



designed by engineers for engineers...

Aspen was established in 1992 by three engineers who were installing air conditioning and refrigeration equipment. This often proved to be awkward with the existing products, so we developed the peristaltic condensate pumps to meet our own needs.

Since then Aspen Pumps have developed a market leading range of pumps, designed and manufactured in the UK, for all conditions and variable installations. The success has been built by hands-on knowledge of installation engineers.



Only Advanced Engineering's Indoor range of Coil Cleaners and condensate drain clean are approved 'pump safe' by Aspen Pumps.

aspen contents





Peristaltic Pumps

In 1992 Aspen pioneered the use of peristaltic condensate pumps and today are still setting the standard for reliability and innovation.

Peristaltic pumps offer the ideal solution for condensate removal due to the combination of quietness, reliability and installation advantages. The peristaltic rotary movement generates a continuous pressure meaning that the pump can be sited over 15 metres away from the condensate source with no effect on performance. In addition, the pump mechanism does not come into contact with the water, removing the risk of contamination or corrosion.

- QUIET OPERATION
- SITED AWAY FROM THE CONDENSATE SOURCE
- RELIABILITY & LONG LIFE
- CAN RUN DRY





Universal

The Universal peristaltic pump operates with two temperature sensors. These allow the pump to detect and be triggered by a change in air temperature, making this pump suitable for many applications.



Standard

The Standard peristaltic pump is triggered by the hard-wired cooling signal from the air conditioning unit.



MK4

The MK4 peristaltic pump operates using water level sensors. This allows the pump to detect and be triggered by the level of water in the condensate tray.



Mechanical

The Mechanical peristaltic pump operates by using a remote reservoir with an internal float mechanism. It is available with or without a high level sensor output.



Compressor Sensor

Ideal for applications where complete silence is important. The Compressor Sensor pump is triggered by a sensor, which is designed to be mounted onto the compressor in an external condenser unit.

Peristaltic accessories are available on page 48

- Senses 5°C differential across the evaporating coil
- Only requires live/neutral supply and 2 sensors either side of the evaporating coil – one 'air on' and one 'air off'
- Operates only on cooling
- · Self-priming lifts 3m
- Discharge head: 12m
- Water flow rate: 6.25L/hr at 12m head
- 3 minute timer overrun
- No siphoning back
- No loud sound from dry running

- Manual test switch
- Pumps water, fibrously contaminated water and air
- Pump rating: 230V AC, 0.2A Alternative voltages available
- · Connecting cable: 3m
- · Fire retardant plastics
- Inlet/outlet size: 6mm
- · Push-in plug
- · Wall-mounted bracket
- CE marked

INSTALLATION NOTES

Connect the pump to the appropriate drip tray (using the vinyl tube supplied), then connect to the mains power supply. Situate the red sensor in the ambient 'air on' side of the evaporating coil (NOT TOUCHING COIL). Position the blue sensor to the 'air off' side of the evaporating coil. This will sense 5°C differential and operate the pump.

The pump is designed to sit level on its base and MUST at all times have adequate space around it for good ventilation.

Ensure that there are no kinks or trapped parts in the piping, which must have a 6mm I/D and a 9mm O/D. Fix the pipes with cable ties to the pump injet and outlet.

PLEASE NOTE: where space is limited lay and fix suction vinyl tube along bottom of condense tray, as pump is self-priming.

A variable connector is provided to make easy installation between the condensate tray outlet and vinyl tube.



PUSH-IN PLUG

SERVICE GUIDE

We recommend that you inspect the pump head regularly, and change the pump head tube every 12 months or more frequently if required.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth

Product	Height	Width	Depth	Weight
UNIVERSAL	115mm	135mm	77mm	1.35kg



Universal

The Universal peristaltic pump operates with two temperature sensors. These allow the pump to detect and be triggered by a change in air temperature, making this pump suitable for many applications.

The Universal is designed to fit in ceiling voids and lift the condensate water from wall mounted machines where a gravity drain is too obtrusive. It can also be used on cassettes fitted with an internal lift pump.

The pump can be mounted remotely as it is self-priming to a height of

3 metres and will pump 6.25 litres of water per hour against a maximum head of 12 metres. The pump runs constantly while the air conditioning system is cooling – when the cooling switches off a 3 minute timer ensures that the condensate tray is emptied before the pump switches off.

The Universal pump is a peristaltic rotary type - which means that it is quiet in operation, very reliable and will run dry without fear of damage or embarrassing noise. Unlike other pumps using either mechanical or electrical conductivity sensors, the Universal does not suffer from corrosion or contamination problems.

- Operates on hard-wired 150-230V cooling signal
- Self-priming lifts 3m
- Discharge head: 12m
- Water flow rate: 6.25L/hr at 12m head
- · 3 minute timer overrun
- No siphoning back
- · No loud sound from dry running
- Manual test switch

- Pumps water, fibrously contaminated water and air
- Pump rating: 230V AC, 0.2A Alternative voltages available
- · Connecting cable: 2m
- · Fire retardant plastics
- · Inlet/outlet size: 6mm
- Push-in plug
- · Wall-mounted bracket
- CE marked

INSTALLATION NOTES

Connect the pump to the appropriate drip tray (using the vinyl tube supplied), then connect to the mains power supply, and control link to the air-conditioning units cooling signal.

PLEASE NOTE: The signal wire must be connected to the cooling signal only. This ensures that when the system is on heating, the pump does not run.

The pump is designed to sit level on its base and MUST at all times have adequate space around it for good ventilation.

Ensure that there are no kinks or trapped parts in the piping, which must have a 6mm I/D and 9mm O/D. Fix the pipes with cable ties to the pump inlet and outlet.

A variable connector is provided to make easy installation between the condensate tray outlet and vinyl tube.

All the peristaltics now come with a wall-mounted bracket which is designed to hold a replacement head tube for your servicing convenience.



SERVICE GUIDE

We recommend that you inspect the pump head regularly, and change the pump head tube every 12 months or more frequently if required.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
Black	Switched live from signal

Product	Height	Width	Depth	Weight
STANDARD	115mm	135mm	77mm	1.35kg



Standard

The Standard peristaltic pump is triggered by the hard-wired cooling signal from the air conditioning unit.

The Standard is designed to fit in ceiling voids and lift the condensate water from wall mounted machines where a gravity drain is too obtrusive. It can also be used on cassettes fitted with an internal lift pump.

The pump can be mounted remotely as it is self-priming to a height of 3 metres and will pump 6.25 litres of water per hour against a maximum head of 12 metres.

The pump runs constantly while the air conditioning system is cooling – when the cooling switches off a 3 minute timer ensures that the condensate tray is emptied before the pump switches off. Rollers in the pump act as check valves to stop the condensate draining back into the condensate tray.

The Standard pump is a peristaltic rotary type - which means that it is quiet in operation, very reliable and will run dry without fear of damage or embarrassing noise. Unlike other pumps using either mechanical or electrical conductivity sensors, the Standard does not suffer from corrosion or contamination problems.

MK4

- · Operates on bead contact with water
- 3 minute timer overrun

Mechanical

- Operates on a float switch
- 2 reservoir options available
- Available with high level sensor option
- Float switch cable: 3m
- Self-priming lifts 3m
 Discharge head: 12m
- Water flow rate: 6.25L/hr at 12m head

- No siphoning back
- No loud sound from dry running
- Manual test switch
- · Pumps water, contaminated water and air
- Pump rating: 230V AC, 0.2A Alternative voltages available
- . Connecting cable: 2m
- Fire retardant plastics
- Inlet/outlet size: 6mm
- Push-in plug
- Wall-mounted bracket
- CE marked

MK4 INSTALLATION NOTES

Connect the pump to the appropriate drip tray (using the vinyl tube supplied), then connect to the mains power supply.

WATER LEVEL DETECTOR:

When the unit is first switched on you need to allow 5 mins for the electronics to stabilise.

To ensure that the detector will operate satisfactorily, please abide by the following:

- The detector will trigger when the water level has reached the first 2 or 3mm of the sensor, this should be taken into account when positioning the height of the sensor. As the device works on heat conductivity it can take up to 30 secs for the pump to switch on.
- 2. Position the sensor away from direct draught and make sure the tip is a minimum of 5mm from the base of the tray. Ensure the tip is in free air and unable to touch the sides. The ambient sensor within the cable 5cm from the tip can be seen as a small disc beneath the sleeve, this should also be positioned in free air to avoid any heat conduction.

MECHANICAL INSTALLATION NOTES

Connect to the mains power supply.

Decide which reservoir is correct for your installation and position the reservoir into the condensate tray or to the drainpipe connection (depending on which reservoir you use).

Ensure you have placed the float magnet facing upwards. Then Connect the pump to the reservoir (using the viny) tube supplied).

ALWAYS ENSURE RESERVOIR IS MOUNTED HORIZONTALLY

The pump is designed to sit level on its base and must at all times have adequate space around it for good ventilation.

Ensure that there are no kinks or trapped parts in the piping, which must have a 6mm I/D and an 9mm O/D. Fix the pipes with cable ties to the pump inlet and outlet.

Both the MK4 and Mechanical share the same SERVICE GUIDE & ELECTRICAL CONNECTIONS as the Universal peristaltic pump (see page 6).

Product	Height	Width	Depth	Weight
MK4 & MECHANICAL	145mm	160mm	83mm	1.7kg



MK4 & Mechanical

The MK4 peristaltic pump operates using water level sensors. This allows the pump to detect and be triggered by the level of water in the condensate tray.

