

Arcadia Shake™

16

YOUR OBJECTIVE:

To learn the correct method for installing Arcadia Shake™.

ARCADIA

This shingle is a “best” quality roofing product. This means that when offering a choice of “good,” “better” and “best” products, this shingle would fall in the “best” category. Arcadia is an oversized 9½" x 37½" designer shingle with an 8" exposure.

Fastening, steep slopes, and flashing requirements are special because of the thickness, design, and weight of this product.

FOR UL FIRE RATING, underlayment may be required. Apply flat and unwrinkled.

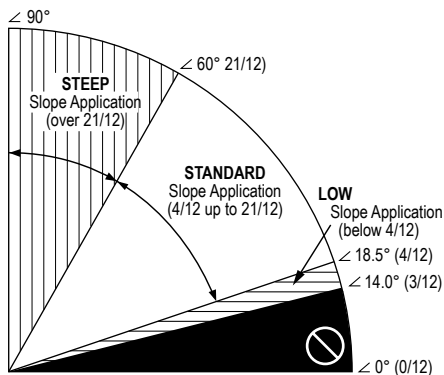


Figure 16-1: Slope definitions

IMPORTANT: Do not apply Arcadia Shake below 3/12 slope.

STANDARD OR STEEP SLOPES: CertainTeed recommends DiamondDeck® Synthetic Underlayment, Roofers' Select® High Performance Underlayment, or shingle underlayment meeting ASTM D226, D4869 or D6757. Take care to ensure sufficient deck ventilation when DiamondDeck or other synthetic underlayment is installed. Follow manufacturer's application instructions.

LOW SLOPES: One layer of CertainTeed's WinterGuard® Waterproofing Shingle Underlayment (or equivalent, meeting ASTM D1970) or two layers of 36" (914 mm) wide felt shingle underlayment (Roofers' Select or underlayment product meeting ASTM D226, D4869 or D6757) lapped 19" (483 mm) must be applied over the entire roof; ensure sufficient deck ventilation. When DiamondDeck or other synthetic underlayment is installed, weather-lap at least 20" (500 mm) and ensure sufficient deck ventilation. Follow manufacturer's application instructions.

THE ROOF DECK MUST BE AT LEAST: ¾" (9.5 mm) thick plywood, or 7/16" (11 mm) thick non-veneer, or 1" (25 mm) thick nominal wood deck.

COLD WEATHER CLIMATES (ALL SLOPES): WinterGuard or its equivalent is strongly recommended whenever there is a possibility of ice build-up. Follow manufacturer's instructions.

FLASHING: Corrosion-resistant flashing must be used to help prevent leaks where a roof meets a wall, another roof, a chimney or other objects that penetrate a roof.

SEALING: Shingle sealing may be delayed if shingles are applied in cool weather and may be further delayed by airborne dust accumulation. If any shingles have not sealed after a reasonable time period, hand sealing may be necessary.

CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

WARRANTY: These shingles are warranted against manufacturing defects and are covered by SureStart™ protection. See the warranty itself for specific details and limitations.

For technical questions, information on acceptable alternative application methods and materials, or a copy of the product warranty, contact the sources listed below:		Warranty	Alternate Instructions	Technical Questions
Your supplier or roofing applicator		✓		
CertainTeed Home Institute	800-782-8777	✓	✓	
CertainTeed-RPG Technical Services	800-345-1145	✓	✓	✓

FASTENING

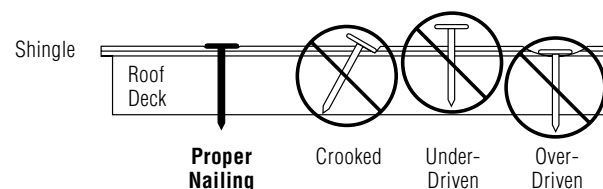


Figure 16-2: Proper and improper nailing.

IMPORTANT: For decks ¾" (19 mm) thick or thicker, nails must go at least ¾" (19 mm) into the deck. On thinner decks, nails must go at least ⅛" (3.2 mm) through the deck.

