

## **Building for Mold: Planning Worksheet**

How the walls in homes are built:

Walls in homes serve several purposes, but primarily walls are what give a home structure and what protect us from the weather. When building walls in a home, there are three parts to consider:

1. **Studs and frames** are the vertical and horizontal beams or posts that are attached with screws or nails to the floor and the ceiling and are used to support the walls. Studs can be made out of almost any material, but they're usually wood or metal.
2. **Wall panels** are the big sheets of hard material attached with screws to both sides of the studs like the bread of a sandwich. Wall panels can either run from the floor to the ceiling or piece together like a puzzle. Wall panels can be made out of wood, drywall, plaster, brick, stone, cement or aluminum.
3. **Insulation** is used in the space between wall panels, like peanut butter and jelly inside a sandwich. Insulation helps to keep the temperature inside of a home consistent, and it muffles sound from outside. Insulation can be made out of many materials, including fiberglass (very thin glass fibers), cotton (cellulose), polyester batting (teddy bear stuffing), and wool.

The challenge:

Your job is to use the materials given to you and your knowledge of molds and wall building materials to design and build two different walls: one wall that you think will be highly mold-susceptible and one wall that you think will be mold resistant. Use the table to describe the materials that you will use for building each wall, and explain why you selected those materials.

<b>Mold-Resistant Materials</b>	
<b>Material I chose for:</b>	<b>Why do you think this will be mold-resistant?</b>
Frames	
Wall Panels	
Insulation	

<b>Mold-Vulnerable Materials</b>	
<b>Material I chose for:</b>	<b>Why do you think this will get moldy?</b>
Frames	
Wall Panels	
Insulation	