

AS-SHOWER

A heat exchanger in your bathroom



... an elegant solution saving up to 45% of energy spent for the domestic hot water production.

The exchanger is intended for wastewater heat recovery up to the maximum water pressure of 16 bars and temperature 90°C. For showering, hot water from 37°C to 40°C is normally used. Out of this hot water, we are able to use for showering about 5°C, which accounts for 10% only. The remaining water (at the temperature of 35°C) ends without any use in a sewer. This means that 90% of energy we use for heating of the water is wasted.

The new shower exchanger AS-SHOWER can reduce such losses very efficiently. It can use 45% of energy for preheating of cold water and decrease thus the hot water consumption.

The exchanger working part, i.e. the absorber, is formed of corrugated plates made of polished stainless steel sheets. Fresh water flows through a system of channels inside the plates and gets warm by taking the heat from the wastewater flowing over the absorber surface. As the fresh water temperature from the water mains is about 10°C, it can draw some 12 to 14°C from the wastewater warm at 35°C.

If the lukewarm water, preheated in the exchanger, is brought to the mixing valve, then the hot water stream is blended here with it (instead of the cold water coming directly from the mains) to provide warm water at the temperature usually used for showering. In this way, the hot water consumption drops down even by 45%, and this represents the savings offered by the AS-SHOWER exchanger. The necessary showering comfort is then provided with automatic water blending in a thermostatic mixing valve.



Placements

The exchanger installation should be considered before your bathroom retrofitting or fitting a new bathroom. According to space requirements and possibilities, it is advisable to place the exchanger under the shower pan or as close as possible to it. The exchanger must be always laid on a horizontal surface. It is necessary to have accessible both drain and cold water inlet.



Connections

Wastewater flows over the drain trap to the exchanger and then it continues to a sewer. A DN40 plastic pipe should be used for the wastewater connection. The exchanger is a counter-current type and the clean water inlet is always closer to the wastewater outflow. Flexible armoured hoses with cap nuts and flat gaskets can be suitably used for the clean water connection. For more details, see the Installation & Operating Instructions.

Cleaning

Clean working surfaces of the exchanger are the basic precondition for the heat transfer. During regular cleaning of the shower pan siphon the deposits formed in the draining pipe and in exchanger should be removed. We advise to use environmentally friendly, biological based preparations, where bacteria consuming the impurities existing in the drain will do the cleaning work for you. All you have to do is to pour the cleaning solution into the shower pan siphon.

Technical parameters

Water pressure	max. 16 bar
Water temperature	max 90 °C
Exchanger casing	ABS plastic (vacuum forming)
Absorber	Stainless steel pressed sheet (AISI 316 Class)
Wastewater connection	DN40
Clean (cold) water connection	G ¾"
Dimensions	552 x 144 x 87 mm

