

MOULD OVERVIEW

Mould can develop quickly in a building after water leak, flooding and even after fires. Remember Fire Fighting Services typically use water to put fires!

The development of mould within properties is undesirable both in the short and long-terms. Experience loss mitigation professionals such as structured designs can evaluate the risk of mould developing and take the necessary steps to minimise the risk of mould and spore development.

This process can include, moisture assessment, stripping out of damaged building materials, sterilisation treatments and most importantly creating conditions unsuitable for mould growth. Cool dry air conditions attained by suitable ventilation or drying equipment is a primary aim. Subsequently monitoring of the moisture content of the building and if needed micro-organism swab testing ensures a successful outcome.

Is Mould dangerous? Health issues associated with mould and airborne spores has been widely reported by the media for several years. Contact with mould can cause both short-term and long-term complaints for many people, particularly those with increased sensitivity, children and the infirm.

Likely health effects of exposure to mould

1. Allergic reactions: Mould spores can trigger allergic reactions like sneezing, a runny nose, red eyes, and skin rash.
2. Respiratory problems: Inhaling mould spores can cause coughing, wheezing, and shortness of breath. It can also trigger asthma attacks in susceptible individuals.
3. Asthma development: Some research suggests that children living in mould-infested homes may be at risk of developing asthma before the age of seven.
4. Respiratory infections: Prolonged exposure can lead to respiratory infections like bronchitis or sinusitis.
5. Severe infections: In people with severely compromised immune systems, mould can sometimes spread to other organs and lead to potentially fatal infections.

This is for informational purposes only. For medical advice or a diagnosis, consult a professional.

Understanding and Preventing Mould in Your Property

What happens if I have Mould and how do I recognise what to do?

The Problems with Black Mold



It is impossible to completely remove mould from your house as every building contains, within its fabric, mould spores. For the most part, in dry conditions, these remain dormant and consequently completely harmless. However, in warm and damp conditions these spores will activate and form damaging mould. Black Mould 'Mildew' is often viewed as black or dark green spots but can vary in coloration. Mould draws nutrients from surfaces and produces the strong permanent dyes as a by product. Advanced mildew may also develop a furred white appearance.

Mildew will grow on walls, ceilings and most decorative finishes; this not only looks unsightly, but the mould also generates unpleasant and musty odours. Household furnishings, carpets and clothes can also be damaged by the presence of mildew with fibres being weakened and permanent staining occurring. In addition, and most important of all, since the spores can become airborne, they pose a serious health risk and are positively linked to cause and aggravate allergies and respiratory problems such as asthma particularly in children.

Who can Remove Mold?

Professional removal is always the safest and best solution; however, any homeowner can remove mould as long as they understand the cause of the problem, denature any developed mould and take preventative action to minimize a reoccurrence. If significant water damage from a flood has occurred or if the mould is coming from an air-conditioning system, it would be better to leave the assessment and eradication to a professional mould remediation company. Remember dry mould is potentially the most dangerous as this can release spores.

Since mould can pose a real health risk, it is crucial to remove it properly.

Black Mould tends to develop on surfaces and furnishings in warm, damp and dark conditions where there is limited air movement. The mould will stop developing in dry conditions, but it will not die and can reactivate if moisture becomes present. Typically, an aired house will not develop mould during summer months but if poorly ventilated and centrally heated during winter the growth may be significant. Mould can be denatured 'killed off' by various means including fungicides, bleaches, ultraviolet light and ozone. Of these methods only fungicides with a residual effect will provide long term protection against a return mould. Many specialist suppliers found on the internet offer a selected range of highly

effective fungicidal washes, additives and surface maintainers which are of negligible toxicity to household occupants.

What Causes Black Mould?

In order to fully deal with the problem of black mould and eliminate it completely you first need to understand what has created it. If you have a mould problem in your house, even if you clean the mould itself, it will simply return if you do not fix the problem which is allowing the mould to grow.

There are essentially two major factors which when brought together encourage fungal growth (black mould) and these are poor ventilation and moisture. Without moisture mould cannot develop.

