

PABCO PREMIER® 30-40-50 YEAR AND PREMIER ADVANTAGE® LAMINATED SHINGLES

Architectural Specifications: ASTM D-3018-94, Type I ASTM D-3462-99

1 General Instructions

ALWAYS FOLLOW LOCAL BUILDING CODES. TO QUALIFY FOR WARRANTY PROTECTION AND TO OBTAIN STATED COVERAGE, THESE DIRECTIONS MUST BE FOLLOWED. See PABCO's limited warranty for details, limits and conditions. Ask your supplier for a copy or visit our web site at pabcoroofing.com. Standard application exposure is 5 5/8" to the weather.

The step by step application instructions below apply to standard slope/inclines between 4" per foot and 21" per foot. For low slopes (2" to 4" per foot) and steep slopes (more than 21" per foot), modify the installation as described in Section #7. Do not apply these shingles on roofs having a slope less than 2" per foot.

IMPORTANT: THE DIAGONAL APPLICATION DESCRIBED HERE IS NECESSARY TO PREVENT OBJECTIONABLE PATTERNING. PABCO IS NOT RESPONSIBLE FOR PATTERNING ON ROOFS WHERE THE DIAGONAL METHOD OF APPLICATION IS NOT USED.

Ventilation: To prevent harmful condensation, air must circulate freely under the roof deck. FHA Minimum Property Standard indicates: A minimum of 1 square foot of total net free ventilating area is required for each 150 square feet of ceiling area, or 1 square foot for each 300 square feet of ceiling area if (A) a vapor barrier is installed on the warm side of the ceiling or (B) approximately one-half the ventilation is provided near the ridge.

2 Roof Deck Requirements: New Construction

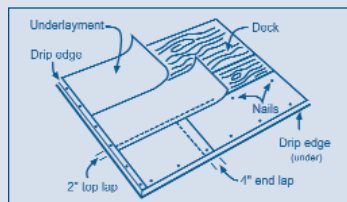
Plywood decks must be at least 3/8" thick plywood or 7/16" OSB type board conforming to the specifications of the American Plywood Association and the building code, or wood board decks must be well-seasoned, minimum nominal thickness 1", not over 6" in width.

PABCO SHINGLES SHOULD NEVER BE APPLIED TO ANY OTHER DECK without first obtaining written approval from PABCO'S Sales Manager. Requests for approval must be accompanied by the deck manufacturer's recommended application procedure for asphalt shingles. **APPLICATION DIRECTLY OVER POLYURETHANE OR POLYSTYRENE SURFACES WILL NOT BE APPROVED.**

3 Underlayment

On decks with a pitch of 4" per foot or greater, for new construction or when old roofing has been removed, apply a single layer of underlayment felt complying with ASTM D226 or ASTM D4869 and the building code. Lap the felt 2" horizontally with 4" end laps. Lap the felt a minimum of 6" from both sides over all hips, ridges and valleys.

Drip edges are made of corrosion resistant materials that extend 2" minimum back from the roof edges and bend downward over them. Apply drip edges directly to the deck along the eaves and over the underlayment along the rakes.



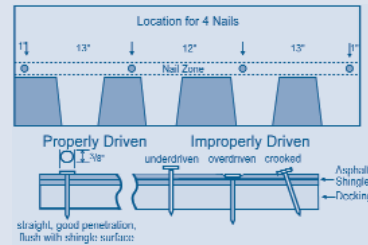
4 Eaves Flashing

If winter temperatures average 25oF or less, and ice may form along eaves to cause a back-up of water, install an eaves flashing for ice dam protection. Install a self adhering, peel and stick type underlayment sheet complying with ASTM D1970 parallel to the eaves. It overhangs the drip edge 1/4" to 3/8". This sheet extends up the roof to at least 24" inside the interior wall line. Horizontal laps (when needed), should be located over the overhang area. Horizontal overlaps are at least 2", end laps are at least 6".



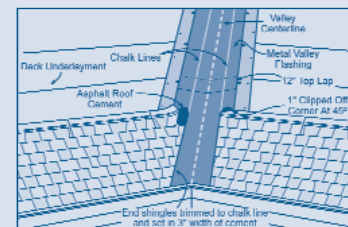
5 Nailing Instructions

Use four nails per shingle for normal application, positioned in the nail zone as shown below. Nails shall be at least 1" long, aluminum or galvanized, 3/8" head, 11 or 12 gauge roofing nails. Nails must be driven flush with shingle surface. **NAILS MUST NOT BE OVERDRIVEN TO CUT INTO SHINGLES.** See Nail Application Instructions Technical Bulletin at pabcoroofing.com for more information and details.



6 Valleys

Valley application must be in compliance with the building code. Where allowed, PABCO recommends using open metal valleys. This valley starts with a 36" underlayment centered down the valley. PABCO recommends the use of self adhering underlayment (ASTM D1970) for this bottom layer. The underlayment felt covering the decks extends over this and is trimmed overlapping 6". A second layer of felt is applied over this, centered down the valley. The metal valley flashing must be at least 26 gauge galvanized metal or an equally corrosion resistant metal, at least 24" wide. It is to be formed with a "W" shape and center rib. Apply the metal valley without puncturing it. Center the metal in the valley over the second layer of underlayment, extending beyond the drip edge 1/4" to 3/8". If more than one piece of flashing metal is needed, the lower piece is nailed at the top. The upper piece laps over the lower piece nails by at least 12" and the lap is cemented together with asphalt roof cement complying with ASTM D4586, Type II. Snap 2 chalk lines down the valley, starting 3" on either side of the valley center line at the top of the valley and diverging 1/8" per foot down the valley. Apply the shingles into the valley in the normal sequence of application for the rest of the roof. Trim the shingles to the chalk line, but never use a piece less than 12" wide. If necessary, trim the preceding shingle on the course. Apply the shingles into the valley so that no nails pass through the valley metal. Clip the upper shingle corner (in the valley) 1" at 45o. Embed each shingle end in a 3" wide strip of asphalt roof cement. See Valley Application Instructions Technical Bulletin at pabcoroofing.com for more information and details.



7 Special Applications

For areas where local knowledge indicates exposure to high winds may occur, shingles must be applied with 6 nails (spaced as shown below) and sealed to qualify for wind damage warranty coverage. **Steep Slope Application:** On slopes greater than 21" per foot

(Mansard type roofs), 6 nails are required, spaced as shown below. These shingles are to be hand sealed at the time of application with asphalt roof cement, by applying 4 spots about the size of a quarter equally spaced along the nail zone, above the exposed area of the shingle.

Low Slope Application: On slopes of 2" to 4" per foot, provide a



