

Eight-Penny News

VOLUME 8 • NUMBER 9 • JUNE 1990

Real Estate Auctions: Fire Sales or Smart Marketing?

Real estate auctions, once rare in New England, are on the rise and even gaining some respectability as a way to move property. In some areas, most notably around Boston and in southern Maine and New Hampshire, the number of homes sold at auction has increased as much as 500% since the boom days of 1986. Much of this increase has been due to a jump in foreclosures. Manchester's *New Hampshire Sunday News*, for instance, has 3 or 4 full pages in the classified each week taken up entirely by foreclosure auction notices, most of them for single-family homes.

But not all real-estate auctions are fire sales. Auctioneers have long argued that auctions can be a good way to move property. Amid the foreclosures and forced sales, some New England builders have begun to take the auctioneers' advice and use auctions to sell off slow-moving properties.

As reported in the *Concord Monitor*, for example, one central New Hampshire builder recently auctioned off seven houses he had finished but had not been able to sell. After listing them with a real estate agent for 6 months at \$120,000 each, he hired an auctioneering firm and sold the properties to the highest bidders. The auction drew about 40 serious bidders, and the properties sold for an average of \$100,000. Of that, the builder paid the auctioneer the first \$100,000 and 7.5% of the rest.

The properties were sold at what is called an "absolute" auction. This means the properties would go to the highest bidder. The other type of auction, the

auction "at reserve" or "on consent," sells the properties only if bids top a certain level determined by the seller.

Concord, N.H., auctioneer Chris Wallenstein says that absolute auctions inspire the highest bidding.

"If you say you're going to sell to the highest bidder no matter what, you get serious players. No one's going to let the other guy steal it, so the thing will get fair market value. In fact, in this market, the only way to get real market value is through an auction in which the bidding is truly competitive."

Scott Pollock, a member of the New Hampshire Auction Board—a state regulatory agency—and a realtor whose Bedford, N.H., firm, HABS, Inc., specializes in what the industry calls "workouts" of troubled real-estate properties, agrees that auctions are an increasingly useful tool in today's market. He says that while a year ago a move to sell at auction was a signal that a builder was "circling the drain," auctions now have a higher profile and less stigma attached.

"It can be a good move for someone who needs to reduce debt," says Pollock. "What's nice about auctions is that you know where you stand at the end of the day. If the broker does his job, people are going to show up and bid."

Pollock stresses the importance of moving to auction before financial pressures get too great. If a bank has a lien on a property, for instance, it may forbid the owner to sell at auction if the owner lacks other assets to back

the loan with. At best, says Pollock, a bank in that position will require the seller to offer the property at auction at reserve (the minimum bid being equal to the amount of debt). That, in turn, will reduce the attractiveness of the property to potential bidders.

Nevertheless, banks are sometimes willing to let troubled sellers offer properties at auction. "If the bank forecloses and then can't get a third-party buyer at the foreclosure auction, it's stuck with a piece of property it doesn't want," says Pollock. "No one wants that. So some banks are amenable, even though there might be some shortfall after the sale."

Phil McGlone, who handles workout loans at First New Hampshire Bank, says that he'll consider letting properties go at auction at reserve. But McGlone allows this to happen under two conditions: The builder's other assets must be able to cover the amount of the loan beyond the reserve level, and the existing loan can't be cross-collateralized.

Most knowledgeable people in the field agree that the best bet is to sell when you still have some flexibility. This is the one common trait among the most successful sellers at auction.

"There's no typical profile of a seller," says Wallenstein. "It might be someone who's beginning to feel some financial pressure, and rather than face increased costs, he sees the logic in selling for a little less than the original market price."

"But another profile is someone with a very successful project who has a few properties left and doesn't want to continue carrying

the costs for a year or two until the market gets better."

Unlike arrangements with real-estate brokers, which usually give the broker 6% to 10% of the sale price, arrangements with auctioneers vary widely. Most auctioneers don't care to discuss their arrangements. But one industry insider said the seller is usually responsible for covering advertising costs, with the auctioneer getting either a base and percentage or a straight percentage of the sale. The auctioneer's percentage share can run from as low as half a percentage point to as high as 20%.

