

NELA

ECONOMICAL SHOWERING

Shower exchanger



WASTEWATER
ENERGY RECOVERY
SPECIALIST

SAVE MORE THAN 42% OF ENERGY
USED TO HEAT THE SHOWER WATER

Producer: **SAKAL** technologie pro úspory energií
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ECONOMICAL SHOWERING

Shower exchanger

Output of the preheated clean water

Input of the clean water

Input of the wastewater from the siphon

Output of the wastewater



- The shower exchanger NELA is intended for the wastewater recovery in the bathrooms.

Water used for normal showering is around 37-40°C warm. During the showering process water temperature is reduced only by 4-5°C. The remaining warm water then ends wastefully in the drain. In other words 90% of the heat required to achieve the desirable water temperature is lost.

Installing the shower exchanger NELA in to the shower drain system can considerably reduce those losses. Up to 42% of the energy could be reused to preheat cold water, therefore reducing the amount of hot water required.

Absorber - the working part of this innovative product is made from profiled polished stainless steel plates AISI 316, housed in ABS casing. Incoming water is directed through the system of small internal channels, which are heated by the waste water freely flowing over the surface of the exchanger. Cold clean water at 10° absorbs 12-14°C from the remaining 35° contained in the waste water. Preheated water is then directed to the tap, where it is mixed with hot water. The volume of hot water required is reduced by around 42%.

Comfortable showering is guaranteed by use of a thermostatic mixing tap.

ENERGY EFFICIENCY MORE THAN 42%



■ LOCATION:

The shower exchanger could be added to your system at any time, but ideally during house build or bathroom modernisation. According to the available space, position the exchanger horizontally under the shower tray, or as close to the shower drain as possible. Access to the cold water supply and the waste pipe is required.

■ CONNECTION:

The waste water after the shower flows through the shower exchanger in to the drain. The waste water side of the exchanger is connected by a 40 mm plastic pipe, the correct connection is given by the exchanger design. It is easier to use flexible hoses for the fresh water connection. Incoming cold water always flows in the opposite direction to the waste water hence, the connection is always next to the waste outlet. More about you can find in montage instructions.

■ CLEANING:

Clean internal working surfaces of the exchanger are important for an efficient heat transfer. There are no other special requirements for the cleaning or maintenance of the exchanger. Coating which naturally occurs inside the drains is normally dissolved by household cleaning agents applied during shower tray cleaning. Alternatively, very effective, easy to use and environmentally friendly are biological cleaners. Apply the solution in to the shower drain and the bacteria which feeds on organic dirt, will do the cleaning. The bacteria will die off when there is nothing left to consume.

■ DIMENSIONS AND OPERATIONAL LIMITS:

Cold water pressure:	max. 16 bar
Working temperature:	max. 90°C
Exchanger housing:	ABS vacuum formed
Absorber:	AISI 316 stainless steel
Waste water connections:	DN 40
Cold water connections:	G 1/2"
Dimensions:	552 x 144 x 87 mm
Weight:	1800 g