by Randy Herold

The heat is on: A new treatment for mold that doesn't need any chemicals to do its job

Why would a hotelier possibly want to heat up his or her building? Perchance, the hotel or resort has had complaints regarding unsightly mold, and management is concerned about their guests as well as the financial viability of the business. If so, hotel engineers might want to consider what heat treatment can do for their property. A new environmental remediation technology known as the ThermaPure® heat treatment process uses superheated air to treat various environmental concerns.

Background

Heat has long been used by man to disinfect and sanitize. In the 1860s, Louis Pasteur developed the pasteurization process, which involves using heat to kill harmful micro-organisms in milk, juice and other foods. That brings up cooking with heat. The main reason heat is used in cooking is to reduce the number of microorganisms present in the dish. Heat also is used in the creation of vaccines. Vaccines are composed of heat-killed strains of a specific virus that are then injected into a patient in order to boost antibody response. In summary, heat has a proven track record for disinfecting and sanitizing.

The ThermaPure® heat treatment process was developed by E-Therm, an environmental remediation company located in Ventura, Calif. In layman's terms, heat treatment is pasteurization applied to a building — the building is injected with superheated dry air, a process that kills various pests and micro-organisms. The heat treatment process has five basic applications: 1) microbial remediation (mold, bacteria and virus) 2) pest remediation, 3) volatile organic chemical elimination, 4) odor reduction and 5) construction dry out.

How does it work?

The initial work begins with an inspection of the property to determine if heat treatment would be an effective choice for the targeted environmental concern. Once heat treatment has been given the green light, the project site is prepared for treatment. Preparatory work typically involves removing heat-sensitive items and setting up the equipment and containment. This process can usually be completed in a few hours. Depending on the project and structure, the sprinkler system may need to be momentarily shut off and isolated.

The equipment used in heat treatment is relatively simple: portable propane heaters, air blowers, Mylar ducting and digital thermometers. Treatment times vary depending on the scope of work and project size but usually range between one to four hours. Temperatures also vary depending on the targeted environmental concern, but usually range between 130-160 degrees Fahrenheit. The entire heat treatment process often can be completed in eight hours or less.

Why use heat treatment?

Heat treatment remediation has proven to be successful to combat the onset of mold. The ThermaPure® heat treatment process has garnered significant industry support such that it was recently awarded the Best New Product honor by the National Society of Professional Engineers. In addition, there have been multiple case studies supporting the success for each of the five main applications of heat treatment.

Pictured below: The introduction of forced heat into a mold environment offers hoteliers an effective alternative to costly demolition or toxic chemical remediation.

As mentioned above, heat treatment is a multifunctional technology, meaning that it has many applications, but it also has some other very valuable points, especially for the hospitality industry. Heat treatment can be completed in off-peak hours to minimize business interruption. It is also flexible in scale: treating an entire structure, specific areas or separate floors. If high temperatures are a concern for the structure, lower temperatures can be employed for longer durations. Heat treatment also has less of a "scare factor" compared to traditional remediation methods. Heaters and air blowers are less likely to raise questions from guests, versus workers wearing masks and Tyvek® suits spraying chemicals. Perhaps the strongest advantage of a heat treatment process is safety. No toxic chemicals are used, there are no lingering residues, and there are no threats to pets, plants, and most importantly, people.

Conclusion

Guest complaints about mold often lead to dissatisfied guests, rumors spreading within the hotel, and lost potential revenue. It also results in negative reviews being posted on travel review sites on the Internet. These bad reviews reflect negatively on a given property and may cast suspicion on the hotel and its Management's priorities. Heat treatment offers the hospitality industry an effective alternative to mold remediation. ✧

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