

 **IronRidge Product Catalog**



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What's New

New Products

IronRidge Rail Mid-Clamp Kits can now be ordered with either **Hex Bolt (29-7000-XXX)** or **T-Bolt (29-70TB-XXX)**. Please refer to page 9 for additional information. IronRidge mid clamps fit both Standard (XRS) and Light (XRL) IronRidge Rails.

Enphase Mounting Hardware Kits (29-5003-005) are now available to mount either one or two Enphase inverters (depending on the model). Please refer to page 15 for additional information.

Two New Facilities

We are happy to announce the opening of our Eastern USA facility, effective June 1, 2011. Located in **Mountain Top, PA** our newest warehousing and logistics facility will support regional deliveries and will call pick-ups for most of our products.

For those of you with projects located in Ontario Canada, we are now shipping our Standard Rail Assemblies directly from **Mississauga, ON Canada**. Our "Domestic Content" compliant IronRidge Standard Rail products satisfy the Mounting System requirements of Ontario Power's FIT and MicroFIT (Feed-in Tariff) programs. For details, please turn to page five.

*Not all products are available in every location. Please refer to our Distributor Price List for detailed information regarding ship-from availability per each catalog item.

Ground Mount Kits Discontinued

As previously identified by a UNI-GRxxxx part number, the replacement solution for ground mounting applications is to configure the IronRidge Light Rail (XRL) Assembly in a portrait mode mounting scheme (rails in a horizontal position) along with either Roof Mounting System components, or Ground Array System components.

IronRidge Mounting Systems - Overview



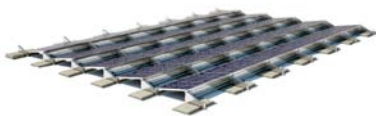
IronRidge Roof Mount System consists of additional components that complement the IronRidge Standard and Light Rail assemblies, while supporting virtually any commercial or residential roof mount installation, regardless of roof type or pitch.



IronRidge Ground Array System scales to support a wide range of site and terrain challenges. This system consists of components that allow for installer-supplied steel pipe to combine with our Standard Rail assembly for simple, rapid, cost effective ground mounting.



IronRidge Pole Mount System offers user-adjustable tilt angle settings, and accommodates a wide range of solar applications including off-grid backup systems, roadside signals, moderate load remote systems, and call boxes.



IronRidge Ballasted Roof Mount System is compact, easy to ship, light on the roof, and engineered for quick and intuitive installation. This system works with most solar panels and, because it is a rail-less system, handles uneven and obstructed roofs with ease.

*This is a new product line, and we ask that you contact us when ordering parts from this system as they are not yet listed in this catalog.

Here at IronRidge we've been designing and manufacturing solar mounting products since 1996. Although we aren't the largest racking provider based on sheer volume, our products are outstanding and our customers consistently rank us as #1 in customer service and technical support.

Ontario, Canada Customers: Feed-in Tariff Program

Program Summary

Ontario's FIT program is North America's first comprehensive guaranteed pricing structure for renewable electricity production. Eligible renewable electricity generators (which can include homeowners, business owners, farmers, as well as private investors) are paid a cost-based price for the renewable electricity they produce through a qualifying renewable energy project within the Ontario province. The FIT program is divided into two streams – FIT and microFIT. MicroFIT is for projects of 10kW or less, and offers a simplified application and contract issuance process.

The Feed-in Tariff (FIT) Program was enabled by the Green Energy and Green Economy Act of 2009, for the Ontario province of Canada only. For more, please visit: www.ontario.ca/renewableenergyprojects.

“Domestic Content” Requirements

Currently, the FIT program categorizes components and labor used in solar power projects as falling into eight distinct categories. The eight categories total 100%, with each category representing a set percentage based on the program rules. To satisfy the FIT and MicroFIT Domestic Content requirement, your project must achieve a score of 60% or greater. For each category, you will receive all or nothing, meaning you must be 100% in compliance within a given category, to count its percentage towards your goal of 60% or greater.

The products we manufacture address category number six of the eight presented, entitled “Mounting Systems”. This category has been given a weight of 9%. If your project's Mounting Systems conforms 100% to the FIT Program requirements, you will then receive 9% towards your goal of 60% or greater. Conversely, if your mounting system is, for example, 95% compliant, you will receive 0% (instead of 9%) towards your goal of 60% or greater.

