



# PRODUCT SUMMARY

VERSION 24-1



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# **ROOFTOP SUPPORT SYSTEMS**

MIRO Industries was founded over 40 years ago to provide solutions to meet the needs of contractors, consultants, engineers and architects in designing supports for rooftop equipment for both commercial and industrial applications. MIRO exists to find solutions for your specific needs.

A building's roof is one of its most important elements, and its integrity must be maintained regardless of the equipment it supports. Whether used during new construction or retrofit, MIRO Rooftop Supports distribute loads over the maximum appropriate surface area, avoiding unwanted roof penetration. We also select the right materials to help mitigate other types of potential damage.

Whether supporting gas or steam lines, HVAC equipment, conduit, ductwork, walkways, bridge or crossover assemblies, MIRO Rooftop Support Products offer both off-the-shelf and custom solutions to meet and exceed your expectations.

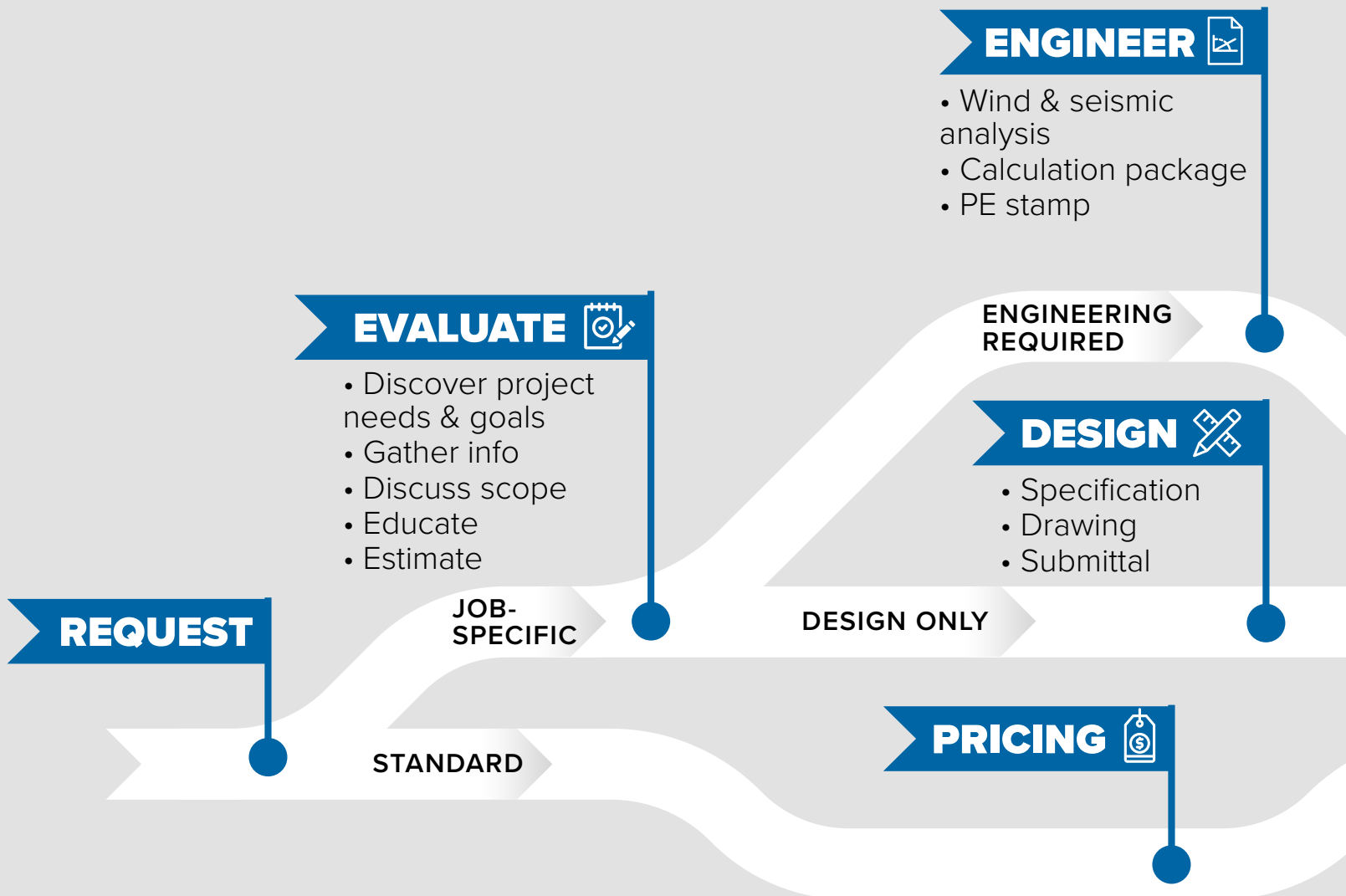
## **GLOSSARY**

BS - Base Strut  
DS - Duct Support  
H - Hanger  
HD - Heavy Duty  
HDG - Hot-Dip Galvanized  
H.O.R. - Height off Roof  
ID - Inner Diameter  
LD - Light Duty  
OD - Outer Diameter  
P - Polycarbonate  
PH - Pipe Hanger  
R - Roller  
RAH - Roller Adjustable Height  
SB - Single Base  
SS - Stainless Steel

# WE MAKE IT EASY.

At MIRO Industries, we spend all day thinking about rooftop supports so you don't have to. The flow chart below shows our proven process. Whether you need a standard solution or a job-specific one, with or without engineering, we can guide you through the entire process.

**Call us for a free consultation: 1-800-768-6978**



# ENGINEERING AVAILABLE

Some projects require engineered solutions. MIRO's team of engineers can provide a job-specific plan for your project. They are experts in assessing your job requirements and finding the best and most cost-effective ways to meet those requirements. MIRO's ability to design, engineer, and execute intricate projects has made us the go-to leader in the rooftop support industry.

## BUILD



- Fabricate to drawings
- Package for shipping

## SHIP



- Ship packaged product
- Provide tracking
- Deliver

## SUPPORT



- Follow up
- Educate
- Warranty

## THE MIRO PROVEN PROCESS



# PILLOW BLOCK SUPPORTS

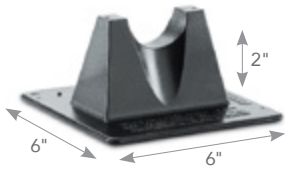
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Our Pillow Block supports are an easy-to-install and low-cost solution to many of your basic rooftop support needs. The various models can support gas lines, electrical conduit, solar lines, and just about any other mechanical piping. The load-dispersing foot design can be used in conjunction with a spacer to add additional height if required, or can be used on its own without risk of compromising the roof membrane. All Pillow Block supports are made of 100% UV stable polycarbonate.

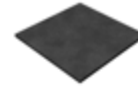
# PILLOW BLOCK SUPPORTS

PILLOW BLOCK ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 1.5



1.5 Pipe Guide

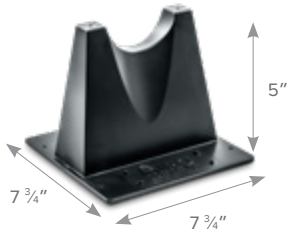


PAD1212



1" x 36", 2-Sided Adhesive Tape

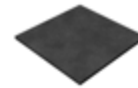
## 3.0



3.0 Pipe Guide



3-R Spacer

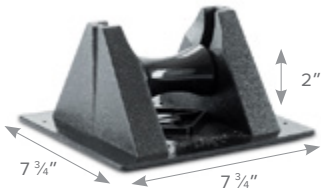


PAD1212



1" x 36", 2-Sided Adhesive Tape

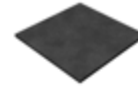
## 3-R-2



3-R-2 Pipe Guide



3-R Spacer



PAD1212



1" x 36", 2-Sided Adhesive Tape

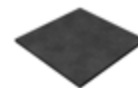
## 3-R-4



3-R-4 Pipe Guide



3-R Spacer



PAD1212



1" x 36", 2-Sided Adhesive Tape

| MODEL | PIPE SIZE | MAX HEIGHT | MAX LOAD* | CASE QTY. | SHIPPING WEIGHT |
|-------|-----------|------------|-----------|-----------|-----------------|
| 1.5   | 1 1/2"    | 2"         | 72 lbs.   | 48        | 16 lbs.         |
| 3.0   | 3"        | 5"         | 120 lbs.  | 24        | 28 lbs.         |
| 3-R-2 | 3"        | 2"         | 118 lbs.  | 24        | 26 lbs.         |
| 3-R-4 | 3"        | 4"         | 118 lbs.  | 24        | 27 lbs.         |

\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

ROLLER SERIES

STRUT SERIES

HANGER SUPPORTS

DUCT SUPPORTS

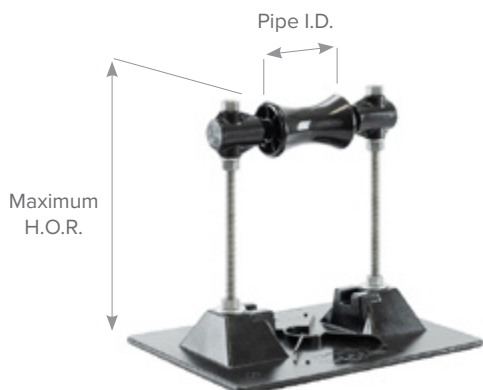
MECHANICAL SUPPORTS

SUREFOOT ACCESS



# ROLLER PIPE SUPPORTS

For gas lines, water and steam lines, and more ranging in size from 1" to 10". Designed specifically for use in expansion/contraction applications, these supports use a self-lubricating roller to absorb both longitudinal and lateral pipe movement.



