

# clawFR® & clawFRplus™

## Wire Management

## Manual

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## Introduction

The clawFR & clawFRplus Wire Management product line is comprised of four major components that intuitively install to safely secure wiring for photovoltaic (PV) arrays.

This installation manual explains how to install Wire Management products for clawFR & clawFRplus 5 Degree, 10 Degree, and Dual Tilt.



WIRE MANAGEMENT PRODUCTS ARE NOT COVERED UNDER THE PANEL CLAW LIMITED PRODUCT LIABILITY WARRANTY



THIS PRODUCT MUST BE INSTALLED AND USED ACCORDING TO THIS WRITTEN INSTRUCTION. ANY INSTALLATION OR USE OF THIS PRODUCT NOT IN ACCORD WITH OR NOT AUTHORIZED BY THIS WRITTEN INSTRUCTION SHALL VOID ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, ON THE PRODUCT OR THE USE OF THE PRODUCT AND MAY CAUSE FAILURE, PROPERTY DAMAGE AND PERSONAL INJURY. PANELCLAW IS NOT LIABLE FOR ANY UNAUTHORIZED USE. INSTALL AND USE ONLY WITH OTHER PANELCLAW **AUTHORIZED** RACKING PRODUCTS TO ENSURE PROPER FIT AND FUNCTION.

## Safety Overview

Safety is an essential part of every PV installation and every construction site. It is imperative to plan ahead for any safety concerns and hazards to promote safe work practices during installation. This section does not claim to address or support all safety concerns that may arise during the installation of PanelClaw mounting systems or any other aspect of the work being performed. Before beginning work, installers should refer to all local and federal safety, health, and regulatory requirements to assure compliance. Refer to OSHA Part 1926 and its related Subparts for federal construction related regulations and standards.



DO NOT STEP OR STAND ON WIRE MANAGEMENT PRODUCTS

## UL 1565 Wire Positioning - Ratings

The clawFR & clawFRplus Wire Management products conform to UL STD 1565 and are Certified to CSA C22.2 #18.5-13 Positioning Devices, with the following ratings:

- Operating Temperature Range: -35 to 90C
- Maximum Load: 10lbs
- For Outdoor Use



