

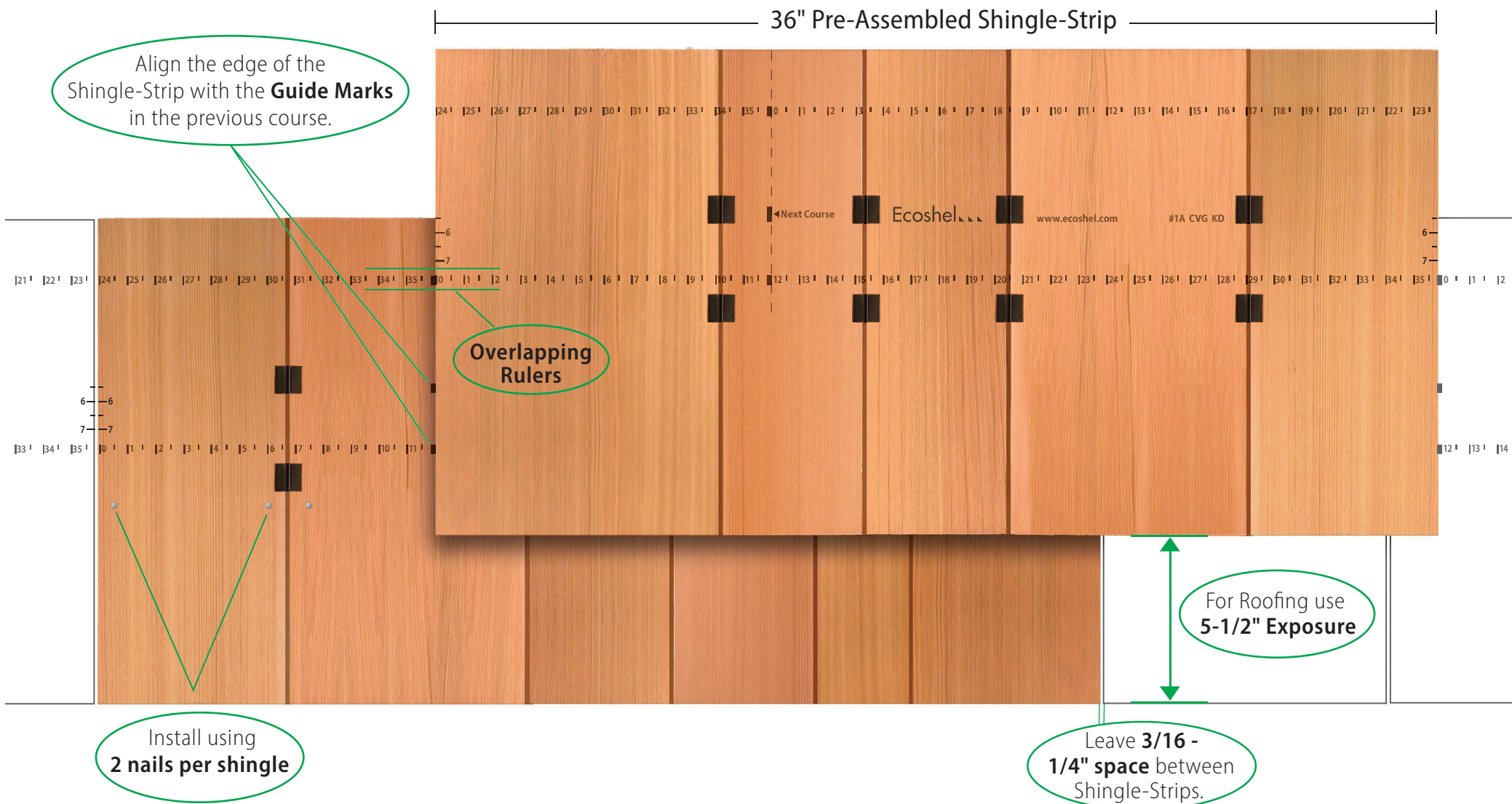
## Installation Instructions for Roofs Vers 7.1

36" Pre-Assembled Shingle-Strip



For installation assistance call (617) 383-4988, or email [tech@ecoshel.com](mailto:tech@ecoshel.com)

