

The fireplace is often one of the most visible design elements in a room, serving as both a focal point and a reflection of the owner's personal style. The elements framing the fireplace—the mantel, hearth and surround—do the most to transform a room's appearance and establish a mood. With the right surround, a fireplace becomes the heart and soul of a room and embodies its character.

Combining the qualities of fire resistance, heat retention and moldability, concrete is fast becoming the material of choice for fireplace surrounds, replacing more traditional alternatives such as brick, stone and marble. No other material offers as much opportunity for self-expression as concrete. Using special coloring, texturing and casting techniques, concrete artisans are able to replicate almost any look imaginable, from ornate to contemporary to extraordinary.

"The advantage of concrete is that complex details are not complex at all

because concrete is a liquid product," say Tommy Cook and Steve Silberman of Absolute ConcreteWorks, Poulsbo, Wash., a company specializing in architectural precast concrete.

As exhibited here, concrete fireplace surrounds can take many forms. Units can be as simple as a mantel or as elaborate as a full floor-to-ceiling wall complete with a mantel, hearth and other architectural features. They can have a rustic stone-like look and feel or they can be as smooth and elegant as fine marble. They can have clean lines and sharp angles or incorporate curves and intricately cut designs. Concrete can also be combined with other materials such as wood, tile or metal to produce dramatic contrasts in texture and shape.

#### **Anything Is Possible**

Thanks to the versatility of concrete, many concrete artisans have come up with innovative ways to bring each client's aesthetic vision to life.

Using precast concrete and custom-mixed integral pigments, Brandon Cohen of Pourfolio Custom Concrete, San Diego, created an ultracontemporary surround for the family room of a home in Rancho Bernardo, Calif., shown above.

Pourfolio lead designer Zachary Alan collaborated with the homeowners and their interior designer to examine the space for the fireplace and come up with ideas. They settled on an asymmetrical vin-yang effect combining a custom hearth and mantel of different colors and dimensions and textured side panels. The entire assembly is supported on the wall, so it appears to be floating above the floor. The colors—dark gray for the hearth and side panels and red for the mantel—were replicated from paint swatches. The red was custom matched exactly to the color of the home's front door.

A concrete fireplace can also convey a distinctive theme and even incorporate elements from its surroundings. Recently, Absolute ConcreteWorks completed a 14-foot-tall nature-themed fireplace surround with a design inspired by foliage and other elements found on the owner's property. "In the rafters of the room where the fireplace is located, there was an abandoned bird's nest, which we preserved by clear coating it," say Cook and Silberman. "We took a tree branch off the property and incorporated it into the face of the concrete at the top of the fireplace surround. Then we placed the nest in the branch."

Buddy Rhodes of Buddy Rhodes Studio, San Francisco, sometimes builds fireplace surrounds using custom precast concrete tiles, sized and colored to the customer's specifications. By stacking the tiles and securing them to the wall, he can create an impressive surround that extends from floor to ceiling. Rhodes also specializes in a signature "pressed" finish that incorporates one or more infill colors to give pieces a veined, marble-like appearance. One of his more unusual projects was a two-sided fireplace, shown on this page. "We used the same firebox, and did one surround in the dining room on one side and another surround in the living room on the other side," he says.

Not all concrete fireplace surrounds are precast. Wayne Sellon of Tajmawall, Temecula, Calif., specializes in rustic carved and textured concrete surrounds and walls that mimic natural stone. He uses a proprietary polymer concrete mixture, which he hand applies with a trowel and then stamps for texture. After the concrete sets, he hand carves the rock features and then applies stain to achieve natural color variations.



"We don't use a stamp to create the stones," says Sellon. "Stamps are hard to work with and the pattern looks repetitious. My customers like the idea that they are getting something that's one of a kind." Sellon does, however, use wood-patterned stamps to create authentic replications of wood mantels for some of his fireplace creations.

#### **Design Considerations**

While virtually any fireplace style is achievable with concrete, it's important that the finished product not only

satisfies the client's aesthetic vision but also is in scale with the size of the room and harmonizes with its surroundings. Without careful forethought and attention to good design principles, you risk creating a piece that's overwhelming and outlandish.

