# Anchor Plate/Pilot Hole Flashing (INS-SOP-0244-02)



## Overview

[Link to CURRENT version of this SOP](#)

This SOP describes flashing holes on multiple roof types including composition shingle, tile roofs, and flat roofs. The flashing prevents roof leaks.



## Legend

| General | |
|---|---|
|  | Ensure all Arc Flash PPE is worn during the shown portion of the Installation SOP. |
| | This symbol indicates a safety-specific call out |
|  | Photo or screenshot required for the Foreperson Installation Checklist (FIC). |
|  | Pro Tip to help the installation procedure. |
|  | Indicates to Tap on a screen or device within an application or website. |

| Safety Hazards | | |
|---|---|---|
|  Health Hazard |  Explosive Hazard |  Environmental |

| | | Hazard |
|---|---|---|
| ☠ Acutely Toxic | ⬤ Oxidizing Hazard | 🔥 Flammable |
| Pressurized Gas Hazard | Corrosive Hazard | ! Eye irritant, skin irritant, or both |
| See the Safety Data Sheet in the Related Documents list for additional information relating to OSHA Hazard Pictograms. | | |

## Tools & Materials Required

| Estimated Time: | ~2 min. per flashing |
|---|---|
| Tools | Composition Roof:<br><br>● Pry bar<br>● Putty knife<br><br>Tile Roof:<br><br>● Scissors<br>● Hand brush<br>● Battery leaf blower |

|  |  |
|---|---|
|  | - Hand roller<br>- Pry bar<br><br>Flat Roof:<br><br>- Latex or vinyl gloves<br>- Scissors<br>- Hand roller<br><br>Corrugated Metal Roof:<br><br>- Flat metal file<br>- Eye protection<br>- Hand roller<br><br>All Roofs:<br><br>- Caulking gun<br>- Shop rags |
| Materials: | Composition Roof:<br><br>- Galvanized flashing cards 8" x 12"131-01359<br><br>- Spray paint to match roof (if possible)<br><br>Tile Roof:<br><br>- PROTECTO WRAP, PS45 FLASHING, 9IN"x 50FT ROLL 131-01349<br>- Protecto Wrap Spray Adhesive - "Protecto Tak" 131-01347<br><br>Flat Roof: |

|  | <ul><li>Acetone</li><li>ETERNABOND ROOFSEAL OR CHEMLINK ROOFSEAL WHITE REPAIR TAPE - 8IN X 50FT 178-09552 (works with TPO, PVC, EPDM, and rolled comp)</li></ul>Corrugated Metal Roof:<ul><li>Acetone</li><li>ETERNABOND ROOF SEAL OR CHEMLINK ROOF SEAL WHITE REPAIR TAPE - 8IN X 50FT 178-09552</li><li>Latex or vinyl gloves</li><li>Rags</li><li>Scissors</li></ul>All Roofs:<ul><li>M1 sealant: 178-06009</li></ul> |
|---|---|

## Composition Shingle Roof

1. Locate anchor holes and missed pilot holes
   - Pilot Holes that miss rafters shall be marked for identification.
   - Check any areas where equipment was removed (antennae, old solar, etc.).

2. Use a pry bar to loosen the shingle where the flashing will be installed.



- Do not remove nails from shingles if the card will not be visible from the ground.
- The bottom edge of the flashing card will stick out past the shingle.
  - This is OK - paint to match if applicable.

**3.** Apply M-1 sealant into the holes to be flashed for added protection.

- Use only enough to fill holes; excess may fall into the attic area.



**IMPORTANT:** If any nails were removed due to the flashing card being in a highly visible location the nail holes <u>MUST BE SEALED!</u>

## 4. Prepare the Flashing

- Use 8" x 12" flashing cards.

5. Apply a U-shaped bead of sealant to the underside of the flashing.

   ○ The open part of the U will face towards the low side of the roof (downslope).

