## WASTE WATER HEAT RECOVERY FOR SHOWERS

# RECCUP

## **TECHNICAL SPECIFICATION** RECOUP **PIPE HEX ACTIVE**-F

SALUNS / GROUND THE





**SHOWER** 

WASTE WATER IN



PREHEAT

WATER OUT

- Designed for same level installation with shower trays
- Low power Sanishower® Flat electrical pump
- Double-walled copper vertical heat exchanger
- Up to 68.5% heat recovery efficiency \*
- Cost-effective SAP points for Part-L Compliance
- First-fix & retrofit friendly design
- No-end user interaction required
- No planned maintenance
- SAP listed, SBEM, BREEAM, DEAP & ETL recognised
- WRAS approved
- Legionella Control risk assessed
- Pipe HEX Rd Active available for reduced install height

#### **GENERAL DATA**

DESCRIPTION	VALUE
Overall height required for installation	2347 mm
Outside diameter of external tube	63 mm
Material - Internal tube	Copper
Material - External tube	PVC
Shower flow rate range (when installed as System A)	5 - 15 Litres/min
Max. Mains water inlet pressure	10 bar
Min. Mains water inlet pressure	1 bar
Max. Mains water working temp	40 °C
Mains & Preheated water connection	½" female BSP
Shower waste in connection	32mm / 40 mm
Soil waste water out connection	43 mm
Water volume - mains water (Recoup Pipe HEX)	0.3 Litres
Sanishower <sup>®</sup> Flat Pump Dimensions	295 x 162 x 144 mm
Sanishower <sup>®</sup> Flat Pump Voltage - Frequency	220-240V - 50-60Hz
Sanishower <sup>®</sup> Flat Pump Noise Level	40 dB(A)
Combined product weight (Recoup Pipe HEX 10kg)	15 kg

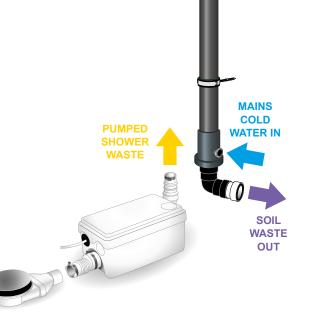
#### **PERFORMANCE & EFFICIENCY**

SHOWER FLOW RATE @	PIPE HEX ACTIVE EFFICIENCY (RECOVERED ENERGY KW)*			
40°C (LITRES/MIN)	SYSTEM A	SYSTEM B	SYSTEM C	
9.2	65.2% (10.88)			
11.0	63.6% (12.69)	49.9% (9.96)	54.0% (10.77)	
12.5	62.5% (14.17)			

\* Based on KIWA test data and PCDB figures for SAP 2012

#### PRESSURE DROP ON THE MAIN WATER CIRCUIT

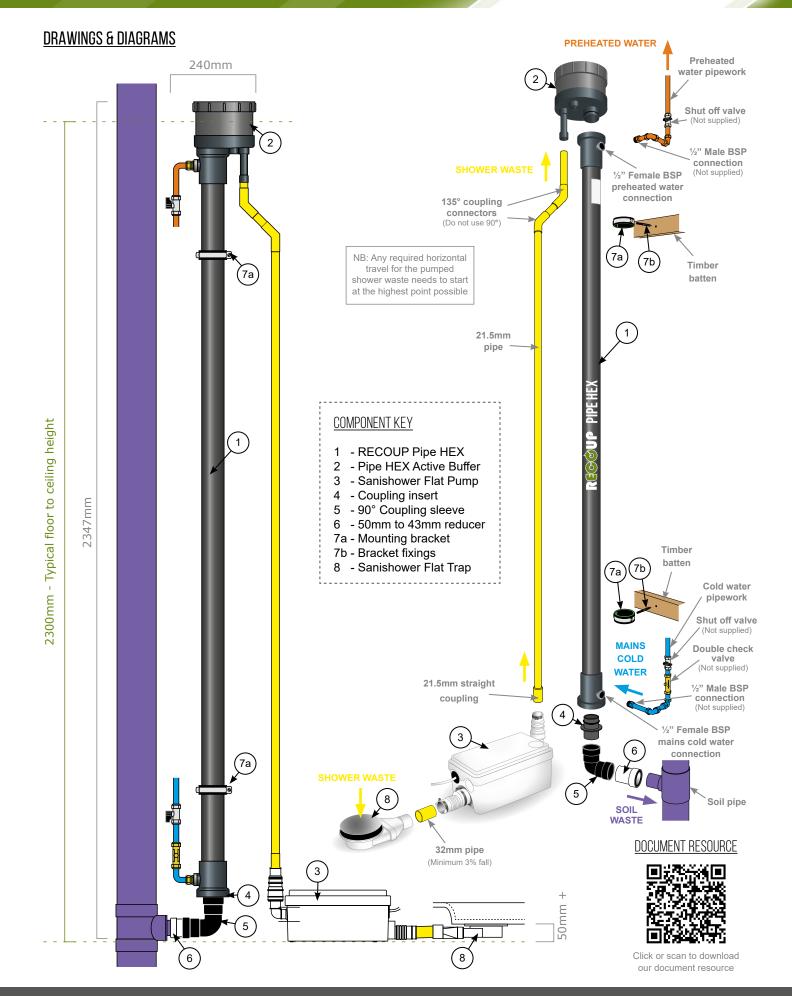
	SHOWER FLOW RATE @	PIPE HEX ACTIVE PRESSURE DROP ( BAR )			
	40°C (LITRES/MIN)	SYSTEM A	SYSTEM B	SYSTEM C	
-	9.2	0.39	0.24	0.16	
-	12.5	0.67	0.41	0.27	





