

# APPLICATION INSTRUCTIONS

## ASPHALT SHINGLES



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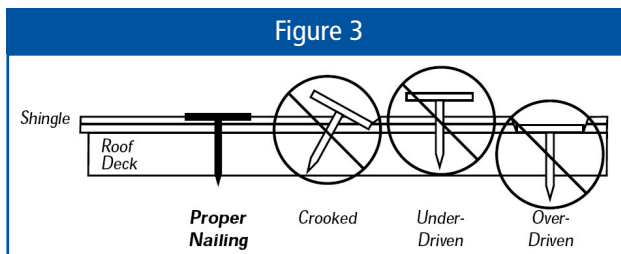
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### 3.1 – GENERAL DIRECTIONS

#### A – Nail Requirements :

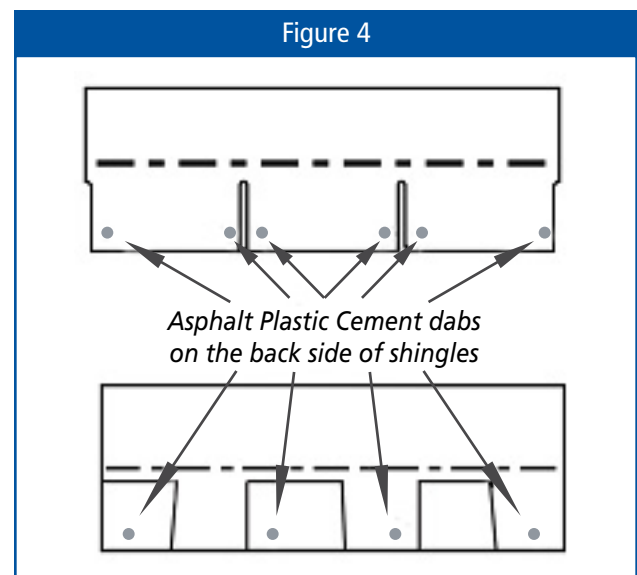
Use 10 to 12 gauge galvanized nails with a minimum 9 mm ( $3/8$ " ) head for all types of shingles. Nails must be long enough to penetrate a minimum of 19 mm ( $3/4$ " ) into solid wood deck or just through the plywood deck. **Do not use staples to fasten shingles.** Raised nails can result in shingle distortion and may prevent sealing. Drive nails until they are flush with the surface; do not overdrive nails. Do not nail in the adhesive strip: this may prevent shingles from sticking together (see **Figure 3**).



#### B – Asphalt Plastic Cement :

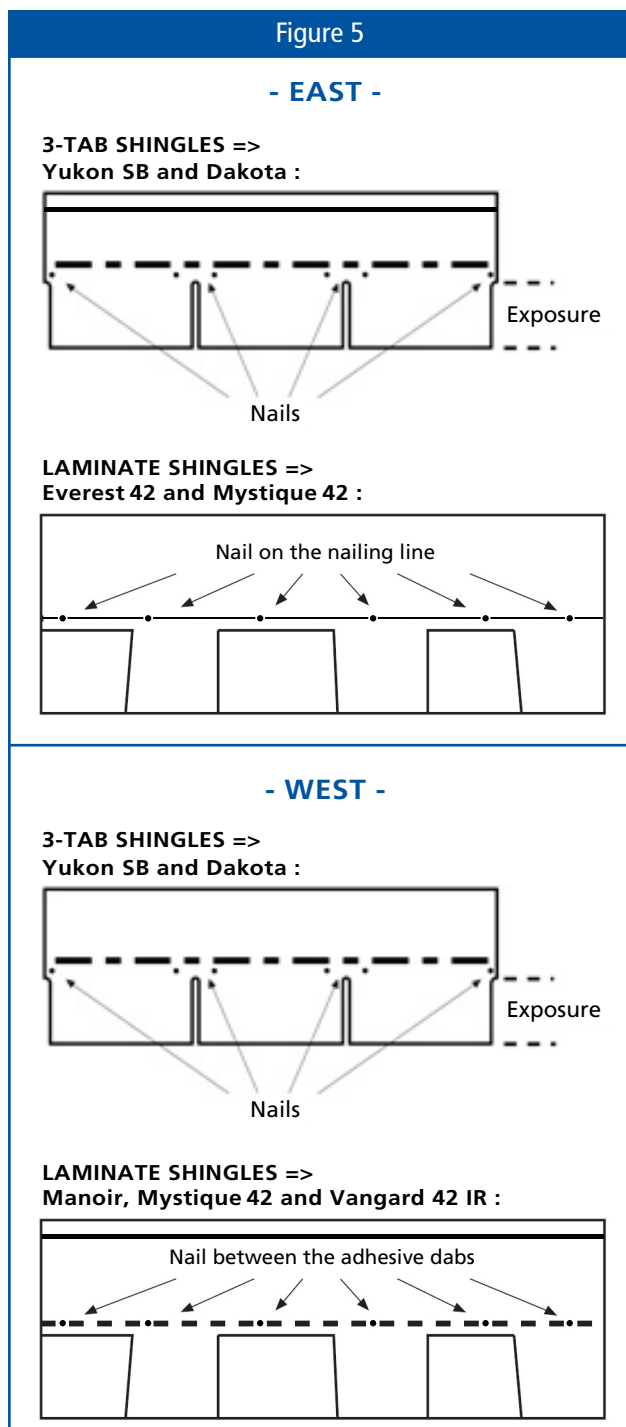
Use an Asphalt Plastic Cement which conforms to CAN/CGSB 37.5-M89 and/or ASTM D-4586. Asphalt Plastic Cement must be applied with a comb or notched trowel in a thin (less than 2 mm or  $1/16$ " thick) even coating. Overuse of Asphalt Plastic Cement can damage the shingles.

**IMPORTANT :** Shingles have a factory applied adhesive that is activated thermally. Certain conditions will hinder the effectiveness by which the adhesive keeps the shingles down to prevent wind blow-offs.



## SEAL DOWN SHINGLES IF INSTALLED:

- In high wind areas ;



- On slopes greater than or equal to 15/12. Please refer to **Section 3.1-D** and see **Figure 4** ;
- At a temperature that will not activate the self-seal adhesive, refer to **Section 3.1-F** (BP recommends that hand sealing should be done from September 21<sup>st</sup> to March 21<sup>st</sup>) ;
- In areas subject to high dust conditions.

