



**Fu-Tung Cheng** arrived on the scene three decades ago, first garnering attention for his innovative kitchen designs, replete with organic textures and artisanal touches, and then commanding a bigger stage: entire houses making

expressive use of cast concrete. Over the years, the founder of Cheng Design and Construction has conceived products for manufacturers such as Elkay and Zephyr Ventilation and launched his own specialty architectural-concrete line—including ShapeCrete, a sculptable, just-add-water mix targeted to designers and DIYers alike. The Berkeley-based California native spoke with *Interior Design* about his body of work and his highly experimental process.

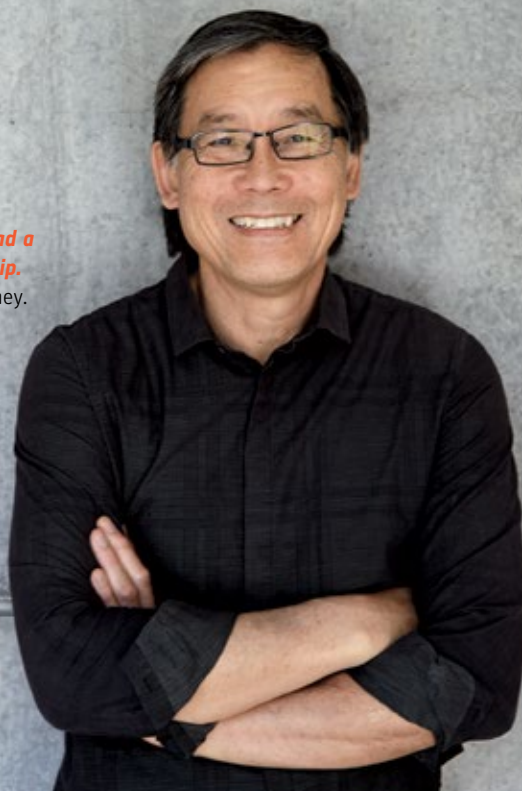
## a concrete idea

Designer Fu-Tung Cheng brings an ancient material into the digital age

**Let's start with concrete, a material with which you've had a very long and deep relationship.**

Concrete has taken me on a journey. It started with a very modest form—countertops with a sculptural quality—that gradually morphed into entire houses that carry the same expression. So I've scaled up the work, from crafting *things* to crafting *houses*. ➤

**From top:** Cheng test drives the meditation pavilion of a home he designed in Los Altos Hills, California. The Berkeley-based talent.





## CROSSlines

### Those countertops remain one of your signatures.

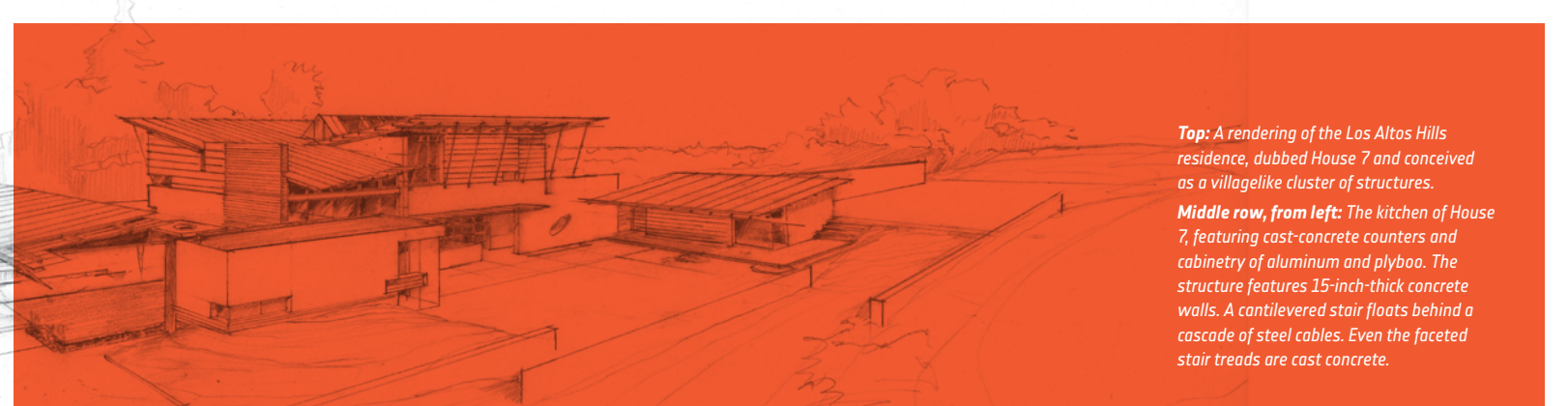
People first got to know me through kitchen design. It was a focus of my early career, but at the time I was desperate to move beyond just designing kitchens. Luckily, clients saw my potential and gave me the opportunity to design entire houses.

