

# Energy-Efficient Remodeling: Traditional Builders Find a Niche Beyond Energy Codes

## Builder's Experience



**Challenges:** Meeting the demand for your business once people hear about your services.

**Would he do it again?** Yes

### Attributes of Energy Efficient Remodeling:

- Energy Efficiency
- Quality and Durability

**Builder Tips:** "Evaluate the whole house as a system and create the best combination of practical efficiency measures that meet the client's budget."

### Builder:

Willie and Jeff Delfs  
Able Homebuilders  
Sioux City, Iowa

### Builder Type:

Small Residential Remodeler/Builder

### The Technology:

Energy-Efficient Construction

### The Project:

Knowing the Delfs' expertise in energy efficiency, Don and Susie Townley approached Able Homebuilders about replacing the windows and siding in their 1970s house and expanding the kitchen by 400 square feet. Using optimum-value framing for the exterior kitchen walls, stabilized cellulose insulation, high performance glazing, insulative vinyl siding, and whole-house building envelope air sealing, the Delfs achieved 20-percent energy savings from one December to the next. Even with a few bad weather days, Able Homebuilders completed the remodel in just 60 days.

*"We set out to create a niche for ourselves, and with the rate of our business growth, we must be doing something right."*

– Willie Delfs



By improving the building envelope and efficiency of their client's homes, Able Homebuilders can add space without adding to monthly utility bills. In addition to expanding the kitchen, they also replaced the windows and exterior siding.

## THE DELFS' STORY

"Able Homebuilders offers a variety of home technology features that help differentiate them from their competitors, but energy-efficient remodeling has become their most profitable niche," says Willie Delfs.

"First and foremost, incorporating energy efficiency is the most important thing we do for our customers. There was a point when we didn't understand this, but after we educated ourselves on the process, we saw it was so easy. There's no reason that anybody out there shouldn't be doing it. It doesn't matter whether it's remodeling

or new construction, every bit of energy savings benefits your customer, your business, and the environment. Energy efficiency is an important part of our business model, and we wouldn't go back to building the way we started."

"We realized that there was a large remodeling niche that deserved the attention of an energy-efficient contractor. When we started out, we decided to



Able Homebuilders of Sioux City, Iowa, was founded by brothers Willie, Jeff, and C.L. Delfs. The Delfs started as remodelers in 1987, then expanded to new construction in 1993. They began as traditional stick builders and quickly saw the business benefits of energy efficiency. Their commitment to construction excellence and efficiency has earned them awards from numerous organizations, and helped build their reputation as energy experts. Able Homebuilders average over 100 remodels and two new homes a year, with annual sales revenue in excess of a million dollars.

### Why the Delfs promote energy efficiency in construction:

*"By studying energy efficiency, we've become smarter builders than we were ten years ago. Ten years from now, we'll be even smarter because as technology advances, we'll be using it before our competition."* – Willie Delfs



Workers level and set a window before caulking.

## EFFICIENCY ESSENTIALS

High-impact energy features to consider when building or remodeling include:

- Whole house building envelope air sealing
- Furnaces with an efficiency rating of 92 percent or higher
- Duct sealing
- Programmable thermostats
- Advanced framing (optimum-value) techniques to maximize insulation effectiveness
- Sprayed fiber insulation
- High performance, low-E windows

focus on the working-class market. As our reputation grew, more affluent clients requested our services based on referrals. For the last ten years, most of our client base has come from referrals. Now we're recognized for energy-efficient remodeling, so when someone is looking for construction services that involve energy efficiency, we're the first company people call."

## MAKING THE SWITCH

A local utility presentation about incentive programs that help offset the cost of energy upgrades changed Able's business strategy in 1997.

"As builders and businessmen, we thought, 'Now here's an edge we can have over our competitors.' At the time, it was a very competitive market with tight profit margins. We decided that learning more about building performance would be worth it if we ended up earning a couple extra thousand dollars per job in addition to providing a better product to our clients."

"As we began educating ourselves through the local utility's ENERGY STAR® program, we started learning about why energy efficiency was important—how energy efficiency affects all of us. We

used ENERGY STAR to create our basic requirements; as time progressed, we became so comfortable with ENERGY STAR that we committed ourselves to 100-percent participation. Then we thought, if we can build ENERGY STAR qualified homes for new construction, why not take it to our remodeling business?"

"Shortly thereafter, we joined EEBA (the Energy & Environmental Building Association), which puts on annual conferences that Jeff and I attended to expand our knowledge. In trying to target our niche, we wanted to become known as the local 'energy guys'."

"The main concept is that a house, whether new or remodel, is a system, and whatever you do to it affects everything else. We don't start each day going to work to just throw sticks together and do it over again at the next project. By studying energy efficiency, we've become smarter builders than we were ten years ago. Ten years from now, we'll be even smarter because as technology advances, we'll be using it before our competition."

## CONVINCING THE CUSTOMER

"A large portion of people's disposable income goes straight to utility companies. As a larger portion of their income gets tapped, it's really a no-brainer for our customers to increase their home's energy efficiency. Our goal is to be able to add space without adding energy consumption."

"Sometimes, there is an initial hesitation from our clients. They want to know how much it's going to cost them. We try to make them realize that the measures we're proposing will pay them back. We're very persistent because we think it's important that our customers recognize both the short- and long-term benefits of energy efficiency."

