

Support Systems

www.bigfootsupport.com





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## Simply a better way

At Big Foot Systems we pride ourselves on our quality products, professional technical support, extensive application understanding and experience.

Launched in 2001, we began by introducing a comprehensive range of eco-friendly non-penetrative, easy to use and cost-effective support products for rooftop ductwork, cable tray and pipework runs. Simple frameworks to support condensing units as an alternative to traditional timber, steel and concrete constructions quickly followed.

Following the successes and flexibility of our light duty support products we added steel frame systems for the support of larger, heavier rooftop building services equipment such as refrigeration equipment and air handlers.

Solar frameworks and access platforms for rooftop walkway and maintenance purposes were added as markets developed.

Our aim at Big Foot Systems continues to be to provide easy to assemble rooftop building services support systems. Our range of products provide quick, simple, safe and versatile solutions for the support of rooftop HVACR equipment, solar panels and access platforms. Big Foot Systems sets the standard on any installation, meeting the needs of architects, consultants, engineers and contractors. Big Foot products are packed for ease of handling and available internationally via a network of approved distributors.

Big Foot Systems – simply a better way.

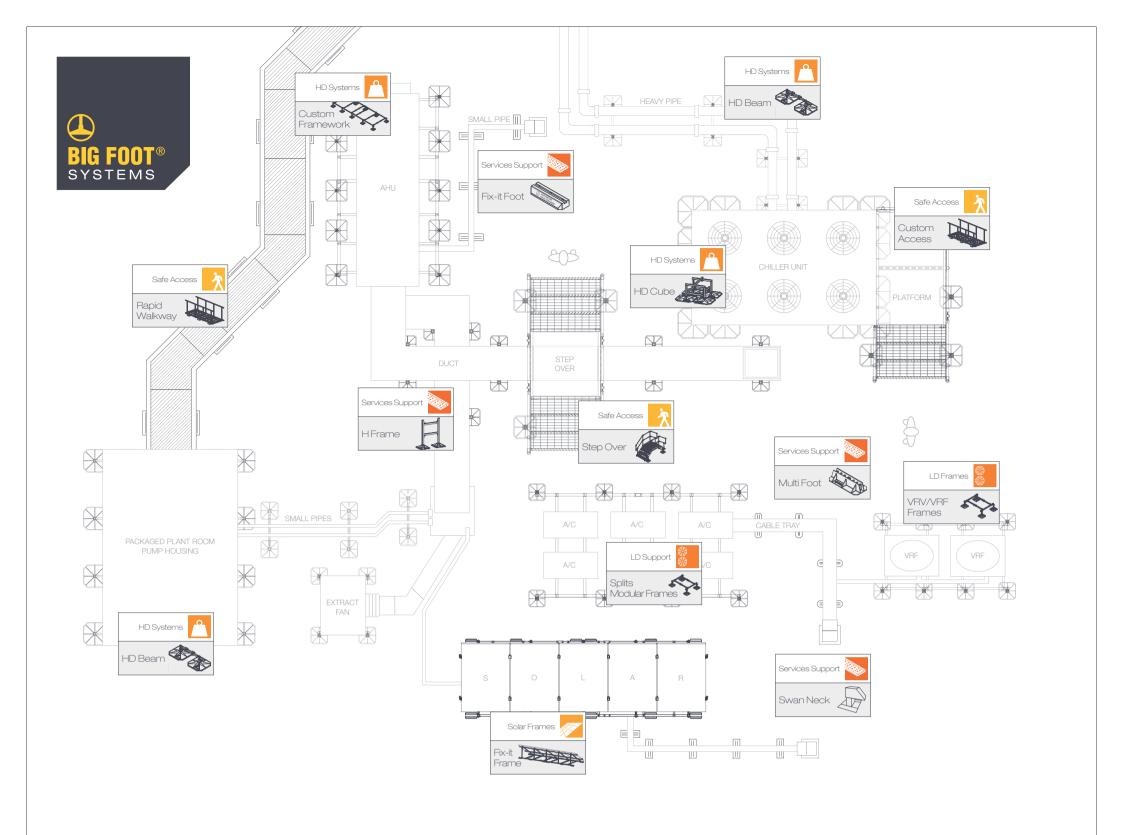












### Big Foot Systems Product Range

Non-penetrative rooftop building services support systems



#### Services Support

With the main plant positioned upon the roof, there is generally a need to install associated auxiliary services. Service containment such as duct, pipework and cable ladder/tray can be supported using a number of auxiliary support products from our Services Support range.

#### TYPICAL APPLICATIONS

- Pipework
- Duct Runs
- Cable Ladders ■ Cable Trays
- Modular Cable Management Systems
- Supply & Extract Fans
- Attenuators
- Filters

#### FEATURES & BENEFITS

- Cost and time-effective installation
- Product construction minimises the risk of penetrating the roof top finish
- Improved system aesthetics
- Robust, high quality recycled materials

For ease of specification these products are detailed on the following building product libraries:







#### Light Duty Frames

The Big Foot Systems Light Duty Frame range offers both standard and custom frames for Air Conditioning and small Air Handling Units. Delivered packaged to site the frame components and leg assemblies can easily be handled. With an ever increasing number of HVACR manufacturers supplying products, our frames are dimensionally configurable at design stage, both in footprint and height.

#### TYPICAL APPLICATIONS

- AC (Splits & VRF/VRV)
- Air Handling Units
- Air Source Heat Pumps
- Compressors
- Supply & Extract Fans
- Attenuators
- Filters

#### FEATURES & BENEFITS

- Standard Frames supplied boxed
- Cost effective, prefabricated support system
- Versatile modular frameworks
- Quick to install, robust and secure



### Heavy Duty Systems

The Big Foot Systems Heavy Duty range offers a robust cost-effective support alternative to on-site concrete constructions which aids load dispersal and are non-penetrative. With minimal on-site assembly and easy positioning, the HD Cube and HD Beam offer a standardised approach with Custom designs for larger plant and services.

#### TYPICAL APPLICATIONS

- Chillers
- Plant Rooms
- Air Handling Units
- Generators Packaged Plant
- Heavy Pipes & Steels

### Armoured Cabling

- FEATURES & BENEFITS Optional fully-certified
- independent warranty ■ In-house CAD Service
- Finite Element Analysis (FEA)
- Wind loading performance calculation
- Cost and time effective on-site installation
- Prefabricated for consistent and controlled installations
- Ensures greater project design flexibility



#### Solar Frames

Big Foot Systems Solar Frames are versatile, robust and quick to install. Available in various sizes, angles and heights, Solar Frame systems can be adapted to almost any installation and for as many panels as any scheme requires. A wind analysis and ballast assessment service is also available

#### TYPICAL APPLICATIONS

- PV Panels
- Solar Thermal Panels

### FEATURES & BENEFITS

- For the support of solar panels in a portrait or landscape arrangement
- Versatile, modular framework available in various sizes
- Computational Fluid Dynamics (CFD) wind analysis report and ballast recommendation service available
- Optional fully-certified independent warranty



#### Safe Access

The Safe Access range from Big Foot Systems provide low level standard modular walkways mounted on non-penetrative rubber feet, to custom fabrications requiring a more consultative approach necessitating detailed proposals and site surveys. Big Foot Systems detailed engineering drawings provide concise, economically engineered Safe Access solutions to fit within planned or existing rooftop services (complying with necessary safety standards)