The detector has two sensors within the head which warm up to 15°C above ambient. When the lower sensor comes into contact with water, the heat conductivity from the sensor provides a temperature difference energising the pump. Once the level of the water has dropped below the tip of the sensor, the pump will continue until the sensor has completely dried out.

The Mechanical peristaltic pump operates by using a remote reservoir with an internal float mechanism. It is available with or without a high level alarm output.

The pump is designed to be mounted remotely if required and has a 3 metre (9.8ft) lead to the float switch. Simply position the float switch in the condensate tray or fix to the drain-pipe connection (depending on chosen reservoir). Then connect the reservoir to the pump.

- · Operates on E.M. field compressor signal
- · Self-priming lifts 3m
- · Discharge head: 12m
- Water flow rate: 6.25L/hr at 12m head
- · 3 minute timer overrun
- No siphoning back
- · No loud sound from dry running
- · Manual test switch
- Pumps water, fibrously contaminated water and air

- Pump rating: 230V AC, 0.2A Alternative voltages available
- · Connecting cable: 3m
- · Sensor cable: 10m
- · Fire retardant plastics
- · Inlet/outlet size: 6mm
- · Push-in plug
- · Wall-mounted bracket
- CE marked

INSTALLATION NOTES

Decide where the pump will be located and connect it to the appropriate drip tray (using 6mm VD vinyl tube), then connect to a 240V mains power supply.

Position the sensor vertically against the compressor, so it protrudes above the top of the compressor like an aerial. This is important as it is where the electromagnetic field is strongest. Use the cable tie supplied to fix the sensor securely to the compressor. A 10m sensor cable is supplied, which can be extended if required.

The pump is designed to fit level on its base and MUST have adequate ventilation space around it at all times.

Ensure that there are no kinks or trapped sections in the piping, which must have a 6mm I/D and 9mm O/D. Fix the pipes with cable ties to the pump inlet & outlet.

A variable connector is provided to allow easy fixing between the condensate outlet tray and the vinyl tube.

SERVICE GUIDE

We recommend that you inspect the pump head regularly, and change the pump head tube every 12 months or more frequently if required.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth

Product	Height	Width	Depth	Weight
PUMP	145mm	160mm	83mm	1.7kg
SENSOR	126mm	22mm	16mm	0.1kg



Compressor Sensor

Ideal for applications where complete silence is important.

The Compressor Sensor pump is triggered by a sensor, which is designed to be mounted onto the compressor in an external condenser unit. When the air conditioning system starts up, the compressor produces a localised electromagnetic field, triggering the sensor, which in turn activates the peristaltic pump. The pump runs constantly while the compressor is operational. When the compressor switches off, a 3 minute timer ensures that the condensate tray is emptied before the pump switches off.

Rollers in the pump act as check valves to stop the condensate draining back into the condensate tray.

The pump can either be fitted in the ceiling void or installed within the condenser unit (or nearby), as long as the pump and it's plug/socket are sheltered and fully protected from any water ingress. The pump can be mounted remotely in this way, as it is self-priming to a height of 3 metres and will pump 6.25L/hr of water against a maximum head of 12 metres. The Compressor Sensor pump is a peristaltic rotary type - which means that it is quiet in operation, very reliable and will run dry without fear of damage or embarrassing noise.

Tank Pumps

When looking for high flow rate, reliability and value for money, Aspen tank pumps are the perfect solution.

Aspen's continued focus on innovation has created a market leading range of tank pumps, designed to suit a diverse array of applications. With reliability as the key decision criteria, the tank pumps are designed to perform even under the most challenging of applications, including hot water.

- HIGH FLOW RATES
- BUILT IN HIGH LEVEL SAFETY
- HOT & COLD WATER OPTIONS
- VALUE FOR MONEY





NEW Hi-flow 0.5L

The Hi-flow 0.5L has the same market leading reliability of the Hi-flow 1L & 2L pumps and is ideal when space is limited.





Hi-flow 1L & 2L

Hi-flow tank pumps are designed to collect condensate water from refrigeration and air conditioning units. They operate automatically when the float rises and will discharge to a head of 4.6 metres.



Hi-lift 1L & 2L

Hi-lift tank pumps are designed to collect condensate water from refrigeration and air-conditioning units. They operate automatically when the float rises to discharge to a head of 12 metres. The Hi-lift will pump a smaller volume of water than the Hi-flow, but to a greater head.



Heavy Duty 6m & 10m

Heavy Duty pumps are designed for the rapid removal of condensate. They are particularly useful in situations where multiple refrigeration units are installed, or where large refrigeration systems deposit considerable quantities of condensate at one time.



Hot Water Heavy Duty & Economy

The Hot Water Heavy Duty and Economy pumps are designed to collect hot water from humidifier drain down cycles and normal condensate water from any associated air conditioning or boiler systems.

Tank pumps accessories are available on page 48

- · Tank capacity: 0.5L
- · Discharge head: 3.5m
- · Water flow rate: 180L/hr max.
- · Inline valve to prevent siphoning back
- Pre-wired safety switch 230V, 4.0A max.
- Incorporated back-plate for vertical mounting
- Pump rating: 230V AC, 0.4A Alternative voltages available

- Auto-resetting thermal cut-out to shaded pole motor
- . Connecting cable: 2m
- · Fire retardant plastics
- 3 inlet positions: 2 x 27mm ø, 1 x 20mm ø push out
- · Outlet size: 6mm & 10mm
- · Push-in plug
- · CE marked



HI-FLOW 0.5L PERFORMANCE 200 150 0 1 2 3 4

SERVICE GUIDE

Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump housing. Ensure a suitable cleaner is used as plastics can be damaged by certain chemicals.

ELECTRICAL CONNECTIONS

Brown	Live	
Blue	Neutral	
Green/ Yellow	Earth	
2x Black	Safety switch	

Product	Height	Width	Depth	Weight
HI-FLOW 0.5L	125mm	205mm	120mm	1.4kg



Hi-flow 0.5L

When you need to remove a lot of condensate water fast, Aspen's range of Hi-flow pumps are the perfect solution.

The new, stylish Hi-flow 0.5L has the same market leading reliability of the and is ideal when space is limited.

The pump quietly removes up to 180L/hr, with a maximum head of 3.5 metres. For ease of installation there is a push-in plug and an incorporated back-plate for vertical mounting. The installation flexibility continues with three inlet options and a dual-size non-return outlet barb, suitable for both 1/4" and 3/8" tube.

0.5L Boiler Pump Set

- For the domestic boiler market
- · Audible alarm, with auto cut-out
- Pump accepts PH levels as low as 3
- Ideal for use in cellars as it will not rust
- The set includes the new Acid Neutraliser

FP.1195



- Tank capacity: 1L or 2L
- · Discharge head: 4.6m
- · Water flow rate: 288L/hr max.
- Inline valve to prevent siphoning back
- Pre-wired safety switch 230V, 4.0A max.
- · Clear deck for quick and easy inspection
- Incorporated back-plate for vertical mounting
- Pump rating: 230V AC, 0.6A Alternative voltages available

- Auto-resetting thermal cut-out to shaded pole motor
- . Connecting cable: 2m
- · Fire retardant plastics
- · 2 inlet positions: 25mm ø
- · Outlet size: 6mm & 10mm
- · CE marked



SERVICE GUIDE

Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump housing. Ensure a suitable cleaner is used as plastics can be damaged by certain chemicals.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

Product	Height	Width	Depth	Weight
HI-FLOW 1L	140mm	235mm	140mm	1.7kg
HI-FLOW 2L	170mm	235mm	140mm	1.75kg



Hi-flow 1L & 2L

Aspen's Hi-flow tank pumps are designed to collect condensate water from refrigeration and air-conditioning units. They operate automatically when the float rises and will discharge to a head of 4.6 metres.

The Hi-flow will pump a greater volume of water than the Hi-lift, but to a lesser head.

The Hi-flows incorporate two high quality switches, activated by a float system. One operates the centrifugal type pump and the other is used as a high level safety switch. In the event of a pump failure this device will switch off the refrigeration unit and can simultaneously activate an optional audio and/or visual alarm.

The deck of the pump is clear plastic for quick and easy internal inspection, and it comes with a 2 metre long cable with push-in plug which makes installation and maintenance easier.

In all cases a tank pump must be sited under the source of the condensate.

Tank capacity: 1L or 2L

Discharge head: 12m

Water flow rate: 11L/hr at 12m head

No siphoning back

· No loud sound from dry running

Pre-wired safety switch 230V, 4.0A max.

Requires 230V supply only

Clear deck for quick and easy inspection

Fits into shallow ceiling void or unit

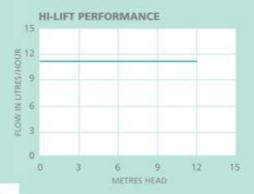
- Incorporated back-plate for vertical mounting
- Pumps water, fibrously contaminated water and air
- Pump rating: 230V AC, 0.4A Alternative voltages available

· Fire retardant plastics

· 2 inlet positions: 25mm ø

· Outlet size: 6mm

CE marked



SERVICE GUIDE

Inspect the pump head regularly and change the pump head tube every 12 months or more frequently if required. Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump. This only takes 3 minutes! Ensure a suitable cleaner is used as plastics can be damaged by certain chemicals.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

Product	Height	Width	Depth	Weight
HI-LIFT 1L	132mm	235mm	140mm	1.8kg
HI-LIFT 2L	165mm	235mm	140mm	2kg



Hi-lift 11.82L

Aspen's Hi-lift tank pumps are designed to collect condensate water from refrigeration and air-conditioning units. They operate automatically when the float rises to discharge to a head of 12 metres.

