



Photo courtesy of Blueconcrete.com

Delta Performance Products tested its ICT Reactive Sealing System with oil, mustard and wine. After five hours, the surface was wiped clean, and the company reports there was no visible staining or etching. The ICT system is comprised of Counter Hard densifier and First SealZ sealer.

by Amy Johnson

Think about what happens to a kitchen counter every day. People splash acids on it. They spill things that stain it. They chop and slice on it. They set hot pots and dishes down on it. And they clean and clean and clean it with water and chemicals and green scrub-pads.

"Concrete countertops are countertops that are made out of concrete," says Jeffrey Girard, P.E., president of The Concrete Countertop Institute. "They're not art, they're not sculpture, and they're not merely decorative. They're countertops." Their manufacture and performance must be consistent with the form, function and aesthetics of a countertop.

In many ways a countertop serves in a harsher environment than an outdoor patio,

and yet it is held to a much higher visual standard. "You see a floor from five feet away," says Mike Heidebrink, president of Cheng Concrete. "A counter is viewed from only two feet away, so it must deliver a very fine finished aesthetic."

Concrete is a material well suited for countertops. It is durable, strong, versatile and beautiful. But it is also easily misunderstood by homeowners and, unfortunately, by some contractors too. After all, if you can drive on it, they think, why can't you put a wine glass on it?

Countertops are not driveways, and they're not floors. The concrete mix is different, and the methods for pouring or casting are different.

Equally important but perhaps less

### **Know Your Sealer Types**

Here are brief descriptions of different sealing materials
— and some of the qualifications and circumstances you need
to consider when dealing with products in each category.

#### Penetrating sealers

Penetrating sealers are relatively inexpensive, easy to apply and leave no film to chip or peel. They fall into two categories, according to Jeff Girard: densifiers and repellants. Once a repellent such as silane, siloxane or fluoropolymer is applied, no other topcoat except wax can reliably be used over it, he says. Densifiers such as sodium silicates, potassium silicate and lithium silicates react with the free salt and lime in concrete to create a gel that fills the pores. "They leave no topical film build, so it is easy to get a real nice natural look," says Bob Chatterton of Surface 519, "but they are very dependant on mix design, need enough time to react with the concrete, and generally have poor to medium resistance to acids and oils."

### Acrylics

Acrylics are easy to apply and relatively inexpensive. The bond well and offer some stain resistance. They will not darken the color of the concrete. They are not particularly durable or scratch-resistant, so they are often used as a base for other sealers, including wax or urethane.

### **Epoxies**

Prized for good adhesion and excellent chemical (i.e., stain) resistance, epoxies are also very tough and quick curing. They are optically clear, high-gloss and build to a thick film, so their aesthetics appeal to customers who like the look of a glass surface. Two-part epoxies take some practice and experience to mix and apply to the best effect. Epoxies scratch easily, so they are often topped with a scratch-resistant urethane topcoat, although this combination increases cost and work time.

"Some people really like the thick build (20 to 30 mils) of a clear epoxy," says Doug Bannister, owner of The Stamp Store, based in Oklahoma City. "Epoxies are excellent at popping color.

"Epoxies are (also) self-leveling, so they compensate for flaws and unevenness in the surface. Sometimes color will settle more in low spots, so an uneven surface might have more color variation and interest, while the epoxy coating provides a smooth work surface."

#### **Urethanes**

Polyurethanes are usually more scratch-resistant and applied at a thinner film build, so they look a bit more natural, but they are not as stain-resistant as epoxy, according to Chatterton. Like epoxies, they must be measured and mixed precisely. They are also sensitive to surface preparation and may require priming. Water-based urethanes can be formulated at different gloss levels.

"Urethane won't show scratches, water spots or finger marks if you go with a satin finish," says Ben Ashby of Concrete Solutions. "We topcoat with a water-based urethane for the food preparation surface. Urethanes don't harbor bacteria. They are also easy to repair. If it gets cut you can sand the area and reapply the coating."