Here's what it takes to conform: “Mounting systems, where the **structural components** of the fixed or moving mounting systems, have been entirely machined or formed or cast in Ontario. The metal for the structural components may not have been pre-machined outside Ontario other than peeling/roughing of the part for quality control purposes when it left the smelter or forge. The machining and assembly of the mounting system must entirely take place in Ontario (i.e. bending, welding, piercing, and bolting).” – *Ontario Power Authority*

IronRidge Products Needed to Meet the “Domestic Content” Requirements

To simplify achieving the all-or-nothing 9% score assigned to category six, “Mounting Systems”, we offer a FIT Compliant version of our premium, best performing IronRidge Standard Rail (XRS) Assembly. These Standard Rail components ship from Mississauga Ontario. Our Light Rails are not yet available as FIT Compliant.

IronRidge Products included are as follows: 1.) Rail, rail splices and rail end caps that prevent dust and debris from entering the rail located on pages 8 and 9. 2.) End, mid and bottom clamps that clamp other manufacturer's panels to our rails, found on pages 9 1 10. 3.) Rail L1 Feet commonly used to attach our rails to roofs and other mountable surfaces and substrate on page 12.

Ontario FIT Compliant “Structural Components” Summary

As per the definition of category six entitled ‘Mounting Systems’, we supply the following IronRidge products as FIT and MicroFIT compliant. When purchasing these items, you will notice not all catalog part numbers distinguish FIT from non FIT items. Therefore, we ask that you please explicitly inform your direct supplier (distributor, IronRidge Direct, solar equipment eTailor, etc) which items are for Ontario’s FIT program.

	Ontario FIT Item #	Description	
IronRidge Standard Rail 	51-70CR-108A	XRS, Rail 108" (9 Feet) Clear	
	51-70CR-144A	XRS, Rail 144" (12 Feet) Clear	
	51-70CR-168A	XRS, Rail 168" (14 Feet) Clear	
	51-70CR-192A	XRS, Rail 192" (16 Feet) Clear	
	51-70CR-216A	XRS, Rail 216" (18 Feet) Clear	
Standard Rail Internal Splice 	29-70CS-010	Splice, XRS, Mill	
Mid Clamps With Hex or T-Bolt Kit 	29-7000-105	Kit, 4pcs, Mid Clamp A/B/I, 2.00", Mill	
	29-7000-101	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Mill	
	29-7000-108	Kit, 4pcs, Mid Clamp F/K/G, 2.50", Mill	
	29-7000-104	Kit, 4pcs, Mid Clamp H, 2.75", Mill	
	29-70TB-105	Kit, 4pcs, Mid Clamp A/B/I, 2.00", Mill T-Bolt	
	29-70TB-101	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Mill T-Bolt	
	29-70TB-108	Kit, 4pcs, Mid Clamp F/K/G, 2.50", Mill T-Bolt	
	29-70TB-104	Kit, 4pcs, Mid Clamp H, 2.75", Mill T-Bolt	
End Clamps 	29-7000-125	Kit, 4pcs, End Clamp I, 1.25", Mill	
	29-7000-134	Kit, 4pcs, End Clamp A, 1.34", Mill	
	29-7000-224	Kit, 4pcs, End Clamp B, 1.41", Mill	
	29-7000-157	Kit, 4pcs, End Clamp C, 1.57", Mill	
	29-7000-160	Kit, 4pcs, End Clamp D, 1.60", Mill	
	29-7000-165	Kit, 4pcs, End Clamp J, 1.65", Mill	
	29-7000-171	Kit, 4pcs, End Clamp E, 1.71", Mill	
	29-7000-214	Kit, 4pcs, End Clamp F, 1.81", Mill	
	29-7000-187	Kit, 4pcs, End Clamp K, 1.87", Mill	
	29-7000-204	Kit, 4pcs, End Clamp G, 1.97", Mill	
29-7000-230	Kit, 4pcs, End Clamp H, 2.30", Mill		
Bottom Clamp	29-7000-117	Kit, 4pcs, Under Clamp, Clear	
Adjustable L-Foot 	29-70CR-017	Kit, Adjustable L-Foot Mill	

IronRidge Rail Assemblies

Our product development team strives to keep things simple and intuitive for installers while accommodating a wide range of mounting scenarios. As a result, we offer two complementary styles of rail known as IronRidge Standard Rail (XRS) and IronRidge Light Rail (XRL). With each offering its own distinct set of advantages, please refer to our website or contact our customer service team for assistance in determining which rail assembly is best for you and for your project.



IronRidge Standard (XRS) Rail

The IronRidge Standard Rail is our premium, best selling, best performing rail. Spanning over 12' between mounts under most load conditions, this rail has slots for both top and bottom mounting. Our Standard Rail's Strength Curve™ profile enables longer spans between mounts than any other rail in the industry. The XRS rail is manufactured using extruded 6105-T5 aluminum and is available in clear or black anodized finish.

Black finish and custom lengths are special order, call for additional details.

