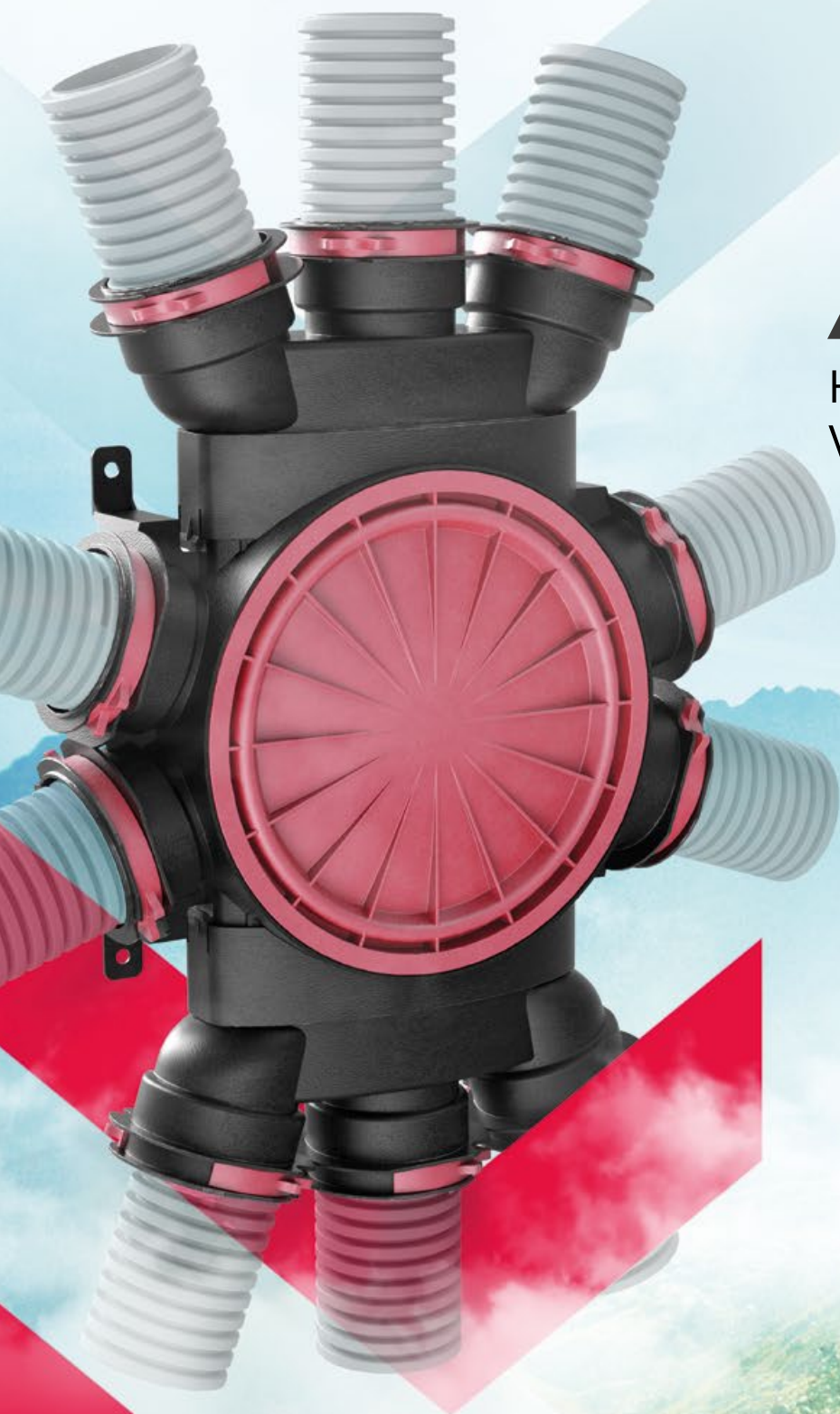




BETTER AIR WITH US



ARIA

HEAT RECOVERY
VENTILATION SYSTEM

PRODUCT CATALOGUE 2021



HEATPEX ARIA

The idea behind the HEATPEX ARIA ventilation and heat recovery system is to meet the needs of Investors and Installers when it comes to a complete solution for single-family houses.

The process of setting up a heat recovery ventilation system installation begins with the design. This is why our website hosts the ARIA PLANNER application which will assist in and automate the documentation processes and generate a bill of materials for each investment in just a few minutes.

HEATPEX ARIA's original OneClick technology enables very fast and convenient installation without the use of tools. Moreover, the system is one of the first on the market to meet the most restrictive ATC1 airtightness class. This ensures low operating costs and, together with the Ultra-Fresh® technology (total bactericidal activity at 99%), the highest air quality for the users.