Nails must be 11 or 12 gauge roofing nails, corrosion-resistant, with at least ¾" (9.5 mm) heads, and at least 1¼" (32 mm) long.

NOTE: Nails are required as fasteners for this product; staples are not allowed.

LOW AND STANDARD SLOPE

Use SIX nails for every full shingle located as shown below.

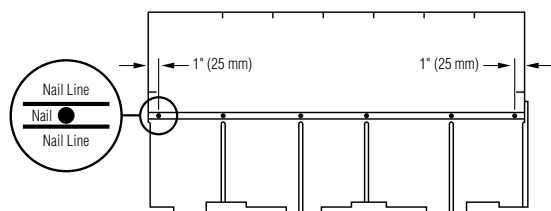


Figure 16-3: Use six nails for every full shingle.

STEEP SLOPE

Use SIX nails and FOUR spots of asphalt roofing cement for every full shingle as shown below. Apply asphalt roofing cement 1" (25 mm) from edge of shingle. Asphalt roofing cement meeting ASTM D 4586 Type II is suggested.

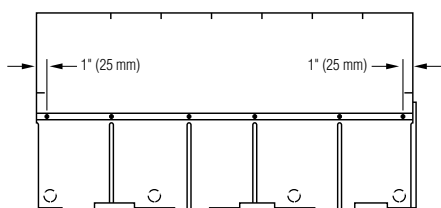


Figure 16-4: Use six nails and four spots of asphalt roofing cement on steep slopes.

CAUTION: Excessive use of roofing cement can cause shingles to blister.

STEPPED-OFF DIAGONAL METHOD FOR CLEAN-DECK APPLICATION

5" STEPPED-OFF DIAGONAL APPLICATION METHOD (NEW ROOF OR TEAR-OFF)

UNDERLAYMENT: Apply as required.

ALIGNMENT: Snap horizontal and vertical chalklines to help assure consistent average 8" (203 mm) exposure of all shingles and to align diagonal offsets from course to course. Use the shingle's "side cut" feature to obtain 8" (203 mm) nominal exposure by aligning the "side cut" feature to top of previous course. Maintain the 5" (127 mm) offset consistently from course to course throughout the entire roof application using the top edge laying lines. Where needed, such as going around a dormer, other increments of 5" (127 mm) could be used. Fasten all shingles as shown in the "Fastening" section.

IMPORTANT: Do not align end joints of a given course closer than 5" (127 mm) from one another including starter shingles. This will prevent having a side joint over a side joint. Side "shiplap" feature is designed to close shingle end joints.

STARTER COURSE: (TWO LAYERS OF STARTER MATERIAL ARE RECOMMENDED): Use two layers of Presidential® Starter of similar color, or a lower layer of full width 15 1/4" (387 mm) SwiftStart® or a 10" (254 mm) High-Performance Starter and then a top layer of Presidential Starter. Follow Presidential Starter application instructions and/or other optional starter instructions

(see below). **NOTE:** All starter shingles need to be 10" (254 mm) or greater in width. Extend the shingles over the rake and eaves about 1/2" (13 mm) if drip edge is used, or about 3/4" (19 mm) if no drip edge is used.