## **i** NAMING CONVENTION

### ROLLER SERIES





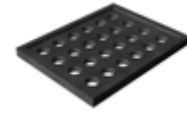
# ROLLER SUPPORTS

ROLLER SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 2-RAH-5

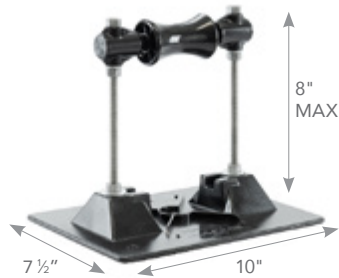


2" Aluminum  
Pipe Guide

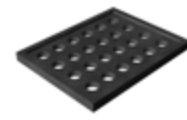


PAD710

## 3-RAH-8

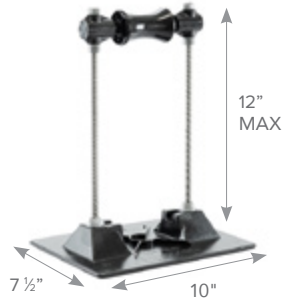


3" Aluminum  
Pipe Guide

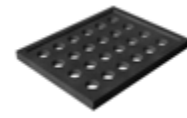


PAD710

## 3-RAH-12



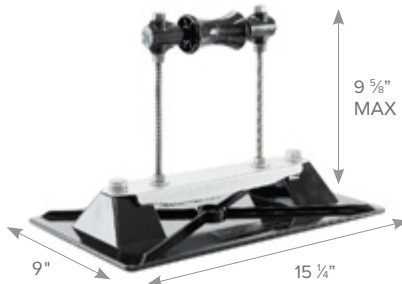
3" Aluminum  
Pipe Guide



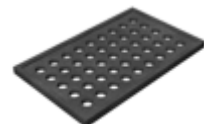
PAD710

## 4-RAH-10

AVAILABLE IN  
STAINLESS  
STEEL



4" Aluminum  
Pipe Guide



PAD915  
(polycarbonate base)

| MODEL    | PIPE SIZE | HEIGHT RANGE    | MAX LOAD  | CASE QTY. | SHIPPING WEIGHT |
|----------|-----------|-----------------|-----------|-----------|-----------------|
| 2-RAH-5  | 2"        | 3 7/8" - 5"     | 144 lbs.* | 12        | 18 lbs.         |
| 3-RAH-8  | 3"        | 3 7/8" - 8"     | 172 lbs.* | 12        | 21 lbs.         |
| 3-RAH-12 | 3"        | 3 7/8" - 12"    | 172 lbs.* | 7         | 14 lbs.         |
| 4-RAH-10 | 4"        | 4 1/2" - 9 5/8" | 335 lbs.* | 6         | 22 lbs.         |

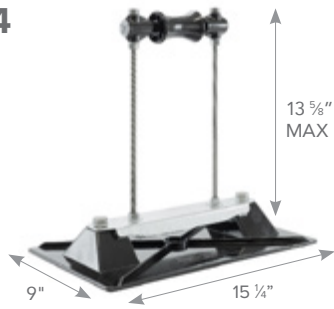
\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

# ROLLER SUPPORTS

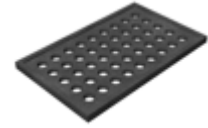
ROLLER SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 4-RAH-14

AVAILABLE IN  
STAINLESS  
STEEL

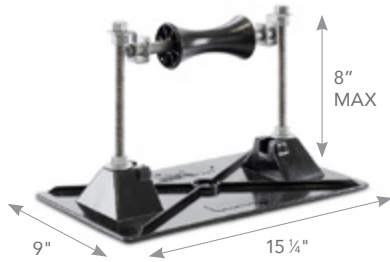


4" Aluminum  
Pipe Guide

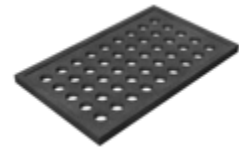


PAD915  
(polycarbonate base)

## 5-RAH-8

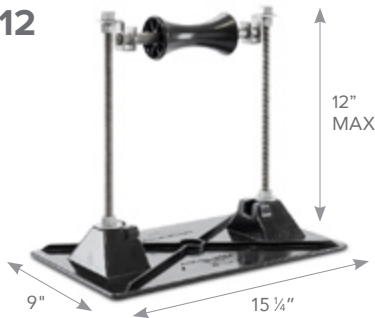


5" Aluminum  
Pipe Guide

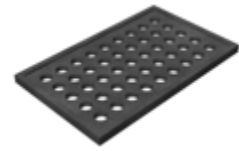


PAD915

## 5-RAH-12



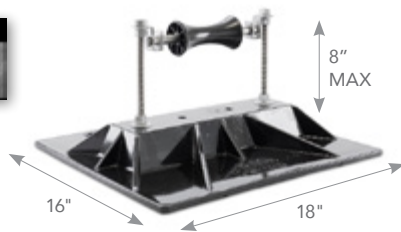
5" Aluminum  
Pipe Guide



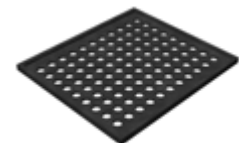
PAD915

## 6-RAH-8

AVAILABLE IN  
STAINLESS  
STEEL



6" Aluminum  
Pipe Guide



PAD1618  
(polycarbonate base)

| MODEL    | PIPE SIZE | HEIGHT RANGE     | MAX LOAD*  | CASE QTY. | SHIPPING WEIGHT |
|----------|-----------|------------------|------------|-----------|-----------------|
| 4-RAH-14 | 4"        | 4 1/2" - 13 5/8" | 186 lbs.** | 6         | 24 lbs.         |
| 5-RAH-8  | 5"        | 4" - 8"          | 335 lbs.   | 6         | 25 lbs.         |
| 5-RAH-12 | 5"        | 4" - 12"         | 335 lbs.   | 6         | 27 lbs.         |
| 6-RAH-8  | 6"        | 4 3/8" - 8"      | 578 lbs.   | 4         | 33 lbs.         |

\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

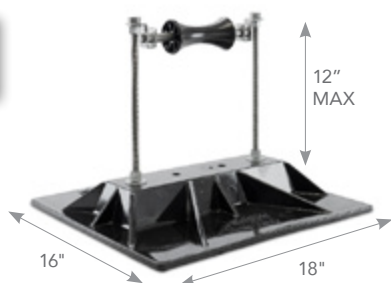
\*\* Max load based on all-thread capacity.

# ROLLER SUPPORTS

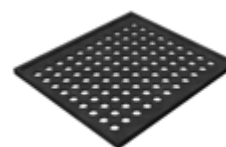
ROLLER SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 6-RAH-12

AVAILABLE IN  
STAINLESS  
STEEL



6" Aluminum  
Pipe Guide

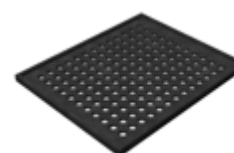


PAD1618  
(polycarbonate base)