HEATPEX ARIA means better air!



EASY AND QUICK INSTALLATION

With an original system of connections – OneClick technology, all the parts of the heat recovery system can be connected without any tools. If any modifications are needed during the installation of the system, the different parts can be disconnected easily without risk of damage.

Thanks to flexible corrugated pipes the installation is very easy. No fittings, such as pipe elbows, are required.



LOW NOISE LEVEL

The optimal air flow through different parts of the system and double wall pipes helps to reduce the level of noise generated by the flowing air, which matters especially during the night.



LOW PRESSURE LOSS

The careful design of each single part of the system and smooth inner surface of the pipes allow to keep the system's pressure loss low.



HIGHLY CUSTOMISABLE

The modular design of the system makes it easy to customise its parts to the specific requirements of any building. This helps to reduce the number of parts which are left unused, to limit the space taken by the ventilation system to a minimum and to keep the costs of the entire project as low as possible.



HYGIENE

The pipes and other parts of the HEATPEX ARIA system are treated with the Ultra - Fresh® antimicrobial to make the air ducts resistant to microbes (99% reduction). This resistance has been confirmed by an independent laboratory in a test according to the ISO 22196 standard.

The smooth inner surface of the air duct keeps dirt deposits to a minimum.

The high hygienic quality of the HEATPEX ARIA system is confirmed by the Polish National Institute of Public Health.



DURABILITY & STRENGTH

The system components are made of extremely light yet durable plastic material ensuring reliable operation for years, without the risk of mechanical damage or corrosion.

More importantly the construction material used (PP – polypropylene) is considered safe as it poses no health hazard and is 100% recyclable.



COMPACT SIZE

The small size of the HEATPEX ARIA system allows to conceal the parts of the system in the ceiling, either in the insulation layer covered with screed or inside the plenum space if a dropped ceiling is used.



TOP AIRTIGHTNESS CLASS (ATC 1)

Through the use of appropriate materials and a patented system of connections between the individual parts of the system, we have achieved the top airtightness class for the system (ATC 1) according to the PN-EN 17192 standard.

This means that the airtightness of the ductwork in our system is three times higher than that for class D. This is achieved with outusing any additional sealing material during the installation works. The ATC 1 airtightness class has been confirmed by tests performed by an independent laboratory.





CLEAN AIR: THE KEY TO FEELING WELL

The quality of the air in your home is one of the main factors affecting the way you feel, so keeping the air clean and fresh has a significant effect on your health. When breathing, you use the oxygen contained in the air and you breathe out carbon dioxide. Apart from CO₂, you are also exposed to other unwanted pollutants, such as moist, dust or unpleasant smells. As a result, you may develop a headache, have difficulty concentrating, feel nervous and clearly less comfortable.

In order to keep the optimum quality of the air inside your home, it is necessary to continuously remove the dirty air and to supply fresh outdoor air rich in oxygen to the interior. This is the role of ventilation.

NATURAL VENTILATION: DOES IT WORK?

The natural ventilation system used in the majority of residential buildings is no longer an effective solution for modern, energy-efficient homes. Airtight doors and windows prevent infiltration of fresh, outdoor air. In a natural ventilation system, the ventilation strength depends on the difference of temperature between inside and outside of the building. This makes it inefficient in the summer when the difference is minimal. On the other hand, in the winter the ventilation is too strong and too much warm air is removed from the building, which results in high heating bills.

HEAT RECOVERY VENTILATION: THE BEST WAY TO VENTILATE YOUR HOME!

The response to the shortcomings of a natural ventilation system is heat recovery ventilation (HRV). HRV continuously replaces polluted air with clean air, regardless of weather conditions or the season of the year and recovers the heat from the warm air removed from your house, keeping your heating bills low.

HOW DOES IT WORK?

