



THE COST OF NOT BUILDING GREEN

"In spite of the cost of living, it's still popular."

– Kathleen Norris, American novelist (1880-1966)

The media have presented plenty of stories that have focused on the cost of green building. This has always been a tricky subject because there are numerous perspectives, ranging from "it's actually less expensive" to "it's prohibitively costly."

As we get more green buildings on the ground (or under it, in some cases), we have more data to support our particular point of view. According to "The Cost of Green Revisited," the cost for green building is essentially negligible. The report (produced by San Francisco-based Davis Langdon, consultants in managing construction costs) notes that the cost of specific types of larger

buildings (e.g., laboratories, office buildings and libraries) can be all over the map; however, that cost rarely has to do with green building features and has more to do with mind-set.

Cost implications for home builders are more significant, but again, the real impact is influenced more by the point where the project begins. In residential construction as well as commercial, taking a standard product and adding "green stuff" to it is going to cost more, period. Approaching the product from the conceptual stage as a green building, however, gets builders much closer to that break-even point.



But people seldom talk about the cost of not building green. Perhaps it's because this is the inverse of the "green building cost savings" argument. But the shift in thinking may have some benefit. Buyers who don't buy green pay a substantial cost. The increases come in the form of higher utility costs, higher maintenance costs and more frequent replacement of less durable materials.

The average U.S. household energy expenditure in 2004 was \$1,680 (from the 2006 *Buildings Energy Data Book*). An energy-efficient green home these days can save 40 percent – and 60 percent is no longer a pipe dream for new homes. At the 40 percent level, not building green has already cost that home owner an average of \$672 a year, and those dollars also are leaking out of the local economy, which is generally not thought to be a good economic strategy for any community.

Let's talk risk, shall we? A well-thought-out green home will have quality control built into the process: Heating and cooling systems will be checked for proper operation; duct systems will be sealed and tested; proper moisture control will lower the risk of structural as well as interior damage. The buyers, if properly informed about the benefits of their green home, will have an added level of confidence in the performance of their home (which translates to referrals). Absent these green features, the risk of call-backs is increased, and call-backs can get pricey.

There is also the added cost of using more materials than necessary. According to the Partnership for Advancing Technology in Housing, standard material costs are \$1,000 more for a 2,400-square-foot home when optimum value engineering techniques are not used.

There are also the fuzzier cost implications that are certainly real, but not easily quantified. According to the U.S. Environmental Protection Agency, asthma is the most common serious chronic disease of childhood and the third-ranking cause of hospitalization among children under 15. Common triggers of asthma (eliminated or significantly reduced in green homes) include PVC, formaldehyde and

volatile organic compounds found in paints and glues.

So it turns out that *not* building green can often cost more to build, and most certainly cost more for the occupant. Perhaps this is a subtle difference in perspective, but confidently promoting green homes as less expensive than a standard home should get your prospective buyers' attention.

Stay on top of the latest practices in building performance. Refer to the *Guide to the Built Green® Checklist* (www.builtgreen.org) and the U.S. Department of Energy's *Building America Best Practices* manuals (<http://www.buildingamerica.gov>) for valuable assistance in getting to your efficiency goals. 🏠

The full report, "The Cost of Green Revisited," can be found at www.davislangdon.com/USA/Research/ResearchFinder/2007-The-Cost-of-Green-Revisited/.

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