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Builder/General Contractor

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Builder

General Contractor

General contractors have a tough job. Faced with the challenges of managing project budgets, scheduling and dealing with subcontractors, clients, architects, building officials, and the weather, it's no wonder energy and building science tend to be a low priority for most builders. Energy efficiency is difficult to see, and many buyers assume that all new homes are energy-efficient. And after all, the insulation and HVAC contractors are supposed to do their jobs properly, aren't they? Unfortunately, the general contractor is straight in the line of fire when it comes to interpreting the construction documents, and producing a building that works properly, wears well, doesn't suffer moisture damage, and is inexpensive to maintain.

Building energy-efficient homes can provide several benefits to large and small builders. In addition to the marketing support provided by EPA for ENERGY STAR Labeled New Homes, builders who pay attention to the house as a system can reduce their warranty costs, improve customer satisfaction and referrals, and increase their profits. To build a house right takes time and attention to details, and substantial understanding of the reasons we do things the way that we do. It takes diligence in dealing with tradespeople; training them in what we want done, and why, is critical. The reward is a high level of confidence in dealing with clients, in saying "this product is superior to the competition." You can sell these superior features on their merits. Some builders offer energy bill guarantees. Others provide checklists for prospects to take with them when they look at the competition: "Here are 25 things we do to ensure your home will be safe, comfortable, efficient, and durable. See how many other builders do all of these things!"

Builder/Designers

"In New York, houses with less than 1,500 square feet of inhabitable space are permitted to be built without the involvement of an architect or engi-

neer. Often there is no budget for a designer. Sometimes the builder uses prepared or traditional designs. Sometimes the builder is the designer. In all of these cases, or if the designer on a project is inaccessible or uninterested in the subject matter of this guide, it may be useful for the builder to read Chapter 4 as well as Chapter 5.

Energy Code Requirements

In order to meet the energy code, the builder needs to know the energy-related specifications for the entire project. This means not only understanding the thermal performance specifications that are submitted along with the permit application, but also all of the General Requirements (see page 4). These energy requirements affect the work of many of the subs on the job, so the general contractor has to keep track of all of these requirements. It is a good idea to be familiar with all the material in this guide, as well as the ECCCNY, so you are not surprised.

ENERGY STAR

The same skills required to meet the energy code are useful in building an ENERGY STAR Labeled New Home. Learn to communicate with and coordinate your subcontractors about energy requirements, with an eye on the whole picture. Refer to Chapters 3 and 4.

Building homes with a systems approach may require some adjustments to your typical construction sequence. For example, you may ask framers to seal leaks with caulking, construction adhesive, or gaskets; to install exterior foam insulation; or to install draftstops in key areas. You will need to insulate and air seal shower or bathtub units on exterior walls before the plumber hooks them up. You may need to coordinate framers to allow the proper room for mechanical installations. Work closely with a certified HERS Rater to identify cost-effective options for improving energy efficiency. In addition, look at the other sections in this manual, look at EEBA, determine what details you want to use, and pass that information along to the various subcontractors.

Going Further

EEBA has a chapter that covers issues facing a general contractor. The remainder of EEBA, as well as many of the other resources listed in Appendix B, are also useful sources of information about house as a system, moisture, drainage, energy, air pressure, combustion safety, and other topics.