Part of ROCKWOOL Group



# Rockfon<sup>®</sup> Planar<sup>®</sup> and Planar<sup>®</sup> Macro Linear Metal Systems

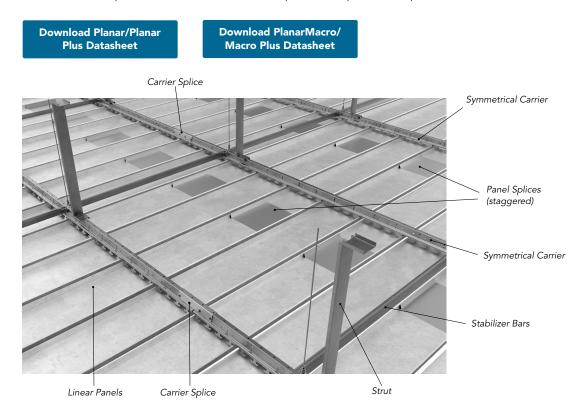
# **Exterior Installation Guide: Symmetrical Carrier**



Project – Atlanta Braves CoolToday Park, GA Product – Rockfon® Planar Macro

# **System Overview**

The Rockfon<sup>®</sup> symmetrical carrier is a carrier used with Rockfon<sup>®</sup> Planar and Planar Macro systems for exterior applications. It is an aluminum double grip profile that allows the panels to snap into place. The carrier can be used with Planar/PlanarPlus, and PlanarMacro/Macroplus. Refer to our datasheets for suspension and panel finish options and accessories.



# **Best Practices**

Always follow good safety practices when installing ceilings. Prior to beginning installation ensure that all materials are received and in good condition. Record any shipping damage on the carrier's bill of lading and contact Rockfon<sup>®</sup> immediately to order replacement material:

- Email: cs@rockfon.com
- Fax: 866-211-3824
- Customer Service: 800-323-7164

If there are any issues with your order, contact Customer Service at 1-800-323-7164, telephone option 1. E-mail replacement material orders, including your purchase order number on document, to cs@rockfon.com. For technical assistance, contact Technical Services at 1-800-323-7164, telephone option 2.



# **Installation Conditions**

## **Temperature and Humidity**

Avoid installation in high moisture conditions where the space is not properly ventilated and acclimatized. Rockfon® Planar/ Planar Macro should be installed in a clean environment, free from construction dust and debris.

## Handling

Panels come shipped in cartons and should be stored in a dry location. Prior to installation, inspect the cartons for damage. Use care in handling and removing the panels. It is recommended to use clean gloves with a non-marking rubber/latex coating or polyethylene gloves when handling Rockfon<sup>®</sup> metal ceiling products to avoid contamination. For panels longer than 4' it is recommended that two installers handle the panels when moving or installing into the ceiling plane.

# **Reference Documentation**

Several industry standards are published and available. Acoustical and metal ceiling installers should familiarize themselves with these installation methods and best practices recommended for ceiling systems.

Prior to installation, it is imperative the installer become familiar with any project specific documentation available. These items will confirm ceiling layout, panel sizes and finish, ceiling accessories, ceiling fixture layout and orientation, and any special edge conditions.

## **Industry Standard Documentation**

- ASTM C636 (Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels, https://www.astm.org/Standards/C636.htm)
- CISCA Metal Ceilings Technical Guidelines
- CISCA Ceiling Systems Handbook

## **Project Specific Documentation**

- Reflected Ceiling Plans
- Project Specifications
- Approved Project Submittals (Datasheets, Shop Drawings)

## **Other Documentation**

- Linear Metal Ceilings Brochure
- Product Case Study

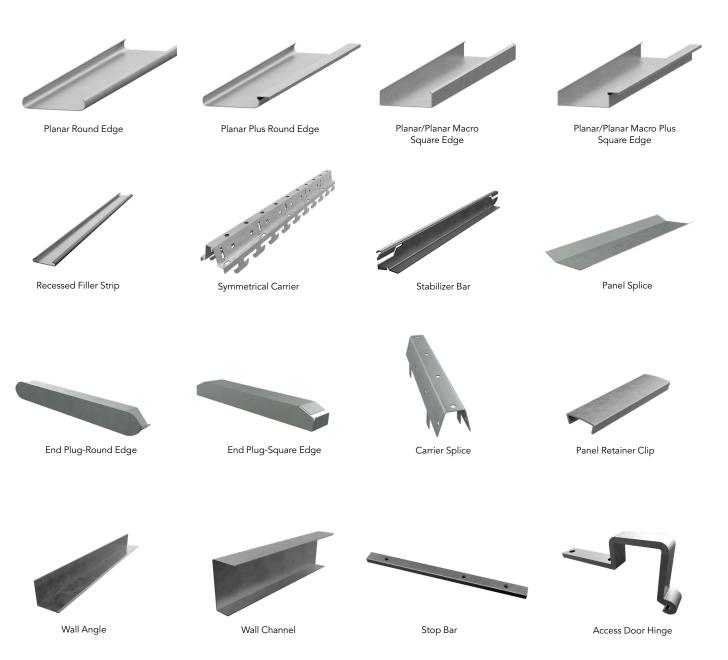


# **Tools Required**

- Laser or leveling device
- Miter saw/circular saw
- Marking tool (pencil)
- Square nose side cutter
- Clean gloves
- Aviation snips

