



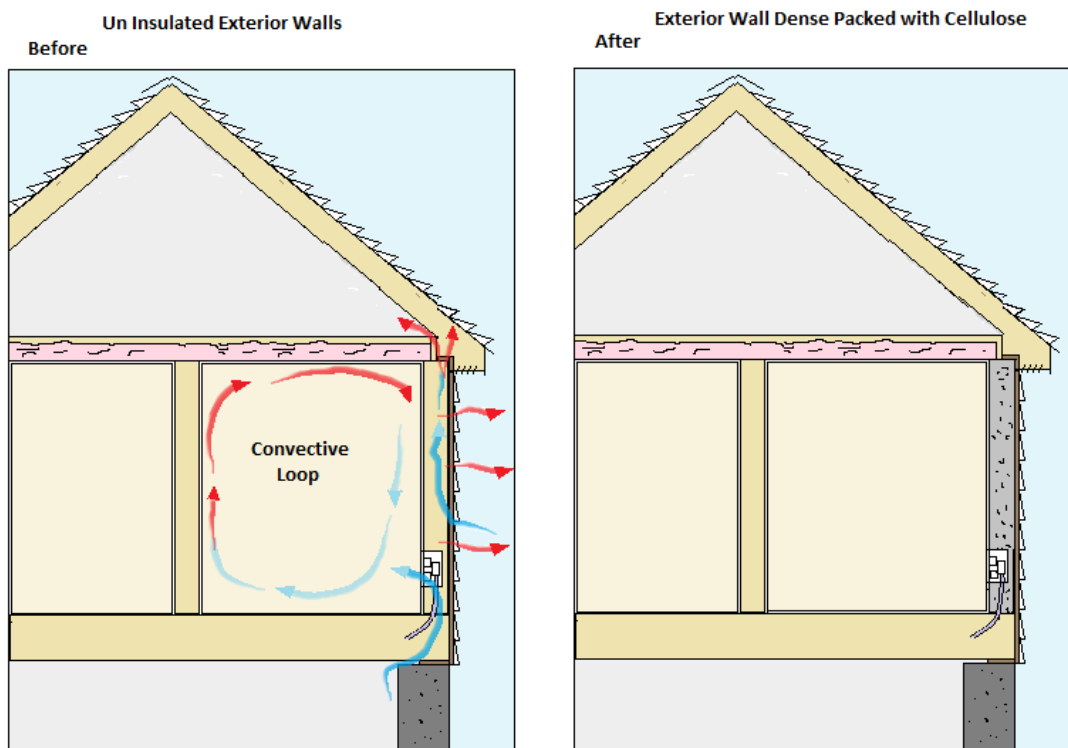
## Exterior Walls

One of the first areas of a home that are noticeably poorly insulated or completely un insulated are the exterior walls. If the exterior walls of a home are not properly insulated the living spaces will be uncomfortable in both the winter and the summer. The conditioned air of the home leaks out of the un insulated walls which forces the HVAC equipment to run more frequently to keep the home at the desired temperature.

Un insulated exterior walls are cold to the touch in the winter. Hot air produced by a home's HVAC system forms a convective loop as seen in this diagram. The cold air comes into the home through the un insulated exterior walls, travels across the floor since cold air sinks and gradually heats up and rises to the ceiling along the warmer interior walls and travels back to the exterior walls. This cycle continues and causes drafts for the living spaces.

### Dense Packed Cellulose Insulation - Retro Fit Home

There are a couple approaches to this problem depending on the situation. If a home's exterior walls are closed, as in the case of most retro fit scenarios, then we would dense pack cellulose insulation into the exterior walls. We do this by removing a portion of the siding, drilling a hole in each wall cavity, and pumping the cellulose in until each cavity is completely packed with cellulose. We plug each hole with a wooden plug and seal it with hand held foam. We then re install the siding that was removed. We can do this same procedure from within the home if necessary. When we do this from inside the home we plug the hole with a wooden plug and apply a coating of spackle.



**Closed Cell Spray Foam, Open Cell Spray Foam,  
Wet Spray Cellulose - Open Walls or New  
Construction**

The other situation that we find for exterior walls is when the walls are open from the inside. When there is no sheet rock installed and the 2x4 framing is exposed. In this scenario we can install closed cell spray foam, open cell spray foam, or wet spray cellulose as seen in these pictures.

