

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO BUILDING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

THIS PRODUCT IS COVERED BY A LIMITED WARRANTY, THE TERMS OF WHICH ARE PRINTED ON THE WRAPPER.

IN COLD WEATHER (BELOW 40°F), CARE MUST BE TAKEN TO AVOID DAMAGE TO THE EDGES AND CORNERS OF THE SHINGLES.

IMPORTANT: It is not necessary to remove the plastic strip from the back of the shingles.

I. ROOF DECK

These shingles are for application to roof decks capable of receiving and retaining fasteners, and to inclines of not less than 2 in. per foot. For roofs having pitches 2 in. per foot to less than 4 in. per foot, refer to special instructions titled "Low Slope Application". Shingles must be applied properly. TAMKO assumes no responsibility for leaks or defects resulting from improper application, or failure to properly prepare the surface to be roofed over.

NEW ROOF DECK CONSTRUCTION: Roof deck must be smooth, dry and free from warped surfaces. It is recommended that metal drip edges be installed at eaves and rakes.

PLYWOOD: All plywood shall be exterior grade as defined by the Engineered Wood Association. Plywood shall be a minimum of 3/8 in. thickness and applied in accordance with the recommendations of the Engineered Wood Association.

SHEATHING BOARDS: Boards shall be well-seasoned tongue-and-groove boards and not over 6 in. nominal width. Boards shall be a 1 in. nominal minimum thickness. Boards shall be properly spaced and nailed.

TAMKO does not recommend re-roofing over existing roof.

2. VENTILATION

Inadequate ventilation of attic spaces can cause accumulation of moisture in winter months and a build up of heat in the summer. These conditions can lead to:

1. Vapor Condensation
2. Buckling of shingles due to deck movement.
3. Rotting of wood members.
4. Premature failure of roof.

To insure adequate ventilation and circulation of air, place louvers of sufficient size high in the gable ends and/or install continuous ridge and soffit vents. FHA minimum property standards require one square foot of net free ventilation area to each 150 square feet of space to be vented, or one square foot per 300 square feet if a vapor barrier is installed on the warm side of the ceiling or if at least one half of the ventilation is provided near the ridge. If the ventilation openings are screened, the total area should be doubled.

IT IS PARTICULARLY IMPORTANT TO PROVIDE ADEQUATE VENTILATION.

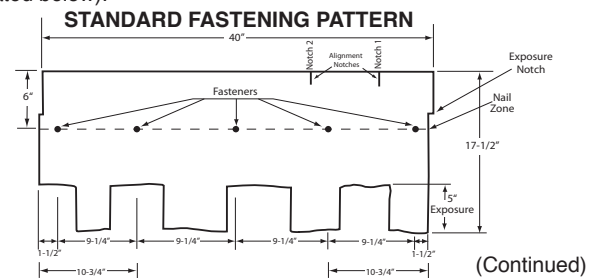
3. FASTENERS

WIND CAUTION: Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur. This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These conditions may impede the sealing of the adhesive strips on the shingles. The inability to seal down may be compounded by prolonged cold weather conditions and/or blowing dust. In these situations, hand sealing of the shingles is recommended. To insure immediate sealing, apply a quarter-sized dab of TAM-PRO® Premium SBS Adhesive or TAMKO Tam-Seal Adhesive to the back of each tab. Place the adhesive a minimum of 1" (25MM) from the side of the tab and 1" (25mm) up from the bottom of each tab. Press shingle firmly into the adhesive. For maximum wind resistance along rakes, cement shingles to the underlayment and each other in a 4" (102mm) width of TAM-PRO SBS Adhesive or TAMKO Tam-Seal Adhesive. Caution: Apply ONLY a thin uniform layer of adhesive less than 1/8" (3mm) thick. Excessive amounts can cause blistering of the shingles and may soften the asphalt in certain underlayments resulting in the asphalt flowing, dripping and staining. Shingles must also be fastened according to the fastening instructions described below.

Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, this will result in the termination of TAMKO's liabilities under the limited warranty. TAMKO will not be responsible for damage to shingles caused by winds in excess of the applicable miles per hour as stated in the limited warranty. See limited warranty for details.

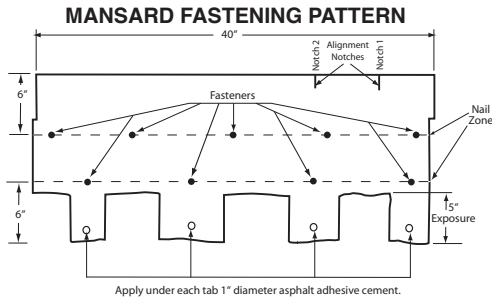
FASTENING PATTERNS: Fasteners must be placed 6 in. from the top edge of the shingle located horizontally as follows:

1) Standard Fastening Pattern. (For use on decks with slopes 2 in. per foot to 21 in. per foot.) One fastener 1-1/2 in. back from each end, one 10-3/4 in. back from each end and one 20 in. from one end of the shingle for a total of 5 fasteners. (See standard fastening pattern illustrated below).

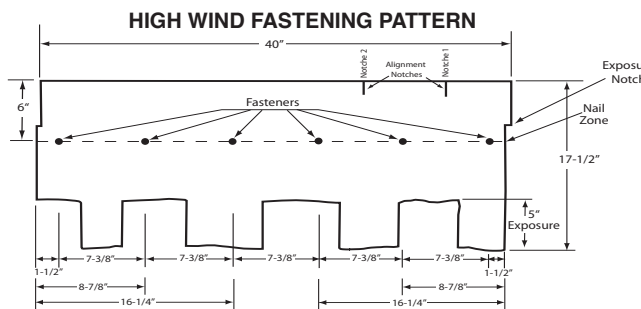


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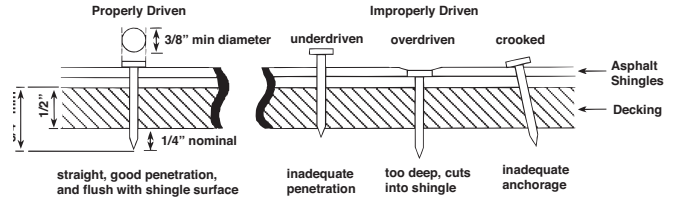
2) Mansard or Steep Slope Fastening Pattern. (For use on decks with slopes greater than 21 in. per foot.) Use standard nailing instructions with four additional nails placed 6 in. from the butt edge of the shingle making certain nails are covered by the next (successive) course of shingles. Each shingle tab must be sealed underneath with TAM-PRO SBS Adhesive or TAMKO Tam-Seal Adhesive immediately upon installation. Spots of cement must be equivalent in size to a \$.25 piece and applied to shingles with a 5 in. exposure, use 9 fasteners per shingle. (See Mansard Fastening Pattern illustrated below).



3) High Wind Fastening Pattern. (For High Wind Application requirements) One fastener 1-1/2" back from each end. One fastener 8-7/8" back from each end and one fastener 16-1/4" back from each end for a total of six (6) fasteners per shingle. In addition to this shingle fastening pattern requirement for High Wind Application, TAMKO also requires the use of the following TAMKO products: TAMKO felts or underlayments; TAMKO Moisture Guard Plus underlayment at all eaves, rakes, and valleys; TAMKO or TAM-PRO cements and coatings products where required; TAMKO ventilation where required, TAMKO starter shingles if available in area, and TAMKO Hip and Ridge shingles installed on all hips and ridges. Along rakes, cement shingles to the underlayment and each other in a 4" (102 mm) width of TAM-PRO SBS Adhesive or TAMKO Tam-Seal Adhesive. Also, see local building codes for proper nailing application. If High Wind Application requirements are not followed, the High Wind Application Warranty MPH, as stated on Table I in the Limited Warranty, reverts to the Standard Application Wind Warranty MPH limit. (See High Wind Fastening Pattern illustrated below).