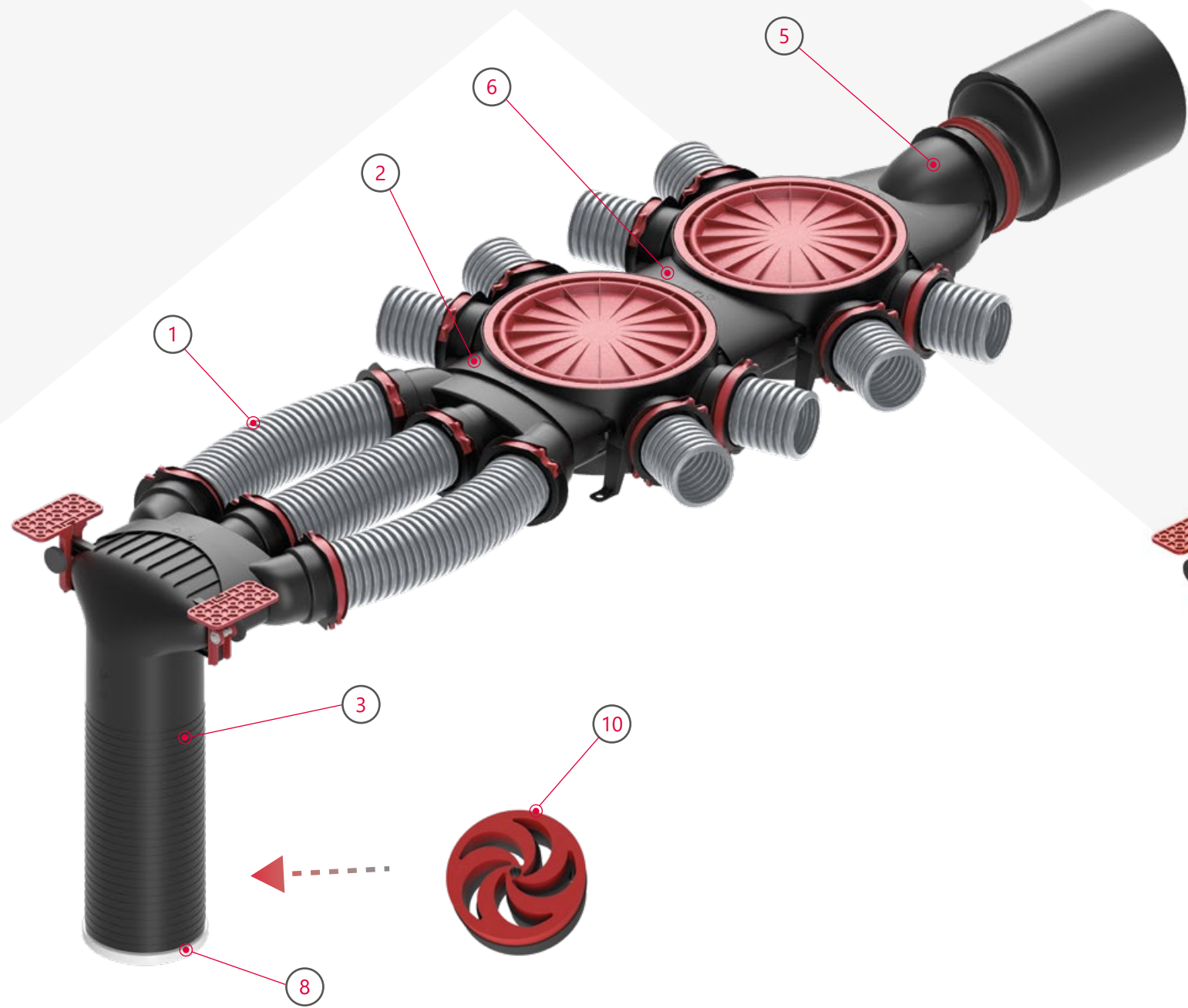
An air handling unit with heat recovery is responsible for forcing the flow of air. The unit sucks in fresh outdoor air and uses the filters inside the unit to remove pollutants from the air before it is supplied to the inside of the building. The unit also removes dirty indoor air from the house.

The unit is equipped with a heat exchanger where the heat is exchanged between indoor and outdoor air, but without mixing the two. However, the unit itself would be no use without a system of air ducts.