For high-volume operations, urethanes that cure by exposure to ultraviolet (UV) light are unrivaled for their near instantaneous curing, according to Bill York. However, the cost of the curing system, starting at \$2,000, keeps them out of reach for many fabricators of kitchen countertops. York adds that a UV lamp comes with strict safety procedures that must be



The epoxy and urethane combination used to seal this countertop gives it the stain protection of epoxy and the abrasion resistance of polyurethane.

learned and followed. Some UV sealer products require a pass of the UV lamp 15 inches above the substrate to cure it, which can expose eyes and skin to extreme physical danger. Other UV-cured sealers allow the light to be used much closer to the surface.

### **Polyaspartics**

These coating materials are relatively new to countertops. They offer adhesion equivalent to epoxy and scratch resistance equivalent to urethane, according to Bannister. They are extremely fast curing, so fabricators need to learn from suppliers how to work with them efficiently. Because of their relatively high price, they are used more often for commercial countertops, where fast turnaround is required. They are difficult, but not impossible, to formulate with less than a high gloss, Bannister says.

### Nanotechnology hybrid

The newest entry on the countertop sealer market is a blend of acrylic and urethane, dubbed "nano" for its extremely small molecule size. These small molecules produce a tighter surface for high resistance to scratches and stains. The material is borne in an alcohol carrier, which emits an odor that dissipates in an hour or two, according to a manufacturer of the stuff.



understood is the difference between sealers used for flatwork and those used on countertops. The right sealer plays a critical role in making a concrete slab, however beautiful, into a functioning kitchen counter.

### What customers want

To keep a kitchen counter functional as well as beautiful, there are certain performance requirements homeowners want from a countertop sealer. "The number one objective for a countertop sealer is food safety," according to Bill York, senior technical advisor for V-Seal Concrete Sealers.

After safety, the most important characteristic for most end users is chemical and stain resistance. Because unsealed concrete is porous, it is vulnerable to etching from acids like lemons or vinegar and stains from wine, even rings left by water glasses. Most customers want a sealer that will protect the concrete from this type of damage.

For home cooks, heat resistance is a significant benefit. They don't want a sealer that will discolor or melt if they set a hot pot on it. Also, a sealer needs to resist abrasion. Abrasion resistance isn't just important for keeping a countertop



The blend of acrylic and urethane used to seal this countertop is formulated with small molecules to produce a surface highly resistant to scratches and stains.

looking good — scratches made by cutting on the counter or dragging rough objects over it dull the finish and create microfractures where bacteria can thrive.

The last requirement on the list is

the most subjective: the finish. Some customers want a high gloss for a modern, space-age look. At the other end, some customers want the counter to look just like concrete, as if there were no sealer on it. Most settle in the middle for a matte or satin finish that avoids the plastic look of a thick, glossy material, but still offers a protective coat between the food and the concrete.

#### What contractors can do

After years of research and product refinement, most countertop experts agree that the single perfect universal sealant remains undiscovered. So, short of perfection, how does a concrete artisan select the right sealer?

The most direct answer is to listen to proven experts, and here's one good reason: often, you're not just applying sealers, you're applying sealer systems. Manufacturers and trainers who have been working with countertops for a long time have a track record of research and continuous improvement of sealer systems. Contractors can benefit from this research by selecting one of these proven systems, usually comprised of two or more materials, and becoming trained to use it rather than trying to develop their own system through trial and error.

Also, if they've been using the same



Epoxies are excellent at popping color. Also, they are self-leveling, so they create a smooth surface for preparing or eating food even if the concrete underneath is not perfectly smooth.

# **CONGRATS!**

CHENG Concrete Honors the 2010 Members' Circle of Distinction Visit **chengconcrete.com/2010circle** for winners' photos.