## 10-RAH-8

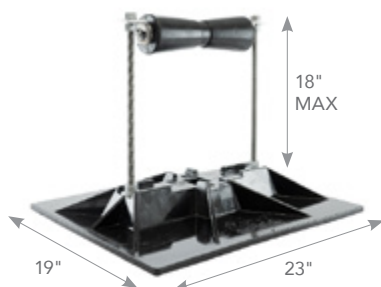


10" Aluminum  
Pipe Guide

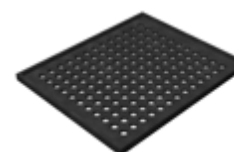


PAD1923

## 10-RAH-18



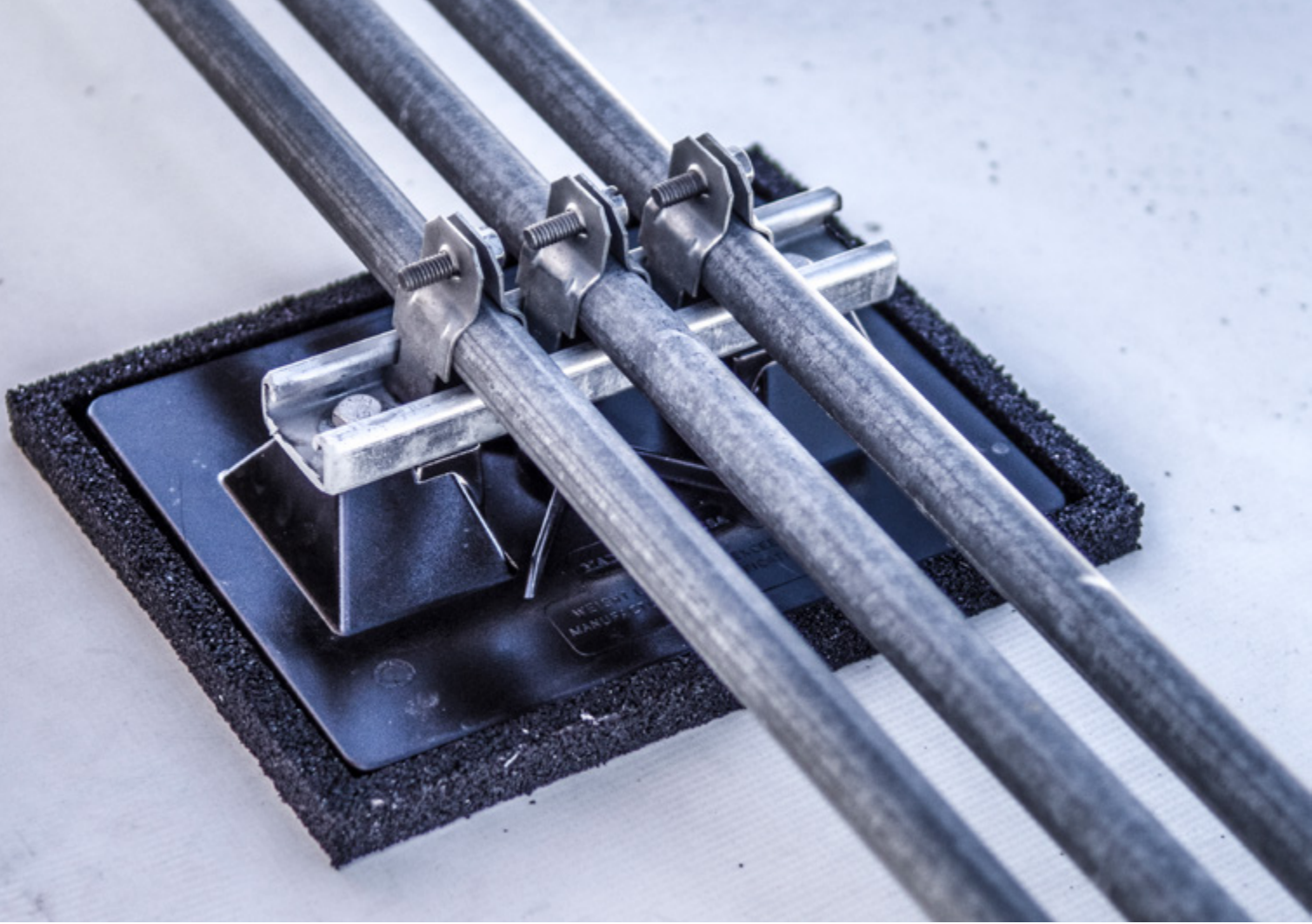
10" Aluminum  
Pipe Guide



PAD1923

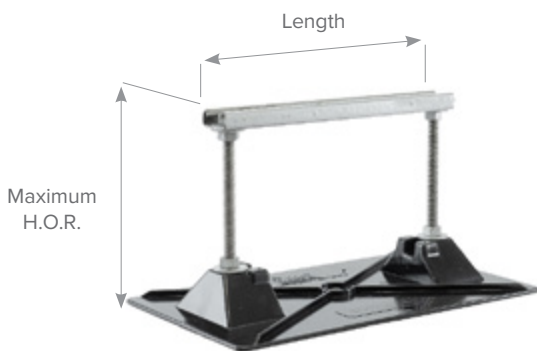
| MODEL     | PIPE SIZE | HEIGHT RANGE | MAX LOAD* | CASE QTY. | SHIPPING WEIGHT |
|-----------|-----------|--------------|-----------|-----------|-----------------|
| 6-RAH-12  | 6"        | 4 3/8" - 12" | 578 lbs.  | 4         | 35 lbs.         |
| 10-RAH-8  | 10"       | 6" - 8"      | 960 lbs.  | 1         | 17 lbs./unit    |
| 10-RAH-18 | 10"       | 6" - 18"     | 960 lbs.  | 1         | 18 lbs./unit    |

\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.



# STRUT PIPE SUPPORTS

For conduit and other small electrical piping. Uses channel strut to allow for the addition of pipe clamps. Ranges in height from 2.5" to 18" and in widths up to 48".



## **i** NAMING CONVENTION

### STRUT SERIES

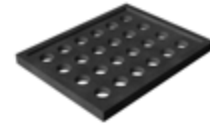
**12 - BS - 8**

Length      Base Strut      Max H.O.R.

# STRUT SUPPORTS

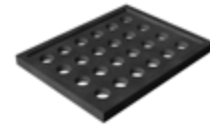
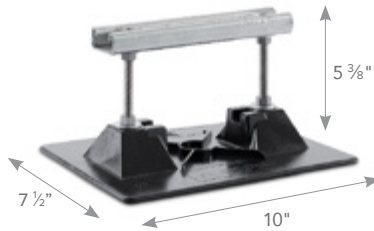
STRUT SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 8-Base Strut-2



PAD710

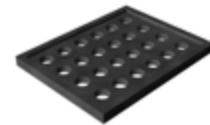
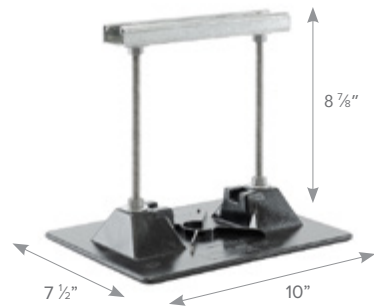
## 8-Base Strut-5



PAD710

## 8-Base Strut-8

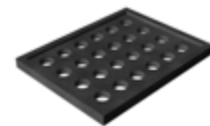
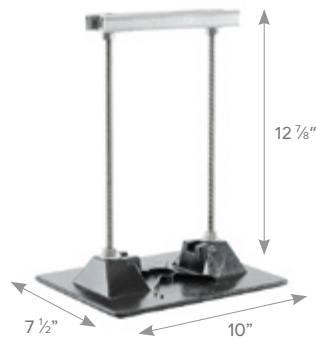
AVAILABLE IN  
STAINLESS  
STEEL



PAD710  
(polycarbonate base)

## 8-Base Strut-12

AVAILABLE IN  
STAINLESS  
STEEL



PAD710  
(polycarbonate base)

| MODEL   | HEIGHT RANGE     | STRUT LENGTH | MAX LOAD* | CASE QTY. | SHIPPING WEIGHT |
|---------|------------------|--------------|-----------|-----------|-----------------|
| 8-BS-2  | 2 1/2"           | 8"           | 172 lbs.  | 12        | 21 lbs.         |
| 8-BS-5  | 3 1/2" - 5 3/8"  | 8"           | 172 lbs.  | 12        | 23 lbs.         |
| 8-BS-8  | 3 1/2" - 8 7/8"  | 8"           | 172 lbs.  | 12        | 26 lbs.         |
| 8-BS-12 | 3 1/2" - 12 7/8" | 8"           | 172 lbs.  | 7         | 18 lbs.         |

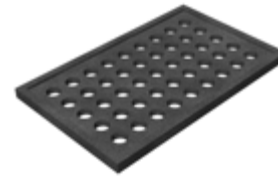
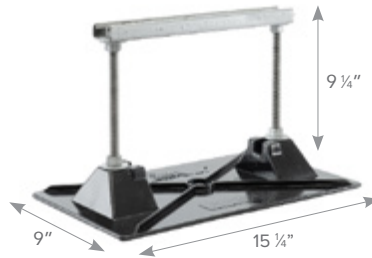
\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

# STRUT SUPPORTS

STRUT SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 12-Base Strut-8

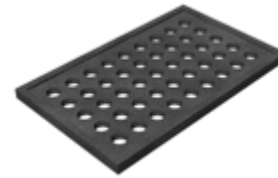
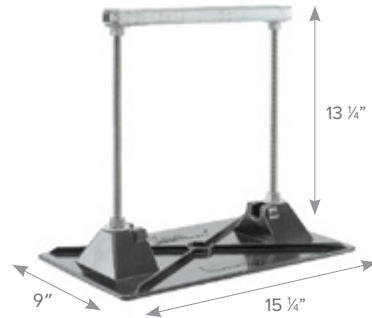
AVAILABLE IN  
STAINLESS  
STEEL



PAD915

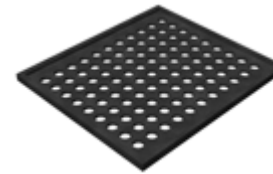
## 12-Base Strut-12

AVAILABLE IN  
STAINLESS  
STEEL



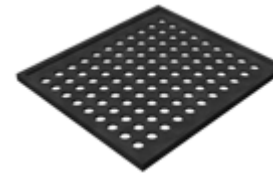
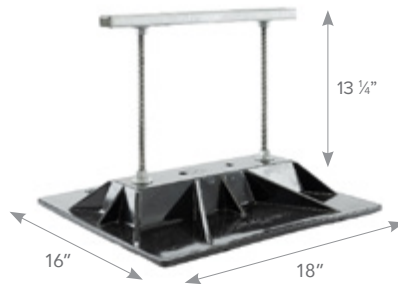
PAD915