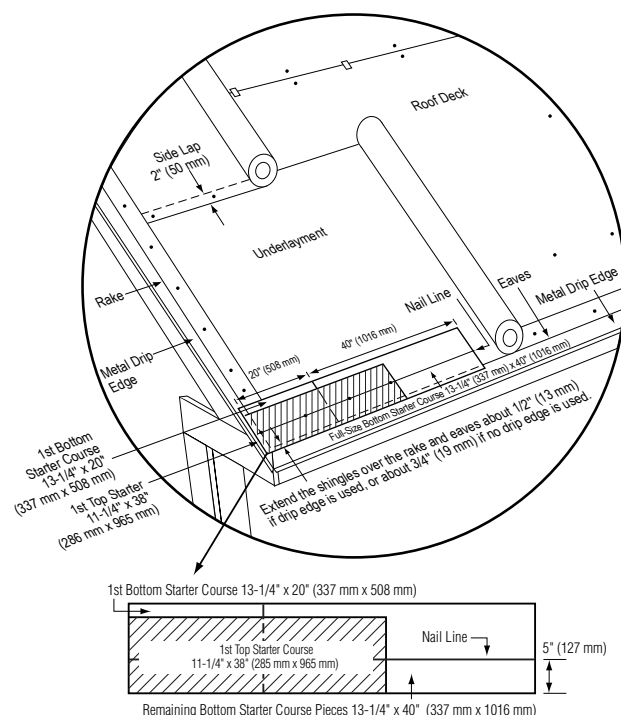


Figure 16-5: Starter course

ALTERNATE STARTER COURSE APPLICATION METHOD:

Use one layer of full width Presidential Starter. **For the first starter shingle**, cut 20" (508 mm) off from one side and apply the remaining 13 1/4" x 20" (337 mm x 508 mm) piece to the lower left corner of the roof. **For the next five starter shingles**, apply full 13 1/4" x 40" (337 mm x 1016 mm) pieces.

For the seventh starter shingle, cut 20" (508 mm) off and apply the remaining 20" (508 mm) piece. Continue to apply starter shingles along the eave by using cut 20" (508 mm) and full 40" (1016 mm) pieces following the same instructions for the first seven starters (one 20" [508 mm] followed by five 40" [1016 mm] then repeat).

NOTE: Every multiple of the "7th starter piece" must be cut to 20" (508 mm) to avoid a joint less than 5" (127 mm) from the Arcadia Shake shingle applied above it. Do not install a starter piece that creates a joint less than 5" (127 mm) from the field shingle above.

1ST COURSE: Apply a full Arcadia shingle beginning at the lower left corner of roof, aligning left and bottom edges flush with starter shingle (see below).

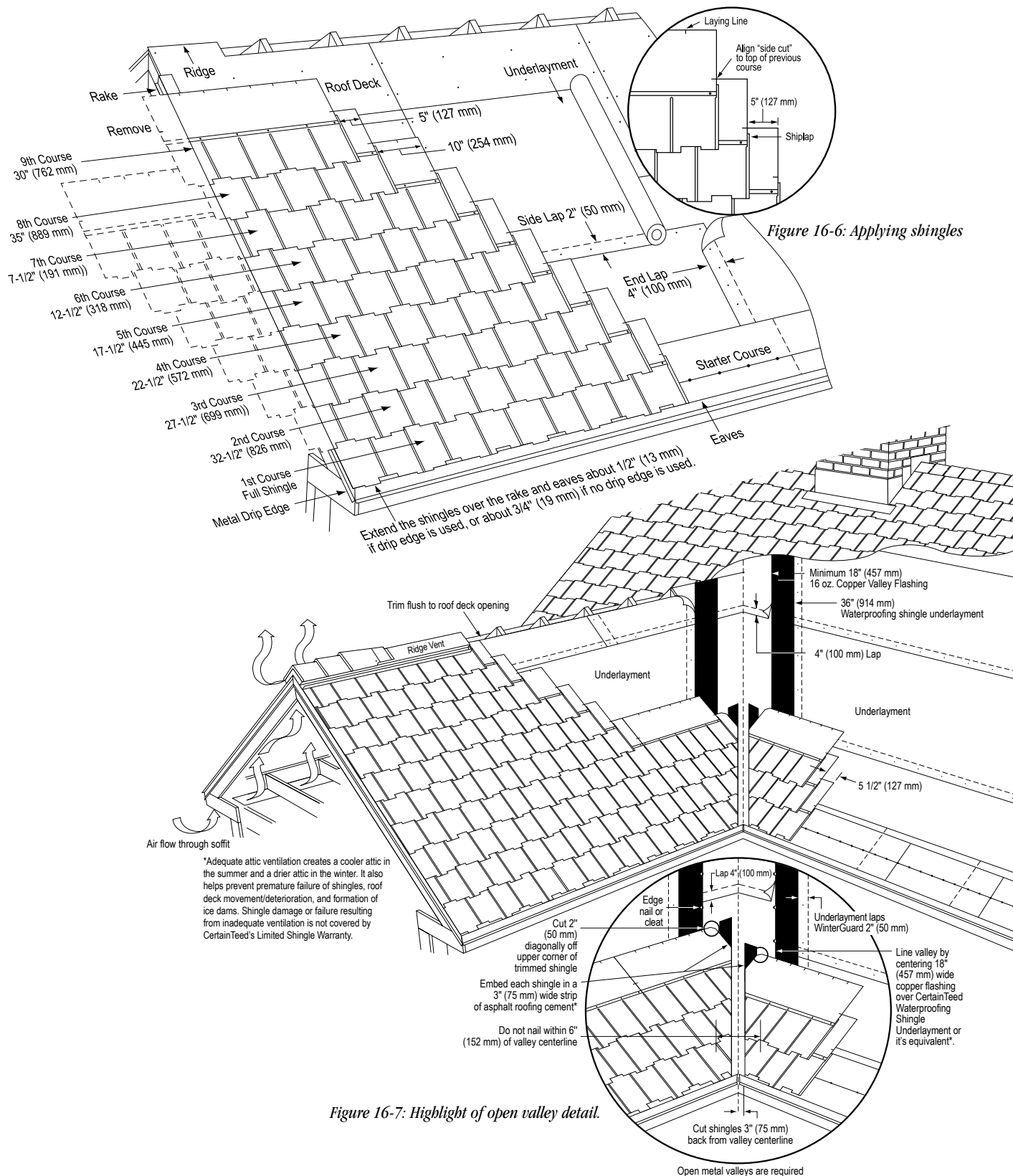
2ND COURSE THROUGH 7TH COURSE: Apply right edge of shingle aligning it to the far right laying line of the previous course. For correct exposure align "side cut" to top of previous course. Cut the overhanging rake side piece off the left side of the shingle. (see Figure 16-6). The 7th course remaining piece is approximately 7 1/2" (191 mm). Install full shingles flush against the seven applied courses overlapping the shiplap piece (see Figure 16-6).

