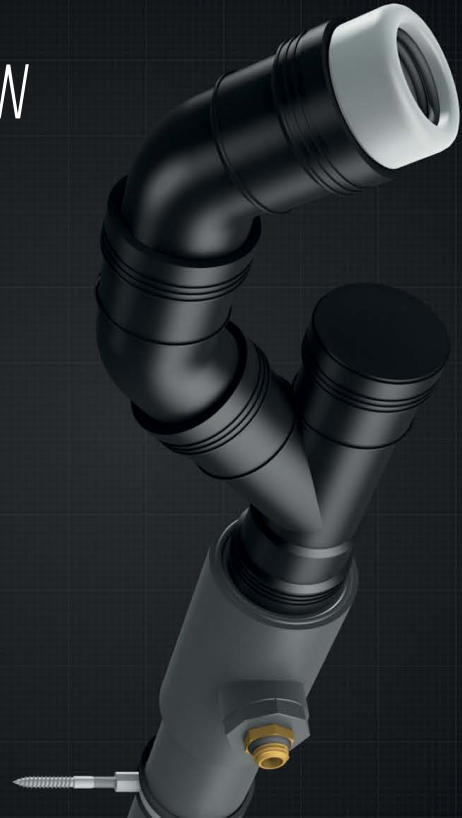


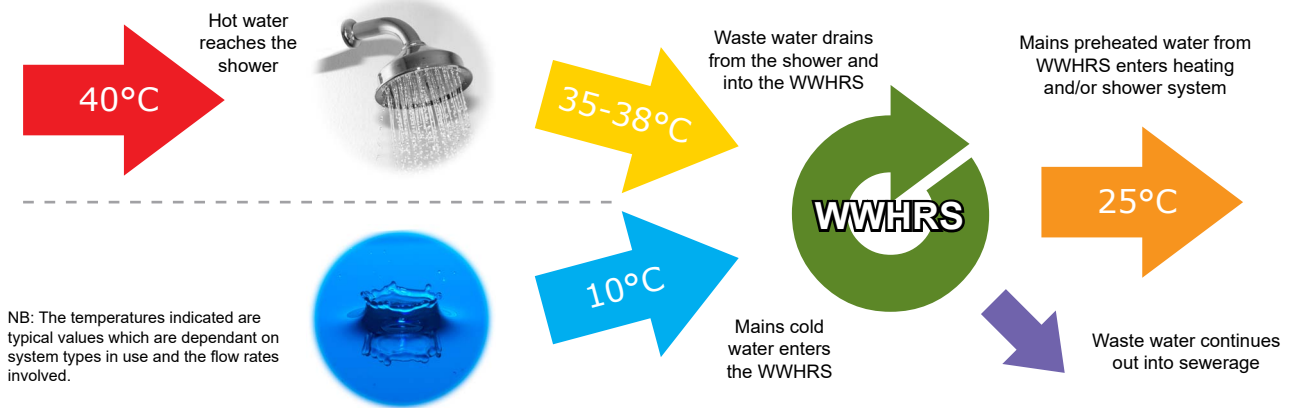
# PIPE+HE PRODUCT OVERVIEW

- DOUBLE-WALLED COPPER HEAT EXCHANGER
- NO PLANNED MAINTENANCE
- DESIGNED FOR FIRST-FLOOR SHOWERS OR ABOVE
- FITS WITHIN STANDARD UK CEILING HEIGHT
- UP TO 67% HEAT RECOVERY EFFICIENCY
- 3 RECOGNISED INSTALLATION METHODS
- NO-END USER INTERACTION REQUIRED
- HIGH QUALITY EU MANUFACTURE
- FIRST-FIX FRIENDLY DESIGN
- SAP LISTED
- WRAS APPROVED
- LEGIONELLA CONTROL RISK ASSESSED
- COST-EFFECTIVE SAP POINTS FOR PART-L COMPLIANCE



## WASTE WATER HEAT RECOVERY

WWHRS is the abbreviation of Waste Water Heat Recovery System. In the simplest terms a system or technology that uses a heat exchanging process to transfer the remaining heat from shower waste water and increase the heat of cold mains water coming into the system. Less energy is then used to increase the heat of the preheated mains water to the required temperature.



