

COLE HAAN
FACTORY
STORE

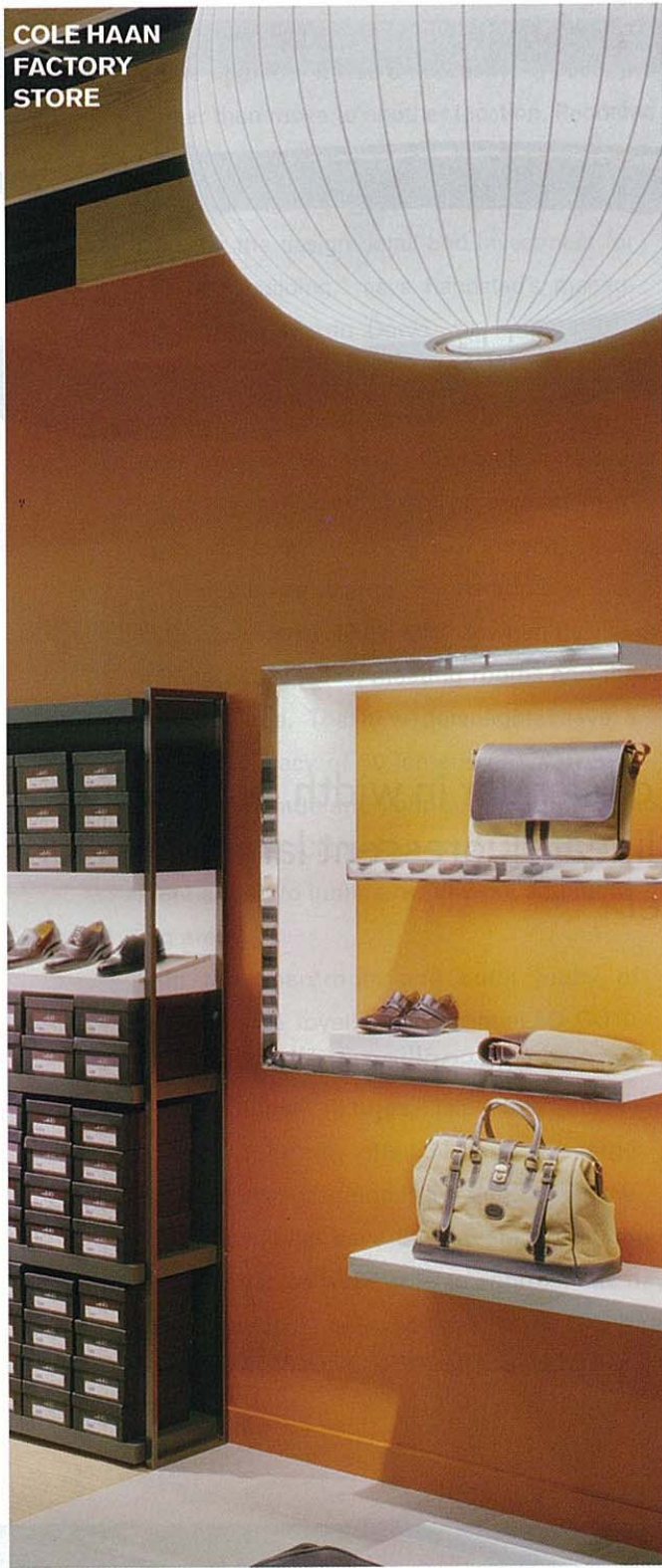


Photo: Paul Rivera

AT&T EXPERIENCE STORE

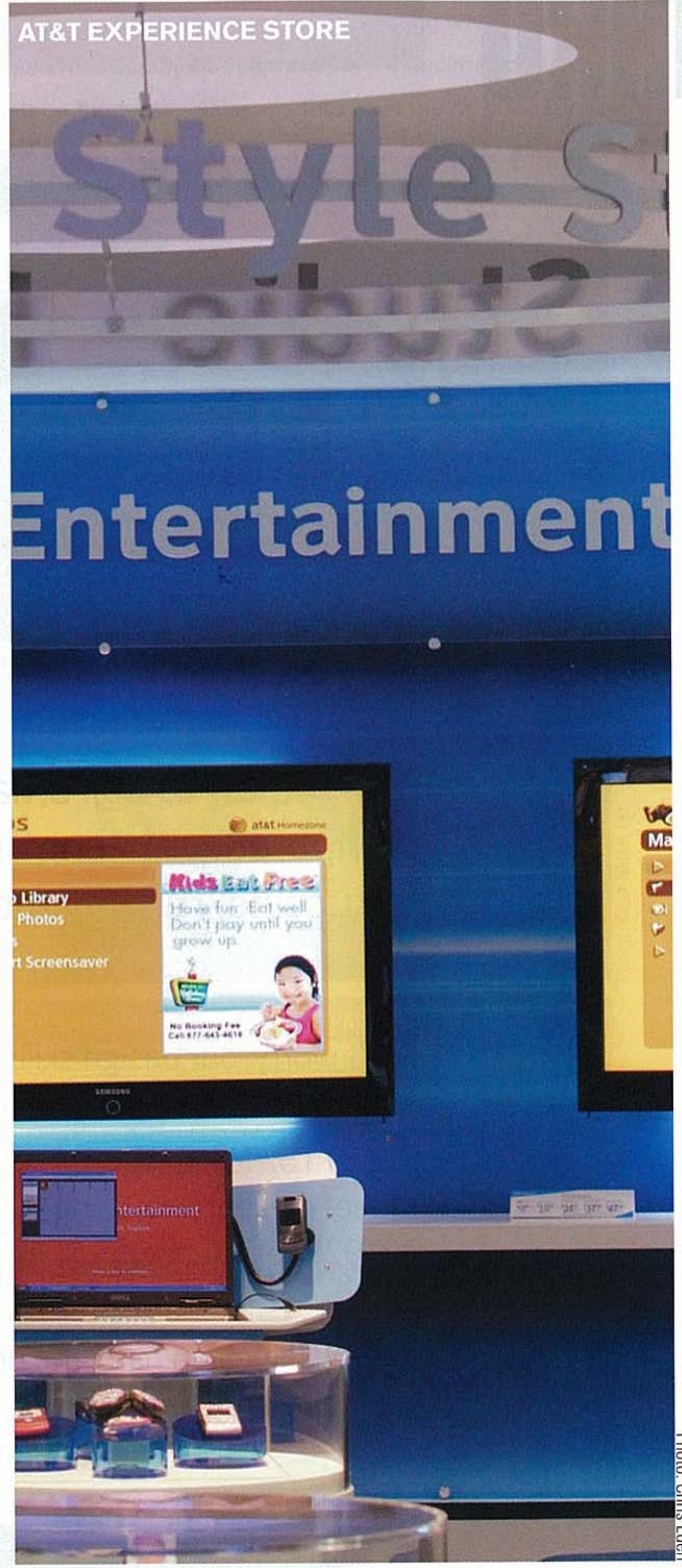


Photo: Chris Eden

PROTOTYPES



Photo: Paul Brokering Photography

For retailers like the Gap, AT&T and Old Navy, a prototype store can be the gift that keeps on giving. Part of the package is a memorable, easily replicated and oftentimes watt-squeezing lighting concept that helps reinforce the brand image across multiple sites.

Prototypes are not cookie-cutter; retailers can have vastly different visions for their stores. Lighting designer Darrell Hawthorne of Architecture & Light, San Francisco, contrasts Old Navy and Banana Republic. Old Navy—with its “exposed and raw” design style—opted for a bare-bulb fluorescent strip “at a low price point,” he says. Banana Republic, on the other hand, had a “surprisingly high price point” for one prototype. It was “much more refined visually, with the bulk of the lighting consisting of semi-concealed track heads contained within linear slots.”