Other than financial arrangements, how do you choose an auctioneer? "Track record and references," says Pollock. "You should know what type of auctions they do, and how many real-estate auctions they've done. What is their success ratio? If you're looking at an absolute auction, what will the auctioneer do to get the word out and market the property?"

Selling at auction, particularly absolute auction, carries risks. But with good marketing and a little luck, it can quickly reverse a negative cash-flow situation and let a builder move on to other things. That's what Northfield, N.H. builder Glenn Jordan found when he sold a few properties at auction.

Jordan has sold four homes at auction over the past two years. He pays for advertising—typically \$500 per home—and gives the auctioneer 3%. His most recent sale was a Cape on 11 acres. "I paid \$150,000 for the house and about 40 acres a few years ago, and I got \$135,000 for the house and 11 of those acres. I was pretty happy with that."

Jordan sees auctions as a logical way to move his properties in the down market. "Prices have gone down, and I've accepted that. The way things are going, it's just nice to move the properties—certainly better than tying them up for six months with a realtor. On some of the sales I made money, on some I didn't. But overall, it was better than continuing to make payments." —David Dobbs

IN BRIEF

Timber vs. Owls, Again

Once again the timber industry finds itself negotiating a compromise with an owl, but this time it's the Mexican spotted owl. The timber in question is located in the conifer forests of New Mexico, Arizona, and Colorado.

The owls were originally granted 2,000 acres of "protective management" territory in two New Mexican forests, but they have lost ground in a recent U.S. Forest Service decision. The new rules allocate 1,500 acres. Within this area, 450 acres are off-limits to "any ground-disturbing activity" (logging and major road work). Timber harvesting is allowed on 500 of the acres. According to forestry officials, the change will allow the harvest of another 3 million board feet of lumber—a 15% increase in timber production for this area. ■

The Final Frontier

A computer technology called "artificial reality" may be the ultimate design tool of tomorrow. Special goggles with miniature 3-D television screens and "data suits" that give sensory feedback will let architects, designer, and clients see and even "touch" (via the suits) a 3-D version of any design that can be created on computer. Designers and clients will be able to "walk through" the interior of a proposed design, open closet doors, and even check counter heights by "resting" a hand on them. The technology will allow the user to see and feel the effects of design changes instantaneously. Early versions of the technology, called "virtual reality," are already being tested in several California laboratories. And one software company, Autodesk, is looking into the technology's possibilities as a design tool. ■

New FHA Mortgage Ceilings

HUD has raised the Federal Housing Administration's (FHA) mortgage ceilings for a one-year period for homebuyers in 206 high-cost urban markets.

The new regulations allow homebuyers in 88 urban areas to obtain mortgages of up to \$124,875. In another 188 high-cost markets, the new ceiling is set somewhere between the old level of \$101,250 and the new one of \$124,875.

The upward adjustments should generate an estimated \$100 million in fee income for the FHA Mutual Mortgage Insurance Fund, which has experienced significant losses in recent years. ■

New Connectors Streamline Timber Framing

The invention of a new timber fastening system, "Timberlok," has simplified timber framing and made it more affordable than conventional timber-framing with traditional wood joinery. While national reserves of old-growth timbers have all but disappeared, Timberloks may be paving the way towards use of glulam timbers in house construction.

The Timberlok joining system combines traditional timber-frame joinery with concealed bolts and anchors (see drawing, next page). The bolt draws the wood connection together for a tight joint. The load is concentrated on the tenon and not the bolt itself.

Green Mountain Precision Frames (Box 293, Windsor, VT 05089; 802/674-6145) supplies Timberlok fasteners with precut frames. If needed, the company will also provide a whole house package including stress-skin wall and roof panels and interior and exterior finish. But according to Peter Ferrick of Green Mountain Precision Frames, the company is "glad to remain one of the few timber framing companies that will provide a builder with just the frame."