## 16-Base Strut-8



PAD1618

## 16-Base Strut-12



PAD1618

| MODEL    | HEIGHT RANGE     | STRUT LENGTH | MAX LOAD* | CASE QTY. | SHIPPING WEIGHT |
|----------|------------------|--------------|-----------|-----------|-----------------|
| 12-BS-8  | 4 1/4" - 9 1/4"  | 12"          | 335 lbs.  | 6         | 24 lbs.         |
| 12-BS-12 | 4 1/4" - 13 1/4" | 12"          | 335 lbs.  | 6         | 26 lbs.         |
| 16-BS-8  | 4 3/4" - 9 1/4"  | 16"          | 578 lbs.  | 4         | 33 lbs.         |
| 16-BS-12 | 4 3/4" - 13 1/4" | 16"          | 578 lbs.  | 4         | 50 lbs.**       |

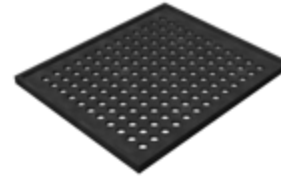
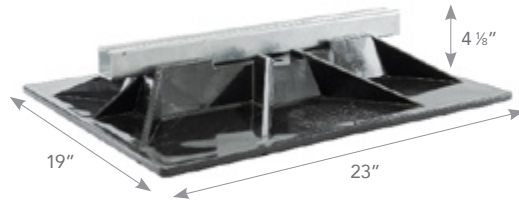
\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

\*\* Dimensional shipping weight. Not actual case weight.

# STRUT SUPPORTS

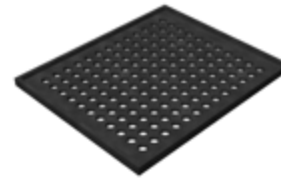
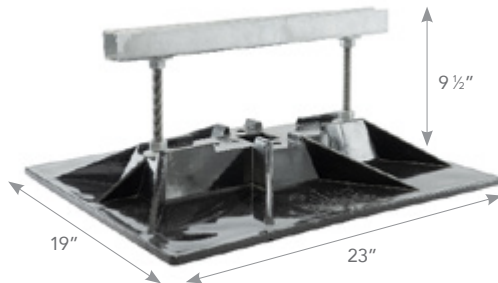
STRUT SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 20-Base Strut-4



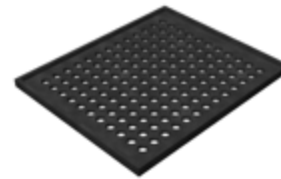
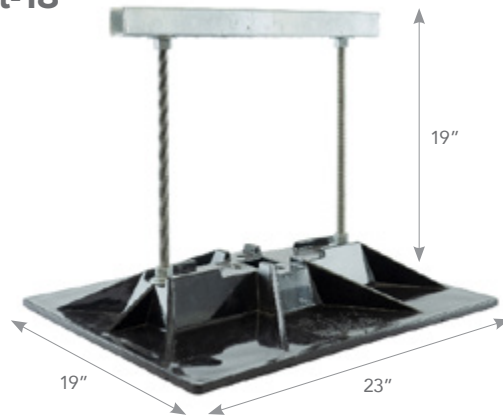
PAD1923

## 20-Base Strut-8



PAD1923

## 20-Base Strut-18



PAD1923

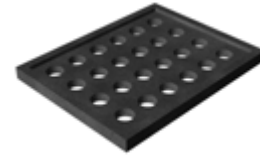
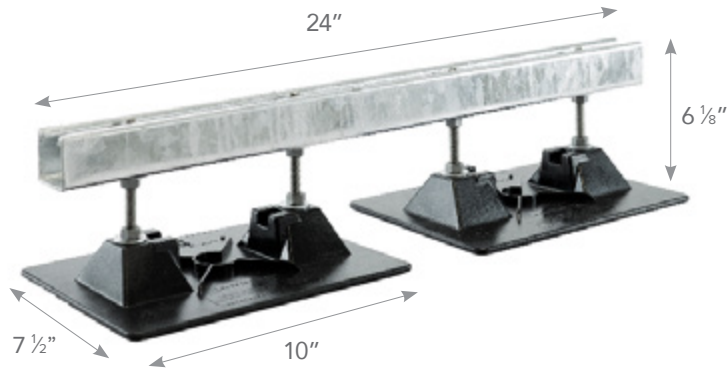
| MODEL    | HEIGHT RANGE    | STRUT LENGTH | MAX LOAD* | CASE QTY. | ACTUAL PRODUCT WEIGHT |
|----------|-----------------|--------------|-----------|-----------|-----------------------|
| 20-BS-4  | 4 1/2"          | 20"          | 960 lbs.  | 1         | 13 lbs./unit          |
| 20-BS-8  | 5 1/2" - 9 1/2" | 20"          | 960 lbs.  | 1         | 14 lbs./unit          |
| 20-BS-18 | 5 1/2" - 19"    | 20"          | 907 lbs.  | 1         | 15 lbs./unit          |

\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

# STRUT SUPPORTS

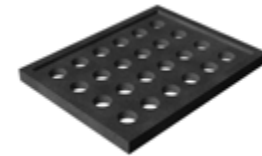
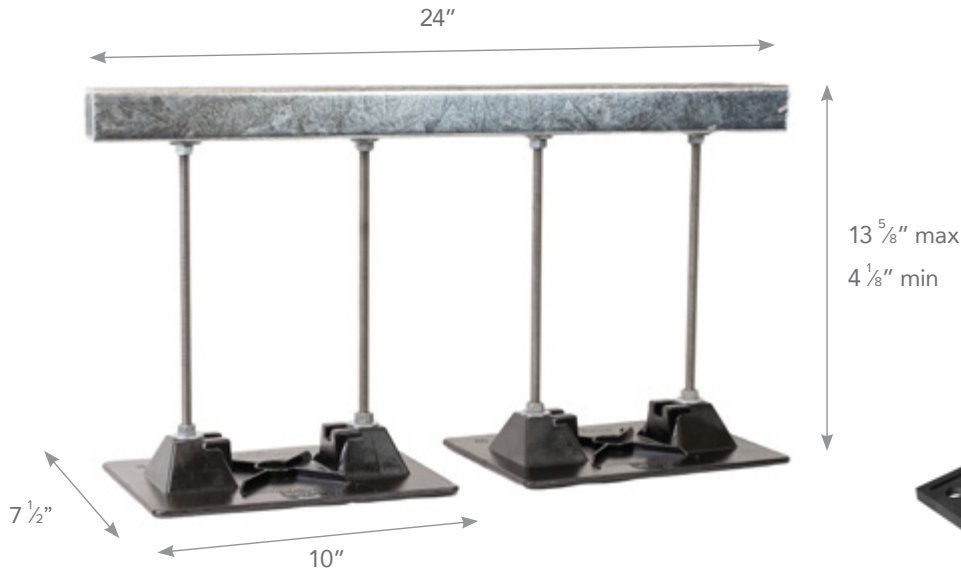
STRUT SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 24-Base Strut-5



PAD710

## 24-Base Strut-14



PAD710

| MODEL    | HEIGHT RANGE     | STRUT LENGTH | MAX LOAD*      | CASE QTY. | ACTUAL PRODUCT WEIGHT |
|----------|------------------|--------------|----------------|-----------|-----------------------|
| 24-BS-5  | 4 1/8" - 6 1/8"  | 24"          | 115 lbs./ft.   | 1         | 6 lbs/unit            |
| 24-BS-14 | 4 1/8" - 13 5/8" | 24"          | 172.5 lbs./ft. | 1         | 7.0 lbs/unit          |
| 36-BS-5  | 4 1/8" - 6 1/8"  | 36"          | 115 lbs./ft.   | 1         | 10 lbs/unit           |
| 48-BS-5  | 4 1/8" - 6 1/8"  | 48"          | 115 lbs./ft.   | 1         | 12 lbs/unit           |

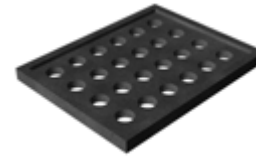
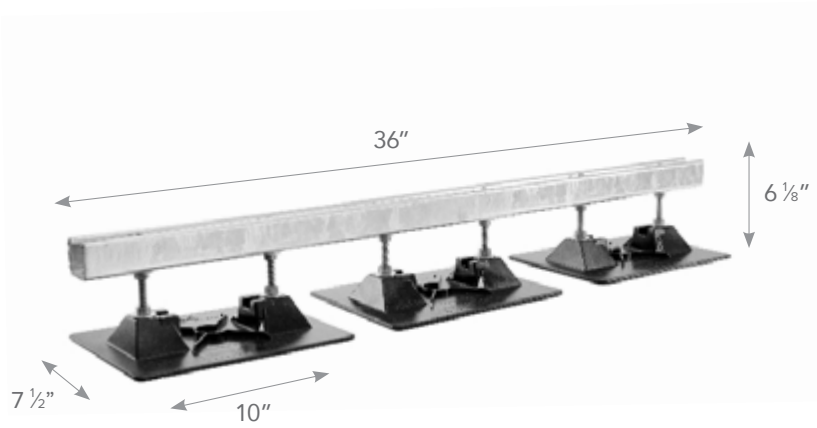
\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.



