on coastal applications and other saline or corrosive environments.

Before nailing additional nails, it is necessary to pre-drill with a 4mm drill bit.



CORRECT NAILING



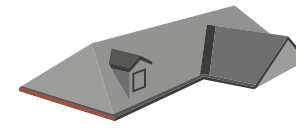
NAIL COVERAGE: 40 NAILS/M²

SPECIAL FASTENERS: BLACK LACQUERED SEALING SCREW

Stainless steel with neoprene bonded washer 4,9x38mm for exposed elements. Before fixing the screw it is necessary to pre-drill with a 5mm drill bit



PREPARING THE ROOF DECK



EAVES

a. The roof substructure must consist of one of the following options:

- 25mm x 152mm sized timber boards.
- 16mm or greater APA plywood.
- 18mm or greater APA OSB strand board.

**For other substructures please contact our Technical Department.*

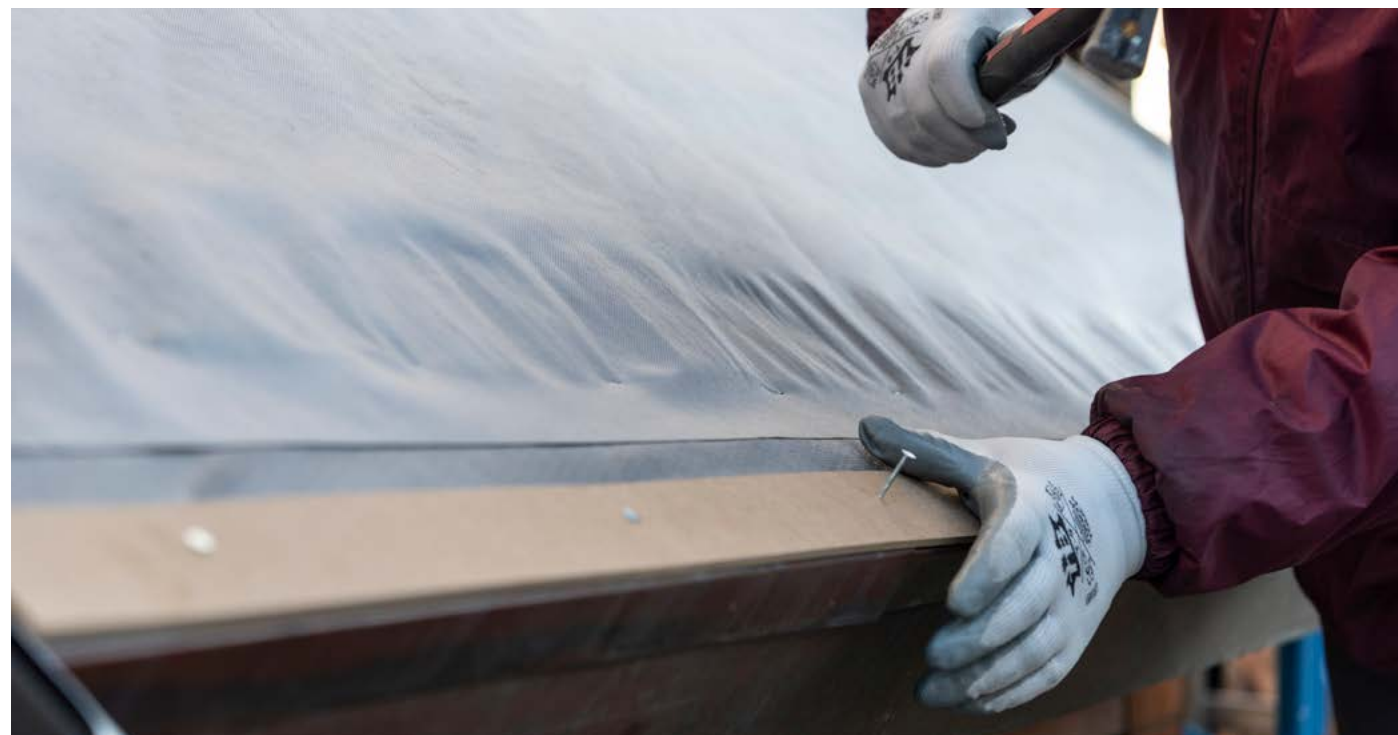
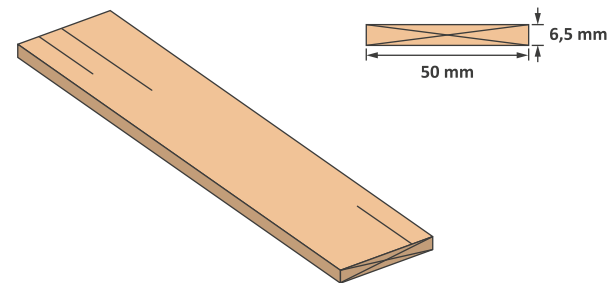
b. The substrate must be clean and kept dry at all times during installation. Locate and fix any holes, wet or uneven areas that could affect the performance of READYSLATE®.

c. A water resistant breathable roofing underlay is necessary. The underlay must be in accordance with local building codes and installed per manufacturer's requirements.

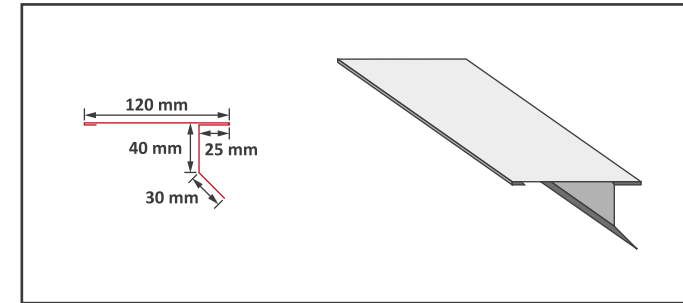
d. An Ice & Water barrier is recommended for low-pitch areas, valleys and other vulnerable roof areas and meeting points.

GETTING STARTED

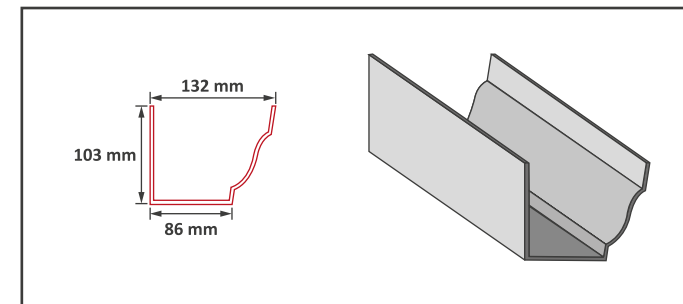
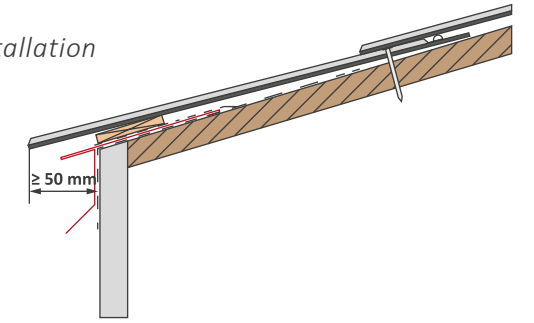
Starter stripwood: Fix a 5-6,5 mm thick and 50 mm wide wooden strip to the roof eave installed with flat head stainless steel nails.



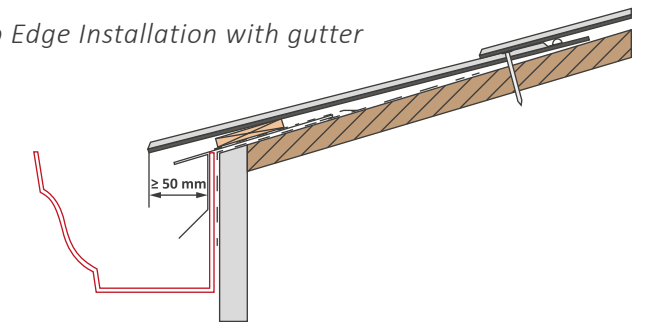
a. Drip edge



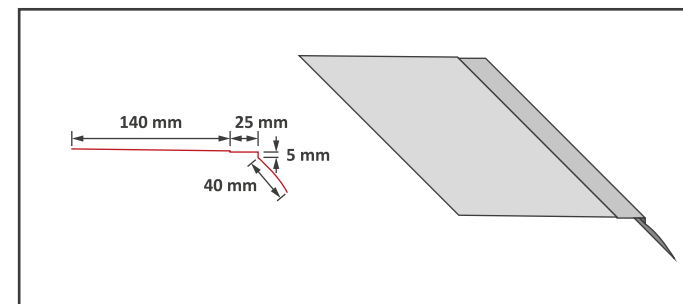
Drip Edge Installation



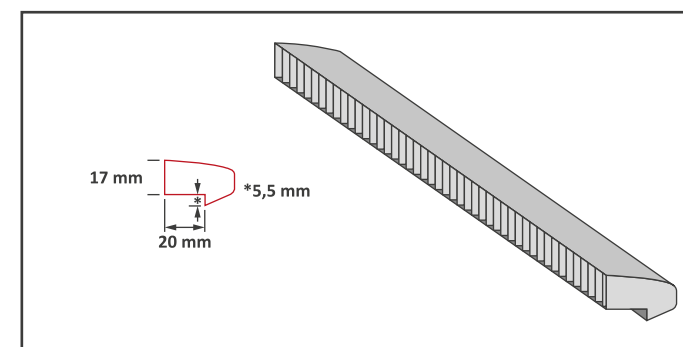
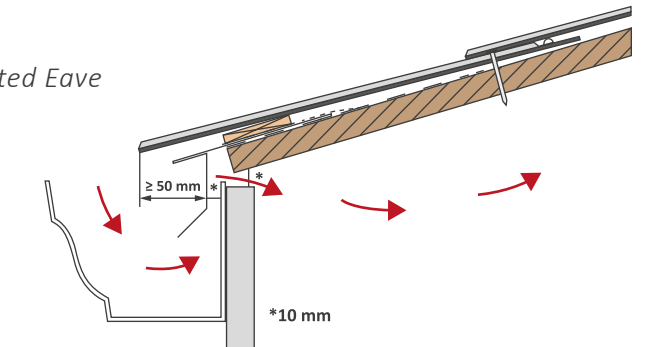
Drip Edge Installation with gutter



