



By Duo Dickinson, AIA, an award-winning architect who has taught at Yale University and Roger Williams University. He is the author of six books. His most recent book, *The House You Build* (The Taunton Press; 2004; \$34.95), aims to help readers build homes with excellent features while staying within their budgets. Dickinson lives in Madison, Connecticut.

Home of the Future

Planning a home with later expansion in mind

Q We plan to build a smaller house now and add to it as we have children. What are the different ways we might approach this as we plan the initial construction?

A Master-planned construction is one way a professional home designer (architect or other) can be critical to the success of a project. It is relatively easy to design two-dimensional plan spaces that allow for addition, but it is much harder to create a three-dimensional reality that can easily accept extension, addition, and reinvention. Here are some points to keep in mind:

1. Some exterior walls in a Phase I construction may—after Phase II—carry twice as much weight, and therefore you need to think about where all that additional load is going to go and how it is collected into the existing foundation.

2. Your roof forms can create never-ending problems when they aren't thought about in advance. Your Phase I roof will probably have

another roof bumping into it later—and internally pitched roofs, flat areas, and long shallow valleys usually leak over time.

3. Chimneys might need to be dramatically extended or even relocated to accommodate the final roof form.

4. Expansion affects not just your house, but your site as well. If your house has a septic field, well, or even just a curb cut to the street, you can avoid enormous expense simply by locating all your site amenities to fit the final footprint.

And be aware that your master plan might have to be master *replanned* for the next phase.

Q When we build, we are putting a large deck on the front of the house. I like the low maintenance of weather-resistant composite materials. But I'm afraid the finish looks are too flat to have out front. Is there any way to give composite materials richer finish, or should I go with cedar?

A You should talk to your composite product supplier, but my distinct impression is that these recycled products are not comfortable with additional coats of paint or finish. Rather than creating an ongoing maintenance nightmare, you might realize that one of the real beauties of composite products is that they are almost completely rot-resistant. Instead of avoiding such a product, why not just soften its overall impact on your deck design? Add container plantings, pots, garden beds built with the product itself, or even sculptures. These will add beauty without harming the surface.

Q One of the things that I find most appealing on the outside of a house is a roof with some character. How can I get the best-looking roof possible for a house with \$150-per-square-foot construction budget?

A At that price, most of your choices come down to two products. The obvious one is asphalt shingles. For me, these shingles look "cheesy" when they, in an exaggerated and grotesque fashion, seek to simulate old wood, hand-split wood, or thick variegated slate. Because of this, I typically use heavy-gauge (30- to 40-year warranty) three-tab asphalt shingles without the extra layers, fake shadow lines, wrinkles, creases, etc. On lower-budget projects, we've also used color banding to give the project



some zip. This is very low-cost and has very large impact. Typically these are offered in fairly bland tones of gray, brown, and black, but lately manufacturers have been producing some deep greens, reds, and blues that are better looking.

The second form of roofing that might be affordable is a standing-seam aluminum roof—one of the more commercial systems rather than a custom-fabricated product. For this application, dozens of colors are available, but you've got to be comfortable with the pitter-patter of rain on the roof and also with the fact that ice and snow slide off these roofs like greased lightning, often terrifying homeowners.

Q My builder says I need GFCIs in the kitchen, bathrooms, and laundry of my house. What is a GFCI, and why do I have to have it?

A GFCI stands for ground fault circuit interrupter. This is an electric outlet with an independent breaker built into the socket. Should a breaker engage—perhaps because of a power overload or because it senses the presence of water—it will shut off power to this outlet. To reset, simply push a button on the GFCI outlet. On older systems, resetting required a trip to your home's breaker box to flip a switch or replace a fuse.

GFCIs are required to prevent people from electrocuting themselves. These breakers are virtually hair-trigger, shutting down a circuit when moisture is detected. Though very sensitive to moisture (a steamy shower, etc.), they are worth the minor aggravation because they have undoubtedly prevented accidental deaths.