BEST INTERIOR KITCHEN Eric Boyd, Reaching Quiet Design, Charlotte, NC
BEST BATH Mike Moncrieff, New Edge Design, Lynden, WA
BEST INTEGRAL SINK Nick Relampagos, It's Concrete, Hayward, CA
BEST FIREPLACE Ian Wyndlow, Liquid Stone Studios, Ladysmith, BC

BEST WATER FEATURE Nathan Yates, Poured Concrete Specialists, Plover, WI
BEST DECORATIVE FINISH Jeff Kudrick, J & M Lifestyles, Randolph, NJ
BEST FUNCTIONAL FEATURE Jack Cooper, Jax Custom Surfaces, Carlsbad, CA
BEST SCULPTURE Andrew Kerr, Kerr Concrete Design, Evanston, IL
BEST FURNITURE Jack Cooper, Jax Custom Surfaces, Carlsbad, CA

### HONORABLE MENTION

Dominic Boinich, Counter Balance, Santa Cruz, CA (2) Eric Boyd, Reaching Quiet Design, Charlotte, NC Brian Brown, Soul Focus Stone, Mendocino, CA Frank Cordero, Cordero Rubalcaba, Lake Forest, CA Brian Creasy, Coulee Concrete Designs, Lake Oswego, OR Chris Frazer, DC Custom Concrete, San Diego, CA Cheolsa Kim, Zaiki Design, Pacifica, CA (2) Jeff Kudrick, J & M Lifestyles, Randolph, NJ Mike Moncrieff, New Edge Design, Lynden, WA John Newbold, Newbold Stone, Austin, TX (3)
Eric Pottle, Surface Works, Peoria, AZ
Matthew Ward, Wards Works, Piedmont, SC
Ian Wyndlow, Liquid Stone Studios, Ladysmith, BC (2)

### BECOME A MEMBER TODAY, EXPERIENCE ITS REWARDS.



- No-Cost Access to Complete CHENG Training Programs\*
- Targeted Online Referral Directory
- The Most Recognized Brand in Concrete Design
- \*1 year membership and eligibility status required.

Inquire about New Membership Incentives.

1.510.849.3272 x 217 chengconcrete.com/2010member



PRODUCTS, TRAINING + MEMBERSHIP

sealer for a while, they should look at what's new, especially in systems optimized for countertops. This is an area that shows continuous improvement, and even though sources agree the perfect sealer isn't there yet, the options are getting better all the time.

Training the customer is also key. The end users need to know what different looks are available with different sealers, what trade-offs might need to be made and what their role is in maintaining and protecting the sealed surface. (The gift of a trivet or cutting board at the end of the project serves as both a nice gesture and a gentle reminder.)

The type of operation a contractor runs is also a factor in choosing a sealer system to work with. A shop producing large numbers of countertops at high speeds will probably want a rapidly curing system that can be automated. Studios working at lower volumes will not want to invest in the spray equipment or space required for such a system.

### Sealing options

In the early days, fabricators' options were limited. "The industry started out with floor sealers, stone sealers, even wood sealers — we had to use what was already available," Heidebrink says. Sealer technology has advanced over the years and more options are available now. "There are finally sealers that are formulated for the stringent requirements of concrete countertops," says Bob Chatterton of Surface 519. "But it is still hard to say if one material is better than another, as every sealer has different properties. Every project has different needs and conditions and every customer has different expectations. Sometimes the best a fabricator can do is make a list of what characteristics are important in a sealer, research which one covers the most items on that list and be ready to make at least one or two concessions."

- www.buddyrhodes.com
- www.concretecountertopinstitute.com
- www.concreteexchange.com (Cheng Concrete's contractor network)
- www.concretesolutions.com
- www.surface519.com
- www.vseal.com

Want to learn more? Search online at www.concretedecor.net

countertop sealer





### Let's Talk About Sealers: Experts Reveal a Wide Range of Practices

Fabricators' approaches to sealing countertops are as varied as their creative countertop designs. Here are some observations from manufacturers and artisans about how they protect the work:

"For customers who like a dynamic surface, a penetrating sealer can be as simple as mineral oil or olive oil. This surface will patina, change and evolve. Wears and spills are part of that evolution. It's just like a butcher block — they can re-oil it whenever they want to."

