Upstart builder Martha Rose proves extreme green can be elegant and affordable. | by Eric Scigliano

ust off upper Greenwood Avenue, on a former chicken farm that's now her latest housing miniproject, Martha Rose faces a moment of truth, in the form of a garden hose and a virgin driveway. Rose, a small 50-ish woman with a gray ponytail, a shy smile, and a burgundy Smart Car, looks more like a librarian than a builder. But after 35 years in construction, she's not just a veteran but a pioneer-a one-of-a-kind trailblazer on the sustainable-building frontier. Three years ago, when the local Master Builders' Association launched its new Built Green standards for energy-efficient, environmentally friendly construction, it set a high bar for its top, five-star rating: nearly three times as many merit points from a 300-item checklist as the three-star rating most green builders seek. "We meant five-star to be something very hard to get," says Aaron Adelstein, the Built Green program's executive director. "Martha kind of blew it out of the water."

Rose got the green-building gospel in 2001: "It just seemed like a no-brainer," she says—good for the world and for business. She set out to go all five-star and to do it while building midrange spec rather than high-end custom homes, from \$400,000 townhouses in Rainier Vista on up. Now 19 of 25 five-star homes completed in King and Snohomish counties are hers.

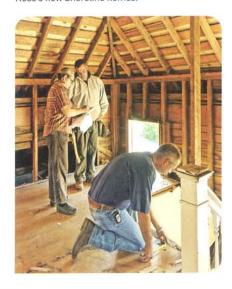
The secret, says Rose, is planning. She and her architects, the CB Anderson firm, sweat every impact from the start, juggling sustainability, cost, long-term savings, and popular taste. But planning can't eliminate surprises—such as, for starters, the driveway serving the Shoreline site's three new houses and 1904 farmhouse. To eliminate runoff into nearby Puget Sound, Rose has laid an extensive catchment basin (crushed rock four to five feet thick). Above it, she's tried something new: what's supposed to be pervious pavement, cement and aggregate with no sand filling the spaces.

In its first hose test, the concrete soaks up water like a TV-commercial paper towel. Success—but at a price. Rose will later learn that the railroad-ballast rock she used holds much more water than the smaller pebbles her civil engineer calculated for. So she could have laid it just three feet deep, saving thousands of dollars plus the environmental costs of all that extra rock. Another lesson learned.

At 2,400 square feet and \$960,000, these four-bedroom, two-and-three-quarter-bath houses push the affordability and (with 10,000-square-foot lots) density envelopes. But each also has a detached dwelling unit over the two-car garage—affordable extra housing and a hedge against the mortgage. And that price buys a powerful battery of

utility-bill-whittling features: 20 inches of formaldehyde-free attic insulation, much more than Seattle's energy code requires; triple-glazed windows; \$50,000 worth of solar water-heating and photovoltaic-generating collectors, tanks, and accessory equipment. Double electric meters and hot-water gauges monitor solar input; on one overcast afternoon, the houses used slightly more juice than they generated; when the sun shines,

Measuring up Martha Rose (below) started as a construction laborer over 30 years ago. Now she teaches her workers the green gospel. (Above) Rose's new Shoreline homes.





**Green chic** Rose used sustainable beech and oak for the kitchen and bath cabinets (above and right). In the garage apartment (below), bamboo floors and exposed beams dominate the open plan.

they sell back to the grid. A quiet Fantech ventilation system with a heat exchanger captures 90 percent of the warmth passing through. Three-thousand-gallon rain barrels, rated for potable water, are painted to match the houses.

No off-gassing carpet or particleboard crosses Rose's thresholds; the floors are bamboo with a low VOC finish, which provides an elegant matte surface. When asked what's in the glues used to laminate the bamboo, Rose admits, "I'll have to look into that." There's always something new to inspect.

The robust closet shelving is bare pine; why use any finish if you don't have to? The cabinets are European beech and oak, less fashionable but more sustainably grown than other hardwoods. Otherwise, healthful and conscientious choices have proven aesthetic pluses. The second full bathroom's commercial-grade Marmoleum flooring has

a warm corklike glow. The walls of the main suite's bath are covered with modulated green porcelain tiles from Architerra in Georgetown. They cost more, but they're twice as hard as ordinary ceramic; durability means sustainability. Conventional shower curtains and enclosures breed mildew, so Rose uses polyester window curtains, which add a light, airy effect. Kitchen counters of Richlite, a durable resin-and-recycled-paper compound, cost as much as granite, but Rose shaves that cost by making them all straight runs. The bonus: no wasteful, clutter-collecting elbows.

Planning ahead extends to landscaping, an afterthought for many builders. The three lots have different features: a field of blueberries (edible plants are a Rose standby) for one; two spacious play areas joined by a wheelchair-accessible ramp for another; and the third nestles under stately fir, madrona, and Port Orford cedar trees. All are carpeted with wood chips—nitrogen-rich alder, salvaged from a tree-cutting operation—like a giant play patch. Buyers must lay their own sod, if they insist.

Going grass-free might seem heretical in the suburbs, but Martha Rose has bucked convention from the start. Out of high school, she got "women's work" in an insurance office and loathed it. A boyfriend's mother urged her to "get a job that pays a man's wage that you can do anywhere in the world." She haunted construction sites till she found a crew that would take on a woman laborer, and never looked back.

Now she looks toward building leaner and even greener. Her next project—another three-house short plat in Shoreline—will have smaller lots and homes, lower prices, and... "We might try something really radical," she says, and smiles. \*\*





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