



Shingle Application Instructions - 3-Tab Shingles

DIRECTIONS

NOTE: SHINGLES MUST BE APPLIED PROPERLY. WE ASSUME NO RESPONSIBILITY FOR LEAKS OR DEFECTS RESULTING FROM POOR APPLICATION OR FAILURE TO PROPERLY PREPARE THE SURFACE TO BE ROOFED OVER, OR FAILURE TO PROVIDE PROPER VENTILATION IN ACCORDANCE WITH MINIMUM PROPERTY STANDARDS REQUIREMENTS. REVIEW ALL APPLICABLE BUILDING CODES, MINIMUM PROPERTY STANDARDS AND REQUIREMENTS PRIOR TO APPLYING THESE SHINGLES USING THE APPLICATION INSTRUCTIONS FOUND ON THE WRAPPER. PLEASE USE CAUTION WHEN STACKING BUNDLES ON SLOPED ROOFS.

ROOF DECK: Must be smooth, firm, dry and securely nailed. Plywood must be exterior grade, conforming to building code requirements. Half-inch plywood is recommended for best deck performance. The installation of asphalt shingles on dimensional lumber (including shiplap/board decks) is not recommended as it may potentially cause buckling problems. Buckling is not covered by our Limited Warranty. **REROOFING:** Split and re-nail curled or buckled shingles, replace any missing shingles, remove loose or protruding nails, and sweep surface clean. Roof slope should be 4:12 or steeper. For slopes 4:12 to 2:12, see special underlayment requirements outlined below. Never apply asphalt shingles to roof slopes less than 2:12

EAVE PROTECTION: Apply eave protection as per building code requirements, overhanging eaves by a nominal 1/4" and extending up the roof at least 24" beyond the interior wall line. Ice & Water Protector is recommended for best performance, applied according to instructions printed on each wrapper.

UNDERLAYMENT: For areas where the roof slope is less than 4" per foot down to 2" per foot, use one layer of ICE AND WATER PROTECTOR, applied according to instructions printed on each wrapper. Alternately, use 2 layers of asphalt saturated felt (or equivalent), the first sheet overlapping the eave protection by 19", followed by full 36" widths overlapping each preceding course by 19". **(NOTE: IF THESE PROCEDURES ARE FOLLOWED, SHINGLES APPLIED TO SLOPES 3:12 TO 4:12 WILL BE WARRANTED FOR THE FULL WARRANTY TERM FOR THE SHINGLE. SHINGLES ON SLOPES 2:12 TO 3:12 WILL BE WARRANTED FOR 12 YEARS.)** For areas where the roof slope is 6" per foot down to 4" per foot, it is strongly recommended to cover the remainder of the deck with one ply asphalt saturated felt (or equivalent) laid parallel to the eaves, with 2" horizontal laps and 4" end laps. Apply metal drip edges on top of any underlay along rake edges and directly to the deck along eaves.

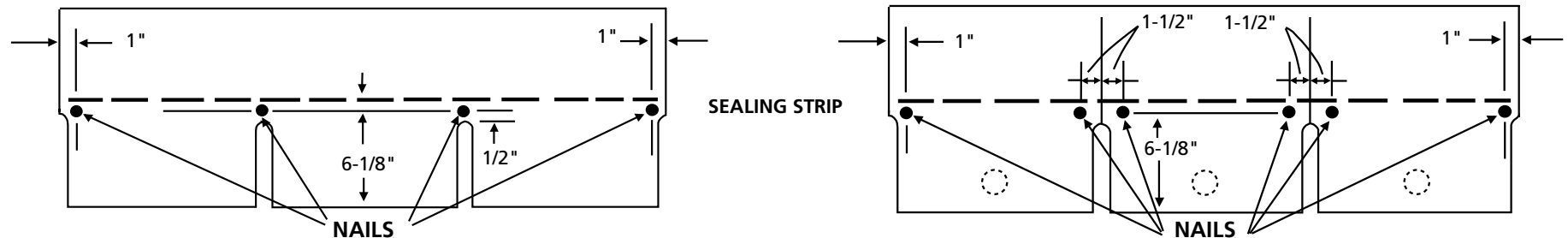
CHALK LINES: Sufficient chalk lines should be struck to ensure accurate vertical and horizontal alignment of shingles. Vertical chalk lines every 4 to 5 shingle lengths are recommended for alignment of cutouts.

FLASHINGS: Base flashing should be in place before shingles are applied. Cap flashings of sheet metal and base flashing of metal or mineral surfaced roofing should be used at chimneys, skylights, vents, walls and other vertical surfaces and sealed with asphalt plastic cement. Flashing shall conform to the requirements of applicable building codes and good roofing practice.



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NAILING: Use galvanized (zinc coated) roofing nails, 11 or 12 gauge, with at least 3/8" diameter heads, long enough to penetrate through plywood or 3/4" into boards. Use 4 nails per shingle placed 6-1/8" above the butt edge, approx. 1" and 13" from each end and 1/2" above each cutout. Drive nails straight so that nail head is flush with, but not cutting into shingle surface.



