Eight-Penny News

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Remodeling Remains Hot, NARI Says

Remodeling contracts averaged $72,000 in 1988, the National Association of the Remodeling Industry revealed in its most recent survey of member firms. Contractors answering the survey projected even better performance in 1989, with an average anticipated sales volume of $1.94 million, up from $1.5 million in 1988.

The 1988 National Remodeler/Contractor Industry Survey reports that the kitchen remained the main target of homeowners who hire remodeling contractors. Kitchens topped the list both for new homeowners (57.6%) and for all types of remodeling projects commonly undertaken (65.7%).

Following the kitchen, the most popular remodeling projects among new owners were additions, 49%; baths, 47.5%; and decks, 34.7%. Among all types of remodeling projects, the most popular after the kitchen were room additions, 61.6%; bathroom remodeling, 56.5%; complete home renovations, 43.8%; patios and porches, 35.6%' bathroom additions, 28.7%; finished basements, 27.7%; enclosed porches, 26.5%; added garages, 25.8%; and finished attics, 10.9%.

The most commonly installed items in 1988 were decks, roofing, and window replacements.

Figures were obtained from responses from 1,100 contractors nationwide. They averaged over 83 jobs in 1988. ■

Keep Your Roof Algae-Free

That ugly brown stuff discoloring the roof you installed last fall may be algae, reports the Asphalt Roofing Manufacturers Association (ARMA) . Often mistaken for soot, dirt, or tree droppings, airborne algae can grow on most roofing materials. It is especially visible on pale or pastel-colored roofs and does well in warm, humid climates.

ARMA offers some solutions, however. The most effective is a mixture of chlorine bleach, trisodium phosphate, and water. ARMA recommends applying the mixture with a cloth, mop, or soft-bristled brush, since a high-pressure sprayer or stiff brush can remove the roofing granules along with the algae. Cleaning should remove the algae, though it won't prevent its return.

If you're due for a new roof, however, several types of algae-resistant asphalt shingles are now being marketed; check with your dealer, or, for more information, ask for the technical bulletin "Algae Discoloration of Roofs" from ARMA, 6288 Montrose Road, Rockville, MD 20852. ■

New Guidelines Simplify Solar

The term "passive solar" has been misused about as badly as any in the design and real estate business over the last 15 years or so. To judge by the glowing phrases of real estate agents, you'd think anything with glass facing south was passive solar. At the other end of the spectrum there is the aggressive-passive solar design: a battleship prow of tilted glass, quilted shades, water walls, and weird shapes. Small wonder that the term passive solar has become almost meaningless to most consumers and many builders.

A new workbook may clear things up. It is produced by the Solar Energy Research Institute (SERI) and the Passive Solar Industries Council (PSIC) in cooperation with the U.S. Department of Energy and the NAHB. Five years in the making, "Passive Solar Design Strategies: Guidelines for Home Builders" attempts to distill the most useful solar energy design information into a form that builders can easily apply. Douglas Balcomb, a solar energy expert at SERI and one of the workbook's authors, says the solar energy design guide "uses builder's language rather than engineer's language. The principles of solar design have been disseminated for some time. What builders need now are the numbers."

There's a lot to recommend "Guidelines for Home Builders." It's short and sweet but packs a lot of useful information. The language is clear and to the point. Its overviews of solar heating principles and of the three basic passive solar designs (direct gain, sunspace, and thermal storage walls) are clear and concise. Best of all, it's region-specific.

There are 240 possible regional versions of the workbook, each containing the climate-related information (degree days, "shading factors" for angle of winter and summer sun, prevailing summer winds, "heat gain" factors, etc.) needed to plan such location-specific details as eave overhang, optimum insulation R-value, thermal mass, and glazing area.

