

A R C H I T E C T U R A L

LIGHTING

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JULY/AUGUST 1995 \$6.00



1995 IALD Awards

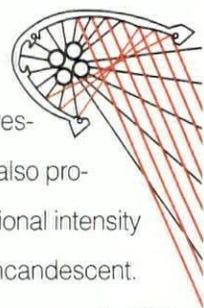
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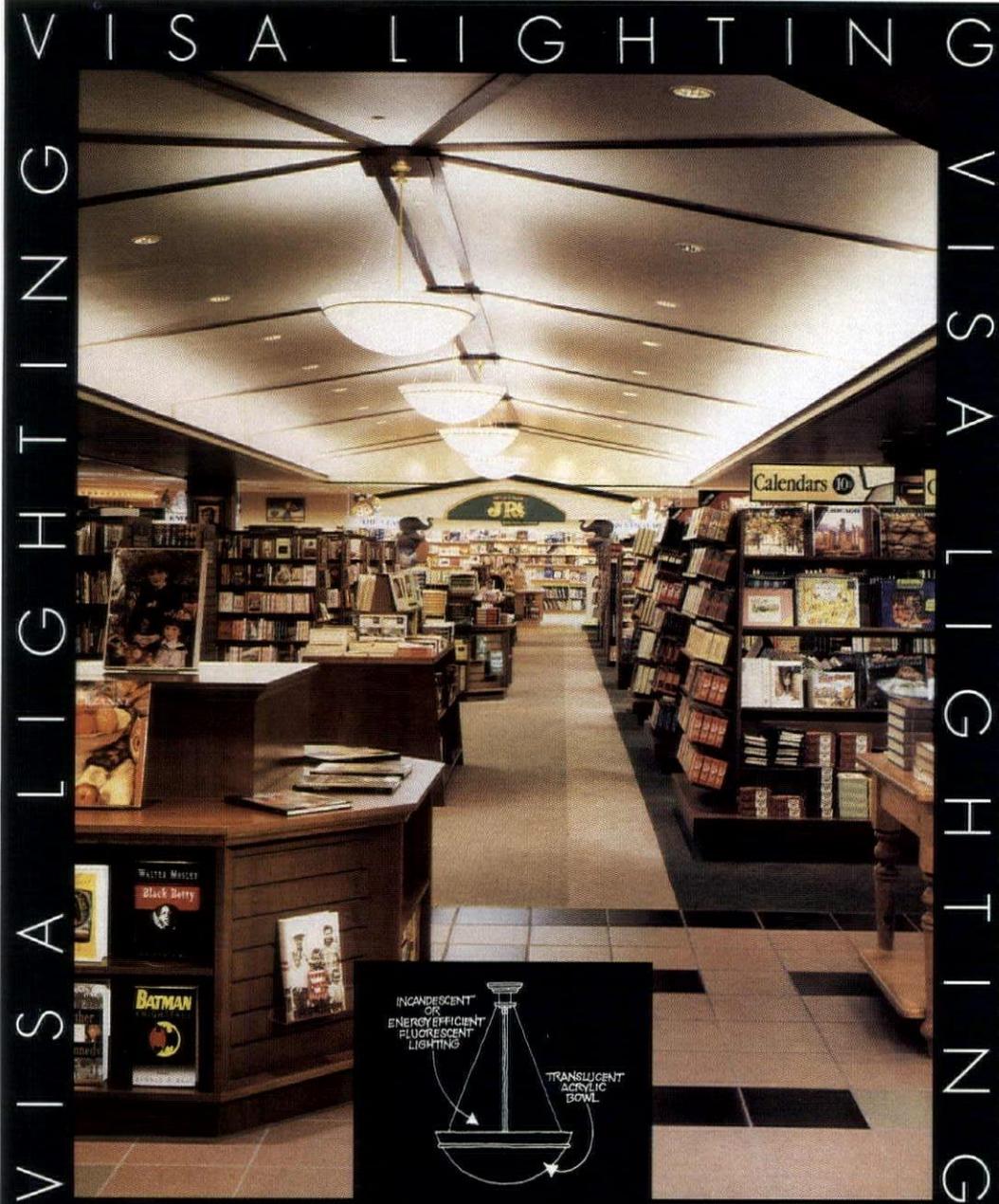
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VISA CP3024 pendants installed at the Barnes & Noble Superstore, Rockford, IL.

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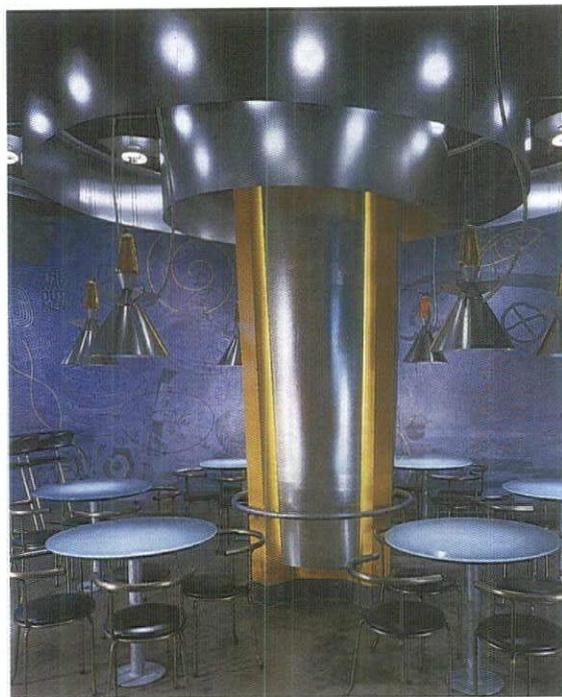
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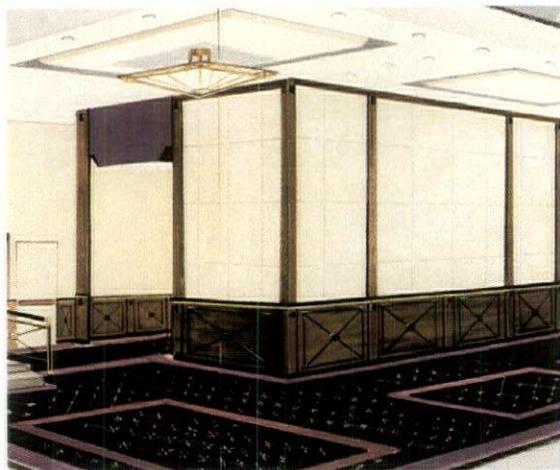
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LIGHTING

