

# Mold

Adding UV to your heating, ventilation and air conditioning system can reduce allergy symptoms

60,000,000 people in the United States are affected by allergies, and mold is one of the 5 most common allergens. The dark, cool and moist surfaces that typically exist in HVAC systems are very favorable places for mold growth. The spores released from the growth are distributed throughout the structure. Applying UV light in these vulnerable areas can make a huge difference in the spore counts in the air. In regions where the air is typically drier and mold growth is less of a problem, UV applied in the recirculating airstream passing through an HVAC system can make a significant reduction in the mold spore counts in indoor air. By reducing the density of mold spores, the indoor air quality is enhanced and allergy symptoms reduced.

## UV Kills Germs!

Fresh outside air is healthy to breathe in part because natural UV from the sun controls the level of airborne microorganisms. Ultravation® brings UV indoors to help control microorganisms in indoor air. With a UV system installed in your HVAC system, the numbers of airborne bacteria and viruses that cause colds and other illnesses will be reduced as air is circulated through the system. With most people spending as much as 90% of their time indoors, optimizing indoor air quality becomes increasingly important. Today's advanced building techniques are another factor to consider when evaluating indoor air quality. To increase heating and cooling efficiency, and to add to indoor comfort, homes and commercial buildings are more airtight than ever. While efficiency and comfort goals may be achieved, an unintended effect is that with less outdoor air "leaking" into the indoor space, airborne organisms and other contaminants can accumulate.

The HVAC system now has an increased role in maintaining indoor air quality -- adding UV disinfection along with filtration and other enhancements helps it fulfill that role.

## UV Controls Mold!

That smell when the air conditioner turns on -- especially after it has been off for a while. What is it? Chances are it's MOLD, and those mold spores spread around, landing everywhere in the house. Or if mold is

growing in a damp place elsewhere in the house, the air conditioner helps distribute the spores as the air is recirculated. UV can play an important -- if not vital -- role in controlling home damaging mold. As insurance companies raise rates and even exclude mold damage from their coverage, UV can be a big help -- consult your HVAC contractor.

How a UV system pays for itself: It saves energy!

A UV system uses about the same amount of electricity as a standard light bulb. Yet it can help your HVAC system increase its efficiency, so you may use less power overall. When mold becomes established on cooling elements, it begins to insulate it from the passing air. This makes the heat transfer from the air to the elements more difficult. When this happens the HVAC system begins to run a little longer and then cycles more often to accomplish the same temperature setting. This obviously uses more energy and in addition, increases wear and tear on the system. Of course we recommend quality filtration to keep the elements as well as the UV lamps free of dust, then the UV will keep the mold away, and help to optimize efficiency.