When cementing shingles, apply a small dab of Asphalt Plastic Cement, the size and thickness of a 25¢ – or a 16 mm (<sup>5</sup>/<sub>8</sub>" ) bead, 1.5 mm (<sup>1</sup>/<sub>16</sub>" thick) – located 2.5cm (1" ) and 30 cm (12" ) in from each end. Shingles must be pressed firmly into Asphalt Plastic Cement (see **Figure 4**).

### C – Protective Tape :

Do not remove parting strip of protective tape from the shingle underside. Its purpose is to prevent the shingles from sticking together while in the bundle. It does not affect the application or the effectiveness of the product.

### D – Application on roofs with slopes greater than or equal to 15/12 :

On such slopes, use six (6) nails per shingle instead of four. For nailing positions refer to **Section 4** for 3-tabs and **Section 5** for Laminates. See also **Figure 5**. After nailing, apply a small dab of Asphalt Plastic Cement (refer to **Section 3.1-B**). Excess application of Asphalt Plastic Cement can cause blistering. For Laminate shingles, apply Asphalt Plastic Cement 2.5 cm (1" ) and 30 cm (12" ) in from each end for a total of four dabs. Shingles must be pressed firmly into Asphalt Plastic Cement (see **Figure 4 and 5**).

### E – High Wind Warranty Installation :

To qualify for High Wind Warranty, which warrants against wind damage or shingle displacement for winds between 200 km/h (125 mph) and 220 km/h (135 mph), shingles must be fastened using 6 nails and all shingles located at the roof edges must be cemented together with a 10 cm (4" ) wide layer of Asphalt Plastic Cement. If above special application instructions are not followed, shingles will be warranted for winds up to 180 km/h (110 mph). See **Table 1a – EAST** and **Table 1b – WEST** for wind speed warranty.

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Table 1a – EAST

Shingles	Standard Wind Warranty	High Wind Warranty
• Manoir • Everest 42 • Mystique 42	180 km/h (110 mph)	220 km/h (135 mph)
• Yukon SB • Dakota	180 km/h (110 mph)	200 km/h (125 mph)

Table 1b – WEST

Shingles	Standard Wind Warranty	High Wind Warranty
• Manoir • Mystique 42 • Vanguard 42 IR	180 km/h (110 mph)	220 km/h (135 mph)
• Yukon SB • Dakota	115 km/h (70 mph)	130 km/h (80 mph)

### F – Cold Weather Application :

Shingles have a factory applied adhesive which is thermally activated. The self-seal adhesive must be subjected to sufficient heat to activate the bond. When the shingles are installed in environmental conditions that will not produce such a temperature or in very windy areas, the shingles should be sealed down with spots of Asphalt Plastic Cement under each tab as specified in CSA A123.51-M85. BP recommends that hand sealing should be done from September 21 to March 21. Please refer to [Section 3.1-B](#) and see [Figure 4](#) for proper cementing method.

### G – Installing Over Existing Layer of Shingles :

Old roofs must be dry and provide a smooth surface. Replace all damaged, curled, broken, buckled or loose shingles. To ensure a smooth even surface, sweep the old roofing prior to the installation. Nails must be long enough to penetrate a minimum of 19 mm ( $\frac{3}{4}$ "") into solid wood deck or just through the plywood deck. Apply new shingles using butt-edge (nesting) application method where the top of the new shingle is nested against the bottom of the exposed portion of the old roofing shingle.

Multiple layers installation must be done in accordance with local bylaws and building code requirements ; load restrictions must be considered when applying more than one layer of roofing material.

When trying to decide whether you should apply asphalt shingles over old shingles, use the following checklist to ensure you meet the requirements for multiple layer installation :

- Make sure the deck can support an additional layer of shingles. Check your local building code as some local ordinances forbid re-roofing over two or more layers of shingles because of the danger of overloading the supporting structure ;
- Verify the underside of the deck for boards that are warped or rotten and must be replaced ;
- Check that the old roof system does not have moisture retention problems and will meet minimum ventilation requirements ;
- Check the condition of the old shingles. Remove or drive in any protruding nails. Defects in the old layer of shingles may telegraph through the new layer. BP will not be responsible for appearance problems related to multiple layer installation, such problems being typical of this type of installation ;
- Remember if adding a second layer, you will need longer nails to ensure that you nail into the roof deck ;
- The hip & ridge shingles of an existing roof on which new shingles are to be installed must be removed before application of new shingles.

### H – Ventilation :

All roof structures must be provided with through ventilation to prevent entrapment of moisture-laden air beneath the deck. Ventilation provisions must meet or exceed current National Building Code requirements. In the U.S.A., check local building codes for minimum requirements. In general, as specified in most building codes, every roof space or attic above an insulated ceiling must be ventilated with openings to the exterior to provide an unobstructed vent area of not less than 1/300 ft<sup>2</sup> of the total insulated ceiling area. This ratio does not

apply for all roofs. A low slope roof or one with cathedral ceilings requires twice (2×) the ventilation or a ratio of 1/150 ft<sup>2</sup>. The vents used may be roof-type vents, eave-type vents, gable-end type vents or any combination, and should be uniformly distributed so as to not impede each other from ventilating each roof space. When calculating the net free area (unobstructed open area), be sure to factor in any obstacle to free air circulation such as screens, grids, louvers, blades, etc.

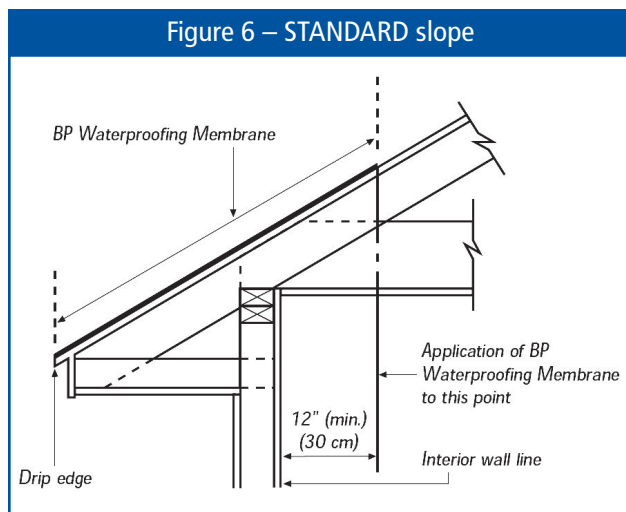
There must be at least 5 cm (2") of space between the insulation in the attic and the deck. If insulation was added to the deck without leaving space for air flow, the ventilated soffit might not be able to do the job it was intended to do.