#### TYPICAL APPLICATIONS

- Plant Maintenance
- Plant Inspection
- Roof Access
- Fire Escapes
- FEATURES & BENEFITS

### Quick and simple, on-site assembly

- Flat packed for ease of transportation
- Health and safety regulation compliant
- Optional fully certified independent warranty
- Custom designs available

















# Big Foot Product Selector

Use the chart below to help find the perfect support for your application



									<u>^</u>						次		
		5	Services	Suppor	t	LD Frames		HD Systems		Solar Frames		Safe Access					
BIG FOOT® SYSTEMS		H Frame Sets	Multi Foot	Fix-it Foot	Mini Split Kits	Standard Frames	LD Custom Frames	HD Beams	HD Cubes	HD Custom Frames	PV Fix-it Packs	Solar Custom Frames	Rapid Walkway	Plant Deck Frame	Step Over Platform	Step Over	Custom Safe Access
		Pages 10-11	Pages 12-13	Page 14	Page 15	Pages 18-19	Pages 20-21	Pages 22-23	Pages 24-25	Pages 26-27	Pages 28-29	Pages 30-31	Page 32	Page 33	Page 34	Page 34	Page 35
	Cable Basket ≤ 150mm			•													
	Cable Tray ≤ 300mm		•	•													
Electrical	Cable Trays 450 & 600mm wide	•	•	•													
ctr	Cable Trays 750 & 900mm wide	•															
Ele	*Cable Ladder ≤ 450mm wide	•															
	*Cable Ladder ≥ 600mm wide	•															
	*Bus Bars	•															
t	Small Duct <300mm wide	•	•														
Duct	Larger Ducts	•															
	*Attenuators, (Silencers)	•	_	_													
	F&R Pipes > 40mm ≤ 65mm dia. F&R Pipes > 65mm ≤ 100mm dia.			•													
Φ	F&R Pipes > 100mm ≤ 150mm dia.		-														
Pipe	High Level Support	_						_									
	*Multiple Pipe Runs																
	Pipes greater than sizes shown																
	,																

	1-2 No. A/C Split units <175kg each									
ing	3-4 No. A/C Split units <175kg each			•						
ij	5-6 No. A/C Split units <175kg each			•						
Ξ	1 No. VRV/VRF unit**			•						
Air Conditioning	2 No. VRV/VRF units**			•						
ij	3 No. VRV/VRF units**			•						
4	4 or more A/C or VRV/VRF units							-		
	Extract Fans									
	Supply Fans									
S	Larger Condensers									
<u>ič</u>	Air Cooled Condensers									
Heavy Services	Air Handling Units									
S	Chillers									
eav	Boiler Houses									
Ĭ	Plant rooms									
	Low Level Support									
	High Level Support									
	Split level Roofs									
_	Adjustable Legs									
Solar	3 Panels – 10, 20 & 30°									
S	4 Panels – 10, 20 & 30°									
	5 Panels – 10, 20 & 30°									
10	Clearance height <155mm									
nts	Clearance height >155 ≤ 1000mm									
me	Clearance height > 1000mm									
Access Requirements	Landings 600mm Wide									
nbe	Landings 1000mm Wide									
Ä	Low Level Access/Fire Escapes									
ess	Larger landings/Additional Steps									
CC	Cat Ladders									
4	Companion Way Ladders									





 $<sup>^{\</sup>star}$  Weight dependant  $^{\star\star}$  Based on typical carcase size of 990mm x 760mm



Non-penetrative supports for pipework, duct and cable ladder/tray

The H Frame Set is a quick, versatile and economical solution for supporting pipework, duct, cable ladders/trays or any combination of these. You provide your own strut, keeping the duct and pipe installations low-cost and totally flexible by fabricating the framework on-site.

The majority of installations require 305mm H Frames but where a greater load distribution is required 450mm and 600mm H Frames are also available.

### H Frame Set 305mm

- Versatile application
- Quick & easy installation
- Excellent load distribution
- Compatible with industry standard componentry
- Interchangeable with 3 strut sizes – one foot fits all
- Supplied with adhered





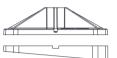
#### KIT INCLUDES

Feet with adhered mat	x 2	Recom
reet with adhered mat	X Z	on PVC
Brackets and fixings	x 4	surface
Assembly instructions	x 1	polyme

#### FOOT FLEECES nmended for use C membrane roof es to prevent er migration

PLEASE NOTE: Strut NOT included

#### 305 ANGLED MATS 2.5° and 5° rubber mats are also available for sloped roof applications

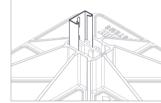




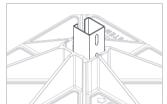
#### PRODUCT INFORMATION

Model	305mm	305mm 5 Pack
Part no.	B6088	B9645
Foot Size (mm)	305	305
Rec. frame load (kg)	300	300
Packaged weight (kg)	6.75	34

#### INTERCHANGEABLE STRUT







 $40 \times 38 \times 1.9 \,\text{mm}$  Euro Strut



41 x 41 x 1.5 mm Strut

## H Frame Set 450mm & 600mm



For ease of specification these products are detailed on the following building product libraries:







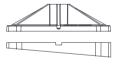
Plastic feet	x 2
Rubber mats	x 2
Insert	x 2
Brackets and fixings	x 2
Assembly instructions	x 1

PLEASE NOTE: Strut NOT included

FOOT FLEECES Recommended for use on PVC membrane roof

surfaces to prevent polymer migration

450 ANGLED MATS 2.5° and 5° rubber mats are also available for sloped roof applications

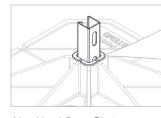




PRODUCT INFORMATION

Model	450mm	600mm
Part no.	B6089 👕	B9222 🕎
Foot Size (mm)	450	600
Rec. frame load (kg)	500	500
Packaged weight (kg)	13.35	23.10





41 x 41 x 1.5 mm Strut















Non-penetrative supports for pipework, duct and cable tray

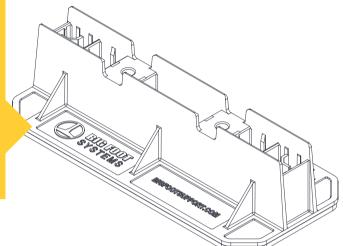
The Multi Foot is designed to be a multipurpose support for duct, pipework and cable trays or any combination of these.

This extremely versatile and cost-effective one-piece support is available in two sizes with the new integrated mat configuration.

