

Miscellany

Showtime Atlanta: NAHB 89

Few Breakthrough Products, but Many Pleasant Surprises. Shoe-horning 67,000 out-of-towners into a large hall with 1,000 exhibits on Super Bowl weekend can produce any number of results. In the case of NAHB's 45th Annual Convention and Exposition, there was an enthusiastic response to the Atlanta, Ga. Location and a generally positive mood about the seminars, the exhibits, and the outlook for the year ahead. The show – the first of three to be held in Atlanta – drew many Eastern builders who had not made it to Dallas or Houston in previous years.

On the floor. There weren't many breakthrough products on the exhibition floor this year, but there were plenty of rewards for the persistent. What follows are some of the things that caught the eye of the JLC editors who attended.

The exhibit that drew the most chuckles and head shaking was the full-featured, high-tech toilets from the Japanese company, Toto (Willits, Calif.). Despite the increased acceptance of bidets in the luxury market, American sensibilities were clearly not ready for the timer-triggered seat warmer, the remote-controlled water-spraying piston that emerged from the bowl, or the warm air blower from the same general region in either the deluxe or battery operated models. Almost lost in the shuffle was interest in their more practical offering: a dependable 1.6 gpf (gallon per flush) toilet.

Windows are still benefiting from fierce competition. Andersen (Bayport, Minn.) has embraced the newest sealing technology for double and triple glazing and will be converting their entire line in the next year. Marvin (Warroad, Minn.) was again showing off "instant opacity" technology that uses electrically charged particles to shade or completely obscure glass at the flip of a switch. They are also beginning to produce stock, curved double glazing units reminiscent of Victorian turrets, and double glazing that is formed, rather than mitered, at 90 degrees.

Weiser Lock (Huntington Beach, Calif.) has an ingenious idea with their Genesis system that allows these locks to be rekeyed by the user with the purchase of a new "programming" key and matching user keys. It has dozens of applications in new construction (change the locks once the subs are out), remodeling (homeowner rekeys each evening after tradesmen are gone), multi-unit management, etc.

Wilson-Art (Temple, Texas) has further simplified edge treatments for laminate counters, doors, and drawers with their Perma-Edge System. The stock laminate edge treatments (drops, coves, half-rounds, bevels, etc.) come in a T-molding form that snaps into an easily cut dado in the counter,

door, or drawer face edge.

Of the ever increasing number of imported products, I was most impressed with the modular, pumice-block fireplaces from



Isokern (Orange Park, Fla.), a Danish company. According to the manufacturer, the firebox, smoke shelf and chimney blocks can be mortared into place in less than half a day by a mason. The package, including damper and chimney to 22 feet, is just \$1,800, and firebrick on the interior is optional because of the thermal qualities of the processed pumice.

Easy to miss in the 17 football fields' worth of products was Prest-on's "Insta-back" drywall fasteners (Hot Springs, Ark.). These aren't corners, but perforated plates that clip on to the edge of drywall and join it to another sheet where there's no backing. Just drive drywall screws through each sheet into the "Insta-back" and then break off the tabs on the face of the drywall.

Two new ridge vent systems in evidence were Roll Vent (Warminster, Pa.), a nylon-like matrix that looked ever-so-much like foundation drainage mat upon which you nail your cap shingles, and Ridge Master (Detroit, Mich.). the latter is an interesting departure from the ridge vent standard because its baffles are on the underside rather than on the roof surface where they can clog with ice and snow.

Tools. Most tool manufacturers don't time new products for the Builders' Show, but all of last summer and fall's releases were prominently displayed.

Porter-Cable (Jackson, Tenn.) was busy this year. Their "Tru-Match" joining system for solid surfacing (Corian, Avonite, etc.) uses a stepped-shoe router and a special carbide cutter to create a right joint and matched surface. Their new laminate splitter offers an easy way to quickly run off 1/16-inch to 4-inch strips of laminate. Porter-Cable is also a strong contender in the cordless sweepstakes with their new high-torque (12-volt) Model 9850 Driver/Drill.