NAILS: TAMKO recommends the use of nails as the preferred method of application. Standard type roofing nails should be used. Nail shanks should be made of minimum 12 gauge wire, and a minimum head diameter of 3/8 in. Nails should be long enough to penetrate 3/4 in. into the roof deck. Where the deck is less than 3/4 in. thick, the nails should be long enough to penetrate completely through plywood decking and extend at least 1/8 in. through the roof deck. Drive nail head flush with the shingle surface.



4. UNDERLAYMENT

UNDERLAYMENT: An underlayment consisting of asphalt saturated felt must be applied over the entire deck before the installation of TAMKO shingles. Failure to add underlayment can cause premature failure of the shingles and leaks which are not covered by TAMKO's limited warranty. Apply the felt when the deck is dry. On roof decks 4 in. per foot and greater apply the felt parallel to the eaves lapping each course of the felt over the lower course at least 2 in. Where ends join, lap the felt 4 in. If left exposed, the underlayment felt may be adversely affected by moisture and weathering. Laying of the underlayment and the shingle application must be done together.

Products which are acceptable for use as underlayment are:

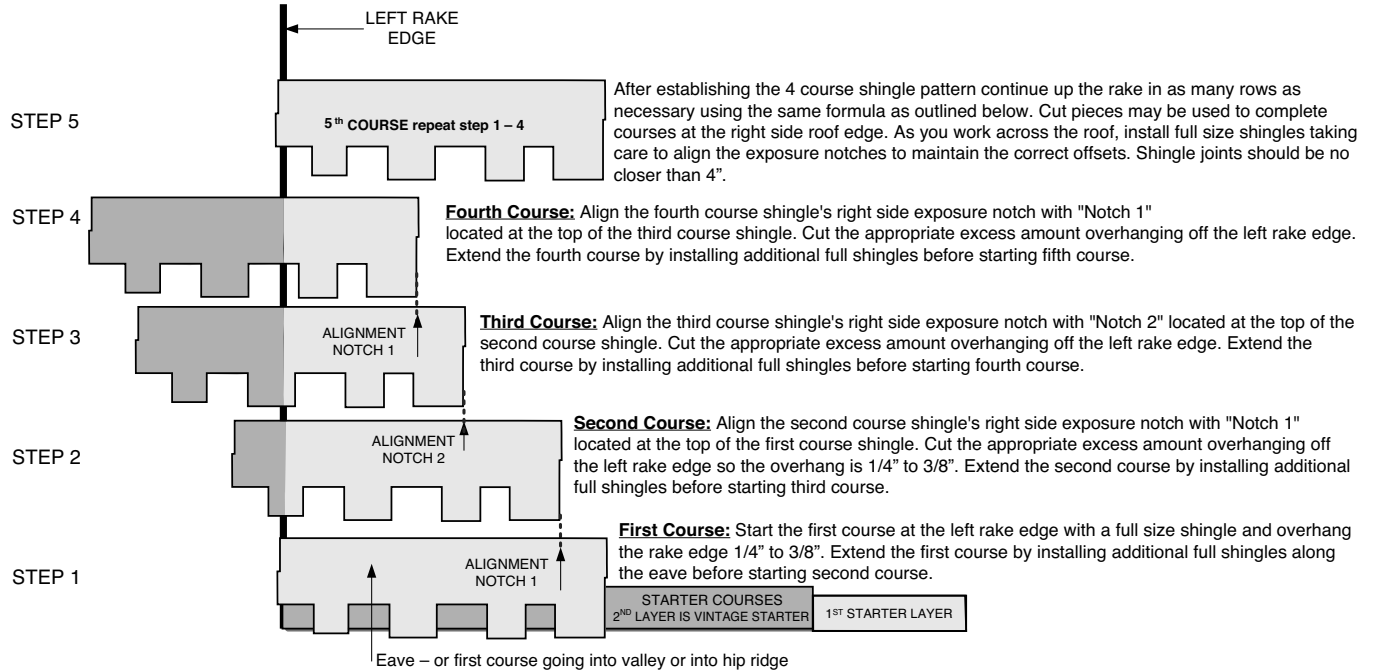
- TAMKO No. 15 Asphalt Saturated Organic Felt
- A non-perforated asphalt saturated organic felt which meets ASTM: D226, Type I or ASTM D4869, Type I
- Any TAMKO non-perforated asphalt saturated organic felt
- TAMKO TW Metal and Tile Underlayment, TW Underlayment and Moisture Guard Plus® (additional ventilation maybe required. Contact TAMKO's technical services department for more information)

