

# Oregon Roof Consulting and Inspection

No-Nonsense Roofing Advice for Property Owners: Affordable ~ Thorough ~ Versatile ~ Capable

Serving the Portland Metro area and all of Oregon: (503) 654-4612

Oregon CCB: 199121 ~ WA Lic: OREGORC871MR

PO Box 220190, Milwaukie, OR 97222

## Resume' ~ Track Record ~ Experience ~ Qualifications ~ History

Please note : I have 44 years of legitimate verifiable experience as a laborer / grunt / gopher for my brother's roofing business in the 60's, the better part of 3 decades as a roofing contractor, 6 years as an estimator / project manager for 2 large roofing companies and am now nearing the end of my 10<sup>th</sup> year as the owner / operator of Oregon Roof Consulting and Inspection. I have personally installed over 1,000 roofs and have done at least 14,000 roofing estimates back in the roofing days. Oregon Roof Consulting has participated in 5 courtroom hearings and 16 arbitration hearings in Oregon and Washington and 19 on site CCB mediation meetings in Oregon - all as an expert witness, so, we are somewhat familiar with the roofing trade.

I have done work for but not limited to : Homeowners; Businesses and corporations of all sizes; Insurance companies; Banks; Churches; Relocation companies; Roofing contractors; Investment groups; HOA's; Apartment complexes of all sizes; The State of Oregon; Multiple school districts including West Linn; David Douglas; and every elementary, middle, and high school in both Hood River and Wasco ( The Dalles ) counties; United States Coast Guard in Astoria; etc. I have done jobs all over Oregon and Washington; All over the San Francisco Bay Area including San Francisco, Oakland, Napa, Richmond, Alameda, Fremont, Pleasanton, Berkeley, Fresno, Sacramento and Reno Nevada. We have also helped with two shingle roofing projects on the remote South Pacific island of Rarotonga ( Cook Islands ). This is all on my website. See [www.oregonroofconsulting.com](http://www.oregonroofconsulting.com)

Thank you,

Owner of Oregon Roof Consulting & Inspection

### Oregon Roof Consulting and Inspection No-Nonsense Roofing Advice for Property Owners



- Affordable ~ Thorough ~ Versatile ~ Capable
- Roofing in Oregon Since 1973
- Project Management & Monitoring
- Inspections ~ Certifications ~ Owner Advocacy

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Joe Sardotz, Owner Operator



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Roof Inspection for :

Job Address :

Banks, Oregon 97106

I inspected this roof on November 25<sup>th</sup> 2023. I met the owner, looked in the attic and we got on the roof. The roof is a new 50 year Certainteed 'Presidential TL' shingle in the Shadow Gray color. Separate photo emails will be sent. Each will be numbered to correspond to the numbered items on the summary. The following items should be noted :

1. Some damage was done to sprinkler heads caused by a truck. The roofer should pay to have this corrected. A contractor should not leave a jobsite with significant legitimate damage.
2. A rep from Certainteed inspected this roof and pointed out some 'issues'. Certainteed employees are not allowed to write a report so I was called. I write reports all the time.
3. It would be wise to block off the louvered wall vents as they interfere with the RVO-38 attic vents.
4. Certainteed requires that component flanges be double sealed. None here are sealed. \*\*See attached Certainteed pages.
5. Most plumbing vent pipe jacks are the high quality long lasting 'Ultimate' type however a 3" pipe in back has an entry level 'no-caulk' type. The rubber collar on this will fail decades before the shingles do. Plus, it is best that all pipe jacks are the same – for continuity.
6. There is a group of shingles that are severely scuffed / damaged to the point that they need to be replaced. Some minor scuffing is typical but these shingles are severely damaged.
7. There are multiple potential water entry points around the chimney.
8. Some skylites are leaking. Some of the skylite counter flashing is damaged. Different color caulking has been carelessly smeared on some of the glass. According to the owner one skylite did not have a counter flashing on the back side for over a month and there was leaking here every time it rained.
9. Certainteed requires these shingles to be laid in a specific pattern which is 5/5/15. These are at 5/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5. This causes diagonal rows which is not the correct pattern. Certainteed puts 'alignment notches' at the top of all shingles. These notches allow for correct installation. These notches

were apparently not used. \*\*See attached Certainteed pages.