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
Special Order	XRS, Rail 108" (9 Feet) Clear	51-70CR-108A
51-7000-144A	XRS, Rail 144" (12 Feet) Clear	51-70CR-144A
51-7000-168A	XRS, Rail 168" (14 Feet) Clear	51-70CR-168A
51-7000-192A	XRS, Rail 192" (16 Feet) Clear	51-70CR-192A
51-7000-216A	XRS, Rail 216" (18 Feet) Clear	51-70CR-216A
51-7000-144B	XRS, Rail 144" (12 Feet) Black	Special Order
51-7000-168B	XRS, Rail 168" (14 Feet) Black	Special Order
51-7000-192B	XRS, Rail 192" (16 Feet) Black	Special Order
51-7000-216B	XRS, Rail 216" (18 Feet) Black	Special Order



IronRidge Light (XRL) Rail

This is our super-light, highly cost-effective rail. Spanning over 6’ between mounts under most load conditions, the XRL rail features top-slot panel clamping for quick and intuitive installation. This rail is manufactured using extruded 6105-T5 aluminum and is available in clear or black anodized finish.

Black finish and custom lengths are special order, call for details.

Item #	Description
51-6000-144A	XRL, Rail 144" (12 Feet) Clear
51-6000-168A	XRL, Rail 168" (14 Feet) Clear
51-6000-192A	XRL, Rail 192" (16 Feet) Clear
51-6000-216A	XRL, Rail 216" (18 Feet) Clear
51-6000-144B	XRL, Rail 144" (12 Feet) Black
51-6000-168B	XRL, Rail 168" (14 Feet) Black
51-6000-192B	XRL, Rail 192" (16 Feet) Black
51-6000-216B	XRL, Rail 216" (18 Feet) Black



Internal Rail Splices

IronRidge Standard and Light Rails can be easily extended with our patent-pending internal splice bars. The internal splice bars do not interfere with clamping or with mounting, and offer a near seamless appearance. Standard (XRS) Rail and Light (XRL) Rail Splices are made with extruded 6063-T3 aluminum. *Includes Hardware.

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-7000-010	XRS Splice, (Fits Standard Rail)	29-70CS-010
29-7000-000	XRL Splice, (Fits Light Rail)	N/A



XRS



XRL

End Caps

Available for both Standard (XRS) and Light (XRL) Rails, end caps provide a finished look while protecting against the collection of water and debris inside the rail. End caps are cast from black polycarbonate with UV protection.

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-4000-099	XRS End Cap (Quantity: 20)	29-4000-099 - Specify as Ontario FIT Compliant Version
29-4000-088	XRL End Cap (Quantity: 20)	N/A



Mid Clamps

IronRidge Mid Clamps are used when top-mounting solar modules to the top slots of either our Standard (XRS) and/or our Light (XRL) Rails (fits both). These Clamps are not dependent upon the solar module’s mounting holes.

These Mid Clamps may be ordered with Hex bolts or with T-bolts. Mid clamps create a spacing of .25” between modules thus maximizing the total number of modules per set of rails. Available in clear or black anodized finish.

Black anodized requires special order, call for details.

Ontario Canada FIT Item #
***Specify as FIT Compliant When Placing Your Order**

(See Page 5 for Details)

Item #	Description	Ontario Canada FIT Item #
29-7000-105	Kit, 4pcs, Mid Clamp A/B/I, 2.00", Mill (Hex Head)	29-7000-105
29-7000-101	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Mill (Hex)	29-7000-101
29-7000-108	Kit, 4pcs, Mid Clamp F/K/G, 2.50", Mill (Hex)	29-7000-108
29-7000-104	Kit, 4pcs, Mid Clamp H 2.75", Mill (Hex)	29-7000-104
29-71TB-105	Kit, 4pcs, Mid Clamp A/B/I, 2.00", Mill (T-bolt)	29-71TB-105
29-71TB-101	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Mill (T-bolt)	29-71TB-101
29-71TB-108	Kit, 4pcs, Mid Clamp F/K/G, 2.50", Mill (T-bolt)	29-71TB-108
29-71TB-104	Kit, 4pcs, Mid Clamp H, 2.75", Mill (T-bolt)	29-71TB-104
29-7000-105B	Kit, 4pcs, Mid Clamp A/B/I, 2.0", Black (Hex)	Special Order
29-7000-101B	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Black (Hex)	Special Order
29-7000-108B	Kit, 4pcs, Mid Clamp F/K/G, 2.5", Black (Hex)	Special Order
29-7000-104B	Kit, 4pcs, Mid Clamp H, 2.75", Black (Hex)	Special Order
29-70TB-105B	Kit, 4pcs, Mid Clamp A/B/I, 2.00", Black (T-bolt)	Special Order
29-70TB-101B	Kit, 4pcs, Mid Clamp C/D/J/E, 2.25", Black (T-bolt)	Special Order
29-70TB-108B	Kit, 4pcs, Mid Clamp F/K/G, 2.50", Black (T-bolt)	Special Order
29-70TB-104B	Kit, 4pcs, Mid Clamp H, 2.75", Black (T-bolt)	Special Order

Bottom Mounting Clamps

When bottom Mounting PV Panels/Modules beneath IronRidge Rails, the following IronRidge Mid Clamp is required. (Note: Standard End Clamps work for both top and bottom applications).

