bryant®

Heating & Cooling Systems

WHY THE EVOLUTION™ AIR PURIFIER MATTERS





CAPTURES & KILLS

THE EVOLUTION™ AIR PURIFIER CAPTURES & KILLS® CORONAVIRUS[1] FROM FILTERED AIR TO HELP CREATE A HEALTHIER HOME

WHY HEALTHY HOMES MATTER

There's something in the air inside. In fact, the EPA has recognized that indoor air pollution is a very real problem and ranked it among the top environmental risks facing the general public.[2] Here's why:



Did you know...?

- Americans spend an average of 90% of their time indoors where concentrations of some pollutants are often 2 to 5 times higher than outside air [3]
- With the COVID-19 pandemic and shelter-in-place orders, time spent inside is potentially climbing higher as homes have become the replacement for the office, school, gym
- People who are often most susceptible to the adverse effects of pollution – the very young, older adults, and people with cardiovascular or respiratory disease – tend to spend more time indoors [3]
- Current evidence suggests that SARS-CoV-2, the virus that causes COVID-19, is transmitted through the air [4]
- A home's layout, design, occupancy and HVAC (heating and cooling) system can impact potential airborne spread of the virus [4]

When you add it all up, healthier indoor air matters because your home can become an environment for exposure to airborne viruses, molds and other pathogens. That's why the CDC recommends several precautions for slowing the potential for virus transmission, including social distancing, face coverings, surface disinfecting, and hand washing.[5] In addition, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) recommends improving central air filtration to MERV 13 or higher to limit the transmission of viruses.[6]

Because you have to capture it before you can kill it, the Evolution air purifier offers an outstanding MERV 15 measure of efficiency for residential air filters.

WHY THE BRYANT® EVOLUTION AIR PURIFIER MATTERS

As part of a strategy for slowing the spread of infectious disease in your home, the Evolution air purifier should be considered essential. Featuring our patented Captures & Kills® technology, the Evolution air purifier offers proven, third-party tested effectiveness with a 99% inactivation of captured viruses and germs when used as instructed,[1] including:

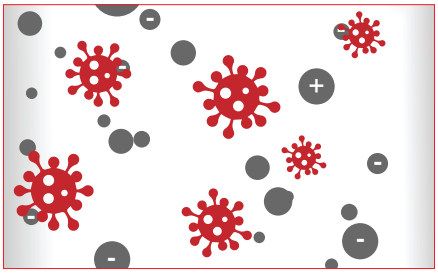
- Coronavirus
- Common cold surrogate
- Bacteria that causes strep throat
- Human influenza



CAPTURES & KILLS

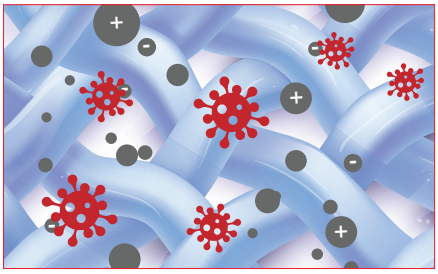
HERE'S HOW THIS WORKS

Our Evolution™ air purifier treats the air flowing through your HVAC system's air handler using a three-step, charge/capture/kill process that inactivates 99% of select germs and viruses:[1]



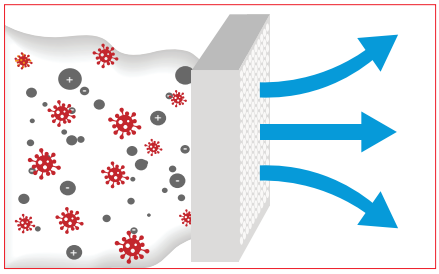
Charge

The purifier creates a "cloud" of electrically charged ions that attach themselves to airborne dust, pollen, viruses, germs and other particles as they pass through.



Capture

The ionized particles are pulled toward an oppositely charged, pleated filter and captured at an extremely high rate, similar to how a magnet attracts metal shavings.