### 40mm Multi Foot Packs

- Versatile application
- Quick & easy installation
- Supplied with adhered rubber mats for optimum roof protection
- Boxed for convenience
- Accepts a full range of strut sizes
- Rigid nylon foot





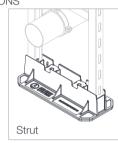
#### PRODUCT INFORMATION

Model	400mm 4 Pack			
Part no.	B9640 📦			
Height (mm)	80			
Width (mm)	180			
Length (mm)	400			
Max. load per foot (kg)	259			
Packaged weight (kg)	6.8			

PLEASE NOTE: Multi Foot is supplied WITHOUT any fixings or fittings

#### MULTI FOOT APPLICATIONS



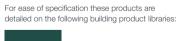




### 600mm Multi Foot Packs

- Versatile application
- Quick & easy installation
- Supplied with adhered rubber mats for optimum roof protection
- Boxed for convenience
- Accepts a full range of strut sizes
- Rigid nylon foot









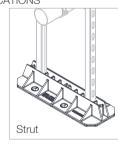
#### PRODUCT INFORMATION

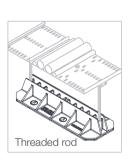
Model	600 mm 3 Pack
Part no.	B9655 🍞
Height (mm)	80
Width (mm)	220
Length (mm)	600
Max. load per foot (kg)	474
Packaged weight (kg)	7.5

PLEASE NOTE: Multi Foot is supplied WITHOUT any fixings or fittings

#### MULTI FOOT 600 APPLICATIONS













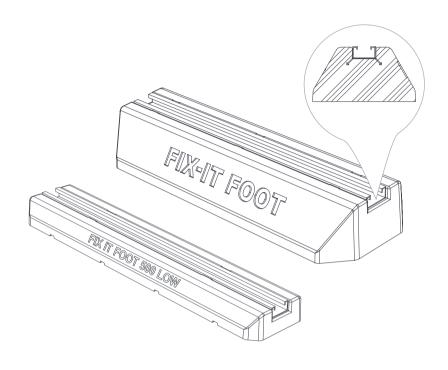
FOOT FLEECES Recommended for use on PVC membrane roof surfaces to prevent polymer migration

Non-penetrative supports for pipework, duct and cable tray

The seven sizes of Fix-it Foot are a neat and tidy roof top support solution from Big Foot. The feet have 40mm x 20mm aluminium channel recessed into the top face to allow for easy fixing of services. Suitable for pipework, duct and cable tray runs.

The Fix-it Foot is made of durable, recycled rubber, which offers built-in anti-vibration and makes it both economical and environmentally responsible.

### Fix-it Foot

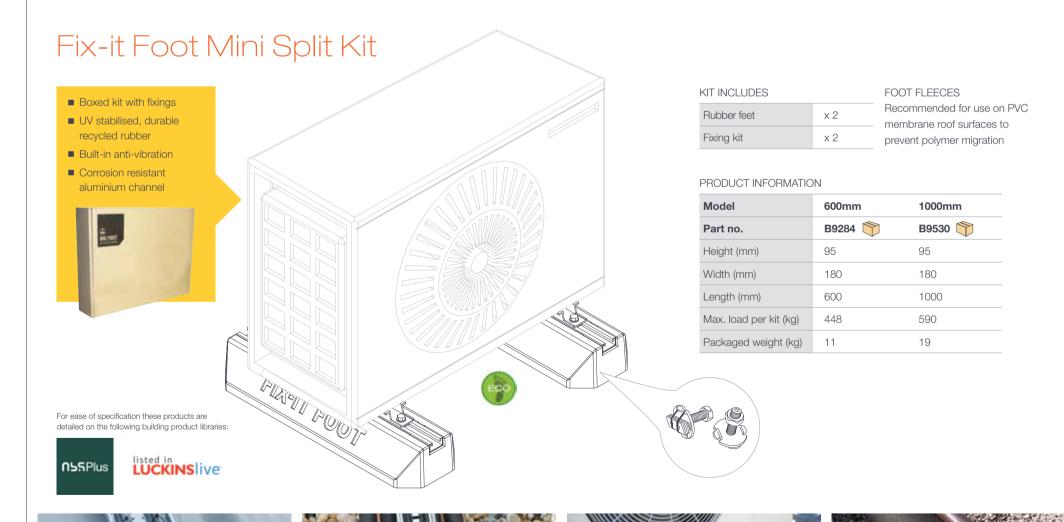


#### PRODUCT INFORMATION

Model	250	400	600	1000
Part no.	B6735	B6736	B6737	B9096
Height (mm)	95	95	95	95
Width (mm)	180	180	180	180
Length (mm)	250	400	600	1000
Max. load per foot (kg)	82	128	224	295
Packaged weight (kg)	2.3	3.4	5.5	9.5

Model	250 Low	400 Low	500 Low
Part no.	B9043	B9045	B9368
Height (mm)	50	50	50
Width (mm)	130	130	130
Length (mm)	250	400	500
Max. load per foot (kg)	82	128	134
Packaged weight (kg)	1.2	2	4.6

PLEASE NOTE: Fix-it Foot is supplied WITHOUT any fixings or fittings









### Mounting Platforms



Simply fitted into the top of the Big Foot mouldings, these Platforms provide a versatile support system. Available with a plain top or with 2 or 4 sides, they have a central M10 threaded insert and are available with 305mm or 450mm feet.

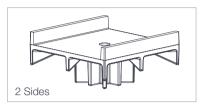
#### KIT INCLUDES

Platform	x 2
Plastic foot	x 2
Rubber mat	x 2

#### PRODUCT INFORMATION

Model	305mm Plain Top	305mm 2 Sides	305mm 4 Sides	450mm Plain Top	450mm 2 Sides	450mm 4 Sides
Part no.	B9098	B9099	B9100	B9101	B9102	B9103
Useable area (mm)	126 x 126	114 x 126	114 x 114	126 x 126	114 x 126	114 x 114







### Vibromats



Where elevated walkways are not required these compressed recycled rubber mats, in 3 size options, can be laid directly onto the roof top. This clearly denotes areas for personnel access and protects the membrane or roof material from potential damage from foot fall and ancillary equipment. The AV strip can be used as an additional isolating strip between the Big Foot Support Frame and the installed unit.

#### PRODUCT INFORMATION

Model	Small Tile*	Large Tile*	Plain Tile	AV Strip
Part no.	B6491	B6282	B6416	B6024
Height (mm)	30	30	45	15
Width (mm)	150	500	500	75
Length (mm)	600	1000	500	1000



### **AV Pads**

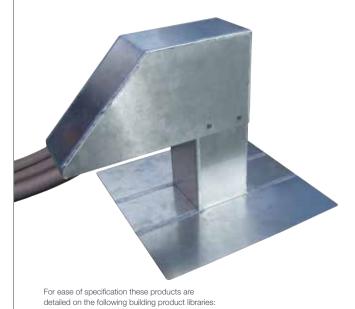


In a similar way to that of the AV Strip, the AV Pad affords a greater degree of isolation between unit and Big Foot support frame against vibration.

#### PRODUCT INFORMATION

Model	51mm	76mm	101mm	152mm	305mm	457mm
Part no.	B6909	B6910	B6911	B6912	B6913	B6914
Height (mm)	22.2	22.2	22.2	22.2	22.2	22.2
Width (mm)	51	76	101	152	305	457
Length (mm)	51	76	101	152	305	457

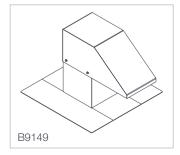
### Swan Necks



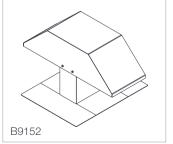
LUCKINS live

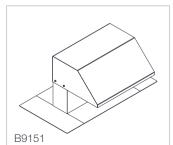
High quality Swan Necks are ideal for one of the most sensitive areas of a flat roof... the point at which it is necessary to penetrate it with cable and pipe runs. A large flange around the foot of the Swan Neck allows a full seal with the roof membrane. The 2mm aluminium plate is lightweight and won't go rusty. A full hood protects against rain ingress, and rounded outlet protects pipes, insulation and cables.