# Wire Management Accessories



**Note:** The above images are not on the same scale.

## Tools

Drill with torque limiter or torque wrench

**ALERT: NO IMPACT DRIVERS**

Torque Setting*	Fastening Operation
3 ft-lb (4.1 Nm)	Wire Router

\* +/-4% allowable during installation

Socket sizes	Fastening Operation
10 mm Magnetic	Used with 6 mm bolts

# Homerun Clip & Cover and Homerun Clip & Cover XL Installation

Part Number: 500062302, 5000628, 5000766, 5000767

**Tip:** With Homerun Clip & Cover, wires can be installed on one or both sides of the base

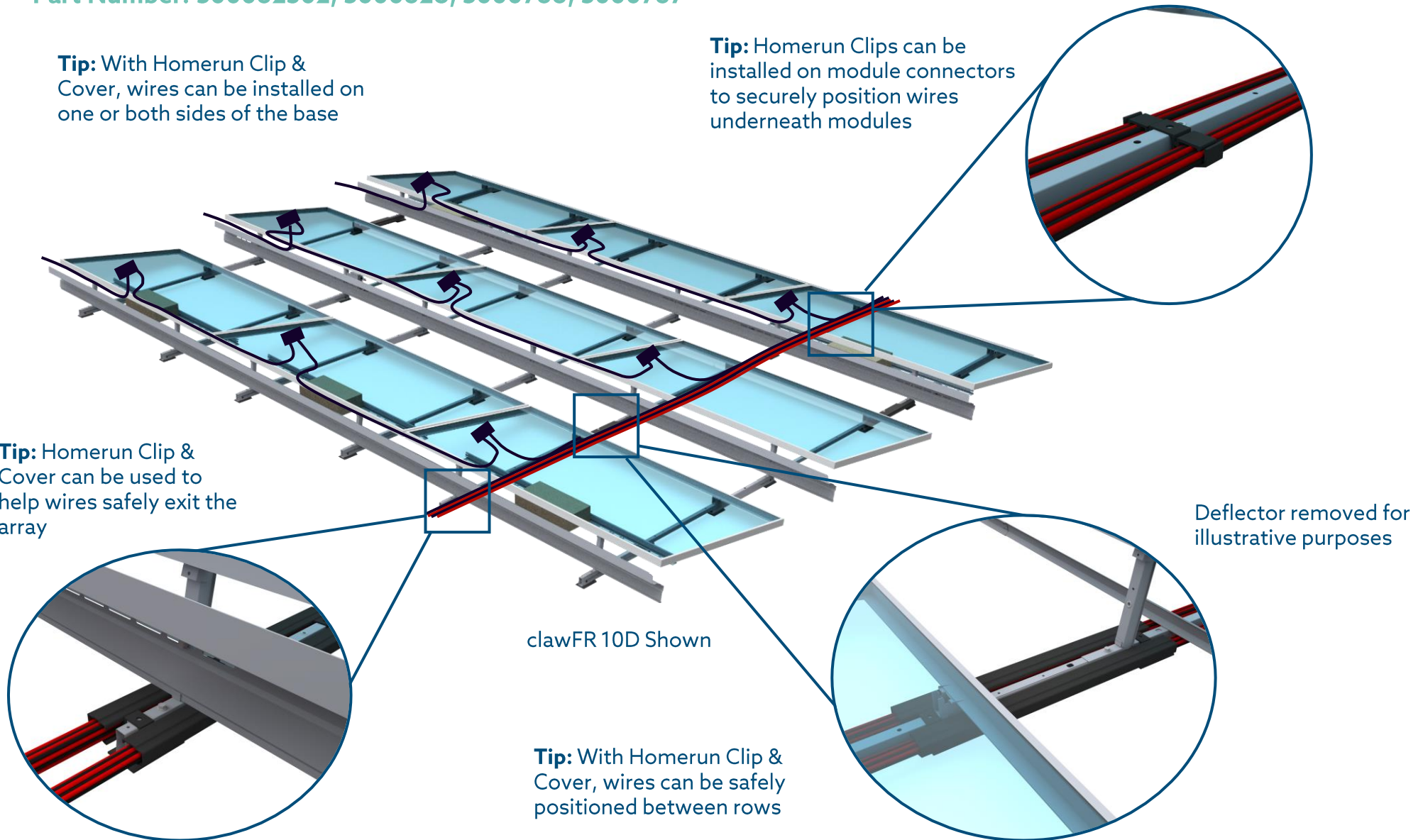
**Tip:** Homerun Clips can be installed on module connectors to securely position wires underneath modules

**Tip:** Homerun Clip & Cover can be used to help wires safely exit the array

clawFR 10D Shown

**Tip:** With Homerun Clip & Cover, wires can be safely positioned between rows

Deflector removed for illustrative purposes

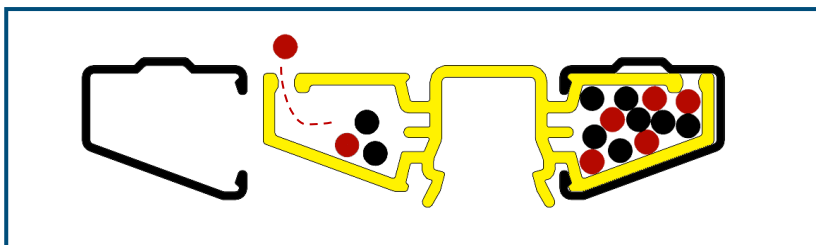


# Homerun Clip & Cover Installation (Continued)

Part Number: 500062302, 5000628

Homerun Clip & Cover provide a convenient solution for safely and securely positioning wires running between module rows. Homerun Clip clicks directly onto the Module Connector without the need for any tools.

Each **Homerun Cover** Pack includes 25 Covers.  
Each **Homerun Clip** Pack includes 100 Clips.



Insert wires into Homerun Clip as shown, before snapping on Homerun Cover

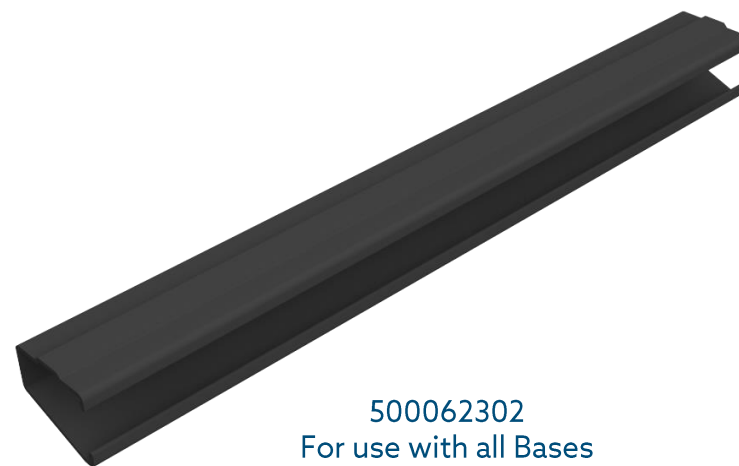
A maximum of 12 #10 wires or 8 #8 wires are allowed for each side dependent on outer diameter.

