

SMART FLOW



Decentralized ventilation system with heat recovery for wall mounting

Caring for your health!

Smart Flow is a unique, cutting-edge product that we have developed to protect your health, improve your comfort and quality of life, and save electricity and heat in your home!

B&B CORPORATION



Smart Flow is a compact decentralised ventilation and heat recovery system for wall mounting.

The system is designed to protect your health, improve the quality of human life, reduce harm from the impact of pathogenic microorganisms on the human body and domestic animals, which may occur as a result of saturation of the environment and atmospheric air with harmful substances, from industrial pollution with harmful substances, from pollution caused by the production of toxic and waste products, from pollution caused by vehicles, from small particles of car tires, from increased humidity in rooms, which leads to the formation of mold and fungi on surfaces and is subsequently inhaled by humans and causes lung diseases, chronic lung diseases, leads to respiratory allergies, from chemical and biological allergens, from pollen of flowers and plants, etc.

The Smart Flow system has a clear medical purpose and is recommended by a number of medical specialists:

- Infectious disease specialists
- Bacteriologists
- Virologists
- Toxicologists
- Allergists
- Cardiologists
- Dermatologists
- Otolaryngologists
- Immunologists
- Oncologists
- Pulmonologists
- Occupational hygiene and medicine
- Psychiatrists
- Neurologists
- Nutritionists
- Endocrinologists

Smart Flow allows you to avoid many causes that lead to deterioration of your health, thanks to its unique design and unique functionality that allows you to flexibly control the system. Smart Flow allows you to significantly improve the quality of your life, improve the health of yourself, your children and pets.

Smart Flow allows you to prevent various harmful factors that worsen the quality of your life and health.

Smart Flow is recommended by a number of medical specialists.

Smart Flow is successfully used in private homes, multi-storey buildings, kindergartens, schools, offices, retail and warehouse premises, municipal and industrial buildings, laboratories, hospitals, etc.

Smart Flow, thanks to its technical parameters, is the only system that successfully overcomes the negative pressure that forms in rooms, especially on high floors.

Smart Flow is a clean and fast installation in an external wall.

The main purpose of the decentralized ventilation system with heat recovery for wall mounting **Smart Flow** and its advantages:

1. Preventing the formation of mold and mildew in rooms on walls, ceilings and other surfaces as a result of ventilation and sudden temperature changes in summer and winter, as well as prevention.

Mold and mildew are strong allergens and cause malignant diseases of the respiratory system.

- 2. Preventing indoor air pollution with dust, allergens and other pollutants that cause various types of acute and chronic lung diseases, cardiovascular diseases, hypertension, neurological diseases, increase stress and worsen the quality of life. The system is equipped with a filter system: an activated carbon filter that absorbs unpleasant odors, a particulate filter and a fine filter, a G3 class filter the filter system prevents the penetration of viruses and bacteria, allergens, mites, micro- and macroparticles that cause serious diseases and worsen the quality of life, significantly increasing the cost of medicines and treatment.
- 3. The system is equipped with a built-in humidity sensor, temperature sensor, CO2 and CO sensors (optional), PM2.5 particle sensor (optional), the possibility of optional installation of a gas sensor and other sensors upon request.

Compact system - easy to maintain and operate, budget option and easy to install, does not require complex maintenance, except for filter replacement and dust removal, and does not require service maintenance.

- 4. The presence, correct and regular use of **Smart Flow** allows you to save up to 50%-60% of energy costs associated with the constant opening of windows and doors to ventilate the premises, since through open windows and doors air contaminated with dust, allergens and exhaust gases, micro- and macroparticles, mites enters the room, and there is also a sharp decrease in temperature in the room, which contributes to the formation of condensation, mold and fungi, which, when inhaled, cause severe allergies and lung diseases.
- 5. **Smart Flow** normalizes indoor humidity, prevents mold formation and fungi spreading indoors. Protects against penetration and spread of bacteria and viruses from outside. Protects against allergens, micro- and macroparticles, and polluted exhaust gases entering the room.

Smart Flow is a unique, high-tech, cutting-edge product with the ability to use artificial intelligence - **AI**.