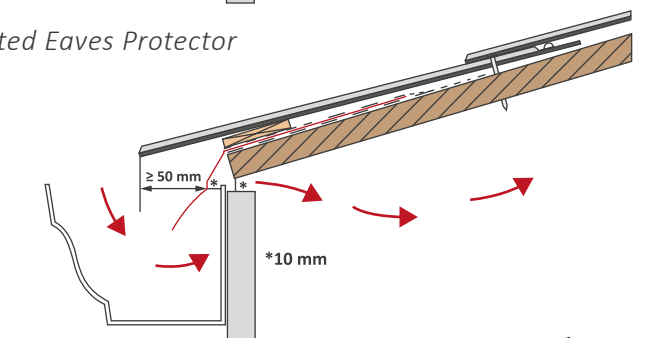
b. Vents



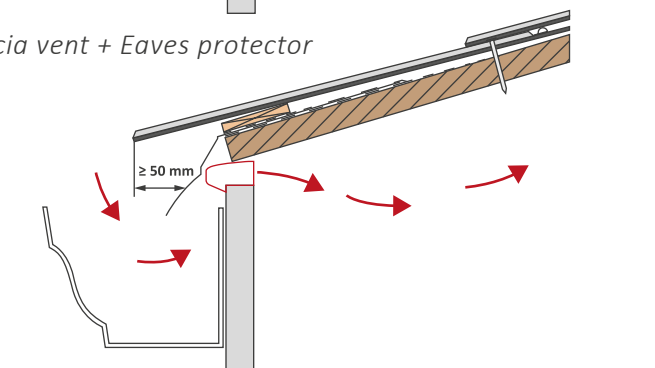
Vented Eave

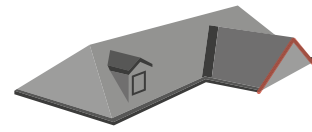


Vented Eaves Protector

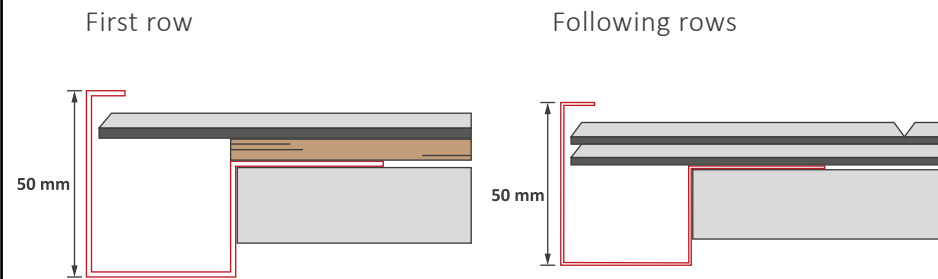
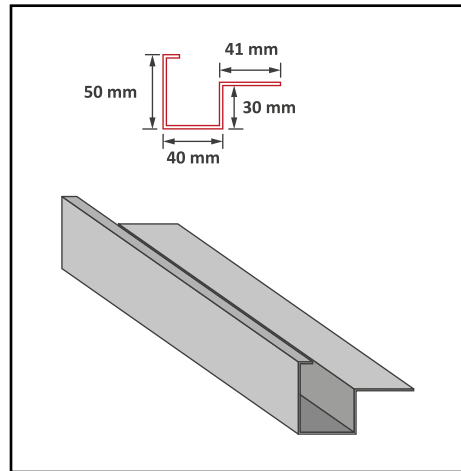


Fascia vent + Eaves protector

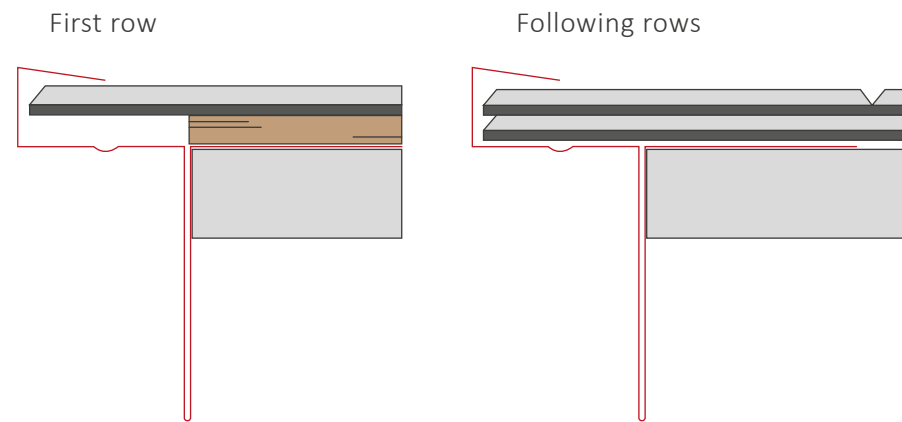
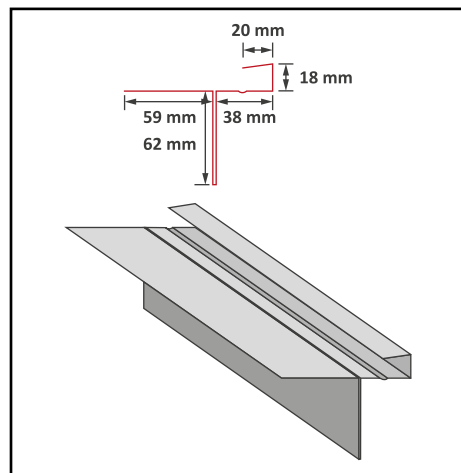




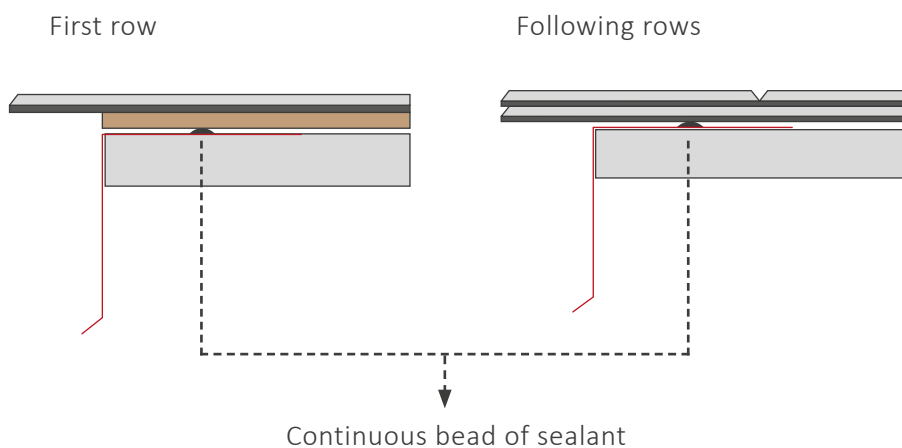
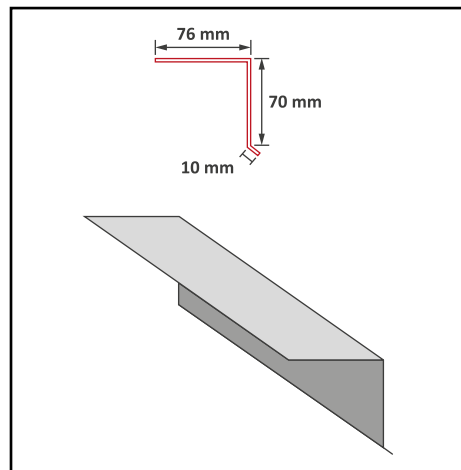
a. 50mm Side Edge flashing Black Alu/metal



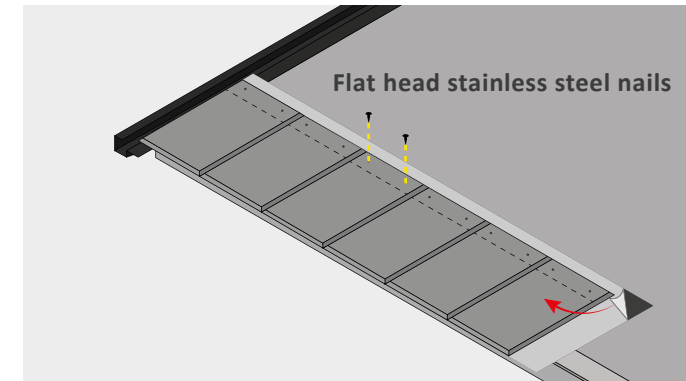
b. 18mm Slate Dry Verge - Black Alu/metal



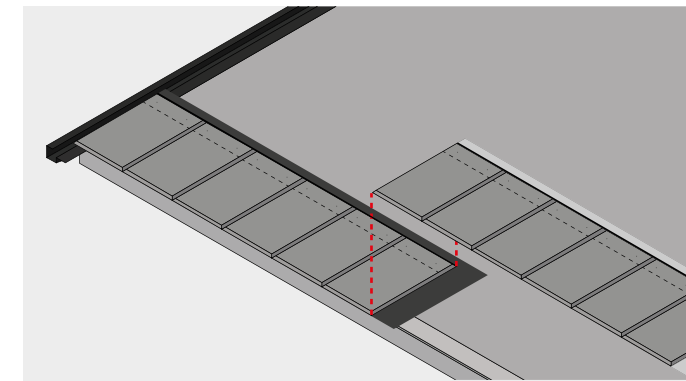
c. 70mm Kick out Drip Edge - Black Alu/metal



a. First row: Start from the left to the right.

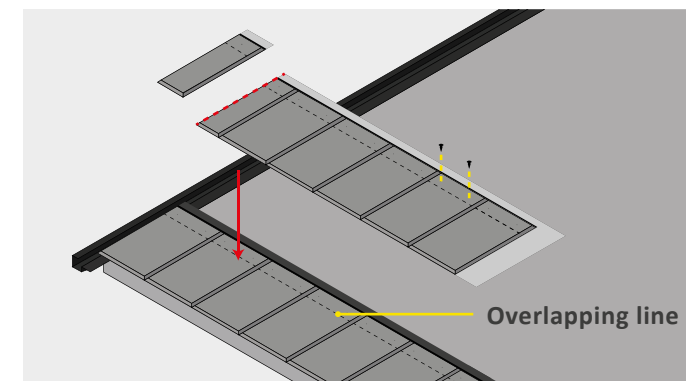


Lay the first READYSLATE® panel down and nail the 6 slates to the roof substructure (never to the wooden strip) ensuring there is an overhang of 5 to 7 cm over the edge of the eaves. Make it fit laterally in the dry verge flashing. Once fitted, peel back the protective film. All individual slate are predrilled to simplify the process.

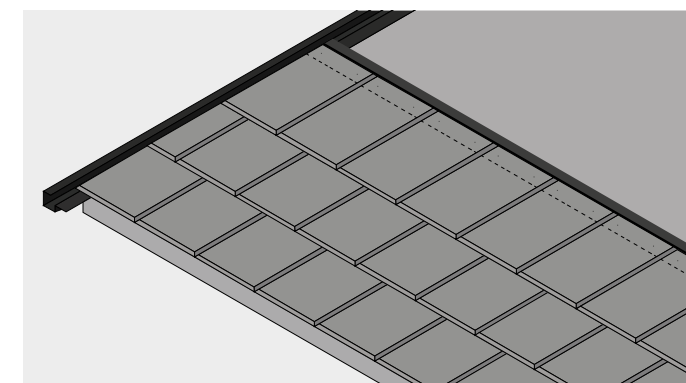


Repeat for all READYSLATE® panels in the first row, covering the waterproof sheet area at the right of each panel. Remember to make all necessary measurements and markings to ensure the overhang distance is maintained. For the final slate panel on a row, measure the gap between the last slate of the panel and the edge of the roof and cut to size. Keep the remaining part of the slate panel for the installation of the next row.

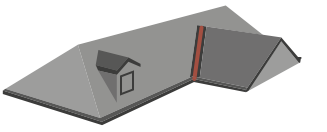
b. Second and remaining rows.



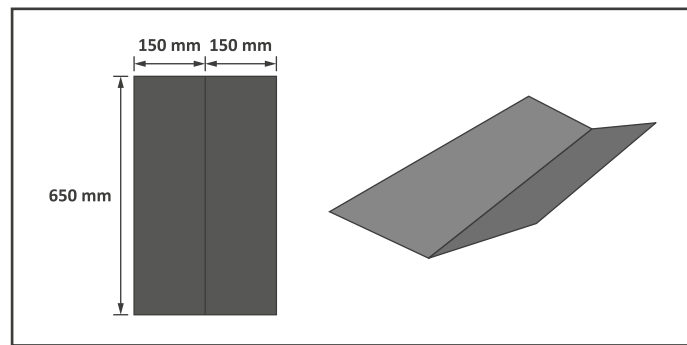
Use a circular saw with an appropriate stone disc to cut half of the first slate tile. Remaining rows must be always installed overlapping the joints of the preceding panel. All READYSLATE® modules are marked with an overlapping line. The lower edge of all panels must coincide with this line to ensure all panels are correctly laid.



