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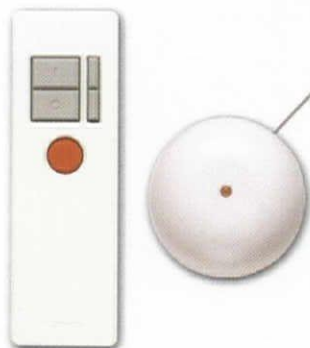
architectural | lighting

2nd annual
light &
architecture
design awards

Light is everything.

Light affects people.

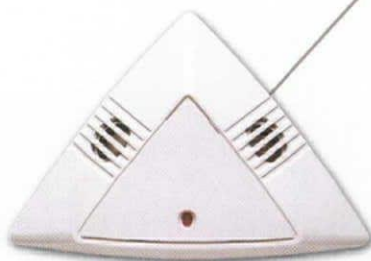
When the light is right, students learn more, employees are more productive, there are fewer health complaints and occupant comfort is increased.



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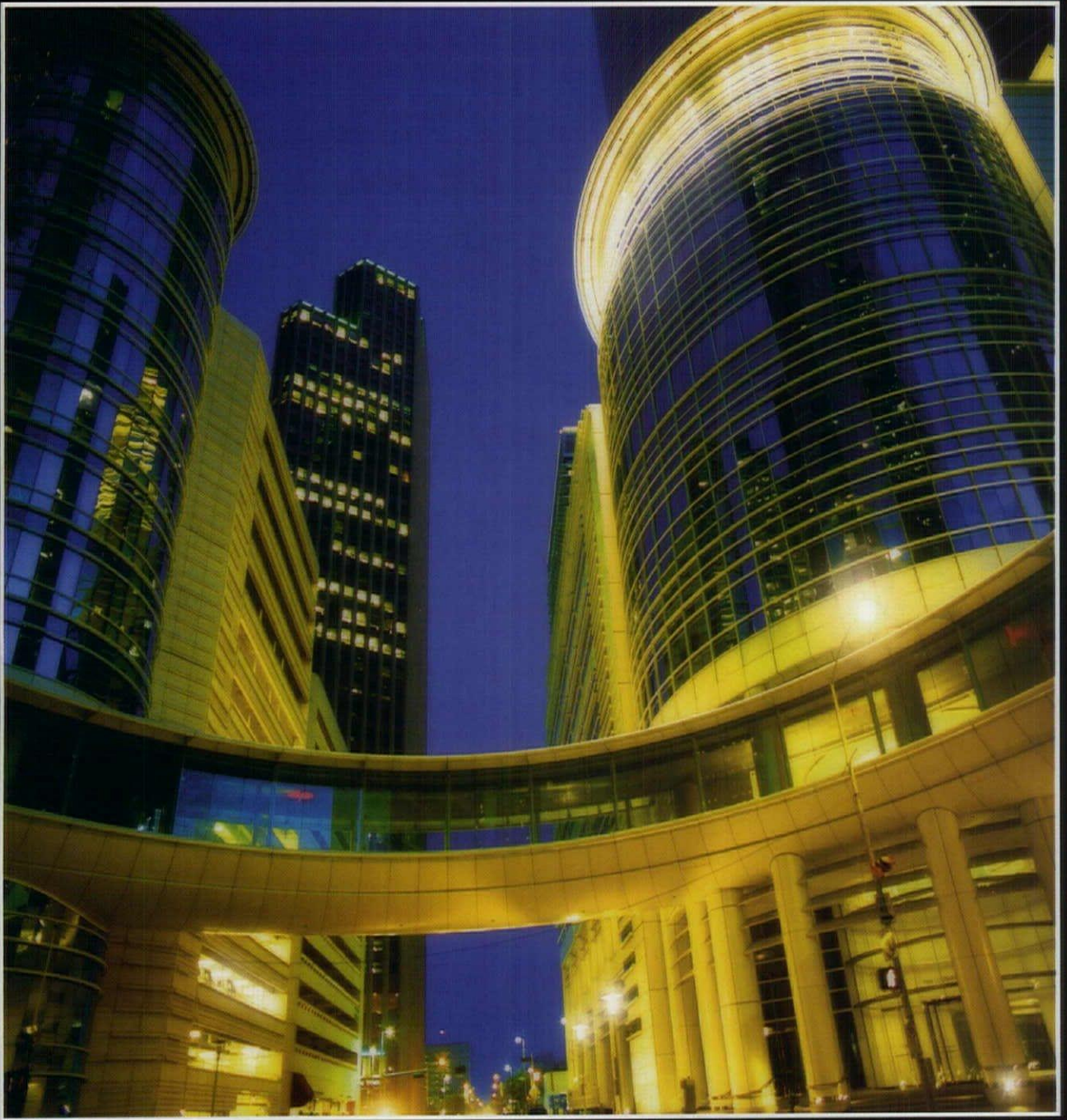
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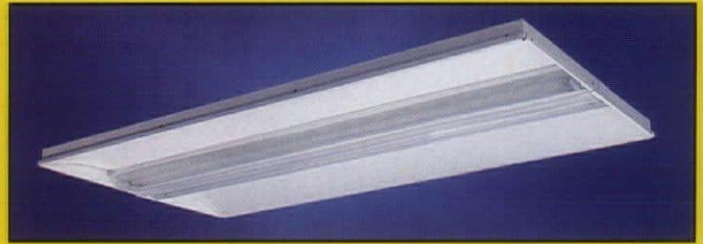


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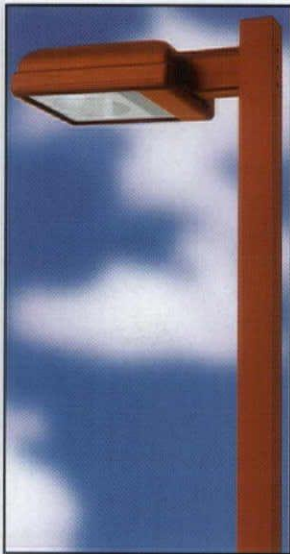


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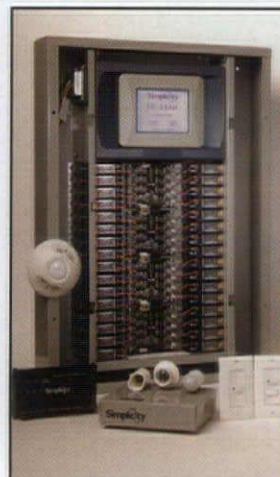
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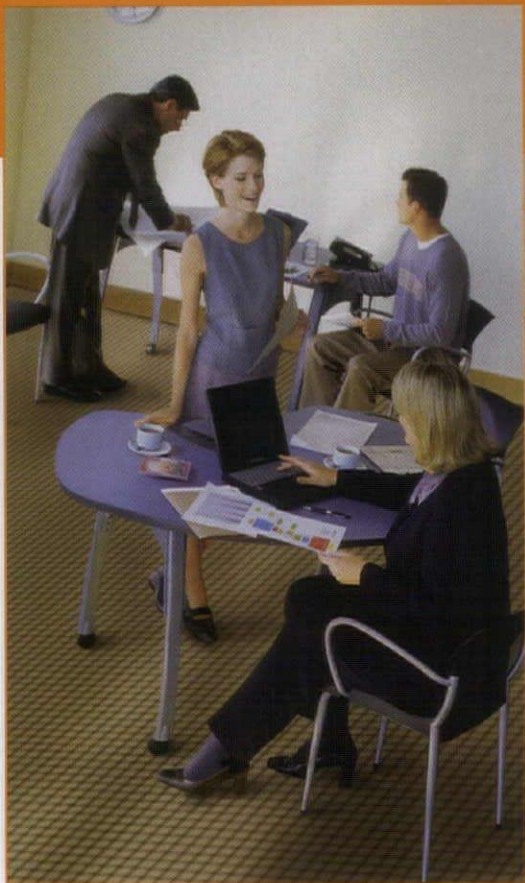
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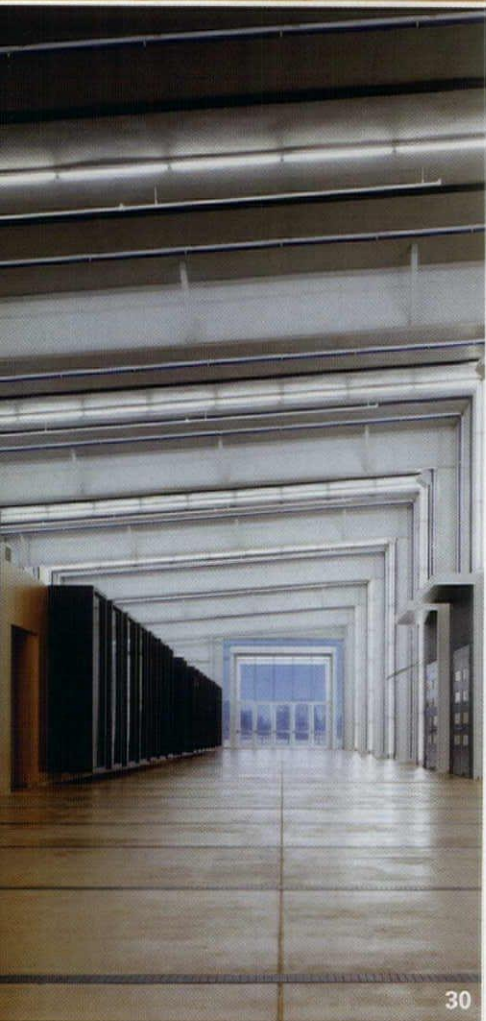
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26



30



51



industry

- 09 **comments**
- 11 **briefs** / Targetti Goes to China; Light Specification Tools; and more
- 21 **report** / Picturing Your Project: Hiring a Photographer
- 64 **exchange** / The struggle over photography: Are there answers? 

projects

- 25 **HIGHLIGHT** / A|L Light + Architecture Design Awards 

OUTSTANDING ACHIEVEMENT

- 26 **institutional** / Atlantic Terminal

COMMENDABLE ACHIEVEMENT

- 28 **institutional** / St. Thomas Aquinas Church
- 29 **institutional** / Julien J. Studley
- 30 **institutional** / McClendon Athletic Facility
- 31 **cultural** / Overture Center for the Arts
- 32 **cultural** / Jazz at Lincoln Center
- 33 **retail** / Carlos Miele
- 34 **hospitality** / Semiramis Hotel
- 35 **outdoor** / Frost Bank Tower
- 36 **outdoor** / Panama Canal Bridge

ALL VIRTUOUS ACHIEVEMENT



- 36 **budget** / Panama Canal Bridge
- 38 **color** / Morongo Casino Resort & Spa
- 40 **daylight** / David L. Lawrence Convention Center

PROJECT DETAILS AND SOURCES

RETAIL LIGHTING FOCUS

- 45 **project** / Whole Foods Market, Austin, Texas
- 46 **project** / Lafayette Maison, Paris
- 48 **products** / A Little Light Shopping

details

- 51 **method** / In the Spotlight: Lighting Art 
- 57 **technology** / LEED: What It Means for Lighting Design 
- 63 **ad index**

Cover: Entrance Lobby, Atlantic Terminal, Brooklyn, New York (page 26).

PHOTO: ELLIOTT KAUFMAN/ELLIOTT KAUFMAN PHOTOGRAPHY

This page: Atlantic Terminal, Brooklyn, New York; McClendon Athletic Facility, Oklahoma City; the Highland Drive residence, Seattle; Nasher Sculpture Center, Dallas.



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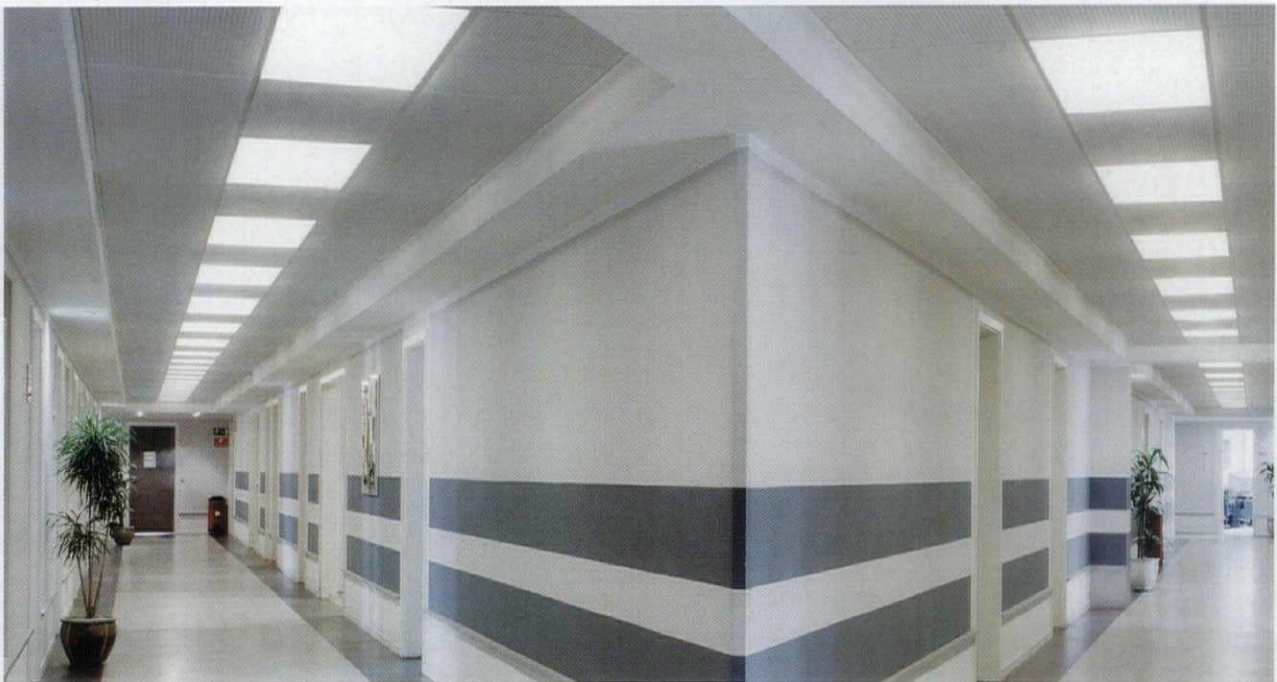
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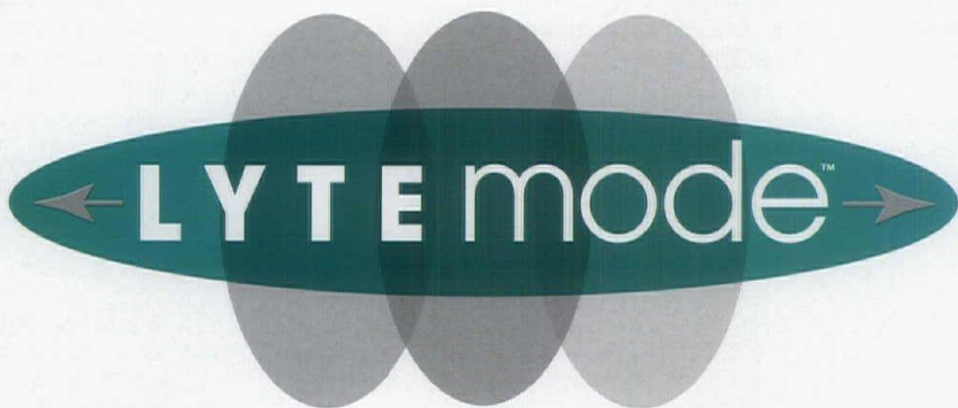
*Annual savings based upon replacement of 7,055 fixtures at a 200,000 sq. ft. facility.



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Get with the Program

WITH THE SECOND ANNUAL A|L LIGHT + Architecture Awards in print, the program seems safely established. Entries were up 17 percent over

2004, with more winning projects overall. The jury discussion was compelling, and delved into issues above and beyond the immediacy of the 2005 submissions. Do the magazine and the awards curriculum have a responsibility to issues like *Dark Sky*? Should lighting be honored for salvaging bad architecture? Do categories help the judging process or add another layer of criterion to wade through? What role does photography play in evaluating a project?

Coincidentally, the magazine also conducted a readership study in June that gathered interesting and timely data about the awards program, providing additional fodder for contemplation as the event matures in the coming years.

The first point for meditation is that a considerable number of respondents did not feel they had projects for which the lighting is a significant enough component to warrant the time and money involved in submission. Almost 10 percent of the respondents who had heard of the program, but had not entered, attributed it to the deficiency of their existing projects, with a few of the following comments: "projects fairly mundane," "need a deserving project," "quality of projects," and "most projects are too basic."

Though not entirely unpredictable, it is nevertheless noteworthy that, of those who were aware but had not entered, a greater percentage were architects (75 percent, versus 69 percent for lighting designers), with significantly more architects (37 percent) than lighting designers (14 percent) citing a lack of interest in a lighting awards program as the primary reason. While lighting designers will naturally have more appreciation for an event of this nature (designing exceptional lighting is their professional purpose after all), I found the percentage of uninterested architects troubling. The elephantine question in the room: Are those architects "lacking interest" also designing substandard projects when it comes to lighting?

Going out on a limb, since this theory is based on a hunch rather than survey stats, I wonder if

their lack of interest is, in part, a lack of confidence. Is it overly intimidating to enter their work, as lighting aware as it may be, into the ring with submissions from some of the best lighting designers in the country? That five of the twelve winning projects (all of which had a lighting designer on the team) have already been recognized by other recent industry awards programs—judged by entirely different juries with diverse experience, design philosophies, and skills—seems to confirm that, indeed, these are the best of the best, and formidable challengers. (It should be noted, however, that two of the twelve recent winners were entered by architecture firms.) If this is the case, would more architects be encouraged to submit relevant projects, and thereby promote the importance of lighting, if there were a lighting award available only to this group—like, for example, the many design recognition programs that exist only for students?

My suggestion is not intended to mollycoddle architects; rather, it provides additional encouragement to creatively and thoughtfully incorporate lighting into their projects, with or without the influence of a lighting designer. Moreover, such an event may not be an obvious awards vehicle for architects, but it does them well professionally to expand their thinking in this regard: Better lighting makes a better project, which presumably equates to more clients. That is a system of recognition we can all appreciate.

EMILIE W. SOMMERHOFF
EDITOR-IN-CHIEF

JULY/AUGUST EXCHANGE QUESTION:

Design awards programs abound. Are there too many? What is the effect, positive or negative, of the number? Do they encourage design, or merely serve a marketing agenda? What kind of awards program—specific to architectural lighting design—would you like to see instituted?

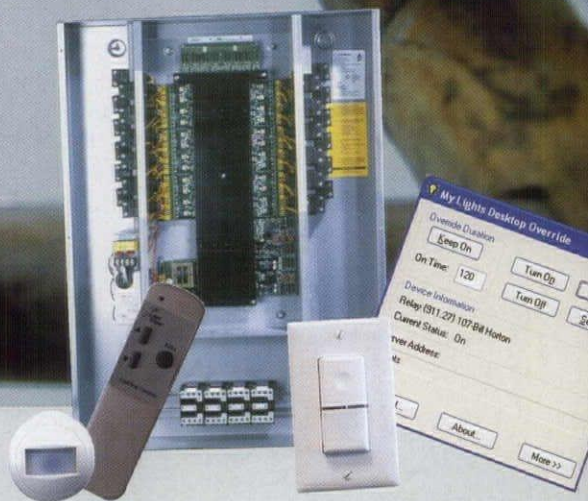
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DOES THE FUTURE LOOK BRIGHT?

WITH THE EXPLOSION OF 100-DEGREE-PLUS TEMPERATURES ACROSS MOST OF THE United States in the second half of July, the release of two reports on buildings, electricity, and climate change, coupled with the U.S. House of Representatives and U.S. Senate passing of an energy bill, is particularly timely.

REPORTS ON CLIMATE CHANGE

The reports are distributed by the Pew Center, an independent nonprofit and nonpartisan organization providing information on global climate change, established by the Pew Charitable Trusts, one of the largest U.S. philanthropies devoted to environmental topics. The two reports, "Towards a Climate-Friendly Built Environment" and "U.S. Electric Power Sector and Climate Change Mitigation," are available at the Center's website, www.pewclimate.org/global-warming-in-depth/all_reports.

According to the Center, buildings and electricity sectors account for approximately half of the nation's carbon dioxide emissions. The reports find that "a portfolio of affordable technology and policy options exists to completely transform the high-emitting buildings and electricity sectors to low-GHG (greenhouse gases) emitting sectors over the next 50 years." As Eileen Claussen, president of the Pew Center states in a press release, "This research shows that we can achieve enormous reductions in the building and electric sectors, but only if we craft a clear and comprehensive policy to guide them."

ENERGY LEGISLATION

The most comprehensive package of U.S. energy policies in more than 13 years, a \$12.3 billion energy bill was passed by both the House and Senate at the end of July. Some of the specifics of the legislation include \$14.5 billion in energy-related tax breaks (\$2.9 billion to the coal industry; \$3.1 billion for electric power producers and distributors; and \$2.6 billion to oil companies, according to a *New York Times* report). Additional incentives, to the tune of \$1.3 billion, encourage energy-efficiency and conservation programs, along with alternative energy sources, which will receive another \$4.5 billion.

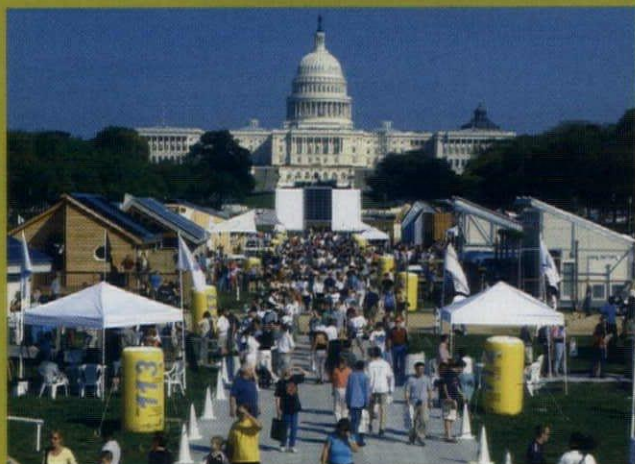
The National Electrical Manufacturing Association, a strong lobbying force on Capitol Hill, actively worked to have an energy-efficient commercial buildings provision—one that "provides a tax deduction of up to \$1.80 per square foot for new or renovated buildings that exceed the ASHRAE 90.1-2001 standard by 50 percent, with deductions for lighting systems, HVAC systems, and building envelope"—included in the 1,724-page bill. This measure, which also provides up to a \$.60 deduction per square foot for individual systems, will go into effect December 31, 2005.