10. The exposure of the rows is inconsistent. \*\*See photos.
11. There are places at various locations on the roof where shingle end joints are exposed. These end joints should never be visible.
12. There should be another shingle row at the top of the main front side. Too much of the last row of shingles is exposed.
13. At the end of a few rows there are missing shingle pieces.
14. At some parts of the chimney and skylites the shingles are tight to the step flashings. There should be a 'reveal' here to accommodate proper drainage.
15. We lifted shingles all over the roof to check nailing. We looked at at least 150 nails and a good 90% were over driven. All manufacturers have identical nailing requirements. Over driven nails can leak and the holding power of the nails is greatly compromised / diminished. \*\*See attached Certainteed page.

Conclusion : This roof – in my opinion – was not professionally installed. There are numerous things on this roof that an experienced, legitimate, qualified, professional simply would not do. This roof is not remotely close to Certainteed or any shingle manufacturers' instructions/specifications/requirements and the Oregon Code.

It is any Contractor's responsibility, obligation, and requirement to 1) Know how a roof system should be installed. 2) Install that roof system correctly.

*\*\* The Oregon Residential Specialty Code R102.7.1 : 'Additions, alterations or repairs (excluding ordinary repairs) to any structure shall conform to the requirements for a new structure without requiring an existing structure to comply with all of the requirements of this code, unless otherwise stated. Additions, alterations or repairs **shall not cause an existing structure to become unsafe or adversely affect the performance of the building.....**'. R905.1 : 'Roof coverings shall be applied in accordance with the applicable provisions of this section and manufacturers installation instructions'. R903.1 : ' Roof Assemblies shall be designed and installed in accordance with this code and the approved manufacturers instructions such that **the roof assembly shall serve to protect the building or structure**'. R105.2 : 'Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in a manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction'. \*\* A permit may or may not be required in your area. To inquire call local building officials.*

Thank you,



Owner of Oregon Roof Consulting & Inspection

**\*\*This document carries no warranty or guarantee. It is an opinion based on industry standards, manufacturers specifications, local codes and my experience\*\***

## Here Are Some Tips

In a roof-over, you need to expose step-flashing before installing the second layer of shingles. If the second layer is just cut around the object, and the apron flashing is not brought out on top of the new shingles, then the original step flashing drains onto the apron and down between the layers. After several years, the deck is saturated and rotting. Opening up the flashing the right way is a "pain," but it must be done. Thanks to Tim Mosher from Lima, OH. Tim recently repaired the bottom corners of 8 dormers on his parent's roof where the flashing was "shingled-over"... no wonder he sent us this tip!

5. Apply an additional row of shingles over the metal flashing strip, trimmed to match the vertical width of the metal flashing strip on the shingle surface. Fasten shingles with face nails sealed over with a small dab of roofing cement.
6. Next, if there is siding, bring it down over the vertical part of the step flashing to serve as cap flashing. Do not nail the siding into the vertical flashing.

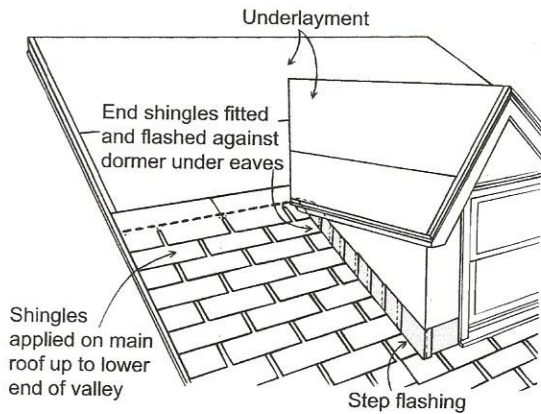


Figure 6-4: Front/side wall flashing.

7. If the vertical front wall meets a sidewall, as in dormer construction, cut the front flashing so that it extends at least 7" around the corner. Then continue up the sidewall with step flashing as described earlier. A good quality caulk, or asphalt roofing cement, may be useful to fully seal behind corner joints, if they will not be soldered.