- 1. **Smart Flow** uses 2 identical fans with the same increased power and increased flow rate from European manufacturers with an increased service life and reliability of the system.
- in **Smart Flow**, the use of two fans guarantees a longer service life, greater reliability of the system, greater maximum power of each fan from **100 m3** to **350 m3** in both directions which helps to successfully overcome reverse draft and vacuum in residential premises.
- **Smart Flow** has a high maximum power and flow rate due to two built-in fans, which prevents the formation of condensation in the system, prevents the formation of mold, fungi and bacterial contaminants, which are then inhaled and enter the lungs and lead to respiratory diseases and allergies.
- due to two built-in fans and greater power, **Smart Flow** systems do not form condensation and are installed only horizontally without a slope, due to which black stripes do not form on the facade walls, the aesthetic and cosmetic appearance and appearance of the building are not disturbed.
- Only **Smart Flow**, thanks to two built-in fans, successfully overcomes negative pressure in highrise buildings. And also thanks to the flexible control system developed by us with extended technical capabilities and parameters. Only the use of two built-in fans with equally increased maximum power allows you to reliably remove excess moisture from the room and in a short period of time - this is energy savings and reduced energy costs.
- 2. The ceramic heat exchanger in **Smart Flow** is designed and manufactured by us according to our own unique design with a composition that guarantees the necessary heat transfer and heat absorption of the passing air per unit of time, is custom-made and meets the necessary requirements for use in ventilation and heat recovery systems which also contributes to additional removal of condensate in the system, prevents the formation of mold and fungi in the system, the accumulation of bacterial agents.
- The ceramic heat exchanger in **Smart Flow** has a unique design that promotes the passage of a larger air flow with less resistance, does not retain moisture, does not form condensation due to a sharp temperature drop, does not retain dust and other contaminants, does not accumulate dust, does not form mold, fungi and bacteria and other harmful agents, as well as allergens.
- 3. Energy efficiency 91-99% has no analogues.
- 4. Energy savings of up to 60% has no analogues.
- 5. **Smart Flow** is quick and easy to install and requires no maintenance.
- 6. Smart Flow has the ability to update its functions via Wi-Fi.
- 7. **Smart Flow does NOT** use a complex application that needs to be constantly updated and which always leads to problems when managing such systems has no analogues.
- 8. **Smart Flow** This is a smart home and green energy system.
- 9. **Smart Flow** is controlled only via **Wi-Fi**, at a distance of up to 15-20 meters, control is possible via **Android**, via **Touchscreen Display** wireless communication via **Wi-Fi** up to 5 systems has no analogues, you can connect the system via a switch with a cable and all the described control methods remain available and complement each other.
- 10. In **Smart Flow**, you can individually and, if necessary, change the password for access to the system itself, for its security and management it has no analogues.
- 11. Maximum flexible individual settings of all parameters has no analogues
- 12. A wide range of settings and operating capabilities has no analogues
- 13. **Smart Flow** a very flexible and interchangeable system in all respects.
- 14. Keeping the room warm during cold periods and keeping the room cool during warm periods.
- 15. **Smart Flow** is equipped with a humidity sensor and a temperature sensor.
- 16. **Smart Flow** is equipped with a processor
- 17. Only **Smart Flow** can be equipped with automatic blinds to prevent air from entering the room when it is not needed has no analogues

With more than 20 years of experience in the field of ventilation, air conditioning and heating, we have created a unique compact ventilation and heat recovery system designed to solve the vital needs of mankind, with the ability to protect and save energy costs associated with human life, with the ability to protect human health, improve the quality of life and reduce energy costs up to 60% associated with human life.

This system was created based on many years of experience in creating similar types of systems and which contribute to a significant qualitative improvement in everyday life and life, as well as professional qualities of a person, increase efficiency, reduce stress and the onset of rapid fatigue both in residential premises and in offices, workplaces, and production with a qualitative improvement in rest, efficiency and labor productivity of personnel and employees.

Smart Flow is recommended by a number of medical specialists and is designed to reduce indoor humidity, prevent mold and mildew, prevent the penetration of solid particles, allergens and other pollutants from the external environment, enrich the air we breathe with oxygen O2, which improves brain function, improves positive emotions, helps reduce the rapid onset of fatigue and helps increase performance. The system helps remove excess CO2 and CO from the room, which have a negative impact on human health and lead to frequent headaches and premature fatigue, as well as depressive states.

Smart Flow helps reduce humidity and prevent the formation of mold and mildew in rooms, which, when inhaled, lead to allergic reactions and malignant diseases of the respiratory tract and lungs, especially in modern agglomerations.

