

Living green: What worked for me

Build a home with a smaller footprint

By Jason Wolfe, 29, Indianapolis, graduate architect, Demerly Architects

In designing a house, one of the biggest things we wanted to achieve was keeping it small, which means you use fewer materials, you have a smaller space to heat and cool and less house to maintain.

I designed the home with my partner, Veronica Vela, who is also a graduate architect. We both are graduates of Ball State University's College of Architecture and Planning.

We wanted to build as nice of a house as we could within our modest budget. In 2007, we bought an empty lot in the 1600 block of Cornell Avenue on the Near Northside. We picked the lot specifically because it was next to the Monon Trail, so I could bike to my office in Broad Ripple and she could get Downtown easily.



Jason Wolfe

We designed a two-story home, with 700 square feet on each floor, and a basement. We also built a detached, two-car garage with a second floor, which we can convert to a work studio. On the second floor, a studio space next to the master bedroom is designed to easily convert into a second bedroom, if needed.

We chose to orient the house along the east-west axis, allowing us to bring as much southern light deep into the house as possible. We also chose to locate the house along the lot's north edge, so that our neighbor to the south doesn't block our natural daylight.

Because our home is in an industrial section of town, we chose to use silver galvanized metal siding from MBCI (Metal Roofing and Wall Systems), a local company, for the primary siding and roofing.

This material is very common on industrial buildings, so we felt that it was fitting for the location. It is also fairly low in cost, extremely durable and easily replaceable, has a 25-year warranty and can be recycled at the end of its life.

For the front and back of the home, we chose stained black cedar siding, a natural material that weathers well.

It's a contemporary-style house with a pitched gable roof and a small porch. The silhouette is very much like the houses on this block.

We eliminated outside trim around the windows and paired large picture windows with operable,

Couple's design focused on size, scale and how the home fit into the neighborhood



Architects Jason Wolfe and Veronica Vela designed their home on Cornell Avenue to include many "green" elements.

Photo provided by Jason Wolfe

smaller ones. We placed windows on opposite sides of rooms to get better air flow and installed two ceiling fans. Both steps enable us to use less energy. Two skylights upstairs make the studio more light-filled and allow us to keep the lights off until sundown.

We also used high-efficiency heating and cooling equipment. It's a little more expensive, but over the life cycle of the product, the equipment will pay for itself quickly in reduced energy bills. We also chose appliances that are Energy Star-rated.

The blown-in cellulose insulation in the walls, made with some recycled materials, provides more consistent insulation than traditional insulation. For lighting, we used compact fluorescent lights throughout the home and track lighting on the first floor to provide flexibility.

In the kitchen, we used stainless-steel countertops that last for a long time and can be recycled. Throughout most of the house, we have bamboo flooring that's quite durable, cost-effective and helps keep the space bright. It's a highly renewable resource since it grows back quickly.

While we don't consider ourselves to be on the extreme side of the sustainability movement, we felt a responsibility to make those choices in the design that could make the biggest difference in the long term.

What's inside the house

- ✓ Ceiling fans for better air flow
- ✓ Upstairs skylights for natural light
- ✓ Efficient heating and cooling systems
- ✓ Recycled materials for insulation
- ✓ Compact fluorescent lighting
- ✓ Energy Star appliances
- ✓ Bamboo flooring

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