

# Mold & Mildew

A successful installation of commercial wallcovering requires that building walls are not subject to moisture accumulation. If the design, construction or maintenance of a building and/or other circumstances allow moisture to accumulate in a wall or wall cavity, wallcovering may act as a vapor barrier, restricting the escape of moisture and increasing the risk of mold growth. Proper design, construction and maintenance practices can prevent moisture accumulation. In all cases, moisture and sources of moisture accumulation must be corrected before installing any wallcovering.

## **Vinyl Wallcoverings**

Vinyl wallcovering has little or no moisture permeability. Vinyl wallcovering permeability can be increased through perforation and alternative product constructions with varying degrees of increased permeability depending on the methods used. No wallcoverings will prevent mold growth, however, if moisture accumulation is permitted to occur. An experienced professional who is familiar with building conditions and circumstances should be consulted concerning benefits and limitations of vinyl wallcovering.

MDC's wallcoverings contain additives to resist mold and other micro-biological growth on the product. Those additives, however, will not prevent mold growth if moisture is allowed to accumulate behind the wall.

## **Increased Permeability and Permeability Testing**

The permeability of conventional vinyl wallcovering can be increased by perforation. If vinyl wallcovering is given high quality perforation, is properly installed on a permeable wall surface and properly maintained it will have greater permeability than conventional vinyl wallcovering which has not been perforated.

While offering increased permeability, perforated wallcovering is not a solution for and should not be used in buildings which have or may have wall cavity moisture accumulation or other moisture problems. Perforated wallcovering will not prevent mold growth or other moisture related damage if moisture accumulation is permitted to occur in a wall or wall cavity.

Permeability is a measure of the amount of water vapor (moisture) that can pass through a specified material in a certain amount of time. The measure and degree of permeability is expressed in units referred to as perms. Materials with high perm levels will allow more moisture or water vapor to pass through than those with lower perm values.

### **Wallcovering Selection and Installation**

It is important to keep in mind that wallcovering is a building material and is one component of a building's integrated wall system (which includes exterior wall surface, sheathing, exterior wall cavity vapor barriers, insulation, framing, HVAC and interior wall substrate, among other materials). Prior to using any wallcovering an experienced building professional must be consulted to determine, in light of wall and building conditions, permeability requirements, and other building specific requirements, which wall surfacing materials are appropriate for that building.

All wallcoverings must be installed by an experienced commercial wallcovering installation professional who understands wallcovering use and installation requirements, including the requirement to test for and eliminate sources of moisture accumulation prior to the installation of wallcovering.

Building maintenance must include those actions necessary to prevent the development of moisture accumulation sources as well as routine inspections for an immediate corrective action if moisture accumulation is found in a wall or wall cavity.

### **Prevention of Mold & Mildew**

Regardless of the type of wallcovering selected, including breathable materials, there is no way for mold or mildew to be prevented. Mold and mildew are naturally occurring and are present everywhere in nature. They need only water and organic material (such as wood, paper or plant material) to feed upon and grow. The recommendations provided by MDC are not a guarantee against fungal growth but rather a precautionary tool.

### **Additional Information**

For more information on wallcovering permeability and mold, MDC recommends that you visit [www.wallcoverings.org](http://www.wallcoverings.org)