**The shingle warranty will only be valid if all roof structures are provided with proper through ventilation.**

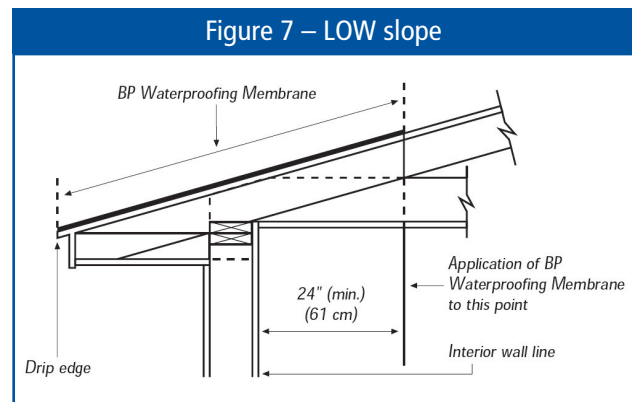
### 3.2 – EAVE PROTECTION & UNDERLAYMENT

#### A – Eave Protection :

Apply a non-corroding metal drip edge at the eaves (see [Section 2.3](#)). Next, install the eave protector ; GRIPGARD or WEATHERTEX® or BP Slate or Smooth Surface Roll Roofing starting at the drip edge.



Starting at the low point of the roof, work upward. Apply the eave protection membrane by laying the roll horizontally and extending up the roof, from the eaves, to a point at least 30.5 cm (12") beyond the interior wall line (see [Figure 6](#)). On low slopes equal or greater than 2/12 to under 4/12 the eave protection membrane must be extended a minimum of 61 cm (24") beyond the inside surface of the exterior wall (see [Figure 7](#)). This requirement may vary depending on location. Check your local building code for minimum requirements. Be sure to :



- 1] Cut the eave protection membrane into lengths of 3 m to 4.5 m (10' to 15').
- 2] Align this material along the edge of the roof and re-roll.

#### For self-adhering membranes :

- 3a] Peel back about 30.5 cm (12") of release film backing and adhere the peeled area. Re-roll to the adhered portion.
- 3b] Pull on the release film backing to unroll the eave protection membrane and press the material into place to ensure tight bond. If the membrane deviates from the roof line, cut and start as above mentioned procedure.
- 3c] End laps must be a minimum of 15.2 cm (6"), side laps a minimum of 7.6 cm (3"). For GRIPGARD, the end laps must be sealed down with a 10 cm (4") wide, thin and uniform layer of Asphalt Plastic Cement.



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Table 2 – RECOMMENDATIONS and REQUIREMENTS for BP Shingles

Slope	Shingles	Eave Protection		Underlayment		Documentation	
		Minimum	Products	Minimum	Products	BP	Other
< 2/12	Shingles cannot be installed	n/a	n/a	n/a	n/a	n/a	n/a
* $\geq 2/12 < 4/12$ Low Slope	<ul style="list-style-type: none"> <li>• Dakota</li> <li>• Yukon SB</li> </ul>	REQUIRED : 24" past inner face of exterior wall	<ul style="list-style-type: none"> <li>• Gripgard</li> <li>• Weatherex®</li> </ul>	REQUIRED : 2 Plies n°15 Plain Felt over entire roof surface	<ul style="list-style-type: none"> <li>• Gripgard</li> <li>• Weatherex®</li> <li>• n°15 CSA Pro</li> </ul>	<b>Application Instructions:</b> Sections [R5] 3.2 ; [R5] 3.3	<b>National Building Code:</b> Sections 9.26.5 ; 9.26.6 ; 9.26.8
* $\geq 3/12 < 4/12$ Low Slope	<ul style="list-style-type: none"> <li>• Manoir</li> <li>• Everest 42</li> <li>• Mystique 42</li> <li>• Vanguard 42 IR</li> </ul>	REQUIRED : 12" past inner face of exterior wall	<ul style="list-style-type: none"> <li>• Gripgard</li> <li>• Weatherex®</li> <li>• Smooth Surface</li> <li>• Slate Surface</li> </ul>	RECOMMENDED : 1 Ply n°15 Plain Felt over entire the roof surface	<ul style="list-style-type: none"> <li>• n°15 CSA Pro</li> <li>• Plain n°15</li> <li>• Deckgard**</li> <li>• Suredeck**</li> </ul>	<b>Application Instructions:</b> Sections [R5] 3.3 ; [R5] 5	<b>National Building Code:</b> NBC sec 9.26 CSA A123.5 CSA A123.51/52
$\geq 4/12 < 6/12$ Standard Slope	• All BP Shingles	REQUIRED : 12" past inner face of exterior wall	<ul style="list-style-type: none"> <li>• Gripgard</li> <li>• Weatherex®</li> <li>• Smooth Surface</li> <li>• Slate Surface</li> </ul>	RECOMMENDED : 1 Ply n°15 Plain Felt over entire the roof surface	<ul style="list-style-type: none"> <li>• Plain n°15</li> <li>• Deckgard**</li> <li>• Suredeck**</li> </ul>	<b>Application Instructions:</b> Sections [R5] 3 ; [R5] 4 ; [R5] 5	<b>National Building Code:</b> Sections 9.26.5 ; 9.26.6 ; 9.26.7
$\geq 6/12 < 8/12$ Standard Slope		RECOMMENDED : 12" past inner face of exterior wall					
$\geq 8/12$ Steep Slope		RECOMMENDED : 12" past inner face of exterior wall					<b>National Building Code:</b> CSA A123.2 CSA A123.3 CSA A123.22

\* Special application required for low sloped roofs.

\*\* Slopes equal or greater than 3/12 only.

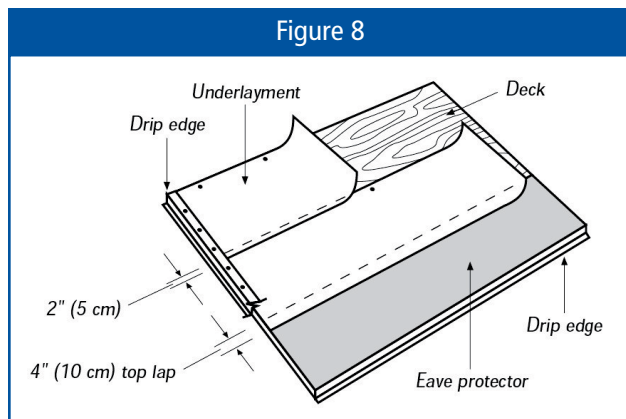
**For Slate or Smooth surface roll roofing :**

- 4a) Along the eave edge, the roll roofing must be sealed down with a 10 cm (4") wide, thin and uniform layer of Asphalt Plastic Cement.
- 4b) End laps must be a minimum of 15.2 cm (6"), side laps a minimum of 7.6 cm (3"). For Slate or Smooth Surface Roll Roofing, the end laps must be sealed down with a 10 cm (4") wide, thin and uniform layer of Asphalt Plastic Cement.