- Tape measure
- Slot screwdriver
- Phillips screwdriver
- Vinyl siding removal tool

# **System Components**



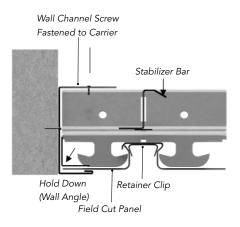


# **1. Suspension System Installation**

All suspension must be installed per ASTM C636 including local building codes and standards. Special attention should be given to the squareness and levelness of the system. Failure to have a square and level system will create a poor aesthetic appearance, misalignment with the carrier tabs, and difficulty in installing the linear panels. Use minimum 12-gauge galvanized steel hanger wire per ASTM C636 for suspending the grid.

1.1 Secure the specified perimeter treatment to the walls using appropriate fasteners. Reference any project documents for proper ceiling elevation.

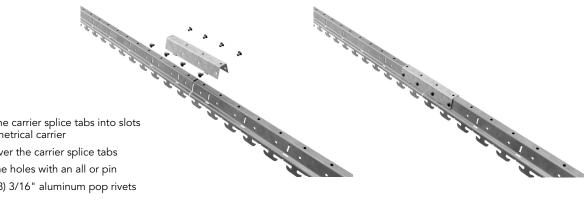
## Wall Channel



1.2 Determine panel direction and layout the carriers perpendicular to the panel direction. The spacing of the carriers is dependent on the designed wind pressure in Pounds per Square Foot (PSF). Spacing carriers closer together will achieve higher PSF resistance. First and last symmetrical carriers should be installed no more than 6" from the parallel side of the wall.

Symmetrical carriers require a splice connection with a splice/coupling that installs over the top of the carriers. It is best practice for the splice locations to be staggered from carrier to carrier.

Note: Ensure carrier tabs are aligned and in the same plane from carrier to carrier. Install suspension members level and square.

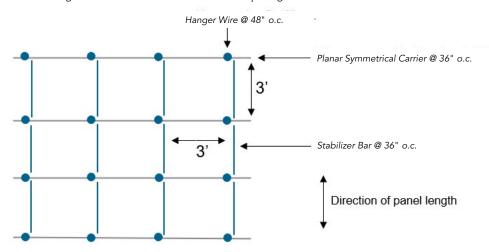


- 1. Insert the carrier splice tabs into slots of symmetrical carrier
- 2. Bend over the carrier splice tabs
- 3. Align the holes with an all or pin
- 4. Install (8) 3/16" aluminum pop rivets



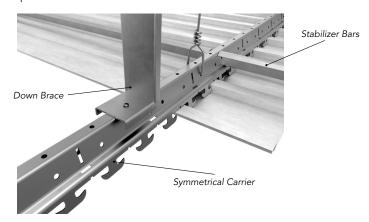
## **Example Suspension Layout for Symmetrical Carrier**

Note - The max allowable carrier spacing for exterior installations is 36", however, the designed wind pressure (PSF) from architect/engineer of record will determine actual spacing.



## 1.3 Down Brace Methods

Down braces (struts) are required for exterior installations and must be positively attached to the suspension and structure above. Typical strut types include EMT conduit, 25 GA and 20 GA. C-Channel support track or stud material. Strut type and dimensions are dependent on the designed wind pressure (PSF) and plenum depth and should be verified by the architect/ engineer of record prior to installation.



## 1.4 Stabilizer Bars

Stabilizer bars are used for maintaining the spacing and alignment of the symmetrical carrier and should be located at or near down brace locations. On occasion, the size of the stabilizer bar needs to be reduced. This can be accomplished using the following method:

- 1. Cut the stabilizer bar in half
- 2. Overlap the ends and clamp together to the appropriate length
- 3. Using Tek screws or aluminum pop rivets, join the pieces together





When field splicing, deduct approx. 3/16" from module length. Ex. - a 20" carrier spacing requires a 19-13/16" stablizer bar



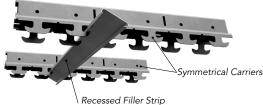
# 2. Panel Installation

Note: Double check the suspension system is square and level prior to panel installation. For best aesthetics, plan panel layout so that panel joints/splices are staggered and within 12" from carrier.