Finally, one of the more interesting items in the bill is the expansion of daylight-savings time by four weeks—three weeks in the spring and a week in the fall. This change will be implemented in 2007. **AIL**

SOLAR PROJECTS RACE TO THE FINISH LINE

THE U.S. DEPARTMENT OF ENERGY HAS ANNOUNCED THE PARTICIPATION OF 18 scholastic teams from the United States, Canada, and Spain in the second annual Solar Decathlon to be held this October in Washington, D.C. A forum for innovative and experimental ideas in architecture, engineering, and technology that can be applied to building homes in order to produce energy, the collegiate and university-level teams will compete by building and operating an energy-efficient solar-powered home, approximately 800 square feet in size. They have been designing, researching, testing, and building these projects for the past two years at their respective academic institutions. Periodic project summaries, a schematic energy analysis report, construction documents, and plans for arrival, assembly, and dismantling of the houses have been submitted throughout the two-year development process.

The final phase of the competition will commence September 29, when the homes are assembled on the National Mall, creating a "solar village." Starting October 6, teams will compete in 10 contests, evaluated in categories that include architecture, livability, comfort, and power generation for heating and cooling, hot water, lights, appliances, and an electric car. The public will be able to tour all 18 homes from October 7 to 16 with the exception of October 12. The "solar village" will also play host to exhibits and activities addressing energy efficiency and renewable energy.



Thousands of people visited the "solar village" in 2002 on the National Mall in Washington, D.C. to learn from the student teams and tour the demonstration houses (above).

The first decathlon in 2002 showcased projects with translucent walls to provide light and insulation, and fiber optic cables attached to solar collectors to transmit light into a home. No doubt, this year's projects will be equally if not more innovative. For more information, visit eere.energy.gov/solar_decathlon. **AIL**

TARGETTI GOES TO CHINA

INTERNATIONAL COMPANIES, PARTICULARLY North American and European manufacturers, continue to monitor China's emergence as a global economic force. One sector especially aware of China's manufacturing impact is the lighting industry. Rather than view this as a threat, some manufacturers are

developing ways to embrace this changing playing field, and the most recent is Italian lighting manufacturer Targetti Group.

Along with a new headquarters in Florence, and a factory in Neri, Italy, the company opened its first Asian facility in Guangzhou, China, in early June. Sited as one step toward continual improvement of the company's overall "production and logistics structure," the Chinese facility is one part of the company's strategic plan to stay competitive in its Asian markets. Additionally, Targetti has established Heshan Targetti, a joint venture between the Italian parent company and Neo Neon, a leading Chinese manufacturer with over 15,000 employees, specializing in LEDs. Management will be comprised of both Italian and Chinese personnel. The new 86,000-square-foot factory will employ 150 people, and is located outside the city center in an emerging manufacturing district in Canton Province. The new facility will focus on the production of the Targetti collection for Asian consumers, and to that end, a Mandarin catalog has been developed. **AIL**

MERGER ACQUISITION FOR JUNO

IN OTHER SIGNIFICANT COMPANY NEWS, SQUARE D COMPANY, A SUBSIDIARY OF French manufacturer Schneider Electric, has signed a merger agreement that provides for the acquisition of Illinois-based Juno Lighting. The transaction is valued at \$610 million, which includes an assumed debt of approximately \$200 million. The merger will allow Schneider Electric's North American Operating Division a broader product portfolio and distribution channels, along with access to new markets and the ability to sell complementary products to each company's customer base.

Juno's board of directors unanimously approved the merger agreement; however, the transaction is subject to approval by Juno's stockholders and standard regulatory approvals. Juno had previously announced a company strategic review in June 2005. The merger transaction is expected to be completed in Juno's last fiscal quarter of 2005. **AIL**

For news updates, company buzz, upcoming events, competition information, and more, visit WWW.ARCHLIGHTING.COM

WEB AID FOR LIGHTING SPECS

ONE OF THE GREATEST CONCERNS FOR LIGHTING DESIGNERS, ARCHITECTS, AND interior designers is ensuring that the lighting design envisioned for a project is the solution actually employed. Accompanying this challenge is luminaire selection and the specification process—making sure the product specified is the product installed. The newest tool to provide continuity in the specification process is Designing with Light, a catalog and website duo launched by Lightolier at this year's American Institute of Architects National Convention.

This online management system allows designers, no matter their level of expertise with lighting, to create a quality lighting solution in addition to specification documents for projects. A 176-page catalog includes an introductory section that discusses lighting composition topics such as focal glow and ambient luminescence. The body of the catalog provides an overview of over 1,000 products.

The companion website allows users to search by product attributes, such as fixture type, lamping, lighting effect, and mounting. Designers can also set up multiple personalized project folders, sorting and storing information for budget pricing, lead times, technical specifications, and photometry. Additionally, designers can create, update, view, and export fixture schedules in DXF format directly to project drawings. **AIL**

The screenshot shows the 'Designing with LIGHT' website interface. It features a navigation bar with links for 'Application Support', 'Where To Buy', 'Education', 'Press Room', and 'My Account'. The main content area is titled 'Attribute Search' and shows filters for 'Fixture Type', 'Lamping', 'Lighting Effect', 'Mounting', and 'Finish'. A 'Keyword Search' box is also present. Below the filters, there are two images of lighting fixtures: a 'Sully Illuminated pressed glass' fixture and a 'Sully Illuminated pressed glass' fixture. A table below the images lists product details:

Fixtures	Category Name	Finish	Availability	Discount	Price Key
2300AL	Sully Illuminated	Matte Black	2-4 weeks	0	0
2300BK	Sully Illuminated	Matte Black	2-4 weeks	0	0
2300WH	Sully Illuminated	Matte White	2-4 weeks	0	0

The website—www.designingwithlight.com—provides an online management system for the lighting component of design projects. There are several search functions, and users can sort information by fixture type, lamping, lighting effect, and mounting (above). Fixture schedules can be created and exported directly into construction documents (below).

The screenshot shows the 'Designing with LIGHT' website interface displaying a 'Fixture Schedule for project Smith Boutique'. The table below shows the schedule details:

Type	Designation	Volts	Watts	Mounting	Qty	MFG	Category
JA1	Alcyon Glass Cylinder MR16	120V	50	Recess	1	Lightolier	2300AL
JA	H Floor Plan Lamp					Lightolier	8004BK
JA1	Line End					Lightolier	8004BK
JA1	Angle Connect					Lightolier	8005WH

A New Angle on Aesthetics

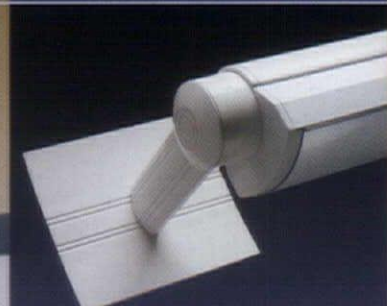
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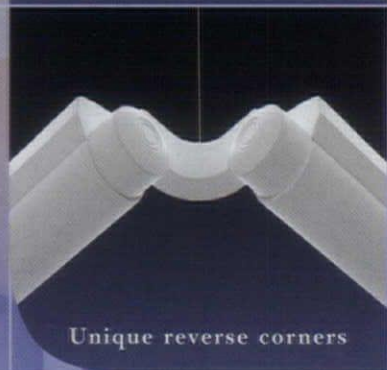
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NAED ENDOWMENT ON A ROLL

THE RECENT ARRIVAL OF A STEADY STREAM OF PRESS RELEASES ANNOUNCING substantial donations to the National Association of Electrical Distributors (NAED) Education and Research Foundation piqued the curiosity of A|L editors. What prompted the donations? And why the sizable amounts? The answer is a response to changing economic developments. In light of unpredictable revenue flow and in order to provide up-to-date practice management information for its membership, NAED has implemented a two-phase plan to sustain and expand its services.

Before April 2003, the NAED Foundation focused solely on industry training. But in order to better reflect the needs of its members, the Education and Research Foundation, as it is known today, established a long-term endowment fund called the Channel Advantage Partnership (CAP). In November 2003, an initiative began to bring a steady flow of funding to the Foundation to support future education and research projects, and create financial stability. "The NAED Foundation is the vehicle that can help us," says Bill Elliott, current NAED chairman, 2004-05 CAP chairman, and 2003-04 Foundation chairman. "By creating an endowment fund, we will have the resources to address issues like competing with the retail channel, redistributing product cost effectively, and increasing profits."

Designed as a perpetual fund, the principal amount of each company's pledge will remain untouched, while the interest

will be used to commission projects. Since the endowment was established, 24 distributors and 11 manufacturers have pledged a total of \$6.4 million. There are four contribution levels: Governor Level (\$100,000), with 23 contributors; Guarantor Level (\$250,000), with eight contributors; Regent Level (\$500,000), with three contributors; and Visionary Founder Level (\$1 million), with one contributor. Lighting manufacturers that have contributed include Legrand North America, Thomas & Betts Corporation, Lutron, Osram Sylvania, Philips Lighting, GE Consumer & Industrial, and Hubbell. GE Commercial & Industrial vice president, Michael Petras, says of the company's contribution to the fund, "The Foundation's research and education initiatives are critical in keeping our industry successful with new technology and ideas."

While minimum pledges of \$100,000 (for distributors) or \$250,000 (for manufacturers) are required—and earn companies a permanent position on the CAP Council, which selects future educational programs and research projects—donations of lesser amounts are accepted through the Annual Contribution Campaign. While the endowment fund will eventually provide for all education and research, contributor pledges are paid over a number of years with slowly accruing interest. Until the fund becomes self-sustaining, the Annual Contribution Campaign will continue to (CONTINUED ON PAGE 16)



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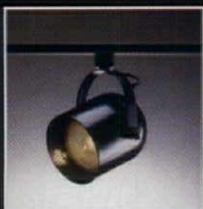


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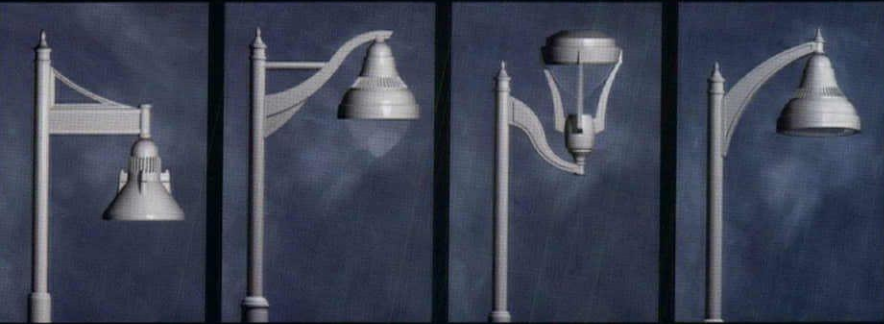


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(NAED ENDOWMENT; CONTINUED FROM PAGE 14)

support existing training programs.

Elliott explains the drive to take part in the CAP: "NAED is the only trade organization that represents our business and can address the specific needs of our industry. Contributing to the fund is like putting money in the bank. The money will be there indefinitely to help us improve our industry." This perspective will likely aid the upcoming second phase of the endowment campaign. For more information, visit www.naed.org. **AIL**

FRIENDLY BACTERIA



DON'T BE SO QUICK TO REACH FOR THE ANTIBACTERIAL soap. The jellyfish lounge (left), part of the Symbiotic Bacterial Light Project by Australian visual artist John Nicholson and University of New South Wales microbiologist Kathy Takayama, was recently exhibited at Australia's Canberra Contemporary Art Space, and is illuminated by two harmless species of bioluminescing bacteria. **AIL**

"ONE FOR ONE" CAMPAIGN

CONTINUING ITS MISSION TO SET THE "GLOBAL STANDARD FOR EXCELLENCE IN lighting design," the IALD Membership Committee has embarked on a program to enhance membership. The main component of this plan: To increase membership by 15 percent by the end of the year.

The IALD hopes increased numbers will enhance the value of membership through the development and maintenance of member benefits, as well as increase the IALD's exposure to the public and clients, broaden the knowledge base of the association, strengthen its influence, and better represent the interests of independent architectural lighting designers worldwide.

The new campaign, titled "One for One," encourages each existing member to recruit at least one new member by the end of 2005. And not without incentive. Members who register new recruits by October 1 will receive a discounted registration fee for the 2005 IALD Education Conference—Lighting the Future: Responding to the Opportunities of a Worldwide Profession Today and Tomorrow—to be held in Alexandria, Virginia, October 21 to 22. Each new recruit will earn members a larger discount. With one recruit, there is a \$20 reduction in price; two to five recruits equals a \$40 savings; and six or more recruits will garner a \$75 discount. Who said there isn't strength in numbers? **AIL**

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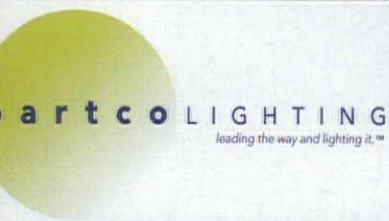
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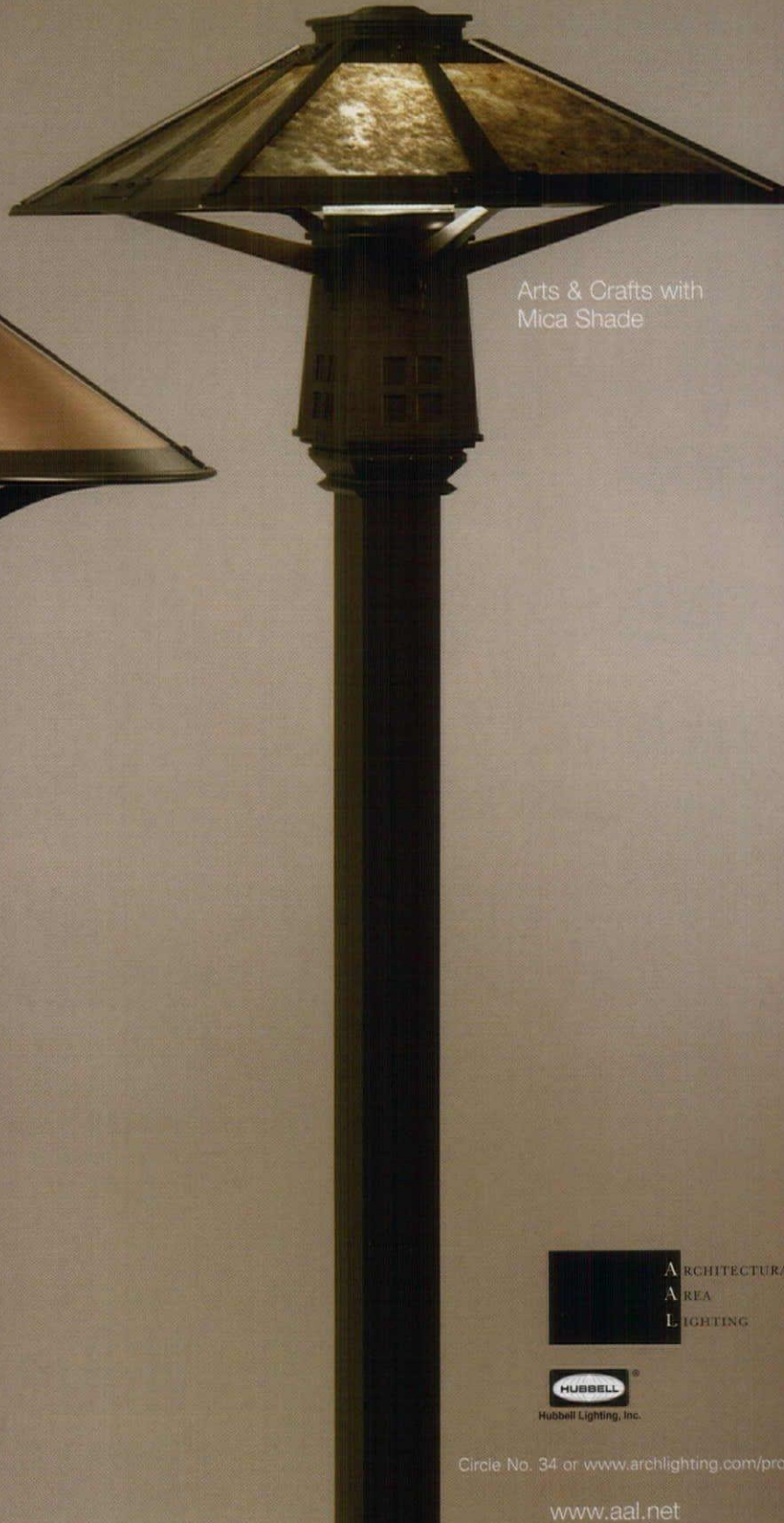
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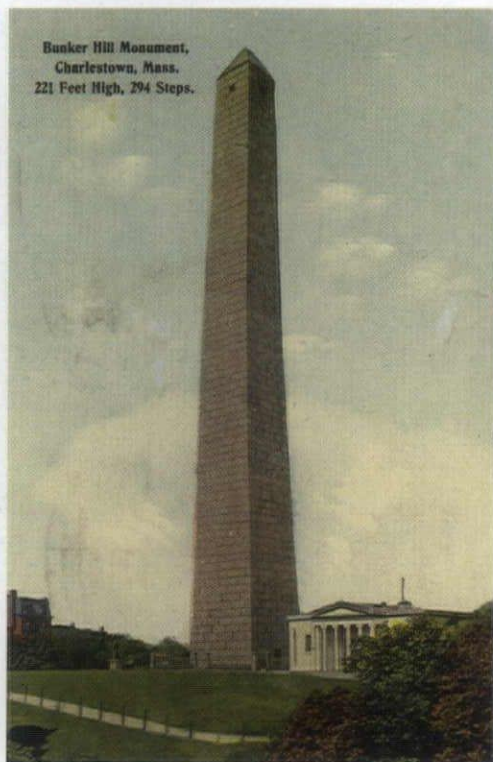
BY THE LIGHTS OF THEIR EYES

IN ORDER TO MEET THE NATIONAL PARK SERVICES' OBJECTIVES OF SUSTAINABILITY, ENERGY CONSERVATION, and "green" design, several historic landmarks and sites are receiving "lighting makeovers," as part of larger, more comprehensive restorations. One such landmark is the Bunker Hill Monument in Charlestown, Massachusetts, site of the first major battle of the American Revolution.

The goals of the project are to "provide improved accessibility to the monument, illuminate the historic site for all to see at night, and to preserve the site for future generations." The 221-foot-tall obelisk was built between 1825 and 1843 and is the oldest major monument in the United States. And despite an annual stream of visitors numbering close to 200,000, the historic site—which includes the monument, the Bunker Hill Lodge, and an adjacent visitor's museum—has not undergone any extensive rehabilitation in almost a century.

The lighting design, prepared by Ripman Lighting Design in Belmont, Massachusetts, calls for the monument's exterior to be lit with 150W ceramic metal halide lamps arranged in clusters to illuminate the upper portion of the obelisk and the main shaft. The base of the monument will also be lit with 150W ceramic metal halide lamps to provide an even wash of light down to grade, each face illuminated asymmetrically from left to right in order to render the monument's form.

Lighting manufacturer Osram Sylvania will donate the lamps. This is one of several projects in the Boston area, including the Old State House, that the Danvers, Massachusetts-based company has played an active part in sponsoring the relighting efforts. The project is slated to start at the end of September, and last approximately 18 months. **AIL**



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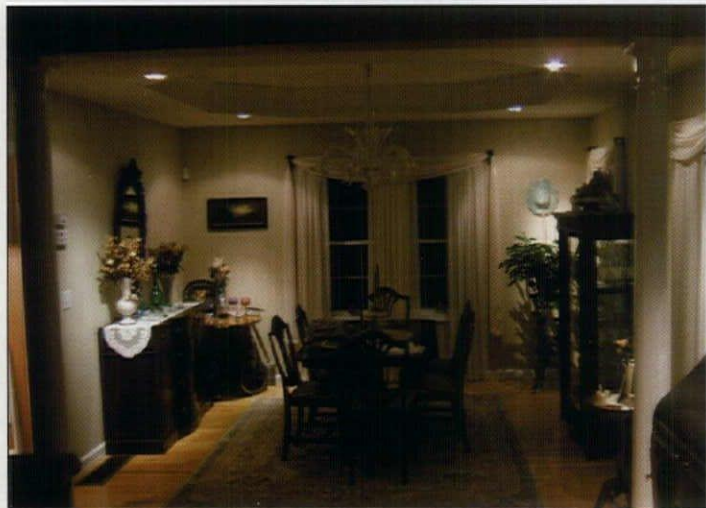
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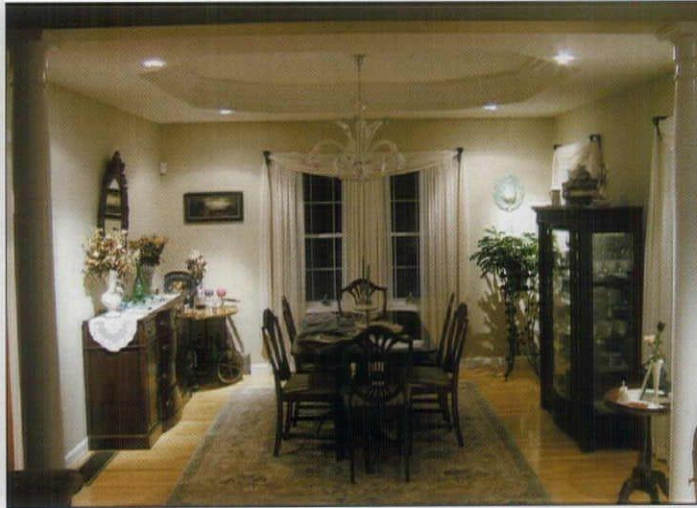
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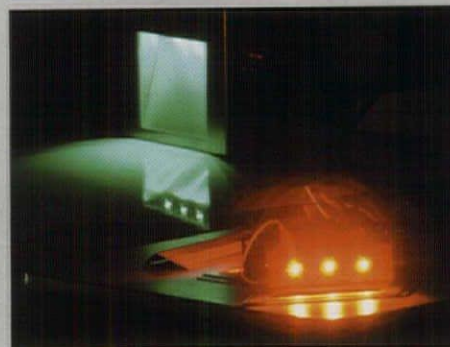
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Picturing Your Project: Hiring a Photographer

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THE ADAGE "A PICTURE IS WORTH A THOUSAND WORDS" stands, especially in the design world. And, for architects and designers looking to market their projects, a high-quality photograph is worth even more. Take it from an editor. The amount and quality of the artwork often determines the value and appeal of a design publication's content to readers, and for this reason, architecture and design magazines generally will not publish a project without superior photographs. Simultaneously, design firms, small and large, have their own in-house requirements for professional photography—marketing materials, portfolios, client proposals. If a design firm views publication of its work essential to future business, it can't afford not to commission or buy rights to professional photographs. If a studio does not, architectural photographer Walter Dufresne says, "it means the owner is not reinvesting in the business."