"The important thing to remember about design is to scale the fireplace to the room. It's best to design at the jobsite, using cardboard cutouts to help give the idea of shape. Clients like to see what the mantel will look like at different sizes and widths. Also, the

## **FIREPLACE DOS AND DON'TS**

If this article inspires you to venture into the business of making decorative concrete fireplaces, heed these words of wisdom from the veteran fireplace contractors we talked to:

- Never build the firebox. Have customers pick out their firebox insert and build the surround around it.
- Don't send customers away if they come in without a clear idea of what they want. Inspire them with a portfolio of design options, and work with them

to create a unique piece.

- Always make a mock-up of the fireplace design and create shop drawings. You don't need to use complicated computer software. For example, Rhodes uses graph paper and a scale ruler.
- Research your concrete mix, and know what you can (or can't) achieve with it. This will give you more confidence when you're pouring and ensure greater consistency in the final product.
- Make sure your mold is wellmade, watertight and can handle the pressure of the wet concrete. The better the mold, the less touchup work the cast piece will need once it's out of the mold.
- Plan ahead. How are you going to install the fireplace elements—will you be screwing them to the wall, using construction adhesive (for lightweight pieces), or both? How are you going to get the pieces from your truck through the homeowner's

front door? If you plan the preliminary steps right, installation day should be problem-free.

- Work closely with a framing contractor to figure out the best way to securely attach or support the surround, especially when installing heavier pieces.
- Practice makes perfect. Don't expect to become an expert after taking a weekend course in concrete fireplace construction. There are many small details to worry about.



architecture of the building will push you in a certain direction," says Rhodes.

Cohen recommends asking clients how they plan to use their fireplace: "Will it be in a family room? Do they want a mantel to hang stockings on? Do they want to sit on a hearth, or would they rather have a piece flush with the floor?" He also asks clients if there are other elements they want to integrate, such as a box for storing firewood.

Although many clients (or their architects) will have very specific ideas for the design of their fireplace, some will need assistance choosing a style that reflects their tastes. "I show them our portfolio, which has tons of ideas," says Silberman. "I inspire them with options, and then encourage them to go back home, look online at The Concrete Network photo gallery, or search for 'concrete fireplaces' on the Internet, and then pick four to eight designs they like or that have elements they like."

Silberman tells clients to bring in pictures of what they do and don't like. "Some customers don't want the look of granite, but they like the look of limestone. That helps give direction to the design," he says. It's also important to work within a client's budget, he adds. "What we build is totally custom;

we can adjust when we're evaluating the elements in the design. We may tell a customer 'with this scrollwork, it's going to cost more money.' We can eliminate the scrolls or turn a curve into a straight line, and if the design is still acceptable, then the cost will be lower. It's a question of how much the customer is willing to give up."

#### **Color Options**

The color palette for concrete fireplaces is unlimited. Using integral pigments or topically applied stains, contractors can custom blend colors to match or complement other design elements in the room, such as a rug, prominent work of art, cherished piece of furniture, or window treatments.

Despite the infinite options, the most popular colors tend to be light, neutral tones such as sandstone, white or beige. "We often use a color called universal—a universally light-beige khaki color. Black is also really popular," says Rhodes.

For the customers of Absolute ConcreteWorks, white and off-white are in-vogue. "People are going for the marble-look," says Cook, as illustrated by the photo on this page.

Cohen sees interest in both extremes of the color spectrum. "A lot

of homeowners are trying to match travertine in their tile floors. Many choose a light color to keep the room bright. Others want to make a statement with a bold color like burgundy or red."

## **Creating the Molds**

Perhaps the most important and complex aspect of fabricating a custom concrete fireplace is building the mold, an undertaking often requiring the skill of an artist as well as expertise in mold making.

"Most of our molds are built with regular wood and particle board, and it technically takes a good finish carpenter to build a good mold. The better the

woodworking skills, the better the mold will be," say Cook and Silberman.

Rhodes likes to use Melamine as a mold material. "It produces straight lines so we get a smooth, crisp edge," he says. For curved features, he makes plaster molds.

