

DEALING WITH MOULD IN RESIDENTIAL AND COMMERCIAL PROPERTIES

by the CILA Claims Management Special Interest Group Author: Ron Rookledge, Head of Technical Services. Rainbow Restoration. April 2023

April 2023



DEALING WITH MOULD IN RESIDENTIAL AND COMMERCIAL PROPERTIES



1. Introduction

We are starting to see an increased awareness of mould and fungi in residential and commercial properties. This article will help you to know about mould and fungi in a building environment and understand what needs to be done to protect the health, safety and welfare of its occupants.

Mould spores are ubiquitous and are naturally present in all residential and commercial properties. They are on the surfaces we touch and in the air that we breathe. In most cases, they do not present a problem and in the main, occupants of these properties live in harmony with this natural ecosystem.

Mould and fungi become a problem when active mould growth is seen and or individuals suffer some ill health affects which may be attributed to mould.

2. What is mould?

Mould also known as, fungi are multicellular organisms. They are found everywhere in the environment and are extremely diverse. They have been able to adapt to almost every environment found on Earth.

Mould requires a food source for growth, usually carbohydrates such as paper on plasterboard, wallpaper, cardboard, wood, textiles, and other organic matter.

3. What causes mould to grow?

Factors for growth include moisture availability, warmth and oxygen. Mould will grow when the ideal growth conditions are met, forming visible coloured growth on a surface. When ideal growth conditions are met, germination can occur as quickly as 48 hours but usually takes on average 5 to 25 days.

Germination is dependent on:

- Temperature
- · Relative humidity/moisture availability
- Food source

4. How does mould affect human health?

Fungal fragments and spores become aerosolised when the mould is disturbed. Fragments which are bigger than 5 μ m (micrometers) can cause irritation to the skin. Fragments which are smaller than 5 μ m can cause irritation to the airways. Fungal spores range from 2 μ m to 50 μ m and can cause irritation to the skin, eyes and respiratory system.

DEALING WITH MOULD IN RESIDENTIAL AND COMMERCIAL PROPERTIES



Other microbes are present with mould such as bacteria. Both fungi and bacteria can stimulate allergic responses with some individuals.

Individuals who are more susceptible to allergic reactions, need to avoid exposure to microbial contamination in water damage buildings.

4. What are mycotoxins?

They are secondary metabolites produced by fungi, some of which are toxic. Some fungal species produce several types of mycotoxin, while several species may produce the same mycotoxin. However, secondary metabolites are only produced in highly optimal conditions, where nutrients and moisture are in excess.

Under ideal conditions for mould growth and mycotoxin concentrations can reach high enough levels to cause illness if ingested inhaled or through skin contact.

There is a lack of substantial evidence that the presence of mycotoxins in water damaged buildings is a cause for concern to human health.

5. Dealing with a customer who is reporting mould growth in a property

There are a series of questions that you can ask to establish what your course of action may need to be. You should however consider the customers, health, safety and welfare and establish if there is a risk to the customer.

5. Establish the facts

Establish if there are people present in the property that have either an underdeveloped or suppressed immune system. You need to determine if infants are present, the elderly, or those who are undergoing medical treatment such as chemotherapy that may compromise their immune system.

Due to a compromised immune system, such individuals should not be exposed to microbiological activity, including active mould growth in water damaged buildings. It may be necessary to consider alternative accommodation for such individuals, while restoration and reinstatement of a water damaged property is undertaken.

It is necessary to understand the duration and extent of the mould contamination within the property.

Ask the customer how long the mould been present? Is it long-term i.e. many months or even years? Or has the mould appeared recently ie: in the last week or two? Also ask if the customer regularly cleans the mould off and does it reappear in a short space of time?

DEALING WITH MOULD IN RESIDENTIAL AND COMMERCIAL PROPERTIES



Mould, that has been present for a long time may indicate high levels of moisture in the property as a result of a building defect or heavy moisture-load, due to showering; cooking or the drying of laundry.

In cases such as this it may be necessary to appoint an experienced loss adjuster; building surveyor or a damage management company that specialises in mould remediation.

Mould that has just appeared may indicate that there has been a change in the moisture within the property as a result of either recent building defect or an escape of water. In a case, such as this it may be necessary to appoint a Loss Adjuster; Trace and Access Engineer, or a Damage Management company that specialises in mould remediation.

For longer term mould problems where there appears to be no building, defect, or escape of water, it is possible to have the property monitored for a short period of time for say 2 to 3 weeks. Remote monitoring can provide data demonstrating how the moisture levels within the property vary throughout the day. It can show peaks in moisture levels in the atmosphere at different times of day, such as early in the morning when the bathroom is being used or on evenings and meals have been cooked. It can also demonstrate a case where there is a lack of ventilation and helps the surveyor to make appropriate recommendations for the fitting of humidity controlled extractor fans.

6. How big is the area that's been affected?

Areas smaller than a square meter with little surface contamination can be safely cleaned away using a detergent based products or a proprietary brand mould remover from the supermarket. If it continues to reappear, then assessment may be required by an appropriately qualified professional.

Anything larger than 3 m² that regularly reappears after cleaning requires assessment and recommendations for removal of treatment by appropriately qualified professionals.

When mould is greater than 3 m², and there is significant growth, it may be necessary for surface materials to be removed, decontamination and the reinstatement of the surface materials and redecorating.

6. How does air and surface sampling benefit?

Surface and air sampling can help identify the species of mould present in the dwelling. Distinct species of mould have different health effects, so knowing the type of mould present can help determine the level of risk to human health and inform the remediation process.

Surface and air sampling can be used to verify that the remediation process was successful in removing the mould from the dwelling. This can provide peace of mind to the occupants and ensure that the dwelling is safe to inhabit.

In some cases, surface and air sampling may be required by law or regulations, such as in cases of rental properties.

Overall, surface and air sampling are an important tool in the assessment, remediation, and verification of mould in a domestic dwelling, helping to ensure the health and safety of the occupants.



6. What can be done to prevent mould growth in a domestic property?

Mould growth can be a frequent problem in domestic properties, especially in areas with high humidity levels or poor ventilation. Here are some steps that you can take to prevent mould growth:

- Repair any leaks to prevent moisture from entering the property.
- Improve ventilation: Ensure the property has adequate ventilation, especially in areas prone to moisture, such as the bathroom, kitchen, and laundry room.
- Consider using mould-resistant paint in areas that are prone to moisture, such as the bathroom and kitchen.
- Clean the property regularly to prevent dust and dirt build up, which can provide a breeding ground for mould.
- Dry any wet areas immediately, such as spills, leaks, or water damage, to prevent mould growth.
- Identify and remove any sources of moisture in the property, such as plants, wet clothes, or waterlogged materials.

By following these steps, you can help prevent mould growth and maintain a healthy living environment in the property.

Disclaimer

This document is an educational guide only. It been prepared as a general guide to mould and fungi in residential and commercial properties and is aimed at Insurance Companies, Claims Handlers, Loss Adjusters and the wider cleaning and Damage Management Industry. The author will not accept responsibility or liability for actions or inaction by companies or individuals using the information contained in this documented guide.