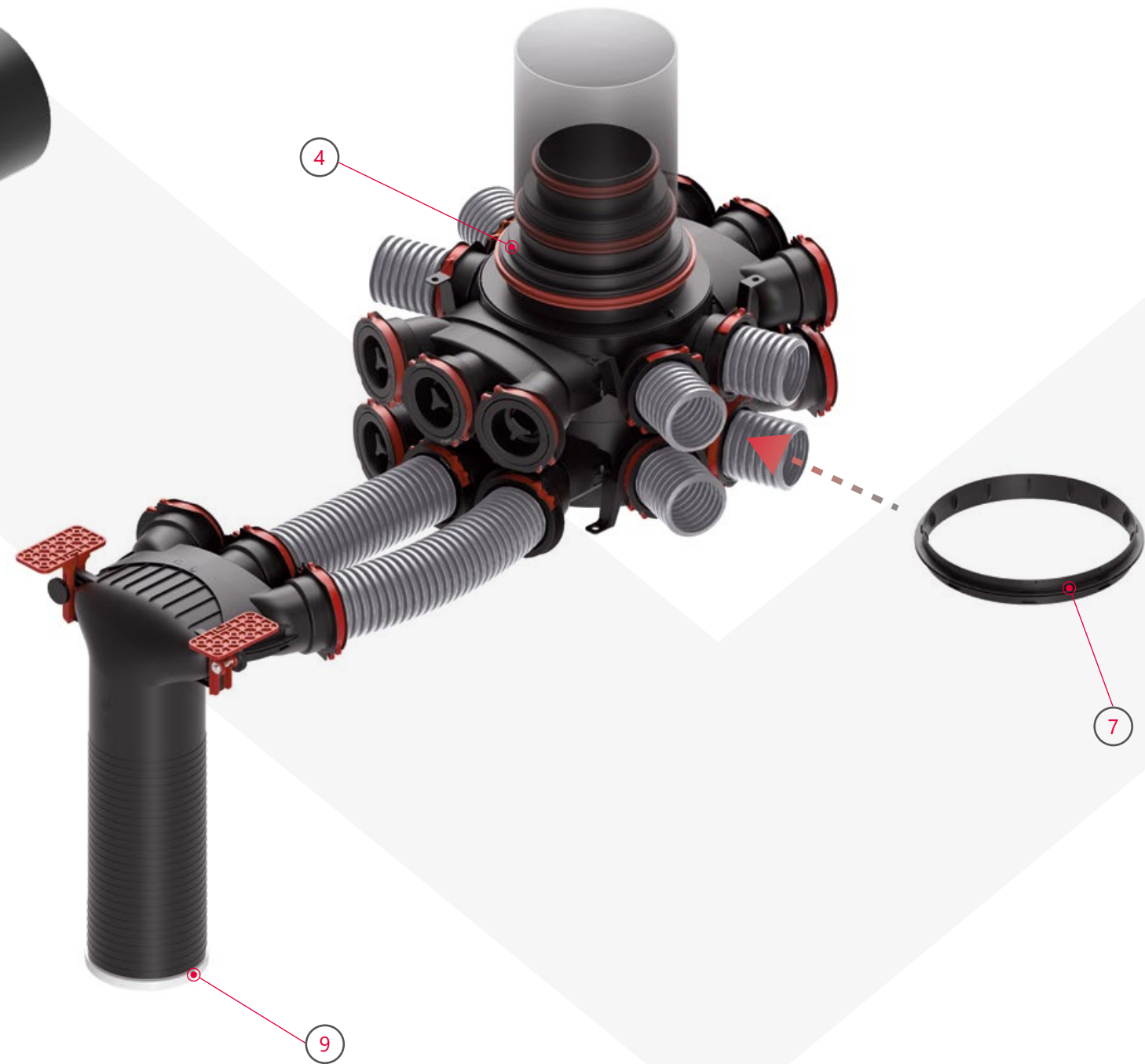
HEATPEX ARIA system will efficiently distribute clean, fresh air throughout your home. It will supply fresh air to your living room or bedroom and remove polluted air from your kitchen or bathroom.

WHAT ARE THE BENEFITS OF HEAT RECOVERY?