In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers to help prevent water damage. Contact TAMKO's Technical Services Department for more information. TAMKO does not recommend the use of any substitute products as shingle underlayment.

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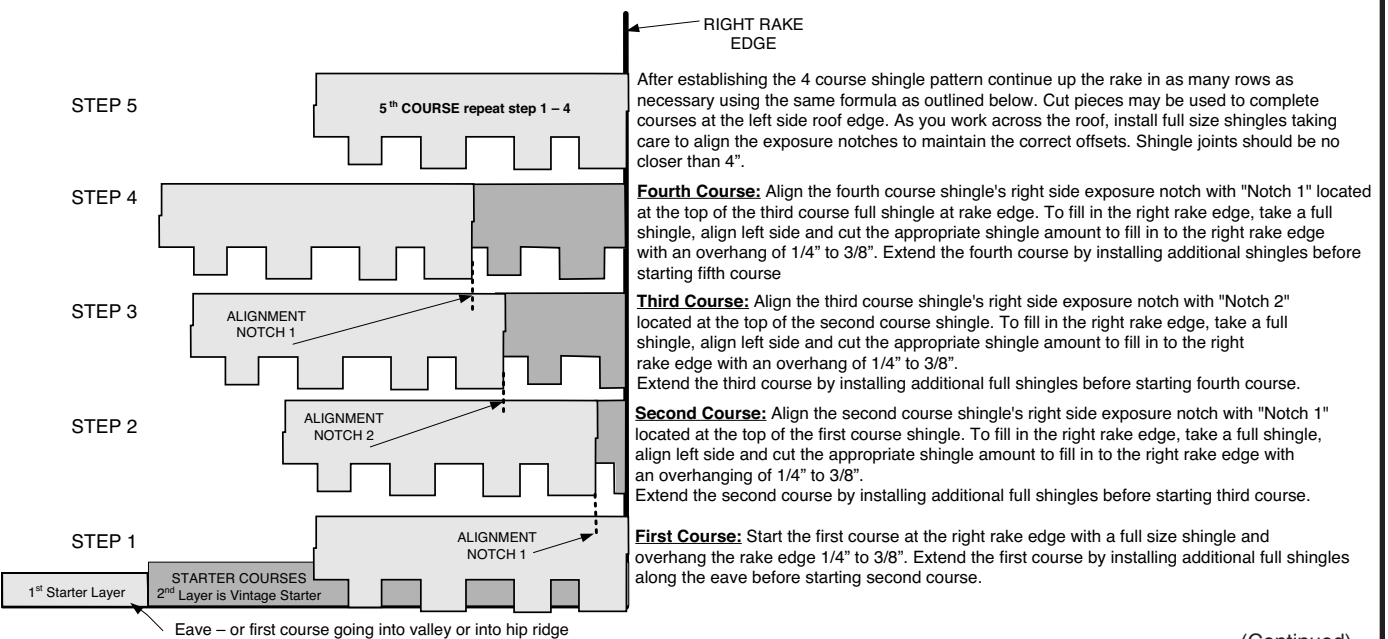
SHINGLE APPLICATION FOR LEFT TO RIGHT INSTALLATION:

IMPORTANT: USE **ALIGNMENT NOTCHES** TO START SHINGLE COURSES, DO NOT MEASURE IT.



