



## THE TREEHOUSE

## peruvian roots

Lorena Checa Associates works from a fierce love of natural imagery to create residential designs that evoke both that love and nature

by Courtney Boyd Myers

**Lorena Checa is a 40-year veteran of Washington, DC,** but her heart, mind, and sense of design grew out of her childhood spent in Peru. With summers spent at the family farm in the northern region of Peru, she developed a fierce, respectful love for being outside. Now, as the founder of Lorena Checa Associates (LCA), her 18-year-old architecture firm specializes in whole-house renovation and additions, and each project overflows with references to nature.

In 2002, LCA was assigned to renovate a couple's home located on a beautiful, 10,000-square-foot lot that abuts a forest preserve with a creek running behind the property. Known as the Treehouse, phase one of the \$1 million project in McLean, Virginia, a wealthy suburb of Washington, DC, was started in 1992, and construction on the final phase was completed in 1999. "I brought out the best the site had to offer, but in very subtle ways," Checa says. Having grown up in a climate with very temperate weather, Checa is used to spaces that have a sense of nature entering interior spaces. With the forest of 100-year-old oak trees as inspiration, LCA designed the house to be

ABOVE, OPPOSITE: Lorena Checa's Treehouse. The Virginia home's style echoes Checa's Peruvian upbringing and absolute love of nature. It won the AIA/DC Presidential Citation for Sustainable Design in 2003.

built on stilts, which reacts well with the natural, sloping, wooded site. Checa designed a 100-square-foot addition, which relied on two concrete piers, used for structural support. The entire project required only minimal construction, thus embracing the ecology of the land. The home features an oversized copper roof with an oversized downspout, the bottom of which acts like a catch basin with a drain that allows water to flow into the gardens. LCA won the 2003 AIA/DC Presidential Citation for Sustainable Design for the Treehouse.

From 2003 to 2006, Lorena Checa Associates worked on a whole-house renovation with a deck addition and screened porch for a family of four in a double townhouse in Washington, DC. The \$1.3 million project included a renovation of the entire basement, first floor, second floor, and third floor guest quarters. LCA implemented a solar-thermal system on the roof, which provided most of the hot water in the house, maple and mahogany wood for a custom kitchen, several landscaped rain gardens and Oceanside tile in the master bath, which is made of 100 percent recycled glass. The design team also maximized daylight with large, energy-efficient windows, skylights, and glazed doors. "One of my strengths," says Checa, who rarely works with interior designers, "is maximizing natural daylight." She does this with daylighting and some energy-efficient artificial lighting. "I'm a very good lighting designer," she says, "only because I love a well lit home." She also designs windows and walls to maximize cross ventilation and uses ceiling fans to augment the natural movement of air.

Two of her most recent projects are a gut rehab and an addition, both in Arlington, Virginia. For the \$1.4 million gut rehab, Lorena started designing in April 2006, and construction is now substantially complete. There were substantial changes, including the relocation and redesign of the main staircase. The existing brick home was "deconstructed" rather than demolished, salvaging most of the building materials for reuse—either for this project or donated to nonprofit centers. LCA implemented a geothermal HVAC in combination with hydronic radiant floors. Extremely energy-efficient Loewen windows and doors were used throughout the house, as well as EcoStar's polymeric, slate-tile roofing system, made of recycled tires.

Checa's most recent project, a 1970s contemporary rambler, located in Arlington, was an interior rehabilitation. The project cost less than half a million dollars and was completed in May 2010. LCA used hydronic radiant floors, LED lights, cork flooring, and cabinets made out of dark, chocolate-brown bamboo. And when LCA completes a house, it does everything. "Every last towel bar and ceramic tile is selected by us," Checa says. "What's fun for me is educating clients and opening them up to a whole world of design they didn't know before." **gb&d**

**space**  
The Treehouse

**location**  
McLean, VA

**square footage**  
10,000

**completion**  
2002

**unique features**  
Very little construction was performed, out of respect for the local ecology; features that were added include a large downspout and catch basin to direct rainwater to the gardens

**unique fact**  
The architects won the 2003 AIA/DC Presidential Citation for Sustainable Design for the project

