

**ICC-ES Evaluation Report****ESR-1389**

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**DIVISION: 07—THERMAL AND MOISTURE PROTECTION**  
**Section: 07310—Shingles****REPORT HOLDER:****CERTAINTEED CORPORATION**  
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[www.certaiteed.com](http://www.certaiteed.com)**EVALUATION SUBJECT:****CERTAINTEED ASPHALT SHINGLES****1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)
- Other Codes (see Section 8.0)

**Properties evaluated:**

- Weather resistance
- Fire classification
- Wind resistance

**2.0 USES**

The CertainTeed asphalt shingles described in this report are Class A roof coverings when installed as described in this report.

**3.0 DESCRIPTION****3.1 General:**

CertainTeed asphalt shingles are available as three-tab, four-tab, laminated and no-cutout strip asphalt shingle roof covering materials. See Table 1 and Figure 1 for recognized product names, shingle types, manufacturing locations, overall dimensions, installed weights, maximum exposure to the weather, and fastening details. The shingles are self-sealing by means of adhesive strips located on either the weather side or the underside. See Figure 1 for adhesive strip location for field shingles and Starter Strip shingles.

**3.2 Three-tab Shingles and Four-tab Shingles:**

Three-tab and Four-tab shingles are composed of a single layer of fiberglass mat, impregnated and coated with asphalt on both sides, and surfaced with mineral roofing

granules on the weather side and a mineral release agent on the back side.

**3.3 Laminated Shingles:**

Laminated shingles, including two-layer laminated, three-layer laminated and tri-laminate laminated shingles, are composed of multiple thicknesses of coated and surfaced fiberglass mat, cut and bonded together in different patterns. The weather side is surfaced with mineral roofing granules, and the back side is surfaced with a mineral release agent.

**3.4 No-Cutout Shingles:**

No-Cutout Shingles are similar to three-tab shingles, except that the No-Cutout Shingles are continuous strip shingles, without tabs.

**3.5 Accessory Shingles:**

**3.5.1 Hip and Ridge Shingles:** Hip and ridge shingles are factory-made shingles to be used for covering hips and ridges. The hip and ridge shingles are composed of the same materials as the roof shingles. The hip and ridge shingles have perforations that extend from the top of the cut-out to the top of the shingle, which facilitate the tearing of the shingle into three or four equal pieces.

**3.5.2 Starter Strip Shingles:** Starter Strip shingles are factory-made shingles to be used as the starter course (under the first course of roof shingles). The Starter Strip shingles are composed of the same materials as the roof shingles. The shingles are supplied in 7-inch-by-36-inch-long (178 by 914 mm); 10-inch-by-36-inch-long (254 by 914 mm); or 7-inch-by-39<sup>3</sup>/<sub>8</sub>-inch-long (178 by 1000 mm) strips. As an alternative to factory-made starter strips, starter strips can be formed by removing the lower tab portions of the factory-made shingles except for the Presidential Shake and Presidential Shake TL shingles. For Presidential Shake and Presidential Shake TL shingles, the Presidential Starter shingles consist of one 13<sup>1</sup>/<sub>4</sub>-inch-wide-by-40-inch-long (337 mm by 1016 mm) base shingle and one 11<sup>1</sup>/<sub>4</sub>-inch-wide-by-40-inch-long (286 mm by 1016 mm) base shingle.

**3.6 Fasteners:**

Fasteners must comply with ASTM F 1667 and must be minimum No. 12 gage [0.105-inch-diameter (2.67 mm) shank], <sup>3</sup>/<sub>8</sub>-inch-diameter-head (9.5 mm), galvanized steel, stainless steel, aluminum or copper roofing nails. Fasteners must be of sufficient length to penetrate into the sheathing <sup>3</sup>/<sub>4</sub> inch (19.1 mm), or through the sheathing, whichever is less.

### 3.7 Underlayment:

The roof underlayment must comply with ASTM D 226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D 1970, or must be underlayment recognized in a current ICC-ES evaluation report as complying with the ICC-ES Acceptance Criteria for Nonasphaltic Fiberglass-based Roof Underlayment (AC160) and recognized 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, ice dam protection in accordance with IBC Section 1507.2.8.2 or IRC Section R905.2.7.1 must be provided.

### 3.8 Asphalt Cement:

Asphalt roofing cement must comply with ASTM D 4586, Type I, Class I, or Type II, Class I.

## 4.0 INSTALLATION

### 4.1 New Construction:

**4.1.1 General:** When installed on new construction in accordance with this section, the shingles are a Class A roof covering. The shingles must be installed in accordance with IBC Section 1507.2 or IRC Section R905.2, except as noted in this report. The roof deck must be code-complying, minimum  $\frac{3}{8}$ -inch-thick (9.5 mm) exterior-grade plywood;  $\frac{7}{16}$ -inch-thick (11.1 mm) oriented strand board (OSB); or nominally 1-inch-by-6-inch (25 by 152 mm) lumber installed as solid sheathing conforming to IBC Sections 2304.7.2 or 2308.10.8. Minimum roof slope must be 2:12 (16.7%). The maximum roof slope must be as stated in Section 4.1.2 of this report. Installation instructions are included as part of the identification label attached to each bundle of shingles. (See Section 7.0.) Underlayment must be as described in Section 3.7 of this report, and applied in accordance with IBC Section 1507.2.8 or IRC Section R905.2.7.

### 4.1.2 Application:

#### 4.1.2.1 Eave and Rake Edges of the Roof:

**4.1.2.1.1 Roof Slopes of 2:12 to 21:12 (16.7% to 175%):** Starter Strip shingles must be attached to the eave and rake edges with four or five fasteners, equally spaced along the nail line as shown in Figure 1. The Starter Strip shingles must overhang the eave and rake edges by  $\frac{1}{2}$  to  $\frac{3}{4}$  inch (12.7 to 19.1 mm).

**4.1.2.1.2 Roof Slopes Greater than 21:12 (175%):** Starter Strip shingles must be attached to the eave and rake edges with four or five fasteners, equally spaced along the nail line as shown in Figure 1. The Starter Strip shingles must overhang the eave and rake edges by  $\frac{1}{2}$  to  $\frac{3}{4}$  inch (12.7 to 19.1 mm).

**4.1.2.2 Field of the Roof:** The first course of field shingles must be installed over the starter course. Each course of shingles must be offset from the preceding course as shown in Figure 2 and as specified in Table 1. Fastening details, including number and location of fasteners, and maximum exposure to the weather, are described in Table 1 and Figure 1.

Methods of fastening for roof slopes of 2:12 (16.7%) to 21:12 (175%) and for roof slopes greater than 21:12 (175%) are as shown in Figure 1 for the standard and high-wind applications. For slopes greater than 21:12 (175%), the shingles must also be hand-sealed as described in Section 4.1.2.4.

**4.1.2.3 High Wind Fastening:** Shingles must be fastened with four or five No. 12 gage roofing nails, described in Section 3.6, as shown in Figure 1, when the shingles are installed under the following conditions:

**4.1.2.3.1 IBC:** When the roof is installed in applications where the basic wind speed is 110 mph (177 km/h) or greater.

**4.1.2.3.2 IRC:** When the roof is installed in areas where the basic wind speed is 110 mph (177 km/h) or greater, as defined in IRC Figure R301.2(4).

**4.1.2.4 Shingle Sealing:** In colder climates or wind regions where it is questionable whether the factory-applied adhesive will activate and seal the shingles, the shingles must be hand-sealed to the satisfaction of the code official. Hand-sealing must consist of applying a minimum of four 1-inch-diameter (25.4 mm) spots of asphalt roofing cement to the unexposed surface of the underlying course of shingles, equally spaced across each shingle. For three-tab and four-tab shingles, one spot of asphalt roofing cement must be placed under each corner of each tab (two spots per tab); the tab must then be pressed into the cement. For laminated shingles, four equally spaced spots of asphalt roofing cement must be placed under the exposed portion of the shingle; the shingle must then be pressed into the cement.