Condensation

If you have black mould, the likelihood is that it is due to condensation. This is good news as the problem can often be fixed inexpensively.

Condensation occurs because airborne moisture, Structured Designs work normally relates to moisture resulting from flood, leaks and the extinguishing of fires. In daily life moisture within a property occurs from the use of bathrooms, cooking and gas fires and the occupants themselves. Moisture becomes trapped in our homes and condenses on cold surfaces such as windows and cold walls. Often paints blister and wallpaper lifts, providing ideal surfaces for mould growth. This problem has become progressively worse in recent years as modern properties have been made virtually airtight and draught free to conserve heat losses.



Typical causes condensation problems occurring include:

Fitting of loft insulation without adequate ventilation

Fitting Double-Glazed windows in older properties

Old double glazing installed without trickle vents.

Nonventilated or mobile gas fires.

Blocking chimneys or existing air-vents

Increasing the number of persons occupying a room or building

Installation of Central Heating System

Heating some but not all rooms in a property

Overuse of bathroom showers!

Dishwashers & clothes driers venting within the property

Drying clothes and linen on radiators

Insufficient or broken extraction fans to kitchens and bathrooms

Not opening windows to ventilate the property generally on good weather days

Cooking, particularly pan boiling without adequate extraction fans.

Unoccupied properties

Allowing condensation or humidity to build-up with inadequate ventilation

Placing large furniture against external walls

General building defect like leaking roof, failed window frame sealants ETC

Large numbers of potted plants. (The water used to feed the plants, all ends up in the air of your property)

To see if condensation is likely to be the cause of your problem, on-line suppliers can provide 'Humidity Sensor Tabs' to test the amount of humidity in problem areas, or low-cost electronic meters to determine the general humidity of larger areas.

If you do have condensation problems, there are a variety of simple solutions available. Essentially there are 3-stages:

1. You must improve the ventilation of a room or the entire property.

Unblock air-vents and consider additional vents in walls or trickle vents to windows.
Repair extractor fans or consider installing additional extractors to kitchens & bathrooms & Laundries and rooms where achieving airflow is problematic.
Install a positive pressure ventilator in the loft to ventilate the whole house.
Use a dehumidifier(s) for specific rooms or the whole house
Vent clothes driers to external vents.
Manage the use of showers and bathrooms to prevent moisture build-up.
Mop up condensation moisture regularly.
Use reusable moisture absorbent packs to keep cupboards and small rooms dry.
Be aware to air the property at every available opportunity
Ensure that there is not a significant temperature difference between nearby rooms, particularly where the warm rooms are kitchen or bathroom or living room.

2. Treat the Existing Mould Problem.

Mould can be sterilized from a hard impervious surface by washing with a mild bleach detergent or preferably Skilled Build Steriliser & Mould Exterminator.

Clothes and textiles and curtains can be laundered, preferably with a suitable additive sold for treating mildews (Note it is likely that so evidence of the black/blue/green mould staining will remain.

Other building surfaces should have damaged fabric and decorative materials like wallpaper and flaking paints removed. Treat the remaining surfaces and substrates using Steriliser & Mould Eradicator solution. This solution will penetrate porous surfaces and denature 'kill' the mould and spores.

Wallpapers should be hung using the best quality paste with mould inhibitor. Re painting should be undertaken with either a water or solvent based paint blended with Antifungal Paint Additive. This additive provides long term protection against mould developing on the painted surfaces.

However, please remember that if you do not adequately tackle the cause the mould then it will eventually return. Out of convenience, several supplier's product ranges include a Mould & Mildew removal kit which contains all the instructions, safety and application equipment and products to sterilize and additive to enable you to repaint a room. The kits are easy to use and provides everything you need to make mould disappear.

3. Maintain areas to prevent re-occurrences.

Now you have eradicated the mould the final step is to manage any re occurrence. There is no substitute to tackling the causes of moisture build-up as described above, but certain rooms and surfaces are prone to mildews, particularly bathrooms. Source a non-toxic fungo-biocidal 'anti-mildew' spray which kills mould/spores whilst leaving a residual treatment with lasting effect. Most are suitable for virtually all surfaces.

