

Enviroshingle™

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Installing

Enviroshingle® APPLICATION INSTALLATION GUIDELINE

This Guideline and Installation Diagram have been designed for printability for your convenience. To ensure this we have maintained the image quality. With some internet connections this may take up to 15-20 seconds to download. Thank you for your patience.

Warning: Do not proceed with installation of the Enviroshingle® roof until you have thoroughly read these instructions and reviewed the installation diagrams. If you have any questions or concerns related to the installation procedures outlined below, please call our toll free number (1.866.423.3302) for assistance **BEFORE** starting your project. Enviroshake is not responsible for any costs incurred by the customer associated with improper installation procedures.

Storage: Enviroshingle® needs to be stored in a covered dry location and can be stored in the original factory shrink-wrap outdoors for up to 6 months. If the product is stored in a location where the product becomes submerged in water from rain run off, the product can become stained and the warranty is voided. If the product is stored outside for longer than 6 months the UV protected shrink-wrap will start to break down and the product will start to weather prematurely.

Enviroshingle® bundles are packaged 14 pieces per bundle – 10 bundles = 100 square feet when installed at a 5" maximum exposure. 1 skid will have 70 bundles of Enviroshingle®. As a rule, Enviroshake recommends adding 10% to "take-offs" for simple roof structures, and more for complicated roofs. Aged Cedar Enviroshingle® will come with skids wrapped in green wrap with a white top and Enviroshingle® tape. Silvered Cedar Enviroshingle® will come in white wrap with a green top and Enviroshingle™ tape.

- Enviroshingle® is designed to replicate the look of natural weathered perfection milled cedar. No two shingles are exactly alike and will vary in thickness (+/- 20 %) and shading due to the unique materials and manufacturing process employed by Enviroshake.
- Do NOT stack material or another skid on top of ridge caps.
- SC shakes are bundled with white wrapping/strapping, and AC shakes are bundles with green wrapping and yellow strapping.
- Storage and transportation shingles may cause some shingles to lift upwards slightly. A tolerance level of ½ inch is acceptable. To assist in helping the shingles lay down you can Nail where indicated by the inverted V mark "Λ" on the nailing strip of shingle – Enviroshingle® is designed to be installed at a **5" exposure.**
- IF THERE IS ANY SHINGLE DAMAGED OR OUTSIDE THE ABOVE TOLERANCE DO NOT INSTALL ON FLAT ROOF SURFACES. USE IN VALLEYS, CORNERS, ETC, WHERE CUTTING IS REQUIRED.
- **You do not need to be split every shingle prior to installation – It is only required that on every second row you break the first shingle at the first keyway (from the left or right) to prevent keyway on keyway, and then break every 5th-6th shingle to ensure a random look.** You can nail down without splitting (4 nails per) and this will give you the desired look of a split shingle course. If you need to split – this can be accomplished by snapping by hand in a quick motion – or by taking a knife and scoring the crease in the keyway and snapping. The nailing pattern on a split shingle is 1 nail in the

inverted V mark “Λ” and another nail 2-3 inches vertically above the first nail.

- Enviroshingle® bundles are factory shuffled, with two different profiles.
- As a composite product that is manufactured to replicate the look of a “weathered” cedar roof, the shingles will fade over time once installed, and will demonstrate a variance of grey color shades from dark grey to light grey similar to an aged cedar roof. This is an ongoing process over time and the transition will vary between regions and will vary between individual shingles. Over time this will even out, but there may still be variations so as to maintain the “weathered” look. Despite being factory shuffled, the installer should still be aware of color variations between bundles and skids when installing, as some additional shuffling may be required on site to avoid patching.

The installer should be aware of potential color variations between die lots when installing. The installer should ensure that the date codes on the back of the bundles are from the same time frame, if there are bundles with different date codes they should be set aside and used on a defined roof area where there is enough material to cover this area or as a starter row to avoid having a potential sight line on the roof where the old and new product join. Never mix old product from another project with new product on a new project. Do not start a roof area unless you have confirmed that you have enough product on site to finish the area. If you run out of material you will need to hand shuffle the old material with the new material to avoid the potential for a sight line on the roof caused from a tone variation in the two die lots. For this reason, always leave the smallest roof area to the last to finish.

Upon finishing each roof area the contractor should stand back to view the roof and ensure that there are no visually un appealing aesthetics caused by the installation, prior to proceeding to the next roof area. Failure to do so and to install product with colour variation will leave the contractor liable for the labor and material required to fix such a problem.

