

# Strut *Foot*

Universal Flat Roof Support System



## About Us

Our manufacturing division has been involved in offsite manufacturing for the M&E building service sector for over 20 years.

In the last 10 years we have developed the StrutFoot system for the support of HVAC equipment, cable management and mechanical services without the need to penetrate the roof membrane.

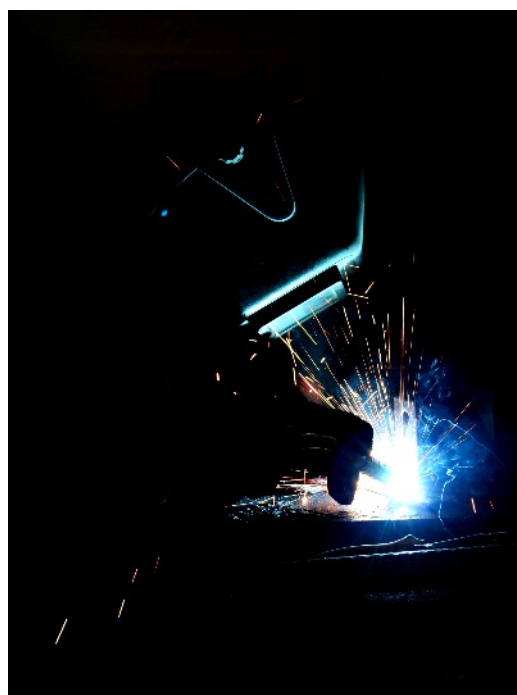
We pride ourselves in being the only UK manufacturer to offer design and manufacture of these products totally in house, including the injection moulding of the plastic feet used in our systems.

Design work and site surveys are carried out by our experienced engineers.

StrutFoot is a ISO 9001 and a 14001 accredited company and also a CE 1090 accredited company.

## Contents

|  |       |
|--|-------|
| StrutFoot Around the World             | 1     |
| StrutFoot Plastic Feet                 | 2     |
| StrutFoot Dual Foot & Basket Feet      | 3     |
| StrutFoot H Frame Kits                 | 4     |
| StrutFoot Base & Plus                  | 5     |
| StrutFoot LD Frames                    | 6     |
| StrutFoot HD Frames                    | 7     |
| StrutFoot SFR Rubber Feet              | 8     |
| StrutFoot SFR Mini Split & Angled Pads | 9     |
| StrutFoot SFR Vibro & AV Pads          | 10    |
| StrutFoot Cantilever Kit               | 11    |
| StrutFoot Fleeces & Mounting Blocks    | 12    |
| StrutFoot Duct Adjuster                | 13    |
| StrutFoot Angled Leg Assembly          | 14    |
| StrutFoot Cushion Clamps               | 15    |
| StrutFoot Beams                        | 16    |
| StrutFoot Quads                        | 17    |
| StrutFoot StepOver                     | 18    |
| StrutFoot Bespoke Access               | 19    |
| StrutFoot Case Study                   | 20-21 |



# StrutFoot Around the World



Countries:

Australia, Austria, Belarus, Belgium, Bulgaria, Canada, China, Czech Rep, Denmark, Dubai, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, India, Italy, Morocco, Netherlands, New Zealand, Nigeria, Poland, Portugal, Romania, Russia, Saudi Arabia, Slovenia, South Africa, Spain, Switzerland, United Kingdom & United States of America



| Code   | Description (mm)  | Dimensions (mm) (L x W x H) | S.W.L (KG Per Foot) |
|--------|-------------------|-----------------------------|---------------------|
| SF3200 | R200 Plastic Foot | 200 x 200 x 120             | 150                 |
| SF3105 | R305 Plastic Foot | 305 x 305 x 120             | 175                 |
| SF3505 | R500 Plastic Foot | 500 x 500 x 120             | 250                 |

StrutFoot's plastic feet are made from 100% recycled High Density Polyethylene (HDPE). Each of our plastic feet are complete with an anti-vibration pad which are pre-attached. These help prevent polymer migration between the roof and the plastic. They can be used for different types of strut/box; 41x41mm, 41x21mm and 40x40mm.

#### Material Testing Report

|                        |  |
|------------------------|--|
| <b>Material</b>        | High Impact HDPE                                     |
| <b>Colour</b>          | Black  |
| <b>Company</b>         | Engineering Plastics R&D Centre                      |
| <b>Test date</b>       | 03.05.2015   |
| <b>Test conditions</b> | Room temperature 23 deg for 24 hrs, humidity 50+/-5% |
| <b>Injection temp</b>  | 230-250 deg C  |
| <b>Melt index</b>      | 10.2g/10min  |

| Test Item                    | Units             | Standard | Value |
|------------------------------|-------------------|----------|-------|
| Tensile Strength             | MPa               | GB/T1040 | 16.9  |
| Elongation at break          | %                 | GB/T1040 | 13.7  |
| Bending strength             | MPa               | GB9341   | 18.8  |
| Notched Izod impact strength | KJ/m <sup>2</sup> | GB/T1843 | 7.7   |

