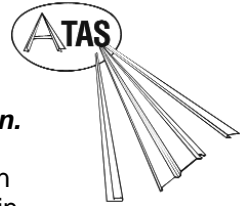


ADVANTA[®] SHINGLE

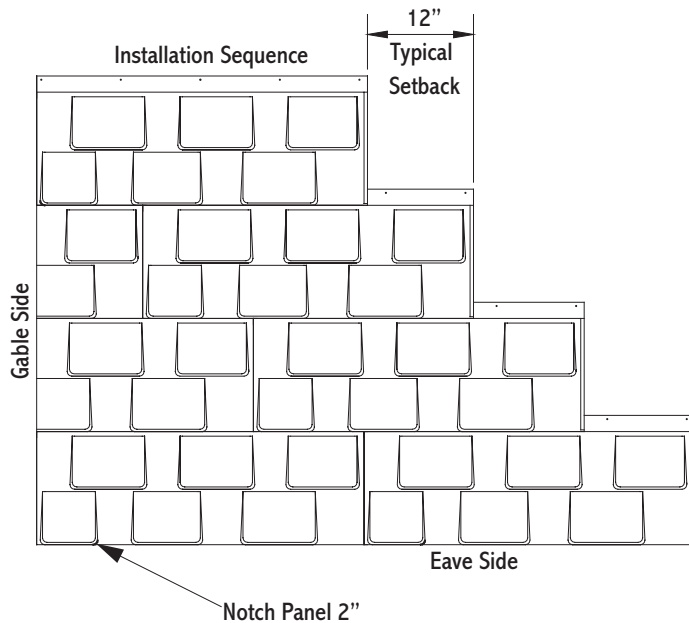
Installation Guide

ADVANTA Shingle's patented four-way interlock design guards against wind driven rain and prevents wind uplift. Panels measure 1' x 3' with a 3 square foot net coverage area. There are seventeen (17) panels per carton and two (2) cartons per square (100 square feet). Panels weigh 95 pounds per square. Minimum recommended pitch is 3:12, subject to building codes.

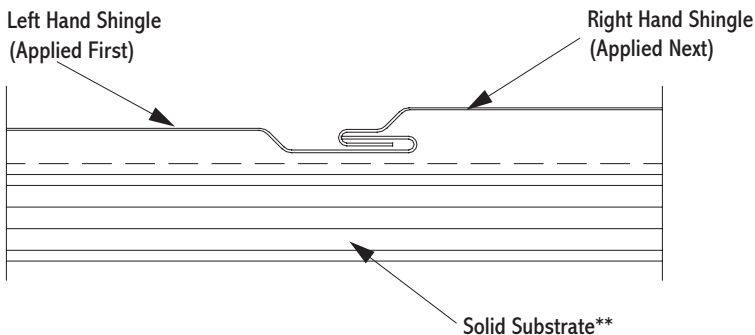


Review and understand complete guide before beginning installation.

This guide has been prepared as suggested details to particular design conditions. Each condition has certain limitations to performance, aesthetics or economics. Professionals qualified to assess this information for a specific project, should determine that the selection and installation are made to their requirements. ATAS **cannot** assume any responsibility for the actual selection and/or installation of materials. The panels, flashings and trim shown in this guide are installed over solid and plumb substrate. It is assumed that the structure has been designed and prepared in accordance with local building codes.



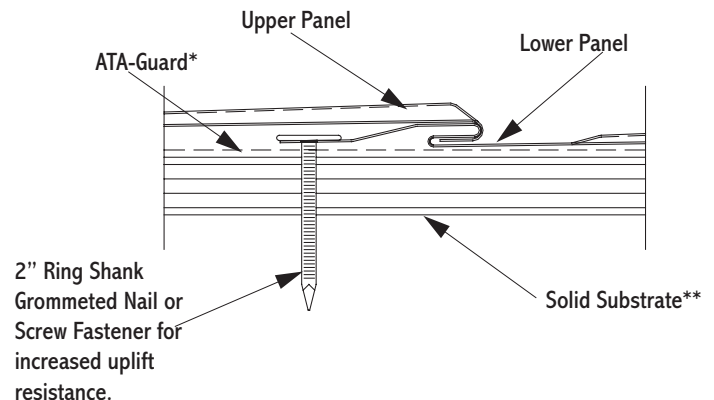
Left/Right End Lap Joint



Panel Installation Detail

Snap a vertical line to square up the roof plane with the eave line. Start in the bottom left hand corner of the roof plane with a full length panel. Install shingles in a left to right manner starting from the eave. Panel sidelaps should be staggered with a 12-inch typical setback. Repeat with a full length panel every fourth row. Panels are pre-punched to accommodate five fasteners per panel. There are 170 fasteners per square. Manufacturer recommends using 2" ring shank, galvanized roofing nails; however, a pneumatic fastener gun with fasteners that have equivalent pull out values can also be used. Screw fastening may be utilized for increased uplift resistance.

