

NEW ENGLAND

U P D A T E

CBTC '96: Heard at the Show

This past February, more than 4,000 builders and remodelers braved blizzard conditions to attend our 1996 Construction Business & Technology Conference (CBTC) in Marlborough, Mass. Those who made the trip were treated to more than 50 business and technical seminars, as well as a 50,000-square-foot Product Expo. New at CBTC '96 were energy and safety resource rooms, a popular hands-on computer lab, and two live technical workshops presented and videotaped on the Expo floor.

Next year's conference is planned for Feb. 28 through Mar. 2 at the Rhode Island Convention Center in Providence, R.I.; a western region show is also scheduled for Sept. 26 to 28, 1997 at the Santa Clara Convention Center in Santa Clara, Calif. The following excerpts from this year's show will give you some idea of what you can expect at next year's conferences. Hope to see you there.

Ventilate On Demand

Energy-consulting engineer Marc Rosenbaum presented builders with an overview of ventilation systems ranging from a single fan with passive air inlets to systems with multiple fans and ducts, and ending with a look at heat-recovery ventilators.

"Ventilation really is more a function of the number of people in the house than of the square footage," Rosenbaum explained. "A room with a ceiling that is twice as high doesn't necessarily



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need twice as much ventilation."

In tight houses, natural ventilation is inadequate, said Rosenbaum. And even in leaky houses, natural ventilation depends on the weather. "So I put a mechanical ventilation system in every house I build. I want to bring fresh air to people, and I want to have control over when it happens, and how much I get. And if I'm willing to spend a little more money, I like to also control where it ends up."

Setting Standards

In the session "Sensible Quality Standards," husband-and-wife builder team Kent and Lew Hanson explained that expectations are the key to customer satisfaction. "As a custom builder, you are in the business of building a dream," said Kent. "Well, dreams are perfect, but homes are not. As the builder, you are in control of those expectations."

To solve the problem, the Hansons created quality standards. Their warranty is included as part of every contract, and describes the potential deficiencies and industry standards in 11 broad categories from foundations to finishes.

The Hanson's warranty draws in part on industry-accepted quality standards from a pamphlet

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This month in New England Update:

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Heard at the Show,
continued

published by the Metropolitan Builders Association of Milwaukee. "There are things defined as tolerable in that book that we never tolerate," said Kent. "But if you've listed those in your contract, and



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you do better than that, you are now a hero. It's a nice treat to have a client feel that you've done more than you have promised. So we try to underpromise and overdeliver."

Timely Subs

When the conversation in "The Legal Clinic" turned to subs who walk off the job, *JLC* columnist Quenda Story quickly got to the heart of the matter. "If they're gone, they're gone," she said, "but the real question is this: Is walking off the job enough of a breach to allow you to go and get somebody else to finish the work?" Abandonment isn't the only cause for a breach: "Sometimes the sub isn't walking off the job," Story noted, "but he's off doing somebody else's job." The solution is contract language that sets start and completion dates, and that spells out the GC's expectations about a sub's availability to do the work. "If the sub breaches the contract," said Story, "you should have the option to replace him."

Gary Ransone, author of *The Contractor's Legal Kit*, added that two of the fundamental concepts behind breach of contract

language are written notice and opportunity to correct. "I include a clause on subcontractor default," Ransone said, "that says if the sub either fails to correct defective work or fails to commence and complete work promptly, the GC will provide 48 hours written notice of the breach." If the sub does not take substantial steps to correct the breach, Ransone's subcontract allows the GC to hire someone else to finish or correct the work. "Having specific contract language like this," he said, "makes it clear that any action you take is justified."

Hybrid Heating Design

According to Richard Trethewey in a session with John Siegenthaler on radiant floor heating, comfort has less to do with "blowing warm air at people" than with keeping surrounding surfaces warmer than the room's occupants. Unfortunately, most heating system designs are based, Trethewey explained, on "the coldest day of the year, plus 50% for error, plus a little pixie dust." The result, he said, is "equipment that's too large, too much radiation, too much baseboard."

