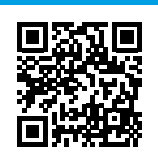
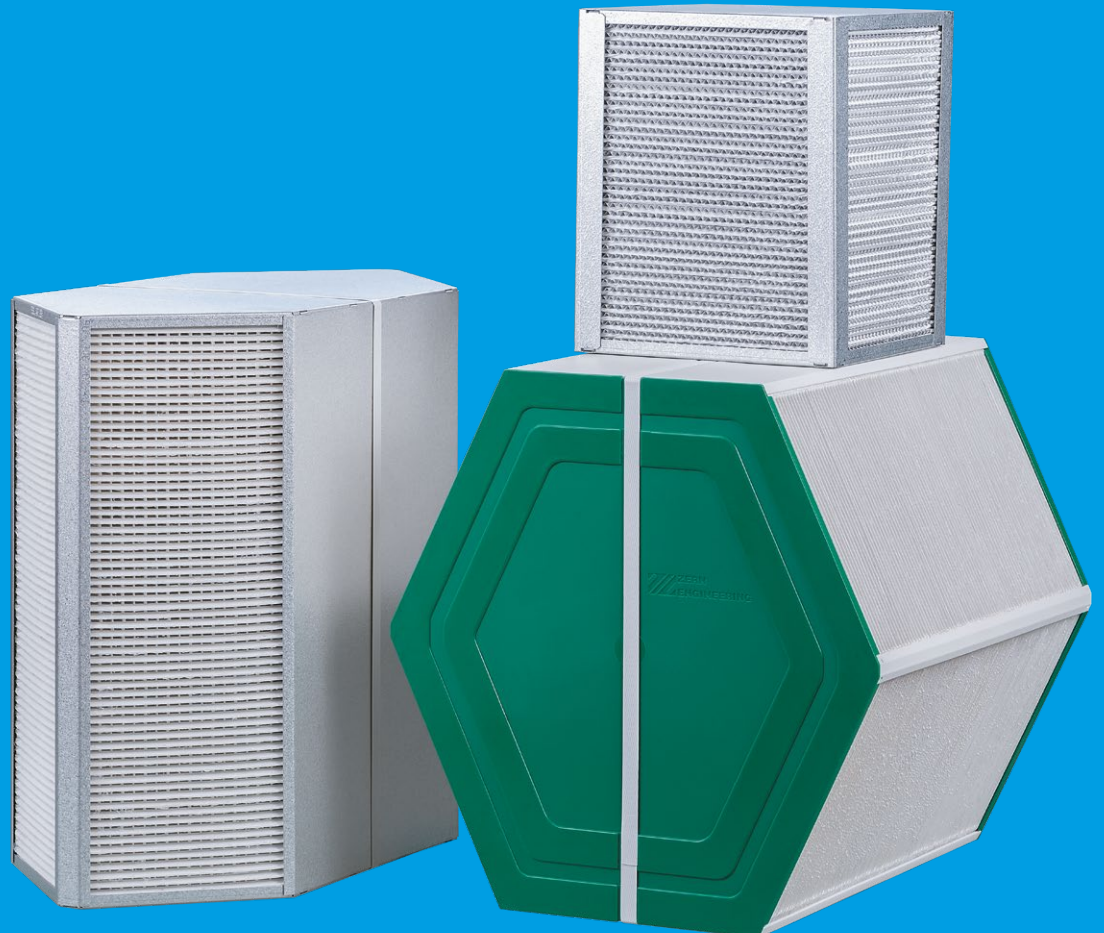


GUIDELINES

FOR CLEANING
ENTHALPY PLATE HEAT EXCHANGERS



- This manual serves to prevent undesirable consequences which may arise if the recommendations for the procedure are not followed.
- Please read this manual before cleaning and disinfecting the product and follow the recommendations until the procedure is completed.
- This manual serves to prevent undesirable consequences which may arise if the recommendations for the procedure are not followed.
- This manual has been compiled with the utmost care and attention to all relevant standards.
- The manual cannot be subject to any legal claims.
- ZERN ENGINEERING reserves the right to change the contents of the manual, in part or in full, at any time without prior notice.
- ZERN ENGINEERING is not liable for any damage that may be caused to the product during cleaning and disinfection.

BRIEF INFORMATION ABOUT THE MEMBRANE

The membrane used in the product as the basis of the core (plate stack) is made of durable corrosion-resistant polymer and environmentally friendly plastic.

In addition, the membrane is modified with special nanoparticles, which give the surface smoothness and low friction resistance, which makes it difficult for dust and other unwanted impurities to adhere to the membrane surface.

Normally, a product with a membrane should be cleaned once every two years.

You can determine whether the product needs to be cleaned yourself, depending on the air quality and visual condition of the air filters of the air-handling unit as well as the product itself.

GENERAL RECOMMENDATIONS FOR CLEANING THE PRODUCT



Carefully use mounting tape to remove/install and move the product.



Do not use sharp tools or hard brushes during cleaning which may damage the core.



Do not use lubricants when assembling and disassembling the product.



Do not use high-pressure washing for cleaning.



Do not twist or squeeze the product.



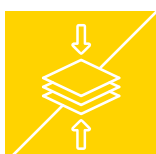
Do not use cleaning chemicals which are not suitable for this procedure.



Do not throw or drop the product.



Do not use open flames or high temperatures when drying the product.



Do not apply force or mechanical stress to the core plates.



Avoid direct sunlight, UV rays.



Avoid heavy mechanical impact on the product.

INSTRUCTIONS FOR CLEANING THE PRODUCT

Procedure



The heat exchanger should be cleaned every 6 months as recommended by VDI6022. If the heat exchanger shows traces of dirt, dust or other unwanted inclusions on visual inspection, it can be cleaned more frequently. You can use a vacuum cleaner with a soft brush nozzle to remove dust, dirt and other impurities.

Reasonably adjust the draft of the product to avoid mechanical damage to the core (plate stack) and collect dust, dirt from all open plates of the working space (core, plate stack).

If blowing with a vacuum cleaner does not bring the desired result, rinse the product with water, following the steps below.



1. Place the product in a suitable container (basin, bathtub, shower tray, etc.).



4. Remove the product from the container.
It is allowed to dry the product plates with a dry cloth, except for the working space (stack of plates, core).



2. Gently rinse the product under running clean water on all sides.

NOTE:

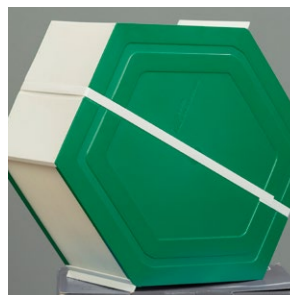
Standard tap water pressure (0.3 – 6 bar; 0.03 – 0.6 MPa) is recommended to avoid unintentional damage to the core.



5. In the event that the membrane adheres during the cleaning procedure, allow the water to drain completely by alternately turning the product upside down.
Then use a domestic hair dryer of approx. 3000 W to blow through the core (working space) in cooling mode several times until you are sure that the membrane has stopped sticking.



3. For added effect, fill the container with water, dip the product in the water and with smooth reciprocating movements run the water through the core (plate stack) to remove any dust, dirt or other impurities.



6. Leave the product to dry in a well-ventilated room for 48 hours.
Every 12 hours, turn the heat exchanger to the opposite side to better remove residual moisture.
Position the heat exchanger on the air duct side as shown in the photo.
To ensure constant moisture evaporation, raise one side of the heat exchanger 5-10 mm from the plane on which it is located.
Before installing the product in the unit, make sure that there is no moisture left in it.



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