Enviroshingle[®]

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.

Do NOT install when nighttime temperatures are below -18°C (0°F).

Enviroshingle bundles are packaged 5 pieces per bundle. 28 bundles = 100 square feet when installed at a 5¼" exposure. 1 skid will have 84 bundles of Enviroshingle. As a rule, Enviroshake recommends adding 10% to "take-offs" for simple roof structures, and more for complicated roofs. All skids are marked with the product description and color, e.g. Aged Cedar or Silver Cedar.

- 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.
- Storage and transportation may cause some shingles to lift upwards slightly. A tolerance level of ½" is acceptable. To assist in helping the shingles lay down you can nail where indicated by the **O** mark on the nailing strip of the shingle Enviroshingle is designed to be installed at a **5**½" **exposure**.
- IF A SHINGLE IS DAMAGED OR OUTSIDE THE ABOVE TOLERANCE, DO NOT INSTALL ON FLAT ROOF SURFACES. USE IN VALLEYS, CORNERS, ETC., WHERE CUTTING IS REQUIRED.
- 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 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 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 <u>defined roof area</u> 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 products 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 unappealing 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 the 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 5¼" exposure.

- 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" plywood is recommended. The most common rafter spacing is 24", and 5/8" plywood is recommended for that.
- Enviroshingle requires a minimum 3/8" space gap between all shingles.
- Minimum 1½" 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. *If installing in a coastal area, Enviroshake highly recommends the use of SS 316 fasteners. A powernailer is suitable for use in installation on field shingles but not recommended for caps. Nail where indicated by the **O** mark on the nailing strip of shingle. If installing on a roof where the underside of the roof deck will be visible (i.e. a vaulted ceiling), minimum 1¼" nails (or screws) can be used on field shingle 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 "<u>pure silicon</u>" 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 **3** nails
- Every cap receives **2** screws. Enviroshake recommends pre-drilling holes for screw placement
- It is important the head of the nail is not 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 when nighttime temperatures are below -18°C / 0°F
- The joint (keyway) between 2 shingles in one course should never be closer than 1½" 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.
- 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 9" exposure and are fastened with 2 screws (min. 2½"). We recommend the holes are predrilled. When using ridge caps with ridge vents the slope of the ridge cap should be 1 less than the roof slope (i.e. 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 installing on a turret, do not use full shingles, use split shingles to best accommodate the curve

• If installing on a curved roof, you may have to drop the exposure through the transition area

INSTALLING Enviroshingle

REVIEW INSTALLATION VIDEO (LINK BELOW) BEFORE READING GUIDELINES

https://youtu.be/8jrreF5cFaw

Underlayment

Before applying the Enviroshake-supplied peel and stick synthetic underlayment (Enviroshield), nail metal drip edge along the eaves. Cover the <u>entire</u> 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.

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 as per the video to allow for 2^{nd} row keyway offset. Trim along the base of the upper tile. Next trim a piece vertically about the same width as the overhanging jut out. Fasten in place using $2 - 1 \frac{1}{2}$ " ring shank nails or screws. Repeat this process for the entire starter row.

Second course

Space shingles a minimum of 3/8" apart. Apply a second course of Shingles directly over the starter course so **the edge of the second course is about a ¼" overhang.** Remember to trim the edge shingle as you did for 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.

Third and all remaining courses

Remember to chalk so the exposures remain constant. Use a 5¼" exposure. Trim the edge tile and lay the next course. The first tile on each course has 2 nails, as it is not a full 12"-wide piece.

Line up the exposure, gap, fasten and finish off with a hammer if needed.

