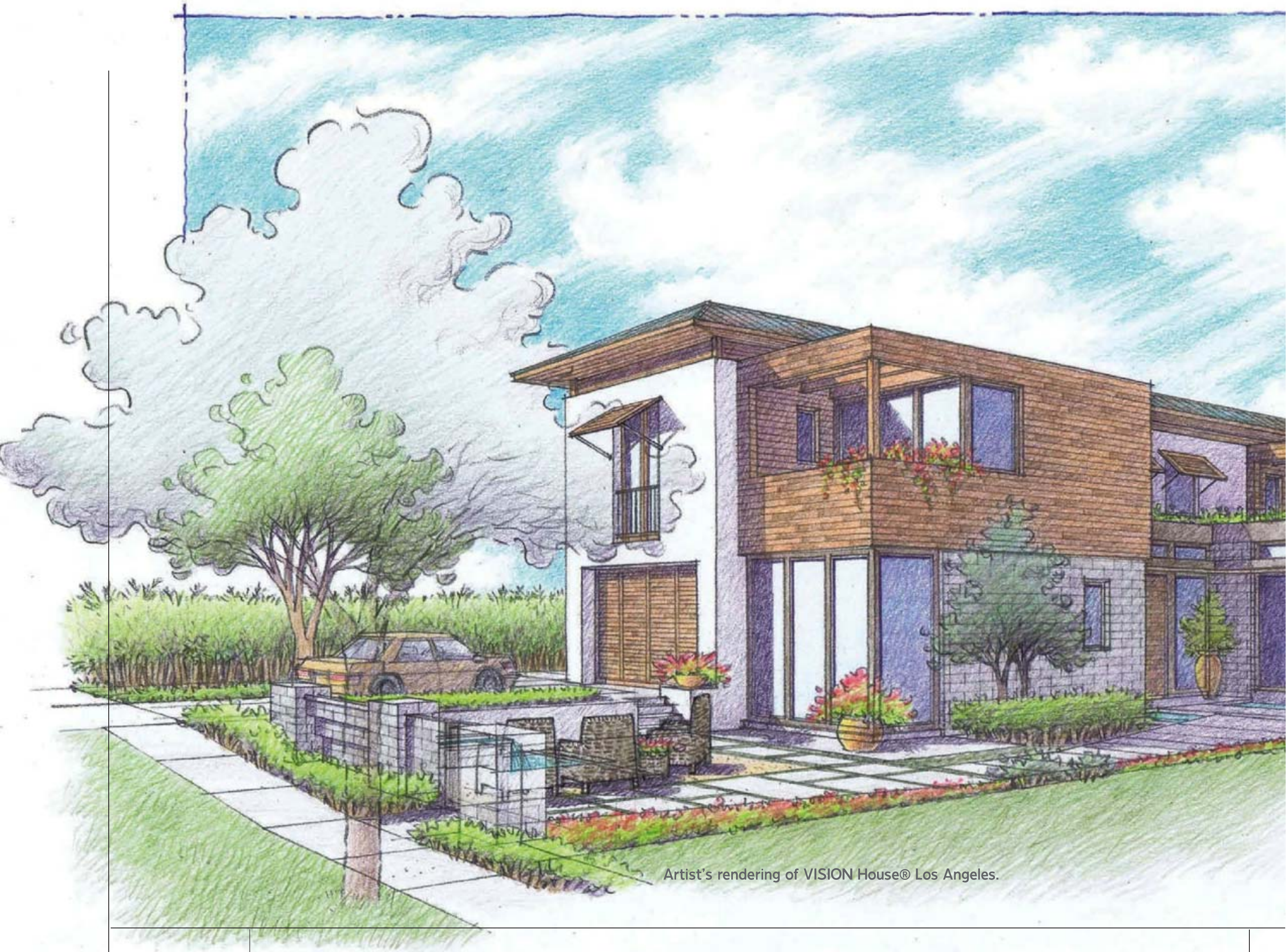

Artist's rendering of VISION House® Los Angeles.

