AUSTRALIAN WATERPROOFING CONSULTANTS

Waterproofing or Condensation problem??

Progress report - Over the last 5 months we have been busy on a number of interesting projects which have dealt with waterproofing problems associated with a number of defects. One interesting project that has come to light concerned a possible waterproofing issue that had been blamed for mold development on the internal walls of a home in Malvern. On closer examination of the dwelling we see that the issue is not one of a waterproofing defect rather the issue is one of condensation build up arising from a number of related issues all coming together to form the perfect "moisture storm" …. internally.
Condensation within a home is not a new problem and one that is still not widely appreciated. In simply living within our homes we develop large amounts of moisture caused by a range of activities. These can include moisture arising from cooking, unflued gas heaters (a by-product of gas heating is carbon dioxide and H2O!), bathroom use, i.e hot steamy baths, showers and the like, clothes washing and simply breathing! when we sleep at night we exhale a lot of moisture, up to 400 mls per person per night. Figures of 15 litres of water per day for a household is not uncommon through simply doing the things we take for granted at home.
The Air around us contains a certain amount of moisture all of the time. We also know that Warm air will "hold" more moisture than Cool air. Problems can occur in the home when this moisture reaches the saturation or what is termed as the "Dew Point". This is the point at which the warm air can no longer "hold" the moisture in suspension. This moisture laden air may come into contact with an impervious cool surface such as a window, the saturated moist air then cools rapidly and gets converted to water which is seen particularly in the morning on internal windows. On an absorbent surface such as painted walls, drapes, carpets, clothing etc. this moisture is absorbed.
Try this experiment, grab a cold beer out of the fridge put it on the bench, now watch the beer glass convert moist warm air around it into water droplets!! Ladies a wine glass will do…... filled of course with a lovely Sav! this is all in the name of Science!!!
The end result of all this moisture frequently leads to the development of mold and a damp "feel" to the home if that excess moisture is not managed. If you've seen mold developing on your walls, particularly in areas with little to no air movement occurs such as behind TV's etc, or your clothes feel inexplicably "cool", or even "damp" and you have water running down the inside of your windows you more than likely have a condensation problem NOT a waterproofing problem.

Australian Waterproofing Consultants – part of the Australian remedial waterproofing group
PO box 4039 Narre Warren South , 3805 Victoria, Australia
ABN 45 595 901 535

admin@waterproofingconsultants.com.au www.waterproofingconsultants.com.au

Now that we have established this, what now. The answer is to manage the moisture build up and there are several ways to do this.

The easiest management option is to open a window and let dry air from the outside in and to "push" the saturated air out. It surprises a lot of people to know that even in winter that external air is drier than internal air! Essentially we are allowing forced air changes, swapping moist air for dry air. this however is not always the best option.
Over the years' products have been developed to help manage this process by using low positive pressure technology, using dry warm ceiling air and "forcing" it at very low pressure into the internal parts of the home via an opening in the ceiling. Or in the case of apartments taking dry air from the external side and forcing this into the internal parts of the dwelling thereby "forcing" the saturated air out of the building. This all happens literally under your nose. The systems are quiet and run at low speeds and pressures, so much so you don't know it's happening. Before you know it you have a much drier and healthier home. this is only but one of a number of options

So if you have a "waterproofing" or "condensation" problem the team at Australian waterproofing consultants can help to identify the real issue. We have the range of knowledge and expertise to guide you through the process to help solve your problem.

Regards

Karl Wootton
Senior Technical Consultant