Cohen stresses that molds should be watertight and able to handle the pressure of the wet concrete. He uses laminated particle board because it's impermeable. "We prefer to pour everything face down," he explains. "That way we can get the smoothest surface, and don't have to rely on hand troweling [to fill voids]."

#### **Lightweight Mixes Simplify Installation**

In most cases, the components of the fireplace surround are precast in the shop and trucked to the installation site. Because the cast pieces can be heavy and cumbersome, and may require direct mounting to a wall, contractors often use lightweight concrete mixes, such as glass-fiber-reinforced concrete (GFRC), to reduce the weight and make the pieces easier to install and transport.

"GFRC is the absolute right choice for building concrete fireplaces. The biggest advantage is weight," says Cook. "[Before using GFRC], we used to build mantels that ended up weighing 600 to 800 pounds and would take six to seven guys and some special equipment to lift."

The GFRC mix used by Absolute ConcreteWorks is comprised of cement and silica sand and uses glass fibers in place of aggregate. It also contains a polymer additive for strength. The material produces a product that's only about a third of the weight of conventional precast concrete (200 pounds vs. 600 pounds), permitting the surround to be cast in larger and fewer pieces.

"The GFRC fireplaces we build are hollow on the inside, which contributes to the lower weight," notes Cook. "If using regular concrete methods, we would have to pour solid to get the strength, which makes the fireplace weigh more."

# DEMAND HEATS UP FOR DECORATIVE FIREPLACES

According to a recent consumer survey conducted by the Hearth, Patio & Barbecue Association (www. hpba.org) homeowners consider a fireplace to be a major design feature, with many describing it as an architectural element. In fact, fireplaces are so popular in American homes that half of all households (55 million) have at least one fireplace or freestanding stove.

Fireplaces also rank among the top three features desired by new home buyers, after outdoor porches and upgraded kitchens, according to the National Association of Home Builders (NAHB). This coincides with a recent HPBA survey of 1,700 homeowners nationwide. More than half (59 percent) consider their fireplace to be a major selling feature, and 22 percent of home buyers say an existing fireplace or stove played a significant role in their choice to buy a specific home.

Homeowners are also extending the allure of the fireplace beyond the traditional living room or family room space, installing them in kitchens, bedrooms, bathrooms, and even outdoors. Some are building see-through fireplaces into outdoor walls so they can be enjoyed from both inside and outside the home. Other popular options include portrait-style fireplaces that are built into a wall, corner units, and dramatic freestanding fireplaces. In the kitchen, homeowners are installing fireplaces that can serve multiple functions, such as warming the room while heating an oven above for baking. Regardless of the room style, size or function, a concrete fireplace can be created to enhance any setting.

The high strength-to-weight ratio of GFRC also minimizes damage during handling, such as chipping, cracking or breaking. Another advantage of using GFRC is lower delivery and installation costs. "You don't need a crew of six or seven guys to hoist a mantel. You can use only one or two guys," says Cook.

For some projects, though, particularly those requiring special textural effects or finishes, there may be no substitute for conventional precast concrete. Depending on the size and weight of the cast pieces, special supports may be required for installation. For example, for the wall-mounted red and gray surround produced by Pourfolio, Cohen's crew had to strip the drywall down to the studs, sister in another set of studs next

to the existing studs to reinforce the wall, and then install custom metal support brackets. "We teamed with a local metal worker who came to the site and helped us figure out how to hang it," Cohen says. The hearth and red mantel were designed with open spaces on the backside so each piece could slip over and rest on the metal supports.

# WHERE TO SEE MORE EXAMPLES OF CONCRETE FIREPLACE SURROUNDS:

The Concrete Network Photo Gallery

(www.concretenetwork.com/photo-gallery)

**Absolute ConcreteWorks** 

(www.absoluteconcreteworks.com)

Buddy Rhodes Studio (www.buddyrhodes.com)

Lucioni Arts (www.seattlesecretgarden.com)

Pourfolio Custom Concrete (www.pourfolio.com)

Tajmawall (www.tajmawall.com)



BUDDY RHODES CONCRETE PRODUCTS. PHOTO BY DAVID DUNCAN LIVINGSTON