Black & Decker (Hunt Valley, Md.) answered the cordless challenge with the Univolt System that has universal chargers for

their new 13.2 volt drills and drivers as well as their 9.6 volt tools. They were also proudly displaying prototypes of their 24-volt hand power tools that are run

from a battery pack that you wear like a toolbelt. They promise nearly the power of corded tools and very fast recharging.

There wasn't much new in pneumatic tools, although Paslode (Lincolnshire, Ill.) admitted that they were about to begin testing an Impulse (their hoseless gas cartridge guns) finish nailer with selected contractors. Sounds like a hot item.

But the two stars of the show for me were a level with brains and a drywall eater. The gypsum chipper is from International Machine Marketing, Inc. (Austin, Texas) and distributed by Domtar, the Canadian gypboard folks. It's about the size of a small portable cement mixer and runs on single-phase, 220 volts on the jobsite. The shredded wallboard scraps – just gypsum and paper – can be sold to landscapers and nurseries or hauled to the dump with 60 percent reduction in volume and savings in handling (particularly in multi-story work) and landfill fees.

The other tool marries Silicon Valley magic to the old-fashioned spirit level. Judging by half a dozen overheard conversations, Wedge Innovation's Smart Level was the unofficial hit of the show, at least with the tradesman-turned-builder set (Santa Clara, Calif.). Looking at first like a mason's level with sharply angled ends, the Smart Level is an LCD module fitted to a teak and aluminum rail. It reads a full-circle 360 degrees to 1/10 degree accuracy, or can be set to less precision for rough-in. It will show you plumb and level with an electronic "bubble", or read out the angle in degrees, slope percentage, or a rise-and-run ratio. Drop it, and you can recalibrate to original accuracy just by inverting it a couple of times. It may seem pricey at \$100 plus, but it's built to last, it has the potential to change the way you do some things, and besides, when you're in love it doesn't matter.

- Paul Spring

Builders' News on Video

At the end of a long day, it's great to flip on the TV and catch up on the news and sports. Now you can learn about the latest building trends and issues by popping the NAHB Digest into your VCR.

Produced by the National Association of Home Builders, the NAHB Digest is a 15-minute tape offering information on issues affecting builders. Some recent stories have included preventing radon problems, adaptable housing for disabled people, and coping with impact fees.

"So many of our members are buried under reading material. This is one way to get up to date quickly," says Don J. Roberts,

executive producer. "And it's nice to actually show builders how to do something or what something looks like."

So far, three editions have been released with the most recent issued in late February. Most subscribers are NAHB associations who are showing the tapes at meetings or making them available to members on a loan basis, he says.

Subscriptions cost \$60 per year for three issues. For more information, contact Don Roberts, NAHB Public Affairs, 15th and M Streets, NW, Washington, D.C. 20005; 800/368-5242, ext. 291.

- Wendy Talarico

Northeast Housing Sales Slow Down, Prices Too

Sales of existing homes were down in many Northeast locations in 1988: Vermont suffered the second highest decline in the nation, with a drop in sales of 17.6 percent. Massachusetts and Maine also suffered major declines – 13.3 and 9.4 percent. According to a recent article in the Burlington Free Press (Burlington, Vt.) this caused the price of existing homes in the region to level off during the last quarter of 1988. The article cites a report by the National Association of Realtors, which shows

that price escalation has slowed in some Northeast cities, and reversed itself in others. In the Boston area, prices increased a modest 3 percent, although by the nation's standards, prices were still pretty high: Boston ranked fifth in the country at \$182,800. Seventh-ranked Hartford saw a price increase of just 0.7 percent, with a median home price of \$165,000. Meanwhile, the sixth-ranked New York metropolitan area saw a 3.6 decline, down to \$178,500. ■