To prove his point, Trethewey showed that in New England, most systems are oversized for the 6,000 hours in a year when the temperature is between 72°F and 32°F. The problem is that heating design often depends on the bias of the designer. "If you ask the duct guy," said Trethewey, "you get a duct solution; if you ask the plumber, you get a pipe solution."

Trethewey prefers a mix of heating sources. For the second floor, he recommends a "hydro-air" system — a design that warms air by blowing it over hot water piped from a boiler. Such a stand-alone system eliminates the need to run ducts to

the second floor, and can also be used for cooling. He recommends radiant floor heat in the kitchen, bathrooms, and the "great room — those big rooms with 30-foot-high ceilings that no one knows how to heat." For intermediate rooms, use hydronic baseboard.

Initial investment is higher, said Trethewey, but in the long term, a hybrid design is more efficient, because it provides greater control. "Most control systems are primitive — like a car with the gas on full blast, plus a brake," he explained. "When the thermostat calls for heat, the boiler delivers until either the thermostat is satisfied or the high temperature limit is reached in boiler." But this system is inefficient, because it delivers 180°F boiler water no matter what the heating load. A radiant system, on the other hand, delivers water at temperatures no higher than what's required. Trethewey pointed out that savings are substantial: For every 3°F the water temperature is lowered, there's a 1% savings in energy cost.



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Radiant-heated buildings will also have a less heat loss. While ordinary convective heating creates higher temperatures at the high point of room — say, 5°F higher — with radiant floor heat, the air gets cooler toward the ceiling. According to Trethewey, designers using radiant heat can derate heat losses by at least 15%. ■

Builders Spin Their Own Web Presence

Small contractors finding Internet a useful marketing tool

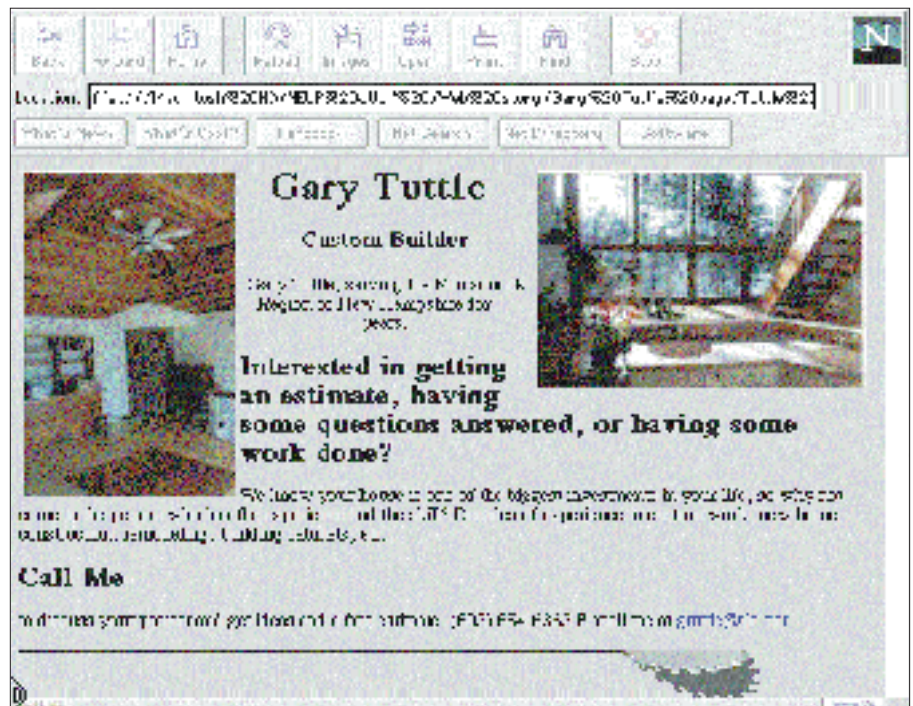
A World Wide Web "page" — actually a screenful of words and pictures accessible through the Internet — is relatively quick, easy, and cheap to create. As many small builders and remodelers are finding, this means that the World Wide Web can give almost any contractor customized access to a large and relatively affluent audience — the estimated 10 to 15 million Americans who currently use the Internet.

