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 **Constructor Set**
Modular Rooftop Mounts

Constructor Set™

Modular Configuration Guide

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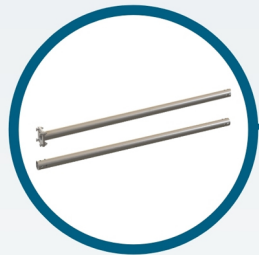
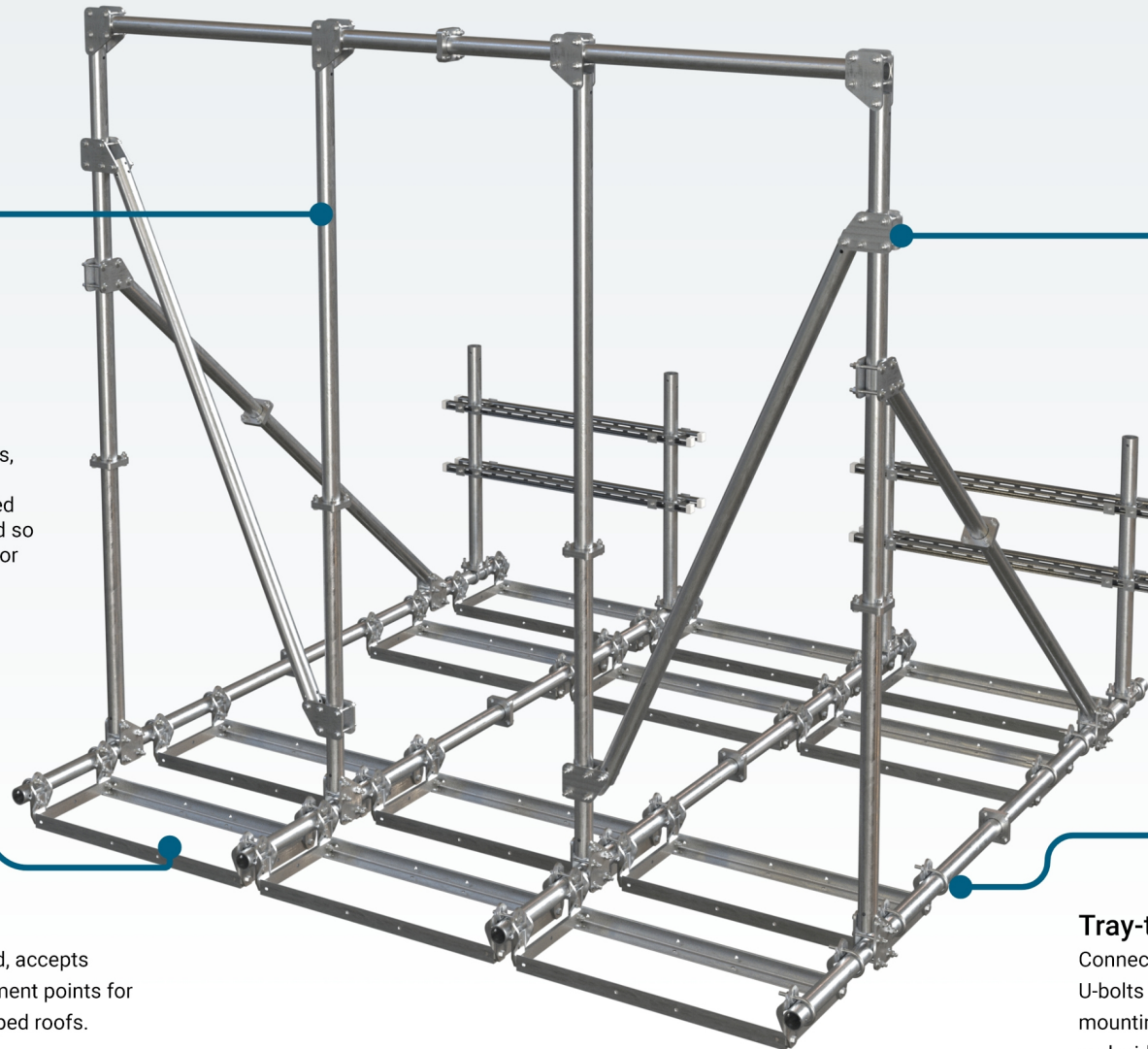
Assemble Your Own Constructor Set™

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Product Overview & Anatomy

The Constructor Set™ system is engineered with carefully designed components that work together seamlessly to create a robust and adaptable mounting solution. Understanding how these pieces fit together is essential to unlocking the full potential of your installation. This page provides an overview of the key components that make up your modular mounting system. From ballast trays and connector pipes to adapters and adjustable clamps. Each element has been precision-engineered to work in perfect harmony, giving you the flexibility to build custom solutions that meet your specific needs.