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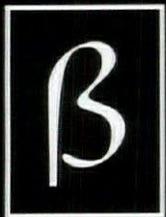
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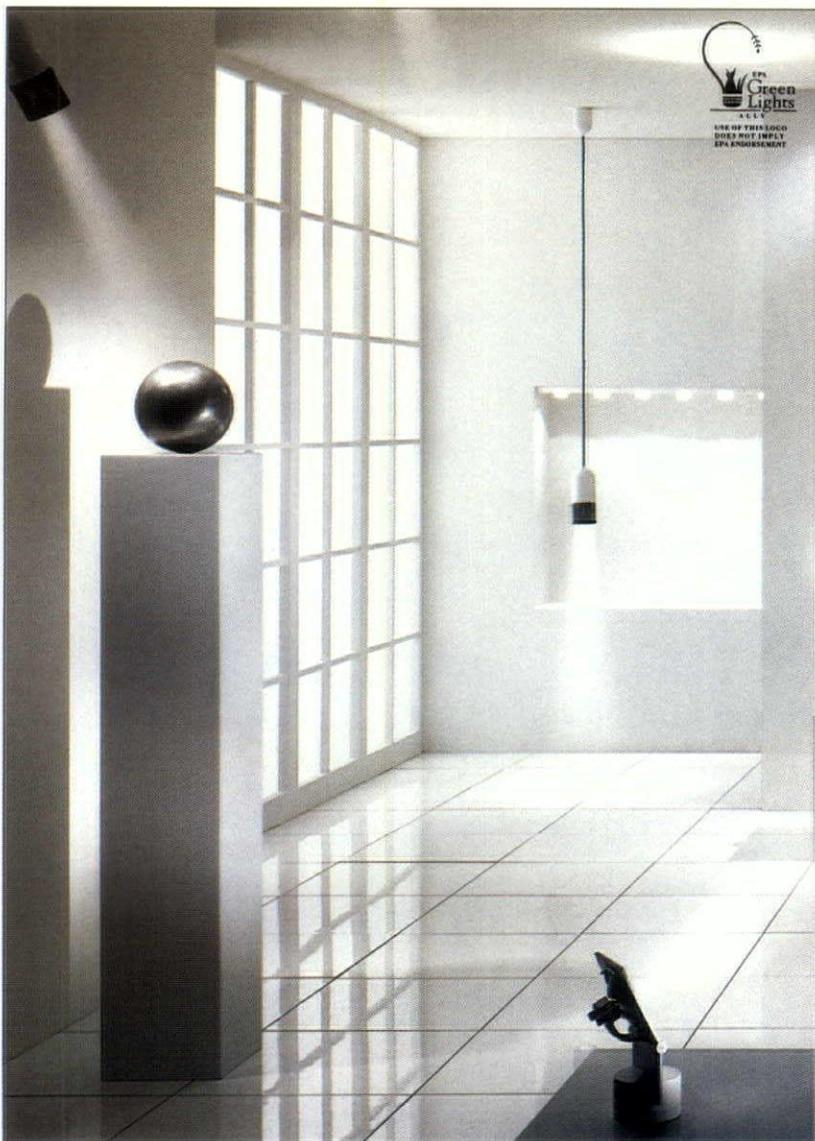
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LIGHTFAIR FULL OF OPTIMISM, CONFIDENCE

After another year of a healthy economy, booths were busy and seminars were packed amid an optimistic, confident atmosphere at Lightfair International in Chicago on June 7-9. Some 11,000 lighting professionals registered for the show, and more than 315 manufacturers representing all major product categories exhibited. *Architectural Lighting* played a special role in two events: as cosponsor of the IALD Lighting Awards and sponsor of the New Product Showcase.

The IALD Awards recognized 15 of the industry's leading projects, featured in this issue. An Award of Excellence honored "Ahmanson Theatre," E. Teal Brogden, IALD and Becky Bowen of Horton•Lees Lighting Design Inc., and another recognized "Santa Barbara Courthouse," Ross De Alessi, IALD of Ross De Alessi Lighting Design. Thirteen projects received Citation Awards.

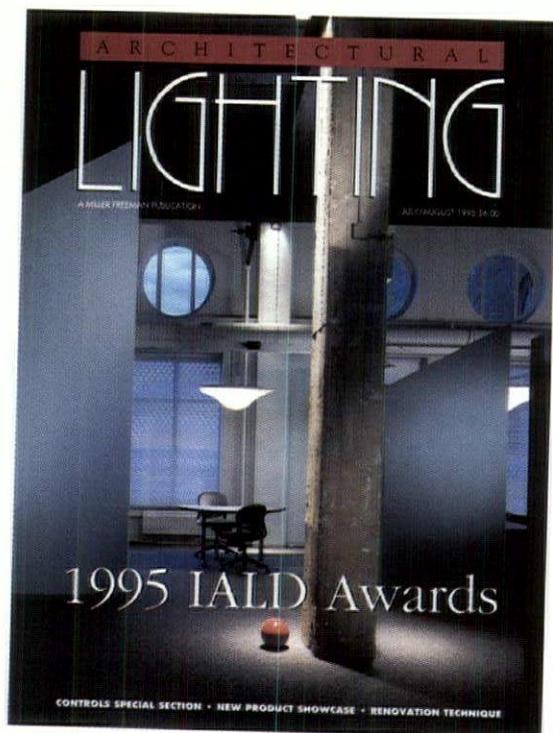
On Thursday, lighting professionals packed the popular New Product Showcase. A total of 89 products were showcased and a select group of products across a broad range of categories received Awards of Distinction. Philips Lighting Company's Master Color Metal Halide Lamps line received top honors with the first-ever Best New Product of the Year Award.

