# WAYS TO REDUCE DIRECT COSTS

DIRECT COSTS ARE USUALLY THE LARGEST SLICE OF THE COST-COMPONENT PIE FOR BUILDERS. CUTTING THEM GOES A LONG WAY TOWARD SAVING MONEY

**By Al Trellis**

For the vast majority of builders, direct construction costs constitute the largest single component of cost, and thus, logically, they become the first and most important area of potential savings. Most of these savings are derived from some combination of the following strategies.

## INCREASE EFFICIENCIES

There are two significant components to this approach. Better prepared construction documents lead to better communication, fewer questions, reduced misunderstandings, and less wasted time dealing with mistakes. To increase efficiencies, you need to require:

1. **Standardized drawing formats, dimensioning, notations, and terminology.** Actual people in the field have to build what is drawn, and they deserve consistency, accuracy, and clarity.
2. **Better detailing of plans.** Good construction plans use sections and exploded drawings to assist workers in the field by specifically showing how you want various details to be constructed.
3. **Standard details and components.** Proper preparation of the construction documents requires an integrated approach that incorporates the knowledge of the designer/draftsman, the purchaser/specifier, and the construction supervisor. In this way, the working drawings will be fully compatible with the specifications and the plans will incorporate details and readily available products that we know we can obtain quickly and at a good price.

The second component of increased efficiencies involves reviewing and revising your plans using what is commonly referred to as value engineering (or lean design). This process first applies fundamental cost analysis to the individual design and construction details of a house plan and then goes through a similar process that relates to the specifications and inclusions. The following is an overview of the guiding considerations as applied to home design.

1. **Overall design:** In this phase, the design is reviewed from a global perspective with an eye toward cost reduction. It's not uncommon to completely reject or redesign in this phase when a global problem is discovered. Specifics to consider include:
   - **Modularity:** Optimal use of modular materials, such as 4x8 sheet goods and dimensional-length lumber.
   - **Shape and size:** Essentially, using minimal materials for a given square footage, such as:
     - Percentage of space above the garage
     - Ratio of square feet to exterior wall linear footage
     - Number and size of openings
2. **Structural design:** This phase details the structural components of the plan and attempts to find the least-expensive construction methods, including those for:
   - **Wall systems:** Stud size and spacing; header sizes; non-load bearing wall design; sheathing selection; connection details
   - **Floor systems:** Size and type of joists; size and type of beams and columns; subfloor selection
   - **Roof systems:** Trusses versus rafters; rafter design; sheathing selection; connection details
3. **Nonessential components:** In this phase, the plan is reviewed with an eye toward eliminating any components deemed to be nonessential or that are believed to contribute less to perceived value than their cost warrants. Examples may include omitting a second window in a secondary bedroom or the elimination of bridging or strapping not required by code.
4. **Less-expensive components:** The final step in the value-engineering sequence is to check individual pieces and parts to evaluate whether there are less-expensive but still acceptable substitutions that can be made in the existing design. It could be using a 48-inch base cabinet rather than two adjacent B24s for the same cabinet space at lower cost.

Remember, it is possible to excessively value engineer a new home. While reducing costs is an important goal, cost reduction must be done in the larger context of creating overall value.

## BUY BETTER

The purchasing function is a key factor in any comprehensive program that aims to reduce direct costs. It's not uncommon, especially among small companies, to find building companies with strong estimating and weak purchasing abilities. This is the result of asking an individual to do multiple activities for which he or she isn't equally well-equipped. When purchasing, builders should:

1. **Avoid sole-source purchases.** Even the most diligent businessperson will lose a step without constant competition and external motivation to improve. Consistently obtaining multiple quoted prices is a fundamental requirement of any exceptional purchasing strategy.
2. **Use the internet.** The availability of almost unlimited information through the web can act as a virtual bidding process when properly utilized. This is especially true for certain types of materials and material suppliers, where the opportunity for direct shipment creates a viable alternative to traditional supply channels. Great purchasing is really about knowing the true value of that cost, when to pay it, and how to minimize it.
3. **Assess installed sales versus separate purchase of labor and materials.** More and more the trend is to use trade contractors that provide both labor and materials. There are definite advantages to this practice, primarily in the areas of responsibility and reduced management effort on the builder's part. The issue here is about the cost versus the value of any economies created. It's important to constantly compare the true total costs of installed sales to the costs of purchasing labor and materials separately. This is especially true when the materials used are relatively simple, such as drywall and siding.
4. **Consider using buying groups.** There are several cooperative buying groups, all of which give the builder an opportunity for pre-negotiated, volume-based prices and rebates. Explore and analyze these groups to see whether the services provided are a good fit for your company.
5. **Monitor the marketplace for new vendors.** The importance of this cannot be understated. Well-established trades can get complacent; newer ones may offer better service or pricing in their desire to secure new business and grow.
6. **Make sure the bidding system is logical, organized, and efficient.** This ensures that procuring bids is relatively easy. Failure to have such a process will result in an unspoken but real reluctance to obtain frequent competitive bids.

## CHANGE SUBCONTRACTOR PRICING PARADIGMS

Allowing trade partners to use pricing methodologies that don't accurately reflect reality is a sure way to overpay. Using simplistic mathematical pricing models, such as dollars per square foot, often results in any gains derived from value engineering benefiting the trade rather than lowering costs for the builder.

Another problem with price-per-square-foot quotes is that for most trades, costs aren't linear. In many parts of the country, electricians will quote by the square foot, but simple logic tells us that the last square foot costs considerably less than the first (that is, the service panel is already included). This is an example of a model that increasingly punishes builders as houses get larger and larger.

The first step in ensuring that the quoted price is correct is to understand how that price was derived. Don't hesitate to get trades to explain their thinking. Only then can you assist them in finding a better way to price their work and eventually get to a place where you can tell them what you will pay.

## BECOME A PREFERRED CUSTOMER

One of the best ways to consistently obtain good pricing from trade partners is to be a good partner yourself. For most subcontractors, this means giving them three things they very much want: a reliable, steady volume of work; clean, organized jobs ready for the next trade; and rigid adherence to agreed-upon payment terms. **PB**

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