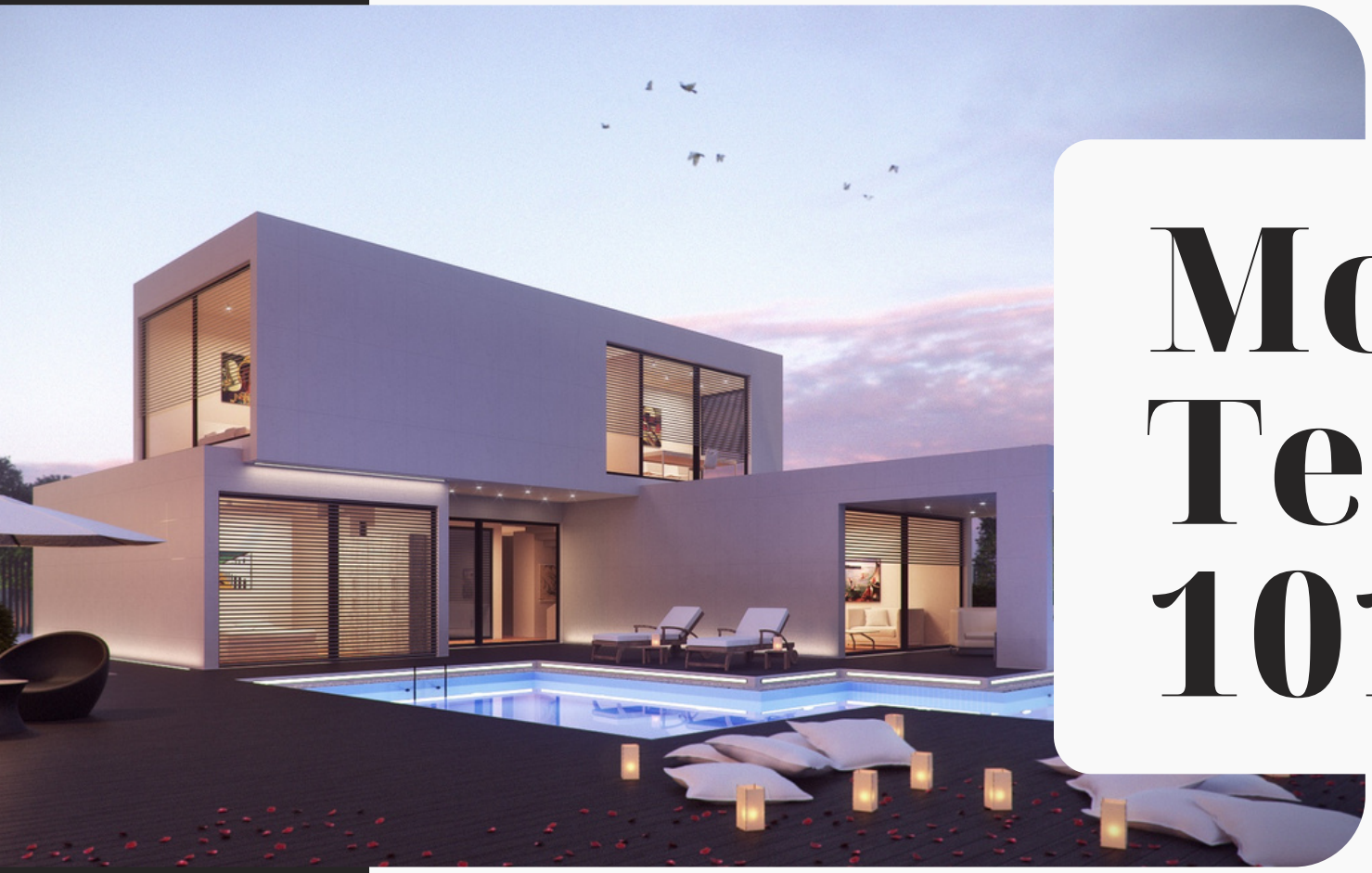


Mold Testing 101

The basics of mold testing, things to consider, and how to find a mold inspector that's right for you

What is a mold inspector?

Mold inspectors are hired to help search for suspected water damage in a dwelling, to determine the health of a dwelling, to locate the source of mold growth and other contaminants, to obtain samples and submit them to a lab for analysis, and conduct post-remediation validation. Because it is an unregulated industry and the requirements to become a mold inspector include a simple weekend course, it is important to find an inspector that has obtained specialized knowledge and experience beyond this certification. Mold inspector and mold tester share the same meaning and are terms that are used interchangeably.

About Mold Testing & Sampling

Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no US Environmental Protection Agency (EPA) regulations or standards for airborne mold contaminants. Mold testing and sampling is highly complicated as there are many factors to consider when seeking testing from a mold inspector.

Mold Testing Limitations

Antiquated Methods

Many testing methods, for example, air sampling machines and lab analyses, have not been improved or updated since the 1990s.

False Negatives

Often times, tests do not reflect what's going on in an environment. Mold can be hard to find and can be hidden in unsuspecting places. False negatives can provide a false sense of security and even work against a family member(s) that have been made ill by a dwelling.