Digital photography has changed the playing field, and not necessarily for the better, notes San Francisco-based Douglas Salin, who has specialized in photographing lighting for 22 years. "It's the monkey principle. If you put enough monkeys in a room with typewriters, you'll get a great work. If designers take enough shots, they'll get a serviceable photo. It might look good on the web, or as a small image in a magazine. But that's it." In other words, no cover shot. With the advent of digital, designers themselves are now shooting projects that formerly would have been done by professionals. In this, argues Salin, they are actually doing themselves a disservice. "You're trying to promote good lighting design. If you short-change yourself with bad photography, people will not appreciate what you have done."

FINDING AND FUNDING A PHOTOGRAPHER

The primary obstacle for designers wishing to commission photography is cost. Undertaking the process in conjunction with other firms on the proj-

ect helps reduce fees. "We put together a consortium of owners, contractors, and other interested parties so that we can afford the best," says lighting designer Leni Schwendinger. "The photographer then grants equal rights for use to the group for in-house/promotional use." Arrangements like this incur additional up-front charges, but are ultimately more economical than if each party undertook the process alone. Esto, an architectural photo agency, generally charges a 25 percent markup for each additional party for the same licensing rights.

Sharing the load can make the process affordable, but it means balancing each party's agenda. Salin, who works with both manufacturers and lighting designers, provides an example: "The manufacturer prefers to see a predominance of their product. The lighting designer is interested in the integration of all the lighting and products."

The group approach also requires accommodating a crowd of cooks in the kitchen. "Everyone paying a chunk wants to be there. Then you have four directors, with four whistles and clipboards," says Erica Stoller, director of Esto. To avoid such problems, determine the distinct "views" each party would like ahead of time and, advises Stoller, put one person in charge.

How a firm ultimately uses the photography also dictates cost. Will it appear in in-house materials like presentations and portfolios? Will editorial publishing rights be required? Will the photographs be used in advertising? Each scenario requires a different licensing agreement, with a related fee schedule, which differs with the photographer. For Salin, there are two types of usage: editorial and advertising. He is more lenient with editorial applications, generally only charging for covers, but requires separate fees for advertising-related usage. Esto, on the other hand, reserves editorial rights.

The message here is not to be discouraged by cost; rather to work around it. The right photographer will help its clients navigate this challenge.

SUBMITTING PHOTOS FOR PUBLICATION

Low-res files or color photocopies generally suffice for initial consideration.



Submit project information in hardcopy format, with images on a disc or as print-outs. Don't send large files via e-mail.

With digital files, the rule is: the higher the resolution, and the larger the scan, the better. Contact the publication for format specifics.

Confirm that the images are available for editorial use up front. If they aren't, alert the publication.

Occasionally, a scouting shot is enough to entice a magazine to commission its own photography.

High-quality shots are marketing musts, so it is critical for firms to overcome their fear of cost and contract issues.

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Lara Swimmer, an architectural photographer based in Seattle, notes "I am nearly always willing to work within a budget, if the project is interesting to me." Indeed, a firm's relationship with the photographer should steer its ultimate selection. Personal style, aptitude with the subject, and location are also factors. Most photographers do not advertise, beyond a website. Swimmer mails promo pieces, but notes most her assignments come from past work and word of mouth. Salin sends a "Pick of the Month."

PREPARING FOR A SHOOT

Preparing for the photo shoot requires a minutiae-minded director. Suggesting the many details that could go wrong, an extensive architectural photography checklist is downloadable from the American Society of Media Photographers (ASMP). Reminders include: Will the elevators be working? Will the security alarms be off? Is the lighting computer or motion-sensor controlled? Will spare bulbs be available? It also helps to have a representative from the firm on hand during the session, notes Swimmer, "to review Polaroid or digital pictures to make sure they are getting what they want. It is not always necessary if the firm and photographer are familiar with each other's style."

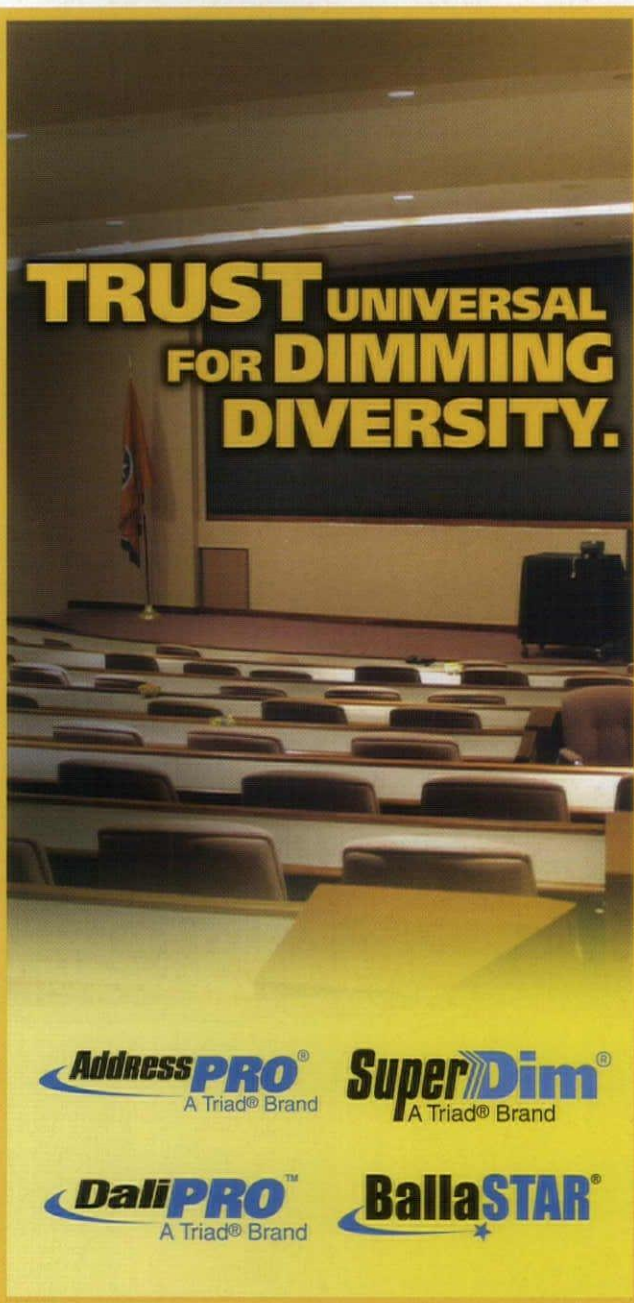
Another consideration specific to architectural lighting photography is the use of "fill," or supplemental, light. Purists will argue photography intended to portray the quality of the lighting should not include supplemental illumination, and indeed, most lighting-specific awards programs require the entrant to mention where fill light has been used in order to even the playing field. The opportunity to control the use of fill is another reason the lighting designer should be involved up front. The alternative opinion is that film is not able to capture what the eye actually sees, and therefore fill light is necessary to reproduce the space accurately. "The photographer's job is to capture the scene as close to what the eye perceives as possible," says Salin, who notes that designers owe it to their industry to promote quality lighting in the most effective way. "What you are trying to show them is the differences between bad lighting design and good lighting design, so if you restrict images to those without supplemental light, you are asking people to view your work under less than perfect conditions."

WITH PHOTOGRAPH IN HAND

Once the photographs are ready, it is key to understand the rights conferred by the original agreement. A contract does not necessarily permit a firm to grant permission to magazines for publication; this should be confirmed before submitting a project for consideration, since some publications do not have the budget to purchase photography. Also, know where else images are appearing, since magazines may demand initial or exclusive publication rights. (See the sidebar on page 21 for additional pointers.)

Professional photography benefits everyone on a project, and yet it seems, few projects include images specifically documenting the lighting. "Not just lighting designers, but consultants in general, are in the habit of taking what is left over, and not acting aggressively to say what they want at the beginning," says Stoller. A picture may be worth a thousand words, but designers should confirm those are the words they want people to hear.

For more guidance on this process, the American Society of Media Photographers provides a helpful PDF, titled "Working with an Architectural Photographer." Visit www.asmp.org.



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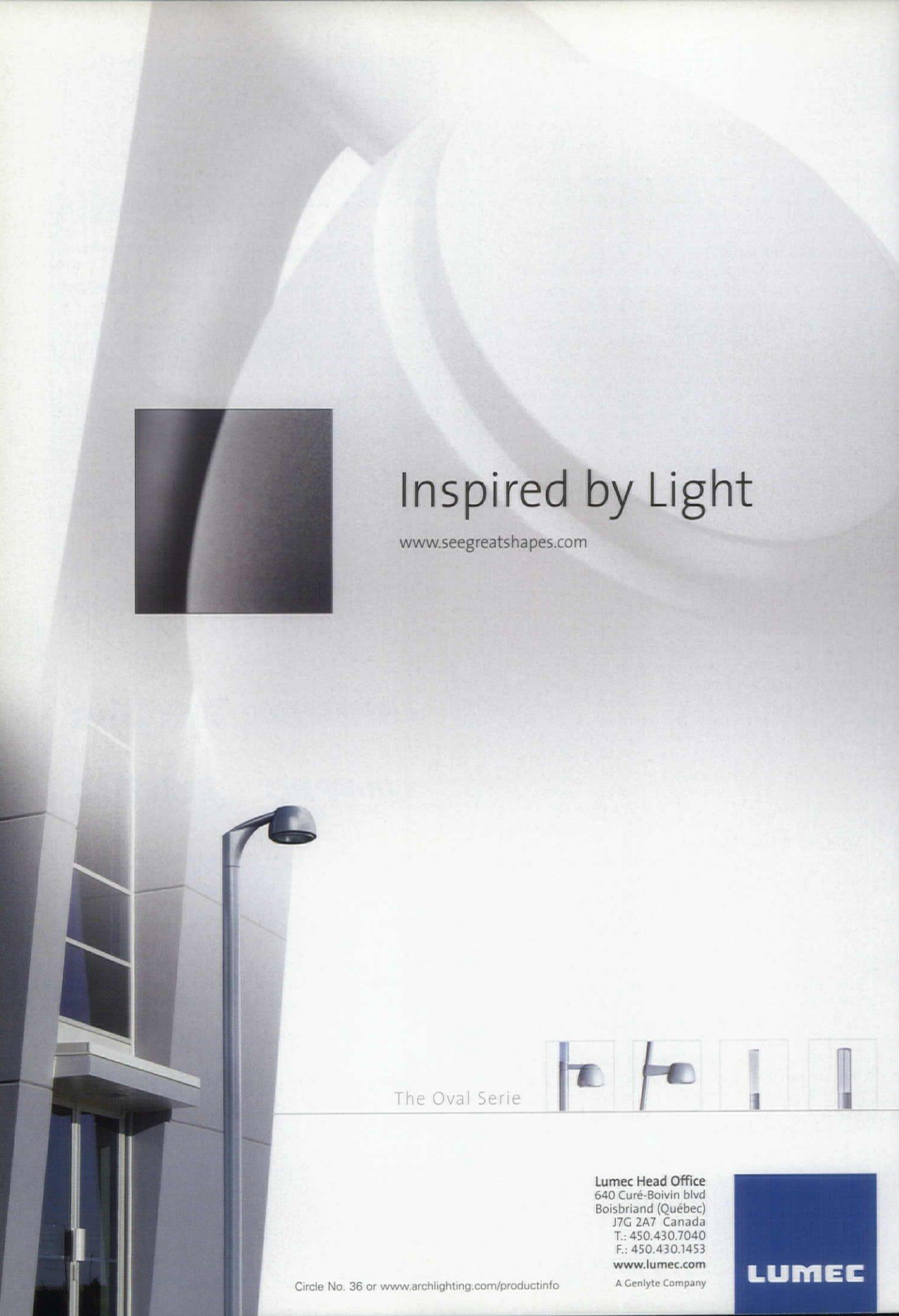
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COMMENDABLE ACHIEVEMENT

28



PROJECT ⇨ ST. THOMAS AQUINAS CHURCH
 ENTRANT ⇨ LAM PARTNERS
 CATEGORY ⇨ CORPORATE/INSTITUTIONAL

29



PROJECT ⇨ JULIEN J. STUDLEY
 ENTRANT ⇨ VOA ASSOCIATES
 CATEGORY ⇨ CORPORATE/INSTITUTIONAL

30



PROJECT ⇨ McCLELLON ATHLETIC FACILITY
 ENTRANT ⇨ ELLIOTT & ASSOCIATES
 CATEGORY ⇨ CORPORATE/INSTITUTIONAL

31



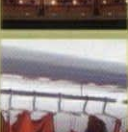
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 CATEGORY ⇨ ENTERTAINMENT/CULTURAL

32



PROJECT ⇨ JAZZ AT LINCOLN CENTER
 ENTRANT ⇨ CLINE BETTRIDGE BERNSTEIN
 CATEGORY ⇨ ENTERTAINMENT/CULTURAL

33



PROJECT ⇨ CARLOS MIELE
 ENTRANT ⇨ FOCUS LIGHTING
 CATEGORY ⇨ RETAIL

34



PROJECT ⇨ SEMIRAMIS HOTEL
 ENTRANT ⇨ FOCUS LIGHTING
 CATEGORY ⇨ HOSPITALITY

35



PROJECT ⇨ FROST BANK TOWER
 ENTRANT ⇨ CLINE BETTRIDGE BERNSTEIN
 CATEGORY ⇨ OUTDOOR

36



PROJECT ⇨ PANAMA CANAL BRIDGE
 ENTRANT ⇨ BRILLIANT LIGHTING DESIGN
 CATEGORY ⇨ OUTDOOR

A|L VIRTUOUS ACHIEVEMENT AWARDS

36



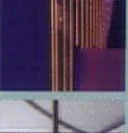
PROJECT ⇨ PANAMA CANAL BRIDGE
 ENTRANT ⇨ BRILLIANT LIGHTING DESIGN
 CATEGORY ⇨ BEST LIGHTING DESIGN ON A BUDGET

38

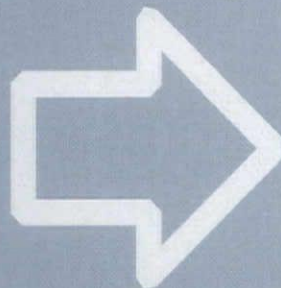


PROJECT ⇨ MORONGO CASINO RESORT & SPA
 ENTRANT ⇨ VISUAL TERRAIN
 CATEGORY ⇨ BEST USE OF COLOR

40



PROJECT ⇨ DAVID L. LAWRENCE CONVENTION CENTER
 ENTRANT ⇨ LAM PARTNERS
 CATEGORY ⇨ BEST INCORPORATION OF DAYLIGHT



THE SECOND ANNUAL A|L LIGHT + ARCHITECTURE

Design Awards are bigger and better than the first. With 17 percent more entries, and a total of 12 winning projects (three more than last year) in 11 different cities, the program's success has proven that the industry does, indeed, need another opportunity to honor great architectural lighting.

Representing a range of professional skills, the jury impressed us with its thought-provoking discussion about the nature of light and architecture, and seemed to set the sublime integration of the two as its primary criterion for recognition. Perhaps most interesting was its choice to honor several projects for which, the jury felt, great lighting salvaged mediocre architecture. The jurors this year were: David Lewis of New York architecture firm Lewis.Tsurumaki.Lewis; Peter Morante, director of energy programs at the Lighting Research Center in Troy, New York; Sean O'Connor, principal of his own Philadelphia-based firm by the same name; and Peter Wheelwright, chair of the department of architecture, interior design, and lighting at Parsons School of Design in New York. A|L heartily thanks them for their time and energy, valuable commodities in this day and age.

And now, a big round of applause, please, for seventeen pages of fantastic architectural lighting design!

AIA DESIGN AWARDS

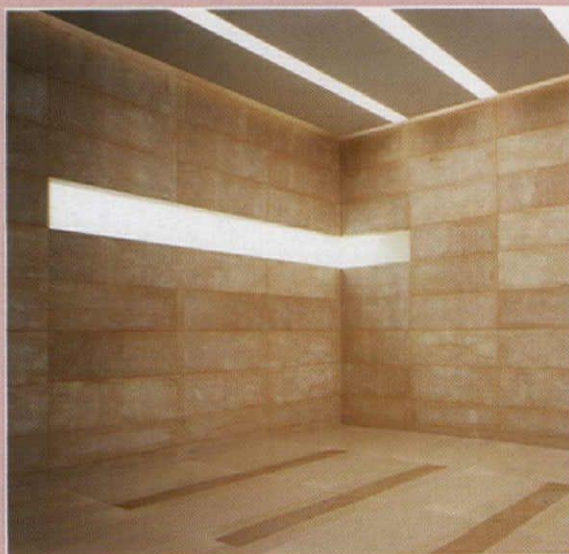
PROJECT ⇨ ATLANTIC TERMINAL

ENTRANT ⇨ CLINE BETTRIDGE BERNSTEIN

CATEGORY ⇨ CORPORATE/INSTITUTIONAL



The street-level lobby is defined by a series of Barrisol ceiling stripes with recessed T8 fluorescent lamps and two structural columns internally illuminated (above). An accent stone on the floor mimics the ceiling strips, and an L-shaped slot defines the back wall (below). The column lamps are mounted on a pie-shaped tray that slides out for easy relamping (right bottom).



ONE OF THE RECENT PROJECTS CONTRIBUTING TO THE REBIRTH AND REVITALIZATION OF downtown Brooklyn is the 10-story Atlantic Terminal Building. The office and retail complex provides substantial square footage—400,000 square feet of office space and 375,000 square feet of retail—over the borough's subway hub at Flatbush and Atlantic Avenues.

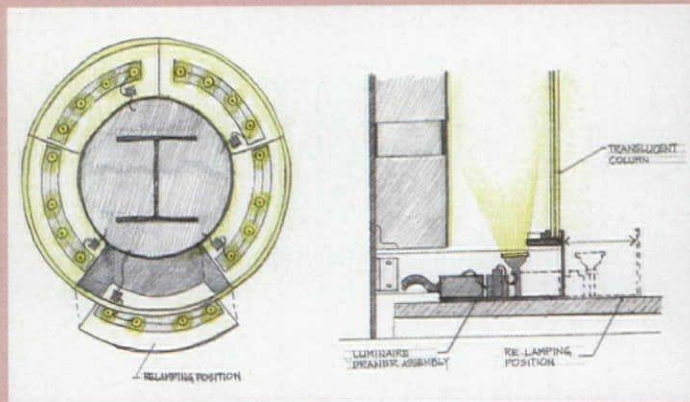
The entrance to the office portion of the complex is comprised of two lobbies, one on the ground floor and one on the fifth floor. Cline Bettridge Bernstein Lighting Design (CBBLD) and Swanke Hayden Connell Architects are behind the sleek and minimal design, an unexpected treat in spacemaking not often found in a conventional office lobby. Tenants pass through both lobbies, and the lighting was developed to act as a unified whole, a complete experience, despite being divided into two parts. In both spaces—which are long, narrow volumes—the lighting reinforces a sense of visual and physical movement, discretely directing people where they need to go.

At the ground-floor lobby, the ceiling is defined by a series of Barrisol stripes, a seamless translucent material that reflects and enhances ambient light. The illuminated T8 fluorescent ceiling strips echo the bands of a darker accent stone on the floor. These two horizontal planes are brought together volumetrically at the far end of the space, where a single L-shaped slot defines the back wall as a plane, and as a volume, as it ever so slightly turns the corner. Two structural columns clad in white glass, and internally illuminated with base-mounted MR16s, balance the striated promenade. The final accent to this lesson in abstraction is a perimeter ceiling cove, lit with T8 fluorescent lamps set back 10 inches from the cove edge.

Arrival at the fifth-floor lobby presents a variation to the theme already experienced on the ground floor. The Barrisol ceiling strips are repeated, and extended as vertical slots. The effect is a series of illuminated Ls. Opposite this glowing perspective is a canted wood-veneer-paneled wall with a light slot inserted in the middle. A wide linear fluorescent cove light anchors the paneled wall from above. The reception desk at the far end of the lobby is also outfitted in wood and fluorescent illuminated glass panels, a glowing volume that provides an extra level of scale for the 213-foot-long space.

Volumes and planes, edges and surfaces—the two lobby spaces at Atlantic Terminal are an exercise in seamless design. Simple but sophisticated materials and details provide an award-winning integration of architecture and light.

JURY COMMENTS A very seductive project. • The integration of the concept of materials, the architecture, and the lighting are done in concert. • The light totally defines the space, playing off the surfaces and dichotomy of materials. • There is the tectonics of the space and the tectonics of the light. The light itself has a very formal quality, and that is a really positive aspect of the project.



ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM



The fifth-floor lobby continues the architectural and lighting palette from the entrance lobby. Barrisol ceiling strips are repeated and extended as vertical slots, creating a perspective of upside-down illuminated Ls (above). Opposite is a canted wood-veneer-paneled wall with horizontal light slots. The reception desk at the far end adds another level of scale for the 213-foot-long space (below).