It also contains four fill-in-the-blank worksheets that let you apply the information to a particular house or design. You can explore various "what-if" scenarios to weight the benefits of increased insulation, added glazing or thermal mass, or other options. This enables you to evaluate the potential energy benefits of different designs. The worksheets can help you plan virtually everything about a home's heating and cooling strategy, from the amount of glazing to the performance levels of your hvac systems. PSIC is presently testing computer software that will do the same thing.

The term passive solar has become almost maningless, but a new workbook may change that.

The solutions the book suggests range from "suntempering" – merely adding south-facing glass – to more advanced (and unconventional) technologies such as water walls. However, the emphasis is on moderate approaches. A practical, market-wise approach is taken throughout. For instance, the book points out that while tilted glazing allows the most solar gain, "ordinary vertical glazing is easier to shade, less likely to overheat, less susceptible to damage and leaking, and so is almost always a better year-round solution."

One of the workbook's basic tenets is that passive solar design blends logically with the consumer preference for both windows and energy efficiency. As Balcomb puts it, "People like to use a lot of windows anyway. We're simply trying to outline intelligent ways to use them – to make them energy assets instead of liabilities."

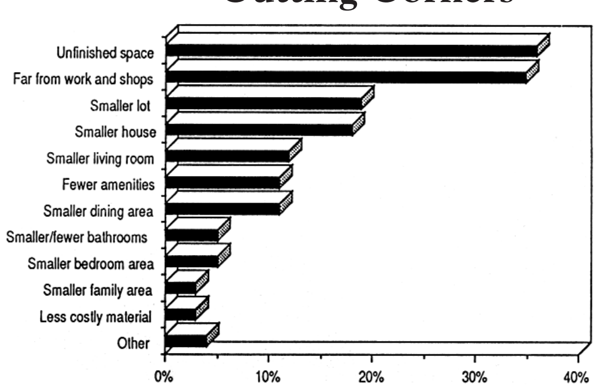
Regional editions of the workbook are generated as groups request them. A master text is kept on computer; to generate the workbook for any given region, the master text is simply merged with region-specific information. Generally, a minimum of 15 copies must be requested to make printing a new region's workbook feasible. PSIC recommends that a workshop accompany the workbook; with that option, the usual $50 price drops to around $30 (though the workshop entrance fee is extra, ranging from $100 to $250 per person). Workbooks for areas that have already been produced are available singly at $50 each.

Groups sponsoring workshops so far have ranged from HBAs to solar energy groups and state energy offices. The areas covered have included Burlington, Vt., Atlanta, Denver, Washington, D.C., central New England, and Omaha, Neb. PSIC and the NAHB are trying to encourage local and state HBAs to sponsor more.

For more information about either workshops or the workbooks, contact Tom Farkas at 800/368-5242.

– David Dobbs

Cutting Corners



What tradeoffs would you accept to make a house more affordable? *A recent NAHB survey asked this question of 1,776 new-home buyers. Almost 40% of them revealed that they would rather commute farther and have unfinished space than accept cheaper materials and smaller rooms.*

Formaldehyde on the Run

While radon mania keeps formaldehyde off the front pages, the particleboard industry has been quietly working in the background to lower the trace amounts of ureaformaldehyde (UF) in products made out of particleboard and medium density fiberboard. High formaldehyde levels have been a cause for concern for owners of tight, energy-efficient homes, and a potential liability for builders.

Ureaformaldehyde adhesives are used to make such pressed wood products as subflooring, shelving, drawer fronts, cabinet doors, and furniture tops. The unreacted or "free" formaldehyde molecules floating around the particleboard and medium density fiberboard are the first ones to outgas and cause irritation.

Bill McCredie, executive vice president of the National Particleboard Association (NPA), spends much of his time working on the formaldehyde issue with four federal regulatory agencies: OSHA, EPA, HUD, and CPSC (Consumer Products Safety Commission). McCredie says that NPA has made changes in its 45 particleboard and 15 fiberboard plants to lower formaldehyde outgassing.

