GREEN + DESIGN
Conference and Expo
Commercial • Hospitality • Residential • Retail

Green + Design Conference Debuts in Atlanta

The first-ever Green + Design Conference and Expo took place last week, Oct. 1-2, at the Hyatt Regency Place in Atlanta. The event focused on sustainable practices and innovations for the interior design, retail design, kitchen and bath design, hospitality design and multi-dwelling design industries. Keynote speakers were Josh Dorfman, environmental entrepreneur, author, radio personality and founder of eco-friendly furniture company Vivavi; and William Ham, vice president of facility operations for MGM Mirage Design Group, which is currently building the new CityCenter development on the Las Vegas strip. *DDI* sponsored the retail design track, featuring five sessions on how green design and sustainability practices are affecting the retail industry.

Keynote 1:

Josh Dorfman started out the conference session by asking, "Is green a fad or a trend?" Dorfman, founder and CEO of Vivavi & Modern Green Living, authored the book "The Lazy Environmentalist," and is the creator, producer and host of a radio show by the same name. He opened up his presentation by discussing green solutions that fit our lifestyles, such as water conservation and sunlighting, and by detailing how "going green" has become more attainable and economically viable. Suggesting that the green movement is an indirect result of our economic system and the choices we made in the 20th century, Dorfman emphasized the importance of leadership, or "doing things smarter." The expanding palette of green materials available has made sustainable design more popular, and easier than ever before, Dorfman said, citing the examples of naturally grown, recycled and certified materials. Many companies are making green choices, from builders creating eco-friendly condominiums to car manufacturers like Toyota. Companies such as Pizza Fusion are rolling out entire chains of green franchise locations, while other retailers are experimenting with green pilot stores. Big-box retailers such as Target and Home Depot are offering green merchandise, while Wal-Mart is instituting sustainable initiatives of its own. By shifting the focus away from "doom and gloom" and toward proactive solutions, Dorfman said we can re-imagine how we do almost everything, adding that many small choices add up to a big result. "Sustainability is living as well as you possibly can in tune with nature," he concluded.

To obtain professional, unedited, live recordings of the sessions at the Green + Design Conference and Expo 2007, visit **www.twosense.com/GD2007/index.html** and submit your order.

Keynote 2:

Designed by eight world-class architects, the 76-acre CityCenter development currently under construction in Las Vegas will not only be beautiful—it also promises to be environmentally conscious. In his keynote session, **William Ham**, vice president of facility operations at MGM Mirage Design Group/CityCenter, spoke of the development's goals of LEED certification, driven by water conservation, energy efficiency and materials selection. The $7 billion "city within a city" is adjacent to the Bellagio, and will feature 18 million sq. ft. of new construction. The development will focus on indoor environment quality, which includes being completely non-smoking, with the exception of the casino areas. Even there, heightened displacement ventilation will improve indoor air quality. Ultra low-flow plumbing fixtures, even in the commercial kitchens, will ensure a 30 percent to 40 percent water savings in some of the buildings. The sustainable applications used in this development may begin to find themselves in other MGM properties, Ham said. "We are looking to retrofit our existing properties in a more sustainable way," he says. "We are currently doing energy studies of our existing buildings. Our sustainability effort is a corporate-wide ideal."

RET1:

Known for its obsession with return on investment (ROI), Bentonville, Ark.-based Wal-Mart Stores Inc. has found that sustainable building design concepts hold a great deal of potential. **Bill Correll**, director of architecture for Wal-Mart Stores Inc., said the big-box retailer has been doing green projects for years because sustainability fits into its core initiatives. The company began experimenting with skylights and white roofs in the mid-'90s after working on test projects with famed green architect William McDonough. Currently, Wal-Mart's standard green features include white roofs; daylight harvesting with continuous dimming of fluorescent lights; heat reclamation from refrigerator systems; exterior LED signage; high-efficiency HVAC systems; active de-humidification; and central monitoring. In 2005, Wal-Mart made new goals for green—to have 20 percent energy/greenhouse gas (GHG) reduction in existing stores within seven years; and to have 25 percent to 30 percent reduction in GHG for new prototypes in four years. The "higher-efficiency" pilot projects in the works include LED case lighting; variable speed fans/motors; floating pressures; emerging HVAC technologies, emerging refrigeration technologies (CO2 second loop); radiant floors, modular solar walls; and photovoltaic leasing agreements. "What we do has to be substantial, pervasive and real," Correll said. Other green tests include rainwater harvesting; xeriscape testing; bioswales testing; pervious pavement; vegetative roofs; waterless/low-flow urinals; low VOC paints; and recycled plastic. Wal-Mart eliminated more than 100 million sq. ft. of vinyl tile from its stores by using concrete floors (where 15 percent of cement had been replaced with fly ash). The company's real estate initiative will also give land back to a wildlife conservancy that will equal its development footprint. "You have to have the will to work through the problems," Correll said. "Push for changes and share what you learn."

