

## Solution 4:



### *Dry the Area*

Dry items before mould grows, if possible. In most cases mould will not grow if wet or damp items are dried within **24-48 hours**.

To dry carpet and backing within 48 hours, remove water with a wet vacuum, pull the carpet and pad off the floor, and dry them using a fan to blow air over them. A dehumidifier can be used to reduce the humidity in the room where the carpet and backing are drying, while fans can be used to accelerate the drying process.

Water can be removed from **concrete or cinder block** surfaces with a water-extraction vacuum. The drying also can be accelerated by using dehumidifiers, fans and heaters.

**Hard surface flooring (such as linoleum, ceramic tile, and vinyl)** should be vacuumed or damp wiped with a vinegar solution and allowed to dry. They should be scrubbed clean, if necessary. If the under-flooring is wet, it should be dried using a vacuum or by exposing it to the air.

Water should be removed from **upholstered furniture** with a water-extraction vacuum. Fans, dehumidifiers and heaters may be used to accelerate the drying process. Completely drying upholstered furniture within 48 hours may be difficult, so if the piece is valuable, you may consider consulting a restoration or water-damage professional who specializes in furniture.

Many people make the mistake of thinking that they can just buy a dehumidifier and put it in a room where there is mould, and after a few hours the mould will be gone! Wrong. There is no way that a dehumidifier will take away mould on its own. You must first clean the area, as previously pointed out, where the mould is contained, then place the dehumidifier in the clean environment and thus begin the process of drying moisture and reducing humidity below 60%. You have just read about the cleaning in the previous solution, so you should have a clean environment by now. So let's keep that clean environment dry. But how you may ask? Why not try a dehumidifier.

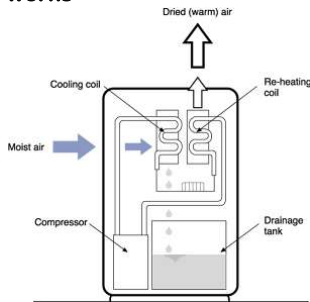
### **What is a dehumidifier?**

A dehumidifier takes moisture out of the air by condensing it onto a cold surface. Have you ever poured a cold glass of water on a hot, humid summer day? If you have, you have seen the moisture condense on the glass. This is because when air cools, it can't hold its moisture. If you leave the glass on a table long enough, and if the air is humid enough, a big puddle of water will form. The same thing happens in an air conditioner when the moisture in the room condenses on the air conditioner's cold coils. You will notice, if this is a window unit, that water drips out the back of the unit onto the ground. So, a dehumidifier is just an air conditioner that has both its hot and cold coils in the same box. First, a fan draws the room's air over the cold coil of the air conditioner to condense the moisture. Next, the dry air passes through the hot coil to heat it back up to its original temperature.

Dehumidifiers work for less power than an air conditioner. They run on 1/10<sup>th</sup> of the power that an air conditioner would use. Dehumidifiers can also be running twenty four hours a day, seven days a week.

## How a dehumidifier works

A dehumidifier works on the same principal as a refrigerator. Moisture laden air is drawn into the dehumidifier and is passed over a cold coil (evaporator). The warm damp air then condenses on the cold coil into water droplets, which pass into the water container. The air is then passed over the warm coil (condenser) and is expelled from the dehumidifier.



In cold conditions the water accumulating on the cold coil may freeze. For this reason it is important that the dehumidifier has a Hot Gas Defrost system. This enables the dehumidifier to transfer hot gases into the cold coil, thus melting any moisture that may have frozen. Without a system of this type the dehumidifier must defrost itself (only achievable when temperatures rise) or employ an expensive, heavy and noisy heating system.

As the dehumidifier lowers the humidity, it will start to remove dampness that has accumulated in the wall linings, furnishings and bedding. For this reason it is important to run the dehumidifier constantly for the first few weeks. Once the selected humidity levels are reached the dehumidifier will then maintain this humidity level automatically.

**When you have cleaned the area**, you can then use a Dehumidifier which performs the next job automatically. It takes the unpleasant moisture and mustiness out of the air in small spaces like bathrooms, laundry, musty storage closets, bedrooms, store rooms, under stair rooms etc.

**The midi sized dehumidifiers** are specially designed for tight quarters. A compact midi size unit comes complete with whisper-quiet, state of the art peltier module, (compressor-free no moving parts) that is so quiet while it is working away for you. In conditions of 30 °c and 80% relative humidity, the dehumidifier removes 600ml of moisture per day, storing the collected moisture in an easily removed transparent bottom tank. A clear 2 litre catchment tank is fitted, so you don't have to empty it every day. We find the dehumidifier switches itself off when the tank is full. These units are particularly useful in small walk in wardrobes and in bathrooms.

**Larger 11 – 38 litre dehumidifiers** have a built in humidistat that switches the unit on automatically. Digital models have reset control for **40/50/60/70%** humidity. They are designed for room areas from 20 square metres to 140 square meters. An average bedroom is about 20 square metres and a standard lounge room is around 40 – 60 square metres.

Keeping the fans going the whole time during those hot and humid months is a great idea, by employing a dehumidifier to run with the fans on, at medium level, will ensure you don't have a mould problem, as moisture and humidity are kept well below 60%. Providing you have purchased the right size dehumidifier to suit the area. Speak to a dehumidifier sales person\* for the correct size required.

***\*See references at back of book.***



**A dehumidifier doubles up as a dryer for clothes in the laundry.** Make use of a space in the laundry to set the dehumidifier with the louvre adjusted "upward" so that the wind (warm air flowing out) can hit the clothing directly. A small closet allows for faster drying. Or, inside the house, hang clothes to air on a clothes horse, and run the dehumidifier in front of the linen cupboard with doors open. When the air outlet is aimed at the cupboard, moisture can be eliminated much faster. You are always aiming to get your area below 60% humidity. I know we have mentioned that a few times, but I think it has sunk in now.

It is more common for mould to be found in the bathroom, on a windowsill, shower curtain, or wall. This mould can be wiped off the surface with a damp cloth and some sugar soap or white vinegar. Preventing mould growth requires controlling the moisture source. This may be as simple as using a dehumidifier or fixing a simple leak.

#### **Summary:**

- ***Area must be clean before you employ a dehumidifier***
- ***Keep area below 60% humidity***
- ***Use a dehumidifier as a cheaper alternative to drying clothes***
- ***Use a midi dehumidifier for smaller contained areas – cupboards***
- ***A dehumidifier uses less power than an air conditioner***