

Changing the way we build means changing the way we live.

By building green, we can:

reduce CO<sub>2</sub> emissions in the atmosphere while lowering our energy bills.

divert vast quantities of lumber from landfills and reduce construction waste.

lessen the over-production of lumber and needless deforestation.

decrease the demand for mined materials such as copper and lead.

eliminate chemicals in the air we breathe inside and outside our homes.

lower the amount of traffic on our roads and improve the air quality in our cities.

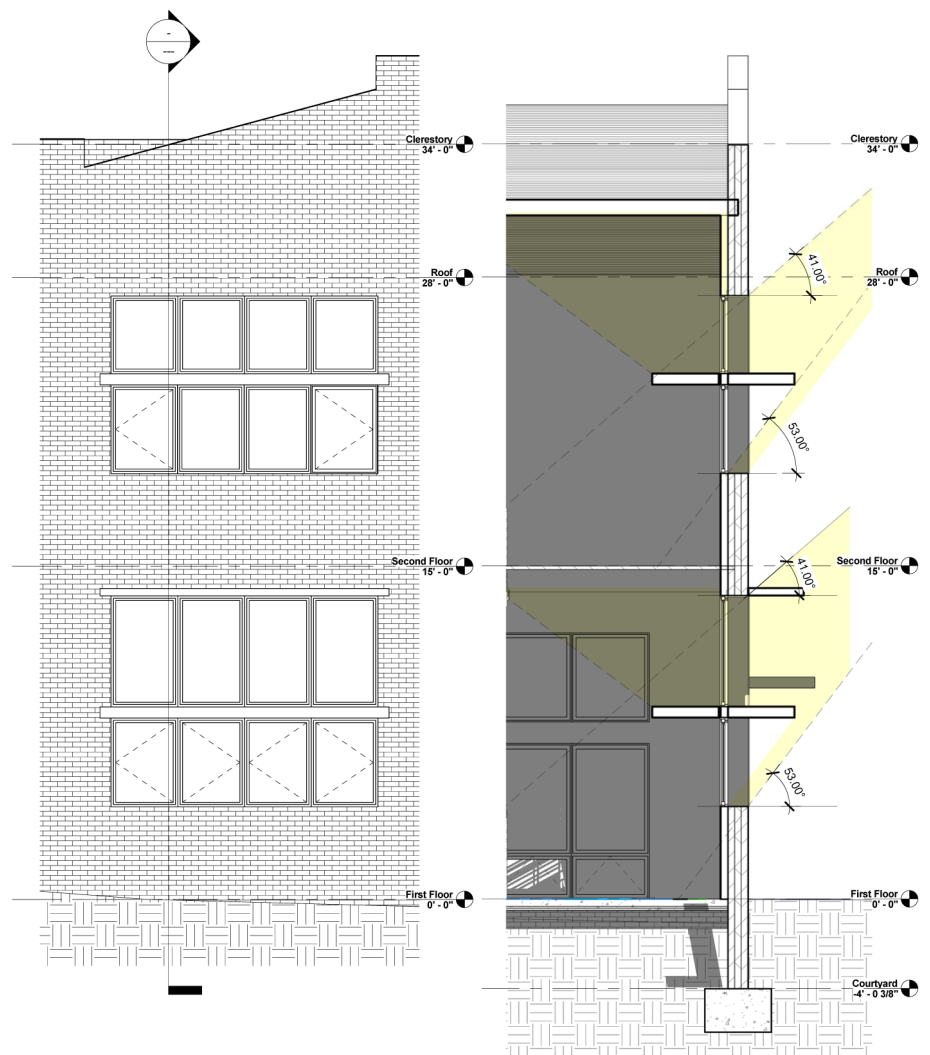
improve our homes and communities, our city and the legacy we leave future generations.

Visit [collierbuild.com](http://collierbuild.com) to find more resources on green building.

# (re)source

Green construction, healthy homes, stronger communities, a better environment

A healthy and sustainable built-environment makes a better shared-environment. And green construction helps build stronger communities with a smaller environmental footprint. That's why Collier Construction is committed to being a resource on green building.



# know the difference.

You want to know what makes green homes different, and we want to tell you. For starters, we thought you would appreciate a brief description of a few building techniques that make a home sustainable.

## resource management

From the planning stage to finish carpentry, sustainable resource management means rethinking the way we select, use and recycle building materials. We select materials that are manufactured with a lesser environmental impact, order only what is needed, and re-purpose extra materials. And renewable resources such as bamboo allow us to build homes without depleting our natural habitats, while low VOC materials prevent unhealthy in-home air.



## advanced framing

In wood framed houses, lumber serves as a thermal bridge by which heat is transferred from one side of the wall to the other, worsening a home's energy consumption. Using advanced framing, we decrease the total square footage of lumber in a wall by 54%. In place of the unnecessary lumber we use insulation, strengthening the wall's thermal capacity.

## the insulated crawl space and attic

When hot humid air meets cool 72° lumber, condensation causes mold, mildew, bugs and rot. We seal, insulate and condition the crawl space and attic space, which controls temperatures and prevents condensation. A healthy home needs dry spaces, so we move temperature differential to the exterior of the home where condensation can't do any damage.

## the sealed air barrier

The movement of air through walls is bad; it causes condensation and energy loss. A sealed air barrier is a framing technique that means we have glued a home's sheathing to its framing which stops airflow. Preventing air infiltration is a change in procedure, not in products. Once it is understood, it takes no additional time or money to implement.

## the rain screen siding system

Once we've done everything we can to prevent airflow, energy loss and condensation, we use a rain screen siding system that prevents even small amounts of moisture from reeking a lot of havoc. Siding can repel a lot of rain, but not all, which is why we create an escape for moisture. That is, between its framing and exterior, we wrap the home in high-density polyethylene sheathing and create a passageway that allows water to dry or exit from behind the siding.