



Minimizing Mould Growth in Cold Rooms

Why does mould growth occur in Cold Rooms?

Mould spores are naturally occurring and are found outdoors and indoors. Mould need 3 conditions to grow: a moisture source, the right temperature range and an appropriate food source. Cold rooms often have high humidity conditions coupled with lower temperatures (condensation).

Signs of Mould Growth

Look for signs of water damage (e.g. water stains, peeling paint) and of high humidity (e.g. condensation on surfaces, rusty cans). Mould often appears as small dark (brown or black) spots in the early stages but some types of mould are white in colour.



Water stains / mould growth in a notebook



Mould growth on a tray



Mould growth on a sample box



Mould growth on wood



Preventing Mould Growth

- Maintain relative humidity to < 50% if possible. Turn OFF any unnecessary humidification. Consider installing a fan to increase air circulation in the interior.
- Remove any unnecessary sources of water (e.g. containers of water that are not used anymore). Clean up all spills promptly.
- Report any leaks, water intrusion, etc.
- Ensure that the door is shut tightly to prevent water condensation inside the cold room.
- Access to the cold room should be minimized in summer months (e.g. planning work so as to reduce the number of in/out trips, nominating a single person access where feasible, etc).
- For cold rooms that require more frequent access, consider installing a plastic curtain near the door to reduce air mixing when the door is open.
- Consider using a refrigerator for more frequently used items and restocking it when needed.
- Avoid storing paper, books, cardboard, textiles, or other porous materials inside the cold room. Styrofoam is okay. Store files in plastic bins.
- Avoid items from being in contact with the walls (e.g. leave a 2 cm gap). Avoid storing items directly on the floor.
- If paper (e.g. Kim Wipes) must be stored inside the cold room, place them in a re-sealable plastic container.
- Avoid using wooden furniture (e.g. shelves) in cold rooms. Use non-porous materials with a smooth surface (e.g. metal shelves). Also consider the use of wire shelving to promote air circulation. Mould growth on plastic shelves has been observed at the University. In theory, the plastic shelving units can be scrubbed clean of mould with soap and water but some plastic shelving units have a pitted design which make it difficult to scrub clean.
- Routinely wipe down surfaces (e.g. walls, containers, shelving units, equipment, bench tops, etc.) with soap and water to prevent mould growth. If there is mould present, contact your property manager. Do not try to clean or remove mould contamination unless you have been properly trained by the Office of Environmental Health and Safety (EHS).

If you see mould growth / water issues:

- Report your concerns to your Supervisor.
- Your supervisor (or designate) will then contact the Property Manager.

For urgent water intrusion episodes (e.g. flood, plumbing leaks, backed up sewers, etc.), call 416-978-3000 for immediate assistance.