

Moisture Analyser in Mold Detection and Prevention



Mold in an indoor environment is always a matter of concern. It is unsightly, can cause odors and has the potential to trigger health problems when inhaled or touched.

In an effort to conserve energy many people seal their homes almost hermetically to keep warm or cold air inside. This restricts natural airflow; the exchange between indoor and outdoor air is almost absent. Especially in rented units occupants are often unfamiliar with proper ventilation practices.

The combination of lack of airflow and high humidity levels (i.e. caused by improperly vented cooking and drying activities) can set the stage for mold growth. Spores can start to breed in walls and on furniture and quickly spread throughout a dwelling. This can result in serious health consequences for humans and animals: common allergic responses include runny noses, red eyes, sneezing and skin rashes. In more serious cases mold can trigger asthma attacks and in some cases, mold even releases potentially toxic substances.



Whenever mold is noticed in a dwelling, measurements should be taken to locate the mold and establish an appropriate plan to remediate the mold infestation. At a minimum measurement for airflow, humidity and temperature should be taken. Additional, biochemical measurements might be necessary to determine immediate threats to human health.

A simple way to measure spores in the air is by the use of a sedimentation test. A petri dish with spore nutrients is placed in the room and spores present in the room's air are caught. The sealed dish is then transferred to a laboratory to proof the existence of mold and identify the exact type of mold.

Another way to check for mold is by means of air sampling.

Spores can be sucked into an air-sampling instrument, which has a built-in petri dish. Again, a laboratory analyzes the dish content.

A mold remediation company has to clean the dwelling including all walls and surfaces. Going forward, a plan has to be established to avoid future mold issues. This plan should be based on the knowledge that the parameters airflow, moisture in the air and temperature are the main factors for the growth of unwanted mold and mildew.

In an effort to create healthy indoor environments more commercial buildings as well as private residences are being equipped with test instruments to monitor the existing conditions.