Support Systems for Rooftop Building Services



PROTECT THE ROOF. PROTECT THE WARRANTY. PROTECT THE ENVIRONMENT.



WHY ECOFOOT?

The design of the EcoFoot was derived from necessity. Our design team consulted with members of the trade; including: equipment installers, contractors, mechanical engineers and roofing consultants. We asked them what they liked, and more importantly, what they disliked about the current support products they used. The feedback was unanimous.

Every user wanted a more versatile support, providing more options and easier installation. An overwhelming majority wanted a product that was locally manufactured and eco-friendly. This lead to the design of the EcoFoot.

Our engineering team designed a support with a larger overall dimension than the marketplace standard – providing greater rooftop protection and added stability. With the adaptability of threaded rod and strut, both horizontal and vertical adaptations are easily attainable. The possibilities of the EcoFoot are endless.

The greatest downfall of non-penetrative supports is the applicability of wind-loading and seismic-loading capabilities. So, our team has designed a solution.

With increased market pressure for low cost support solutions, many manufacturers resort to sourcing their products off-shore. We proudly support our local economy by sourcing, designing and building EcoFoot from North American raw materials, in Canada.

We were not just satisfied with only supporting our local economy, we also wanted to protect our environment. Utilizing recycled materials is a staple in the manufacturing process. However, we've gone even further in utilizing cleaner production methods, producing less waste, using fewer chemicals.

EcoFoot is the wise choice!

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WHAT ARE YOU SUPPORTING?

	PIPE	DUCT	SMALL EQUIPMENT	LARGE EQUIPMENT	PERSONNEL
EcoBlok	 ✓ 				
Quick Frame 120		 			
Quick Frame 175		 			
Mini Frame			~		
EcoFrame				~	
EcoFrame XL				~	
Heavy Frame				~	
Safety Walk					~
Safety Stairs					~



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QUICK FRAME 120

for supporting cable tray, pipework systems and ductwork runs

DESCRIPTION:

The QuickFrame 120 is an economical support solution for lighter weight rooftop supports. It's built to accommodate 1/2" threaded rod, or 1-5/8" strut off the shelf. Installers can customize their required supports on site. This allows for the most flexible solutions and ease of setup. The non-penetrative design spreads out the weight load, keeping the roofing membrane safe and decking/ insulation below free of damage. For heavier weight loads we recommend the QuickFrame 175.

SPECIFICATION REFERENCE:

Product to be supported on EcoFoot QuickFrame 120. Designed to accept 1-5/8" x 1-5/8" strut, complete with 12" x 12" non-penetrative UV stabilized bases. Product is made of HDPE and glass fiber fill. Product is manufactured in an eco-friendly method, minimizing waste and environmental impact. EcoFoot QuickFrame 120 to rest on UV stabilized recycled pre-polymer bound rubber mats.







QUICK FRAME 175

for supporting cable tray, pipework systems and ductwork runs

DESCRIPTION:

The Quick Frame is designed with simplicity in mind. It's built to accommodate standard 1/2" threaded rod, or 1-5/8" strut off the shelf. Installers can customize their required support on site. This allows for the most flexible solutions and ease of setup. The non-penetrative design spreads out the weight load, keeping the roofing membrane safe and decking/insulation below free of damage. For installations requiring seismic bracing or extreme wind loading, the EcoFoot Roof Lock can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.

SPECIFICATION REFERENCE:

Product to be supported on EcoFoot Quick Frame support kits, Designed to accept 1-5/8" x 1-5/8" strut, complete with 171/2" x 171/2" non-penetrative UV stabilized bases. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. EcoFoot Quick Frame to rest on North American manufactured UV stabilized recycled pre-polymer bound rubber mats. Quick Frame supplied with galvanized finish pre-formed brackets and fixings of mild steel with hot dip galvanized finish. Quick Frame is non-penetrative and is designed to avoid roof membrane penetration.