THOUSE IN CHIVIA	TIODOOT IN GENVATION						
Model	Square Small	Square Medium	Square Large	Oblong Small	Oblong Small	Oblong Large	
Part no.	B9154	B9148	B9149	B9150	B9152	B9151	
Outlet Size (mm)	75 x 75	125 x 125	200 x 200	125 x 250	125 x 250	125 x 500	
No. of outlets	1	1	1	1	2	1	
Height (mm)	385	385	385	385	385	385	













**N55**Plus





<sup>\*</sup> Includes 2 No. steel plate core at either end



Non-penetrative support frames for air conditioning multi frames, mini-splits, VRFs and small AHUs

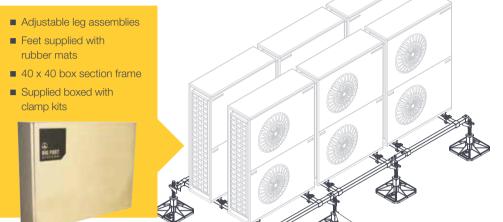
The LD standard product range consists of three standard modular frames, available in 1m, 2m and 3m arrangements. This ensures minimal crossmember deflection whilst maintaining structural stability; as opposed to weaker alternatives often constructed from poor quality pre galvanised strut. Our highly competent engineers and designers have developed the product range through our rigorous product development cycle, including validation through testing.

In order to facilitate the process of identifying the required frame for the specified air conditioning manufacturers Splits or VRF/VRV units (or indeed a combination of both) Big Foot Systems have created 'Frame Selectors'.

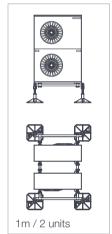
For further details contact the Big Foot Systems Technical Office on +44 (0)1323 844 355.

with all leading

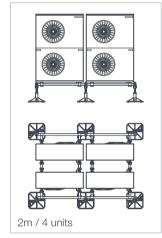
# Standard Frames

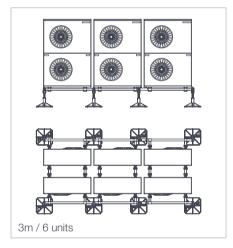


Model	1m Modular Frame	2m Modular Frame	3m Modular Frame
Part no.	B6075	B6077 👕	B6078 🕥
Height (mm)	290-400	290-400	290-400
Width (mm)	1200	1200	1200
Length (mm)	1000	2000	3000
Weight (kg)	40	69	93
Max. loading (kg)	480	720	960



PRODUCT INFORMATION





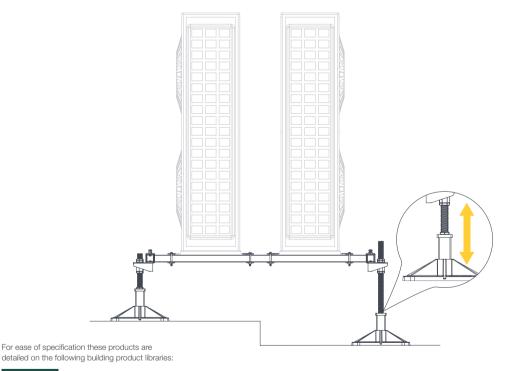
# Standard Frame Variants

KIT INCLUDES

Condenser Clamp kits Assembly instructions

40mm x 40mm box section end bars 1.2m Cross bars – 40 x 40 section

305mm Leg assemblies with rubber mats



#### PRODUCT INFORMATION

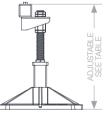
Model	1m	2m	3m
Part no.	B9088	B9089	B9090
Height (mm)	290-610	290-610	290-610
Width (mm)	1200	1200	1200
Length (mm)	1000	2000	3000
Weight (kg)	40	69	93
Max. loading (kg)	480	720	960

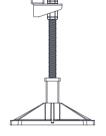
#### LEC OPTIONS

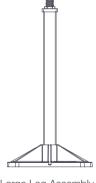
LEG OPTIONS						
Model	Standard	Long Stud	Large			
Box section (mm)	40	40	40			
Min. height (mm)	290	290	730			
Max. height (mm)	400	610	825			

305/450 ANGLED MATS 2.5° and 5° rubber mats are also available for sloped roof applications









Standard Leg Assembly

Long Stud Assembly

Large Leg Assembly



LUCKINS live

**NSSPlus** 

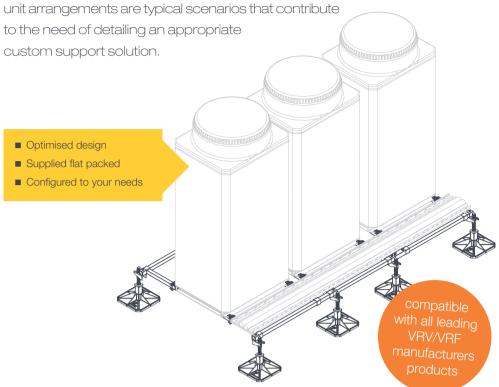


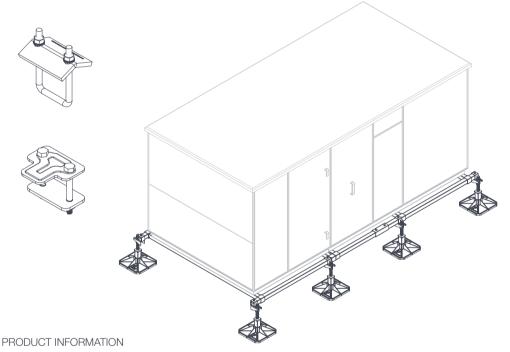




Project specific non-penetrative support frames for air conditioning and ventilation equipment

Big Foot Systems offer a custom design service, where our standard offer may not be suitable in meeting specific application requirements placed on today's roofs. Limiting factors such as weak roof construction, space constraints, existing upstands/services obstruction and stacked/sectioned





ANGLED RUBBER MATS	The solution to sloping roofs, 2.5° & 5° rubber mats are available
LEG HEIGHT ADJUSTMENT	290-400mm: floor to top of framework (290-610mm: stepped roof option)
LINEAR ADJUSTMENT	The cross-bars which support the condenser units can slide along the plain bars into the positions required, then are locked securely in place
LD CONDENSER CLAMPS	The repositionable clamps are located on both sides of the cross-bars, locking down onto the feet of the condenser units as they are tightened
LEG & BRACKET POSITIONING	The leg and bracket are usually positioned outside the framework, but can be positioned inside if there is an obstruction or the load dictates
FOOT FLEECES	Recommended for use on PVC membrane roof surfaces to prevent migration of plasticizers

For ease of specification these products are detailed on the following building product libraries:







#### Technical Report Submittals

There may be situations where a design feasibility study, and/or a detailed technical analysis demonstrating the validity of a proposal against design parameters may be required.

Typical examples involve wind loading performance, beam deflection and weight distribution etc. These are written by our highly qualified engineers and can be provided to aid and clarify technical understanding, depending on customer supplied information, project size and value.



#### Finite Element Analysis

FEA is a powerful tool that achieves numerical test data through means of running a computer simulation to enable close analysis of the effect of variable loading conditions on solid elements. With our qualified engineering experts, its application within Big Foot Systems design process is used to validate structural integrity against beam deflection. This enables optimisation of design and application. Written analysis can be provided through our Technical Report Submittal service dependent upon scheme size and complexity.