Plants have reduced the amount of "free" formaldehyde by using UF resins that emit less. The switch to lower-emitting UF resins has also helped plants meet new OSHA standards concerning formaldehyde exposure in the workplace.

In addition, the plants now use a "scavenger," a generic term for the powdered urea added to the resin and wood mixture to bond with the stray molecules of formaldehyde.

Finally, some medium density fiberboard plants (which use higher levels of UF resins than particleboard plants) apply gaseous ammonia to the newly made boards. The ammonia gas is drawn through the boards by a vacuum. As the gas passes through the board, it reacts with the "free" formaldehyde molecules, converting them to carbon dioxide and water, which then evaporate.

According to these voluntary standards, UF levels cannot exceed 0.3 in particleboard and medium density fiberboard. Certified NPA testers spot check every "lot" of board produced in any eight-hour period. They also conduct quarterly, unannounced tests. For these less frequent tests, an entire board will be pulled and sent off to a laboratory for a more detailed analysis.

McCredie is pleased with their progress. He points out that formaldehyde levels have been reduced by 25%. Exposure to the remaining trace amounts of formaldehyde are not showing signs of any ill-effects. "But," he cautions, "there will always be individuals who are susceptible."

– Jan Colarusso Seeley

R.S. MEANS REPORT

COMMERCIAL BUILDING COSTS

RETAIL STORE

Location Multipliers (Multiply base cost by the correct factors for the city nearest you.)

Boston, Mass.	1.12	Concord, N.H.	.93
Albany, N.Y.	.96	Hartford, Conn.	1.02
Portland, Maine	.89	Burlington, Vt.	.90

Model costs for a one story, split face concrete block building with steel joists, 14-foot-story height, 360 l.f. perimeter, and 8,000 sq. ft. of floor area, moderate climate.

Job - Description	Unit Cost/Unit	Cost/SF Floor Area
Excavation & Backfill - site preparation for slab and trench for foundation wall and footing.	$.69/sq. ft. ground	$.69
Footings and Foundations - poured concrete; strip and spread footings and 4' foundation wall.	2.25 /sq. ft. ground	2.25
Slab on Grade - 4" reinforced concrete with vapor barrier and granular base.	2.28/sq. ft. slab	2.28
Super structure - metal roof deck, open web steel joists, beams, interior columns.	2.72/sq. ft. roof	2.72
Exterior Walls - decorative concrete block, 90% of wall.	7.26/sq. ft. wall	4.12
Exterior Doors - sliding entrance door and hollow metal service doors.	1,200/each	.31
Windows - storefront, 10% of wall.	20.66/sq. ft. window	1.30
Roof Covering - built up tar and gravel with flashing.	1.57/sq. ft. roof	1.57
Roof Insulation - Perlite/urethane composite.	1.14/sq. ft. roof	1.14
Roof Openings and Specialties - gravel stop and hatches.	.30/sq. ft. roof	.30
Interior Partitions - Gypsum board on metal studs, 60 sq. ft. floor/L.F. partition.	2.79/sq. ft. partition	.47
Interior Doors - single leaf hollow metal, 600 sq. ft. floor/door.	448/each	.75
Wall Finish - paint.	.28/sq. ft. surface	.09
Floor Finish - vinyl tile.	2.05/sq. ft. floor	2.05
Ceiling Finish - mineral fiber tile on concealed Z-bars.	3.03/sq. ft. ceiling	3.03
Interior Surface of Exterior Wall paint only, 90% of wall.	.80/sq. ft. wall	.45
Plumbing - toilet and service fixtures, supply and drainage, 1 fixture/890 sq. ft. floor.	2,555/each	2.87
Heating and Cooling - single zone unit, gas heating, electric cooling.	4.48/sq. ft. floor	4.48
Electrical Service and Distribution - 400 amp. service, panel board and feeders.	.99/sq. ft. floor	.99
Lighting and Power - fluorescent fixtures, receptacles, switches and miscellaneous power.	3.99/sq. ft. floor	3.99
Alarm Systems and Emergency Lighting	.33/sq. ft. floor	.33
SUB-TOTAL		36.18
Overhead and Profit - 15%		5.43
Architect Fees - 8%		3.34
TOTAL BUILDING COST		44.95