**4.1.2.5 Hip and Ridge Shingles:** Hip and ridge shingles must be placed evenly over hips and ridges (or over shingle-over ridge vents), and fastened to the roof deck with two fasteners, located on either side of the shingle, along the nail line as shown in Figures 1 and 3.

**4.1.3 Valley Construction:** Open valleys are recommended by CertainTeed, although closed-cut valleys may be used for Grand Manor, Centennial Slate, Carriage House, Presidential TL, Presidential Shake and Landmark TL shingles. Closed-cut valleys are recommended by CertainTeed for all other shingles. Acceptable valley construction for closed-cut, California closed-cut, or woven valleys must require that a 36-inch-wide (914 mm), 50-pound-per-100-square-foot (2.4 kg/m<sup>2</sup>) or greater, smooth-surfaced roll roofing, complying with ASTM D 6380, or specialty underlayment complying with ASTM D 1970, be installed vertically in the valley over required underlayment. The California valley methods must be limited to Landmark, Landmark-Woodscape, New Horizon, and Centennial Slate shingles for slopes of 4:12 or greater and are further described in Figure 4 of this report. Fasteners must not be placed within 6 inches (152 mm) of the valley centerline. For open valleys, corrosion-resistant metal valley flashing must be centered and placed vertically in the valley over the smooth-surfaced roll roofing, or specialty underlayment.

Corrosion-resistant metal valley flashing must be as follows:

- IBC: A minimum of 16 inches (406 mm) wide, complying with IBC Table 1507.2.9.2.
- IRC: A minimum of 24 inches (610 mm) wide, complying with IRC Table R905.2.8.2.

### 4.2 Installation—Reroofing:

When installed over existing wood shingle or Class A or Class C asphalt shingle roofs in accordance with this section (Section 4.2), the shingle products are recognized as Class A roof coverings. The existing wood or asphalt shingle roof covering must be inspected in accordance with provisions and limitations of IBC Section 1510 or IRC Section R907, as applicable. Prior to the reroofing, hip and ridge covering must be removed, and a single layer of ASTM D 226, Type II, nonperforated, felt underlayment must be installed over the existing wood shingles. Except as noted in this section, the shingles must be installed in accordance with Section 4.1 of this report. Fasteners must

be of sufficient length to penetrate  $\frac{3}{4}$  inch (19.1 mm) into the sheathing, or through the sheathing, whichever is less. Flashing and edging must comply with Section 4.1.3 of this report and the following, as applicable:

- IBC: IBC Sections 1510.5 and 1510.6.
- IRC: IRC Sections R907.5 and R907.6.

## 5.0 CONDITIONS OF USE:

The CertainTeed Asphalt Shingle Roof Covering Systems 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 shingles must be manufactured, identified, and installed in accordance with the applicable codes, this report, and the manufacturer's published 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 Avery, Ohio; Fremont, California; Norwood, Massachusetts; Oxford, North Carolina; Peachtree City, Georgia; Portland, Oregon; Shakopee, Minnesota; Shreveport, Louisiana; and Wilmington, California, under a quality control program with inspections by Underwriters Laboratories Inc. (AA-668).

## 6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with ASTM D 3462.
- 6.2** Reports of dynamic wind resistance testing in accordance with ASTM D 3161, modified to use a wind speed of 110 mph (177 km/h).
- 6.3** Quality documentation.

## 7.0 IDENTIFICATION

Each bundle of shingles bears a label with the name and address of the CertainTeed Corporation manufacturing plant; the product brand name; the Class A roof classification; the installation instructions; the evaluation report number (ESR-1389); and the name of the inspection agency (Underwriters Laboratories Inc.). Additionally, in accordance with ASTM D 3462, each bundle of shingles is marked with the area of the roof surface covered and the style, type and color of the product.

## 8.0 OTHER CODES

### 8.1 Scope:

In addition to the codes referenced in Section 1.0, the products described in this report were evaluated to compliance with the requirements of the 1997 *Uniform Building Code™* (UBC).

### 8.2 Uses:

See Section 2.0.

### 8.3 Description:

**8.3.1 (General) through 8.3.5 (Accessory Shingles):** See Sections 3.1 through Section 3.5.

**8.3.2 Fasteners:** Fasteners must comply with ASTM F 1667 and must be minimum No. 12 gage [0.105-inch-diameter (2.67 mm) shank],  $\frac{3}{8}$ -inch-diameter-head (9.5 mm), galvanized steel, stainless steel, aluminum or copper roofing nails. Minimum No. 16 gage [0.06-inch (1.5 mm)],  $\frac{15}{16}$ -inch-crown-width (23.8 mm), corrosion-resistant staples may be used when approved by the code official. Staples must not be used with Grand Manor, Carriage

House, Centennial Slate, Presidential TL, Landmark TL and Hatteras shingles. 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.

**8.3.3 Underlayment:** Roof underlayment must comply with ASTM D 226 Type I or Type II. In severe climate areas subject to roof ice buildup, underlayment in accordance with UBC Table 15-B-1 must be provided.

**8.3.4 Asphalt Cement:** See Section 3.8.

### 8.4 Installation:

#### 8.4.1 New Construction:

**8.4.1.1 General:** When installed on new construction in accordance with this section, the shingles are a Class A roof covering. The shingles must be installed in accordance with UBC Table 15-B-1, except as noted in this report. The roof deck must be code-complying, minimum  $\frac{3}{8}$ -inch-thick (9.5 mm), exterior-grade plywood;  $\frac{7}{16}$ -inch-thick (11.1 mm) oriented strand board (OSB); or nominally 1-inch-by-6-inch (25 by 152 mm) lumber installed as solid sheathing conforming to UBC Sections 2312.2 and 2320.12.9. Minimum roof slope must be 2:12 (16.7%). The maximum roof slope must be as stated in Section 4.1.2 of this report. Installation instructions are included as part of the identification label attached to each bundle of shingles. (See Section 7.0.) Underlayment must be as described in Section 8.3.7, and applied in accordance with UBC Table 15-B-1.

#### 8.4.1.2 Application:

**8.4.1.2.1 (Eave and Rake Edges of the Roof):** See Section 4.1.2.1.

**8.4.1.2.2 (Field of the Roof):** See Section 4.1.2.2.

**8.4.1.2.3 High Wind Fastening:** Shingles must be fastened with four or five No. 12 gage roofing nails, described in Section 3.6, as shown in Figure 1, when the shingles are installed under the following conditions: In areas exposed to conditions where the basic (fastest mile) wind speed exceeds 80 mph (129 km/h), on structures a maximum of 40 feet (12 192 mm) in height, in Exposure B areas; but where the maximum basic (fastest mile) wind speed is not greater than 110 mph (177 km/h), on structures a maximum of 30 feet (9144 mm) in height, in Exposure B areas. See UBC Section 1620.

**8.4.1.2.4 Shingle Sealing:** See Section 4.1.2.4.

**8.4.1.2.5 Hip and Ridge Shingles:** See Section 4.1.2.5.

**8.4.1.3 Valley Construction:** See Section 4.1.3, but revise the last paragraph to read as follows: Corrosion-resistant valley flashing must be a minimum of 18 inches (457 mm) wide and comply with UBC Section 1508.2, except that the flashing must extend 9 inches (305 mm) from the centerline each way.

