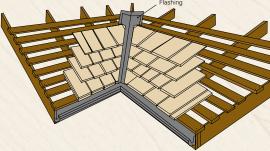
# Roof Valleys

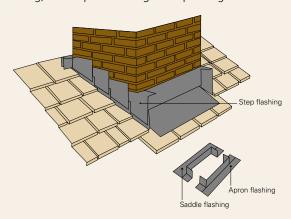
- Instal flashing that extends about 12" (30.5 cm) on either side
- Then, cover with shingles, leaving a 4" space (10.2 cm) on either side of center for water drainage
- Trim shingles with same angle as valley while making sure all joints between shingles are well-covered by a solid shingle



# Chimneys

- The most intricate aspect of shingling around a chimney concerns flashing because of the various types required
- Each flashing has to extend at least 4" (10.2 cm) up chimney surface and at least 6" (15.2 cm) over roof area covered by shingles
- Flashing sections must overlap in each corner by at least 3" (7.6 cm) to prevent water infiltration
- Overlap each step flashing with next by at least 3" (7.6 cm)
- Trim shingles with same angle as flashing and lay them at about 1/8" (0.3 cm) from flashing for expansion

*Note:* Shingles overlap step flashing and saddle flashing, while apron flashing overlaps shingles.



# Hips and Ridges

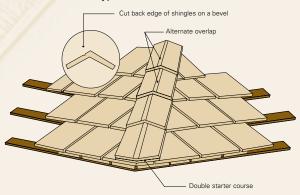
There are 2 ways to go about installing roof hips and ridges:

### Shingles:

- Choose same-width shingles, namely 4" to 5" (10.2 cm to 12.7 cm)
- Before laying last 3 courses on hips and ridges, instal flashing that extends 8" (20.3 cm) on either side
- Begin lower end of hips with double course using same exposure as roof. Then do ridges by working from both ends towards center
- Alternate overlap all shingle hips and ridges
- Instal hip and ridge caps with 2 nails of about 2" (5.1 cm) driven into either side

### **Prefabricated Units:**

 Using prefabricated hip and ridge units can considerably save on installation time since they come with mitered joints and concealed nails.
Care must be taken to choose the appropriate units for roof type.



## **Existing Buildings**

There are 2 ways of installing shingles on an existing building:

- By removing original covering and proceeding the same way as for a new construction
- By installing shingles directly on top of original covering and making sure there is a good surface for driving in nails securely

In both cases, an even surface is necessary to prevent water infiltration.

## FAQ

### What's the proper exposure?

Exposure depends on a number of factors such as intended use, climate, longevity, and appearance.

**Roofs:** The steeper the slope, the greater the exposure (3-3/4" to 5") (9.5 cm to 12.7 cm).

*Walls:* More exposure is customary as walls are less subject to the elements.

## What kind of sheathing should I use?

Building codes recommend wooden lath sheathing.

### Why use R&R?

In the industry, R & R shingles are chosen to produce the best overall apperance while considerably reducing labor costs.

### Do cedar shingles need to be treated?

They are often left natural and turn silver gray with time. However, they can be treated with a chemical preservative or stain to achieve a different visual effect.

# SBC

### Cedar Shingle Manufacturer

754, 8° Rue, Saint-Prosper, Beauce Quebec, Canada G0M 1Y0 Phone: (418) 594-6201 Fax: (418) 594-8334 E-mail: info@sbccedar.com Web Site: www.sbccedar.com

This installation guide merely provides general guidelines on cedar shingling installation. Although its content is accurate, it does not cover all the intricacies encountered in individual projects. Moreover, since building codes tend to differ from one area to the next, it is always best to consult an expert prior to proceeding. This being the case, SBC shall not be held liable for any damage or prejudice resulting from the use of its products and any information found herein.



**SBC's** seasoned team manufactures eastern white cedar shingles, which meet the market's highest quality standards. Our primary focus is customer satisfaction achieved through personalized service and sustained quality.

This installation guide is yet another example of our engagement. In it, we trust you will find useful information to enable you to produce cedar shingling which meets your expectations.

Cedar shingles make a long-lasting, natural-looking covering renowned for the inherent oils that protect it against rotting and insects. Moreover, cedar features high insulation properties and can withstand variations in temperature and moisture.