## SOIL STACKS AND VENT PIPES

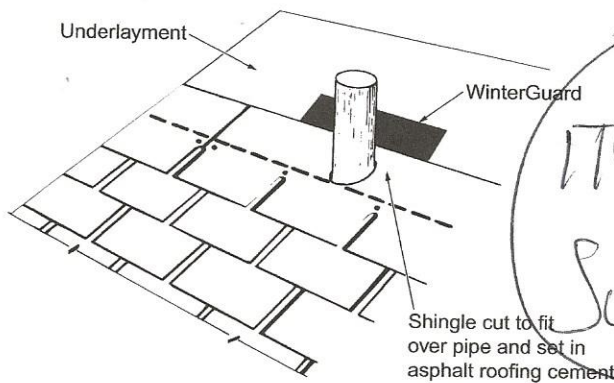


Figure 6-5: Cutting shingle to fit around vent pipe.

Practically all homes have circular vent pipes or ventilators projecting through the roof. Before installing the flashing, bring the shingles up to the vent pipe. Then cut a hole in the shingle that will go over the pipe and install the shingle, setting it in asphalt plastic cement. Next, place a preformed flashing flange, sized to fit snugly over the pipe, over the vent pipe and set it in asphalt roofing cement. Be sure the flange is seated squarely on the roof.

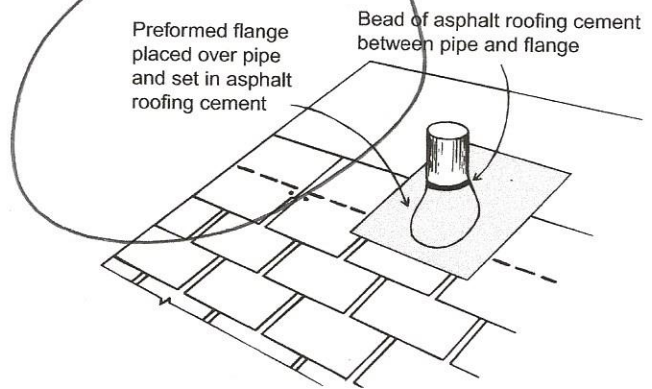


Figure 6-6: Placement of flange over vent pipe.

After the flashing is in place, continue applying the shingles. Cut the shingles in the succeeding courses to fit around the pipe, and embed them in asphalt roofing cement where they overlap the flashing flange. The completed installation should appear as shown in Figure 6-7, with the lower part of the flange overlapping the lower shingles, and the side and upper shingles overlapping the flange.

Follow the same procedure where a ventilator or exhaust stack is located. If the ventilator, exhaust stack, or soil pipe is near a ridge, bring the shingles up to the protrusion from both sides and bend the flashing flange over the ridge to lie in both roof planes, overlapping the roof shingles at all points. Ridge shingles are then positioned to cover the flange. Embed the ridge shingles in asphalt roofing cement where they overlap the flange.

Flexible neoprene boots are also commonly used to flash around vent pipes.

ITEM 4  
ON  
SUMMARY

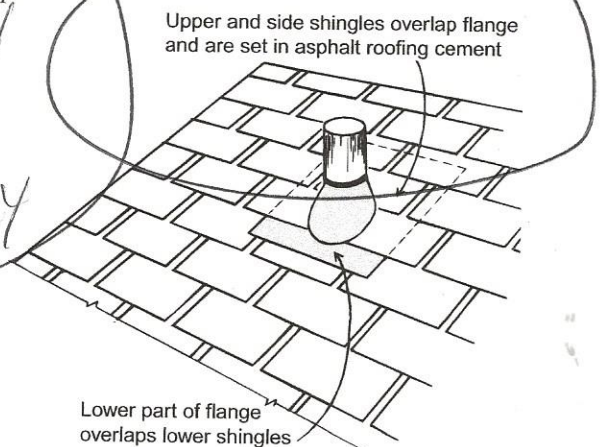


Figure 6-7: Applying shingles around flange.

# Correct Fastening

# 8

ITEM #11 ON SUMMARY ↓ ↓

## YOUR OBJECTIVE:

To learn CertainTeed's recommended methods for fastening shingles.

## GENERAL FASTENING GUIDELINES

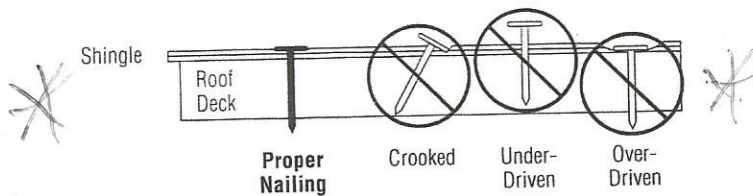


Figure 8-1: Fastening three-tab, strip-type shingles.