The controls community was certainly well represented at Lightfair, offering today's lighting professional extraordinary opportunities in energy conservation and aesthetics. In this issue, we review the state of the art in control technologies in an extensive special feature plus a controls product guide.

On a final note, I would also like to announce several positive new developments at *Architectural Lighting*. Managing Editor Christina Trauthwein has been given the added responsibility of managing our popular design features section. Lyndon Lorenz, who serves as art director for

our sister publication *Facilities Design & Management*, has joined the team as creative director. And Joseph Proscia, a new sales associate, has carved out his own territory in the South (TN, SC, MS, LA and WV) so that *Architectural Lighting* can provide even more intensive support to manufacturers who wish to build sales relationships with the magazine's readers.

It was a pleasure seeing so many familiar faces at Lightfair and meeting many new people for the first time. It was certainly a warm welcome. Continue to keep us informed about your expectations of the magazine, your best projects and your observations about the lighting industry—we're always listening.



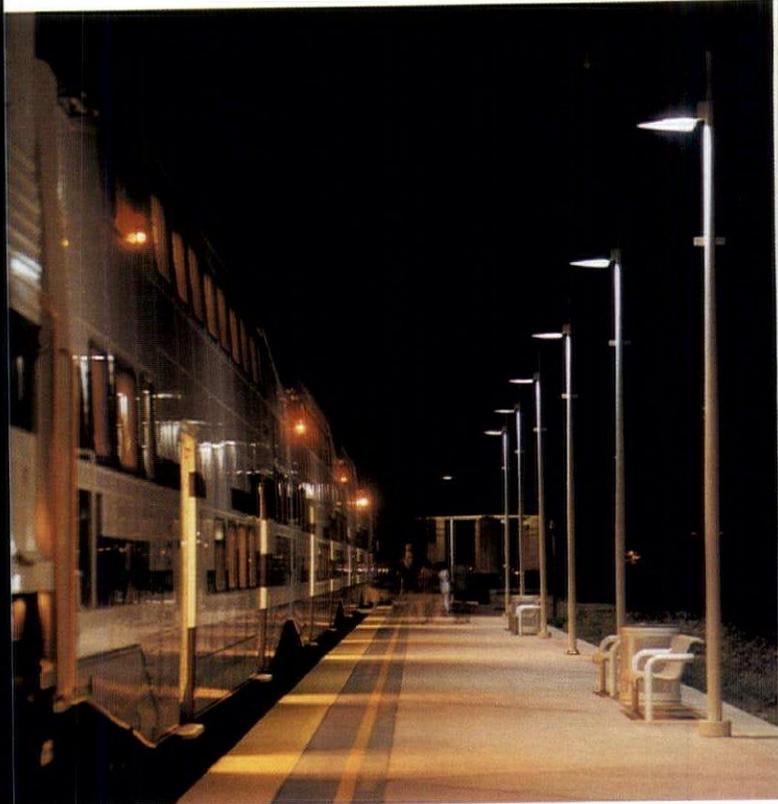
CRAIG DILOUIE
EDITOR-IN-CHIEF

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The Rancho Cucamonga, California, Metro Rail Station*
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BROGDEN WINS EDISON AWARD

Top honors in GE Lighting's 13th annual Edison Award competition for excellence in lighting design went to E. Teal Brogden, IALD, design principal for Santa Monica, CA-based Horton•Lees Lighting Design, Inc., and her assistant, Becky Bowen. The relighting of the Ahmanson Theatre in Los Angeles was the winning entry which, according to the judges, incorporated a quality, modern design that brought ambiance and sophistication to the theatre's interior. Brogden capped this achievement by receiving an Award of Excellence from the International Association of Lighting Designers' annual IALD Lighting Awards (see page 2 of the IALD Awards in this issue).

NATIONAL LIGHTING BUREAU ANNOUNCES 1995 AWARDS

The National Lighting Bureau (NLB) has announced its 16th annual National Lighting Awards Program, established to recognize lighting applications that demonstrate the value of

quality electric illumination. According to the NLB, the goal of the awards program is to publicize case histories illustrating the benefits of good lighting, such as increased productivity, sales, safety and security. The project must have been completed on or after January 1, 1993 to be eligible. Entries must be received by October 13, 1995. For more information, contact the NLB at (202) 457-8437.

SEATTLE DESIGN CENTER SEMINARS

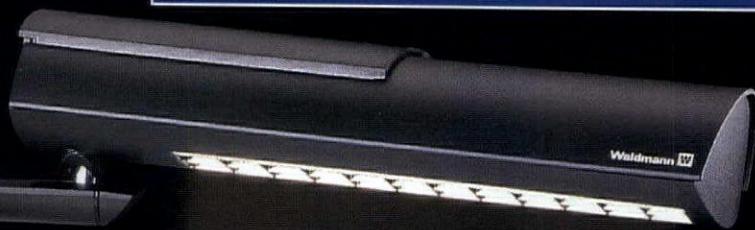
Seattle Design Center presents the following Talk of the Trade series:

- September 7, Seattle: "1996 Color and Design Trends"; speaker: Leatrice Eiseman
- September 14, Portland, OR; September 21, Vancouver, B.C.: "Lighting Design for Residential Interiors"; speaker: Jim Benya, PE, FIES, IALD

Call (800) 497-7997 or (206) 762-1200 for details.

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Ergonomic task lighting solutions for the 21st century.