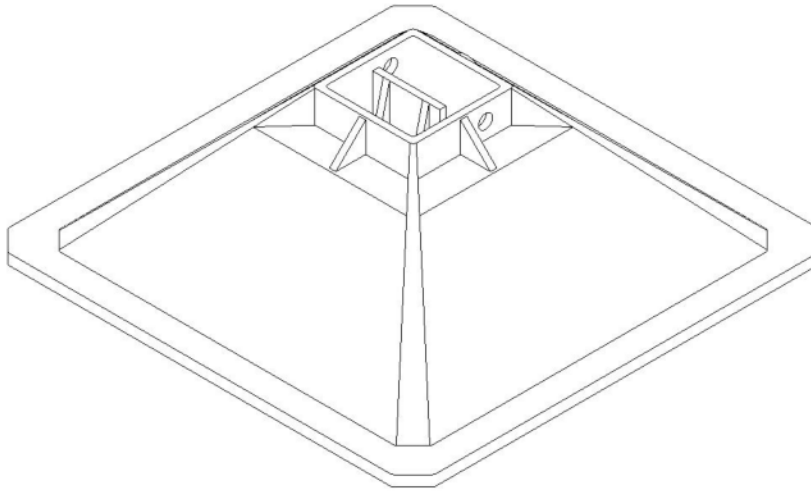
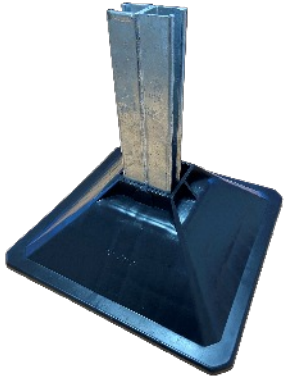
## StrutFoot R400 Dual Foot

The R400 Dual Foot has been designed to fit both 80x80 Box Section and 41x82 back to back channel. This foot has been designed and manufactured in house to offer flexibility in framing system installation.

It is made with a High Density Polyethylene (HDPE) plastic making it lightweight and very robust. There is an anti-vibration foam pad pre-attached meaning there is no penetration of/or reaction with the waterproof roof membrane.

### Product Information

| Part No | Feet Size (mm) | Product Weight (kg) | S.W.L (kg) |
|---------|----------------|---------------------|------------|
| R400D   | 400            | 3.97                | 1000       |



## StrutFoot Basket Feet

StrutFoot have developed a new plastic foot to speed up the installation of basket tray. We have two products with a clearance of 30mm and one with a 80mm clearance.

It is made with a High Density Polyethylene (HDPE) plastic making it lightweight and very robust, click and go.

### Product Information

| Part No | Feet Size (mm) | Feet Height (mm) |
|---------|----------------|------------------|
| SF3030  | 140            | 30               |
| SF3080  | 140            | 80               |



The H Frame Kit is a quick and easy solution to support all cable management, ducting and pipe work.

H Frames are supplied in box form.

They are designed to use channel which is not included. As a module, our manufacturing department can fabricate the H Frames in house to speed up the process of installation on site.

### H Frame Kit Includes

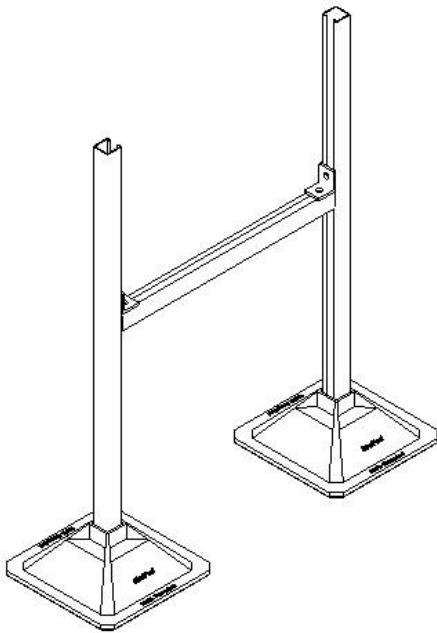
| Product      | Quantity |
|--------------|----------|
| Plastic Feet | x 2      |
| Fixing Kit   | x 1      |

### Product Information

| Part No | Feet Size (mm) | Product Weight (kg) | Frame S.W.L (kg) |
|---------|----------------|---------------------|------------------|
| SF3305  | 305            | 4.1                 | 350              |
| SF3500  | 500            | 10                  | 500              |

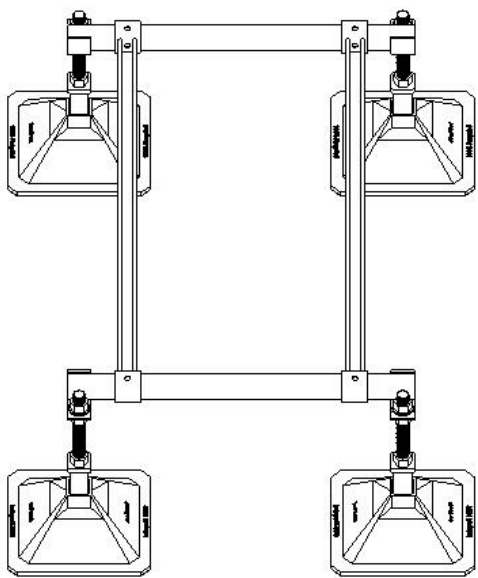


- High Density Polyethylene (HDPE)
- Designed to fit channel (not included)
- No penetration of waterproof roof membrane
- Anti-vibration pads pre attached to feet
- Off site cutting & delivering service available
  - Available in 305mm & 500mm

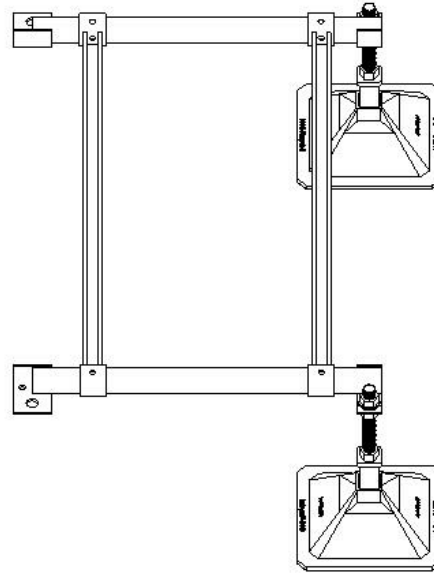




- Easy to adapt & extend to suit most installations and can be extended to any length.
- Channel framework provides strength & convenience for cable management installation
- Cross compatibility with all channel type brackets
- Fast & economical systems for mounting M&E services, Air Conditioning & Refrigeration on flat roofs
- Easy to install for individual products or complete installations
- No penetration of waterproof roof membrane
- Non drill system