SUCCEEDING COURSES: To start the 8th course, shift a full shingle to the second laying line at 10" (254 mm) from the right side of the previous shingle below, cut the overhanging rake side piece off the left side of the shingle and install full shingles to the right to finish this horizontal course.

For the 9th course and as you continue up the rake, shift a full shingle to the first laying line at 5" (127 mm) from the right side of the previous shingle below, cut the overhanging rake side piece off the left side of the shingle. Do not start a course with a single piece

less than 7½" (191 mm) in length or that does not maintain the 5" (127 mm) offset dimension with the shingle course below it except when a 10" (254 mm) shift is required as illustrated. Finish the horizontal courses with full shingles, working from the eaves up the roof from left to right. **NOTE:** This is the only approved method of application for Arcadia shingles.

Roofing over an Existing Roof (Roof-Over) is not allowed with these shingles.



CHIMNEY FLASHING

METAL STEP FLASHING: First course of metal flashing must consist of a minimum 5" x 12" (127 mm x 305 mm) piece applied flush with the lowermost edge of the first shingle. Succeeding courses of flashing must consist of pieces that are a minimum 5" x 12" (127 mm x 305 mm) in size applied with the top edge of the flashing even with the top of the shingle. Each succeeding course of flashing must "overlap" the flashing course beneath it a minimum of 2" (50 mm).

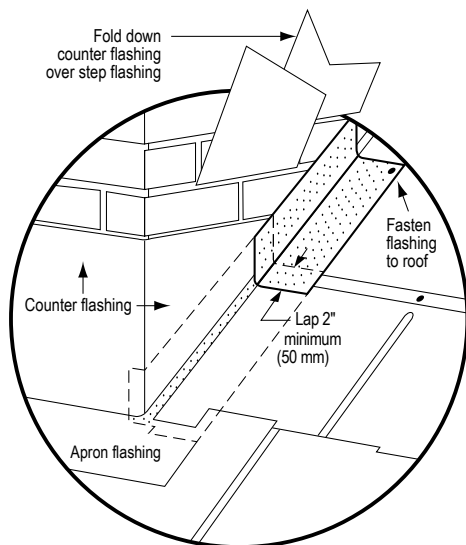
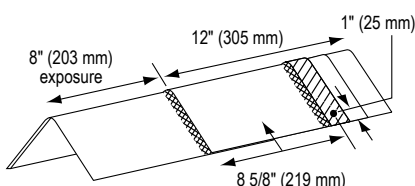


Figure 16-8: Flashing around a chimney.