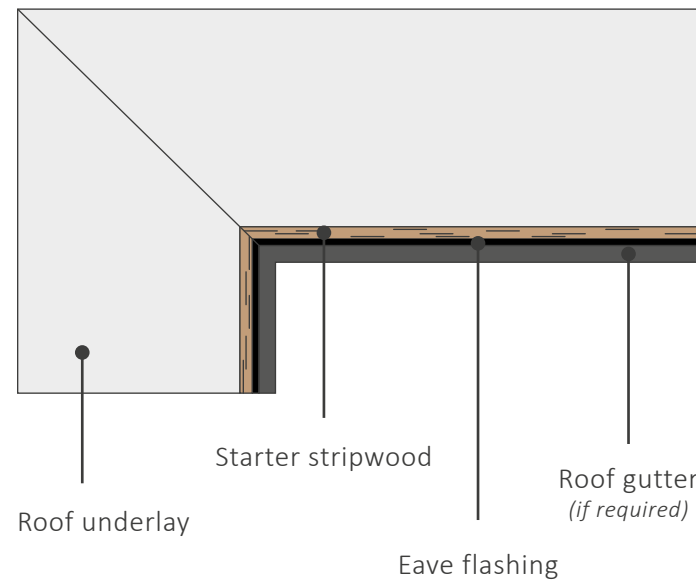
Simply cutting a half of the first slate piece in alternate rows ensures the correct coverage of all joints of the preceding row. Follow the instructions in the former step for all remaining rows, cutting part of the modules when needed. Do not throw any remaining pieces; they will come in handy when adapting other panels.



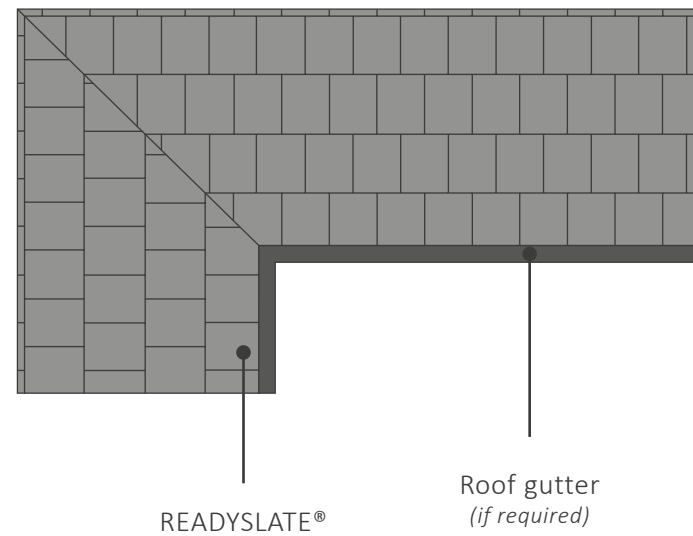
a. Closed Valley



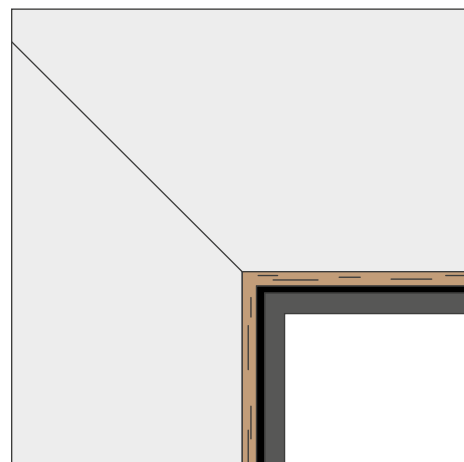
Valley before installing READYSLATE®



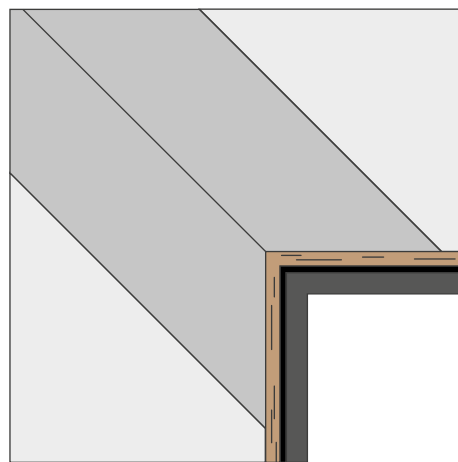
Valley after installing READYSLATE®



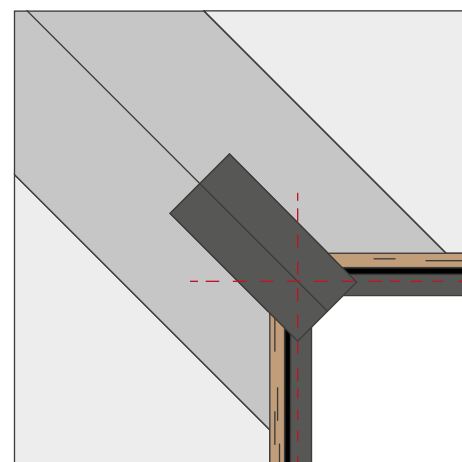
Closed valley details



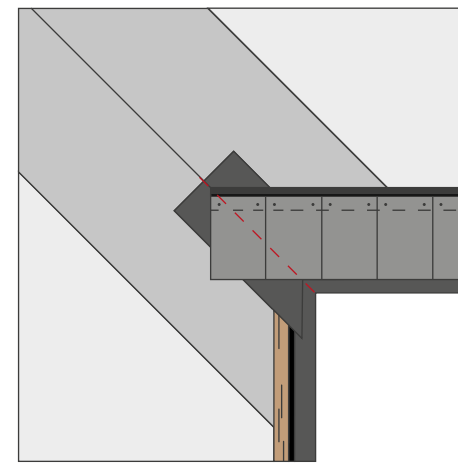
Substructure covered with eave flashing and underlay. Starter stripwood fixed.



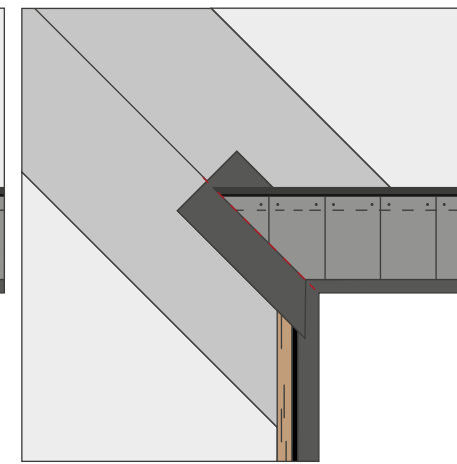
Installing an ice and water barrier is recommended in low pitch situations.



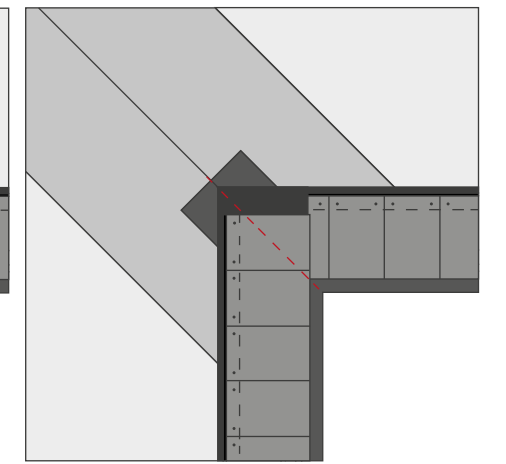
Installation of the 1st valley flashing. Cut the flashing according to angle of the valley, allowing for a 50mm overhang.



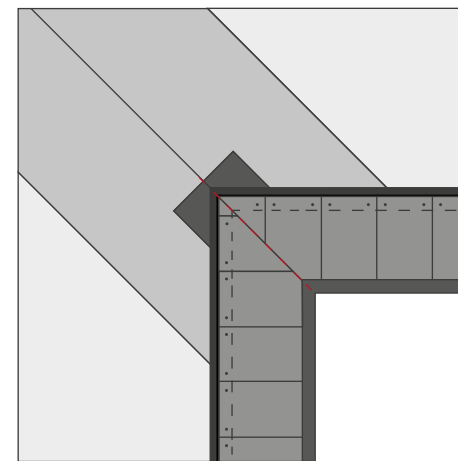
Place the first READYSLATE® panel and mark it according to the angle.



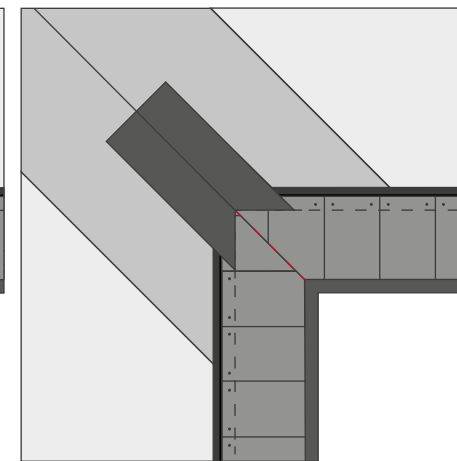
Cut the READYSLATE® panel to size.



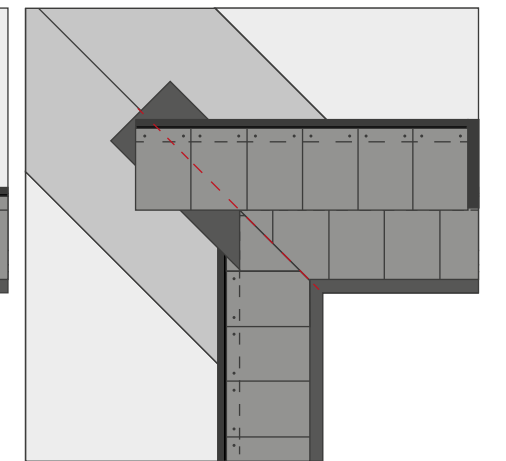
Place the adjacent READYSLATE® panel and mark the angle.



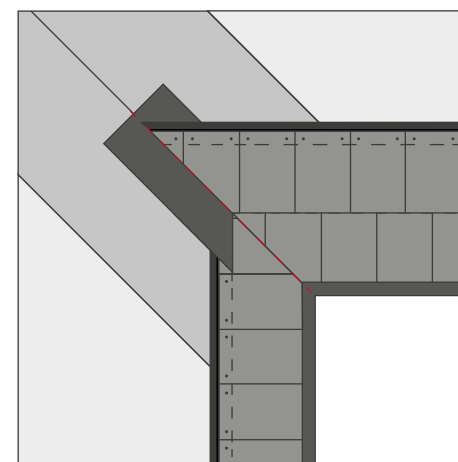
Cut the READYSLATE® panel to size.



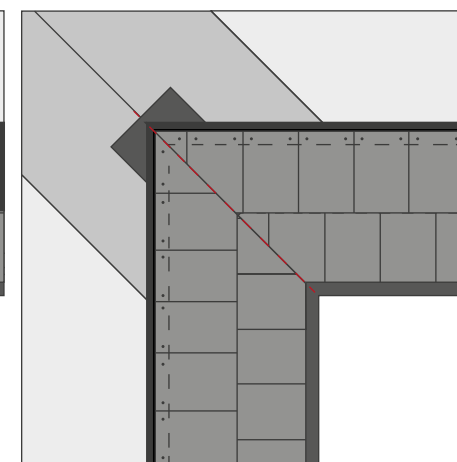
Cut the angle of the 2nd flashing as per the 2 overlap lines and fix it.