PHOTOS BY ELLIOTT KAUFMAN, DETAIL RENDERING COURTESY OF CBBLD

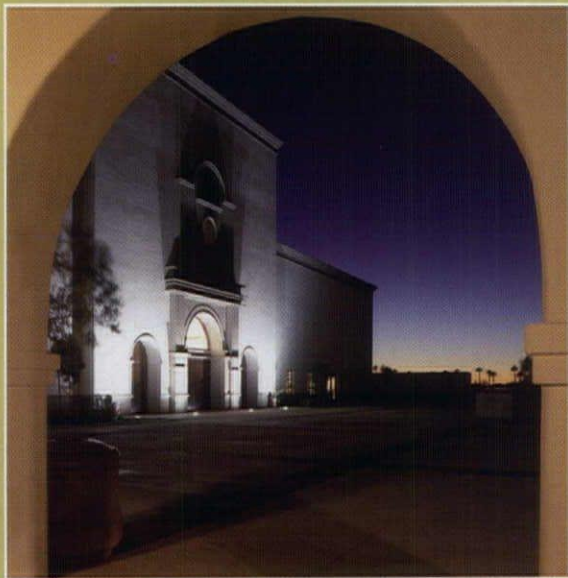
FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

AIA DESIGN AWARDS

PROJECT ⇨ ST. THOMAS AQUINAS CHURCH

ENTRANT ⇨ LAM PARTNERS

CATEGORY ⇨ CORPORATE/INSTITUTIONAL



IN THE RAPIDLY DEVELOPING COMMUNITY OF AVONDALE, ARIZONA, A WHITE ABSTRACT FORM stands as a strong, but simultaneously subtle, beacon in a sea of suburban beige stucco. The St. Thomas Aquinas Church, with its simplicity of form and detailing, is a fusion of traditional Catholic themes and a Southwestern vernacular.

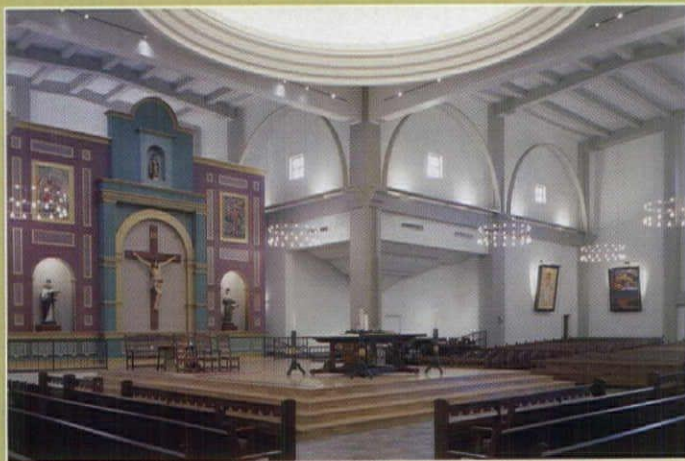
Lighting firm Lam Partners, along with CCBG Architects, created a mission-style Catholic Church with clean lines, simple forms, and minimal ornamentation to reflect the messages inspired by the church's patron, Saint Thomas—those of simplicity, humility, and economy. With its humble exterior approach (left top) and predominantly concealed fixtures throughout, the lighting was no exception; it is fully integrated to enhance the architecture and form. The team respected traditional religious typology and achieved a dynamic and controlled focus to the space, as well as an order to the bright volume, by placing the altar in the center under a light-filled dome. Lined with bare fluorescent strips concealed within a stepped cove that rings its perimeter, the dome glows as if illuminated by sunlight (left center). Lam Partners designer Jamie Perry says, "The entire lighted environment becomes part of the experience of the space, rather than low light levels with accent lighting on one focal point."

Because of the project's scope and the size of the congregation, lighting the 30,000-square-foot space and allowing for a possible mass of up to 2,000 participants posed a challenge: To retain a humble and subdued environment, yet have the option to create a grand space with increased ambient lighting and sparkle. A master pre-programmed control system was installed to set a variety of scenes that Father Kieran Kleczewski, priest of St. Thomas Aquinas, says, "give us the ability to highlight what we want, and to capture the ethereal sense of old mission lighting."

Providing more of a connection to the outdoors than a useful means of illumination, punched openings transform the side aisles with subtly changing daylight conditions. Enhanced by indirect fluorescent sources and clerestory windows, daylight is reflected into the sanctuary (left bottom). "Many architectural decisions were made with respect to lighting," Paul Ladensack, principal at CCBG Architects, says. "The building's orientation utilizes the strong local sunlight for effect."

With features including murals backlit to appear as if they float from the wall in a halo of light, to lighting that transforms the reredos wall (the ornamented backdrop for the altar) into a three-dimensional feature (below), Ladensack says, "there was not an opportunity lost in effectively lighting the space."

JURY COMMENTS There is a nice precision about this lighting. Look at the darkened shadow, the framing of the side walls of the church, and the frontal scenographic initiative; it's pretty cool.



THE INTERPLAY OF LIGHT AND PRIMARY COLORS, WITH SIMPLE GEOMETRIC ARCHITECTURAL forms, defines the 15,000-square-foot office of Julien J. Studley, a commercial real estate firm in Chicago.

Conceived by architecture firm VOA Associates, this dynamic is most apparent in the reception area, where two rectangular elements are highlighted with light: Behind the reception desk, a vertical block of white acrylic glows, backlit with a fluorescent source (right center). On another wall in the waiting room, a blue acrylic-block wall section that separates the waiting area from the adjacent conference room is illuminated with cold cathode, a long-life source chosen to minimize maintenance in the hard-to-access space (right top). This featured element, notes the design firm in its project description, is intended to create "a sense of well-being through color that is empowered by light. It is non-threatening, soothing, and soft." The highlighted backdrop of blue also allows the various red elements—furniture and the wall behind the reception desk—to pop, "energizing the space with warmth and passion."

In the workstation area, cubes and planes interact with light and color to visually enliven what, in many offices, is a dull view of standard cubicles. Much of the lighting is adeptly incorporated into architectural details, revealing very little of the lighting equipment, a fact that impressed the A|L Design Awards judges. Here, it is not about the fixtures, notes Nicholas Luzietti, the design principal on the project. "It's really about the output and quality of the light." Simple and efficient T5 fluorescents hidden in the base of the cubicles signal a clear path down the corridor (right bottom). Above, T5s tucked in coves over the work area provide ambient light, while recessed downlights provide additional illumination without cluttering the ceiling plane.

More prominent decorative fixtures add punch in meeting areas, like the break and conference rooms. In the breakout space, the blue glass pendants are "fun and casual, fostering a sense of relaxation and escape from the work environment," stated the design firm, whereas the conference room features a direct/indirect T5HO pendant that mimics the sleek geometric architectural forms throughout the office (below).

The importance lighting plays in the character of the space is clear, a function of the way the firm approaches the medium: "There is an energy to light unlike that of any other element that can be incorporated into the space," notes the design firm, a concept that dates back to the earliest buildings. In designing the Studley office, the firm's intention was to celebrate the "unique power of light."

JURY COMMENTS The lighting not only accommodates the typical expectations of an office, but also reinforces—either through back-lighting, through shadow, through other kinds of subtle manipulations—the actual design.

PROJECT ⇨ JULIEN J. STUDLEY
ENTRANT ⇨ VOA ASSOCIATES
CATEGORY ⇨ CORPORATE/INSTITUTIONAL



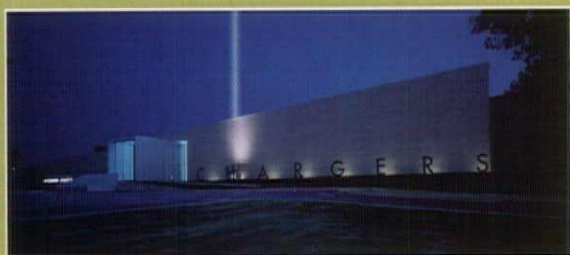
FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

A|L DESIGN AWARDS

PROJECT ⇨ McCLENDON ATHLETIC FACILITY

ENTRANT ⇨ ELLIOTT & ASSOCIATES

CATEGORY ⇨ CORPORATE/INSTITUTIONAL



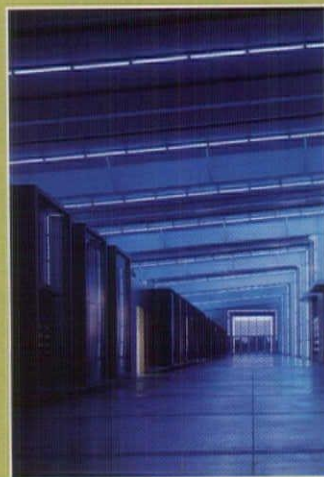
CAPTURING “THE EXCITEMENT OF SPORT” WAS A CRITICAL PART OF THE ARCHITECTURAL concept for the Oklahoma City-located McClendon Athletic Facility, which serves grades 5 to 12. A “memorable building and experience with the use of timeless forms” was yet another criteria for architecture firm Elliott & Associates. An adaptation and expansion of an existing gym, the new space creatively employs light—in a cost- and energy-efficient way, at \$3.71 and 1.2 watts per square foot—to achieve both goals.

To generate excitement and school pride, the designers installed a blue xenon searchlight at the building’s entrance (left top), which on game nights, can be seen as far as five miles away. Intended as a celebratory feature, the 10,000W searchlight also assists visitors in locating the facility. The new canopied entrance leading from the parking lot into “the Mac,” as students have nicknamed their facility, initiates the lighting approach applied throughout the project. By day, sunlight filters through the perforated metal that forms the canopy walls and ceiling, casting a dot-matrix pattern on the ground (left center). By night, simple T8 fluorescent tubes wrapped in a blue tube guard and attached to the corridor ceiling beckon to game-goers. Previously, visitors arrived and entered the facility “somewhat helter-skelter,” notes Rand Elliott, principal in charge on the project. Delineating this corridor with light has helped organize the traffic entering the building, in addition to providing an exciting architectural detail.

A similar treatment continues inside and down the main interior corridor. Here, alternate lines of blue and 3500K white fluorescent strips span the ceiling approximately every 7 feet on center (below). The two colors enable three lighting scenarios in the main corridor: For evening events, all blue creates a “very rich, festive atmosphere,” says Elliott. During the day, the facility is illuminated with either a combination of blue and white light, or white light only. A surprising and welcome effect of the design, McClendon’s corridor has become a “truly social space.”

This decidedly simple approach also illuminates the gymnasium (left bottom). White T8 fluorescents are arranged vertically around the room, simultaneously providing ambient light and an interesting visual detail. Standard high-bay fixtures with metal halide sources direct lighting onto the court. In the gym, lighting combines with white bleachers and walls to create a “high-energy space,” says Elliott. “The room becomes electric because of all the light bouncing around.”

JURY COMMENTS This is a project where the lighting and architectural decisions were made hand in hand. You see that in the way the entrance was set up, by the striations of the light—the way they run across the ceiling and across the hallway. That banding then also iterates the banding in the basketball court. There is an incredible congruency between the program, the architecture, and the lighting design.



ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM

THE CESAR PELLI-DESIGNED EXPANSION OF MADISON, WISCONSIN'S OVERTURE CENTER for the Arts relies on lighting to knit together a diverse array of existing structures and new spaces. Cline Bettridge Bernstein Lighting Design (CBBLD) visually links the spaces by replicating variations of the fixture design, white light quality, and colored light programming.

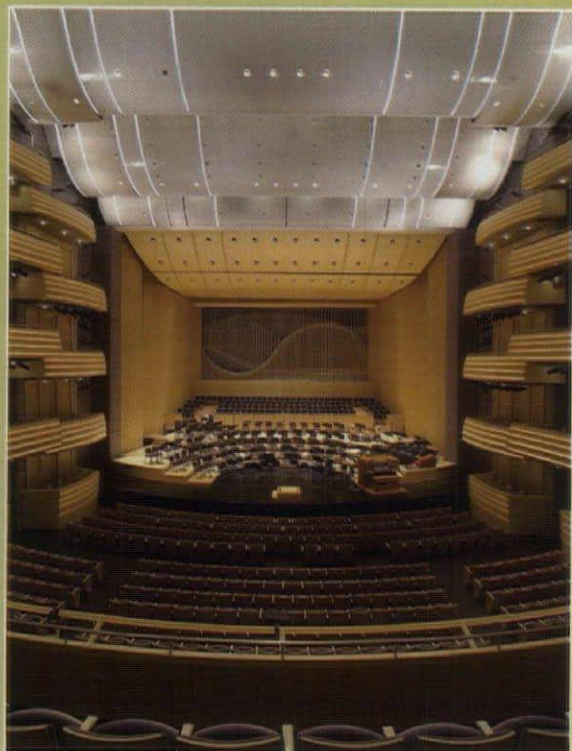
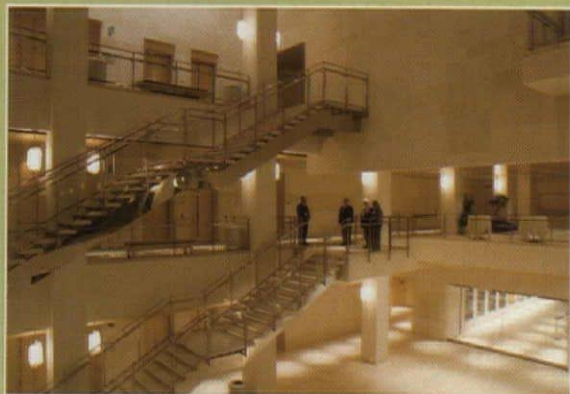
In Overture's three-floor rotunda, the center's signature entrance and its nodal hub, the experience of theater-going takes shape. CBBLD devised a four-tier arrangement of low-voltage, color-changing LED strip-lights tucked within parapet coves to accentuate the rotunda's cylindrical dimension (below). The colored lighting visually resembles the cover-embedded triphosphor ribbon of neon light encircling the rotunda staircase adjacent to the space. A DMX system and iPlayer 2 power the rotunda's dimmer-controlled LEDs, playing two-hour-long color sequences that display an array of vertical cross-fades appropriate for an evening's specific program. The color scheme was devised to accentuate the architecture and signify—through a subtly shifting palette—the progression from pre-performance to intermission to post-performance.

The north-facing lobby of the new addition proved most challenging. This space—drenched in natural light during the day, sparkling on the streetscape at night (right top)—prepares visitors to transition into the concert hall. To warm the minimalist interior, CBBLD created soft pools of light generated by PAR56 accent recessed downlights. The lighting firm also designed a custom pendant comprised of five layers of overlapping white glass, each shaped like a billowing ribbon, and positioned in an alternating horizontal and vertical pattern (right center). The fixture creates a playful sparkle that contrasts with the lobby's austere rectilinear dimensions.

Once inside the 2,253-seat acoustical chamber, visitors encounter a cornucopia of curves, most notable in the parapets that enclose the balconies, and in the undulating ceiling panels (right bottom). In addition to the dimmer-controlled PAR56 accent fixtures and crystal-trimmed downlights (customized to maintain acoustical integrity) that provide general lighting, the hall glows with the help of low-voltage tube lights tucked inside the parapet coves. Fiber optic lighting—powered by fan-less illuminators to eliminate noise and programmed to mirror the rotunda's lighting scenes—accentuates the ceiling and brings a subtle and continuous variation to the experience. As the rotunda's sequence plays out, so too does the fiber optic color scheme in the concert hall, in unison with the rotunda, creating a visual link between activity in the hall and life within the complex.

JURY COMMENTS The project does seem to have three very episodic aspects: the entry way with the dome is one kind of idea about light; the main space is another; and the auditorium is a third.

PROJECT → OVERTURE CENTER FOR THE ARTS
ENTRANT → CLINE BETTRIDGE BERNSTEIN
CATEGORY → ENTERTAINMENT/CULTURAL



FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

A|L DESIGN AWARDS

PROJECT ◊ JAZZ AT LINCOLN CENTER

ENTRANT ◊ CLINE BETTRIDGE BERNSTEIN

CATEGORY ◊ ENTERTAINMENT/CULTURAL



JAZZ PERFORMANCE HAS A NEW HOME. HOUSED WITHIN THE TIME WARNER BUILDING AT Columbus Circle, Jazz at Lincoln Center provides three performance venues as diverse as the music itself. From the intimate setting of Dizzy's Club, to the experimental Allen Room, to the grandeur of Rose Hall, each space provides a different experience. One firm lending continuity to these distinct pieces is Cline Bettridge Bernstein Lighting Design (CBBLD), whose careful sensibility toward lighting helped unify the space.

Rafael Viñoly, the architect behind the design, envisioned each performance space as a building on a public square, with its "façade" defined by a different colored wall. CBBLD designer Michael Hennes explains: "Color is used as an important space-defining element. The brightly colored walls organize the space vertically—those walls are washed with light. The open spaces use downlights with a wider beam."

The cozy atmosphere of Dizzy's Club (left center) is achieved with lighting details like perimeter ceiling soffits accented with recessed A-lamp downlights, a surface-mounted low-voltage cove light that illuminates the drink rail, and battery-operated table lamps that mimic candlelight. The center ceiling houses halogen PAR56 lensed wallwashers.

The main objective for the Rose Theater (left top), which can be reconfigured into a theater-in-the-round, was to provide theatrical light around the rim of the hall. This was achieved by illuminating the front of the wood balconies, and through an interactive series of 5-foot-square LED illuminated boxes referred to as "diamonds," which are programmed to change color with a DMX theatrical control system.

The double-skin curtain wall of the Allen Room (below) allows spectacular views of Columbus Circle, but required careful control of the lighting to minimize reflection from the glass, and spill light into and from the retail space below. Architectural and theatrical lighting is hidden above a ceiling comprised of thin vertical gold rails. To create a shimmer effect, the quartz halogen houselights focus on the rails.

Lastly, a small exhibit space (left bottom) designed by the Rockwell Group required an even illuminance level on the floor without light spilling onto the interactive wall displays, which include flat-panel monitors. The main architectural feature is an undulating wood-veneer ceiling with monopoint-mounted MR16 lamps inserted between the curved wood beams, providing a splash of accent light. At each end of the space, translucent light box displays with colored insert panels identifying jazz icons are backlit with dimmable fluorescent lamps.

JURY COMMENTS The lighting makes all the difference in these spaces, transforming the experience for both performers and audience. • The city view backdrop in the Allen Room is amazing.



ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM

THE LIGHTING IN THE CARLOS MIELE STORE IN NEW YORK'S MEATPACKING DISTRICT magically illuminates both the high-end dresses and the hip organic interior by New York-based architecture firm Asymptote. Rather than standard spotlights on shelves and racks found in typical retail settings, the lighting concept by New York firm Focus Lighting is unconventional and creative, and yet, completely deferential to the merchandise.

Balancing the light levels deep into the store was critical to the client, who wanted passersby to see the length of the space. In the front window (right top) and at the changing rooms in the back of the store, removable acrylic panels conceal 4-foot 28W and 8-foot 52W slimline fluorescents—depending on the available space—with integral ballasts. Color temperature was also important. “We try to paint pictures with light on an architectural canvas,” explains Paul Gregory, principal of Focus Lighting. “Here, we were painting a white picture, and our lighting pallet was different shades of white.” Throughout the 5,700-square-foot store, cool 3500K T8s emphasize the sweeping white walls and Barrisol fabric ceiling, in contrast to the warmer incandescent fixtures used to highlight the brightly colored clothing.

A configuration of fluorescent strips and MR16 accent lights illuminate the clothing on the perimeter racks (below). Hidden in a roll-formed metal shell that contains the rod on which the clothing hangs, two T8 fluorescents light the wall behind the clothing. Also concealed inside the shell, MR16s angle in to accent the color and texture of the garments. On top of the shell, two additional T8 fluorescents uplight the wall and curved ceiling. In order to avoid glare and the reflection of the light source, the shiny coating on the walls morphs into a matte finish near the rack. The light above and around the merchandise, already dynamic against the white walls, makes the dresses “glide” along the rack.

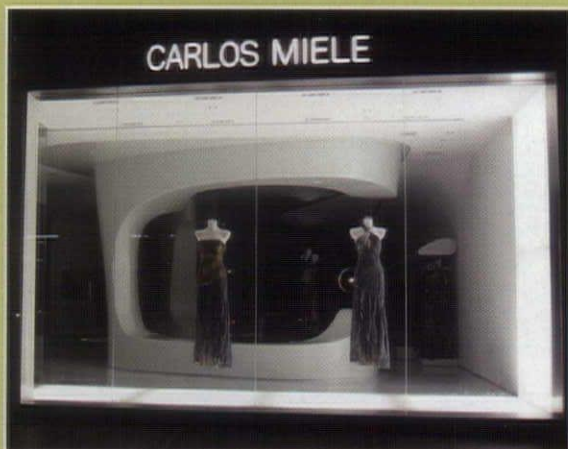
Fluidity and weightlessness define the project. Indirect light helps hide edges and shadows, creating a smooth flowing surface. In addition to the graceful movement of the architectural terrain, five minimalist mannequins dressed in the latest collection “float” around the store. A 90W PAR fixture recessed in the Barrisol fabric ceiling lights each from above (right center). The hovering figures are also illuminated from below by a ring of four MR16s, alternating with four segments of curved 15-millimeter neon tubes (right bottom and center). Embedded in the floor, with a remote neon transformer accessible from the basement, the arrangement suggests a visible energy is emitted by the dresses themselves.

JURY COMMENTS The store's lighting adds to an atmosphere that invites the customer to enter, shop, and buy • Elegant use of simple fixtures integrated into the walls, floor, and fixturing maximize the effects of the curvaceous architecture without compromising the architectural surfaces and while still keeping the merchandise a priority.