Enviroshingle® is designed to weather to a lighter grey tone once installed on the roof. Given this, it is important that when a roof area is started, it is also completed in a timely manner. Do Not start a roof area that you are not able to complete due to the roof area not being prepared or due to a lack of material on hand. If this happens and you install unweathered product at a later date beside the existing weathered product on the roof, there will be a color disparity, and there will be a visible difference that may not go away over time.

Due to the manufacturing process some shingles may have unfilled top corners. This material is acceptable as Enviroshingle **does not need head lap** and this does not affect the performance or wind rating of Enviroshingle. (Miami Dade tested to 185 mph)

Do not begin installation until you have received your order in its entirety.

Enviroshake recommends that snow guard devices be installed in conjunction with **Enviroshingle™** in areas where there is a risk of snowfall accumulation and the possibility that a build-up of snow could slide off the roof causing inconvenience or harm to life and property. Please consult with your roofing contractor regarding the risk factor in your area and the appropriateness of installing these devices on your home.

The following is intended as a guide to the installation of **Enviroshingle™** Where applicable, local building code requirements will always take precedence and must be adhered to.

Caution – Do not walk on an Enviroshingle™ roof when moisture/frost is present as surface will be slippery and greatly increases the risk of a slip and fall.

GUIDELINES

Enviroshingle™ is typically installed in straight, single courses at a 5” exposure, however Enviroshingle™ can be installed at exposures as low as 4” or in staggered courses.

It is required that on every second row you break the first shingle at the first keyway (from the left or right) to prevent keyway on keyway, and then break every 5th-6th shingle to ensure a random look. To

properly adhere the split shake, nail the first nail in the inverted V mark "Λ" and another nail 2-3 inches vertically above the first nail. When breaking the shingle profile, snap quickly to encourage a cleaner edge or use a knife to score the material prior to snapping. **Option 2** is to use the 'staircase' or stepped method- See illustration below. This method also ensures proper keyway management.

- Enviroshake recommends installing on 5/8" plywood. Enviroshake does not recommend installing on OSB. *Note: For rafters spaced 20 or more inches apart, 1/2- or 5/8-inch plywood is recommended. The most common rafter spacing is 24 inches, and 5/8-inch plywood is recommended for that.*
- Enviroshingle™ requires a minimum 3/8" space gap between all shingles.
- Minimum 1 ½" large head ring shanked roofing nails are required. They can be hot dipped galvanized roofing nails or stainless steel roofing nails (304 or 316). Enviroshake recommends stainless steel nails. A power-nailer is suitable for use in installation on field shakes but not recommended for caps. Nail where indicated by the inverted V mark "Λ" on the nailing strip of shingle. If installing on a roof where the underside of the roof deck will be visible (ie. a vaulted ceiling), minimum 1 ¼" nails (or screws) can be used on field shake to ensure they do not protrude through the decking.
- Nails must be fully covered by shingles and not visible in joints.
- Where applicable, only a "pure silicon" sealant should be used to cover up exposed nail heads or to seal joints on ridge caps. The sealant should be colour matched to the weathered light grey colour of Enviroshingle™.
- Every Enviroshingle™ receives 4 nails
- Every cap receives 2 screws. Enviroshake recommends pre-drilling holes for screw placement
- It is important that the head of the nail not be driven below the top surface of the shingle at any time. If you are using a power-nailer, adjust the setting to prevent this situation from occurring –very important during cold weather installations.
- Enviroshingle™ should not be installed in temperatures beyond -20 degrees C / -4 degrees F
- The joint (keyway) between 2 shingles in one course should never be closer than 1 ½" to a joint below or above it.
- Shingles must be cut in order to fit properly around vents, in valleys, and beside flashing. Shingles should be cut with a circular saw for straight lines or with a jigsaw for curves.
- Always use an uncut factory edge along rake/gable ends.
- A Synthetic underlay is required for underlayment. Enviroshake supplies a peel and stick synthetic peel and stick underlayment, Enviroshield, for each project. **Enviroshield is required for the Gold Warranty*
- Enviroshield or a 36" ice/water barrier membrane is used on eaves, valleys, rakes, hips and ridges
- Ridge caps are installed at a maximum of 9" of exposure and are fastened with 2 screws (min. 2 1/2"). When using ridge caps with ridge vents the slope of the ridge cap should be 1 less than the roof slope (ie. if it's a 7/12 slope on the roof and you're installing over a ridge vent - order 6/12 ridge caps).
- Shuffled loads are like "die lots". Enviroshake recommends that the installer DOES NOT start one elevation with one shuffled lot# and finish with another. It is recommended that any leftover material then be used for starters or hips and ridges, OR shuffle them in with the next lot to be applied.
- Enviroshake recommends that the installer complete one roof section at a time with shuffled material before moving on to the next section.
- If installing on a 2/12 roof, this is considered low slope and Enviroshake recommends installing as per our low slope installation addendum.
- If a Class A roofing system is required, Enviroshake recommends installing as per our Class A system installation addendum.
- If installing on a turret, do not use full shakes, use split shakes to best accommodate the curve
- If installing on a curved roof, you may have to drop the exposure through the transition area