## SPECIFICATION INFORMATION

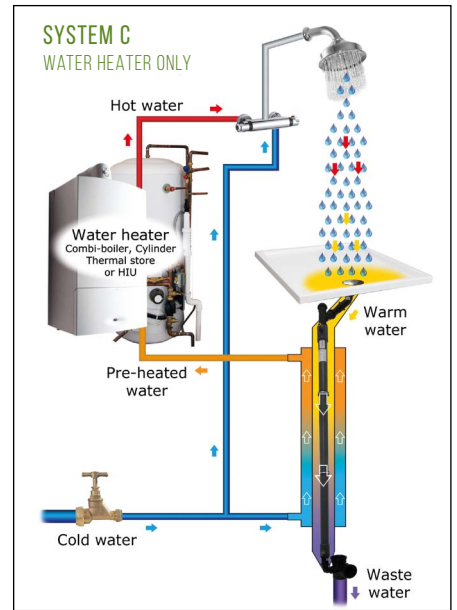
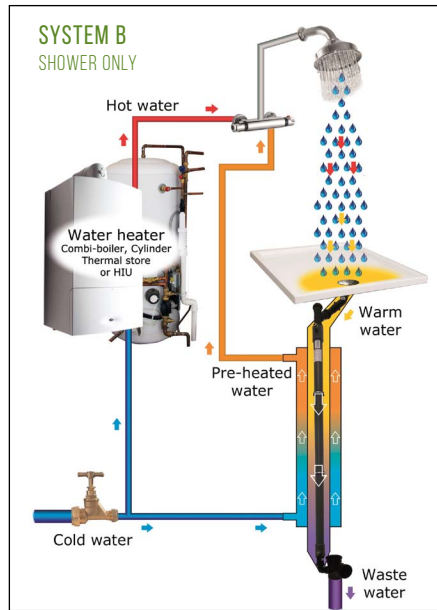
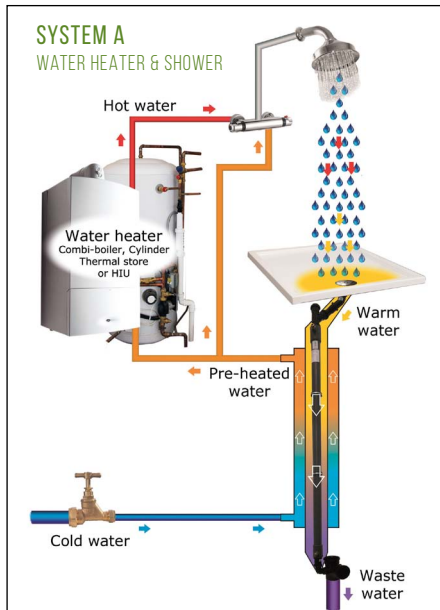
Description	Value	Unit
Overall length (Height) required for installation	2400	mm
Outside diameter of external tube	50	mm
Material - Internal tube	Copper	
Material - External tube	PVC	
Shower flow rate range	5 - 12.5	Litres/min
Max. Mains water inlet pressure	10	bar
Min. Mains water inlet pressure	1	bar
Max. Mains water working temp	85	°C
Mains water connection	½" male	BSP
Waste water connection (Using the reducer supplied)	40 - 43	mm
Full product weight	10	kg
Water volume - mains water	0.3	Litres

Installation Method	Pipe+HE Efficiency (Recovered energy kWh)
<b>System A</b>	64.2% (12.1)
<b>System B</b>	49.4% (9.3)
<b>System C</b>	55.5% (10.4)

The table above shows the Pipe+ HE efficiency and energy recovered with shower flow rate of 9.0 litres per minute and water temperature of 40°C. Efficiency and recovered energy levels will vary depending upon the flow rate and water temperature. With optimisation up to 67% efficiency can be achieved.

## INSTALLATION METHODS

There are three recognised installation methods for waste water heat recovery systems. System A supplies the preheated water to both the water heater and shower. System B supplies the preheated water to only the shower and System C to only the water heater. System A produces the greater efficiencies and recovers more energy, followed by Systems C and then B.



The Pipe+ HE is usually installed on the ground floor or building floor below the shower that feeds into it. Typically the layout is arranged so that the Pipe+ HE is situated alongside a soil stack. This allows the used waste water to reach the soil easily and enables the Pipe+ HE to be cloaked and boxed away neatly as pictured.

## DOUBLE WALLED HEAT EXCHANGER

European regulations (NEN 1717) require that double walls must be used to separate drain water and drinking water. This is to protect against contamination and reduce the risk of Legionella. In the RECOUP Pipe+ HE, this is accomplished by squeezing two copper pipes against each other. This creates a very sturdy and reliable construction, in which the contact between the pipes does not depend on the water pressure.



## WARRANTY

The Recoup Pipe+ HE comes with a 2 year warranty unless agreed otherwise. This starts from either the date of invoice from Recoup Energy Solutions Ltd or the date of installation recorded on the received SAP documentation in line with the SAP Design and Installation Checklist.

This warranty is conditional on the product being installed in accordance with the instructions (Installation and ALL requirements for SAP, if product is to be recognised for Energy efficiency calculations), correct plumbing practices and Building Regulations.

## MAINTENANCE

The maintenance required for the RECOUP Pipe+ HE is very minimal, as in normal circumstances the flow rate of the shower water should not allow any residue to build up. In the unlikely event that residue build up does occur, a soap based cleaning product can be used to flush through the pipe.

Additional access (Through normal use this should not be required) should be obtainable with a pipe cleaning brush either via the shower/bath trap (or by removing the cap, Part 4 in installation Section 4, if there is access). Once cleaned rinse through with warm water from the shower.