PROJECT ⇨ CARLOS MIELE

ENTRANT ⇨ FOCUS LIGHTING

CATEGORY ⇨ RETAIL



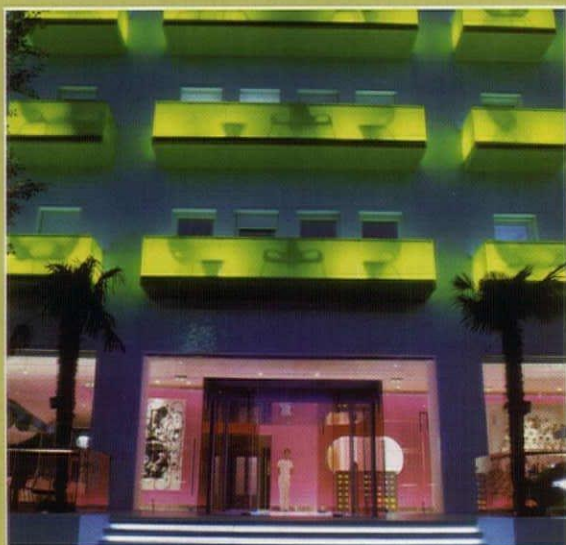
FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

A|L DESIGN AWARDS

PROJECT ⇨ SEMIRAMIS HOTEL

ENTRANT ⇨ FOCUS LIGHTING

CATEGORY ⇨ HOSPITALITY

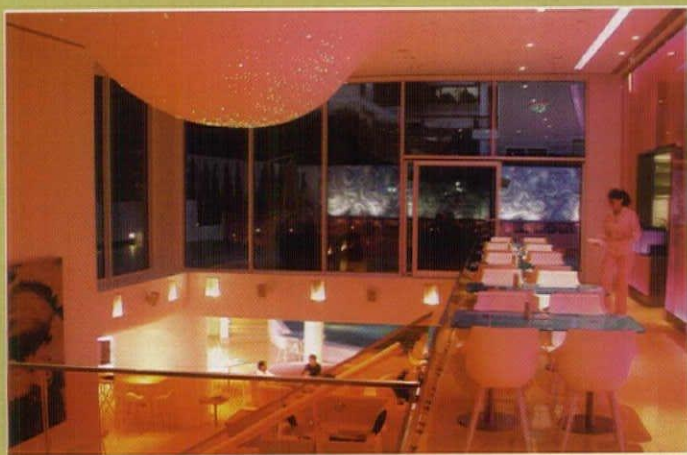


LAST SUMMER, WITH ITS INTERIORS DESIGNED BY KARIM RASHID AND A LIVELY LIGHTING concept crafted by Focus Lighting, the 52-room Semiramis Hotel welcomed the Olympics to Athens. Much of the boutique hotel's impact has to do with the juicy colors that seem to flow over and beyond the structural boundaries—a result of light's interaction with the colored glass that exists throughout. The exterior balconies offer the most apparent example of their communion. Wrapped with green-tinted glass, the guest-room lookouts interact playfully with sunlight during the day; at night, backlit by 9W fluorescent steplights located on either side of the balcony door, the lemony silhouette of the table and chairs suggests the trendy hospitality inside (left top). At the entrance, blue-gel fluorescents beneath a fritted-glass floor feed visitors into the lobby. Around the white cutout of the reception desk, a lightly frosted glass wall—both up- and down-lit with LEDs—slowly rotates through a color cycle (left center), as do LED-illuminated ceiling slots that stretch across the lobby. Under Rashid's direction, pink became the color of choice throughout the space, such as in the second-floor lounge area, where a rose-tinted glass wall faces an amber glass railing (below). "These are the colors of sunset when the sun is coming through at a low angle and everyone has a warm, rich glow," says Paul Gregory, principal designer at Focus Lighting.

Quirky details, brought to the fore with light, contribute to Semiramis's unique character. Each guestroom has its own symbol, rather than a room number; these appear as backlit glass cutouts at the front desk (left center), and are used to communicate messages to guests. Hanging paper "do not disturb" signs are rendered obsolete by LED "message boards" on the floor in front of each room, which tie back into a central switchboard. Here and elsewhere, the project adeptly capitalizes on the various benefits of LEDs. A recessed ceiling detail in the hallways, for example, features a piece of acrylic backlit with white LEDs. This technology could fit in the small ceiling space and provide an even, glowing band, unlike fluorescent, which would have been too large for the space and caused socket shadow.

Even the guestrooms partake of the lighting experience. Here, visitors are greeted with an installation by New York artist Megan Lang, which is backlit to create an interesting detail and comfortable ambient light (left bottom). Focus Lighting designed the hinged fluorescent reading lamps on either side of the bed, which are normally dimmed to 50 percent, but reach full brightness when pivoted outward.

JURY COMMENTS It is like a lot of projects we've seen. They are very theatrical, very aggressive. But for a "gaudy" project this has a lot of interesting restraint. It has an economy that you don't typically feel in these "Las Vegas-type" projects.



ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM

WITH A SIGNIFICANT PRESENCE BOTH DAY AND NIGHT, THE FROST BANK HEADQUARTERS has created a signature feature for the Austin, Texas, skyline (right top). As lighting design firm Cline Bettridge Bernstein (CBBLD) explains, "the architect wanted a building that comes to a singular statement at the top; a clear, memorable symbol."

The layered lighting scheme reinforces the building's design parti, and weaves together its three sections: a rectangular base, a tower, and a six-story glass crown structure at the top.

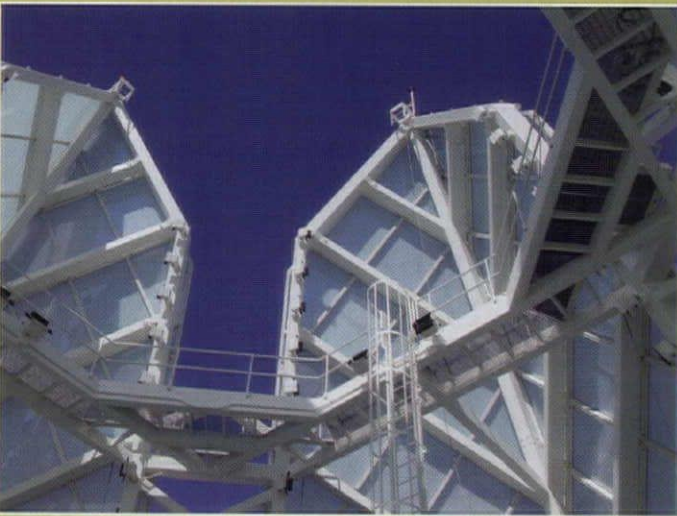
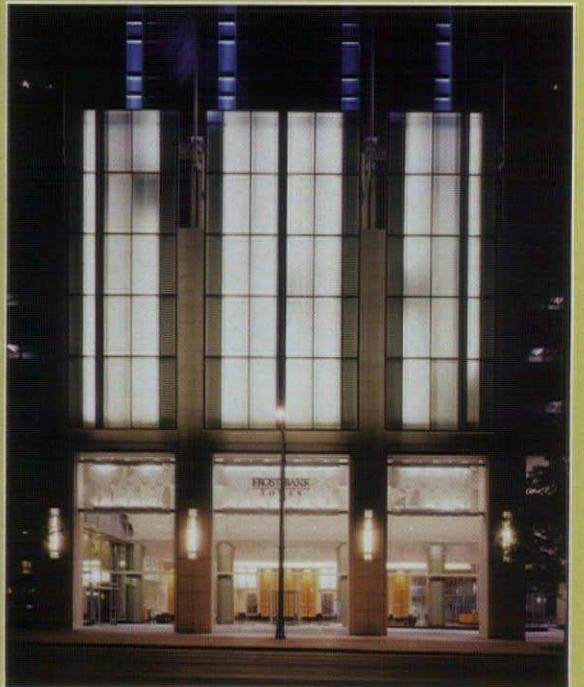
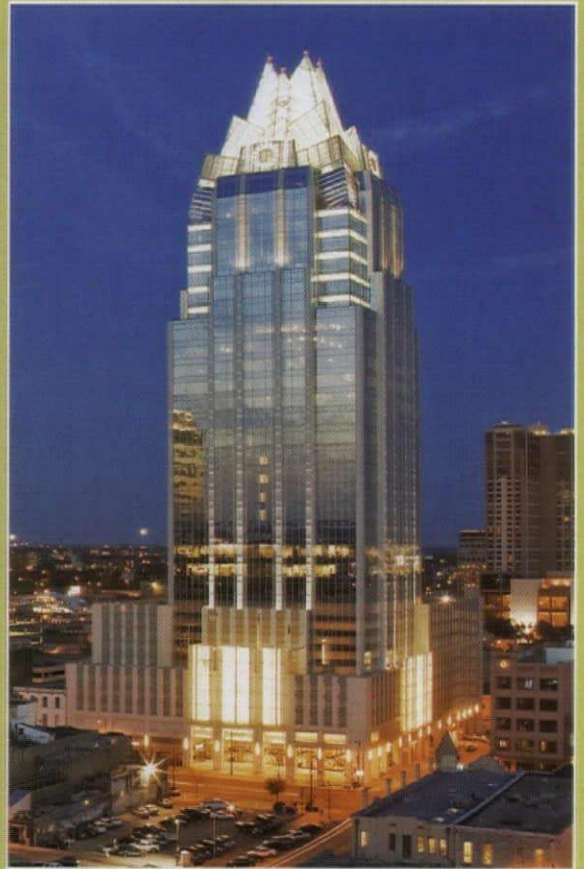
Custom-fabricated sconces accent the base of the building and delineate the lobby entrances, in conjunction with a screen comprised of a series of five-story-high rectangular glass panels that hang vertically from above (right bottom). CBBLD worked with design architects Duda/Paine to create the cost-effective custom solution—an exterior non-dimming lensed T8 fluorescent with an architectural metal and glass decorative housing. In addition, 3000K T8 fluorescent sources illuminate the glass panel screen from behind, hiding a garage beyond. At the top of the glass screen, 250W lamps highlight a series of vertical bands on the tower elevations. The designer's selection of cooler 4200K sources for the midsection of the building aids in the visual transition, as do the illuminated corner horizontal bands just below the crystal-like form that caps the tower. This attention to detail provides a seamless flow, as the viewer's eye is led to the top of the building.

A significant challenge was achieving even illumination for the crown-like structure. Owing to the angle of the glass and the glass support frame, floodlighting would have caused significant shadowing. Instead, as CBBLD explains, the solution mounts metal halide floodlights vertically, cross-lighting the opaque glass panels straight on (below). With careful aiming and shielding, viewing through the gaps in the crown's segmented top is prevented.

Accessing the fixtures and lamps for maintenance was another important consideration. To this end, the designers chose long-life metal halide sources, and the luminaires on the crown parapets are easily reached via a catwalk, while others are accessible via the window-washing system. The lighting design has made a form that is in fact shaped by a series of panels, read volumetrically.

JURY COMMENTS Skill and ability are required to take these architectural elements and manipulate them. • The lighting strategy disassembles the building's volumes. • Appreciate the corners of the building drawing your eye up to the top. • The lighting makes the top read volumetrically, rather than as shard-glazed glass pieces. • It makes the architecture much more exciting and interesting at night.

PROJECT ⇨ FROST BANK TOWER
 ENTRANT ⇨ CLINE BETTRIDGE BERNSTEIN
 CATEGORY ⇨ OUTDOOR



FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

PHOTOS BY PATRICK Y. WONG, ASMP/ATELIER WONG PHOTOGRAPHY

A|L DESIGN AWARDS

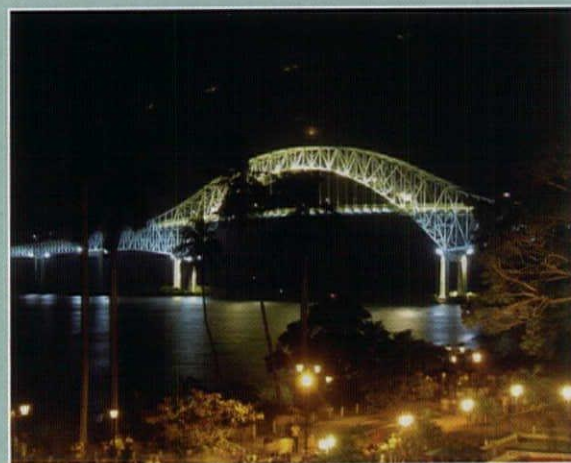
PROJECT ⇨ PANAMA CANAL BRIDGE

ENTRANT ⇨ BRILLIANT LIGHTING DESIGN

CATEGORY ⇨ OUTDOOR



Its size made the Panama Canal Bridge particularly challenging to light. A massive freighter passes easily under the bridge's central section, emphasizing its height (above). By night, lighting helps impress upon viewers the bridge's immense size, though it is even bigger than it appears, since only a 4,200-foot-section of the total 1.7-mile length was ultimately illuminated.



AS PART OF A MASSIVE PUBLIC RECOGNITION CAMPAIGN, TELECOMMUNICATIONS company Bellsouth Panama decided to light one of the most famous structures in the country—the Panama Canal Bridge. From the beginning, the project faced an extremely tight budget. The original request was for a lighting solution not to exceed \$60,000, notes lighting designer Robert Daniels, a bit incredulously. "Upon seeing the bridge from a nearby shore location, we said that was way too low. That is the price to purchase a Mercedes, not to illuminate a bridge almost two miles long." Indeed, the final price tag for the lighting equipment and installation was \$167,000—higher than the original figure, but still a phenomenal feat given the size of the final project, which is more than three times longer than the 1,250-foot Empire State Building is tall.

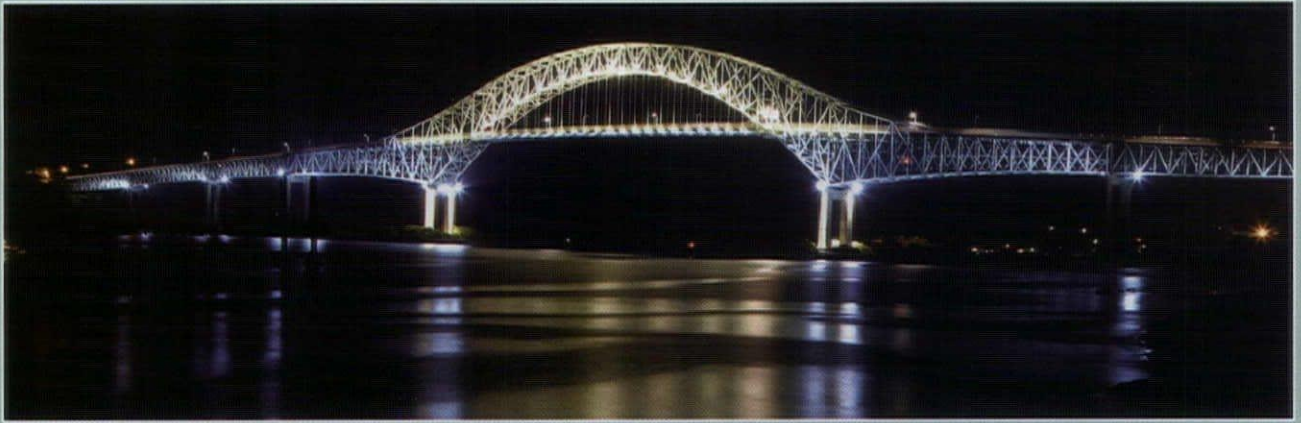
Daniels' firm, Brilliant Lighting Design, in coordination with Panama-based Conceptos Brillante, illuminated 4,200 feet of the bridge's total 1.7-mile length. Taking direction from the structure's architectural forms, the lighting highlights the bridge's center arch and side wings, distinguishing each with color. The arched middle truss glows with a 4100K white light, supplied by metal halide sources, as do the four 11-story-high concrete piers supporting this central span. A combination of 175W, 250W, and 400W sources illuminate the arch's cables, depending on the length, while 1000W fixtures downlight the piers. Additional sources define the horizontal axis of the roadway, and the bend in the arch above. The box trusses on either side stretching away from the central span are set apart with blue-filtered 1500W stadium lights. The same fixture is also used to light the bottom of the middle span, with four located on either side of the center section. Even with the depletion of lumen efficiency caused by the filters (30 percent, according to Daniels), eight 1500W fixtures are able to light a distance of almost 1,200 feet. As the arms stretch toward either side of the river, fewer luminaires are used to light the span between piers, causing the lighting effect to fade out gradually.

The project necessitated several inventive solutions. All fixtures mounted on the arch required a vibration dampener to eliminate damage from the shaking caused by heavy traffic on the steel bridge. The number and diversity of fixtures attached required custom equipment that could be easily adapted; a patent is pending on the solution. The lighting traverses the distance between piers aided by lighting platforms, which had to be clamp-welded to the structure. Invasive welding on or drilling into the existing concrete and steel was impossible, given the age and condition of the bridge. These platforms also facilitate maintenance, which involves a one-year relamping schedule for the blue horizontal fixtures and a three-year cycle for the rest of the sources.

Daniels points to several factors helpful in meeting the budget. Certainly labor costs are less expensive in Panama (though he notes, there were plenty of import/export fees on the fixtures to account for that are not usually encountered on a domestic project). Manufacturing some of the equipment in Columbia was also helpful. Perhaps most effective, Daniels and his team considered which of the bridge elements needed to be clearly visible. "You can see the arch from the city, so this seemed the most important area to illuminate. Therefore, we went from a soft blue, building the intensity of the light at the center."

JURY COMMENTS From a design point of view, the lighting doesn't split the bridge in half. Rather it creates a luminous whole. It takes the figure of the arch to the horizontal. In a minimal way, it is pretty successful in the disassembling of the bridge and the importance of the significant aspect of the bridge. The budget text was also impressive. They did accomplish it. It was minimal, but with a good lighting scheme.

ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM



The underside of the central span is illuminated by 1500W blue-filtered luminaires, which are also used to uplight the sides of the bridge (below left and right). The fixtures are supported by a platform, which could not be welded or drilled onto the bridge. "The bridge commission did not want us to do anything that might weaken the structure," says Robert Daniels of Brilliant Lighting Design.



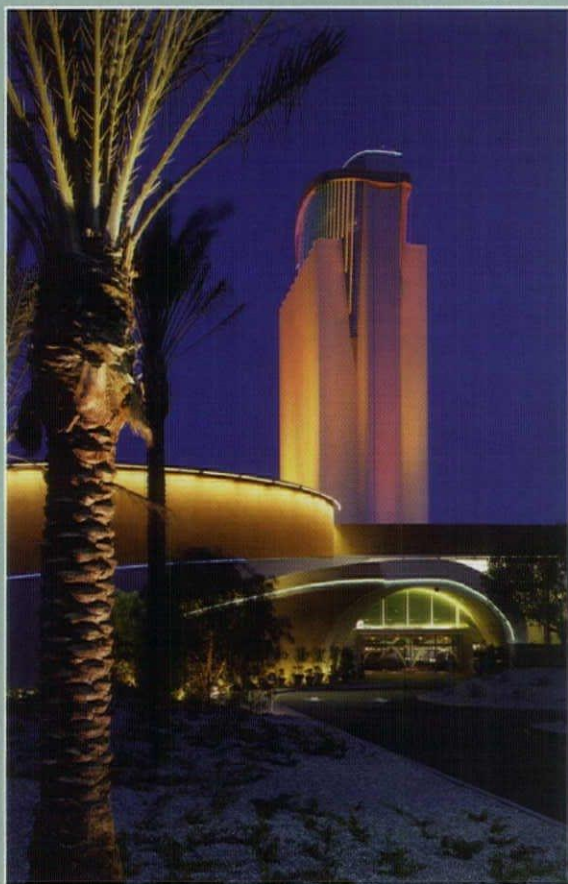
FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

A|L DESIGN AWARDS

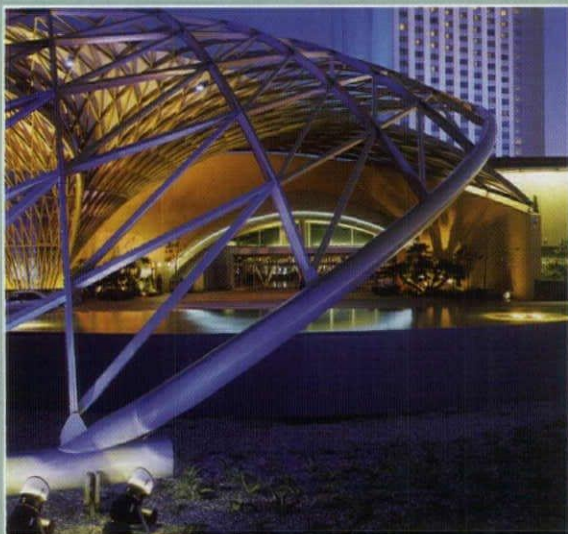
PROJECT ⇨ MORONGO CASINO RESORT & SPA

ENTRANT ⇨ VISUAL TERRAIN

CATEGORY ⇨ HOSPITALITY



Striking a balance, the natural terrain gives way to a fluid color concept (above). Over 30 feet high on the curve of each petal, the porte cochère is wider than five lanes of traffic (below and right).



DRIVING TOWARD THE MORONGO CASINO RESORT AND SPA NEAR PALM SPRINGS, CALIFORNIA, is an experience—one that begins five miles away. A skyline in itself, the 27-story hotel tower beckons passersby to come in and try their luck. The project, a 44-acre gaming and resort development for the Morongo Band of Mission Indians, took inspiration from the natural terrain to create a dazzling icon that blends harmoniously with the surroundings, and at nightfall, becomes a desert oasis.

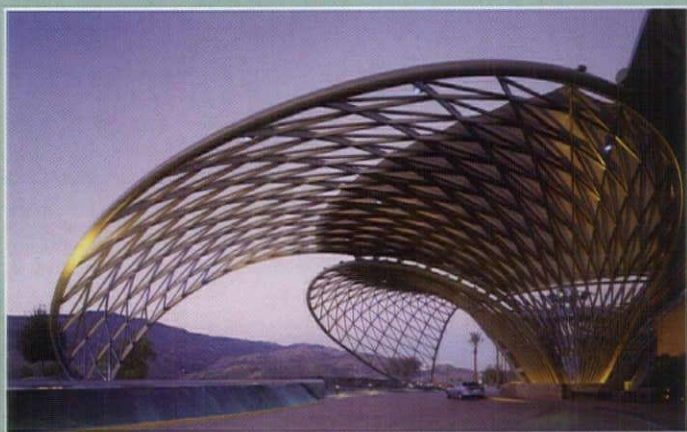
Drawn in by the tower, visitors encounter an adaptation of the arid landscape. Project designer and senior associate, Trevor Pollard, then with architecture and urban planning firm Jerde Partnership, says, "Architecture alone would not create the experience of an 'entertainment resort oasis.'" The application of light, however, transforms the surroundings with a splash of natural color into just that.

Taking care to balance light levels and comply with self-imposed dark-sky regulations (the sovereign nation of Morongo does not have a dark-sky ordinance), lighting design firm Visual Terrain limited the tower's color palette to the spectrum of natural light from sunrise to sunset. Fixtures, mounted on top of the low-rise casino building, uplight the entire tower façade with overlapping fixture focus to emulate the sky's natural color variation and gradations of light. An evolution from the initial idea of projecting images onto the tower's top, a 4,000-linear-foot DMX-controlled LED curtain wall was custom-fit onto the window mullions to enable a continuous light show throughout the night.

The porte cochère at the main entrance to the casino offered another opportunity for color. Lit indirectly and with downlights hidden within its form, the floral concept of the steel structure mimics the tones of a desert flower. But, as Matt Levesque, senior project designer with Visual Terrain explains, "these moments wouldn't be special without the other moments balancing them out." For this reason, the integration of a static white wall-grazing technique on the low-rise casino was used to distinguish the architectural elements.

