



# POWER-PIPE®

WASTE WATER HEAT RECOVERY SYSTEMS

# Heat Recovery for Waste Water

SAP  
Listed

Great benefits for;

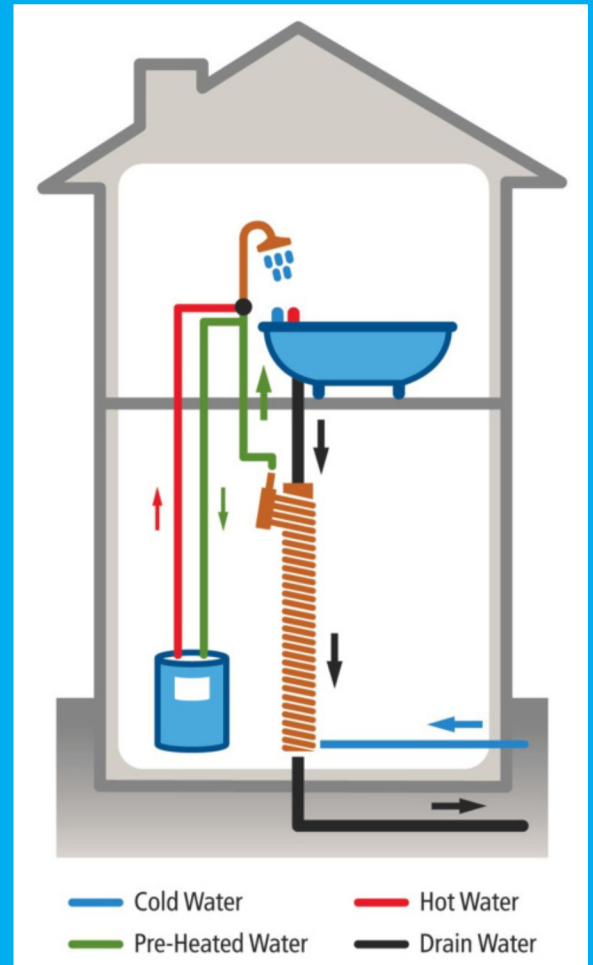
- ✓ Developers
- ✓ Home owners
- ✓ Commercial application

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

# How it works

Heat lost from the shower is one of the largest and most overlooked energy resources. Typically over 90% of the heat used in a shower is simply lost down the drain.

1. Warm waste water falls down the vertical pipe. Surface tension causes the water to be attracted to the inner surface of the pipe.
2. As it naturally spreads itself it increases the contact surface area and maximises the heat transfer to copper pipes coiled around the outside.
3. Cold mains water runs through these pipes from the bottom to the top.
4. The unique multi coil system means there is virtually no pressure loss.
5. Heat transfers from the waste water to the mains water as the mains water travels up the Power-Pipe®.
6. The pre-warmed mains water is fed to the cold side of the shower mixer and into the water heater.
7. Because the water is pre-warmed, less hot water is required to blend with it at the mixer valve, saving energy.



## Part L & SAP listed

Over 60 different lengths and diameters of the Power-Pipe® have been tested and are listed in SAP.

This means that you can use them to help you to increase a new buildings energy efficiency and meet the new tougher Building Regulation Part L requirements.



# Developers & specifiers

Adding a Power-Pipe® to a development is one of the most cost effective ways of increasing your SAP score. Not only that, but it is quick and easy to install and requires no maintenance or user interaction. See how it compares to other technologies that can influence a SAP calculation:

	SAP10 Increase	Cost	Installation	Maintenance p/a	User Interaction	Cost per SAP 1%
Power-Pipe® E2-60	15%	£385	£50	£0	N	£29
Air Source Heat Pump	70%	£5,000	£1,500	£50	Y	£93
Solar PV (2kw)	25%	£3,000	£500	£0	N	£140
Biomass Boiler	65%	£10,000	£2,000	£250	Y	£185
Insulation (+50mm to 150mm)	2%	£500	£0	£0	N	£250
Solar Thermal	15%	£3,500	£500	£60	N	£266
MVHR	3%	£1,000	£500	£100	Y	£500

Table created in conjunction with SAP assessors Base Energy Consultants, product supply The Code Store. It is based on adding products to a typically specified 3 bedroom house already achieving minimum requirements of SAP10.