Running ductwork and trunk lines through the web brings the entire system into conditioned airspace.

With this system, ducts and other mechanicals are protected during construction, and leave a clean finish at the end of the project.

VISION HOUSE® LA TESTS A NEW SYSTEM

Improved Wood Framing

04

Boise Cascade's new framing concept saves energy for the homeowner, has a green story you can sell, and reduces job site waste.

BY JULIE KNUDSON

What do you get when you put a new spin on a traditional concept? If you're talking about the world of framing, then one answer is Boise Cascade's Conditioned Airspace HVAC Framing System. It's a long name, but it accurately describes the company's answer to an age-old dilemma.

In conventional framing systems, most HVAC ductwork is run through crawlspaces and attics, while the air handler or furnace itself sits in the garage. That means the intake air often contains whatever odors and pollutants that might be lingering nearby—gas cans for the lawnmower, half-used paint cans, bottles of weed killer—and pumping it straight into the living area. It also means the incoming air is usually the wrong temperature; stifling in the summer when you're trying to cool things down and frigid in the winter when occupants most want to be warm. The traditional pathways for ductwork also translate into wasted energy costs in the form of leaks of expensive conditioned air into unoccupied spaces.

Enter Boise Cascade's new framing system. It addresses the energy-gobbling drawbacks of conventional framing methods that run ductwork in unconditioned space, while simultaneously offering builders an option with more sustainable manufacturing methods and innovative design practices that cut down on waste and lessen environmental impact.

Testing Ground: VISION House® LA

One home taking advantage of Boise's new framing concept is Green Builder's own VISION House® Los Angeles, a demonstration home created to serve as a research and training ground offering information to builders, architects and consumers.

Los Angeles-based Structure Home is the project's builder, and Mark Sapiro, Structure's co-founder, says he chose Boise Cascade's engineered wood products because they're certified green-engineered, a good match for this project. "I know that the products are manufactured with sustainability in mind," he says.

Sapiro evaluated the product's stability and potential to decrease callbacks, along with the system's efficiency and waste reduction features. Result: He's become a believer. "We really love the product and we hope to incorporate it, not just in this one VISION Home," Sapiro says. "We're hoping that Boise Cascade will be

Boise Cascade's laminated veneer lumber (right) offers consistent quality when compared to traditional dimensional lumber.

one of those manufacturers that we'll continue to use and incorporate into future projects."

Sourcing, Tracking and Planning

The sustainability of Boise's system starts with the raw materials. "Boise Cascade demands full forest certification of all wood fiber used," says Denny Huston, general sales manager of Boise Cascade Engineered Wood Products. "The company doesn't own forests, but buys wood fiber in compliance with forest certification standards, such as the Sustainable Forestry Initiative (SFI) and Forest Stewardship Council (FSC)." Huston says that Boise Cascade utilizes a chain-of-custody tracking system that documents the sourcing of all wood fiber purchased, which ensures that only material from acceptable sources makes its way into Boise's inventory. Through the use of this comprehensive, documented system, Boise Cascade engineered wood products are eligible for credits toward either LEED or National Green Building Standard certification.

Once the trees have been turned into EWP, Boise takes another opportunity to reduce waste. Instead of shipping standard-length lumber out to each job site, the de-

TREE SCIENCE

PEELING VS. CUTTING

Finding new ways to reduce waste throughout the manufacturing process is one task Boise Cascade has mastered with its engineered wood products. "When you look at traditional dimensional lumber, you're taking a round log and you're trying to cut rectangular pieces out of it," Carver says, "The whole geometry of it creates a lot more waste." So instead of cutting conventional boards out of each tree, Boise Cascade instead peels their logs. This shaves veneers off each log, and the plies are then glued together to create Versa-Lam beams and Versa-Stud framing lumber. These laminated products offer the right moisture content for fewer post-construction problems, and they're stronger and straighter than dimensional lumber. The more efficient use of raw materials adds to the sustainability of Boise Cascade's engineered framing products.

The process of peeling the tree creates very little dust, instead using virtually all of the wood fiber to create laminated veneer lumber.