QUICK FRAME ROOF LOCK

the solution for seismic and wind loading installations

DESCRIPTION:

The EcoFoot Quick Frame Roof Lock is designed for installations that cannot accommodate non-penetrative supports to satisfy code. The design creates a protective seal on 3 points – the perimeter, the bottom and the penetration. Using 5 steps, a leak free seismic solution can be achieved.

ROOF LOCK OPTIONS:

The kit is designed to be secured to the structure in **5 steps** to create a safe and leak-free solution. Tethering systems are also often used to secure the strut to the rooftop avoiding membrane penetrations. This is a popular option, especially if a roof anchor is already present.



NOTE: Quick Frame Rook Lock application is only for use with QF-175 (Consult a Structural Engineer to confirm.)







MINI FRAME for supporting small VRV/VRF and HVAC units

DESCRIPTION:

The MiniFrame is designed for supporting small equipment. This is perfect for units weighing less than 250lbs. It is designed to securely support all types equipment on membrane roofs without the need for cutting holes, pouring concrete bases or making any modifications to the roofing membrane. This method is not only less labor intensive, but also a much more versatile solution for on-site modifications and fine adjustments. The mini frame is made of 2" x 2" square tube. The non-penetrative design spreads out the weight load, keeping the roofing membrane safe and decking/insulation below free of damage.

SPECIFICATION REFERENCE:

Product to be supported on EcoFoot MiniFrame. Metal framework construction of a of 2" x 2", mild steel with electroplated zinc coating, 42" wide x 18" high, supported by 17.5" x 17.5" non-penetrative UV stabilized EcoFoot bases. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. EcoFoot bases to rest on North American manufactured UV stabilized recycled prepolymer bound rubber mats. Product supplied flat packed with assembly instructions. MiniFrame is non-penetrative and is designed to avoid roof membrane penetration.







ECOFRAME

for supporting VRV/VRF and other HVAC units

DESCRIPTION:

The EcoFrame is designed to securely support all types of equipment on membrane roofs without the need for cutting holes, pouring concrete bases or making any modifications to the roofing membrane. This method is not only less labour intensive, but also a much more versatile solution for onsite modifications and fine adjustments. Each leg is height adjustable to account for unlevel roof surfaces, ensuring the equipment sits level for optimum operation.

The design of the saddle-style expansion joint allows for easy modification for larger equipment, or EcoFrame expansion. The non-penetrative design spreads the weight load, keeping the roofing membrane safe and decking/ insulation below free of damage. For installations requiring seismic bracing or extreme wind loading, the EcoFrame Roof Lock can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.

SPECIFICATION REFERENCE:

Product to be supported on EcoFrame support framework. Metal framework construction of 2" x 2" square tube mild steel with electroplated zinc coating, including height adjustable leg assemblies and and fittings supported by 17.5" x 17.5" non-penetrative UV stabilized EcoFoot bases. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. EcoFoot bases to rest on North American manufactured UV stabilized recycled pre-polymer bound rubber mats. Product supplied flat packed with assembly instructions. EcoFrame is non-penetrative and is designed to avoid roof membrane penetration.





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ECOFRAME XL

for supporting large VRV/VRF and other HVAC units

DESCRIPTION:

The EcoFrame XL is designed as a wider alternative to the standard EcoFrame. This is often used when larger equipment is being mounted or multiple units are being mounted in a cluster, instead of a row. The EcoFrame XL has longer and deeper cross bars to account for the added deflection of the equipment weight. It is designed to securely support all types equipment on

membrane roofs without the need for cutting holes, pouring concrete bases or making any modifications to the roofing membrane. This method is not only less labor intensive, but also a much more versatile solution for on-site modifications and fine adjustments. Each leg is height adjustable to account for uneven roof surfaces, ensuring the equipment sits level for optimum operation. The design of the saddle-style expansion joint allows for easy modification for larger equipment, or future expansions. The non-penetrative design spreads out the weight load, keeping the roofing membrane safe and decking/

insulation below free of damage. For installations requiring seismic bracing or extreme wind loading, the EcoFrame Roof Lock Kit can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.

