Miscellany

Housing in the Future

Builders and remodelers must know the housing market — who's buying, what's being bought, and why — and they must know how they can predict how long this market picture will persist. That's the word from Dan Paquette, a successful developer who spoke at the recent Advanced Residential Construction Conference in Cromwell, Connecticut. According to Paquette, he looks at four factors to help him predict what business he'll be into in the next five years, and to help him make some good guesses about the next ten: demographics, household formation and product type, labor markets, and migration patterns. What follows is a brief summary of his comments on these issues.

Demographics and Household Formation: The American housing scene has gone through dramatic changes, and will continue to do so. Demographics will be a large factor in these changes. In a National Association of Home Builders report "Framework for the Future," long range planners predict that due to a decline in tax incentives for investors, a mild economic recession towards the end of this decade, and a moderation in household formations, housing starts will be constrained to an annual rate of 1.5 million between 1988-1990. But who will be buying? And what?

Most studies see a surge of married couples in the 35 to 44 year age group (members of the "baby boomer" generation). The studies also show that married couples want single-family housing. Many of these couples will have accumulated significant amounts of home equity, and have relatively high incomes. So they are expected to fuel the demand for upscale single family housing. In addition, the number of singles in this age group, and singles over 75 will grow. They are expected to want condominiums or owner-occupied multi-family housing. The condominium housing market, usually associated with volatile markets such as vacation, young urban professional, and retirement housing, should hold its own for the next three years, largely because land shortages and high housing costs will make them the only affordable alternative in many markets.

Meanwhile, these same studies note that the number of those reaching the household formation age will decline (due to the "baby bust" between 1963 to 1983) after 1990. As a result the demand for entry level housing and rental housing will decrease.

Regional Migration Patterns: In the July 1987 *Housing Economics Magazine*, an article entitled "Are Migration Patterns shifting Back to the North?" by Andrew Lofgren states: "Since 1983 unemployment rate advantages have improved — resulting in less out-migration, and particularly in New England — net in-migration. The effect of reduced migration from the snowbelt to the sunbelt has already been reflected in housing activity."

He concludes: "If unemployment rates continue to improve and stabilize in the Northeast, we can look forward to [further] reduced net-out-migration and stronger relative housing activity.

What will hinder this formula in New England is the cost of living (and particularly the lack of affordable housing). These factors will inhibit people from moving in from other regions. It's important that builders wishing to keep the housing market vital not forget that it needs to be fed from below. This makes affordable housing an issue — even for the builder building upscale housing.

Labor Force: Any hindrance to in-migration will have a depressing effect on the labor pool as well. And the same demographics that tell of the "baby bust" generation, provide bad news regarding our future workforce. Daniel N. Chambers of the NAHB staff states: "The labor force will grow more slowly for the next decade than at any time since the 1930's."

The Hudson Institute recently released report entitled *Workforce 2000* states that the ability to match new workers to new jobs will require greater training efforts and greater education. To the building professional, this means that there will be a greatly reduced pool of workers and all of the other service sector employers will be competing with construction employers.

This will greatly affect the cost of labor man/hours as well as how labor will be regarded. More builders will have to seriously look at modular and pre-fabricated products. And they'll have to take good care of the craftspeople they do have on staff. As a dying breed, finish carpenters may be getting a salary and benefit package ten years from now that many attorneys and accountants would envy.

By looking at these issues, a builder can make a better business plan, but Paquette warns that the unexpected can always change the picture. He mentioned how the AIDS epidemic and changing moral values may change household formation patterns (perhaps resulting in different requirements for housing); and that the growing land crisis will have its own effect on development. It's important to study the predictors outlined above, but be flexible and alert for the unpredictable. ■

NAHB Councils Promote Manufactured Housing

With the trend toward factory-built housing accelerating due to on-site labor shortages, foreign competition, and an increasing interest in predictable quality control, NAHB's Building Systems Councils (BSC) are expecting greater activity this year. Several separate councils operate under the BSC, including the Modular Building Systems Council and the Panelized Building Systems Council. The latter's membership is comprised of manufacturers of pre-cut, panelized, and component buildings. The two Councils supply lists of their memberships to builders, and organize special plant tours of panelized and modular facilities. And both are involved with the BSC's Showcase '88 to be held in Orlando, Fla. (Nov 14-16, 1988).