The Hi-lift will pump a smaller volume of water than the Hi-flow, but to a greater head.

The pumps incorporate two high quality switches, activated by a float system. One operates the centrifugal type pump and the other is used as a high level safety switch. In the event of a pump failure this device will switch off the refrigeration unit and can simultaneously activate an optional audio and/or visual alarm.

The pump is a peristaltic rotary type, which means that it is quiet in operation, very reliable and will run dry without fear of damage or embarrassing noise.

Unlike other pumps using either mechanical or electrical conductivity sensors, the Hi-lift does not suffer from corrosion or contamination problems. The deck of the pump is clear plastic for quick and easy internal inspection.

Heavy Duty 6m

Discharge head: 6m

Pump rating: 230V AC, 1.5A

· Water flow rate: 900L/hr at zero head

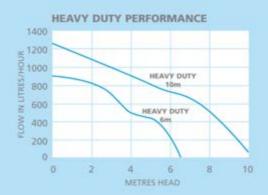
Heavy Duty 10m

Discharge head: 10m

Pump rating: 230V AC, 0.49A

· Water flow rate: 1250L/hr at zero head

- · Tank capacity: 4L
- Non-return valve.
- No siphoning back
- · Pre-wired safety switch 230V, 4.0A max.
- · Fire retardant plastics
- · 2 inlet positions: 40mm ø
- Outlet size: 10mm
- · CE marked



SERVICE GUIDE

Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump housing. Ensure a suitable cleaner is used as plastics can be damaged by certain chemicals.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

Product	Height	Width	Depth	Weight
HEAVY DUTY 6m	205mm	300mm	150mm	3.5kg
HEAVY DUTY 10m	265mm	300mm	150mm	4.3kg



Heavy Duty 6m & 10m

The Aspen Heavy Duty pumps are designed for the rapid removal of condensate. They are particularly useful in situations where multiple refrigeration units are installed, or where large refrigeration systems deposit considerable quantities of condensate at one time.

The pump unit is robustly constructed and designed to give reliable performance. This is particularly important in environments where efficient cleanliness is of utmost importance.

Two floats provide the operational control, one to operate the pump, and the other a safety float to be wired into the refrigeration unit control circuit.

The Heavy Duty tank pumps have a greater water flow rate than the Hi-flow tank pumps, for more heavy duty applications.

Hot Water Heavy Duty

Tank capacity: 5L

Discharge head: 15m

· Water flow rate: 1800L/hr at zero head

Pre-wired safety switch 230V, 4.0A max.

• Pump rating: 230V AC, 1.1A

Max. water temperature: 100°C

· Connecting cable: 2m

· 2 x non-return check valves

2 inlet positions: 40mm ø

Outlet size: 15mm

CE marked

Hot Water Economy

· Tank capacity: 4L

Discharge head: 6m

Water flow rate: 900L/hr at zero head

Pre-wired safety switch 230V, 4.0A max.

. Pump rating: 230V AC, 1.5A

Max. water temperature: 100°C

Connecting cable: 2m

Fire retardant plastics

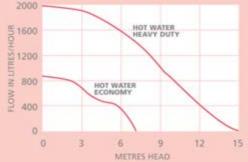
No non-return valve supplied

· 2 inlet positions: 40mm ø

Outlet size: 10mm

· CE marked

HOT WATER PERFORMANCE



SERVICE GUIDE

Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump housing. Ensure a suitable cleaner is used as plastics can be damaged by certain chemicals.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

Product	Height	Width	Depth	Weight
HOT WATER HEAVY DUTY	160mm	355mm	320mm	7kg
HOT WATER ECONOMY	205mm	300mm	150mm	3.6kg



Hot Water Heavy Duty & Economy

The Hot Water pumps are designed to collect hot water from humidifier drain down cycles and normal condensate water from any associated air conditioning or boiler systems.

Hot Water Heavy Duty

The internal pre-wired safety float is a low current switch to stop the drain down cycle in the unlikely event of pump failure. The pump is operated via internal float switches.

Hot Water Economy

The pump unit is built of heat resistant cycoloy and operates in the same way as the Heavy Duty tank pumps (see pages 22-23).

Mini Pumps

Since the launch of the Mini Orange, Aspen has become the global market innovator for Mini Pumps. Aspen has built a reputation for designing reliable and quiet pumps, that the installer can fit where space is limited.

The Mini Lime was an industry revolution, a one piece pump held horizontally within a dedicated system, which allows easy access and pipe management. Following the trend for smaller AC units, the Mini Aqua was designed to fit in the smallest of spaces, continuing Aspen's focus on making the installer's life easier.

- QUIET
- SMALL
- RELIABLE
- FLEXIBLE INSTALLATION OPTIONS







Mini Orange & Maxi Orange

The Mini Orange and Maxi Orange condensate pumps allow great installation flexibility. Perfect for fitting quickly and easily either above the false ceiling, behind wall-mounted evaporators or in the plastic conduit.



Mini Lime & Maxi Lime

The Mini Lime and Maxi Lime pumps are completely unique, in both their design and installation advantages. The pumps are clipped directly onto the reservoir so there is minimal suction lift. The Lime pumps are completely reversible and also benefit from easy access for servicing.

Lime Systems

Once you have selected the required Lime pump, the next step is choosing the desired system. There are 5 types of trunking systems available; all comprise all the components required: pump, elbow, 800mm conduit & ceiling plate. (Pump is available without system).



Mini Aqua

The ultra slim Mini Aqua has been designed to fit in the smallest of spaces, giving the installation flexibility needed where the latest generation of A/C units are becoming even smaller.



NEW Mini Blanc

The Mini Blanc is the latest addition to our range, an easy to install and discreet mini pump that can be mounted directly below the wall unit.



Mini pumps accessories are available on page 48

Mini Orange

- Pump rating: 230V AC, 16W
- Water flow rate: 12L/hr at zero head
- Max. recommended head: 10m
- 23dB(A) at 1m

Maxi Orange

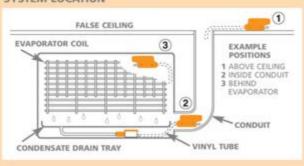
- Pump rating: 230V AC, 15W
- Water flow rate: 26L/hr at zero head
- Max. recommended head: 20m
- 35dB(A) at 1m

- Alternative voltages available
- 1PH 50Hz
- 4A volt-free alarm wires, N.O., N.C., 230V
- Hall effect semi conductor level sensors, with high level safety
- Max. water temperature: 40°C
- Discharge tube: 6mm
- Fully potted electronics
- Thermally protected
- · CE marked





SYSTEM LOCATION



Product	Height	Width	Depth	Weight
MINI ORANGE	51mm	107mm	39mm	0.25kg
MAXI ORANGE	66mm	122mm	44mm	0.45kg



Mini Orange & Maxi Orange

The Aspen Mini Orange and Maxi Orange pumps are designed to be installed:

- above the false ceiling where possible
- behind wall mounted evaporators
- in plastic conduit

By connecting the drain hose to the reservoir and placing the pump drive unit within the evaporator, condensate water can be pumped away to a suitable drain.

Within the Orange kit there are two reservoirs to choose from, which must sit flat and horizontal. One allows you to connect directly to the drain hose of the evaporator and the second reservoir can be placed directly into a condensate tray.



Mini Lime

- Pump rating: 230V AC, 15W
- Water flow rate: 11L/hr at zero head
- Max. recommended head: 10m
- 23dB(A) at 1m

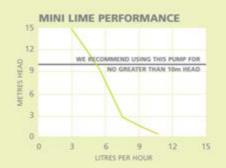
Maxi Lime

- Pump rating: 230V AC, 15W
- · Water flow rate: 34L/hr at zero head
- Max. recommended head: 15m
- 35dB(A) at 1m

- Alternative voltages available
- 1PH 50Hz
- 4A volt-free alarm wires, N.O., N.C., 230V
- Hall effect semi conductor level sensors, with high level safety
- Max. water temperature: 40°C
- · Discharge tube: 6mm
- Fully potted electronics
- · Thermally protected
- CE marked



MAXI LIME





Product		Width	Depth	
MINI LIME	79mm	99mm	44mm	0.31kg
MAXI	115mm	99mm	44mm	0.47kg



Mini Lime & Maxi Lime

The Aspen Mini & Maxi Lime pumps are completely unique, in both their design and installation advantages. The pumps are clipped directly onto the reservoir so there is minimal suction lift. By connecting the drain hose to the reservoir of the pump unit, condensate water can be pumped away to a suitable drain.

The pumps fit securely into a specifically designed elbow that holds them horizontally to ensure reliable operation. The pump and elbow are reversible therefore they can be installed easily on either side of an evaporator unit.

The Lime system makes installation easy by providing a pump complete with the conduit trunking, in which the pump and all pipework are hidden. This system allows easy access for maintenance and ensures that the reservoir is level at all times.

- Completely reversible
- Quick and easy to install

Simple...