Mike Heidebrink, Cheng Design, Berkeley, Calif.

"In my own kitchen my countertop dates back to 1988. The sealer has long since worn off. I just rub olive oil on it. That's what I like about it. Someone who wants a synthetic material that never changes wouldn't like it."

 Buddy Rhodes, Buddy Rhodes Concrete Products, San Francisco

"Now that concrete counters have been around for a while, customers know better what to expect. People looking for concrete are becoming more forgiving. They are letting concrete counters be what they are."

- Kelly Carr, Concrete Jungle Inc., Northridge, Calif.

"We start with an acrylic lacquer to pop the color. We like the color to just jump!"

- Ben Ashby, Concrete Solutions, San Diego

"Don't oversell a customer on heat resistance. My test is, can you place a pot of boiling hot water on the surface? I find when moving a pot from a gas stove to a counter, sealers fail about half the time. It doesn't hurt the concrete, but it wreaks havoc with the sealer. They should use a trivet, just like they would with Corian."

— Ben Ashby

"An artisan concrete countertop is a handmade product and it will look and wear like a handmade product. Customers should think of waxing a countertop they way they take care of a floor or fine furniture."

- Buddy Rhodes

"When I coat a table or countertop with an epoxy, pleurae, or polyaspartic, I wet-sand the coating with 1,000-grit sand paper, then buff it with heavy-grit, then fine-grit buffing compound. This rids the coating of any imperfections and makes the piece feel like a fine piece of marble. This can be very time-consuming. Fifty square feet of countertop may take two days to get perfect. This process also seems to make the piece much more scratch-resistant."

Rick Ogden, Rick Ogden Construction, Pryor, Okla.



Photo courtesy of Tommy Cook

A place for everything and everything in its place: This fabrication shop was set up by Tommy Cook.

by Natasha Chilingerian

Countertop artisans have many U considerations to weigh while setting up their fabrication shops — location, size, work flow and equipment, to name a few. And they all have the same goals in mind: to create quality products and run a successful business. Experts from across the country have plenty of advice on how to achieve these goals.

The first task on an artisan's new-shop to-do list is to choose a location. Some veteran artisans say a nondescript facility that's not in the center of town is the way to go, since the rent will be cheap and attracting drive-by business is usually not a concern for decorative concrete fabricators. Jeremy French, who owns Mandala Design, in Asheville, N.C., operates his shop in an industrial section

of the city that's close to many useful resources. "We have woodworkers and a lumber yard on each side of us," French says. "We're centrally located in terms of our market - we're close to Lowe's, a hose shop and a boat shop. We don't have to travel more than five minutes for 90 percent of our materials."

The ideal location may depend on the relationship an artisan has with his or her customers, however. Chris Klipfel of CK Concrete Design, in St. Louis, Mo., chose an attractive space downtown because it's often used to entertain potential clients. "You have to consider the quality of your work space and how easy it is for people to get there," Klipfel says. "We feel that we should provide an experience, and people think it's fun to come into our shop."

### **Ten Shop Tips**

Getting started in concrete fabrication can be overwhelming. Here are 10 solid pieces of advice that veterans from across the country have for artisans who are setting up shop:

Think about how you can minimize labor. Stock plenty of tools, store them close by and replace them after each use. Think about how a task can be completed by one worker instead of two. Outsource work if you can. Workers will save time, accomplish more and in turn

affect the bottom line of your business.

Keep your overhead low. If you're just starting out, don't buy more tools or equipment than you need, and buy used as long as it doesn't mean sacrificing quality. Save money on rent by avoiding the most expensive part of town.

Conceptualize your design up front and make it modifiable. When designing your space, keep in mind that you'll likely make changes in the future to accommodate the direction your business takes. Emphasizing mobility and flexibility in your design will save you hassles down the road.

Give your potential customers easy access to your work. Have a showroom that clients can visit. It's also a good idea to allow them into your work space, since many value seeing the works you have in progress.