All of the timbers in a frame come with precut mortise-and-tenon joints. The anchors are inserted and the connections predrilled for the bolts. Each

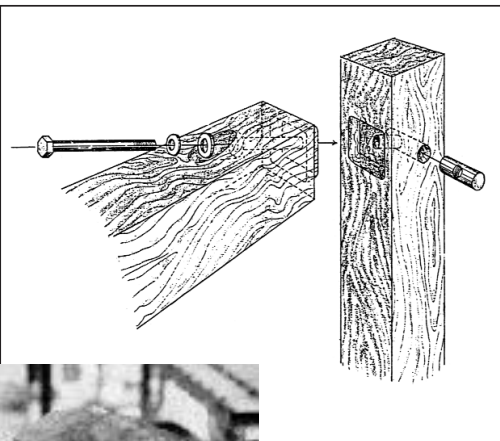
piece of the frame is numbered according to a 2-foot-square grid laid over the house plans so the assembly is easy to follow. And each connection is color coded to a nylon washer on the proper-length 5/8-inch bolt. A frame can be assembled in "bents" (a timber framing term for frame sections that include roof-truss and supporting wall posts) or piece by piece, since each connection can be made quickly in the air. Green Mountain Precision Frames hopes this system will make timber frames, and especially glulam frames, accessible to residential stick builders.

Aside from ridge beams and long-span headers in some

homes, glulam construction has primarily been the domain of commercial timber framers. These specialized companies rely on expensive engineering know-how to design the connections for a glulam frame. And the connections usually require tons of heavily bolted, plate steel. On a 2,200-square-foot timber-framed addition recently built with Timberloks in Saddle River, N.J., Green Mountain Precision Frames estimated that 5,000 pounds of steel were saved in the construction of ten gambrel roof bents. Without Timberloks, 120 gussets, each made of 30x30x3/8-inch plate steel, and eight 8x3/4-

continued on next page

The Timberlok joining system combines traditional timber-frame joinery with concealed bolts and anchors. The bolt draws the wood connection together for a tight joint (inset). The load is concentrated on the tenon and not the bolt itself.



Peter Ferrick of Green Mountain Precision Frames says he doesn't intend to compete with the elegance of traditional timber-frame joinery. Like other timber framers, he likes the aesthetic of traditional joinery. But he is also quick to point out that a traditional timber frame is not cheap. "Timberloks could make timber-frame style houses accessible to more people," he says. And the final look is very much the same, since the steel connectors are concealed.

Glulams are also resource efficient. Ferrick believes this is as important as the issue of initial affordability; he calls it "the long-term affordability issue." Glulams permit the use of smaller, second-growth trees because each lamination is only about 2 inches thick.

A newsletter of the Timber Framers' Guild of North America recently cited solid-sawn timbers as "the Achilles heel for timber framing." According to recent Forest Service reports, old growth stands of our nation's timber reserves continue to dwindle. Thus, even stick builders may soon be looking for framing alternatives, and they will look for lower-quality lumber that won't compromise the quality of their buildings.

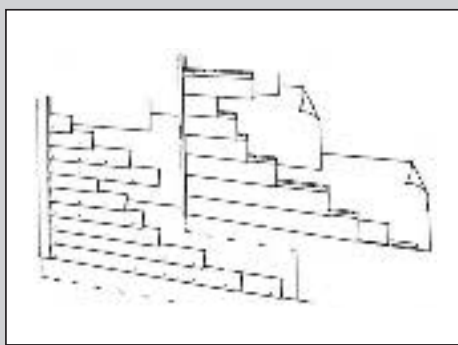
— Clayton DeKorne

continued from previous page inch bolts, would have been required. The time and expense of using these connections would have been prohibitive for the project. According to the consulting architect, Timberloks proved less expensive than conventional steel connections.

Green Mountain Precision Frames recently delivered a bid on a 1,550-square-foot, two-story, glulam-framed Cape to the town of Hartford, Vermont for an affordable housing project. The company estimated \$28,500 for the enclosed shell—\$23,000 for the glulam frame and stress-skin panels, and \$5,500 for the cost of erection.

