GreenBuilder VISION HOUSE LOS ANGELES

ROCK

As our West Coast demonstration home nears completion,

here's a sneak peak at 25 products that put it on the leading edge of innovation.

> Also in this issue: **Disney Goes Green** A first-hand account of the Earth Day grand opening of our new *Epcot*[®] exhibition.

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VISION HOUSE Los Angeles

Tvvek

PRODUCT SHOWCASE

>> As Structure Home puts the finishing touches on our VISION House[®] Los Angeles project, here's a sneak preview of the many eco-friendly products that together make this demonstration home a model of performance, durability and indoor air quality. We'll have full coverage of the home in our July issue, when all of the finish work is complete. >>

BY CHRISTINA BIRCHFIELD

Certification and Verification Goals for VISION House[®] Los Angeles

- Leadership in Energy and Environmental Design (LEED) Certification
- California ENERGY STAR Certification
- California Advanced Homes Program (CAHP)
- California Home Energy Efficiency Rating System (CHEERS) Verification
- Cal-Green (Tier 2)
- WaterSense-Certified Products
- VHLA will surpass the minimum Title 24 requirements by 30%



BEAM

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Beam Electrolux Serenity QS Series

he central vacuum is clinically proven to relieve allergies. It delivers up to five times the cleaning power of a conventional vacuum, and removes 100% of contracted dirt and allergens from living areas without stirring up dust inside the home. And it is guiet. The system qualifies for green building certification points in both the National Association of Home Builders and LEED green building programs.

- Quiet Pak sound insulation
- Built-in utility inlet
- Self-cleaning filter
- On-Guard anti-microbial dirt-collection bucket
- 10-year warranty



SCAN HERE for more information on this product.

VHLA Application

Whole-House Service

www.beamvac.com

Bentley Prince Street Carpet

ISION House® L.A. features Hollywood Sequel and Scan biobased carpeting. Hollywood Sequel has a hint of "old Hollywood glamour" with "dynamic lines and glimmering highlights." With fun color names such as "Bagger" and "Invalid Coupon," multi-colored Scan carpet takes a humorous approach to everyday life. The company conducts product life-cycle assessments (LCAs) and invests in third-party verified carbon credits to neutralize the CO2 emissions.

- Carpet and Rug Institute (CRI) Green Label Plus-certified
- Produced with net-zero greenhouse gas emissions
- Company has ReEntry carpet recycling program



SCAN HERE for more information on this product.

www.bentleyprincestreet.com

VHLA PRODUCTS

VHLA Application

Two Secondary Bedrooms; Area Rug for the Office Downstairs



• Easy-to-use LEED calculator automatically determines points



Boise Cascade **BCI Floor** Joists

oise Cascade BCI floor joists support VISION House® L.A.'s floors. Boise's engineered wood products are stronger, more reliable, and when installed, use 50% less wood than ordinary lumber. Using Boise's engineered wood products is a more efficient use of valuable natural resources.

>>SPECIFICATIONS>>>>

- Forest Stewardship Council (FSC)
- Sustainable Forestry Initiative (SFI)
- Program for Endorsement of Forest Certification (PEFC)
- National Association of Home Builders (NAHB)



Custom-Bilt Metals Titan Cool Roof

itan *Cool Roof* standing-seam metal roof saves money and lasts longer than many other roofing systems. The steel roof features steel-bonded metallic coating with ULTRA-Cool technology by PPG. Colors like the weathered copper used on VISION House® L.A. reflect up to 70% of the sun's energy in both visible and UV light, reducing cooling costs by 20%. *Cool Roof* meets Energy Star requirements. Custom-Bilt gutters complement the roof.



SCAN HERE for more information on this product.