- 1. Select Mini or Maxi Lime
- 2. Choose from the 5 trunking ranges available (see next page)

Systems available for Mini Lime

 Slimline system (includes conduit sleeve)

BBJ system

Inoac/Inaba system

Artiplastic system

Optimal system

IVORY: FP 1500 WHITE: FP 2857

IVORY: FP 2083 WHITE: FP 2856

IVORY: FP 2100 WHITE: FP 2855

IVORY: FP 2077

WHITE: FP 2291

Systems available for Maxi Lime

BBJ system

TVORY: FP 2213

Inoac/Inaba system

IVORY: FP 2214

Artiplastic system

IVORY: FP 2405

Optimal system

WHITE: FP 2290

Please note that the Maxi Lime is supplied with BBJ trunking (D.70) as standard.

Lime Slimline system







Lime BBJ system







Lime Inoac/Inaba system







Lime Artiplastic system







Lime Optimal system







The Lime pump included in the Optimal system comes complete with a Optimal rubber casing (as shown in the picture above).



SUMUNE SYSTEM

Lime Systems

Once you have selected the required pump, the next step is choosing the desired system. There are 5 types of trunking systems available.

The systems all comprise of all the components required: pump, elbow, 800mm conduit & ceiling plate.

For simple installations the Slimline system is perfect (Slimline is a non extendable range of trunking). For both simple and more complex installations the BBJ and Inoac system packs are ideal. They can be integrated within the ranges of BBJ (pages 68/69), Inoac (pages 70/71) and Inaba trunking. This allows for maximum installation flexibility when required.

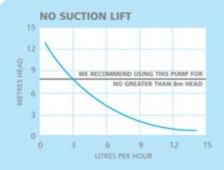
Finally there are the Artiplastic and Optimal systems which can be integrated within the Artiplastic and Optimal ranges of trunking accessories respectively.

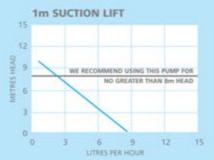
The Lime pumps are available on their own, without a system.

MINI LIME OEM: FP 2124 MAXI LIME OEM: FP 2215

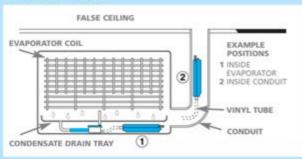
- Pump rating: 230V AC, 16W Alternative voltages available
- 1PH 50Hz
- 4A volt-free alarm wires, N.O., N.C., 230V
- Hall effect semi conductor level sensors, with high level safety
- · Water flow rate: 14L/hr at zero head
- · Max. recommended head: 8m
- 21dB(A) at 1m

- Max. water temperature: 40°C
- · Discharge tube: 6mm
- Fully potted electronics
- Thermally protected
- · CE marked





SYSTEM LOCATION



Product	Height	Width	Depth	Weight
MINI AQUA	28mm	165mm	28mm	0.18kg



Mini Aqua

The Mini Agua has been designed to fit in the smallest of spaces, giving the installation flexibility needed where the latest generation of A/C units are becoming even smaller. The Mini Aqua is designed to be installed:

- · within wall mounted evaporators
- · in plastic conduit

By connecting the drain hose to the reservoir and placing the pump drive unit within the evaporator or conduit, condensate water can be pumped to a height of 8 metres.

It's probably the smallest condensate pump in the world!



ACTUAL SIZE

Mini Aqua LG Due to the increasing popularity of

the LG Art Cool Gallery, we have designed the Mini Aqua LG. The only condensate pump small enough to fit hidden inside!

FP.1026



Mini Blanc - Deluxe

- Pump rating: 230V AC, 16W
- Water flow rate: 12L/hr at zero head
- Max. recommended head: 10m
- 21dB(A) at 1m
- Push-in plug

Mini Blanc - Basic

- Pump rating: 230V AC, 11W
- · Water flow rate: 6L/hr at zero head
- Max. recommended head: 4m
- 18dB(A) at 1m
- Hard-wired

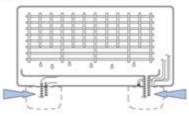
- Alternative voltages available
- 1PH 50Hz
- 4A volt-free alarm wires, N.O., N.C., 230V
- Hall effect semi conductor level sensors, with high level safety
- Max. water temperature: 40°C
- Discharge tube: 6mm
- Inlet size: 21mm ø
- Fully potted electronics
- Thermally protected
- CE marked





SYSTEM LOCATION

Can be placed at any point along bottom edge of the evaporator where the drain hose can exit,



Product	Height	Width	Depth	Weight



Mini Blanc Deluxe & Basic

Designed to be fitted below the indoor unit, the Mini Blanc offers an extremely easy to install Mini pump for all wall and ceiling suspended indoor units.

Suitable for both commercial and domestic installations, the quick fit pump is simply screwed to the wall. It is easy to access therefore low maintenance.

The Mini Blanc is ultra quiet in operation as well as discreet with a slim profile of 55mm from the wall.

Available in 2 models, the 'Deluxe' is available with a push-in plug and has a flow rate of 12L/hr and a recommended lift of 10 metres. We also offer the hard-wired 'Basic' with a flow rate of 6L/hr and recommended lift of 4 metres.

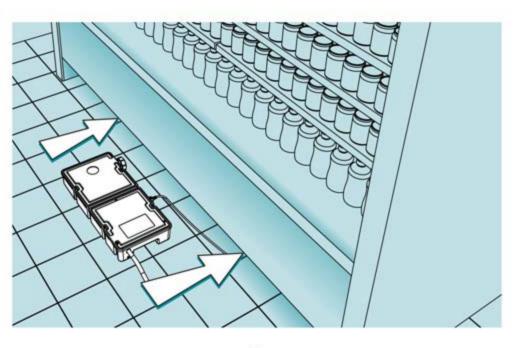


Supermarket Pumps

A complete solution, to meet the growing demand for the reliable condensate removal pumps within the retail refrigeration industry.

As environmental concerns grow over the use of energy within the retail sector, the use of energy inefficient evaporator/condensate trays is starting to raise questions. Aspen's refrigeration pumps offer a lower carbon alternative. The range is designed to work with integral HT or LT multidecks. The pumps are suitable for use by both the OEM market and direct installers.

- QUICK AND EASY TO INSTALL
- EXCEPTIONALLY RELIABLE
- EASY TO CLEAN
- LOWER CARBON ALTERNATIVE TO EVAPORATOR TRAYS



Low Profile ERRP

Standing at a height of only 75mm, it is a simple but very effective solution for the removal of water from directly underneath refrigeration units during the auto defrost cycle. Ideal for individual refrigeration units with limited space, it is suitable for both the OEM market and for direct installers.

ERRP

The high capacity Economy Retail Refrigeration
Pump tank and covers are plastic, which not
only makes the unit lightweight and easy to clean,
but has allowed the freedom to incorporate extra
features to benefit the service engineer during
installation and maintenance.

Cold Cabinet

The stainless steel Cold Cabinet Refrigeration Pumps high capacity permits the draining of several units together.

The pump is operated by floats which activate sensors as the water level rises in the tank. Cleaning and maintenance of the pump is simple, as they can be removed easily from underneath any unit.

Macerators

The Macerator pumps are designed to collect condensation and defrost water from food hall cabinets. They both feature an internal filter blade to stop the pump from clogging with food debris between maintenance visits and will discharge the water to a head of 8.5 metres.

Accessories are available on page 48

TECHNICAL SPECIFICATIONS

Tank capacity: 3.5L

Water flow rate: 190L/hr max.

· Max. recommended head: 21m

Pump rating: 230V AC, 1.6A

· Thermally protected

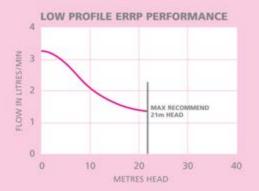
· High level safety switch

Filter to catch debris

Outlet size: 10mm

Inlet hole to lid: 50mm

- · Side inlet option available
- Plastic tank/cover
- · Lightweight
- · Push-in plug
- · Handles to enable easy carrying
- Water temperature: 0°C to 40°C
- · Single float hall effect switch



SERVICE GUIDE

IMPORTANT: Flush the pump through with anti-bacterial wash and clean both filters every 6 months or more often if required, to avoid sludge build-up. Replacement anti-bacterial "Stayclean" strips are recommended and are available from Aspen Pumps.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

PUMP DIMENSIONS

Product	Height	Width	Depth	Weight
LOW PROFILE ERRP	75mm	530mm	240mm	2.4kg



Standing at a height of only 75mm, it is a simple but very effective solution for the removal of water from directly underneath refrigeration units during the auto defrost cycle.

Ideal for individual refrigeration units with limited space, it is suitable for both the OEM market and for direct installers. The tank side of the pump has capacity for 3.5 litres of water drained directly from the refrigerator during the auto defrost cycle, which is pumped away quickly through two filters to catch any debris.

The design shares many 'service engineer friendly' features with the larger, established ERRP, including lightweight and easy-to-clean plastic tank and covers, plus a push-in plug and recessed handles at either end to enable easy installation and servicing.

TECHNICAL SPECIFICATIONS

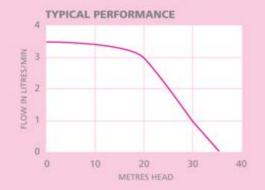
- · Tank capacity: 11L
- · Water flow rate: 225L/hr max.
- Max. recommended head: 35m
- Pump rating: 230V AC, 0.35A
- · Thermally protected
- · High level safety switch
- · Filter to catch debris
- · Outlet size: 10mm
- Inlet hole to lid: 50mm
- · Side inlet option available

Economy Retail Refrigeration Pump

- Plastic tank/cover
- Lightweight
- · Push-in plug
- · Handles to enable easy carrying
- Water temperature: 0°C to 40°C
- Single float hall effect switch

Cold Cabinet

- Stainless steel tank/cover
- · Hard-wired
- Water temperature: 0°C to 75°C
- 3 floats & relay



SERVICE GUIDE

IMPORTANT: Flush the pump through with anti-bacterial wash and clean both filters every 6 months or more often if required, to avoid sludge build-up. Replacement anti-bacterial "Stayclean" strips are recommended and are available from Aspen Pumps.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

PUMP DIMENSIONS

Product	Height	Width	Depth	Weight
COLD CABINET	100mm	585mm	400mm	7.8kg
ERRP	100mm	590mm	405mm	4.9kg



ERRP & Cold Cabinet

A simple yet very effective solution for the removal of water from supermarket retail refrigeration units.

