

CONNECT AND PROTECT

nVent CADDY Pyramid

Rooftop Support System



Plumbing & HVAC Applications







WHY BUY NVENT CADDY PYRAMID

For Engineers and Consultants:

CHALLENGE:

- Properly support heavy loads
- Minimize the chance of point loading or abrading the roof membrane
- Ensure chemical compatibility with anything you place on the roof membrane

PYRAMID SOLUTION:

- Pyramid offers a broad portfolio compatible with most roof surfaces, including single-ply, bituminous, metal and spray foam
- Pyramid provides excellent load distribution with some of the industry's best load ratings
- Pyramid minimizes point loading and roof abrasion
- Pyramid is UV stable, corrosion resistant, and durable over an extensive temperature range

Electrical Applications



Equipment Support Applications





WHY BUY PYRAMID

For Building Owners:



WHY BUY PYRAMID

For Contractors and Installers:

CHALLENGE:

- Roofs not only protect some of the most valuable assets, they often represent a significant cost to replace and maintain
- Substandard materials and methods can increase the chance of roof damage
- Increasingly, roofs are seen as prime real estate and are being utilized for equipment placement, alternative energy systems, and as green space

PYRAMID SOLUTION:

- Pyramid is extremely roof compatible
- Pyramid is designed to minimize the chance of damage to roofs
- Pyramid is fast and easy to install, minimizing costs
- Pyramid provides an aesthetically pleasing, flexible engineered solution designed to meet the challenges of densely populated roofs

CHALLENGE:

- Meet the project scope and stay within budget
- Provide a high quality installation
- Need a fast and easy to install solution
- Adapt to a broad range of applications and roof materials

PYRAMID SOLUTION:

- Pyramid is designed to get installers on and off the roof quickly
- Pyramid creates an aesthetically pleasing, high quality solution
- Pyramid offers a broad portfolio of solutions that simplify material management

Pyramid rooftop supports are a surface mounted solution for supporting electrical and mechanical applications on a variety of roof surfaces.

They offer superior load capacity and dramatically reduce installation time by replacing slow, heavy and labor-intensive methods for support of pipe, conduit, duct, cable tray and equipment.

Unlike wood blocks, Pyramid supports are specifically designed for rooftop applications, incorporating unique materials and finishes that protect roof membranes and provide superior corrosion protection.



"Our clients' roofs are a significant investment. Protecting these assets requires the use of engineered solutions that can withstand the test of time, which is why we have standardized on the Pyramid family of roof top supports."

> Chris Denman, Vice President and Partner Roof Management, LLC

Load Rating

- Fewer supports required for the same load
- · Less material, less labor

Distribution

- Minimizes point loading and stress concentrations
- · Reduces likelihood of roof membrane damage

Foam Bottom

- Provides roof membrane compatibility
- · Eliminates the need for a separation sheet

More than 14 years of designing and building high-quality rooftop support solutions

· Continuously innovating for over 110 years

nvent CADDY Quality

Rooftop Supports: Load Distribution

	52 kg	159 kg	227 kg	259 kg	349 kg	454 kg	Kg/cm²
							0.14
Product P	0 0		3.5	3 6		X	0.28
Product BF	•				X	X	0.42
				<u> </u>			0.56
Product BL					and other alternati were tested at val		0.70
Wood 4 x 4				loads usir mat. Thes static load membran findings f	the e roof	0.84	
				superio	en load, Pyramid or or load distribution Ilternatives		0.98
Product RB			X	range omany a	is a superior roof	n	1.12
Product M		X	X				1.27

X Product does not support load ratings at this level

nVent CADDY Pyramid ST Strut-Based Supports

Pyramid ST Strut-Based Supports offer an ideal solution for mounting electrical and mechanical applications to strut. Superior load distribution and a low abrasion foam interface combine to ensure that the roof membrane is protected despite varying roof surfaces and shifting caused by expansion and contraction.

- Provides superior load distribution, even with varying rooftop surfaces
- Ready to use out of the box, saving installation time and labor
- Compatible with roof surfaces including single ply, bituminous, metal and spray foam
- Foam bottom offers low abrasion interface for better roof membrane protection
- Hot-dip galvanized and UV stabilized for long lasting performance



PYRAMID ST FIXED STRUT SUPPORTS

Provides a fixed-height mounting platform with 152 mm, 254 mm, or 457 mm of usable strut length.