The use of the decentralized ventilation system with heat recovery **Smart Flow** is recommended by a number of medical specialists, since due to its unique design, technical parameters and method of use, it enriches the air in the premises with oxygen, reduces and removes CO2 and CO from the air in the premises, reduces humidity in the premises and prevents the formation of mold and mildew on surfaces in the premises, prevents the penetration of allergens, bacteria and viruses into the premises, prevents the penetration of solid dust particles, small particles, mites and other harmful agents into the premises.

Enriching the air with oxygen helps to improve concentration, the prevalence of positive emotions, stress reduction, fatigue reduction, and all this is associated with a person's mental health, their successful integration and implementation in society. A higher oxygen content in the inhaled clean air improves brain function, eliminates daytime sleepiness, increases human performance and productivity, saturates with positive emotions, and significantly reduces depressive states. In schools, children remember educational material better, feel more cheerful and active, do not feel tired and fatigued.

When using the Smart Flow system for ventilation of rooms, the windows in the rooms do not open, which guarantees safety and prevents accidents accompanied by severe injuries and tragic outcomes for both children and pets.

Oxygen is of paramount importance for the human body.

Oxygen is of paramount importance for all living organisms. Poor nutrition, smoking and air pollution are some of the main reasons why the human body does not receive enough oxygen. Its deficiency leads to fatigue, metabolic disorders, premature aging and the risk of cardiovascular diseases.

1. Indoor air saturation with CO2 and CO leads to poisoning of the body, damages the brain and reduces mental abilities, reduces performance, reduces concentration, leads to easy fatigue, depression and stress.

High concentrations of CO2 indoors can cause drowsiness, headaches, dizziness, nausea and decreased concentration.

At high concentrations of CO2 (more than 5-7%) in the air, the human body has difficulty removing this gas, which can lead to suffocation and loss of consciousness even with sufficient oxygen. Small amounts of CO2 in the air do not pose a health hazard. However, in closed spaces, especially with poor ventilation, CO2 concentrations can increase to dangerous levels.

CO2 poses a potential hazard to human health and the environment, especially when its concentration in the air increases.

Carbon monoxide (CO) is a dangerous gas that can be fatal because it is colorless and odorless and is formed during incomplete combustion of fuel. When inhaled, CO binds to hemoglobin in the blood, blocking oxygen transport and causing poisoning that can cause serious health problems and even death. Carbon monoxide is a colorless, odorless gas. It is one of the most common air pollutants and is formed by the incomplete combustion of carbon-containing materials. The largest source of CO is motor transport - more than 65% of the total emissions in the country. Carbon monoxide enters the body through inhalation. In the blood, it binds to hemoglobin and forms carboxyhemoglobin, the bond of which is 250 times stronger than that of oxyhemoglobin. Its harmful effects are due to the disruption of oxygen transport to tissues. Intrauterine exposure leads to fetal damage. The formation of carboxyhemoglobin determines the impact of carbon monoxide on health.

The resulting carboxyhemoglobin leads to tissue hypoxia and disorders in organs sensitive to oxygen deficiency: the heart, brain, blood vessels and formed elements. Health risks are assessed by the amount of carboxyhemoglobin formed in the body, which depends on its concentration in the air and the duration of exposure. At low concentrations of carboxyhemoglobin (below 10%), patients with angina experience increased symptoms or neurobehavioral effects. The safe level is defined as 2.5 - 3.0% carboxyhemoglobin, which is equivalent to a 30-minute exposure to 60 mg/m3 or an 8-hour exposure to 10 mg/m3. This level is recommended to protect public health. Patients with cardiovascular disease are sensitive to high concentrations.

At high concentrations of CO in the air, it binds with hemoglobin in the blood to form carboxyhemoglobin (COHb), which reduces the blood's ability to carry oxygen to organs and tissues. This can lead to a variety of symptoms, including headache, dizziness, nausea, vomiting, weakness, confusion, blurred vision, and loss of consciousness.

Carbon monoxide poisoning can cause permanent damage to the brain, heart, and other organs, especially with prolonged exposure to high concentrations or in people who are sleeping. In severe cases, CO poisoning can lead to coma and death.

Even low concentrations of CO can cause heart, respiratory, and nervous system problems, especially in people with chronic medical conditions.

At lower concentrations of CO, symptoms may include headache, fatigue, dizziness, nausea, and other flu-like symptoms.

It is important to note that carbon monoxide is especially dangerous because it cannot be detected by the senses. Therefore, it is important to take steps to prevent poisoning, such as using CO detectors, regularly checking heating and ventilation, and avoiding excessive exposure to CO in the air.

Using Smart Flow completely eliminates this risk.