- ◆ Proper placement of fasteners is important for shingle performance and warranty protection. Ideally, placement of fasteners should be as specified according to the precise locations shown for each shingle. However, in practice some variation (dimensional tolerance) is acceptable.
- ★ ◆ Nails are strongly recommended instead of staples. (Nails **MUST** be used with LandMark® TL, Presidential®, Presidential® TL, Arcadia Shake™, Carriage House®, Belmont™ and Grand Manor® shingles.)
- ◆ Nailing locations vary by shingle style and by roof slope. It is critical to fasten the shingles in the proper locations in order to achieve designed performance. Improperly fastened shingles may blow off or slip out of place. The use of asphalt roofing cement in small quarter-size dabs to hold the shingle down is required on most shingles when applied to steep slopes exceeding 21/12 (60 degrees). Consult individual shingle application instructions for details on the above, including fastening points.
- ◆ Fastening a heavier and thicker premium shingle requires longer nails.
- ◆ Nails with a barbed or rough shank are recommended. Smooth pneumatic nails are also acceptable.
- ◆ Nail shanks must be either 11- or 12-gauge.
- ◆ Nail head diameter must be at least 3/8".

- ◆ Nail shanks must be long enough to penetrate the roofing and then go 3/4" into solid wood, plywood or non-veneer wood decking, or through the thickness of the decking, whichever is less.
- ◆ Be sure fasteners are driven straight, with nail heads flush with the shingle surface and never cutting into the shingle (Figure 8-1).
- ◆ All nails must be corrosion resistant; for example, double-dipped galvanized steel, aluminum, copper, or stainless steel.
- ◆ To prevent shingle distortion, do not attempt to realign a shingle by shifting the free end after two fasteners are in place.
- ◆ Fasteners should not go into, above, or between the self-sealing strips (except for Highland Slate). If they do, the shingles may not seal properly and will be more likely to blow off.
- ◆ If a nail is underdriven, be sure that it is hammered down flush.
- ◆ Seal overdriven nails with asphalt roofing cement and install another nail nearby.
- ◆ Fasteners must not be exposed; i.e., visible on the finished roof.

## ARE STAPLES ACCEPTABLE?

- Both ARMA and CertainTeed **strongly recommend** that properly driven and applied roofing nails be used as the fastening system for asphalt shingles. Staples can perform acceptably if properly applied, but proper alignment and application is more difficult with staples than with nails, making shingle damage and blow-offs more likely.
- ★ (Nails **MUST** be used for Landmark TL, Presidential, Presidential T/L, Arcadia Shake, Carriage House, Belmont and Grand Manor shingles, plus in high-wind areas and to qualify for an increased wind warranty if available.
- Caution:** Check your local Building Code for applicable fastener requirements.

# TECHNICAL BULLETIN

## PROPER USE OF PNEUMATIC COIL NAILERS

*SUPERSEDES PREVIOUS BULLETINS*

### Issue Description:

The proper use of pneumatic coil nailers for the installation of asphalt shingles.

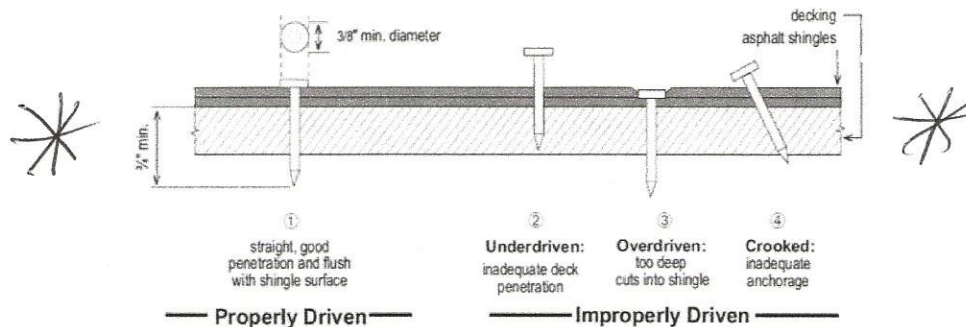
### Recommendations:

Proper setup and use of pneumatic coil nailers is critical for correct installation of Owens Corning® asphalt shingles. Improper use of pneumatic coil nailers may lead to shingle damage and/or shingle failures during a high-wind event. Ensuring proper nail gun setup will:

- ✓ Prevent over-driving the nails, which can cause the nail head to blow through the shingle.
- ✓ Prevent under-driving the nails, which can prevent shingles from laying flat and sealing properly.