Top/Bottom Lap Joint

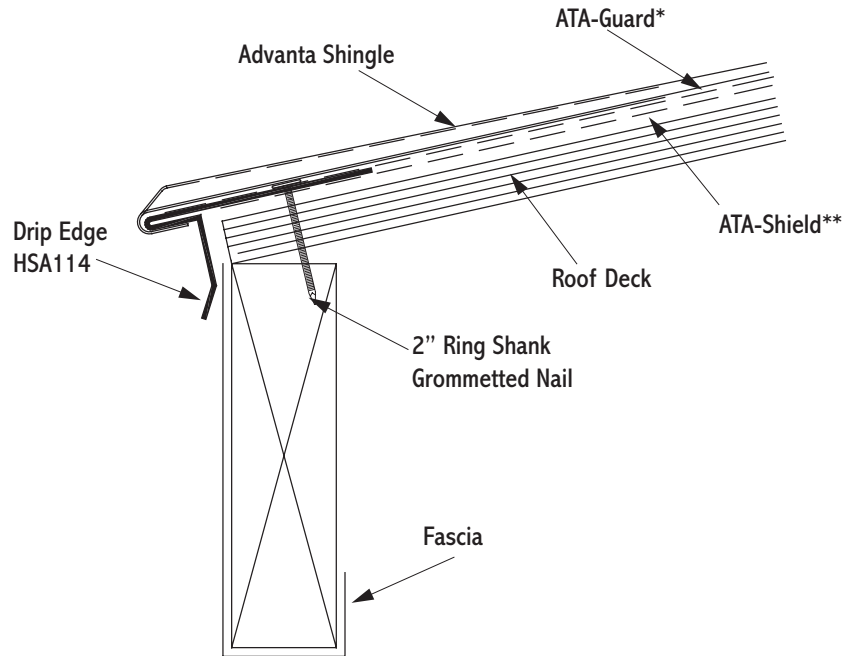


** Recommended solid substrate is a minimum 5/8-inch exterior grade plywood or equivalent. ADVANTA[™] Shingles can be applied over existing roofing materials in accordance with local building codes. Current roof deck should be structurally sound and capable of anchoring fasteners.

Published panel width dimensions are to be considered as nominal dimensions. Overall panel width dimensions may vary during installation due to adjustments to accommodate as built roof conditions.

Eave Detail

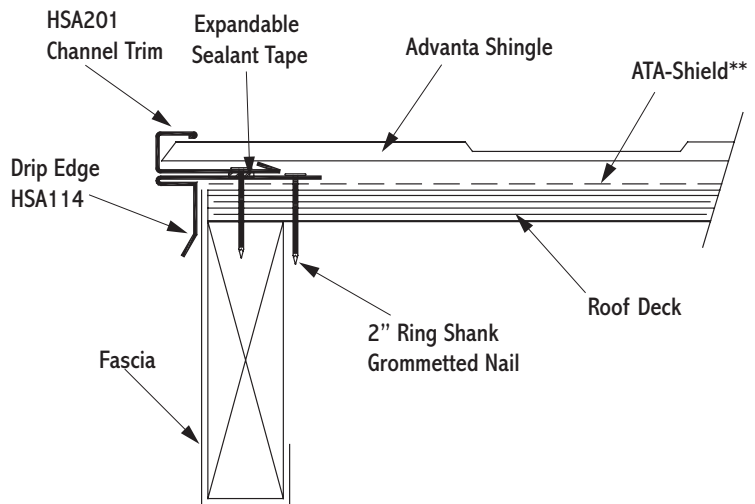
1. In re-roofing applications: cut back and remove existing shingles and drip edging to be flush with the eave and gable lines.
2. In all applications: apply ATA-Shield** along eave and up the roof to a point at least 24" beyond outside face of exterior wall.
3. Install drip edge against fascia trim. Space fasteners at a maximum of 12" o.c. Overlap drip edge a minimum of 3".
4. Beginning on top of drip edge install ATA-Guard* to roof.
5. Refer to gable and/or valley details as required before installing panels.
6. Attach the lower flanged edge of the shingle over the drip edge. Square the panel in the channel trim at the gable edge and fasten with a ring shank grommeted nail. (See panel installation section.)



