

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 31 13—Asphalt Shingles

REPORT HOLDER:

**PABCO ROOFING PRODUCTS
A DIVISION OF PABCO BUILDING PRODUCTS**

EVALUATION SUBJECT:

PABCO ASPHALT SHINGLES: TAHOMA, SG-30, PREMIER, PREMIER RADIANCE, PREMIER PROFESSIONAL, PREMIER ELITE, PREMIER RADIANCE ELITE, PREMIER ADVANTAGE, PRESTIGE, PARAMOUNT, PARAMOUNT ADVANTAGE AND CASCADE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018 and 2015 *International Building Code*® (IBC)
- 2018 and 2015 *International Residential Code*® (IRC)

Properties evaluated

- Weather protection
- Wind resistance
- Fire classification

2.0 USES

The PABCO asphalt shingles described in this report are used as Class A roof coverings over new and existing roofs.

3.0 DESCRIPTION

3.1 General:

The PABCO asphalt shingles recognized in this report are roof covering materials complying with ASTM D3462 and are Class A roof coverings when installed as described in this report. The products are available as three-tab shingles (SG-30 and Tahoma), laminated shingles (Premier, Premier Radiance, Premier Professional, Premier Elite, Premier Radiance Elite, Premier Advantage and Prestige) and as open tooth shingles (Paramount, Paramount Advantage and Cascade). See Table 1 for shingle types, product names and dimensions.

3.2 Materials:

3.2.1 Three-tab Shingles: SG-30 and Tahoma shingles are three-tab shingles composed of a single layer of fiberglass mat, impregnated and coated on both sides with

asphalt. The weather side is surfaced with mineral granules; the back side is surfaced with sand or granules. The three-tab shingles are self-sealing with a 1/2-inch-wide (12.7 mm) intermittent sealant strip parallel to, and 6⁵/₈ inches (168 mm) above, the butt edge of the shingle on the weather side. The maximum exposure to weather is 5⁵/₈ inches (143 mm).

3.2.2 Laminated Shingles: Premier, Premier Radiance, Premier Professional, Premier Elite, Premier Radiance Elite, Premier Advantage and Prestige are laminated shingles composed of multiple layers of the single-layer product, laminated together. The weather side is surfaced with mineral granules; the back side is surfaced with sand or granules. The laminated shingles are self-sealing with a minimum 1/2-inch-wide (12.7 mm) intermittent sealant strip parallel to, and 1³/₈ inches (35 mm) above, the butt edge of the shingle on the underside. The maximum exposure to weather for all shingles is 5⁵/₈ inches (143 mm).

3.2.3 Open Tooth Shingles: Paramount, Paramount Advantage and Cascade are shingles composed of multiple layers of the single-layer product, laminated together before the teeth are cut from the sheet. The weather side is surfaced with mineral granules; the back side is surfaced with sand or granules. These open tooth shingles are self-sealing with minimum of 1/2-inch-wide (12.7 mm) intermittent sealant strips, one centered 1 inch above the butt edge and one centered 5¹/₄ inches (133 mm) above the butt edge of the shingle on the underside. These open tooth shingles are applied with a 4¹/₂-inch (110 mm) exposure to the weather.

3.2.4 Accessory Shingles:

3.2.4.1 Hip and Ridge Shingles: Prefabricated hip and ridge shingles are provided with a factory-applied sealant, as PABCO Shadow Cap. The product is perforated to facilitate separation into four 13¹/₄-inch-wide-by-9²⁷/₃₂-inch-long (336 mm by 250 mm) pieces for use as either hip or ridge covering shingles.

3.2.4.2 Starter Strip Shingles: Starter strip shingles are factory-made shingles to be used as the starter course under the first course of field shingles. The starter strip shingles are manufactured from the same materials as the field shingles. Universal Starter Shingles are 7⁵/₈ inches wide by 39³/₈ inches long (194 mm by 1000 mm) and fully covered when correctly applied. Paramount Starter Shingles are 13¹/₄ inches high by 40 inches wide (337 mm by 1016 mm) and are exposed 4¹/₂ inches (114 mm) when correctly applied.

3.2.5 Fasteners: Fasteners must be No. 11 gage [0.120-inch-diameter (3.05 mm)] or No. 12 gage [0.105-inch-diameter (2.67 mm)], 3/8-inch-diameter-head

(9.5 mm), corrosion-resistant nails complying with ASTM F1667. Fasteners must be of sufficient length to penetrate into the sheathing $\frac{3}{4}$ inch (19.1 mm), or through the sheathing, whichever is less.