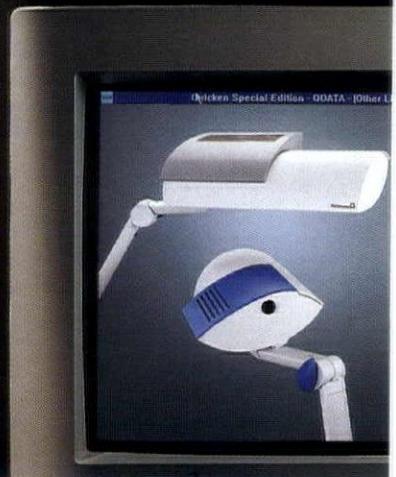
Introducing Roma: Its innovative design and superior technology set new standards for the VDT office. The Roma features a sleek fully articulating arm and new swivel joint connected to the base of the head which permits maximum rotation and positioning. The aluminized parabolic louver directs light evenly over work surfaces and virtually eliminates VDT glare and reflection.

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THEATRE LIGHTING SEMINAR TO BE HELD

Broadway Lighting Master Classes '95 will be held October 12-15, 1995 in New York City's John Jay College Theatre and Mayflower Hotel. The seminar will focus on the current and future design philosophy of stage lighting, with emphasis on creativity. Topics include lighting for opera, special effects, color in lighting and computers in theatre lighting, hosted by speakers including Jules Fisher, Abe Feder and the faculty of leading Broadway Lighting professionals. For more information, call (212) 787-0389 or fax (212) 721-0979.

INTERPLAN ANTICIPATES RECORD ATTENDANCE

Interplan, the interior planning and design exposition, will be held November 1-3, 1995 at the New York Coliseum in New York City. Cosponsored by Designer's Saturday, Inc. and Miller Freeman, Inc., a publisher of three contract interiors magazines including *Architectural Lighting*, Interplan drew 8,500 design professionals last year and anticipates 10,000 this year.

Educational programs are expanded 30 percent this year to include five tracks (32 sessions) on interior planning and design trends; interior product trends; facility development trends; facility/space management trends; and career development.

Three lighting sessions will cover the integration of

electric lighting and daylighting, fiber optic applications and a panel on energy conservation problems/solutions.

Interplan also reported that more than 150 exhibitors have committed to booths, including Luxo Corp., Waldmann Lighting Co., Nora Lighting and Century Lighting.

To receive a complete listing of educational programs, or to receive other information about exhibiting at or attending Interplan, call (800) 950-1314.

VTI ACQUIRES NEONIX

In March, Voltarc Technologies, Inc. (VTI), a manufacturer of neon and fluorescent sign components, wiring devices and specialty lamps, announced that it acquired Neonix, Inc., a manufacturer of solid-state power supplies for neon signs. VTI will continue to market Neonix products under the Neonix brand, while all operations have been consolidated into VTI's facility in Fairfield, CT.

FDG GAINS NEW CLIENTS

New York City-based Fitzpatrick Design Group (FDG) announced the firm has been retained by Saks Fifth Avenue to design the ninth floor of its New York flagship store; Bon Ton (based in York, PA) to design a new store in Greece Ridge Mall in Rochester, NY; and Clarks International to create a new prototype design/concept for the British company's new Super Shoe Store.

Continued on page 14

The Lab of the future needed technology for the future.

National Renewable Energy Laboratory's new Solar Energy Research Facility, Golden, Colorado.



RTL task light with integrated occupancy sensor

Garcy|SLP provided it.

Garcy|SLP is proud to be a part of the Solar Energy Research Facility. It is the federal government's showcase for cutting edge, energy saving technologies.

As part of its energy efficient lighting system, SERF selected Garcy|SLP task lights with integrated occupancy sensors. The sensor conserves energy automatically by turning the task light off when it's not needed. SERF also added T8 energy saving lamps to enhance their lighting energy efficiency.

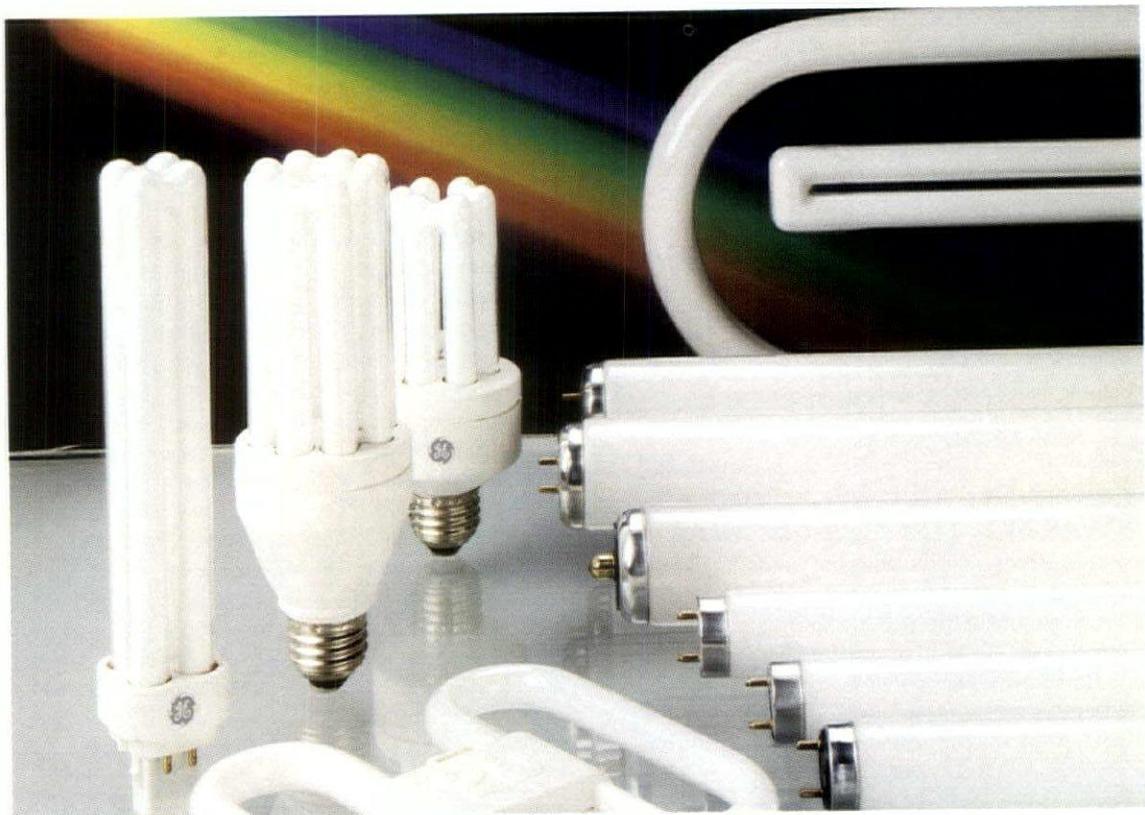
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Las Vegas Hilton's new exterior lighting incorporates 175 1,500W Sylvania Metalarc metal halide lamps mounted in five types of narrow-beam fixtures.