INSTALLING Enviroshingle™

Underlayment

Before applying the Enviroshake supplied peel and stick synthetic underlayment (Enviroshield), nail metal drip edge along the eaves. Cover the entire roof deck with Enviroshield. After the underlay is laid, nail drip edges along the rakes. Cap nail the top edges of the underlay strips into the roof deck every 3 feet, or as required by weather conditions.

If not using Enviroshield, and not using a peel and stick underlayment, then an Ice/water barrier material (36 in.) must then be installed along the eave of the roof as per local building code. The bottom edge of the synthetic underlayment must be overlapping the ice and water barrier by 4".

Starter Course (Always gap the starter row, as you would do the entire roof- 3/8" gap between the starter row shingle)

Enviroshingle™ is typically installed in straight, single courses. Cut the shingle in half on the nail bar line, and use the thin end (the tail, with the uncut edge exposed) as the starter row, and then use the butte end of the shake for the finishing row at the top. It is important for the first course of shingles to be straight. To align, the shingle needs to be even with the drip edge and nail down. Place another shingle the same way at the other end of the eave. Tack a string to the butt end of both shingles and align the butts of the intervening shingles on the string.

To insure that your courses remain straight, **snap a chalk line every course (do not use red chalk)** and space shingles at a minimum of 3/8" apart. Apply a second course of shakes directly over the starter course so **the edge of the second course is even with the edge of the starter course**. The joint between 2 shingles in one course should never be closer than 1½" to a joint below or above it. This also applies to shingles with simulated joints.

Valley

Use 24" wide W-flashing (heavy gauge) in the valleys. Copper is recommended for added longevity, however galvanized or painted aluminum is acceptable. Apply ice and water barrier material (36") in the valley and along the rakes prior to installing the flashing. When nailing shingles along valleys, be sure to nail no further than 2" into valley. To keep shingles along the valleys straight, use a 1" x 4" board as a guide. Place the board in the valley, one side flush against the center. Lay the last shingle of the course at the valley over the 1 x 4, mark a line across the shingle where it passes the board and cut. This will provide an ample space for runoff on both sides of the valley.

NOTE: Enviroshake requires that all installers review the Installation Guide Manual prior to commencing installation. FAILURE TO DO SO MAY VOID WARRANTY IF THE INSTALLATION GUIDE INSTRUCTIONS ARE NOT FOLLOWED. All installers still need to watch for colour variation with the bundles/skids at the site and further shuffle the material accordingly if this is the case.