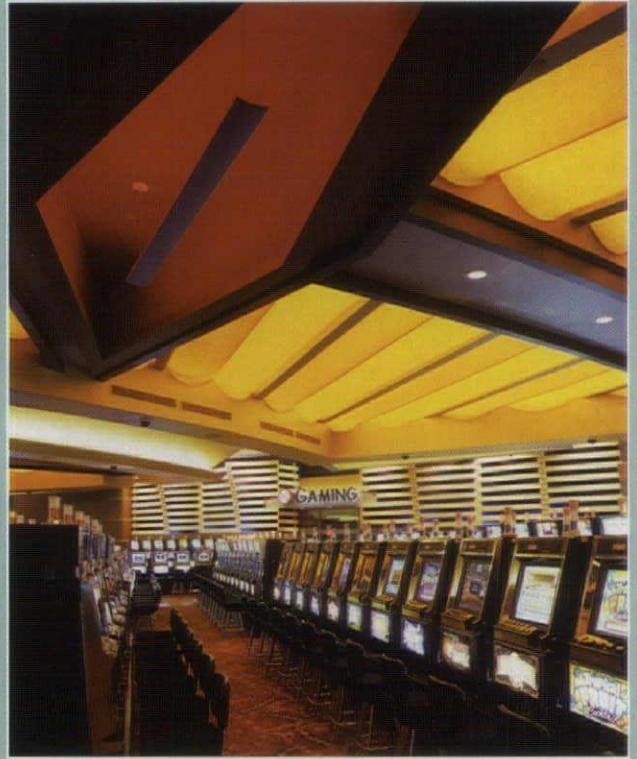
The lighting experience travels inside to a casino teeming with color from floor to ceiling. Backlighting techniques are used throughout, providing continuity while helping to define the casino's many zones. The reception desk, also illuminated by a row of LED uplights, gives way to the pit bar, the focal point of the casino, where highlighted glass bead curtains with water trickling down them make up a subtle water feature. Slot machines and game tables sit below an expanse of intricate ceilings with colored fluorescent fixtures and a field of dramatic fabric panels. The trick to all this color? Finding the right balance.

JURY COMMENTS The otherwise nondescript tower façade has become a canvas for color. Warm and cool colored coves reflective of the landscape define space throughout the casino floor, as well as add dimension and layers of interest.

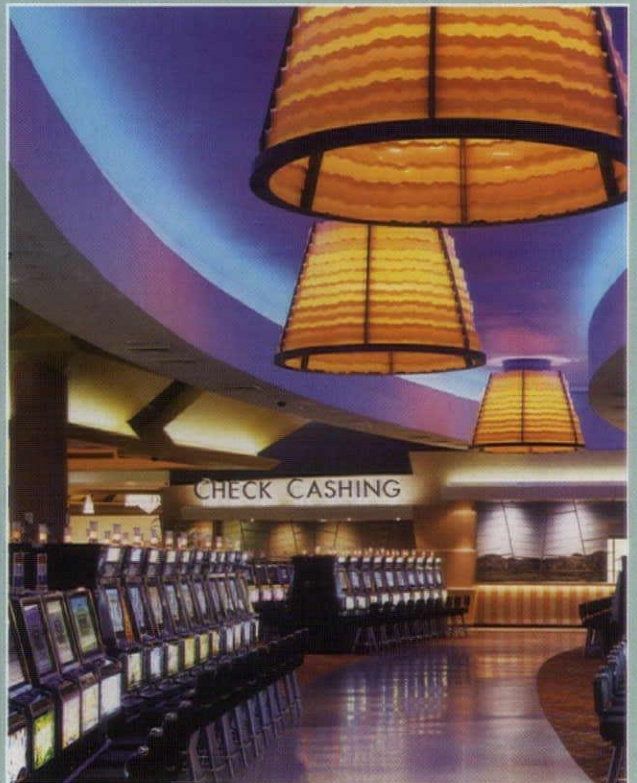


PHOTOS BY TOM PASVA

ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM



Custom pendants over gaming tables integrate MR16 downlights, a dimmer, and a security camera (above left). The multiple-plane angled ceiling helps define the casino's various zones (above right), while large drum-like orange pendants lining the pathway create contrast with the blue-hued ceiling (below right). MR16 downlights highlight the beaded curtain water feature that creates privacy in the pit bar, but allows guests to see out (below left).



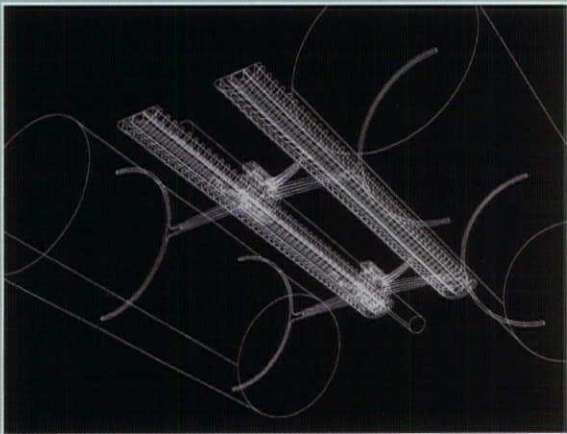
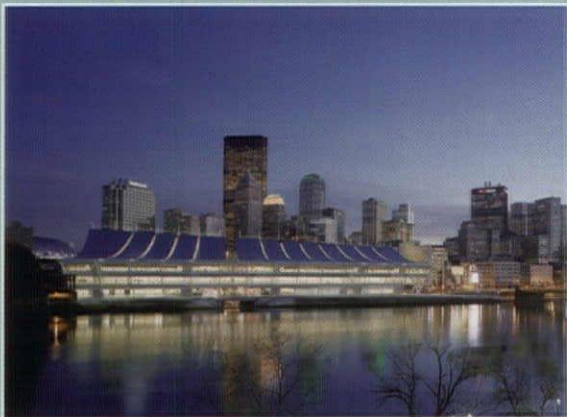
FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

BEST INCORPORATION OF DAYLIGHT AIA DESIGN AWARDS

PROJECT ⇨ DAVID L. LAWRENCE
CONVENTION CENTER

ENTRANT ⇨ LAM PARTNERS

CATEGORY ⇨ ENTERTAINMENT/CULTURAL



At night, the convention center gives off an inviting light, creating a transparent living room for the city (top). Paired fabric ducts and fluorescent fixtures along the lower structural cables create an integrated large-scale luminaire (above). The form is an extension of adjacent bridges (below).

IT WOULD BE SOMETHING OF AN UNDERSTATEMENT TO SAY THAT THE DAVID L. Lawrence Convention Center in Pittsburgh is a departure from a typical and architecturally mundane exhibition hall. This space, in its form and lighting approach, is environmentally conscious. In fact, it is the world's first certified green convention center. While architect Rafael Viñoly conceived the center as a daylit space and focused the design on sustainability, the advocacy for a green building was aggressively led by the Green Building Alliance of Pittsburgh, a nonprofit organization dedicated to bringing about the integration of green building practices into development projects.

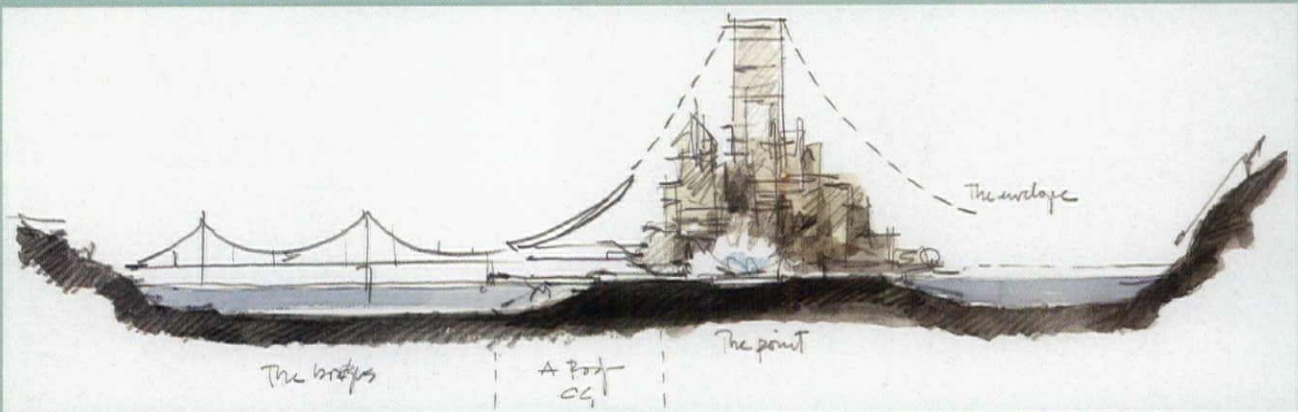
Situated on the Allegheny River shore, the sweeping roof of the massive 984-foot-long, 1.5 million-square-foot structure with its cable suspension system and bridge-like curves, pays homage to a local landmark, the Three Sisters—a trio of suspension bridges to the west of the convention center. Part of the natural ventilation system, the roof also offers a column-free exhibition hall, and perhaps most relevant to its designation as Best Incorporation of Daylight, eleven 8-foot-wide glazed glass ribbon skylights that cover 10 percent of the roof and allow the entry of daylight.

David Rolland, project manager with New York-based Rafael Viñoly Architects, explains, "Architecture is both mass and space. The interplay of solid and void, surface and opening, and protrusion and reveal can only be accomplished through the delineation of light and shadow." Add to these skylights an expanse of glass walls on the north side, and daylight becomes the primary source of illumination throughout the main exhibit hall and perimeter pre-function areas.

Inside the exhibit hall, daylight is augmented by continuous lines of direct/indirect T5HO photocell-controlled fluorescent fixtures that downlight the exhibits, and also uplight the voluminous roof structure. Rather than metal halide high-bay fixtures, fluorescent lighting was chosen after a battery of exhaustive physical and computer modeling to analyze and manipulate daylight levels and sun patterns. Lam Partners principal Keith Yancey says that, in addition to concerns about energy use and the difficulty in finely controlling metal halide, the team ultimately "chose a fluorescent system that could be integrated into the architectural components, thus avoiding huge fixtures stuck onto the delicate structure of the space."

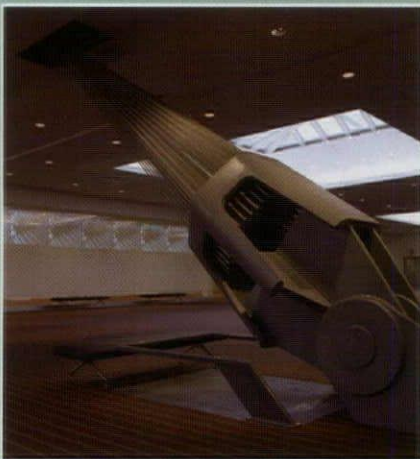
Something was needed to control the natural light spilling into the hall, so a shading system of sails and panels was developed that adjusts to control daylight and alter direct sunlight. The multitude of motorized opaque shades can provide full exposure, diffuse the light, or create a complete blackout. As Yancey states, "we needed a solution to basically throttle the sunlight down to virtually nothing."

JURY COMMENTS There are so many different sources necessary in a building like this, so one of the things appreciated about this project is that it is very minimal.



ADDITIONAL JURY COMMENTS AND EXPANDED PROJECT COVERAGE AT ARCHLIGHTING.COM

The rooftop pedestrian bridge leading to the riverfront borrows light from the exhibit hall. Narrow-beam metal halides concealed behind handrails light the roof overhang when the hall is dark (right). Opaque shades making up the solar dimming system control daylight and alter direct sunlight (below). The main exhibit hall is illuminated with continuous rows of direct/indirect T5HO photocell-controlled fluorescent fixtures (below right). Giant cable anchors, both inside and outside the building, are highlighted with PAR metal halide sources (bottom left). Continuous lines of low-brightness photocell-controlled fluorescent downlighting illuminate pre-function spaces (bottom right).



FOR PROJECT DETAILS, INCLUDING A LIST OF MANUFACTURERS, SEE PAGE 42

A/I DESIGN AWARDS

Atlantic Terminal Building, Brooklyn, NY

ARCHITECT Swanke Hayden Connell Architects, NY
 LIGHTING DESIGNER Cline Bettridge Bernstein Lighting Design, NY
 PHOTOGRAPHER Elliott Kaufman/Elliott Kaufman Photography
 TOTAL SQUARE FOOTAGE 400,000
 WATTS PER SQUARE FOOT 1.5
 MANUFACTURERS Kurt Versen, Legion Lighting, Lightolier, Linear Lighting, Osram Sylvania, Starfire Lighting

St. Thomas Aquinas Church, Avondale, AZ

ARCHITECT CCBG Architects, Phoenix
 LIGHTING DESIGNER Lam Partners, Cambridge, MA
 PHOTOGRAPHER John Denker/CAPS
 TOTAL SQUARE FOOTAGE 30,000
 LIGHTING COST PER SQUARE FOOT \$5.00 (installation) WATTS PER SQUARE FOOT 2.4
 MANUFACTURERS 2nd Avenue Design, Bega, Hydrel, Lighting Services Inc, Lutron, McGraw-Edison, Metalux, Portfolio, Rambusch, Shaper, Specialty Lighting Industries, Translite Sonoma, Visa

Julien J. Studley, Inc., Chicago

ARCHITECT VOA Associates, Chicago
 PHOTOGRAPHER Nick Merrick/Hedrich Blessing Photography
 TOTAL SQUARE FOOTAGE 15,300
 LIGHTING COST PER SQUARE FOOT \$6.00 WATTS PER SQUARE FOOT 1.48
 MANUFACTURERS Alko, Cooper Lighting, Focal Point, Leviton, Lightblock, Square 1 Precision Lighting, Tech Lighting, Trainor Glass, USA Illumination

McClendon Athletic Facility, Oklahoma City

ARCHITECT Elliott + Associates, Oklahoma City
 CONTRACTOR Smith & Pickel Construction, Oklahoma City
 CIVIL ENGINEER Grossman & Keith Engineering, Oklahoma City
 LANDSCAPE ARCHITECT Laurie Keffer, Oklahoma City
 PHOTOGRAPHER Robert Shimer/Hedrich Blessing Photography
 TOTAL SQUARE FOOTAGE 46,000
 LIGHTING COST PER SQUARE FOOT \$3.71 (fixtures/installation) WATTS PER SQUARE FOOT 1.2
 MANUFACTURERS Beta, Juno Lighting, Linear Lighting, Lithonia, Paramount, Selux, Strong International

Overture Center for the Arts, Madison, WI

ARCHITECT Cesar Pelli & Associates, New Haven, CT
 ARCHITECT OF RECORD Potter Lawson & Flad, Madison, WI
 LIGHTING DESIGNER Cline Bettridge Bernstein, NY
 PHOTOGRAPHER Jeff Goldberg/Esto, Zane Williams
 TOTAL SQUARE FOOTAGE 280,000 (phase one)
 LIGHTING COST PER SQUARE FOOT \$7.68 (fixtures/lamps)
 MANUFACTURERS Bega, Cole Lighting, Color Kinetics, Edison Price, Elliptipar, ETC, Hydrel, Legion Lighting, Leucos, Lighting Services Inc, Louis Poulsen, Lumentyte/Drama Lighting, Q-Tran, Sirmos, Specialty Lighting, Starfire Lighting, Winona Lighting, Zumtobel

Jazz at Lincoln Center, New York

ARCHITECT Rafael Viñoly Architects, NY
 LIGHTING DESIGNER Cline Bettridge Bernstein, NY
 PHOTOGRAPHER Brad Feinknopf/Feinknopf Photography
 TOTAL SQUARE FOOTAGE 140,000
 LIGHTING COST PER SQUARE FOOT \$15 (installation)
 MANUFACTURERS Ardee, Bega, Design Plan, Edison Price, ETC, Legion Lighting, Lighting Services Inc, Lightolier, Osram Sylvania, Philips, Rambusch, RSA, Specialty Lighting, Starfire Lighting

Carlos Miele, New York

ARCHITECT Asymptote, NY
 LIGHTING DESIGNER Focus Lighting, NY
 PHOTOGRAPHER Paul Warchol
 TOTAL SQUARE FOOTAGE 5,800
 LIGHTING COST PER SQUARE FOOT \$22 (equipment) WATTS PER SQUARE FOOT 4.5
 MANUFACTURERS A&L Lighting, Abrisa, Atlite, B-K Lighting, Concealite, Decorative Films, Gamalux, GE Lighting, Halo, Juno Lighting, Lamar, Let There Be Neon, Lightlab, Lightolier, LightTech, MDL, Philips, R&R Plastics, Rosco Laboratories, RSA Lighting, Osram Sylvania

Semiramis Hotel, Athens

INTERIOR DESIGNER Karim Rashid, NY
 LIGHTING DESIGNER Focus Lighting, NY
 PHOTOGRAPHER Jennifer Alexander/Focus Lighting
 LIGHTING COST PER SQUARE FOOT \$42 (equipment)
 MANUFACTURERS FiberPro Solutions, Ghidini, Unilamp

Frost Bank Tower, Austin, TX

DESIGN ARCHITECT Duda/Paine, Durham, NC
 LIGHTING DESIGNER Cline Bettridge Bernstein, NY
 PHOTOGRAPHER Patrick Y. Wong, ASMP/Atelier Wong Photography
 TOTAL SQUARE FOOTAGE 515,000
 LIGHTING COST \$242,000 (exterior installation)
 MANUFACTURERS Arc Sales, Belfer, Bronzelite, Design Plan, Elliptipar, Hydrel, Kurt Versen, Legion Lighting, Lighting Services Inc, Philips, Specialty Lighting Industries, Osram Sylvania, USA Illumination

Panama Canal Bridge, Panama

LIGHTING DESIGNER Brilliant Lighting Design, Miami
 GENERAL CONTRACTOR Conceptos Brillante, Panama
 ELECTRICAL AND STRUCTURAL CONTRACTOR Antonio Navarro
 PHOTOGRAPHER Robert Daniels
 LIGHTING COST \$134,700 (fixtures); \$32,400 (installation)
 MANUFACTURERS GE, Special FX

Morongo Casino Resort and Spa, Cabazon, CA

EXECUTIVE ARCHITECT Thalden Boyd Architects, Las Vegas
 DESIGN ARCHITECT/INTERIOR DESIGN The Jerde Partnership, Los Angeles
 INTERIOR DESIGN Hirsch Bedner Associates, Los Angeles
 LIGHTING DESIGNER Visual Terrain, Van Nuys, CA
 PHOTOGRAPHER Tom Paiva
 TOTAL SQUARE FOOTAGE 659,800
 LIGHTING COST PER SQUARE FOOT \$5.75 (fixtures/installation) WATTS PER SQUARE FOOT 2.3
 MANUFACTURERS Architectural Cathode, Birchwood, Bruck Lighting, Color Kinetics, Contrast Lighting, Element Labs, Elliptipar, Gardco, grandMa, Halo, Hevi Lite, Hydrel, iLight, Leviton, Martin, Metalux, Northstar/Thom, Portfolio, RSA, Selux, Spectrum, Teka Illumination, Visa

David L. Lawrence Convention Center, Pittsburgh

ARCHITECT Rafael Viñoly Architects, NY
 LIGHTING DESIGNER Lam Partners, Cambridge, MA
 PHOTOGRAPHER Brad Feinknopf/Feinknopf Photography, Stephen M. Lee
 TOTAL SQUARE FOOTAGE 1.5 million
 LIGHTING COST PER SQUARE FOOT \$4.80 (installation) WATTS PER SQUARE FOOT 1.35
 MANUFACTURERS Altman, Corelite, DesignPlan, Gardco, Greenlee, Failsafe, Kramer, Legion Lighting, Leviton, Light Project/Steng, Lighting Services Inc, Lumark, Lumière, McGraw-Edison, Metalux, Neoray, Phoenix, Portfolio, Shaper, SPI, Surelites

FOR MANUFACTURER AND APPLICATIONS INFO, VISIT ARCHLIGHTING.COM



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WHOLE FOODS, AUSTIN, TEXAS

CHALLENGE Far from the sterile environment of a conventional supermarket, the inviting atmosphere of the Whole Foods Markets encourages shoppers to explore and linger. While retailers favor bright lights to lure customers to displays, general concerns over the use of traditional lamps, specifically the ultraviolet and infrared wavelengths they emit, have prompted stores to rethink their lighting approach. Owing to this and other issues like energy usage, the Whole Foods Markets' lighting standards, while store specific, "have been in continual development," says Mike O'Leary, principal at CTA, the architecture and engineering firm that has worked with the store for the past five years. The defining challenge found in developing a lighting concept for the new 80,000-square-foot landmark store in Austin, Texas, was efficiency.

ARCHITECTURAL AND LIGHTING SOLUTION In keeping with the personal yet theatrical ambiance common to all Whole Foods Markets, the design team (Whole Foods Market construction, decor, and department specialists; CTA; Lighting Design Lab; Legacy Lighting; and Konzept Lighting) used a variety of fixtures to complement each aspect of the store. Brightly colored walls and inward curving departments with theme-park-like monikers—Fifth Street Seafood, Candy Island, and Lamar Street Greens—provided opportunities to transition from heavy use of incandescent sources to ceramic metal halide on track and other specialty fixtures, like fiber optics and case-specific lamps.

To maintain a comfortable ambient light level, hovering around 50 foot candles, the team used a variety of sources throughout the store. Minimal

linear fluorescent direct/indirect fixtures illuminate the aisles, while additional light is supplied by high-bay compact fluorescents, aluminum-reflector pendants, fiber optics, wall sconces, and MR16 and adjustable ceramic metal halide track lighting.

The fiber optic system in particular helped lower the watts per square foot, as well as provided a heat-free source to illuminate food cases. With adjustable accent lights and multi-beam fixtures installed in 11 departments, the system of 54 lamps lighting 408 individual fixtures (each source can light up to 8 endpoints), has the capability to replace 400 watts with 68 watts.

Enclosed cases, such as those used for desserts, gelato, and charcuterie, are illuminated from above with recessed fiber optic fixtures and frequently also include internal fluorescent case lights. Open cases of seafood on beds of ice also use the fiber optics above; however are also accented with metal halide and MR16 track lighting.

The designers addressed issues of discoloration and acceleration of bacterial growth and decomposition in the aged beef department (a result of ultraviolet and infrared wavelengths) with ultraviolet-free "natural color" 3800K fluorescent lamps lining the inside perimeter of the cooler window. With traditional lamps, yellow and green portions of the visible light spectrum dulled the shades of red in the meat, but with the specialty lamps, meat is stored safely and remains visually appealing.

