

# Eastern White Cedar Shingles Installation Guide

Installing Eastern White cedar shingles is a relatively simple process. However, to get the most out of your shingles, you must follow a few simple guidelines. Installation techniques vary from new homes to renovations, from walls to roofs. Just follow the steps outlined on the following pages and you're set.

## STEP 1

### FIRST, CHOOSE THE RIGHT TYPE OF SHINGLE...



Grade	Characteristics	Recommended Use
<b>A</b> (Extra)	<ul style="list-style-type: none"> <li>Pale color</li> <li>Premium Quality</li> <li>No imperfections (clear wood, no knots)</li> <li>Clear heartwood</li> </ul>	<ul style="list-style-type: none"> <li>Siding</li> <li>Roofing</li> <li>Suited for harsh climactic conditions</li> <li>Highly resistant and durable</li> </ul>
<b>EXTRA</b>		
<b>B</b> (Clear)	<ul style="list-style-type: none"> <li>Rich color</li> <li>Standard quality</li> <li>No knots on exposed face (6" of exposed surface)</li> </ul>	<ul style="list-style-type: none"> <li>Siding</li> <li>Steep sloped roofs</li> <li>Interior and exterior designs</li> </ul>
<b>CLEAR</b>		
<b>C</b> (2nd Clear)	<ul style="list-style-type: none"> <li>Beige to brown color</li> <li>Economical shingle</li> <li>Sound knots on exposed face (6" of exposed surface)</li> <li>Rustic appearance</li> </ul>	<ul style="list-style-type: none"> <li>Siding</li> <li>Interior and exterior designs</li> <li>Secondary building walls</li> </ul>
<b>2nd CLEAR</b>		
<b>D</b> (Special)	<ul style="list-style-type: none"> <li>Width of 3" to 6"</li> <li>Variable color</li> <li>Acceptable defects on full surface</li> </ul>	<ul style="list-style-type: none"> <li>Starter course (undercourse) and siding</li> <li>Rustic interior decoration</li> <li>Varied secondary use</li> </ul>
<b>SPECIAL</b>		

\* FWS only uses the best grades for our stained products.

Note: Grades A, B and C are available in two categories: (R) Regular; (R&R) Resquared and Rebutted.

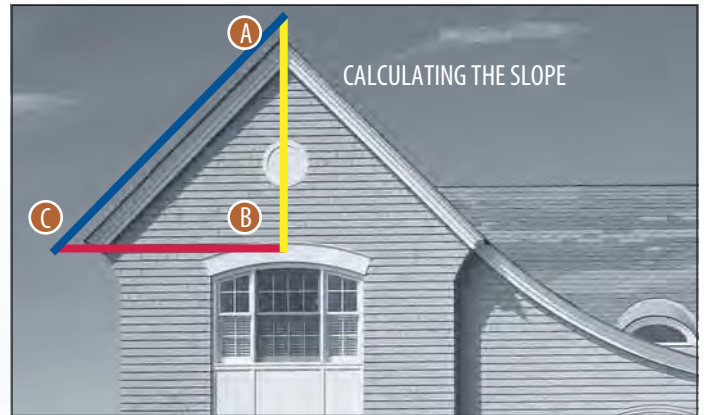
### ... AND THE RIGHT NAILS

It is important to choose the nail that's appropriate for each job. Only rust-resistant galvanized nails will help maximize the life and appearance of your shingles.

Renovations	New construction
1-3/4" (4.5 cm) nails, 14 gauge	1-1/4" (3.2 cm) nails, 14.5 gauge
	
14 gauge nail	14.5 gauge nail

### THEN, BE SURE TO CALCULATE HOW MUCH YOU'LL NEED

To calculate the number of squares needed for your project, you'll need to measure the number of square feet and to decide on the exposure. A standard package of cedar shingles covers 25 ft<sup>2</sup> (2.3 m<sup>2</sup>) with a 5 inch (12.5 cm) exposure. The unit used to measure shingles is called a square (1 square = 4 boxes of shingles).