**8.4.2 Installation—Reroofing:** See Section 4.2, but revise the last sentence to read as follows: Flashing and edging must comply with Section 8.4.1.3 and Section 1520 of the Appendix to UBC Chapter 15.

### 8.5 Conditions of Use:

See Section 5.0.

### 8.6 Evidence Submitted:

See Section 6.0.

### 8.7 Identification:

See Section 7.0.

TABLE 1—PRODUCT DESCRIPTIONS AND MANUFACTURING LOCATIONS

PRODUCTS	SHINGLE TYPE	PLANT LOCATION	PLANT DESIGNATION	DIMENSIONS (width x height) (inches)	WEIGHT (lb per 100 square feet)	MAXIMUM EXPOSURE TO THE WEATHER (inches)	LOCATION OF NAIL "LINE" (distance above shingle butt) (inches)	OFFSET FROM PRECEDING COURSE OF SHINGLES (inches)
<b>SHINGLES</b> (See Note 1)					(Applied)		(See Note 2)	(See Note 3)
Grand Manor Shingle, also known as Grand Manor	3-Layer Laminated	Oxford, NC	OX	36 x 18	425	8	8 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
Carriage House Shingle, also known as Carriage House	2-Layer Laminated	Oxford, NC	OX	36 x 18	355	8	8 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
Centennial Slate	2-Layer Laminated	Oxford, NC	OX	36 x 18	355	8	8 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
Presidential Shake TL	Tri-Laminate	Fremont, CA; Shakopee, MN	FR, SH	40 x 14 <sup>1</sup> / <sub>4</sub>	480	4	9	5, 15, 5, 15
Presidential Shake	Laminated	Fremont, CA; Shakopee, MN	FR, SH	40 x 14 <sup>1</sup> / <sub>4</sub>	355	4	9	5, 15, 5, 15
Landmark TL	Tri-Laminate	Fremont, CA; Oxford, NC	FR, OX	40 x 13 <sup>1</sup> / <sub>4</sub>	340	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 17 <sup>1</sup> / <sub>2</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark Premium	Laminated (Metric)	Peachtree City, GA; Portland, OR; Shakopee, MN; Shreveport, LA; Wilmington, CA; Oxford, NC; Avery, OH	PT, PO, SH, SP, WI, OX, AV	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	300	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark Premium-Woodscape Premium	Laminated (Standard)	Norwood, MA	NW	36 x 12	300	5	5 <sup>5</sup> / <sub>8</sub>	7, 7, 8, 7, 7
Landmark Solaris	Laminated (Metric)	Peachtree, GA; Portland, OR	PT, PO	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	300	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark Plus	Laminated (Metric)	Peachtree City, GA; Portland, OR; Shakopee, MN; Shreveport, LA; Wilmington, CA; Oxford, NC; Avery, OH	PT, PO, SH, SP, WI, OX, AV	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	265	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark Special	Laminated (Metric) Impact Resistant	Shreveport, LA	SP	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	265	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark	Laminated (Metric)	Peachtree City, GA; Portland, OR; Shakopee, MN; Shreveport, LA; Wilmington, CA; Oxford, NC; Avery, OH	PT, PO, SH, SP, WI, OX, AV	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	250	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>
Landmark-Woodscape	Laminated (Standard)	Norwood, MA	NW	36 x 12	250	5	5 <sup>5</sup> / <sub>8</sub>	7, 7, 8, 7, 7
Landmark Premium-Woodscape Premium	Laminated (Standard)	Norwood, MA	NW	36 x 12	300	5	5 <sup>5</sup> / <sub>8</sub>	7, 7, 8, 7, 7
Landmark-Woodscape	Laminated (Standard)	Norwood, MA	NW	36 x 12	250	5	5 <sup>5</sup> / <sub>8</sub>	7, 7, 8, 7, 7
XT-30	3-Tab (Metric)	Portland, OR	PO	39 <sup>3</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub>	245	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>
XT-30	3-Tab (Standard)	Avery, OH; Norwood, MA; Oxford, NC; Shakopee, MN; Shreveport, LA	AV, NW, OX, SH, SP	36 x 12	245	5	5 <sup>5</sup> / <sub>8</sub>	6
XT-30 IR	3-Tab (Standard) Impact Resistant	Shreveport, LA; Oxford, NC	SP, OX	36 x 12	245	5	5 <sup>5</sup> / <sub>8</sub>	6
XT-25	3-Tab (Metric)	Portland, OR	PO	39 <sup>3</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub>	225	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>
XT-25	3-Tab (Standard)	Avery, OH; Norwood, MA; Oxford, NC; Shakopee, MN; Shreveport, LA	AV, NW, OX, SH, SP	36 x 12	225	5	5 <sup>5</sup> / <sub>8</sub>	6
CT-20	3-Tab (Metric)	Portland, OR	PO	39 <sup>3</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub>	200	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>
CT-20	3-Tab (Standard)	Oxford, NC; Shreveport, LA	OX, SP	36 x 12	200	5	5 <sup>5</sup> / <sub>8</sub>	6
Landmark Premium-Architect 80	Laminated (Metric)	Portland, OR	PO	38 <sup>3</sup> / <sub>4</sub> x 13 <sup>1</sup> / <sub>4</sub>	300	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub> , 16 <sup>1</sup> / <sub>4</sub> , 5 <sup>5</sup> / <sub>8</sub> , 5 <sup>5</sup> / <sub>8</sub>

TABLE 1—PRODUCT DESCRIPTIONS AND MANUFACTURING LOCATIONS (Continued)

PRODUCTS	SHINGLE TYPE	PLANT LOCATION	PLANT DESIGNATION	DIMENSIONS (width x height) (inches)	WEIGHT (lb per 100 square feet)	MAXIMUM EXPOSURE TO THE WEATHER (inches)	LOCATION OF NAIL "LINE" (distance above shingle butt) (inches)	OFFSET FROM PRECEDING COURSE OF SHINGLES (inches)
Independence Shingle, also known as Independence	3-Tab Laminated (Standard)	Avery, OH; Oxford, NC; Shakopee, MN	AV, OX, SH	36 x 12	300	5	5 <sup>5</sup> / <sub>8</sub>	6
Hatteras	4-Tab	Oxford, NC	OX	36 x 18	235	8	9 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>
New Horizon Shingle, also known as New Horizon	No Cutout (Standard)	Avery, OH; Shakopee, MN	AV, SH	36 x 12	245	5	5 <sup>5</sup> / <sub>8</sub>	6
Classic Horizon Shingle, also known as Classic Horizon	3-Tab (Standard)	Avery, OH; Oxford, NC	AV, OX	36 x 12	250	5	5 <sup>5</sup> / <sub>8</sub>	6
<b>ACCESSORY PRODUCTS</b> (See Note 1)								
Shingle Ridge	Hip and Ridge	Oxford, NC	OX	12 x 18	n/a	8	8 <sup>5</sup> / <sub>8</sub>	n/a
Presidential Accessory	Hip and Ridge (Standard)	Shakopee, MN	MN	12 x 12	n/a	5	5 <sup>5</sup> / <sub>8</sub>	n/a
Presidential Accessory	Hip and Ridge (Metric)	Portland, OR	PO	9.84 x 13 <sup>1</sup> / <sub>4</sub>	n/a	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	n/a
Mountain Ridge	Hip and Ridge	Fremont, CA	FR	8 x 12 & 10 x 12	n/a	8	8 <sup>5</sup> / <sub>8</sub>	n/a
Hatteras® Accessory	Hip and Ridge	Oxford, NC	OX	12 x 18	n/a	8	9 <sup>3</sup> / <sub>8</sub>	n/a
Shadow Ridge	Hip and Ridge (Standard)	Avery, OH; Norwood, MA; Oxford, NC; Shakopee, MN	AV, NW, OX, SH	12 x 12	n/a	5	5 <sup>5</sup> / <sub>8</sub>	n/a
Shadow Ridge	Hip and Ridge (Metric)	Portland, OR	PO	9.84 x 13 <sup>1</sup> / <sub>4</sub>	n/a	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	n/a
Solaris Hip and Ridge Accessory	Hip and Ridge	Portland, OR	PO	9.84 x 13 <sup>1</sup> / <sub>4</sub>	n/a	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	n/a
Solaris Accessory	Hip and Ridge	Portland, OR	PO	13 <sup>1</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub>	n/a	5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	n/a
Presidential Starter	Starter Shingle	Portland, OR	PO	40 x 13 <sup>1</sup> / <sub>4</sub> , bottom layer; 40 x 11 <sup>1</sup> / <sub>4</sub> , top layer	n/a	4 (top layer)	4 (bottom layer) 6 (top layer)	n/a
High Performance Starter	Starter Shingle	Oxford, NC	OX	36 x 10	n/a	n/a	max 3, or into solid wood	n/a
Swiftstart	Starter Shingle	Shakopee, MN	SH	38 <sup>3</sup> / <sub>4</sub> x 7 <sup>5</sup> / <sub>8</sub>	n/a	n/a	max 3, or into solid wood	n/a
Universal Starter	Starter Shingle	Avery, OH; Oxford, NC; Shakopee, MN; Shreveport, LA	AV, OX, SH, SP	36 x 7	n/a	n/a	max 3, or into solid wood	n/a
For SI: 1 inch = 25.4 mm; 1 lb/100 ft² = 0.0488 kg/m²								
NOTES:								
1. Includes algae-resistant (AR) versions.								
2. Nail "Line" - Distance from lowermost lowest edge of shingle to target nail location.								
3. See diagrams for offset sequence.								