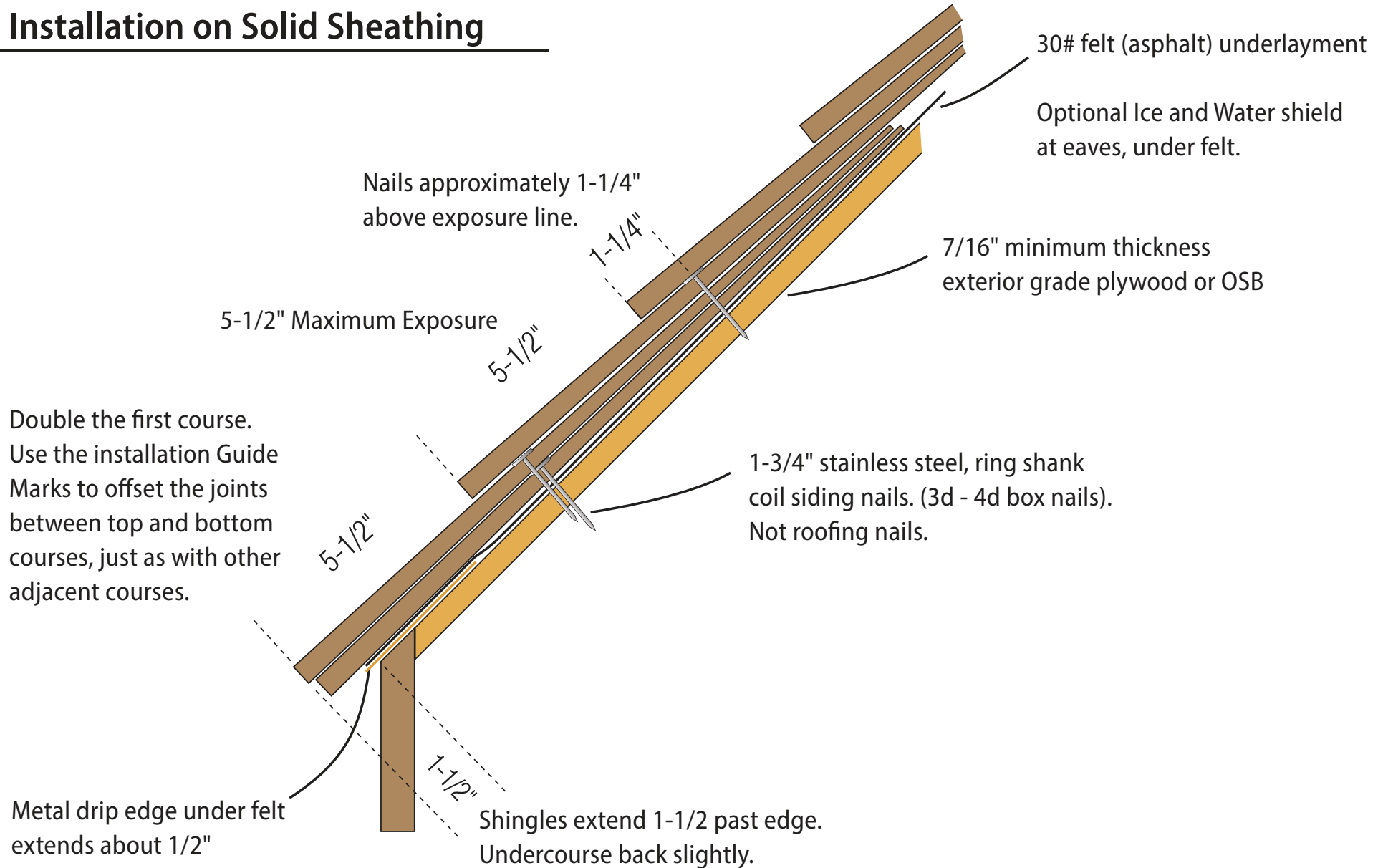
# Installation Basics



- Each course is offset 12" from the previous course. For each new course, position the first Shingle-Strip anywhere in the course, with the left edge aligned with the Guide Marks in the previous course. Then just continue installing Shingle-Strips to the left and right to complete the course.
- The numbers in the overlapping rulers will be continuous: 0 - 36 - 0 - 36 - 0 . . . (the overlapping rulers may not be aligned exactly as shown). If the course crosses a chimney, dormer, etc., just align the first Shingle-Strip on the other side with the Guide Marks in the previous course. To install partial Shingle-Strips (cut-off sections), position the section so the numbers in the overlapping rulers are continuous.
- When each course is offset 12", using the guide marks , all keyway joints between shingles will be offset at least 1-1/2" over 3 courses.