VHLA Application

05

All Floors

www.bc.com/wood

VHLA PRODUCTS

VHLA Application

Roof and Gutters

SPECIFICATIONS

- Standing-seam metal is a long-lasting roof solution
- Steel-bonded metallic coating assures durability
- ULTRA-Cool technology by PPG reflects 70% of the sun's energy
- Reduces cooling costs by 20%
- Meets Energy Star requirements

SCAN HERE

for more information o this product



DuChateau **Chateau Collection**

uChateau Floors' Chateau Collection in Kasteel has an antique appearance that recreates centuriesold European styles. One of the first companies to introduce its finishing system, its pure hard-wax oil finish penetrates deep into wood fibers, protecting them from within, and offering excellent durability and reparability. The environmentally friendly, zero-VOC finish maximizes the wood's natural character and beauty. Floors gain a rich patina as they age.

- Material: FSC-certified wood
- Finish: hard wax oil
- Natural finish ingredients include sunflower, soybean and thistle oil, combined with natural carnauba and canella waxes
- Zero VOCs

VHLA PRODUCTS



DuPont Tyvek Whole House Weatherization System

yvek StuccoWrap and FlexWrap protect VISION House® L.A. from weather. StuccoWrap has an engineered, grooved surface that better manages water when installed as a drainage plane. Curing stucco over the wrap helps keep the scratch coat from cracking, and promotes a stronger stucco facade. FlexWrap is a flashing that requires no mechanical fasteners, thus better protecting the home.





SCAN HERE for more information on this product.

www2.dupont.com

www.duchateaufloors.com



SCAN HERE for more information on this product.

VHLA Application

Floors in Main Living Areas

SPECIFICATION

- Non-woven fiber reduces air leakage
- Breathable, which allows moisture vapor to pass through, and can prevent growth of mold and mildew
- Reduces susceptibility of scratch coat to cracking
- Contributes to National Green Building certification and LEED

VHLA Application

Home Exterior

DuPont Zodiaq

eat and scratch resistant, DuPont Zodiaq is an engineered solid-surface material made with pure quartz crystals. It scores seven on a hardness scale, compared to 10 for diamonds. Its non-porous surface does not require sealants or waxes, and cleanup is easy with a damp cloth or non-bleach, non-abrasive cleaners. Colors used in VISION House[®] L.A. include Snow White and Crema Marfil, along with one of the line's newest colors— Coarse Pepper.

SPECIFICATIONS

 Solid surface is easy to keep clean

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 Heat and scratch resistant



Complete Suite of Kitchen Appliances









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SCAN HERE for more information on this product.

VHLA Application

Kiτchen; Baτhroom

www2.dupont.com/Surfaces

VHLA PRODUCTS

Gaggenau Kitchen

ISION House® L.A. is fully outfitted with a Gaggenau dream kitchen suite. First, there's a refrigerator tower with stainless-steel interior, wine storage with separate temperature controls for white and red wines and a water-sensing dishwasher. The suite also includes a combi-microwave oven, combi-steam oven, warming drawer, gas cooktop, induction cooktop and a teppanyaki cooktop. A powerful wallmounted ventilation hood clears the air, and a coffeemaker with built-in grinder completes the scene.

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>>SPECIFICATIONS>>>>>>

- Cooling and cleaning appliances are Energy Star certified
- Five-year warranty

SCAN HERE for more information on this product.



SPECIFICATIONS

- 100% recycled concrete
- Available in fine (3/8") or coarse (3/4") sizes
- Also available in paver base, as a less energy intensive alternative to decomposed granite

VHLA PRODUCTS

GreenRock Landscape Decorative Rock

reenRock landscape decorative rock is derived from 100% recycled concrete. Color and texture is a special blend of concrete roofing tiles, concrete paving stones and concrete blocks recycled from damaged unused materials. Depending on size, the landscape rock can be either a ground cover or a paver base.

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SCAN HERE for more information on this product.

www.fitev.honda.com

SCAN HERE for more information on this product.

VHLA Application

Pathways and Patios

www.greenrock.us.com/products

Honda Fit EV

onda Fit EV is a pure electric vehicle. Honda says the vehicle is dedicated to "blue skies for our children." The five-passenger car with fold-down rear seats features a three-mode driving system-normal, sport and ECON (economy mode). The vehicle can go as many as 123 city miles with a three-hour charge, and emits no tailpipe emissions. The car comes with a smartphone *HondaLink* for monitoring its energy use-and locating the nearest charging station.