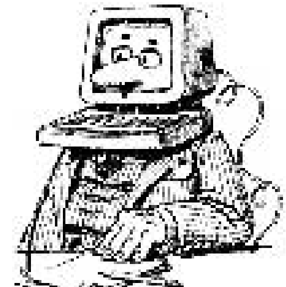
The above costs are based on a national average of unit price costs for the typical commercial construction of a single retail store. The cost per square foot for multiple units, such as in a small strip mall, may be slightly lower. Costs shown are for basic construction only and do not include site clearing and grading, site utilities, paving, landscaping, site improvements, land and development costs, and special finishes and equipment. Costs will vary significantly from project to project due to quality, size, complexity, and local economics.

This report is adapted from the 1989 edition of Means Light Commercial Cost Data, published 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.

Builders Hit the Deck

According to a recent *Boston Globe* story, things were slow enough in the Boston area this summer that at least one union local, Construction and General Laborers Union #22, felt it had to resort to drawing cards to pass out its meager jobs. The Globe reported that while 50 out-of-work laborers gathered round, a union official cut the deck and then passed out the playing cards; the first holder of a 3 got the one job available that day. When JLC called to learn more about the distribution system, the local's Lou Mandarini said, "It doesn't matter what the system is. It's a fair system."

— David Dobbs



Computer Bits:

Looking for an article you saw in a building magazine? Building and Remodeling Index, (BRI) a computerized database of past articles from 43 magazines is available from BRI, P.O. Box 7466, Portland, ME 04112; 207/871-7066.

The best of Lotus 1-2-3 and Software Shop's Construction System Job Cost module are available with Software Shop Construction Connection. Contact Tom Scott, Rt. 34, P.O. Box 728, Farmingdale, NJ 07727; 201/938-3200.

Two or more people can simultaneously access the same project database on separate computers with Primavera Systems, Inc.'s 2.1 Expedition construction contract control software. Contact Jennifer Garfield, Letven/Diccicco, Inc., 455 Business Center Dr., Horshan, PS 19044; 215/957-0300.

Automate your bookkeeping and do job-cost accounting, general ledger, payroll and more with Master Contractor from Data Automation Services International, Inc. Contact DASI at P.O. Box 1319, Alachua, FL 32615; 800/635-6366.

Affordable Housing On Track

A home built from boxcars may sound like a railroad buff's dream, but it may become more like the American Dream for low-income families in Memphis, Tenn.

The Fannie Mae Foundation, part of the Federal National Mortgage Association, the nation's biggest buyer of mortgages on the secondary mortgage market, cited the Memphis "City Cottage" for its uniqueness and practicality. Made from two boxcars connected by a breezeway, the cottage received an honorable mention from the foundation's Awards of Excellence.

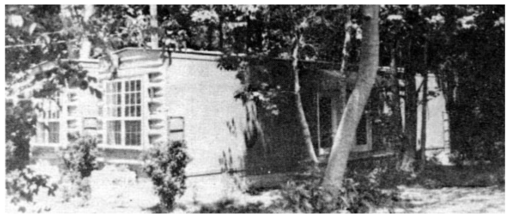
The idea for using boxcars for housing all started when Memphis developer George Cates and his wife, Bena, were driving through Alabama. They noticed hundreds of abandoned boxcars. Bena Cates recalls, "After ten solid miles of boxcars, we gave up counting."

Cates was intrigued. Here was something that, with the help of an imaginative architect and a willing construction crew, could become an attractive and practical low-cost home.

