



Constructing Against Mold

How the Building Community Can Mitigate the Harmful Effects

One of the most predominant issues that builders face continues to be poor Indoor Air Quality (IAQ), and one of the leading offenders of indoor air quality is mold. While mold is most widely associated with humid climates and coastal areas affected by water damage, the reality is mold can grow in buildings in even the driest regions.

The Challenge

Buildings with poor indoor air quality create an unhealthy environment for building occupants that can lead to health risks, including allergies and respiratory disease, such as asthma. Developers and property owners are increasingly aware of these factors and are seeking the most effective methods for reducing risk by creating the best indoor environments possible.



Moisture and fungal growth problems in modern buildings can be attributed to the integrity of the building envelope and the susceptibility of construction and finishing materials to bio-deterioration. Rainwater or pipe/sprinkler leaks are common sources of moisture intrusion. Wind-driven rain can enter the building envelope and saturate construction materials, especially when roof and window flashings fail. Less obvious sources include water vapor migration and

infiltration of humid outdoor air into the building envelope. When cool surfaces are exposed to warmer outdoor air, the result is elevated relative humidity (dampness) and condensation, which provides the ideal environment for mold colonization.

The Solution

Preventing poor indoor air quality starts by developing a good design and implementing smart construction processes for minimizing moisture intrusion and thereby reducing the risk for indoor mold growth. Another important step is to determine the best HVAC system for the building size and verify proper installation. Selecting and properly installing building materials, such as flooring, furnishings and finishes that resist mold growth is also critical.

The Benefits of the **GREENGUARD Mold Protection Program™**:

Avoid costly legal issues resulting from poor IAQ and/or Building Related Symptoms (BRS).

Save money and minimize schedule delays by identifying and addressing problems early.

Maximize lifespan of mechanical and envelope components of the building.

Increase property value by promoting safe, comfortable indoor environments.

Provide critical services that differentiate your team from other builders.

The Program

With the introduction of the GREENGUARD Mold Protection Program™, buildings undergo comprehensive evaluations to incorporate design, construction and ongoing operations principles to prevent indoor mold growth. The GREENGUARD standard that incorporates these principles is being introduced as a national ANSI standard. The GREENGUARD Mold Protection Program includes the following steps for preventing moisture and fungal growth in modern air-conditioned buildings:

- **Review** design documents at several stages to identify and correct building features with a known history of moisture-related failures.
- **Develop** comprehensive plans to reduce the chances of moisture intrusion and mold growth during construction.
- **Perform** periodic construction observations to monitor moisture-sensitive installations and verify conformance with smart practices.
- **Test** immediately prior to occupancy to verify the facility is typical of a dry building with no mold problems.
- **Train** construction and facility maintenance staff to readily identify and respond to mold and moisture issues.
- **Provide** recommended procedures for continued operation and maintenance of the building to limit the possibilities for mold growth.



Builders, developers and owners work closely with GREENGUARD authorized building consultants to implement these steps in order to design and construct buildings in a manner that prevents indoor mold growth. Once certified, owners and occupants are assured that the value of their property has not been compromised by mold.

For more information, please email: mold@greenguard.org or
Contact a member of the GREENGUARD team at: 800-427-9681