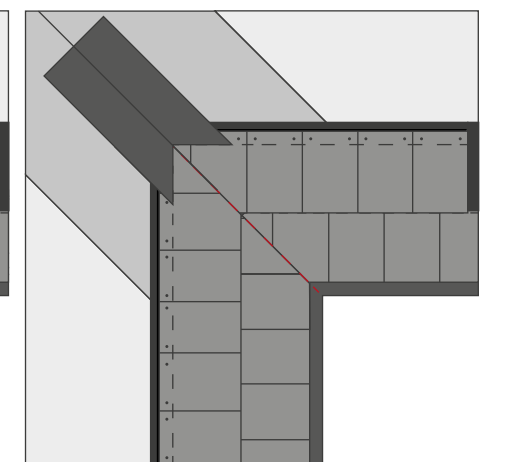
Place of the 2nd row of READYSLATE® panel.



Cut it to size as previously indicated.

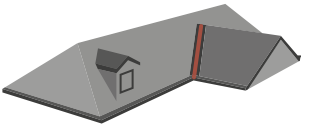


Continue with the remaining panels.

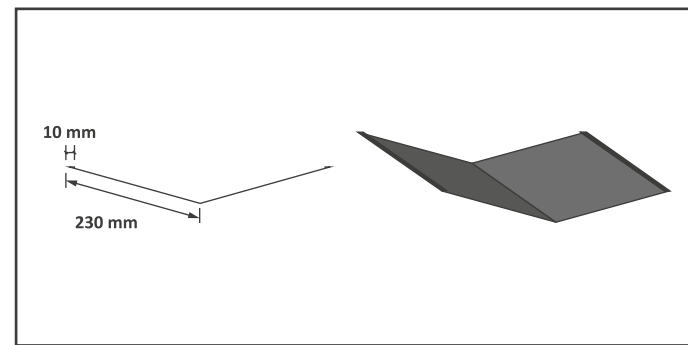


Continue the installation interweaving flashings and READYSLATE® rows.

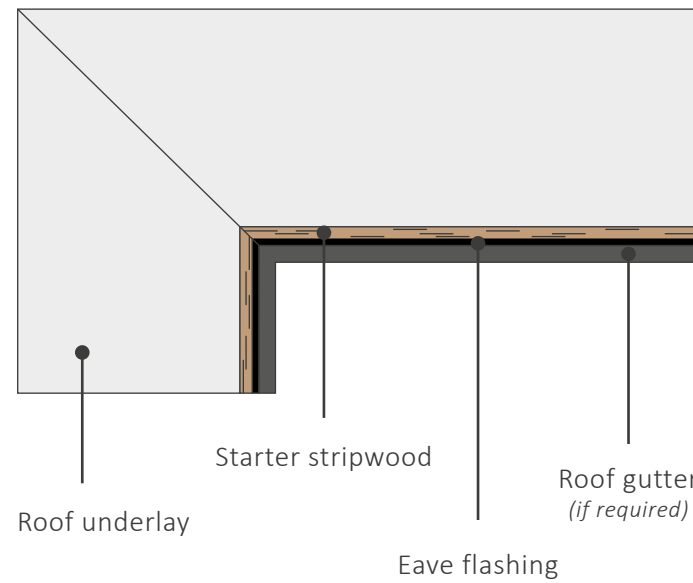
VALLEY



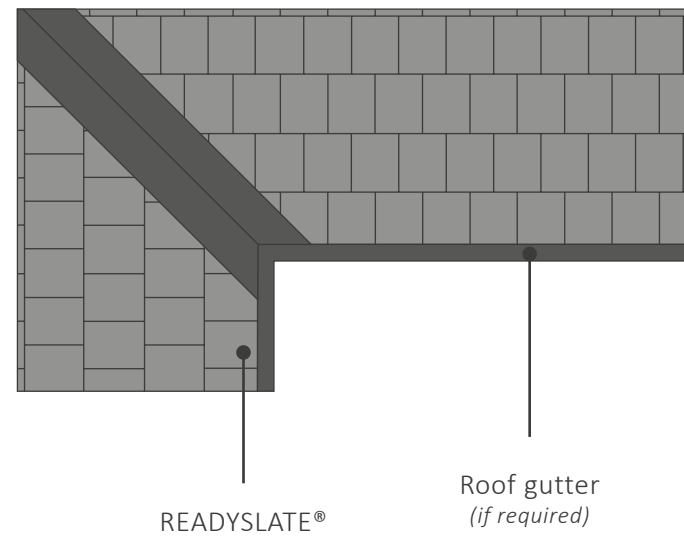
a. Open Valley



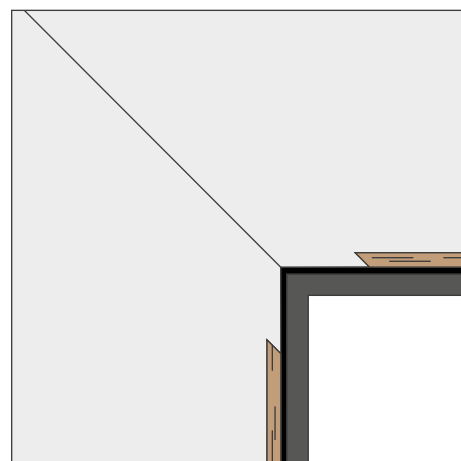
Valley before installing READYSLATE®



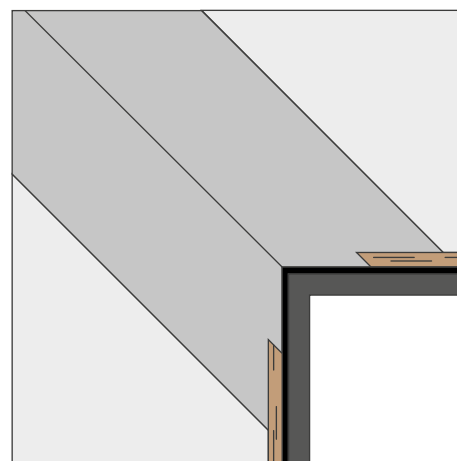
Valley after installing READYSLATE®



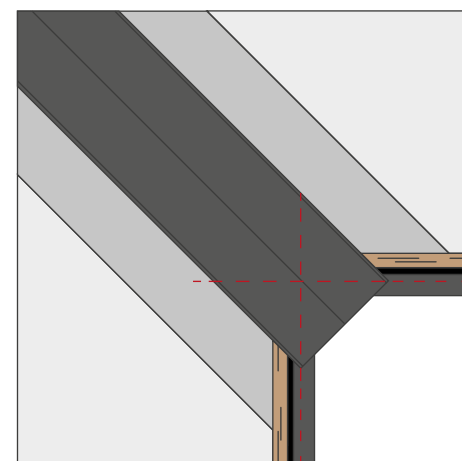
Open valley details



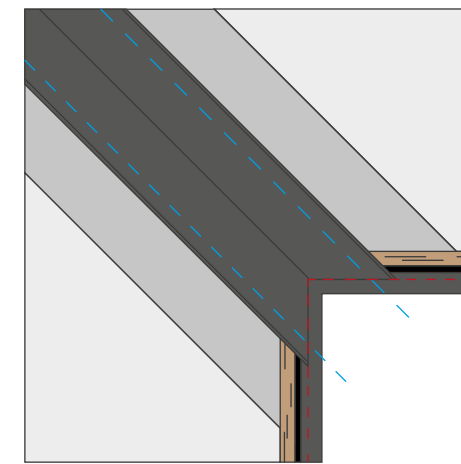
Substructure covered with eave flashing and underlay. Starter stripwood fixed.



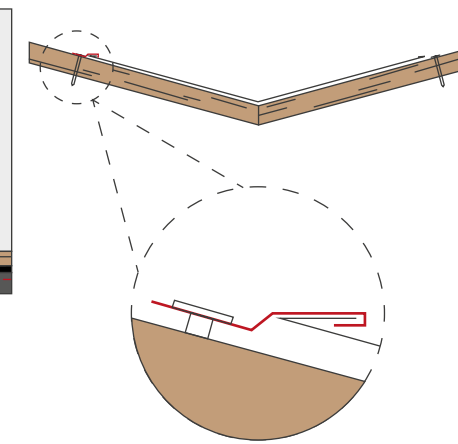
Installing an ice and water barrier is recommended in low pitch situations.



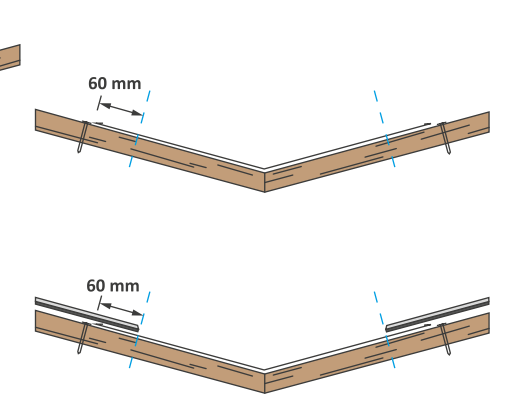
Installation of the valley flashing: 50 mm overhang.



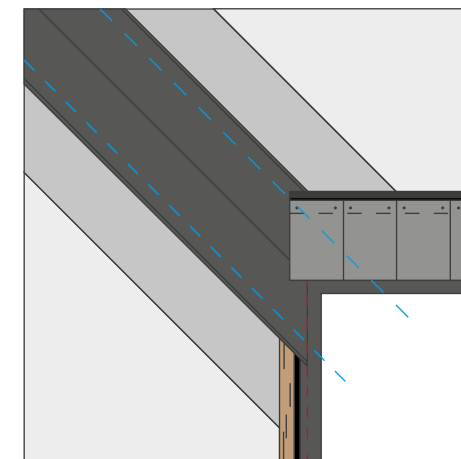
Cut the flashing according to the angle of the valley, allowing for a 50mm overhang.



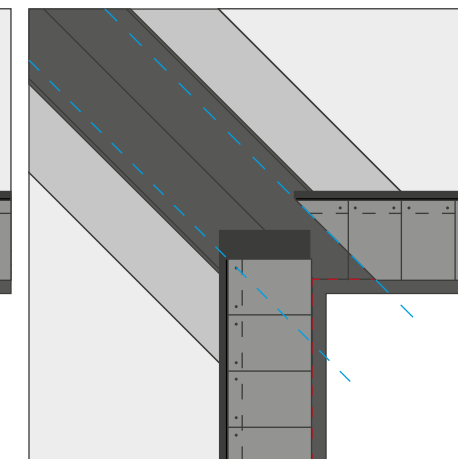
The metal flashing is fixed to the substructure using clips.



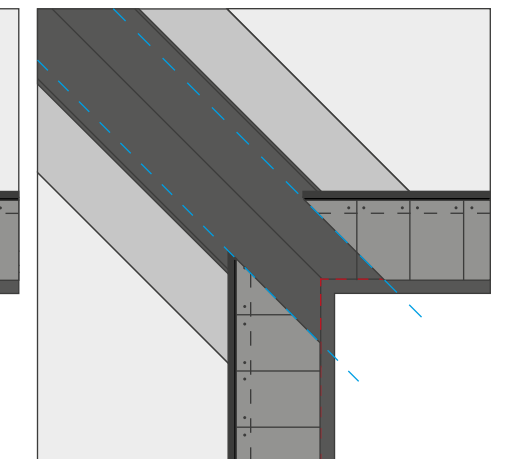
READYSLATE® overlaps 60 mm, a mark a chalk line to be used as a reference. The panel must be installed following that marks.



