CORE HRV - General Product Information 1

Introduction

Congratulations on purchasing your new CORE HRV - Heat Recovery Ventilation. The exchanger is classed as an high performing Counterflow Heat Exchanger with maximum efficiency due to our unique and patented channel design.
The HRV is a component for energy recovery (recuperation) for ventilation devices that are designed for living spaces. The HRV is not designed for any other operating mode.

Notes on packaging and shipping

Even though an HRV appears to give the impression of being robust and sturdy, applying heavy weight to pallets whilst storing or transporting, especially in combination with high temperatures, can lead to distortion and damage.
For shipment of larger quantities, it is recommended:

- Pallets with sufficient load capacity
- No stacking over 2,5 m high
- packaging with foil
- securing the HRV on the pallet with a lid (cardboard) and straps made of polypropylene.

For shipment of single HRV, it is recommended:

- A box suitable for parcel shipping
- Appropriate stabilization as a transport safeguard (e.g. **very coarse (> 10 mm), non-dusting filling material**)

The weight of your ERV varies greatly depending on the type and height. In the following table you will find the minimum requirements we recommend for cardboard packaging for each weight:

Weight [kg]	Composition	Corrugation	Width [mm]
<2	135TL / 100WS / 100WS	1-fluted	4,0
2	135TL / 100WS / 100WS	1-fluted	4,0
3	120TL / 100WS / 120TL	1-fluted	4,0
4	135TL / 100WS / 100WS	1-fluted	2,5
5	135TL / 100WS / 135TL	1-fluted	2,5

TL = test liner, KL = kraft liner, WS = Fluting

Additional note:
Please contact your cardboard supplier for the exact composition of the cardboard.

Notes on storage

The temperatures during the entire life cycle of the HRV must be within the limits of - 20 ° C to + 50 ° C. Otherwise there is a risk of distortion, odour formation, the occurrence of leaks or other kind of damage. All of this reduces the high performance of your HRV.
Never stack multiple HRVs higher than 2.6 m and do not load an HRV with more than 30 kg. Do not load an HRV unevenly.
Always place an HRV on one of its closed surfaces.

If you replace an HRV during the winter time with an ERV, please make sure to store the HRV in a dark, cool place and take in account the maximum load mentioned above.

Notes for handling and installation

The HRV is completely ready for installation. Please do not use any additional oils, sprays, talc or other lubricants for installation in order to make the HRV easier to slide into the socket.
Please do not let the HRV fall and avoid strong forces.

The strapping attached at the factory is important. It is not packaging material and should **NOT** be removed. It is used to facilitate installation and maintenance of the ERV. The strapping is not designed to carry the weight of the ERV during continuous transport!

Notes on usage

The HRV is designed for living areas.

Before an HRV can be put into operation in a ventilation device, the corresponding device settings must be made.

For more information about our products please visit us at www.core.life.
We will be pleased to assist you!

Your ventilation unit manufacturer will inform you about the corresponding settings.

If you carry out renovation work, use strong cleaners or oils for floors and furniture or other chemicals, including biologically produced, biodegradable and bio-based chemicals, in quantities > 50 ml, we recommend removing the HRV from the ventilation unit, switching off the ventilation unit and, at least for the time of work, better still a few days to a week afterwards and to ventilate the affected area extensively with open windows and doors.

In this way, you avoid the transfer of odours (see chapter Odour) and possible damage to the material, which cannot be restored using the recommended cleaning procedure. The influence of chemicals can reduce the high technical performance of your HRV.
The HRV is not designed for applications in areas with a high chemical load, including workshops and production halls. The HRV may only be used in office and living areas!

The temperatures during the entire life cycle of the HRV must be within the limits of - 20 ° C to + 50 ° C. Otherwise there is a risk of distortion, odour formation and the occurrence of leaks. All of this reduces the high performance of your HRV.

Notes on cleaning
A dirty HRV can be cleaned and disinfected. You can find detailed information on the washing and disinfection process in our cleaning instructions.