This affordable house uses glulam instead of solid-sawn timbers because they are less expensive to build with. The price for equal size solid-sawn timbers is about the same. But glulams, which are constructed of several laminations of machine-stress-rated (MSR) lumber, can span longer distances. So there are fewer joints in the frame. And the company prices a frame by the number of joints in it. Moreover, the MSR lumber in the glulams is kiln-dried and dimensionally stable, so they are generally more uniform than ordinary solid-sawn timbers. Since they are ordered to length, there is no waste.

R.S. Means Report Exterior Siding



Description	Worker hrs/ s.f	Cost per s.f. Mat	Cost per s.f. Labor	Wall Area Total
Wood siding				
Clapboards: 1/2-x6-inch beveled cedar, "A" grade.	.032	1.58	.75	2.33
Building paper: #15 felt.	.002	.03	.06	.09
Trim: 1x4 cedar.	.005	.09	.12	.21
Paint: primer & 2 coats.	.017	.19	.36	.55
Total	.056	1.89	1.29	3.18
Vinyl siding				
Clapboards: 8-inch.	.032	.64	.79	1.43
Building paper: #15 felt.	.002	.03	.06	.09
Backer: 1/2-inch insulation board.	.008	.32	.19	.51
Trim: vinyl	.013	.32	.34	.66
Total	.055	1.31	1.38	2.69

The above costs are based on a national average of unit price costs for residential construction. The prices are based on a square foot of wall area. Do not subtract openings from the area of the wall. Labor costs are a base rate including fringes for a carpenter of \$14.05/hr. and a full rate including overhead and profit of \$23.30. All costs shown here will vary significantly from project to project due to quality, complexity, and local economics.

This report is adapted from the 1990 edition of *Means Residential Cost Data*, pub-

lished by the R.S.Means Company. Means publishes a wide range of estimating data and related guides for the construction industry. For more information, contact R.S. Means Company, Inc., 100 Construction Plaza, Kingston, MA 02364; 617/585-7880.

Clarification:

The May edition of the R.S. Means Report (8d News, pg. 5) incorrectly tallied the total costs per s.f. for asphalt shingles. The correct totals are: Materials, .76; Labor, 1.10; Total, 1.86.

Boston Back on Hot Housing List

Philadelphia, Boston, and Washington, D.C., have joined the top ten cities for residential development through 1991, according to the Danter Co., a Columbus, Ohio, market research firm.

Dropping from the list are Miami-Hialeah, Fla.; New Orleans, La., and San Antonio, Texas.

Terry Hall, Danter's director of marketing, attributes the rise of the three new areas to a deficit in multi-family building. Danter, like other such marketing firms, considers such factors as job growth, household growth, and housing starts. They also consider one other factor, Hall says: "the number of people in the market who are seeking new housing alternatives."

Hall cautions builders against assuming that an area's place on the list means instant opportunity. An area's eligibility can evaporate quickly if housing starts soar. Some markets on the list are in housing slumps. For instance, Hall says of Boston, "There is a problem in the condominium market, but it's still a fairly strong market overall."

The study measures standard metropolitan statistical areas, which often include suburbs as well as the city for which they are named.

Danter's top ten housing markets are, in order, New York, Los Angeles-Long Beach, Calif.; Philadelphia, Pa.; San Francisco, Calif.; Newark, N.J.; San Jose, Calif.; Cleveland, Ohio; Boston, Mass.; Chicago, Ill.; and Washington, D.C. ■

Partnerships May Unite Big, Small Builders

Partnerships between big builders and small local builders are likely to benefit both due to the financial and regulatory conditions that will come into play in the 1990s, a Florida building consultant says.

Lewis F. Goodkin of the Goodkin Research Group in Lauderdale by the Sea, Fla., has delivered just that message to the Urban Land Institute. The Washington-based land institute is a non-profit group dedicated to sound land-use planning and development.