### TECHNICAL SPECIFICATION Recoup PIPE HEX ACTIVE-F

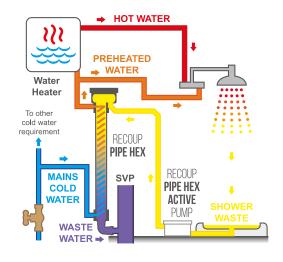




01379 844010

## 

#### **INSTALLATION METHODS**



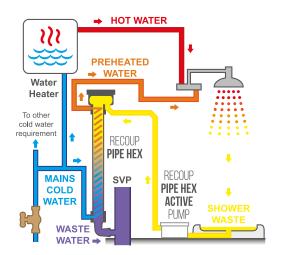
#### SYSTEM A

Preheated water supplied to shower mixer (cold inlet) and the water heater

This installation method provides the highest WWHRS efficiency.

Only one WWHRS unit can supply preheated water to the water heater as System A. All secondary WWHRS units should be connected as System B.

To maximise SAP impact, install WWHRS as System A on the primary shower, or in a room with a shower only. If design and layout allow, it may be possible to connect two showers to one WWHRS unit. Connected as System A, the total flow rate of both showers should be <16 l/min.



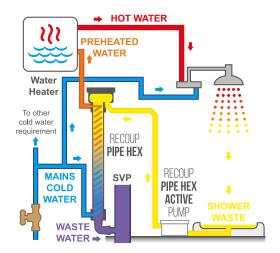
#### SYSTEM B

#### Preheated water supplied to shower mixer (cold inlet) on the shower only

The WWHRS efficiency of this installation method is not as high as System A or C but is the simplest and often the most cost-effective method to install or retrofit.

As preheated water is supplied to the cold side of the shower TMV only, there is no additional connection to the water heater . System B should be used for any secondary showers in a dwelling or where multiple showers are fed from centralised plant.

If design and layout allow, it may be possible to connect two showers to one WWHRS unit. Connected as System B, the total flow rate of both showers should be <24 l/min (@ $60^{\circ}$ C DHW temp).



#### SYSTEM C

#### Preheated water supplied to water heater 🔐 only

Greater WWHRS efficiencies are produced than System B but lower than System A. Only one WWHRS unit can feed preheated water to the water heater as System C.

This installation method can offer a more cost-effective installation option where two stacked showers are attached to a single WWHRS (eg. In a town house with 1st & 2nd floor showers). Connected as System C, the total flow rate of both showers should be <24 l/min (@60°C DHW temp).

- Combi-Boiler, Cylinder (Any heat source inc. Boiler, Heat Pump, Direct Electric, Solar Thermal), Heat Interface Unit (HIU) or Thermal Store.
- For more detail watch our **installation method animation** here.

#### **SPECIFYING** - RECOUP **PIPE HEX ACTIVE**

Recoup WWHRS | Pipe HEX Active | Installed as System A; System B; System C (delete as appropriate) | to (Add shower(s) install location) Include the line of text above or go to **specify.recoup.co.uk** for the full Recoup Pipe HEX Active product specification.