# Installation Step-by-Step

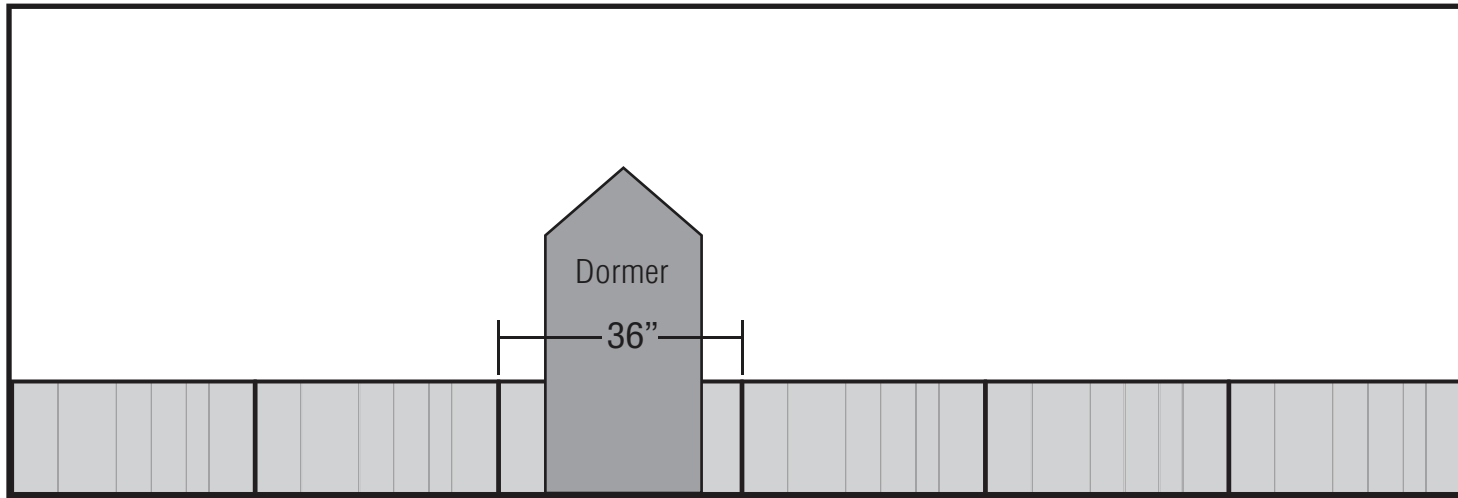
## Installation on Solid Sheathing



# 1. Install the First Course

Install the first course maintaining the full 36" Shingle-Strip pattern across any openings. Start installing from the edge, or start at any convenient point in the middle of the roof, and work toward roof edges or valleys .

Allow a 3/16 - 1/4" gap between Shingle-Strips.

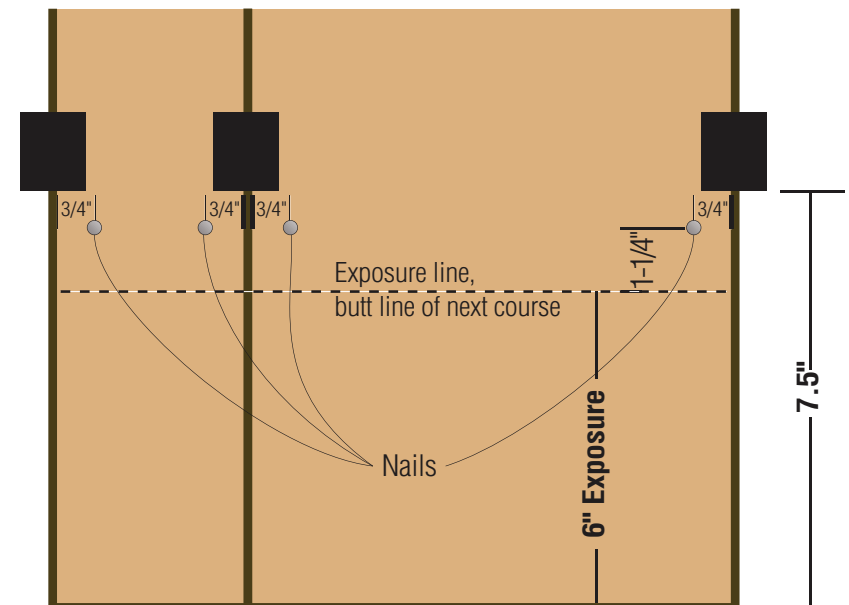


## Fasten Each Shingle

Fasten each shingle using two nails per shingle. Position fasteners about 3/4" in from each edge, and approximately 1-1/4" above the exposure line (the butt line of the next course).

The shingle clip is 7.5" above the butt, and overlaps the shingle 1/2". The clip can be used as a visual reference for the nail position.