3.2.6 Underlayment: Roof underlayment must comply with 2018 IBC Sections 1507.1.1 and 1507.2.3, 2015 IBC Section 1507.2.3, IRC Section R905.1.1 and Table R905.1.1(1), as applicable. As an alternative, a roof underlayment recognized in a current ICC-ES evaluation report as complying with AC160 or AC188 may be used, provided it is recognized as being intended for use with Class A asphalt shingles. In areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier must be provided in accordance with 2018 IBC Sections 1507.1.2 and 1507.2.7 [2015 IBC Section 1507.2.8.2], IRC Sections R905.1.2 and R905.2.7, as applicable.

3.2.7 Asphalt Cement: Asphalt cement must comply with ASTM D4586, Type II.

3.2.8 Sheathing: The roof deck must be minimum $\frac{3}{8}$ -inch-thick (9.5 mm), exterior-grade plywood; minimum $\frac{7}{16}$ -inch-thick (11.1 mm) oriented strand board (OSB); or solid sheathing using minimum nominally 1-inch-thick lumber with a maximum width of 6 inches (152 mm) conforming to IBC Section 2304.8.2 or Section 2308.7.10 and IRC Sections R503.2 and R803.

4.0 INSTALLATION

4.1 General:

PABCO asphalt shingles must be installed in accordance with the applicable code, this report and the manufacturer's published installation instructions. The shingles must be installed in accordance with IBC Section 1507.2 or IRC Section R905.2, as applicable, except as noted in this report.

The manufacturer's published installation instructions and this report must be strictly adhered to, and a copy of the instructions must be available at all times on the jobsite during installation.

4.2 Shingle Application:

4.2.1 Three-Tab and Laminated Shingles: Shingles are applied with vertical joints offset $5\frac{5}{8}$ inches (143 mm) from adjacent courses. End joints must be a minimum of 3 inches (76 mm) from a fastener in the shingle below. Offset patterns between courses may vary, provided side laps are a minimum of 5 inches (127 mm) in succeeding courses. Maximum exposure to the weather is $5\frac{5}{8}$ inches (143 mm).

4.2.2 Open Tooth Shingles: Paramount and Paramount Advantage shingles are applied with vertical joints offset $5\frac{3}{4}$ inches (146 mm) from adjacent courses. Cascade shingles are applied with vertical joints offset 5 inches (127 mm). End joints must be a minimum of 3 inches (76 mm) from a fastener in the shingle below. Maximum exposure to the weather is $4\frac{1}{2}$ inches (114 mm).

4.2.3 Application in Colder Climates and Windy Regions: In colder climates or windy regions, when it is questionable whether the sealant strip will activate and seal the tabs, the shingles must be hand-sealed. For three-tab shingles, two 1-inch-diameter (25.4 mm) spots of asphalt cement must be applied to the underside of the corners of each tab, so that the cement does not squeeze out from under the shingle. For laminated shingles, four 1-inch-diameter (25.4 mm) spots of asphalt cement are applied so that the cement does not squeeze out from

under the shingle. Two spots are located at the corners of the butt edge, and two spots are equally spaced in between. For open tooth shingles, the asphalt cement must be applied as required for laminated shingles, except the location of the spots of asphalt cement must be under each tooth.

4.3 Shingle Fastening:

Three-tab shingles must be fastened to the roof deck with a minimum of four fasteners along the nail line, which is $6\frac{1}{4}$ inches (158 mm) from the butt edge. Laminated shingles must be fastened to the roof deck with a minimum of four fasteners located within the $\frac{1}{2}$ -inch-wide (12.7 mm) fastener zone, which is centered 6 inches (152 mm) from the butt edge. Open tooth shingles must be fastened to the deck with a minimum of five fasteners located within the nail zone. For roof slopes greater than 21:12 (175 percent slope), six fasteners must be used for the three-tab, laminated and open tooth shingles. See Figure 1.

4.4 Flashings:

The roof must be flashed in accordance with 2018 IBC Sections 1503.2 and 1507.2.8 [2015 IBC Sections 1503.2 and 1507.2.9] or IRC Sections R903.2 and R905.2.8, as applicable.

4.5 Hip and Ridge Application:

Hip and ridge shingles must be placed evenly over the hips and ridges, and fastened to the roof deck using two fasteners, one on each side of the shingle, approximately $6\frac{5}{8}$ inches (168 mm) from the butt edge and 1 inch (25.4 mm) from the side edge. The hip and ridge shingles are installed with a $5\frac{5}{8}$ -inch (143 mm) exposure to the weather. Fasteners must be long enough to penetrate into the sheathing $\frac{3}{4}$ inch (19.1 mm), or through the thickness of the sheathing, whichever is less.