Lack of Standards

There exist no standard thresholds for airborne mold contaminants because exposure to any amount of water damage mold contaminants (spores and non-toxic fragments) is UNSAFE.

Mold Testing Limitations

Only DNA from the Spore Can Be Measured

Polymerase chain reaction (PCR) can be used to identify individual mold genera/species. However, the fragments, dried crystalline pieces that break off of a mold spore, are just as toxic as the spore itself. Many common substances, such as gypsum, biocides, and bleach can interfere with PCR tests, yielding negative results.

Toxic Mold is Radiomimetic

Exposure to trichothecene producing toxic molds, specifically T2 toxins, can behave like radiation exposure in the body. Due to the toxin's sticky nature, hypersensitive individuals report staying sick if they take contaminated items from one house to another. Cleaning these toxins is extremely challenging. During electrical changes in the atmosphere, for example, shifts in the weather, these toxins amp up or suddenly become bioavailable, causing an individual to feel intensified negative health effects until exposure to these toxins ceases; ex: removing the mold contaminated item from the house.

Types of Mold Sampling/Collection

Air Sampling

The most common form of sampling used. If samples are not taken near a visible colony, samples will often result as negative. Samples are taken by using a pump that forces air through a collection device (cassette) which catches airborne contaminants that are later assessed in a lab; outdoor control samples are taken to compare indoor samples.

Tape Lift Sampling

Tape lift sampling uses a clear adhesive tape or slide to microscopically examine stains, settled dust, and spores. The clear adhesive is pressed on the surface, removed with light pressure, placed on a clear slide/surface inside a sample bag, and submitted to the lab for testing.

Types of Mold Sampling/Collection

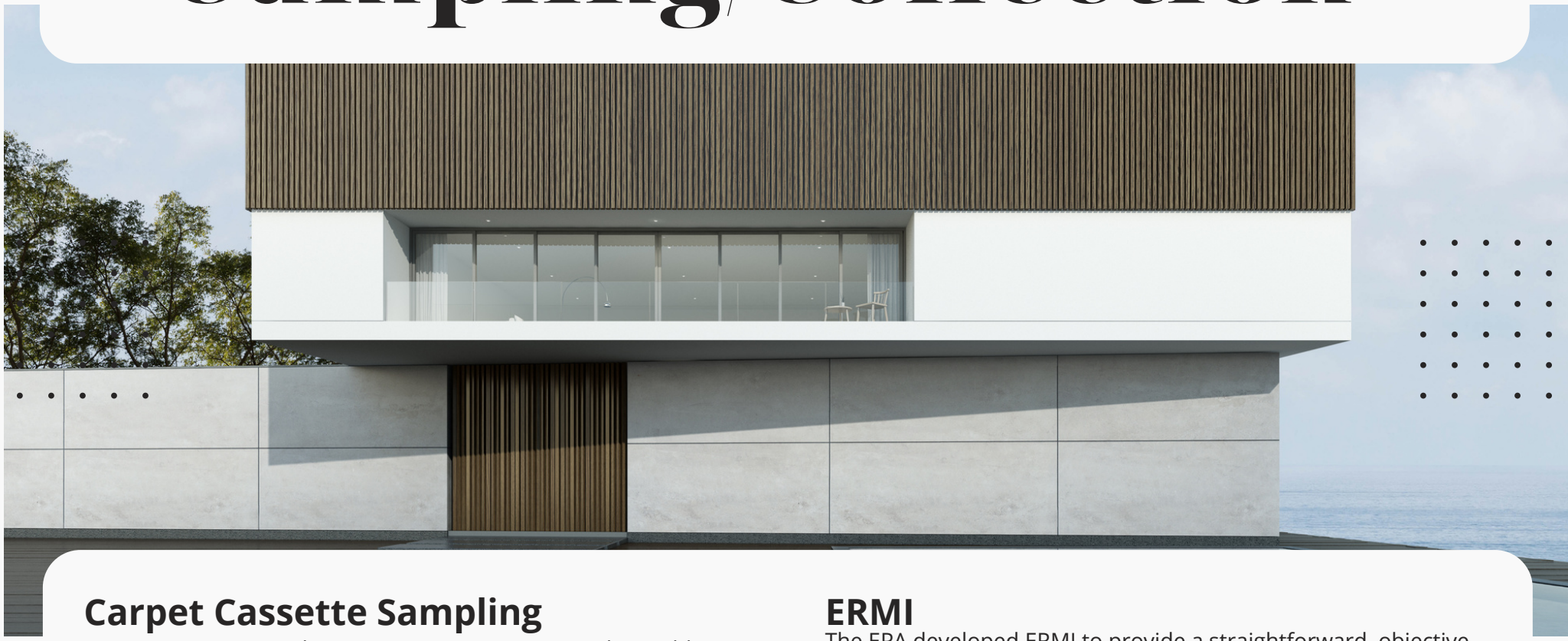
Bulk Sampling

Bulk sampling collects small pieces of material, such as building materials and/or carpet segments, to determine if they contain mold growth or contamination.The sample can be cultured for species identification or analyzed using direct microscopy for genus identification.

Swab Sampling

Swab sampling uses a sterile cotton or synthetic fiber-tipped swab to test an area of suspected mold growth. Samples are cultured for species identification or analyzed using direct microscopy for genus identification. Identified spores are typically reported as ‘present/absent. This sampling is the least likely to be discredited in a court case.