### Key Considerations:

- Use regulated compressed air and never apply more air pressure than is necessary to properly drive the fasteners.
- Most pneumatic coil nailers operate at optimum efficiency when the pressure is set between 80 and 95 psi.
- Most coil nailers are equipped with a depth adjustment knob. Adjust the settings for the nail heads to be driven flush.
- The startup and cutout pressures on the compressor should be set to maintain optimum operating pressure in the compressor tank at all times.
- Air hose length and diameter should be considered when setting psi at regulator.
- Operating more than one coil nail gun from a single compressor may affect how well the fasteners penetrate the shingles.
- Use corrosion resistant 11 or 12-gauge nails with a minimum 3/8-inch diameter heads, complying with ASTM F1667.
- Unusually cold or hot temperatures may require additional tuning of the compressor for optimum nail driving performance.
- Always read and be familiar with the operating instructions for the compressor and nail gun.
- When using pneumatic coil nailers, **always ensure that the nail is driven flat and flush with the shingle.**
- **Any shingle into which an overdriven fastener has been installed must be repaired by either replacing the shingle or covering the fastener with asphalt roofing cement and installing an additional fastener within 1-inch of the overdriven fastener.**



Please contact 419-248-6557 for additional information.  
Email: [gettech@owenscorning.com](mailto:gettech@owenscorning.com)

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*Here's a Tip...* When establishing the 4-course shingle pattern, use the proper alignment notches to determine where to cut the shingles on the left hand side. For example, install the first course full shingle, then place a full shingle above it by lining up the right side edge with the 5 1/2" alignment notch in the 1st course shingle below, then fasten and trim the 2nd course shingle along the rake edge. Likewise, use the 15 1/2" alignment notch at the top of the 2nd course shingle to place the right side edge of the 3rd course shingle. Finally, use the 5 1/2" alignment notch at the top of the 3rd course shingle to place the 4th course shingle

**5" AND 15" OFFSET, FOUR-COURSE DIAGONAL METHOD**

**1ST COURSE:** Start at left rake, hip or valley and apply a full shingle.

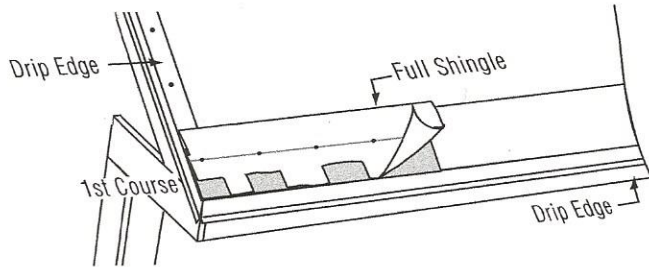


Figure 15-12: First Course.

**2ND COURSE:** Cut 5" from the left edge of the first shingle. Install the remaining 35" piece by lining up the right lower edge with the 5 1/2" alignment notch in the top of the First Course shingle.

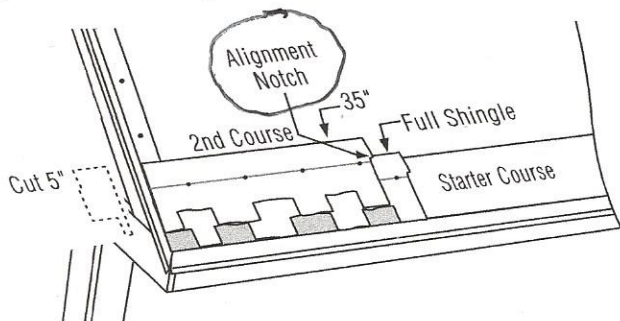


Figure 15-13: Second Course.

**3RD COURSE:** Cut 20" from the left edge of the first shingle. Install the remaining 20" piece by lining up the right lower edge of the shingle with the 15 1/2" alignment notch in the top of the Second Course shingle.