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-7000-117	Kit, 4pcs, Under Clamp, Clear	29-7000-117 Specify as Ontario FIT When Ordering



End Clamps

End clamps are used when top-mounting modules to the top slot of either our Standard (XRS) and/or our Light (XRL) Rails (these end clamps fit both rail types). These clamps are not dependent upon the module’s mounting holes.

IronRidge End Clamps require 1.5” of rail on each end and vary in height depending on the module being mounted. Please use sizing charts (page 11) or our online Configurator (See our website, look under the ‘Tools’ tab) to determine the correct size of end clamp for your project (based on your panel selection). Also available in black anodized finish.

Black is special order, call for additional details.

Item #	Description	Ontario Canada FIT Item # *Specify as FIT Compliant When Placing Your Order (See Page 5 for Details)
29-7000-125	Kit, 4pcs, End Clamp I, 1.25", Mill	29-7000-125
29-7000-134	Kit, 4pcs, End Clamp A, 1.34", Mill	29-7000-134
29-7000-224	Kit, 4pcs, End Clamp B, 1.41", Mill	29-7000-224
29-7000-157	Kit, 4pcs, End Clamp C, 1.57", Mill	29-7000-157
29-7000-160	Kit, 4pcs, End Clamp D, 1.60", Mill	29-7000-160
29-7000-165	Kit, 4pcs, End Clamp J, 1.65", Mill	29-7000-165
29-7000-171	Kit, 4pcs, End Clamp E, 1.71", Mill	29-7000-171
29-7000-214	Kit, 4pcs, End Clamp F, 1.81", Mill	29-7000-214
29-7000-187	Kit, 4pcs, End Clamp K, 1.87", Mill	29-7000-187
29-7000-204	Kit, 4pcs, End Clamp G, 1.97", Mill	29-7000-204
29-7000-230	Kit, 4pcs, End Clamp H, 2.30", Mill	29-7000-230
29-7000-125B	Kit, 4pcs, End Clamp I, 1.25" Black	Special Order
29-7000-134B	Kit, 4pcs, End Clamp A, 1.34" Black	Special Order
29-7000-224B	Kit, 4pcs, End Clamp B, 1.41" Black	Special Order
29-7000-157B	Kit, 4pcs, End Clamp C, 1.57" Black	Special Order
29-7000-160B	Kit, 4pcs, End Clamp D, 1.60" Black	Special Order
29-7000-165B	Kit, 4pcs, End Clamp J, 1.65" Black	Special Order
29-7000-171B	Kit, 4pcs, End Clamp E, 1.71" Black	Special Order
29-7000-214B	Kit, 4pcs, End Clamp F, 1.81" Black	Special Order
29-7000-187B	Kit, 4pcs, End Clamp K, 1.87" Black	Special Order
29-7000-204B	Kit, 4pcs, End Clamp G, 1.97" Black	Special Order
29-7000-230B	Kit, 4pcs, End Clamp H, 2.30" Black	Special Order



Carport Clamp

When mounting directly to purlins, Z-bars, girts and other structural beams, our carport clamps offer the same minimalistic .25" spacing between solar modules as do our Standard and Light Rail Mid Clamps.

Item #	Description
29-7MID-CAR	Mid-clamp with 2 3/4" Press/Friction Fit Carriage Bolt; Flange Nut Included

Calculating Rail Length & Panel Clamp Size

Calculating Rail Length

Calculate total required mounting widths as follows:

Add module widths + .25" space between modules for mid clamps + 1.5" to each end for end clamping. This formula will provide you with total width of rails. *If rail splices are needed, see page 8.

For example, to mount five modules that are each 40" wide, the calculations are as follows:

- $5 \times 40" = 200"$ (account for width of modules in portrait mode)
- $4 \times .25" = 1"$ (account for width of mid-clamps between the five modules)
- $2 \times 1.5" = 3"$ (account for two end clamps on ends of rail)
- $200" + 1" + 3" = 204"$ (total length of one rail)
- Two 18' rails will be required to mount these five modules

*IronRidge stock rails lengths: 12', 14', 16', and 18'.

Calculating Panel Clamp Size

Panel clamp size is the direct result of module (solar panel) thickness. Reminder: Our Mid and End Clamps fit both IronRidge Standard (XRS) and IronRidge Light (XRL) Rails.