Section off each area of your work space to keep dust and other airborne particles from spreading. This not only prevents your pieces from being damaged or ruined, but it saves time. Instead of cleaning sawdust off the floor before beginning the next step of a project, you can transfer the piece to another area and move right along.

Consider the types of projects you plan to work on while planning your space. If large pieces are in your future, you'll need the space for them, and if the sizes of your pieces will run the gamut, make your space flexible. For example, build tables that can be cut down or pieced together in different ways for different-sized projects. Use tables on wheels so they can be moved out of the way to clear floor space when needed.

Have a good business plan. Don't let the actual work get in the way of your business' success. "You need to hire people to do the actual work so you can focus on running your business," Fox says. "It's so labor-intensive, and you don't want to waste a week working on a piece when you could have been out there marketing and selling." Adds French, "This is a very difficult industry to make a living in. You need to plan well from the beginning — that will determine how successful you'll be."

Establish a protocol for each project and stick to it. Following a predetermined plan, which includes necessary paperwork for each project and the path it takes through your work space, will increase work productivity in your shop by miles.

Keep your shop organized and clean. Not only will your shop be a more pleasant place to work in, but you'll eliminate the time you would have spent searching for tools and cleaning up stubborn messes (and in the long run, accomplish more).

Choose a location based on your budget and needs. For countertop artisans with a slim budget, an inexpensive rental space in an industrial neighborhood will do just fine. But if you have more money to spend and plan to make your shop a place for impressing potential clients, a more central location may be for you.



Tommy Cook, co-owner of construction consulting and training company CM Services — and former co-owner of Absolute Concrete Works in Poulsbo, Wash. — warns that artisans should investigate county codes before settling on a spot. About five years ago, he was briefly put out of business for operating a commercial-industrial business in an area zoned for commercial retail use.

The second move to make while setting up shop is to design an effective interior layout. Bayard Fox, owner of Cement Elegance in Bend, Ore., says the most successful shops are divided into five separate sections: a wood shop for making forms and molds, a manufacturing space, a detailing space, a finishing space for steps such as sealing and spraying, and finally, an area for staging, wrapping and shipping. Fox says ideally, walls should separate each area to keep dust and mixing powders from floating throughout the shop. A showroom should be separated from all work areas, he says.

"The biggest challenge is dust," Fox says. "It's important to make sure your showroom is separate, and it's good to have a dust containment system because dust can migrate into the showroom. And your wood shop needs to be separate — wood dust is not good to have near concrete."

While a showroom is valuable for allowing clients to view samples of an artisan's work, some experts feel potential buyers can benefit from seeing the work space as well. Todd Sarandos, of Red Concrete, in Burlington, Vt., says he's planning to shrink his current showroom and use a portion of it as a finishing space where customers can see what's being worked on. "Clients also like to see what's in progress," he says.

Experts agree that the organization of an artisan's workplace should be determined by work flow as well as the size and type of projects on the artisan's agenda. Each new project enters a shop as a set of raw materials, travels through a number of stages and finally exits as a finished piece, so artisans should organize their work areas according to the path they want their pieces to take. Sarandos says his projects travel in a loop from station to station, while French says his shop is set up so raw materials can

enter the front and completed projects can exit the back.

Jeff Kudrick, co-owner of J&M Lifestyles LLC in Randolph, N.J., stresses it's important for artisans to establish a project protocol that they can stick to, which will help them use their time efficiently and make fewer mistakes. This includes not only the physical setup of the shop, but also the use of paperwork to keep track of each step. "Come up with a full process that works," Kudrick says. "In the shop, plan your route from the

time a piece is made to the time it goes out. It's a matter of recording all of your information and following a process."

Large projects require more space, or at the very least, the flexibility to create more space. Sarandos has a lot of open space to work with in his large warehouse shop that's divided up by shelving, and the space was recently put to good use when he created 14 large picnic tables for a university. Klipfel recently fabricated 24-foot-long steel casting tables for a large project — casting display bases for



mannequins in Macy's department stores across the country. The tables were then broken down to smaller sizes for everyday use. He also makes the most of his space by bolting different-sized tables together when needed, instead of taking up additional space in his shop by bringing in a new, larger table.