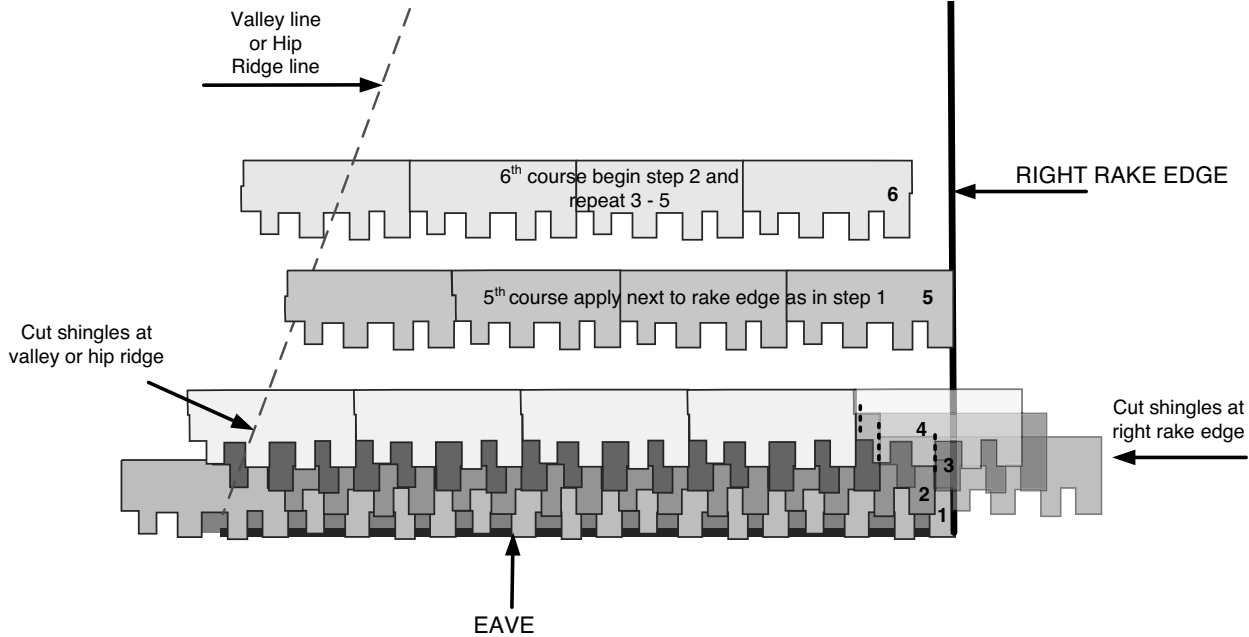
SHINGLE APPLICATION FOR RIGHT TO LEFT INSTALLATION:

IMPORTANT: USE **ALIGNMENT NOTCHES** TO START SHINGLE COURSES, DO NOT MEASURE IT.