DO NOT NAIL INTO OR ABOVE THE SEALING STRIP

NAILING ON STEEP SLOPES/HIGH WIND AREAS: For high wind areas, or on slopes of 21" per foot (60°) or more, use 6 nails per shingle placed as shown above. Ensure that no nail is within 2" of a joint/cutout of the underlying shingle. Seal down each shingle at time of application with three 1" diameter (approx. size and thickness of a quarter) spots of asphalt plastic cement placed under the shingle 2" above the bottom edge and equally spaced along the shingle. Apply plastic cement in moderation since excessive amounts may cause blistering. In Canada, manual sealing in addition to 6 nails is required for High Wind zone warranty coverage. Manual sealing is not required in the state of Florida. **CAUTION:** Shingles should seal to the underlying course when the factory applied asphalt sealant is sufficiently warmed by the heat of direct sunlight. When application conditions might limit the effectiveness of the sealing strip, such as in cool weather or in areas subject to high winds or blowing dust, shingle adherence should be ensured through manual sealing as described above.

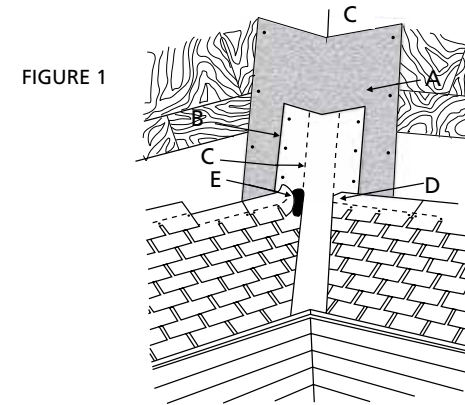
To ensure coverage under the High Wind Resistance Limited Wind Resistance Warranty;

- the shingles must be installed with additional nails as above, and
- the shingles must have an opportunity to seal or be manually sealed as described above, and
- Manual sealing is not required in the state of Florida.
- Starter strip shingles must be used at all eaves and rakes.



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OPEN METAL VALLEY: (FIGURE 1) For longer roof performance metal valleys are recommended. Complete valley flashing before shingles are applied. Center a 36" width strip of 50 lb. roll roofing or ICE & WATER PROTECTOR (A) in the valley. Ensure flashing is tight to the deck, then fasten with only enough nails to hold in place, nailing at the edges only. Center a minimum 24" wide, minimum 28 gauge pre-finished/galvanized metal valley liner (B) in the valley, and fasten with only enough nails to hold in place, nailing at the edges only. Snap two chalk lines (C) the full length of the valley, 6" apart at the top and increasing in width 1/8" per foot towards the bottom. When the shingles are being applied, lay them over the valley flashing, trim the ends to the chalk line, and cut a 2" triangle off the corner to direct water into the valley (D). Embed the valley end of each shingle into a 3" band of asphalt plastic cement (E), and nail the shingles 2" back from the chalk line. **CLOSED CUT AND WOVEN VALLEYS ARE ALSO ACCEPTABLE.**



SHINGLE APPLICATION:

STARTER COURSE: If 3-tab shingles are used, cut off the tabs along a line level with the top of the cutouts, and install the starter course with the factory applied sealant adjacent to the eaves overhanging the rake edges and eaves by a nominal 1/4" minimum. Begin starter course (A) with a shingle cut 4" short so that joints will not coincide with joints between first course shingles.

RANDOM SPACING (PREFERRED METHOD) (FIGURE 2)

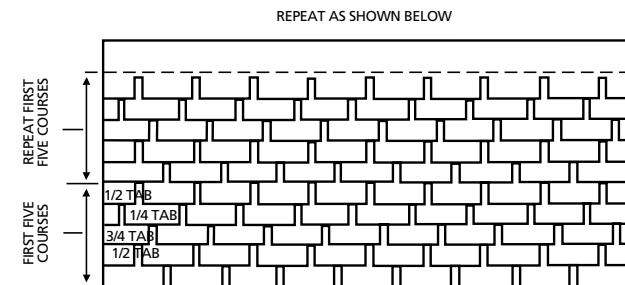
Random spacing can be achieved by removing different amounts from the rake tab of succeeding courses in accordance with the following general principles:

- 1) The width of any rake tab should be at least 1/4 tab.
- 2) Cutout centerlines of any course should be located at least 1/4 tab laterally from the cutout centre line in both the course above and the course below.
- 3) The rake tab widths should not repeat closely enough to cause the eye to follow a cutout alignment.

ALTERNATE METHOD (FIGURE 3)

FIRST COURSE: Start with a complete shingle applied flush with starter course at rake and eave (B). Nail as described above and continue across roof with full shingles.

FIGURE 2





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SECOND COURSE: Start with a shingle from which one half tab has been cut at the rake end (C). Apply with lower edge of the tabs just down to the tops of the cutouts in the first course.

THIRD AND SUCCEEDING COURSES: Start third course with a shingle from which a full tab has been cut (D). Cut off an additional half tab to start each succeeding course, using the tops of the cutouts as an exposure guide. At the 7th course, repeat the sequence of the first six courses up the roof. For maximum wind protection, cement shingles at rake edges.