Goodkin says it won't be as easy for big builders to construct large, sprawling residential communities as it was in the second half of the 1980s. For one thing, he says, loans for such large projects will be harder to find. That's due mainly to the federal "one borrower" rules, which restrict the amount one savings and loan can lend to one builder. The big builders are being encouraged to go to other institutions to get

some of their financing. That spreads the risk out among lenders.

The solution, Goodkin says, may involve small builders. First, he says, big builders should consider smaller developments on smaller tracts—perhaps just 15 homes in a good location. Then, he says, they should consider a partnership with a small, local builder.

Such partnerships will benefit both, Goodkin says. For the bigger builder, it's a way to crack open the door in a community where he's unknown. It also means less of an outlay for moving and temporarily housing crews for just one project, something that only a major project could justify. For the small builder, it's a chance to get involved in a bigger project and possibly increase his credit line. The small builder also will be attracting equity financing, although he likely will have to invest some smaller percentage

himself, perhaps 10%.

"The smaller guy is intimately involved in the community," Goodkin says, and lenders like that. "Many of those folks will make a project less risky."

Big builders may find it increasingly advantageous to do larger communities with a number of small builders. "Getting involved with even three or four builders, a developer could add significantly to his volume," Goodkin says. But volume aside, he says, big builders "are going to try to get the local expertise" that small builders have. Small builders are often more conscientious about workmanship and models, Goodkin says, and they know what works with local buyers.

For the small builder, getting involved with large developers may turn up other opportunities, such as with in-fill lots as big projects wind down. In the end, he says, both builders may be stronger for the experience. ■

Affording the Dream

If your neighbors keep junk cars in their front yard, go over and thank them. If your yard isn't full of crabgrass, by all means go out and cultivate some. As for that whirlpool you're intending to put in the upstairs bath, don't do it! They're expensive. They make your skin pruny. And the tax assessor is just waiting for this kind of luxury item to up your assessment.

These and other interesting, informative, and well, obscure tips for avoiding assessment increases and keeping your home affordable await you in *Your Low-Tax Dream House*, a new book by Steve Carlson.

Housing these days is expensive, roughly four times higher than what our grandparents paid. But the initial purchase price is only a fraction of the expense. "It is the total of monthly, quarterly, and yearly bills" that really jacks up the cost of housing, says Carlson, an experienced builder, remodeler, journalist, and former tax assessor.

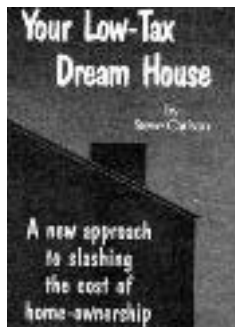
Since taxes are among the largest costs of homeownership, the book focuses on ways to avoid upping your assessments. But in

the process, Carlson explores lots of techniques for bringing building and maintenance costs down as well. In short, a low-tax strategy is also an affordability strategy.

Here are a few of the interesting ideas in the book. Many assessors won't bother going inside a house if they can size it up from the exterior. In fact, in some states, including Maryland, assessments are done from the outside only. That's precisely the reason why a carpenter friend of Carlson's purposely left the outside of his home unfinished and run down. Inside the house you'll find plush carpeting, expensive trims, and designer lavatory fixtures.

Now this particular example may be extreme, but he's got a point. As Carlson points out, "Fancy exteriors are not only expensive initially, they also have a disproportionate effect on property taxes." While your house doesn't have to look like a packing crate, avoiding fancy trim work, expensive exterior doors, and extravagant landscaping will save you thousands in building materials, labor, and of course, taxes.

If your state or community



allows the assessors to enter your home, there are still plenty of ways to avoid steep assessments.

The first rule of thumb: "movable things aren't taxed." A kitchen island may be a luxury item, but if you set it on wheels, you won't have to pay taxes on it. Movable items are considered personal property while those items that are nailed down or screwed to the wall become part of the taxable real estate. For the same reason, area rugs are not taxed, but wall to wall carpeting is.

Leaving spaces unfinished may be the easiest and best way to save on building costs and taxes. "On average, finished space costs three to four times as much per square foot as unfinished space," Carlson

says. And that's before the tax assessor sees it. You may not want to leave the wiring exposed in the living room, but there are some spots, like the laundry room, the attic, the basement and the garage, that really don't need dry-wall and trim.