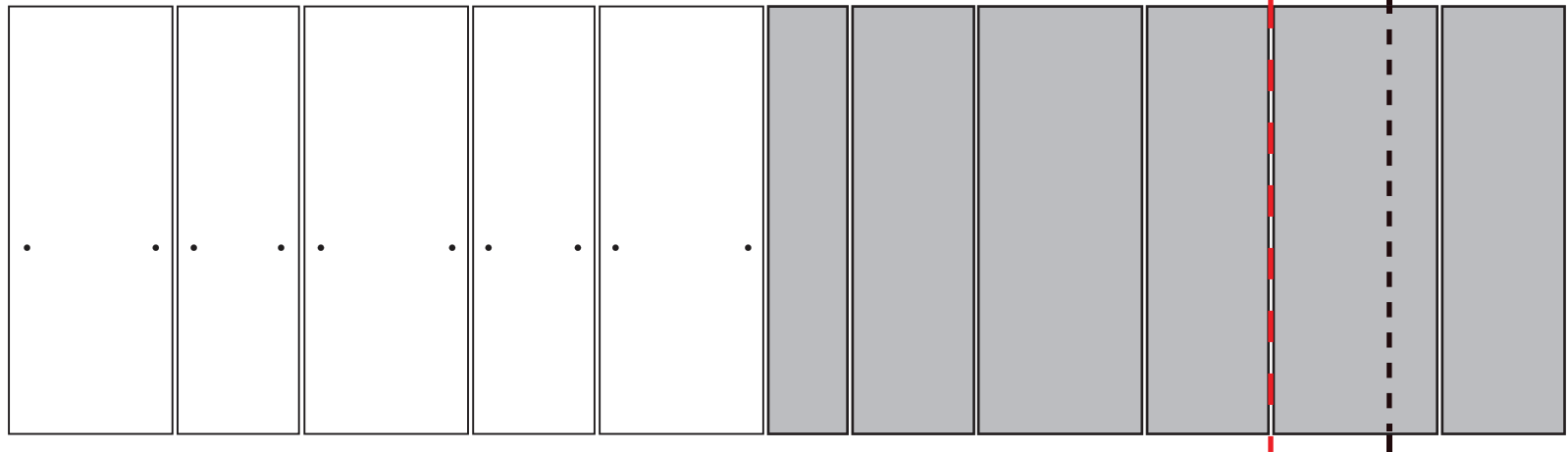
**Don't overdrive the nails.**  
**Nailheads should not penetrate the shingle.**



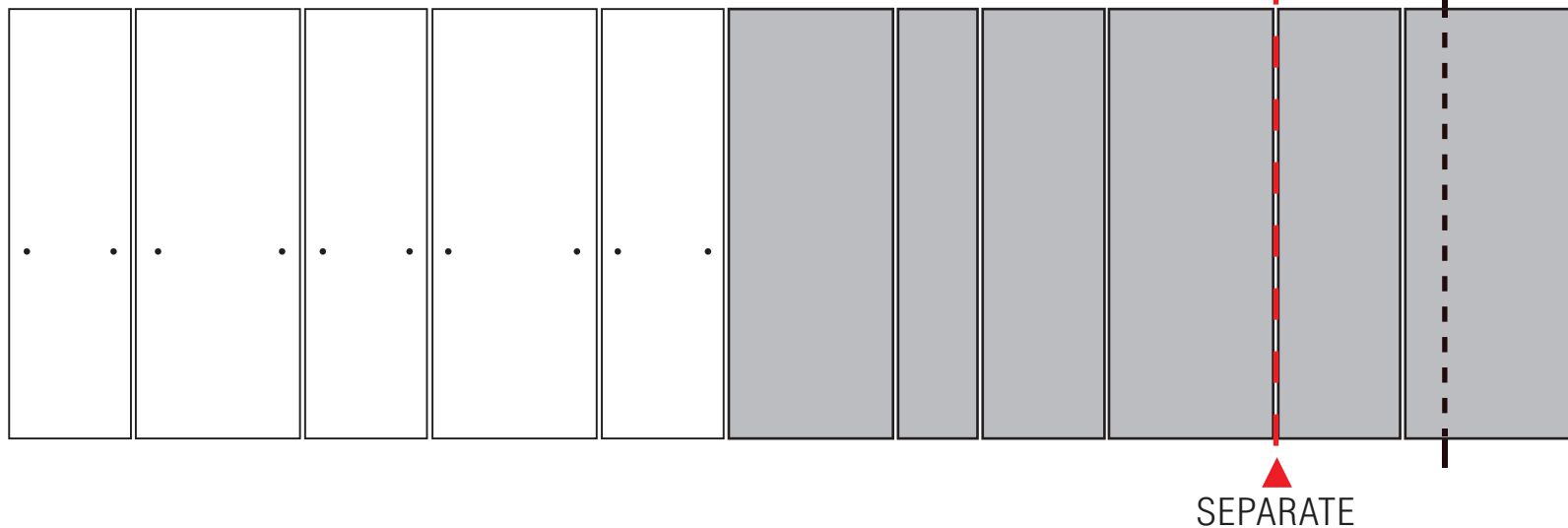
## 2. Ending the Course (at the roof edge, dormer wall, chimney, etc.)