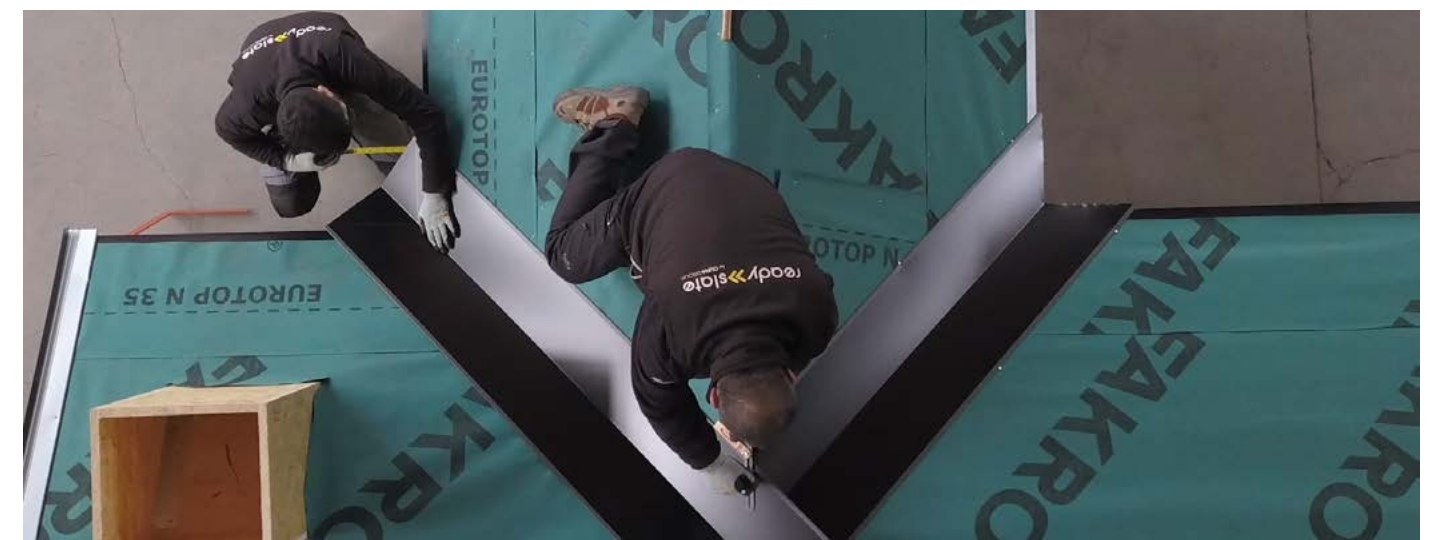
Place the first READYSLATE® panel and mark it according to the angle.



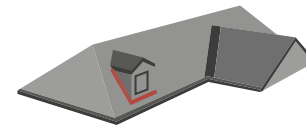
Cut of the READYSLATE® panel to the overlap mark and place the adjacent panel on the other side of the valley.



Cut of the READYSLATE® panel to the overlap mark. Continue with the installation of the remaining panels as described before.



MARKING OUT LINES



ROOF TO WALL

Marking out chalk lines (or equivalent) is a great idea to guarantee a correct and straight installation of the READYSLATE® panels.

HORIZONTAL LINES

To ensure the READYSLATE® panels are laid down correctly, mark horizontal chalk lines from the bottom starting in 20 cm from the eaves. READYSLATE® panels must overhang 5cm from the edge of the building, if the overhang is more, the first line's distance will be calculated by subtracting 25 cm minus the desired overhang length. Then continue to mark the remaining lines every 25 cm to be in accordance with the overlapping line. **Horizontal lines are marked every 25 cm to indicate where the panels overlap.**

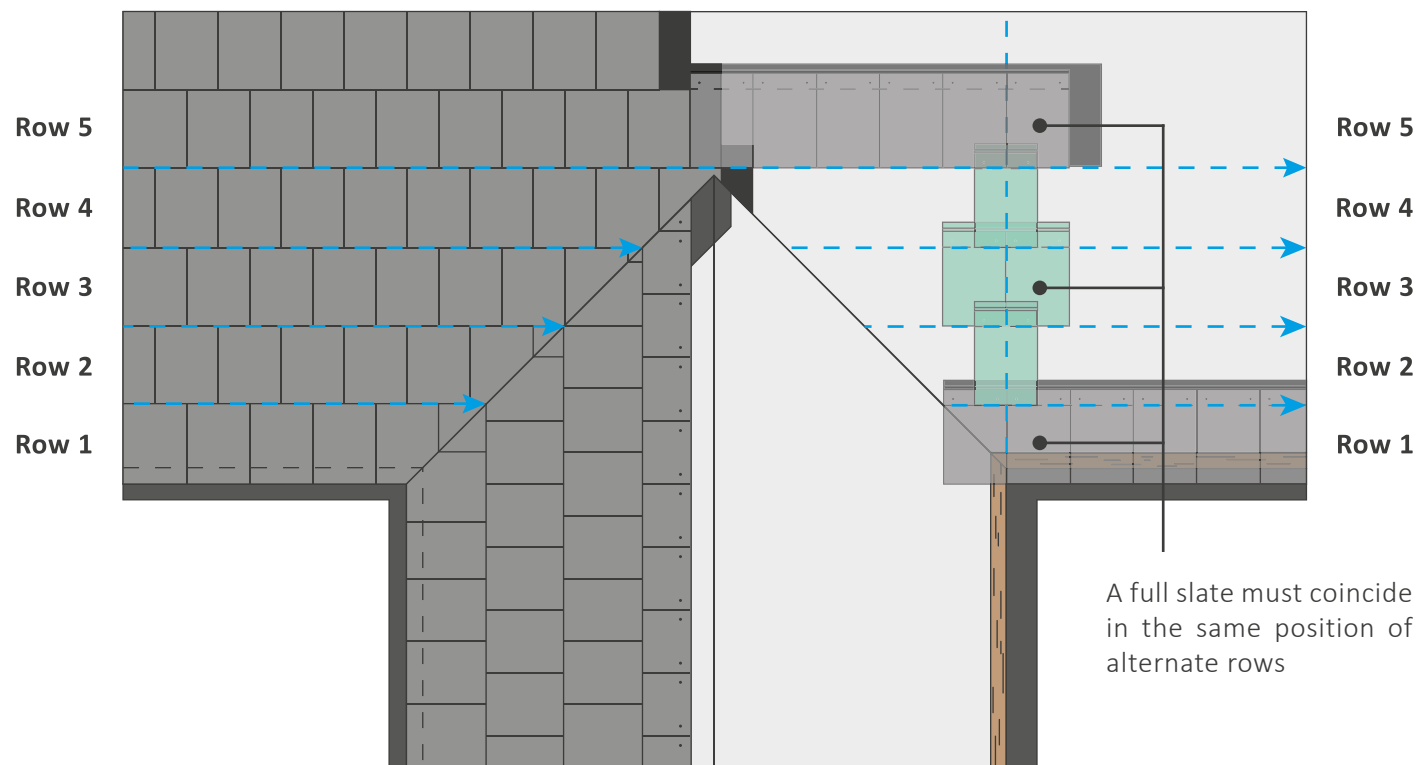
VERTICAL LINES

Vertical lines help to keep panels aligned. Marking out chalk lines every 4-6 slates (80-120 cm) should be sufficient.

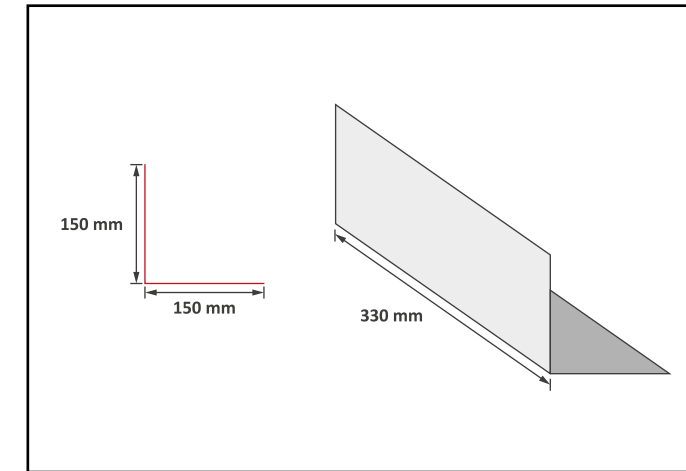
REESTABLISHING THE STARTER COURSE

Marking out vertical lines becomes critical when your roof installation includes elements such as dormers or gables that interrupt the first row of installation. Install the READYSLATE® panels to a point past the obstruction, then place one panel on the top and use it as a reference to mark the new lines to the bottom.

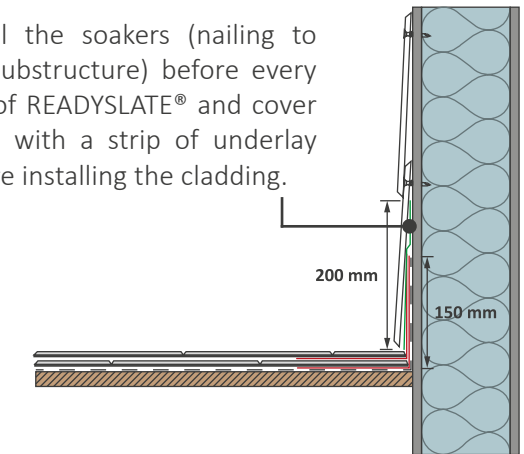
Calculate the alternance of slates and halves (every 2 rows-50 cm- there is a full slate in the same position) making sure the first slate from the bottom left side must be a full or a half.



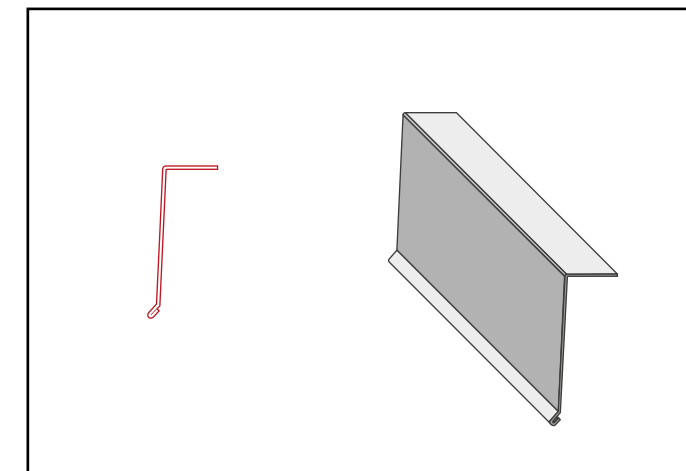
a. Side: soakers + wall cladding



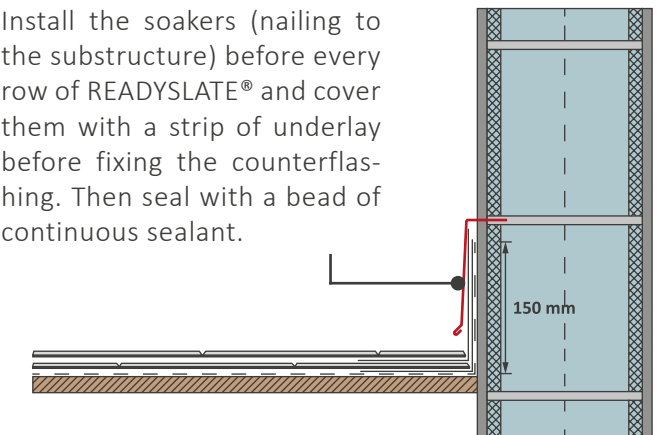
Install the soakers (nailing to the substructure) before every row of READYSLATE® and cover them with a strip of underlay before installing the cladding.