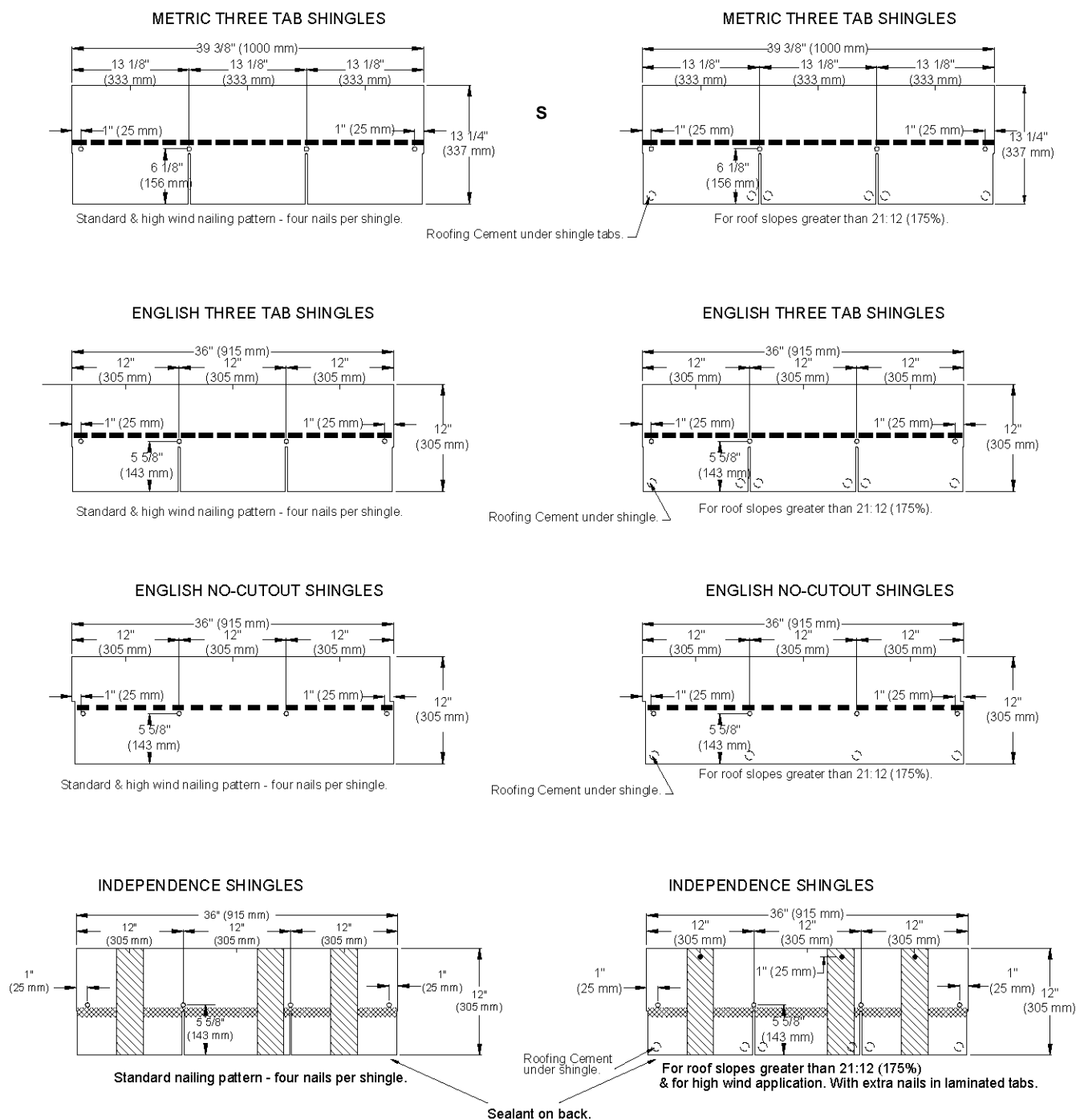


FIGURE 1—SHINGLE PROFILES AND FASTENER PATTERNS



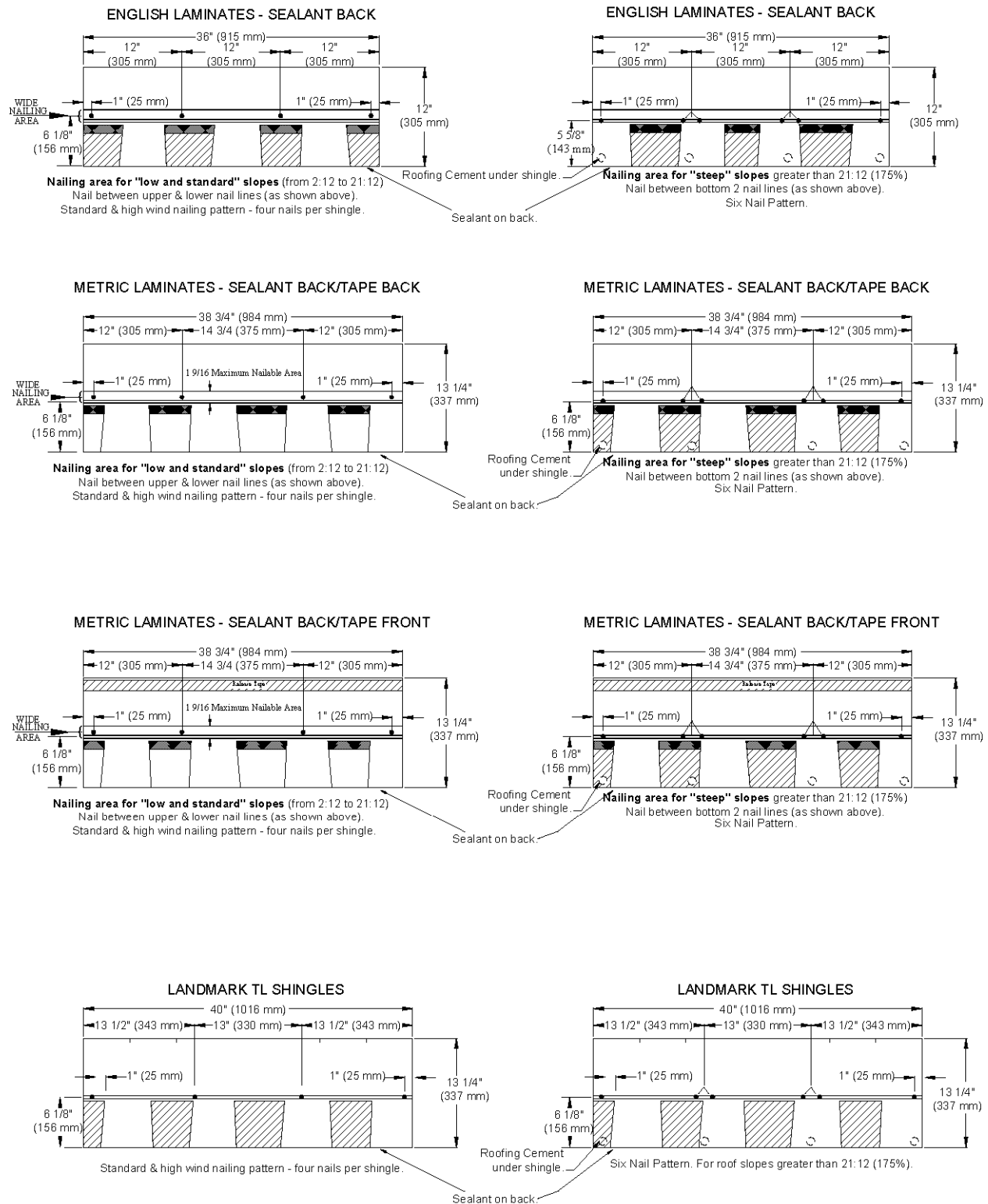


