



Les Bardeaux Lajoie inc.

Manufacturer of Eastern White Cedar Shingles

INSTALLING WHITE CEDAR SHINGLES



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INSTALLING WHITE CEDAR SHINGLES

CAUTION NOTICE

If a product has imperfections, do not install it. Under the warranty, faulty material will only be replaced if the request is made before the product was installed and if it was properly stored. For more details, please contact us.

Installing Eastern white cedar shingles is a relatively simple process. Simply follow guidelines carefully. Remember that installation techniques vary from new constructions to renovations, from roofs to walls. For maximum efficiency, follow the guide!

All installations must conform to construction industry standards in effect and be made according to the manufacturer's instructions.

Information contained in this document is explained as exactly as possible. Bardeaux Lajoie Inc. is not responsible for any damages or prejudices that may result from using this guide.

NAILS OR STAPLES

14.5 gauge and rust resistant, 3.2 cm (1 1/4 in) galvanized nails will extend the life of shingles and improve its overall appearance.

APPEARANCE

Use stainless staples or 11.2 mm (7/16 in), 16 gauge and crown aluminum staples minimum. Using staples will make installing shingles much faster.

CUTTING

To cut a shingle length wise, use a knife to make a sharp incision on the surface of the shingle and then bend it along the cut line. The shingle should break evenly. You can also use an electric saw.



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The exposure is the uncovered part of the shingle, meaning the visible portion of a row of shingles.

HOW TO CALCULATE THE QUANTITY YOU NEED

Calculating the quantity of shingles you need to complete your work depends on the exposure. The smaller the exposure, the more shingles you will need. The exposure varies between 4 to 6 inches, depending on the type of shingles you use and the presentation you want.

For example, a standard bundle of cedar shingles will cover 2.3 m² (25 ft²) with an exposure of 12.5 cm (5 in).

To help calculate quantities, the unit of measure commonly used is the square (one square=4 bundles of shingles).

The total area to cover divided by the surface of a square of shingles, depending on the exposure used, will give you the approximate quantity of squares you need.

To increase a roof's performance, you can always use a smaller exposure. For walls, since vertical surfaces are less exposed to climatic conditions, you can have more flexibility.

Examples of areas covered by a square of shingles based on different exposures.

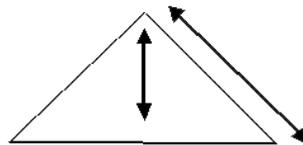
Size of Exposure	Area Covered
10 cm (4 in)	7,3 m ² (80 ft ²)
12,5 cm (5 in)	9,3 m ² (100 ft ²)
15 cm (6 in) *	11,2 m ² (120 ft ²)

* Caution notice: the larger the exposure, the greater the risk of buckling.

CALCULATING THE SLOPE

In roofing, the exposure varies according to the pitch (the slope) of the roof. The steeper the slope, the greater the exposure, and vice-versa.

To calculate the slope of a roof, divide the height of the roof by the length of its slope.



- If the slope of your roof is equal or smaller than 25%, do not use cedar shingles.
- Between 27 and 33%, the exposure should be a maximum of 4 inches.
- More than 33%, you can increase the exposure to a maximum of 5 inches.

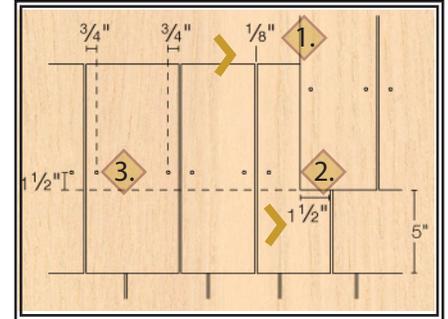
We recommended adding an error margin of approximately 5% when calculating necessary quantities of shingles. If you are unsure about the quantity you need, we will happily assist you.

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BASIC RULES

These rules apply to both roofs and walls installations.

1. Depending on the degree of humidity of the shingle, leave a 3 to 6 mm (1/8 to 1/4 in) area between each shingle for expansion to prevent buckling.
2. Never have the joints of two shingles in line if they are separated by only one course of shingles. Keep at least a 1 1/2 in (4 cm) space between the joints of shingles.
3. Place two nails per shingle 2 cm (3/4 in) from each edge (side) of the shingle and 4 cm (1 1/2 in) above the exposure. If your shingle is larger than 15 cm (6 in), we recommend using 3 nails.
4. Knots and other imperfections must be treated as edges of shingles. Joints must be placed in alternating rows at least 4 cm (1 1/2 in) off the start of the imperfections.



WALL INSTALLATION

On walls, the exposure for Grade A and B Eastern white cedar shingles can be as much as 15 cm (6 in) * and 12.5 cm (5 in) for Grade C shingles.

* Caution notice: the larger the exposure, the greater the risks of buckling.

THE PREPARATION

1. The shingles should be nailed to 2.5 x 7.5 cm (1 x 3 in) wooden laths nailed directly on the wall's structure or the existing sheeting if the base is solid, i.e. rough lumber (1 x 4 boards).
2. The distance between the centers of the laths must be equal to the width of the exposure.
3. To align the shingles, temporarily tack a wooden lath to the wall or simply draw a straight chalk line.
4. The first row must always be two shingles thick and cover at least 2.5 cm (1 in) of the top of the foundation to prevent any possible infiltration between the bottom of the shingle wall and the foundation.