**Tip:** Homerun Clip and Cover is more easily installed prior to modules being in place.

**Alert:** MC Connectors shall not be placed inside of the Homerun Clip, Homerun Clip XL, and Wire Router



Reference height from bottom of Homerun Clip to ground.



500062302  
For use with all Bases



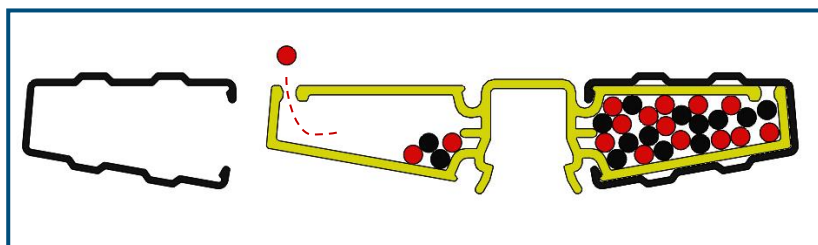
5000628  
For use with all Bases

# Homerun Clip & Cover XL Installation (Continued)

Part Number: 5000766, 5000767

Homerun Clip & Cover XL provide a convenient solution for safely and securely positioning wires running between module rows. Homerun Clip XL clicks directly onto the Module Connector without the need for any tools.

Each **Homerun Cover XL** Pack includes 25 Covers.  
Each **Homerun Clip XL** Pack includes 100 Clips.

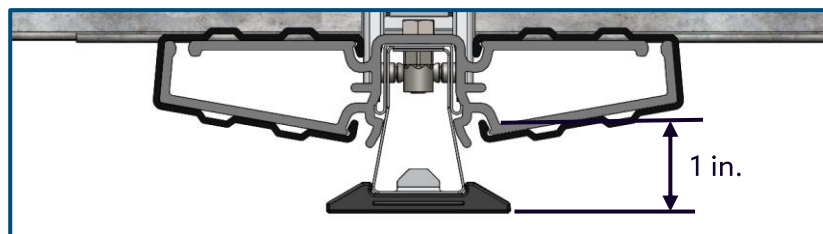


Insert wires into Wire Clip as shown, before snapping on Cover

A maximum of 25 #10 wires or 16 #8 wires are allowed for each side dependent on outer diameter.

**Tip:** Homerun Clip and Cover XL is more easily installed prior to modules being in place.

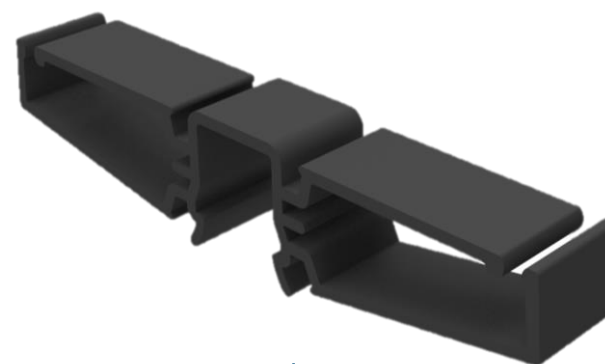
**Alert:** MC Connectors shall not be placed inside of the Homerun Clip, Homerun Clip XL, and Wire Router



Reference height from bottom of Homerun Clip to ground.



