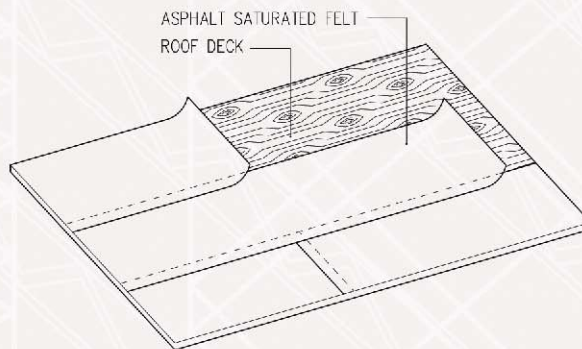


## INSTALLING ASPHALT SHINGLES ON RESIDENTIAL HOMES IN HIGH WIND AREAS

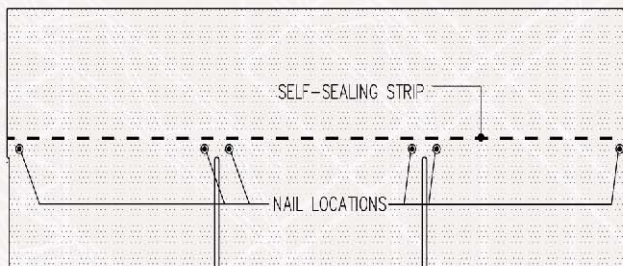
**For your own protection, only use licensed contractors for any shingle installation, and make sure you have a written, signed contract in hand before the work begins. Refer to the product manufacturer's installation instructions and other instructions that may be required by the local Building Department.**

### 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

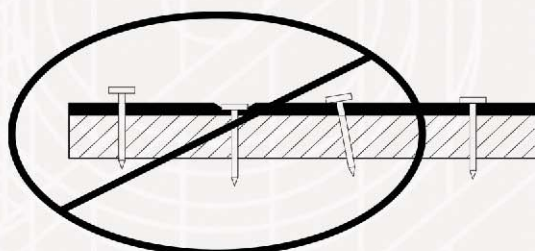


- Use six fasteners per shingle:
- ☑ 12 gauge galvanized nails.
  - ☑ 3/8" diameter head.

- 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



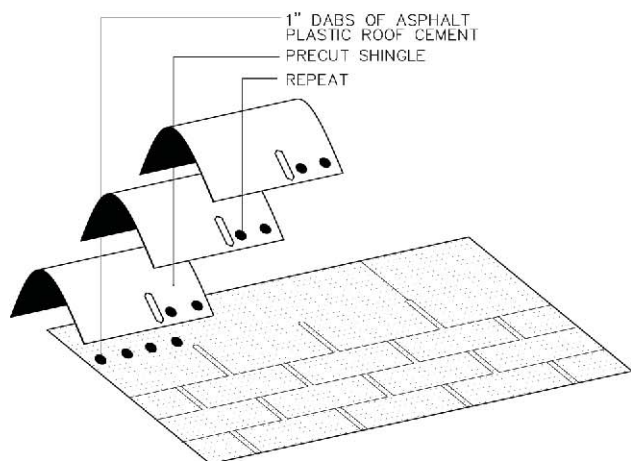
IMPROPER

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

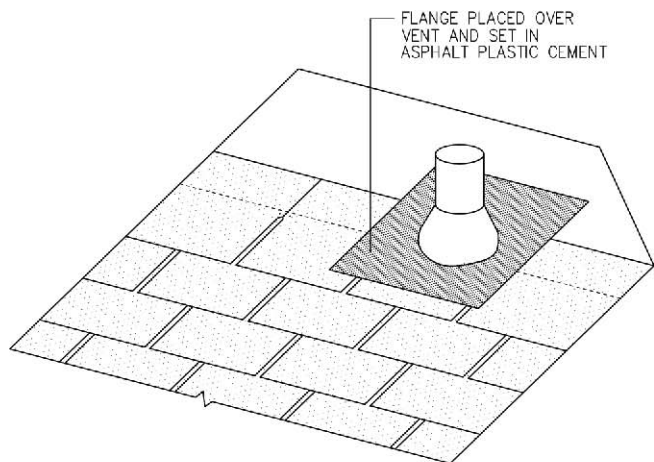
### Sealing Tabs



### Hand Applied Asphalt Plastic Cement:

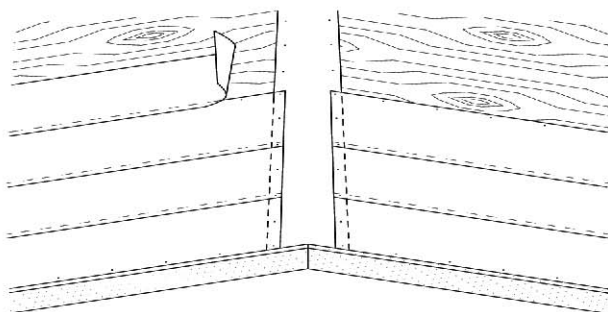
- ☑ Between starter strip and first course at the eave.
- ☑ Along the rake.
- ☑ Hip and ridge cap.
- ☑ Use 1" diameter size dab.

### 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.