#### Computational Fluid Dynamics (CFD)

CFD is a powerful tool used by our engineering team to closely analyse and interpret fluid characteristics within a modelled computer simulation. Typical use for this tool within Big Foot Systems include analysis of Solar Panels, AHUs, Chillers, Packaged Plant and VRFs etc. against extreme imposing wind pressures. Measurements are taken for wind tipping, wind sliding and wind uplift limits, to validate design/ballast recommendations ensuring safety for application. Written analysis can be provided through our Technical Report Submittal service dependent upon scheme size and complexity.









+44 (0)1323 844 355



Boxed non-penetrative support frames for chillers, AHUs, packaged plant, generators, pipes & steels

The HD Beam was developed as a lighter weight companion to the HD Cube and comprises 50mm x 50mm x 3mm square hollow sections to minimise beam deflection. Typical applications include large and heavy plant but is equally functional at supporting heavy pipes and services. HD Beam is a robust but flexible solution where space may be limited, or there is a requirement to position directly over existing structural roof beams. With M24 stud built into both legs, adjustability in height will maintain a level system on roof falls up to 5°, and additional adjustment is not usually needed. The vertical leg assemblies, coupled with the 450mm or 600mm feet and rubber mats, function in distributing the weight of the combined system.

Unlike other proposals/solutions we ensure the weight is evenly distributed through a specified quantity of HD Beams.

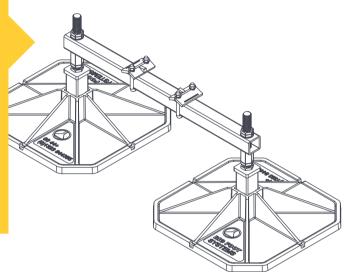
As part of our service offer and to support a technical submission our quotations will always state the 'UDL' and/or 'Point Loads' (kN/m²) in line with the specified or assumed roof performance. An optional, 'quick fitting' Clamp Kit ensures a rigid fix back to the services, or secondary steelwork.

Our technical capability in line with breadth of range enable Big Foot to design a frame specific to your need... we are yet to encounter a scenario under which we haven't been able to provide a solution.

## Adjustable HD Beam

- Adjustable height support ■ Non-penetrative high load carrying capacity
- Elevates heavy services off the roof to facilitate long term roof maintenance
- Hot dip galvanised mild steel
- Flat packed and boxed for convenience





#### PRODUCT INFORMATION

Model	600HDB	450HDB
Part no.	В9373 🥎	B9423 👕
Foot size (mm)	600	450
Height (mm)	300-360	300-360
Overall width (mm)	642	486
Overall length (mm)	1502	1346
Max. load per HDB (kg)	1500	1000
Packaged weight (kg)	37	35

#### HEIGHT ADJUSTMENT

Height adjustment from 300mm to 360mm. Big Foot feet can interchange with our various leg assemblies to offer customers differing support heights and footprints to suit

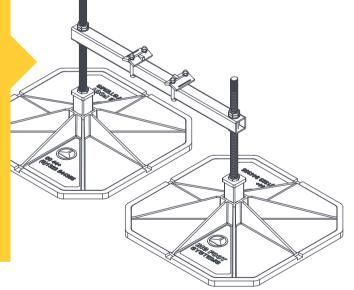
#### KIT INCLUDES

TIT INOLODEO		
Leg assembly	x 2	
Rubber mats	x 2	
800mm cross bar	x 1	
Beam clamps	x 2	
Assembly instructions	x 1	

## Adjustable Large Stud HD Beam

- Adjustable clamp kit supplied
- Non-penetrative high load carrying capacity
- Elevates heavy services off the roof to facilitate long term roof maintenance
- Hot dip galvanised mild steel
- Flat packed and boxed for





#### PRODUCT INFORMATION

Model	600 LS HDB	450 LS HDB
Part no.	B9692 👕	B9690 👕
Foot size (mm)	600	450
Height (mm)	300-580	300-580
Overall width (mm)	642	486
Overall length (mm)	1502	1346
Max. load per HDB (kg)	1500	1000
Packaged weight (kg)	38	36

KIT INCLUDES

Plastic feet	x 2
Rubber mats	x 2
HD Beam metalwork	x 1
Beam clamps	x 2
Assembly instructions	x 1

For ease of specification these products are detailed on the following building product libraries:



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Non-penetrative support products for chillers, AHUs, packaged plant & generators

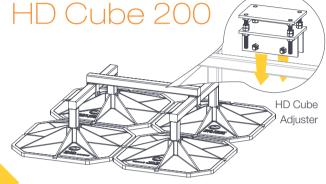
The HD Cube offers a complete, efficient and robust solution for supporting heavier services on flat roofs. It has been designed and manufactured using 50mm x 50mm x 3mm square hollow sections for heavy duty applications. This ensures minimal cross-member deflection whilst maintaining structural stability. Whilst minimising any deflection, the Cube still allows large loads of 2000kg and 3000kg each, in either 4 x 450mm or 4 x 600mm foot configurations respectively. Due to the close proximity of the feet, the enlarged square base naturally afford very good load distribution capabilities to spread

evenly on the roof. Ideal for the support of large and/or heavy plant - in fact anything which has an integrated skid or frame. The HD Cube provides a simplistic approach without the necessity of craning or casting, and then weatherproofing, traditional concrete plinths early on in the construction. Our technical capability in line with breadth of range and product versatility enable Big Foot Systems to design a frame specific to your need... we are yet to encounter a scenario under which we haven't been able to provide a solution.

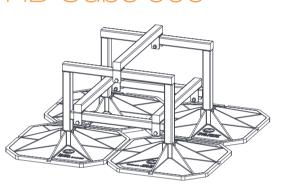


- Fast assembly
- Alternative to complex heavy frameworks
- High load capacity and excellent load distribution
- Flat packed and boxed for





### HD Cube 600



#### PRODUCT INFORMATION

Model	200HDC	200HDC
Part no.	B9528 🕥	B9529
Foot size (mm)	600	450
Height (mm)	332	332
Footprint (mm)	1292 x 1292	1132 x 1132
Max. load per HDC (kg)	3000	2000
Packaged weight (kg)	62	72

#### KIT INCLUDES

Plastic feet	x 4
Rubber mats	x 4
Cube flat pack side	x 2
Cube cross bar	x 1
Assembly instructions	x 1

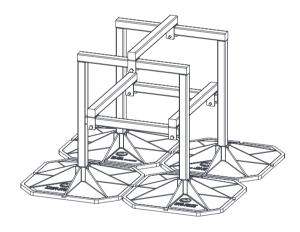
#### PRODUCT INFORMATION

Model	600HDC	600HDC
Part no.	B9522	B9521 🕎
Foot size (mm)	600	450
Height (mm)	587	587
Footprint (mm)	1292 x 1292	1132 x 1132
Max. load per HDC (kg)	3000	2000
Packaged weight (kg)	82	75

#### KIT INCLUDES

11111020020	
Plastic feet	x 4
Rubber mats	x 4
Cube flat pack side	x 2
Cube cross bar	x 3
Assembly instructions	x 1

### HD Cube 800



### PRODUCT INFORMATION

Model	800HDC	800HDC	
Part no.	B9516	B9517	
Foot size (mm)	600	450	
Height (mm)	880	880	
Footprint (mm)	1292 x 1292	1132 x 1132	
Max. load per HDC (kg)	3000	2000	
Packaged weight (kg)	87	80	

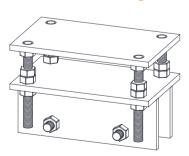
#### KIT INCLUDES

Plastic feet	x 4
Rubber mats	x 4
Cube flat pack side	x 2
Cube cross bar	x 3
Assembly instructions	x 1

# HD Cube Adjuster



**N55Plus** 



#### PRODUCT INFORMATION

Model	HDC Adjuster
Part no.	B9374 🕥
Length (mm)	250
Width (mm)	150
Max. adjustable height (mm)	140
Weight (kg)	3

#### VERTICAL ADJUSTMENT

Optional levelling HD Cube Adjuster to accommodate roof falls and anti-vibration mounts, which allows for 80mm of height adjustment.

