

Building healthier interiors at the Rose

By: [Celle Owens](#) July 17, 2015 3:07 pm

With the health of future residents in mind, the interiors of Aeon's the Rose project in Minneapolis will be outfitted with affordable and durable nontoxic finishes, providing a national case study for healthy building materials.

When it opens to residents later this year, the 90-unit affordable housing complex under construction at Franklin and Portland avenues will be one of the greenest buildings in the Twin Cities as part of the [Living Building Challenge](#) program. But beyond major energy, water and sewer systems, the nonprofit is taking a health-focused approach to interior materials and finishes.

In partnership with the newly-formed [Healthy Materials Lab](#) at the Parsons: The New School of Design in New York and the Living Building Challenge, they'll share product information, best practices and health outcomes in an effort to move the market toward nontoxic materials.

Many traditional building materials like vinyl flooring, wall paint, drywall — especially those that are cost-effective and used in affordable housing projects — are laden with toxic chemicals, said Alison Mears, director of the Healthy Materials Lab. Most people assume products are safe and they don't think to ask.

"When you get on the plane to go somewhere, you don't assume that you have to check out the plane before you take off. You assume somebody has done that ... and that you don't have to get underneath the plane checking that everything is in order," Mears said.

That's not the case with building products, she said. The market is murky at best, though some manufacturers have started to transparently share product contents through the [Health Product Declaration](#) initiative.

Finding healthy materials proved challenging for Aeon, said Gina Ciganik, the nonprofit's vice president of housing development.

In some cases, there was simply no healthier alternative. In others, the alternative that was available was prohibitively expensive or not durable enough for rental housing, she said. The developer aimed for products that are cost-neutral, durable and aesthetically pleasing.

Durability in healthy products is a major challenge, said Jonsara Ruth, with the Parsons Design Lab. Many of the products that exist today like lime paints and mineral-based plasters for wall coverings are too delicate and would be impractical in a place like the Rose, with lots of kids and rental turnover.

Aeon was careful to test products — like scratching up different flooring products with keys to see how they hold up, Ciganik said. They went with toxin-free ground limestone flooring with a soy-based binder to replace typical vinyl tile. Granite kitchen countertops from Cold Spring, Minnesota, are naturally toxin-free and durable. The interior paint from Sherwin Williams is currently best in class with zero volatile organic compounds.

The market for healthy building alternatives has already expanded since Aeon started construction last year, she said.

"There were some products that weren't available in a healthy option or we couldn't afford them, and even during the construction period new products came online and we were able to change out," she said.

Both leading manufacturers and small innovators are helping to expand the healthy building products movement, Mears said. Many major players want to see themselves as at the "forefront of change," which is encouraging.

"They don't want to be left behind and they know that people are demanding other products," she said.

As an innovator, Ciganik said Aeon has probably paid a "pioneering premium," but finding healthy materials should



Gina Ciganik, of Aeon, highlights the limestone flooring product in the Rose, an affordable housing complex at the corner of Franklin and Portland avenues in Minneapolis. The natural product is free of toxins.

As an innovator, Ciganik said Aeon has probably paid a pioneering premium, but finding healthy materials should be easier for the next affordable housing developer.

Switching to healthier building alternatives has benefits throughout the supply chain — including employees at manufacturers, workers on the job site and eventual building occupants. In many cases, people with little means living in buildings with toxic chemicals are working in different service sectors where they are also exposed to chemicals, Ciganik said.

“If they are both the ones working all day in plants with this toxicity and coming home and living in buildings with this toxicity — it’s sort of a double-whammy for the low-income community,” she said.

While many of the products are installed or applied similarly to their less healthy counterparts, there’s a learning curve for contractors.

When they run out of something at the Rose, Ciganik said workers can’t just run to the nearest store and pick up more product. They have to wait until they have the specialized materials. One contractor told her that it’s also harder to tell what’s left on the punch list when they walk into a room because they can’t smell the signature chemicals.

Residents will need to be more aware of their environment, too, when they start moving in this fall.

Aeon plans to do resident outreach and education to help them become healthy product leaders in their homes, Ciganik said. Bringing in furniture treated with flame retardants, burning petroleum-based candles and reheating food in plastic containers could offset the healthy environment created.

While construction is nearing completion, it’s still only the beginning of the work to see what’s replicable and the overall impact of the environment created.

Once the residents move in, the Healthy Materials Lab researchers will be tracking health outcomes and comparing the Rose to other new affordable housing projects to see if residents are indeed healthier.

“We don’t really know if this project has been successful until about a year afterwards when you can see what the health of the inhabitants is,” Ruth said.

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