Types of Mold Sampling/Collection



Carpet Cassette Sampling

Carpet cassette sampling uses a carpet cassette and portable air pump to collect mold, pollen, and other particulates from carpeting. Samples are cultured for species identification or analyzed using direct microscopy for genus identification, just like the two previous methods of sampling.

ERMI

The EPA developed ERMI to provide a straightforward, objective, sensitive and standardized way to assess mold and indoor air quality investigations. The EPA developed the ERMI as a ranking system based on dust samples taken with a Swiffer cloth collected from homes, the ERMI will help predict the moldiness of homes. This test can be completed by the occupants of the dwelling or a professional. It is recommended that a professional complete the test if using it as basis to break a lease or for litigation purposes.

Types of Mold Sampling/Collection

Moisture Meters

A moisture meter is an instrument used in many industries to detect moisture content in materials. Mold inspectors rely on moisture meters to identify potential problems and damage to structures from moisture buildup. Most meters are calibrated to wood, which provides a relatively accurate reading in wood moisture content. Typically, this scale ranges in the 5 to 40% range. When testing the moisture content in non-wood materials, such as concrete, a relative scale of 0 to 100 is often used, where 0 is bone dry and 100 is saturated.

Particle Counters

A particle counter is an instrument that measures and counts the number of various sized particles in the air. Particle counters can be used to monitor potential contamination in environments or to monitor indoor air quality (IAQ).

Types of Mold Sampling/Collection

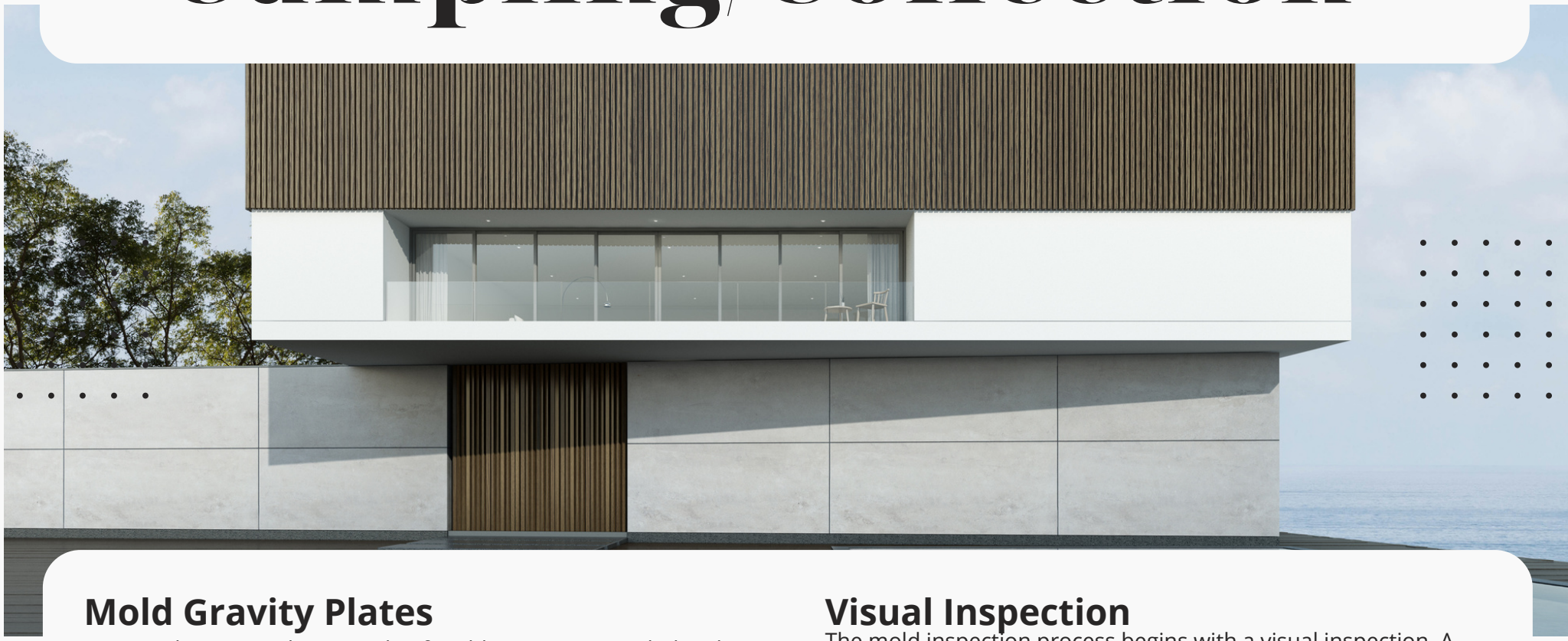
Thermal Imaging

Thermal imaging can help identify water damaged walls, floors, and ceilings. By revealing the difference in temperature between a wet area and the surrounding dry areas, moisture issues are discovered that otherwise would have been passed over if a simple visual inspection was conducted.