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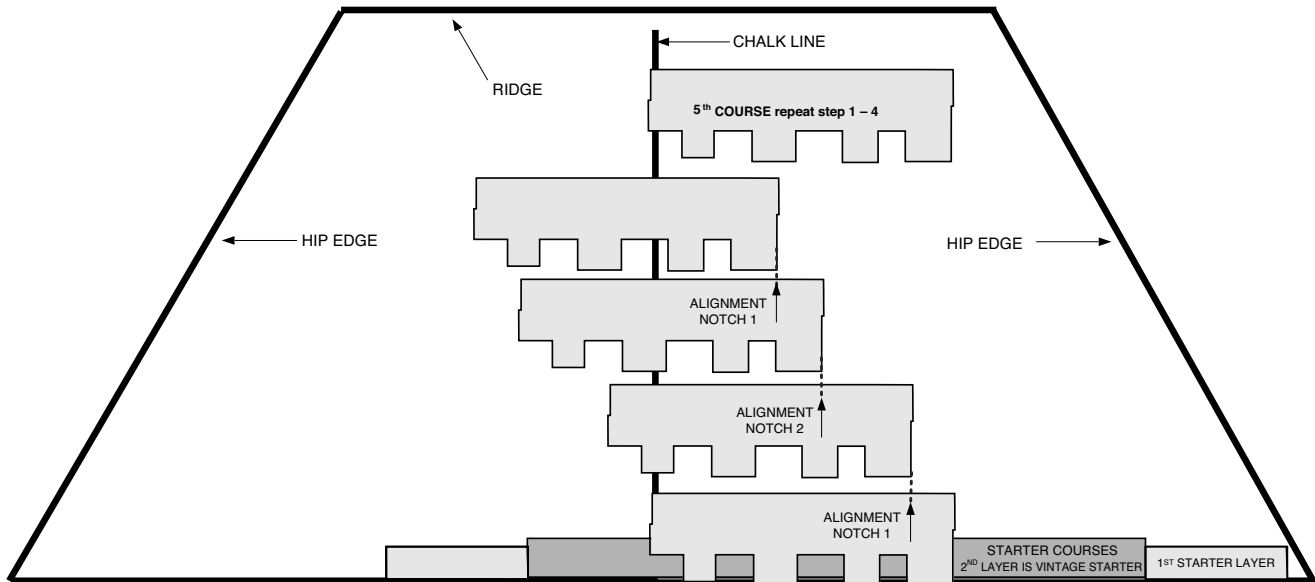
SHINGLE APPLICATION FOR RIGHT TO LEFT INSTALLATION CONTINUED:
IMPORTANT: USE **ALIGNMENT NOTCHES** TO START SHINGLE COURSES, DO NOT MEASURE IT.



SHINGLE APPLICATION ON A HIP ROOF:

IMPORTANT: USE **ALIGNMENT NOTCHES** TO START SHINGLE COURSES, DO NOT MEASURE IT.

For shingle application on a hip roof, strike a chalk line from the top point of the hip roof (at the ridge) down to the eave. This will be the reference line to shingle from, starting on the right side of the line using the left to right instructions. Fill in the left side of the chalk line applying shingles right to left. Install both sides of the chalk line as shingle courses go up the roof. As you work across the roof, install full size shingles taking care to align the exposure notches to maintain the correct offsets. Trim the last shingle in each course along the hip edge and finish with Heritage Vintage Hip and Ridge AR shingle products to complete the ridge. **Refer to Hip and Ridge Fastening Detail in Section 8 to complete the ridge.**



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Central District	220 West 4th St., Joplin, MO 64801	800-641-4691
Northeast District	4500 Tamko Dr., Frederick, MD 21701	800-368-2055
Southeast District	2300 35th St., Tuscaloosa, AL 35401	800-228-2656
Southwest District	7910 S. Central Exp., Dallas, TX 75216	800-443-1834
Western District	5300 East 43rd Ave., Denver, CO 80216	800-530-8868

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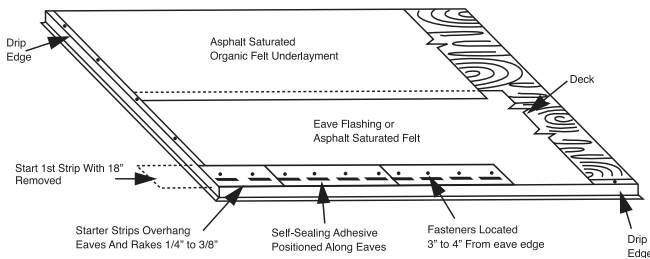
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5. APPLICATION INSTRUCTIONS

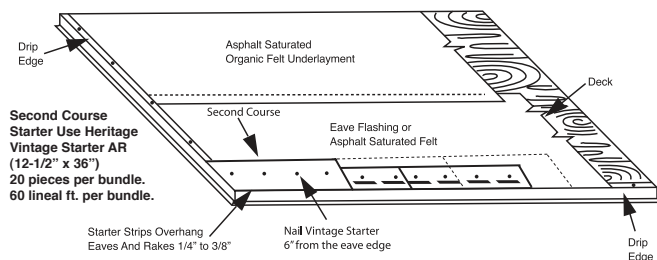
STARTER COURSE: Two starter course layers must be applied prior to application of Heritage Vintage AR Shingles.

