

# Installing Shingles with New-Roof Construction

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## Use Proper Nails & Nailing Methods

Corrosion-resistant roofing nails should be used when affixing asphalt shingles. These nails should have a minimum nominal shank diameter of 12 gauge (0.105”) and a minimum head diameter of 3/8”.

Smooth- or rough-shanked nails are acceptable. Galvanized and aluminum nails generally have adequate corrosion resistance. Stainless steel nails are corrosion resistant. Nails shall be long enough to penetrate through the roofing materials and a minimum of 3/4” into the roof deck. Where the deck is less than 3/4” thick, the nail shall penetrate through the roof deck.

Drive nails straight and flush with the shingle surface; do not break the shingle surface with the nail head (Fig. 6). **IMPORTANT** – Follow the shingle manufacturer’s application instructions regarding specified nail type, size, and grade, as well as special nailing procedures and proper positioning of nails on the shingle.

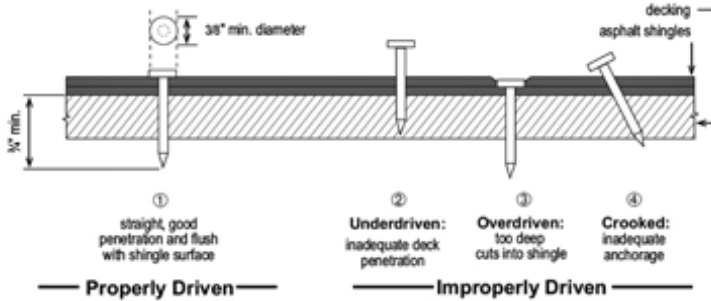


Fig. 6

If a nail does not penetrate the deck properly and cannot be tapped down into position, remove the nail, repair the hole with asphalt roofing cement that complies with ASTM D4586, and place another nail nearby. If necessary, replace the shingle.

With three-tab shingles, follow the manufacturer’s application instructions. Use a minimum of four nails per shingle (See Fig. 7.). Always keep the shingle end joints of succeeding courses at least 2” away from the nails in the previous course. NAIL PLACEMENT IS CRITICAL. The manufacturer’s application instructions must be followed for the number and placement of the nails. The nails must be placed so they penetrate through all the layers of the shingle. Please be sure to follow your local building codes.

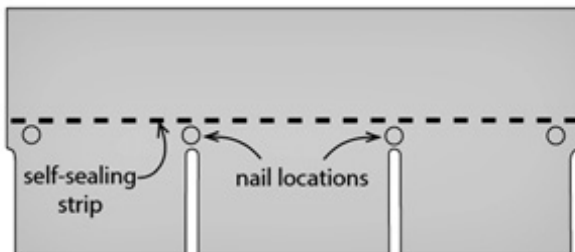


Fig. 7

**EXAMPLE ONLY – Refer to manufacturer’s application instructions for exact nail placement requirements.**

## **Where to Begin**

The use of horizontal and vertical chalk lines can assist in providing good shingle alignment. Because minor variations in shingle dimensions occasionally occur, chalk-line usage can help ensure the proper horizontal and vertical alignment, exposure and coverage of shingles.

If the roof surface is interrupted by a dormer or valley, begin applying shingles from a rake and work toward the break. If the surface is uninterrupted, begin at the rake deemed most visible. If both rakes seem equally visible, or it is a hipped roof, start at the center and work both ways.

## **The Starter Strip**

The application of three-tab asphalt shingles begins with a starter course (composed of “starter strips”) to back up and fill in the spaces under the shingle end joints of the first course of shingles (see Fig. 8).