

ow much per square foot do your frames cost?" "How much more does a timber frame cost than a regular custom-built house?" These are questions I frequently hear from prospective customers. Perhaps they aren't foremost on people's minds, but they are two of the first ones asked.

As most clients attracted to the craft of timber framing want to live in a space created specifically for their wants and needs, and as the vast majority of timber-frame companies work solely with custom designs, the most appropriate response to either question is: "I don't know. It depends on so many factors."

This response may sound flippant. It isn't. It's honest. But such questions are legitimate, if not expected. Anyone looking at timber frames realizes that this is an intense method of building. People just want an idea of the amount of money involved. Unfortunately, there are no quick answers.

Since we have been asked these questions so often,

I believe it is important that we look at those factors that affect the amount of money one will spend to live in an environment of beams and posts. Once these factors are understood, cost can be more readily and accurately determined and controlled.

Species of Timber. Let's view this in the extreme: white pine vs. mahogany, both of which our company has used. For the sake of neatness, let's assume that the average frame requires 10,000 board feet of timbers. Let's say that the raw white pine costs the company \$1 per board foot, and the mahogany costs \$5 per board foot. That's \$10,000 vs. \$50,000. Again, this example looks at extremes, but even in more modest contrasts, one species of wood can easily cost twice the amount of another.

**Grades of Specific Species.** Not all wood of the same species costs the same. For an example of the cost variations, let's look at Douglas fir. No. 2 grade and better would cost much less than half of what

you would spend for kiln-dried dense select structural free-of-heart center. Is the latter a better product? You bet it is. Is it worth an additional \$12,000 to \$15,000 dollars? That's a question you'll have to decide, hopefully with insight from your timber-frame company.

Extent of Timber Framing. Do you want a whole-house timber frame, or do you want to limit timber framing to your great room or maybe simply timber-frame trusses on the stick-built walls of the great room? There are aesthetic, as well as economic, reasons to consider the last two options. The economics of limiting the timber framing should be clear. Aesthetically, focusing on the timber framing in one or two areas of the home can increase its drama.

Volume Efficiency. Many clients want great rooms that soar, often to a height that easily would allow the placement of a second floor. Same cubic feet, but twice the square footage if they were to put the floor in place. The cost of putting in the floor is ridiculously low. It would cut the cost per square foot in the great room almost in half. I'm not saying that you shouldn't have open spaces; I merely point out the economic consequence.

**Number of Corners.** Any time that you deviate from a straight line in any kind of construction, the costs go

up. A simple rectangular footprint is the least expensive way to lay out your exterior wall. Actually, a square is your best bet economically since the ratio of wall and roof surfaces to floor square footage is as good as it gets.

That being said, four corners can yield a boring structure. On the other hand, we have worked on homes that have had more than 30 corners, in addition to angled projections other than 90 degrees. Again, it's the extremes that prove the point.

Complexity of the Frame. The effect of complexity is similar to that of the number of corners. I could design two frames, each of equal square footage, and have one legitimately cost twice as much as

the other. And it would be a rectangle with a simple gable roof.

The more expensive one would have double digit corners, angled jutouts, five or so intersecting roof planes, dormers, hips and several different floor levels. On second thought, it would be easy to triple the cost of the less expensive frame.

Level of Design, Engineering and Craftsmanship. Perhaps a better heading for this section would be "Your Level of Expectations." Twenty years ago, I paid \$300 or so for a Mont Blanc fountain pen. If my parents had known, they would have been upset with themselves for so obviously failing to instill in me a sense of economy. After all, think how many Bics \$300 would buy. But I use the Mont Blanc virtually every day, I've never had it repaired, and using it improves my penmanship and clears my thinking. Plus it feels good to hold. My expectations of what I wanted from a pen were high.

It's like that with timber frames. There are companics that fall all along the quality spectrum. You have to decide where within that spectrum your expectations lie.

**Accessibility of Site.** Is your building site is on a remote island or at the top of a rugged mountain? Or is it hard to get to and, once there, difficult on

which to work? If so, then expect to pay more than you would have if you had chosen a flat, easily accessible site. Unfortunately, it is often the difficult sites that hold the greatest attraction.

Change Orders. Avoid them. Make all your decisions, changes and upgrades—most of them anyway—during the design process. Such thoroughness will require diligence and discipline on your part, but paper is cheaper than timbers, brick and concrete.

To summarize: "How much per square foot do your frames cost?" "I really don't know. It depends." **THI** 

The frame of this home was fashioned from old-growth, Douglas fir timbers. Although it costs significantly more than the same frame design made from white pine, the owners were willing to pay the difference for better quality and beauty.



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