**StrutFoot Base System**



**StrutFoot Plus System**

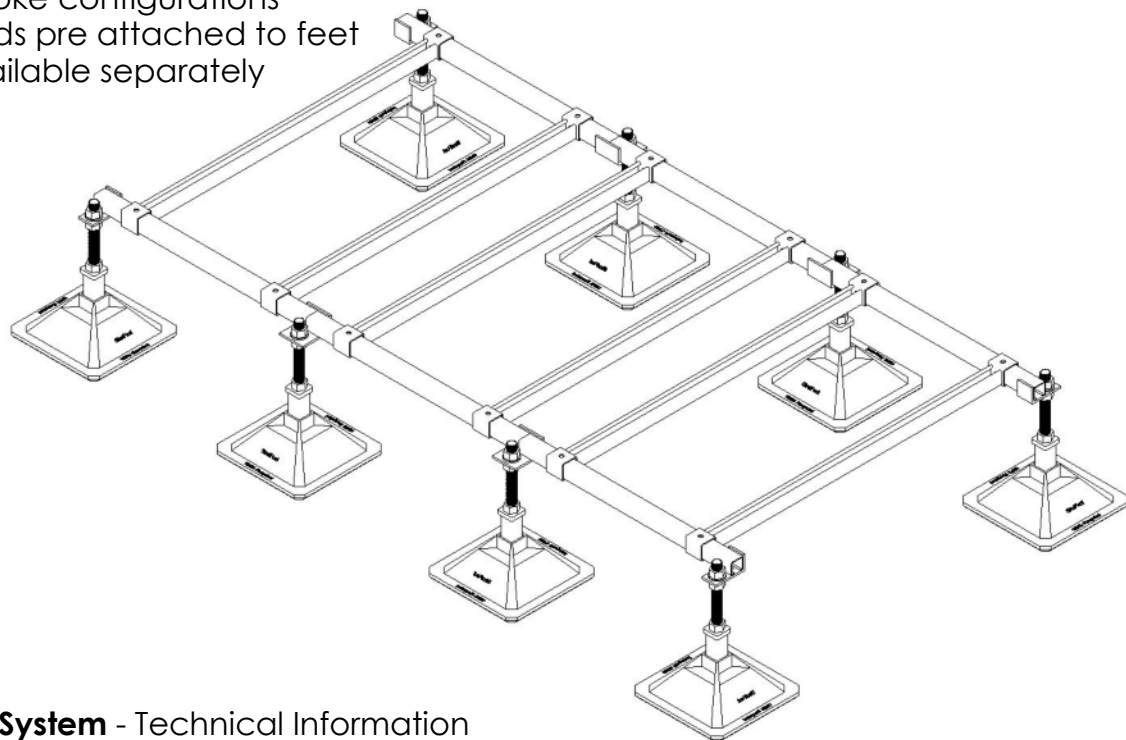
**StrutFoot Support System - Technical Information**

| Part No | Product Description | Complete Leg Assembly | Sliding Arm | Side Rails (mm) | Sliding Arms (mm) | Product Weight (kg) | Max S.W.L (kg) |
|---------|---------------------|-----------------------|-------------|-----------------|-------------------|---------------------|----------------|
| SF1002  | StrutFoot Base      | 4                     | 2           | 1000            | 1300              | 32                  | 700            |
| SF1004  | StrutFoot Plus      | 2                     | 2           | 1000            | 1300              | 26                  | 350            |



## The **StrutFoot**<sup>TM</sup> Flat Roof Support System, offering total flexibility for design, layout & installation.

- Channel framework provides strength & convenience for cable management installation
- Cross-compatibility with all channel type brackets
- Fast & economical systems for mounting M&E services, Air Conditioning & Refrigeration on flat roofs
- Easy to install for individual products or complete installations
- No penetration of waterproof roof membrane
- Standard & bespoke configurations
- Anti-Vibration pads pre attached to feet
- Feet & blocks available separately