Gable Detail

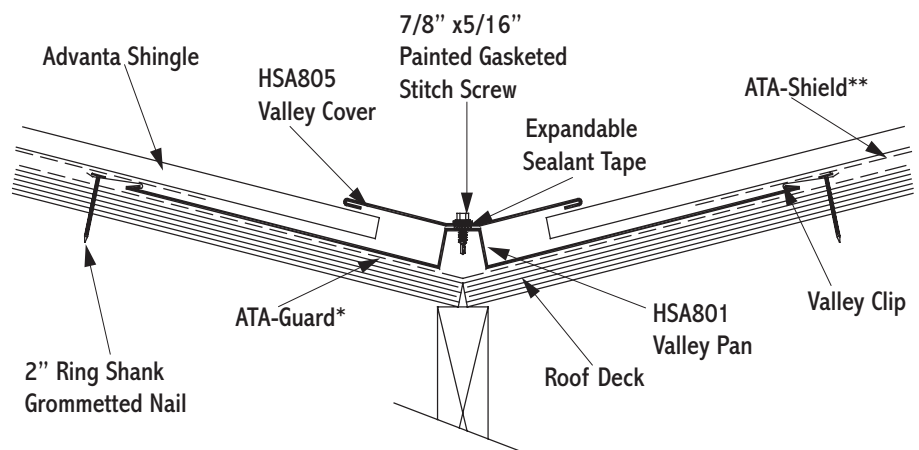
1. Apply drip edge over ATA-Shield at gable. Make sure to overlap the drip edge at the eave line.
2. Apply butyl caulk tape to drip edge.
3. Lay the channel trim over drip edge as shown. Overlap channel trim a minimum of 3".
4. Align the first shingle into the channel trim and snap a line across the roof plane. (See panel installation section.)

Note: Notch bottom flange of panel as needed to allow for proper drainage at eave/gable juncture and other similar conditions.



Valley Detail

1. Install ATA-Shield** 18" up both sides of the valley line.
2. Install the valley pan and clip fasten through the substrate 24" o.c. Overlap valley pans at a minimum of 6". Install ATA-Guard* 6" over edge of valley pan.
3. Lay shingles onto the valley pan maintaining a 2" clearance from the valley's center.
4. Apply butyl caulk tape to valley pan as shown and install valley cover with 6" min. overlap, fasten with 7/8" painted gasketed stitch screws spaced 24" o.c.



Underlayments: ATA-Guard* is a polyolefin based, 100% asphalt free, high strength reinforced roofing underlayment for use beneath metal roofing on steep slope applications. 1000 sq. ft. per roll at 48" wide.

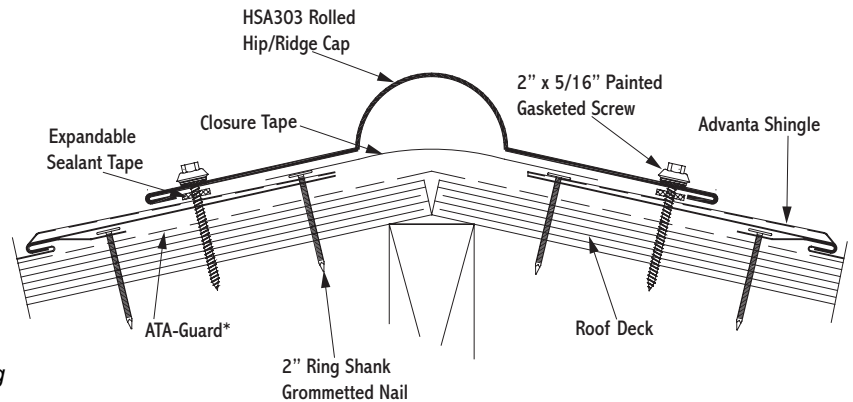
Underlayments: ATA-Shield** is the recommended self adhesive underlayment for eaves, sidewall and any critical areas exposed to ice damming and extensive water run off. Available in 65'-8" x 39-3/8" rolls (200 sq. ft. per roll).

Hip & Ridge Detail

Hip and ridge applications are handled in the same manner.