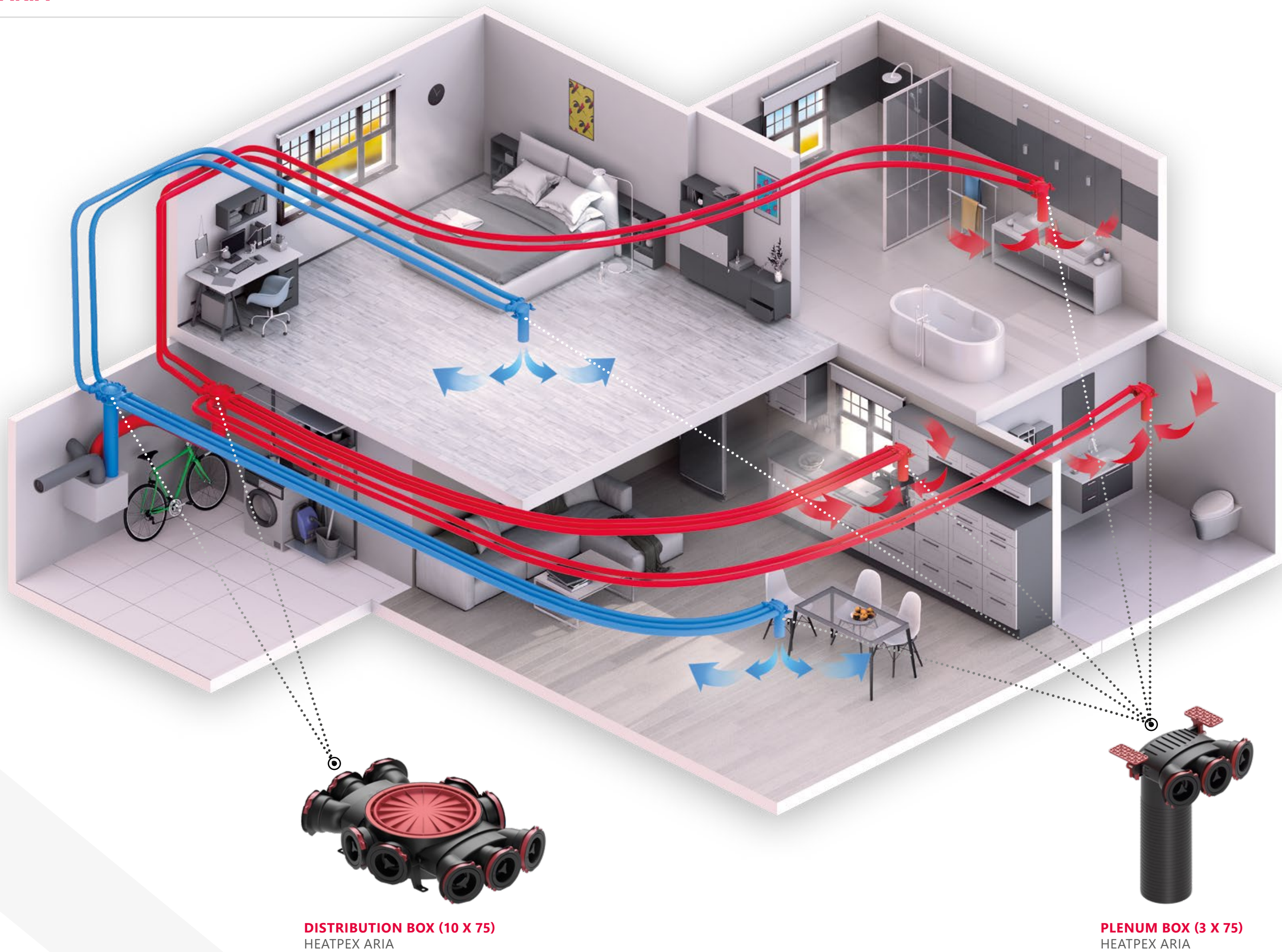
- ⦿ Your home will be ventilated 24 hours a day, regardless of the weather or the season of the year.
- ⦿ You will breathe fresh air, free from pollutants, in any room of your building.
- ⦿ You will save energy by reducing ventilation heat losses.
- ⦿ You will be able to adjust the ventilation intensity depending on your preferences.



No.	NAME	CATALOGUE NUMBER
1	Pipe 75 (50m pipe coil)	520 075 050
2	Distribution box (10 x 75)	523 000 001
3	Plenum box (3 x 75)	523 375 001
4	Main central connector (125/160/200)	524 109 001
5	Main side connector (125/160)	524 110 001



No.	NAME	CATALOGUE NUMBER
6	Horizontal coupling	524 111 001
7	Vertical coupling	524 112 001
8	Supply air diffuser	520 021 001
9	Exhaust air diffuser	520 022 001
10	Damper	520 024 001



DISTRIBUTION BOX (10 X 75) HEATPEX ARIA

The HEATPEX ARIA distribution box is connected directly to the HRV unit. It is responsible for the supply of fresh air to or the extraction of dirty air from different rooms in a building. The distribution box is made of a high quality polypropylene resistant to contamination.

- ⌕ A modular structure allows to customise the box to the air flow requirements
- ⌕ 10 pipe sockets in the standard configuration
- ⌕ Designed to be connected to the main central connector or the main side connector
- ⌕ Can be extended by connecting additional distribution boxes using the horizontal or vertical couplings

The distribution box contains the following parts*):

- ⌕ Main body with 4 sockets – 1 pc.
- ⌕ 3 x 75 module with gasket for the oval slot – 2 pc.
- ⌕ Cover with gasket – 2 pc.
- ⌕ Pipe fixing rings – 10 pc.
- ⌕ End plug with gasket – 10 pc.



DIMENSIONS			NO. OF SOCKETS	MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]			
498	360	106	10	PP	523 000 001

*) The distribution box is supplied as a factory-assembled unit.

PLENUM BOX (3 X 75) HEATPEX ARIA

The plenum box allows to connect up to three 75 mm pipes to a 125 mm supply or exhaust air diffuser. Each unused connection must be covered with a 75 mm end plug (supplied by the manufacturer).