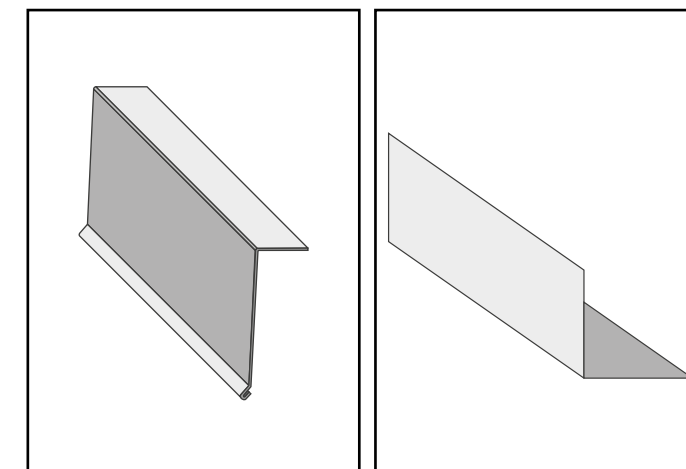
b. Side: soakers + counterflashing



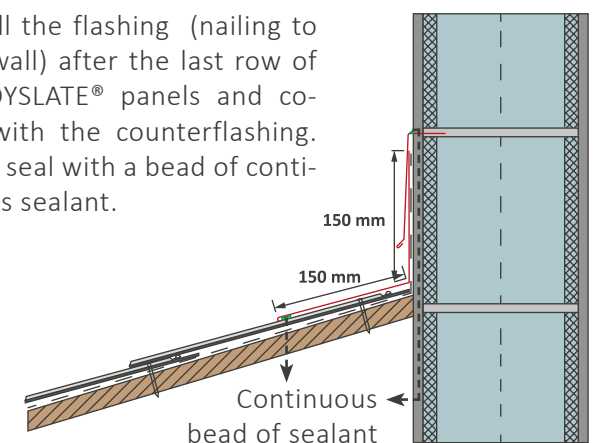
Install the soakers (nailing to the substructure) before every row of READYSLATE® and cover them with a strip of underlay before fixing the counterflashing. Then seal with a bead of continuous sealant.



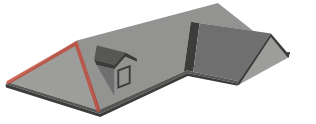
c. Front



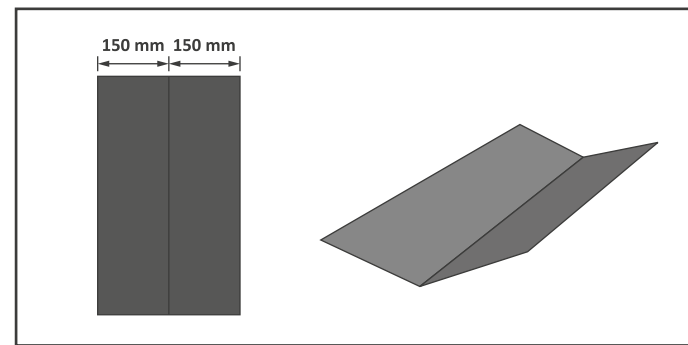
Install the flashing (nailing to the wall) after the last row of READYSLATE® panels and cover with the counterflashing. Then seal with a bead of continuous sealant.



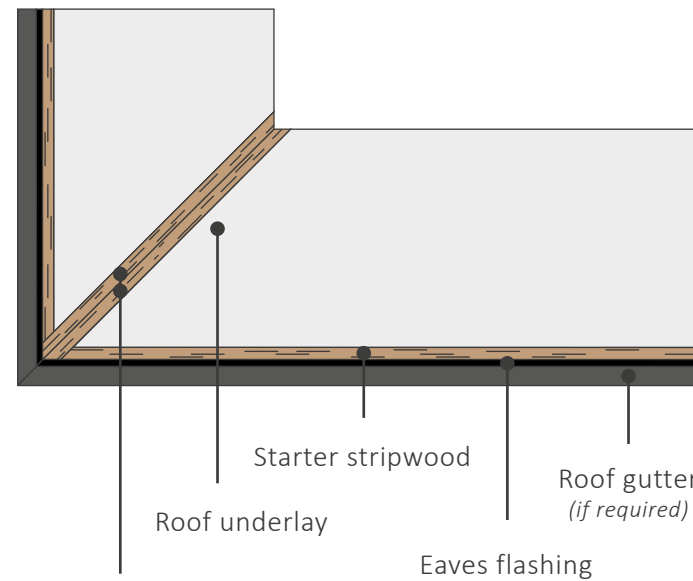
RIDGE AND HIP



a. Hip

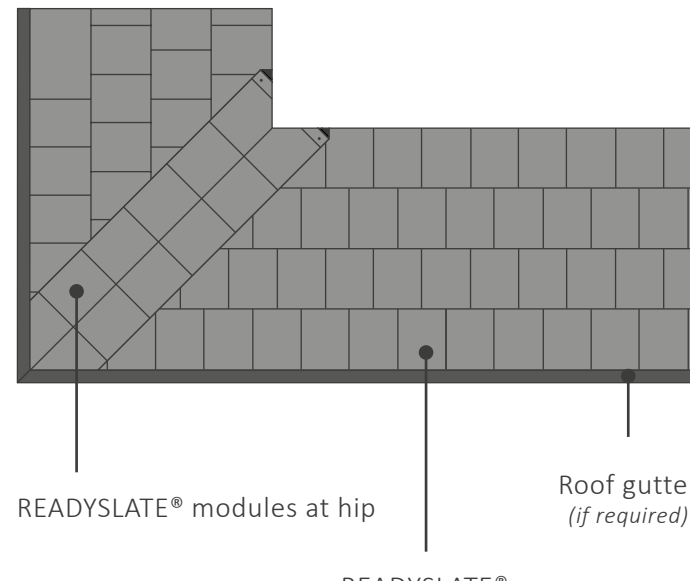


Hip before installing READYSLATE®

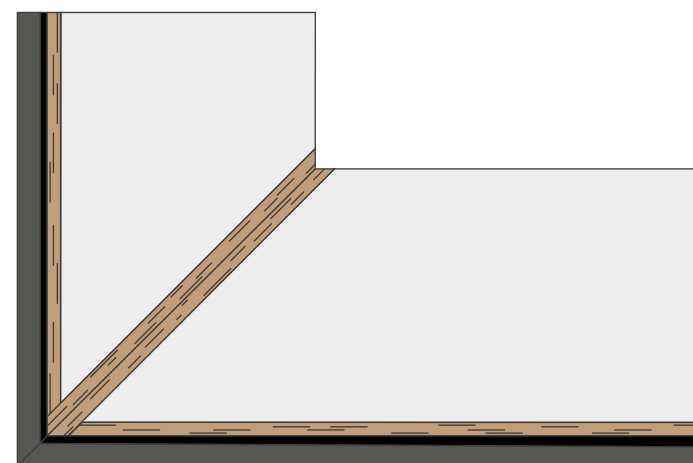


Stripwood at both sides of the hip

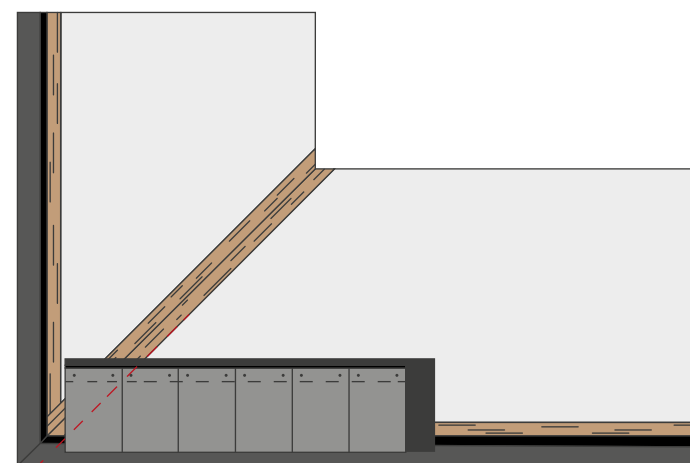
Hip after installing READYSLATE®



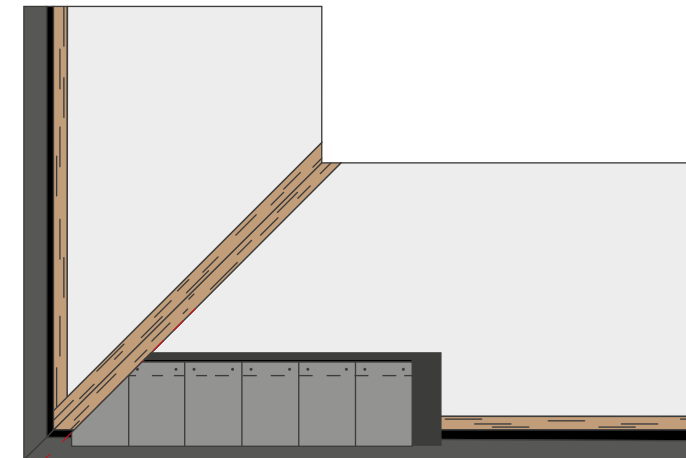
Hip details



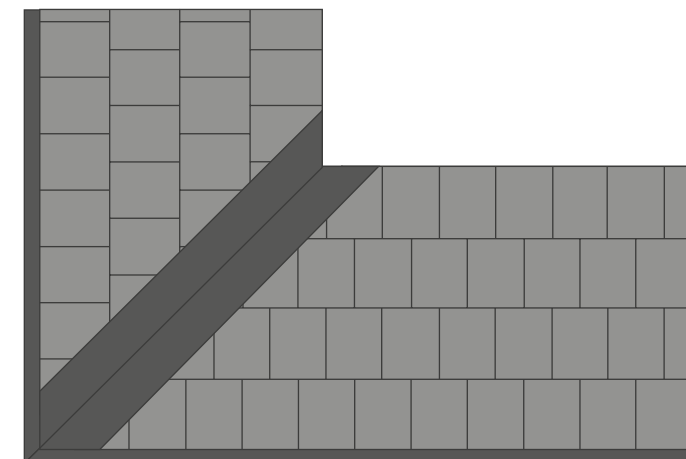
Substructure with gutter, eave flashing and underlay. Stripwood installed at eaves and at hip.



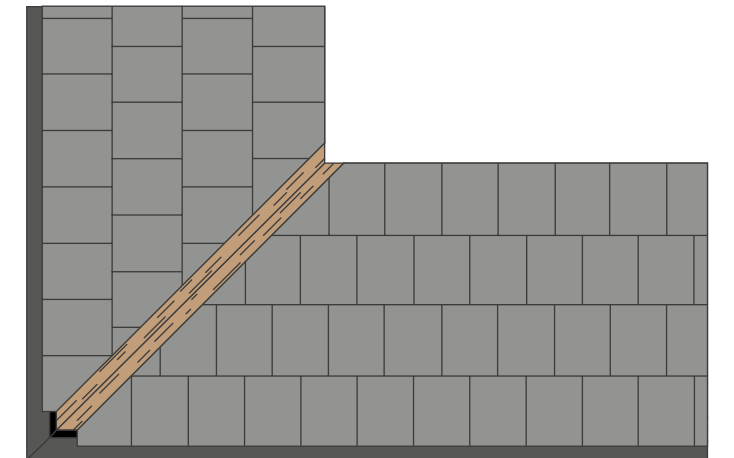
Disposition of the first READYSLATE® panel.



