

"MOLD - the new asbestos of litigation"

"Mold is one of the most important issues builders face"

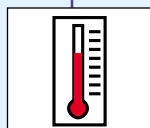
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Mold has become the focus of much discussion and expensive litigation. Evidence of mold and in particular, black mold, is being found from coast to coast, creating an hysteria and a fear of "toxic mold syndrome". Insurance companies are reacting by petitioning jurisdictions to cap rapidly rising damage awards.

So What Is Mold and What Can Be Done About It?

Molds are a type of fungus which spread by way of microscopic spores that are usually airborne. One form of mold is called mildew. Mold spores are everywhere in the environment – both outdoors and indoors.

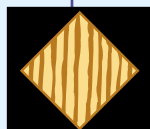
To survive, mold needs four elements:



1 Moderate temperature - between 4 - 38°C.



2 Oxygen - to breathe.



3 Food source - frequently the cellulose content of paper or wood fibre. Wood, dust, paper, drywall, ceiling tiles, plywood and cardboard provide an ideal colony or source of food for the growth of mold. Concrete does not rot or become a food source for mold because it is non organic.



4 Moisture - to promote mold growth. It doesn't require standing water – usually high humidity is enough to encourage mold to flourish.

In the construction industry, much is done to prevent the migration of moisture and to create moisture barriers however, buildings are susceptible to mold if these conditions exist.

How To Prevent Moisture From Entering A Home

1. Leaks and Flooding - A slow leak, resulting from poor construction, can cause serious problems. Chronic sources of water include roofs, doors, windows and foundations. These areas are particularly important and must get extra attention during the construction phase.



2. Condensation and Airborne Moisture - Moisture in the air can encourage mold, if humidity reaches about 60% or higher. Relative humidity refers to the ratio of the amount of moisture in the air. This is why a cool basement often feels humid or damp and it can also become musty smelling. This is a sign of mold growth.

3. Air Leaks - Forced air leaking into a house under sill plates and around doors, windows and electrical outlets can lead to vapour condensation and ultimately, mold.

Mold Susceptibility

Building Materials:	Susceptible to mold growth?	Provides food source for mold?	Susceptible to deterioration due to mold?
Concrete masonry	Yes	No	No
Gypsum wallboard	Yes	Yes	Yes
Wood surfaces	Yes	Yes	Yes
Vinyl, linoleum	Yes	No (although the adhesive used to lay them may be)	Yes
Plastics, metals	Yes	No	No

Source: NCMA Report on Mold (January, 2003)

So What Is Mold and What Can Be Done To Prevent Mold?

Buildings that are constructed with no overhang on the top floor are susceptible to rain and moisture infiltration. Also, changes in the construction industry, such as the use of more organic materials, have been good for mold growth. "Certain molds like to grow only on certain materials". Concrete masonry does not "feed" the organic growth of mold, depriving it of a host.



Masonry wall construction in public buildings reduces the likelihood of mold growth.

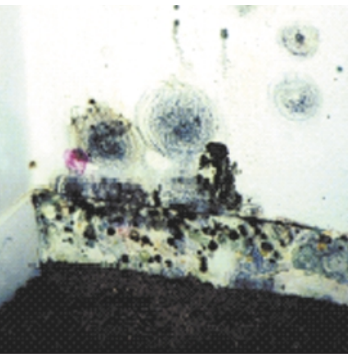
When properly installed, concrete masonry affords protection against the spread and damage caused by mold.

Ironically, a drafty, old house is more likely to have better air circulation, which is necessary to prevent a build up of moisture from cooking or bathing. Good air circulation discourages mold growth.



Heavy mold growth on underside of spruce floorboards.

In Vancouver, the building industry has been faced with a multi-billion dollar mold problem. Wood frame multi-storey buildings, using new synthetic stucco, have developed mold infestations within a few years of construction. The synthetic stucco was porous, thereby allowing moisture to penetrate the wall.



Mold growing in closet as a result of condensation from room air.

The only way to remedy this problem is to tear off the stucco, as well as the rotted and wetted materials, resulting in extremely high costs and often millions of dollars of litigation.

"The North American insurance industry estimates that within the past 10 years about 9,000 toxic-mold lawsuits were filed in the United States and Canada". The number continues to grow with no end in sight. One school in Aurora, Ontario was closed due to mold.

One problem clearly is the lack of health-based standards for exposure to mold. Because there is a lack of established standards, businesses



have no way of evaluating the safety level of its existing air quality. The insurance industry's response to this growing problem is their increasing reluctance to underwrite

buildings for coverage due to the number of buildings experiencing mold problems.

Previous concerns about asbestos and other airborne problems have given rise to much more attention by the general public and resulting fear. Prevention of the likelihood of mold is the best cure.

To prevent future problems and litigation, designers and builders must be sure that moisture is prevented from infiltrating construction and better still, they must use materials that are unlikely to support the growth and spreading of mold. It is recommended to keep the humidity levels below 40% during the heating season and below 60% during the cooling season. Keeping building construction materials that are organic, such as wood and paper, away from areas that are likely to have moisture or experience humidity is another way to prevent mold from starting.

QP2000 Concrete Blocks - a good defense against mold.

Careful consideration of the four situations required for mold to start is your best prevention. Remember that concrete masonry is not a source of food for mold and therefore, wherever possible, the use of concrete masonry is advised where sufficient air circulation is not available or the penetration of moisture is possible.



Mold removal and remediation



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