6. Insert flashing under comp, covering all holes.

   ● The hole to be flashed must have at least 4" of flashing on either side; center the flashing as much as possible.



   ● Butt flashing to the nails in the course above.

**IMPORTANT:** If the card will be in a highly visible area from the ground and needs to be hidden, remove the nail(s) from the shingle and seal the nail hole(s). Slide flashing up so it will be flush with the edge of the course. This must be documented with photos (sealing the nail holes, showing the flashing under the shingle, and with the shingle resting with flashing installed).
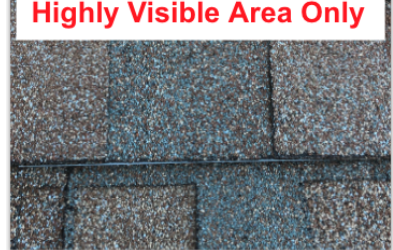


- Anchor holes may require up to 3 card flashings, depending on where the holes line up with the comp layers. Ensure that all unused pilot holes have a flashing underneath them.
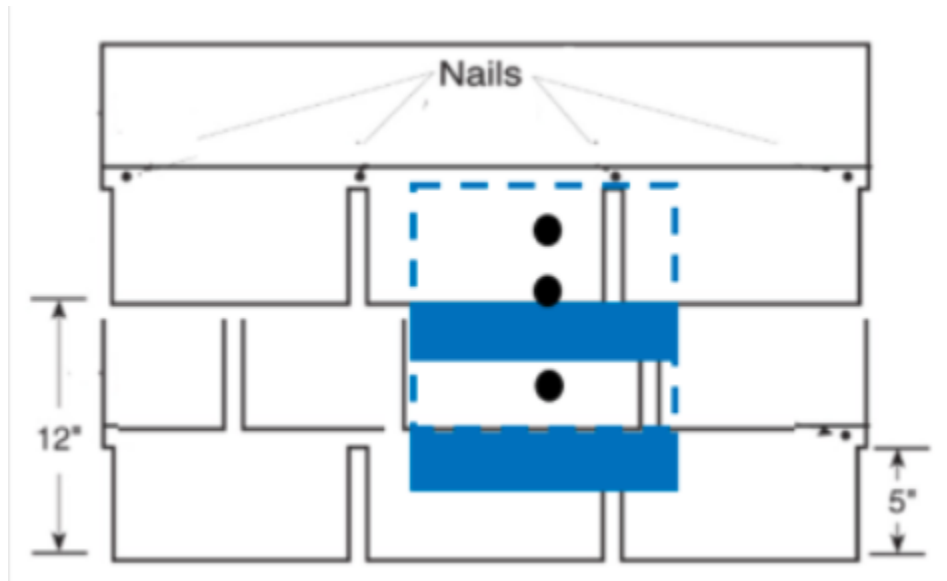
7. Apply M1 into the holes on top of the shingle

- If possible, paint the portion of the flashing card that protrudes below the shingle to match the roof.
- Use another flashing card to avoid overspray from spray paint

**IMPORTANT:** Once complete, any excess sealant above what is pictured shall be cleaned off of the roof surface.

- Flashing must be installed Landscape, under every shingle course that has been penetrated.
- The Flashing card must NOT be installed in the portrait orientation!