INSTALLING MULTI-TONE Enviroshingle™

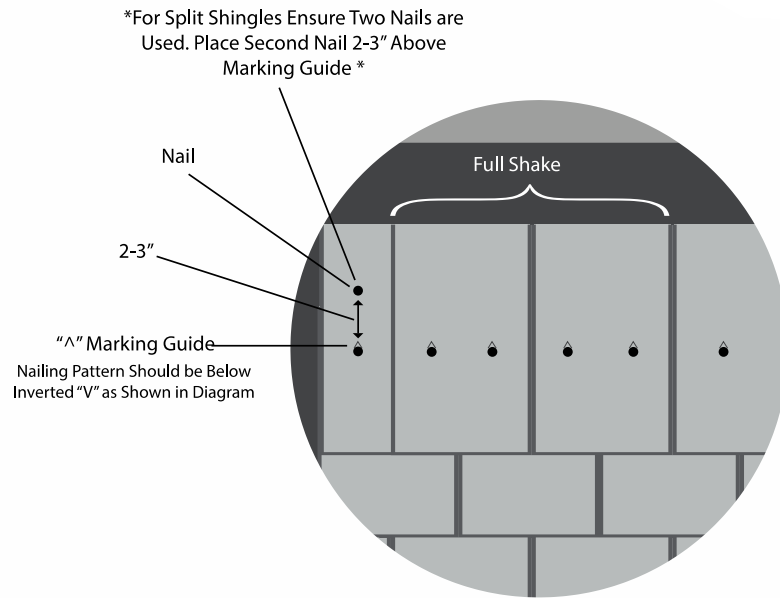
To create the Multi-Tone look, 50% AC- Aged Cedar **Enviroshingle™** is used, and 50% SC- Silvered Cedar **Enviroshingle™** is used. The skids will arrive on site with the SC **Enviroshingle™** being in a white wrap with a green top, and AC **Enviroshingle™** being in a green wrap with a white top. The bundles will be marked with SC having white straps, and AC having yellow straps. The CCMC sticker on the back of every bundle will also state whether the bundle is the AC or SC SKU. All bundles need to be shuffled on site, and every shingle needs to be broken along the preformed keyway. Once the pieces are broken they are to be installed in an alternating pattern of 1 AC shingle, followed by 1 SC shingle as you move down the course. IE. 1 SC, 1 AC; 1 SC, 1 AC; 1 SC, 1 AC etc. Additionally, each subsequent row should start with the opposite colour. IE.

SC, AC, SC, AC, SC, AC

AC, SC, AC, SC, AC, SC

SC, AC, SC, AC, SC, AC

All split shingles required 2 nails per piece. The nailing pattern on a split shingle is 1 nail in the inverted V mark "Λ" and another nail 2-3 inches vertically above the first nail. **The required gapping of 3/8" between every shingle must be maintained.** Enviroshake recommends using AC-Aged Cedar **Enviroshingle™** ridge caps with a Multi-Tone **Enviroshingle™** roof.



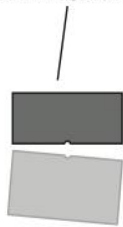
Illustrated as Enviroshingle™

Use 4 nails Per Shingle

Starter Row

Step 1:

For the Entire Starter Row All Pieces Used Need to be Cut Horizontally. Turn the Shingle Over, to Expose the Ribbed Backing, and Cut Shingle Horizontally Along the Middle of the Nail Bar Line. Use the Top Piece of Shingle for the Starter Row, and The Bottom Piece of the Shingle for the Finishing Top Row.



Step 2:

To Start the Row the First Shingle Used Needs to be Vertically Split Along the Center Keyway. With the Factory Edge to the Outside, Use this Shingle as your First Piece on the Starter Row. For the Remainder of the Starter Row Use your Pre-Cut Full Shingles.



Minimum 3/8" Gap Between Every Shingle

Starter Row Flush with Metal Drip Edge

Minimum 3/8" Gap Between Pieces

Starter Row



Rake Edge

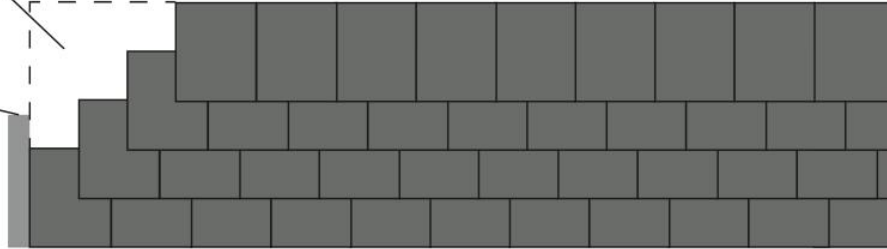
Install Full Shingles Directly Over the Starter Row, with a Maximum 1/4" Overhang

Step 2:
Once Completed, Complete the Row With the Required Width of Shingle, Remembering to Keep the Factory Edge Exposed.

Staircase Pattern

The Staircase Pattern is Recommended to Avoid Keyway on Keyway Issues.