Mold Detection Dogs

Mold sniffing dogs are trained to alert their owner for at least 18 kinds of mold deemed harmful to human health. Their training is similar to bomb-sniffing dogs and drug-sniffing dogs. Mold sniffing is hazardous to a dog's health.

Types of Mold Sampling/Collection



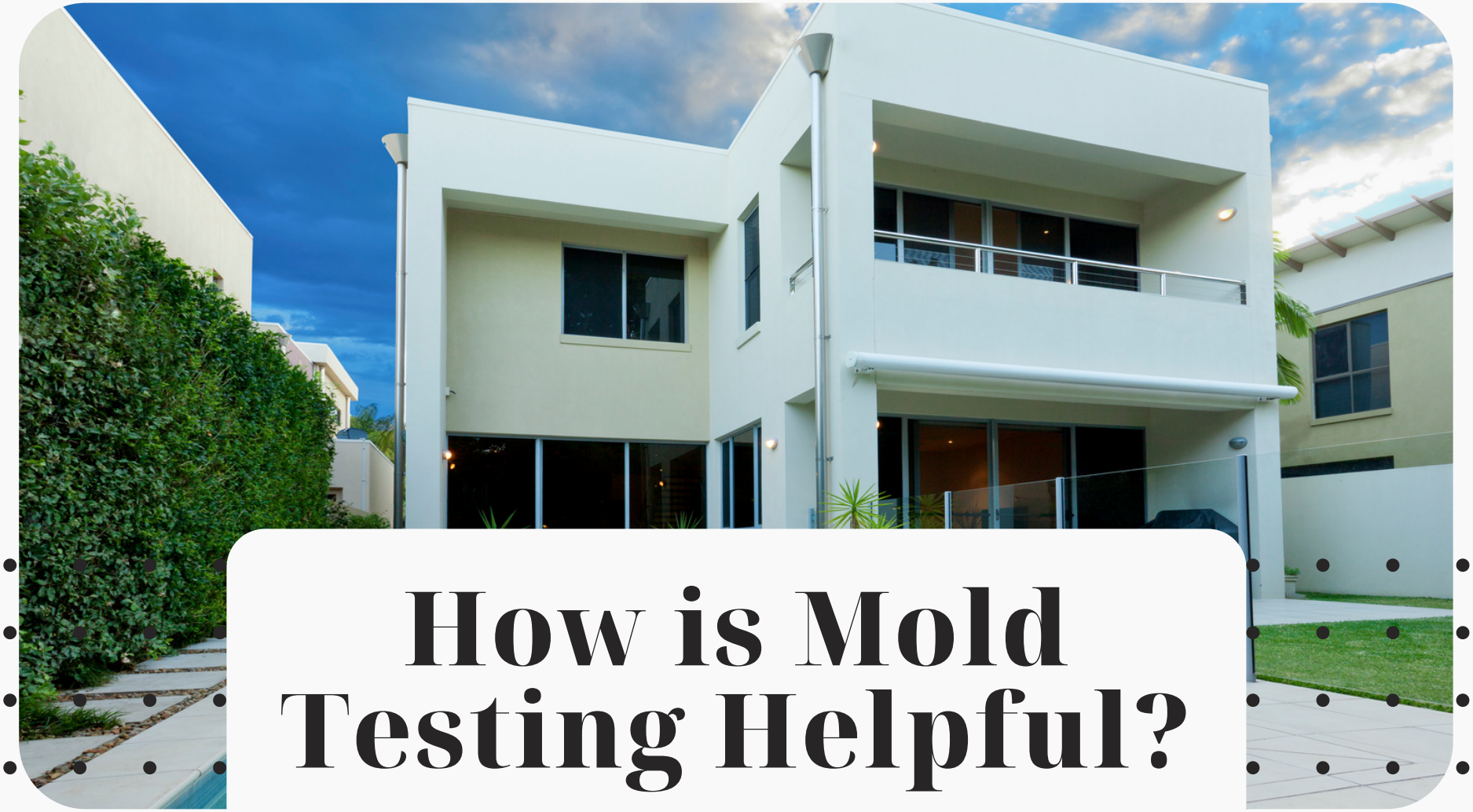
Mold Gravity Plates

Gravity plates provide a sample of mold spores suspended in the air of any room, which may be inhaled. Over a period of one hour, mold spores suspended in the air settle on the plate medium. Following the exposure time, a Sharpie is used to record the location, date, and collection time on each plate label. The plates are then sent to a lab for analysis. Often times, plate tests can result in actual mold colony growth.

Visual Inspection

The mold inspection process begins with a visual inspection. A visual mold inspection checks for mold growth throughout the dwelling, including hidden areas. Visual inspections should always precede sample collection.

- To break out of a lease
- To find the cause of an illness
- To validate your illness for yourself, family, and friends
- For litigation purposes



How is Mold Testing Helpful?

Where are the common problem areas that mold growth can occur?