# CORRECT
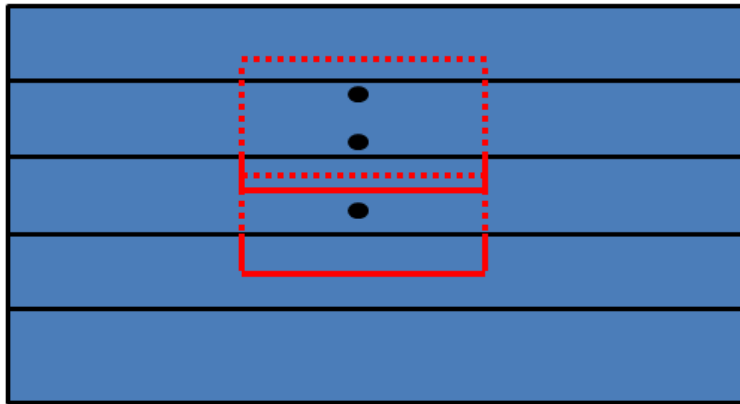


# INCORRECT
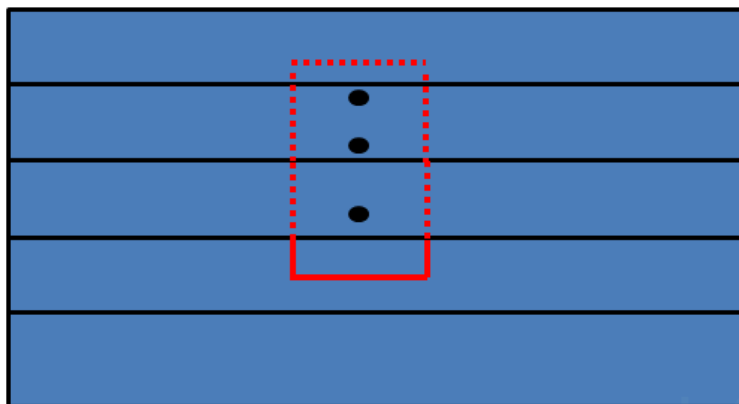
## Presidential Shake Roof

**NOTE:** This is the same procedure as traditional composition, but with a different profile than the standard 3-tab or architectural shingles.
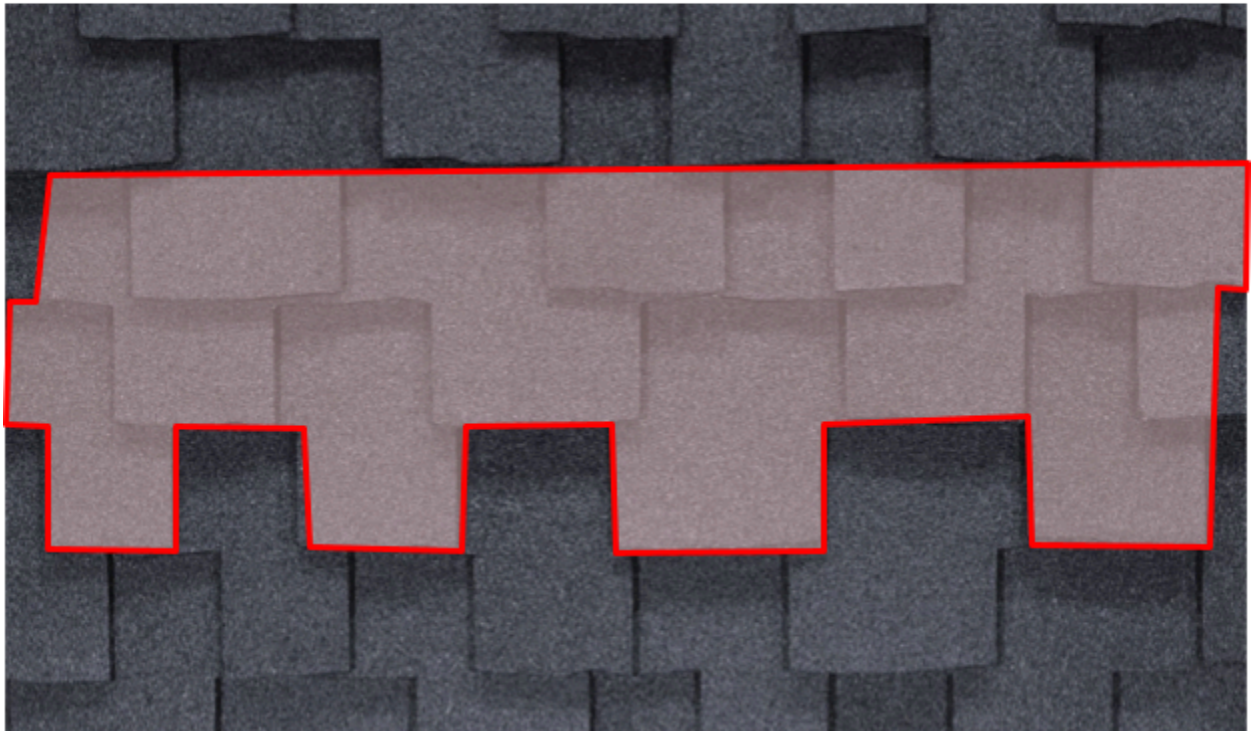