VHLA PRODUCTS



VHLA Application

Parked in the Driveway or Garage

- 20 kWh lithium ion battery
- Charges in as little as three hours
- City driving range: 123 miles
- HondaLink smartphone monitoring system



VHLA Application

Corbond MCS

Insulates Ceiling;

Spider Insulates

Walls

Johns Manville JM Corbond MCS and **Spider Insulation**

ohns Manville JM Corbond MCS SPF closed-cell spray polyurethane foam insulates the roof to R-38, while blown-in Spider insulation brings walls to R-19. Corbond is made with 13% pre- and post-consumer waste. The foam product acts as both a thermal and moisture barrier. Spider is a formaldehyde-free, blown-in fiberglass insulation made of 25% recycled fiberglass content.

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Kichler Fluorescent and LED Lighting

nergy-saving fluorescent and LED lighting is now available for almost any application. In VISION House® L.A., Kichler Lighting provides LED path, step, garden up-lighting and underwater lighting outdoors. Fluorescent lanterns illuminate entries. Indoors, fluorescent bath lighting includes several stylish fixtures that save on electricity use.





SCAN HERE for more information on this product.

- Corbond MCS achieves R-38 at 6" thickness
- Corbond MCS creates thermal, air and moisture barrier
- Corbond MCS does not shrink or settle
- Spider has little or no waste and does not settle
- Spider is naturally mold resistant and used with a moldresistant adhesive
- Spider spray application allows for installation around pipes, wires and junction boxes



SCAN HERE for more information on this product.

> http://specjm.com/products/sprayin/spider.asp http://specjm.com/products/closedcell/jmcorbondmcs.asp

VHLA PRODUCTS

VHLA Application

Underwater; Garden; Entries; Bathrooms

- 2-in-1 LED Water/ Accent Light is designed for underwater use, but can also be used as an accent light
- LED mini-step light is available with a louvered faceplate, and provides even light to illuminate steps
- Fluorescent lantern is available for mounting on walls, posts or ceilings—or as a hanging light fixture

Kitchen Craft Cabinetry

itchen Craft cabinets in a variety of styles and finishes provide storage throughout the kitchen, bathrooms and mudroom/laundry room of VISION House® L.A. The styles include classic Shaker influences and contemporary. Finishes range from a coffee beanlike espresso to hand-brush glazed and high-gloss white. A certified member of the Kitchen Cabinet Manufacturers Association's (KCMA) Environmental Stewardship Program (ESP), Kitchen Craft uses environmentally responsible materials and low-emission coatings.



VHLA Application

Kitchen; Master Bathroom; Three Other Baths; Mudroom/Laundry

SPECIFICATIONS

- Kitchen: Door styles Plymouth and Pamli in Maple Espresso, Palermo and Alumina Door with Frosted Glass finishes
- Master Bathroom: Pamli door style in Palermo finish
- Bathroom two, three and five: New Haven door style and Maple Espresso finish
- Mudroom/laundry: Calvi and Terni door styles in Gloss White and Plymouth Maple Espresso Alumina doors with Frosted Glass finishes

Kohler Generator

ohler Generators for grid-connected electric systems provide just-in-case peace of mind. VISION House® L.A. features a 20-kW generator that can be powered by propane or natural gas. The generator includes a 100amp automatic transfer switch. The switch monitors utility power usage. At the first sign of an outage, the switch automatically and safely transfers power from the utility to the generator.





SCAN HERE for more informati on this product.



SCAN HERE for more information on this product.

VHLA PRODUCTS

VHLA Application

Located Outside the Home: Whole House Capability

- 20-kW generator
- 100-amp automatic power transfer switch
- Operates on propane or natural gas
- Available with Remote Monitoring/OnCue Home Generator Management System

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VHLA Application

Master Bathroom

Kohler Plumbing Fixtures

he Kohler *Reve* toilet is EPA WaterSense certified. The Reve elongated one-piece toilet features dualflush technology. The flush can be either .8 or 1.6 gallons. A .8-gallon toilet can save as much as 6,000 gallons of water annually, compared with a 1.6-gallon flush toilets, and saves as much as 16,500 gallons a year compared to an older, 3.5-gallon model.