WHILE LAS VEGAS HILTON SPARKLES, JRY IS AWARDED ANOTHER CONTRACT

The Las Vegas Hilton, located adjacent to the Las Vegas Convention Center, is a 30-story tower housing 3,174 rooms and suites. When originally opened, the Hilton was painted beige and lighted with 400W high-pressure sodium lamps mounted one floor above the pool deck. By 1988, the hotel expanded, was repainted white and was relighted with 400W metal halide lamps on a 12-ft. setback to light the exterior.

As the hotel continued to expand, so did the exterior lighting to 1,000W metal halides. Even with the 1,000W lamps, however, the 12-ft. setback didn't provide the look the property needed, according to Jack Young, president of John Renton Young Lighting & Sign (JRY).

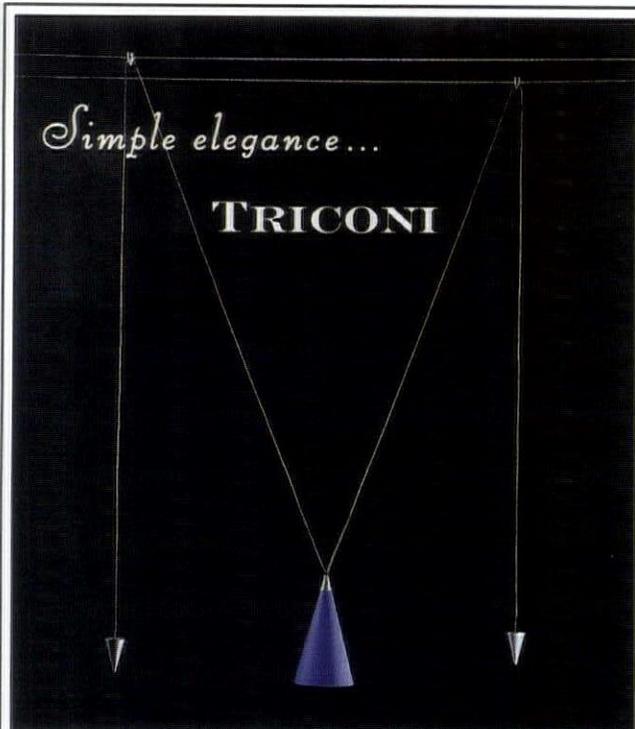
Young demonstrated an alternative lighting design with a 30-ft. setback to the satisfaction of the Hilton's management team. The new exterior lighting incorporates 175 1,500W Sylvania Metalarc metal halide lamps mounted in five types of narrow-beam fixtures. Set four, five or six lamps per 20-ft. pole, on a 30-ft. setback, the lamps provide 18 to 22 fc (maintained), depending on location. The new three-phase 277/480V lighting system operates from dusk to dawn, year-round, and is controlled by a photo electric cell.

Said Young, "Everyone is pleased with the exterior lighting. We got the quality illumination we wanted and the structure really stands out against the skyline."

In further news, JRY reported it was awarded the exclusive lighting design contract for New York, New York, a new \$300 million casino/resort scheduled to open in 1996 in Las Vegas.

JRY's challenge will be to create an ambiance that entices the more than 28 million visitors who come to the "city of lights" every year. Among Las Vegas' themed casinos, New York, New York will be the first to emulate a major metropolitan city—creating an impressionistic design of New York City.

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NEW FOR KABLE LITE

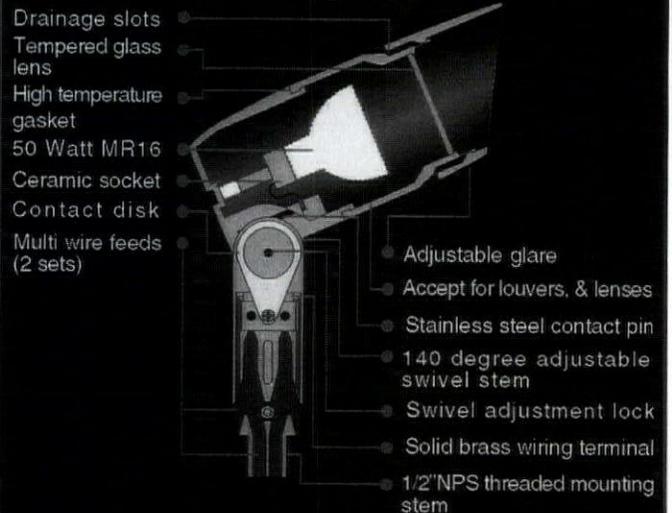
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ACCENT DOWNLIGHTS