Module Thickness		Clamp Type	Part Numbers	
mm (ref)	Inches		End Clamp	Mid Clamp
31.0 - 32.5	1.22-1.28	I	29-7000-125	29-7000-105
33.3 - 34.8	1.31-1.37	A	29-7000-134	29-7000-105
35.1 - 36.6	1.38-1.44	B	29-7000-224	29-7000-105
39.1 - 40.6	1.54-1.60	C	29-7000-157	29-7000-101
39.9 - 41.4	1.57-1.63	D	29-7000-160	29-7000-101
41.1 - 42.7	1.62-1.68	J	29-7000-165	29-7000-101
42.7 - 44.2	1.68-1.74	E	29-7000-171	29-7000-101
45.2 - 46.7	1.78-1.84	F	29-7000-214	29-7000-108
46.7 - 48.3	1.84-1.90	K	29-7000-187	29-7000-108
49.3 - 50.8	1.94-2.00	G	29-7000-204	29-7000-108
57.7 - 59.2	2.27-2.33	H	29-7000-230	29-7000-104

Roof Mount System



IronRidge Roof Mount components are engineered to complement our rail assemblies, making IronRidge Standard and IronRidge Light Rails roof mountable. When combined, the resulting system will support virtually any commercial or residential roof mount installation, regardless of roof type or pitch.

To better serve the needs of installers, we engineer components across system categories that utilize our Standard and Light Rail assemblies.



Adjustable L-Foot

Our adjustable L-feet are engineered for most roof mounting applications. Vertical slots provide adjustability to account for roof irregularities. Our L-feet integrate easily with QuickMount and other roofing products. Our L-feet are manufactured using 6105-T5 aluminum and are also available in black anodized finish. This product works with both Standard and Light Rails.

Hardware Included

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-7000-017	Kit, Adjustable L-Foot Mill	29-70CR-017
29-7000-017B	Kit, Adjustable L-Foot Black	Special Order



Aluminum Standoffs

Our flat top two-piece Aluminum Standoffs are ideal for flush-mounted applications and are sized to integrate easily with Oatey Flashings. IronRidge Aluminum Standoffs are available in four lengths ranging from 3” to 7”. They ship pre-assembled, and include L-Foot Mounting hardware (as described on page 12).

Item #	Description
51-6003-500L	Standoff 3”, Flush Mount, Mill
51-6004-500L	Standoff 4”, Flush Mount, Mill
51-6006-500L	Standoff 6”, Flush Mount, Mill
51-6007-500L	Standoff 7”, Flush Mount, Mill



Steel Standoffs

Flat top welded steel standoffs are ideal for tilt-mounted applications and are sized to integrate easily with Oatey Flashings. Our steel Standoffs are available in 4”, 6” and 9” lengths. This product typically bolts beneath our Adjustable L-Foot product (page 12) when additional spacing is needed.

Item #	Description
51-4004-00T	Standoff 4”, Tilt Mount, Steel
51-4006-00T	Standoff 6”, Tilt Mount, Steel
51-4009-00T	Standoff 9”, Tilt Mount, Steel



Flashing

Flashing products by Oatey and QuickMount work perfectly with IronRidge products, allowing for quick, leak proof installations. Use the QuickMount Flashing for mounting directly to composition roofs, and use the Oatey Flashing with IronRidge standoffs.

Item #	Description
31-1000-000	Flashing, QuickMount 12 Pack
31-1000-001	Flashing, Oatey 12 Pack



Fixed Tilt Legs

Our Tilt Legs attach directly to IronRidge Standard (XRS) and to IronRidge Light (XRL) Rails. This simple design provides adjustability in all 3 axes, and a variety of lengths cover most angles. Each Tilt Leg Kit comes with the shorter front leg, the longer rear leg, mounting brackets and hardware. Our Tilt Legs are manufactured using 6061-T6 aluminum.

Item #	Description
51-7210-010	Tilt Leg Kit, 10", Mill
51-7215-015	Tilt Leg Kit, 15", Mill
51-7220-020	Tilt Leg Kit, 20", Mill
51-7225-025	Tilt Leg Kit, 25", Mill
51-7230-030	Tilt Leg Kit, 30", Mill
51-7240-040	Tilt Leg Kit, 40", Mill



Adjustable Tilt Leg Assembly Kits

As with our Fixed Tilt Legs, these adjustable Tilt Legs attach directly to the IronRidge Standard (XRS) and the IronRidge Light (XRL) Rails. Each Tilt Leg Assembly kit comes with the shorter fixed front leg, the longer adjustable rear leg, and all the necessary hardware. The Tilt Legs are manufactured using 6061-T6 aluminum.