At the end of a course, just cut the Shingle-Strip to the correct length. Sometimes it's easier to separate the shingles at the joint after the last full shingle, and then cut and install the last shingle using a shingle from the cut-off sections. Shingles can be separated by prying out the plastic clips on the front using a small flat blade screwdriver. Bend the clip up on the front and then pull it out of the slot on the back.

< roof edge  
< wall. etc.



If the last shingle will be too narrow (less than 3"), then separate the shingle-strip at the previous joint.



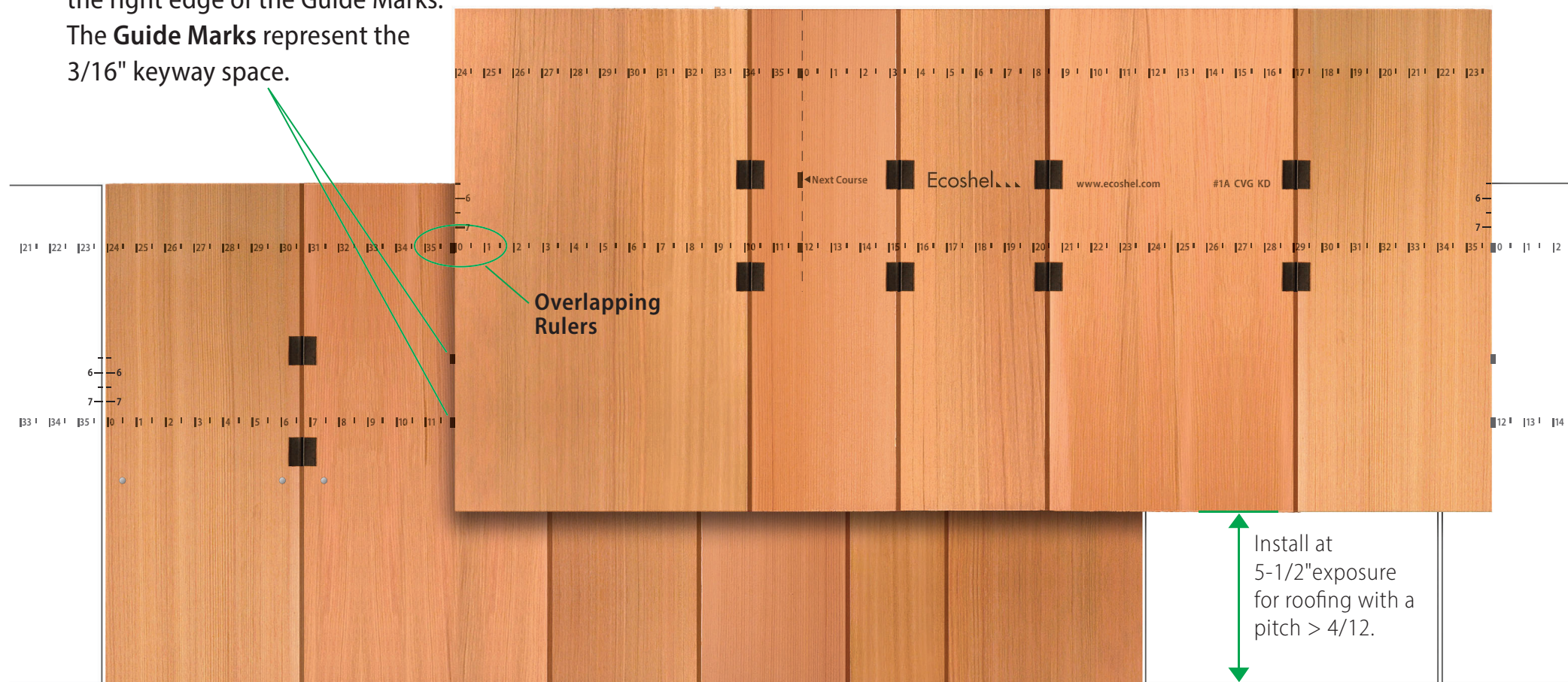
### 3. Position and Install the Next Course

For each new course, position the first Shingle-Strip anywhere in the course, aligned with the Guide Marks in the previous course. Then continue installing Shingle-Strips to complete the course. Numbers in the overlapping rulers will be continuous (0 - 36 - 0 - 36 ...).

If the course crosses a dormer, chimney, etc., align another Shingle-Strip on the other side with the Guide Marks in the previous course. To install partial Shingle-Strips (cut-off sections), position the section so the numbers in the overlapping rulers are continuous.

Align the left edge of the Shingle-Strip with the right edge of the Guide Marks.

The **Guide Marks** represent the 3/16" keyway space.