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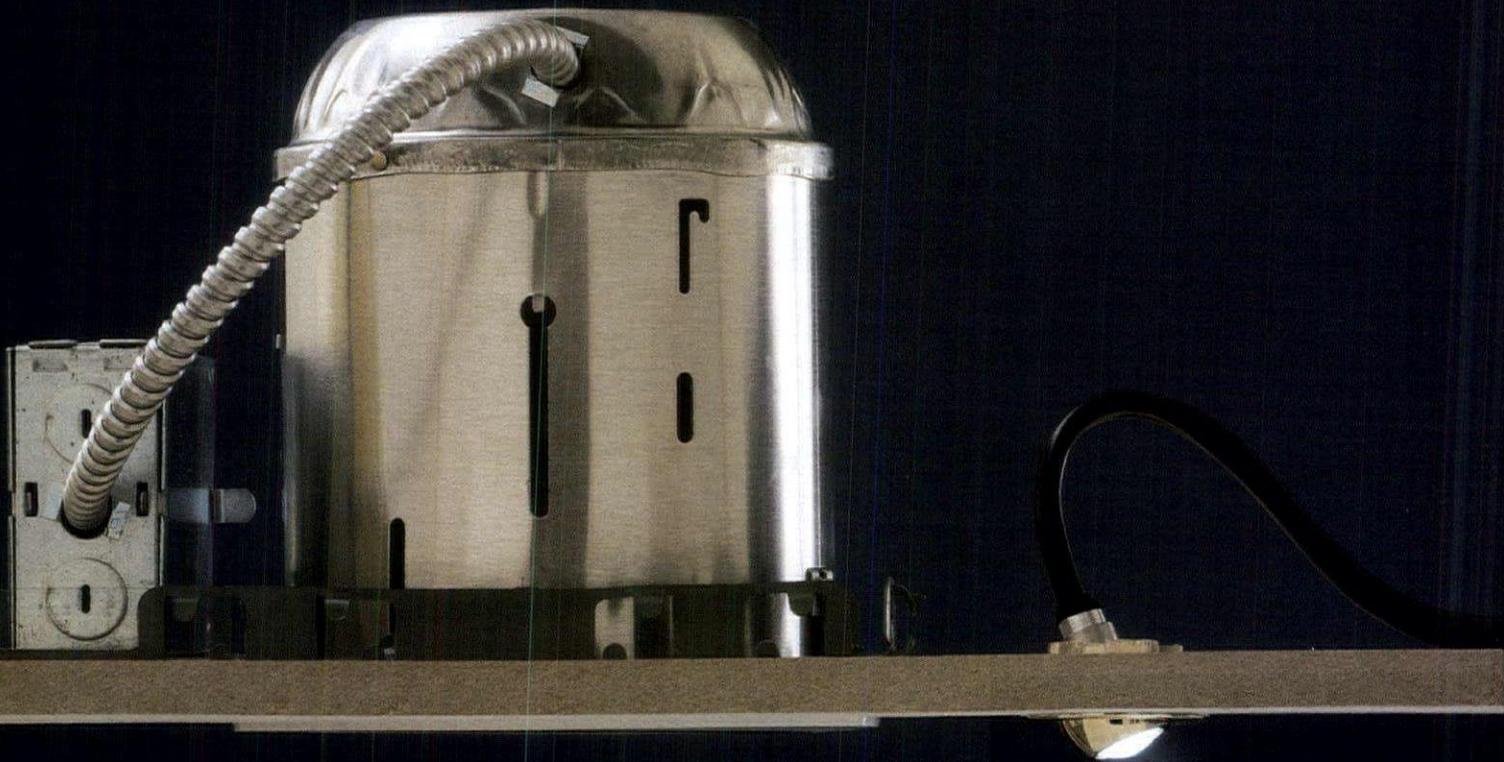


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SUPERIOR BUYS PESCHEL HID CONTROL LINE

An agreement has been reached between Peschel Energy, Inc. and Superior Electric for the purchase of the Peschel Energy HID Lighting Control product line, according to Philip J. Weis, division general manager of the Warner Electric Linear Motion & Electronics Division of Dana Corporation. The purchase involves the transfer of all design and manufacturing from California to the Superior Electric facility in Bristol, CT. Peschel will remain involved in sales and marketing functions for an indefinite period.

THE INTERNET LIGHTS UP

The Electronic Resource Network of Architecture, Engineering and Construction (AECNET)—an on-line and Internet information resource accessible via direct dial-in or the Internet—has signed agreements with the International Association of Lighting Designers (IALD), the Illuminating Engineering Society of North America (IESNA) and the Lighting Research Center (LRC). IALD and IESNA members are able to access technical and professional information in both public and reserved areas. Members are also able to communicate to each other in the electronic forum. Under another agreement, LRC will place many of its reports and publications on-line in the LIGHTNet area of AECNET in the near future. In addition, the LRC will be

accessible to AECNET users via e-mail and in dedicated message forums and conference areas on-line. For more information, contact AECNET at (800) 9AECNET, fax (516) 754-5772 or e-mail info@aecnet.com.

...In other Internet news, the GE Lighting Institute has established a unique Internet site on the World Wide Web at www.ge.com. The site offers a complete visual tour of the Institute's architecture and lighting education and training facilities physically located at GE Lighting's world headquarters at Nela Park in Cleveland. The GE Lighting Web also provides a schedule of events, information about conferences and registration forms for those desiring to attend. For more information, contact GE Lighting at (216) 266-9000 or TKMcGowan@mail.light.ge.com.

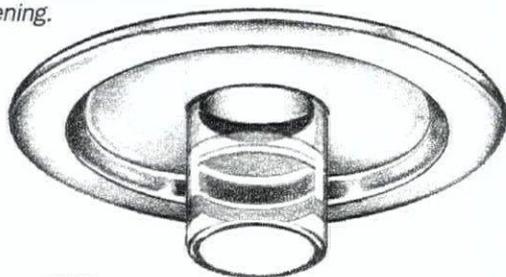
LIGHTING COMPANY MOVES

Lighting Corporation of America, formerly Hanson Lighting Group, has relocated its international headquarters to Birmingham, AL from Atlanta. Lighting Corporation of America, a \$500 million company employing more than 3,500 people, is comprised of Columbia Lighting, Kim Lighting, Moldcast Lighting, Prescolite, Progress Lighting and Spaulding Lighting. According to Lighting Corporation of America, Birmingham was chosen due to the city's business climate and because several of the company's 14 manufacturing plants are located in the South.