While metal halides and MR16s will be phased out in the future to make way for more efficient light sources, CTA's O'Leary "would still like a warmer color rendition in some areas." With every store, the lighting method continues to evolve. **SALLIE MOFFAT**

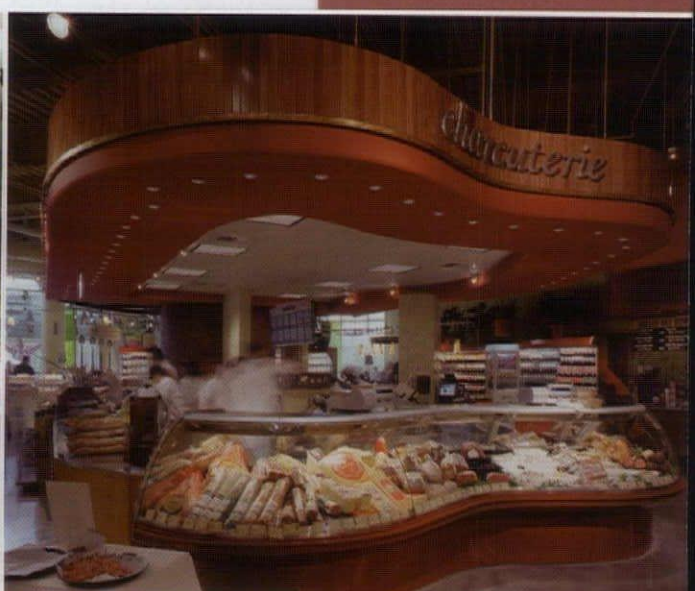
DETAILS

PROJECT Whole Foods Market, Austin, Texas

ARCHITECT CTA, Billings, Montana
LIGHTING DESIGNERS Lighting Design Lab, Seattle; Konzept Lighting, Austin; and Legacy Lighting, Austin

PHOTOGRAPHER Aker Zvonkovic Photography, Houston

MANUFACTURERS Bä-ro, Casablanca, Color Kinetics, Corelite, Delray, DL Manufacturing, Energy Plus, Fiberstars, Halo, Juno, Merco Savory, Metalux, Pal, Portfolio, Shaper, Sistemalux, Tech Lighting, Teron, Waldmann



LAFAYETTE MAISON, PARIS

DETAILS

PROJECT | Lafayette Maison,
Paris

DESIGN TEAM | Studios d'architecture ORY, Paris (architecture); Saguez and Partners, Paris (interiors); Ansorg-Belux, France (lighting design and supply); Ingo Maurer, Munich (light art)

PHOTOGRAPHER | Hans-Georg Esch, Blankenberg, Germany

MANUFACTURERS | Ansorg-Belux, Ingo Maurer GmbH



CHALLENGE The opening of Lafayette Maison, a store dedicated to home decor, signaled a significant turn for the famed Parisian retailer Galleries Lafayette, which had not previously sold housewares. Located on the Boulevard Haussman directly across from the original flagship building, dating back to 1893, the new venue faced one primary challenge: how to balance the salon-like shop areas with the energetic circulation space.

ARCHITECTURAL AND LIGHTING SOLUTION At the origin of this evolution is the Paris-based global design agency, Saguez and Partners, who were responsible for developing the concept of a large store—over 100,000 square feet—that embodied the qualities of home. They wanted the space to be warm and generous, but also efficient and well ordered. To reflect this duality, Saguez and Partners created a space that is clear and accessible, and that promotes maximum visibility for the more than 100 different brands on display. Simultaneously, the space invites customers to rest in the cafes and food courts, and in an exhibition space on the top floor, whose signature is a glass conservatory, representative of the building's nineteenth-century Haussmanian style.

A unique lighting scheme was integral to this strategy. The idea was to create two distinct “moods”: one for the display surfaces and one for the circulation areas. The first environment was implemented with bright, high-contrast accent lighting to accentuate the products’ design details. Each of the five levels of the store is dedicated to a different area of the home. The second is a subtle play between the flow of natural light and a dynamic LED installation by lighting artist Ingo Maurer that generates a poetic and

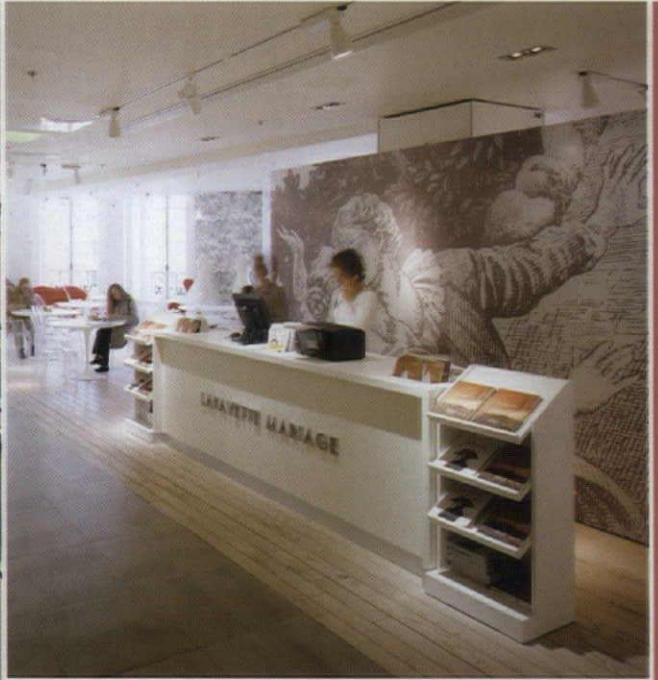
animated identity for the building’s central core.

Ansorg-Belux was chosen to highlight the products on display, and was instrumental in producing a unified lighting solution across departments by using a single type of luminaire throughout the store. Recessed tracks in the ceiling are used to mount adjustable spotlights, which have a narrow beam angle—less than 15 degrees. These fixtures sharply focus on specific products, creating an exhibit-like feel, and can be rotated and tightened to adapt to different display configurations. The luminaire’s discreet design and adaptability also mean that it does not interrupt the visual fluidity of the space, and therefore, concentrates the customers’ attention on the displays.

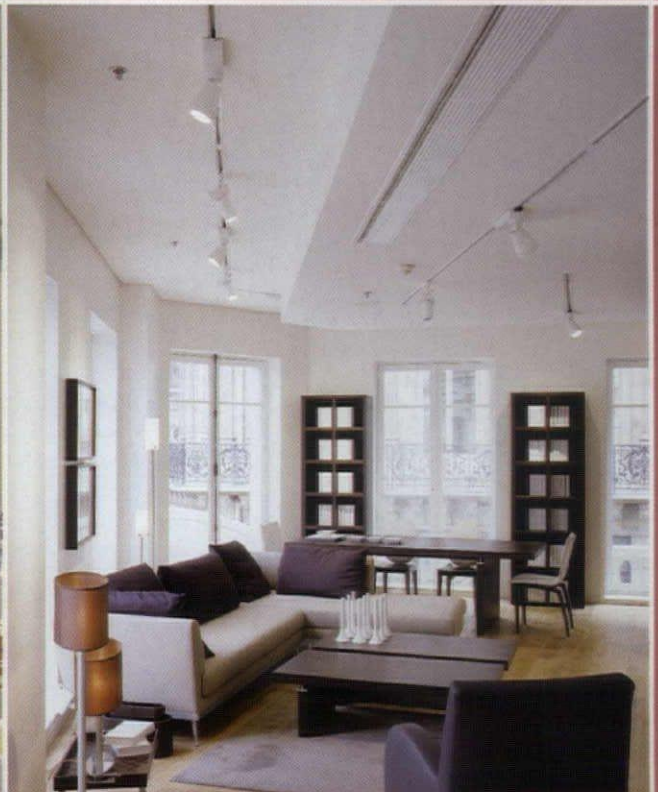
In contrast to this minimalist approach, Lafayette Maison showcases in its core space—the central atrium and the customer circulation areas—a spectacular but delicate lighting intervention by Maurer. The installation, composed of clear glass panels embedded with LEDs, creates an array of colored multilingual words and symbols, and forms a constellation of light points that illuminate the surface of the guard rail, while revealing its transparency. The flood of natural light from the glass-covered conservatory above reinforces the playful quality of the space, balancing the purposeful nature of the surrounding merchandise lighting.

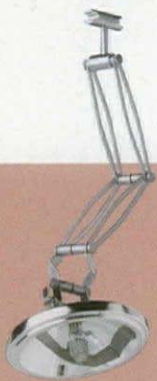
Where most department stores rely on large amounts of diffuse general light, Lafayette Maison turns to both daylight and punctuated accent light, in addition to a fun, original treatment of the circulation areas. **AURELIA DUPLOUICH**

A graduate of the Versailles School of Architecture, Aurelia Duplouich has worked on projects in France and the United States.



With their track bed recessed in the ceiling, adjustable luminaires unobtrusively light the surrounding home merchandise at the Lafayette Maison in Paris. The central circulation space features an animated installation by light artist Ingo Maurer, in which LEDs embedded in clear glass panels flash multilingual words and symbols (top left).

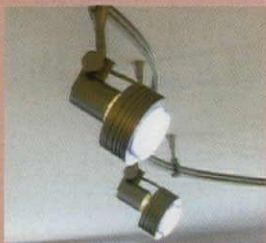




A LITTLE LIGHT SHOPPING

MP LIGHTING | VERTICAL DOUBLE RAIL SYSTEM | MPLIGHTING.COM

This low-voltage double-rail fixture can be suspended by rigid rods or by cable for longer length drops. Fitted with an AR111 source, it has 1/4-inch-diameter tubing, 4-inch arms, and at full extension, is 10 inches long. There are three standard and five custom finish options available, and directional adjustments to the light can be made with its 270-degree swiveling head. **CIRCLE 222**



ARDEE LIGHTING | FLEXSION | ARDEELIGHTING.COM

This bendable monorail low-voltage track is a flexible alternative to angular track systems. Featuring brass constructors, housed within a synthetic track material, Flexsion's fluid appearance places focus on the light rather than the fixture. Available in 4-, 8-, and 12-foot sections, the track can be mounted on most surfaces at a choice of suspension lengths, and its small-scale aimable spotlights can be lamped with halogen or metal halide. **CIRCLE 223**



LIGHTING SERVICES INC | FOLE | LIGHTINGSERVICESINC.COM

The Fole adjustable recessed spotlight is one of five in a series of fiber optic fixtures from Lighting Services Inc. It has a beam spread capable of 15 to 40 degrees, lockable rotation adjustment, removable front bezel to allow for color gels, and is available in five finishes: black, white, silver, platinum, or graphite. **CIRCLE 224**



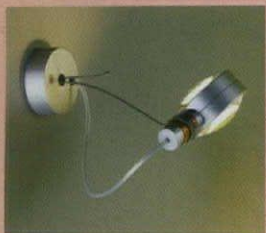
OSRAM SYLVANIA | POWERBALL PLUS | SYLVANIA.COM

This metal halide lamp with a high-performance color rendering index of 95, is suitable for accent lighting applications. With 12,000 hours of life, more than four times that of the standard halogen PAR38, the Powerball Plus has additional features that include reduced color shift through life, higher R9, and a unique shape for better optics. The lamp is available in PAR30, T4.5, and T6 at 70 watts. **CIRCLE 225**



W.A.C. | PRECISION SPOTS | WACLIGHTING.COM

This line of track heads fits both low-voltage and line-voltage systems. Constructed of die-cast aluminum, they feature concealed wiring, abrasion-resistant powder-coat paint finishes, horizontal aiming, and vertical locking capabilities. Available in white, black, and two-tone black/platinum, the fixture can be lamped with halogen MR16, AR111, PAR20, PAR30, or PAR38, and can be used with extensions and suspension kits. Accessories such as cross-blade and honeycomb louvers, as well as color lenses, are also offered. **CIRCLE 226**



TOBIAS GRAU | OXX | TOBIAS-GRAU.COM

A wall and ceiling luminaire, the OXX targets light in two directions from its approximately 3 1/2-inch diameter head, so that multiple surfaces can be simultaneously illuminated. Available in polished or satin-finished aluminum, it is offered with or without orange neck accents, uses a G9 60W lamp, and has a body that is just over 9 inches long. **CIRCLE 227**

Specs Library



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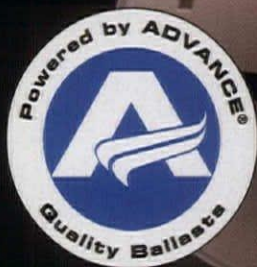
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JESSICA N. JOHNSON

LIGHTING ART IN RESIDENTIAL AND MUSEUM SETTINGS

FEW DESIGN ELEMENTS HAVE THE ABILITY TO ENHANCE ARTWORK MORE THAN lighting. True for painting, sculpture, textiles, and other media, in the right situation the depth of an artist's line can be measured while color and texture leap toward the eye. Conversely, ill-advised lighting schemes can significantly discount the beauty of the object on display, and in some cases, actually damage the artwork. Two designers involved with residential and museum lighting reveal key issues associated with properly lighting artworks in various media and settings.

1. LOOK AT THE ARTWORK; LISTEN TO THE CLIENT. For Christopher Thompson, founder and principal of the Seattle-based lighting firm Studio Lux, one of the key steps in the process of lighting artwork in a residential setting is also the most obvious: to physically look at the artwork in question and ask a few critical questions. What are the material palette and dimensions of the piece? Is it displayed horizontally or vertically, indoors or outdoors? Thompson adds a few more considerations: "Is it under glass, or just a canvas? What is the material of the frame? What is the projection of the frame off the wall? These are important issues in understanding the placement of a fixture in relationship to the display item." Viewing the artwork for which the lighting is being designed is sometimes impossible because the client has yet to purchase the specific piece. In these instances, Thompson pulls from experience. "We can look at a wall and determine—given its size and proportion—what the artwork may or may not be, and we will design for our worst case scenario. By doing this, we know that if the artwork happens to be the largest the wall will accommodate, we have it covered."

Another step in Thompson's process involves communication with the client. "While clients may not know the technical lingo that we use in our industry," Thompson adds, "they do have a very emotional, visceral reaction. Listen to what people like and what they don't like." Thompson's firm uses perspective drawings and renderings to show the interplay of light in a room, and to ensure that the lighting designer and client are in concert. After this exchange, it is important to work with the architect, builder, or interior designer to define how the particular fixtures will work with the aesthetics and structure of the architecture. It can be a disheartening and often an expensive setback to discover, too late, that a particular fixture was scheduled in the same location as a structural element.

2. LIKE EVERY PROJECT, BUDGET DETERMINES FIXTURE CHOICE. The project's budget will largely determine the fixture selection. Thompson describes one key difference between high-end fixtures and low-end fixtures: "On the high end, there are fixtures that allow you to aim the lamp and then lock down the focus. That means that anyone who relamps the fixture will not disrupt the original aim. On the low end, you are challenged by the process of aiming and focusing each time the fixture is relamped. This is a great source of frustration for lighting designers, because aiming and focusing—while a small percentage of what we do in relation to the overall design process—has the largest visual impact on the success of the overall result."

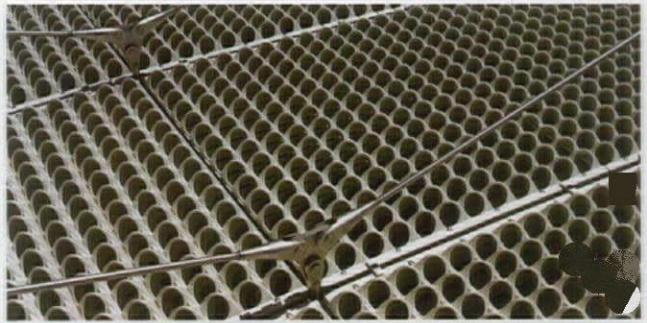


The ceiling/roof system at the Nasher Sculpture Center in Dallas, developed by Arup Lighting in conjunction with Renzo Piano Building Workshop, blocks out the sun, while providing a uniform, shadowless natural light (above). For a Seattle home, lighting firm Studio Lux developed a palette of fixtures that achieves a customized result. Lenses and filters were added to address the artwork (below).



3. FIXTURE PLACEMENT HELPS ESTABLISH FOCAL POINTS. The angle of reflection is equal to the angle of incidence. This rule will determine the placement of the fixture relative to the artwork. Fixture placement and aim provide the appropriate contrast between the artwork and its surrounding environment. "Generally," Thompson says, "we will let the light bleed out past the framed artwork, or at the very least, have it cover the frame so that you don't have an overly contrasting relationship between the artwork and the wall." Lighting artwork in a residential setting creates a focal point, which adds visual stimulus to the room. It also reflects light off the vertical surfaces, which contributes to the overall ambient light level of the space.

4. BE MINDFUL OF BOTH ULTRAVIOLET AND INFRARED LIGHT. One technology that has had a significant impact on art lighting is fiber optics. "UV light will travel deep into an object before it is absorbed and cause damage," explains Ruth Ellen Miller, president of NoUVIR, a fiber optic lighting company specializing in art installations. "We've also found that infrared damages; it changes the humidity level of objects. When you see a painting that is cracked or yellowed, that's IR damage." The solution is to use balanced visible light that includes all colors so that photons reflect off an object equally. For museums, the use of a fiber optic system, which removes both ultra violet (UV) and infrared (IR) light, allows collections such as gems and minerals, textiles/costumes, and documents to be exhibited far longer than previous curatorial methodologies understood. "If you remove all of the UV and IR, suddenly you greatly extend the life of the artifact," says Miller. "A document will last 40 times longer than it did under halogen or fluorescent lamps because there is no heat." Additionally, no heat means reduced amounts of dust, and therefore, no need to clean and move an object as frequently. Collection size also does not preclude the use of a fiber optic system, and many private collectors are beginning to employ this technology.



The unique roof panels at the Nasher (above) block damaging UV rays.

5. IN A MUSEUM, FOCUS ON THE COLLECTION, NOT INDIVIDUAL OBJECTS. While many of the concerns related to lighting a residential artwork are universal, museum settings offer additional considerations. Brian Stacy, a principal lighting designer who leads the New York Arup office, says that, like residential projects, it is important to understand the collection that will be on display. However, it is less important to design for and investigate each individual piece. "A lot of the proj-

ART LIGHTING 101: TECHNIQUES FOR ARTWORK IN ANY FORM

EXHIBIT DISPLAY CATEGORIES

- three-dimensional objects
- flat displays on vertical surfaces
- realistic environments
- display cases

THREE-DIMENSIONAL OBJECTS

- Use light from different directions to accentuate the shape and texture of the artwork on display. Diffuse light luminaires should be set first, at 10 feet from the centerline of the object. The distance of the directional light source should always be greater than the distance of the diffuse light source.
- Use directional light to add shadow and express depth, and diffuse light to add further detail in the shadows.
- Place object 3 feet above the floor plane on a high-reflectance pedestal. In plan, the edge of the pedestal should be set 5 feet from the placement line for diffuse and directional lights. A backlight lamp should be set back 12 inches from the pedestal edge.
- For small, low objects, the main source of illumination is best employed at a 30-degree angle.
- For large objects, use ambient diffuse light in combination with narrow-beam light to highlight the object on display.
- Aim luminaire downward, to minimize direct glare.
- Keep the light within the mass of the display object.
- Use indirect ambient light, such as a cove uplight, to provide an ambient light source to fill in shadows.
- Use recessed uplights to highlight and minimize shadows.

Technical information compiled from:

Egan, M. David, and Victo Olgay, *Architectural Lighting, 2nd Edition*. New York: McGraw-Hill, 2002.

Mark S. Rea, Ed. *Lighting Handbook, 8th Edition*. New York: IESNA, 1993.

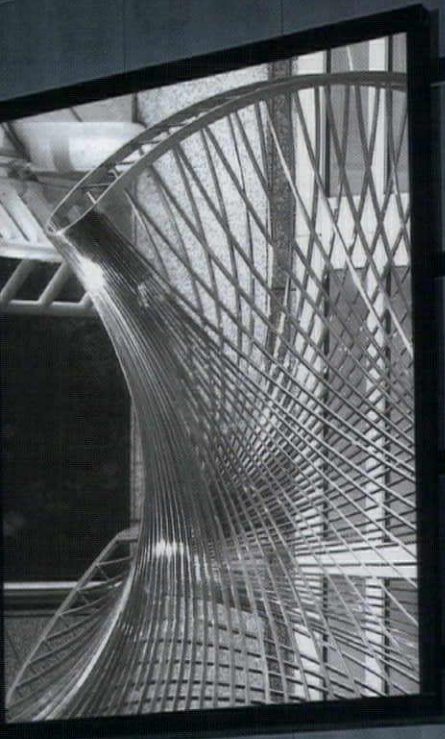
TWO-DIMENSIONAL OBJECTS

- Luminaire placement for lighting objects hung on a vertical surface is preferred at a 30-degree angle.
- A steep angle will emphasize texture, but in turn mute color and cause shadows if the artwork has a deep frame.
- Shallow angles enhance color, but flatten textures and may cause reflected glare.
- Use of a framing projector can make objects look internally illuminated. With framing projectors adjust light cutoff to precisely match the illuminated image.
- With adjustable fixtures, adjust beam spread to cover object.
- Include identification labels in spill light.

CASE LIGHTING

- Use light filters and glazing to reduce UV light on displays.
- Use cool light sources (fiber optic or fluorescent lamps) to reduce heat. Incandescent lamps generate too much heat for this type of installation and proximity to objects.
- If sparkle is desired in the display, use point sources.
- Cases can be lit internally two ways: either by a shielded source secured at the case mullions; or with a "light attic," a top section of the display that contains diffusing and/or directional sources, and louvers or diffusing glass to control the light. Both scenarios require ventilation to remove heat.
- Cases can also be lit externally. In this instance, the light source should be located behind the viewer and surroundings kept dim to minimize reflected glare; case mullions should not shadow objects; and ventilation should enable heat dissipation.

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**DARK SKY
COMPLIANT**

ects," Stacy explains, "focus more on developing a gallery shell and understanding what is an acceptable maximum light limit." Often, a variety of media will share a common exhibit space. This requires, according to Stacy, "a bit more thought into how you layer the light so that it doesn't look bright on one wall and dark on another. We try to keep the contrast ratio between the art and the wall at one to two, or one to three, which is often difficult."

