

building **an** awareness

Andrew Borgese believes in taking advantage of the natural surroundings of a site when designing houses.



FALMOUTH
ARCHITECT WORKS
COLLABORATIVELY TO
CREATE ECO-FRIENDLY
HOMES.

The Green Team



Borgese is remodeling homes that are 75 percent more energy efficient than they were before the remodel.

When Andrew Borgese began Integrata Architecture & Planning in 2002, he rooted his business philosophy in the spirit of collaboration. The best projects, Borgese believes, come to fruition through seamless teamwork among architects, builders, interior designers, and craftsmen. His best and truest collaborator, however, may be Mother Nature.

Borgese believes in taking full advantage of natural advantages, such as sunshine and structural angles, to save energy and natural resources. While his projects often have a sophisticated shine, they are as green as they get.

“Houses and buildings are systems, almost living systems,” Borgese says in his downtown Falmouth office. Borgese designs in this sunny open space while his wife and business partner, JeanneMarie Borgese, runs the business end of the operation. They have four school-age sons.

Houses should breathe, Borgese says, and work in concert with sun, breeze, and the land. In the energy-saving portion of his projects, he believes in saving the energy that

is imbedded in the project instead of creating something new. “I hate to tear something down,” this LEED-accredited architect says. “The greatest thing you can do is use a building.” Before a complete teardown, he says, it is important to consider the real cost: the deconstruction, trucking away the old materials and burying them in a landfill, finding and mining new materials. Besides being environmentally sound, Borgese’s methods can save serious money.

For instance, he says, insulation and proper sealing are “the cheapest and simplest things you can do.” He is finishing a rebuild of a three-bedroom 1970s ranch home in Woods Hole that was constructed as a year-round house. Borgese expects it to be 75 percent more energy efficient after the remodel.

Poorly constructed and badly insulated, the home is “typical of many houses built in the ’70s,” Borgese says. “The walls and roof leaked tremendously. There was not enough insulation and there were gaps.” Good air circula-

By Mary Grauerholz



Borgese chooses energy star rated products for his projects.

tion is critical, he points out, but just as important is not leaking air that has just been heated. The average house, he adds, has air leakage “equivalent to a 4-foot-diameter hole.”

To properly insulate the Woods Hole house, Borgese tore down about one-third of the structure—mostly walls and roof—but kept the floor framing and foundation intact. He then eliminated the “thermal bridge” by installing continuous rigid foam insulation on the outside of the framework. “This is money better spent, and this is where, as a designer, I have to start,” he says.

The Woods Hole house also is incorporating many green products. Paints are free of volatile organic compounds, and windows have proper U-values. Some of the floors are Plyboo brand bamboo. (“Not all bamboo is a green product,” he says.) The air-conditioner condenser and hot water tank are extremely energy efficient.

The home is truly a success story: It is part of a pilot program by Energy

Star to test the expansion of subsidies for environmental construction techniques into renovations and additions.

Work like this, he says, is “a rational progression” of reducing energy consumption. As Borgese says, “Why install lots of lighting in a corner when a window will do better?” After incorporating energy-saving techniques, “then you can look at things like solar panels.”

Borgese knew Woods Hole as a boy before it became a location for many of his architectural designs. “I was one of those summer people,” he says with a smile. After graduate school, he and JeanneMarie wanted to see if they could make a go of their dream architectural firm. “I thought it was time to do it my way,” he says.

Borgese began Integrata to change the way houses and other structures progress through the stream of the people who construct them and those who live in them. “Architecture can be very egocentric, and typically is a

linear business,” he says, where the workers follow one after another to complete their end of the project. At Integrata, Borgese listens carefully to his clients. Then he sits with builders and others, and they work collaboratively, creating an “integral design process” through construction. “In the best projects, communication is huge,” he says.

The philosophy works. Integrata designs are more than smart; they are beautiful. Sunshine pours in through deep energy-efficient windows. Bamboo floors shine. Soft colors are easy on the eye. Throughout the home is a sense of spaciousness, a pleasurable openness. As Borgese says, “In the end, you have a house that breathes.” 

For more information, visit www.integrata.us.

Mary Grauerholz is the communications manager at the Cape Cod Foundation and a freelance writer. She is a frequent contributor to *Cape & Islands Home*.