- ⊗ Installation on the main (structural) ceiling, or inside the plenum space if a dropped ceiling is used
- ⊗ Adjustable fixing wings
- ⊗ Ribbed surface to ease cutting the diffuser pipe

The plenum box contains the following parts*):

- ⊗ Main body – 1 pc.
- ⊗ 3 x 75 module with a gasket for the oval slot – 1 pc.
- ⊗ Pipe fixing ring – 3 pc.
- ⊗ End plug with gasket – 3 pc.
- ⊗ Adjustable fixing wing with a screw – 2 pc.
- ⊗ End plug for a diffuser pipe – 1 pc.



DIMENSIONS					NO. OF SOCKETS	MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]	Diameter ID [mm]	Diameter OD [mm]			
248	315	447	124,1	128	3	PP	523 375 001

*) The plenum box is supplied as a factory-assembled unit.

MAIN CENTRAL CONNECTOR 125/160/200 HEATPEX ARIA

The main central connector is used to connect the main supply air pipe or the main exhaust air pipe to the distribution box. The unused part which diameter is smaller than that of the pipe should be cut off.

- Installed in the main slot of the distribution box
- Designed for connection of 125 mm, 160 mm and 200 mm pipes
- Designed for use with spiral pipes or pre-insulated flexible pipes
- Gaskets to ensure airtight and rigid connection



DIMENSIONS		MATERIAL	CATALOGUE NO.
Height [mm]	Diameter [mm]	PP	524 109 001
170,4	249		

MAIN SIDE CONNECTOR 125/160 HEATPEX ARIA

The side connector is used to connect the main supply air or exhaust air pipe to either side of the distribution box. It is designed to be fixed into the oval slot on either side of the distribution box replacing one 3x75 module. If a 125 mm diameter pipe is used, the unused part should be cut off.

- To be fixed into the oval slot on either side of the distribution box, in place of a 3x75 module
- Designed for connection of 125 mm and 160 mm pipes
- Designed for use with spiral pipes or pre-insulated flexible pipes
- Gaskets for airtight and rigid connection



DIMENSIONS			MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]	PP	524 110 001
284	216	167		

HORIZONTAL COUPLING HEATPEX ARIA

The horizontal coupling is used to connect two or more distribution boxes horizontally.

- To be fixed into the oval slot of the distribution box
- Connecting additional distribution box increases the number of available sockets by four



DIMENSIONS			MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]	PP	524 111 001
216	110	92		

VERTICAL COUPLING HEATPEX ARIA

Vertical coupling is used to connect two or more distribution boxes vertically.

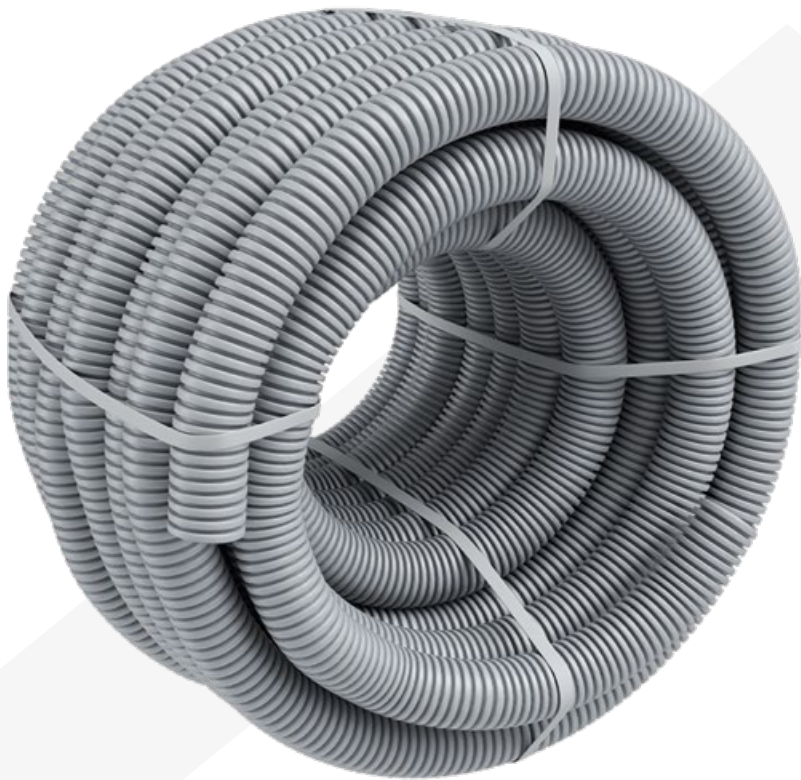
- To be fixed into the main slot of the distribution box.
- Connecting another distribution box vertically increases the number of available socket by ten.
- Indentation for fingers for easy installation of the connector in the distribution box.