Sniffing Out Carbon Monoxide

If you've got a customer who's complaining of frequent flu-like symptoms, it's possible that improperly exhausting heating systems are to blame – not a bug. If backdrafting is suspected, there are several devices on the market today that can detect the presence of carbon monoxide. Both Advance Detection Systems, Inc. (260 Evergreen Ave. Huntington Station, N.Y. 11746; 516/549-0851) and Sporty's Shops (Clermont County Airport, Batavia, OH 45103; 800/543-8633,

513/732-2411 in Ohio) sell disposable detectors for \$1.95 (less in bulk) that must be replaced every four months. Quantum Group, Inc. (11211 Sorrento Valley Road, Suite D, San Diego, CA 92121; 619-457-3048) sells a detector for \$10 that lasts a year. Quantum also sells permanent detectors as does Bdc Electronics, Inc. (P.O. Box 4996, Midland, TX 79704; 800/543-5300, 915/694-7934 in Texas). Prices for these range from \$99 to \$199. ■

Timber in Vermont

Vermont will benefit from a new push by the U.S. Forest Service for timber bridge construction. The winning entry in a nationwide design competition for bridges using native hardwoods will be built in the state in 1990. The competition is the first one to be held in the country since 1889.

Many of Vermont's concrete and steel bridges have been

deemed obsolete and in need of replacement. The U.S. Forest Service is promoting the use of timber bridges for their replacement and cites ease of construction and maintenance, and favorable economics as reasons.

As part of the agency's drive, the first New York/New England Timber Bridge Conference will be held in Fairlee, Vermont in June, 1989. ■

Consumers Want Bigger and Better, And They'll Move to Get it

Here are some of the results from a recent NAHB survey of 1,800 homeowners who bought a new home since 1980 under the Homeowners Warranty (HOW) insurance plan.

The home buying of the baby boom generation has been one of the main factors in the long housing recovery for the past six years. This will continue until the 1990s as the baby boomers trade up. They and their families are the driving force for demand for large single-family detached quality homes.

Of those surveyed, more than three-fourths of the male heads of the households and about three-fourths of the female heads of the households responding to the survey were between 25 and 45 years old. Twenty percent of these households have combined incomes of \$75,000 or more, and another 34 percent have com-

bined incomes of \$50,000 to \$75,000. Forty percent are in managerial or professional positions.

As a group, they wanted everything bigger and better, even knowing how much more it will cost.

Some overall conclusions.

Here are some conclusions drawn from the survey:

- The strength of this market is in move-up or up-scale buyers. They want bigger homes with more amenities.
- Consumers are still very energy conscious.
- Consumers are extremely quality conscious.
- Most require a family room.
- A large well-equipped kitchen is essential.
- Skylights in kitchen and bathroom are popular.
- Separate shower and tub, with separate toilet in master-bed-

room bath are desired.

- Consumers want larger back yards.
- Consumers are willing to commute longer distances to work or shopping for the type of home they would like to own.
- Most want homes they can expand. They want homes about 30 percent larger than the homes they have now.
- Openness of design is preferred.

Some detailed findings. The leading choice of type of structure is a two-story house with a basement, preferred by 32 percent of those surveyed. Here are some other specific issues:

- 63 percent of the consumers want a full basement, even knowing it will cost \$10,000 more.
- Almost half of those surveyed want a completely open

kitchen/family room arrangement.

- 75 percent want master bedrooms, separate from the other bedrooms. The preferences for bedroom arrangements vary with the nature of the family.
- Almost 60 percent want four or more bedrooms, though only 13 percent use four or more bedrooms for sleeping needs.
- A walk-in closet in the master bedroom is a must for over 80 percent of the homeowners.
- The washer and dryer should be in a separate laundry room for 44 percent surveyed.
- A wet bar in the family room, skylight in the bathroom and kitchen, fireplace in the family room is the preference of the homeowners.
- More than 70 percent would

like more than 2 1/2 baths. (25 percent would like to have three or more bathrooms.)

