

TECHNICAL SPECIFICATION

RECOUP DRAIN+ DUO HE

WASTE WATER HEAT RECOVERY FOR SHOWERS



- Double-walled copper horizontal heat exchanger
- Designed for integration in wet room spaces
- Patented heat exchanger with built-in shower trap
- Up to 57% heat recovery efficiency
- 3 recognised installation methods (System A, B & C)
- Can be incorporated into modular bathrooms
- In-line tile or Quadratto cover plate options
- No planned maintenance
- Easy access for cleaning
- SAP listed, SBEM, BREEAM, DEAP & ETL recognised
- WRAS approved
- Legionella Control risk assessed

GENERAL DATA

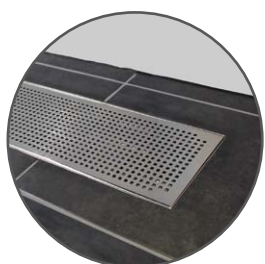
DESCRIPTION	VALUE
Minimum depth required for installation	205mm
Overall width required for installation	866 mm
Material - Heat Exchanger	Copper
Shower flow rate range	5 - 12.5 Litres/min
Max. Mains water inlet pressure	10 bar
Min. Mains water inlet pressure	1 bar
Max. Mains water working temp	85 °C
Mains & Preheated water connection	½" male BSP
Waste water connection	40 - 43 mm
	21 kg
	1.42 Litres

PERFORMANCE & EFFICIENCY

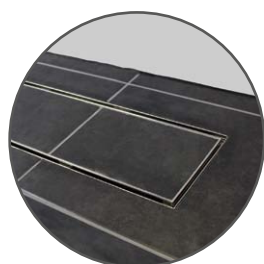
SHOWER FLOW RATE @ 40°C (LITRES/MIN)	DRAIN+ DUO HE EFFICIENCY (RECOVERED ENERGY KW)		
	SYSTEM A	SYSTEM B	SYSTEM C
5.8	57.4% (6.04)		
9.2	57.3% (9.56)		
11.0	56.7% (11.31)	44.9% (8.96)	49.2% (9.82)
12.5	56.4% (12.79)		

PRESSURE DROP ON THE MAIN WATER CIRCUIT

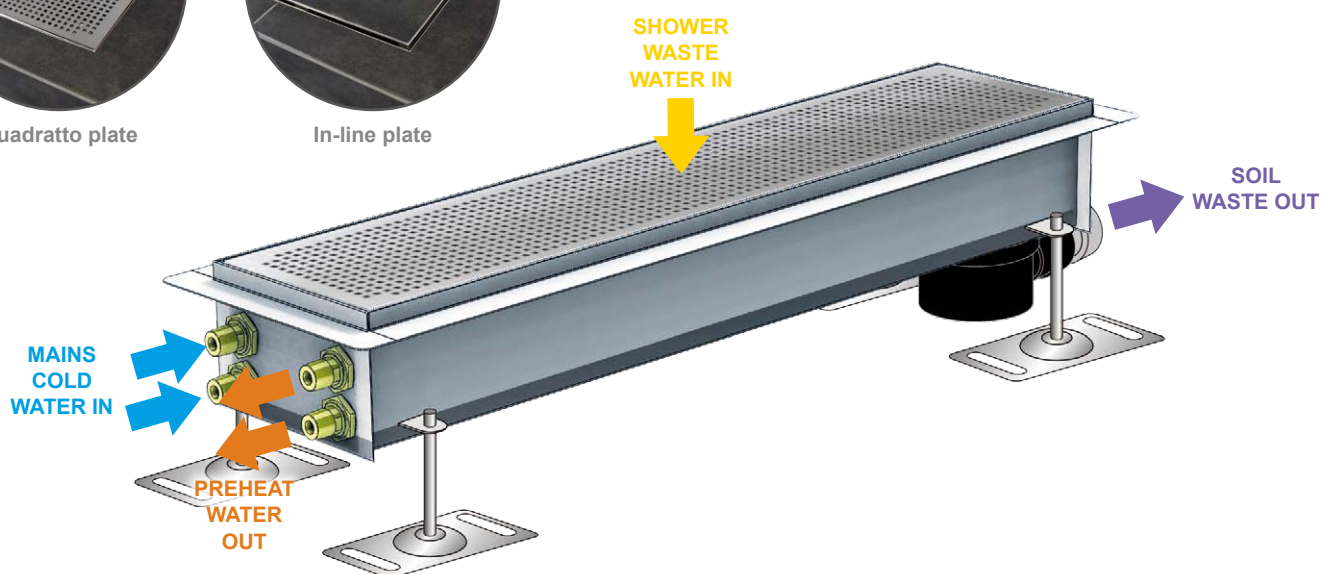
SHOWER FLOW RATE @ 40°C (LITRES/MIN)	DRAIN+ DUO HE PRESSURE DROP (BAR)		
	SYSTEM A	SYSTEM B	SYSTEM C
5.8	0.14	0.08	0.06
9.2	0.32	0.20	0.13
12.5	0.54	0.34	0.22



