

**SUSTAINABLE PRACTICES
FOR BUILDING OWNERS AND OCCUPANTS**

INDOOR AIR QUALITY

**VOC-CONTAINING MATERIALS
MOLD/MILDEW PREVENTION**

VOC-Containing Materials

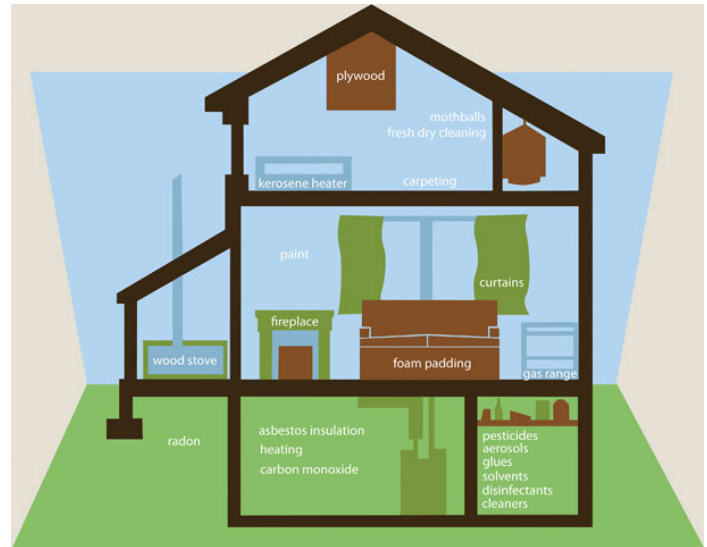


Background:

VOCs (volatile organic compounds) are chemicals that are emitted from liquids and solids as gases. In the indoor environment VOCs are emitted from common, everyday items listed in the section below. The US EPA has reported that VOCs in indoor air are often 2 to 5 times higher than outdoor air¹. VOCs have been known to cause both short- and long-term health effects.

Common Household VOC containing Materials:

- carpet
- composite
- wood products
- insulation
- paints
- adhesives
- furniture
- cleaning products
- copy and fax machines
- tobacco smoke
- deodorant and cologne



Sources of Indoor Air Pollution (Red River College)

Did you know?

No federally enforceable standards have been set for VOCs in non-industrial settings¹.

Did you know?



Sick Building Syndrome (SBS) is often associated with VOC health effects. Effects such as headaches, dizziness, nausea, eye, nose or throat irritation, dry coughs, fatigue, asthma, etc. are all possible symptoms.

Sources: Photo Credit: Red River College (<https://blogs.rrc.ca/wellness/2014/02/watching-paint-drywhats-actually-happening-2/>)

¹<https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality>

VOC-Containing Materials



TARGET GROUP	WHAT CAN I DO
<p>All members of the Rochester Community</p> 	<ul style="list-style-type: none"> • Be aware of what household products contain VOCs and avoid and/or reduce use. • Select low or no VOC products where available.
<p>Developer, Landlord, Business Owners, Institutions, Homeowners</p> 	<ul style="list-style-type: none"> • Specify low-VOC or no VOC building materials. • Prior to moving in tenants, conduct building flush-outs. LEED for New Construction EQc3.2 offers a possible method of construction management to flush-out a building.

Mold/Mildew Prevention



Background:

Mold growth occurs when excessive moisture accumulates in buildings or on building materials (insulation, carpet, ventilation systems, etc.) Mold growth is found almost everywhere: indoor and outdoors.

Concept:

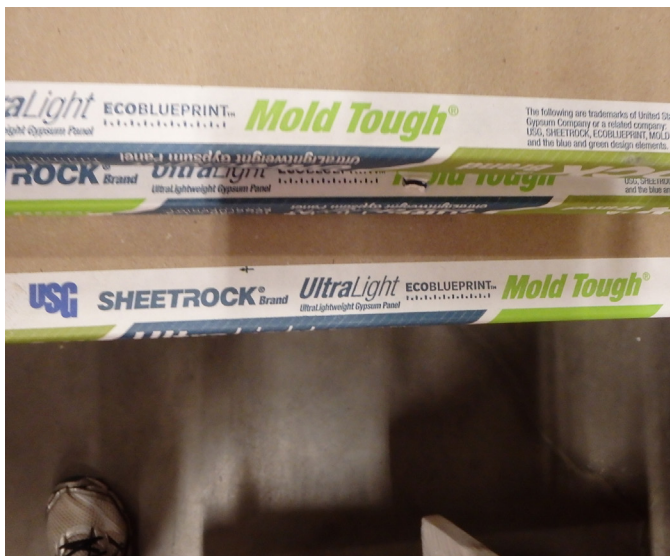
Controlling moisture is the most important strategy for reducing indoor mold growth.

Mold Likes to Grow In:

Indoor spaces with a relative humidity of greater than 50% is favorable for mold growth, damp and dusty conditions and/or rooms with stagnant air.



Mold growth in poorly ventilated space



Mold resistant materials

Did you know?

Moisture trapped in walls of a home can decrease insulation values and the structural integrity of wood frame construction.

Did you know?

The most common indications of mold exposure are allergies and irritation of the throat, eyes or skin.¹ Individuals with current health conditions such as allergies, asthma or emphysema are often more sensitive to mold than others.

Sources: ¹<https://www.health.ny.gov/publications/7287/> (NY Dept of Health)

Mold/Mildew Prevention



TARGET GROUP	WHAT CAN I DO
<p>Developer, Landlord, Business Owners, Institutions, Homeowners</p>	<ul style="list-style-type: none"> • When constructing a new development or performing a renovation of an existing structure, ensure that the potential for exposure to rain or other sources of water are thoroughly noted. LEED offers guidance on construction indoor air quality. • Use materials such as cement board to meet the ASTM D3272 standard that are moisture-resistant behind showers and tubs. • Use properly sized-exhaust fans in bathrooms, along with mold/mildew resistant paint and caulk. • Use breathing building envelope membranes to allow moisture to leave the inside of the structure but not enter it. • Waterproof, seal, and insulate foundation walls. • Install vapor barriers under concrete slabs. • Use dehumidifiers. • Consider using paperless, or moisture-resistant sheetrock. • Track indoor humidity. • Practice proper indoor housekeeping.
<p>Tenants</p>	<ul style="list-style-type: none"> • Pay attention to high moisture areas and try to keep them dry. If mold growth is persistent and/or a water leak is identified, contact your landlord for repair. • Ensure exhaust fans are working and report issues to the landlord. • Track indoor humidity. • Practice proper indoor housekeeping. • Use dehumidifiers.