SPECIFICATIONS

- Dual flush option
- Qualifies for EPA's WaterSense program
- Saves 6,000 gallons compared to 1.6-gallon toilet and 16,500 gallons compared to 3.5-gallon toilet
- Elongated bowl
- Quiet-Close seat
- May be eligible for consumer rebate



SCAN HERE for more information on this product.

www.us.kohler.com

Leviton Electric Car Charging Station and Lighting Control

art of energy saving is monitoring lighting use. Control systems used in VISION House® L.A. include a universal dimmer that, unlike many other dimmers, controls either LED- and CFL-dimmable bulbs. An occupancy sensor switches lights on and off automatically. Mini-meters measure electrical consumption or production, and the *Evr-Green Level 2 Car Charger* enables fast charging of most electric vehicles.





SCAN HERE for more information on this product.

<image>

VHLA Application

Throughouτ τhe House; Car Charger

- Dimmers control both dimmable CFLs and LEDs
- Occupancy sensors turn lights on and off as needed
- Mini-meters measure electrical consumption or production
- Car charger quickly charges electric vehicles

Maytag High-Capacity Maxima Front-Load Laundry Pair

aytag High-Capacity Maxima Front-Load washer features a PowerWash cycle that provides extracleaning action to loosen deep set-in stains using an internal water heater. The 7.4-cubic ft. dryer has Advanced Moisture Sensing, to provide even drying on loads as large as 18 pounds.





SCAN HERE for more information on this product.

SPECIFICATIONS

- Energy-Star rated
- Internal water heater and PowerWash cycle clean deep-set stains
- Washer uses 82% less water and 84% less energy than pre-2004 top loaders
- Washer can handle up to 29 towels per load
- Fresh Hold option allows a 16-hour window in which to transfer wet laundry to the dryer
- 7.4-cubic ft. dryer evenly dries up to 18 pounds of laundry





Mythic Paint

ythic Paint is a premium, non-toxic, zero-VOC paint available in more than 2,000 hues. Colors used in VHLA include Bedouin Sand, Blooming Berry, Green Gold and Washed Clay. It can also be matched to any color, and is available in all finishes for interior and exterior painting. There are three lines. Mythic Pro, Mythic Classic and Mythic Black Label. The last is not only non-toxic, but is also primer and top coat in one. The paint has a patented technology to prevent fading, and is extremely durable.



SCAN HERE on this product.

www.mythicpaint.com

www.insideadvantage.com www.maytag.com

VHLA Application

Laundry Room

VHLA PRODUCTS

SPECIFICATIONS

- Zero VOC
- Non-toxic and requires no warning label
- Manufactured in zeroemission facility
- Recyclable plastic container

for more information

VHLA Application

Used Throughout the Home

Noritz **Tankless Gas** Hot Water Heater

he Noritz Tankless Gas Water Heater is Energy Star rated, designed to last twice as long as a traditional tank water heater. It's built with recyclable components and replaceable parts—and is 93% efficient providing up to 8.4 gallons per minute of endless hot water.

All Domestic Hot Water **NORITZ** >>SPECIFICATIONS>>>>>>

- Energy Star rated
- 93% efficient
- Less expensive PVC-vented installation



SCAN HERE for more information on this product.

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Orenco Stormwater System

ince 1981, Orenco has produced rain-, gray-, storm- and wastewater collection and treatment systems that use little energy and produce highquality, re-usable treated water. VISION House® L.A. features the company's stormwater catch basin and pump basin, which provide stormwater filtration, storage and transportation. The system uses no chemicals or additives.

- Catch basin
 - Pump basin



SCAN HERE for more information on this product.

www.noritz.com

VHLA PRODUCTS

VHLA Application

VHLA PRODUCTS

VHLA Application

Εχτερίος Stormwater Basin



>>SPECIFICATIONS>>>>>>

- Pumps run only when necessary
- Stone-patterned access lid helps system blend into the landscape

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Schlage Knob Sets and Back Plates

chlage Century Collection levered knobs and back plates, used throughout VISION House® LA, house provide ease of access for all. Levers are easier to operate than typical round knobs, making it easier for people with arthritis or other disabilities-or just with their hands full-to open and close doors. Knob sets offer an easy three-step installation.



on this product.