The Retail Refrigeration pumps are low in height which means they can be easily installed underneath a refrigeration unit, where direct drainage is not available and water needs to be pumped up above the ceiling and away to a suitable drain. The high capacity of the pumps also permits the draining of several units together. The pumps are operated by floats which activate sensors as the water level rises in the tank.

Cleaning and maintenance of the pumps is simple, as they can be removed easily from underneath any unit.



TECHNICAL SPECIFICATIONS

· Self-priming

· Discharge head: 8.5m

Water flow rate: 780L/hr max.

Pump rating: 230V AC, 0.38A

· Connecting cable: 2m

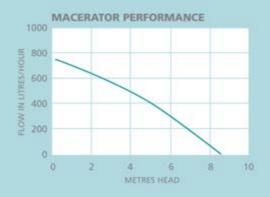
Pre-wired safety switch 230V, 4.0A max.

Macerator 4L

- · Tank capacity: 4L
- 2 inlet positions in deck: 40mm ø & 55mm ø
- Outlet size: 10mm

Macerator 12L

- . Tank capacity: 12L
- 2 inlet positions in deck: 40mm ø & 55mm ø
- Additional 3/4" inlet connector in tank
- · Outlet size: 10mm



SERVICE GUIDE

Flush the pump thoroughly with anti-bacterial wash every 6 months to avoid sludge build-up in the pump housing.

ELECTRICAL CONNECTIONS

Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

PUMP DIMENSIONS

Product	Height	Width	Depth	Weight
MACERATOR 4L	230mm	335mm	150mm	3.8kg
MACERATOR 12L	230mm	335mm	310mm	6.8kg



Macerator Pump 4L & 12L

The Macerator pump is designed to collect condensation and defrost water from food hall cabinets. It has an internal filter blade to stop the pump from clogging with food debris between maintenance visits and will discharge the water to a head of 8.5 metres.

The internal pre-wired safety float is a low current switch to stop the drain down cycle in the event of pump failure. The pump is operated via two internal float switches. The Macerator pump comes in two different tank sizes: The 4 litre, made from plastic and the 12 litre, made in stainless steel.

TECHNICAL SPECIFICATIONS

- Temperature: -20°C to +90°C
- Motor options: 230V-1Ph-50Hz thermally protected 110V-1Ph-60Hz Other motors available on request
- Shaft: 316 Stainless steel
- · Sealed upper and lower bearings
- Motor IP54 rated (excluding Miniature column pump)
- · All pumps supplied with agitator



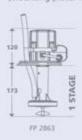
ELECTRICAL CONNECTIONS

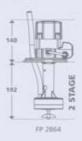
Brown	Live
Blue	Neutral
Green/ Yellow	Earth
2x Black	Safety switch

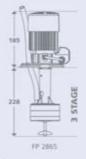


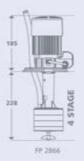
COLUMN PUMP DIMENSIONS

(Mounting plate: 122mm x 149mm)









MINIATURE COLUMN PUMP DIMENSIONS

Above fixing surface: 76mm Below fixing surface: 116mm Fixing plate: 136.5mm x 90mm



Column Pumps

The four Aspen Column pumps are designed primarily for beverage chillers, to continuously pump chilled water around a python system to provide the optimum cooling rate for soft drinks and cold beverages.

Once the mounting plate is fixed to the water tank, any of the four interchangeable pumps can be fitted by simply twisting the pump so it locks securely into the bayonet detail on the plate. The pumps are just as quick to release from the plate, without the need to remove the outlet tube. With minimal installation costs and low maintenance, these pumps are ideal for both direct installers and the replacement market.

Miniature Column Pump

For small chiller and recirculation duties, this pump offers high performance and quality at low cost. The pump is typically used in vending machines but can be adapted to suit many different markets.

PERISTALTIC SPARE TUBE KIT



SILICONE GREASE



PERISTALTIC ROTOR **ASSEMBLY**



PERISTALTIC FRONT HOUSING



PERISTALTIC STANDARD PLUG-IN CABLE



PART NO. 1553

PERISTALTIC **BACK PLATE**



PART NO. SA1161

PERISTALTIC PUMP BRACKET For all Aspen peristaltics



3m PERISTALTIC UNIVERSAL PLUG-IN CABLE



REDUCING CONNECTORS (Bag of 5) 1/4" to 3/8"



UNIVERSAL PLUG-IN CABLE

8m PERISTALTIC









NON RETURN VALVES

(Bag of 5) 1/4" or 3/8"



DRAIN TRAY



16mm with 18,16 &14mm Pipe fitting Ø

PART NO. FP2626

TANK PUMP BRACKET For Hi-flows & Hi-lifts



MINI PUMP FLOAT



PART NO's, 16mm; FP2633 18mm; FP2634 20mm; FP2635 COLOURED REDUCERS (Bag of 20) With 20,18,16 &14mm Pipe fitting Ø

MINI AQUA BRACKET



LIME BRACKET



MINI BLANC BEIGE COVER



LIME **INLET HOSE** 1 metre length

14mm I/D & 19mm O/D



PART NO. FP2859 **INLINE FILTER (16mm)**





INLINE FILTER

700 micron mesh 1/4"-1/4" & 3/8"-3/8"



90° HOSE CONNECTOR

(Bag of 5)



PART NO. FP1023

OFFSET HOSE CONNECTOR

(Bag of 5)



PART NO's: CLEAR 1/4": 1270 BRAIDED 1/4": 1235 CLEAR 3/8": 1060 BRAIDED 3/8": 1977

VINYL TUBE

1/4" x 30m clear or braided 3/8" x 30m clear or braided



PUMP TEST BOTTLE

500ml capacity



PART NO. 2811

PART NO. FP1248

ANTI BACTERIAL TABLET

(50 per pack) 18mm Ø





STAY CLEAN STRIP

(Bag of 3) 9 x 110 x 25mm



DRAINKLEEN ONE SHOT

(Box of 12)





TECHNICAL SPECIFICATIONS

- Purge facility
- · Liquid recovery rate: up to 80kgs/hr
- Vapour recovery rate: up to 30kgs/hr
- Push/pull: up to 320kgs/hr
- 230V & 110V models available
- 500W Oil-less compressor
- High pressure cut out of 410PSIG
- · Large condenser and high air flow

- Suitable for most types of refrigerant, both liquid and vapour
- · Rugged, moulded case
- Ergonomic carrying handle
- Lightweight at under 13kg

The EcoWarrior is suitable for refrigerants: R-11, R-12, R-22, R-113, R-114, R-123, R-134A, R-404, R-407C, R-410A, R-500, R-502

Refrigerant Hoses

- STANDARD HOSE FP 1908
 3000 PSI/206 bar burst
 750 PSI/51 BAR MAX, working pressure
- PREMIUM HOSE #P 1909
 4000 PSI/275 bar burst
 800 PSI/55 BAR MAX, working pressure

Both types of hose are available singly or in packs of 3. They are also available in 3 different colours. (Hose length: 72")





DIMENSIONS

Product	Height	Width	Depth	Weight
ECOWARRIOR	358mm	395mm	275mm	12.5kg



ECSWARRIOR

Highly affordable with no frills on the outside, it's extremely efficient on the inside where it matters.

With a 500W oil-less compressor, a large condenser and high airflow, the EcoWarrior offers a quick, easy to use solution for recovering refrigerant gases, which is not only an environmental necessity but a legal requirement.

Suitable for most types of refrigerant, the unit has a liquid recovery rate of up to 80kgs/hr, a vapour recovery rate of up to 30kgs/hr, with a purge facility.

Lightweight at under 13kg, the EcoWarrior has a clear display panel and a rugged, moulded case with a built-in carry handle to make your life easier.



Fan Speed Controller

- · Available for cooling only
- · Optional heat pump model
- · Condenser temperature coil sensor
- Max. output: 3A
- Min. speed setpoint: 30 to 60°C
- Volts: 230V Hertz: 50-60 Hz
- Heat pump model: reversing valve input 24 to 240V AC opto isolated

3 Phase Failure + Phase Protection Detector

- Input supply: 300 to 480V AC phase to phase
- Supply frequency: 48-63 Hz
- Temp. range: -20 to 60°C
- Relay output: 8A 250V AC resistive 3A 250V AC inductive 8A 24V DC

Hi-Level Water Sensor

- Volts: 230V Hertz: 50-60 Hz
- Two sensor operating systems available: condensate sensor or float sensor

Ventilation Fan Speed Controller

These slim, stylish units are designed for supply/extract ventilation systems.

So many Controllers on the market are bulky and unattractive, but this range from Aspen is designed to be on show... not hidden in a cupboard!

The controller can easily be installed either as a flush-fit unit (recessed) or as a surface mount unit (retro-fit). The fascia and enclosure are designed to be slim and unobtrusive, while the smooth

keypad provides a simple interface for the end user, to allow easy control of their local ventilation.