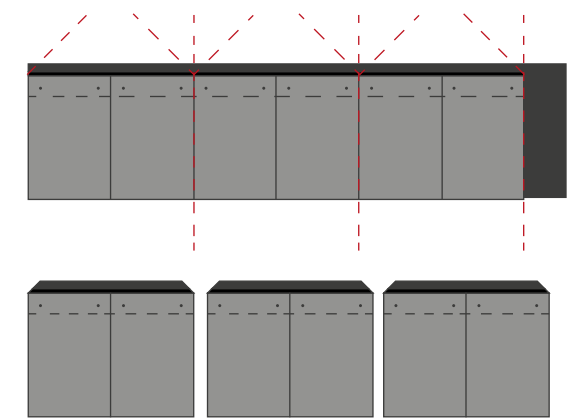
Cut the first READYSLATE® panel following the stripwood of the hip.



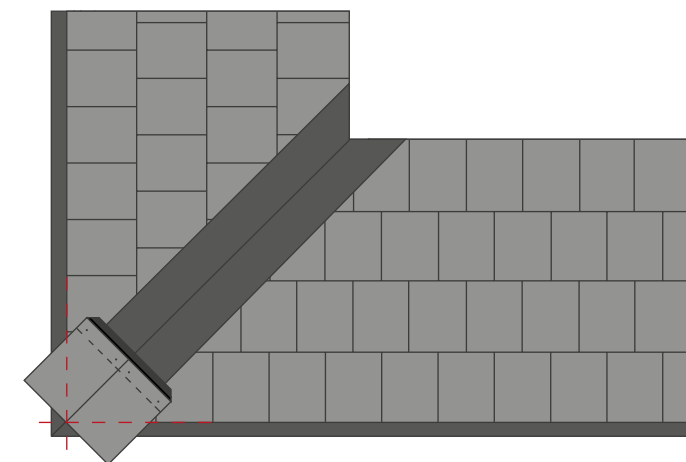
Optionally, fix a hip flashing before covering it with READYSLATE®.



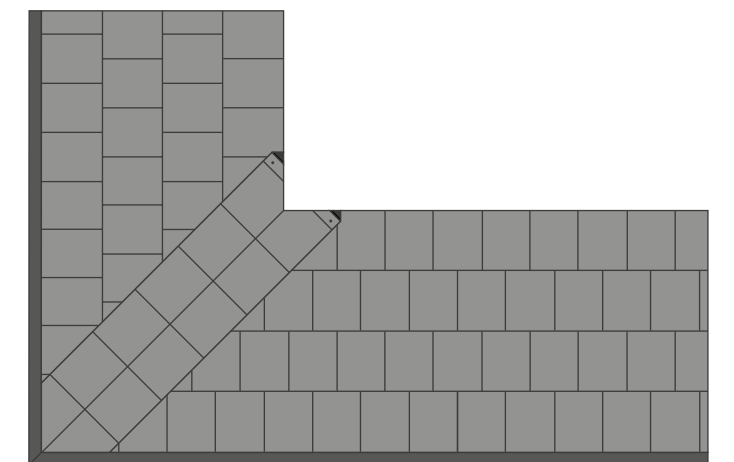
Cover the roof with READYSLATE® panels, performing the cutting and installation of the panels as already explained.



Cut the panel to get 3 ridge modules of 2 slate piece each and cut off the corners of the membrane with a cutter.

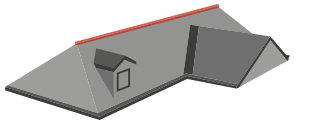


Place, cut and fix the READYSLATE® modules on the hip.

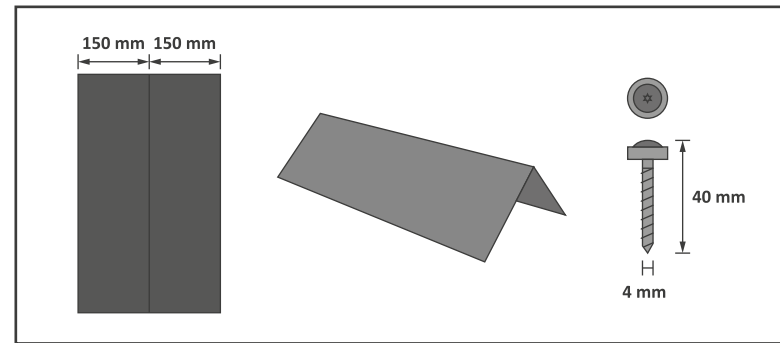


Complete the covering of the hip with the READYSLATE® pieces. Use special fasteners with rubber washer to fix the last READYSLATE® piece.

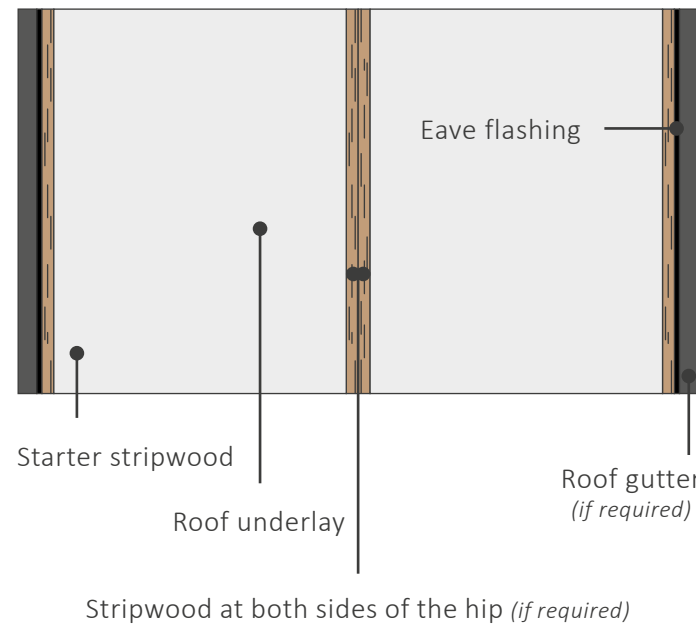
RIDGE AND HIP



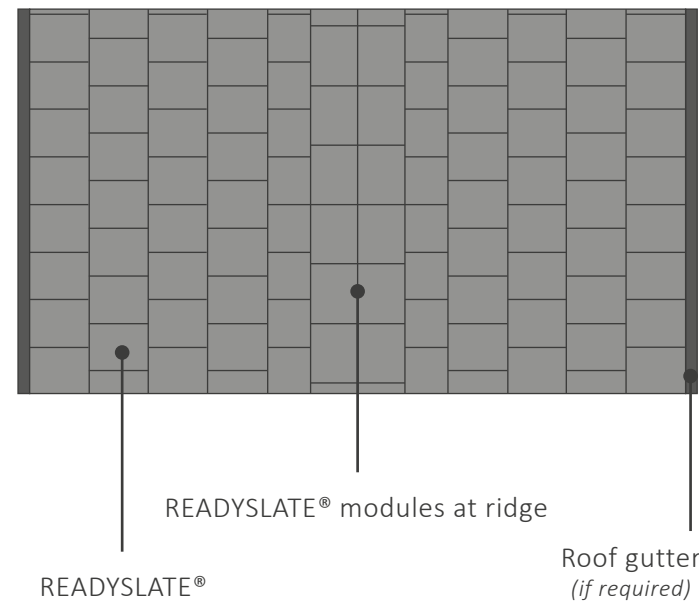
b. Ridge cap + READYSLATE®



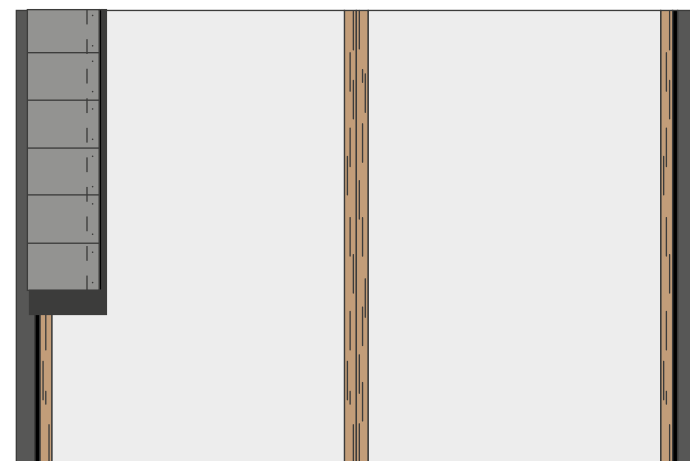
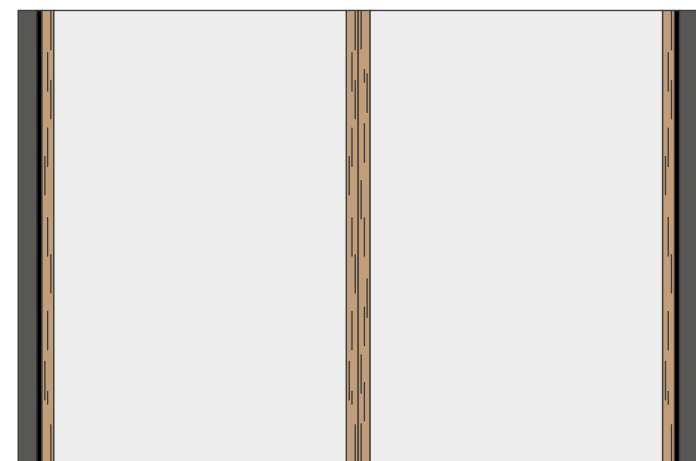
Ridge before installing READYSLATE®



Ridge after installing READYSLATE®

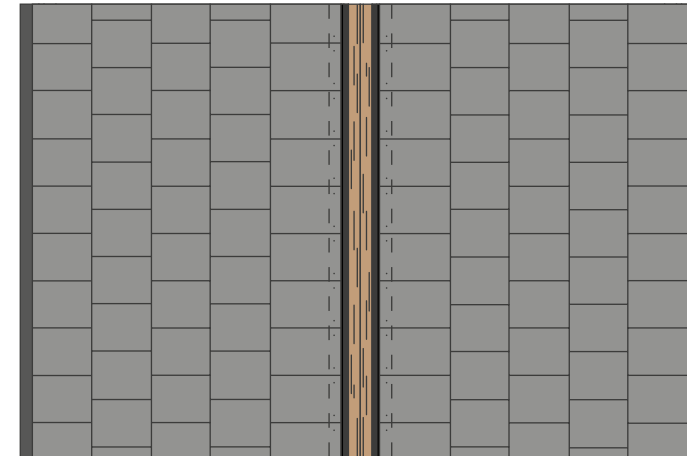


Ridge details

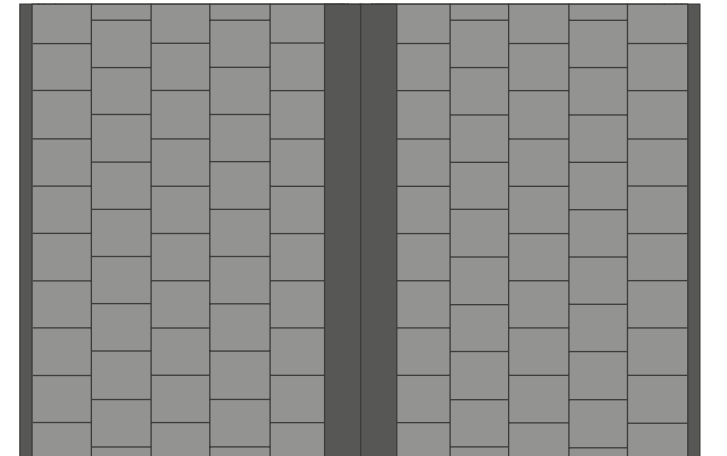


Substructure with gutter, eaves flashing and underlay.