Kill

Captured airborne microbes remain on the pleated filter instead of recirculating back into the home and are subjected to an intense electric field.

The Evolution air purifier is designed to require minimal maintenance. Maintenance is limited to the replacement of the air purification cartridge and inspection/brush cleaning of the ionization array. The frequency of each will vary depending on ductwork design and local environmental conditions.

INDEPENDENT TESTING AT THE UNIVERSITY OF COLORADO

Our confidence with the performance of our Evolution air purifier capturing and killing coronavirus from filtered air[1] is based upon third-party testing at a university environmental engineering laboratory that specializes in disinfection science.

- Tests were conducted with a murine coronavirus that is closely related to the human coronavirus SARS-CoV-2, which causes COVID-19
- The murine pathogen surrogate allowed testing to be completed safely[7]

Controlled environment tests showed that the Evolution air purifier inactivated 99% of coronavirus on its filter.

DEFENDING YOUR HOME TAKES A COMPREHENSIVE APPROACH

Viruses spread from infected individuals when they breathe, speak, sneeze or cough. The viral particles are contained in aerosols, the largest of which quickly settle on indoor surfaces, while the smaller ones can remain airborne.[8] And while the SARS-CoV-2 virus itself is extremely small (about 0.1 microns in diameter),[9] the larger respiratory droplets or aerosols that can transmit viruses are large enough to be captured when passing through enhanced air filtration.

Filtration technology does not prevent person-to-person or surface transmission; rather, it helps eliminate particles in the air when they flow through your HVAC system and make contact with the filter. That's why controlling airborne pathogens with Bryant indoor air quality products like the Evolution air purifier makes sense. In addition, following CDC guidelines for personal hygiene and managing surface-based pathogens are important for a comprehensive defense strategy. This includes:

- Physical distancing both at home and when away
- Vigorous hand washing with soap and water for 20 seconds
- Cleaning and disinfecting "high-touch" household and personal items such as counter tops, door handles and cell phones

CHOOSE BRYANT AND YOU'RE COVERED

At Bryant, we offer a complete arsenal of indoor air quality products that can help you control airborne pollutants inside, including:



- Humidifiers/dehumidifiers that can help limit pathogen growth through humidity control



- UV germicidal lamps that can kill mold and bacteria on your indoor coil and drain pan



- ERVs/HRVs and fresh air ventilators that can introduce fresh outdoor air to help dilute the airborne pollutants inside

For more information on our complete line of indoor air quality products, go to our residential products website at *www.Bryant.com.*

And while you are there, use our dealer locator to contact a local Bryant dealer for recommendations on how our indoor air quality products can be a part of your home's healthy air strategy.

[1] The Evolution™ air purifier has demonstrated effectiveness against the murine coronavirus, based on third-party testing (2020) showing a >99% inactivation, which is a virus similar to the human novel coronavirus (SARS-CoV-2) that causes COVID-19. Therefore, the Evolution air purifier can be expected to be effective against SARS-CoV-2 when used in accordance with its directions for use. Third-party testing (2012, 2007) also shows ≥99% inactivation for the type of virus that causes common colds, Streptococcus pyogenes and human influenza. Airborne particles must flow through your HVAC system and be trapped by the Evolution filter to be inactivated at 99%.

[2] *https://www.epa.gov/iaq-schools/why-indoor-air-quality-important-schools*

[3] *https://www.epa.gov/report-environment/indoor-air-quality*

[4] *https://www.epa.gov/coronavirus/indoor-air-and-coronavirus-covid-19*

[5] *https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fguidance-business-response.html*

[6] *https://www.ashrae.org/file%20library/technical%20resources/ashrae%20journal/2020journaldocuments/72-74_ieq_schoen.pdf*

[7] *https://aem.asm.org/content/aem/76/9/2712.full.pdf*

[8] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7293495/*

[9] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7224694/*

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HEALTHYHOMES

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