5000767 Homerun Cover XL  
For use with all Bases

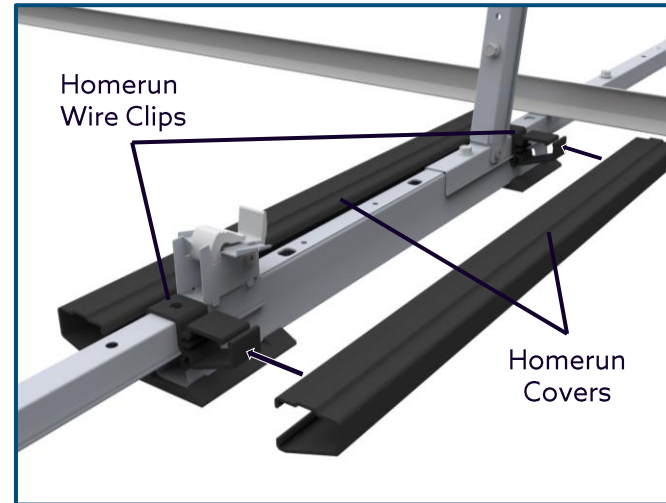
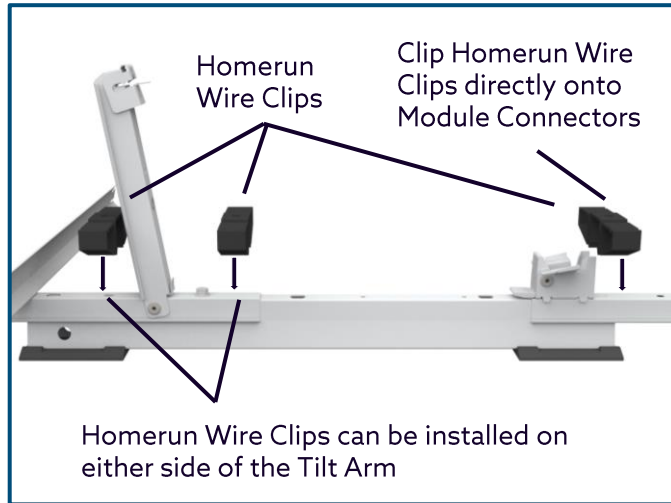


5000766 Homerun Clip XL  
For use with all Bases



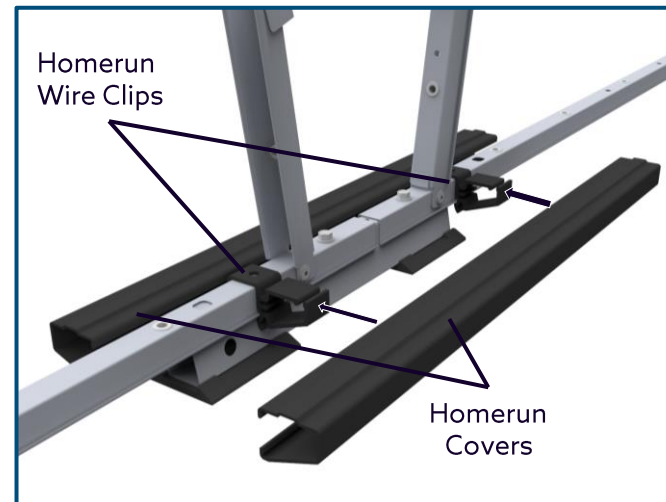
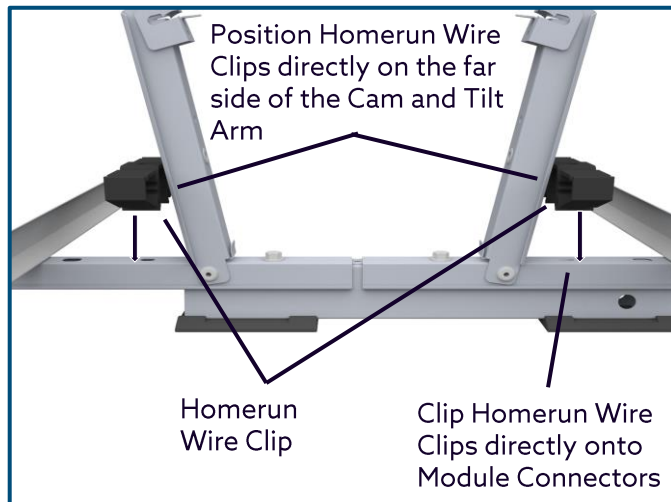
# Homerun Clip & Cover and Homerun Clip & Cover XL Installation (Continued)

Part Number: 500062302, 5000628



**clawFR & clawFRplus 5D & 10D:** Click Homerun Wire Clips directly onto the Module Connectors on the far side of the Cam and Tilt Arm. Homerun Covers click directly onto one or both sides of the Wire Clip. No mechanical fasteners are needed for installation.

