

The Expandable Floor Plan

by Clay Johnson

Occasionally I'm asked to design a small house that will later be expanded into a much larger house. It might be for a growing family, whose needs will change as children come along and get older. Or, as in the two cases illustrated here, it might be a vacation cabin where the owners plan eventually to live year-round. Sometimes the final plan is twice or even three times as large as the original — meaning that a lot of thought has to go into making a practical transition from the small house to the large house.

In effect, it's like designing two houses

at once — in some ways, two very different houses. Not only must both plans work well, but, ideally, the expansion to the final plan should be invisible.

Kitchen Considerations

When designing an expanding house, some of the usual design considerations become more critical. Take kitchens, for example, which are expensive to build and remodel. The kitchen requirements for a vacation cabin are usually minimal. Clients will tolerate cramped counter space, small ovens, and a certain amount of inconvenience on a vacation or week-

end getaway. But when they come "home," they want it all — especially in the kitchen. There are three ways for a kitchen to make this transition.

Start with the keeper kitchen. The first option, and the one with the highest initial expense, is to build the permanent kitchen in the vacation cabin. This uses more space and commits the cabin design to revolve around the kitchen, but it may make the most sense in certain situations. This is the option we chose in Case A, which was built for a couple with no children. Because they would be cooking only for themselves most of the time, a modest-size kitchen would work in both plans. (However, they wanted a larger dining area in the final plan, to accommodate occasional guests).

The disposable kitchen. The second choice, which has a low initial expense but costs more later, is to build the smallest kitchen you can get away with in the cabin. When the house expands, this kitchen comes out and the ultimate kitchen is built how and where the client wants. This works well when the budget for the initial cabin is tight, and gives the greatest flexibility in designing the permanent kitchen. The tradeoff is that the final kitchen costs more because we are not using any of the value of the original kitchen. So I try to make it a simple "camp" kitchen.

This is the option we chose in Case B, which was designed as a vacation cabin for a young couple just starting a family. Their current budget didn't allow for an extravagant kitchen, but we knew that any kitchen we built for the small version of this house wouldn't be large enough or well-equipped enough to serve their family in the future. So we invested as little as possible into the original kitchen.

The expandable kitchen. The third option is the compromise: Build half a

Case A



This vacation cabin, designed for a professional couple without children, will become a retirement home with a guest bedroom.

Case B



A young family on a tight budget wanted an expandable getaway cabin to accommodate their needs as the children grow and their income increases.

kitchen in the cabin, then add to it for the permanent house. This is the most cost-effective option, but it's also the most restrictive and difficult to design. "Half" a kitchen still needs the basics: stove, sink, dishwasher, and refrigerator. Storage, pantry, and extra counter space are relatively easy to add. The trick is to try to permanently locate the plumbing and mechanicals to keep down the cost of the remodel. Less expensive items like floor coverings can be upgraded when the space is enlarged.

Stairways to the Future

Stairs are expensive to build and not at all portable, so they typically define the circulation for both the cabin and the permanent home. There are also no (code-approved) small versions of staircases, so they are a dominant factor in the design of a small cabin. A simple way to avoid the staircase dilemma is to build

the cabin as a one story and expand later to two stories. If the cabin has two stories, the stair and hall typically become the spine of the circulation for the expanded home.

In Case A, the cabin's stairway is very tight and barely provides enough space for the rear entry door underneath. The door at the top of the stair has two advantages: It allows the stairwell to be open to the living room, increasing its volume; and it provides acoustic privacy for the bedroom.

To avoid any rebuilding in the expanded plan, the stairs form a T at the landing to access the new second-floor area. In some houses, it would be inconvenient, even unsafe, to have to run up and down five steps to get from one bedroom to another. For example, if the house were used by a family with young kids, there would be frequent trips between the two bedrooms. But because

the couple, when they retire, plan to use the second bedroom purely for guests, the T actually helps to separate the guest quarters from the master bedroom.

In Case B, we planned for the living area to remain intact in the expanded plan. The staircase, as part of this area, remains essentially the same, with the new bedrooms accessed from the original loft area.

Details, Details

As in any custom project, most of the factors influencing the design of an expanding vacation cabin are case specific, but a few elements pop up again and again.

The entry. The front door of the cabin may or may not be the front door of the larger house. In some cases, the addition of a larger living/dining area means the old front door becomes a passage to the kitchen. In Case A, the expansion made room for a new dedicated entry that works well with the new plan. In Case B, the entry stays the same, bringing you into the living room through the outdoor living space provided by the verandah.

The hearth. Fireplaces are expensive, so if the cabin has one, it needs to fit well in the expanded house, too. In Case A, the fireplace in the living/dining area will stay to create a cozy touch in the new dining room. In Case B, the hearth becomes the focal point for the enlarged living room. If the clients want a hearth, but the location doesn't work well in the expanded plan, a wood stove is a better choice.

Exterior geometry. This subject is too big to properly treat here. However, when the budget is tight, as it was in Cases A and B, adding off of a gable end is often the best way to go. I purposely kept the expansion walls as uncluttered as possible to allow for practical expansion. In some cases, window headers can be reused as passage door headers. As in any expansion, you have to watch the setbacks; in a delayed expansion, they might even change.



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