DIMENSIONS		MATERIAL	CATALOGUE NO.
Diameter [mm]	Height [mm]	PP	524 112 001
249	31		

PIPE 75 HEATPEX ARIA

- ⌕ A flexible pipe made of high-density polyethylene PE-HD
- ⌕ Treated with an antimicrobial, with 99% reduction of bacteria
- ⌕ Easy installation with no pipe elbows needed
- ⌕ A small diameter for easier installation inside walls or ceilings
- ⌕ The smooth inner surface of the pipe reduces flow resistance to a minimum and makes cleaning easier.
- ⌕ Very good soundproofing



DIMENSIONS			MATERIAL	CATALOGUE NO.
Diameter OD [mm]	Diameter ID [mm]	Coil length [m]		
76	62	50	PE-HD	520 075 050

DISTRIBUTION BOX BODY HEATPEX ARIA

Main body of the HEATPEX ARIA distribution box.

It includes:

- ⌕ Socket for HEATPEX ARIA pipes, with pipe fixing ring – 4 pc.
- ⌕ Oval slot with gasket for connecting 3 x 75 module, the main side connector or a horizontal coupling – 2pc.
- ⌕ Main slot with gasket for connecting the main top connector or a vertical coupling – 2 pc.



DIMENSIONS			MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]		
286	360	106	PP	524 101 001

PLENUM BOX BODY HEATPEX ARIA

Main body of the plenum box.

It includes:

- ⌕ Oval slot with a gasket for connecting a 3 x 75 module
- ⌕ Adjustable fixing wings with screw – 2 pc.



DIMENSIONS			MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]		
142	315	446	PP	524 105 001

3 X75 MODULE HEATPEX ARIA

Part of the distribution box and the plenum box.

- ⌕ To be fixed into the oval slot
- ⌕ Supplied with pipe fixing rings



DIMENSIONS			MATERIAL	CATALOGUE NO.
Length [mm]	Width [mm]	Height [mm]	PP	524 103 001
308	161	94		

DISTRIBUTION BOX COVER HEATPEX ARIA

It is designed to cover the main slot of the distribution box.



DIMENSIONS		MATERIAL	CATALOGUE NO.
Diameter [mm]	Height [mm]	PP	524 104 001
249	15		

END PLUG 75 HEATPEX ARIA

75 mm end plug is used to plug the pipe sockets of the plenum and distribution boxes. It comes with a rubber gasket for an airtight plugging.



DIMENSIONS		MATERIAL	CATALOGUE NO.
Diameter OD [mm]	Height [mm]	PP	520 010 001
79	35		

DAMPER 125 HEATPEX ARIA

Damper made of polyethylene . It helps to adjust the ventilation system and effectively reduces noise.

- ⌕ Effective noise reducing
- ⌕ Easy installation inside the plenum box pipe connected to a diffuser
- ⌕ Stepless adjustment of the air flow rate by turning the damper disc



DIMENSIONS		MATERIAL	CATALOGUE NO.
Diameter [mm]	Height [mm]	PE	520 024 001
128	50		

DOUBLE SOCKET COUPLING 75 HEATPEX ARIA

This coupling is used to join two HEATPEX ARIA 75 mm pipes. It must be used with two 75 mm gaskets (sold separately).



DIMENSIONS		MATERIAL	CATALOGUE NO.
Nominal diameter [mm]	Length [mm]	PP	520 023 001
75	118		

GASKET 75 HEATPEX ARIA

Rubber 75 mm gasket for use on a 75 pipe or an end plug.



DIMENSIONS		MATERIAL	CATALOGUE NO.
Nominal diameter [mm]		Rubber	520 020 001
75			

SUPPLY AIR DIFFUSER 125 HEATPEX ARIA

Disc-type diffuser used to supply air to rooms.

- Designed for installation inside the HEATPEX ARIA plenum box
- It comes with a flange with a gasket for high airtightness
- Diameter: 125 mm
- Stepless adjustment of the air flow by turning the disc

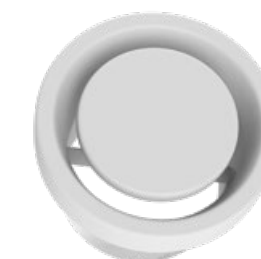


DIMENSIONS		MATERIAL	CATALOGUE NO.
Nominal OD [mm]	Height [mm]	Steel	520 021 001
160	60		

EXHAUST AIR DIFFUSER 125 HEATPEX ARIA

Disc is used to extract air from rooms.