SPECIFICATION REFERENCE:

Product to be supported on EcoFrame support framework. Metal framework construction of a combination of 2"x2" and 2"x3" tube, mild steel with electroplated zinc coating, including height adjustable leg assemblies and fittings supported by 17.5" x 17.5" non-penetrative UV stabilized EcoFoot bases. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. EcoFoot bases to rest on North American manufactured UV stabilized recycled prepolymer bound rubber mats. Product supplied flat packed with assembly instructions. EcoFrame XL is non-penetrative and is designed to avoid roof membrane penetration.





HEAVY FRAME

for large equipment, chillers etc.

DESCRIPTION:

The EcoFoot Heavy Frame is designed for the heaviest of support requirements. It's the solution to avoiding the need for concrete casting during construction. The EcoFoot Heavy Frame can accommodate I-beams as a rail support for large equipment. Each leg is height adjustable to account for unlevel roof surfaces, ensuring the equipment sits level for optimum operation. For installations requiring seismic bracing or extreme wind loading, the EcoFoot Roof Lock Kit can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.

SPECIFICATION REFERENCE:

Product to be supported on EcoFoot Heavy Frame. Metal framework construction of 2" x 2" square tube mild steel with electroplated zinc coating, height adjustable leg assemblies and and fittings supported by 17.5" x 17.5" non-penetrative UV stabilized EcoFoot bases. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. EcoFoot bases to rest on North American manufactured UV stabilized recycled pre-polymer bound rubber mats. Heavy Frame is non-penetrative and is designed to avoid roof membrane penetration.







ECOFRAME WINGS

designed for extra support, and to stop flight

DESCRIPTION:

The EcoFoot base is 50% larger than the industry standard, this gives us the ability to support heavier loads on rooftops with fewer EcoFoot bases required. This reduces material and labor costs. We have added wings on the leg assemblies to serve 2 purposes:

- 1. Added lateral stability across the reinforcement ribs in the EcoFoot base.
- 2. Can be secured to the EcoFoot base with a 1/2" x 3/4" bolt. This is useful in installations where seismic and/or wind loading is a factor.

SIDE VIEW OF WING





ECOFRAME ROOF LOCK

the solution for seismic and wind loading installations

DESCRIPTION:

The EcoFrame Roof Lock is designed for installations that cannot accommodate non-penetrative supports to satisfy code. The design creates a protective seal on 3 points – the perimeter, the bottom and the penetration. Using 5 steps, a safe, simple, leak free seismic solution can be achieved.

SPECIFICATION REFERENCE:

See the **5** installation steps on page 6 to create a safe and leak-free solution. There is also a tab at the top of the leg assembly which can tether to seismic tie-downs.









ECOFRAME ROOF LOCK 21



SAFETY STAIRS

for safe access over existing equipment and services

DESCRIPTION:

The EcoFoot Safety Stairs are designed to provide safe access over rooftop equipment and services. Designed for simple installation and rapid assembly, the EcoFoot Safety Stairs take less than an hour to completely assemble. The only tool required is an adjustable wrench. The design can be customized by the number of stairs required for vertical clearance and the platform for horizontal clearance.

SPECIFICATION REFERENCE:

EcoFoot Safety Stairs to be installed, constructed of 2x2" box section and flat plate mild steel, hot dipped galvanized finished with open grid landings and stair treads. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. Metalwork to be supported by North American designed and manufactured UV stabilized 17.5" x 17.5" EcoFoot bases, with height adjustable electroplated zinc leg assemblies and spun galvanized finish fixings. EcoFoot bases to rest on North American manufactured UV stabilized recycled pre-polymer bound rubber mats. Safety Stairs are nonpenetrative and are designed to avoid roof membrane penetration.

For installations requiring seismic bracing or extreme wind loading, the EcoFoot Roof Lock Kit can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.