**NOTE: THE FIRST COURSE MUST BE DOUBLED.** For the doubled first course, align the Shingle-Strips in the top course with the guide marks in the undercourse, but **use an exposure = 0.**

# Installation Details

## General Information

Ecoshel Shingle-Strips come in different shingle patterns that are evenly distributed in the cartons. This provides a random widths appearance. You don't need to be aware of the different patterns.

Each Shingle-Strip includes includes **Guide Marks** at 12" from the left edge. This is where you wil align the edge of the Shingle-Strips in the next course. By following this installation procedure, each course is offset 12" from the previous course, and all joints are offset at least 1-1/2" from the joints in the next two courses.

Ecoshel uses select premium quality Western Red Cedar shingles. Minor defects, saw marks, and dimensional variations are part of the character of the product. If a Shingle-Strip is damaged, set it aside to cut up for detail work or corners, or to be used as a partial strip at the beginning or end of a course.

The gap between shingles (the "keyway") is necessary to allow the shingles to expand when they absorb moisture. When the shingles expand the keyway will become more narrow.

## Sheathing, Underlayment, and Flashing

Ecoshel Cedar Shingles must be installed on solid sheathing with a minimum thickness of 7/16", or on 1 x 4 spaced sheathing. Plywood, OSB, or solid lumber may be used. The recommended underlayment is 30 pound asphalt impregnated felt. In northern climates, an ice and water shield should be installed along eaves at the width specified by local codes. Proper standard flashing must be used at all intersections with vertical surfaces (chimneys, dormers, etc.), and in valleys. Do not use steel core flashing as it will cause black stains. Copper or zinc flashing should be installed under ridge units to help preserve the shingles. See the Hip & Ridge section for more information.

## Cutting Shingle-Strips

Ecoshel Shingle-Strips can be separated into individual shingles by bending and removing the plastic clips. Use a small screwdriver to pry the clips out of the slots on the front. Bend the clips away from the slot and then pull the clips out of the slots on the back.

Individual shingles can be cut to specific widths or shapes for detail work. Shingle-Strips can also be cut with circular saws, jigsaws, or on a table saw. Small battery powered circular saws work very well.

For the fastest and most precise installation, use a long saw table with a saw guide. If you don't have a saw table, you can easily make one with a half sheet of plywood or OSB. See the Saw Table section in these instructions.

Establish a location where shingle-strip cut-offs can be kept until they are needed.

## Fasteners

Stainless steel fasteners are essential to avoid black streaks. Stainless steel ring shank coil siding nails are recommended. For standard roofing installation at a 5-1/2" exposure, 1-3/4" fasteners should be used. If there is rigid foam between the sheathing and the Shingle-Strips, increase the length of the nail by the thickness of the foam.

Medium crown staples of the correct length may also be used. Roofing nails for composite shingles, with the oversize head and wider shank, should not be used.