**B – Underlayment :**

Refer to Table 2 for underlayment requirements for BP Shingles. If you want to meet fire-resistant ratings, the use of underlayment is mandatory under BP shingles.

The purpose of shingles is to shed water as well as to protect against rain which can periodically be driven under shingles. Thus, even when an underlayment is optional, its use over the entire roof deck is strongly recommended. An underlayment consists of BP's GRIPGARD, WEATHERTEX®, BP n°15 Lined Asphalt Felt, BP n°15 Plain Asphalt Felt, DECKGARD or SUREDECK laid horizontally over the deck and must be applied over the entire roof deck.



The underlayment should be installed over the entire deck surface, with the length parallel to the eave. Use BP's GRIPGARD, WEATHERTEX®, BP n°15 Lined Asphalt Felt, BP n°15 Plain Asphalt Felt, DECKGARD or SUREDECK. Overlap horizontally sheets of GRIPGARD, WEATHERTEX® and on 7.6 cm (3"), of DECKGARD or SUREDECK on 10 cm (4"), of asphalt felts (BP n°15 Plain Asphalt Felt, BP n°15 Lined Asphalt Felt and CSA Classic) on 2" and 15.2 cm (6") vertically (see **Figure 8**). Nail sufficiently

to hold the underlayment in place until the shingles are applied. Install shingles as soon as possible after installation of the underlayment. Building Products of Canada Corp. recommends installing the shingles the same day as the underlayment, to keep it from being wet or wrinkled. If underlayment is used to waterproof over a long period of time, it should be visually inspected to ensure it is not wet, wrinkled or otherwise damaged. If it is, it should be discarded and replaced by a new approved underlayment.

**3.3 – UNDERLAYMENTS FOR LOW SLOPE SHINGLE APPLICATION**

The following application instructions must be followed when Yukon SB or Dakota are installed on slopes equal or greater than 2/12 to under 4/12 or when Manoir, Everest 42, Mystique 42 East and West and Vanguard 42 IR shingles are installed on slopes equal or greater than 3/12 to under 4/12. Please refer to **Section 2.1**.

**Method 1 :**

As described for normal slopes, for optimum protection against water penetration, use a single ply of GRIPGARD or WEATHERTEX® over the entire wood deck. They are strong, self-adhesive, roofing membranes that are applied by peeling off the release / film paper backing as it is unrolled.

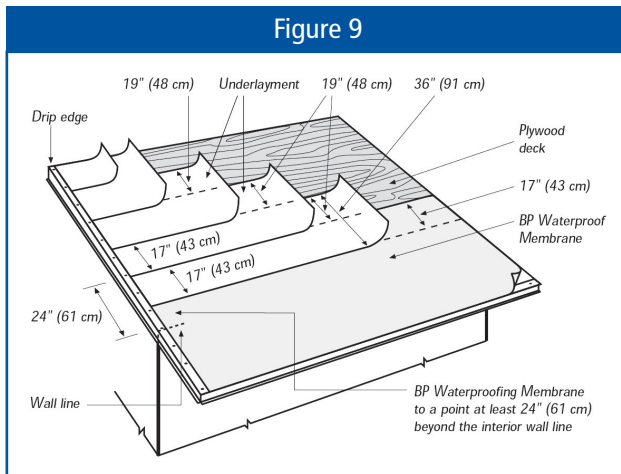
Starting at the low point of the roof, apply GRIPGARD or WEATHERTEX® by laying the roll horizontally. End laps must be a minimum of 15 cm (6"). For GRIPGARD, the end laps must be sealed down with a 10 cm (4") wide, thin and uniform layer of Asphalt Plastic Cement. End lap sealing is not required for WEATHERTEX®. Each succeeding course should be lapped over the preceding, lower course by at least 7.6 cm (3") for GRIPGARD and WEATHERTEX®. Felt underlayment is not required when GRIPGARD or WEATHERTEX® is installed over the whole roof.

**Method 2 :**

Eave protection consists of a single ply of GRIPGARD or WEATHERTEX® laid horizontally and extending up the roof, from the eaves to a point at least 61 cm (24") beyond the interior wall line. End laps must be a minimum of 15 cm (6"). If more than one width is required, overlap the second course 7.6 cm (3") over the first for GRIPGARD or WEATHERTEX® (see **Figure 9**).

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Next, install the underlayment. This calls for a double layer of BP n°15 Lined Asphalt Felt or BP n°15 Plain Asphalt Felt, for all low slope applications or DECKGARD and SUREDECK for all slopes equal or greater than 3/12. Lay horizontally over the rest of the roof. Underlayment must be applied over the entire roof deck. Start with a 91 cm (36") wide sheet overlapping GRIPGARD or WEATHERTEX® 43 cm (17"). The first layer should also completely cover the Eave Protection in order to facilitate the application of shingles. Apply a second 91 cm (36") sheet, overlapping the first one 48 cm (19"), leaving 43 cm (17") exposed. Thereafter, 91 cm (36") sheets are laid, each to overlap the upper 48 cm (19") of the preceding course, until the rest of the roof deck has been covered. Each course of felt is nailed towards its upper edge with only enough nails to hold it in place until the shingles are applied (see **Figure 9**).

