

Nail Application Instructions for Laminated Shingles

Nails

Nails must be corrosion resistant. They are commonly galvanized or aluminum. Use $\frac{3}{8}$ " diameter heads, 11 or 12 gauge roofing nails. They must be long enough to penetrate through the roofing materials and at least $\frac{3}{4}$ " into the decking. If the decking is less than $\frac{3}{4}$ " thick, the nails must penetrate through the boards. [See the nail length chart.]

Nails must be driven flush with the shingle surface. An underdriven nail may damage the overlaying shingle by tearing through that shingle as it settles down over the nail head or if it is stepped upon. An underdriven nail may hold the overlaying shingle up, providing extra opportunity for wind damage. An overdriven nail will tear through the shingle, allowing an extra path for water intrusion and reducing the shingle's resistance to wind damage. A nail that is driven at an angle may cause any or all of the problems that come from underdriven nails and from overdriven nails.

Nails must be properly positioned on the shingle. [See figure for nail position.] If nails are placed below the Nail Zone, the nail heads will not be covered by the overlaying shingles. If nails are placed above the Nail Zone, the wind resistance of the shingles is reduced and damage may occur which allows an extra path for water intrusion. The indicated positions across the shingle are to assure the nails are not near the end-to-end joints of the overlaying shingles.

Special Applications

Steep Slope Application: On slopes greater than 21" per foot (Mansard type roofs), 6 nails are required. [See figure for nail position.] Shingles are to be hand sealed at the time of application with asphalt roof cement complying with ASTM D4586, Type II. Apply 4 spots about the size of a quarter equally spaced along the Nail Zone, above the exposed area of the shingle.

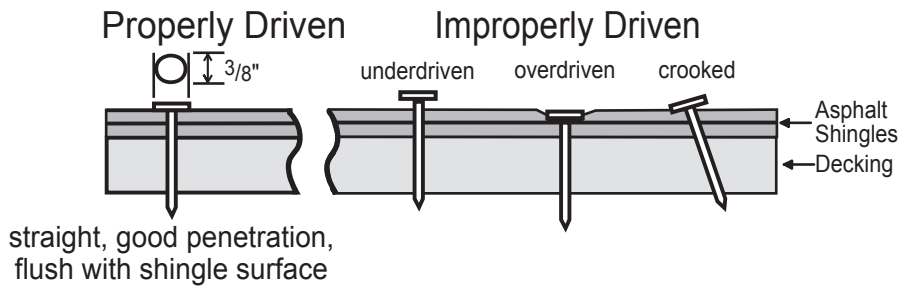
High Wind Application: For areas where local knowledge indicates exposure to high winds is likely (or where required by the building code), shingles must be applied with 6 nails and sealed to qualify for wind damage warranty coverage. [See figure for nail position.] PABCO shingles have a self-sealing asphalt strip that must be subjected heat to bond the shingles together. Direct warm sunlight can fully seal a roof in one day in hot climates. In other locations, the time needed to reach a fully sealed roof will be longer. If it is safe to allow the seal strip to bond the roof, that bond is generally stronger than a hand sealed roof. If it is not reasonable to wait for the seal strip bond, hand sealing (as detailed above) is appropriate.

Exposed Soffit Application: In areas where nail penetration through the decking is visually objectionable and 4 nails per shingle is the "normal" application, it is permitted to apply the shingles with shorter nails if 6 nails per shingle are used. The shorter nails are to be the maximum length possible without coming through the decking.

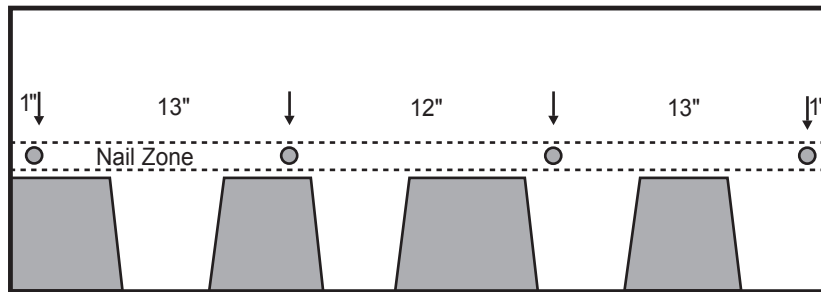
PABCO Limited Shingle Warranty

PABCO warrants that our shingles are free from manufacturing defects that adversely affect their performance. PABCO is not responsible for failures of any roof system that are not directly attributable to a PABCO product defect. See PABCO's limited warranty for details, limits and conditions.

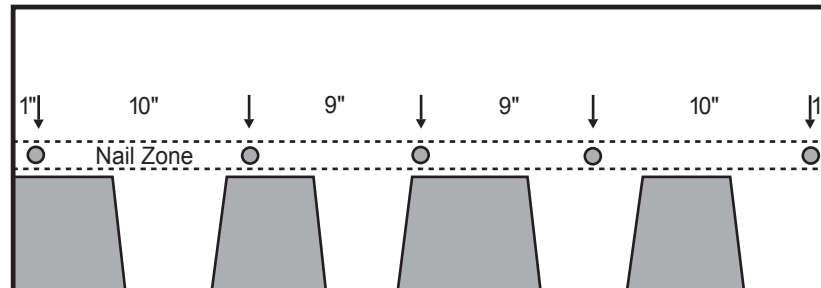
<u>Product</u>	<u>Nail Length</u>
PABCO Premier 30, 40 & Precise □	1"
PABCO Premier 50 & Advantage □ (for new construction)	1 1/4"



Positions For 4 Nails



Positions For 5 Nails



Positions For 6 Nails

