

# MOLD GROWTH

Mold growth requires the presence of three conditions as summarized below.

- Viable Mold Spores
- Appropriate Food Source
- Adequate Moisture Source

These conditions represent the “Mold Triangle”. Controlling any one of these factors effectively will minimize the potential for mold growth.

Mold spores are difficult to control due to the large number of spores in the typical Outdoor environment. Outdoor mold spore levels can often be in the range of 5,000 to 100,000 spores per cubic meter (s/m<sup>3</sup>). These spores can enter the indoor environment through various openings in the building, as well as being brought in on people and clothing.

Appropriate food sources are generally specific for the particular type of mold species. However, most species generally prefer organic material, which may include many building materials and building contents, such as wood, paper (drywall), cardboard (boxes), and dirt/dust. Once again, the prevalence of these materials in the typical building environment makes this difficult to control.



Water, or moisture, is generally the most effective aspect of the “Mold Triangle” to control in typical building environments. Any water intrusions should be quickly remedied, and the moisture quickly dried. Any affected building materials should be thoroughly dried within 24 hours, or properly discarded.

Building materials do not need to be saturated to support mold growth. Elevated relative humidity levels in the air can provide enough moisture to cause condensation and mold growth. Relative humidity levels should be maintained between 30 and 60% to minimize mold growth and maximize comfort.

Any visible mold growths should be properly removed to prevent the release of airborne mold spores. Mold growth that has been treated, and is incapable of future growth, can still release mold spores, which can retain their allergenic and toxic effects.



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