### 3.4 – UNDERLAYMENTS FOR STANDARD SLOPE APPLICATION (≥ 4/12)

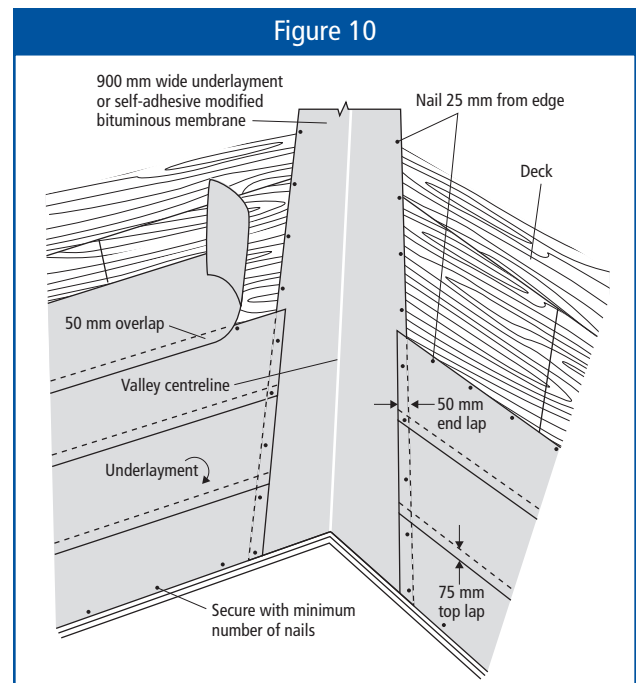
For slopes equal or greater than 4/12, best protection consists of one ply of BP n°15 Lined Asphalt Felt or BP n°15 Plain Asphalt Felt. End laps must be a minimum of 15 cm (6"). Overlap the subsequent course 7.6 cm (3") over the previous course.

### 3.5 – VALLEY PREPARATION & INSTALLATION

#### A – Valley Preparation :

Valleys may be open, closed, or woven (**Laminate shingles are not recommended for woven valleys**). Regardless of the type of valley selected, the valley flashing must be in place before shingle application has begun. The metal flashing must be corrosion-resistant. For proper water flow start shingle application on the roof plane with the lower slope or height.

After installing eave protection and prior to installing the underlayment, apply valley flashing by first installing along the valley centre a minimum 900 mm (35.4") wide strip of GRIPGARD or WEATHERTEX® or underlayment and secure with enough nails to hold in place. Trim horizontal courses of underlayment to overlap valley strip by a minimum 150 mm (5.9") where applicable. Where valley flashing joints occur, overlap a minimum of 300 mm (11.8") in the flow direction and if the valley flashing is underlayment, embed the overlap in asphalt roofing cement (see **Figure 10**).

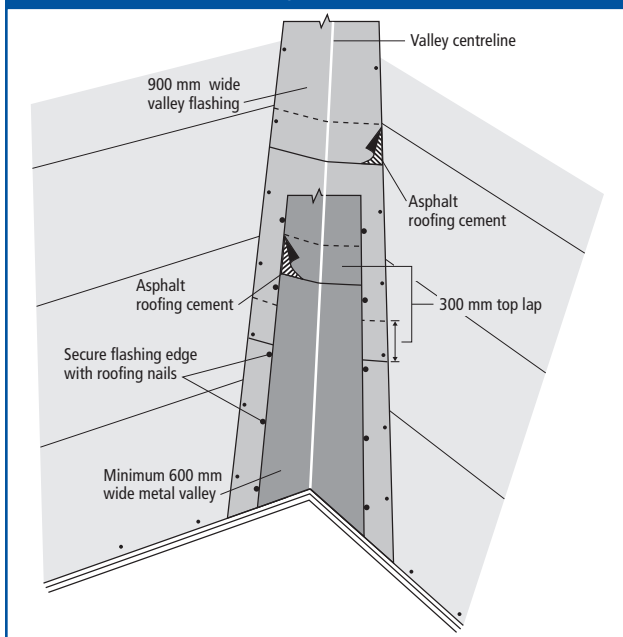


#### B – Valley Installation :

##### • Open Valley – Metal :

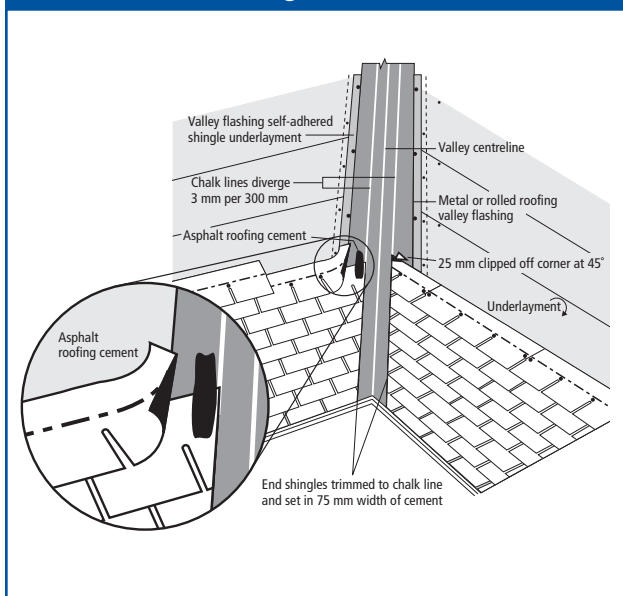
Metal valley sections should not be less than 600 mm (23,6") wide with a maximum length of 3 m (118"). Valleys shall consist of one thickness of metal, formed so as to guide water away from the shingles.

Figure 11



With valley flashing already in place, centre the sheet metal in the valley. Secure metal flashing by nailing on 300 mm (11.8") – 450 mm (17.7") centres without puncturing the metal (see Figure 11). This can be achieved by nailing so that nail shanks are adjacent to the metal edge with the nail heads overlapping and securing the flashing in place. If more than one piece of metal flashing is required, overlap in the flow direction by 300 mm (11.8") and embed in asphalt roofing cement (see Figure 11).

Figure 12



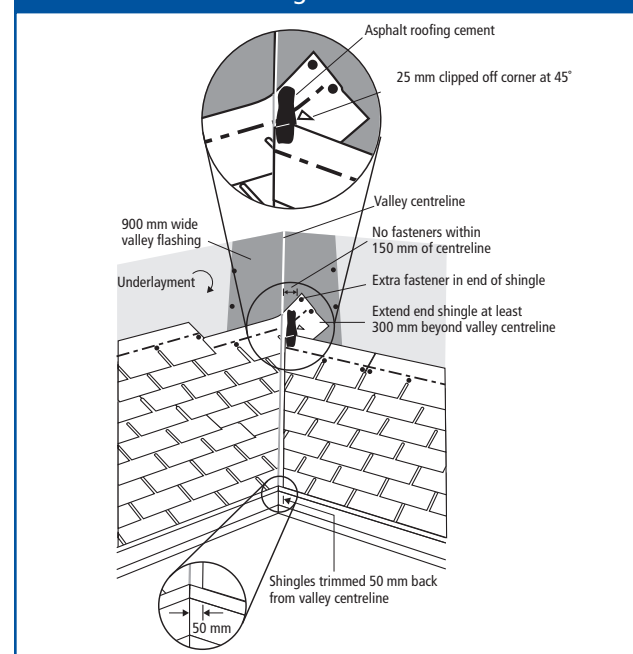
Before installing shingles, snap two chalk lines, each 7.6 cm (3") from the centreline of the valley at the top diverging down the valley to the lower end from the centreline at the rate of 10 mm/m to a maximum of 200 mm (7.9") apart. As the field shingles are applied toward the valley, trim the last shingle in each course to fit to the chalk line. Do not use a shingle less than 300 mm (11.8") in size to finish a course running into a valley. Clip 25 mm (1") from the upper corner from each shingle at a 45 degree angle to direct water into the valley and prevent water ingress between courses. Embed the end of each valley shingle into a 7.6 cm (3") band of asphalt plastic cement extending from the valley flashing to the top portion of the shingle. There should be no exposed nails along the valley flashing (see Figure 12).