And most artisans agree mobility is important, which is why tables with wheels are often favored. "You can never have too much space," Klipfel says.

Equipment and tool choices can

be simple or elaborate, and experts say they're likely to be determined by the artisan's budget and the type of work he or she plans to do. Cook says that at minimum, an artisan opening his or her first shop needs a chop saw, table saw, air compressor, nail gun and drill for the woodworking area, plus a vibrator, concrete mixer and concrete trowels for the casting area. If the artisan advances to working with glass-fiber reinforced concrete (GFRC), Cook recommends a high-shear mixer, a peristaltic pump and a calibrated scale.

Folks just starting out can save money by purchasing used equipment and tools on Craigslist or at pawnshops, swap meets and flea markets, Cook suggests. Sarandos says he purchased a used forklift and scored some industrial racks for free from a nearby business that was closing. But, all experts warn that old equipment is used at the artisan's risk. "If you make a bad decision, something could break down," French says.

Tables to work on are essential to any shop, and Sarandos says to make sure their surfaces are consistently flat. He says if concrete isn't casted on a flat, level surface, the results will be irregular. So if after multiple uses a table's surface becomes flawed, it needs to be replaced, as he recounts from personal experience. "We were banging our heads against the wall for a while trying to figure out why the concrete was coming out with a curl or twist to it," he says.

Every concrete countertop manufacturer knows how much productivity affects the bottom line of their business. To increase productivity, experts recommend that all artisans set up shops for maximum efficiency

- for example, if tools are stored near work stations and replaced after each use, workers will save time searching for items and complete more work in the long run. "Our guys were spending most of their time looking for stuff, so we stocked both of our woodworking areas with the same tools so they wouldn't have to walk halfway across the shop," Klipfel says.

Cook stresses having "a place for everything and everything in its place," or practicing what he calls ergonomics. "You want to be able to access areas with an even flow and not have to walk across the room to get something," he says.

Sarandos suggests outsourcing some work if possible, which will also save workers' time. "Instead of being crowded and cramped in our space, we work with other woodworkers and carpenters who get a portion of our work," he says.

And last not but not least, keep the shop clean. "I've had people come in and say, 'Wow, this place is clean for a concrete shop," Cook says. "If you don't keep it clean, it's going to be harder to clean it up later. When concrete sets, it's not easy to scrape it off the floor." \$\infty\$



Power Tools and Floor Machines



### Toll-Free 1 (866) 639-0960 Fax: (770) 399-3997 www.granquartz.com

Stocking Locations in Anaheim, Atlanta, Boston, Chicago, Denver, Houston, Los Angeles, Miami, San Francisco & San Jose.

GranQuartz Stone & Concrete Systems reserves the right to make changes in design, engineering, or specifications and to add improvements or discontinue manufacture at any time without notice or obligation. Consult the applicable operator manual before utilizing the product.



## **Brilliant Bar Tops**

by David Searls

### Santa Cruz Mountain Brewing, Santa Cruz, Calif.

### **Contractor: Counter Balance**

n converting a warehouse in an offbeat neighborhood to an organic microbrewery, the married duo of Emily Thomas and Chad Brill proved to be up for anything. So five years later, when the Southern California couple needed to rethink their decision to construct a bar out of green wood that hadn't yet properly cured, they were open to less-than-traditional construction materials.

"My husband wanted to go with stainless steel," says Thomas of their plans for tearing down and reconstructing a bar that, while only five years old, was already buckling, warping and showing gaps. But one regular patron of Santa Cruz Mountain Brewing had another proposal, says Thomas. "Dominic told me, 'This bar will be so cool that people will come in just to see it.' And they do."

