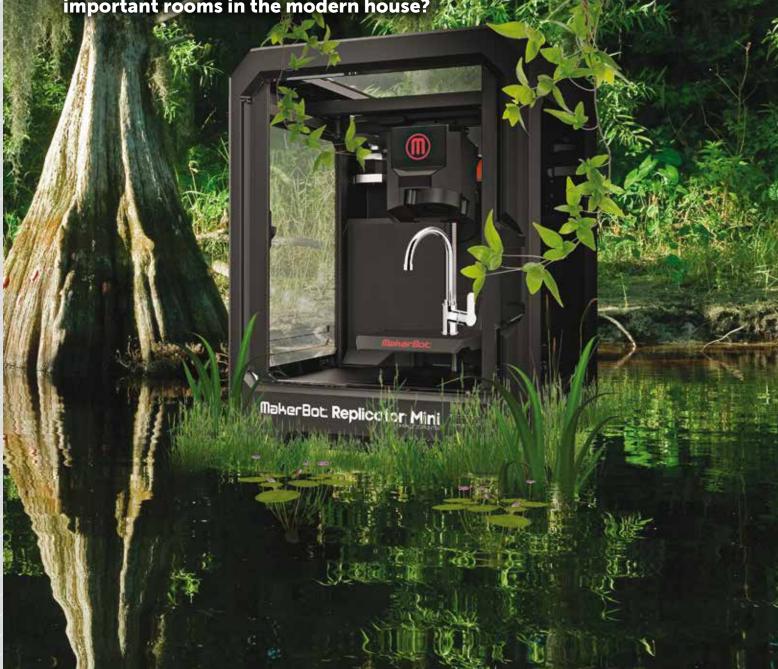


GreenBuilder

KITCHENS AND BATHS EVOLVE

New products, new design concepts and changing expectations are transforming these pivotal living spaces. Throw in 3-D printing, and almost anything goes. Are you ready to rethink the most important rooms in the modern house?





Truly green kitchens and baths include design elements that will stand the test of time.

These projects should age in place along with their owners, while at the same time optimizing energy use and water efficiency.

BY SUCHI RUDRA

OW DO YOU achieve both sustainability and design that can weather ever-changing trends in a kitchen or bathroom? It's not easy, and it also depends on whether you're designing a remodel or a new construction project.

Not surprisingly, water consumption is a major factor to consider when it comes to kitchen and bath design. On average, about 70 percent of a family's water use—about 280 gallons of water—happens indoors; 21 percent of that is just from doing laundry. The bathroom consumes the most amount of water, with the toilet using as much as 27 percent, according to the EPA. Just the faucets in the bath and kitchen can issue 11 gallons of water per person each day.

That means the type of shower heads, faucets, toilets, washers and dishwashers that are installed have a big impact on the home's water consumption (and utility bill), so if you're recommending bang-for-your-buck upgrades, this is a good place to start—that, and replacing older energy-hogging appliances with new, efficient ones.

DESIGN DRIVERS

But as designers across the country have observed, the jury is still out on eco-friendly kitchen and bath design that may require a higher upfront investment. For example, California is currently leading the way in water conservation, but that is a campaign driven more by building codes than consumer demand, according to Therese DuBravac, a Portland, Oregon-based design consultant at Neil Kelly Design.

"People are money conscious. There is a growing awareness, though, and people are seeing that a bigger house with continued on next page

Slimming Down. This kitchen features a 24" counter-depth Glass Door Refrigerator from Bosch. The company is releasing a full line of 24" appliances this year, reflecting the growing demand for flexibility and trend toward downsizing.

LED lights instead. If the client wants a countertop from another country, I don't like to do that, but then we get FSC-certified lumber for the cabinets," she explains.

Still, for Gaylor, it's not just about LED lights or no-VOC paint—it's about minimizing landfill waste. "I'm trying to find a place for whatever is being ripped out. Don't try to get rid of it—the whole point is to try to the keep the product viable, to find a second life for it or recycle it into something else."

If there's anything at all from the bathroom or kitchen that's salvageable, Gaylor will list it on Freecycle or Craigslist or take it to Habitat for Humanity. Certain companies like GE have a program to recycle old appliances, including fridges, and some ceramic tiles that have been demo'd can be recycled with programs like Tile Take Back from Crossville Tile, a company that will recycle previously installed tile, even if it's not their product.



Savvy Substitute. This Daltile floor tile, made in the U.S., was digitally printed to look like stone, but for a fraction of the price.



More or Less. The *Aquia* one-piece toilet from TOTO gives users the option of choosing 0.9 or 1.6 gallons of water per flush.

The Scoop on Surrounds

NTERIOR DESIGNER PATRICIA GAYLOR prefers tiled-in shower surrounds over other choices, such as acrylic panels. Though quick to install, acrylic panel surrounds will off-gas, are easily scratched and usually end up in the landfill.

Using a top-quality backer board that resists moisture and mold under ceramic or porcelain tile will last indefinitely, if properly installed. Large-format tiles can reduce the number of grout lines--and hence, maintenance. Homeowners can also use no-VOC adhesives, grouts and grout sealers to enhance indoor air quality. And of course, adequate ventilation can prevent the conditions that breed mold.

Although free-standing tubs are more requested now by homeowners, according to the 2015 NKBA survey, they aren't necessarily the go-to choice for designers, says Gaylor. Although the small size of clawfoot tubs means there is less water wastage, the heavy weight (often cast-iron) requires a strong floor to hold a full tub, not to mention less flexibility in spatial arrangement of the bathroom.

On the other hand, these tubs are likely to enjoy a long installed life, and can be refurbished and reused in another bath or home.



Updated Classic. The *Melinda Tub* from MTI Baths offers a modern interpretation of the classic clawfoot.

A Modern Colonial Kitchen

The kitchen in this energy-efficient new home combines style with water-saving fixtures, energy-efficient lighting and appliances and beautiful, natural materials.

PHOTOS BY PETER KRUPENYE

N THE SMALL TOWN of Old Greenwich, Conn., Chris Murphy, co-founder and president of Murphy Brothers Contracting, and his wife Diane decided to construct their own home to create an extremely energy-efficient and comfortable space. Because of lot size restrictions and the importance the couple placed on the kitchen as a gathering spot for family and friends, the Murphys

opted for an open kitchen plan in their classic Colonial-style home.

When choosing elements, Diane Murphy, who headed up the interior design of her home, says she "still wanted to love it in 15 years, so there are a few modern contemporary flairs to it, but not something too trendy. It's something you could accessorize with paint, found objects or window treatments if you want to do that."

The kitchen includes white, Shaker-style cabinets, a crisp marble continued on page 20



Style and Performance. White is the theme for this coastal Colonial kitchen. Insulated low-E windows and doors from Marvin helped replicate the classic style while providing the required energy efficiency.