

Cleaning the air

Reducing the amount of pollutants in the air is the most effective way to improve indoor air quality. Filtration products capture contaminants that can't be removed through vacuuming and regular cleaning. Among the filtration solutions available are [UV light units](#), air filters, energy recovery ventilators ([ERVs](#)), heat recovery ventilators ([HRVs](#)) and [electronic air cleaners](#).

UV light units help decompose contaminants, such as bacteria, chemicals, dust mites, animal dander, cat saliva and mold, through a process called photocatalytic oxidation. When the UV lights are installed in the ductwork of your central air and heat system, they can eliminate most of the organisms in the treated area.

Activated carbon and microbiocide-treated filters can also purify your home's air. Both the carbon and the microbiocide-treated filters remove odor and kill bacteria, but the carbon filters are more effective at removing odor, and the microbiocide-treated filters trap bacteria as the air is pulled through, which inhibits growth of biological contaminants.

The efficiency of the air filter is an important consideration. Efficiency is measured in terms of the particle size an air filter can capture. The higher the efficiency, the more effective it will be. Look for the filter's MERV (Minimum Efficiency Reporting Value) number, a new industry standard that rates filters based on their performance. Residential filters typically have an MERV range of one to eight.

Electronic air cleaners clean the air by taking recirculated air and passing it through a prefilter that traps the large pollutants. Then, ionizing wires give a positive electrical charge to remaining particles. A negatively charged collecting section collects the particles. Pollutants pass through an optional carbon filter that absorbs unwanted odors.

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[ERVs](#) and [HRVs](#) bring fresh air into the home and exhaust stale air out. An HRV conserves energy from indoor conditioned air and transfers it outdoors. An ERV does the same thing, but it also maintains the desired humidity levels to keep the house comfortable.

To find out which indoor air quality products are right for you, contact [Welzig Heating and Air](#).