- Provides superior support for pipe, conduit, duct, cable tray and equipment
- Multiple sizes and load ratings offer the ability to tailor the solution to the application
- · Easy to transport to the roof

Material: Polyethylene, Polypropylene, Steel Finish: Hot-dip galvanized Temperature: -45 to 65°C Static Load Safety Factor: 3:1

Part Number	Article Number	Strut Length	Height	Static Load
PSF6C	360463	152 mm	122 mm	1,334 N
PSF10C	360464	254 mm	122 mm	4,450 N
PSF10D	360465	254 mm	163 mm	4,450 N
PSF16C	360466	406 mm	122 mm	6,670 N
PSF16D	360467	406 mm	163 mm	6,670 N





PYRAMID ST ADJUSTABLE STRUT SUPPORTS

Allows elevation changes of up to 457 mm off the roof surface with 254 mm or 406 mm of usable strut length.

- Height adjustability provides effective navigation of pipe, conduit, duct and cable tray around obstructions
- Multiple sizes and load ratings offer the ability to tailor the solution to the application

Material: Polyethylene, Polypropylene, Steel Finish: Hot-dip galvanized Temperature: –45 to 65°C Static Load Safety Factor: 3:1

Part Number			Height	Static Load
PSA10CH13	360468	254 mm	152 – 330 mm	4,450 N
PSA16AH18	360469	406 mm	178 – 457 mm	6,670 N



PYRAMID ST BRIDGE ASSEMBLIES

Provides a fixed-height mounting platform off the roof surface with 610 mm to 1524 mm of usable strut length.

- Ideal for supporting multiple pipe runs, cable tray and air handling units
- Multiple sizes and load ratings offer the ability to tailor the solution to the application

Material: Polyethylene, Polypropylene, Steel Finish: Hot-dip galvanized Temperature: -45 to 65°C Static Load Safety Factor: 3:1

Part Number	Article Number	Strut Length	Height	Static Load
PSB24A	360475	610 mm	142 mm	8,900 N
PSB30A	360476	762 mm	142 mm	8,900 N
PSB36A	360477	914 mm	142 mm	8,900 N
PSB42A	360478	1,067 mm	142 mm	13,340 N
PSB48A	360479	1,219 mm	142 mm	13,340 N
PSB60A	360480	1,524 mm	142 mm	13,340 N

Static loads are assumed to be uniformly distributed.



Pyramid H-Frame

Pyramid H-Frame Series Support System is a fast and economical solution for a variety of rooftop applications where support height and width exceed those of the Pyramid ST or Pyramid RL series. It provides an ideal support solution for duct, large diameter pipe or cable tray. Superior load distribution and a low abrasion foam interface combine to ensure that the roof membrane is protected despite varying roof surfaces and shifting caused by expansion and contraction.

- Foam or rubber bottom offers low abrasion interface for better roof membrane protection
- Compatible with roof surfaces including single ply, bituminous, metal and spray foam
- Provides superior load distribution, even with varying rooftop surfaces
- Rubber rooftop interface ideal for solar panel array installations
- Hot-dip galvanized and UV stabilized for long lasting performance
- · Accepts standard strut channels

PYRAMID H-FRAME POST BASE

Mounting hardware pre-installed in bases

Material: Polyethylene, Polypropylene, Steel Finish: Hot-dip galvanized Temperature: -34 to 54°C Static Load Safety Factor: 3:1 Strut Type: A

Part Number	Article Number	Rooftop Interface	Height	Length / Width	Static Load
PHB	360422	Foam	117 mm	314 mm	3,335 N
PHBR	360423	Rubber	118 mm	314 mm	3,335 N

PYRAMID H-FRAME KIT

 Kit includes 2 post bases with pre-installed mounting hardware,
6 bolts, 6 strut nuts, and 2 L-brackets to complete H-frame

Material: Polyethylene, Polypropylene Temperature: –34 to 54°C Static Load Safety Factor: 3:1 Strut Type: A

Part Number	Article Number	Rooftop Interface	Height	Length / Width	Static Load
PHK	360420	Foam	117 mm	314 mm	6,670 N
PHKR	360421	Rubber	118 mm	314 mm	6,670 N

Static load represents 3,335 N per post base. The end user must select and evaluate the strut framing to ensure the assembled H-frame can properly support the applied load.

SUPPORT ACCESSORY:



Material: Steel

Finish: Hot-dip

galvanized

Pyramid H-Frame Hardware Kit

 Kit includes 6 bolts, 6 strut nuts, and 2 L-brackets to build custom multi-tier H-frame assemblies

Part	Article	Screw
Number	Number	Diameter
HFRMHDW	360424	M12



Pyramid Equipment Supports

Pyramid Equipment Support is a fast, flexible and innovative system for supporting heavy-duty mechanical services on rooftop surfaces. Superior load distribution and a low abrasion foam interface combine to ensure that the roof membrane is protected despite varying roof surfaces and shifting caused by expansion and contraction.