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RET2:

Barbara Horton, president, CEO and senior principal of Horton, Lees, Brogdon Lighting Design Inc., discussed the ways lighting in retail can be effective within current code restrictions. Horton presented the various energy codes affecting lighting design, such as ASHRAE 90.1 2001/2004; the International Energy Conservation Code; Title 24 (California); LEED; and the Dark Skies initiative. In outlining the various lamp technologies—incandescent, halogen, fluorescent, white LED and ceramic metal halide—Horton said ceramic metal halide is a good retrofit lamp, which will probably be available commercially in the near future. LED is a technology that Horton said is still being perfected and which needs improvement in terms of ambient colors. Projects such as Bloomingdale's in San Francisco, Niketown, Samsung, Fila and Whole Foods were examples Horton used to discuss the impact of various—and often strict—codes on lighting design. To combat design obstacles presented by new lighting codes, Horton offered several strategies. "Use materials and finishes wisely," she said, adding that lighter tones usually work better. Other suggestions included adding natural light through skylights or vertical glazing; control systems; thinking in terms of kilowatt hours instead of lighting power density; using equipment that makes use of performance optics; alternative performance lamps such as T5 or LED; rethinking ambient light levels and focusing on task for improved highlighting; zone lighting for off or restocking hours; selecting fixtures with luminous qualities; and highlighting perimeter display areas for greater impact.

RET3:

Beauty company Aveda and outdoor sports enthusiast Recreational Equipment Inc. (REI) have been leading the way in adapting green principles. **Jan Tribbey**, Aveda's vice president of design and visual merchandising, discussed the company's commitment to green, from organic botanicals and "soil-to-bottle ingredients" to sourcing, packaging, architecture and interior design. "Environmental responsibility and economic success are not mutually exclusive," Tribbey said. With a global and local activist view, Aveda has made the environment a priority, and asks 13 questions, (such as "Do we need it?" "Can we live without it?" or "Can we borrow, rent or get it used?") every time it begins a new project. Aveda has worked with LEED, MERGE and CERES to evaluate resource consumption factors and other environmental impacts. Its schools, flagships, stores and fixtures all focus on a minimalist aesthetic, material selection, reducing toxins, energy efficiency and design for disassembly. The company advocates sourcing local materials, recycled and reclaimed materials, and eliminating PVC wherever possible.

Kevin Hagen, manager of corporate social responsibility for REI, outlined the company's sustainability history, where it began with employees and random acts of kindness, and eventually became a frameworks-based strategic focus. The purpose of REI's co-op is to "inspire, educate and outfit for a lifetime of outdoor adventure and stewardship." Hagen said it is this principle of stewardship—made of social impacts, environmental impacts and products—that has evolved as the basis for the company's green initiatives. By 2020, REI plans to be a climate-neutral and zero-waste-to-landfill organization. Its goals for green building include enhancing the retail experience, reducing environmental impacts, reducing cost of operations and aligning buildings with its values. REI's new prototype store in Boulder, Colo., is part of the LEED retail pilot and will feature green elements such as solar tubes. "Looking at business through the lens of environmental and social responsibility reveals opportunities and risks we wouldn't otherwise see," Hagen said.

RET4:

Jay Valgora, founder of Studio V Architecture, presented green approaches to urban development, to include his firm's latest mammoth project: Lac Mirabel in Montreal. The 330-acre project, which will be the world's first large-scale LEED-certified retail development, will feature a 1.7-million-sq.-ft. retail complex, a new town center, 3,200 residential homes, a sports and entertainment facility and the revitalization of existing wetlands. A retractable roof that will trap heat for the winter months and allow for an open-air feel in the warmer seasons will run through the center's main thoroughfare. A trout stream, sustained on-site, will run right through the center of the complex, and will serve as an ice skating rink in the winter. Valgora says that more than half of Studio V's projects are now green in nature. "I'm astonished of the impact of green principles on design and architecture," he says.

Using the application of stone, wood, glass and greenery, Valgora's group is looking to reinterpret green architecture "in a contemporary and meaningful way." With this new project Studio V is reinventing how they look at sustainability, and redefining the language of green. "This is not new urbanism; this is something completely different," Valgora emphasizes. "We are bringing the garden back into the machine. Bringing the greenery back into urbanity."

RET5:

"Green-Up Your Roof," a session led by **Jim Lindell**, national marketing manager for Weston Solutions Inc.'s GreenGrid Green Roof Systems, enlightened conference attendees with the attributes and benefits of installing green roofs in the retail sector. Lindell defined a green roof as "a roof predominantly covered with vegetation." Today, there are more than 100 million sq. ft. of green roofs in Europe. In the United States, there were 3 million sq. ft. of green roofs in 2006, and Lindell said that number is expected to double for 2007. Some of the benefits of green roofs include increasing the longevity of the roof membrane system, acting as a buffer from external temperatures, reducing UV exposure and doubling or even tripling the service life of the roof. The increased energy efficiency can reduce the average daily energy demand by up to 75 percent, Lindell said. Green roofs are also effective solutions for stormwater management, retaining 70 percent to 100 percent of a typical rain that falls on the roof surface. And because roofs and road surfaces radiate heat, green roofs can reduce the urban heat island effect immensely in metropolitan areas. "Greening of 6 percent of a city's buildings would reduce summer urban temperatures by 3-4 degrees Fahrenheit," Lindell explained. Finally, green roofs lead to improved air quality (16 sq. ft. of grass can remove more than 0.5 pounds of dust and provide enough oxygen for one person annually) and reduced noise levels (by as much as 10 decibels). ddi