### **StrutFoot** Support System - Technical Information

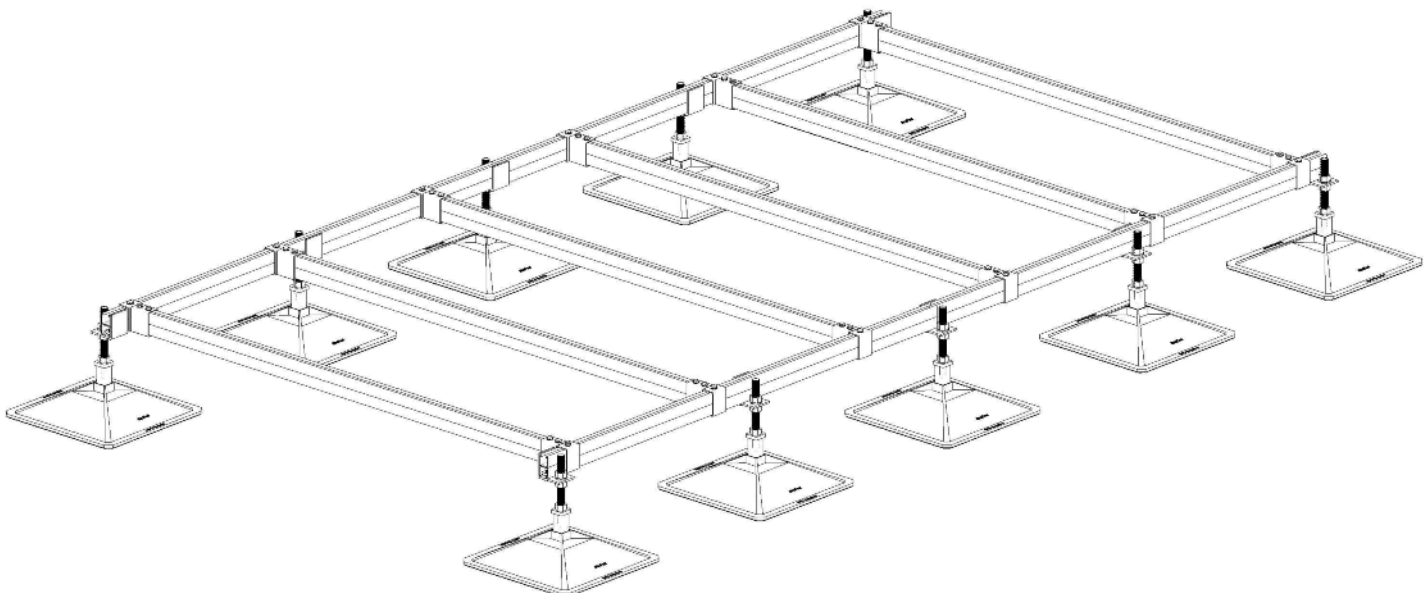
| Part No | Product Description | Complete Leg Assembly | Sliding Arm | Side Rails (mm) | Sliding Arms (mm) | Product Weight (kg) | Max S.W.L (kg) |
|---------|---------------------|-----------------------|-------------|-----------------|-------------------|---------------------|----------------|
| SF1302  | StrutFoot 2         | 4                     | 2           | 1000            | 1300              | 28                  | 700            |
| SF1304  | StrutFoot 4         | 6                     | 4           | 2000            | 1300              | 49                  | 1050           |
| SF1306  | StrutFoot 6         | 8                     | 6           | 3000            | 1300              | 70                  | 1400           |
| SF1308  | StrutFoot 8         | 10                    | 8           | 4000            | 1300              | 91                  | 1750           |
| SF1310  | StrutFoot 10        | 12                    | 10          | 5000            | 1300              | 113                 | 2100           |
| SF1312  | StrutFoot 12        | 14                    | 12          | 6000            | 1300              | 134                 | 2450           |





StrutFoot's HD system is predominantly used for large Air Handling Units and Chillers. Each system is manufactured in house enabling us to make the design suit the unit being supported.

The system has been designed using heavy duty 41x82 hot dipped galvanised channel. It has been designed for heavy loads, cable management and pipe work which can all be easily installed into the channel system.



Welding to ISO 9606-1

Galvanising to BS EN ISO 1461:1999

CE 1090

ISO 9001 Quality & ISO 14001

Environmental Certification Number 1753

Channel to BS6946



## StrutFoot SFR Rubber Feet

The SFR range of recycled rubber feet has been designed to carry loads on non-penetrable roofs; which include pipe work, cable management and small units. We offer the SFR feet with Aluminium channel to ensure a high corrosion resistance.

| Part No | Model      | Length (mm) | Width (mm) | Height (mm) | Max Loading Per Foot (kg) |
|---------|------------|-------------|------------|-------------|---------------------------|
| SF4025  | SFR250     | 250         | 180        | 95          | 160                       |
| SF4040  | SFR400     | 400         | 180        | 95          | 240                       |
| SF4060  | SFR600     | 600         | 180        | 95          | 450                       |
| SF4010  | SFR1000    | 1000        | 180        | 95          | 645                       |
| SF4525  | SFR250 Low | 250         | 130        | 50          | 160                       |
| SF4540  | SFR400 Low | 400         | 130        | 50          | 240                       |

| Part No | Model              | Length (mm) | Width (mm) | Height (mm) | Max Loading Per Foot (kg) |
|---------|--------------------|-------------|------------|-------------|---------------------------|
| SF1560  | SFR600 High Block  | 600         | 130        | 150         | 450                       |
| SF1512  | SFR1200 High Block | 1200        | 130        | 150         | 645                       |

### MATERIAL SPECIFICATION

SBR-Recycled Rubber. Bound using a ratio of high quality moisture curing Polyurethane Pre-Polymer. BS7188:1989+A2:2009 and BS EN1176-7:2008

### METAL PROFILE

Aluminium strut 41mm x 21mm profile compatible with strut fixings.