- Leaking appliances: washing machine, refrigerator, water heater, dishwasher, etc.
- Bathrooms: moisture issues & leaks
- Basements, crawlspaces, attics, roof
- HVAC system and duct work
- Building materials, wall cavities, insulation
- Window sills and condensation in between glass windows and doors
- Closets, mattresses, upholstery, linens, trunks/cases

Vet a mold inspector by asking the following

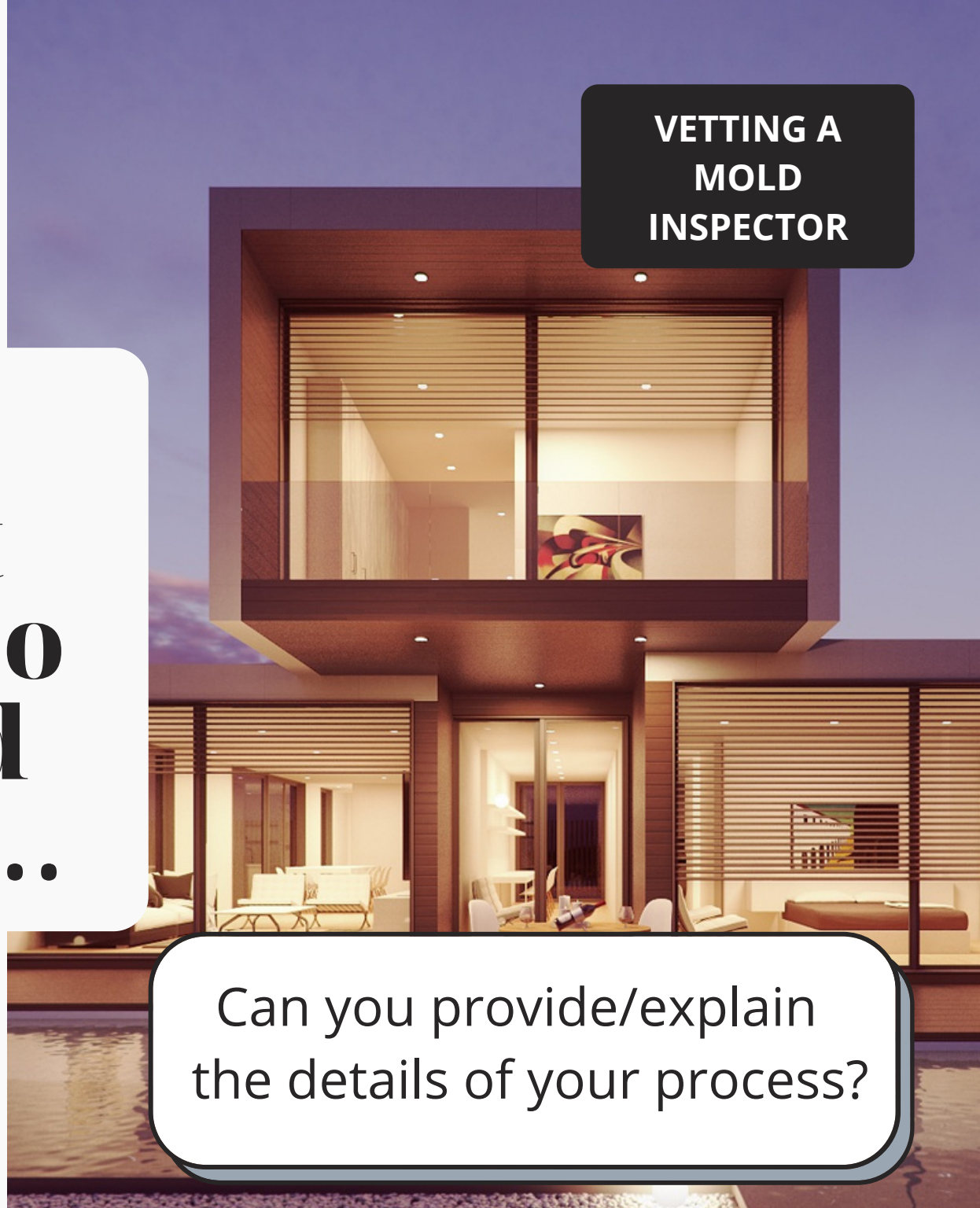
Q: Do you perform visual inspections only?

Q: Are you experienced with finding the source of mold growth when non-visible?