### Beer money

The man with the plan was Dominic Boinich. A former construction superintendent, Boinich is a metal fabricator who designs and creates furniture and commissioned public art. At 5 Feet From the Moon Studios, in Santa Cruz, he and girlfriend Katrina King, a metal sculptor, work in metals, wood, glass and other media. Boinich had also recently expanded his palette to include decorative concrete as Counter Balance.



"I can practically see it from my studio," he says, explaining his regular patronage and interest in the microbrewery and its hapless bar.

Boinich got so excited about the prospects of replacing the 17-foot-long wooden top with GFRC concrete that he agreed to do it for, in his words, "a thousand bucks in beer and a couple thousand in materials."

In precasting the three long segments at his studio in late October of last year, Boinich had to make a spur-of-the-moment decision to cover up a minor flaw. He settled upon a wood-grain stamp pattern along one end that harks back to the surface's all-wood origins. "It looks like the old bar is growing right back into the concrete," he says.

The bar's surface also contains five disks that serve as glass holders. For each, Boinich hand-etched a Santa Cruz Mountain Brewing logo and provided illumination via pocket lights with dimmer control under each disk.

### Making waves

Boinich is most proud of a sneaky touch he gave to the brass seams that define the bar's segments. One is a stylized letter S, while the other takes the curvy form of a C. "Most people don't even notice it until I point it out," says Boinich, "but the letters stand for Santa Cruz."

Only one of his characteristic design flourishes gave him even a moment's pause. The wavy-edge technique used at one end is "a trade secret" which he won't divulge, but he says this about his inspiration: "I just had this vision in my mind, a cocktail table with a tablecloth hanging from it. I was just pushing the envelope to see how much I could stretch concrete. I had some concern that I might be going a bit over the top here, but the basic concrete color keeps it from going too far."

From Emily Thomas' standpoint, maintenance is easy, and there's certainly no fears of splintering or warping this rugged surface. Best of all, it serves as an attraction in its own right. As she stated in a handwritten thank-you note to Boinich after the job was completed, "A customer's experience at the brewery is so crucial to the future of the company and you have just elevated that experience."

As a regular, Boinich knows the reaction of others to what is possibly the area's first concrete bar. "They flip over it," he says. "The bartenders are getting tired of answering questions about it."

www.counterbalanceart.com



This 26-foot-long cast-in-place bar looked like a "Flintstone bar" at first, according to artisan Michael Crane. It came out with broken edges and a pale orange tone that wasn't quite right. He ground it, leaving color in recessed areas, and finished with a two-part epoxy.

Photos courtesy of A Touch of Stone Custom Tile & Decorative Concrete

### Coyote Café, Virginia Beach, Va.

### Contractor: A Touch of Stone Custom Tile & Decorative Concrete

While Michael Crane can't say for certain that the ice bar he designed and poured at the Coyote Café in Virginia Beach, Va., is the only one of its kind in the world, he's willing to go pretty far out on that limb. "There's one in Florida and one in Switzerland, but they're both different than mine."

Those and a few other places around the globe are frozen bars constructed entirely of ice. But if you want to talk about the combined artistry of decorative concrete and solid water — in the form of a 4-inch wide, 1.75-inch illuminated deep trench to keep drinks chilled — well, now you're most likely talking one-of-a-kind.

#### **Cold fusion**

As president of A Touch of Stone Custom Tile & Decorative Concrete in Hampton Roads, Va., Crane saw his mission at Coyote Cafe as being to "bring concrete and water together in





one functioning unit." He was on his own when he did so. "I looked all over on the Internet but couldn't find any direction for the ice rail," he says. So he figured it out for himself. Working with an HVAC pro, he designed his own preplumbed drop-in kit that went into a 2-by-4 trough cast into the concrete and lined with copper flashing.

"It's plumbed with a water supply line and an HVAC line, the ice kept at minus 5 degrees Fahrenheit," he says of the design, which he's considering patenting. "Then I added a string of indoor/outdoor rope lighting in the ice that gives it a glowing, cool blue appearance."