Item #	Description
51-7516-016H	Adjustable Tilt Leg, 16 inches (18-22")
51-7528-028H	Adjustable Tilt Leg, 28 inches (30-46")
51-7556-056H	Adjustable Tilt Leg, 56 inches (58-94")



Wire Clips

IronRidge Wire Clips fit our Standard (XRS) and Light (XRL) Rails, and accommodate up to ten 5mm panel wires, or one MC4, one Enphase wire and one dual Enphase wire. Cast from black polycarbonate with UV protection.

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-4000-077	Wire Clip (Bag of 20)	29-4000-077

Enphase Mounting Hardware Kit

Contains hardware to mount either one or two Enphase inverters, depending on model. Each kit includes two .25" bolts and associated hardware.

Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-5003-005	Kit, 14/ x 3/4 Enphase Mounting	29-50CR-005



Grounding

Wiley grounding clips (WEEB DMC), grounding lugs, and bonding jumpers are all available. Order one grounding clip for every two top mounting clamps, one grounding lug for every rail segment, and one bonding jumper for every splice.

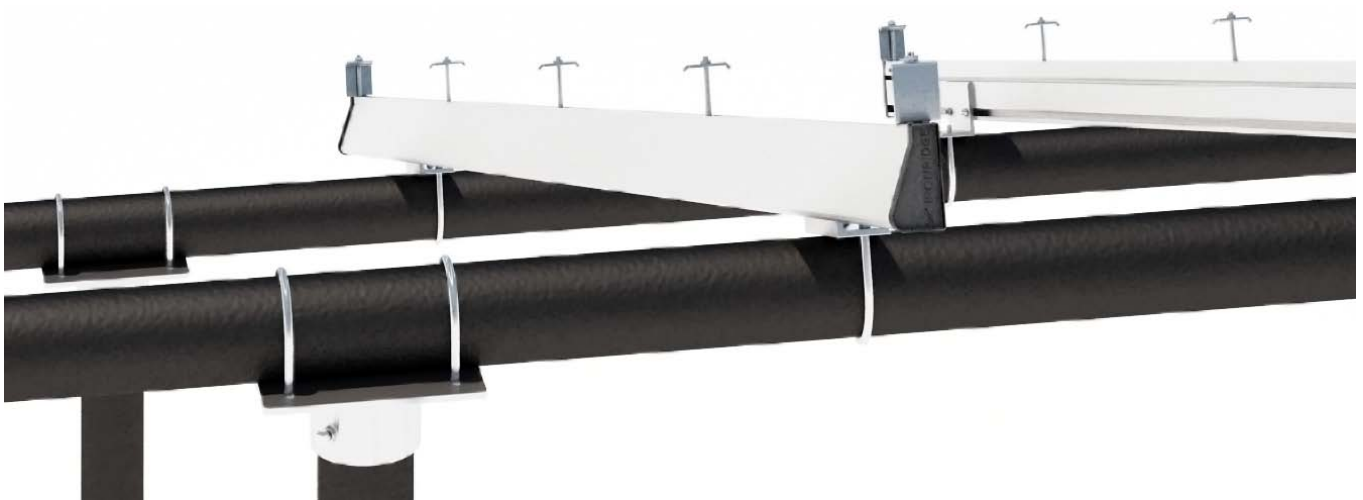
Item #	Description	Ontario Canada FIT Item # (See Page 5 for Details)
29-4000-001	WEEB DMC Compression Clip	29-4000-001
29-4000-002	WEEB Grounding Lug	29-4000-002
29-4000-003	WEEB Bonding Jumper	29-4000-003
29-4000-005	WEEB 9.5NL Grounding Clip	29-4000-005

Ground Array System



IronRidge Ground Array components are engineered to combine locally sourced 2" or 3" schedule 40 pipe with our Standard Rail (XRS) module mounting assembly to provide an intuitive, adaptable, cost effective solution.

When our Ground Array components are combined with our Standard Rail Assembly (page 7) and locally sourced 2" or 3" schedule 40 pipe (page 17), the resulting system will support virtually any commercial or residential ground array installation across a wide range of ground conditions and ground slope.



Schedule 40 Pipe c Summary

To save installers money, we have engineered the use of locally sourced 2" or 3" schedule 40 steel pipe as the primary structural element of our Ground Array System. Sourcing this pipe locally is highly advantageous for installers, as they benefit from reduced shipping costs, product and inventory costs, and shortened delivery times. We provide intuitive online tools that will help you quickly and easily craft a bill of materials that also helps simplify local pipe costing and purchasing.

