



Walls:

- Calculate the total area to be covered and choose your exposure
- Divide the area by the area covered depending on the exposure
 - 4 inch exposure 1 square covers 80 sq/ft
 - 5 inch exposure 1 square covers 100 sq/ft
 - 6 inch exposure 1 square covers 120 sq/ft
 - Ex: 300 sq/ft at 5" coverage requires 3 squares
 - 1 square is 4 bundles so 12 bundles required
 - See grid supplied





Roof:

- Since roof have steeper slopes and are more exposed to weather, less coverage is recommended
- If the right coverage is chosen, the roof could be covered by 3 layers providing a roof that will last for 25 to 30 years

Courtesy of :





Ventilation: the right way

- Proper ventilation is essential:
- For shingling roofs or walls, proper ventilation is essential for durability, quality and longevity.
- Proper ventilation reduces moisture considerably.
- Proper ventilation with lath sheathing results in significant savings in energy costs.
- Always install shingles over spaced sheathing, using 3 cm x 10 cm (1 in. x 4 in.) laths.
- Shingle exposure should not be more than 15 cm (6 in.).
- Installing a mesh screen is necessary to prevent insects from getting in through ventilation space on corners, edges or walls.
- Lath sheathing should be nailed in a staggered pattern: 4 nails to form a square and 1 nail in the middle.
 Courtesy of :





Roof installation

Using the Right Nails

- First be sure to use rust-resistant nails to nail down shingles.
- Nails must be long enough to go 128 mm (1/2 in.) into the sheathing or deck. Some codes require that nails go 132 mm (3/4 in.) into the deck.

Starting Right

- Install spaced sheathing. Shingles must always be nailed to sheathing for ventilation. Check building codes to make sure proper sheathing is used for the type of building being roofed.
- Install drip edge and valley flashing material.
- Install a starter course at the eaves of the roof, allowing a 4 cm (11/2 in.) overhang beyond the eaves fascia and a 128 mm to 192 mm (1/2 in. to 3/4 in.) overhang beyond the rake fascia.
- Install the first course of wood shingles on top of the starter course. If required (heavy snow regions), overlay the starter course with two layers of shingles.
- To align the starter course and first course, nail down a shingle with the correct overhang on each end of the eaves. Drive a nail into the butt of each shingle and stretch and tie a string between the nails.







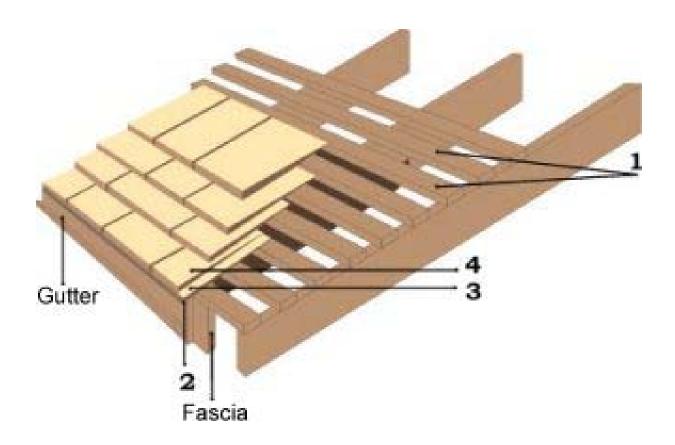
- Every third or fourth course, measure from the eaves up to the butts of end shingles and snap a chalk line to align butts of the next course of shingles.
- To allow for expansion of a pre-finished shingle, space shingles 3 mm to 6 mm (1/8 in. to 1/4 in.) apart. (Depending on degree of humidity.)
- Offset adjacent shingle courses by at least 4 cm (11/2 in.). For heavy snow regions, increase to 5 cm (2 in).
- Do not let two joints line up directly in any three courses.
- Use two nails at 2 cm (3/4 in.) from each edge of the shingle and 4 cm (11/2 in.) above the exposure or butt of the succeeding course.
- Avoid cutting shingles at ridge by shortening exposures of last few courses installed below ridge.