# STRUT SUPPORTS

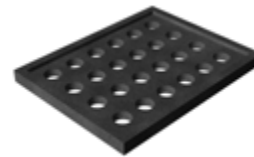
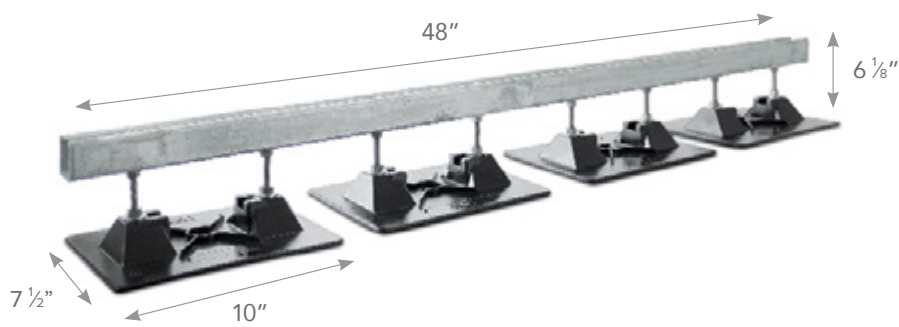
STRUT SUPPORT ACCESSORIES  
SEE PAGE 34 FOR MORE INFO.

## 36-Base Strut-5



PAD710

## 48-Base Strut-5

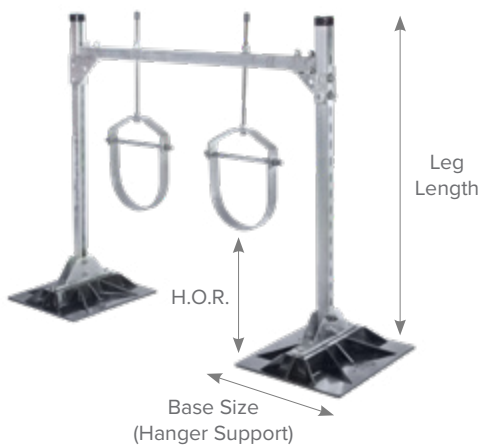


PAD710



# HANGER SUPPORTS

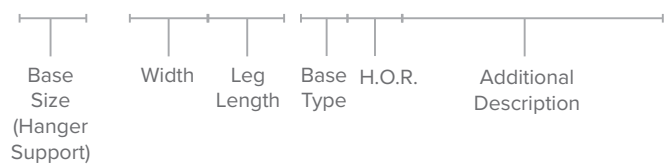
An adjustable solution for supporting large rooftop piping, such as water lines, ammonia lines, gas lines, and more. They are available in a number of different configurations for each and every rooftop layout. These configurations include clevis hangers, roller chairs, roller hangers, and trapeze hangers. Each can be configured to support multiple pipes, whether they are stacked or side-by-side.



## **i** NAMING CONVENTION

### HANGER SUPPORTS

**8H - 34x40 P-20 W/(2)6" C**





# HANGER SUPPORTS

## ADJUSTABLE HANGER SUPPORT | 6-H, 8-H, 10-H



Adjustable Hanger Supports are designed for single or multiple pipes, single or multiple tiers and for various heights.

To obtain pricing for the models 6-H, 8-H and 10-H Supports, please contact your local sales representative. The Sales Rep Locator is available on our website.

### Information Needed for Pricing Quote:

- Size of pipe
- Pipe contents
- Clearance height above roof
- Thickness of insulation around pipe (if any)
- Center line distance between adjacent pipes for multiple pipe supports
- Type of pipe
- Quantity of supports required (or total footage of pipe)

| NAME | HANGER TYPE   |
|------|---------------|
| C    | CLEVIS HANGER |
| BH   | BAND HANGER   |
| RH   | ROLLER HANGER |
| T    | TRAPEZE       |
| RC   | ROLLER CHAIR  |

-See naming convention on page 7 for more information

### Adjustable Clevis Hanger Style



### Trapeze Hanger



### Chair Roller Support



### Roller Hanger Support



\* See MIRO Specification for pipe support loading design constraints. Base and support pad size will be determined by job specific requirements. Stainless steel bases available upon request.



# DUCT SUPPORTS

## ADJUSTABLE DUCT SUPPORT

DS Supports are designed for single or multiple tier duct, pipe, cable tray, etc. They are also available in various heights.

Information Needed for Pricing Quote: Dimensions of duct, duct material (stainless or galvanized, single or double wall), clearance height above roof, insulation (if any), total footage of duct, and whether or not the duct need to be enclosed.



## **i** NAMING CONVENTION

### DUCT AND CABLE TRAYS

**8DS**

Base Size  
(Duct Support)

**36x58**

Width      Leg  
Length

**P-14**

Base Type      H.O.R.



# DUCT SUPPORTS

### Duct Support with Adjustable Header



### Enclosed Duct Support



AVAILABLE IN  
STAINLESS  
STEEL

### 3rd Leg Duct Support



### Multi-Tier Duct Support



\* See MIRO Specification for duct and cable tray support loading design constraints. Base and support pad size will be determined by job specific requirements. Stainless steel bases available upon request.



# MECHANICAL SUPPORTS

Heavy-duty supports can be custom-built to any dimensions and load requirements that your project requires. They also are available with different deck materials, including our standard interlocking planks, bar grating, or fiberglass, or can be ordered without a deck to allow equipment to be mounted directly to rails. Like with all of our support products, the height on our mechanical supports is easy to adjust on-site.

## **i** NAMING CONVENTION

### HD MECHANICAL SUPPORT

**8HD 36x48 P-12**

Base Size  
Heavy Duty

Width

Leg  
Length

Base  
Type

H.O.R.





**LIGHT DUTY (LD) MECHANICAL SUPPORT**

MIRO LD Mechanical Supports are a quick and easy solution to elevating small and light rooftop mechanical units. They are designed to support a unit 8” off the roof, with a weight capacity of up to 200 lbs. They are available in several different dimensions to accommodate varying size units. Ships with bases and hardware for on-site assembly. Visit our website for assembly instructions.



LD Supports ship partially disassembled. Minimal assembly required.

| PAN SIZES | HEIGHT | MAX LOAD* | SUPPORT PAD |
|-----------|--------|-----------|-------------|
| 24x24     | 8”     | 200 lbs.  | PAD710      |
| 30x30     | 8”     | 200 lbs.  | PAD710      |
| 20x36     | 8”     | 200 lbs.  | PAD710      |
| 36x36     | 8”     | 200 lbs.  | PAD710      |

(Custom Pan Sizes Available)

**HEAVY DUTY (HD) MECHANICAL SUPPORT \*\***

The HD Mechanical Support is a larger alternative to the LD, providing increased adjustability, customization, and weight capacity. To obtain pricing for the HD Mechanical Support, please fill out our Custom Quote Template and submit it to your local Sales Representative. The templates, as well as a Sales Rep Locator are available on our website.

Information needed for pricing quote:

- Width and Length desired
- Height off roof
- Weight of unit being supported

**HD Mechanical Support w/ Decking**



**HD Mechanical Support - Rail Only**



\* Max load based on limiting the roof membrane to a load of 3 psi. Ultimate capacity of support is not listed.

\*\* Base and support pad size will be determined by job specific requirements. Bar grate or fiberglass available as platform materials upon request. Stainless steel bases also available upon request.



# SUREFOOT ACCESS

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Built to offer safe and cost-effective access to facilities and equipment, MIRO stairs, ramps, and platforms are custom-designed to meet your site and OSHA standards. They can be shipped partially assembled or as a kit for easy on-site assembly.

- MIRO Bridge Crossovers span across pipes, ducts, expansion joints, elevation changes and other potential obstructions with engineered stair access.
- MIRO Ramps provide solutions for wheeled access to areas previously blocked by rooftop pipes, structural gaps, or minor elevation changes, allowing heavy items to be rolled in or out for placement or service.
- MIRO Service Platforms offer secure, elevated access to equipment in almost any setting, and are specifically designed for rooftop applications.





# SUREFOOT ACCESS

To obtain pricing for MIRO Stairs, Crossovers, Walkways, Service Platforms, or the Ramp Systems, fill out our Custom Quote Template and submit to your local Sales Representative. The templates, as well as a Sales Rep Locator are available on our website.



Information needed for pricing quote:

- Desired span clearance
- Desired clearance height off roof
- Specify if railing is needed

Products are designed to meet OSHA 1910 Subpart D for walking/working surfaces. Base size determined for job specific requirements.

Products are available in full stainless steel configurations upon request.

### Bridge Crossover Standard



### Service Platform



### Custom Ramp



## MIRO STANDARD CROSSOVERS

MIRO's Standard Crossovers are a selection of pre-designed crossovers that are easy to order, easy to assemble, and that accommodate a large majority of situations where a crossover stair system is needed. They are available in fifteen standard sizes. If you need something else, MIRO is the leader in custom rooftop stairs, crossovers, and platforms and we would be happy to provide you a custom quote.

MIRO Crossovers are designed to meet OSHA 1910 Subpart D for walking/working surfaces.