The trade show is an opportunity for builders to meet with building systems' manufacturers and their products. Other councils under the BSC are the North American Log Homes Council, the National Dome Council, and the Associate Members Council. For information about the Showcase, or for membership lists, contact the BSC at 800/368-5242, ext. 576. ■

Manuals Address Roofing Problems

Last October, we reported on the Asphalt Roofing Manufacturers' Association (ARMA) decision to take a firm stand against use of its products on insulated roof decks. The group recommends a flow-through ventilated air space be provided between the top of the insulation and the nailable deck to assist in heat and vapor dissipation in cases of insulated decks. Guidelines for doing this are available in *Give Your Attic a Breath of Fresh Air,* a booklet available from the American Society of Home Inspectors. (Send a self-addressed stamped envelope and $1 to ASHI, 3299 K St., N.W., Washington, D.C. 20007.) You might also want to take a look at ARMA's Residential Asphalt Roofing Manual. The 60-page manual has been updated and covers all phases of residential roofing from selection of the right roofing material through to maintenance of the completed roof. (Send $10 to ARMA, 6288 Montrose Road, Rockville, MD 20852.) ■

Maine Legislates Construction Contracts

In a move to protect consumers, the State of Maine has passed MRSA c. 219-A, an act requiring basic written contracts for home construction work, both new and renovation. The Act requires that any home construction contract for more than $1,400 in materials of labor "must be in writing and must be signed by both the home construction contractor and the homeowner or lessee." The contract must contain "the entire agreement" and must contain the names of the parties, location, work dates, contract price, method of payment, description of the work, a warranty, a method of resolving disputes, a change-order statement, and if the result of door-to-door sales, a description of the consumer's rights to avoid the contract in such a case. In each of these areas, the law specifies what is allowable and required. In the case of method of payment, the law limits the initial down payment to no more than one-third of the total contract price. It also specifies that the warranty shall read that "In addition to any additional warranties agreed to by the parties, the contractor warrants that the work will be free from faulty materials; constructed according to the standards of the building code applicable for the location; constructed in a skillful manner and fit for habitation." In addition the warranty rights and remedies set forth in Maine's Uniform Commercial Code (UCC) apply. The law also requires that change orders be written and executed by both parties.

There is allowance for an exemption — if the contractor informs the homeowner or lessee of his rights under the law and the parties mutually agree to a contract or change order that does not contain language as set forth in the law. Contractors who violate the law shall be subject to a fine of $100 to $1,000, unless they can prove that the violation was unintentional and a bona fide error. ■

Home Energy Rating System Available in Vermont

A rating system which evaluates the energy efficiency of homes is now available in Vermont through the non-profit Energy Rated Homes of Vermont, Inc., in Burlington. Over the past year, a committee of energy technicians from the private and public sectors tailored the nationally accepted Energy Rated Homes (ERH) rating system to Vermont. ERH is able to rate homes on a one- to five-star scale, with a "four-star" rating considered "energy efficient."

ERH ratings are voluntary and available to anyone. As well as being a marketing tool (ERH of Vermont can supply yard signs and certificates of the home's rating), the ERH rating is being used by participating lenders as documentation for stretching a homebuyer's qualifying ratios. These lenders will allow a larger mortgage for homes with a four or five-star rating.

Most builders in Vermont constructing houses with 2x6 walls and 12 inches of fiberglass in the attic are probably quite close to, if not at, the "four-star" level. ERH of Vermont is able to provide ratings for any single family home, whether from plans or already built. The fee for each rating is $150 or $200, depending on whether the builder desires a blower-door test to determine the home's infiltration rate. However, through July, the organization is offering one free rating to each builder who contacts them. Builders in Vermont should call 802/865-3926. For information about the national program, contact ERH of America, 100 Main Street, 4th Flr., Little Rock, AR 72201; 501/374-7827. ■

Associations Battle Over Thermal Drift

Last September, we reported that the Midwest Roofing Contractors Association (MRCA), and the Roof Insulation Committee of the Thermal Insulation Manufacturers Association (RIC/TIMA) were contesting the R-values some roof foam manufacturers were claiming. They felt that the claims for the urethane foam insulation were unduly high, given that there was strong evidence that the products continued to lose R-value (through a process known as "thermal drift") after they left the factory.