1. Install Advanta shingles to hip or ridge.
2. Apply expandable sealant tape to ridge cap; place just behind returned edge of cap.
3. Secure the cap with 2" x 5/16" painted/gasketed screws approx. 24" o.c. Make sure the screw penetrates the expandable sealant between metal.

Note: Make sure to fasten the caps to the high point on the shingle in order to avoid dimpling, and make sure the screw penetrates the cap through the expandable sealant tape into the solid substrate. Ridge caps can accommodate standard ridge venting products. Refer to venting manufacturer's instructions and local building code requirements.

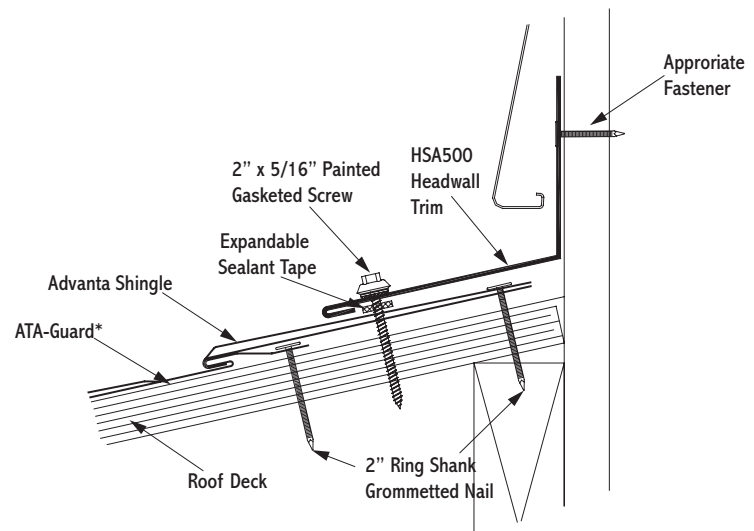


Headwall Detail

Install appropriate underlayment to the edge.

1. Install metal shingles up to the headwall.
2. Apply soft cell closure tape to headwall trim just behind hem.
3. Set trim and secure using 2" x 5/16" painted gasketed screws at 24" o.c. on the sloped side to the trim.

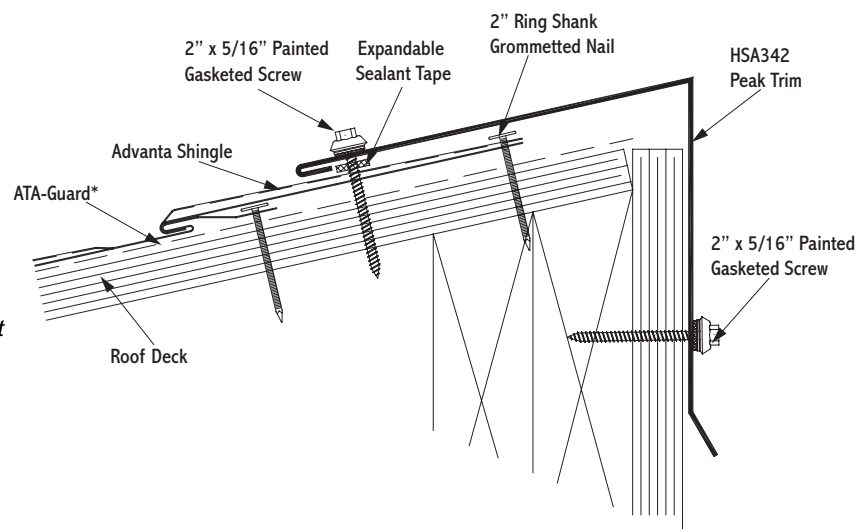
Note: Make sure to fasten the caps to the high point on the shingle in order to avoid dimpling, and make sure the screw penetrates the cap through the expandable sealant tape into the solid substrate.