2 AMP FP 2324 4 AMP FP 2325

ELECTRICAL SPECIFICATION

- · 2 & 4 amp models available
- I230V 50Hz fused
- Maximum ambient temperature: 40°C
- IP33 rated

DIMENSIONS

Product	Height	Width	Depth
VFSC	83mm	154mm	52mm



HEATING FP 2095

ASPEN LACOURD LACOURD

FP 2098

Fan Speed Controller

Controls head pressure to air conditioning and refrigeration systems by increasing and reducing fan speed with temperature on the condenser coil. There is also a heat pump model for connection to the reversing valve.

3 Phase Failure + Phase Protection Detector

Designed to protect 3 phase motors and industrial equipment from over-heating due to a phase failure.

When one phase goes down motors can seem to run normally. It is not until the motor overheats that it is detected, which may be too late.



Hi-Level Water Sensor

For utmost security! The versatile Hi-Level Water Sensor is available with two different sensor options:

- Condensate sensor, as used by the Aspen MK4 peristaltic pump (page 11).
- Float sensor, as used by the Aspen Mechanical peristaltic pump (page 11).
 and Mini Orange pump (page 28-29).

The Hi-Level Water Sensor can be used in conjunction with most pumps that do not include high level safety. It also has 2 levels of sensing - high and low, both with N.O, N.C & C.

DIMENSIONS

Product	Height	Width	Depth
FSC	44mm	150mm	75mm
3 PHASE	58mm	90mm	35mm
HI-LEVEL	70mm	125mm	90mm











designed by engineers for engineers...

The BBJ line of products have been developed over a number of years using our extensive knowledge of air conditioning installations. These are designed to complement our extensive range of pumps. This includes condensing unit brackets, protective guards and a complete range of pipe fixings, all designed to make life easy and quick for the installation engineer.

We offer full sales and technical support from our UK based team who will be pleased to help with any enquiries.

bbj contents



	BRACKETS, GUARDS & BLOCKS
56	Type 1 Brackets
56	Type 2 Brackets
58	Non Metal Brackets
58	Quick Fit Brackets
59	Industrial Galvanised Arms
59	Condensing Unit Drip Trays
60	Condensing Unit Guards & Blocks
61	Rapid-fit Condensing Unit Guards
	PIPE SUPPORT
62	Insulclamps
63	Metal Hangers
63	Plastic Hangers
64	QPC's
64	QPH's
65	Grip Locks
65	Pipe Ties
66	Stud Clip
66	Channel Clip
	ISOLATORS & GRAVITY DRAINAGE
67	Isolators

67 Isolator Security Box

67 Condensate Traps

67 Condensate Drain Pipe

TRUNKING

68 **Economy Trunking**

70 Inoac Trunking



TYPE 1 BRACKET

- 4 sizes available:
 60, 90, 140 or 250kg maximum load
- 3 mounting positions: low, central & top (Type 1 250kg - single mounting position only)



DIMENSIONS

Product	Height	Width	Depth
60KG	450mm		450mm
90KG	500mm	* ×	500mm
140KG	550mm	2	550mm
250KG	680mm	2	680mm

PART NO. TYPE 1 60kg 86141 TYPE 1 90kg 86142 TYPE 1 140kg 86140 TYPE 1 250kg 86584

TYPE 2 BRACKET

- 3 sizes available:
 60, 90, 140kg maximum load
- · Self-adjusting



DIMENSIONS

Product	Height	Width	Depth
60KG	430mm	720mm	370mm
90KG	530mm	900mm	470mm
140KG	580mm	1100mm	450mm

PART NO. TYPE 2 60kg 86144 TYPE 2 90kg 86145 TYPE 2 140kg 86143



Condensing Unit Brackets

BBJ offer a range of easy to install Condensing Unit Brackets that benefit from a high quality finish. They offer a professional appearance and highly economic solution for installations.

These sturdy and secure Brackets all offer horizontal flexibility. They are designed for easy installation and are boxed complete with all necessary fixings.

All steelwork undergoes a 5-part phosphating pre-treatment prior to a 60 micron powder coat finish in ivory.

The Type 1 Brackets are designed to give the choice of 3 positions, enabling the installation of equipment in difficult areas.

The self-adjusting Type 2 Brackets are designed for quick installation and easy levelling on uneven wall surfaces.



NON METAL BRACKET

 2 sizes available: TYPE 1 80kg maximum load TYPE 2 80kg maximum load

 Ideal for use where there is salty sea air



DIMENSIONS

Product	Height	Width	Depth
TYPE 1	410		460
TYPE 2	410	790	460

PART NO. TYPE 1 80kg 86760 TYPE 2 80kg 86761

QUICK FIT BRACKET

3 sizes available:
 60, 90 or 140kg maximum load

· Levelling system

 Adjustable anti-vibration rear foot

 Insulating washer and wall fixing kit supplied



DIMENSIONS

Product	Height	Width	Depth
60KG	375mm	800mm	420mm
90KG	375mm	800mm	465mm
140KG	375mm	800mm	550mm

PART NO. TYPE 2 60kg 86861 TYPE 2 90kg 86862 TYPE 2 140kg 86863 • 2 sizes available: 450mm (sold as a pair) 600mm (sold as a pair)

DIMENSIONS

Product	Height	Width	Depth
SMALL	130	7.57	450
LARGE	130	120	600

PART NO. 450mm 86859 600mm 86860

Condensing Unit Drip Tray

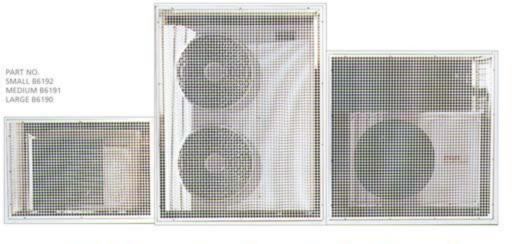
- · Fits all BBJ Brackets
- Available in 2 sizes
- · Choice of metal or plastic
- Flat packed with all required fixings (including 15mm tank connector for outlet)



DIMENSIONS

Product	Width	Depth	Height
SMALL	800mm	400mm	50mm
LARGE	1100mm	400mm	50mm

PART NO. SMALL METAL B6147 LARGE METAL B6146 SMALL PLASTIC B6591 LARGE PLASTIC B6592



BBJ Condensing Unit Guard

A range of 3 aesthetically pleasing, unobtrusive BBJ Condensing Unit Guards to deter vandalism and prevent damage to valuable equipment.

The Unit Guard framework is a painted aluminium structure and the panels are steelwork, which pass through a 5-part phosphating pretreatment prior to a 60 micron powder coat finish in ivory.

The Guards are simple and easy to install, and all panels are removable to allow maintenance of the unit. A back panel is available for free-standing units and extra bottom panels are also available for Guards fixed at high level on walls.

EXTERNAL DIMENSIONS

Product	Height	Width	Depth	
SMALL	700mm	1000mm	450mm	
MEDIUM	1100mm	1100mm	600mm	
LARGE	1400mm	1100mm	600mm	

BBJ Condensing Unit Blocks

- Adapts to all units
- UPVC
- · Maximum load 250kg on one point
- 2 lengths available: SB 450mm length (12 per box) including fixings SB 1000mm length (12 per box) including fixings





BBJ Rapid-fit Guard

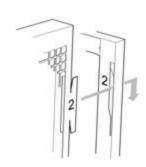
Introducing the new Rapid-fit Condensing Unit Guards. Quick and easy to install, with a simple numbered tab and slot system.

Three sizes are available and all panels are removable to allow maintenance of the unit.

EXTERNAL DIMENSIONS

Product	Height	Width	Depth
SMALL	572mm	1052mm	660mm
MEDIUM	572mm	1152mm	1060mm
LARGE	572mm	1152mm	1360mm

The guard is secured using 3 tamper resistant screws. Extra bottom panels are also available for guards fixed at high level on walls. The framework is a steelwork structure which passes through a 5-part phosphating pretreatment prior to a 70 micron powder coat finish in ivory.





BBJ Insulclamps are a well-known range of pipe clips, supporting individual pipes in a thermo-rubber cushion between 2 metal parts. Used in the air-conditioning and refrigeration industry, Insulclamps are ideal for bigger commercial installations.

The clamps are made of metal and are therefore safe in the event of a fire if they are fitted in ceiling voids. The Insulclamps can be used both internally and externally. BBJ Insulclamps provide a simple yet excellently engineered solution to the problem of effective pipe support.



SIZES AVAILABLE & PART NUMBERS

SIZE	PART NO.	SIZE	PART NO.	
1/4"	B6268	1 3/8"	B6265	
3/8"	B6274	1 5/8"	B6266	
1/2"	B6267	2 1/8"	B6269	
5/8"	B6276	2 5/8"	B6270	
3/4"	B6273	3 1/8"	B6271	
7/8"	B6277	3 5/8"	B6272	
1 1/8"	B6264	4 1/8"	B6275	

INSULCLAMP SPECIFICATIONS

- · Bagged in 10's
- A complete range of 14 sizes to fit 1/4" to 41/8" O/D pipes
- Insulates against heat loss and reduces vibration
- Semi-rigid inserts offer good heat resistance
- Plastic inserts designed to withstand temperatures from -25°C to +125°C

- Quick to install with integral lock nuts
- All metal parts are zinc plated and colour passivated to resist corrosion
- Fits into shallow ceiling void or unit
- Fix to 40 x 40mm and 40 x 20mm channel
- Aluminium channel supplied in either 1 metre (05000) or 3 metre (05023) lengths

BBJ Hangers are used to support pipe work hanging from ceilings. They hold both liquid and gas lines.