## STEP 2

### CALCULATING THE SLOPE

When used on roofs, the exposure will vary according to the slope of the roof. The steeper the slope, the greater the exposure, and vice versa.

To calculate the slope of the roof, divide the distance between points A and B (height) by the distance between points B and C

≤ 1 : 4 or 25 % or 14°	Do not use cedar shingles
≥ 1 : 375 or 27 % or 15°	
≤ 1 : 3 or 33 % or 18°	Maximum exposure = 4" (10 cm)
> 1 : 3 or 33 % or 18°	Maximum exposure = 5" (12.5 cm)

Note : A good shingle roof must be at least three shingles thick. The illustrations on the following pages are for comprehension only.

## STEP 3

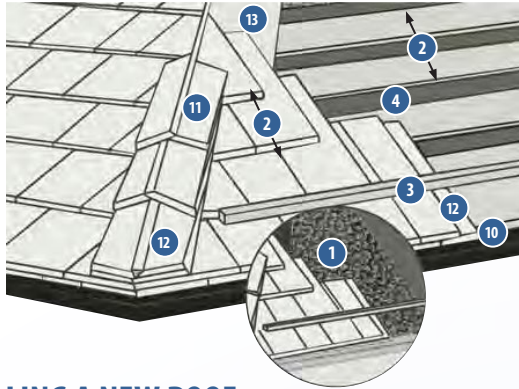
### CALCULATING THE QUANTITY FOR A WALL OR A ROOF

The total area to be covered divided by the corresponding area covered by each square gives us the approximate number of squares needed. To get better performance from your roof, you can always use a smaller exposure. Since the vertical surface of a wall is less exposed to climactic conditions, you can operate with a wider exposure.

Below are several examples of the area covered by one square of shingle with different widths of exposure.

Quantity	Width of exposure	Area covered
One square	4" (10 cm)	80 ft <sup>2</sup> (7.3 m <sup>2</sup> )
One square	5" (12.5 cm)	100 ft <sup>2</sup> (9.3 m <sup>2</sup> )
One square	6" (15 cm)	120 ft <sup>2</sup> (11.2 m <sup>2</sup> )

Note : Please include a 5% margin of error in all calculations.

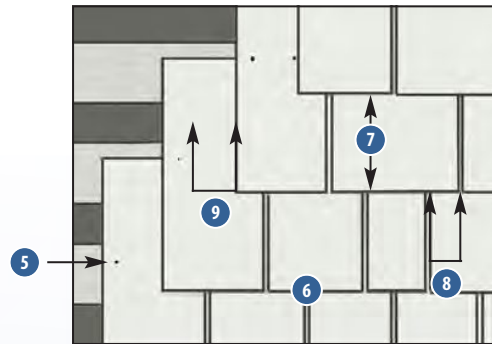


## INSTALLING A NEW ROOF

It's very important to have air circulating behind the shingles, not just an air space.