Since then, MRCA and the National Roofing Contractors Association (NRCA) have jointly released a bulletin citing that evidence and making recommendations. The bulletin, entitled "In-Service R-Values (ISR) for Polyisocyanurate and Polyurethane Roof Insulation Boards" recommends that because "both time and material characteristics will cause R-values to vary," and because "in place, R-values in roofing systems cannot be predicted with absolute accuracy," designers, users, and other affected parties use an R-value of 5.6 per inch of foam thickness as a reasonable guide when calculating thermal resistance of polyisocyanurate (PUR) and polyurethane (PIR) insulation boards over their normal life in a roofing system. The bulletin claims that "once insulation is in place, and aged, the R-values will differ from the original value arrived at by artificially induced aging practices."

Several factors are used to predict how much R-value will be lost, including cell properties and dimensions, blowing agents, aging temperature, thickness, and facing materials. But according to the technical bulletin, "changing technology, usage and thickness effects, technical limitations of in-situ testing and limitations with the testing of field samples" make it almost impossible to accurately predict what the ultimate R-value will be over the life of PUR and PIR thermal insulations. "Further," the bulletin states, "there is no standard test protocol available to the industry to predict accurately the effects of long-term, in-service aging on the degradation of the R-values. The current artificial conditioning practices… are useful for determining initial R-values and the quality of the materials. However, published data shows that they are not indicative of the (in-service) stabilized R-value needed for design purposes." The bulletin reports that the Canadian General Standards Board Thermal Insulation Committee has set a standard of an R-value of 5.8 per inch thickness, and assumes that "in the absence of specific data on specific products, [the R-value of] PUR and PIR thermal insulations with truly impermeable membranes" will be equivalent to that of the unsurfaced product after a five-year period.

Even before its official release, the NRCA/MRCA joint bulletin received mixed reviews from members of the manufacturing community. In a recent press release sent to the trade publications, the Polyisocyanurate Manufacturers Association (PIMA) stated that it "strongly disagrees with the NRCA/MRCA proposal to assign a specific R-value for [PIR] and [PUR] rigid roof insulation… A single standard would penalize high-quality products and give undue recognition to lower quality products." PIMA recommends a range of values: 7.1 to 8.3 for polyisocyanurate and polyurethane foam with facings having high resistance to gas permeation, and 5.6 to 6.2 for foams with facings or coatings with low resistance to gas permeation.

To obtain a free copy of the NRCA/MRCA joint bulletin, write to NRCA, One O'Hare Centre, 6250 River Road, Rosemont, IL 60018; or call 312/318-6722. For more information about PIMA's position, contact Laurie Buehler, PIMA, 104 Wilmot Rd, Suite 201, Deerfield, IL 60015; 312/940-8800. ■

Speed Estimating

"How often do you hear that a house will cost $45 or $65 per square foot to build?," asks William Darling. "Well, estimating a house by the square foot today makes about as much sense as pricing cars by the square foot," says Darling, who has conducted estimating seminars across the U.S. and Canada for over 17 years.

Yet many situations do not call for the other extreme, which would be a highly detailed stick-by-stick estimate. That's why, says Darling, he spent several years developing a speed-estimating system. The system produces reasonably accurate material estimates in an hour or less using a pencil, a calculator, and tables provided by Darling through his seminars.

The estimating system, now used in lumber yards around the country, is based on tables and formulas that convert floor areas and wall lengths into unit measures and costs.

In general, the estimator starts with the floor area. This is projected upward through the building to yield the areas and quantities for all floor, ceiling, and roofing materials. Next, a lineal measurement of the exterior walls is used to develop costs for insulation, wall framing, sheathing, siding, and exterior trim. Interior walls are treated similarly. The next step involves counting doors, windows, and other special features not picked up by the wall and ceiling calculations. Finally the system looks at the roof overhangs for soffit, fascia and gutters, and sill area for anchor bolts, sill, and sill sealer.

The system, says Darling, takes into account waste and extra framing and materials used at corners, openings, and level changes.

"The factors I use are based on years of experience," says Darling, "and are intentionally designed to give conservative estimates of up to 5 percent over actual costs." The estimates do not yield an actual bill of materials, but do give a total cost.