### Standard Crossover (no handrail)



### Standard Crossover sizes (no handrail)

| MODEL   | CLEARANCE SPAN | CLEARANCE HEIGHT | # of STEPS | TOTAL LENGTH |
|---------|----------------|------------------|------------|--------------|
| C-35x12 | 35"            | 12.25"           | 1          | 75.5"        |
| C-47x12 | 47"            | 12.25"           | 1          | 87.5"        |
| C-59x12 | 59"            | 12.25"           | 1          | 99.5"        |
| C-35x21 | 35"            | 21.25"           | 2          | 98.125"      |
| C-47x21 | 47"            | 21.25"           | 2          | 110.125"     |
| C-59x21 | 59"            | 21.25"           | 2          | 122.125"     |

# MIRO STANDARD CROSSOVERS

Standard Crossover  
(with handrail)



## Standard Crossover sizes (with handrail)

| MODEL    | CLEARANCE SPAN | CLEARANCE HEIGHT | # of STEPS | TOTAL LENGTH |
|----------|----------------|------------------|------------|--------------|
| C-35x30H | 35"            | 30.25"           | 3          | 120.75"      |
| C-47x30H | 47"            | 30.25"           | 3          | 132.75"      |
| C-59x30H | 59"            | 30.25"           | 3          | 144.75"      |
| C-35x39H | 35"            | 39.25"           | 4          | 143.75"      |
| C-47x39H | 47"            | 39.25"           | 4          | 155.75"      |
| C-59x39H | 59"            | 39.25"           | 4          | 167.75"      |
| C-35x48H | 35"            | 48.25"           | 5          | 166.75"      |
| C-47x48H | 47"            | 48.25"           | 5          | 178.75"      |
| C-59x48H | 59"            | 48.25"           | 5          | 190.75"      |



# WIND & SEISMIC

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Addressing lateral and uplift loading on rooftop equipment can be a challenging task. MIRO Industries has in-house design professionals that can provide a code-compliant sealed submittal for supporting and restraining your rooftop equipment and distribution lines. Our objective with any project is to provide economical and sustainable solutions that meet equipment support and anchorage requirements. This means that we design solutions that are practical, less complex to install, and easily weatherproofed using typical roofing methods. MIRO Industries has 30+ years of experience providing support solutions for rooftop equipment that protect the integrity of your roof.



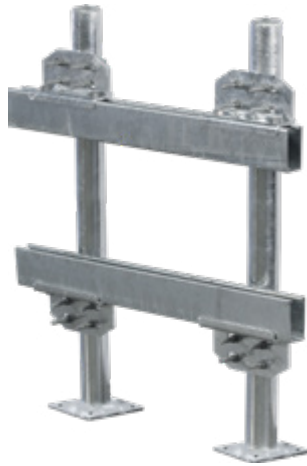
# WIND & SEISMIC SUPPORTS

Protect your rooftop MEP non-structural systems from wind loading and earthquakes by using code-compliant wind and seismic products from MIRO (engineering design, calculation package and P.E. stamp provided by MIRO Industries).

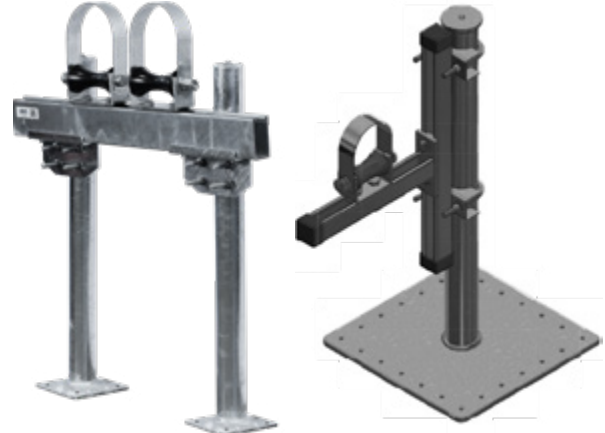
## Stanchion Base



## Enclosed Duct Support



## Pipe Supports



## Tie Down



## Mechanical Equipment Stand



## Bridge Crossover



To obtain pricing for the Wind and Seismic supports, have the following information available:

- Pipe or duct layout
- Type of pipe or duct
- Size of pipe or duct
- Insulation thickness
- Pipe content
- Center line distance between adjacent pipes or ducts
- Clearance height above roof
- Project specific wind/seismic support design requirements

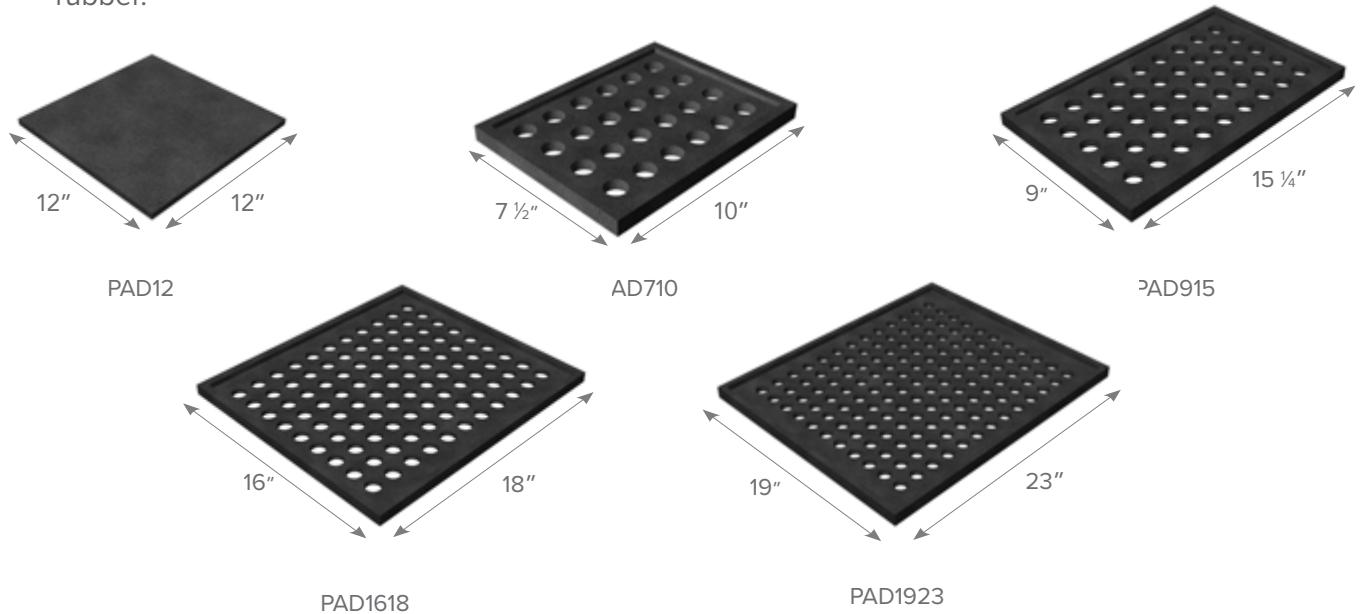
Additional information on needed requirements can be found in the Downloads section at [miroind.com/products/seismic-wind/](http://miroind.com/products/seismic-wind/)

\* Component connection to the frame may be different than shown. Stanchions are designed for project specific applications.

# ACCESSORIES

## Support Pads

MIRO Industries custom support pads are designed specifically to fit the MIRO polycarbonate non-penetrating supports. The slip-resistant pads have a small lip to hold the base to the pad and reduce movement on the rooftop while also protecting the roof membrane. The holes in the pad save weight and allow for venting and drainage. The pads are heat molded using 100% recycled rubber.



| SUPPORT PAD | WIDTH | LENGTH | INDIVIDUAL WEIGHT |
|-------------|-------|--------|-------------------|
| PAD1212     | 12"   | 12"    | 1 lb.             |
| PAD710      | 7 ½"  | 10"    | 2 lbs.            |
| PAD915      | 9"    | 15 ¼"  | 2 lbs.            |
| PAD1618     | 16"   | 18"    | 4 lbs.            |
| PAD1923     | 19"   | 23"    | 7 lbs.            |

\* Rubber pads may not be compatible with PVC roofs. Contact us for optional slip pad for PVC roofs.

## Pillow Block Spacers

Pillow Block Spacers are designed to provide an elevation increase of 2" on the 3-R series of Pillow Block supports. The edges are gently rounded to prevent gouging the roof. A maximum of 2 spacers can be used under each support.



3-R Spacer

| SPACER MODEL | HEIGHT | CASE QUANTITY | SHIPPING WEIGHT |
|--------------|--------|---------------|-----------------|
| 1.5          | 1 ½"   | 63 or 32      | 24 lbs.         |
| 3-R          | 2"     | 24            | 18 lbs.         |

## Pipe Guides (Custom sizes available upon request)

Pipe guides can be attached to the MIRO Dynamic Series supports to keep the pipe centered on the roller. They are designed to fit loosely around the pipe so as to allow for pipe movement. Each support has a size that is kept in stock, but custom sizes can be provided upon request.