What prototypes do have in common is they usually start the same way: a retailer with a tired design realizes it’s time to “refresh the look of its stores,” says Archit Jain, principal, Lighting Design Alliance, Long Beach, CA. “We’ve done a bunch; the

first was the Skechers prototype in 1999.” LDA prototype projects since then include the Gap, T Mobile, Payless, Pottery Barn and Eddie Bauer. LDA typically frames its lighting solution for prototypes around three factors: store image and design; energy use; and ease of equipment use. More rigorous energy codes have changed the design process in recent years, Jain adds. “You have to be careful wattage-wise that they fit in most locations. In the past, when the codes were not as strict, a retailer might have two versions of a design, and they were hesitant to roll out the more energy-efficient design because of its higher first cost—as much as five or eight times more. Now one design may be applicable for 80 percent of the locations and only adapted slightly.”

Hawthorne points out that even in a watt-crunching world, the aesthetic appeal of the prototype is still paramount. “Retail prototypes are always aligned with very specific design goals from the standpoint of the look, feel and attitude of the store. So the lighting design invariably must be in tune with that to further the visual objective. The is-

Some of the world’s most popular retailers use prototype stores to articulate their brand. Three designers explain the art and science of the roll out

ROLL ON

BY PAUL TARRICONE

sues that we, as lighting designers, typically think about are not on the agenda of the people dreaming up new store designs.”

But in time, the practical implications of the lighting do come into focus. “Everyone hates changing light bulbs, so eventually, the conversation comes around to aiming and changing fixtures,” Hawthorne says.

STRATEGIES AT WORK

Limiting the number of lamp and fixture types is usually an important part of the design strategy. Jain says there are typically two sources used in the prototypes designed by LDA: ceramic metal halide (20 watt or 39 watt) “to keep the design in the 1.5 watts-per sq ft neighborhood” and halogen. “You have the metal

halide for punch and the halogen for color rendering.” LDA is also looking at high-efficiency LEDs for its prototype projects but has yet to use them in a roll out.

Hawthorne says, “I’ll limit the lamp types, sometimes using just one, but I never concern myself with limiting the number of fixture types.”

One game plan for the fixtures is to balance the ease of the installation offered by track fixtures with the desire “to clean up the ceilings as much as possible,” Jain says. Track fixtures enable aiming at different angles and can be readjusted quickly, “but ceilings become more cluttered” when track lighting is installed. Recessed lighting solves that problem, often with one slot size housing multiple lamps.

Of course, the overall architecture of a prototype store will often drive lighting decisions. Cole Haan wanted its outlet store prototype to embody the “high-end feel” of its first-quality stores, but still meet the energy requirements of all states, says Jain. Architecturally, the outlet stores mimic the modern beach house concept used in the first-quality stores. Patrons are drawn in by the glowing paper pendants, an illuminated orange storefront display and the lighted “brand wall” that runs the length of the store.

Inside, however, there is one major difference: Cole Haan’s high-end stores have finished ceilings—in which the luminaires can be hidden—while the budget stores have open ceilings—which leave the lumi-

Cole Haan’s budget stores have open ceilings which leave the luminaires exposed. To create the contrast found in high-end stores, linear fluorescent T5 pendants are set off against black ceilings and black-painted track-mounted accent lights.



Photo: Paul Rivera

naires exposed. To create what Jain calls “the high-contrast luxury feel” found in the high-end stores, the prototype has linear fluorescent T5 pendants juxtaposed against the black-painted ceilings and black-finished CMH track-mounted accent lights. Three lamp types (CMH, fluorescent and CFL) were used in the design, which consumes just 1.3 watts per sq ft. Since the roll out, Cole Haan has reportedly experienced a 15 percent sales increase in these outlet stores.

THE NATURE OF BRANDING

Outdoor gear and clothing retailer REI used its prototype store design to underscore its corporate commitment to safeguarding the environment. Each year, the company supports conservation efforts and sends volunteers to build trails, clean up beaches and teach outdoor ethics to kids.

In that spirit, REI describes its first prototype store in Boulder, CO, as “a vision in green.” The lighting scheme used in Boulder was a response to a past design that simply did not work, says A&L’s Hawthorne. “REI had previously employed skylights, but the glare was terrible. They had also employed non-ceramic metal halide HID fixtures, and the performance was terrible. They used daylight controls to turn the HID on and off, and it was terrible.”