- 200HDC: min. 392mm up to a max. of 472mm
- 600HDC: min. 647mm up to a max. of 727mm
- 800HDC: min. 940mm up to a max. of 1020mm





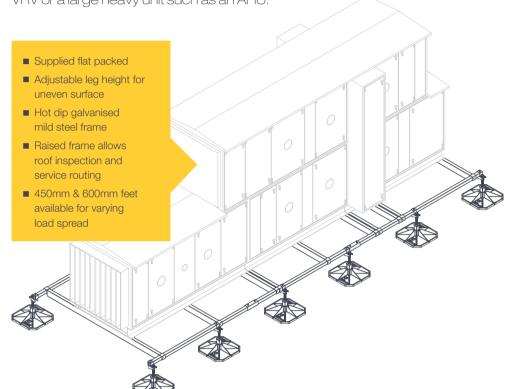




Project specific non-penetrative support frames for large, heavy, irregular shaped & unevenly loaded plant

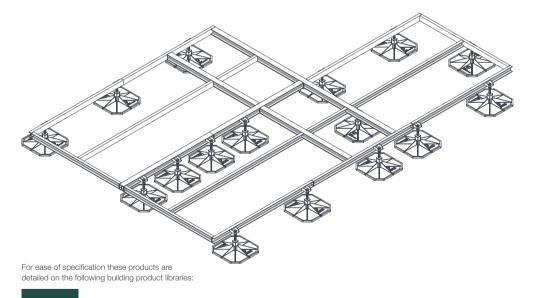
There are many situations at roof level where our traditional offer may not be suitable in meeting unique heavy duty application requirements. Similarly, limiting factors such as weak roof construction, space constraints, existing upstands/services obstruction, stacked/sectioned unit arrangements and louvre screen supports are typical scenarios that contribute to the need of detailing an appropriate custom support solution. With the aid of our technical surveyors, highly skilled engineering team and use of engineering tools such as ANSYS (FEA/CFD) etc. Big Foot Systems can design and manufacture complete one-off solutions.

The necessary solution can vary from a frame similar in design and configuration to that of a standard LD product but utilising larger and longer sectional bars, typically 50mm x 50mm or 100mm x 50mm, supporting large arrays of VRF/ VRV or a large heavy unit such as an AHU.



#### PRODUCT INFORMATION

ANGLED RUBBER MATS	The solution to sloping roofs, 2.5° & 5° rubber mats are available
LEG HEIGHT ADJUSTMENT	Customisable adjustability from floor to top of framework (stepped roof option)
FEET FLEECES	Recommended for use on PVC membrane roof surfaces to prevent migration of plasticizers



The solution can also extend to a custom arrangement of HD Cubes or HD Beams in either 450mm or 600mm foot sizes. These can be designed to support the unit, whilst also considering the imposed loads acting on the structure where it sits. Alternatively, for more complex applications, such as multiples of large and stacked unit layouts with an unusual footprint and uneven loading characteristics, a frame can be designed and fabricated specifically for the project requirements. In all cases, our Engineering Team carefully evaluates and designs each project on its own merit, in order to provide the optimum result.

#### Technical Report Submittals

There may be situations where a design feasibility study, and/or a detailed technical analysis demonstrating the validation of a proposal against design parameters may be required.

Typical examples involve wind loading performance, beam deflection and weight distribution etc. This is written by our highly qualified engineers and can be provided to aid and clarify technical understanding, depending on customer supplied information, project size and value.

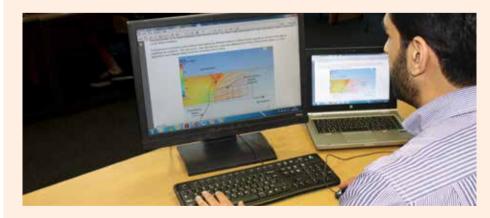


#### Finite Element Analysis

FEA is a powerful tool that achieves numerical test data through means of running a computer simulation to enable close analysis of variable loading conditions on solid elements. With our qualified engineering experts, its application within Big Foot Systems design process is used to validate structural integrity against beam deflection. This enables optimisation of design and application. Written analysis can be provided through our Technical Report Submittal service dependent upon scheme size and complexity.

#### Computational Fluid Dynamics (CFD)

CFD is a powerful tool used by our engineering team to closely analyse and interpret fluid characteristics within a modelled computer simulation. Typical use for this tool within Big Foot Systems include analysis of Solar Panels, AHUs, Chillers, Packaged Plant and VRFs etc. against extreme imposing wind pressures. Measurements are taken for wind tipping, wind sliding and wind uplift limits, to validate design/ ballast recommendations ensuring safety for application. Written analysis can be provided through our Technical Report Submittal service dependent upon scheme size and complexity.





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**N55Plus** 







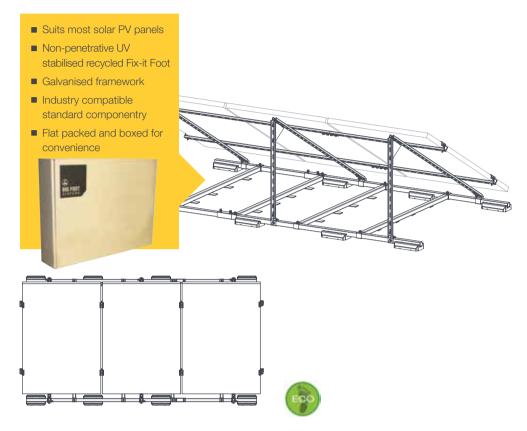
Non-penetrative support frames for photovoltaic panels

Big Foot Solar PV Fix-it Packs provide a quick to install solution using 600mm x 600mm x 50mm, 40kg paving slabs as ballast (not included). Utilising Big Foot Systems Fix-it Foot feet, this modular system is very versatile.

Solar PV Fix-it Frame is available in various sizes, angles and heights and is ideally suited to flat roof applications. Packs come complete with easy fit panel clips.

Standard 10°, 20° and 30° panel systems are available from stock. The metalwork is galvanised to ensure maximum corrosion resistance.