- · Kit includes post-base assemblies, frame and equipmentsupport clamps
- · Assembles and adjusts to size and height in minutes by one person with one tool
- Innovative crossbar and equipment-support clamps enable quick assembly
- Integral foam pad provides gentle interface for all roof types
- · Hot-dip galvanized and UV stabilized for long lasting performance
- Assembled support can be lifted as one unit and easily relocated



PYRAMID EQUIPMENT SUPPORT KIT. 4 POST BASE

Includes all post bases, hardware and framing needed for an out of the box solution to construct a 1 m equipment support.

Material: Steel, Polypropylene, Polyethylene

Finish: Hot-dip galvanized Temperature: -34 to 54°C Height: 305 – 457 mm Length: 1,257 mm Post Base: 314 mm

	Article Number		Width	Surface Area	Ultimate Static Load
PEK4B	360426	4 pc	1,588 mm	0.36 m²	4,980 N

Static load must be stable and uniformly distributed across frame.



PYRAMID EQUIPMENT SUPPORT FRAME EXTENSION KIT

- Allows creation of custom equipment support lengths by attaching the Pyramid Extension Kit in series to a Pyramid Equipment Support Kit
- · Kit includes two post-base assemblies, frame and equipment-support clamps for easy attachment to a Pyramid Equipment Support Kit
- · Square tube and cross bars provide superior load and deflection capabilities over standard strut profiles
- · Assembles and adjusts to size and height in minutes by one person with one tool
- Innovative crossbar and equipment-support clamps enable quick assembly
- Integral foam pad provides gentle interface for all roof types
- · Hot-dip galvanized finish provides superior corrosion protection

Material: Steel, Polypropylene, Polyethylene Finish: Hot-dip galvanized Temperature: -34 to 54°C Height: 305 - 457 mm

Length: 1,588 mm Post Base: 314 mm

	Article Number		Width	Surface Area	Ultimate Static Load
PEKEF	360493	2 pc	1,257 mm	0.18 m	4,980 N

Static load must be stable and uniformly distributed across frame. Pyramid Equipment Support Frame Extension must be used in conjunction with a Pyramid Equipment Support Kit.



PYRAMID EQUIPMENT SUPPORT KIT, 6 POST BASE

Includes all post bases, hardware and framing needed for an out of the box solution to construct a 2 m equipment support.

Material: Steel; Polypropylene; Polyethylene

Finish: Hot-Dip Galvanized Temperature: -34 to 54°C Height: 305 – 457 mm Length: 2,172 mm Post Base: 314 mm

Part Number	Article Number	Post Base	Width	Surface Area	Ultimate Static Load
PEK6B	360427	6 рс	1,588 mm	0.56 m ²	9,960 N

Static load must be stable and uniformly distributed across frame.

"Labor represents over 50%

of the costs on our projects. We chose to standardize on Pyramid Equipment Supports for our air handling unit installations, because one person can easily assemble and locate the support unit where required on the roof. This is a very well designed product that saves installation time & keeps me under budget."

Ulf Engel, Dipl. -Ing. (FH) | ROKO-Klimatechnik

Pyramid Equipment Supports



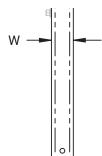
PYRAMID EQUIPMENT SUPPORT HEIGHT EXTENSION

Height extension used to lift the frame up to 914 mm off the roof surface.



• Inserts directly into Pyramid Equipment Support Bases

Material: Steel Finish: Hot-Dip Galvanized



Part Number	Article Number	H Height	A Post Base Height with Extension	W Width
PEH31	360494	568 mm	762 – 914 mm	60 mm

PYRAMID EQUIPMENT SUPPORT POST BASE

Individual post base with height adjustable leg 305 to 457 mm gives you the flexibility to create your own equipment support with strut.

- Ideal for use with strut channel type A and U-shaped brackets to create custom equipment supports
- · Height adjustable
- Innovative base design evenly distributes load to help prevent damage to roof membrane
- Base is manufactured from UV-stabilized thermoplastic material

Material: Steel, Polypropylene, Polyethylene Finish: Hot-dip galvanized Temperature: -34 to 54°C Static Load Safety Factor: 3:1

	Article Number	Height	Length / Width		Static Load
PEB	360425	305 – 457 mm	314 mm	0.09 m ²	3,340 N

SUPPORT ACCESSORY:



Pyramid Equipment Support Clamp

Clamp to secure heavy-duty mechanical equipment when creating a custom frame out of strut.