Taking decisive action will save money by protecting your property and possessions from damage, but most significantly will almost certainly provide an improved living environment to enhance and protect family health.

All recommended product usage is subject to adherence to all published H&S and application data applicable to those products.

Rising Damp



This is when water is drawn up from the ground in a capillary action, like how a sponge works. It is often found in older properties where a damp proof course (dpc) has failed or is non-existent. Typically, the damp rises only to a maximum of 1 metre (3 feet) above the floor or outside ground level (whichever is the higher). Rising damp and condensation (mould) are often confused. Long-term rising damp problems will cause considerable damage to a property as well as creating health risk issues for occupants, similar to

condensation mould. Rising Damp is a significant contributor to instances of Dry-Rot.

If you believe that rising damp may be the cause of your mould or damp problem, then you should consider installing a new chemical dpc (damp proof course) system. DPC Injection creams offer an effective solution for most requirements.

After putting a rising damp solution into action, you will still need to address the problem of the black mould removal. Again Mould & Mildew Eradication Kits are usually suitable for most needs, removing the mould and providing a fungicidal paint additive to ensure continued mould free walls.

Penetrating Damp

An alternative cause of black mould may be penetrating damp – this is where water penetrates walls from the side.

Fixing this problem can be fairly easy.

1. Reasons for penetrating damp include:
 - Leaking gutters & downpipes
 - Porous bricks in an exposed location
 - Decay of pointing mortar
 - Cracks in bricks or pointing
 - Failure of seals to window and door frames
 - Cracks or delamination of external renders
 - Old & flaking external wall paints
 - Frost damage & spalling brick faces
 - Overflow pipe discharge down a wall



Make sure that these leaks and defects are rectified and that all associated repair works are correctly undertaken to prevent further water/moisture penetration into the walls.

Failed pointing may also be an issue. The masonry between your bricks/stone or pointing, as it is commonly known as, is vulnerable over time because of weathering and the freeze/thaw cycles. This leads to cracks occurring which will allow the ingress of water. You will need to rake out old, decayed pointing and apply fresh

durable mortar. You may consider it to be a good idea to treat the wall with a water-resistant seal, which are widely available. These clear liquids can provide long term invisible protection for the wall and stop prevents penetrating damp whilst allowing a degree of micro-porosity to enable moisture trapped in the brickwork to escape. Remember that a wet wall loses more heat than a dry wall!

2. Again any paint applied to both internal & external surfaces after rectifying penetrating damp problems will benefit from pre sterilization treatment and a fungicidal paint additive will ensure continued mould free walls. This product can easily be found on-line.

Actually Removing The Mould

Once you have determined and fixed the cause of the mould you need to remove it. If you not employing a specialist contractor, always fully read and follow the product label and How To Use Sheets. Also read the Health & Safety information and wear suitable protective equipment.

As a general guide, the treatment requires:

1. Firstly, scrub the mould off surfaces with water and detergents.
2. If porous materials have been highly contaminated with mould it should be removed and replaced. This may include soft plaster and plasterboard, drywall, carpet and ceiling tile.

It is important to not just paint over the mould as this is not removing it and most likely it will simply return as the paint starts to peel.

3. Sterilise the surface using a Steriliser & Mould Killer product. Allow to dry. Re treat as recommended.
4. If painting, add a Fungal Paint Additive directly to the desired paint and blend thoroughly. Paint as normal.
5. It is essential to ensure that all surfaces are fully dried before painting. The use of a dehumidifier or a fan may speed up the drying process.

Continued use of a domestic sized dehumidifier will help reduce humidity and prevent future mould growth. In addition, try to increase ventilation in frequently moist areas such as bathrooms. Structured Designs offers the above information in good faith, but we always advise that unless you possess adequate knowledge to safely undertake any of the required tasks listed above, then you should consult and be advised by a professional.