FIGURE 1—SHINGLE PROFILES AND FASTENER PATTERNS (Continued)

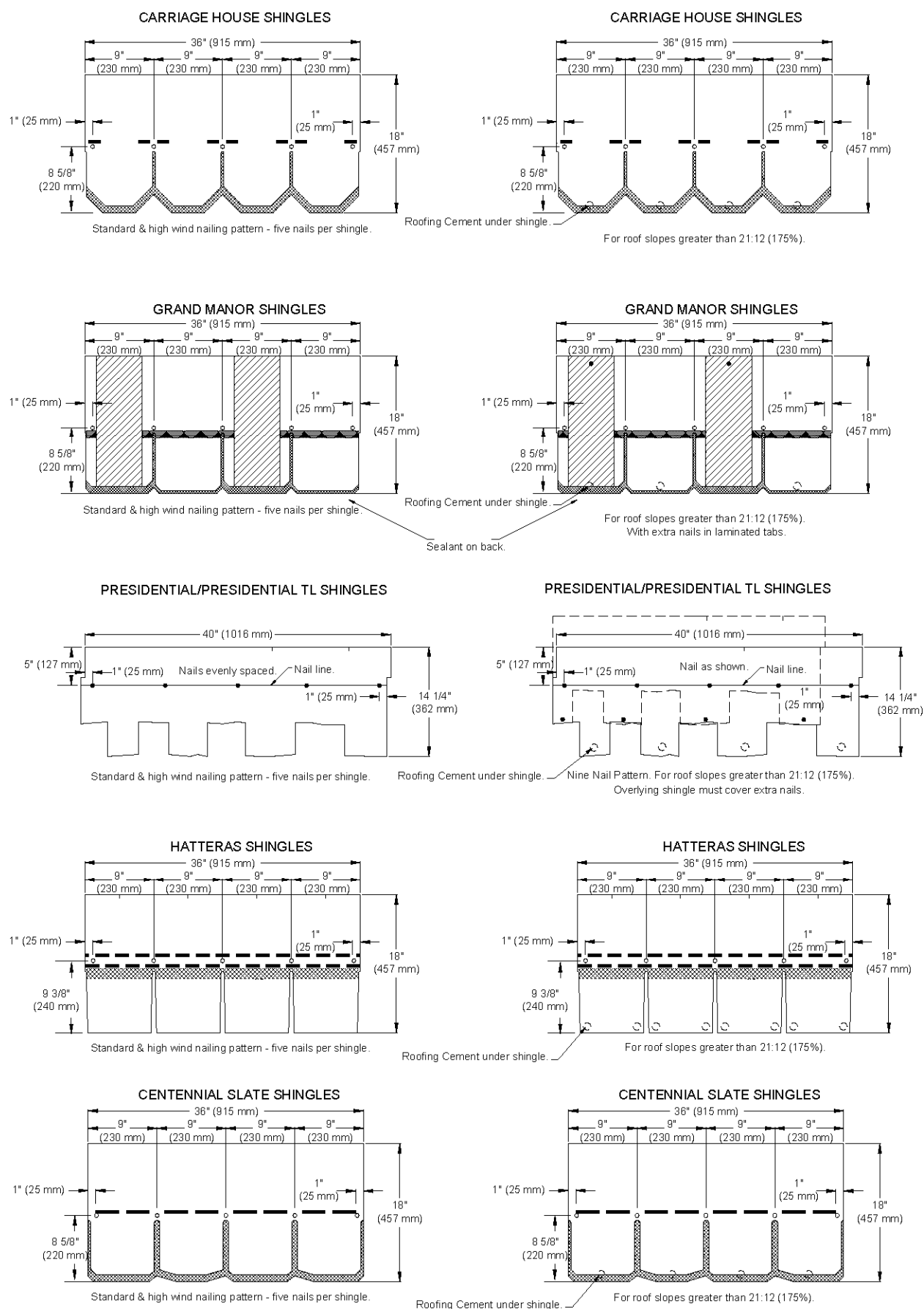


FIGURE 1—SHINGLE PROFILES AND FASTENER PATTERNS (Continued)