Stephen Berger, an architect with Hones Mah Gaskill Rhodes, Inc., in Memphis came up with a series of plans. One featured two boxcars connected by a breezeway. With 1,050 square feet, the home includes two bedrooms, a roomy kitchen, and plenty of living space.

By late 1987, volunteers from the builders association were ready to start the building. Refrigerated boxcars for the project were donated. Since neither the builders not the county building inspector had experience with boxcars, they had to rely on intuition and experience with traditional homes. Officials from the Federal Housing Administration, which provided a mortgage for the buyers, visited the site weekly and videotaped the progress.

Since the boxcars had been refrigerated, they didn't need any additional insulation. The interiors of the steel cars were lined with pine, providing a good base for nailing drywall. But drywall isn't even necessary, says Reggie Garner, president of the builder's association charity project, since pine can be sanded and varnished, providing an attractive, authentic finish.



In Memphis, Tenn., homes built from converted refrigerator boxcars sold quickly at $29,000.

The exterior required some minor changes to take away the boxcar look, he says. That meant pulling off the ladder and plugging a few holes. Paint hides the brilliant Fruit Growers Express emblems.

The 12-foot ceilings were dropped to eight feet, providing attic space and making the cars more homey, Garner says.

Memphis' "City Cottage" sold quickly, just a few days after it went on the market. The cost: $29,900.

— Wendy Talarico

Escrows May Change the Rules

An Ohio lumberyard operator, tires of the pitfalls of traditional remodeling payments, has started a business that handles project payments through escrow accounts.

Reed Varian, owner of Osnaburg Lumber in East Canton, Ohio, believes escrow has advantages for all the parties involved: the consumer, the contractor, and the supplier. It was his experience as a supplier that led him to found Contract Services, Inc. This separate company administers escrow accounts for owners who are contracting for remodeling services. Contract Services earns no fee but keeps the interest earned by the escrow account.

"Escrow is extremely simple in that the face amount of the contract is set aside in an escrow account," Varian says. "The people who are involved in the project are [paid] out of that account at the instruction of the consumer.

"It's a classic escrow in the sense that the consumer maintains control – maintains, in fact, ownership – until the disbursal to the predetermined parties." That means not only is the contractor paid from the account, but so are the suppliers. That's what makes escrow so attractive to suppliers such as lumberyards. "No longer is a supplier at the mercy of the contractor for payment," Varian says. Because the owner and supplier have a contract, the supplier can act directly against the project if payment is not made.

Varian says the advantage to the contractor is that he no longer has to worry that the owner starts out with enough money for the project but then spends it on something else. Under an escrow arrangement, the entire project cost is put into escrow, so the contractor knows funds are available. If the owner needs financing to pay for the project, he'll have to obtain the loan before the project is started, since without the full project cost in escrow, work does not begin. As the contractor sends percentage-of-completion billings, the owner writes a check from the escrow account, where the money is waiting to be tapped.

Varian said the service is available in Ohio and New York and will spread soon to other eastern

Tax Talk:

Legal Tax-Free Transfer

by Irving Blackman

Sooner or later, every closely held business is transferred. The transfer is made voluntarily by the business owner during life, or it is forced on his family after death. A 1987 tax law changed the lifetime transfer rules. The thrust of the rules is to prevent a business owner from freezing the value of his business for estate tax purposes. The law [Section 2036©] is a complex maze that has caused much confusion and uncertainty. After waiting for almost two years, the IRS has finally spoken by releasing Notice 89-99. The purpose of the notice is to answer a number of important questions. While the notice does not answer all points, it makes a start at clearing up some of the confusion.