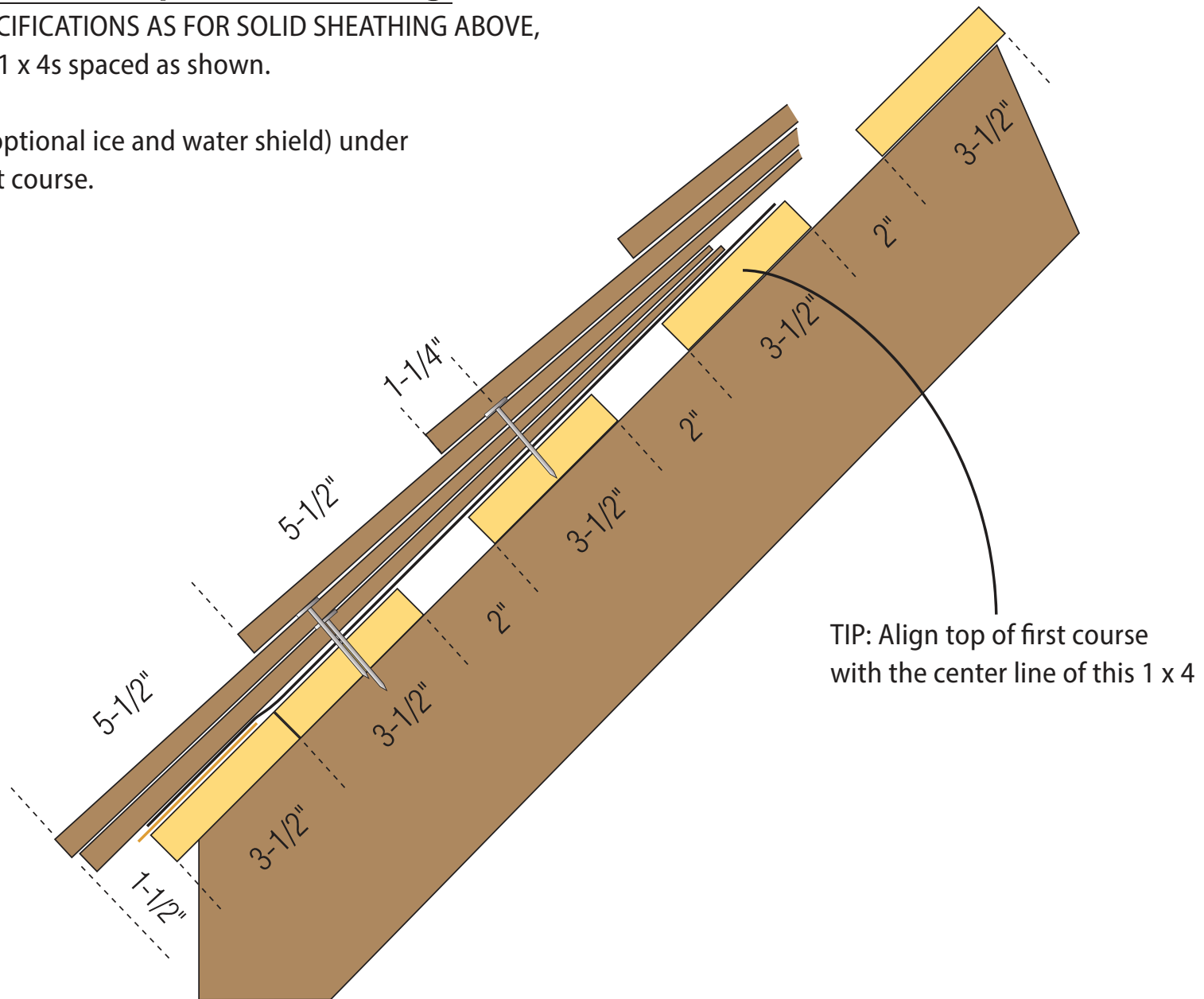
Using a coil siding nail gun will provide the fastest installation. Drive nails tight to the surface of the shingle, but don't overdrive. Nail heads should not be buried in the wood fiber.



## Installation on Spaced Sheathing

SAME SPECIFICATIONS AS FOR SOLID SHEATHING ABOVE,  
but using 1 x 4s spaced as shown.

Felt (and optional ice and water shield)  
at least 1st course.



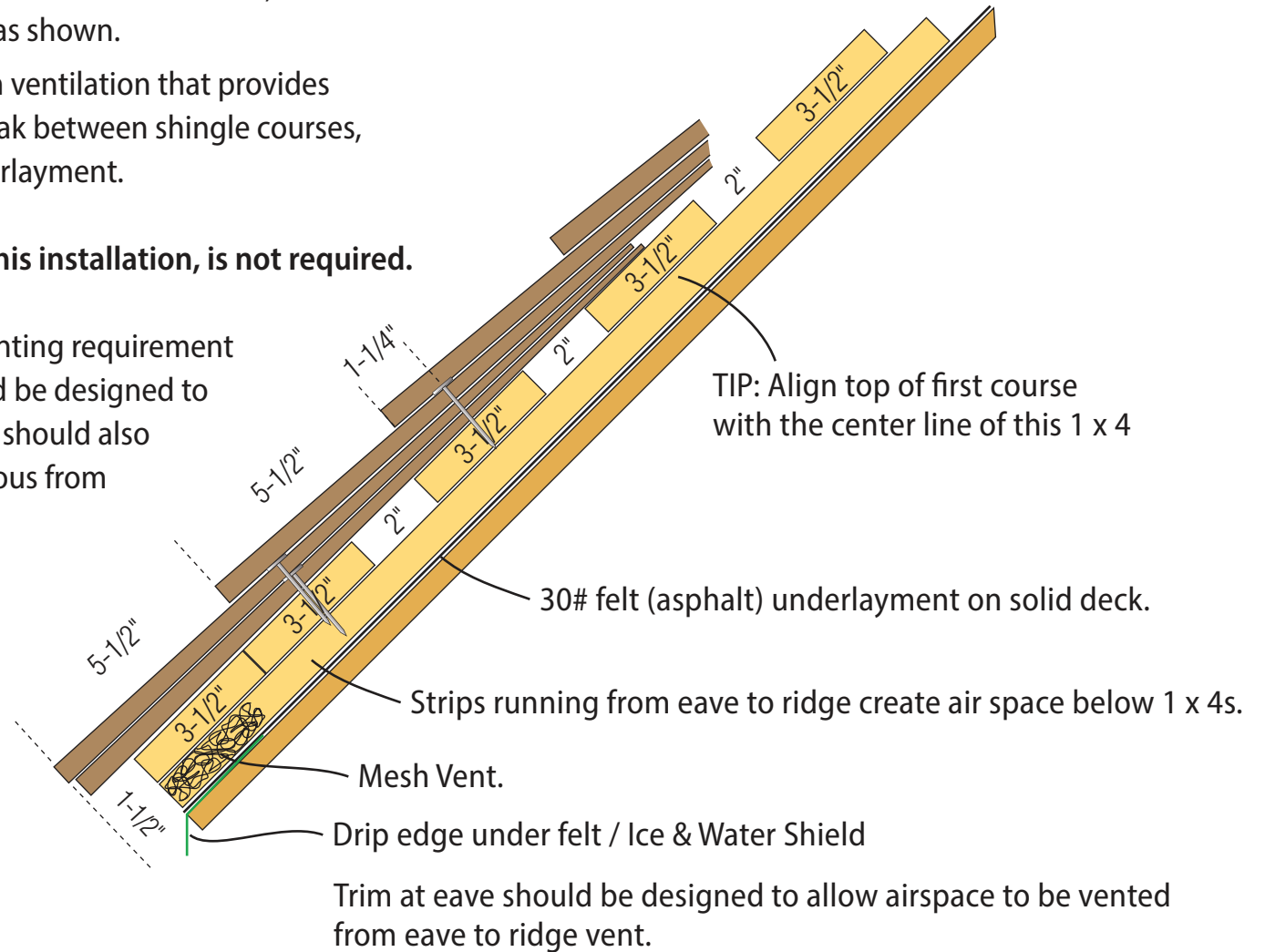
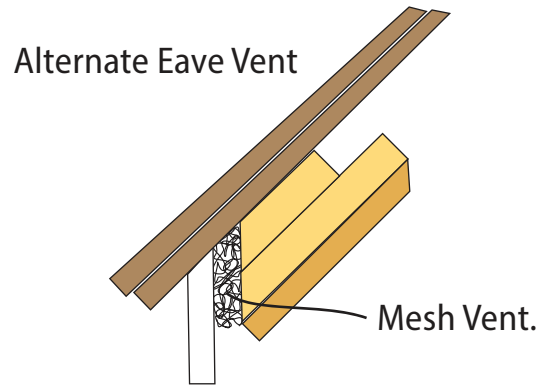
# Installation on Furring Strips over Solid Sheathing