- Flashing cards shall be placed under two courses of shingles and the top card shall overlap the bottom card.

Third Course

Second Course

First Course
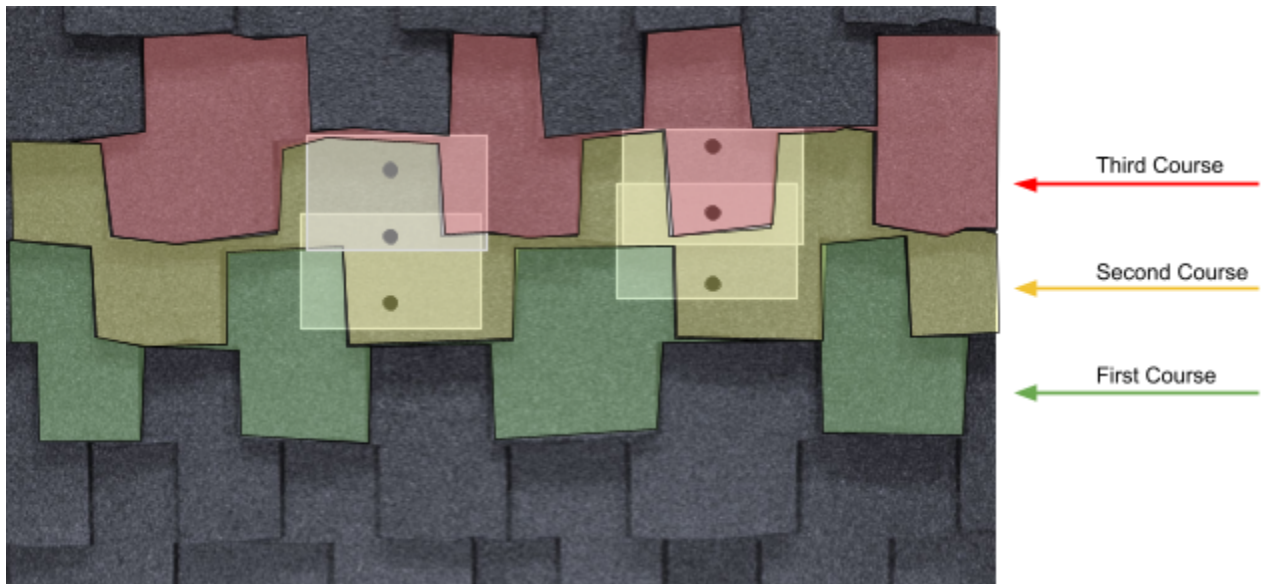
## Tile Roofs

1. Locate anchor holes and missed pilot holes
    ○ Pilot Holes that miss rafters shall be marked for identification.
    ○ Check any areas where equipment was removed (antennae, old solar, etc.).