- Ideal for use with strut channel type A and square tube to create custom equipment supports
- · Slotted design offers fast and easy installation

Material: Steel Finish: Hot-dip galvanized

Part	Article	Strut
Number	Number	Type
PEC	360428	А



Pyramid EZ Rubber-Based Supports







Feature a wide platform base design to provide reliable support and distribute load across roof surface. These versatile supports are fast and easy to install compared to wood blocks and metal straps.

- Quick height adjustment accommodates for uneven roofs or sloped condensate lines
- No tools or fasteners needed; fast snap-on installation
- · Design sheds water and helps reduce pipe corrosion
- Roof-friendly; made of UV-stabilized EPDM material

Material: EPDM-SBR rubber

Part Number	Article Number	NB / DN	Height	Ultimate Static Load
RPSE1H24	182365	25	45 – 102 mm	756 N
RPSE1H57	182370	25	127 – 178 mm	756 N
RPSE2H46	182375	50	102 – 152 mm	1,112 N
RPSE4H46	182380	100	100 – 150 mm	3,920 N

Ultimate load at 6.35 mm deflection. Contact project or roofing engineer for maximum allowable load on individual project roof system.

"As a roofing membrane manufacturer, the products that we choose for our own roof must reflect the same level of quality and durability as our brand. We chose the Pyramid EZ Series Rooftop Support System during our office roof renovation to replace the original wood blocks that held up the gas lines. They were economical, simple to install, and contributed to the general aesthetics of the roof. Just like our installing contractor said, 'These nVent CADDY Supports are pretty sweet!'"

Jerry Beall, Product and Technical Specialist FiberTite Roofing Systems, Seaman Corporation



Pyramid Universal Support





- Captive stainless steel nuts allow for custom attachment methods to the support base including easy attachment of stainless steel strut, threaded rod or other project-specific hardware
- · Foam bottom offers low abrasion interface for better roof membrane protection
- · Compatible with roof surfaces including single ply, bituminous, metal and spray foam
- · Provides superior load distribution, even with varying rooftop surfaces
- Multiple sizes and load ratings offer the ability to tailor the solution to the application
- Base is manufactured from UV-stabilized thermoplastic

Material: Polyethylene; Polypropylene; Stainless Steel 18-8 Temperature: -45 to 65°C

Static Load Safety Factor: 3:1 Height: 101.6 mm

Part Number	Article Number	Length	Width	Thread Size	Ultimate Static Load
PBU6	360495	203.0 mm	152 mm	(3) M10	1,334 N
PBU10	360496	317.5 mm	203 mm	(2) M10	4,450 N
PBU16	360497	483.0 mm	203 mm	(2) M10	6,670 N

"The Pyramid family allows us to streamline our project operations while delivering an aesthetically pleasing product for our clients."

> Kyle Laubach, VP of Operations **Environmental Roofing and Waterproofing**

Pyramid 25 Pipe and Conduit Support









- · Lightweight plastic construction
- · UV resistant, designed and tested for outdoor use
- · No tools or fasteners needed for installation
- Rounded edges to help protect the roof membrane

Material: Acrylonitrile Butadiene Styrene

Part Number	Article Number	Height	Static Load
PPRPS25H4	182450	112.7 mm	111 N
PPRPS25H6	182460	163.5 mm	111 N



Pyramid Tool-Free Supports

The Pyramid Tool-Free series offers a unique labor saving solution for supporting electrical and mechanical applications on a variety of roof surfaces. The Pyramid Tool-Free series restrains pipe and conduit without the need for strut clamps or installation tools. Superior load distribution and a low abrasion foam interface combine to ensure that the roof membrane is protected despite varying roof surfaces and shifting caused by expansion and contraction.

SUPPORT ACCESSORY:



Pyramid Tool-Free Clamp

Two sizes of clamps allow for outside pipe diameters between 0.50" - 2.38" $(12.7 - 60.3 \, \text{mm}) \text{ to}$ be restrained on top of the Pyramid Tool-Free series base.

- · Clamps install without the need for additional tools or strut clamps
- · Clamps come in two different sizes to fit project needs
- Plastic clamps and base will not corrode pipe

Material: Nylon Temperature: -50 to 150°F

Part Number	Article Number	Pipe Diameter
PTF1C	360484	12.7 – 22.4 mm
PTF2C	360485	21.3 – 60.3 mm



PYRAMID TOOL-FREE SUPPORT KIT

Provides a fixed height support 4" (102 mm) off the roof surface for outside pipe diameters between 0.50" - 2.38" (12.7 – 60.3 mm). Kits come in 5.5", 10" or 16" (140 mm, 254 mm, or 406 mm) lengths.