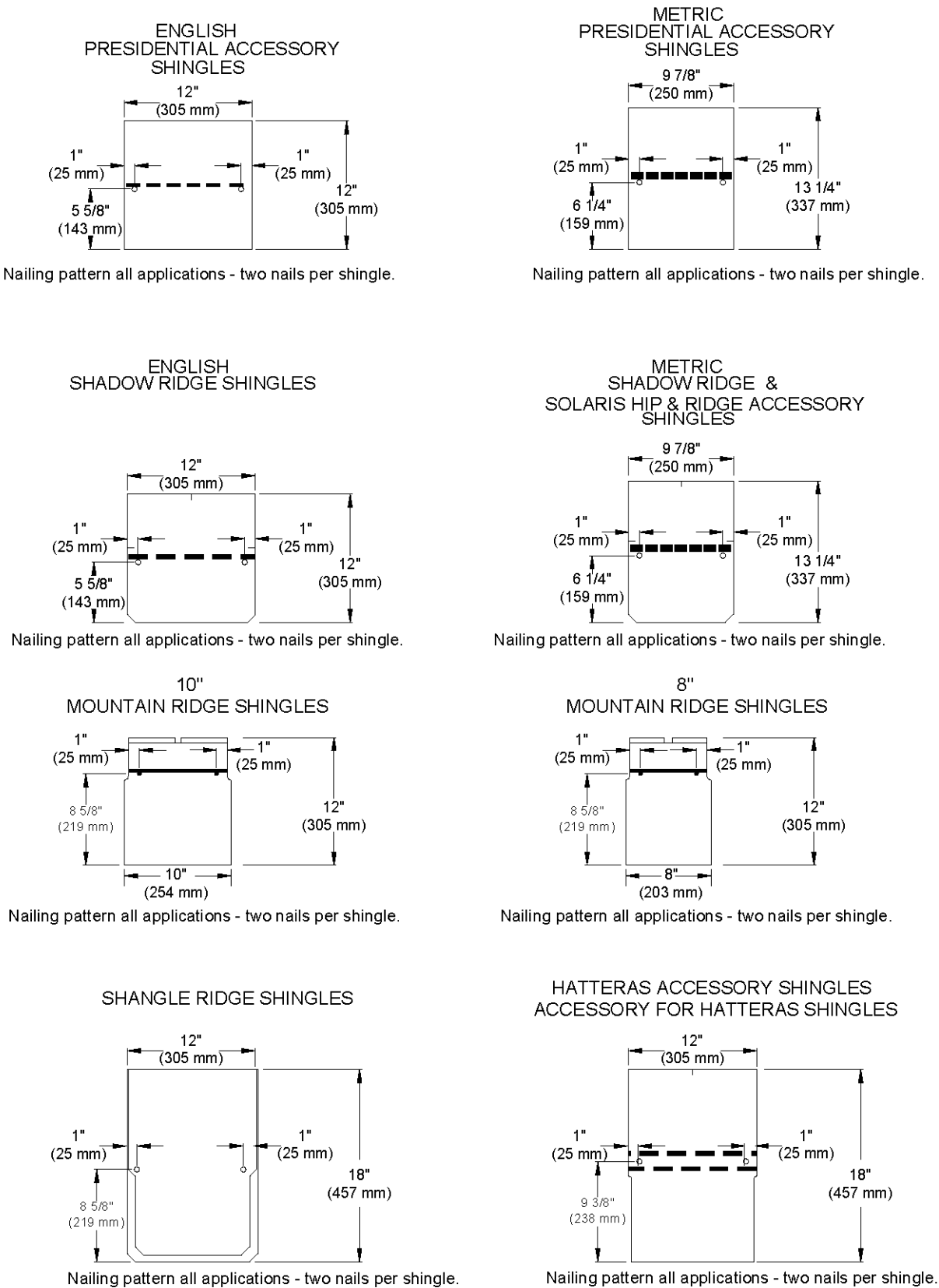
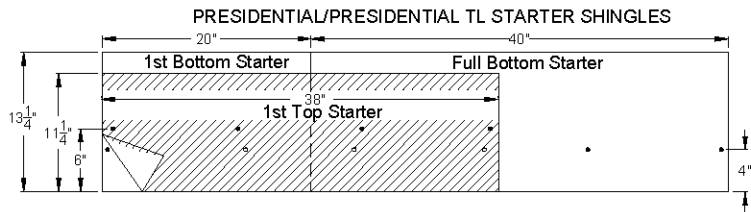
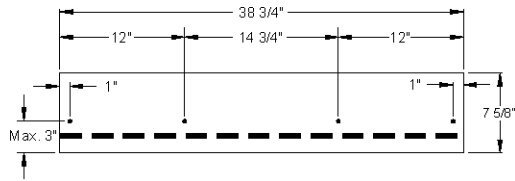


FIGURE 1—SHINGLE PROFILES AND FASTENER PATTERNS (Continued)



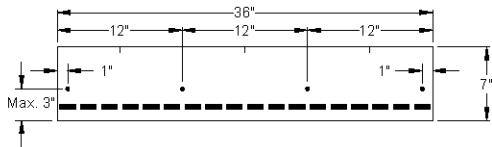
Standard nailing pattern for all slopes from 2/12 (16.7%) up to and exceeding 21/12 (175%) & for high wind application.

SWIFTSTART SHINGLES



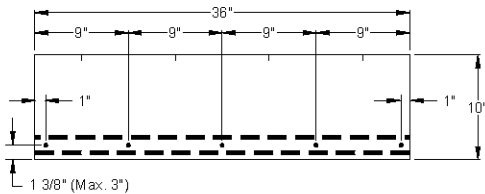
Standard nailing pattern for all slopes from 2/12 (16.7%) up to and exceeding 21/12 (175%) & for high wind application.

UNIVERSAL STARTER SHINGLES



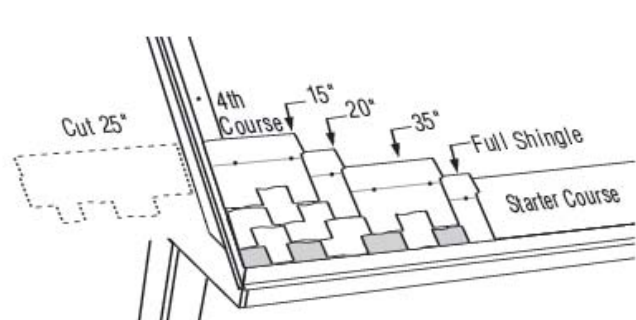
Standard nailing pattern for all slopes from 2/12 (16.7%) up to and exceeding 21/12 (175%) & for high wind application.

HIGH-PERFORMANCE STARTER SHINGLES

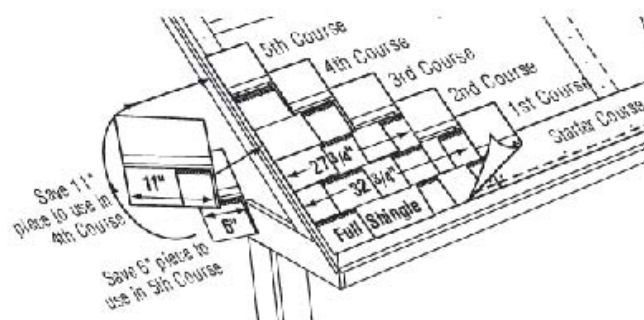
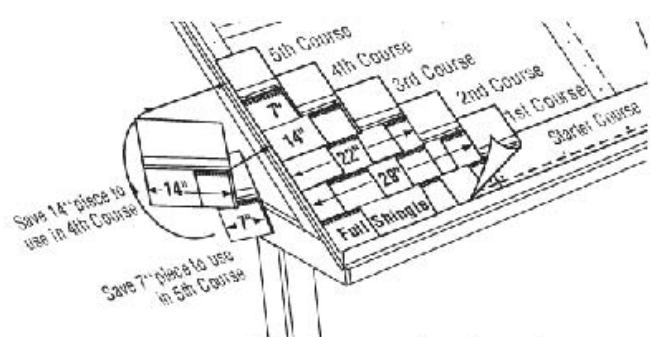


Standard nailing pattern for all slopes from 2/12 (16.7%) up to and exceeding 21/12 (175%) & for high wind application.