• **Closed Cut Valleys :**

Closed-cut valleys are preferred where the slopes are steeper and where specifications call for valley protection using shingles. In these valleys, shingles on the adjacent valleys are butted together.

With valley flashing already in place, apply the first shingle course along the eaves of one roof plane and across the valley. Extend the end shingle a minimum 300 mm (11.8") onto adjoining roof plane. Apply

Figure 13





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succeeding courses in a similar fashion. Press shingles tightly into valley. Nail normally, except ensure that no nail is within 150 mm (5.9") of valley centreline. Secure the end of the shingle crossing the valley with two nails.

Before installing shingles on the adjoining roof, snap a chalk line 50 mm (1.97") from the valley joint on the adjoining roof.

Apply shingles on the adjoining roof plane. Start along the eaves and cross the valley onto the previously applied shingles. Trim the shingles being applied to the chalk line back from the valley centreline. Clip 25 mm (1") from the upper corner of each end shingle to direct water flow into the valley. Nail the shingles to the roof, but keep all nails at least 25 mm (10") outside the chalk line. Embed the end of each valley shingle into a 7.6 cm (3") band of asphalt plastic cement extending from the bottom shingle to the top portion of the shingle (see [Figure 13](#)).

- **Woven Valleys :**

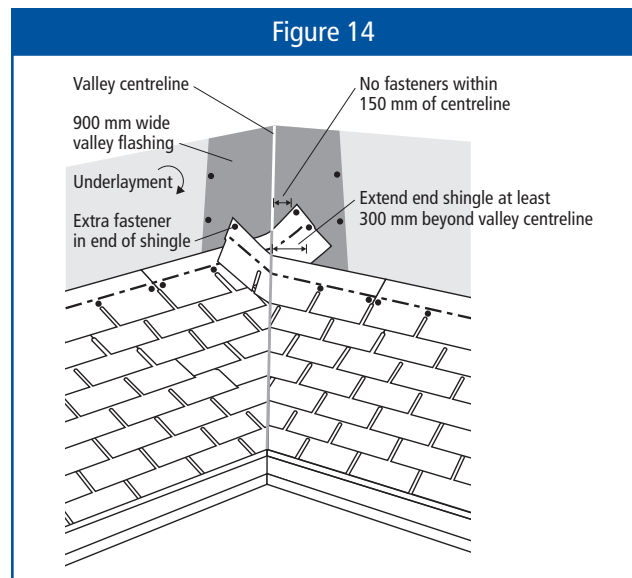
With flashing already in place, begin shingling simultaneously from both roof planes. Apply a chalk down each side of the valley 150 mm (5.9") from the valley joint. Apply shingles along eaves of one roof area and across valley extending the end shingle a minimum of 300 mm (11.8") onto the intersecting roof plane. Apply courses alternately from adjoining roof areas, weaving the shingles together. Press each shingle tightly into the valley and nail as for closed valleys. Nail the shingles down, but keep all nails at least 25 mm (1") from the chalk line (see [Figure 14](#)).

- **Valley at dormer roof :**

Open valley flashings at a dormer roof are done in exactly the same manner as any open valley flashing except that GRIPGARD or WEATHERTEX® is brought down over the first course of shingles of the main roof to the top of the cut outs and out on to the dormer roof. Do not install valley flashing until the shingle application reaches a point just above the lower end of the valley (see [Figure 15](#)).

Installing a layer of GRIPGARD or WEATHERTEX® in the valley, instead of Slate Surface roll, will ensure maximum protection.

Figure 14



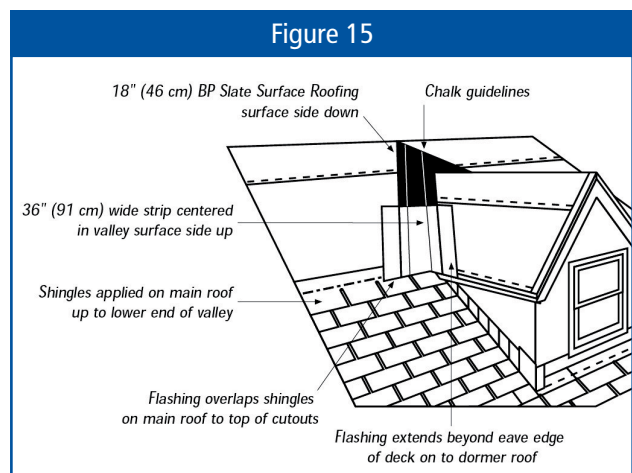
### 3.6 – FLASHING

Flashing details shall follow Building Code requirements. As required, corrosion resistant metal drip and rake edge shall be installed at eaves and rake. Chimneys, vents, etc. should be flashed in an approved manner, using approved material such as galvanized steel or sheet copper.

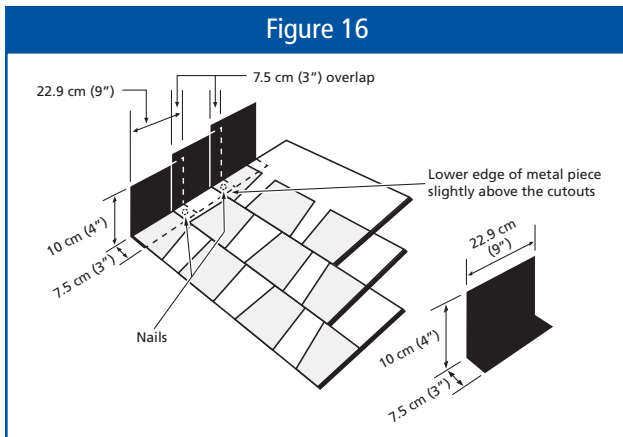
- **A – Vertical Wall Flashing :**

Each piece of metal flashing must be provided with a 7.6 cm (3") side lap. This dimension and the amount of the shingle exposure will determine the width of the metal flashing piece. For example, a 15.2 cm (6") exposure will require a piece of metal flashing 22.9 cm

Figure 15



(9") wide. Each strip is placed on top of the shingle, with the lower edge just slightly above the exposure part of the shingle (see **Figure 16**).