## 2.1 Open reveal panels/separate filler strip (Planar, Planar Macro)

Open reveal panels can be installed with or without a filler strip between panels. If a separate filler strip is being used, install filler strip between the carrier tabs prior to installation of the panels. Space the filler strips according to panel width.

Engage one side of filler strip into carrier tab, and snap opposite side into opposing carrier tab. Center filler strip with space between carrier tabs.





Recessed Filler Strip - Installed

Install panels by engaging one leg of the panels onto carrier tabs. Snap the opposite panel leg onto the tab. Each panel should be supported by a minimum of 2 carriers.



Planar Macro Panels - Installed

### 2.2 Panels with integral filler strips (Planar Plus, Planar Macroplus)

Engage integral filler side first, snap onto carrier tab. Then, engage opposite side onto opposing carrier tab. Continue to install the next panel progressively.





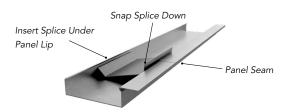


Panels - Installed



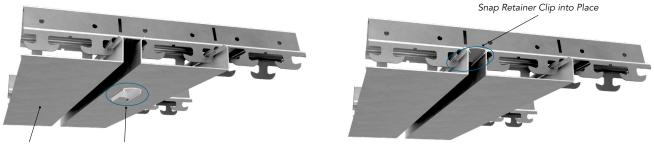
## 2.3 Panel Splices

Install panel splices on the back side of the panels, panels snap into place. If perforated panels are installed, black panel splices are recommended to avoid seeing the splices through the panel perforations.



## 2.4 Panel Retainer Clips

Panel retainer clips should be used whenever there is a long section of cut panel along the perimeter to prevent the panels from walking out, or when added panel security is needed. The clear clips are 2 1/2" long and are inserted into the reveal between the panels at the point the panel engages with the carrier.



Field Cut Panel Align Retainer Clip

#### 2.4 Cutting Linear Panels

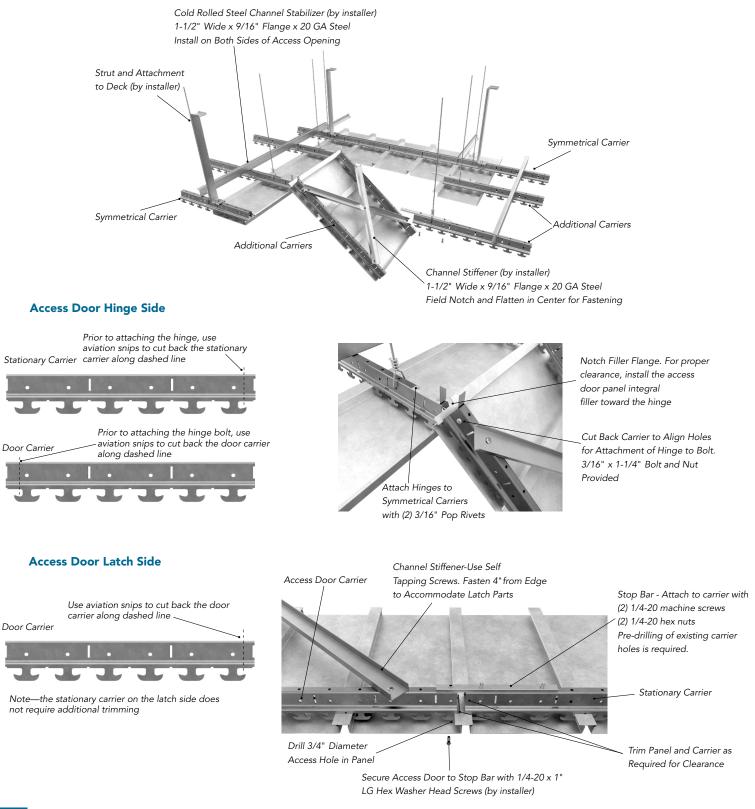
Cutting Planar and Planar Macro is easy with a miter or circular saw with an appropriate metal cutting blade for accuracy of cuts. Use all appropriate personal protective equipment, as well as all appropriate safety precautions. Use an appropriate sized block inside the panel. Place the panel firmly against the saw's back stop. Once the blade is at full speed, slowly cut the panel. Pushing the saw too quickly will result in sharp edges and poor cut quality.

Note: Maintaining a sharp blade is crucial to clean cuts. Be cautious of the cut edges as burrs and cuts are extremely sharp.



# **3. Access Doors**

Access doors are framed out of existing project material (carriers and panels) and constructed by the installer to the desired panel size. An exterior access door kit (part number 249664) is required to complete the assembly. The kit includes (2) door hinges, (2) stop bars, and 3/16" pop rivets.