### Did you train as an architect?

No, in fine art, actually: I studied painting, printmaking, photography, and sculpture. I have two architects on staff, and I also work closely with consulting structural engineers. But I do all my design work by hand—I'm old school!—before it goes into CAD.

### All your houses employ cast concrete. What is so unique about the material?

It has a lot of expressive potential courtesy of its fluidity and its ability to conform to any shape, and to harden and become practical. What I love about working with concrete, with molds, is the tactility. The texture of the concrete makes a difference in how a space "feels." The concrete you find in, say, a parking garage is usually poured against plywood, so it's flat and doesn't have much life to it. For my House 6 in Menlo Park, we used hyper-smooth, glossy forms to pour the walls, so the result is like polished stone. It invites your touch.



**Top:** A rendering of the Los Altos Hills residence, dubbed House 7 and conceived as a villagelike cluster of structures.

**Middle row, from left:** The kitchen of House 7, featuring cast-concrete counters and cabinetry of aluminum and plyboo. The structure features 15-inch-thick concrete walls. A cantilevered stair floats behind a cascade of steel cables. Even the faceted stair treads are cast concrete.



MATTHEW MILLMAN

CLOCKWISE FROM TOP: FU-TUNG CHENG; MATTHEW MILLMAN; RICHARD BARNES; MATTHEW MILLMAN (3)

### Why do you think people respond to concrete so strongly?

People relate to things that have mass, or are solid—especially in this day and age, when everything is comprised of components. When a structure is cast in concrete you sense its solidity, whereas most buildings these days are constructed of steel and then clad with marble or Sheetrock. Walking into a cast-concrete house feels like walking into a castle. We respond instinctually—it's like a cave.

### Sounds almost primordial.

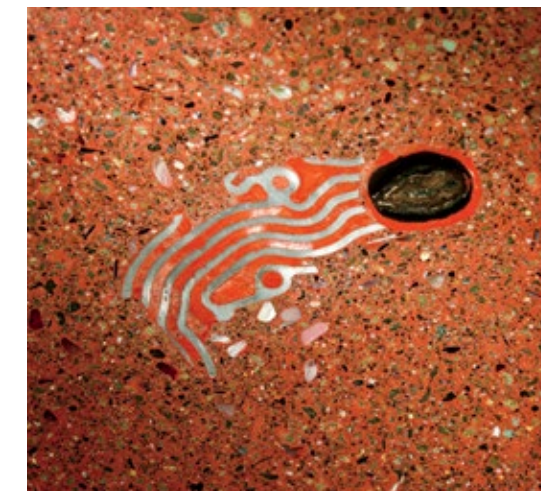
Yes. Yet you can push it in a modern direction. Although I happen to be

more on the analog side of things, I appreciate the technological innovations taking place. High-performance concrete can achieve new levels of strength and, when combined with carbon fiber, its potential stretched even further so you can do more outrageous things with it. I'm also seeing more CNC-routed and 3-D printed forms used to pour concrete.

### A digital revolution for an ancient material! Which is the opposite of your products for the DIY market. Can you talk about ShapeCrete?

ShapeCrete makes creating anything—from a small countertop to a piece of

**Bottom row, from left:** House 7 is capped with a pleated butterfly roof that channels rainwater runoff to a series of water elements. In another project, a concrete countertop is embedded with minerals and a repurposed automatic transmission valve. A 22-foot-long cast-in-place concrete water element brings a Zen touch to a California residence that Cheng remodeled.





## Crosslines

**Clockwise from top:** The rear of House 6, in Menlo Park, California, opens onto courtyard and pool; the blue strata in the concrete facade was created by layering in pigment slurry while the concrete was being poured. A house under construction in Atherton, California, will include a meditation/ yoga room and a cylindrical sauna. A kitchen island inlaid with petrified coral and chrysoprase jade. Cheng designed the Okeanito kitchen hood for Zephyr Ventilation. The exterior of House 6 exhibits a play of textures.



the beauty of wear rather than try to maintain the original look. They're like a time-lapse, constantly changing. I often bury an item in the wall, sometimes a metal sculpture, which then takes 8 to 12 years to start emerging. The first house I designed, it was bowling trophies bought at Goodwill. When the concrete started to erode and the trophies became visible, my clients' kids began chipping away at the wall to get them!

### **Those details are emblematic of your artistic approach.**

Courtesy of my experimental process, and having been trained as a painter, I can't always pin down all the costs at the outset of a project for my clients. We kick the can down the road and see how the project evolves. I freely admit that it's not a perfect process. But it's my process. —Stephen Treffinger

furniture—doable. Mix it in a bucket and pour it into a \$5 Ikea lampshade, and suddenly you have a concrete lampshade...or a beautiful umbrella stand! ShapeCrete puts the material in the hands of anybody who wants to have a little fun and experiment.

### **Something you know a lot about. Can you explain your erosion walls, a feature that you've incorporated into the facade of a few houses?**

By mixing in extra sand when the concrete is poured, the material holds its shape but strategically degrades in certain places. The point is to show