4.6 Reroofing:

When installed over existing Class A or Class C asphalt shingles in accordance with Section 4.0, the shingles are recognized as Class A roof coverings. The existing asphalt shingle roof covering must be inspected in accordance with provisions and limitations of IBC Section 1511, IRC Section R908, as applicable. Fasteners must be of sufficient length to penetrate into the sheathing $\frac{3}{4}$ inch (19.1 mm), or through the sheathing, whichever is less.

4.7 Wind Resistance:

The asphalt shingles have been tested for wind resistance in accordance with ASTM D3161 and ASTM D7158. Shingles tested in accordance with ASTM D3161 are classified as Class F and qualify for use under IBC Section 1504.1.1 or IRC Section R905.2.4.1, as applicable. Shingles tested in accordance with ASTM D7158 are classified as Class H and qualify for use in locations where the maximum basic wind speed is 150 mph (67 m/s) or less, with an Exposure Category of B or C and a maximum building height of 60 feet (18.3 m). Installation must be in accordance with 2018 IBC Section 1507.2.6 [2015 IBC Section 1507.2.7] or IRC Section R905.2.6, as applicable.

5.0 CONDITIONS OF USE

The PABCO asphalt shingles described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The products are manufactured, identified and installed in accordance with this report and the

manufacturer’s installation instructions. If there is a conflict between the manufacturer’s published installation instructions and this report, this report governs.

5.2 The products are manufactured in Tacoma, Washington, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Manufacturer’s published installation instructions and product literature.
- 6.2 Reports of testing in accordance with ASTM D3462.
- 6.3 Reports of testing in accordance with ASTM D7158 and ASTM D3161.
- 6.4 Reports of testing in accordance with UL 790.
- 6.5 Quality control documentation.

7.0 IDENTIFICATION

7.1 Each bundle of shingles bears a label with the PABCO Roofing Products name and address; the

product name and a production date code; the Class A roof classification; references to ASTM D3161 Class F, and ASTM D7158 Class H; installation instructions; and the evaluation report number (ESR-1717). Additionally, in accordance with ASTM D3462, each bundle of shingles is marked with the area of the roof surface covered, the ASTM designation, and style and color of the product.

7.2 The report holder’s contact information is the following:

PABCO ROOFING PRODUCTS
A DIVISION OF PABCO BUILDING PRODUCTS
1476 THORNE ROAD
TACOMA, WASHINGTON 98421-3207
(253) 272-0374
www.pabcoroofing.com
contact@pabcoroofing.com

TABLE 1—PRODUCT DIMENSIONS

SHINGLE TYPE	PRODUCT	DIMENSIONS (inches) (height x width)
Three Tab	SG-30	13 ¹ / ₄ x 39 ³ / ₈
	Tahoma	
Laminated	Premier	13 ¹ / ₄ x 40
	Premier Radiance	
	Premier Professional	
	Premier Elite	
	Premier Radiance Elite	
	Premier Advantage	
	Prestige	
Open Tooth	Paramount	15 ¹ / ₂ x 40
	Paramount Advantage	
	Cascade	
Accessory	Shadow Cap	13 ¹ / ₄ x 39 ³ / ₈
	Universal Starter	7 ⁵ / ₈ x 39 ³ / ₈
	Paramount Starter	13 ¹ / ₄ x 40

