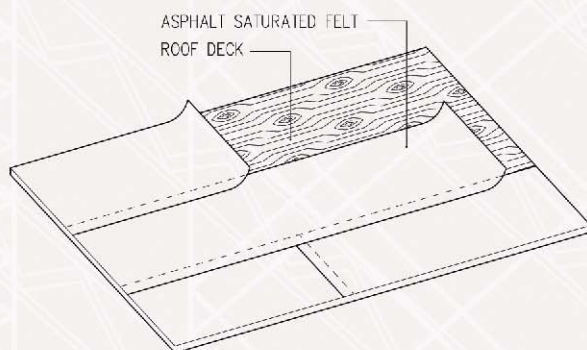


INSTALLING ASPHALT SHINGLES ON RESIDENTIAL HOMES IN HIGH WIND AREAS

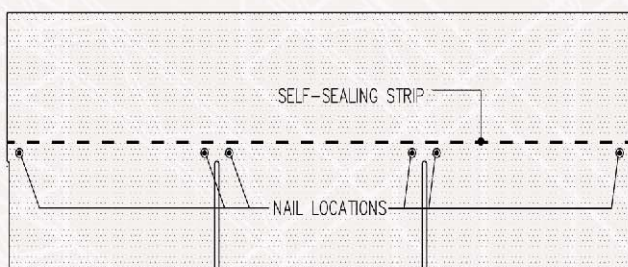
For your own protection, only use licensed contractors for any shingle installation, and make sure you have a written, signed contract in hand before the work begins. Refer to the product manufacturer's installation instructions and other instructions that may be required by the local Building Department.

Installation of Underlayment



- ☑ Use 30# asphalt saturated felt.
- ☑ Secure in place around perimeter, 6" o.c. and 12" o.c. in the field.
- ☑ Drip edge:
 - ☑ At rake over felt.
 - ☑ At eave under felt.

Fastener Placement

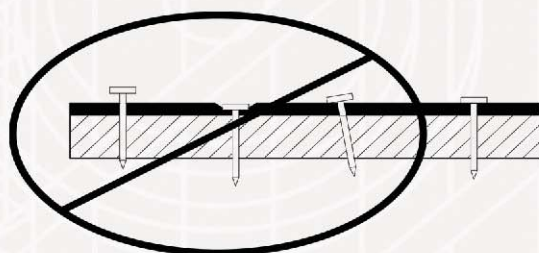


- Use six fasteners per shingle:
- ☑ 12 gauge galvanized nails.
 - ☑ 3/8" diameter head.

- Placement of fasteners:
- ☑ Below the self-sealing strip.
 - ☑ 1" in from edge.
 - ☑ 1" on both sides of the cut-outs.

Follow manufacturers' instructions for installation in accordance with wind speed for the particular location of the home.

Fastener Workmanship



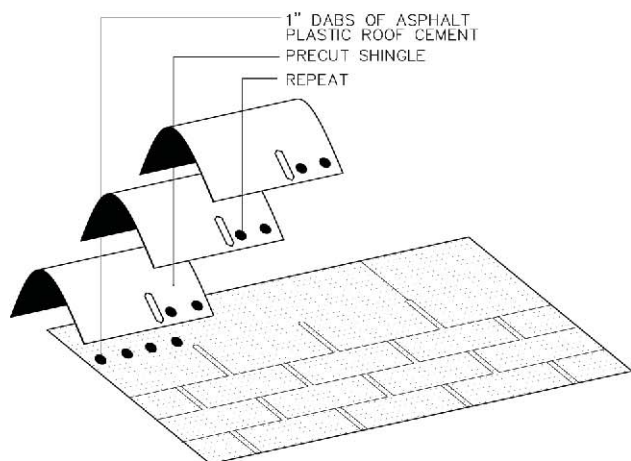
IMPROPER

PROPER

- Do NOT install fasteners:
- ☑ Too high – presents overlapping shingle from sealing.
 - ☑ Too low – cuts into the shingle.
 - ☑ Crooked – could be too high on only one edge and too low into the shingle on the other edge.

INSTALLING ASPHALT SHINGLES ON RESIDENTIAL HOMES IN HIGH WIND AREAS

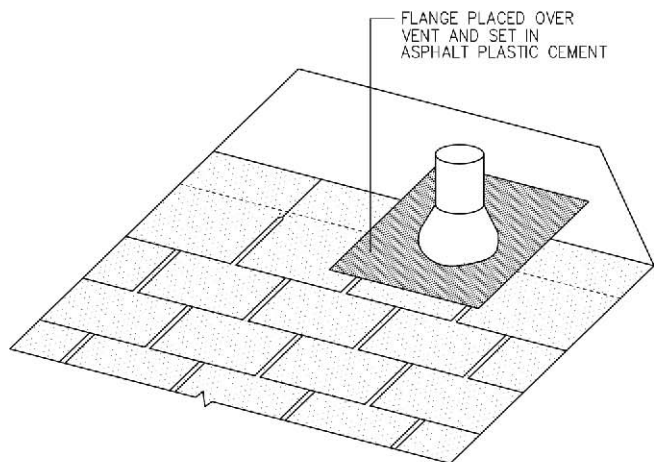
Sealing Tabs



Hand Applied Asphalt Plastic Cement:

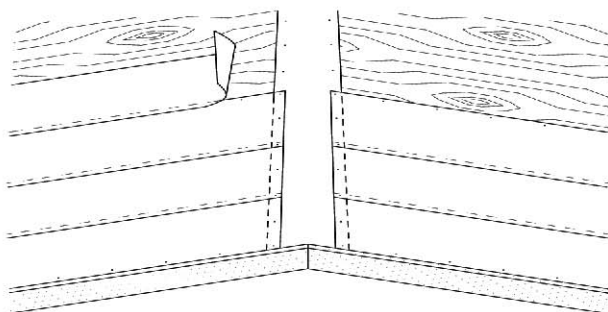
- ☑ Between starter strip and first course at the eave.
- ☑ Along the rake.
- ☑ Hip and ridge cap.
- ☑ Use 1" diameter size dab.

Vent Flashing Installation



- ☑ Shingle up to vent.
- ☑ Embed vent flashing in plastic asphalt cement.
- ☑ Seal over lapping shingles over vent flashing.
- ☑ Continue shingle application.

Valley Underlayment



- ☑ Install felt underlayment through the center line of the valley.
- ☑ Keep fasteners away from centerline.
- ☑ Intersecting felt overlaps underlayment in valley.