### WORKING CONDITIONS

Suitable for internal or external applications in temperatures between -40°C to +80°C. BSEN60068-2-14



## StrutFoot SFR Mini Split Kits

| Part No | Description             | Length (mm) | Width (mm) | Height (mm) | S.W.L per Kit (kg) | Packaged Weight (kg) |
|---------|-------------------------|-------------|------------|-------------|--------------------|----------------------|
| SF4044  | Mini Split Kit SFR 400  | 400         | 180        | 95          | 480                | 9.5                  |
| SF4066  | Mini Split Kit SFR 600  | 600         | 180        | 95          | 900                | 13                   |
| SF4011  | Mini Split Kit SFR 1000 | 1000        | 180        | 95          | 1290               | 21.6                 |

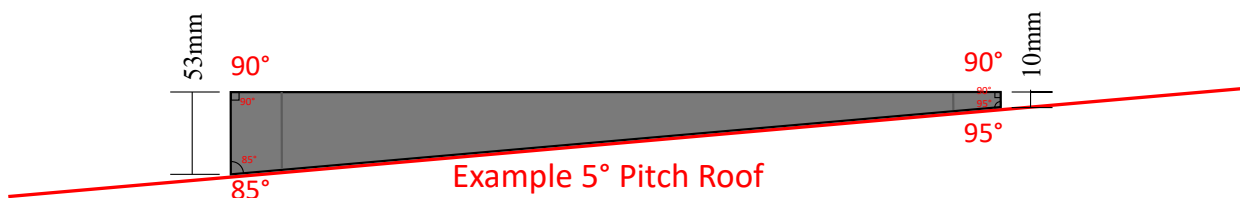
### Kit Includes

|             |     |
|-------------|-----|
| Rubber Feet | x 2 |
| Fixing Kit  | x 2 |



## StrutFoot Angled Rubber Pads

| Part No | Description        | Length (mm) | Width (mm) | Packaged Weight (kg) |
|---------|--------------------|-------------|------------|----------------------|
| SF4071  | SFR 305 2.5 Degree | 305         | 305        | 1.9                  |
| SF4072  | SFR 500 2.5 Degree | 500         | 500        | 6                    |
| SF4073  | SFR 305 5 Degree   | 305         | 305        | 1.6                  |
| SF4074  | SFR 500 5 Degree   | 500         | 500        | 7.5                  |



Both of the StrutFoot recycled rubber mats can be laid directly onto the roof to reduce the noise pollution going through the frame onto the roof.

They can be used as a walkway system or placed under any of our StrutFoot systems to separate the foam pad from the roof.

### StrutFoot SFR Vibro Mats

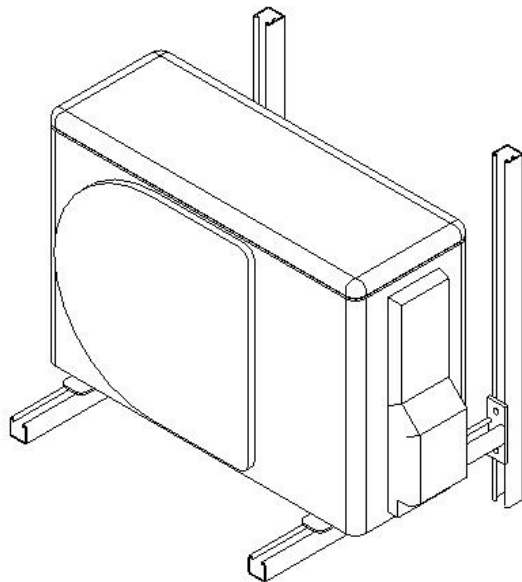
| Part No | Description       | Length (mm) | Width (mm) | Height (mm) | Packaged Weight (kg) |
|---------|-------------------|-------------|------------|-------------|----------------------|
| SF4091  | SFR Vibro Mat 330 | 330         | 330        | 45          | 4                    |
| SF4092  | SFR Vibro Mat 500 | 500         | 500        | 45          | 7.5                  |



### StrutFoot SFR AV Pads

| Part No | Description      | Length (mm) | Width (mm) | Height (mm) | Packaged Weight (kg) |
|---------|------------------|-------------|------------|-------------|----------------------|
| SF4081  | SFR 300mm AV Pad | 300         | 300        | 6           | 0.5                  |
| SF4082  | SFR 500mm AV Pad | 500         | 500        | 6           | 0.85                 |





StrutFoot's cantilever kits are available in 3 different sizes. They are a quick and easy solution to supporting air conditioning units and heat pump systems to the wall. These kits are supplied flat packed with all fixings required.

| Part No | Description                | Length (mm) | Width (mm) | Height (mm) | S.W.L per arm (kg) | Packaged Weight (kg) |
|---------|----------------------------|-------------|------------|-------------|--------------------|----------------------|
| SF6001  | Cantilever Arm Kit - 450mm | 450         | 41         | 750         | 250                | 8                    |
| SF6002  | Cantilever Arm Kit - 600mm | 600         | 41         | 750         | 190                | 9                    |
| SF6003  | Cantilever Arm Kit - 750mm | 750         | 41         | 750         | 150                | 10                   |

#### Kit Includes

|                                 |     |
|---------------------------------|-----|
| Cant Arms                       | x 2 |
| 750mm Strut Uprights            | x 2 |
| M10x25, M10FW, M10 Channel Nuts | x 8 |
| M8x40 Loose Bolt                | x 4 |
| Black PVC End Caps              | x 6 |



**StrutFoot Fleeces**



The StrutFoot fleece has been designed to suit both our plastic feet and rubber feet. They are used for in between asphalt and PVC roof membrane surfaces. This will therefore help prevent polymer migration between the plastic and rubber products.

| Product Information |             |            |                |
|---------------------|-------------|------------|----------------|
| Part No.            | Length (mm) | Width (mm) | Thickness (mm) |
| SF9010              | 215         | 215        | 4              |
| SF9011              | 315         | 315        | 4              |
| SF9012              | 515         | 515        | 4              |
| SF9013              | 250         | 200        | 4              |
| SF9014              | 400         | 200        | 4              |
| SF9015              | 600         | 200        | 4              |
| SF9017              | 1000        | 200        | 4              |

**StrutFoot Mounting Blocks**

The StrutFoot mounting block is a solution for supporting small condensing units on a roof without penetrating the roof membrane. They are made from recycled PVC plastic and are UV stabilised.

| Product Information |             |            |                        |
|---------------------|-------------|------------|------------------------|
| Part No.            | Length (mm) | Width (mm) | Safe Working Load (kg) |
| CB350               | 350         | 105        | 240                    |
| CB450               | 450         | 105        | 240                    |
| CB600               | 600         | 105        | 240                    |
| CB1000              | 1000        | 105        | 240                    |



They are manufactured in house enabling us to also offer bespoke sizes upon request.

