

Variation on a Theme: E'Terra Inn's Holistic Interpretation of Green

By Joe Maty

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You might say that Laurie Adams, owner of the E'Terra Inn near Tobermory, Ontario, takes "green" to another level.

That wouldn't be doing her justice, however.

Yes, Adams is as green as it gets in terms of her insistence on the use of environmentally friendly building materials in the design and construction of the upscale, eco-oriented E'Terra, situated on a scenic inlet of Lake Huron, Georgian Bay. After all, the Inn is certified LEED Gold under the U.S. Green Building Council's Leadership in Energy and Environmental Design green-building rating system.

But for Adams, "green" means sustainable in a multifaceted sense. It means low VOCs, naturally, and non-toxic content.

That's just for starters.

Adams likes to talk of her interpretation of sustainability as being built on three pillars, in a philosophy she attributes to Eugene Odum, a groundbreaking biologist and an early pioneer in the study of ecology. Odum espoused a holistic approach to the environment and man's place within this whole. Odum, an author and educator, employed the foreign-sounding term "ecosystem" when the concept was essentially unheard of in the 1940s and 1950s.

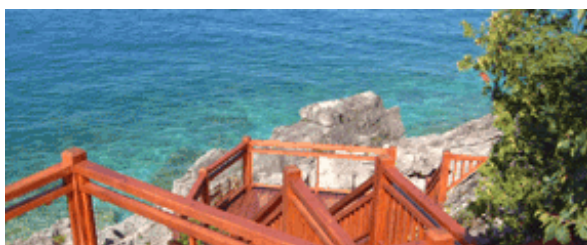
For Adams, the Odum school of thought finds meaning in three-pillared philosophy of sustainability that encompasses the tenets of "ecology, economy and ethics." Under Adams' interpretation of this overarching value structure, it's not enough to simply design and build "green" in the conventional sense. In her way of thinking, the economy and ethics elements of the equation dictate that it's important to know that design and specification is North America-centric, and that purchases do not contribute in any way toward inhumane or cruel labor practices involving man or beast.

"I did try to shop North American for everything," she says, adding that the task was far from easy. "I had no idea of the complexity."



Sustainable-design priorities ranked first and foremost at E'Terra Inn, located on the shore of Lake Huron's scenic Georgian Bay.

Sansin Corp.



The process encompassed all materials, from plumbing and lighting fixtures, to wood siding and structural timbers, and on to finishes such as wood stains and lacquers.

Without question, wood materials and finishes figured



Wood stains are continually put to the test in the harsh climate of Lake Huron's Georgian Bay

Sansin Corp.

wood species and their origins proved to be key factors in performance results.

“We were using a lot of salvaged timber,” she says. “The word from their technicians was that when you have Douglas fir and cedar inside a building for long periods, and then put it back out in the elements, things happen.” What worked on vertical siding, made from newly harvested woods, didn’t necessarily deliver the same result on horizontal rails or decking, or on timbers recovered from old barns and former manufacturing sites.

The wood types include new white-pine siding, originating from Ontario; Douglas fir retrieved from a warehouse in Philadelphia; cedar decking from other old commercial sites; and interior timbers of reclaimed Douglas fir, pine, and white ash.

And then there was the matter of the elements, in the harsh environment of the Lake Huron shoreline. “We have severe exposure due to our orientation, facing north, and the water,” Adams says. Eventually, the right chemistry was matched with the wood, and the results have been visual and performance success.

E’Terra is described as a six-bedroom luxury estate, a “Canadian eco-luxury destination, business getaway and wellness retreat.” The inn is located in a striking geologic region known as the Niagara Escarpment, a formation that extends westward from New York state through Ontario, Michigan, Wisconsin, and Illinois. The escarpment’s most famous section is the cliff over which Niagara Falls plunges.

The Niagara Escarpment in 1990 was designated a World Biosphere Reserve by UNESCO. Development and land use on and adjacent to the escarpment is regulated by the Niagara Escarpment Commission, an agency of the Ontario provincial government. Adams was required to meet stringent environmental controls in securing permits to build E’Terra.