Each metal flashing piece should be long enough to extend 10 cm (4") up the vertical wall, and 7.6 cm (3") onto the roof deck. For the above-mentioned example, taken together, the width and length dimensions require that each metal flashing piece measure 17.5 cm x 22.9 cm (7" x 9").

To install step flashing, place the first flashing piece over the end of the starter strip and position is so that the tab of the end shingle in the first course covers it completely. Secure the horizontal flange to the roof with two nails. Do not nail flashing to the wall as settling of the roof could damage the seal.

Complete the first course of shingles along the roof eave, and secure the end of the last shingle to the metal flashing piece with Asphalt Plastic Cement. Do not nail through the shingle and metal flashing.

Apply the second metal flashing piece to the vertical wall sheathing and the roof deck using the same method described for the first one. Provide at least a 7.6 cm (3") side lap, but do not allow its edge to extend into the exposure for the first shingle course. On the roof deck, the metal flashing pieces must be completely hidden from view by the shingles (see **Figure 16**). Siding serves as cap flashing over step flashing on the vertical wall.

In re-roofing (application over an existing layer of shingles), ensure that the old shingles butting the wall are in good condition. Apply a strip of BP Smooth Surface

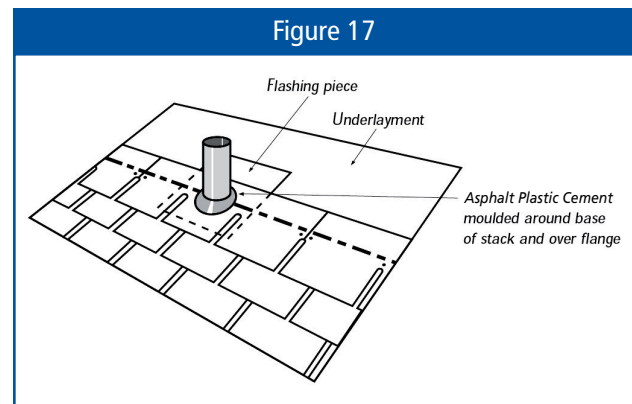
Roll Roofing, GRIPGARD or WEATHERTEX® 20 cm (8") wide over the shingles along the wall. Nail 10 cm (4") apart along each edge of the strip. Cover with Asphalt Plastic Cement and embed the new shingles. Use a caulking gun and draw a bead of Asphalt Plastic Cement between the ends of the shingles and the siding.

Flashings should always be neatly done and color coordinated.

### B – Soil Stack Flashing :

Use either GRIPGARD or WEATHERTEX®, BP Smooth Surface Roll Roofing or a metal flange to flash a soil stack and lay around the soil stack before shingles are laid. Cut a piece of flashing material with a hole in it to fit just over the pipe and large enough to extend 10 cm (4") below, 20 cm (8") above and 15 cm (6") to each side of the pipe. Slip this flange over the pipe and lay it flat on the roof. Form a collar of Asphalt Plastic Cement around the pipe to plug the gap and work it in properly to obtain good adhesion of the Asphalt Plastic Cement to the pipe. Continue laying shingles and cement in all areas that overlap the flange (see **Figure 17**).

Flashings should always be neatly done and color coordinated.



### C – Chimney Flashing :

Chimneys are built on a separate foundation than the building to avoid uneven settling. This necessitates the construction of base flashings secured to the deck and covered by cap flashings secured to the chimney to permit movement, without damage to the water seal.

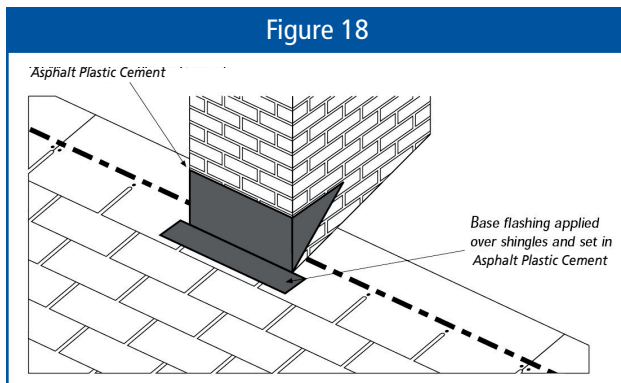
# APPLICATION INSTRUCTIONS

## ASPHALT SHINGLES



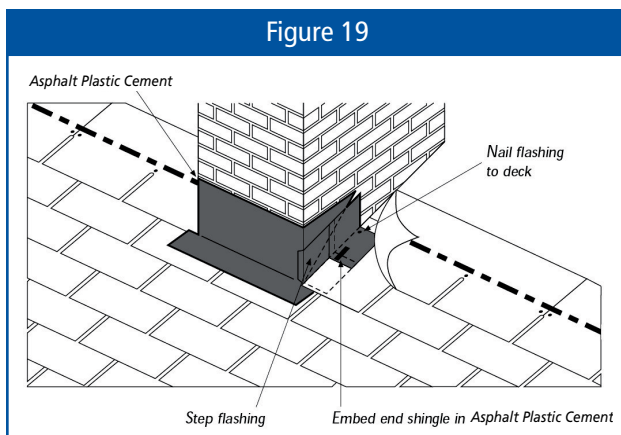
Before flashing, shingles are applied up to the lower face of the chimney. A cricket or saddle is built on the upper side of the chimney to prevent the accumulation of water or ice.

Start on the low side of the chimney and apply a strip of Smooth Surface Roll Roofing, Slate Surface Roll Roofing, GRIPGARD or WEATHERTEX®, cutting the edges to permit folding up the sides of the chimney. Extend 25 cm (10") up the chimney and onto the roof to the top of the cut-outs of the last shingle course. Secure this strip to the shingles with Asphalt Plastic Cement.