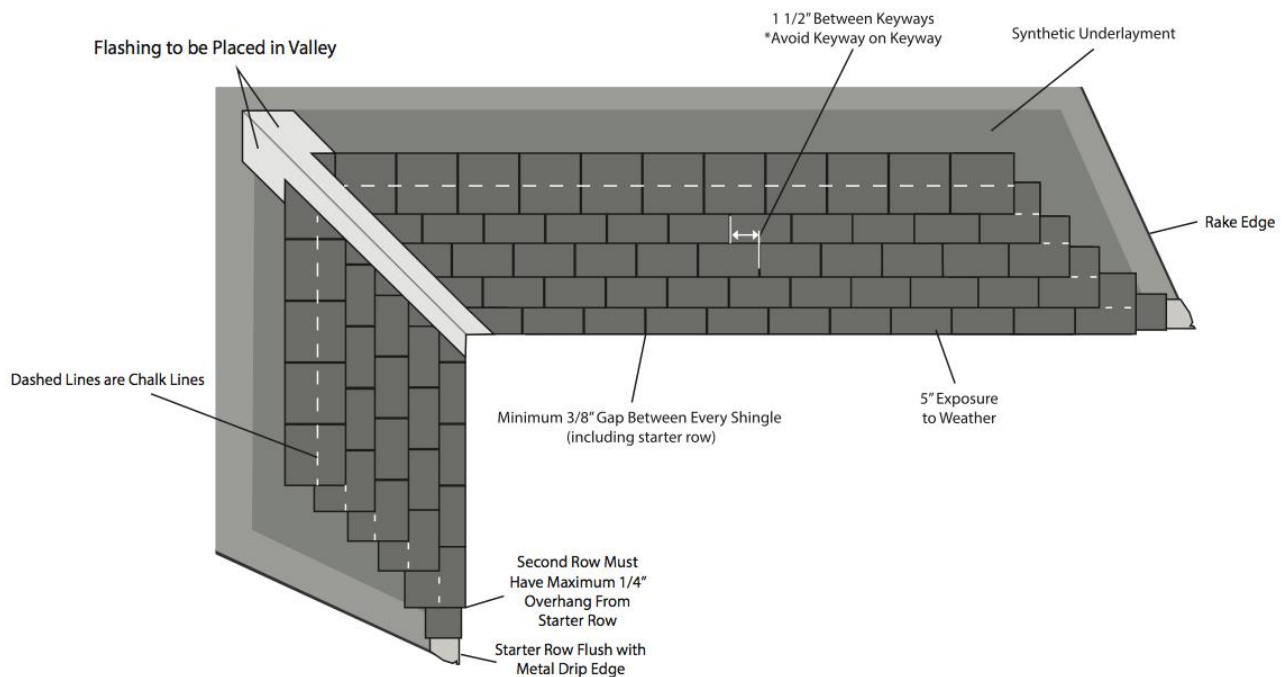
Rake Edge

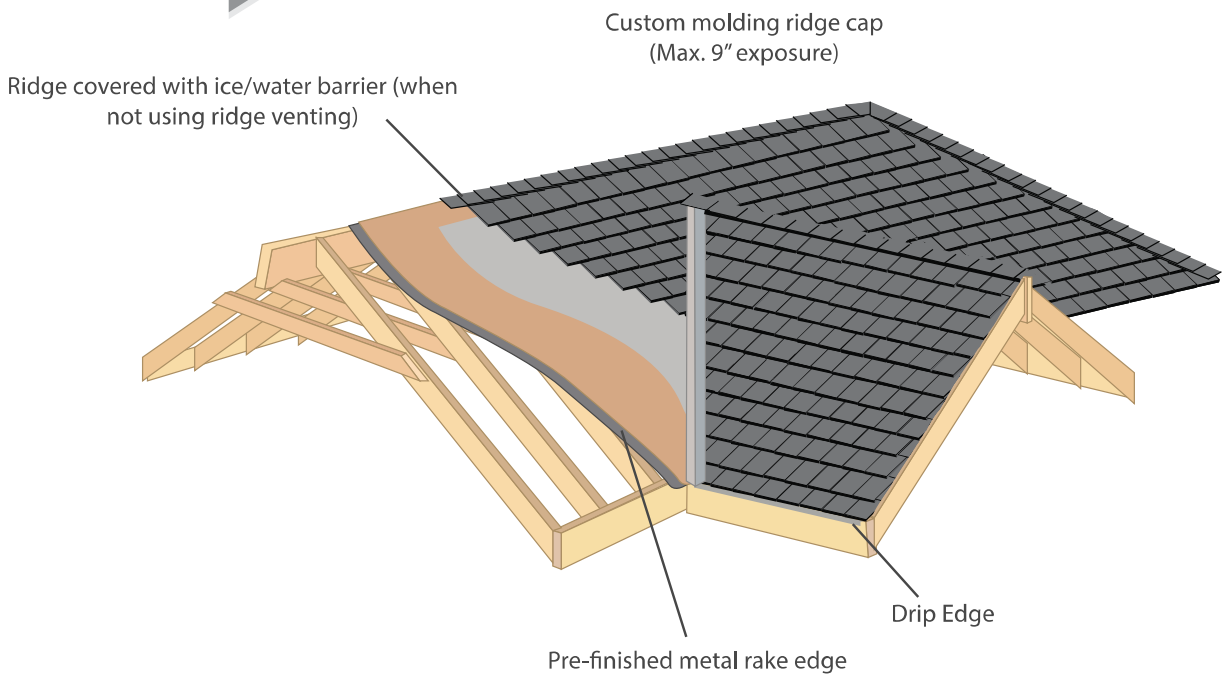
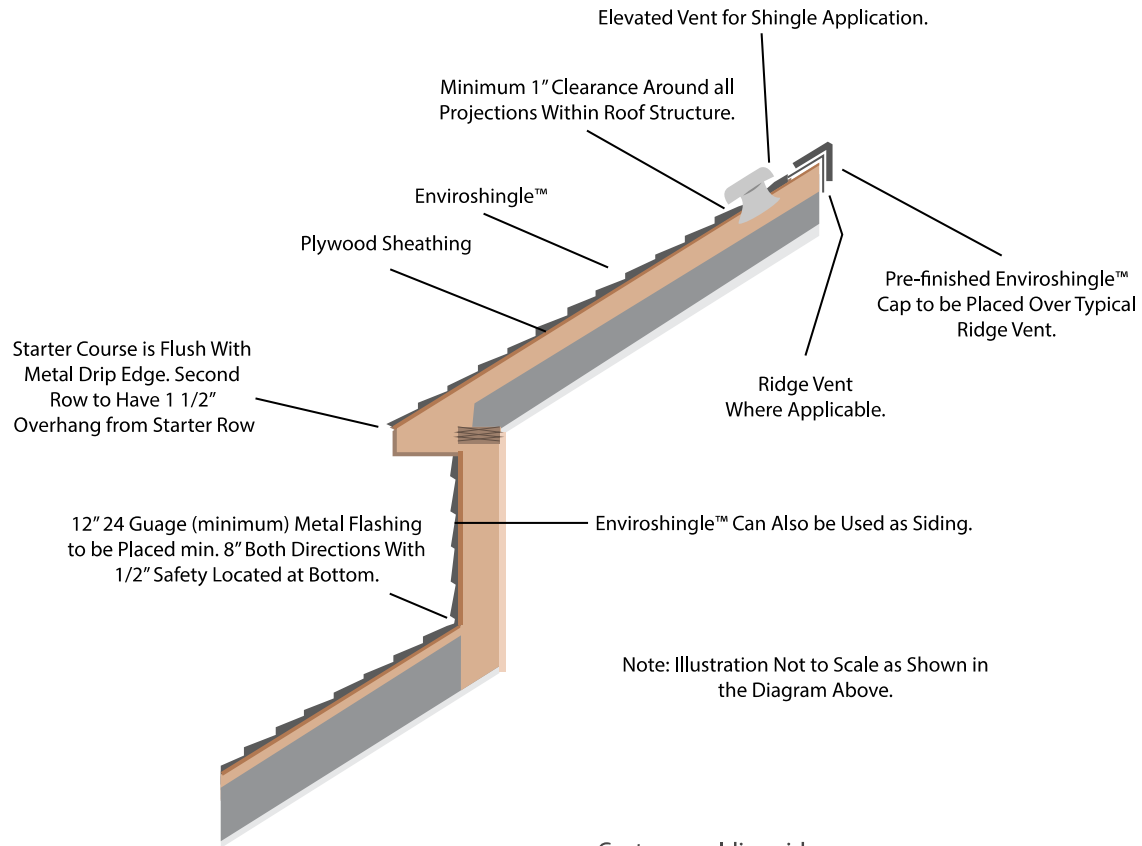


Cut Shingle Vertically to Make Flush,
Always Have Factory Edge to the Outside

Step 1:
Start on Rake Edge, Always Keeping Factory Edge Exposed.
Proceed to Work Towards Valley.
Note: If No Valley is Present, You Can Work in Either Direction
(Left-to-Right, or Right-to-Left)

3/8" Gap is Required Between Every Shingle





SPEC SHEET – Enviroshingle™
A Composite Cellulosic Fibre and Polymer
Engineered roofing Material

Colour:

Silvered Cedar, Aged Cedar, Multi-Tone. Within six to twelve months (with exposure to UV) the product will “weather” similar to a cedar roof. Variation in weathering is expected as with a natural perfection cedar shingle roof.