2. High humidity indoors leads to the formation of mold and mildew on surfaces. Mold is a type of fungus that contains many identical nuclei and grows in the form of hyphae (thread-like cells). Mold occurs both in nature and indoors. Mold allergies can cause symptoms of allergic rhinitis, such as runny nose, cough, and headache.

Mold and mildew are both types of fungi, but mildew is a specific type of mold. Mold is usually black or green, while mildew is gray or white. Mold is classified as a type of mold, or more accurately, the beginning stages of mold.

A mold allergy occurs when the body produces an immune response when exposed to mold. Diagnosis can take time, and identifying the source of the mold can be difficult. Certain medications can help relieve mold allergy symptoms. Removing mold if possible or avoiding it once the source is identified is the best way to manage this allergy.

Mold allergies can develop at any age. Symptoms can begin immediately after exposure to mold. For some people, the effects last throughout the day, especially if they spend a lot of time in an area where there is mold.

Because mold can be present in some buildings, a person may only feel ill at certain times, such as after spending several hours in a building with mold. This is often described as "sick building syndrome." However, other problems can also cause sick building syndrome, such as poor ventilation, poor air conditioning, and dust.

Mold allergies typically cause respiratory symptoms. The effects of mold allergies include: Coughing, sneezing;
Stuffy, itchy, or runny nose;
Itchy, watery eyes;
Sore throat;
Wheezing

Mold allergies can trigger an asthma attack if a person has asthma. Symptoms of asthma caused by mold exposure can include wheezing and shortness of breath.

Mold allergies are similar to pollen and dust allergies. One difference between mold allergies and seasonal allergies, such as grass pollen, is that a person may have a mold allergy that lasts for several seasons or all year round.

Mold is a type of fungus. Fungal infections (mycoses) are different from mold allergies and can affect the skin, feet, lungs, or even the brain. Although anyone can develop a fungal skin infection, fungal infections that cause infections of body organs tend to affect people who have problems with the immune system.

Mold allergies are caused by inhaling spores. Spores are tiny particles that are produced when mold grows and can easily be inhaled into the nose through the air, causing an allergic reaction.

Mold can grow anywhere and usually requires moisture. Anyone can be exposed to mold, but some people are more susceptible to allergies to it. People with asthma or are more likely to develop an allergic reaction to mold.

Indoor mold can also come from the outside environment, and indoor mold levels are usually higher when there is a high mold level outside. Indoor mold infestation can be year-round and often depends on the humidity level in the home. Flooding and water leaks increase the risk of mold in the home.

Most spores can be allergens. They cause an inflammatory process in susceptible people. The reaction is mediated by IgE, a protein that quickly triggers the activation of immune cells. Prevention and removal of mold and fungi that form due to high indoor humidity is achieved with **Smart Flow**. Reduction of indoor humidity caused by breathing of people and other people in them is achieved with **Smart Flow**.

3. **Particulate matter** poses serious health risks, especially fine particulate matter (PM2.5), which can penetrate deep into the lungs and bloodstream, causing various diseases. These particles consist of solid particles and liquid aerosols of various sizes, some of which are visible to the naked eye, while others are much smaller, such as bacteria.

The main harm of particulate matter:

Respiratory diseases:

Dust can cause damage to the lungs and respiratory system, leading to various respiratory diseases, including chronic obstructive pulmonary disease (COPD), asthma, and bronchitis.

Cardiovascular diseases:

Inhaling fine dust particles may lead to an increased risk of heart disease, heart attacks and strokes, as these particles are linked to inflammation and damage to blood vessels.

Cancer:

Some types of dust, especially those containing carcinogens, can cause lung cancer and other types of cancer.

Premature death:

Exposure to high concentrations of fine dust particles is associated with an increased risk of premature death, especially in people with existing cardiovascular or respiratory diseases.

Worsening of existing diseases:

Inhaling dust can worsen existing medical conditions such as asthma, bronchitis, heart failure and others.

Fertility problems:

Some studies suggest that dust may affect reproductive ability.

Effect on the nervous system:

Inhaling dust can affect the nervous system, which can lead to changes in mood, behavior, and cognitive function.

Reduction in life expectancy:

Long-term exposure to high levels of dust may result in reduced life expectancy.

Particularly vulnerable:

Children, Elderly people, People with chronic heart and lung diseases, People with allergies. Due to these harmful effects, it is important to take measures to reduce dust pollution and avoid exposure to high concentrations of dust, especially in areas with high dust levels.