Good quality homes in demand. In conclusion, homeowners responding to the survey prefer not only a large home with quality features like a two-car garage, central air conditioning, skylights, and fireplace, but they want it on a larger lot. If the homeowner cannot afford these features in close-in suburban locations, they are willing to commute longer distances to work and shopping to achieve their dream house. ■

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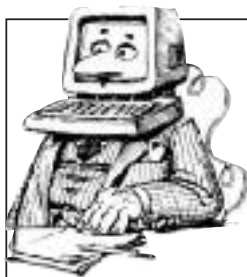
Foam Promises Not to Bug You

Informal testing by Remarc Energy Efficient Homes (Holderness, N.H.) shows that the company's Cedarfoam EPA foam may "represent a research breakthrough for the often publicized problem of insect infestation in foam-core panels," according to the newsletter Energy Design Update. (See "Carpenter Ants and Foam Core Panels," this issue.)

Cedar oil is a natural insect repellent, and Remarc has been searching for two years for a way to use it in their EPA foam product without jeopardizing the product's flammability rating.

They may have succeeded.

Experimental panels using it maintain the product's original ASTM E-84 rating. And, when Cedarfoam panels were left in a section of nearby woods with plenty of ant hills, the results were better than expected. Not only did the Cedarfoam resist ant infestation, but it evidently killed the ants. The company didn't offer any explanation for this unexpected bonus, but said that the manufacturing process involves a second inorganic oil and an emulsifying agent for a smooth mix. ■



Computer Bits:

Checking out the mix... is now possible before you actually do the mixing with seeMIX Jr. The IBM PC compatible software is available from Shilstone Software Co., 8577 Manderville Lane, Dallas TX 75231; 214/361-9681.

Latest version of software for electrical contractors... uses a probe device to take off quantities and measurements from blueprints that are then calculated into material and labor costs. For more information on ESTMAT, contact Software Shop Systems, P.O. Box 728, Farmingdale, NJ 07727; 201/938-3200.

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Indoor Air Quality Surprises

Many people equate tight houses with bad air quality. But Canadian researchers have found just the opposite to be true in homes built under the R-2000 Program. Levels of formaldehyde and other air pollutants were found to be lower – often much lower – in extremely tight houses equipped with mechanical ventilation systems than in much leakier houses that rely on natural ventilation.

The researchers monitored hundreds of very efficient R-2000 houses and nearly 100 conventional control houses across Canada. Natural airtightness of the R-2000 houses, measured with a blower door, averaged a mere .04 air changes/hour (ACH). Occupants and mechanical ventilation increased the ACH to 0.37 during month-long tracer gas testing. Ventilation rates in the conventional houses averaged slightly less over the same period (0.34 ACH), though airtightness of the control houses varied considerably.

Interestingly, houses from either group with forced air heating systems had ventilation rates 20 to 30 percent greater than those relying on electric baseboard.

Formaldehyde monitoring turned up perhaps the most unusual results. No significant reduction in levels was found in houses up to four years old, despite conventional wisdom that aging would cause levels to

decline over that length of time. Instead, high levels were associated with 1) indoor temperatures over 70°, 2) new furnishings or recent renovations, 3) relative humidity over 50 percent, 4) smoking by occupants, and 5) mechanical ventilation systems not meeting the R-2000 guidelines. It was this last observation, coupled with the discovery that less than a third of all the R-2000 houses monitored even came close to meeting the program's specification that ventilation systems be balanced (intake and exhaust), that led to a major change in the program's requirements.