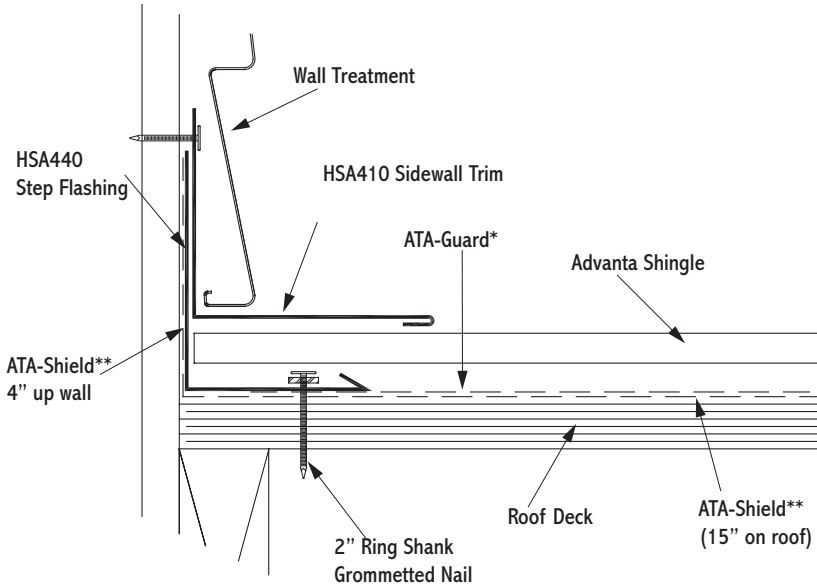
Shed Ridge Detail

1. Install metal shingles up to the roof peak.
2. Apply expandable sealant tape to ridge cap; place just behind returned edge.
3. Set trim and secure using 2" x 5/16" painted gasketed screws at 24" o.c. on the sloped side of the peak trim.
4. Fasten peak trim with 2" x 5/16" painted gasketed screws at 24" o.c.

Note: Make sure to fasten the caps to the high point on the shingle in order to avoid dimpling, and make sure the screw penetrates the cap through the expandable sealant tape into the solid substrate.



Sidewall Detail



1. Install ATA-Shield** along roof plane and up sidewall.
2. Notch bottom flange of panel 3/4" from end for proper overlayment of the step flashing onto the lower shingle.
3. Place step flashing against the sidewall and fasten 1" from the top with one ring shank grommetted nail. Repeat Steps 2 & 3 for each course.
4. Install the panel up to the wall. Fasten the panel as close to the wall as possible without penetrating the step flashing.
5. Install the sidewall trim and fasten to wall with ring shank grommetted nail at 2'-0" o.c.

Note: If the wall treatment is siding it should lay over the sidewall trim. If brick or stucco, a reglet should be used with counter flashing to seal.

Note Regarding Trim Details

The application of flashing and trim requires a detailed approach. Consideration should be given to the roof's geometry and course it creates for water run-off. Location of gutters and the use of snow retention systems should also be considered. Proper planning regarding the sequence of material overlap is critical. Sealants, such as butyl tapes and tripolymers, should be used at overlapping trim edges, in conjunction with exposed fasteners, and to seal flashings. All fasteners should be properly tightened and not over-driven at an angle. Fasteners that are too loose can "back out" over time. An overdriven fastener may cause a depression in the material, which becomes a collection point for standing water.

Pipe Detail

Step 1

Cut on the proper pipe diameter marked on the flashing.

Step 2

Position over pipe and slide down the pipe.

Step 3

Apply polyurethane sealant to the bottom of the base.

Step 4

Mold the flexible base to the panel contours.

Step 5

Fasten with 1/4" x 1-1/8" drilling fastener every 1-1/2" around the base.



Pipe drawings provided by Triangle Fasteners

Tools and Rules:

Basic Equipment Required:
Tie-off ropes, safety harness, long level, ladders, scaffolding with approved planking, extension cords with approved ground plugs and services.

Additional Tools:
Metal folding tool, hammer, chalk line, measuring tape, metal cutting tools - nibblers, drills, hacksaw, utility knife, pop-rivet gun, caulking guns, layout and combination square, C clamps, sheet metal shears (including RH, LH, straight and overhand). Power driven screw gun with proper bits, depth-setting nosepiece, variable speed.

Choose the correct equipment and tools to do the job in a safe manner. Wear safety gear and follow OSHA requirements.

Follow these simple rules:

1. Never cut the panels with an abrasive cut-off wheel or torch, as this will damage the finish.
2. Do not weld the trim or panels.
3. Remove any small burrs left by cutting, screwing or drilling.
4. Remove protective masking immediately after trim is installed.
5. Caution should be taken when unloading the panels to prevent damage.
6. Use appropriate screws for the type of underlayment and long enough to fully penetrate and secure the panel.
7. The stored materials should be kept dry.
8. Do not cut on finished roof. Remove all drill spirals, chips and dust immediately.
9. Seal neoprene closures and soft cell foam by applying appropriate sealant to both surfaces.
10. Put appropriate sealant/butyl tape between overlapping trims.
11. Overlap trims in a manner not to impede the flow of water.

For further information or assistance, contact our Residential Product Support at 800-468-1441