SAME SPECIFICATIONS AS FOR SOLID SHEATHING ABOVE,  
plus 1 x 4s spaced on vertical strips as shown.

The Ecoshel System includes built-in ventilation that provides a slight vent space and capillary break between shingle courses, and between shingles and the underlayment.

**Additional air space, as shown in this installation, is not required.**

If additional space is created, the venting requirement will increase. Trim at the eave should be designed to create a screened vent. A ridge vent should also be used. Venting should be continuous from eave to ridge vent.



## Pre-Assembled Hip and Ridge Shingles

Felt, or flashing should be installed under the hip and ridge units, unless they are used with a ridge vent. Zinc, galvanized, or copper flashing that extends out below the edge of the ridge shingles by at least an inch, will help to preserve the shingles for a distance of up to 15 feet below the ridge.

The zinc or copper dissolves slightly into rain water and washes the shingles below with a solution that kills decay fungi and anything else that might grow on, or in, the wood.

For roofs with a slope longer than 15 feet, a second copper band can be tucked under a course of shingles further down the slope. At least 1" of the copper should be exposed to the weather.

Install hip and ridge shingles starting with the butt end at the eave or rake edge. Use a 5-1/2" exposure and concealed nailing, just like the shingles in the field. Use two nails in each unit, 3/4" in from the edge, and 1-1/2" under the butt of the next shingles. Longer nails are required for the hip and ridge shingles, typically at least 2-1/8 inch. The first course should be doubled. Joints should alternate left and right for all adjacent courses.

Using a formed copper ridge cap rather than ridge shingles, will also provide excellent protection for the shingles below.

## Making a Saw Table

A portable saw table makes installation much easier. The easiest way to set up a table is to make a 2' x 8' top using OSB or plywood mounted on a 2 x 4 frame. Place the table top on saw horses so it can be easily moved.

A small lightweight battery powered circular saw works well for cutting the shingles.

Install a 1 x 3 strip along the back of the table, with a gap in the strip to allow the circular saw to pass through.

Use a large triangle as a saw guide. Tape a thin plastic sheet to the bottom of the triangle and cut it with the saw guided by the triangle. This provides a blade position indicator.

Place the Shingle-Strip on the table with the cut mark in line with the blade channel. Then place the triangle on the Shingle-Strip with the blade position indicator at the cut mark. Cut the Shingle-Strip with the saw guided by the triangle.