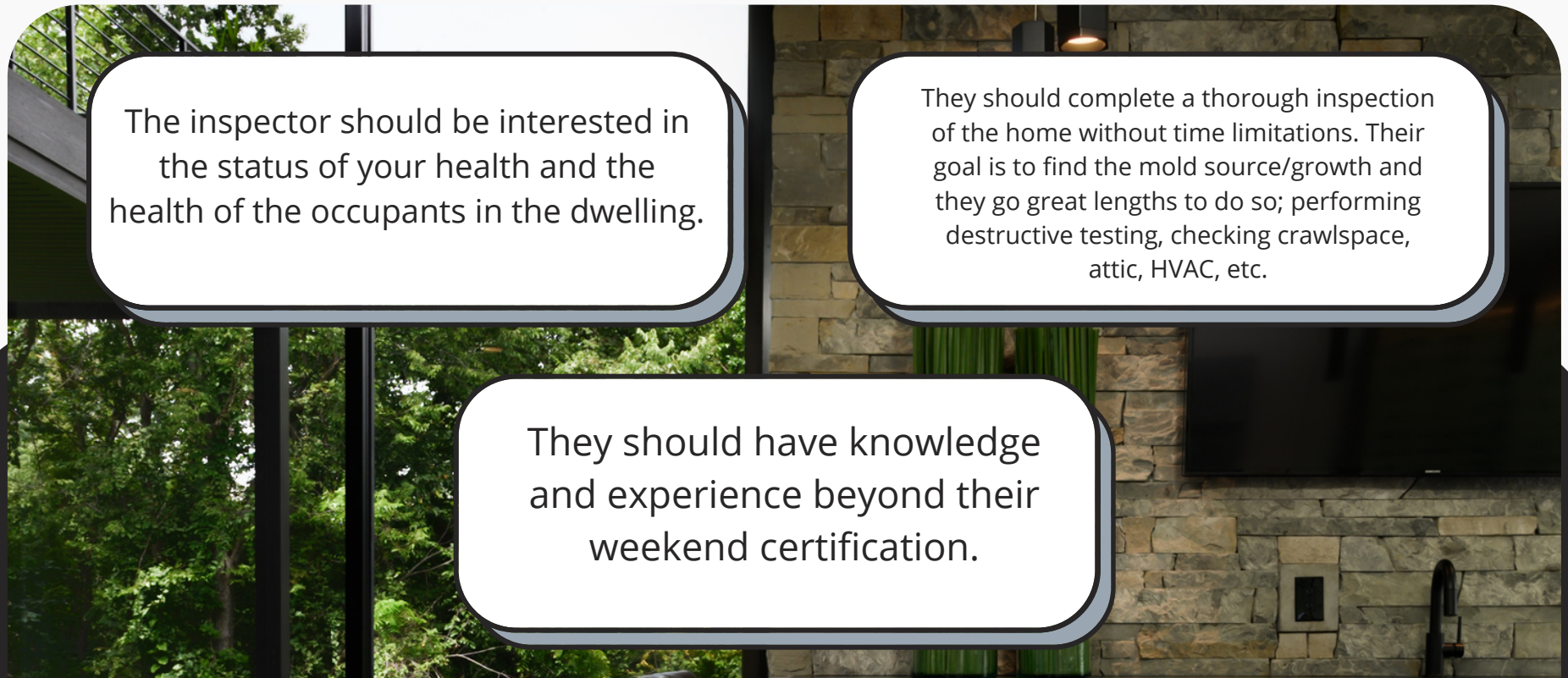
Q: Do you perform destructive testing (ex: testing wall cavities)?

Q: Will you provide a report with the required scope of repairs?

The Most Important Question to Ask a Mold Inspector...



A Trusted Mold Inspector's Process Should Include:

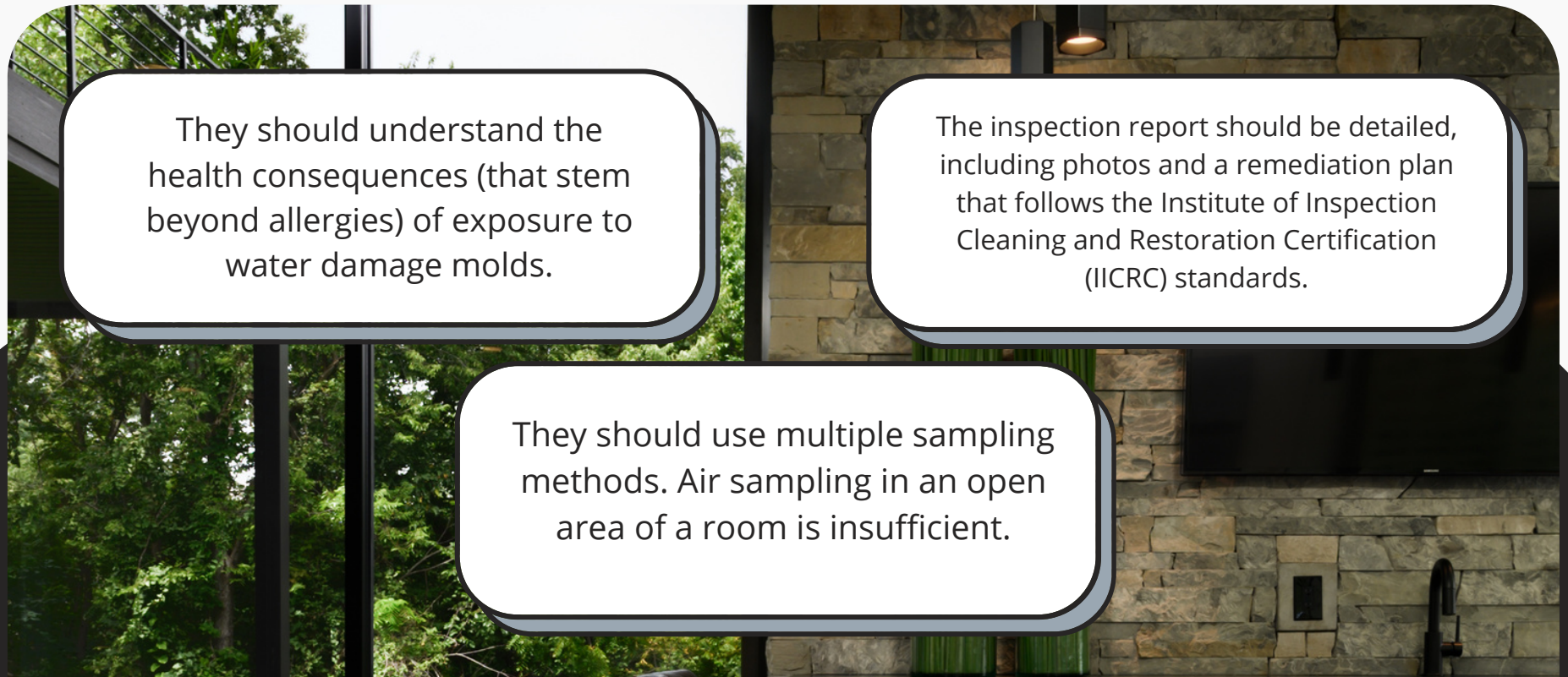


The inspector should be interested in the status of your health and the health of the occupants in the dwelling.

They should complete a thorough inspection of the home without time limitations. Their goal is to find the mold source/growth and they go great lengths to do so; performing destructive testing, checking crawlspace, attic, HVAC, etc.

They should have knowledge and experience beyond their weekend certification.

A Trusted Mold Inspector's Process Should Include:

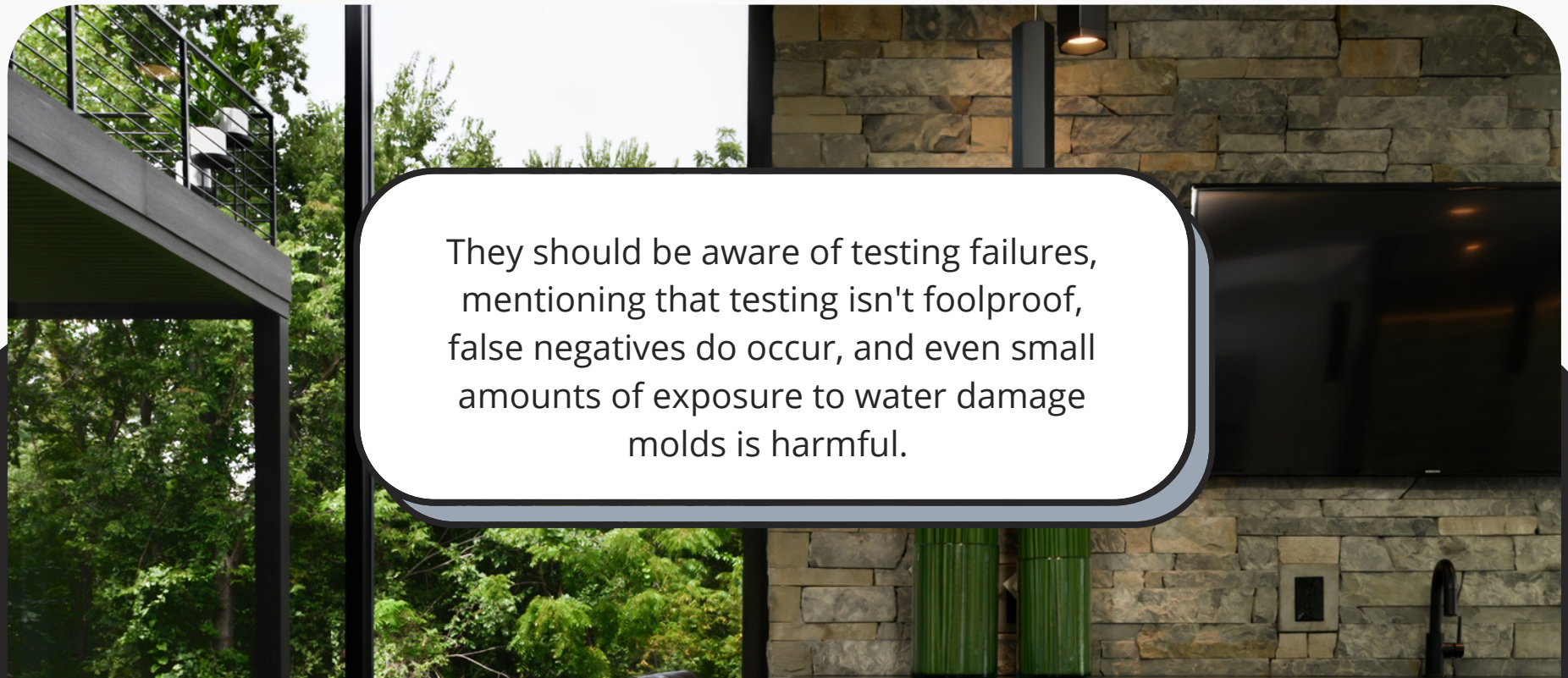


They should understand the health consequences (that stem beyond allergies) of exposure to water damage molds.

The inspection report should be detailed, including photos and a remediation plan that follows the Institute of Inspection Cleaning and Restoration Certification (IICRC) standards.

They should use multiple sampling methods. Air sampling in an open area of a room is insufficient.

A Trusted Mold Inspector's Process Should Include:

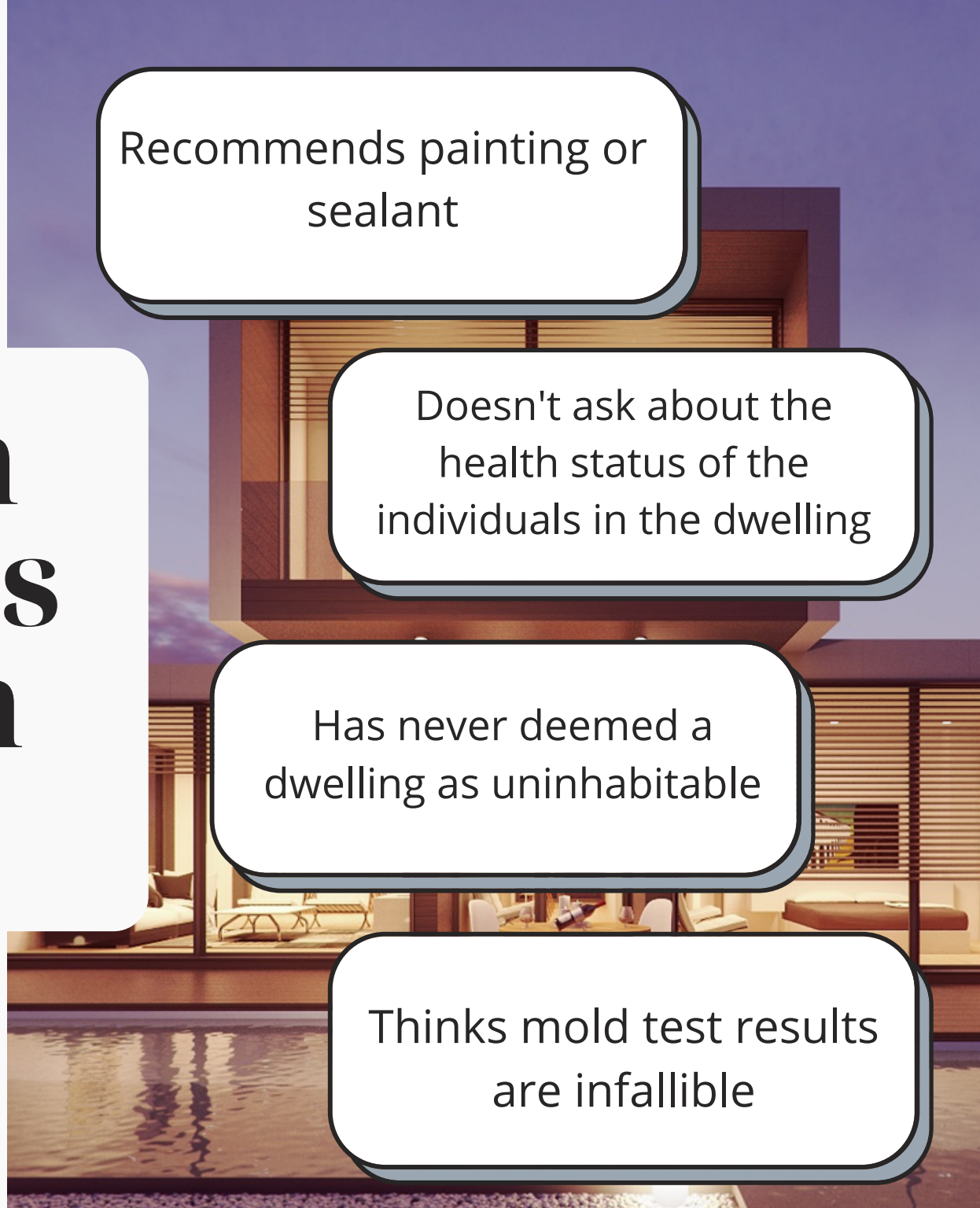


They should be aware of testing failures, mentioning that testing isn't foolproof, false negatives do occur, and even small amounts of exposure to water damage molds is harmful.

Common Red Flags to Watch Out For

- Performs a visual inspection only
- Performs air samples only
- Says mold only causes allergies
- Recommends fogging

Common Red Flags to Watch Out For



- Recommends painting or sealant
- Doesn't ask about the health status of the individuals in the dwelling
- Has never deemed a dwelling as uninhabitable
- Thinks mold test results are infallible

Key Takeaways

- Mold testing can work against a hypersensitive individual as exposure to even a few molecules of toxic mold can keep a person sick (ex: think of an individual with a peanut allergy)

- Learning to trust your mold reactions is far superior than the results of any mold test; trust your body and your senses

- Never trust a landlord to hire an honest or thorough mold inspector; hire your own

- Mold tests aren't able to find spore fragments, another toxic element of mold that can make or keep a person ill

Key Takeaways

- The results of mold tests are not foolproof. False negatives can occur. These false negatives can prevent a person(s) that are severely ill, from leaving the toxic location
- Many people report having multiple inspections completed and are often told that the dwelling looks okay and tests are fine
- The best mold inspectors and remediators will say, “hypersensitive people know more than tests"
- Mold inspection is a highly unregulated industry. Make sure to fully vet the company before hiring

Need help finding an honest mold inspector?

We can help. Reach out to us below.

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