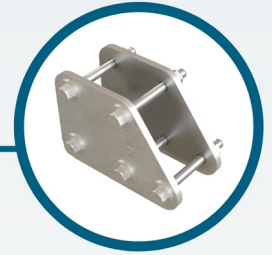
Connector Pipes

Schedule 40 pipe forms the round verticals, horizontals, and diagonals that create the face and bracing of the mount, with flanged pipe sections that bolt together end-to-end so you can customize length without cutting or custom fabrication.



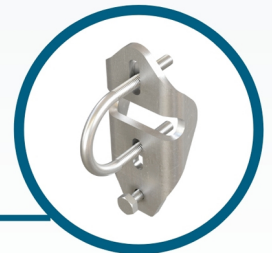
Ballast Trays

The frame's footprint. Distributes roof load, accepts tie-down kits, and provides simple attachment points for tray-to-pipe adapters. Works on flat or sloped roofs.



Adjustable Pipe-End Connection Clamps

Plate-style fittings that join pipes together at the ends. Use for diagonals, horizontals, or verticals. Clamp to standard connector pipes, and pivot for quick angle adjustment.



Tray-to-Pipe Adapters

Connect ballast trays to connector pipes using U-bolts for a fast, secure attachment. Kits include mounting hardware and come in both standard and wide versions to provide added stability.

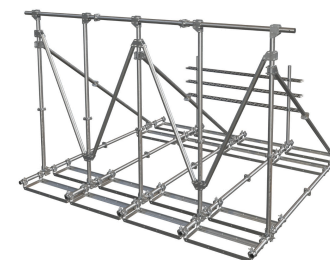
Pre-Assembled Kits for Sloped Roofs

Pre-Assembled Kits for Sloped Roofs

16' Constructor Set™ Frames

The innovative Constructor Set™ Rooftop Mounts feature easy setup and transportation for even the most difficult to access rooftop sites.

- Bolt-together design, all hardware is 1/2"
- All members are 96" or less in length for easy transport in elevators
- Maximum member weight is 70 lb
- Innovative design easily adjusts to sloped roofs



Part #	Mounting Pipes	Footprint	Mats Required	RRU Rack	Weight
CSRT5-161016-R	5	193-1/2" x 192"	16	Yes	2772 lbs
CSRT5-161016	5	193-1/2" x 192"	16	No	2552 lbs

Related Parts

Part #	Name	Weight
MAT18	Rubber Mats	15.50 lbs
CSRT-BTD	Ballast Tie-Down Kit for Non-Penetrating Rooftop Mounts	12.00 lbs

12' Constructor Set™ Frames

The innovative Constructor Set™ Rooftop Mounts feature easy setup and transportation for even the most difficult to access rooftop sites.

- Bolt-together design, all hardware is 1/2"
- All members are 96" or less in length for easy transport in elevators
- Maximum member weight is 70 lb
- Innovative design easily adjusts to sloped roofs



Part #	Mounting Pipes	Footprint	Mats Required	RRU Rack	Weight
CSRT4-121012-R	4	145-1/4" x 144"	12	Yes	2005 lbs
CSRT4-121012	4	145-1/4" x 144"	12	No	1788 lbs

Related Parts

Part #	Name	Weight
MAT18	Rubber Mats	15.50 lbs
CSRT-BTD	Ballast Tie-Down Kit for Non-Penetrating Rooftop Mounts	12.00 lbs

Pre-Assembled Kits for Sloped Roofs

8' Constructor Set™ Frames

The innovative Constructor Set™ Rooftop Mounts feature easy setup and transportation for even the most difficult to access rooftop sites.