For SI: 1 inch = 25.4 mm

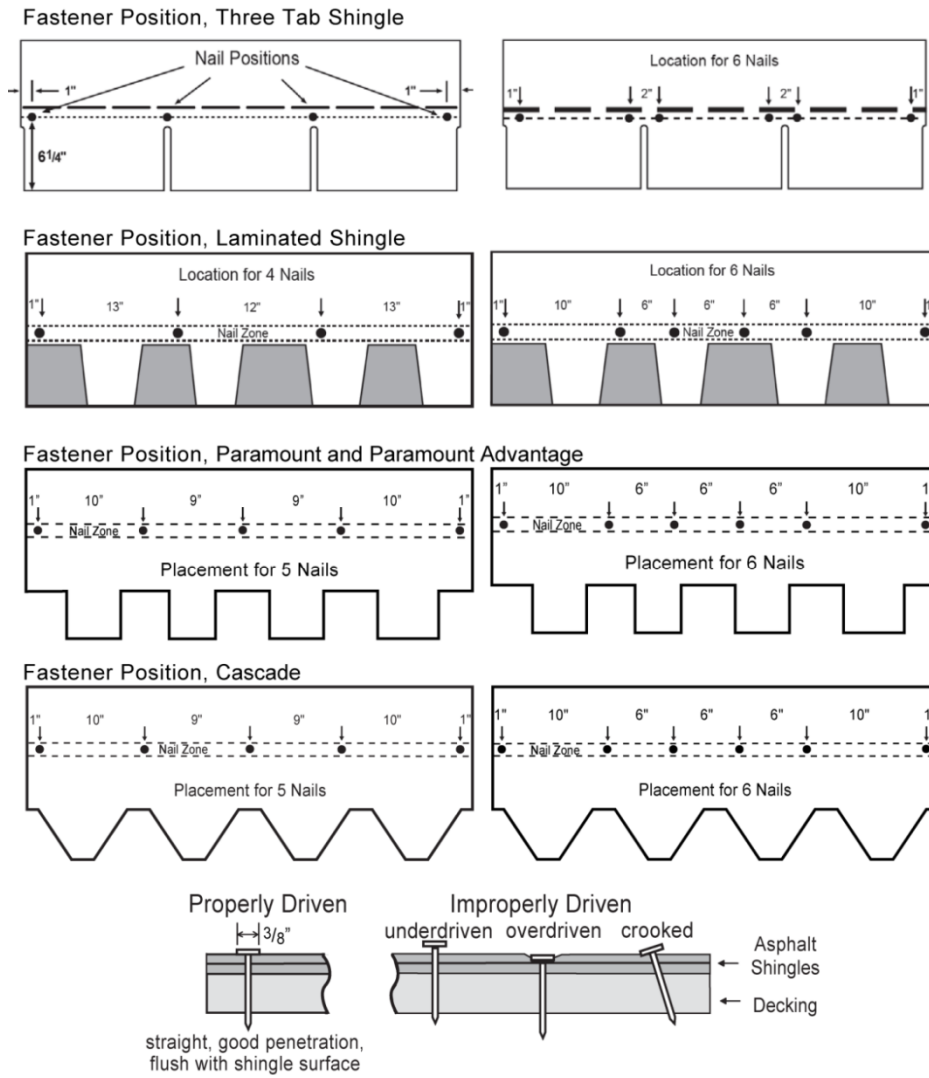


Figure 1, Typical Fastening Details

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 31 13—Asphalt Shingles

REPORT HOLDER:

**PABCO ROOFING PRODUCTS
A DIVISION OF PABCO BUILDING PRODUCTS**

EVALUATION SUBJECT:

PABCO ASPHALT SHINGLES: TAHOMA, SG-30, PREMIER, PREMIER RADIANCE, PREMIER PROFESSIONAL, PREMIER ELITE, PREMIER RADIANCE ELITE, PREMIER ADVANTAGE, PRESTIGE, PARAMOUNT, PARAMOUNT ADVANTAGE AND CASCADE

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that PABCO asphalt shingles, recognized in ICC-ES evaluation report ESR-1717, have also been evaluated for compliance with the codes noted below.

Applicable code edition(s):

- 2019 *California Building Code*® (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2019 *California Residential Code*® (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The PABCO asphalt shingles, described in Sections 2.0 through 7.0 of the evaluation report ESR-1717, comply with CBC Sections 1505.1 and 1507.2, and may be used where the CBC requires a Class A roof covering complying with CBC Section 1505.1.1, a Class B roof covering complying with CBC Section 1505.1.2, or a Class C roof covering complying with CBC Section 1505.1.3, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions respectively, noted in the evaluation report and the additional requirements of CBC Section 1511, as applicable.

The asphalt shingles may be used in the construction of new buildings located in any Fire Hazard Severity Zone within a State Responsibility Areas or any Wildland-Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Building Code*® (IBC) provisions, as applicable, noted in the evaluation report and the additional requirements of Sections 701A.3 and 705A of the CBC.

2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

2.2 CRC:

The PABCO asphalt shingles, described in Sections 2.0 through 7.0 of the evaluation report ESR-1717, comply with CRC Sections R902.1 and R905.2, and may be used where the CRC requires a Class A roof cover complying with CRC Section R902.1.1, a Class B roof covering complying with CRC Section R902.1.2, or a Class C roof covering complying with CRC Section R902.1.3, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions respectively, noted in the evaluation report and the additional requirements of CRC Section R908, as applicable.

The asphalt shingles may be used in the construction of new buildings located in any Fire Hazard Severity Zone within a State Responsibility Areas or Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Residential Code*® (IRC) provisions, as applicable, noted in the evaluation report and the additional requirements of Sections R337.1.3.1 and R337.5 of the CRC.

The products recognized in this supplement have not been evaluated for compliance with the *International Wildland–Urban Interface Code*®.

This supplement expires concurrently with the evaluation report, reissued December 2019.