



INTRODUCTION

Why build green?

They say the apple doesn't fall far from the tree, and I'm living proof: I grew up in the building industry, and I learned the general idea and philosophy of building green from my dad. Long before climate concerns and clean and efficient energy spawned the current movement, my dad built green—without even realizing it. He was in the lumber business, and as far as he was concerned his methods were just common sense; they saved him money and made his customers happy. His methods have always made sense to me, too. My dad built homes that were sustainable and livable. I can't imagine building any other way; that's why I build green.

The facts speak for themselves—according to the U.S. Census Bureau the U.S. population topped 300 million in March 2009. Worldwide, approximately 10,000 babies are born every hour, adding to the world's current population of about 6.5 billion by leaps and bounds. All of these people need a place to live.

Yet, our planet is not getting any bigger, and natural resources do not perpetually renew themselves, especially not at the same rate at which we consume them. As the population continues to grow, nature and its bounty are becoming scarcer and thus more valuable. Creating shelter for a rapidly expanding population will put a strain on natural resources, so we must use them wisely.

As home builders, our job is to provide shelter and respond to the demand for housing. When we construct new dwellings and rehab existing homes, we have the power to decide how to best use our natural resources. We can conserve these precious resources, or we can pretend they are infinite and waste them with no thought of future consequences. If we view our natural resources as the commodities they are and begin to understand that their value increases as they become more scarce, then, as with any commodity investment, we would want to maximize its efficiency to produce a greater return on investment—that is, financial investment and investment in our future.

Essentially our work is embedded in the environment. Therefore, it is not that difficult to imple-

ment the use of materials that are recyclable, renewable, and reusable. Green builders view the house, the site and the surrounding environment as interlocking groups of systems that require careful planning and management.

Although homes built today are 100% more energy efficient than those built 10 years ago, we have a unique opportunity to lessen our impact on the environment even further. In the following chapters I will share my tried-and-true green building experiences and provide insight into how Belcher Homes plans and constructs homes that are practical, sustainable, and most importantly, affordable.

Why build green? It's simple. Green housing is healthier to occupy, due to its materials, components, and construction methods. A healthy house can lower residents' health care expenses and provide a superior quality of life. Furthermore, ongoing maintenance and operating expenses in green homes are lower than those incurred in nongreen housing. Therefore, if you total the monthly mortgage payment, utility payment, and maintenance costs, the aggregate amount spent living in a green home is lower than in a traditional home. Sometimes, the cost can be dramatically lower.

When we consume, we must reuse, renew and recycle. In a word, we must become more efficient.

Emerging competition in green manufacturing has increased the number of green materials available at lower prices, benefiting both builders and consumers. In fact, green manufacturing has become the largest manufacturing segment of the U.S. economy. Even nongreen builders are probably building greener than they realize, because of changes in the materials they use and in building code requirements. This all adds up to making green construction more affordable.

Why build green? Building green raises the bar for the housing industry as a whole by establishing new standards for durability, livability, and sustainability. Building green is building smart.