- Bolt-together design, all hardware is 1/2"
- All members are 96" or less in length for easy transport in elevators
- Maximum member weight is 70 lb
- Innovative design easily adjusts to sloped roofs



Part #	Mounting Pipes	Footprint	Mats Required	RRU Rack	Weight
CSRT3-8108-R	3	97-3/4" x 96"	6	Yes	1218 lbs
CSRT3-8108	3	97-3/4" x 96"	6	No	1069 lbs
CSRT2-8108-R	2	93-3/16" x 96"	6	Yes	963 lbs
CSRT2-8108	2	93-3/16" x 96"	6	No	813 lbs

Related Parts

Part #	Name	Weight
MAT18	Rubber Mats	15.50 lbs
CSRT-BTD	Ballast Tie-Down Kit for Non-Penetrating Rooftop Mounts	12.00 lbs

Pre-Assembled Kits for Flat Roofs

Pre-Assembled Kits for Flat Roofs

We also offer a variety of pre-configured kits for flat roofs, designed to make rooftop installations faster, safer, and easier. Each kit is engineered for reliable performance across standard rooftop applications and incorporates all the innovative features of the Constructor Set™ Family. From single-sector mounts to multi-carrier configurations. Lightweight, modular, and easy to transport in elevators.

To explore all available options and specifications, scan the QR codes below or visit SitePro1.com.



Scan for Website



Scan for Catalog

 **Constructor Set**
Modular Rooftop Mounts

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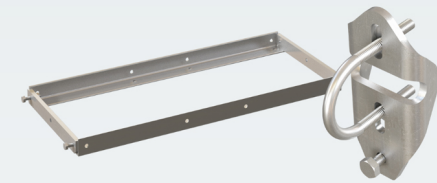
Modular Build Zones Guide

The fully modular design of the Constructor Set™ lets you create custom frames for nearly any site. Explore the five Build Zones below. Work in the order that fits your project, or follow the recommended 5-Step sequence for a fast start.

Build Zone 1

Base Tray Layout

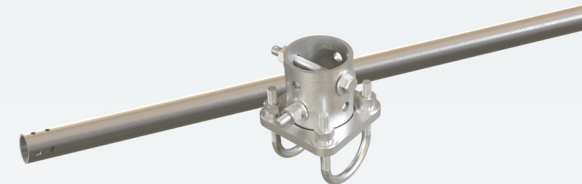
Select your ballast trays and tray-to-pipe adapters to configure the layout based on the required footprint on the rooftop.



Build Zone 2

Base Pipe Layout

Select all necessary pipes based on the chosen ballast trays, desired face width, or antenna separation space.



Build Zone 3

Vertical Face Pipe Layout

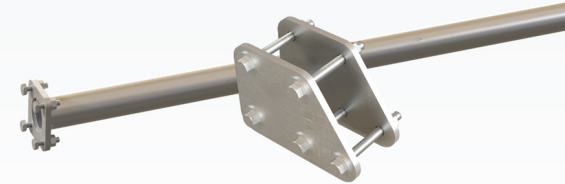
Configure the face of the mount by using a unique combination of components. Add vertical pipes to direct mount antennas or add horizontal pipes to create a frame for adjustable antenna positions.



Build Zone 4

Diagonal Support Layout

Here, you would add diagonal pipes to stabilize your frame and add additional support. We recommend stabilizing in both normal and tangential directions.



Build Zone 5

Getting Creative

At this point, you can add any necessary accessories to accommodate the radio mounting, additional antenna mounting, cable management, and other requirements.

Ballast Trays

These trays form the footprint of the mount and are used to provide additional ballast to non-penetrating rooftop mounts.

- Available in 4' and 8' versions
- Includes hardware for bolting to existing ballast trays

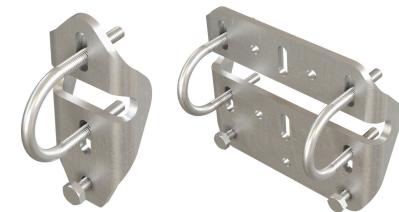


Part #	Dimensions	Mats Required	Weight
TA4-S	18" x 48"	1	39 lbs
TA8-S	18" x 96"	2	69 lbs

Tray-to-Pipe Adapters

These adapters enable attachment to 2-7/8" OD connector pipes via u-bolts.