CEDAR CREST® HIP AND RIDGE



Use Cedar Crest accessory shingles to cover hips and ridges. Carefully separate the three-piece units prior to application, by first folding along the pre-cut lines and then detaching the pieces (see Figure 16-9). No cutting is necessary. There are 30 individual shingles (10 three-piece units) in each bundle. One bundle will cover 20 linear feet. Each 12" x 12" (305 mm x 305 mm) shingle has a shadowline that is a design feature which is visible when applied properly. To prevent shingle damage during application, they must be sufficiently warm to allow proper forming.

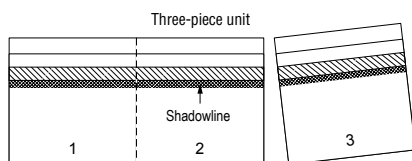


Figure 16-9: Separate to make 3 cap shingles.

FASTENING

IMPORTANT: Use TWO nails to fasten each shingle. Fasteners must be minimum 1³/₄" (45 mm) long. For the starter shingle, place fastener 1" (25 mm) in from each side edge and about 2" (50mm) up from the starter shingle's exposed butt edge, making sure fastener goes ³/₄" (19 mm) into the deck or all the way through the deck. (see Figure 16-10). For each full Cedar Crest shingle, place fasteners 8⁵/₈" (219 mm) up from its exposed butt edge and 1" (25 mm) in from each side edge (see Figure 16-11).

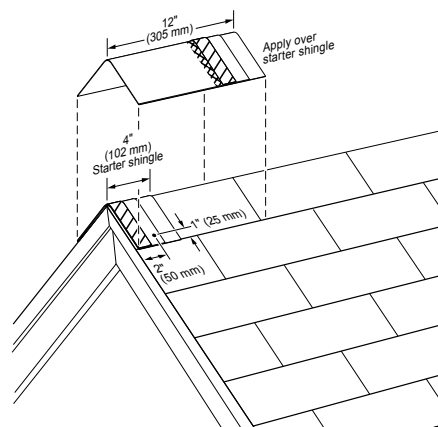


Figure 16-10: Apply a full cap shingle over the starter shingle.

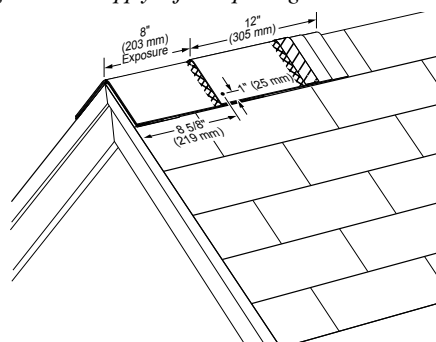


Figure 16-11: Install cap shingles at an 8" exposure and fasten with one nail on each side as shown.

IMPORTANT: High Wind Instructions. In order to achieve the ASTM D3161 Class "F" Wind Resistance Classification each "hip and ridge" shingle must be both – (1) fastened with nails as shown and (2) hand-sealed with two 1/4" (6 mm) wide beads of either BASF "Sonolastic® NP1™ Adhesive" or Henkel "PL® Polyurethane Roof & Flashing Cement" applied from the middle of the shingle's raised overlay on the top piece and extending approximately 4" (100 mm) along the sides of the headlap along a line 3/4"-1" (19 mm-25 mm) in from each side edge of the shingle's headlap as shown. Immediately align and apply the next overlying shingle, gently pressing tab sides into adhesive.

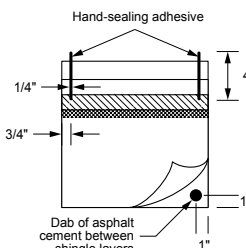


Figure 16-12: Hand seal caps.