Notes on disposal
Please dispose of a visibly soiled HRV, which can no longer be cleaned, as well as a damaged HRV or those that are to be disposed of for reasons of age by putting them in the household waste bin.

Notes on shelf life
The HRV will lose a small part of its high technical performance in the course of its life cycle. This is due to the aging of the materials and different levels of environmental influences. The composition of the airflows have a strong influence on the aging of the HRV, which is why the HRV is only designed for residential areas.

An HRV **can be operated for up to 10 years without interruption** if the conditions under the instructions for handling, use and storage are complied with. In the case of storage, the storage time is deducted from the specified 10 years of operation life. The 10 years start from the date of manufacture (see type plate on the HRV).

Notes on materials
The HRV consists largely of high-quality polystyrene and a small part of adhesive and sealing material. Some HRV types have a metal housing and / or additional aluminum side grilles instead of the plastic housing, which do not affect the performance.
Some of the adhesives used are permanently sticky, which is why sticky surfaces or stickiness inside may still occur. This is not an indication of reduced quality or a manufacturing defect.

Notes on conformities / certificates / standards
Our HRV comply to the following conformities / certificates / standards:

Hygiene standard:	DIN ISO 846
Fire standard:	EN DIN 13501, ISO 11925 (Class E)
Quality management:	DIN ISO 9001:2015

Notes on odour
An HRV consists exclusively of non-metabolizable plastics, tested in compliance with the hygiene standard VDI 6022 - DIN ISO 846. However, if you suspect mould and/or bacterial infestation, please follow the necessary steps for disinfecting according to the cleaning instructions for HRV.

In addition to the odours caused by microorganisms, other odours may arise when using an HRV. Please find here the

2 main types of smells with the corresponding recommended actions.

1. Freshly produced
    a. Smell plastic
    b. Evaporates after a few days of ventilation
    c. Action: Set the ventilation device to the highest air exchange rate when you are not at home and repeat the process until the odour evaporates.

2. Odour transmission (Exchange of odours in the air currents via the membrane)
    a. Smell depending on the smell transmitted and smells from outside or from other rooms (very critical onions and garlic, smoke? Tar?)
    b. Evaporates after a few days of ventilation
    c. Action: Set the ventilation device to the highest air exchange rate when you are not at home and repeat the process until the odour evaporates. (We recommend an extractor hood, especially if there are kitchen smells!)

In addition to odours from the inside, odours from the outside can also get into the interior via the ventilation system. These odours can be "picked up" by the HRV and linger for a long time.
With HRV there can be a small amount of odour transmission due to air exchange through leakage. However, this exchange takes place to such a small extent that only substances with a very low odour threshold can be perceived.

Notes radioactive noble gas radon
When uranium and radium are present in varying degrees in all soils and rocks decay, radon is produced, which spreads through the soil and finally reaches the earth's surface. Radon also reaches the interior of houses from the subsoil of buildings, where it can accumulate. This can lead to high radon concentrations, which are hazardous to health, especially if the room is not ventilated very often.

Radon concentrations in the soil, in the air and indoors vary locally and regionally.

By using a ventilation system in general, you ensure that more fresh air gets into the interior and that accumulation with radon, which can lead to a health hazard, can be prevented.

Notes Use on ships, coastal areas and islands
The HRV is a component for energy recovery (recuperation) for ventilation units designed for living spaces. However, the composition of the airflows has a strong influence on the aging of the HRV.
Due to the increased salt content of sea air, deposits may occur, which may affect the performance of the HRV.
We recommend cleaning the HRV with water once a year.
In addition to odours from the inside, odours from the outside can also get into the interior via the ventilation system. These odours can be "picked up" by the HRV and remain for a long time.

Notes on quality control
Every single CORE HRV exchanger goes through a 100% quality control check before it leaves our factory. Our company is certified according to DIN ISO 9001: 2015.

For more information about our products please visit us at www.core.life.
We will be pleased to assist you!

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