Chuck Mathison, who does building and remodeling work throughout northeastern Massachusetts, is one such contractor. Mathison, who has mailed out a regular print newsletter to a customer list for some time, decided a year ago to put his own Web page on the Internet. To create his World Wide Web page he enlisted his brother, Mark, who works in computers. Mark hadn't created Web pages before. But by tapping the Internet itself for the necessary knowledge, he quickly gained competence at "html" (the code for formatting Web pages) and put together an attractive set of pages. The "home page" — the first one viewers come to — has most of the typical elements of a small contractor's home page: some basic information about the company, links to photos of recent jobs, distinctive graphics, and both a phone number and e-mail address with which to contact the company. Mathison's pages also include excerpts from his newsletter and some maintenance tips for homeowners.

In its first few months, says Mathison, his page brought five warm leads, "one of which went as far as a contract that we almost signed, but lost to someone else who underbid us." Mathison feels the page will eventually bring him contracts, partially because it has opened dialogues with visitors who saw his Web site and then sent casual inquiries — sometimes about what kind of work he did, sometimes how-to questions — by e-mail. If even one of these contacts develops into a job, either directly or through referral, the Web site

generate any hard leads, a built-in counter that tracks visits to the page tells him that dozens of people are looking at it each month, and he feels it will eventually bring him work. "This could be the advertising and marketing tool of the future," he says, "and it's worth exploring because the cost is so little. I mean, a business card ad in a local paper costs more, and this has the potential to reach so many more people."

Creating his own Web page has also raised Tuttle's own interest in using the Internet; he now



Builder-remodeler Chuck Mathison's Internet "home page" contains a nice arrangement of the basics of a contractor's home page — some basic information about the company, links to job photos, distinctive graphics, and more than one way (he lists both his phone number and e-mail address) to contact his company.

will more than pay for the \$10 a month it costs Mathison — and leave him money to treat his brother out to dinner as well.

Gary Tuttle, a builder and remodeler from in New Hampshire's Monadnock region, also turned to a family member — his teenage son, Abe — when he decided to build a page. Though Tuttle's page has yet to

goes online to check out new products (information which he can usually receive by e-mail or by asking for a mailing) and software such as CAD systems or takeoff programs. The entire experience, he says, has given him a new set of tools. If he finds a tool he doesn't quite understand, he says, "I can always get my son to help me." ■

Illusions of Grandeur

Scenic Painter
Fools the Eye

by Nancy Barnett

"I want marble that matches my mantle."

"Can you match that paint to my molding so it looks old?"

"Can you make those heating units disappear into the wall?"

These are the kinds of finish problems contractors need help with. And they can all be solved — with paint. The painted finish can be used instead of the real material in almost any situation: a painted "marble" floor, a painted "wood paneled" wall or ceiling, a painted "stone wall" (complete with arched windows and a lake view), or old "shutters" painted on a living room wall.

The technique is called "Trompe L'oeil," from the French for "fool the eye." In

practice, it means creating a three-dimensional effect on a two-dimensional surface. This includes murals, as well as the imitation of textures like wood, marble, and stone.

In cost, Trompe L'oeil is comparable to using the actual material — perhaps \$10 to \$25 per square foot. On projects where a square-foot price is hard to judge, a scenic and decorative painter may charge from \$35 to \$75 an hour (that rate may sound high, but good Trompe L'oeil craftspeople are highly productive).

Priced either way, it is hard to compare the value of Trompe L'oeil to either ordinary paint or the "real" material — the customer is making an investment in something more unusual and more personalized. The range of materials and textures you can create is practically unlimited, and a good finish person can be an invaluable resource. Trompe L'oeil is not for every-



Decorative painter Nancy Barnett creates a marble balustrade in paint on a flat wall.

one, but it's a finishing touch that can set your work apart from the others. ■

Decorative and scenic painter Nancy Barnett owns and operates Fresco Studios, in Burlington, Vt. Photos by C. Bates.



The painting technique "Trompe Loeil" (French for "fool the eye") can be used to imitate the texture of natural materials, as in the faux marble floor and staircase above, or to create three-dimensional scenes (left).