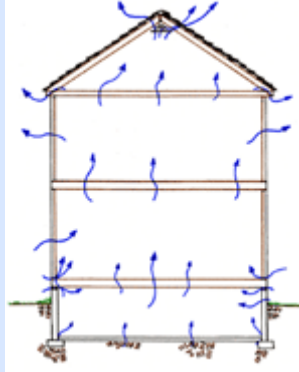


The Stack Effect



Stack Effect

Stack effect is when warm air moves upwards in a house. This happens in summer and winter. Warm air rises because it is more buoyant (lighter) than cold air. As warm air rises it escapes out of the upper levels of our homes creating a vacuum from the lower and cooler ends (downstairs along baseboards, bottom plate, cracks, sockets, windows and framed raise floors). When the more buoyant warmer air escapes higher up from our attic ceiling and walls, new air has to come in to replace this air that escaped. The air that is being "pulled" or "sucked" from below comes through carrying high amounts of vapor from the ground.

Sealing the bottom of your sub-floor with closed cell in combination with creating an unvented conditioned attic will greatly limit the phenomenon of stack effect and therefore increase energy efficiency and comfort.