The first starter course may consist of TAMKO Shingle Starter, three tab self-sealing type shingles or a 9 inch wide strip of mineral surface roll roofing. If three tab self-sealing shingles are used, remove the exposed tab portion and install with the factory applied adhesive adjacent to the eaves. If using three tab self-sealing shingles or shingle starter, remove 18 in. from first shingle to offset the end joints of the Vintage Starter. Attach the first starter course with approved fasteners along a line parallel to and 3 in. to 4 in. above the eave edge. The starter course should overhang both the eave and rake edge 1/4 in. to 3/8 in. Over the first starter course, install Heritage Vintage Starter AR and begin at the left rake edge with a full size shingle and continue across the roof nailing the Heritage Vintage Starter AR along a line parallel to and 6 in. from the eave edge.

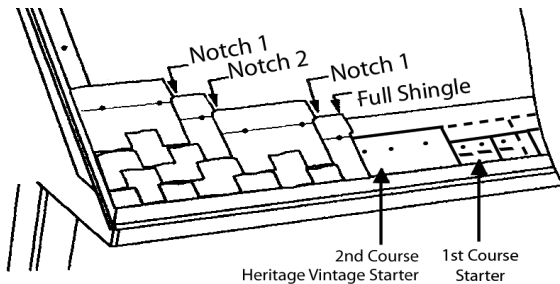
FIRST STARTER COURSE APPLICATION



SECOND STARTER COURSE APPLICATION



SHINGLE APPLICATION OVER STARTERS

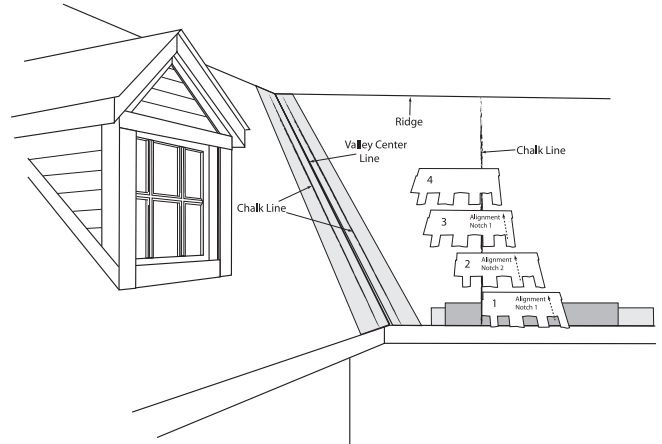


SHINGLE APPLICATION STARTING NEAR VALLEY:

IMPORTANT: USE ALIGNMENT NOTCHES TO START SHINGLE COURSES, DO NOT MEASURE IT.

Some roof layouts may not allow for application to begin at a rake edge, and may require you to begin shingle application near a valley. To begin shingle application starting near a valley, strike a chalk line from the top point of the ridge down to the eave on one side of the valley. This will be the reference line to shingle from, starting on the right side of the line using the left to right instructions. Fill in the left side of the chalk line applying shingles right to left. Install both sides of the chalk line as shingle courses go up the roof. **Refer to Valley Application in Section 7 of these instructions to complete the valley.** As shingles are applied toward the valley trim the last shingle in each course to fit the chalk line in the valley. Never use a shingle trimmed to less than 12" in length to finish a course running into a valley. If necessary, trim the adjacent shingle in the course to allow a longer portion to be used.

SHINGLE APPLICATION STARTING AT VALLEY



6. LOW SLOPE APPLICATION

On pitches 2 in. per foot to 4 in. per foot cover the deck with two layers of underlayment. Begin by applying the underlayment in a 19 in. wide strip along the eaves and overhanging the drip edge by 1/4 to 3/4 in. Place a full 36 in. wide sheet over the 19 in. wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 19 in. If winter temperatures average 25°F or less, thoroughly cement the laps of the entire underlayment to each other with TAM-PRO or TAMKO Plastic Roof Cement from eaves and rakes to a point of a least 24 in. inside the interior wall line of the building. As an alternative, TAMKO's Moisture Guard Plus self-adhering waterproofing underlayment may be used in lieu of the cemented felts.