4. **Fine particulate matter** is a component of atmospheric dust. The current definition is taken from the National Air Quality Standard for particulate matter (PM) since 1987 (referred to as the PM standard) established by the U.S. Environmental Protection Agency. The original definition of fine particulate matter was based on the 1959 Johannesburg Convention and set a particle diameter of 5 µm as the limit.

Fine particulate matter is microscopic solid or liquid matter suspended in the Earth's atmosphere. Sources of particulate matter can be natural (occurring in nature) or man-made.

The main sources are flowers (sources of pollen), fires, diesel engines, mining, construction (sand and metals) and natural sandstorms.

Fine dust particles cause aggravation of allergies, asthma attacks, respiratory diseases, lung cancer and an increased risk of otitis media in children. They are also believed to affect diseases of the heart and circulatory system (for example, heart attacks). The degree of exposure of particles to the respiratory tract depends, in addition to the toxicity of such particles as lead, vanadium, beryllium, aluminum, mercury, hydrocarbon compounds, on the size of the particles: the smaller the particles, the deeper they penetrate into the human lungs. Such particles can be many times more harmful than regular cigarette smoke or regular carbon dioxide and other greenhouse gases. Fine dust of the PM10 size reaches the lungs only partially, since the filtration by the nasal cavity is insufficient for particles smaller than $10~\mu m$. However, ultrafine particles of less than $0.1~\mu m$ reach the alveoli of the lungs and are removed from there very slowly or not at all.

The main causes of dust from human activities:

Economic activities

Transportation:

Diesel engines

Particles from brake wear, catalytic converters, tires, road surfaces

Household needs

Heating and cooking: oil, wood, coal and other solid fuels

Smoking (indoors)

Agriculture, including stubble burning.

Construction

Office equipment: laser printers and photocopiers are a constant source of nanoparticles. Research shows that some of these machines emit up to 2 billion particles when printing a single page. To this end, office equipment must be placed in separate, ventilated areas.

5. **Allergens** can cause a variety of harm, ranging from mild symptoms such as sneezing, watery eyes, and itching to severe reactions such as anaphylactic shock, which can be life-threatening. Allergies can affect various organs and systems of the body, including the skin, respiratory tract, and digestive system.

Here are some of the types of harm that allergens can cause:

Skin irritation:

Allergic reactions to allergens such as dust, pollen, animal dander, or certain foods can cause skin rashes, itching, redness, and swelling.

Respiratory problems:

Allergies to pollen, dust, weeds, or pets can cause symptoms such as sneezing, runny nose, stuffy nose, coughing, and shortness of breath. In severe cases, they can lead to asthma.

Digestive problems:

Allergies to foods such as milk, eggs, nuts, soy, wheat, and fish can cause nausea, vomiting, abdominal pain, diarrhea, and other digestive problems.

Anaphylactic shock:

This is a severe, life-threatening allergic reaction that can cause a sudden drop in blood pressure, difficulty breathing, dizziness, loss of consciousness, and other symptoms.

Decreased productivity:

Allergies can affect a person's ability to work or study because of the discomfort they cause and the need for treatment.

Exacerbation of existing diseases:

Allergies can worsen existing conditions such as asthma, eczema and sinusitis.

About 20% of the population has suffered from allergic reactions or suffers from allergic diseases. Some of the most common allergens in Bulgaria include ragweed, weed and nettle pollen, as well as house dust mites.

6. Car tires pose a threat to the environment and human health for several reasons: tire degradation, toxic emissions, soil and water pollution, and potential fire hazard.

Breakdown and elimination of toxins:

Over time, tires degrade and release microparticles and toxic substances such as heavy metals and polycyclic aromatic hydrocarbons (PAHs).

Environmental pollution:

These chemicals can leach into soil and water, polluting ecosystems and endangering the health of people and animals.

Fire hazard:

Tyres are highly flammable and when burning they produce large amounts of thick black smoke containing harmful substances such as carbon monoxide, hydrocarbons and soot.

Health risks:

Tire microparticles are so small that they can penetrate lung tissue, blood, and even cross the blood-brain barrier, which can have serious health consequences.

To summarize, tires are a significant source of environmental pollution and a potential hazard to human health due to their degradation and release of harmful substances, as well as the risk of fires.

Toxic tire dust may be the most dangerous source of microplastic pollution.

