## **Required Tools:**

Hammer or Stud Finder Roof Marking Crayon Drill with 1/8 inch Pilot Drill Bit Roof Sealant Torque Driver with Bit Adapter 1/2 inch Socket Wrench Flat Pry Bar



## Materials Included In Flat Tile Roof Hoo

- (1) SnapNrack Flat Tile Hook
- 2 (1) 5/16in Flange Bolt
- 3 (1) SnapNrack Bonding Channel Nut, 5/16in 18

## **Other Materials Required:**

- 1 (2) 5/16in Lag Screw (2) (2) 5/16 Washer
- 3 Flexible Flashing (when required for decklevel flashing)



# **Technical Flat Tile Roof Hook Data:**

Material	304 Stainless Steel
Finish	Bare Metal
Weight	1.2 lbs
Design Uplift Load	175 lbs
Design Ultimate Load	650 lbs

# **Dimensioned Flat Tile Roof Hook:**



### 1) Locate the rafter

## 2) Drill pilot holes





#### 3) Install Tile Hook

4) Optional deck-level flashing





# 5) Replace tile and install rail



# Series 100 UL Flat Tile Roof Hook

**Step-by-Step Instructions** 1) Use pry bar to remove roof tile where the Tile Hook will be installed. Locate the rafter underneath the decking of the roof by locating under the eave, in the attic, or by tapping the roof surface with a hammer.

2) Align the Tile Hook over the rafter and drill two pilot holes in the center of the rafter. If the rafter is not found then seal the pilot hole immediately with sealant.

3) Apply roofing sealant to the bottom of the Tile Hook and directly onto each lag screw. Attach the base with two 5/16" lag screws with washers with a minimum 2  $\frac{1}{2}$ " lag shank embedment into the rafter.

4) If deck-level flashing is required, install a flexible flashing over the Tile Hook. See Flat Tile Roof Hook – Deck-Level Flashing section for more details.

5) Replace the roof tiles and install SnapNrack Standard Rail directly to the available channel nut on the Tile Hook arm.

## **Notes**

- SnapNrack engineered systems should only be installed with SnapNrack components and hardware. Any alternate application may void the warranty, the UL 2703 Listing, and the structural calculations may no longer be valid.

## Warning

If a pilot hole is drilled and a rafter is not found, immediately seal pilot hole with roofing sealant to avoid water damage.
Do not over tighten hardware.
Always wear fall protection and safety gear.

## **Design Tools**

- SnapNrack has a suite of design tools to help configure your PV system to be an accurate and fast installation. Please visit us at: www.SnapNrack.com

#### 1) Prepare underlayment

#### 2) Peel off backing





#### 3) Apply flashing

4) Roll flashing



#### 5) Peel off backing

6) Roll strip







# SnapNrack<sup>®</sup>

Solar Mounting Solutions www.SnapNrack.com contact@SnapNrack.com (877) 732-2860

## Series 100 UL Flat Tile Roof Hook Optional Deck-Level Flashing

# **Step-by-Step Instructions**

1) Prepare the underlayment surface for adhesion. The surface should be dry, clean and free of any dirt, dust or foreign matter that may prevent adhesion. Clean the surface around the Tile Hook with a brush of medium-stiff bristles. If necessary, prime the surface with compatible spray or paint primer.

2) Peel off the backing from a 9-in. square of flexible flashing.

3) Apply flexible flashing centered laterally over tile hook and abutted to the tile hook arm. Ensure tape adheres to the corners between the edges of the Tile Hook and the underlayment as well as over the lag screw heads and tile hook surface.

4) Press and smooth out any creases or air bubbles with a roller to maximize contact of the flashing adhesive to 100% of the surface and Tile Hook.

5) Peel off the backing from a 4-in. by 13-in. strip of flexible flashing.

6) Apply the strip with 2-in. laps at the top and side edges of the square flashing. Roll out any creases or air bubbles between the strip, the flashing and the underlayment surface.

## Notes

- SnapNrack recommends testing underlayment surfaces for adhesion. If adhesion is found to be marginal, or you are working in a cold or humid climate, then a primer is recommended to ensure optimal adhesion. Refer to flexible flashing manufacturer's technical data for primer recommendations.

- SnapNrack recommends using Protecto Wrap Protecto Seal Butyl 45 waterproofing membrane, or equivalent, as the flexible flashing and lap material.

- Although optional, SnapNrack recommends laying down a bead of butyl-compatible roof sealant at the top edge of the flashing tape.

- Should the installer choose a different combination of flashing and sealant, they will need to verify material compatibility.