- Attaches to 2-7/8" pipes
- Includes 0.5" attachment hardware to ballast trays
- Wide version for added stability available



Part #	Mounting Pipe	Edition	Connection	Weight
CSRT-PCB	2-7/8"	Standard	(1) 1/2" Bolt	5 lbs
CSRT-PCBW	2-7/8"	Wide	(2) 1/2" Bolts	12 lbs

Adjustable Pipe-End Connection Clamps

These plate clamps enable adjustable pipe-to-pipe connections such as diagonals, horizontals, or verticals.

- Attaches to 2-7/8" connector pipes
- Includes 0.5" attachment hardware
- Easily pivots from one thru bolt

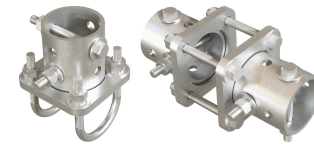


Part #	Mounting Pipe	Pipe Connections	Weight
CSRT-GP30	2-7/8"	Single	11 lbs
CSRT-GP30D	2-7/8"	Double	13 lbs

Fixed Pipe-End Connection Clamps

These weldments allow "T" or end connections for connector pipes.

- Attaches to 2-7/8" connector pipes
- Includes 0.5" attachment hardware
- Additional holes for universal connection



Part #	Mounting Pipe	Pipe Connections	Weight
CSRT-TW1	2-7/8"	Single	11 lbs
CSRT-TW2	2-7/8"	Double	13 lbs

Flange Pipes

These flange connector pipes enable you to create various lengths by bolting them together.

- Constructed with 2-7/8" SCH. 40 pipe
- Available in 2' increments
- Includes 0.5" flange attachment hardware



Part #	Length	Outside Diameter (OD)	Schedule	Weight
CSRT-3024FW	24"	2-7/8"	40	16 lbs
CSRT-3048FW	48"	2-7/8"	40	29 lbs
CSRT-3072FW	72"	2-7/8"	40	42 lbs
CSRT-3096FW	96"	2-7/8"	40	55 lbs

Connector Pipes

Connector pipe that is used to create diagonals and horizontals.

- Constructed with 2-7/8" SCH. 40 pipe
- Available in 2' increments
- Includes holes for 0.5" hardware
- Hardware not included



Part #	Length	Outside Diameter (OD)	Schedule	Weight
CSRT-3024	24"	2-7/8"	40	13 lbs
CSRT-3048	48"	2-7/8"	40	25 lbs
CSRT-3072	72"	2-7/8"	40	37 lbs
CSRT-3096	96"	2-7/8"	40	50 lbs

Assemble Your Own Constructor Set™

RRU Racks

Easily add RRU racks to any Constructor Set™ configuration.

- Includes strut and attachment hardware
- Available in 5' and 10' lengths
- Additional strut rows can be added



Part #	Length	Height	Struts	Weight
CSRT-RRU2-45	60"	48"	4	109 lbs
CSRT-RRU2-410	120"	48"	4	150 lbs

Square Strut

This versatile strut can be used to solve a variety of cable support issues at a communication site.

- 1-5/8" x 1-5/8" heavy-duty 12 ga slotted square strut
- Available in electro galvanized, hot-dip galvanized, and stainless steel versions



Part #	Length	Slot Size	Spacing	Finish	Weight
UNT5	60"	7/16" x 3"	4"	Electro Galvanized	8 lbs
UNT10	120"	9/16" x 1-1/8"	2"	Electro Galvanized	15 lbs

Rubber Mats

Rubber mats are used as a protective barrier between roofing materials and steel footpads.

- Each footpad and jack requires rubber mats for rooftop applications
- Includes ballast tray attaching hardware only for 6 ballast trays
- Manufactured from UV-resistant 1/2" thick rubber



Part #	Description	Size	Weight
MAT18	Rubber Mats	18" x 48"	16 lbs

Ballast Tie-Down Kit for Non-Penetrating Rooftop Mounts

This tie-down kit is used to secure the ballast for non-penetrating rooftop mounts.

- Banding-type ballast tie-down kit
- Includes ballast tray attaching hardware only for 6 ballast trays
- BAND-BTD includes banding



Part #	Description	Weight
CSRT-BTD	Ballast Tie-Down Kit	12 lbs



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Valmont is committed to providing products and services that enhance the lives of our customers, employees, and communities and to do so in an increasingly efficient and environmentally friendly manner. For more information about our commitment to sustainability, please visit valmont.com/sustainability.

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