## How does Power-Pipe® compare to other SAP technologies?

- ✓ Power-Pipe® is the most cost effective way of increasing your SAP score
- ✓ Power-Pipe® installation does not require specialist design or commissioning
  - ✓ Power-Pipe® is completely maintenance free
- ✓ Power-Pipe® is always working without any user interaction

## Size

The Power-Pipe® is unique because it comes in two diameters 50mm or 110mm making it easy to install into a soil stack. The Power-Pipe® also comes in a number of different lengths so you can pick a Power-Pipe® to meet your budget and efficiency requirements.

## Virtually no pressure loss

Unlike other Waste Water Heat Recovery Systems, the Power-Pipe® has 22mm mains water connections and a unique, patent pending design, ensuring virtually no pressure loss to the pre-heated water system. This means that you can comfortably run multiple showers through a Power-Pipe® at the same time, something other systems may not be able to do.



# Commercial/industrial use

Power-Pipe®s not only help save energy in homes, but they should be considered anywhere where hot or warm water is going down the drain and there is a need to simultaneously heat incoming cold water.

Independent case studies show Power-Pipe®s having been installed and paying for themselves in a matter of months, going on to save companies thousands of pounds every year.

Examples of where Power Pipes would create great savings:

Hotels

\*

Hair Dressers

\*

Gyms

\*

Kitchens

\*

Pulp and Paper Mills

\*

Food Processing

\*

Beverage Production

\*

Textile Mills

\*

Tar Sand Processing

\*

Industrial Dishwashers



# Homeowners

Installing a Power-Pipe® into a dwelling will help the homeowner save energy and money without any maintenance, running costs or user interaction.



## Save money

Payback of 2 – 10 years depending on shower usage.

We have case studies available on our website to explain these figures.

We can also work out exactly how much you can save if you provide us with a few basic details about your home heating system.



## Zero maintenance

The Power-Pipe® does not require cleaning or maintenance.

It is made from 100% copper and has also been pressure tested to over 11 bar 3 times to ensure there are no leaks.

The product has a 10 year warranty, but we would expect it to operate for the design life of the building.

With over 40,000 Power-Pipe®s installed you can rest assured of their reliability in the field.



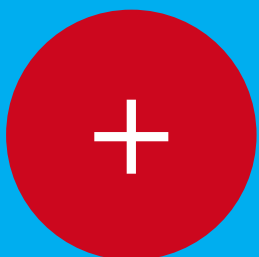
## No user interaction required

The Power-Pipe® is built into your plumbing system and is always working.

There are no switches or buttons to press and no filters to change.

You can't forget to turn it on or off.

It is consistently helping you save energy whenever you have hot water running through it.



## Increased hot water capacity

Adding a Power-Pipe® can help increase the hot water capacity of the properties hot water system.

This effectively increases the amount of available hot water in the property and helps reduce the load on your water heating system.

# Pricing & availability

Over 60 Power-Pipe®s have been tested and have SAP certified efficiency ratings. These can be found in any up to date SAP software or on our website. We have a selection of stock immediately available for despatch to UK & Europe, listed below:

Model	Dimensions		Max showers*	SAP 2012 Efficiency	List Price**
	Diameter (mm)	Length (mm)		@11 Litres/min	GBP £
Power-Pipe® E2-36	50	910	1	37.5%	£300
Power-Pipe® E2-60	50	1520	1	50.7%	£385
Power-Pipe® E2-84	50	2130	1	60.3%	£450
Power-Pipe® X2-36	50	910	3	32.2%	£300
Power-Pipe® X2-60	50	1520	3	46.2%	£385
Power-Pipe® X2-84	50	2130	3	55.9%	£450
Power-Pipe® R4-36	110	910	3	39.5%	£400
Power-Pipe® R4-60	110	1520	3	55.5%	£605
Power-Pipe® R4-84	110	2130	3	63.7%	£750

\*Max showers denotes the maximum recommended number of showers the Power-Pipe® is connected to in SAP System A configuration. This is based on the pressure loss on the mains water created by the WWHR system and assumes a minimum starting mains water pressure of 3 bar.

\*\*Prices do not include delivery or VAT. For larger quantities please speak to us for a quotation.

The highlighted row represents the most cost-effective Power-Pipe model for each Power-Pipe® range (E-series, X-series, R-series).

## Further information

Our website has lots of information and videos to help you find the best Power-Pipe for your development.

For further information, a quotation, installation instructions or to buy online, please contact us:



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