# 87% quicker than standard installations

StrutFoot's adjustable ducting support system is now available for both our plastic feet and rubber feet. They both offer flexibility, a non-penetrative system and quick installation. The height of the duct adjuster can easily be changed using the thumb screw provided.

| Product Information - Plastic Feet |                |          |                      |
|------------------------------------|----------------|----------|----------------------|
| Part No.                           | Feet Size (mm) | Quantity | Packaged Weight (kg) |
| SF5822                             | 305            | x 5      | 10                   |
| SF5844                             | 500            | x 2      | 13.5                 |



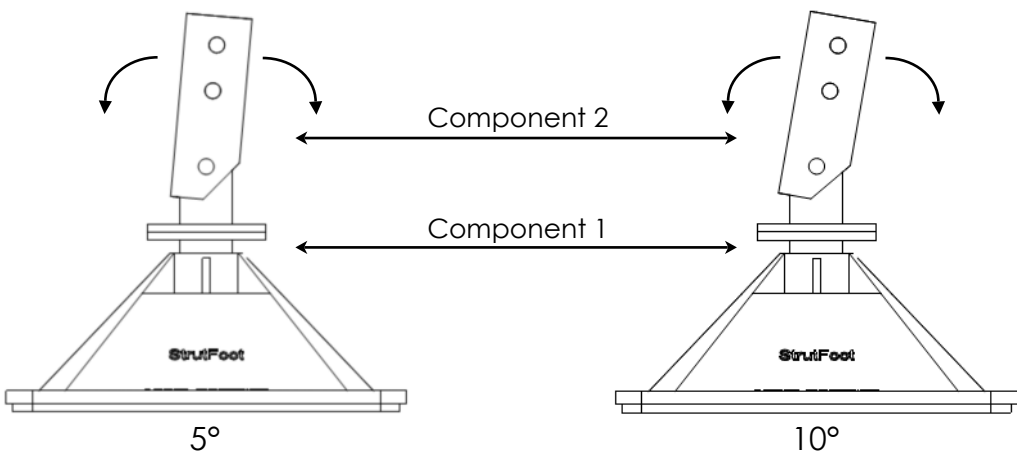
StrutFoot's adjustable ducting support system is now available for our standard rubber feet. The component is sold separately to the rubber foot.

- Non-penetrative duct support
- Quick and easy to install
- Rubber and plastic feet available
- Plastic feet incl Adhered anti-vibration pads
- Comfortable height adjustment using thumb screw
- Static max. Load 80kg
- 8mm stud for ducting support rings and clamps



StrutFoot's new adjustable angled insert allows you to install on a pitched roof up to 10° allowing the framework to sit square. It has been developed so it can be used in both our R200, R305 & R500 plastic foot so it is universal with products already stocked by our suppliers.

It is made from galvanised steel making it suitable for roof applications. It is suitable for both 41x41mm channel and 40x40 box section.



- 
- Kit Includes**
- 
- R305/500 Plastic Foot
  - Component 1
  - Component 2

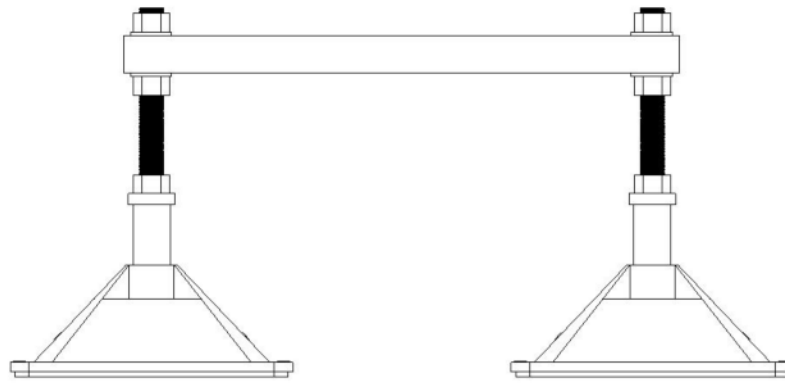




StrutFoot's cushion clamps are used to support copper refrigeration tube. They are supplied with a polymer insert which allows for a strong grip and absorbs shock and vibration running through the tube. A zinc dichromate plating ensures a corrosion resistance.

| Part Code | Pipe Diameter | Pack QTY |
|-----------|---------------|----------|
| SF004     | 1/4"          | 10       |
| SF006     | 3/8"          | 10       |
| SF008     | 1/2"          | 10       |
| SF010     | 5/8"          | 10       |
| SF012     | 3/4"          | 10       |
| SF014     | 7/8"          | 10       |
| SF018     | 1 1/8"        | 10       |
| SF022     | 1 3/8"        | 10       |
| SF026     | 1 5/8"        | 10       |
| SF034     | 2 1/8"        | 10       |





The StrutFoot Beam is an adjustable heavy duty support system which is typically used with heavy Air Handling Units (AHU's) or when existing steel beams need to be picked up on the roof.

| Part No.   | Feet Size (mm) | Beam Size (mm) | Product Weight (kg) | Frame S.W.L (kg) |
|------------|----------------|----------------|---------------------|------------------|
| SFBEAMR305 | 305            | 600            | 10                  | 350              |
| SFBEAMR500 | 500            | 600            | 13                  | 500              |

- Adjustable heavy duty support system
- Used to pick up existing support beams
- Used to support AHU's
- Supplied with fixings
- Supplied to fit unit size
- Hot dipped galvanised (HDG) framework
- Available in 305 and 500mm plastic feet

### StrutFoot Beam Includes

| Product      | Quantity |
|--------------|----------|
| Leg Assembly | x 2      |
| Beam         | x 1      |
| Brackets     | x 2      |





StrutFoot's quad system is a quick and easy solution to support large/heavy AHU's, chillers and plant rooms.