### Solar PV Fix-it 3 Panel Packs



#### KIT INCLUDES

Fix-it Foot feet
Hot dip galvanised base frame
A-frames and fixings
Solar panel clips
Assembly instructions

Big Foot Solar PV Fix-it Pack

**FIX-IT FOOT** 

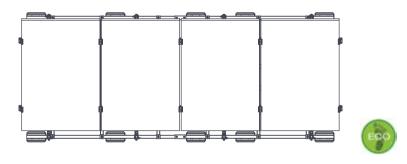
systems use UV stable Fix-it Foot feet as a neat and tidy support solution. Made from durable, recycled rubber with a channel moulded into the top face, allowing fixing of 40mm x 40mm box section or strut



#### PRODUCT INFORMATION

Madel	3 panel pack			
Model	10°	<b>20</b> °	<b>30</b> °	
Part no.	SB9446	SB9447 🕎	SB9448 👕	
Height (mm)	448	740	1070	
Length (mm)	3170	3170	3170	
Width (mm)	1682	1682	1682	
Product weight (kg)	90	90	90	

### Solar PV Fix-it 4 Panel Packs



### PRODUCT INFORMATION

Model	4 panel pack			
Wiodei	10°	<b>20</b> °	30°	
Part no.	SB9449	SB9450 👕	SB9451	
Height (mm)	448	740	1070	
Length (mm)	4200	4200	4200	
Width (mm)	1682	1682	1682	
Product weight (kg)	120	120	120	

### Solar PV Fix-it 5 Panel Packs



PRODUCT INFORMATION

Model	5 panel pack			
Wiodei	10°	<b>20</b> °	<b>30</b> °	
Part no.	SB9452	SB9453	SB9445	
Height (mm)	448	740	1070	
Length (mm)	5260	5260	5260	
Width (mm)	1682	1682	1682	
Product weight (kg)	150	150	150	

**N55Plus** 

LUCKINS live









Project specific non-penetrative frames for solar panels

Big Foot Solar Custom Frames provides a specifically designed yet quick to install solution using 600mm x 600mm x 50mm, 40kg paving slabs as ballast (not included). Utilising either the Big Foot adjustable leg assemblies, to accommodate roof lights and/or fall, or the Fix-it Foot feet, both system options are very versatile with their application and installation options.

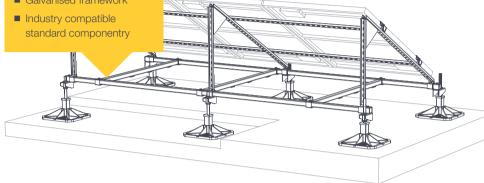
Available in various sizes, angles and heights, the slab frameworks can be adapted to suit almost any installation for as many panels as is required.

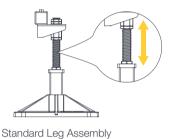
Standard 10°, 20° and 30° panel systems are available from stock, with custom layouts to order. The metalwork is galvanised to ensure maximum corrosion resistance.

### Solar Leg Frame

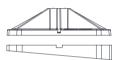


- rubber mats
- Galvanised framework





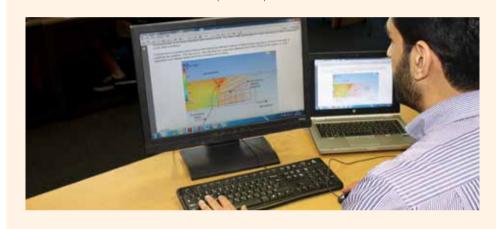
350/450 ANGLED MATS 2.5° and 5° rubber mats are also available for sloped roof applications





#### Wind Analysis Report

Through our Technical Submission service, our qualified engineers can provide specific detailed studies on analysing imposing wind pressure to ascertain optimum ballast recommendations. This is achieved by our engineering experts with the ability to solve and interpret complex fluid flow problems in combination with industry leading ANSYS Computational Fluid Dynamics (CFD) software. Big Foot Systems design recommendations and analysis is based on customer-supplied information and available to customers dependent upon scheme size.



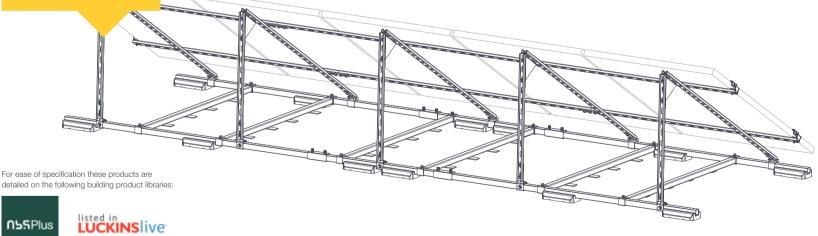
### Solar Fix-it Frame

- Angled brackets available in 10°, 20° & 30° angles
- Non-penetrative UV stabilised Fix-it Foot
- Galvanised framework
- Rubber feet provide soft contact with roof
- Industry compatible standard componentry

#### FIX-IT FOOT

Big Foot Solar Fix-it Frame systems use UV stable Fix-it Foot feet as a neat and tidy support solution. Made from durable, recycled rubber with a channel moulded into the top face, allowing fixing of 40mm x 40mm box section or strut.

















## Big Foot Rapid Walkway and Plant Deck Frames

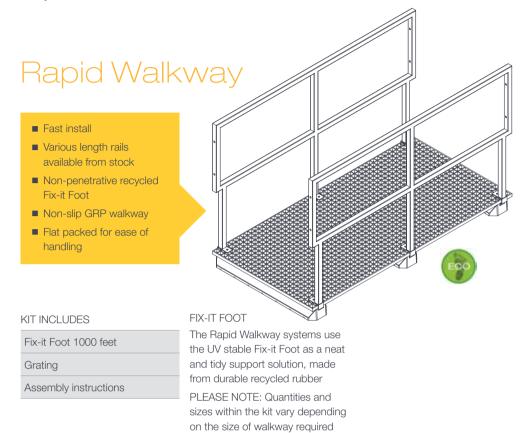




Non-penetrative and modular access products

The Big Foot Safe Access range is designed to allow a secure route for service engineers and other trades to gain access to plant and for managing the flow of other personnel. The metalwork is galvanised to ensure maximum corrosion resistance. Both systems are supplied from stock and are quick and easy to install on site.

Big Foot Rapid Walkway is ideal for establishing clear, safe non-penetrative pathways around installations on a flat roof. The gritted GRP top to the walkway grating provides a permanent non-slip surface in any weather and is supported on Fix-it Foot feet.

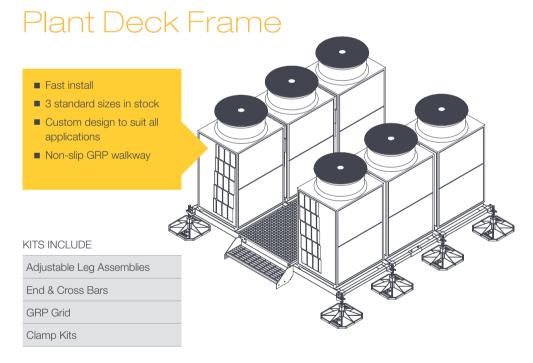


#### PRODUCT INFORMATION

Model	1m	2m	3m
Part no.	B9105	B9106	B9107
Overall length (mm)	1000	2000	3000
Overall width (mm)	1000	1000	1000
Height (mm)	120	120	120
Weight (kg)	32	54	76

#### ACCESSORY INFORMATION

Model	1m Handrail (each)	2m Handrail (each)	3m Handrail (each)	Corner Handrail
Part no.	B9111	B9112	B9113	B9142
Overall length (mm)	1000	2000	3000	1000
Overall width (mm)	-	-	-	1000
Height (mm)	1120	1120	1120	1120
Weight (kg)	12	20	29	24



Big Foot Plant Deck Frames have been designed in line with customer demand to facilitate multiple VRF/VRV installations with access requirements/ restrictions. The systems also benefit from a wide base making them stable in high wind locations, often a design consideration with very tall units.