- It is designed for installation inside the HEATPEX ARIA plenum box.
- It comes with a flange with a gasket for high airtightness.
- Diameter: 125 mm
- Stepless adjustment of the air flow by turning the disc



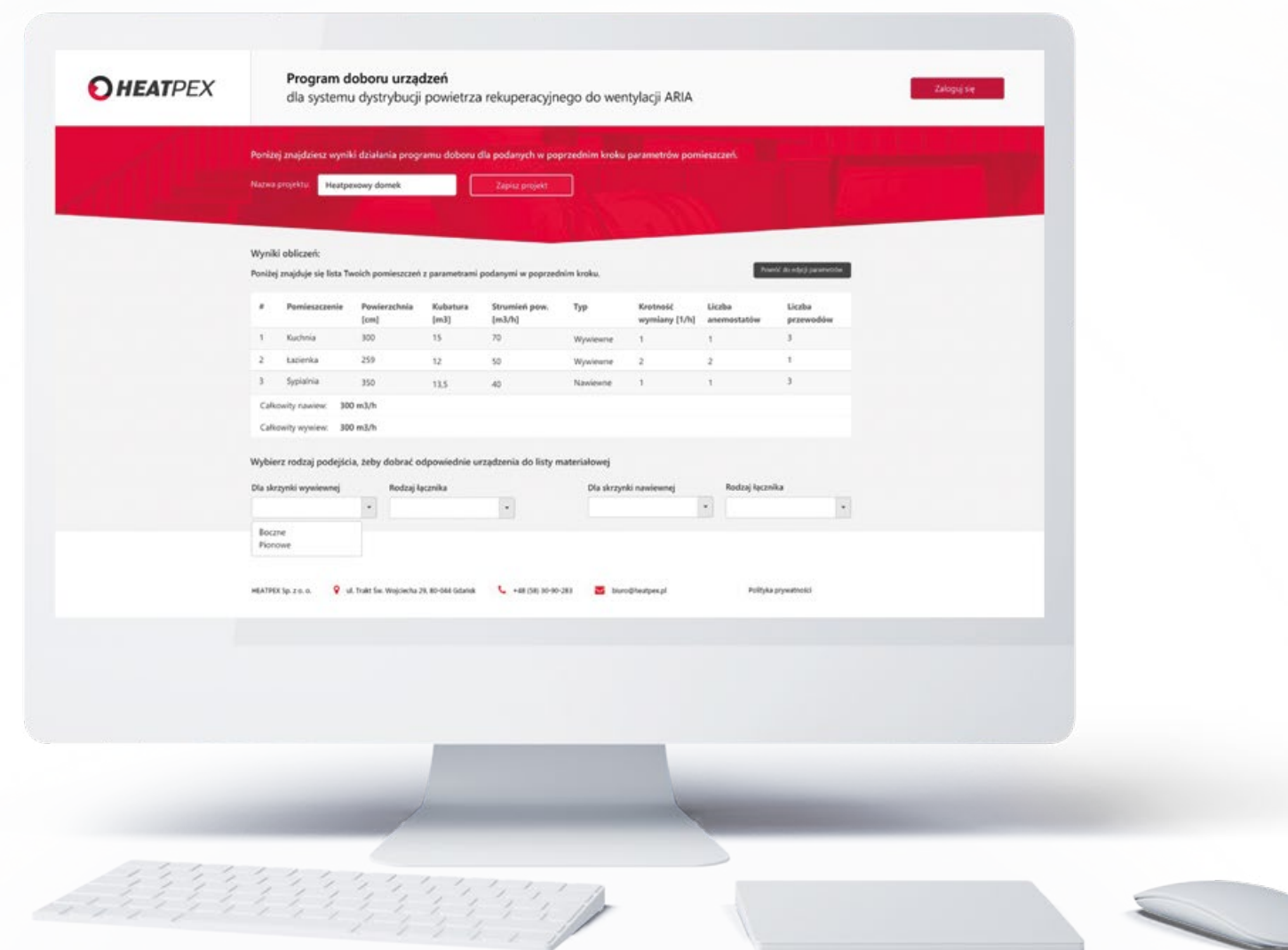
DIMENSIONS		MATERIAL	CATALOGUE NO.
Nominal OD [mm]	Height [mm]	Steel	520 022 001
160	60		



HRV SYSTEM DESIGNER ASSISTANT

ARIA PLANNER is a web-based tool for designing HRV systems for single-family residential buildings, using the HEATPEX ARIA system.

- Enter the room sizes and your family size, and ARIA PLANNER will calculate the capacity of the HRV air handling unit and the air flow rate for each room in your home.
- Generates a bill of the materials for your HRV system.
- Prepares a design document for the HRV system based on industry-specific guidelines.
- No installation on a computer is required. ARIA PLANNER works fully in a web browser
- ARIA PLANNER allows you to create a user account to be able to view and edit your designs.
- Visit the www.heatpex.pl website to use the **ARIA PLANNER** tool.





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