All the framework on each Quad system is HDG for outdoor use. It can be supplied using either our R305 or R500 plastic feet.

We manufacture a welded framework for both our quad to ensure strength and minimize the deflection in the strut.

### StrutFoot Quad Adjustable

| Part No. | Description                    | Feet Size (mm) | S.W.L (kg) |
|----------|--------------------------------|----------------|------------|
| SF6305   | StrutFoot Quad R305 Adjustable | 305            | 700        |
| SF6500   | StrutFoot Quad R500 Adjustable | 500            | 1000       |

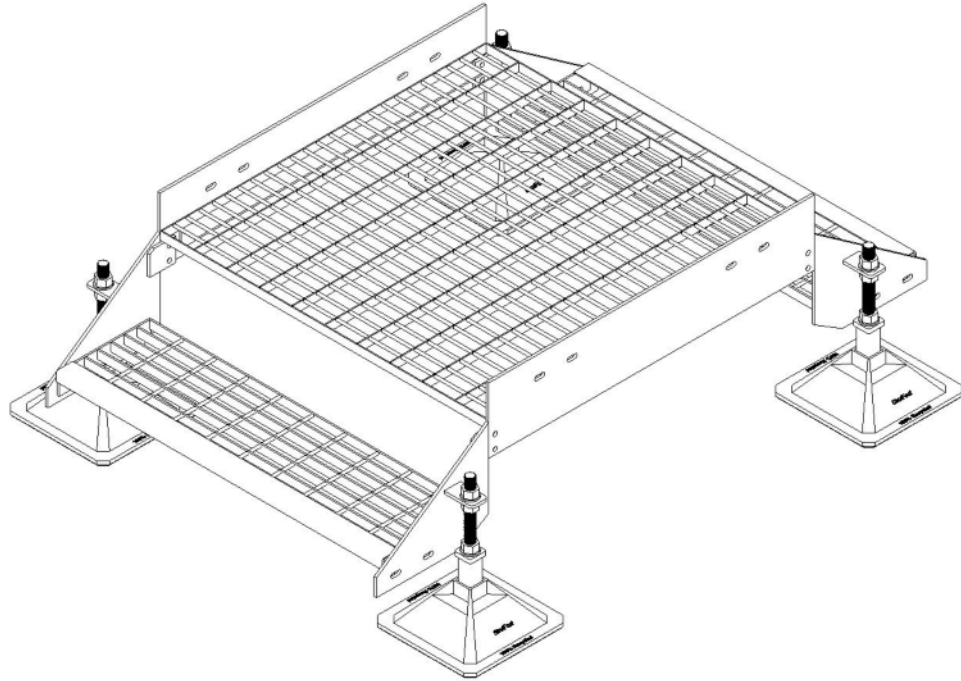


StrutFoot offer a full range of Stepovers to their customers. Each Stepover is complete with 1000mm wide steps, 1000x1000mm platform and handrail.

With our in house design and manufacturing, StrutFoot can supply and install bespoke access to meet the customers specification.

The framework on all of our access is HDG ensuring it is suitable for roof applications. All of the leg assemblies supplied are adjustable and supplied with our R305 or R200 plastic feet.

All of the below systems are available from stock and easily installed.

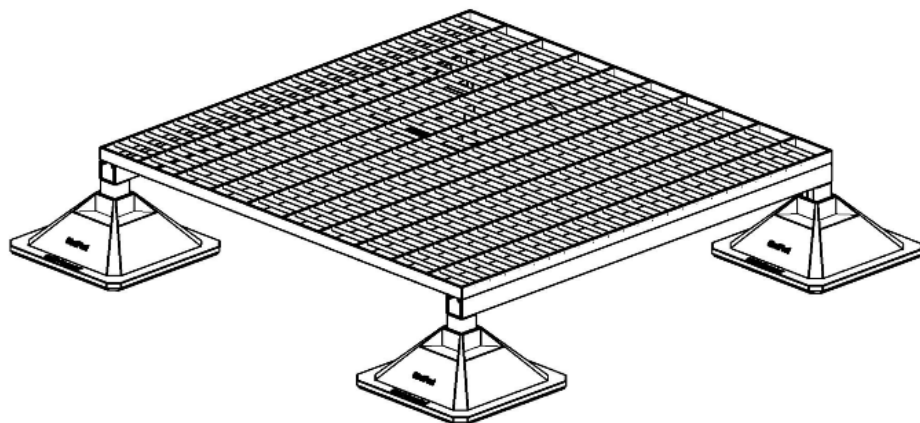


**StrutFoot Stepovers**

| Part No. | Description              | Feet Size (mm) | Platform Size (mm) |
|----------|--------------------------|----------------|--------------------|
| SF8010   | SFA111 - 1 Step Stepover | 305            | 1000x1000          |
| SF8020   | SFA212 - 2 Step Stepover | 305            | 1000x1000          |
| SF8030   | SFA313 - 3 Step Stepover | 305            | 1000x1000          |
| SF8040   | SFA414 - 4 Step Stepover | 305            | 1000x1000          |