A soils report is widely considered the most reliable and accurate method for determining the type and depth of piers for any ground array system. Soils reports can be obtained through a Geotechnical Engineer. A commonly relied upon alternative to obtaining a site specific soils report is to use the IBC 2006 Table 1804.2. The advantage of purchasing a site specific soils report is that the information provided often results in shorter embedment depths, thus lowering both material and installation cost.

*Always check local building codes for pier mounting requirements specific to your location.

In many cases installers rely on our easy to use PE stamped certification and post/pier installation guides that our engineering staff has made available for download.



Top Caps

Our heavy duty cast steel IronRidge Top Caps secure quickly and easily to schedule 40 pipe with 3 set screws. Available in sizes that fit either 2" or 3" schedule 40 pipe, this Top Cap supports cross (schedule 40) piping with U-bolt hardware. The top caps are manufactured using cast steel ASTM A216. As a reminder, schedule 40 pipe not included (See page 17 for more information).

2" schedule 40 pipe outside diameter = 2.375" (2 3/8")

3" schedule 40 pipe outside diameter = 3.5"

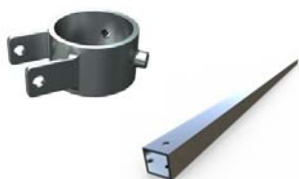
Item #	Description
70-0200-SGA	SGA Top Cap at 2"
70-0300-SGA	SGA Top Cap at 3"



Rail Connectors

Our Rail Connectors secure IronRidge Standard Rails to the schedule 40 horizontal cross pipes (see lower image on page 16). Each Standard Rail requires two connectors to create a secure attachment. Our Rail Connectors are available for both 2" and 3" sizes, and are manufactured using extruded 6105-T5 aluminum.

Item #	Description
29-7001-001	SGA Rail Connector at 2"
29-7001-000	SGA Rail Connector at 3"



Diagonal Brace Assembly Kit

This optional assembly kit is for installations that require extra support. This diagonal brace kit includes the brace, sleeves, and hardware for installation between one north and south pair of support legs.

Item #	Description
70-0200-CBR	SGA 2" (7.5') Brace Assembly (bulk)
70-0300-CBR	SGA 3" (7.5') Brace Assembly (bulk)

Pole Mount Systems



The IronRidge Pole Mount Systems offers a choice of three distinct pole mounting options, each engineered for a specific mounting scenario. The three systems include the Top of Pole Mount, Side of Pole Mount and Single - Arm Side Mount. Each assembly comes in a variety of sizes, and supports a varying number of panels.

Item #	Description
UNI-TP/02	Pole Top (4") Single Row 45" Packaged in 2 boxes
UNI-TP/02A	Pole Top (4") Single Row 55" Packaged in 2 boxes
UNI-TP/03	Pole Top (4") Single Row 70" Packaged in 2 boxes
UNI-TP/04	Pole Top (4") Single Row 90" Packaged in 3 boxes
UNI-TP/04A	Pole Top (4") Single Row 110" Packaged in 3 boxes
UNI-TP/06	Pole Top, (6") Dual Row 70" Packaged in 3 boxes
UNI-TP/06LL	Pole Top, (6") Dual Row 70" Packaged in 3 boxes
UNI-TP/08	Pole Top, (6") Dual Row 90" Packaged in 3 boxes
UNI-TP/8LL	Pole Top, (6") Dual Row 90" Packaged in 3 boxes
UNI-TP/10	Pole Top, (6") Dual Row 115" Packaged in 4 boxes
UNI-TP/10LL	Pole Top, (6") Dual Row 115" Packaged in 5 boxes
UNI-TP/12	Pole Top, (6") Dual Row 140" Packaged in 4 boxes
UNI-TP/12LL	Pole Top, (6") Dual Row 140" Packaged in 5 boxes

Top of Pole Mount



IronRidge Top Of Pole Mounts are a heavy duty mounting system ideal for single pole, multi panel arrays. Mounted atop either 4" or 6" poles, this system supports modules from most manufacturers with ease. Our Top of Pole mounts are manufactured using powder coated steel and heavy1 duty corrosion1 resistant 50521 H32 aluminum.

Schedule 40 pipe not included.

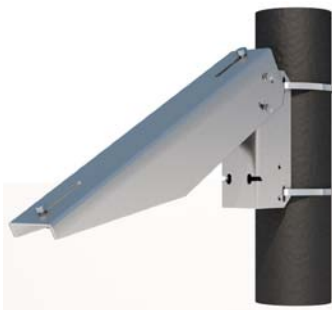


Side of Pole Mount

IronRidge Side of Pole Mounts support pole diameters of 2" to 4" and modules with center-center distribution of 19" to 39". Side of Pole Mounts are manufactured using heavy-duty corrosion-resistant 50521 H32 aluminum.

Schedule 40 pipe not included.