The wood finishes

Sansin, based in Strathroy, Ontario, initially supplied interior stains for E’Terra. The company’s water-based Purity Interior Stain and Purity Clear Satin were the product choices.

prominently in the E’Terra’s design. Here, Adams considered a number of manufacturers and products, which were judged on their merits in terms of eco-friendliness and performance. For interior and exterior stains, she settled on products made by the Canadian-based company Sansin Corp.

“Sansin came in above the others, and they also had an interest in what I was attempting to do,” she says.

The process of evaluating the wood finishes included a fair share of trial and error, Adams says, as different



E’Terra Inn

The Purity products are described as low-VOC, high-solids finishes. The Clear version is recommended for light-colored woods where a “warm, mellow tone” is the objective.

In 2007, Sansin figured in the restoration of the Inn’s exterior decking with its SDF stain, in a color called Monterey Red. The deck was sanded down to bare wood, followed by cleaning and application of two coats of the stain, using a garden sprayer and then back-brushing.

The SDF stain is a water-based, low-VOC stain described as UV resistant and water repellent. Sjoerd Bos, Sansin vice president, says Adams’ single-minded devotion to her interpretation of sustainable design and building made an impression on him and other company representatives.



“She had definitely done her research,” he says. “It made me stop and think twice about what we are doing ourselves,” even though, he added, “we’ve always been green and have embraced that.”

Additionally, the LEED rating system was relatively new when the Inn was built in the early part of this decade, and Adams “certainly put us through the paces, and a number of other manufacturers through the paces” in pursuing LEED credits.

E’Terra Inn

Sansin says it has long been out front in the formulation of water-borne alkyd wood finishes, initially producing these types of products about 25 years ago. “We take oils normally carried in solvents and developed ways to put them in water. The result is the performance benefits of alkyds, with benefits of water cleanup,” Bos says.

Also a key to the products’ appearance and performance profile is nanopigment technology—the use of refined, micronized pigments that facilitate substrate penetration and high pigment “loading,” or concentration, while retaining formulation clarity.

The company continues to build on its product line, with a focus on eco-friendly technologies. Recent product introductions include the Eco-Tone™ color system, offering finely-ground nanoparticle pigment colors for the company’s Purity zero-VOC wood stains.

The Purity zero-VOC stains are also a recent product addition, and entered the market earlier this year.

In addition to stains from Sansin, Adams selected linseed oil-based finishes from Eco-House Inc., a company based in New Brunswick, for application to wood floors in the building interior. Other interior paints were purchased from Para, the Canadian paint and coatings company.



Sansin Corp.

Eco-House Inc. (www.eco-house.com) bills itself as a producer of natural chemistry products, including thinners, oils, varnishes, and paint. Its wood finishes carry the names Light Linseed Oil Primer; Tree Resin & Oil Wood Finish; Hardwood Floor Oil; and Liquid Beeswax Wood Finish,

among others. The company also offers a line of silicate dispersion paints and stains, sometimes referred to as inorganic mineral paints.

“One of our learning experiences involved all the hype about low VOCs,” Adams said. “The oils used on the floors were higher in VOCs, but I learned that there are natural VOCs that differ from synthetics. The tendency with synthetics is that they will offgas over long periods.”

E’Terra’s unique take on sustainability

Adams’ holistic take on sustainability finds interpretation in all facets of the Inn’s design and construction, from copper and cast-iron metal plumbing pipes (as opposed to PVC or other plastic), to insulation based on post-industrial materials, to windows and doors produced with renewable and North America-sourced raw materials.

Examples of her single-minded zeal in pursuing this interpretation of sustainability include the lighting fixtures, made by Hubbardton Forge of Castleton, Vt., known for its high-quality, handcrafted wrought-iron lighting fixtures and accessories. Other materials include dolomite limestone quarried locally, and insulation composed of volcanic “stone wool” and post-industrial slag, manufactured by Roxul Inc. of Milton, Ontario.

Garage doors are fashioned with poplar and cedar veneer, and have no foam core. Among other considerations, Adams says she wanted to safeguard against ill effects of offgassing if the Inn “burns to the ground.”

Those are just some examples; Adams’ approach to sustainability permeates all phases of the inn’s design and construction.

“I sought a balance of ecology and the economics of the domestic market. Can I build the ultimate in luxury and still maintain the principles of ecology? I found I could do it.

“Actually the cost was not greater, taking into account quality and environmental performance,” she says.

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