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MITSUBISHI INVESTS IN FIBERSTARS

The \$169.3 billion Mitsubishi Corporation and its American subsidiary, Mitsubishi International Corporation, announced an investment in Fiberstars, Inc. of Fremont, CA to further develop the emerging world market for fiber optic lighting products. Under the agreement, Mitsubishi will distribute Fiberstars products in Japan, cooperate with Fiberstars on R&D and supply Fiberstars with plastic optical fiber for conversion into a range of commercial and residential indoor and outdoor lighting products.

Market growth for fiber optic lighting products is expected to average 30 percent annually and will have an increasing impact on the \$30 billion annual world lighting market, according to Fiberstars, Inc.

CORRECTION

The location of Poulsen Lighting, Inc. was incorrectly identified in the April/May 1995 issue (page 61). The company is located in Miami. *Architectural Lighting* regrets the error.

12th ANNUAL IALD LIGHTING AWARDS

“THE QUALITY OF THE WORK IS OUTSTANDING. SO MUCH EXCITING AND INNOVATIVE WORK IS BEING DONE BOTH IN THE U.S. ALL AROUND THE WORLD.”

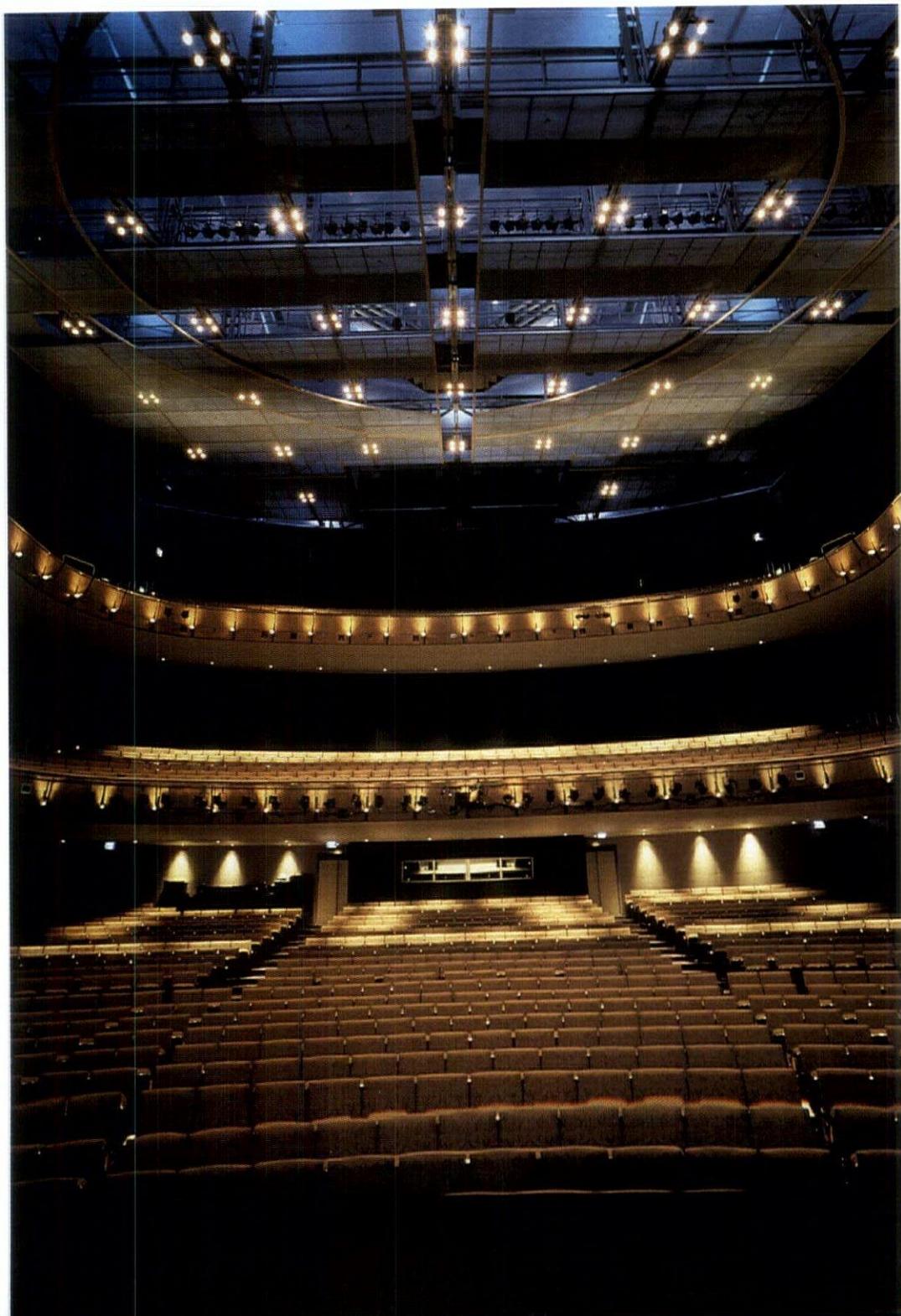
—Steven Hefferan, IALD, 1995 Awards Committee Chairman