Tires emit trillions of ultrafine particles per kilometer. These particles are so small that they can penetrate lung tissue into the bloodstream and cross the blood-brain barrier, which can have a number of alarming health effects. In some cases, tire dust pollution even rivals tailpipe emissions. According to another study, PM 2.5 and PM 10 emissions from tires and brakes significantly outweigh tailpipe emissions.

7. **Automobile exhaust** is harmful to human health and the environment. It contains various pollutants that can cause respiratory problems, cardiovascular diseases, cancer and other serious diseases. In addition, automobile emissions contribute to global warming and worsen air quality.

Harmful to health:

Breathing problems:

Nitrogen oxides, carbon monoxide and fine particulate matter irritate the airways and can lead to asthma, bronchitis and other respiratory diseases.

Cardiovascular disease:

Studies have shown a link between air pollution from cars and an increased risk of heart disease.

Cancer:

Some pollutants, such as benzene, are carcinogenic and may increase the risk of cancer.

Other diseases:

Inhaling pollutants from exhaust fumes can worsen existing illnesses and lead to new ones.

8. <u>Dust mites</u> can cause significant harm to both humans and plants. In humans, especially those with allergies or asthma, dust mites can cause respiratory problems such as coughing, wheezing, runny nose, itchy and red eyes, and skin rashes. In agriculture, plant mites cause harm to various crops such as fruit trees, vegetables, and other plants, reducing yield and quality of produce.

Harmful to humans:

Allergic reactions:

<u>Dust mites</u> are the main cause of allergic rhinitis and asthma. They secrete enzymes that cause allergic reactions such as sneezing, coughing, runny nose, itchy and red eyes, and skin rashes.

Scabies:

Sarcoptes scabiei mites cause scabies, a skin disease characterized by intense itching and a red rash. **Exacerbation of existing diseases:** Dust mites can make things worse for people with lung problems and other illnesses.

It is important for human health to take measures to control and prevent ticks.

Clean air is vital for the human body. Breathing in fresh, clean air can improve overall physical health, increase energy, reduce toxins, and improve mood. Using **Smart Flow** has many health benefits, such as reducing the risk of depression and anxiety.

Here are some of the main benefits of fresh air:

Improves physical health:

Clean air is rich in oxygen, which is necessary for the normal functioning of cells and organs. This leads to improved metabolism, increased energy levels and a reduced risk of disease.

Improves mental health:

Breathing fresh air, especially outdoors, can reduce stress, improve mood, and reduce the risk of depression and anxiety.

Detoxification of the body:

Clean air helps remove toxins from the body through breathing and increases the body's ability to fight harmful substances.

Improves sleep quality:

Fresh air can promote more restful, healthy sleep.

Improves the functioning of the respiratory system:

Clean air is important for respiratory health and can relieve symptoms of respiratory diseases.

Improves the immune system:

Clean air helps strengthen the immune system.

In conclusion, clean air is essential for human health and well-being. Among other benefits, it supports physical and mental health while strengthening the immune system.

SMART FLOW with heat recovery and ventilation is a system that works together to provide a room with fresh air while reducing heat loss. Ventilation is the process of replacing stale air with new air, while heat recovery is the process of extracting heat from stale air to warm or cool fresh air entering the room.

Heat recovery:

Heat recovery uses a heat exchanger to transfer heat from the exhaust air to the incoming fresh air before it is sent into the room. This reduces the need for additional heating or cooling, thereby saving energy and reducing costs.

Ventilation:

Ventilation is the process of replacing stale air with new, fresh air from outside. Depending on the system, ventilation can be natural (through windows and openings) or mechanical (using fans).

Mechanical ventilation is often integrated with heat recovery to improve energy efficiency.

Benefits of Using Heat Recovery and Ventilation:

Improving air quality:

Heat recovery and ventilation provide a constant supply of fresh air, which reduces the concentration of carbon dioxide, humidity and other pollutants.

Energy saving:

Heat recovery reduces the need for heating and cooling, thereby reducing energy consumption and costs.

Improving comfort:

A constant supply of fresh air increases the comfort of residents.

Reducing humidity:

Heat recovery helps reduce indoor humidity, which is especially useful in areas with high humidity.

Fighting allergies:

Heat recovery ventilation can help filter out dust and pollen, which is beneficial for people with allergies.

Ultimately, heat recovery and ventilation are essential components of modern HVAC systems that provide healthy, comfortable and energy efficient building environments.

The use of **Smart Flow** makes a significant contribution to reducing the impact of these harmful factors on human health.

The benefits of using **Smart Flow** have been proven over time and by our numerous users both in our country and around the world.

Team:

B&B Corporation