- 1 Shingles must always be nailed to 1" x 3" (2.75 cm x 7.5 cm) wooden laths or a Cedar Breather® type product, installed according to the instructions included.
- 2 The distance between the centers of the laths must be equal to the width of the exposure.
- 3 To align the shingles, tack a board temporarily to the roof or draw a straight chalk line.
- 4 In areas with harsh climactic conditions, the lath or the Cedar Breather® must be fixed to a wallboard that is covered with a vapor barrier and insulated on the underside by foam or a rigid insulator.
- 5 Place 2, 3/4" (2 cm) nails from each edge of the shingle and 1-1/2" (4 cm) nails above the exposure.
- 6 Depending on the degree of humidity of the shingles, allow an 1/8" to 1/4" (3 mm to 6 mm) space between each shingle for expansion, to avoid buckling.
- 7 Never have the joints of two shingles in line if they are separated by only one course of shingles.
- 8 Keep at least 1-1/2" (4 cm) space between the joints in successive courses.
- 9 Knots and other imperfections in the shingles must be treated as edges of shingles. Joints must be placed in alternating rows, at least 1-1/2" (4 cm) from the start of the imperfections.
- 10 To ease the flow of water into the eaves, allow the first row of shingles to protrude at least by 1-1/2" (4 cm) above the first roof board.
- 11 For the ridge of the roof, choose shingles of the same width, between 4" to 5" (10 cm and 13 cm), and install them by alternating from one side to the other, from one row to the next.
- 12 The first row of shingles and the ridge of the roof must be two shingles thick.
- 13 For roofs with slopes of less than 45%, the metal base – which is installed under the shingles – must cover at least 10" (25 cm) of the ridge or the valley. For roofs with slopes of more than 45%, the metal base must cover at least 7" (18 cm) of the ridge or the valley.
- 14 Be sure to finish all peaks with an air vent, such as Roll Vent®, to allow circulation underneath the shingles.

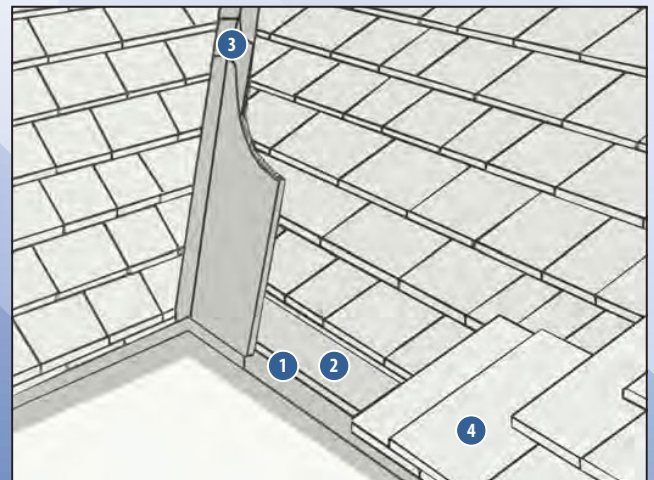
## DETAILS ON ALIGNING SHINGLES



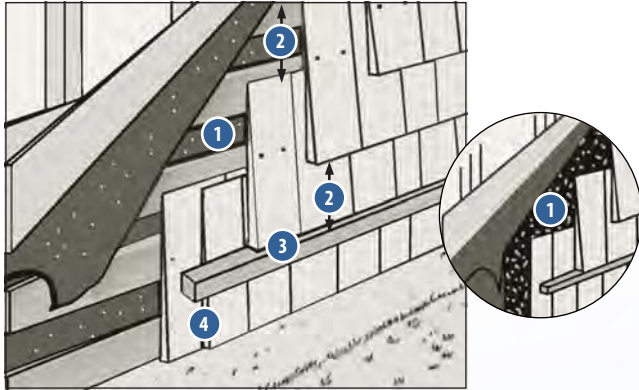
## RENOVATING A SHINGLE ROOF

Renovating a shingle roof brings with it many advantages. It provides a double roof with extra insulation that protects against excess heat and cold. Plus, your house is always covered if a storm should arrive while you're working on the roof.

- 1 Start by removing the first row of shingles at the base, the sides and the ridge of the roof. Doing this will remove a 6" (15 cm) section which will be covered later.
- 2 Cover the newly-exposed areas by nailing down cedar boards. For the ridge of the roof, use beveled cedar siding.
- 3 Nail down cedar boards to the inside of the valleys. This will separate the old metal from the new.
- 4 Install the new shingles directly to the cedar boards and the old shingles which form a flat base for the new roof.
- 5 - 9 Follow the same steps as indicated in the previous section.



Note: The metallic weather sealing strips in sloping joints, above doors, windows and chimneys, must conform to construction industry standards.