**1.5 Pipe Guide**  
1.5" Nominal pipe



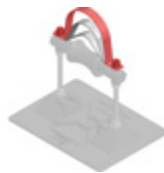
**3.0 Pipe Guide**  
3" Nominal pipe



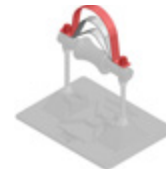
**3-R-2 Pipe Guide**  
3" Nominal pipe



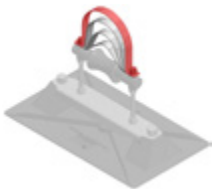
**3-R-4 Pipe Guide**  
3" Nominal pipe



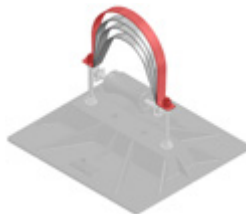
**3-RAH sizes:**  
3" Nominal pipe (stock)  
1" Nominal pipe  
2" Nominal pipe



**4-RAH sizes:**  
4" Nominal pipe (stock)  
1" Nominal pipe  
2" Nominal pipe  
3" Nominal pipe



**5-RAH sizes:**  
5" Nominal pipe (stock)  
1" Nominal pipe  
2" Nominal pipe  
3" Nominal pipe  
4" Nominal pipe



**6-RAH sizes:**  
6" Nominal pipe (stock)  
5" Nominal pipe  
3" Nominal pipe with 2" insulation  
4" Nominal pipe with 2" insulation



**10-RAH sizes:**  
10" Nominal pipe (stock)  
8" Nominal pipe  
6" Nominal pipe

# TERMS AND CONDITIONS

**MIRO** is a recognized leader in the rooftop support industry. Providing a professional service that strategically meets your needs. It is our goal to accomplish this vision through a team of highly motivated professionals, providing an advisory committee in the area of estimating and design.

**MIRO** is the one stop source for rooftop supports from planning through completion. Our goal is your complete satisfaction with our service.

**MIRO** provides a field staff ready to work while maximizing the value of your investment. Services provided: on-site takeoffs, installation, maintenance programs and consulting.

## Standard Terms and Conditions of Sale

### PRICES

All prices are List and applicable only within the Continental United States. Prices are subject to change without notice.

### CREDIT

Invoices are due upon receipt and are past due after 30 days. A charge of 1½% per month of such maximum lesser amounts as is authorized by law, will be made on overdue accounts. Purchaser agrees to be subject to the jurisdiction of state and federal courts of Utah in any dispute over invoices and to pay reasonable attorney fees.

### FREIGHT POLICY

F.O.B. Heber City, Utah, prepay freight & add

### DELIVERY

Immediate on maintained stock. MIRO Industries, Inc. reserves the right to change product design, standard packages, prices and terms without notice.

### Return Policy

(1) If a reasonable error in purchase designation has occurred by purchaser; (2) if MIRO products have not been used, damaged, or placed upon the roof, and (3) if such stock is marketable; purchaser may request such product be returned; but only if purchaser meets the above three requirements, pays all return shipping charges, and pays a 25% restocking return charge. Discontinued items or custom orders of specially manufactured items are not returnable. No returns are allowed after 90 days from the date the PO was issued and without a return number.

### LIMITED WARRANTY

As a recognized leader in the rooftop support industry, MIRO proudly offers a comprehensive limited warranty on its products.

| BRAND                                  | LENGTH OF LIMITED WARRANTY |
|--|----------------------------|
| MIRO Brand Products                    | 20 Years                   |
| Rooftop Sleeper Support Brand Products | 2 Years                    |
| UNIFLEX Brand Products                 | 1 Year                     |
| EKON Brand Products                    | 2 Years                    |

\*Limited Warranty details available at [www.miroind.com/warranty](http://www.miroind.com/warranty) (the "Website"). Any warranty terms listed herein are merely for convenience only and in the event that any of the terms or conditions herein conflict with the provisions, terms, or conditions on the Website, the Limited Warranty on the Website shall control. MIRO Industries, Inc. may change, amend, or modify its Limited Warranty, in whole or in part, in its sole discretion, and any such change, amendment, or modification shall be effective upon posting on the Website.

**MIRO** hereby disclaims and assumes no responsibility for incidental or consequential damage to the structure, its contents, loss of time, profits, energy or any inconvenience from any type of roof leak or damage.

### OWNER'S RESPONSIBILITY

In the event of a damage or leak in the roofing system caused by MIRO pipe supports, the building owner must promptly notify MIRO in writing within ten (10) days after discovery of the leak or damage and no longer than one (1) year after the onset of actual damage. Regular maintenance is required to keep this warranty in full force and effective. (See MIRO Industries specification sheets.)

**MIRO** does not practice professional architecture; therefore, neither the issuance of this warranty or any review of the building's construction by our representatives shall constitute any additional warranty, inspection or approval.

This warranty becomes effective only upon full payment to MIRO for all MIRO products and services, a complete installation and inspection of MIRO products, and MIRO's authorized signature below.

**Transfer of Warranty:** This warranty may only be transferred by the building owner to a subsequent purchaser of the property by giving not less than ten (10) days written notice to MIRO of such transfer. MIRO must have the opportunity to inspect and rectify the roofing system and respond to the building owner and the purchaser.

This document and all of the information therein are the property of MIRO INDUSTRIES, INC. the information contained is loaned, subject to return upon demand, and is not to be used directly or indirectly in any way detrimental to our interest. Further the information contained therein shall not be used, in whole or in part, except when allowed by written authorization from MIRO INDUSTRIES, INC.



# TYPICAL PIPE DIMENSIONS AND WEIGHTS

| Trade Size (in) | STEEL PIPE |         |               |               |         |         |               |               |
|-----------------|------------|---------|---------------|---------------|---------|---------|---------------|---------------|
|                 | Sch. 40    |         |               |               | Sch. 80 |         |               |               |
|                 | ID (in)    | OD (in) | Empty (lb/ft) | *Full (lb/ft) | ID (in) | OD (in) | Empty (lb/ft) | *Full (lb/ft) |
| 0.5             | 0.62       | 0.84    | 0.85          | 0.98          | 0.55    | 0.84    | 1.09          | 1.19          |
| 0.75            | 0.82       | 1.05    | 1.13          | 1.36          | 0.74    | 1.05    | 1.48          | 1.66          |
| 1               | 1.05       | 1.32    | 1.68          | 2.06          | 0.96    | 1.32    | 2.17          | 2.49          |
| 1.25            | 1.38       | 1.66    | 2.27          | 2.92          | 1.28    | 1.66    | 3.00          | 3.56          |
| 1.5             | 1.61       | 1.90    | 2.72          | 3.60          | 1.50    | 1.90    | 3.63          | 4.40          |
| 2               | 2.07       | 2.38    | 3.66          | 5.11          | 1.94    | 2.38    | 5.03          | 6.31          |
| 2.5             | 2.47       | 2.88    | 5.80          | 7.87          | 2.32    | 2.88    | 7.67          | 9.51          |
| 3               | 3.07       | 3.50    | 7.58          | 10.79         | 2.90    | 3.50    | 10.26         | 13.13         |
| 3.5             | 3.55       | 4.00    | 9.12          | 13.40         | 3.36    | 4.00    | 12.52         | 16.37         |
| 4               | 4.03       | 4.50    | 10.80         | 16.32         | 3.83    | 4.50    | 15.00         | 19.98         |
| 5               | 5.05       | 5.56    | 14.63         | 23.30         | 4.81    | 5.56    | 20.80         | 28.69         |
| 6               | 6.07       | 6.63    | 18.99         | 31.52         | 5.76    | 6.63    | 28.60         | 39.90         |
| 8               | 7.98       | 8.63    | 28.58         | 50.27         | 7.63    | 8.63    | 43.43         | 63.23         |
| 10              | 10.02      | 10.75   | 40.52         | 74.71         | 9.56    | 10.75   | 64.39         | 95.53         |
| 12              | 11.94      | 12.75   | 53.57         | 102.10        | 11.38   | 12.75   | 88.59         | 132.66        |

| Trade Size (in) | STAINLESS STEEL PIPE |         |               |               |          |         |               |               |
|-----------------|----------------------|---------|---------------|---------------|----------|---------|---------------|---------------|
|                 | Sch. 40s             |         |               |               | Sch. 80s |         |               |               |
|                 | ID (in)              | OD (in) | Empty (lb/ft) | *Full (lb/ft) | ID (in)  | OD (in) | Empty (lb/ft) | *Full (lb/ft) |
| 0.5             | 0.62                 | 0.84    | 0.87          | 1.00          | 0.55     | 0.84    | 1.1           | 1.20          |
| 0.75            | 0.82                 | 1.05    | 1.2           | 1.43          | 0.74     | 1.05    | 1.5           | 1.69          |
| 1               | 1.05                 | 1.32    | 1.7           | 2.07          | 0.96     | 1.32    | 2.2           | 2.51          |
| 1.25            | 1.38                 | 1.66    | 2.3           | 2.95          | 1.28     | 1.66    | 3.1           | 3.66          |
| 1.5             | 1.61                 | 1.90    | 2.8           | 3.68          | 1.50     | 1.90    | 3.7           | 4.47          |
| 2               | 2.07                 | 2.38    | 3.7           | 5.15          | 1.94     | 2.38    | 5.1           | 6.38          |
| 2.5             | 2.47                 | 2.88    | 5.9           | 7.97          | 2.32     | 2.88    | 7.8           | 9.64          |
| 3               | 3.07                 | 3.50    | 7.8           | 11.00         | 2.90     | 3.50    | 10.5          | 13.36         |
| 3.5             | 3.55                 | 4.00    | 9.3           | 13.58         | 3.36     | 4.00    | 12.8          | 16.65         |
| 4               | 4.03                 | 4.50    | 11            | 16.52         | 3.83     | 4.50    | 15.3          | 20.28         |
| 5               | 5.05                 | 5.56    | 15            | 23.67         | 4.81     | 5.56    | 21.3          | 29.18         |
| 6               | 6.07                 | 6.63    | 19.4          | 31.92         | 5.76     | 6.63    | 29.2          | 40.50         |
| 8               | 7.98                 | 8.63    | 29.2          | 50.88         | 7.63     | 8.63    | 44.4          | 64.19         |
| 10              | 10.02                | 10.75   | 41.4          | 75.57         | 9.75     | 10.75   | 56            | 88.35         |
| 12              | 12.00                | 12.75   | 50.7          | 99.71         | 11.75    | 12.75   | 67            | 113.99        |