**StrutFoot Platform**

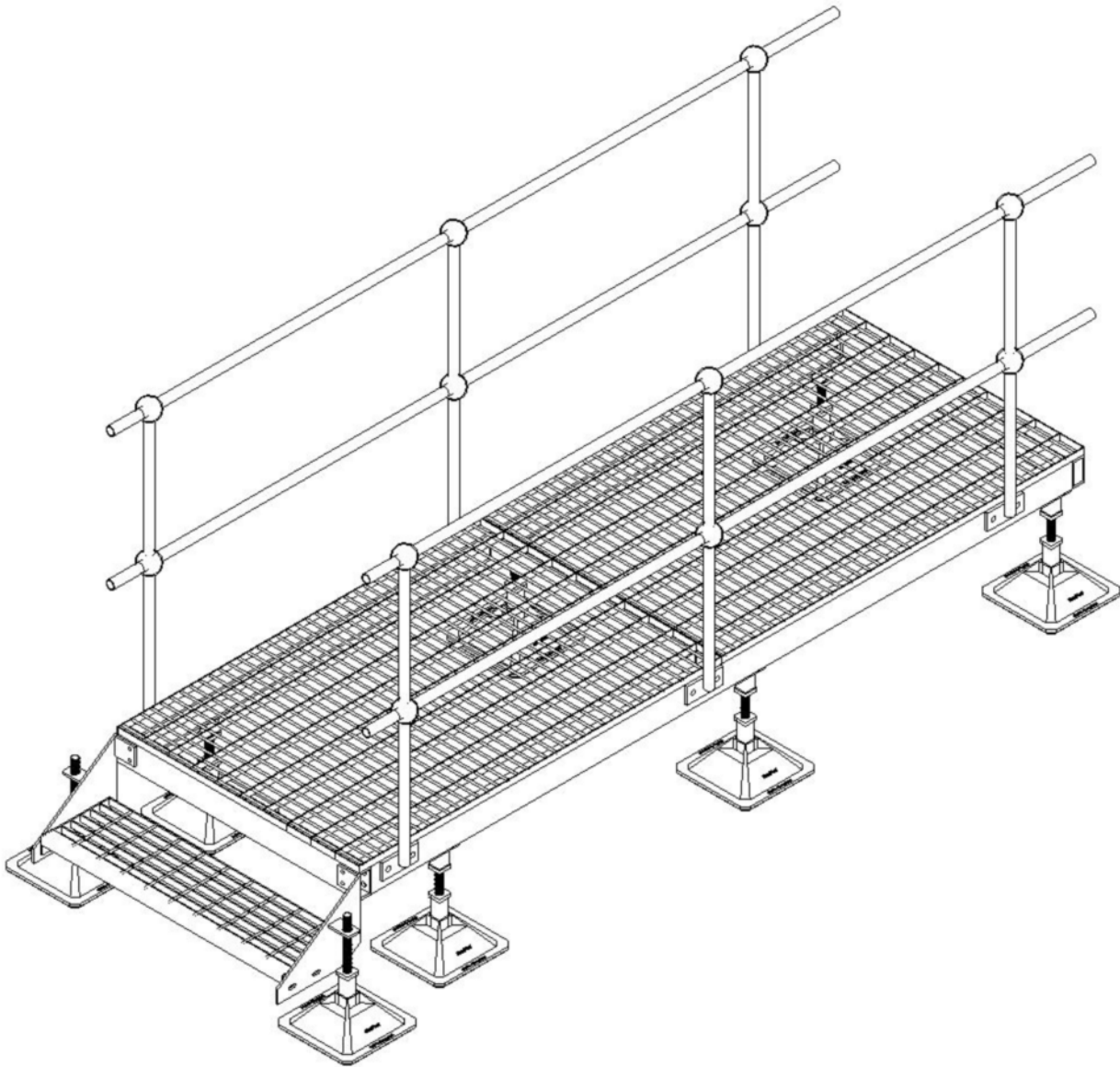
| Part No. | Description                 | Feet Size (mm) | Platform Size (mm) |
|----------|-----------------------------|----------------|--------------------|
| SF8050   | SFA555 - StrutFoot Platform | 305            | 1000x1000          |



StrutFoot are the only supplier who currently design and manufacture bespoke access in house.

Material:

- HDG Framework
- HDG/GRP open mesh flooring
- Handrail - key clamps & box section available upon request





StrutFoot originally supplied a HD frame to support a large AHU on the project. We were then asked to quote, design and install a bespoke platform and three bespoke Stepovers for a project in Southampton.

The client sent us all the technical information regarding requirements for the access; e.g. dimensions and clearance required.

We managed to get all the access manufactured, galvanised, delivered and installed within 23 days.





StrutFoot were tasked with designing roof top supports for AHU's, chillers and ductwork for a project in London.

The client issued us with the drawings and technical specifications for the project. Following a site survey we were able to offer a cost effective solution, designed, engineered and delivered to site in 5 working days to site.



After the installation of the StrutFoot frames, the final inspection was supervised by our Site Manager. The client was pleased with the solutions provided.

The customer requested access to fit just above the ductwork which was already situated on the roof.

Everything was again manufactured in house and delivered to site.

StrutFoot then sent out an installation team to build the framework which was completed in 5 working days.



# Strut *Foot*

Universal Flat Roof Support System



+44 (0) 1922 650 174



[sales@strutfoot.co.uk](mailto:sales@strutfoot.co.uk)



[www.strutfoot.co.uk](http://www.strutfoot.co.uk)