

## Insider Tips

# Collaboration Produces Winning Teams

BY KATHIE CHRISICOS

When it comes down to it, the goal of every home renovation or new construction project is the same: Make your client happy in a timely, cost-effective manner and be proud of the final product. Easier said than done, right? In most cases, it takes a partnership of all the parties involved to reach the overall goal. Working with an effective team from the onset creates better results and far fewer headaches. The collaboration between



KATHIE CHRISICOS launched *Chrisicos Interiors* in 2002. Since then, she has been named one of the 10 Best Architects/Interior Designers in New England by *Women's Business* in 2006 and 2007. She is the recipient of the 2007 PRISM Award for Interior Design and the 2007 "Rookie of the Year" award from the Builders' Association of Greater Boston. She will be participating in a workshop through the Design New England booth.

architects, contractors and interior designers gives you the ability to focus on what you do best and offers your client a clear vision from beginning to end.

When a client envisions their perfect project, they don't break it down into structural elements, building materials, design, color and textures. They just know what they like. Creating a space that's functional, beautiful and (hopefully) inspirational can be tricky. You need to predict how the owner will feel about that space in the future. A professional designer provides the expertise to work with the homeowner in a more personal way to ascertain their taste, culture and needs, and incorporate all of it into the design so it becomes a true reflection of who they are.

How often has a client assumed the builder and architect should know their best choice for colors, counter tops, lighting, window treatments or bathroom fixtures? Why should you know where to put the sofa, when you're focusing on support beams and building codes? Additionally, a client does not always have the time or the expertise to make the myriad of decisions themselves. This is where the interior de-

signer steps in, and offering this advice from the start can be a big advantage.

The interior designer can work with the architect early on in the design process to evaluate furniture placement, movement or flow in the space, window size and placement and adequate lighting. For instance, with renovations and restorations, a room's height may change. Ceiling heights are critical to a home interior plan and greatly impact the scale and proportion of furniture and window treatments. An interior designer can help decide what will look best and take into account all of those components. Additionally, the interior designer can assure the architectural moldings and trim to suit the look and feel the client is trying to achieve.

An added plus of early collaboration is brainstorming. The great minds of the builder, architect and interior designer working together can push the limits and conjure up unique ideas that might not normally be considered if each were working independently.

## Money Talks

Maybe you like to work alone, focusing solely on your area of expertise, rather than the bigger picture and the other professionals involved. Even if that's your philosophy, the cost savings of collaboration alone should be reason to give it consideration. When the design, building and interior elements don't sing together, you may end up with a very unhappy client and many demands for changes. What seem like simple "adjustments" can lead to thousands of dollars in change orders. For instance, moving a wall does not just entail tearing down the

area, it could very well include rebooking the electrician, plumber, or other trade professionals, escalating costs. It impacts your total project schedule, delaying the start of other contracts while you finish this one. An interior designer can help avoid many of these changes by working with the homeowner on planning the space before the construction stage begins. Then the designer works with the other trade professionals throughout the project, to assure the client's "living" needs are met, saving both your client and you time and money!

Realistically most clients would rather not have a multi-discipline approach to their renovation or remodel project. It provides a much more cost-effective way to renovate. The "one-stop-shopping" aspect of your team may also provide a competitive advantage. A streamlined approach is a much more manageable undertaking for the homeowner.

And don't forget the added benefit of referrals. When a homeowner has a designer in mind but not an architect or builder, your network of contacts come into play, sending more business in your direction.

The adage "knowledge is power" is important to remember. When we are well-informed, we are more confident in our decisions. The more resources we can provide our clients, the more knowledgeable they become, and the more secure they are with their choices. The result? A smoother, more successful project for all. Collaboration with a qualified interior designer helps ensure the entire space effectively comes together, giving the client a better result than they even imagined. And that benefits everyone involved. ■

## Sustainable Alternatives

# Tracker-Based Systems Reduce Consumption

BY CHARLES NADEL

Everyone is interested in lowering their electric bill and reducing their carbon footprint, and one way to lowering your consumption of fossil or nuclear-fueled electricity is to install a photovoltaic system. Unfortunately, not every roof can accommodate a photovoltaic system. The typical problems encountered are appearance, roof orientation, roof condition, shading issues and, most importantly, system cost.

One simple way to solve all of the above issues is to install a residential photovoltaic system on a tracker. A tracker is a pole-mounted frame with a motorized mechanism that allows the frame to rotate so that it always faces the sun at an optimal orientation and inclination. Trackers come as dual axis (orientation and inclination) and single axis (orientation) varieties. The dual axis tracker will follow the sun as it rises in the East and travels across the horizon to set in the West, and also will adjust the inclination of the frame mounted photovoltaic modules so that they will always have an optimal inclination as the location of the sun rises as we progress from winter to summer.

Use of the tracker allows designers to avoid roofs that are not optimally oriented or are shaded, and still install photovoltaic systems on properties where they are desired. Use of the tracker avoids placing the highly reflective photovoltaic modules in visible locations on the front of residential properties. In ad-

dition, installing a photovoltaic array on a tracker avoids the heavy foot traffic of the installation crew on the roof, thereby extending the life of the roof.

Depending on the components used, the output of a photovoltaic system can be boosted 30 percent to 60 percent by the tracker system. Using a dual axis tracker will allow for the installation of a smaller, less-expensive photovoltaic array to achieve the same output as a roof-mounted array. As an example, a 4 kilowatt residential roof-mounted photovoltaic array can be expected to generate approximately 450 kilowatts-per-hour (kwhrs) worth of electricity in an average month of operation. A 4 kilowatt, roof-mounted photovoltaic system will have a price tag in the \$35,000 to \$40,000 range. A 2.4 kilowatt dual axis tracker-mounted photovoltaic system can be expected to generate approximately 500 kwhrs in an average month. The price tag for this installation is in the \$22,000 to \$26,000 range. Using the dual axis tracker allows you to generate nearly the identical output at a 30 percent reduction in installed cost.

A Zomeworks dual axis tracker with a 2.4 kilowatt photovoltaic array was recently installed in Halifax, Mass., by Advanced Energy Systems Development. The installation utilized a dozen 200-watt, high-output Sanyo photovoltaic modules and a Xantrex inverter. The system is expected to generate roughly 500 kwhrs of power in an average month. On sunny days during February 2008, the system was generating 18 kwhrs per day with a total monthly output in excess of 300 kwhrs. A similar roof-mounted system would be expected to generate 275 kwhrs in an average month. The costs of the two installations is roughly equal, yet the tracker-based system will generate almost twice as much power. ■

### RESIDENTIAL DESIGN & CONSTRUCTION

April 2, 3:30 p.m. - 5 p.m., W42, "Incorporating Renewable Energy Systems Into Existing Structures"

CHARLES NADEL is the owner of *Advanced Energy Systems Development* ([www.advancedenergysystemsusa.com](http://www.advancedenergysystemsusa.com)), a Wellesley, Mass.-based provider of renewable energy design and installation services to commercial and residential customers.

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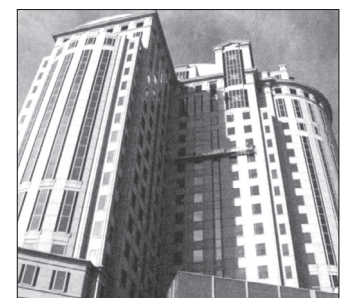
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