clawFR 10D Shown



**clawFR & clawFRplus DT:** Click Homerun Wire Clips directly onto the module connector on the far side of the two Tilt Arms. Homerun Covers click directly onto one or both sides of the Wire Clip. No mechanical fasteners are needed for installation.

clawFR 10D Shown

**Alert:** Two Homerun Wire Clips must be used per walkway aisle.

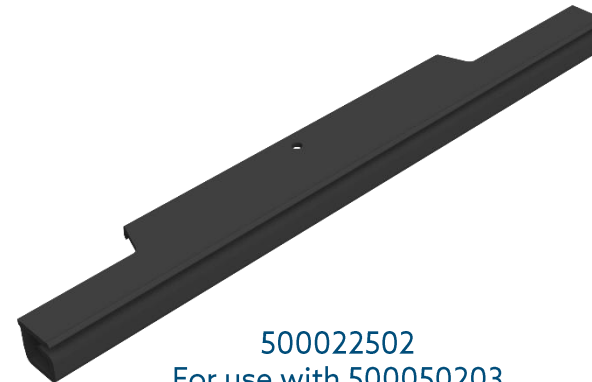
# Wire Router Installation

Part Number: 5000225 [01/02]

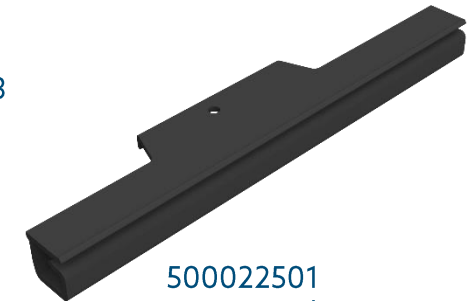
Wire Routers provide a convenient solution for safely and securely positioning up to 4 #10 wires between module rows. Wire Routers install directly onto the Base and provide both physical and UV protection to the PV wire.

Each **Wire Router Pack** includes a total of 25 Wire Routers and 30 washers.

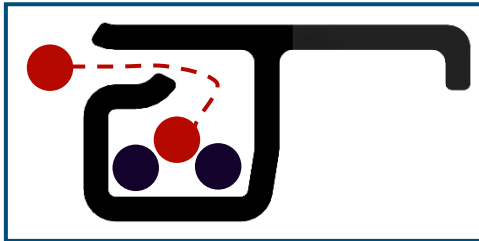
**Alert:** Wire Routers may not be used on Bases to which Mechanical Attachment Struts are installed.



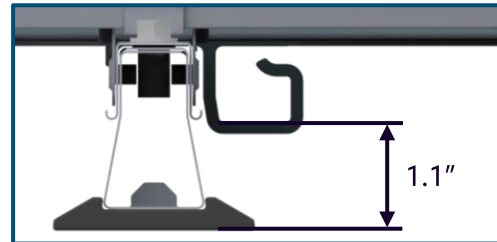
500022502  
For use with 500050203  
Bases



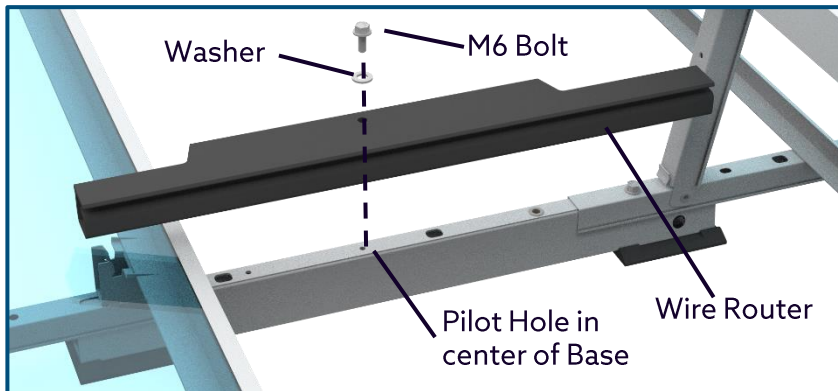
500022501  
For use with  
5000502[01/02] Bases