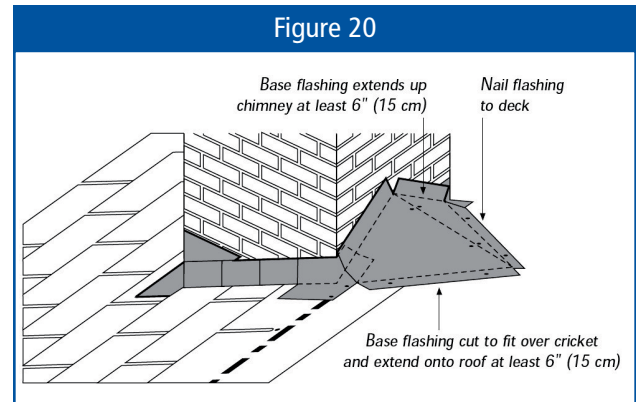


Apply the metal base flashing, starting with the front of the chimney. Bend the base flashing so that the lower section extends at least 10 cm (4") over the shingles and the upper section extends at least 30 cm (12") up the vertical face of the chimney (see Figure 18). Secure the metal flashing to the roll roofing using Asphalt Plastic Cement. Shingle around and / or over the base flashing.

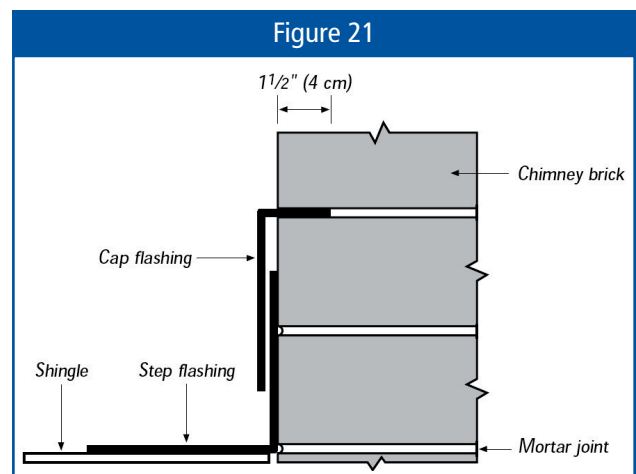
Use metal step flashing for the sides of the chimney, positioning the units in the same manner as flashing a



vertical wall. Cut, bend and apply the step flashing as shown in Figure 19 and as described in Section 3.6-A. Secure each flashing unit to the deck with nails. Embed the end shingles in each course that overlaps the flashing in Asphalt Plastic Cement.

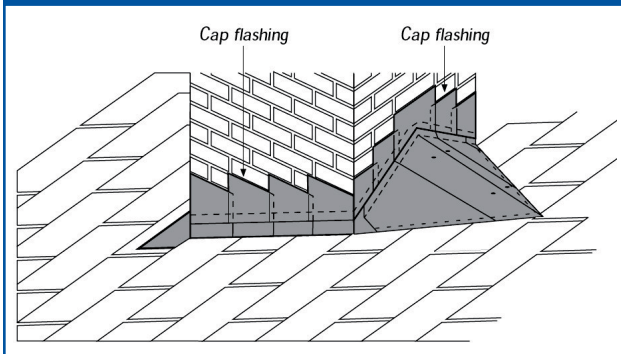


Next, cut and bend the metal base flashing to cover the cricket and extend onto the roof surface at least 15 cm (6"). It should also extend at least 15 cm (6") up the brickwork and far enough laterally to lap the step flashing on the sides (see Figure 20). Shingle around and/or over the base flashing.



Cap flashings must now be placed over all base flashings for positive exclusion of water from the joint. Begin by setting the metal cap flashing into the brickwork as shown in Figure 21. This is done by raking out a mortar joint to a depth of 4 cm (1 1/2") and inserting the bent edge of the flashing into the cleared joint. Refill the joint with mortar or Asphalt Plastic Cement. Finally, bend the flashing down to cover the base flashing and

Figure 22



to lie snugly against the masonry. Don't fasten through the base flashing, as the two must be allowed to move independently.

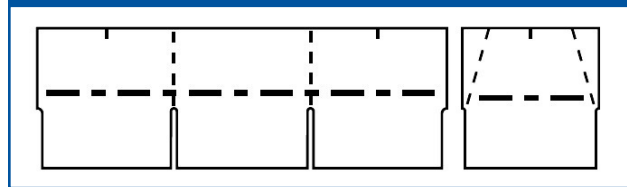
Use one continuous piece of cap flashing on the front of the chimney. On the sides and back of the chimney, use several pieces of similar-sized flashing, trimming each to fit the particular location of brick joint and roof pitch (see **Figure 22**). Start the side units at the lowest point and overlap each at least 7.6 cm (3"). Remember that flashings should always be neatly done and color coordinated.

### 3.7 – HIP AND RIDGE

#### A – Hip and Ridge Installation :

The last course of shingles applied must have the exposed granular surface to within 14.3 cm (5 5/8") of the ridge. The headlap of the shingle is turned over the ridge and nailed on the opposite slope. When both slopes have been completed in this fashion, the ridge capping can be applied. Cut full-size 3-Tab shingles into 3 equal parts to make capping. Cut off both corners of each section at an angle (see **Figure 23**).

Figure 23

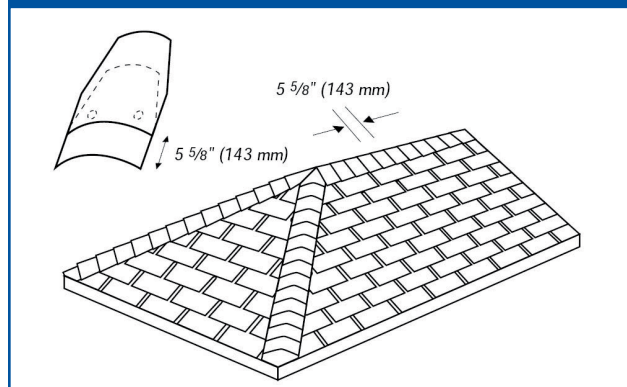


#### B – Apply Hip and Ridge caps as follows :

- 1] Bend the cap down the center so as to have equal exposure of the granules on each side of the ridge. In cold weather, warm the cap before bending.
- 2] Begin at bottom of a hip or at end of ridge opposite to the prevailing wind and apply caps, overlapping to give a 14.3 cm (5 5/8") exposure (see **Figure 24**).

Nail cap with one nail on each side 15.2 cm (6") from the exposed end and 2.5 cm (1") from each side.

Figure 24



### Building Products of Canada Corp.

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If this application instructions differ from the instructions on the packaging, this document is to be considered current. Please make sure to download the most up to date version of this document from the Building Products of Canada Corp. website [www.bpcan.com](http://www.bpcan.com). Please refer to local building codes for addition installation requirements.

In order to benefit from the BP shingle warranty, the shingles must be installed in accordance with these applications instructions.