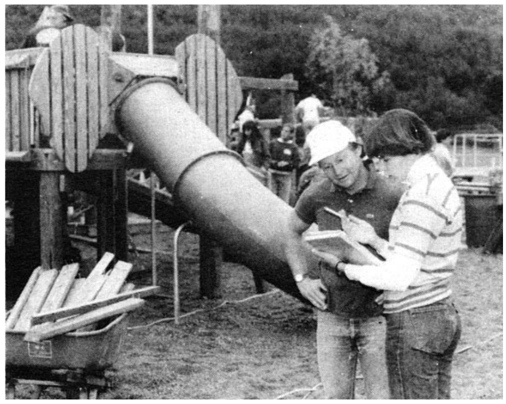
Here's the scoop. Clearly, the owner of the family corporation can no longer recapitalize his corporation – that is, wind up owning the preferred stock while his children own the common stock. As far as the new law is concerned, there are two things wrong with a recapitalization. First, by owning the common stock, the children have received a transfer of property having a *disproportionately large share of the potential appreciation*…a no-no. Second, by owning the preferred stock, the owner has *retained an interest in the income* of the business, also a no-no. What's the result? When you die, the value of the common stock at the time of your death will be included in your estate.

Now, suppose your corporation has only common stock, which obviously can appreciate. You give the common stock to your children. Or you sell the stock to them at its fair market value. The gift or sale (or a combination of the two) is a good transfer. But caution is advised. If you retain an interest in the income of the corporation, you can fall into the Section 2036(c) death trap – the value of the stock owned by your children is swept back into your estate. The language in the notice says than an interest income of the business "may be embodied in any form of interest (present or future), agreement, or arrangement, including without limitation, a preferred equity interest in the enterprise, a promissory note, a life or term interest, an employment agreement, a retirement arrangement, a sale agreement, and a lease agreement." That word "future" can be a troublemaker for as long as you live.

The IRS is telling you're a proper transfer is okay and can be kept out of your estate. But, don't mess around. If you keep an interest string by getting certain income, the Section 2036 (c) trap will be sprung. For example, if the owner works for the corporation and takes a salary, there will be no problem. But taking a salary without working, or taking an excessive salary, will not pass an IRS review. Or, leasing property to the corporation at a fair rental will be okay, but if you take an unreasonable rent it could be held to be an income interest.

Transfer planning is now more important than ever. You must consult a competent professional. Your professional must help you devise a transfer plan that properly deals with Section 2036(c) when it is first implemented. Then, the plan must be monitored every year to make sure that an income interest does not creep into the plan in the future. Mistakes will be paid in high estate tax assessments. Remember, the estate tax brackets go up to 55%. ■

Irving Blackman, CPA, J.D. specializes in closely held businesses. Want to learn more about how to transfer your business? Send for the companion Special Reports – Transfer Your Corporation to the Next Generation…Tax Free, and Transferring Your Business When You Have Two or More Children, $23 each, or $36 for both, Blackman, Kallick, and Bartelstein, 300 South Riverside Plaza, Chicago, IL 60606.



Have trouble handling one or two subs or employees? Try keeping tabs on 350 unskilled workers. That was the chore for Dave Iannello and Sarah Jones recently, as they organized hundreds of eager parents and community members to build a 10,000-square-foot wooden playground in Stowe, Vt., in five days.

It sounds like an organizational nightmare, but Iannello and Jones, construction consultants for an Ithaca, N.Y., playground designer, specialize in drawing quality construction from unskilled volunteers.

It takes remarkable delegation skill – not to mention patience – to coordinate this many people. "The trick is breaking down the job into individual tasks and giving them one step at a time," says Jones (pictured above). "Also, you learn how to size up people's abilities to listen. If they listen, and you show then how to do the task at hand, it works out."

Also, she says that working with novices has its fun side. "You show someone how to use a router, and put them on a small job, and they think they are the router-champion-for-the-day." ■

Bureaucrats All Wet

By this Christmas, a new federal law may ban government employees from staying in unsprinklered motels and hotels while traveling on business.

In September the bill was in the hands of the Government Operations and Science Committees. From there, it was expected to be passed by the House and move onto the Senate, where lobbyists from the sheet-metal contractors group may attempt to add a rider calling for mandatory smoke-control systems.

– Jan Colarusso Seeley