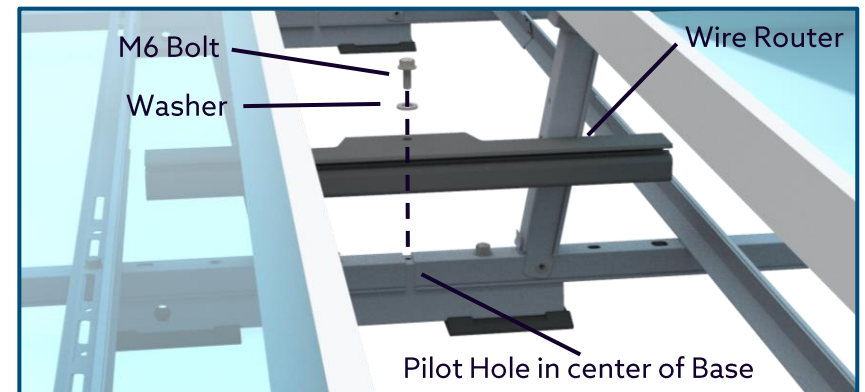
Insert wires into Wire Router as shown. A maximum of 4 #10 wires or 2 #8 wires is allowed dependent on outer diameter.



Reference height from bottom of Wire Router to ground.



**clawFR & clawFRplus 5D & 10D:** Place Wire Router on top of Base and bolt through mounting hole into pilot hole in center of Base. Torque to **3 ft-lb**. clawFR 10D Shown.



**clawFR & clawFRplus DT:** Place Wire Router on top of Base and bolt through mounting hole into pilot hole in center of Base. Torque to **3 ft-lb**. clawFR DT Shown.



# Wire Router Installation (Continued)

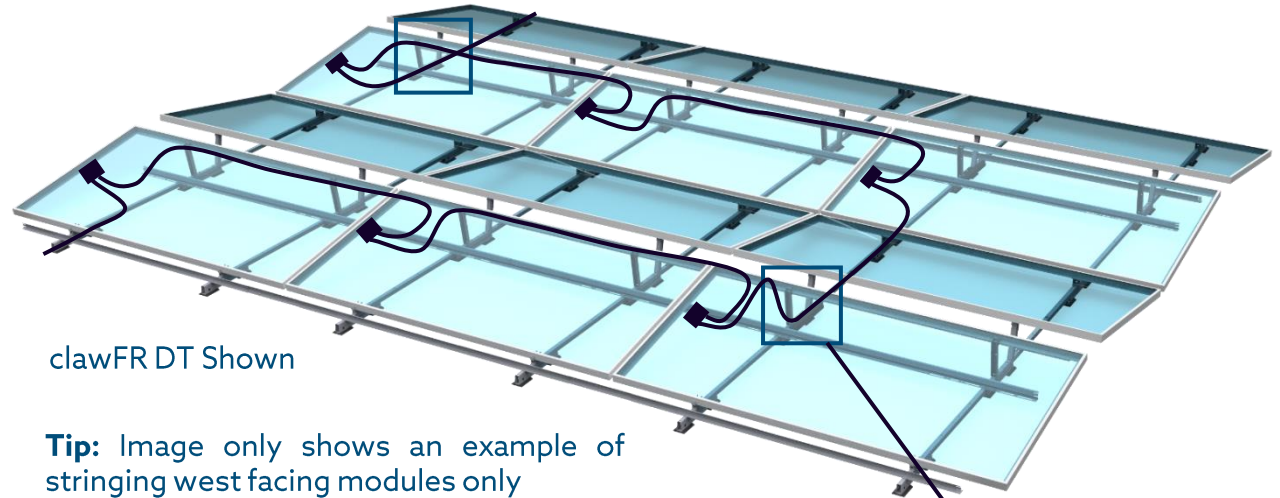
Part Number: 5000225 [01/02]

**Alert:** Wire Routers may not be used on Bases to which Mechanical Attachment Struts are installed.

**Tip:** The gap on the valley is 1.6" [40 mm], which provides built-in physical protection of the wire

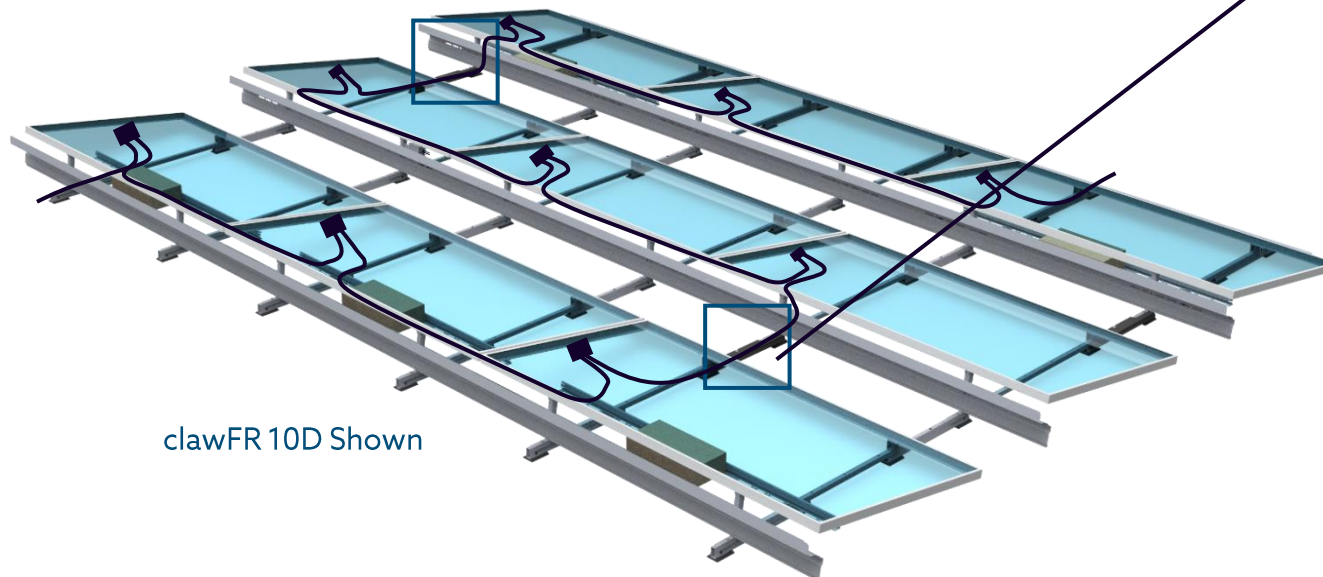
**Alert:** MC Connectors shall not be placed inside of the Homerun Clip, Homerun Clip XL, and Wire Router

**Tip:** Wire Router can be installed on either side of the Base.



clawFR DT Shown

**Tip:** Image only shows an example of stringing west facing modules only



clawFR 10D Shown

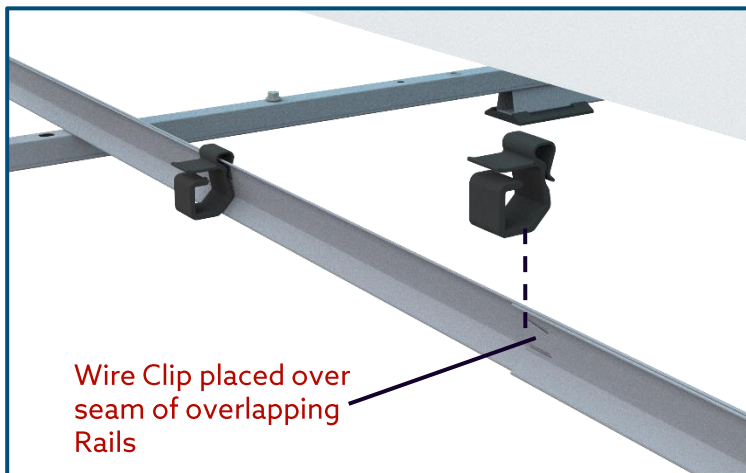
# Wire Clip Installation

Part Number: 5000226

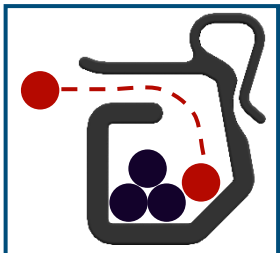
Wire Clips are an optional accessory that provide a convenient solution for safely and securely positioning wires along rows. Wire Clips clip directly onto clawFR & clawFRplus Rails without tools.

Each **Wire Clip Pack** includes a total of 100 Wire Clips.

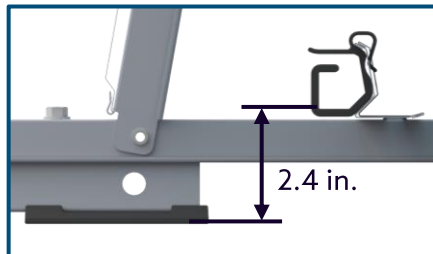
**Alert:** Place Wire Clips over the seam of overlapping Rails.