All states have different laws about what's taxable and what isn't. *Your Low-Tax Dream House* includes 78 pages of information on different states' assessment practices, including exemptions and appeals procedures. It is worthwhile to explore the unique features of your state's system; some of them may apply to you.

Fallout shelters, for instance, are not taxable. Neither are burial plots. In California and Idaho, fruit and nut trees are exempt. In Iowa, wildlife habitats are free and clear. Motion picture studios are exempt in Delaware. But Virginia, Carlson says, has an exemption that just may not be worth the money. "You can get a special assessment if you sign an easement to permit inundation of your property with water."

Your Low-Tax Dream House is available for \$12.95 from Upper Access Publishers, Inc., One Upper Access Road, P.O. Box 457, Hinesburg, VT 05461; 802-482-2988 or 800-356-9315.

—Wendy Talarico

"Sell, Furnish, Install," Another Remodeling Niche

For nine years, Mike Mechill and his ten employees have installed everything from gutters to front doors to attic fans for Sears. Mechill's Sacramento, Calif., company Innerspace, is part of the store's "installed sales" program. In some cases, homeowners purchase their materials from Sears, and Mechill is sent out to install them. In other cases, Sears simply generates the lead and lets Mechill buy the products and do the work. But one thing never changes: to those customers, Mechill is Sears. If they like his work, they praise Sears. If there are problems, they call Sears.

The relationship has worked well for Mechill's company. Sears keeps about 30% off the top of each job, but in return Mechill is guaranteed year-round work. He doesn't need to hire personnel to make sales. He's always paid on time, and he never has to send out any bills. But when it comes to establishing a reputation, Mechill is the first to tell you no one in Sacramento has heard of his company.

Like it or not, installed sales are "a definite trend," says Walter Stoepplwerth, director of Home-Tech Inc., publishers and consultants to the remodeling industry. Within the next five years, he predicts, dozens of home centers across the country will compete directly with contractors for home renovation dollars. Chances are they'll be successful. The stores can rely on name recognition and generous advertising budgets to generate sales. They have showrooms so customers can see what they're getting. Most accept credit cards, making purchases fast and easy.

Remodelers can work with home centers in several different ways. In the first arrangement, remodelers sell the service, furnish the materials, and install them, but all under the name of a well-known store. This type of arrangement, called *SFI* (for sell, furnish, and install), is ideal for companies that want to capitalize on a store's name and reputation.

In the second arrangement—more common and perhaps more

practical for smaller firms—contractors furnish the materials and provide the labor, while home centers generate the leads. To cover the costs of making sales, the home center collects a fee for each job, typically 30 percent. This kind of relationship, Stoepplwerth says, is ideal for contractors who aren't good at generating their own sales.

Ernst Hardware, a chain of home centers located in the Northwest, uses about 100 different contractors to service leads generated from the company's 73 stores. The services, which range from installing ceiling fans and locksets to applying roofing materials, are expected to generate \$4.5 million in revenues for the chain this year, says Mark Remington, manager of installed services.

Ernst is fussy about selecting the contractors who represent them. They must be bonded, insured, and licensed (where applicable) with good credit and a history of good customer relations. In return, Ernst is good to their contractors, giving them a

lot of freedom to do as they like, including working for other home centers.

The last and most limited type of installed sales arrangement employs contractors who simply install the materials that homeowners purchase. Without that markup on the materials, it's a hard way to make money, Stoepplwerth says. But it's a good way to bring some income into a small company or one that's just starting out.

Most contractors see a lot of problems with simply installing materials. For one, they have no control over what goes into the job. A good example might be a customer who purchases an expensive front door. "We'd put it in," Mechill says, "but chances are it would look terrible unless we put in new trim as well." Out of all the installed sales relationships, installing is the least creative. But, says Mechill, who got his feet wet in the business by doing installations for Sears, it's a good way to learn.