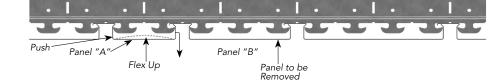
# 4. Panel Removal

Plenum access is often required to service HVAC, Plumbing, and Electrical. In order to access the plenum, individual panels must be removed. First locate the area requiring access and disengage the panels accordingly.

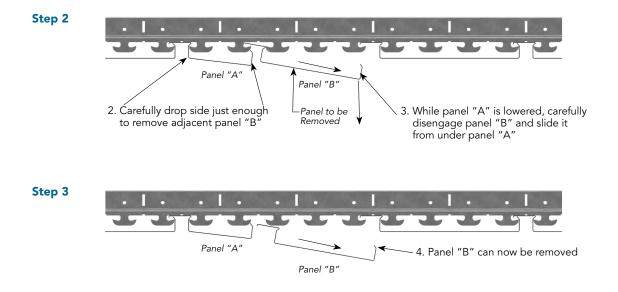
For Planar and Planar Macro - Panels with open reveal can be removed at any point using a standard vinyl siding removal tool.

For Planar Plus and Planar Macroplus - To remove a panel area, start the removal process one panel over on the integral filler side.

Step 1



1. Push the panel "A" toward the side without the integral filler strip. Then apply slight pressure to the face of the panel to spring out the vertical flange. Pull down on the vertical flange to dislodge the panel. Use caution when applying pressure to the panel face, too much pressure will cause permanent distortion to the panel.



# 5. Service Integration

Unlike standard ACT tile and exposed grid, Planar panels install from below and conceal the suspension. Careful consideration should be given to the fixtures and the desired look.

Speaker holes, canned lights, etc., can easily be cut with a drill and hole saw. For recessed fixtures, the preferred type for linear panels are flanged style fixtures. These types of fixtures are trimmed and hide the cut edges of the metal panels. Linear, trim-less light fixtures and diffusers can be installed however proper planning is required early in the shop drawing/submittal phase of a project. Fixture width selected by the architect/designer of record should be coordinated with the panel width (4", 6", or 8" panels). This allows a panel run to be left out, allowing a fixture to be installed within the opening, eliminating the need to cut the panels lengthwise. Cut panel ends can be capped off with end plugs. Fixtures shall not be installed in line with main runners or cross tees. For longer fixtures that disrupt the suspension, "bridge" the suspension with miscellaneous framing material.



# 5. Cleaning

Select a mild, non-abrasive cleaning agent typically used for cleaning painted or reflective surfaces. Never use abrasive cleaning agents, as they may scratch, mar, alter, discolor, and/or remove the finish.

Before cleaning the finish, perform a trial test on a section of the finish which will be hidden from view once installed. This will ensure that the cleaning agent selected is appropriate and will not damage the finish in question.

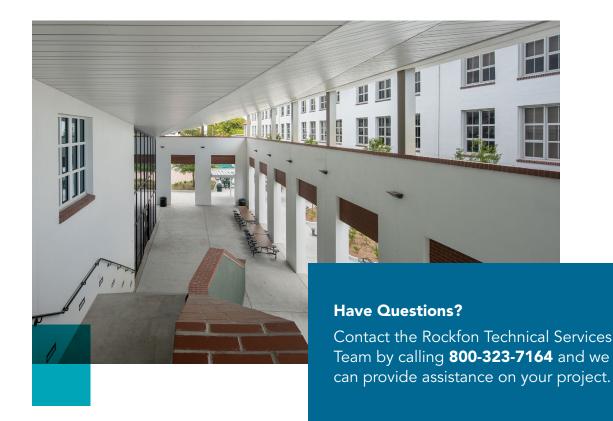
Once an appropriate cleaning solution has been selected, care should be taken to use only the amount which is necessary. Do not soak the ceiling components with the solution.

Use a clean soft sponge or cloth when applying the cleaning agent in order to ensure the applicator does not contain any abrasive elements which may damage the finish.

Any excess cleaning solution should be removed immediately so that the solution does not dry and possibly leave a residue. In the event a large area needs to be cleaned, it is advisable to break the area into smaller, more manageable sections, so that adequate time is available to complete each phase of the cleaning process.

After cleaning the soiled or smudged area, wipe the surface with a dry soft cloth to remove any residual cleaning solution and to dry the area. Use a clean damp cloth to remove any residue that cannot be removed with the dry cloth. Repeat the drying process.

After the components are clean, allow a few minutes for air drying before installation. It is important that the clean components are dry to ensure that other materials, such as insulation, which may be susceptible to damage from moisture does not come contact any moisture or damage from the cleaned materials. For additional cleaning information, please refer to our technical data sheet "**How to Clean Painted & Reflective Ceiling Component Surfaces**."





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