2. Clean the surface of the roof with a hand brush AND blower.
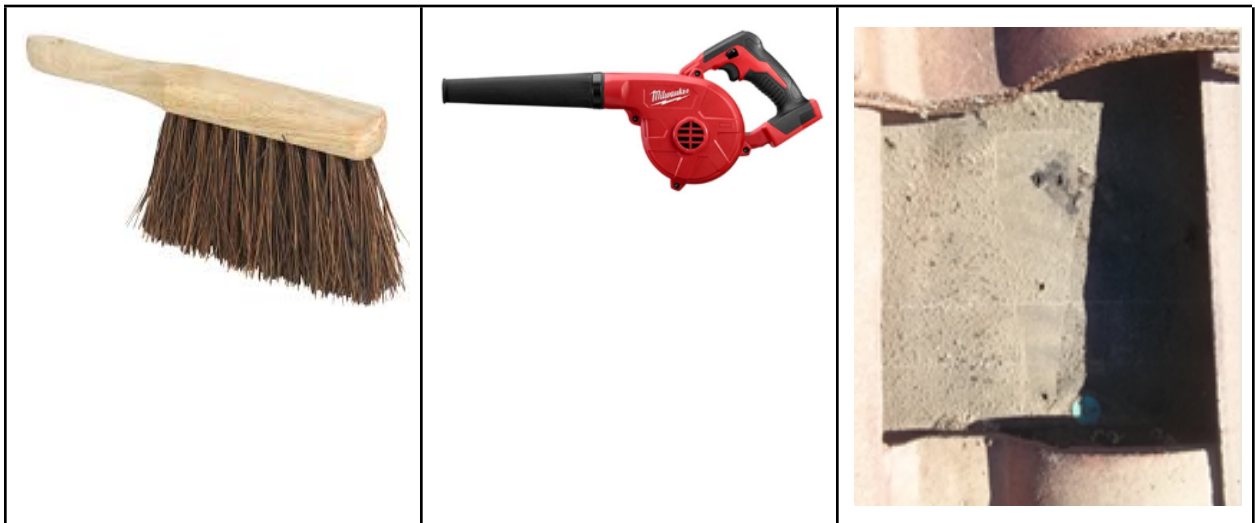
3. Fill all pilot and anchor holes with M1 sealant.

4. Smooth the sealant and work into the surface, using a putty knife.



5. Prep the patch area with adhesive spray.

- Spray the area to be flashed with Protecto Tak adhesive spray.

- Let dry until tacky - approx. 2-3 min.

6. Apply flashing material

- Cut a section of butyl tape large enough to overlap holes by at least 2 inches on all sides.

- Peel butyl tape backing and apply to the surface (which has been primed with adhesive per the previous step).

- Use a hand roller to remove bubbles and creases. This ensures a solid connection to the roof underlayment.

Min. 2"
coverage
on all sides
of the hole.

## Flat Roof

1. Confirm the approved roof type
- The processes and products covered in this SOP work on the following roof types:
    a. Rolled comp
    b. TPO
    c. PVC
    d. EPDM
    e. Modified bitumen



2. Remove anchor/identify missed pilot holes

- Clear away all loose debris from the area.
- Clean the area using acetone. (TPO, PVC, EPDM roofs only)
  - Wear gloves and exercise caution during this step.