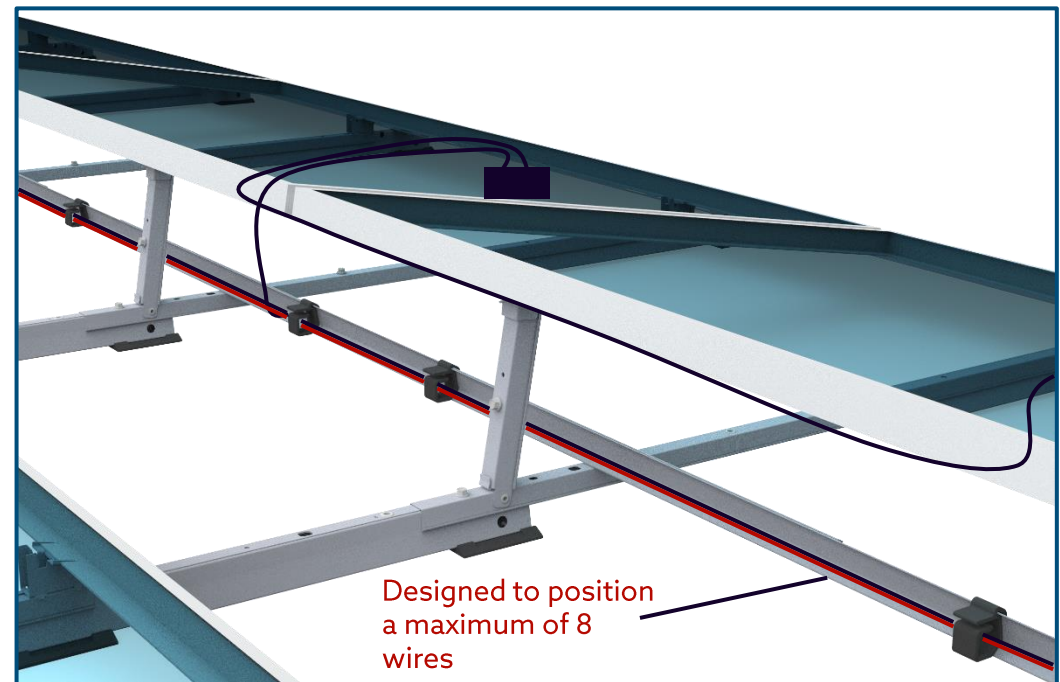
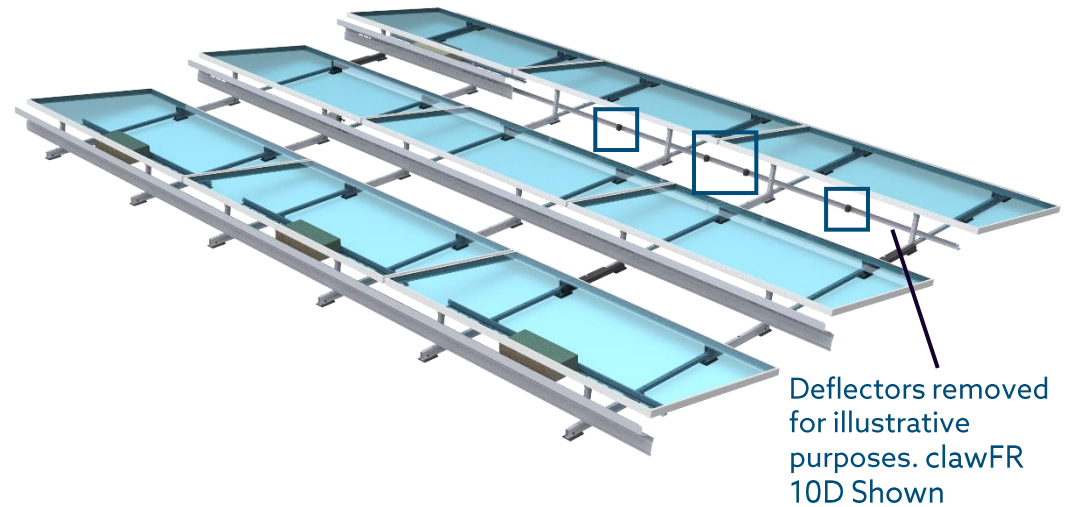
Place Wire Clip over the top of Rail.



Insert wires into Wire Clip as shown. A maximum of 8 #10 wires or 5 #8 wires is allowed dependent on outer diameter.



Reference height from bottom of Wire Clip to ground. clawFR 10D Shown.



**Tip:** Installation is identical for clawFR & clawFRplus 5D, 10D & DT. clawFR 10D Shown.