| Trade Size (in) | PVC PIPE |         |               |               |         |         |               |               |
|-----------------|----------|---------|---------------|---------------|---------|---------|---------------|---------------|
|                 | Sch. 40  |         |               |               | Sch. 80 |         |               |               |
|                 | ID (in)  | OD (in) | Empty (lb/ft) | *Full (lb/ft) | ID (in) | OD (in) | Empty (lb/ft) | *Full (lb/ft) |
| 0.5             | 0.62     | 0.84    | 0.16          | 0.29          | 0.55    | 0.84    | 0.20          | 0.30          |
| 0.75            | 0.82     | 1.05    | 0.21          | 0.44          | 0.74    | 1.05    | 0.27          | 0.46          |
| 1               | 1.05     | 1.32    | 0.32          | 0.69          | 0.96    | 1.32    | 0.41          | 0.72          |
| 1.25            | 1.38     | 1.66    | 0.43          | 1.08          | 1.28    | 1.66    | 0.52          | 1.08          |
| 1.5             | 1.61     | 1.90    | 0.51          | 1.39          | 1.50    | 1.90    | 0.67          | 1.44          |
| 2               | 2.07     | 2.38    | 0.68          | 2.13          | 1.94    | 2.38    | 0.95          | 2.23          |
| 2.5             | 2.47     | 2.88    | 1.07          | 3.15          | 2.32    | 2.88    | 1.45          | 3.29          |
| 3               | 3.07     | 3.50    | 1.41          | 4.61          | 2.90    | 3.50    | 1.94          | 4.80          |
| 3.5             | --       | --      | --            | --            | --      | --      | --            | --            |
| 4               | 4.03     | 4.50    | 2.01          | 7.53          | 3.83    | 4.50    | 2.75          | 7.73          |
| 5               | 5.05     | 5.56    | 2.73          | 11.40         | 4.81    | 5.56    | 3.87          | 11.76         |
| 6               | 6.07     | 6.63    | 3.53          | 16.06         | 5.76    | 6.63    | 5.42          | 16.72         |
| 8               | 7.98     | 8.63    | 5.39          | 27.08         | 7.63    | 8.63    | 8.05          | 27.85         |
| 10              | 10.02    | 10.75   | 7.55          | 41.74         | 9.56    | 10.75   | 12.00         | 43.15         |
| 12              | 11.94    | 12.75   | 10.01         | 58.54         | 11.38   | 12.75   | 16.50         | 60.57         |

| Trade Size (in) | CONDUIT                   |         |               |              |                            |         |               |               |
|-----------------|---------------------------|---------|---------------|--------------|----------------------------|---------|---------------|---------------|
|                 | Rigid Steel Conduit (RSC) |         |               |              | Inter. Metal Conduit (IMC) |         |               |               |
|                 | ID (in)                   | OD (in) | Empty (lb/ft) | Full (lb/ft) | ID (in)                    | OD (in) | Empty (lb/ft) | *Full (lb/ft) |
| 0.5             | 0.63                      | 0.84    | 0.82          | 0.96         | 0.68                       | 0.82    | 0.07          | 0.22          |
| 0.75            | --                        | --      | --            | --           | 0.88                       | 1.03    | 0.92          | 1.18          |
| 1               | 1.06                      | 1.32    | 1.61          | 1.99         | 1.12                       | 1.29    | 1.20          | 1.63          |
| 1.25            | 1.39                      | 1.66    | 2.18          | 2.84         | 1.47                       | 1.64    | 1.53          | 2.26          |
| 1.5             | 1.62                      | 1.90    | 2.63          | 3.53         | 1.70                       | 1.88    | 1.88          | 2.87          |
| 2               | 2.08                      | 2.38    | 3.50          | 4.98         | 2.17                       | 2.36    | 2.51          | 4.11          |
| 2.5             | 2.49                      | 2.88    | 5.59          | 7.70         | 2.60                       | 2.86    | 4.22          | 6.52          |
| 3               | 3.09                      | 3.50    | 7.27          | 10.52        | 3.22                       | 3.48    | 5.20          | 8.72          |
| 3.5             | 3.57                      | 4.00    | 8.80          | 13.14        | 3.71                       | 3.97    | 6.05          | 10.74         |
| 4               | 4.05                      | 4.50    | 10.30         | 15.89        | 4.21                       | 4.47    | 6.74          | 12.76         |
| 5               | 5.07                      | 5.56    | 14.00         | 22.76        | --                         | --      | --            | --            |
| 6               | 6.09                      | 6.63    | 18.40         | 31.04        | --                         | --      | --            | --            |
| 8               | --                        | --      | --            | --           | --                         | --      | --            | --            |
| 10              | --                        | --      | --            | --           | --                         | --      | --            | --            |
| 12              | --                        | --      | --            | --           | --                         | --      | --            | --            |

\* Full pipe weight is based on pipe full of water.

# MASTERFORMAT DIVISION CODES

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The following specifications cover rooftop support systems for piping, conduit, equipment, walkways and cable trays. For your convenience, the specifications have been developed using the section numbering from both the 1995 MasterFormat and the 2004 MasterFormat.

Please contact MIRO Industries, Inc. at 1-800-768-6978 or email at sales@miroind.com if you incur any problems or have any questions regarding these specifications.

## 1995 MASTER FORMAT

### DIVISION 07

**Section 07590** - Roof Maintenance and Repairs

07700 - Roof Specialties and Accessories

07710 - Manufactured Roof Accessories

07720 - Roof Accessories

07760 - Roof Pavers

### DIVISION 15

**Section 15050** - Basic Mechanical Materials and Methods

15060 - Hangers and Supports

15070 - Mechanical Sound, Vibration, and seismic control

15090 - Mechanical Restoration and Retrofit

15411 - Fittings, Trim, and Accessories

15700 - Heating, Ventilating, and Air

Conditioning Equipment

15820 - Duct Accessories

### DIVISION 16

**Section 16070** - Hangers and Supports

16700 - Communications

## 2004 MASTER FORMAT

### DIVISION 07

**Section 07 00 00** - Thermal & Moisture Protection

07 71 00 - Roof Specialties

07 72 00 - Roof Accessories

07 72 46 - Roof Walkways

07 76 00 - Roof Pavers

### DIVISION 21

**Section 21 00 00** - Fire Suppression

21 05 29 - Hangers & Supports for Fire

Suppression Piping & Equipment

21 05 48 - Vibration & Seismic Controls for

Plumbing, Piping & Equipment

### DIVISION 22

**Section 22 00 00** - Plumbing

22 05 29 - Hangers & Supports for Plumbing,

Piping & Equipment

22 05 48 - Vibration & Seismic Controls for

Plumbing, Piping & Equipment

### DIVISION 23

**Section 23 00 00** - Heating, Ventilating & Air

Conditioning (HVAC)

23 05 29 - Hangers & Supports for HVAC

23 05 48 - Vibration & Seismic Controls for

HVAC Piping & Equipment

23 33 00 - Air Duct Accessories

### DIVISION 26

**Section 26 00 00** - Electrical

### DIVISION 27

**Section 27 00 00** - Communication



# HOW CAN WE SUPPORT YOU?

## WE ARE EASY TO WORK WITH

Our goal is to make sure every interaction you have with MIRO Industries is positive, and we take great pride in employing an amazing staff of friendly and knowledgeable people who will work to ensure you are satisfied.

## OUR PRODUCTS ARE EASY TO USE

Since 1982 MIRO Industries has provided quality rooftop support products that are easy to install, adjust, and assemble. They're built to last the lifetime of your roof and are backed by MIRO's 20 year warranty.

## WE CREATE PROJECT-SPECIFIC SOLUTIONS

MIRO's mentality is not "Can we do it?" Our mentality is "How can we do it?" Whether it's the type of project we've seen a thousand times or a unique circumstance that seems too challenging to tackle, MIRO's experts will work with you to ensure you are taken care of and we can provide a solution that is tailored to your specific project.



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