They fit on both M8 and M10 size studding, saving time when supporting pipework or condensate lines. The hangers are adjusted by simply twisting them up or down the rod. They need to be installed every 6ft, and using Hangers means that you no longer need to hang cable trays.





METAL HANGER SPECIFICATIONS

- Bagged in 10's
- Quick and easy pipe installation
- Avoids the need for cable trays
- 8 microns colour passivation coating
- · Use in areas that are fire sensitive

DIMENSIONS

Approximate pipe sizes (allowing for insulation)

	BBJ 2 86492	BBJ 3 86493	BBJ 4 86494
LIQUID	3/8"	1/2"	5/8"
GAS	5/8"	7/8"	1 1/8"



BBJ Plastic Hangers are the ideal solution to support pipework hanging from ceilings.

This dual stud size clamping system will fit securely to both M8 and M10 studding. Three sizes are available, all offering a wide range of adjustment to fit different insulated pipe diameters.

PLASTIC HANGER SPECIFICATIONS

- Bagged in 10's
- Quick and easy pipe installation
- Avoids the need for cable trays
- Adjustable clipping mechanism

DIMENSIONS

Approximate pipe sizes (allowing for insulation)

	BBJ P2 86543	BBJ P3 86544	BBJ P4 86545
LIQUID	3/8"	1/2"	5/8"
GAS	5/8"	7/8"	1 1/8"







BBJ Quick Positioning Clips are a simple pipe clip made from a UV resistant plastic. They are fitted into standard unistrut channels by just a single twist. The QPC's are ideal for smaller installations and can be used both externally and internally. They are tidy and give a professional finish to any installation. The thickness of the pipe clip is equal to the wall thickness of the insulation, meaning no break in "vapour barrier".

DIMENSIONS

Size	Part no.	3/4"	B6446
1/4"	B6445	7/8"	B6449
3/8"	B6447	1 1/8"	B6442
1/2"	B6444	1 3/8"	B6443
5/8"	B6448	1 5/8"	B6538

QPC SPECIFICATIONS

- Bagged in 10's
- A complete range of 9 sizes to fit 1/4" to 15/8" O/D pipes
- Easy installation to 40mm x 20mm channel
- External diameter matches diameter of pipes with 9mm insulation
- Material withstands temperatures from –30°C to +135°C
- · Excellent resistance to oil

BBJ Quick Positioning Hangers reduce the number of stud clips needed to be kept in stock.

This dual stud size clamping system will fit securely to both M8 and M10 studding. Five sizes are available to fit a wide range of different pipe diameters.

QPH's can support refrigeration pipework, insulated pipes and condensate lines.



DIMENSIONS

	No. 1 86532	No. 2 86533	No. 3 86534	No. 4 86535	No. 5 86536
COPPER PIPE	1/4" or 3/8"	1/2" or 5/8"	3/4" - 7/8"	1" - 1 1/8"	11/4" - 13/8"
INSULATED COPPER PIPE		-:	-	1/4" - 3/8"	1/2" - 5/8"
PLASTIC CONDENSATE	-	1=7	20mm	25mm	32mm



BBJ Grip Locks are particularly good for installers who, when installing the first pipe, can hold it within the Grip Lock whilst installing the second pipe.

Grip Locks are simple metal pipe clips that hold both liquid and gas lines. Designed to be fitted directly to the wall or solid ceiling, they can hold insulated pipes without a break in the insulation. Installation requires only one screw to be tightened.



DIMENSIONS

Approximate pipe sizes (allowing for insulation)

	Size 1 86186	Size 2 86187	Size 3 86188	Size 4 86189
LIQUID	1/4"	3/8"	1/2"	5/8"
GAS	1/2"	5/8"	7/8"	1 1/8"

GRIP LOCK SPECIFICATIONS

- · Bagged in 10's
- Hinged for quick and easy pipe installation
- Wide metal components for good pipe support
- Space for electrical cables and condensate tube
- 8 microns of yellow colour passivate



BBJ Pipe Ties are a quick and easy fixing, great for multiple pipework routes. They have a wide tie width to protect pipe insulation.

> These simple ties are reuseable and also have a fixing hole for securing directly to a wall. Available in 4 lengths to suit various pipe diameters, with a choice of 2 colours.



Size	Length	Width	Part no.	Part no. White
T250	250mm	20mm	B6551	B6411
T300	300mm	20mm	B6552	B6412
T350	350mm	20mm	B6553	B6413
T400	400mm	20mm	B6554	B6414





BBJ Stud and Channel Clips have a secure and lockable fastening mechanism, allowing quick and easy fixing with the simple fit and twist action.

The unique ratchet design ensures that the clip remains closed when insulated pipe is squeezed against the wall of the clip. The clips are also easy to remove and relocate for maintenance.

SIZES AVAILABLE & PART NUMBERS

Size	M8	M10	41mm
1/4"	B6800	86814	B6842
3/8"	B6802	B6816	B6844
1/2"	B6801	B6815	B6843
5/8"	B6803	B6817	B6845
3/4"	B6804	B6818	B6846
7/8"	B6805	86819	B6847
1"	B6806	B6820	B6848
1 1/8"	B6807	86821	B6849
1 1/4"	B6808	86822	B6850
1 3/8"	B6809	86823	B6851
1 1/2"	B6810	B6824	B6852
1 5/8"	B6811	B6825	B6853
2"	B6812	B6826	B6854
2 1/8"	B6813	B6827	B6855

STUD CLIP SPECIFICATIONS

- · Bagged in 10's
- A complete range of 28 sizes to fit 1/4" to 2 1/8" O/D pipes
- Easy installation to M8 and M10 studding
- · Fits all types of Metric & Imperial sizing
- Material withstands temperatures from –40°C to +140°C
- Unique lockable ratchet design



CHANNEL CLIP SPECIFICATIONS

- · Bagged in 10's
- A complete range of 14 sizes to fit 1/4" to 2 1/8" O/D pipes
- · Easy installation to 41mm channel
- · Fits all types of Metric & Imperial sizing
- Material withstands temperatures from –40°C to +140°C
- Unique lockable ratchet design

BBJ Isolators

- IP 65 electrical isolator for outside use
- 4 types available

PART NO. 3 POLE 25A B6279 3 POLE 40A B6281 4 POLE 25A B6280 4 POLE 40A B6660



Product	Height	Width	Depth
3 pole 25A	155mm	80mm	100mm
3 pole 40A	185mm	95mm	110mm
4 pole 25A	155mm	80mm	100mm
4 pole 40A	185mm	95mm	110mm

Isolator Security Box

Two part metal housing (270x190x125mm) to protect an electric isolator with a facility to utilise a padlock or otherwise.

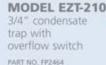


PART NO. 86278

Condensate Traps for air handling units with 3/4" female outlets

MODEL EZT-113B

3/4" economy condensate trap PART NO. FP2462





"waterless" 3/4" condensate trap

condensate trap



overflow switch



coupled condi

PART NO. FP2465

CONDENSATE DRAIN PIPE

FIXTURES: (All sold in packs of 20)

- Straight connector
- 'T' piece
- 90° connector
- 45° connector
- Wall fixing clip
- · 32-25mm reducer
- 25-20mm reducer



The sections of PVC pipe contain 'O' rings which form a secure waterproof seal between fixings when pushed together, with-out the need for gluing.

The drain pipe is available in 3 sizes: 20mm, 25mm and 32mm o/d and comes in 3 metre straight lengths.

STRAIGHT DUCT



Product	size (mm)		Overall	Qty
code	A	В	length	boxed
D.70	70	65	2000	6
D.105	105	75	2000	6

D-105

B6026

B6794

90° ELBOW BEND



Product		size (mm)		Qty
code	A		C	boxed
EB.70	95	95	70.4	20
E8.105	110	110	105.4	20

WALL ROSETTE



Product		size (mm)		Qty boxed
code	A	8	c	
WR.70	115.4	110.4	70.4	20
WR.105	150.4	120.4	105.4	20

FLAT ROSETTE



Product	size (mm)			Qty	
code	A	В	c	boxed	
FR.70	115.4	90	70.4	20	
FR.105	150.4	100	105.4	20	

WALLS COVER FOR INLET OR OUTLET



-[
CODE	WC-70 86050

86789

WC-105 B6049 86790

Product	size (mm)			Oty
code	A	В	c	boxed
WC.70	110	180	70.4	20
WC.105	145	190	105.4	20

WHITE

ELBOW - EXTERNAL 90°





EIN-70 EW-105 86037 B6036 B6779 B6780

Product	size (mm)			Qty
code	A		c	boxed
EIN.70	95	95	70.4	20
EIN.105	110	110	105.4	20:

IVORY

DUCT END





86031 B6775

B6030 B6776

DE-105

Product		size (mm)	Qty	
code	A	8	C	boxed
DE.70	120	45	70.4	20
DE.105	120	50	105.4	20

WHITE

FLEXIBLE JOINT





CODE FJ-70 IVORY 86043 WHITE 86783 FJ-105 B6042 B6784

roduct		size (mm)		Qty
code	A	В	c	boxed
FJ.70	500	65	65	20
FJ.105	500	100	100	20

REDUCER JOINT





RJ-70-105 IVORY 86046 WHITE 86787

Product		size (mm)		Qty
code	A	В	c	boxed
RJ.70.105	105.4	80.4	70.4	20

CONNECTION PIECE





CODE CP-70 86025 IVORY. WHITE B6771

CP-105 86022 B6772

Product	size (mm)			Qty
code	A	В	c	boxed
CP.70	75.4	70.4	70.4	20
CP.105	110.4	80.4	105.4	20