—Wendy Talarico

Tax Talk:

Pension Plan Rule Changed

By Irving Blackman

Do you have a pension or profit plan? Whether you realize it or not, every year the maximum amount that can be deducted by your business for contributions to such plans is changed. The change is indexed to inflation.

Pension plans. The amount you can contribute for any particular employee is limited in two ways. First, the annual retirement benefit cannot exceed 100% of compensation. For example, if an employee earns \$40,000 per year, his annual benefit at retirement cannot exceed \$40,000. For high-income executives, a second limitation caps benefits by a set dollar limit. For 1990, the benefit ceiling has been pushed up by inflation to \$102,582, an increase from 1989's \$98,064 figure. This is good news for business owners who can not only get a larger business deduction, but, even better yet, create a bigger nest egg for retirement.

Profit-sharing plans. These plans also have two general limits—percentage and dollar. The percentage limit, or so-called "annual additions" to the plan, is 25% of salary (including employer contributions, employee contributions, and forfeitures). Employer con-

tributions are capped at 15% of salary. The dollar limit of \$30,000 for 1989 remains unchanged. This \$30,000 top will move up with inflation only when the pension benefit ceiling passes \$120,000.

402(K) plans. These plans are actually a form of the profit-sharing plan. The 1989 cap of \$7,627 has been notched up to \$7,979 for 1990. If you have a 401(k) plan at your company, it is important to immediately communicate this increase to your employees.

Pension and profit-sharing plans still offer one of the best tax breaks in the entire Internal Revenue Code. For a complete discussion of the many new tax-planning opportunities available with pension and profit-sharing plans, send for "Still the Best Fringe Benefit...Profit Sharing and Pension Plans" (\$24), or "Section 401(K)...Everybody Wins, Employers and Employees" (\$23), or \$37 for both. Contact the Book Division, Blackman, Kallick, Bartelstein, 300 South Riverside Plaza, Chicago, IL 60606.

Irving Blackman, CPA, J.D., is with Blackman, Kallick, and Bartelstein, 300 South Riverside Plaza, Chicago, IL 60606.

New Paint Masks Taped Joints

Sometimes it seems that taped drywall joints pop out from nowhere when you turn on the lights. A new USG primer, called "Sheetrock First Coat," may be able to hide taped drywall joints completely.

Taped drywall joints cause problems because joint compound and drywall face paper have different textures and suction. When you apply ordinary primer, the face paper absorbs more of the primer than the joint compound, resulting in an uneven coat.

USG claims that Sheetrock First Coat equalizes the difference in texture and suction between the joint compound and drywall, thus forming a smooth base. So, they claim, after you put on the finish coat, the taped joints don't stare you in the face.



A high-quality pigment enables "First Coat" drywall primer to completely cover taped joints by adjusting for the different absorption rates of tape and drywall, according to U.S. Gypsum.

The product can be brushed, rolled, or sprayed on. It comes in a ready-mix or a powder; just add water. It costs about \$8 per gal-

lon and you buy it from drywall dealers. Coverage is between 300 to 500 square feet per gallon.

—Scott Johnson

Estimating, word processing, accounting, and more can be done with Vertical Solutions' "The Contractor Solution," for Macintosh computers. Contact them at 25050 Avenue Kearny, Ste. 201, Valencia, CA 91355; 805/257-6911.

Have you been guessing at glulams sizes? Try GLSizer, a product that calculates beam size and stress. IBM compatible. Contact The American Institute of Timber Construction, 11818 S.E. Mill Plain Blvd., Ste. 415, Vancouver, WA 98684; 206/254-9132.

AIA pay request forms may be easier to fill out with Paymaster, a program designed specifically for this task. It runs on Lotus 1-2-3. Contact Vanco Business Products, 903 E. 18th St., Ste. 224, Plano, TX 75074; 214/422-0698.

One-Write Plus has a new version that adds inventory tracking and job costing. For more information, contact Great American Software, Inc., 615 Amherst St., P.O. Box 2066, Nashua, NH 03063; 603/889-5400.

Computer Bytes:

