

Infrared thermography Can Help Settle Water and Mold Damage Claims Faster and Less Expensively

To prevail in court, the ability to determine conclusively the cause and responsibility for water intrusion, a prerequisite for mold growth in buildings, is vital. But proving or disproving what caused the damage and where it is coming from--and determining whether it is covered and if it is, how much it is going to cost to repair it--have been time consuming and expensive and often inconclusive INCONCLUSIVE. What does not put an end to a thing. Inconclusive presumptions are those which may be overcome by opposing proof; for example, the law presumes that he who possesses personal property is the owner of it, but evidence is allowed to contradict this presumption, and show who is . The process of finding the source of the moisture intrusion is the hard part, and usually has combined visual inspection, field experience in locating intrusive moisture, the use of contact moisture meters and tearing out walls and ceilings.

Until now, environmental investigators have been using moisture probes. They push the metal probe into the drywall, or into a ceiling, and it will tell them if it's wet or not wet. But they can't always reach all the areas without building scaffolding, bringing in ladders, using a lot of labor and taking a lot of time. If you get water damage loss, you want to eliminate any chance of mold, because so much of it has been written out of policies. If it's not detected and appears down the road, everyone may get sued, from the insurance company to the restoration company.

Now, however, the availability of infrared cameras has dramatically reduced the time and expense of detecting moisture and possible mold in a building and tracing its source. With the IR camera, the investigator can stand on the ground, look around from one spot, map out the entire room and tell the exact location of the water. As a result, IR has been instrumental in cutting down the time that it takes to find everything out. It takes less time for the investigator, and the contractor or restoration company can get in faster, go right to the damage and get to work immediately.

That's because they can evaluate the condition much more quickly without destroying the building, and everybody can understand what it is when the investigator points to the infrared image and says, "This window leaks." It's evident that the window leaks. You can see the color changes on the infrared image. It's a slam dunk.

Hidden Danger

Investigators don't have to spend three hours probing, marking and determining where all the water is. That can be quite time consuming, especially in a large commercial building, where the process can take an entire day or more. Sometimes you don't find it all. And that's the scary part with probes--you can't always get to where the water is. If there is a layer of some material that's trapping the water and you can't get to it, you know it's there. With the IR camera, the water doesn't have to be at the surface. The camera sees through all of the walls and the ceilings to give you a complete picture of the extent of the water.

That's important. What often has happened in the past is that the day after the contractor has used his or her equipment to dry a section of wall identified by a moisture probe, the moisture is still there. You couldn't tell if there still was trapped water slowly leaking without opening the wall up. IR lets investigators see on behind the wall without opening it up, saving time and costs.

The IR camera recently saved a client thousands of dollars by enabling investigators to identify where water came in, where it went out and the route it traveled. Without the camera they would have had to rip up an entire roof to determine where water entered. And they couldn't have determined its route without ripping up the ceiling. Based on the camera's findings, the insurer was able to deny coverage, because investigators could prove it was a maintenance problem. Without the camera, they couldn't have proven that the alleged cause of loss was incorrect, and the insurer would have had to pay. And later, the client could have claimed rot and mold damage.

Multiple Cost Savings

In cases where insurers are liable, infrared thermography thermography (thûr'mög`rəfē), contact photocopying process that produces a direct positive image and in which infrared rays are used to expose the copy paper. can help keep the cost of repair down by enabling the restoration contractors, hired by the insurers, to use their fans, dryers and dehumidifiers in exact locations. This will help dry the facility faster, allowing the people affected to get back to work or into their homes, without as much living or business expense.

Infrared thermography also saves money on the front end, since insurance companies have to pay for any destructive investigative testing, even if there's no damage found. Insurers and investigators have hardly scratched the surface for all of the uses for the IR camera in building diagnostics Building diagnostics is a holistic process of data collection regarding conditions, detection and analysis of

faults/abnormality/defects in building materials and fabrics. This process can be carried out unaided (using naked eye) but often aided by advanced technology such as . Finding water that's underneath flat roofs, which has been a nightmare for roofers and contractors, is particularly exciting. Using IR for flooring water damage claims is also significant because that's one of the highest percentage types of claims that insurance companies pay out.

When adjusters can save money for the insurance company by finding and using specialists who use state-of-the-art tools, they make themselves more valuable to insurers by keeping the indemnity cost of claims handling to a minimum. Infrared cameras are an important addition to that arsenal of tools.

How Infrared Thermography Works

Thermography enables viewers to see and measure heat. All materials on Earth emit heat energy in the infrared portion of the spectrum. Unfortunately, the unaided human eye cannot see in the infrared. Infrared cameras, however, not only can see, but also can record infrared images and measure the temperatures of objects and areas of objects quite accurately. Real-time imaging 'real-time' imaging Visualization of a dynamic process μ secs after occurring, which requires rapid information processing—ie, as the process occurs, as in 'B' mode ultrasound allows the user to see the infrared image displayed as the camera is moved, like a viewfinder The preview window on a camera that is used to frame, focus and take the picture. On analog cameras, the viewfinder is an eye-sized window that must be pressed against the face. Point-and-shoot digital cameras use small LCD screens that are viewed several inches from the eyes.