3. Fill holes with sealant.
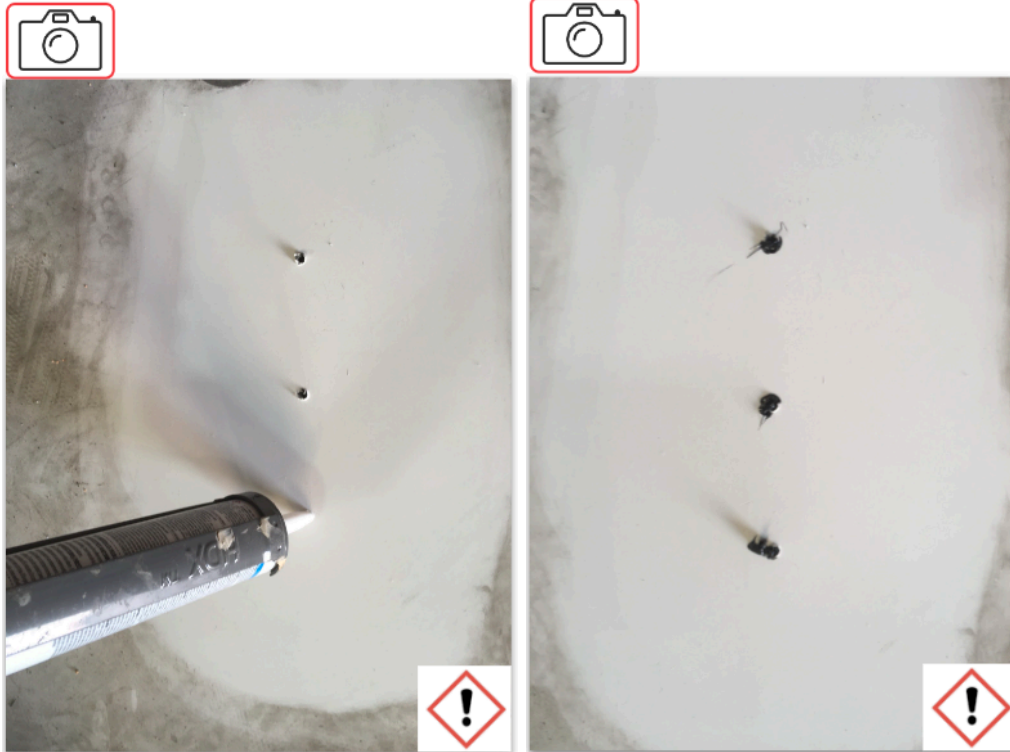
4. Cut roof repair tape to needed length

- All holes must be covered by a minimum of 4" overlap on all sides.
  - The tape roll is 8" wide.
  - Extend length 4" beyond top and bottom holes.
- Round the corners of the tape for a cleaner look.

5. Apply Tape to Roof

**IMPORTANT:** Roof repair tape is extremely sticky.  Only apply it to the area needed. It cannot be removed once it is installed!

- Remove clear backing and adhere the tape to the roof surface.
- Start by laying down one end first.  Press out air pockets as you lay it down.

6. Roll Repair Tape with Roller

**NOTE:** Chemlink roof repair tape is pressure activated.

- Using a hand roller, apply firm pressure to the entire tape patch.
- Be sure to roll the edges.

## Corrugated Metal Roofs

## Step 1: Locate anchor holes and missed pilot holes

- Remove anchors and locate missed pilot holes

## Step 2: ROOF PREPARATION

- Sweep any metal shavings and debris away from the area with a hand broom.

- Use a metal file to shave down the sharp edges around the holes that were left behind.
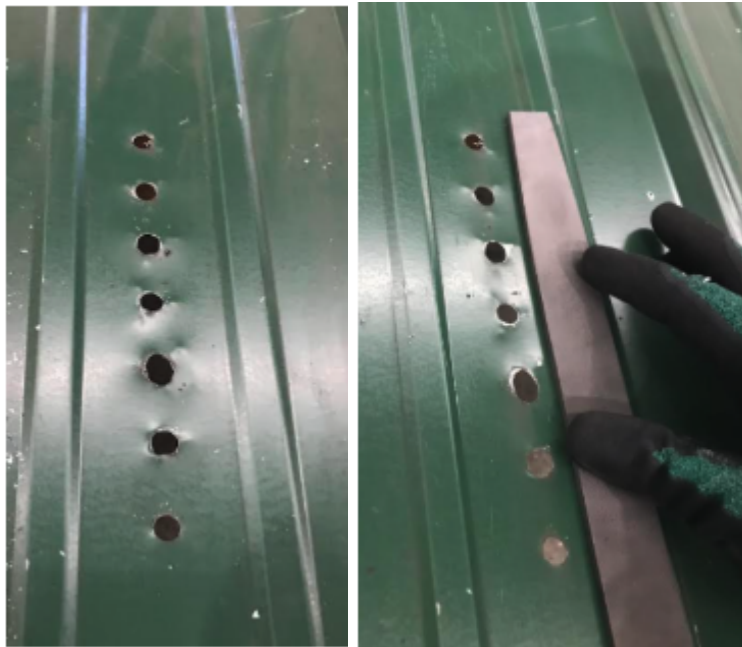


- Clean the roof area that will come in contact with the repair tape. The roof surface needs to be clean and clear of any dirt or debris.