The new 45,000-sq ft REI store, inside of a former Old Navy outlet, is more complicated than the run-of-the-mill retail prototype. “First and foremost, it’s about introducing daylight as a real source of illumination that we could shape and direct. The design combines daylight with fluo-



Photo: Paul Brokering Photography

At the REI store in Boulder, CO, skylights channel light through decorative “Solabells” during the day. The Solabells are equipped with dimming fluorescent lamps for evening illumination.

rescent, CMH and a control system to maximize the visual and energy benefits of each source,” says Hawthorne, who designed the lighting with colleague Inga Birkenstock.

Daylight enters in several ways. A giant hole cut through the roof of the building enables glass panels to transmit daylight to the middle of the store. In addition, skylights from Solatube function as wall washers by illuminating the perimeter walls. When daylight reaches 1,000 lumens within the solar tubes (as early as 9:00 a.m.) fixtures decrease output to 50 percent. A total of 190 skylights were used, including decorative “Solabells,” which provide soft ambient light. These glow after sunset with integral dimming fluorescent lamps.

Enhancing the design are small envelope low-mercury 70-W CMH T6 lamps to create sparkle on the products and reduce toxic waste.

Finally, in lieu of a sophisticated dimming system, time clocks and photo and occupancy sensors were employed. “The variation between daylight hours and 100 percent electric lighting seems indistinguishable and the automation appears seamless,” says Hawthorne. The combination of the systems achieved the required 75-100 footcandles on the merchandise, both day and night.

A second store was opened in Round Rock, TX, but a third planned prototype has been shelved for the moment.

ADAPT AND ADJUST

Oftentimes, nuances and tweaks to a design will allow owners to adapt one prototype to the requirements of different locations. Hawthorne mentions the case of Old Navy. Within Old Navy are U-shaped areas of shelving known as “shops,” each dedicated



AT&T Experience stores come in a variety of sizes, styles and prices. Factors such as ceiling design influence the lighting. The coves in this "Level A" store require more detailed—and expensive—lighting.

Photo: Chris Eelen

to a different product (e.g., denim, T-shirts, etc.). Delineating these areas are rectangular Unistrut frames positioned overhead. Attached to the interior of each frame is track holding two rows of fluorescent troffers. Meanwhile, along the "main street" of these Old Navy stores are streetlights. Even though only two fixtures were used in the design, "it became tricky to adapt the track to each site. We had to manipulate the fixture layout and aiming from store to store."

AT&T has set an even higher standard for complex prototype design. "For most prototypes, we do one version, or a couple of versions up front, and a client will choose one and go with it throughout," says Sean

O'Connor, Sean O'Connor Lighting, Beverly Hills, CA.

But not AT&T. As part of a 50-state, 400-store roll out of the AT&T Experience prototype, Sean O'Connor Lighting was responsible for developing multiple lighting concepts based on the dizzying array of Experience store designs that marked the relaunch of the AT&T brand (after the Cingular brand was retired). The store designs vary based on both the sophistication of the architecture (A, B and C level) and budget (levels 1, 2 and 3). For example, an "A1" store would be the most elaborate, in terms of design and budget, while a "C3" store would be the most basic and least expensive. Not only

the lighting systems, but other architectural elements, including finishes, are governed by this model.

Why so complicated? O'Connor explains that a prototype store with one price point, such as luxury brand retailers Chanel or Louis Vuitton, could roll out the same design and sufficiently meet customer expectations globally. "But AT&T has to appeal to all people at all price points. New York City might see more higher-end phone sales than a store in the middle of the country." Thus, the need for a stable of prototypes to attract a broad range of consumers.