6. INCORPORATE, BUT CONTROL DAYLIGHT. A combination of daylight and electric light is common in many museums today, a change from the designs of previous decades. This "black-box" approach relied solely on electric lighting, and centered on the idea that too much light would damage the artwork. Now a complex arrangement of controls and shading devices enables institutions to tap the benefits of sunlight, while providing protection from harmful UV rays. Stacy offers the Nasher Sculpture Center in Dallas as an example. This collection contains both painting and sculpture and incorporates a roof that is unique in its ability to block out the sun's harmful rays, while providing uniform and shadowless natural light. Consequently, the electrical lighting system's necessity is reduced which, in turn, means reduced building cooling loads and less maintenance.

Jessica N. Johnson is an architect in Raleigh, North Carolina. She received her Master of Architecture from North Carolina State University, and will begin a teaching fellowship there in the fall.



Studio Lux selected in-ground uplights to illuminate two pieces of sculpture in the garden area of a Seattle home. The fixtures create a dramatic effect with shadow and highlight (above).

PHOTO BY STEPHEN MCGEEHEE, COURTESY OF STUDIO LUX

AMAZING JOB!

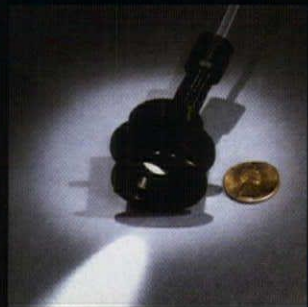
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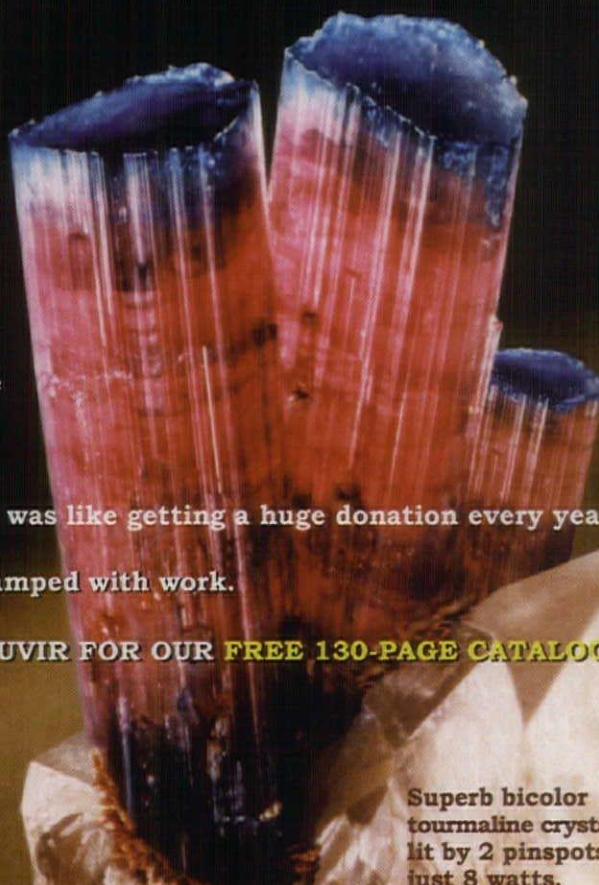
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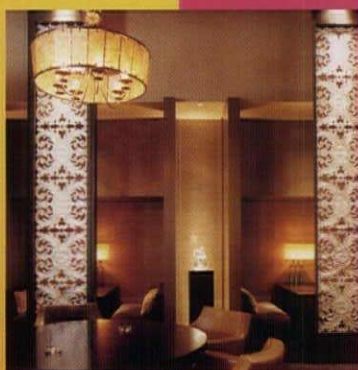
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LEED: What Does It Mean for Lighting?

NICOLA FERZACCA

ONE OF THE PRIMARY GOALS IN ESTABLISHING THE Leadership in Energy and Environmental Design (LEED) rating system was to transform the building construction market by creating a common standard of measurement for green buildings. Whether or not one agrees with the specifics of the rating system, it is hard to dispute the role LEED has played in raising awareness about sustainable design. As interest has developed, designers in all building fields have moved to understand how these design criteria affect their respective disciplines. Over the past six years, as newer iterations of the system have been implemented, there have been more opportunities to incorporate lighting elements into the rating system. Let's consider how the role of lighting is changing among the LEED systems.

LEED RATING SYSTEMS

Currently there are four LEED rating systems that address commercial construction: LEED-NC 2.1 (New Construction); LEED-EB (Existing Buildings); LEED-CI (Commercial Interiors); and LEED-CS (Core & Shell). The U.S. Green Building Council, the organization behind the development of the LEED program, calls these systems "products."

LEED 1.0 was released in 2000. As of November 2002, LEED-NC 2.1 is the current rating system in place for new construction and renovation; however, a draft version of LEED-NC 2.2 was issued for public comment in December 2004. In addition to the LEED-NC products, LEED-EB was released in October 2004. LEED-CI was released in November 2004 for certification of commercial interiors, and applies to interior tenant improvements of new or existing office space. The intent is that it complements LEED-CS, which addresses core and shell construction. LEED-CS was released as a draft version in September 2003, and has not been finalized to date.

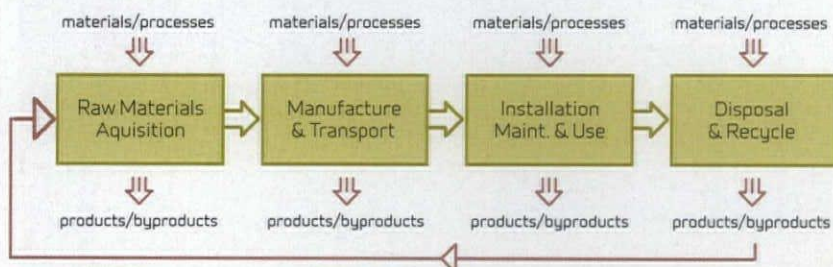
PERFORMANCE CATEGORIES

Of all the 64 potential credits in the current LEED-NC 2.1 rating system, Credit 8, "Light Pollution Reduction," in the Sustainable Sites category, is the only one that relies solely on lighting. There are three main components to this credit. First, to limit light levels by

meeting or providing lower light levels and uniformities than the IESNA *Recommended Practice: Lighting for Exterior Environments* (RP-33-99); second, to reduce skyglow by requiring luminaires with a lumen output greater than 3500 to be full cutoff; and lastly, to reduce light trespass by requiring luminaires within two-and-a-half times their mounting height from the property line not to produce light across that property line. Many of the light trespass and skyglow criteria are very similar to early light pollution standards put forth by the International Dark Sky Association, and when strictly conformed to, preclude some common lighting approaches. For instance, it is not uncommon to use a decorative style 175W metal halide fixture with cutoff optics. While cutoff optics significantly limit the output above the 90-degree plane, this fixture would not meet the criteria of this credit. Furthermore, the current wording of the credit has produced some confusion since there appears to be conflicts between IESNA RP-33 requirements and light trespass requirements. For instance, RP-33-99 describes lighting criteria relative to four different environmental zones ranging from wilderness and national parks (E1) to city centers (E4).

tions in the energy performance of a building, as compared to the base case of a building compliant with ASHRAE/IESNA 90.1-1999. It is important to note that this credit relates to total building energy performance. Certainly, lighting plays a major role in a building's energy performance, but in order to achieve the reductions required to meet LEED criteria, the design of HVAC systems, which contribute an equally significant if not greater percentage of a building's energy use, must also be seriously considered. There has been little change in this approach in the LEED-NC 2.2 draft version, other than updating the base building standards that reductions are measured against. LEED-CI however, provides up to three credits for reductions in lighting power density below ASHRAE/IESNA 90.1-200, and also provides direct credit for daylight-responsive controls. Given that the draft version of LEED-NC 2.2 was released in December 2004 and LEED-CI was released in November 2004, a mixed message is sent: Will future LEED rating systems only look at whole-building energy performance as in LEED-NC 2.2, or allow direct credits for lighting reductions, as in LEED-CI?

In the current Indoor Environmental



The life-cycle assessment process (above) is a systematic framework for understanding the impact a product has on the environment during its life cycle .

In the environmental zone E4, RP-33-99 limits the amount of light trespass across property lines to 0.6 footcandles, which seems in conflict with Credit 8. As such, in the draft version of LEED-NC 2.2, lighting pollution requirements are explicitly defined in relation to these four zones.

For LEED-NC 2.1 in the Energy & Atmosphere category, Credit 1, "Optimize Energy Performance," provides between 1 to 10 credits for achieving various reduc-

Quality category of LEED-NC 2.1, there are no direct credits for lighting systems. Under Credit 6, "Controllability of Perimeter and Non-Perimeter Spaces," credits are given for providing occupant controls, but the requirements consider lighting and HVAC together. The Credit 8, "Daylight and Views," requirements recognize the benefits of daylighting, but do not provide credit for its integration with electric lighting. In newer LEED products (LEED-CI and the draft version of LEED-

NC 2.2), direct credits are given for individual occupant lighting controls. Conspicuously missing are credits available for lighting quality. There has been much talk about providing credits for lighting designed to address the Chapter 10 matrix of design considerations in the IESNA *Lighting Handbook*, but this has not materialized to date. Regardless, this is not lost on the technical advisory groups developing this category, who will likely recognize lighting quality in some way.

In the LEED-NC and CI/CS products, lighting plays only a marginal role in obtain-

ing any credits in the Materials & Resources category. Under Credit 3, "Resource Reuse," and Credit 5, "Regional Materials," lighting products can be used in the calculations, but have minor impact. For instance, Credit 5 provides credit if a certain percentage of construction value is achieved using locally manufactured products. With lighting equipment making up roughly only 5 percent of the construction costs, it will not play a large role. Furthermore, under Credit 4, "Recycled Content," electrical and mechanical systems are explicitly excluded from the calculations. LEED-EB, on the other hand, has developed

a prerequisite for Reduced Mercury Content of Light Bulbs. The metric, picograms of Hg/Lumen-hr, is a newly derived unit meant to recognize long-life lamps while encouraging reduced mercury content. This prerequisite has been contentious due to the calculation requirements and the concern over discouraging the use of energy-efficient fluorescent lamps. The larger issue here is that the lamp is only one component of the luminaire, and while reduction of toxic materials should be encouraged, should mercury be used as a proxy for the full environmental impact of a luminaire? The Materials and Resource category is a sleeping giant when it comes to the subject of sustainability. Understanding how the production of building products affects the environment is a relatively new consideration in mainstream design, and performance metrics are still developing. Hence, there is little information on many systems, including lighting, and credits have been developed based only on information that is readily available, and are therefore not necessarily accurate.

The environmental impact of a product is best understood through a process called life-cycle assessment (LCA), which provides a method for evaluating the environmental burdens associated with the life cycle of materials and services from "cradle-to-grave," or preferably "cradle-to-cradle" (see diagram, page 57). LCA produces quantitative data on 12 impact categories (global warming, acidification, criteria air pollutants, eutrophication, water intake, fossil fuel depletion, ozone depletion, indoor air quality, smog, human health, ecological toxicity, and habitat alteration) resulting from raw extraction, production, use, and recycle and/or disposal of a product or system. Efforts are being made to incorporate LCA metrics into LEED, but it will be a while before such information is available.

It is not uncommon today to see Requests for Proposals requiring firms to address LEED criteria. State agencies are requesting permit applications answer questions related to sustainability, questions derived from LEED criteria. Some cities are even requiring that new buildings be LEED Gold certified. Marginalized in the beginning, lighting is playing a larger role in newer versions, a trend that will continue.

Nicola Ferzacca is the Electrical Department Manager at Symmes Maini & McKee Associates in Cambridge, Massachusetts. He holds a M.S. in Lighting from RPI. Currently, he is serving as chairman of the IESNA Sustainable Lighting Committee, and vice president for the New England IESNA Chapter.

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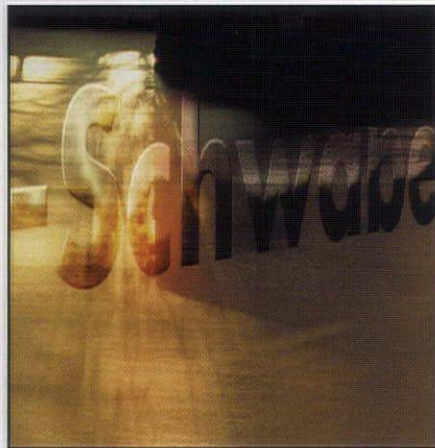
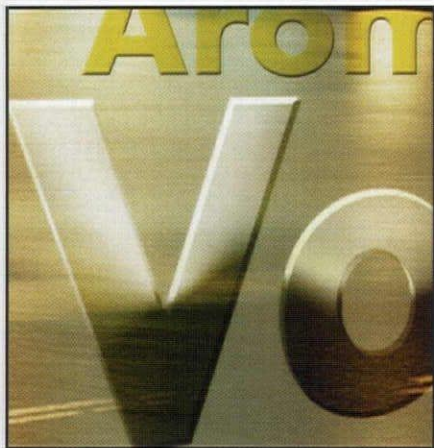
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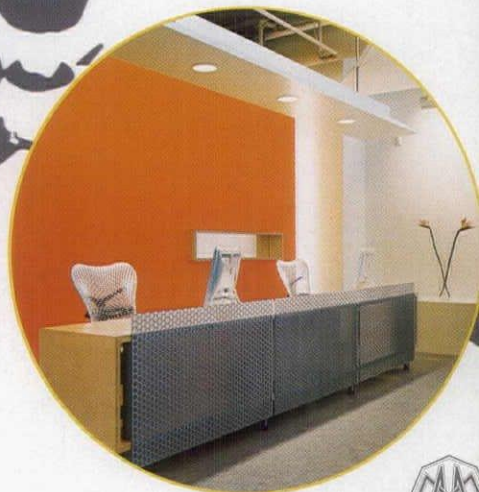
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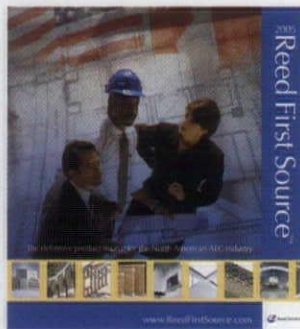
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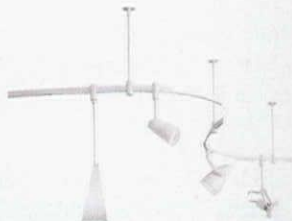
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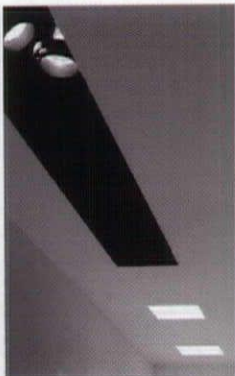
Tech Lighting

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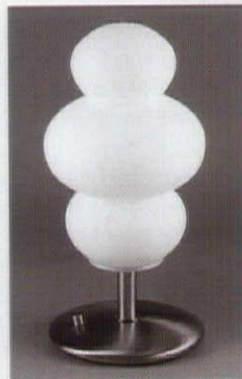
Space Lighting

At Viabizzuno, the true protagonist is the light: it gathers around its experience, knowledge and research. Viabizzuno's design concept is identified with a white page: the two lines are separate but complementary, exactly like the two Viabizzuno collections, *for m* (architectural) and *Alvaline* (decorative). An example, *USA7* a trimless delight. For information, please call 305.477.4411 or visit www.spacelighting.com. **CIRCLE 133**



Wilshire Manufacturing

Wilshire's new Sogno collection combines sleek metalwork with hand-blown glass to make each piece a contemporary design element. We work with designers to create designs that emulate their unique vision. Sogno represents European styling and quality at very affordable prices. Perfect for guestrooms, common areas, restaurants and high-end residential. For more information,



call 800.443.4695 for more information. **CIRCLE 136**

PAGE	ADVERTISER	CIRCLE NO.
49	.....ARCAT	17
18	.....Architectural Area Lighting	34
17, 61	.....Bartco Lighting	49, 125
43	.....Beta Lighting	64
16	.....B-K Lighting	7
44	.....Con-Tech Lighting	73
53, 61	.....Cooper Lighting	41, 126
4	.....Delray Lighting	40
C3	.....Elliptipar	6
61	.....Eurofase	127
61	.....First Source	128
22	.....Gardco Lighting	98
7	.....GE Consumer &Industrial Lighting	19
56	.....HD Boutique	14
2-3	.....Hubbell	120, 121, 122, 123, 124
C4	.....Holphane Corp.	43
50	.....Insight Lighting	74
15	.....Kim Lighting	12
61	.....LBL Lighting	129
61	.....Leucos	130

PAGE	ADVERTISER	CIRCLE NO.
14	.....Light Craft	103
63	.....Light Emitting Diodes 2005	86
8	.....Lightolier Controls	35
5	.....Lithonia Lighting	77
24	.....Lumec	36
62	.....Luraline Products Co.	131
C2-1, 55	.....Lutron Electronics	9, 60
60	.....Merchandise Mart (NeoCon East)	87
62	.....Meyda Lighting	132
54	.....NoUVIR Research	24
13	.....Precision Architectural Lighting	54
19	.....Schott North America, Inc.	55
20	.....Semper Fi Power Supply	96
58	.....Sentry Electric Corp.	56
62	.....Space Lighting	133
62	.....Studio Italia Design	134
62	.....Tech Lighting	135
23	.....Universal Lighting Technologies, Inc.	3
59Vossloh-Schwabe	5
10The Watt Stopper	27
62Wilshire Manufacturing Co.	136

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INTERTECH

The Struggle over Project Photography

Project photography—who pays for it, who ultimately owns it, and who can use it—is a contentious issue. Few lighting designers can afford the fees, and hence are dependent on the architecture firms for photos, which often means a project is not well represented from the lighting perspective. The pho-

tography budget is generally under-funded in the trade press. And yet, design photographers provide a valuable service; not to mention, their right to make a living. Is there a solution to this conundrum? Whose responsibility is it? Should manufacturers contribute dollars toward the cost?

 more information at
WWW.ARCHLIGHTING.COM

ERIK CONROY, DIRECTOR OF MARKETING | ENERGIE

Our dilemma lies in finding projects to photograph, not deciding whether or not we should contribute to the cost. Application photography can be one of the most effective means to promote and sell our products. However, due to the structure of the commercial architectural lighting industry and the layers of organizations between the manufacturer and the end result, often we know very little about the finished project and the overall outcome. Given this, we struggle with whether to ask our agency reps to spend time visiting projects, taking pre-photos, and sending them to us, versus spending time in the field actually selling our products. With this said, designers who cannot afford photography should ask the manufacturer if they would share the cost. Contact your local agency representative, tell them you have a project that shows a given fixture applied well, and send a few digital shots. Most manufacturers would be happy to take a look!

DANIEL E. EDENBAUM, PRESIDENT | DRAGO ILLUMINATION

Hopefully we can all agree that lighting is the single most important thing when it comes to architectural photography. As a start-up company that needs to build its portfolio, photography is doubly important to me. I try to include a photography clause in my contract, and even offer fee reduction incentives if I think it will help the client agree to allow the project to be photographed.

Unfortunately, lighting designers tend to be at the bottom of the totem pole when it comes to having a budget to adequately photograph a project. AE firms and manufacturers have bigger budgets, but accommodating so many parties can get complicated. What I have found works best is for the lighting designer to be the point person directing the photographer. However, each company who is interested in photos should have a separate agreement for copies and their own usage rights with the photographer.

I only work with photographers who grant full rights without charging a small fortune, and refuse to use photographers who charge for every single usage. That would be like me charging a client every time they turned on the lights.

DOUGLAS A. SALIN, ARCHITECTURAL LIGHTING PHOTOGRAPHER

The digital world has changed the outcome of high-quality architectural lighting project photography. Today almost anyone can pick up an inexpensive digital camera and shoot a mediocre image. With minor knowledge of Photoshop, these can be transformed into something somewhat serviceable.

Many professional architectural photographers are leaving the business. Who needs them? They charge too much and are too restrictive with the rights to images. But a professional photographer cannot make a living on a \$100 sale to a magazine. Trade magazines rarely have the budget to pay for images. As a courtesy, I support the trade by providing images gratis for editorial purposes, though I charge nominally for cover shots.

MICHAEL WYPASEK, ADVERTISING MANAGER | PARAMOUNT INDUSTRIES

I have worked with photographers in three general scenarios: 1) If I pay for the photos, I own them outright. The photographer has permission to use them as portfolio samples to sell his own services. 2) The photographer owns the copyright to the photos and grants me unlimited usage for a one-time fee, as long as I run a copyright notice for him. 3) The photographer maintains ownership and grants me rights limited to a specific use, time period, or size.

Maybe my view is colored by my role as a writer and designer, because my work is always "for hire"—owned by my employer or client. I don't necessarily sympathize with photographers who have an inflated estimate of the importance of their work, but I do value their work. I don't want to get soaked by suppliers; but if their work is good, it will make our company look good, so they deserve to be paid adequately for their skilled service. Manufacturers should contribute towards the cost of photography. They profit from it, so they should help foot the bill. Good photography sells product.

MICHAEL ROGERS, LIGHTING DESIGNER AND ENGINEER | ABS CONSULTANTS

One solution, if possible, is to do the photography yourself. We have found that most building owners and tenants do not mind an additional photo shoot if it is properly arranged. By taking my own photos, I have control over the composition and quality. Photography of architectural lighting isn't easy to do, but does pay off with practice, and we currently use our own photos for our website and brochures, with no copyright or ownership issues.

ELLIOTT KAUFMAN, PHOTOGRAPHER | ELLIOTT KAUFMAN PHOTOGRAPHY

The photographer always holds copyrights to all images and only those who have participated in the initial shoot can use them as stated unless further permission is given. A disciplined photographer states unambiguously in his initial proposal/agreement what the limitations of usage are. Those who have entered into the agreement can use the images in only those ways. If additional parties want usage after the shoot, they must go directly to the photographer, as he/she is the only one who can grant additional usage rights. If a participating firm sells the images, or gives permission to use them to a non-participating firm, this becomes a sticky licensing problem at the least, and an invasion of copyright at the most.

Architectural photography can be an enormous undertaking and requires years of experience to successfully capture the essence of design, interiors, and particularly lighting characteristics and personalities. If lighting designers (and other specialists like contractors and manufacturers) participate in the initial shoot, they can be part of the decision of what is photographed and how it is shot. Lighting designers can provide their unique perspective so that the photographer's orientation includes the project's critical aspects, particularly how the lighting story can be captured. It seems clear that given the creative skill, time, and money invested in lighting, documentation of the same should be a basic investment budget line for every project the lighting designer holds dear.