Typical Roof Installation





Courtesy of :



<u>Chimneys</u>

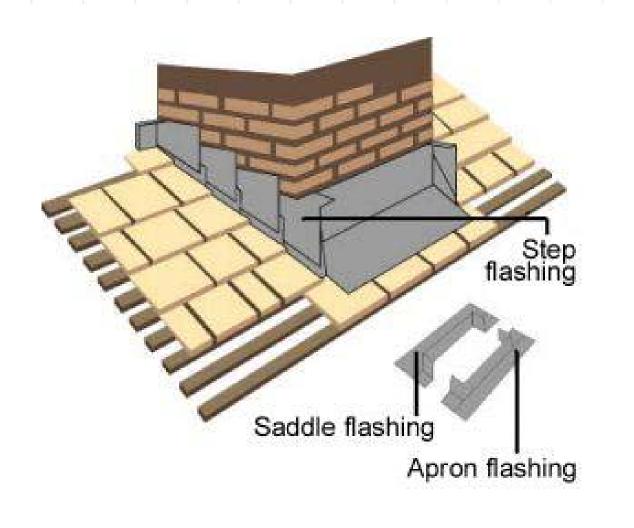
- Saddle flashing goes upslope of chimney.
- Apron flashing goes on the downslope side.
- Cricket flashing may be used instead of saddle flashing.
- Extend apron flashing at least 8 cm (3 in.) up the vertical surface.
- It should go at least 11/2 times the shingle exposure (minimum 15 cm or 6 in.) over roof slope.
- Carry cricket flashing at least 25 cm (10 in.) under the shingles.
- Extend step flashing over the roof at least 8 cm (3 in.) and up the chimney. Cover by at least 10 cm (4 in.) with counterflashing.
- Lap each step flashing over next piece by at least 8 cm (3 in.).
- Install counterflashing to extend down within 3 cm (1 in.) of finished roof surface.





Typical Chimney Installation





Courtesy of :





Roof valleys

- After flashing is installed, shingle away from both sides of the valley.
- This way, all shingles adjacent to valleys can be cut using the same pattern.
- Install shingles to within 5 cm to 10 cm (2 in. to 4 in.) on each side of the centre line of valley.
- Never allow joints between shingles to break into a valley: make sure all joints have a solid shingle beneath and on top of them.
- Never lay shingles with the grain parallel with the centre line of a valley.
- Shingles should lap at least 18 cm (7 in.) over each side of valley flashing.







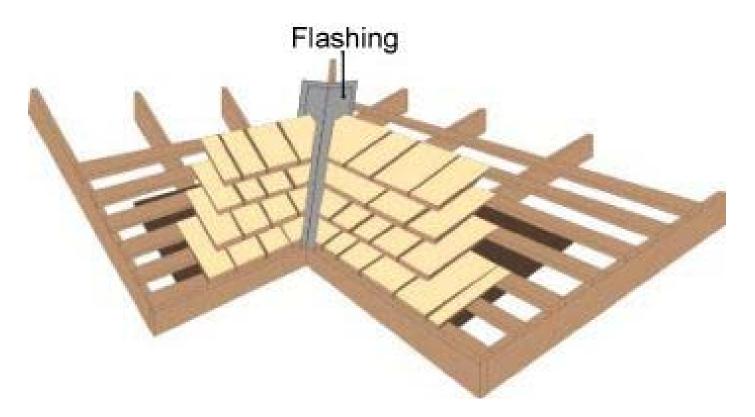
- Install shingles at top of valley at least 10 cm (4 in.) from each side of centre line, increasing by 32 mm (1/8 in.) per 30 cm (1 ft) down the valley.
- Snap chalk lines down both sides of valley for guidelines.
- Follow same principles for shingling into a hip.
- Use one shingle as a pattern for cutting the other shingles.
- Where a shingle course ends at a hip, cut each shingle individually.
- Use triangular pieces cut from shingles used in valleys to finish hip edges.