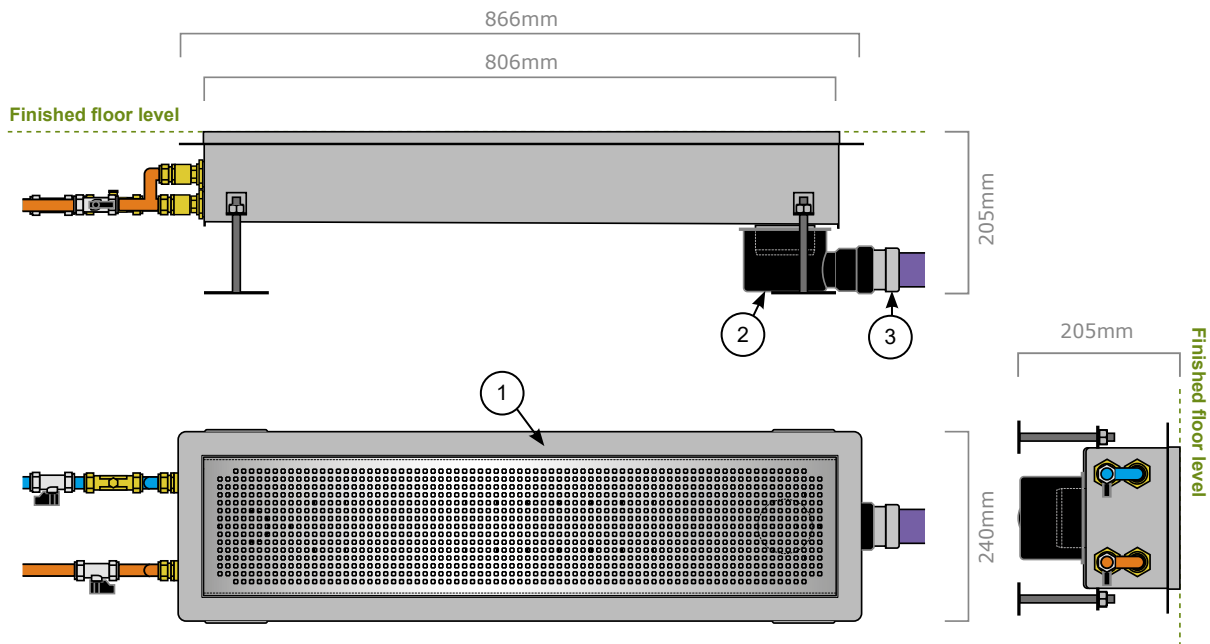
Quadratto plate



In-line plate

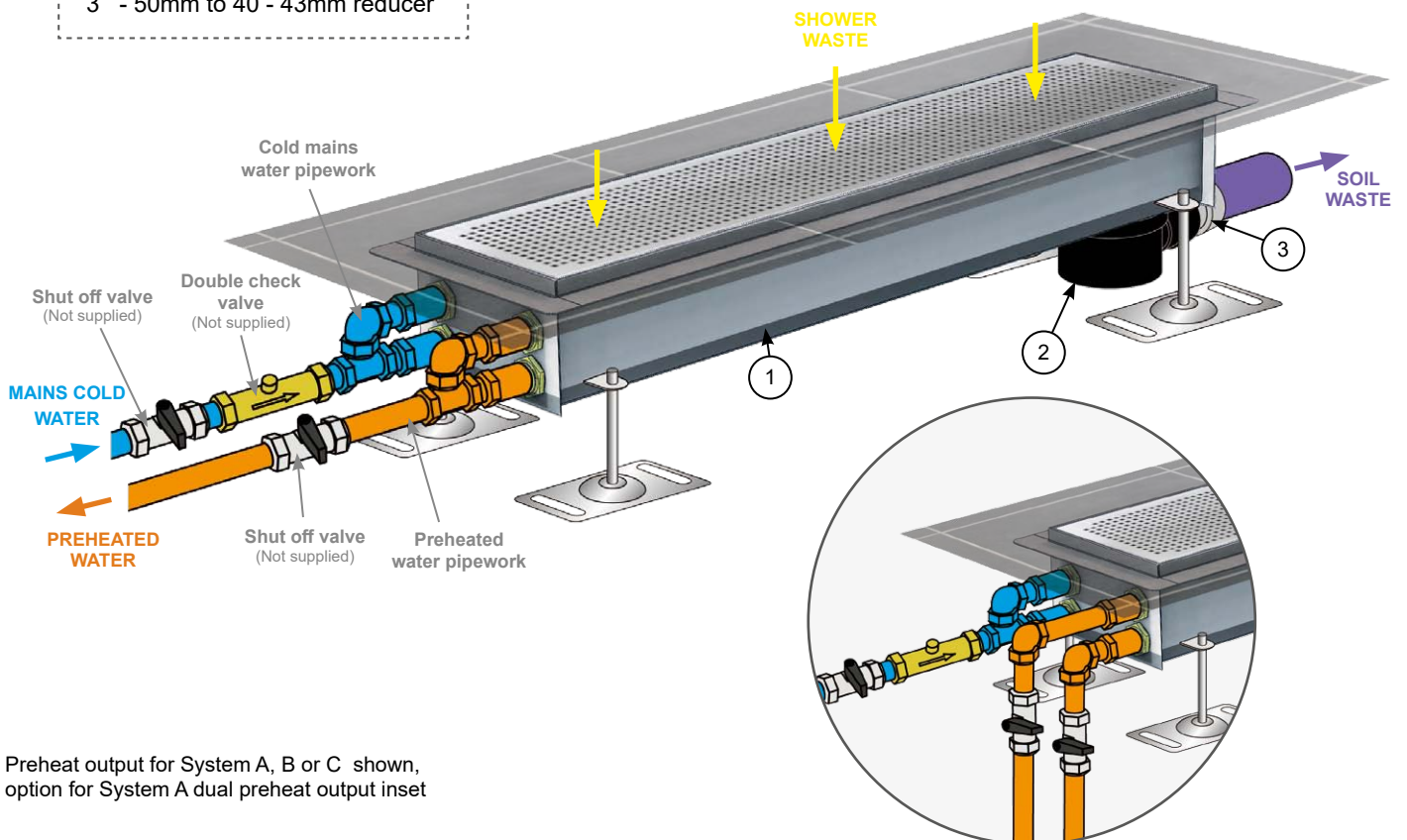


DRAWINGS & DIAGRAMS



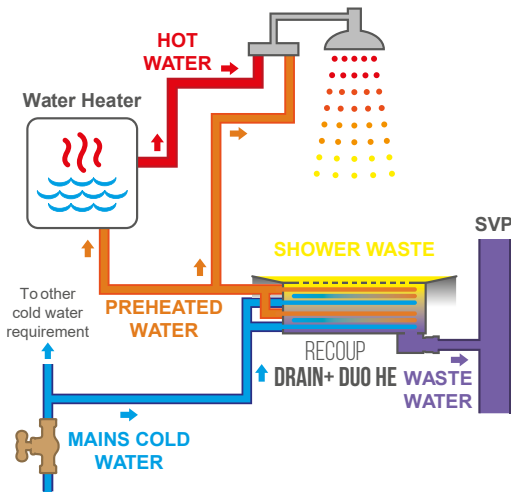
COMPONENT KEY

- 1 - RECOUP Drain+ Duo
- 2 - Waste Syphon Ø50mm
- 3 - 50mm to 40 - 43mm reducer



Preheat output for System A, B or C shown,
option for System A dual preheat output inset


INSTALLATION METHODS



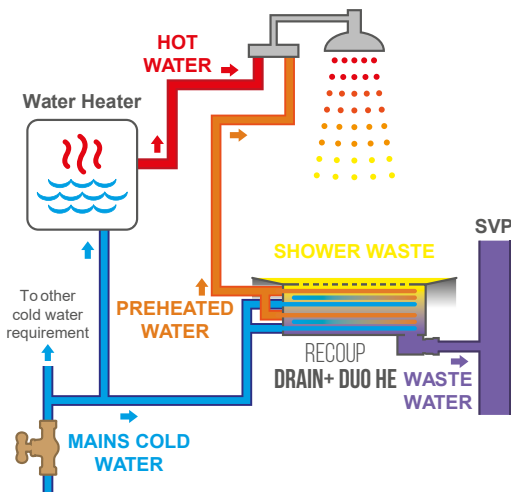
SYSTEM A

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.

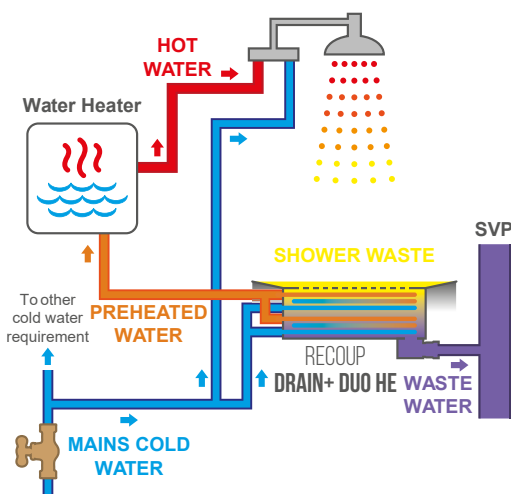


SYSTEM B

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.



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.

 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 DRAIN+ DUO HE

Recoup WWHRS | Drain+ Duo HE | 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.recoupwwhrs.co.uk for the full Recoup Drain+ Duo HE product specification.