In 1984, during the first year of monitoring, the R-2000 houses often had only one or two fresh air supply points in heat recovery ventilation systems, non-continuous ventilation, and only casual balancing efforts. Though formaldehyde levels were slightly better than in the conventional houses, the difference was negligible. Both groups were above the long-term goal of 0.05 ppm but below the current action level of 0.1 ppm. (Levels in houses with electric heat were 14 to 23 percent higher than in those with forced air.) The R-2000 Program then began to require balancing within at least 20 percent and, eventually, a minimum continuous ventilation rate of 10 cfm per room. The

result was a steadily widening gap between the R-2000 and control houses in the 1985 to 1987 monitoring batches. The conventional houses averaged 16 percent higher formaldehyde levels in 1985 and 42 percent higher (.071 vs. 0.50 ppm) in a smaller 1986 study in Ontario. By 1987 the national R-2000 average had dropped to 0.45 ppm – below the long-term goal. While formaldehyde levels in conventional houses also show signs of dropping, average levels remain above the long-term goal. Very high formaldehyde readings (at or above 0.1 ppm) were much more common in the conventional houses: 17 percent versus under 1 percent for the 1987 R-2000 group. The program also measured radon, which came in at a geometric mean of 0.006 working levels (WL) in R-2000 houses and .007 WL in control houses. Nitrogen dioxide levels were found to be similar, and very low, in both groups.

Heat recovery ventilation, which is generally not cost effective if added to conventional "tight" houses, has shown a good payback when combined with the exceptional airtightness levels of R-2000 houses. But to have a real impact on air quality, it takes more than just a ventilation system – it takes a well-designed, and well-balanced system.

- David Kaufman

Quote of the Month:

I wish I could just pack it in. Get into developing middle-income housing.
— Sylvester Stallone (in Esquire)

Tax Talk:

Business Plus Pleasure Equals Tax Deduction

by Irving Blackman

When a taxpayer tries to take an entertainment deduction that is the least bit unusual, you can bet the IRS will try to sink it. So it's nice to learn of a true-to-life hero who sailed to victory over the IRS.

Dr. Detko bought a sportsfishing boat so he could entertain other doctors who might refer patients to him. He sent thousands of dollars entertaining doctors and their families on his boat, and took a deduction for all the costs of the trips. The Internal Revenue Service disallowed the deductions, saying the trips were merely goodwill entertaining and the atmosphere aboard was not conducive to meaningful business discussions.

Under IRS regulations, business entertainment is not deductible unless it is "directly related to" or "associated with" the taxpayer's business. The taxpayer must show a clear business purpose for the expense, have reasonable expectations that his business will benefit from the entertainment, and must anticipate more tangible benefit than mere goodwill. According to Uncle Sam, the entertainment isn't "directly related" if it occurs in a setting that isn't conducive to business discussion.

Dr. Detko took his case to Tax Court (Derko, TC Memo 1987-99), where he won. The court found that the sportsfishing boat provided an environment where

he could discuss the local medical community, and where he fostered the trust and confidence of other doctors. The good doctor was developing more than mere goodwill, and he did in fact receive some referrals from the doctors he entertained.

Dr. Detko went fishing for a tax deduction and landed a whopper. All taxpaying sailors take heed. ■

Irving Blackman, CPA, J.D., is with Blackman, Kallick, Bartlestein, Chicago, Ill. He specializes in closely held businesses. For more information on how to maximize your business entertainment and travel expenses, send for The Complete Guide to Building Your Entertainment Deductions Legally and The Complete Guide to Building Your Travel Deductions...Legally. Cost is \$19 for one or \$32 for both from Blackman, Kallick, Bartlestein, 300 South Riverside Plaza, Chicago, IL 60606.

Building Arts Festival in D.C.

This May, visitors to the National Building Museum in Washington, D.C., will have a chance to attend workshops and demonstrations on skills such as gilding, fine carpentry, ornamental plasterwork, roofing, and stone carving.

It's all part of the NBM's Festival of the Building Arts, scheduled for May 13 at the museum. The celebration coincides with National Historic Preservation Week.

Located in the cavernous 100-year-old Pension Building on Judiciary Square, the NBM was created by Congress in 1980 to commemorate the art of building in America.

The museum's exhibits range from the practical to the esoteric. Recent displays include sheet-metal craftsmanship, the works of architect Viollet-le-Duc, a survey of historic American buildings and a photo contest entitled "A Moment in Building."

The museum also publishes a newsletter and sponsors a lecture series.

- Wendy Talarico