The same basic palette of sources is used throughout the AT&T

stores: metal halide, linear fluorescent and MR16. The more architecturally complex stores (Level A) have additional sources, including blue LEDs, and more lighting integrated into millwork, for example. The ceiling variations also influence the lighting scheme. Level A stores have an hour-glass shaped ceiling with multiple tiers (“like a wedding cake,” says O’Connor); Level B stores have a flat, hard ceiling; and Level C stores have acoustic ceiling tiles. As a result, the coves in the Level A ceiling require more intricate lighting. “The A level stores have the most layering of light and C level the least—or more general illumination.”

THE LEAVE-BEHIND

The final word on a prototype is often just that—a design document for the owner or owner’s architect. Lighting Design Alliance created a design book for Pottery Barn that describes how the lighting should be laid out in future stores. Sean O’Connor Lighting contributed to a broader standards and guidelines manual that covered all architectural aspects of AT&T’s prototype program.

Despite the uniformity, these designers don’t believe that prototypes restrict creativity in any way. Jain, for one, takes satisfaction in the legacy left behind by a job well done: “Do it right once, and it’s right 100 times over.”

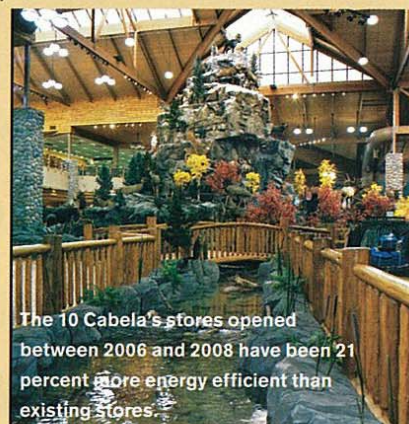
But, alas, prototypes might not be the gift that keeps on giving in terms of design fees. “You do the first one, but the big companies usually deal the designer out of the game as soon as possible,” says Hawthorne. 🐾

Cabela’s Under Control

The look and vibe of a store aren’t the only things that repeat from location to location. Sometimes the hardware responsible for maintaining that look also repeats. Cabela’s, a national supplier of outdoor clothing and gear, has standardized the control system used to run its lighting. The chief reason: energy savings. A store’s electrical load dedicated to lighting can be 50 percent or more. Multiply that across all locations and the importance of lighting control is apparent.

Prior to 2006, Cabela’s used a variety of control systems from multiple suppliers. Whenever it built a new store, there was little system and brand consistency. In ‘06, lighting controls for all new locations were standardized along with other building products. Schneider Electric was selected to supply the intelligent lighting control panel boards, occupancy sensors and power meters. The 10 new stores opened between 2006 and 2008 have been 21 percent more energy efficient than existing stores. Cabela’s puts the return on investment for the control system at one to two years.

The lighting control plan called for circuiting stores so that after store hours, half the general lighting in the retail area, as well as all accent and display lighting, would be turned off. Also, by alternating which fixtures were turned off, the lifecycle of lamps and ballasts would be increased, and in turn, maintenance costs were lowered. The security system, fire alarm and generator transfer switch were also tied into a store’s lighting control panel board, to force all lighting to turn on during alarm periods.



The 10 Cabela’s stores opened between 2006 and 2008 have been 21 percent more energy efficient than existing stores.

In essence, lighting is a hands-off proposition for the manager of a Cabela’s store built since 2006. By the time the manager gets in, lights are staging up. Thirty minutes before opening, feature lights on the sales floor are coming on. At 9 p.m., the lights begin turning off, and by 10 p.m. they are down to nighttime lighting requirements. Exterior lighting, including signage and parking lot lights, also are scheduled into the controller residing within the intelligent lighting control panel board. Ethernet access built into the controllers within the intelligent lighting control panel boards means lighting schedules for all stores connected to the network can be changed via the Internet.

Meanwhile, high-bay warehouse lighting in new stores was shifted from metal-halide fixtures that were typically on most of the day to high-bay fluorescent fixtures that are controlled by occupancy sensors. Once motion is detected by an occupancy sensor in a given aisle, lights turn on until motion is no longer detected. If there is no activity detected for 10 minutes, lights turn off. Occupancy sensors are used in storage rooms, offices, electric rooms, the employee break room and the restrooms.

— Paul Tarricone

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