Although speed estimating is used primarily by materials dealers, contractors might also find it of interest. If you don't want to spend a lot of time developing your own formulas, you'll have to attend one of Darling's seminars — since his materials cannot be purchased separately. The seminars are conducted throughout the U.S. in conjunction with lumber-dealer associations. For more information, contact your local lumber-dealer association, or contact W.S. Darling and Associates, 94 Village Drive, Belleville, Ontario K8P 4R8; 613/962-6354. ■

From What We Gather

As of January 1988, unlicensed contractors in California face minimum $1,000 fines for working without a license on jobs exceeding $300 in value. Still, the state license board estimates that as many as 20,000 people in the 40 building trades regulated are ignoring the law — reported in *Professional Roofing*.

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The "pickled" look is in, in kitchen cabinets, that is, according to an article in *Building Supply Home Centers*. If you're wondering what a pickled cabinet looks like, it has a light see-through stain usually on oak. The magazine also reports that over 88 percent of new residential homes use all-wood cabinets, compared to 62 percent in condos and townhouses, where laminates are more popular.

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Everyone's getting into the software business, it seems. Major housing manufacturer Pulte Homes is trying its hand with the launch of an integrated package called Landmarke. The product is being marketed by a Pulte subsidiary called Cambridge Software, Inc., based in Englewood, Colo.

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If you smell dirty socks when the heat pump kicks on, don't necessarily blame your new laundry detergent. Dr. Thad Godish, of Ball State University, thinks such odors are related to microorganisms growing in the drip pan. The solution is to make sure the drip pan effectively drains away any condensate it catches.

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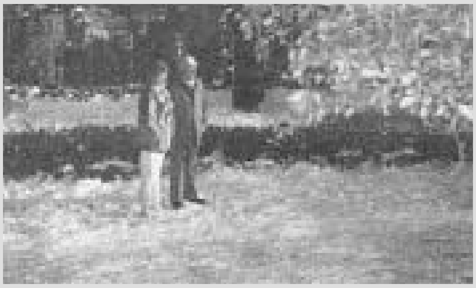
They brought you the 50,000 mile warranty on the drive train, but can Chrysler make a dent in the equally competitive vinyl siding market? They certainly think so with the introduction of premium vinyl siding and accessories under the name Charter America Building Products. The product stems from a joint venture with Worldmark Corp., based in Palm Beach.

Tile Setter Stars in Video

Michael Byrne, contributor to *New England Builder* (see NEB, 11/87), and author of a comprehensive guide to ceramic tile installation called *Setting Ceramic Tile*, demonstrates tile setting in three step-by-step videos produced by The Taunton Press. Byrne shows how to use traditional techniques and modern tile materials to create easy-to-clean countertops, durable walls, and watertight floors. Designed to fit the needs of beginners and experienced professionals, *Tiling Walls*, *Tiling Floors*, and *Tiling Countertops* are available directly from the Taunton Press for $29.95 each ($74.95 for a complete set). The book, also available from Taunton, costs $17.95. Write the company at 63 South Main Street, Newtown, CT 06470; or call 800/243-7252 or 203/426-8171. ■

Most Interesting Application for a Construction Material Department....



It really is Bob Hope and Reba McIntyre — but it's not a New England snow scene. The stuff they're standing in is actually Insul-Safe II Fiberglass blown-in insulation (Certainteed Corp., Valley Forge, Pa.) used to create a wintry effect for a television special.

Reagan Axes Preservation… Again

For the seventh consecutive year, the Reagan Administration is proposing a budget that would make no funds available from the Historic Preservation Fund for matching grants to state preservation programs and the National Trust. The fiscal year 1989 budget request asks Congress to provide no federal funding for the national preservation partnership established by the National Historic Preservation Act of 1966.

Each year, Congress has rejected the zero-funding proposals and has included funding for both the states and the Trust in the appropriations measure ultimately signed by the President.

For the current fiscal year, Congress voted historic preservation its largest appropriation since 1983. The $28.25 million appropriation for the state preservation programs and the Trust came despite the severe constraints imposed on federal domestic spending as a result of deficit reduction efforts. Spending limits for the coming fiscal year are even tougher under a multi-year budget plan agreed to last year by both the President and the Congress. The Administration's budget proposal covers the period from October 1, 1988 through September 30, 1989. ■

Excerpted from an article in Preservation News, *March 1988, the monthly newspaper of the National Trust for Historic Preservation.*