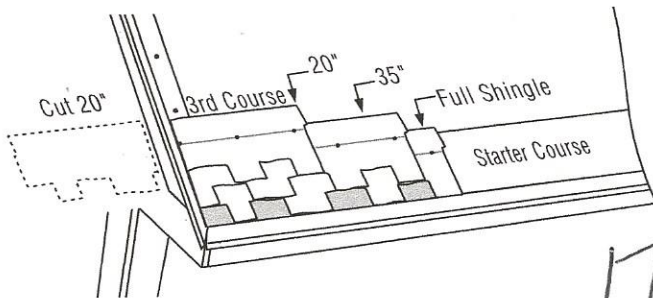


Figure 15-14: Third Course.

**4TH COURSE:** Cut 25" from the left edge of the first shingle. Install the remaining 15" piece by lining up the right lower edge of the shingle with the 5 1/2" alignment notch in the top of the Third Course shingle.

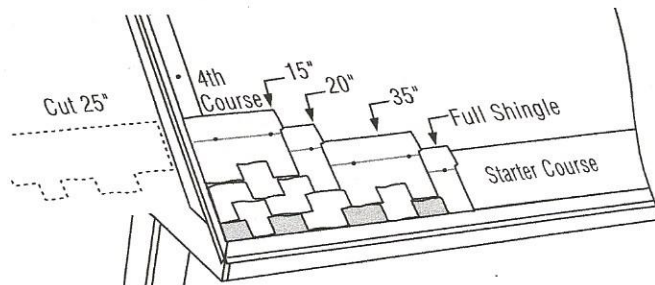


Figure 15-15: Fourth Course.

**SUCCEEDING COURSES:** Start the Fifth Course by installing a full shingle and repeat the four-course pattern. Continue applying shingles filling into the right of the first four courses.

**ANOTHER WAY TO VIEW IT:**

The 5" and 15" offset pattern is established over the 4 courses as follows:

- 1st course shingle = 40" L (full shingle)
- 2nd course shingle = 35" L (1st course - 5")
- 3rd course shingle = 20" L (2nd course - 15")
- 4th course shingle = 15" L (3rd course - 5")

**AN ALTERNATIVE TO STARTING ON THE LEFT:**

Follow the same application instructions specified in the 5" and 15" Offset Method above except instead of starting at the left rake, strike a chalkline perpendicular to the eave, at least 10' from the rake's edge. Install the First Course full shingle by aligning its left edge with the perpendicular chalk-line. Follow the 5" and 15" Offset Method instructions for the remaining courses.

**IMPORTANT:** The designed appearance and service of Presidential Shake Shingles requires strict adherence to the application instructions.

ITEM #19  
ON SUMMARY

*Here's a Tip...* After establishing the 4 course shingle pattern, extend the 1st course by installing additional full shingles along the eave. Using the proper alignment notch in the shingle course below to maintain the 5" and 15" offset, build the courses up the roof by working "back and forth" across the roof deck. (Be careful to maintain the correct offsets!)

### ALIGNMENT AND SHIPLAP NOTCHES

To maintain the correct 5" and 15" diagonal offset pattern, use the **Alignment Notches** at 5½" and 15½" from the right edge of the shingle. These notches are pre-cut into the top of each shingle and serve as a shingle placement guide for the shingles being installed in the course above them.

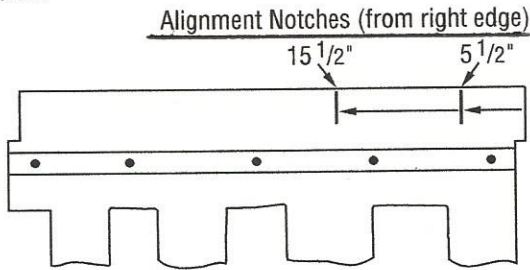


Figure 15-8: Use the alignment notches to ensure shingles are applied at a 5" and 15" diagonal offset.

**Shiplit Notches** on the left and right side of each shingle are used to ensure the proper 4" exposure is continued across shingle courses by lining up the shiplit notches of adjacent shingles.

## ONE CLEAN DECK APPLICATION METHOD

**NOTE:** Shingle applications are on 5" and 15" offsets with a 4" exposure. Apply shingles up the left side of the roof to establish the pattern and fill in to the right. When cutting shingles, always apply the right hand portion (cut-off the left side.) Use the pieces cut off the left rake, hip, or valley to complete courses at the right rake.

