



Environmental Issues in Real Estate

Problems in Buildings Raise Indoor Air Quality Issues

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Indoor Air Quality (IAQ) is becoming more of an issue for people in all parts of the country, including Arizona. There are many factors that contribute to problems with IAQ, and it often is not just one of these factors that cause a problem, but rather a combination of several different factors. Common contributors include: mold, animal dander, dust mites, bacteria, and volatile organic compounds (VOCs). While not all of these may occur at the same time in a building, several of them share a common factor: moisture! It is well-known that mold is often found in damp buildings; however, other potential contaminants include bacteria, dust mites, cockroaches and other pests. Even chemicals can be emitted by damp building materials and furnishings! All of these factors can lead to Sick Building Syndrome (SBS). In property transfers, this becomes an issue for buyers and sellers alike when determining potential risks to human health.



Leaks behind water heaters and plumbing can cause mold growth

Moisture Causes Variety of Indoor Contaminants

Excessive moisture in a building can lead to IAQ problems including: mold, bacteria, dust mites, cockroaches, and other pests. Controlling the moisture and fixing leaks as soon as they are discovered can resolve many of these issues before they become problems!

Indoor Air Quality Certifications

The American Indoor Air Quality Council offers nine board-awarded certifications to experienced indoor air quality professionals. Council certificate holders have demonstrated their knowledge and experience in such fields as building sciences, industrial hygiene, indoor environmental risk assessment and microbial investigation, remediation and consulting. Council certification programs are the most rigorous in the field of indoor air quality and maintain the highest professional standards. If you should ever require an IAQ inspection of any kind, make sure your inspector has a certification from the American IAQ Council!

Ultraviolet (UV) Applications to Indoor Air Quality



UV lamps used in an HVAC system can improve the quality of the indoor air

UV is a type of light that is invisible and considered to be high energy in the electromagnetic spectrum (between X-rays and visible light). It has been known for years that UV has disinfecting or sterilizing effects in regard to surfaces and water, and it's been discovered that UV also can be effective in disinfecting the air we breathe! There are three types of UV light: UV-A, UV-B, and UV-C. UV-C has the most germicidal properties and works by interfering in the DNA processes of microbes, preventing them from multiplying. UV-C is not usually found in nature; however, specialty lamps can be made to produce it in large amounts. In order for UV to properly disinfect air, adequate contact time is crucial. It is important that the air has enough time to come into contact with the light rays, and also that the air has been sufficiently filtered, so as to maximize the effectiveness of the system. Six other factors that can affect the germicidal properties of UV light include: wavelength type, distance between the target and the UV light, UV light supply strength, relative humidity, amount of debris, and temperature. It should be noted that UV is not the end-all, be-all for IAQ. But when used properly and after taking into account the limitations and maintenance requirements of a UV light system, it can prove to be a very useful tool in reducing the amount of microbiological organisms that are found in the indoor air.

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Questions or comments? E-mail us at RBowen@cesaz.com or call 602-230-1471

CES, Inc.
5230 North 16th Street
Phoenix, Arizona 85016
(602) 230-1471 Main
(602) 230-9598 Fax