7. VALLEY APPLICATION

TAMKO recommends an open valley construction with Heritage Vintage AR shingles.

To begin, center a sheet of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment in the valley.

After the underlayment has been secured, install the recommended corrosion resistant metal (26 gauge galvanized metal or an equivalent)

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in the valley. Secure the valley metal to the roof deck. Overlaps should be 12" and cemented.

Following valley metal application; a 9" to 12" wide strip of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment should be applied along the edges of the metal valley flashing (max. 6" onto metal valley flashing) and on top of the valley underlayment. The valley will be completed with shingle application.

SHINGLE APPLICATION INSTRUCTIONS (OPEN VALLEY)

- Snap two chalk lines, one on each side of the valley centerline over the full length of the valley flashing. Locate the upper ends of the chalk lines 3" to either side of the valley centerline.
- The lower end should diverge from each other by 1/8" per foot. Thus, for an 8' long valley, the chalk lines should be 4" either side of the centerline at the eaves and for a 16' valley 5".

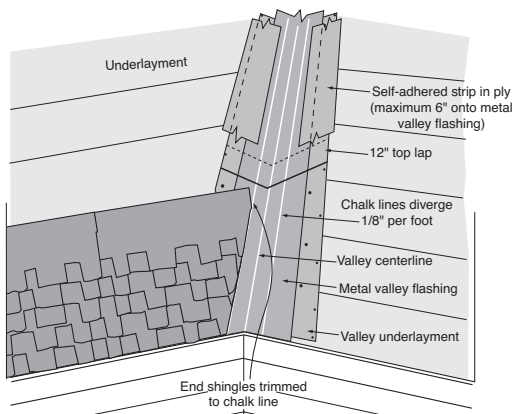
As shingles are applied toward the valley, trim the last shingle in each course to fit on the chalk line. Never use a shingle trimmed to less than 12" in length to finish a course running into a valley. If necessary, trim the adjacent shingle in the course to allow a longer portion to be used.

- Clip 1" from the upper corner of each shingle on a 45° angle to direct water into the valley and prevent it from penetrating between the courses.
- Form a tight seal by cementing the shingle to the valley lining with a 3" width of TAM-PRO or TAMKO Plastic Roof Cements (conforming to ASTM D 4586).

• **CAUTION:**

Adhesive must be applied in smooth, thin, even layers. Excessive use of adhesive will cause blistering to this product. TAMKO assumes no responsibility for blistering.

VINTAGE OPEN VALLEY DETAIL



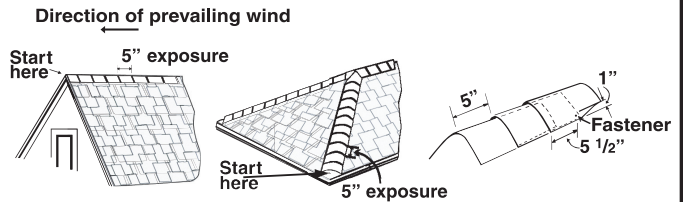
8. HIP AND RIDGE FASTENING DETAIL

Apply the shingles with a 5 in. exposure beginning at the bottom of the hip or from the end of the ridge opposite the direction of the prevailing winds. Secure each shingle with one fastener on each side, 5-1/2 in. back from the exposed end and 1 in. up from the edge. TAMKO recommends the use of TAMKO Heritage Vintage Hip & Ridge AR shingle products.

Fasteners should be 1/4 in. longer than the ones used for shingles.

It is recommended that a 2-layer application of Vintage Hip and Ridge AR be applied to roof to enhance the overall appearance. When the second layer is applied, offset this layer by 1/4 in. to create a "shadow" effect.

IMPORTANT: PRIOR TO INSTALLATION, CARE NEEDS TO BE TAKEN TO PREVENT DAMAGE WHICH CAN OCCUR WHILE BENDING SHINGLE IN COLD WEATHER.



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