### PREPARING THE DECK:

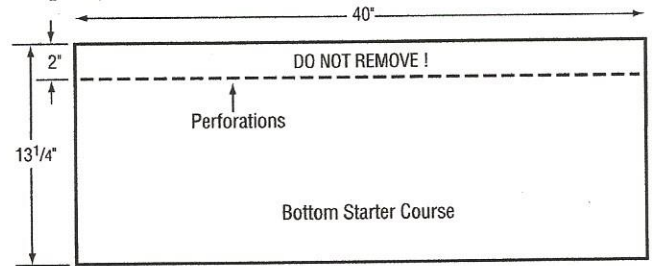
- ◆ Apply underlayment as required. CertainTeed suggests that a layer of shingle underlayment be applied. For UL fire rating, underlayment is generally required. Apply flat and unwrinkled.
- ◆ Snap horizontal and vertical chalklines to assure shingles will be correctly aligned. Expose all shingles 4" (125 mm).

**IMPORTANT!**

### PRESIDENTIAL STARTER:

Use **TWO (2) OVERLAPPING LAYERS** of CertainTeed's "Presidential Starter" shingles, applied in the following fashion, starting at left rake/eaves corner. Starting at the right rake/eaves corner is not permitted. The staggered top edge of the starter pieces will allow a smooth and uniform transition for applied shingles.

- 1. Bottom Starter Course Layer:** Cut 20" off the first bottom piece. Apply remaining 13¼" x 20" piece, followed by full 13¼" x 40" pieces along the eave. **DO NOT REMOVE THE PERFORATED TOP SECTION.** Extend the shingles over the rake and eaves about ½" (13 mm) if drip edge is used, or about ¾" (19 mm) if no drip edge is used.



Colored granules matching the shingle blend are to be exposed at lowermost edge of roof.

Figure 15-9: Presidential Starter (bottom starter course.)

- 2. Top Starter Course Layer:** Remove the 2" perforated top section. Cut 2" off the left side of the first top piece only. Install the 11¼" x 38" piece over and flush to the bottom starter course. Continue with 11¼" x 40" top course pieces over the rest of the bottom starter course.

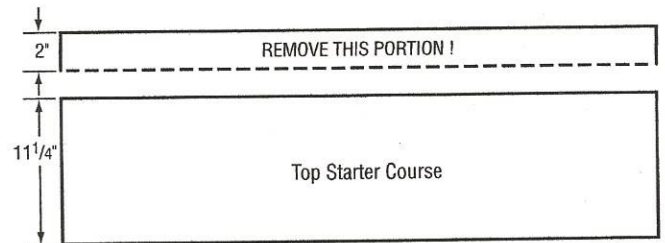
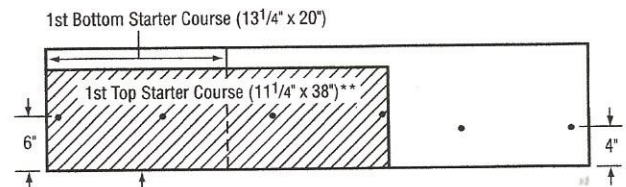
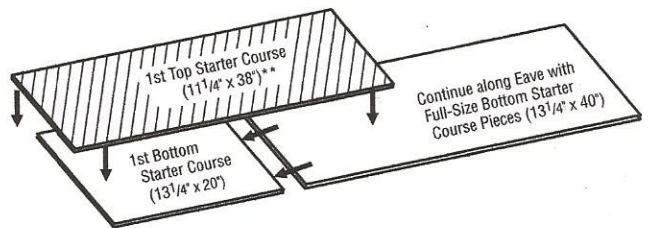


Figure 15-10: Presidential Starter (top starter course.)

**NOTE:** The exposed colored granules on the "top" starter shingles must match the Presidential/Presidential TL shingle colors.

Fasteners should be placed about 1" and 13" in from both ends of a full length starter shingle. Fasteners for less than full 40" starter shingles should be placed about 1" in from each end and evenly spaced no more than 13" apart (2, 3 or 4 fasteners may be used on shorter starter shingles depending on the length.)



Extend the shingles over the rake and eaves about ½" (13 mm) if drip edge is used, or about ¾" (19 mm) if no drip edge is used.

\*\*Continue along eave with 11¼" x 40" Top Starter Course shingles, butted against the in-place Top Starter Shingles and Flush to the Lower Edge of the Bottom Starter.

Figure 15-11: Use two (2) overlapping layers of CertainTeed's "Presidential Starter."