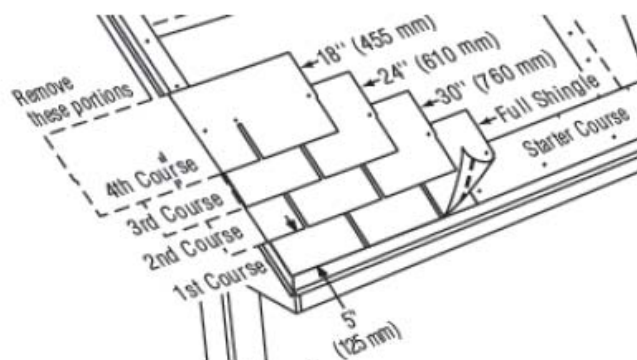
FIGURE 1—SHINGLE PROFILES AND FASTENER PATTERNS (Continued)



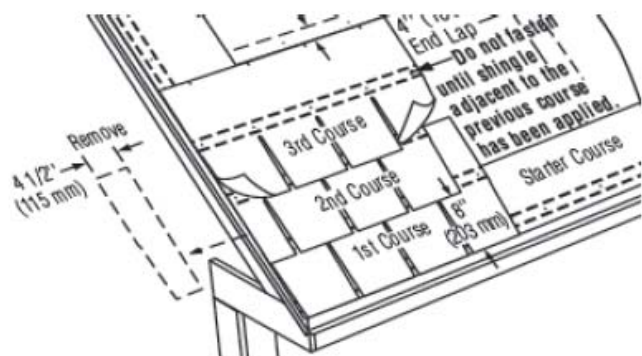
Presidential Shake and Presidential TL

Metric Size Landmark Series  
including Landmark TL

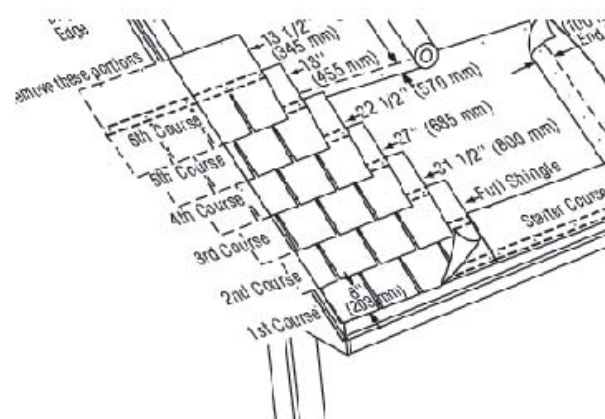
English Size Landmark Series



Independence

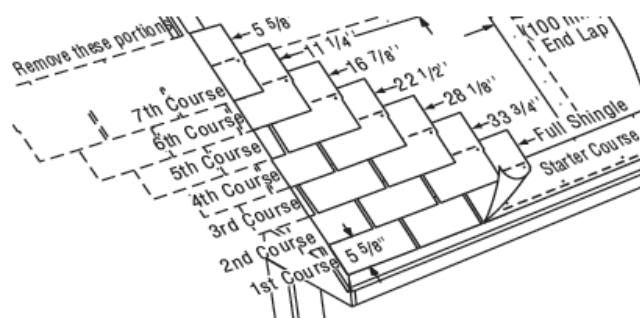


Hatteras (single column rack method)

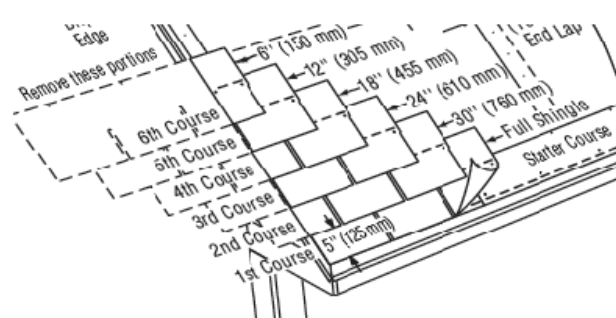
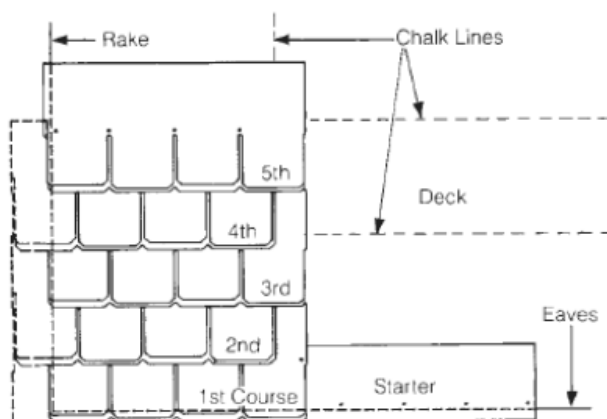
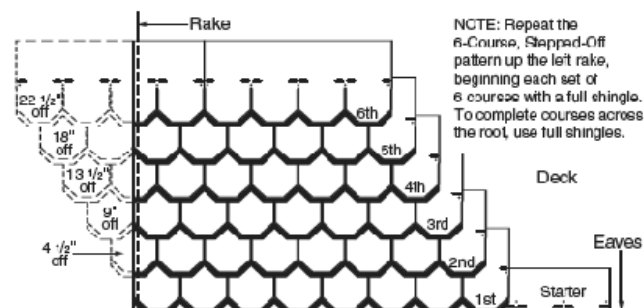


Hatteras (six course diagonal method)

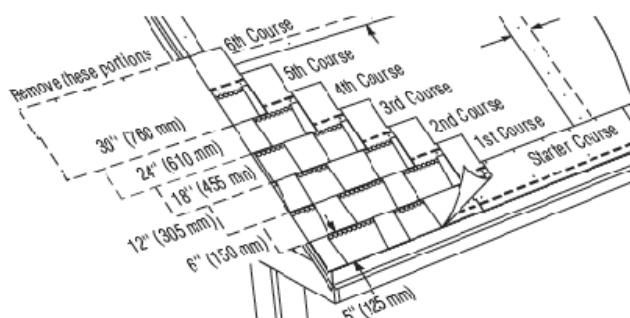
FIGURE 2—APPLICATION OFFSETS



Metric 3-Tab Shingles

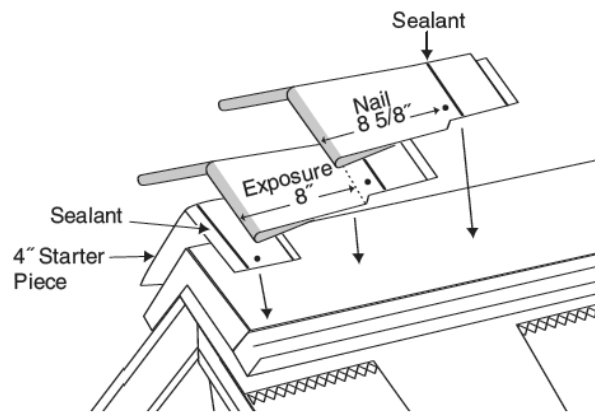
English 3-Tab Shingles including  
Classic HorizonGrand Manor, Carriage House & Centennial Slate  
(single column vertical rack method)

Carriage House (diagonal method)

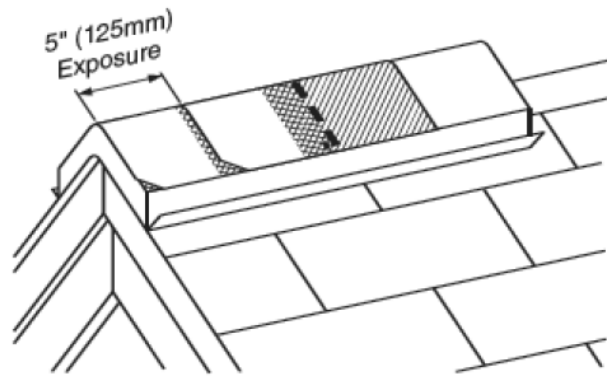


New Horizon

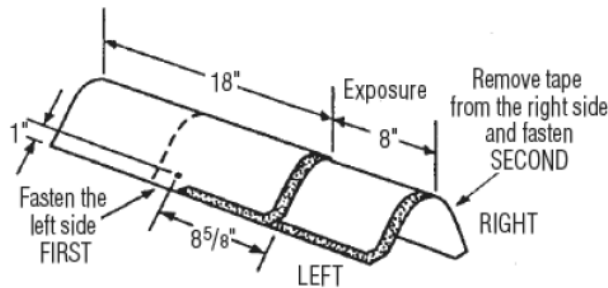
FIGURE 2—APPLICATION OFFSETS (Continued)