SBC manufactures the rebutted and resquared (R&R) shingle, a high-quality product of enhanced beauty that is quick and easy to instal. It is distinguished by its perfectly straight butt, perpendicularly square with its two truly parallel sides. This is why using SBC R&R shingles ensures substantial savings in installation labor costs

### **Features**

Eastern white cedar shingles come in four grades, each with its own distinctive features and applications:

Extra "A"

- 1st grade (top grade)
  - No imperfections
  - Roofs and exterior walls

Clear "B'

2<sup>nd</sup> Clear "C"

Utility "D"

- 2<sup>nd</sup> grade (standard grade)
- No imperfections on exposed surface (up to 6") (15.2 cm)
- Roofs (at least a 4:12 (18°) slope) and exterior walls
- 3<sup>rd</sup> grade (economy grade)
- Sound knots on whole surface
- Exterior walls (secondary buildings) and interior decoration (rustic appearance)
- Lowest grade
- Various imperfections
- Multipurpose (under course, shims)
- Variable bundle sizes available (shims, 10/10, 12/12, 14/14)

# Figuring Out the Quantity

The part of the shingle left uncovered is called "exposure", the measure used in determining the quantity of shingles required to cover a given surface. Choosing adequate exposure is key to achieving the right overall appearance and durability of your cedar shingling.

### Area Covered by 1 Square (4 bundles)

Common Exposures	Areas Covered
4" (10.2 cm)	80 sq. ft. (7.4 m²)
5" (12.7 cm)	100 sq. ft. (9.3 m²)
6" (15.2 cm)	120 sq. ft. (11.2 m²)

### Ventilation

It is important to ensure adequate air circulation underneath shingles to enhance durability, reduce moisture, and save energy. For this purpose:

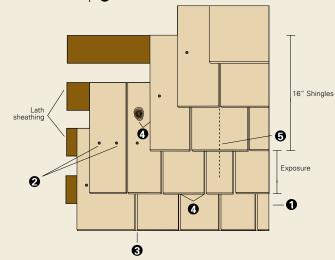
- Instal horizontal wooden laths by setting them apart by a distance equal to exposure (center to center)
- Leave 1/2"gap (1.3 cm) between tips of two adjoining laths
- Nail shingles directly on laths
- Normally, 1" x 4" (2.5 cm x 10.2 cm) laths are used
- It is also possible to use the Cedar Breather<sup>™</sup> (roofs) and Home Slicker<sup>™</sup> (walls).

### General Installation Procedure

Following these recommendations will contribute to your long-term satisfaction:

- Install shingle with butt downwards
- Always work from bottom to top
- Draw a line and place a wooden board at each row to align shingles horizontally
- Use rust-resistant shingle nails (galvanized or aluminum) of about 1-1/2" (3.8 cm) long
- Measure surface to cover and divide by desired exposure to figure out number of courses to instal. Afterwards, adjust exposure to produce even courses
- For 1<sup>st</sup> row (wall, roof), always lay double course of shingles and offset them by at least 1-1/2" (3.8 cm) so that joints do not line up

- Always use 2 nails per shingle at about 3/4" (1.9 cm) from either side, and at 1-1/4" (3.2 cm) above butt of succeeding course 2
- Leave gap of 1/16" to 1/4" (0.2 cm to 0.6 cm) between neighboring shingles to allow for expansion due to wood moisture 3
- Joints of successive courses must always be offset by at least 1-1/2" (3.8 cm) to prevent water buildup. Deal with shingle imperfections in the same way 4
- Never allow joints from any 3 consecutive courses to line up **6**



# Angles, Corners, Openings, Edges

In all these cases, it takes flashing, which comes in various shapes and sizes, and can be made of metal, aluminum, or galvanized steel. If metal is chosen, it will require painting on both sides to make it rustproof. In addition to concealing structural cutting imperfections at some places, proper, well-installed flashing is instrumental to prevent rotting, as well as water and insect infiltration.

Depending on seepage risks, flashing is installed underneath or on top of shingles, and generally extends about 4" to 8" (10.2 cm to 20.3 cm) on either side.

For flashing installation, care must be taken not to drive nails in near center, especially on roof. Remember: shingles must be trimmed with same angle as flashing. Furthermore, for areas more prone to infiltration, caulking joints with silicone is recommended.

### Walls

- Bottom course should protrude by at least 1" (2.5 cm) from top of foundation
- Adjust course exposure to come even with top of doors and windows
- Generally speaking, allow an exposure of 5" to 6" (12.7 cm to 15.2 cm)
- For grade "A" (Extra), exposure on a wall can reach 8" (20.3 cm)
- Leave at least 4" (10.2 cm) for last course at the top
- Instal flashing at top of wall and then cover with shingles
- For corners, there are 2 ways: either with shingles by alternating the courses from each wall, or with boards that cover up corner entirely

### Roofs

- Instal flashing to cover 8" (20.3 cm) of lower edge
- Start with double course nailed over flashing while allowing shingles to overhang eaves by 1-1/2" (3.8 cm) for proper water drainage
- Exposure depends on roof slope:

Slope	Exposure
4:12 (18°) and more	5" (12.7 cm)
3:12 (14°) to 4:12 (18°)	3-3/4" to 5" (9.5 cm to 12.7 cm)
3:12 (14°) and less	cedar shingles are not recommended