## INSTALLING SHINGLE WALLS

The technique used to install white cedar shingles on walls is much like the one used on roofs – only simpler! While roofing shingles have a precise exposure according to the slope of the roof, the exposure on wall shingles can be much greater, as walls are less subject to climactic conditions.

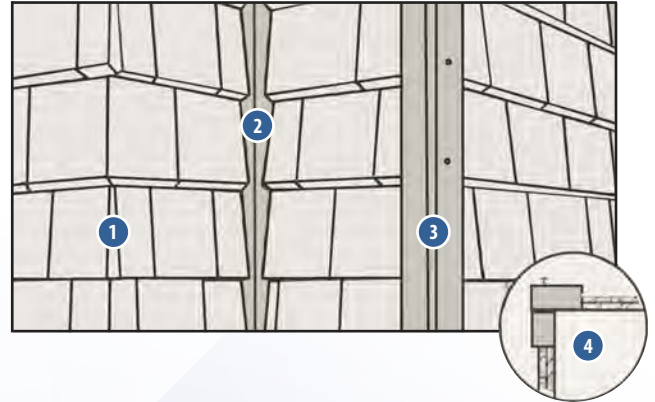
On walls, the exposure for Grade A white cedar shingles can be up to 7" (17.75 cm)\*, and 5" (12.75 cm) for grade B and C shingles.

- 1 Shingles are always nailed to 1" x 3" (2.5 cm x 7.5 cm) wooden laths or a Cedar Breather® type product fixed directly to the frame or the existing wall covering.
- 2 The distance between the centers of the laths must be equal to the exposure of the shingles.
- 3 To align the shingles, tack a board temporarily to the wall or draw a straight chalk line.
- 4 The first row must always be two shingles thick, and must protrude at least 1" (2.5 cm) from the top of the foundation, to ensure against water infiltration between the bottom of the wall and foundation.
- 5 - 9 Follow the same steps as indicated in the first section.

Note : The metallic weather sealing strips above openings (doors, windows, etc.) must conform to construction industry standards.

\* CSA standard 0118-3-94 allows 8" (20 cm) exposure. At FSP, we strongly recommend a 6" (15 cm) maximum exposure.

\* Exposed wood must be touched up with 2 coats of touch up stain.



## FINISHING CORNERS

The interior and exterior corners of shingle walls are easy to complete. Using corner boards is both as effective and aesthetically pleasing as weaving the shingles.

- 1 The standard practice for completing interior and exterior corners is to alternate the overlapping of the corner shingles. Each shingle will be slightly larger than the corner, but this can be trimmed and fine-tuned at the end of the job.
- 2 The interior corner is created by nailing a 1-3/4" (4 cm) square cedar strip to the metal valley, onto which the shingles can be adjusted. The metal valley must be at least 7" (18 cm) larger than each side of the joint.
- 3 Interior and exterior corners can also be created by nailing cedar boards to the ridge on which the shingles will be adjusted.
- 4 Use boards of varying widths to obtain a symmetric corner.

## IDEAL FOR ALL WEATHER CONDITIONS



White cedar from Eastern Canada has a unique cellular structure that is particularly suited to areas with harsh climates. Cedar is well recognized for its insulating, aesthetic and long-lasting qualities. It stands up well to strong winds, needs little maintenance and has a remarkably long life.

Eastern White cedar shingles age well, and are generally left unfinished, in their natural state. Over time, they take on a beautiful silver-gray color much appreciated and sought after by connoisseurs. Interesting visual effects can be achieved by applying different stains to accentuate architectural features. Cedar shingles can also be treated to maximize their life. At Fraser, we use a unique "Flow-Thru™" process, where all six sides of each and every shingle are covered, for maximum protection.

Note: The information contained in this brochure is as accurate as possible. However, Fraser absolves itself of all responsibility with regard to damage or prejudice resulting from the use of this brochure.