Contour:

The exposed surface is striated, 5” exposure, up from the butt end to the nailing strip (nailing points indicated by inverted V mark “Λ”) and is flat and smooth to the tapered end. The underside of the **Enviroshingle™** is flat with hollow recesses.

Dimensions:

Enviroshingle™ comes in widths of 20”, with a length of 12”. Each bundle is comprised of 14 **Enviroshingles** that have the appearance of random widths that can be further separated by breaking them along the simulated key-way. Each **Enviroshingle** is tapered and measures approximately ½” at the butt end and narrows to approximately 1/8” (resembling a milled cedar perfection shingles). The silvered cedar **Enviroshingles** are bundled with white strapping, the aged cedar shakes are bundled with yellow strapping bearing the **Enviroshingle™** script, labeled and shrink-wrapped (Silvered Cedar in white wrapping, Aged Cedar in Green Wrapping) on skids (7 square/skid) for shipping. Each bundle contains 14 pieces of 2 different profiles. There are 10 bundles to a “square” at a 5” exposure. Ridge/Hip caps are a 12” wide one-piece shake, custom formed to slopes of 2/12 through 16/12 and installed at the recommended maximum 9” exposure.

Coverage:

10 bundles (1 square) covers 100 square feet for the manufacturer recommended 2/12 slope (or greater) at the recommended 5” exposure. To determine the number of ridge or hip caps required for a particular pitch, divide the total linear feet by .75 (i.e. 15 feet of ridge/hip divided by .75 equals 20 caps). Ridge/hip caps are sold in bundles of 10.

Installation:

The installation of the **Enviroshingle™** is basically the same as applies to installing wood shingles. Normal code requirements must be applied regarding material standards, fastening, and flashing at intersections when installing the **Enviroshingle™** as the roof covering in a roof covering system. Regular 1 ½ ” (min) large head roofing nails are required. They can be hot dipped galvanized roofing nails or stainless steel roofing nails. **Enviroshake** recommends stainless steel nails. A power-nailer is suitable for use in installation.

Weight:

Enviroshingle™ weighs approximately 260 lbs per Square. (100 square feet of coverage at 5” exposure)

Storage:

Do not stack more than 2 skids high. Caps cannot be double stacked.