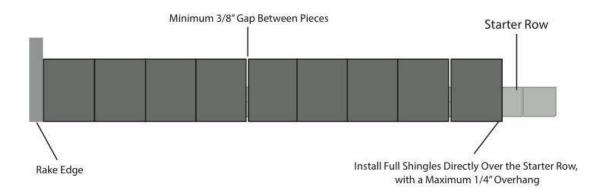
Vallev

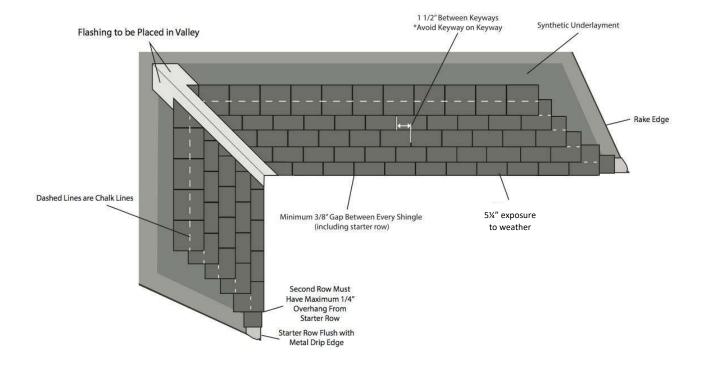
Use 24" wide W-flashing (heavy gauge) in the valleys. Copper is recommended for added longevity, however galvanized or painted aluminum is acceptable. Apply ice and water barrier material (36") in the valley and along the rakes prior to installing the flashing. When nailing shingles along valleys, be sure to nail no further than 2" into valley. To keep shingles along the valleys straight, use a $1" \times 4"$ 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 1×4 , 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.

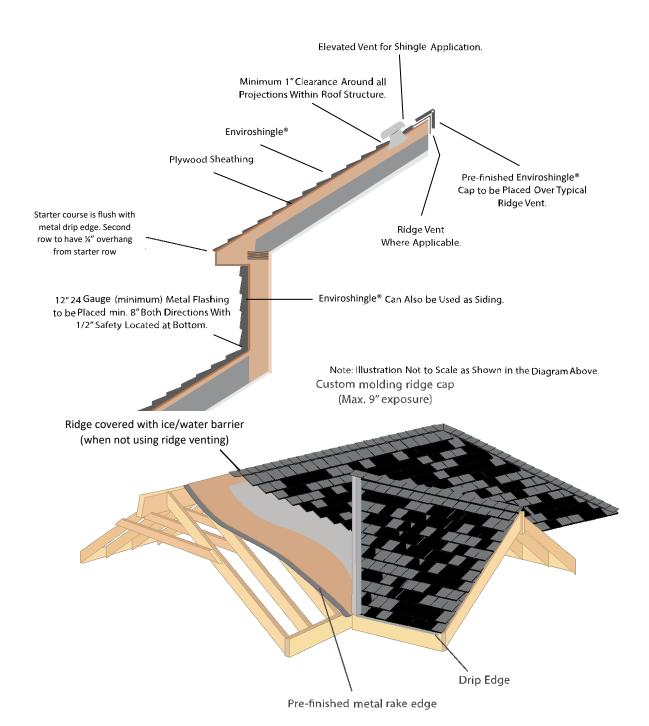
NOTE: Enviroshake requires that all installers review the Installation Guide Manual prior to commencing installation. FAILURE TO DO SO MAY VOID WARRANTY IF THE INSTALLATION GUIDE INSTRUCTIONS ARE NOT FOLLOWED. All installers still need to watch for colour variation with the bundles/skids at the site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

All split shingles require 2 nails per piece. The nailing pattern on a split shingle is 1 nail in the **O** and another nail 2-3" vertically above the first nail. **The required gapping of 3/8" between every shingle must be maintained**.

Second Row







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

Colour:

Aged Cedar, Silvered Cedar and Tropical Silver. Custom colours are available upon request. Within six to twelve months (with exposure to UV) the product will "weather" like a cedar roof. Variation in weathering is expected as with a natural perfection cedar shingle roof.