Doors Throughout the Home

Schluter Tile **Installation Systems**

hat's underneath tile determines long-term installation success. A Schluter Shower System creates a totally waterproof and vapor-tight environment, and can be installed in showers constructed with standard drywall. In many instances, it eliminates the need to build a mortar bed. KERDI-BOARD, available in seven thicknesses, can be a substrate, building panel and bonded waterproofing solution. *DITRA* is a polyethylene mat that serves as an uncoupling layer, waterproofing membrane and provides support/load distribution to prevent cracks.



SCAN HERE for more information on this product.

www.schlage.com

VHLA PRODUCTS





All Tile and Shower Installations

SPECIFICATIONS

- Designed to increase the longevity of ceramic and stone tile installations
- Manufacturing waste is recycled
- Produced in a plant powered with geothermal technology

39

Trane 16 SEER, EER 13 HVAC System

eating, ventilating and air conditioning systems have been selected for the Los Angeles climate. The Trane HVAC four- and five-ton systems feature 16 SEER cooling condensers and the company's *FreshEffects* energyrecovery ventilation system (ERV): an energy-efficient air ventilator, plus their CleanEffects air cleaner.





VHLA Application

Whole-House HVAC

SPECIFICATIONS

- 4-ton air handler model #TAM7AOC048
- 5-ton air handler model #TAM7AOC060
- Whole-house air filtration units model #FD260CLAH000C
- 4-ton condensing unit model #4TTX5049 E1OOOB
- 5-ton condensing unit model #4TTX5061 E1000A
- ComfortLink thermostat model #XL950
- Relay panels model #BAY24VRPAC52DA
- 75VA 24 volt transformers model #CB00714P01
- Energy-recovery ventilators model #100A9P00A

Trex TranscendAE Decking

rex turns approximately 1.5 billion recycled plastic bags, along with scrap wood and sawdust, into durable outdoor railings and decks. Trex *Transcend* combines a finish that resists stains, scratches and mold with a distinctive and natural-looking highdefinition, wood-grain pattern available in seven rich, deep colors.

SPECIFICATIONS

- Made of recycled plastic bags, sawdust and scrap wood
- Keeps 1.5 billion plastic bags out of trees, rivers and landfills
- High-definition, wood-grain pattern
- 25-year Limited Fade and Stain Warranty



SCAN HERE for more information on this product.



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VHLA PRODUCTS

VHLA Application







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www.trex.com

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.greenbuildermag.com

05

Uponor AquaPEX Plumbing, D'MAND Hot Water Delivery and Radiant Floor Systems

quaPEX plumbing includes easy-to-install crosslinked polyethylene tubing to supply water. The system resists corrosion, pitting, scaling and freeze damage. D'MAND Hot Water Delivery uses a pump activated by a button or motion sensor near a plumbing fixture to deliver hot water in seconds. The system saves about 40 gallons of water daily in a typical home. The company's Radiant Floor system also reduces home heating costs.



VHLA Application





- In a "Logic Plumbing" layout uses 83% fewer fittings than a trunk and branch system
- Uses 58% less tubing than a homerun system
- Saves roughly 40 gallons of water a day
- Floor heating can be zoned so that different rooms are set at different temperatures



SCAN HERE for more information on this product.

www.uponor.com

VISION HOUSE® LOS ANGELES

Presenting the home of the future: a smart house that takes advantage of integrated design elements, advanced technologies, and intelligent systems to enhance the home's performance. Durable green products keep the home healthy and safe. The house is regenerative, returning energy to the grid, adding value to its neighborhood, and replenishing its surrounding natural environment.







Now Open! For Opportunities to Tour the Project Visit www.greenbuildermag.com/VISION House/VISION-House-Los-Angeles