**NOTE:** A damp rag or a rag with Acetone can be used to clean the roof surface.

- When using Acetone avoid eye and skin contact. Rubber gloves eye protection shall be worn when using.

## Step 3: INSTALL REPAIR TAPE

- All holes shall be covered by a minimum 4" overlap of tape on all sides, including the top and bottom (the tape is 8" wide).

- Remove the backing and adhere the repair tape to the roof surface by laying down one end of the repair tape, working it in one direction and pressing out air pockets as you lay it down.



- Using the hand seam roller, apply firm pressure to the entire tape patch.
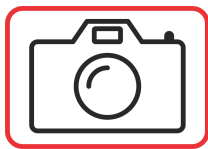
## Verification:

All Roofs:

- ❏  All missed pilot holes are flashed in accordance with SOP.

- ❏  All holes were filled with M1.

- ❏  All necessary photos for the FIC were taken.


Composition Roof:

- ❏  Are there any hidden flashing? If so, was a photo taken of it?
- ❏  If nails were removed, were they filled with sealant?

Tile/Flat Roof:

- ❏ All holes were properly cleared and cleaned.

- ❏ Holes were properly covered with repair tape.

- ❏ Repair tape was rolled out.

Metal Corrugated Roof:

- ☐ Was the surface of the hole properly prepared?
- ☐ Repair tape covers 4" past hole(s) in all directions
- ☐ Repair tape has been rolled out with a hand roller

## Product Feedback

Use the links below to provide feedback on SOPs and/or products:

- [SOP/Work Instruction Feedback](#)
- [Product Feedback](#)

## Approvals

| Approvals | | | |
|---|---|---|---|
| Prepared by: J. Costner | 7/2/2024 | Training: D. Takahashi | 7/3/2024 |

| | | | |
|---|---|---|---|
| Reviewed by: J. Ferreira | 73/32024 | Safety: | |
| Electrical: | | Structural: | |
| Design: | | CRT: Z. Thibert | 7/17/2024 |
| Product: N. Rumley | 7/3/2024 | Other: | |
| Quality: A. Chiu | 7/5/2024 | Other: | |

## Revision History

| Revision | Date | Description | Approval |
|---|---|---|---|
| 1 | 7/3/2024 | Initial Release | J. Costner |
| 2 | 2/13/2025 | Revised Per CO-0128 | J.Ferreira |
| | | | |

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*Compiled from three separate SOPs (all revision 01):

☑ Anchor Plate/Pilot Hole Flashing: Composite Roof - INS-SOP-0041

☑ Anchor Plate/Pilot Hole Flashing: Tile Roof - INS-SOP-0043

☑ Anchor Plate/Pilot Hole Flashing: Flat Roofs (Rolled Comp, EPDM,TPO,PVC) - IN…

# Document Control  Change Order

| | | |
|---|---|---|
| **Change Order Number**: CO-0128 | **New Revision:**  02 | **Submitted By & Date:** J. Ferreira 2/13/2025 |

**Document Title and Number:** Anchor Plate/Pilot Hole Flashing - INS-SOP-0244

**Reason for Change (in detail):**  Added to the catalog of proper flashing on different roof surfaces.

**Description of Change (in detail):**  The addition of the proper process of flashing pilot holes and anchor holes on corrugated roof surfaces

**References:**
XXX

**Effectivity: (Installations in field, New installations, Work in Progress)**
New Installations

**Other documents affected: (Spanish version, other SOPs, Work Instructions)**
Spanish?

| Approvals | Training: | Quality: |
|---|---|---|
| **Product:** J. Ferreira 2/13/2025 | **Electrical:** | **Structural:** |
| **Other:** | **Other:** | **Other:** |