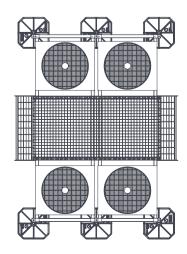
#### PRODUCT INFORMATION

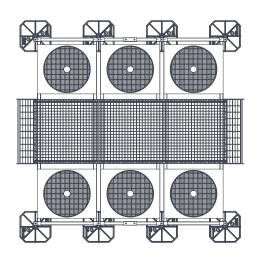
Model	4 unit	6 unit	8 unit
Part no.	B4040	B4060	B4080
Foot size (mm)	450	450	450
Height (mm)	360-465	360-465	360-465
Width (mm)	3400	3400	3400
Length (mm)	2400	3400	4400

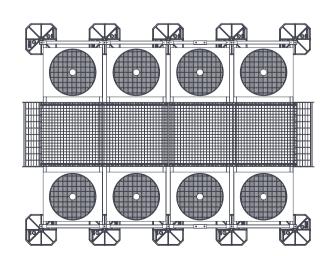
For ease of specification these products are detailed on the following building product libraries:

















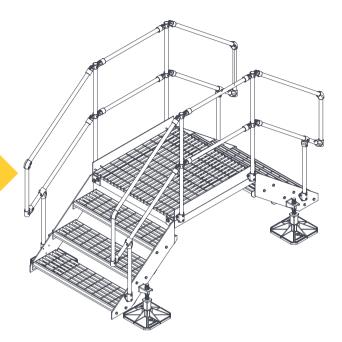
Project specific non-penetrative and modular access products

The Big Foot Safe Access range is designed to allow a secure route for service engineers and other trades to gain access to plant and for managing the flow of other personnel. The metalwork is galvanised to ensure maximum corrosion resistance. Both systems are supplied from stock and are quick and easy to install on site.

Big Foot Step Overs available with 2, 3 and 4 steps and a 1m landing section. The four legs on each Step Over are supplied with 305mm feet and rubber mats for stability. For safe passage over small hazards our Big Foot Step Over Platform is available.

# Step Over

- Flat packed for ease of handling
- 3 different step options
- 1m landing
- Adjustable leg height
- Standard sizes stocked



#### PRODUCT INFORMATION

Model	2 Step unit	3 Step unit	4 Step unit
Part no.	B6939	B6940	B6941
Foot size (mm)	305	305	305
Clearance height (mm)	560	780	1000
Width (mm)	1492	1492	1492
Length (mm)	1713	2213	2713

## Step Over Platform

#### PRODUCT INFORMATION

Model	600	1000	Handrai
Part no.	B9200	B9201	B6942
Foot size (mm)	200	200	-
Clearance height (mm)	155	155	_
Width (mm)	600	1000	-
Length (mm)	1000	1000	1000

#### KIT INCLUDES

	305mm leg assembly k rubber mats	x 4
S	Step handrail	x 4
S	Step stringers	x 4
S	Step grating	x 2/3/4

Landing grating	x 1
Landing kickplates	x 2
Landing handrails	x 2
Fixings and assembly instructions	x 1

### **Custom Access**



Big Foot Systems offer a comprehensive range of Safe Access solutions, which are ideal for a wide range of commercial and industrial applications. Offering secure and easy access to roof-top services, Big Foot's Safe Access systems provide standard site-assembled, safe access walkways, platforms and step overs. In addition, Big Foot will survey and design custom Safe Access systems tailored specifically to meet individual design parameters.











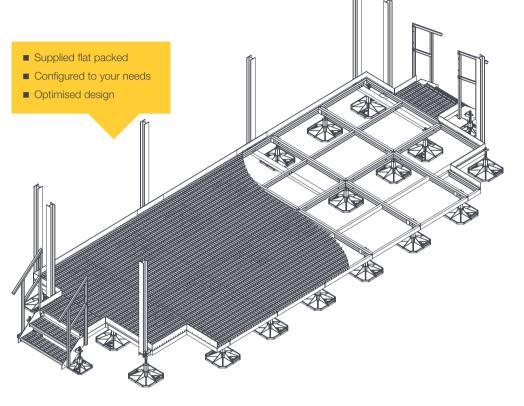


Project specific non-penetrative and modular products

Big Foot Systems offer a custom design service, where our standard offer may not be suitable in meeting unique application requirements posed on today's roofs. Limiting factors such as weak roof construction, space constraints, existing upstands/services obstruction and stacked/sectioned

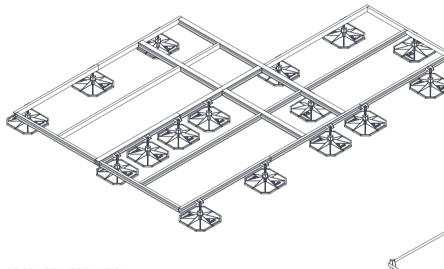
unit arrangements are typical scenarios that contribute to the need of detailing an appropriate custom support solution.

Our highly-skilled designers utilise industry-leading software, including 3D CAD, ANSYS Finite Element Analysis (FEA) and Computational Fluid Dynamics (CFD) packages. Our scheme designs come with the assurance of complete design integrity and optimisation. In addition to this our design team have developed an array of calculators to quickly analyse engineering considerations. This, coupled with our extensive knowledge of waterproofing systems and roof build-up, ensures we provide an economical, safe and well thought through design... every time!



Big Foot Systems offer a comprehensive range of custom designs, which are ideal for a wide range of commercial and industrial applications, from education to food & beverage. The custom products series completes Big Foot's product portfolio of freestanding systems to support plant equipment, installed services and personnel movement on flat roofs. Big Foot's products provide simple, safe and secure non-penetrative, prefabricated support systems negating a need for time consuming and costly penetrations through the roof.





The solution to sloping roofs, 2.5°

PRODUCT INFORMATION	
ANOLED DUDDED MATO	

ANGLED RUBBER MATS	& 5° rubber mats are available
LEG HEIGHT ADJUSTMENT	Customisable adjustability from floor to top of framework (stepped roof option)
FEET FLEECES	Recommended for use on PVC membrane roof surfaces to prevent migration of plasticizers

For ease of specification these products are detailed on the following building product libraries:















www.bigfootsupport.com





















# Simply a better way















RIBA encourages excellence in design, good practise and architectural education and campaigns on important issues such as design standards and sustainability.



Big Foot Systems has been recognised for excellence with ISO 9001. Big Foot Systems has been recognised for excellence with ISO 14001. Copies of accreditations are available on request.



Big Foot Systems is pleased to be eco-friendly where possible. Look out for our green foot symbol!

DISCLAIMER: Big Foot Systems takes no responsibility for the condition of the roof on which our equipment is to be used. You must ensure that the substrate on which the Big Foot Systems is intended for use is structurally sound enough to take the weight and point loadings we have indicated.

All Big Foot Systems products must be installed in line with the guarantees and recommendations of the manufacturer of the roofing system. The on the susceptibility to migration of plasticizers and specific recommendations should be adhered to so that the roof guarantee is not affected.

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