Enviroshake® Slope Chart

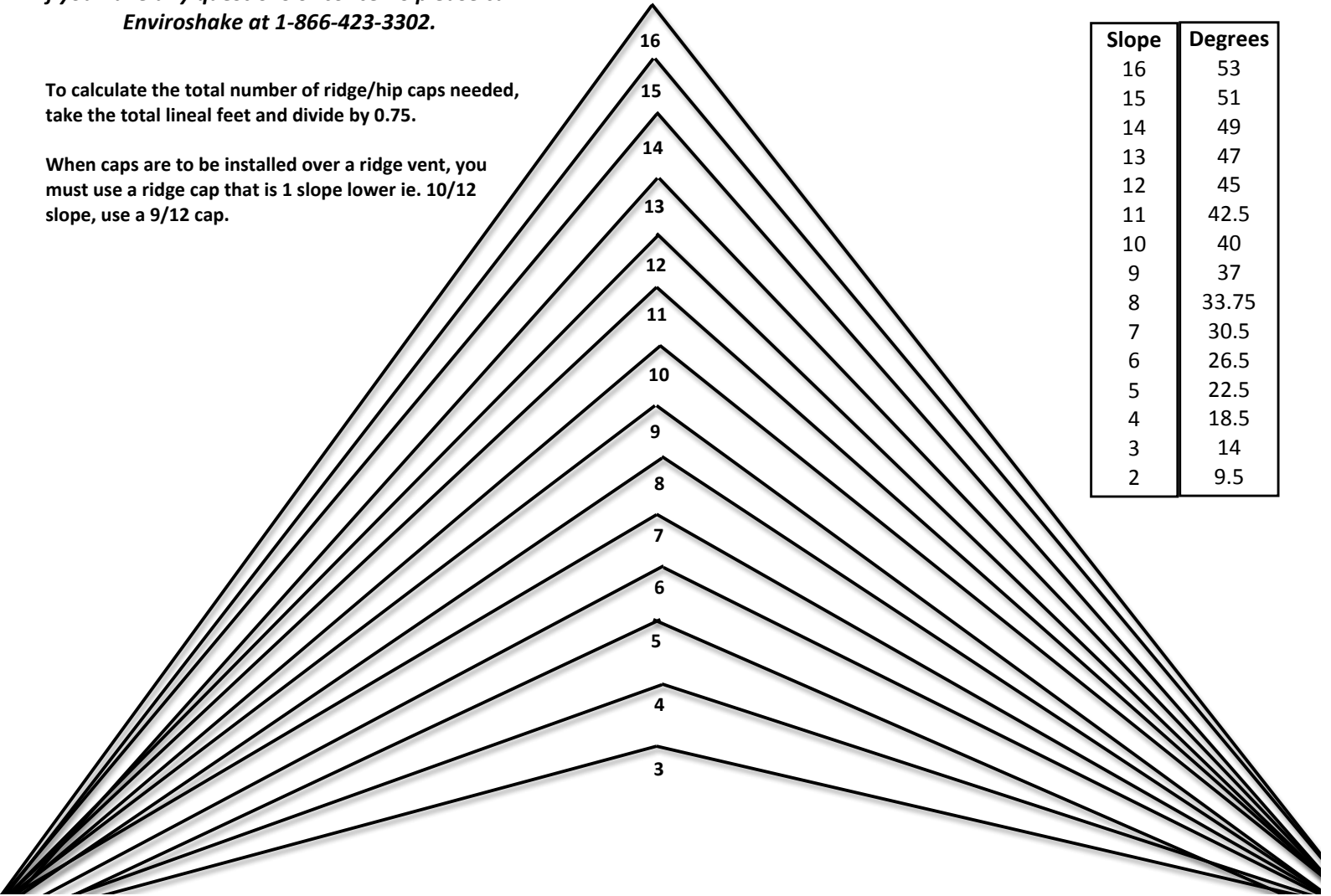
Quality Engineered Roofing

*If you have any questions or concerns please call
Enviroshake at 1-866-423-3302.*

To calculate the total number of ridge/hip caps needed,
take the total lineal feet and divide by 0.75.

When caps are to be installed over a ridge vent, you
must use a ridge cap that is 1 slope lower ie. 10/12
slope, use a 9/12 cap.

Slope	Degrees
16	53
15	51
14	49
13	47
12	45
11	42.5
10	40
9	37
8	33.75
7	30.5
6	26.5
5	22.5
4	18.5
3	14
2	9.5



Enviroshake® Hip Conversion Chart															
Slope #1 (with degrees)															
Slope #2 (with degrees)		4 (18.5°)	5 (22.5°)	6 (26.5°)	7 (30.5°)	8 (33.75°)	9 (37°)	10 (40°)	11 (42.5°)	12 (45°)	13 (47°)	14 (49°)	15 (51°)	16 (53°)	
	4 (18.5°)	3													
	5 (22.5°)	3	4												
	6 (26.5°)	4	4	4											
	7 (30.5°)	4	4	4	5										
	8 (33.75°)	4	4	5	5	5									
	9 (37°)	4	5	5	5	5	6								
	10 (40°)	5	5	5	5	6	6	6							
	11 (42.5°)	5	5	5	6	6	6	6	7						
	12 (45°)	5	6	6	6	6	6	7	7	7					
	13 (47°)	6	6	6	6	6	7	7	7	7	7				
	14 (49°)	6	6	6	6	7	7	7	7	7	8	8			
	15 (51°)	6	6	6	7	7	7	7	7	8	8	8	8		
	16 (53°)	6	6	7	7	7	7	7	8	8	8	8	8	8	

NOTES:

Use this chart for finding the ridgecap to use on a hip where two sloped roof sections meet:

1. Find the column and row based on the slope of the two roof sections that
 2. The number in that box is the corresponding ridgecap to use along that
- To calculate the number of Enviroshake ridgecaps needed along the hip, you will need to find the true length of the hip and divide that figure by 0.75. This calculation is based on a 9" exposure.**

This is valid for eave corner angles of 90 degrees only.

The slope are shown as the rise over a run of 12. (ie. 4:12 is shown as 4)

** All degrees are listed beside the corresponding slope*