Helpful details on aligning

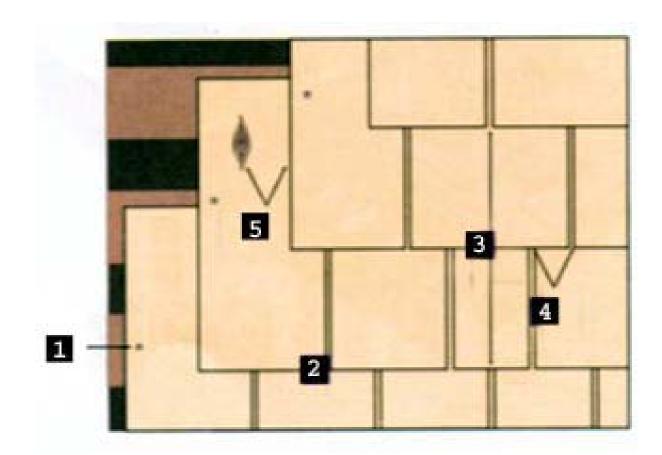
- Place two nails 2 cm (3/4 in.) from each edge of the shingle and 4 cm (1 1/2 in.) above the exposure.
- To avoid buckling, allow 3 to 6 mm (1/8 to 1/4 in.) space between each shingle for expansion (depending on degree of humidity).
- Joints must not line up with joints in the two courses below.
- There must be at least 4 cm (1 1/2 in.) space between joints in successive courses.
- Joints must be placed in alternating rows, at least 4 cm (1 1/2 in.) from the start of imperfections.





Typical Alignment











Wall installations

New Construction: Walls

- Install metal flashing above window and door openings, and caulk around openings.
- Installing metal flashing over all inside corners is also recommended.
- Make sure all door and window casings are in place before starting shingling.
- Exposure on wall shingles can be much greater than roof shingles as walls are less exposed to weather conditions.
- For quantity of shingles required, refer to the "Calculating the right quantity" section.
- First row should always be two shingles thick and protrude at least 2.5 cm (1 in.) from top of foundation







Wall installations (Con't)

Shingling Existing Walls

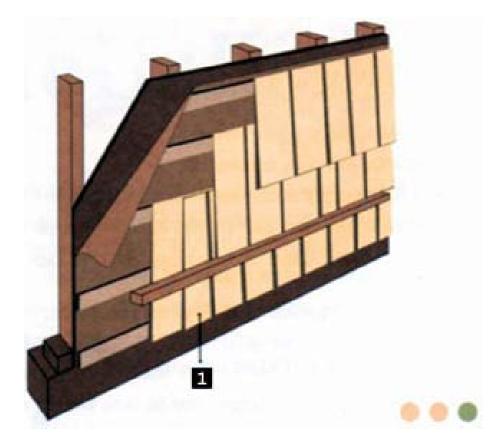
 Shingles are always nailed to 2.5 x 10 cm (1 x 4 in.) wooden laths fixed directly to the frame or existing wall covering. For courses, exposure and installation of shingles, follow steps for new construction walls.





Typical Wall Installation











Hip and ridge units

- Using prefabricated hip and ridge units is faster as they come with mitered joints and concealed nailing.
- For hip roofs, install hip units before ridge units.
- Use same exposure as for shingles when installing hip and ridge units.
- Install double starter units over the first course of shingles at low end of each hip.
- Temporarily install a hip unit at the top of the hip.
- Snap chalk lines on each side of the hip along the edges of both hip units.
- Chalk lines serve as guides for positioning the rest of hip units.







Hip and ridge units (Con't)

- Install ridge units at both ends of the ridge working toward the centre of the roof.
- Create a saddle to cover where both courses meet.
- Use two rust resistant nails to install each hip and ridge unit.
- Use nails long enough to go 1.5 cm (1/2 in) into the deck.
- Applying a 13-kg (30-pound) felt or kraft paper under hip or ridge units is recommended.
- Installing concealed metal hip and ridge flashing is a good idea for a more lasting roof and underlayment.





Typical Hip and ridge units