90° FLAT BEND





CODE FB-**IVORY** B60 WHITE 867

10	FB-105
39	86038
91	B6782
21	marcan.

Product		size (mm)		Qty
code	A	100	c	boxed
FB.70	115	115	70.4	20
FB.105	150	150	105.4	20

WALL SLEEVE





Product		size (mm)			Qty
code	A		c	D	Qty boxed
ING.341	350	100	250	63	20

T-JOINT





CODE B6048 IVORY. WHITE 86788

Product		size (mm)		Qty
code	A	B 1000	c	boxed
TJ.105	200	105.4	105.4	20

45° FLAT BEND

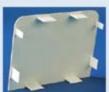




86041 86040 IVORY. WHITE 86795 B6796

Product		size (mm)		Qty
code	A		c	boxed
F8.70.45	92.58	145.5	70.4	20
FB:105.45	92.58	170.3	105.4	20

DUCT CAP





CODE	DC-70	DC-105
	86029	
WHITE	B6773	B6774

Product		size (mm)		Qty
code	A	В	c	boxed
DC:70	70	65	2	20
DC.105	105	75	2	20

ALSO AVAILABLE:

DS.70 & DS.105 DUCT STOP

CODE D5-70 D5-105 B6033 86032

 ADP.93 DRAIN PIPE (50m) CODE

ADP-93 86020

 CET. CLIPS CET CLIP CODE B6047

 CCY. CONNECTORS CODE

CCY B6021

STRAIGHT DUCT





CD-75 86201 CD-100 86196 CD-140 86199

Product		size (mm)		Qty
code	A	8	c	boxed
CD-60	57.5	. 58	2000	5
CD-75	74	62	2000	5
CD-100	99	68	2000	- 5
CD-140	138	78	2000	5

ELBOW (VERTICAL)





NC-60 B6209 NC-75 B6210 NC-100 B6206 NC-140 B6208

Product code	A	size (mm) B	c	Qty boxed
NC-60	65.5	65	120	5
NC-75	82	69	124	5
NC-100	107	75	135	5
NC-140	146	28	1.49	5

END SOCKET





NR-60 86230 NR-75 86232 NR-100 86228

Product			ize (mr	n)		Qty
code	A	В	C	D	E	boxed
NR-60	53	30	99	65.5	65	5
NR-75	53	30	99	82	69	5
NR-100	53	30	115	107	75	5

CORNER CAP





NA-60 86205 NA-75 86195 NA-100 86203

Product		si	ize (mr	n)		Qty
code	A	- 8	c	D		boxed
NA-60	67	65	66	105	110	5
NA-75	84	70	.66	124	125	- 5
NA-100	109	76	66	149	140	5

OUTLET COVER





NW-60 86252 NW-75 86253 NW-100 86248 NW-140 86251

Product			ize (mn	n)		Qty
code	A	В	C	D	E	boxed
NW-60	65.5	65	200	77	81	- 5
NW-75	82	69	.210	94	83	5
NW-100	107	75	231	119	96	5
NW-140	146	85	286	158	105	5

WALL CAP





NK-60 86223 NK-75 86224 NK-100 86221

Product		size (mm)		Qty
code	A	8	C	D	boxed
NK-60	110	110	16	40	5
NK-75	126	314	16	40	5
NK-100	175	145	16	40	- 5

45° ELBOW (VERTICAL)





NU-60 86245 NU-75 86246 NU-100 86244

Product	size (mm)			Qty
code	A	8	c	boxed
NU-60	65.5	65	67	5
NU-75	82	69	72	5
NU-100	107	75	83	5

FLEXIBLE JOINT





NF-60 86219 NF-75 86220 NF-100 86216

NF-140 86218

 Product code
 A
 8 c
 D
 Qty boxed

 NF-60
 59.5
 60
 60
 550
 5

 NF-75
 76
 64
 60
 550
 5

 NF-100
 101
 70
 75
 800
 5

 NF-140
 140
 80
 80
 1000
 5





NZ-60 86261 NZ-75 86262

Product	size (mm)			Qty
code	A	8	c	boxed
NZ-60	65.5	65	117.5	5
NZ-75	86	69	122.5	5

SOCKET





NS-60 86237 NS-75 86238 NS-100 86233 NS-140 86236

Product	size (mm)			Qty
code	A-	8	C	boxed
N5-60	65.5	65	80	5
NS-75	82	69	80	5
NS-100	107	75	80	- 5
NS-140	146	85	80	5

ELBOW (HORIZONTAL)





NE-75 B6215 NE-100 B6211 NE-140 B6213

Product	size (mm)			Qty
code	A		C	boxed
NE-60	65.5	65	119.5	5
NE-75	82	69	141	5
NE-100	107	75	161	5
NE-140	146	85	200	5

UNIVERSAL ELBOW (HORIZONTAL)





NX-60 B6258 NX-75 B6259 NX-100 B6255 NX-140 B6257

Product		size (mm)		Qty
code	A		C	boxed
NX-60	65.5	65	136.8	5
NX-75	82	69	153	5
NX-100	107	75	193.5	5
NX-140	146	85	248	5

T-JOINT





NT-75 B6243 NT-100 B6240 NT-140 B6706

Product			ize (mr	n)		Qty
code	A		C	D	E	boxed
NT-75	80	70	120	160	25	1
NT-100	107	75	161	215	35	1
NT-140	146	85	200	254	35	1

45° ELBOW (HORIZONTAL)





NM-60 B6226 NM-75 B6227 NM-100 B6225

Product	size (mm)			Oty
code	A		C	boxed
NM-60	65.5	65	68	5.
NM-75	82	69	74	5
NM-100	107	75	84	5

SADDLE BAND



NV-L B6247

Product code	size (mm)	Qty boxed
NV-L	360	10.

ALSO AVAILABLE:

• NCX-75 VERTICAL/HORIZONTAL ELBOW (89143)

REDUCER





NJ-60<75 B6707 NJ-75<100 B6708

Product code	size (mm)					Qty
	A.	- 8	C	D		boxed
NJ-60<75	69.5	68	80	82	69	5
NJ-75<100	86	.72	80	107	75:	5



- Saves you time & reduces cost
- No penetration of roof membrane
- Re-roof without decommissioning plant
- Improves aesthetics
- Install in all weathers

The complete solution to supporting building services and access equipment on a flat roof

CUSTOM FRAMEWORKS



Quick to install, non-penetrative frameworks designed to meet your individual requirements. Any shape, any size... delivered flat packed for easy on-site management. All we need are your unit sizes, weights and roof plan and we will do the rest.

Angled AV mats (2.5° & 5°) for sloped roofs are available for 305 & 450mm feet.

MODULAR FRAMEWORKS



There are three basic modular frameworks available in 1m, 2m and 3m versions. The modular frameworks come with 305mm feet which are provided with anti-vibration mats to fit underneath. The frame is constructed from 40 x 40mm standard box section.



H FRAME



No more concrete slabs! Bring your own strut to construct a H Frame in less than 10 minutes, everything else you need comes in the box.

Available in 2 Big Foot sizes: 305 & 450mm.

Pre-assembled H Frame metalwork now available.

MULTI FOOT



Versatile support for forming small H frames from 41mm strut, or cable tray supports using M12 threaded rod. Available in 2 sizes: 400 & 600mm (with optional AV mats).



FIX-IT FOOT



A sturdy support made from durable recycled rubber, with a 40mm aluminium channel insert. Suitable for all standard strut fixings. Fix-it Foot available in 4 sizes: 250, 400, 600mm & 1m. Fix-it Foot Low available in 2 sizes: 250 & 400mm.



For more information visit the Big Foot

WALKWAYS



A range of easy to install, modular walkway systems, with gritted fibreglass grating for a permanent non-slip surface in any weather.

STEP OVERS

Modular Step Overs available with 3, 4 & 5 steps and a range of middle section lengths. The four legs on each Step Over are adjustable in height, with 450mm feet (and AV mats) for stability.



STEP OVER PLATFORM

These simple platforms are ideal to allow safe passage over small hazards, e.g. small pipe pups



WALKWAY SLABS

Ideal for walkways and to protect roof surfaces, with underside detail to allow for small debris on roof.



website... www.bigfootsystems.co.uk

PLATFORMS

Simply fitted into the top of the Big Foot mouldings, theses Platforms provide a versatile support system. Available with a flat top or with 2 or 4 sides, they have a central M10 threaded insert and are supplied in pairs with Big Feet and AV mats.



SWAN NECKS

A quick and simple solution for when pipe and cables have to penetrate the roof surface. The large flange around the foot of the Swan Neck allows a full seal with the roof membrane. Made from heavy duty aluminum and available in various sizes from stock.



VIBROMATS



AV STRIP

Multi purpose AV strip 1000 x 75 x 15mm



SMALL TILE

Inserted metal plate 600 x 150 x 30mm



LARGE TILE

2 Inserted metal plates 1000 x 500 x 30mm

FEET FLEECES

Recommended for use on PVC membrane roof surfaces to prevent migration of plasticizers.



Supplied cut to Foot sizes.

T: +44 (0)1323 848842 F: +44 (0)1323 848846