Only one side of the double thickness tab is laminated together; to secure the other side, after folding the shingle over the ridge and nailing into position, a 1" (25 mm) diameter spot of either NP1 or PL adhesive must be applied between the shingle layers as shown. Immediately align and apply the next overlying shingle, gently pressing tab sides into adhesive.

CEDAR CREST APPLICATION

Apply primary roofing up to hip or ridge on both sides of roof and trim flush. Ensure that the Cedar Crest shingles will adequately cover the top course of the shingles on both sides of the hip or ridge. Prepare a 4" (100 mm) "starter" shingle by cutting off the lower 8" (200 mm) color granule portion of one Cedar Crest shingle.

Apply the 4" (100 mm) starter piece with raised overlay edge over the bottom corner of the hip or to either end of the ridge, overhanging the corner or end by approximately $\frac{1}{2}$ " (12 mm) and bending the starter shingle along its centerline to form into place (see Figure 16-10). Install a nail on each side about 2" (200 mm) up from the starter shingle's exposed butt edge and 1" (100 mm) in from each side edge of the shingle.

Then apply a full 12" x 12" (305 mm x 305 mm) piece over the starter, bending the shingle along its centerline and forming it into place over the hip or ridge, flush with the bottom and side edges of the starter shingle. Fasten with two nails minimum $1\frac{3}{4}$ " (45 mm) long with one nail on each side of shingle $8\frac{5}{8}$ " (219 mm) up from the butt edge and 1" (25 mm) in from each side edge (see Figure 16-11).

Continue application of Cedar Crest shingles up the hip or along the ridge, forming each shingle over the hip or ridge, and fasten as shown in Fastening. Expose Cedar Crest shingles 8" (200 mm), covering all fasteners. To assist in proper alignment, snap a chalk line parallel to the hip or ridge applying along the line where the side edges of the Cedar Crest shingles should be.

MOUNTAIN RIDGE® HIP AND RIDGE

Use Mountain Ridge accessory shingles to cover hips, ridges or rake edges. One box will cover 20 linear feet.

FASTENING

Use two nails to fasten each shingle. Nails must be minimum $1\frac{3}{4}$ " (45 mm) long. For the 4" (100 mm) starter shingle, place fastener 1" (25 mm) in from each side edge and about 2" (50 mm) from the rake (or eave) edge, making sure the fastener goes $\frac{3}{4}$ " (19 mm) into the deck or all the way through. For each full accessory shingle, place fasteners $8\frac{5}{8}$ " (219 mm) up from its exposed butt edge and 1" (25 mm) in from each side edge.

MOUNTAIN RIDGE APPLICATION

Prepare a 4" (100 mm) Starter shingle by cutting off the lower 8" (200 mm) color granule butt portion of one accessory shingle. Apply the 4" (100 mm) starter piece (with sealant nearest the outer edge) over the bottom corner of the hip or on either end of the ridge. Install a nail on each side about 2" (50 mm) up from the starter shingle's exposed butt edge and 1" (25 mm) in from each side edge of the shingle. Next, apply a full Mountain Ridge shingle over the installed starter shingle, flush with the bottom and side edges of the starter shingle. Install a nail on each side of the shingle $8\frac{5}{8}$ " (219 mm) up from the bottom edge and 1" (25 mm) in from each side edge.

Continue application of the Mountain Ridge shingles as shown.

Expose Mountain Ridge shingles 8" (200 mm), covering all fasteners.

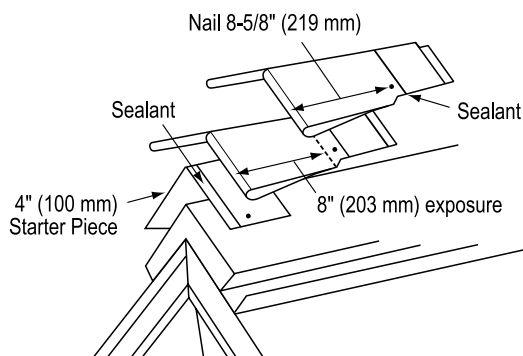


Figure 16-13: Hip and ridge application.