But before his client's customers could chill, Crane had to contend with a 26-foot-long, cast-in-place concrete structure that, he says, "looked like a Flintstone bar at first." The eight-hour pour came out with broken edges and a pale orange tone that wasn't the one he had seen in his mind's eye. "I ground it down, leaving color in the recessed areas, and finished it with a two-part epoxy."

He also retained a wavy, broken edge design to the bar that adds intrigue and could even make the occasional patron wonder if he or she might have exceeded sensible self-imposed limits by a drink or two. The bar itself, along with the stained concrete floor under it, has a warm glow that goes well with the restaurant's Tex-Mex Fusion theme.

In terms of maintenance, the ice bar threw the bartenders a little bit of a curve. "They'd have to iron it every day to get the ice to melt," says Crane.

Iron it?

"Yeah. You know ... with a clothes iron."

Oh, sure. The ironing became part of the daily opening ritual in order to vaporize the dirty surface of ice from the night before. There was also a matter of thawing and draining the trench every couple of months.

As for maintaining the decorative concrete surface, "just scrub it with a hot rag," advises Crane. "Maybe rub in a little beeswax now and then."

#### Alas ...

Innovative design and "ice age technology" are no guarantee of success. The Coyote Cafe earned favorable comments for the new bar from barstool perchers such as the consumer reviewer who wrote at TripAdvisor.com, "Loved the unique bar, with the strip of ice that keeps one's drink cool and drinkable!" Another wrote of the place, which he and his wife stumbled into virtually by accident: "The interior is dark and romantic and the bar is absolutely beautiful. It is equipped with an ice (rail) to keep your drinks cold."

The ice bar wasn't enough.

The Coyote Cafe closed recently in the tough economic environment. Proving, we suppose, that, despite the icy artistry of Michael Crane, it's still a cold, cold world out there.

stouchofstone-va.com



WerkMaster™ introduces the Termite and Scarab. Recognizing a need for machines that can do more than just floors, WerkMaster™ with its Patented Octi-Disc™ Technology gives contractors a real edge.

Surpassing any hand grinder the Scarab is a dream to use and works with most variable speed polisher/grinders. Its patent pending 5 head system uses standard 3" polishing pads or PCDS for tough coating removal. Handheld for countertops, or use the removable handle for stairs or floors.

Designed to get behind toilets, around plumbing and machinery, along bathtub ledges, stair risers, linen closets, and any hard to get to places.

The Scarab was the "HIT of the SHOW" at World of Concrete 2010. Comments like "I have been waiting years for this!" "Every contractor should own one of these." make it the PERFECT complement to any contractor's arsenal of tooling.

Tired of wet grinding countertops? Can't refinish them in the home. Getting calls to refinish

garages, basements, walkways, pools and decks? You need a Termite.

Don't be fooled by its size and weight. The Termite can tear into any surface and deliver results that are simply amazing. Run it on the floor like a conventional grinder or on countertops and stairs!

Featuring WerkMaster's 8 head Octi-Disc™ Technology and versatile 3" tooling, while edging to within 1/8" of the wall, the Termite is the choice of any contractor looking for speed, quality and exceptional results.

Protect your customer's investment with our Environmentally Friendly and Food Safe ULTRAGuard sealer. Resistant to acid, coffee, mustard, ketchup, mayonnaise, vinegar, pickle juice, red wine and pop for up to 24 Hours without etching or staining!

Taking it to the Wall!



# The Latest UV Sealing Technology





**EAP Sealer** 

**Product Training** 



SURFACE

Sealers and Specialty Coatings, Colorants, Training, Cleaners and Mixes

800.475.1975 www.surface519.com

519



• Crack Repair Kits • Color Hardener • Epoxy Coatings • Bubble Gum Liquid Release® • Countertop Epoxy • Release Powder •

• Sealers • Stamp Tool Patterns • Overlayment Systems • Super Hydro Tone Stain • Seamless Epoxy System • Training Seminars •

305-681-3561 • WWW.SUPERSTONE.COM • 800-456-356

Made in the USA