- Clamps install without the need for additional tools or strut clamps
- Additional clamps can be purchased separately for additional pipe runs
- Plastic clamps and base will not corrode pipe
- · Clamps come in two different sizes to fit project needs
- Foam bottom offers low abrasion interface for better roof membrane protection
- Provides superior load distribution, even with varying rooftop surfaces
- · Compatible with roof surfaces including single ply, bituminous, metal and spray
- · Ready to use out of the box, saving installation time and labor
- Multiple sizes and load ratings offer the ability to tailor the solution to the application
- · Easy to transport to the roof
- · Supports green building requirements; thermoplastic bases are made from recycled material and can contribute to earning LEED credits

Material: Polyethylene; Polypropylene; Nylon Temperature: -50 to 150°F Static Load Safety Factor: 3:1

Part Number	Article Number	Surface Area	Static Load
PTF6	360460	26,452 mm²	1,334 N
PTF10	360461	59,355 mm²	4,450 N
PTF16	360462	91,613 mm²	6,670 N

Part	Number of Clamps Include	d	Maximum Clamp Capacity		
Number PTF1C		PTF2C	PTF1C	PTF2C	
PTF6	1	_	3	1	
PTF10	_	2	5	2	
PTF16	_	2	7	3	



Pyramid Tool-Free Supports



PYRAMID TOOL-FREE CABLE TRAY SUPPORT KIT

Provides a fixed height support 4" (102 mm) off the roof surface for cable tray. Kits come in 5.5", 10" or 16" (140 mm, 254 mm, or 406 mm) lengths with securing pins included.

- Push-in pins install without the need for additional tools
- Plastic pins and base will not corrode
- Pins and mounting holes accommodate most perforated cable tray
- · Ready to use out of the box, saving installation time and labor
- · Additional pins can be purchased separately
- Foam bottom offers low abrasion interface for better roof membrane protection
- Provides superior load distribution, even with varying rooftop surfaces
- Compatible with roof surfaces including single ply, bituminous, metal and spray foam
- Multiple sizes and load ratings offer the ability to tailor the solution to the application
- Easy to transport to the roof

Material: Polyethylene; Polypropylene; Nylon

Temperature: -45 to 65°C Static Load Safety Factor: 3:1

Part Number	Article Number	Surface Area	Static Load
PTF6P	360518	26,452 mm ²	1,330 N
PTF10P	360519	59,355 mm²	4,450 N
PTF16P	360522	91,613 mm²	6,670 N



SUPPORT ACCESSORY:





Pyramid Tool-Free Cable Tray Pin

Allows for perforated cable tray to be secured on top of Pyramid Tool-Free series bases.

- Push-in pins install without the need for additional tools
- · Plastic pins and base will not corrode
- Pins and mounting holes accommodate most perforated cable tra

Material: Nylon

Temperature: -45 to 65°C

Part Number	Article Number	Diameter	Length	
PTFP	360521	20 mm	41.9 mm	



Product Application Review

	Product Family	ST	ST Bridge	H-frame	Equipment Supports	EZ	PBU	RPS25	Tool Free
	Page	6-7	7	8	9-10	11	12	12	13-14
	Image			The state of the s		As As			
	Load rating (N)	1334-6670	8900- 13340	3335-6670	4980-9960	756-3920	1334-6670	111	1334-6670
	Elevation (mm)	122-457	122-142	Project specific	305-457. (900 max with height extension)	25-150	Project specific	92/143	101
	Conduit <= 25 mm	X	X			X		X	X
	Conduit <= 50 mm	X	X			X		Х	X
	Conduit <= 100 mm	X	X			X			
	Basket Tray <= 400 mm	X							X
5	Basket Tray > 400 mm		X						
	Perforated Tray	Х	Х				Х		Х
]	Ladder Tray	Х	Х				Х		
	Pipe <= 25 mm	Х	Х			X	Х	X	X
	Pipe <= 50 mm	Х	Х	X		X	Х	X	X
	Pipe <= 100 mm	Х	Х	Х		Х	Х		
	Pipe <= 150 mm	Х	Х	Х			Х		
-	Pipe > 150 mm			Х					
	Air Duct			Х					
	AC unit		X	Х	X				
) 	Air Handling Unit				X				





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