Contour:

The exposed surface is striated, 5¼" exposure, up from the butt end to the nailing strip (nailing points indicated by O mark) 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 12", with a length of 20". Double layer design. Each bundle is comprised of 5 Enviroshingles. Each Enviroshingle is tapered and measures approximately 3/8" at the butt end and narrows to approximately 1/8" (resembling a milled cedar perfection shingles). Each bundle contains 5 pieces. There are 28 bundles to a "square" at a $5\frac{1}{4}$ " exposure. Ridge/Hip caps are a 12" wide one-piece shingle, custom formed to slopes of 2/12 through 16/12 and installed at the recommended maximum 9" exposure.

Coverage:

28 bundles (1 square) covers 100 square feet for the manufacturer recommended 2/12 slope (or greater) at the recommended 5¼" exposure. To determine the number of ridge or hip caps required for a pitch, divide the total linear feet by 0.6 (i.e. 15 feet of ridge/hip divided by .6 equals 25 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 $1\frac{1}{2}$ " (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 260-270 lbs per Square. (100 square feet of coverage at 5¼" exposure)

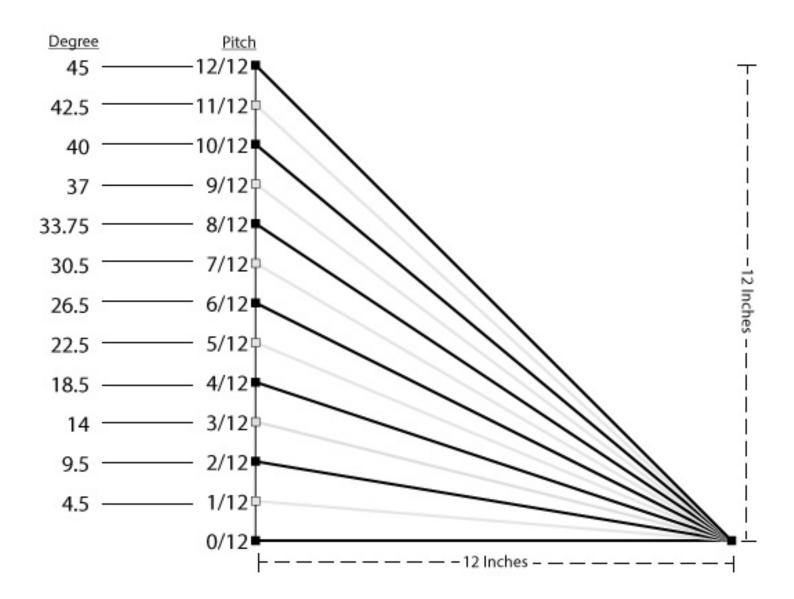
Storage:

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

WHEN INSTALLING RIDGE CAPS, PREDRILL TWO HOLES IN EACH CAP, AT THE O MARKINGS. THEN USE 21/2" TO 3" SCREWS TO FASTEN THE CAP DOWN.

To calculate the total number of ridge/hip caps needed, take the total lineal feet and divide by 0.60. This calculation is based on a 5¼" exposure.

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





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

Enviroshake® Hip Conversion Chart	Slope #1 (with degrees)	91	(53°)													8
		15	(51°)												8	8
		14	(49°)											8	8	8
		13	(47°)										2	8	8	8
		12	(45°)									2	2	2	8	8
		11	(42.5°)								2	2	2	2	2	8
		10	(40°)							9	9	7	7	7	7	7
		6	(37°)						9	9	9	9	2	2	2	2
		∞	(33.75°)					2	2	9	9	9	9	7	7	7
		2	(30.5°)				2	2	2	2	9	9	9	9	2	2
		9	(26.5°)			4	4	5	5	2	2	9	9	9	9	7
		7	(22.5°)		4	4	4	7	2	5	2	9	9	9	9	9
		4	(18.5°)	3	3	4	+	4	4	5	5	2	9	9	9	9
				4 (18.5°)	5 (22.5°)	6 (26.5°)	7 (30.5°)	8 (33.75°)	6 (32%)	10 (40°)	11 (42.5°)	12 (45°)	13 (47°)	14 (48°)	15 (51°)	16 (53°)
				(Si	ree	Бē	р	цļ	İW)	7 (#	əd	olā	5		

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