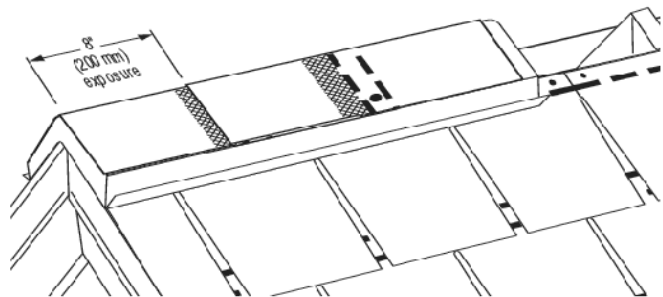
Mountain Ridge – for use with Presidential Shake, Presidential TL or Landmark TL



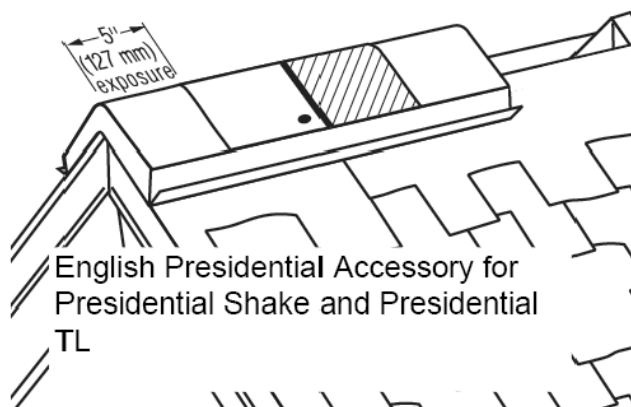
Shadow Ridge – for use with Horizon, Landmark Series and Independence



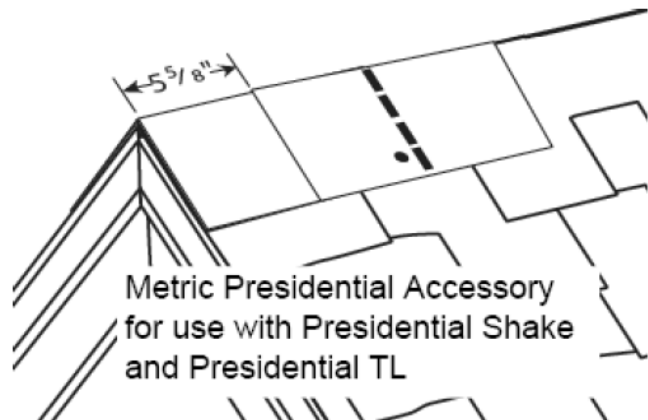
Shangle Ridge – for use with Grand Manor, Carriage House and Centennial Slate



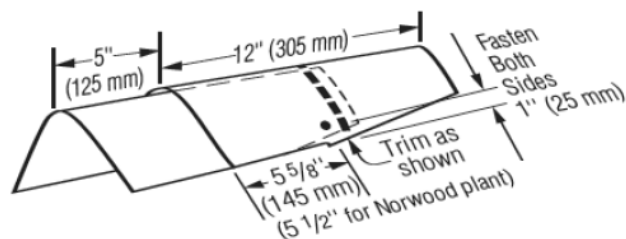
Hatteras Accessory for Hatteras shingles



English Presidential Accessory for Presidential Shake and Presidential TL

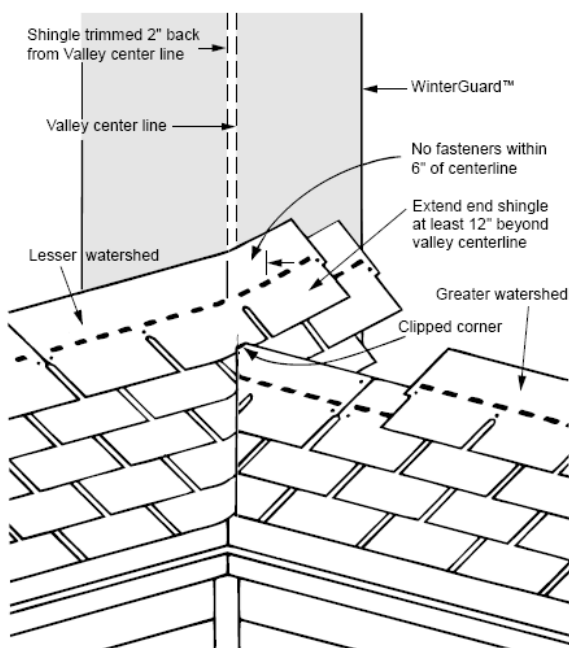


Metric Presidential Accessory for use with Presidential Shake and Presidential TL

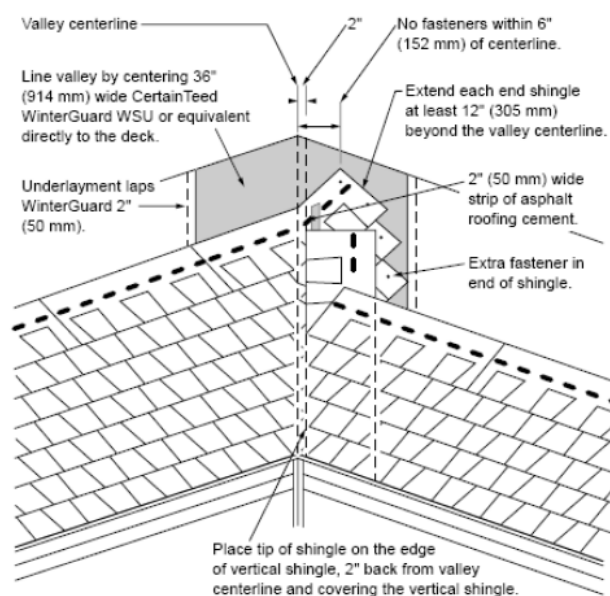


Hip & Ridge for Standard Strip Shingles

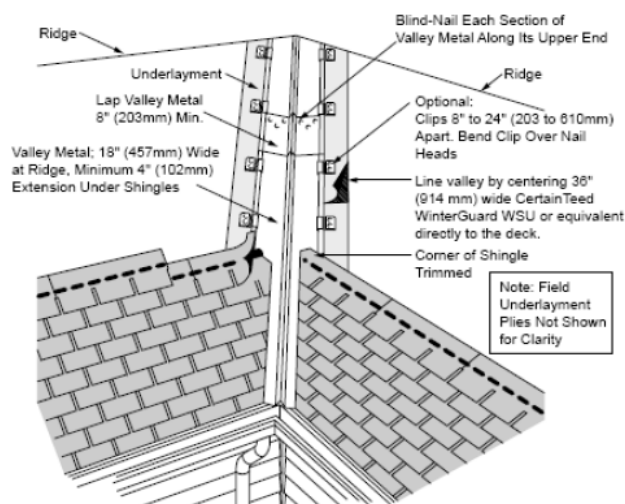
FIGURE 3—RIDGE CAP APPLICATION



Closed-cut valley application – preferred method for all shingle installations, acceptable for Grand Manor, Carriage House, Centennial Slate, Presidential TL, Presidential Shake and Landmark TL.



California closed-cut valley application – acceptable alternate for use with Landmark series, New Horizon and Centennial Slate shingles



Open valley application – strongly recommended method for Grand Manor, Carriage House, Centennial Slate, Presidential TL, Presidential Shake and Landmark TL shingles.

FIGURE 4—VALLEY APPLICATIONS