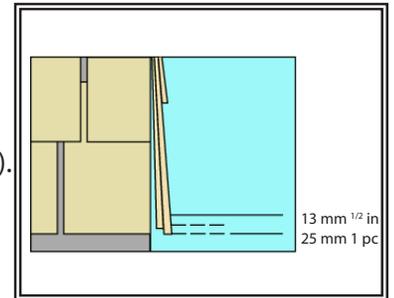
TIPS & ADVICE

Remember to leave a 1/4 in space on top of doors and windows lintels to allow for proper air circulation and drainage.

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STARTING ROW

5. The first row of shingles must always be two shingles thick. Also, make sure that edges are not superposed.
6. Make sure your starting row overlaps over the foundations by at least 25 mm (1 in). The second layer of your starting row must be slightly lower than you first. We suggest approximately 13 mm (½ in).

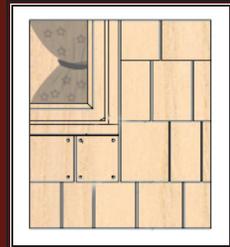


FOLLOWING ROWS

7. Follow the basic rules for the rest of your wall.
8. Finish the top of your wall with a moulding.
9. Leave a 1.3 cm (½ in) space between the finishing moulding and the soffit or 2.5 cm (1 in) behind the finishing moulding to allow for air circulation.

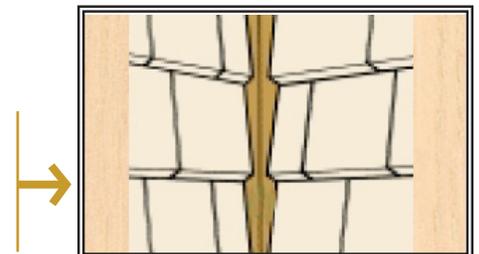
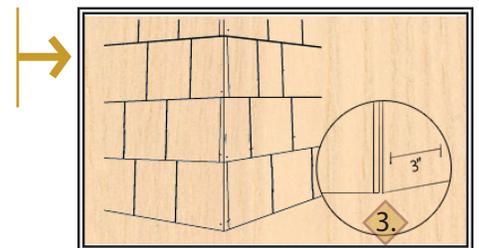
TIPS & ADVICE

For optimal results around windows, make sure edges of the shingle meet the side of the opening. Use 4 nails to fix these shingles and even glue to solidify it all.



INSTALLING CORNERS

1. Standard practice for completing exterior corners is to alternate the overlapping of the corner shingles in a way that those edges alternate successively on each side of the corner.
2. A shingle should extend beyond the corner slightly and can be trimmed later with a knife.
3. The minimum width of a corner shingle should be 7.5 cm (3 in) and the finishing nail should penetrate the side shingle.
4. The interior corner is created by nailing to the metal valley, a square 4 cm (1 ½ in) cedar lath on which the wall shingles can be adjusted. The metal valley must extend 18 cm (7 in) beyond each side of the joint.
5. It is also possible to install interior and exterior corners by completing the edge using two cedar boards on which the wall shingles will be adjusted.

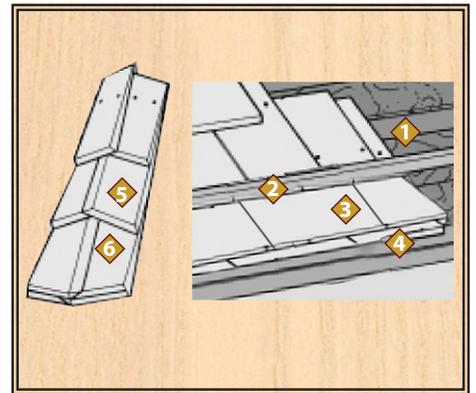


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ROOF INSTALLATIONS

IT IS ESSENTIAL TO HAVE AIR CIRCULATING BEHIND SHINGLES, NOT JUST AN AIR SPACE. TO ALLOW FOR PROPER AIR CIRCULATION, A HOMESLIKER-TYPE OF AERATION MEMBRANE IS NECESSARY.

1. The shingle must be installed on 2.5 x 7.5 cm (1 x 3 in) wood laths.
2. The distance between the laths, centre-to-centre, must be equal to the exposure of the shingles.
3. To align the shingles, temporarily fix a wooden laths on the roof or simply trace a chalk line.
4. To ease the flow of water into the eaves, allow the first row of shingles to protrude by 4 cm (1 1/2 in) above the first roof board.
5. For the ridge of the roof, or valley flashing, use shingles with the same width, between 10 to 13 cm (4 to 5 in). Install them by alternating from one side to the other and from one row to the next.
6. The first row of shingles and the ridge of the roof must be two shingles thick.
7. For roofs with slopes of less than 45 %, the metal base which is installed under the shingles must cover at least 25 cm (10 in) of the ridge of the valley. For roofs with slopes greater than 45 %, the metal base must cover at least 18 cm (7 in) of the ridge or valley.



RENOVATION

1. Remove the first row of old shingles at the base, sides and ridge of the roof.
2. Cover the exposed areas on the base and sides by nailing down a cedar board. For the roof's ridge, use bevelled cedar siding.
3. Nail the cedar boards to the inside of the valley, which will separate the new metal from the old during the installation.
4. Install the new shingles directly on the cedar boards and the old shingles which form a flat surface on which the new roof can be installed.