"Many of our clients don't consider how a remodel can affect their energy use, so it's an education process. But we don't mind spending the extra hour explaining



The crew ensures that window replacements are done properly.

## TECHNOLOGY HIGHLIGHTS

This project included the following PATH-profiled technologies:

- Advanced framing techniques
- High performance glazing
- HVAC equipment and duct installation within conditioned space
- HVAC sizing practice
- Insulative vinyl siding
- Sprayed fiber insulation

the benefits because it's usually during this last hour that they decide to use us for their project. When customers learn about the benefits they hadn't thought about—the intrinsic value of the end product—it helps close the deal. Especially now that energy costs have been rising for the last few years, it's a very easy sell."

"People often say they don't want to do it if it will cost more or take more time. However, incorporating efficiency into our projects doesn't really increase the construction schedule because it's totally integrated into the building process. Depending on the measures involved, the time difference between an energy-efficient remodel and one that's not is minimal."

"We probably lose about a quarter of the jobs we bid on to contractors with a lower bid, which is fine, because we'd rather focus on building our niche as opposed to worrying about jobs with minimal profit."

## START WITH THE BASICS

"We feel that the building envelope is the most important thing to consider when remodeling or building a home. Create

a good building envelope with the right combination of insulation, windows, and caulking to minimize air infiltration. Even if the existing HVAC equipment isn't the most efficient, it will work better in an environment that is well insulated, well sealed, and has good windows. Basically, we create a good, tight building envelope to ensure that less heating and cooling will be required."

"Often, we have to sit down and explain that an older home with less insulation and an antiquated HVAC system might have 12-15 air changes an hour. After making the building envelope tighter, air changes can be lowered to once every three hours. The customer then realizes the importance of not letting that conditioned air out. Once they understand this concept, people recognize how energy-efficient retrofits pay for themselves over time. We don't get too technical on payback methods. We just keep it nice and simple."

"We also try to explain that we look at the home as an interrelated system. When we make changes to that system, we have to take all the pieces into account and make sure that when we leave, the home operates better than it did before we started. There are a lot of different factors to consider. Air intake, windows, doors, solar orientation, roofing and insulation come into play. We also assess older equipment that they may not have thought of replacing. Often, we can do the addition with no extra energy costs to the client."

"We review the home's utility history and have a general idea of the energy benefits associated with each improvement. We come to the table trying to maximize energy performance within the client's budget, while maintaining their monthly level of utility expenditures."

## MARKET ADVANTAGE

"Clients appreciate that we pay attention to their monthly operating costs. It also helps from a marketing perspective because if a



A worker inspects the plumbness of a window.

The Partnership for Advancing Technology in Housing (PATH) brings together builders, manufacturers, researchers, government agencies, and other members of the housing industry. PATH partners work to improve the quality and affordability of new and existing homes. The program is administered by the U.S. Department of Housing and Urban Development's Office of Policy Development and Research.

To learn more about PATH, visit [www.pathnet.org](http://www.pathnet.org).  
To learn more about PATH-profiled technologies, visit [www.toolbase.org/techinv](http://www.toolbase.org/techinv).



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potential client is comparing us to another builder who doesn't include efficiency in their list of services, then it may help us get their business."

"In a small community like ours, people recognize certain business qualities and tell their friends about it. If we treat our customers nicely and educate them in the process, they end up selling our services for us. In the nearly 20 years we've been in business, we've never had to spend much on advertising. Instead, we've just always tried to give our customers a fair price and do the best job that we could, and word of mouth has promoted our business just fine."

"About 95 percent of our work comes from referrals and repeat customers and new clients tell me that they've heard about what we do with energy efficiency. This is the only gauge I have, but with the rate of our business growth, we must be doing something right."

"Being recognized as energy-efficient remodelers and builders definitely has its business advantages. We are in a very competitive market here and can only get a certain amount per square foot to incorporate energy efficiency. I'd say there's about a 5- to 10-percent increase in profit associated with selling efficiency upgrades. Some of the efficiency upgrades involve utility incentives; the other ones we do just because it's the right way to build."

## INSTALLATION AND TRAINING

"There is a small learning curve, so you have to get all your employees and subcontractors on board, but once you've done a couple of jobs, it becomes standard protocol and you don't have to spend any more time or money on it."

"We're fortunate to have built great relationships and can bring the right team to each job. We have electricians, mechanical contractors, and plumbers who have been working with us for many years. They are familiar with our processes and

have no problem paying attention to the specifications. Having a consistent team really helps our business run effectively. As long as we keep our clients pleased, the subcontractor's business benefits along with ours."

"My brother and I will attend conferences and if we see an efficiency measure we view as important, we spend a couple hours with our employees during our regular training sessions to explain the new process. We also train our team members to answer questions about the processes in the field."

## INCENTIVE PROGRAMS

There are multiple utility incentive programs for upgrading heating, air conditioning, and water heating systems. While incentives are usually larger with new construction, even in a remodeling project, homeowners can recover up to 50 percent of their efficiency investment. Typically, utility incentives apply to heating, cooling, and water heating only. In some cases, HVAC and water heating upgrades must be done as a package.

The new federal Energy Bill also gives tax credits and deductions for many of the 12-15 prescriptive measures from ENERGY STAR, which include installing high-efficiency windows; adding insulation to sidewalls, basements, or slabs; adding a programmable thermostat; using high-efficiency HVAC and water heating equipment; and installing at least three ENERGY STAR qualified appliances or lighting.