Item #	Description
UNI-SP/01	Side Pole Mount 25"
UNI-SP/01A	Side Pole Mount 27.5"
UNI-SP/01XH	Side Pole Mount 27.5"
UNI-SP/01XX	Side Pole Mount 30"
UNI-SP/02	Side Pole Mount 45"
UNI-SP/02A	Side Pole Mount 55"
UNI-SP/02X	Side Pole Mount 55"
UNI-SP/03	Side Pole Mount 70"



Single-Arm Side Mount

Our Single-Arm Side Mount is a simple mounting solution for poles, walls and other flat surfaces. This system mounts to poles of 2" to 4" in diameter, and module widths between 5.26 and 25.5 inches.

Our Single Arm Mounts are manufactured using heavy-duty corrosion-resistant 50521 H32 aluminum.

Item #	Description
UNI-SA/14.0	Single Arm, Side Pole 14"
UNI-SA/21.5	Single Arm, Side Pole 21.5"
UNI-SA/26.0	Single Arm, Side Pole 26"

Battery Racks & Enclosures

IronRidge offers a variety of battery racks and enclosures for off-grid battery storage applications. These products come in different sizes and support the most common types of batteries.

All IronRidge battery racks and enclosures are constructed using aluminum with white powder coat finish, and come with stainless steel hardware and latches.



Enclosures for Group 27/31 Batteries



Econobox

The Econobox comes with an easy slide-off cover and can store a single Group 27/31 battery. The Econobox can easily be mounted on a pole using the optional pole mount kit (see below).



LCF01

The LCF01 holds a single Group 27/31 battery. This style enclosure also has a removable control panel, full-length piano hinges, and includes a stainless steel pad-lockable compression latch. The LCF01 uses passive ventilation and is NEMA 3R equivalent.



LCF02

The LCF02 holds two Group 27/31 batteries. This style enclosure also has a removable control panel, full-length piano hinges, and includes a stainless steel pad-lockable compression latch. The LCF02 uses passive ventilation and is NEMA 3R equivalent.

Item #	Name	Description
55-2501-010	Econobox	Holds 1 Group 27/31 Battery
55-0100-100	LCF-01A	Holds 1 Group 27/31 Battery
55-0100-102	LCF-02A	Holds 2 Group 27/31 Batteries

Large Enclosures for Group 27/31 Batteries



1624BE-04A

The 1624BE -04A, which can hold 4 Group 27/31 batteries, has removable control panels, full length piano hinges, and stainless steel tumbler style latches. This enclosure has removable doors and trays, passive ventilation, and is NEMA 3R equivalent.



OES-431

Like the 1624BE -04A, the OES-431 can hold 4 Group 27/31 batteries. This enclosure also has a removable door and control panels. In addition, the stainless steel compression latch is pad-lockable for extra security. The OES-431 has passive ventilation and is NEMA 3R equivalent.

Item #	Name	Description
55-2003-431	OES-431	Holds 4 Group 27/31 Batteries
55-1624-421	1624BE-04A	Holds 4 Group 27/31 Batteries

Enclosures & Racks for 8D Batteries



BEE Series Enclosures

The BEE Series Enclosures hold quantities of 2–6 Group 8D batteries. These enclosures can be either shelf or floor mounted and provide electrical knockouts in convenient locations. All BEE Series Enclosures come standard with passive ventilation and are NEMA 3R equivalent.

Item #	Name	Description
55-2700-200	BEE8D-02A	Holds 2 Group 8D Batteries
55-2700-410	BEE8D-04A	Holds 4 Group 8D Batteries
55-2700-600	BEE8D-06A	Holds 6 Group 8D Batteries

Knock Down Battery Rack



The KDR (Knock Down Battery Rack) is an open-air rack solution for storing up to eight 8D batteries. This floor-mounted unit has an optional cover kit available, and is packaged unassembled to reduce shipping costs.

Item #	Name	Description
57-0880-010	KDR-88D	Holds 8 8D Batteries
57-2008-010	88D Cover	Optional cover kit for KDR-88D

Enclosure Pole Mount Kit



The Enclosure Pole Mount Kit is an optional accessory that can mount any of the Group 27/31 battery enclosures including the Econobox, LCF01A, LCF02A, 1624BE-04A, and the OES-431.

Schedule 40 Pipe Not Included.

This kit is available for 2", 3", 4", and 6" nominal schedule 40 pipe sizes.

Item #	Name	Description
29-5010-115	PMK-2	Mounts Enclosure on 2" Pole
29-5010-116	PMK-3	Mounts Enclosure on 3" Pole
29-5010-117	PMK-4	Mounts Enclosure on 4" Pole
29-5010-118	PMK-6	Mounts Enclosure on 6" Pole

SOLAR MOUNTING MADE SIMPLE