SAFETY WALK

for safe, secure personnel access

DESCRIPTION:

The EcoFoot Safety Walk provides a clear route for rooftop traffic and is designed for quick, non-penetrative installation. Utilizing two main components, a custom pathway can be designed by using stock products. The only thing required for installation is a wrench. No cutting, no welding... simple! For installations requiring seismic bracing or extreme wind loading, the EcoFoot Roof Lock can be used to secure the base safely to the rooftop while satisfying requirements and producing a safe, secure water-tight seal to avoid roof leaks.

SPECIFICATION REFERENCE:

EcoFoot Safety Walk to be installed, constructed of 2x2" box section and flat plate mild steel, hot dipped galvanized finished with open grid landings and stair treads. Product is North American engineered and manufactured from local raw materials in an eco-friendly method, minimizing waste and environmental impact. Metalwork to be supported by North American designed and manufactured UV stabilized 17.5" x 17.5" EcoFoot bases. EcoFoot bases rest on North American manufactured UV stabilized

recycled pre-polymer bound rubber mats. Safety Walk is non-penetrative and designed to avoid roof membrane penetration.







ECOBLOK for light support solutions

DESCRIPTION:

The EcoBlok is designed for applications with light support requirements. It's an eco friendly solution to using lumber and other miscellaneous supports below pipe and small equipment on rooftops. The EcoBlok can accommodate standard 1-5/8" strut, for all accessories and standard fittings. Each EcoBlok is made from recycled tires and UV stabilized for long lasting support. The design and materials of the EcoBlok provide vibration dampening, perfect for protecting the rooftop and reducing vibration noise below.

SPECIFICATION REFERENCE:

Product to be supported on EcoBlok, made from 100% recycled Canadian content. Product designed to adapt to 1-5/8" strut, secured to block by nut and bolt (glue and adhesive – not sufficient and not accepted). EcoBlok is UV stabilized and non-penetrative for longevity and roof membrane protection. The EcoBlok is constructed from a hot compression moulded process combining granulated ambient SBR 8-20 mesh, mixed with UV stabilized binding agent. Product confirms to USA Standard ASTMF F 1292-99. Each block is designed to support a load of 100 lbs for safe roof loading. For larger loads, multiple EcoBloks can be combined for for greater weight dispersion.

DIMENSIONS:





MAX. ROOFTOP LOADING	UNIFORM LOADS
100 lbs	350 lbs
150 lbs	525 lbs
75 lbs	200 lbs
200 lbs	700 lbs
325 lbs	1,150 lbs
500 lbs	1,750 lbs
	MAX. ROOFTOP LOADING 100 lbs 150 lbs 75 lbs 200 lbs 325 lbs 500 lbs

*Includes: (2) x EB40S + (2) x Fixing Bolt Kits

ECOBLOK



CHEMICAL PROPERTIES – EF120

Polypropylene Co-polymer SM20CP

VALUE	TEST METHOD
.9	D1505
20	D1238
3,500 Psi	D-638
7 %	D-638
168,000 Psi	D-790
2.6	D-256
1.4%	
	VALUE .9 20 3,500 Psi 7 % 168,000 Psi 2.6 1.4%

DIMENSIONS:

12" x 12" x 4" (L x W x H)

ECOFOOT BASE RECOMMENDED WORKING CONDITIONS:

-50°C / -58°F to +83°C / 181°F







CHEMICAL PROPERTIES



CHEMICAL PROPERTIES – EF175

Polypropylene Co-polymer SM20CP

PROPERTY	VALUE	TEST METHOD
Density g/cm ³	.9	D1505
Melt Index ³ g/10min	20	D1238
Tensile Strength, Yield	3,500 Psi	D-638
Elongation at Break	7 %	D-638
Flexural Modulus	168,000 Psi	D-790
Izod	2.6	D-256
Shrinkage	1.4%	

DIMENSIONS:

17-½" x 17-½" x 3" (L x W x H)

ECOFOOT BASE RECOMMENDED WORKING CONDITIONS:

-50°C / -58°F to +83°C / 181°F









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