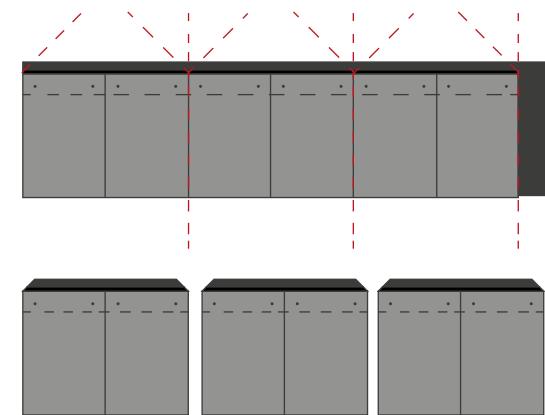
Disposition of the first READYSLATE® panel.



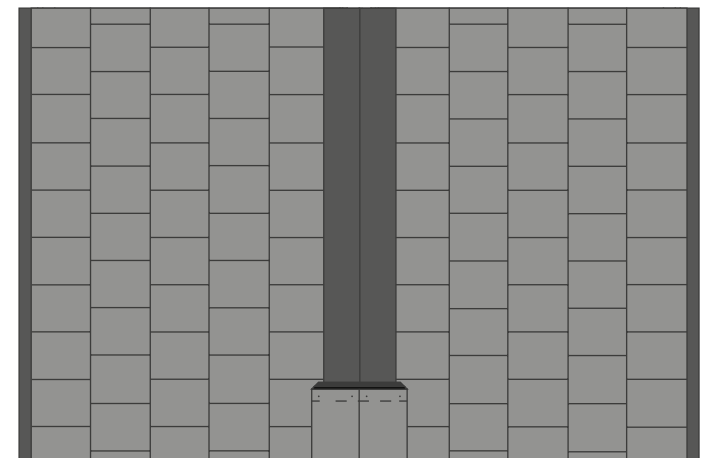
Cover the roof with the READYSLATE® panels up to the ridge.



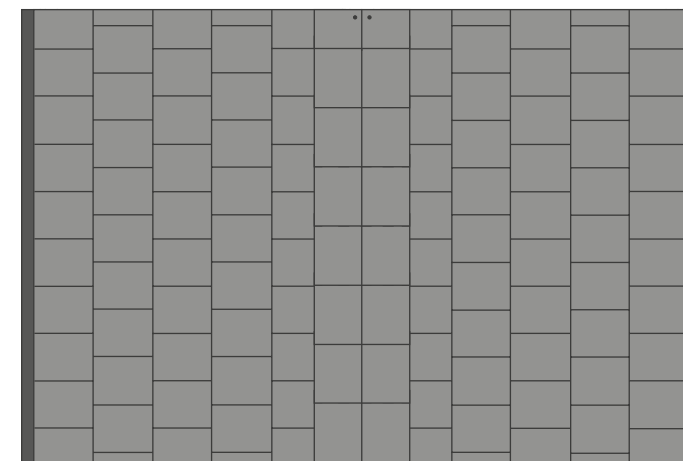
Install the ridge flashing (150 mm at each side of the ridge).



Cut the panel to get 3 ridge modules of 2 slate piece each and cut off the corners of the membrane with a cutter.



Place and fix the READYSLATE® modules on the ridge.

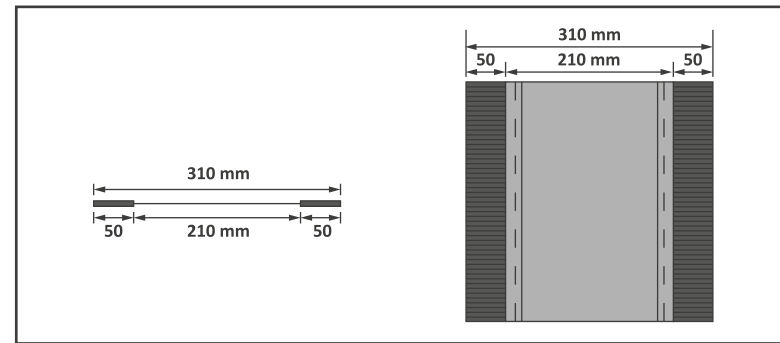


Complete the covering of the ridge flashing with the READYSLATE®. Nail through the inside holes. Additional nails may be advisable, always remember to pre-drill and avoid nailing the slates underneath.

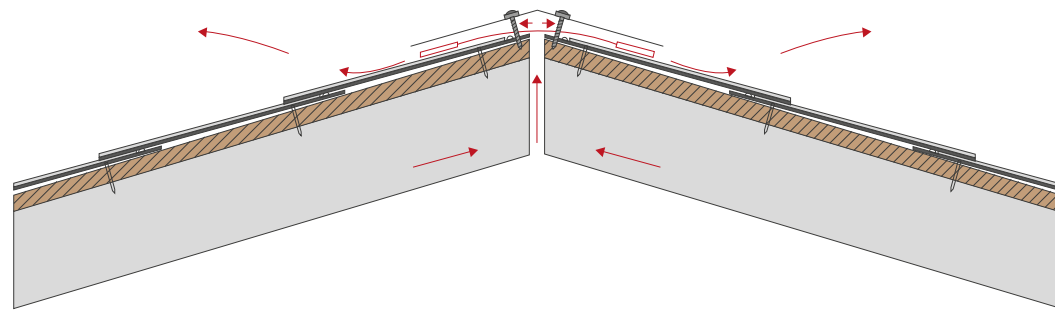
Screws with rubber washers shall be used to fix the last pair of READYSLATE® pieces to the roof. A continuous bead of sealing mastic could be used on the lateral edge of these READYSLATE® pieces.

RIDGE AND HIP

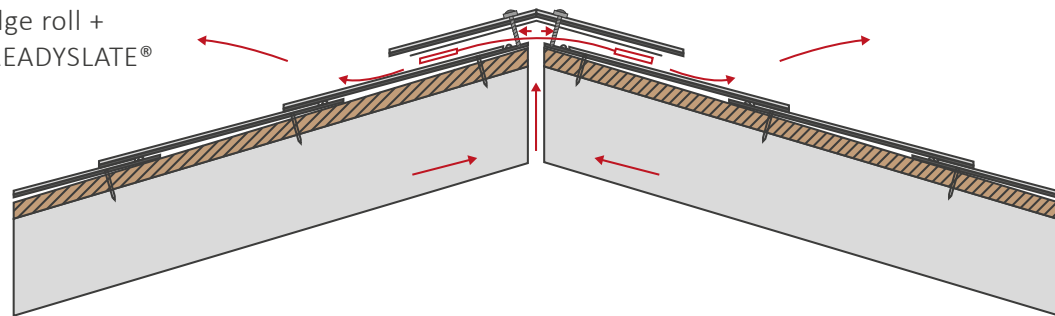
c. Ventilated ridge roll + Ridge cap + READYSLATE®



Ventilated ridge roll + Ridge cap



Ventilated ridge roll + Ridge cap + READYSLATE®



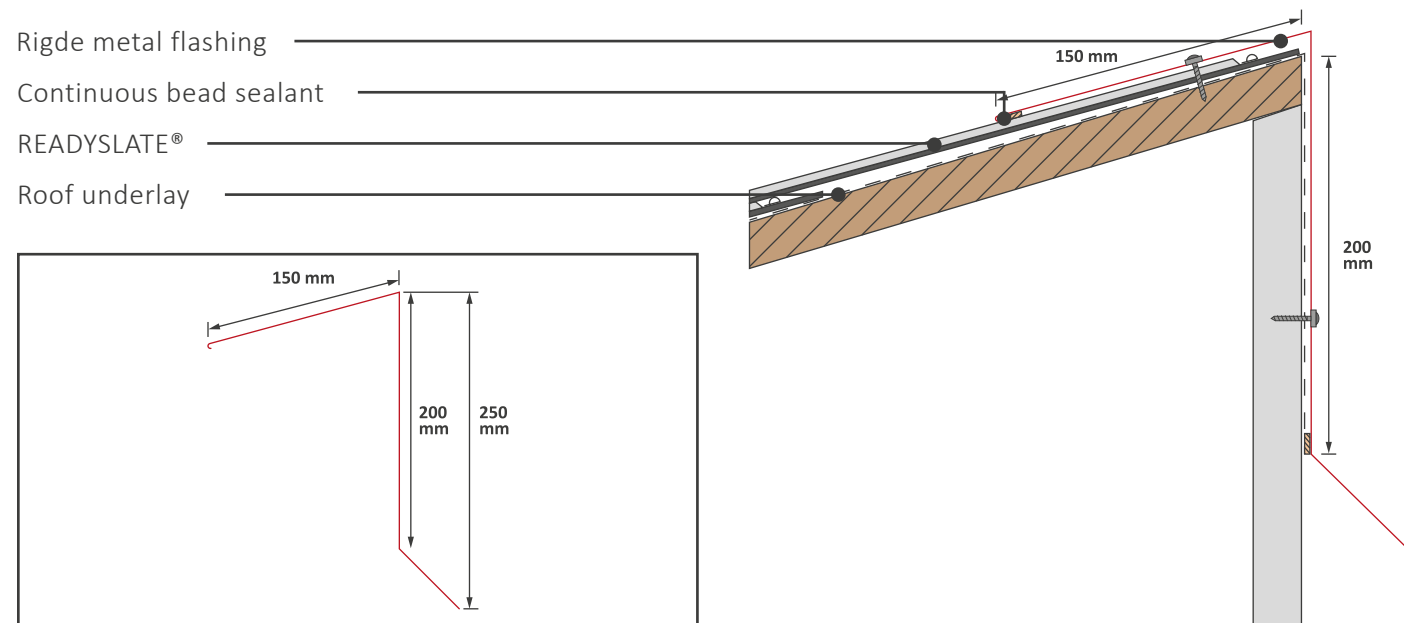
d. Monopitch ridge

Ridge metal flashing

Continuous bead sealant

READYSLATE®

Roof underlay



MAINTENANCE

Regular maintenance and roof cleaning are **absolutely necessary** in order to prevent roof degradation. When properly maintained, the roof is more resistant to external aggressions, more beautiful and more efficient against water infiltrations.

There are some minimum requirements that you should carry out regularly:

- General inspection of the waterproofing elements, overview all the additional works (like chimneys, clerestories, gutters etc)
- Check and clean the water drainage systems, periodical removal of moss, mold and other sediments and residues...

How often you should do maintenance work really depends on several factors that affect the condition of your roof.

One of the best things you can do for your roof doesn't involve much work at all: pay attention to it! Keep an eye on your roof.

READYSLATE® ROOFING SYSTEM IS
MANUFACTURED BY CUPA PIZARRAS
Patent-pending

ready>>slate

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