THE INTERNATIONAL ASSOCIATION OF LIGHTING DESIGNERS (IALD) HAS AWARDED 15 LIGHTING DESIGNERS FOR THEIR OUTSTANDING LIGHTING SOLUTIONS AND CREATIVE TECHNIQUES. THE IALD AWARDS, CO-SPONSORED BY ARCHITECTURAL LIGHTING, RECOGNIZES LIGHTING INSTALLATIONS THAT DISPLAY HIGH AESTHETIC ACHIEVEMENT BACKED BY TECHNICAL EXPERTISE, AND EXEMPLIFY A SYNTHESIS OF THE ARCHITECTURAL AND LIGHTING DESIGN PROCESS. ■ THE 1995 IALD AWARD WINNERS INCLUDE EVERY TYPE OF LIGHTING INSTALLATION, FROM RESTORATION AND RENOVATION TO NEW CONSTRUCTION OF BOTH INTERIOR SPACES AND THE EXTERIOR OF STRUCTURES. IN EACH CASE, LIGHTING DESIGN PLAYS A MAJOR PART IN ACHIEVING THE TOTAL DESIGN GOAL OF EVERY PROJECT. ■ THIS YEAR'S PROGRAM RECEIVED 110 SUBMISSIONS FROM ALL OVER THE WORLD—INCLUDING NORTH AND SOUTH AMERICA, EUROPE, ASIA, AUSTRALIA AND NEW ZEALAND—WITH TWO SOUTHERN CALIFORNIA PROJECTS RECEIVING THE TOP AWARDS OF EXCELLENCE. ■ THIRTEEN IALD CITATION AWARD WINNERS INCLUDE PROJECTS THAT RANGE FROM RELIGIOUS, CULTURAL AND FINANCIAL LANDMARKS TO AIRPORTS, A CONVENTION CENTER, A HOTEL LOBBY, AN ADVERTISING AGENCY, TV FILM PRODUCTION OFFICES AND A BAGEL CAFE. ■ ESTABLISHED IN 1969, THE NEW YORK CITY-BASED IALD IS AN INTERNATIONAL ORGANIZATION DEDICATED TO THE PROFESSIONAL ARCHITECTURAL LIGHTING DESIGNER. COMPRISED OF 450 MEMBERS THROUGHOUT NORTH AND SOUTH AMERICA, EUROPE, ASIA AND AUSTRALIA, THE IALD'S ROLE IS TO PROMOTE THE LIGHTING DESIGN PROFESSION AND TO ADVANCE LIGHTING DESIGN EXCELLENCE IN THE BUILT ENVIRONMENT. ■ FOR INFORMATION ABOUT MEMBERSHIP OR TO RECEIVE INFORMATION ABOUT THE 1996 IALD AWARDS PROGRAM, CONTACT MARIA BECERRA, THE IALD'S EXECUTIVE ADMINISTRATOR, AT (212) 206-1281. ■

1995 IALD AWARD OF EXCELLENCE

Ahmanson Theatre

LOS ANGELES





For the renovation of the Ahmanson Theatre in the Los Angeles Music Center complex, the innovative lighting design takes center stage. Santa Monica-based Horton•Lees Lighting Design Inc. transformed an uninspiring 1960s “black-box” auditorium into an intimate, intriguing home for the city’s performing arts community. According to the IALD Awards judges, the installation shows the “creative use of simple technology and well-integrated design.”

The budget and energy-conscious lighting concept, developed by Horton•Lees principal E. Teal Brogden, IALD, ultimately influenced the redesign of the hall. Simplicity was key to the design, and the team chose to use uplight and downlight as the only elements to light the space.

To add some illusion and visual appeal, Horton•Lees employed a diaphanous scrim of finely-perforated metal floats above the audience to create a transparent, yet solid, chandelier. A combination of colored dichroic light shining onto a specially painted ceiling adds a sense of mystery. Medium base porcelain sockets positioned on the catwalk/scrim structure provided a budget-conscious solution to lighting the area.

Groupings of four 50W PAR30 HIR lamps add sparkle, texture and detail to the ceiling, and provide a comfortable 25 fc of light for

the audience, which is seated 50 ft. below.

PAR20 track fixtures mounted in architectural slots scallop the warm wood veneer and underlight the perforated metal ceiling scrim. This layering of light is also used in the plaza and lobby areas. Here, the original ’60s black-glass curtainwall was replaced with a combination of translucent and transparent glass, revealing the lobby within. The entry canopy is illuminated with pairs of quartz uplights, also used inside to highlight the interior walls.

A “welcome mat” of light is provided by tiny MR16 downlights at each doorway. The only custom fixture appears on the lobby curtainwall columns; the slight angle of its perforated shield recalls the perforated metal ceiling scrim and the tilt of the theater walls.

CREDITS

PROJECT AHMANSON THEATRE ■ **LOCATION** LOS ANGELES ■ **OWNER** MUSIC CENTER OPERATING COMPANY ■ **LIGHTING DESIGNER** HORTON•LEES LIGHTING DESIGN INC. (E. TEAL BROGDEN, IALD AND BECKY BOWEN) ■ **ARCHITECT** ELLERBE BECKET INC. ■ **GENERAL CONTRACTOR** RUDOLPH & SLETTEN INC. ■ **ELECTRICAL ENGINEER** ELLERBE BECKET INC. ■ **PHOTOGRAPHER** ADRIAN VILICESCU PHOTOGRAPHY ■ **LIGHTING MANUFACTURERS** LIGHTTOUER; ELIPTIPAR; HYDREL; LIGHTING SERVICES INC; CSL; CW COLE; GE

Teamwork and design innovation transformed the recently reconfigured Ahmanson Theatre in Los Angeles' Music Center Complex (above and opposite) from a 1960s-style theater into a spectacular hall for the performing arts. Simple uplighting and downlighting techniques are used to add both drama and sparkle to the space.

1995 IALD AWARD OF EXCELLENCE

Santa Barbara Courthouse

SANTA BARBARA, CA



The exterior lighting at Santa Barbara County Courthouse, a working courthouse built in 1928-29, was redesigned by Seattle-based Ross De Alessi Lighting Design to transform the Spanish-Colonial-style structure into an amber palace at night—"a romantic response to the historic landmark," according to IALD Awards judges.

De Alessi, IALD, entered the project understanding that aesthetics, energy efficiency, minimal building penetration and system visibility were tantamount design requirements. Respect for the building's Spanish heritage, and lighting that acknowledged, not masked the architectural symmetry, were critical concerns.

De Alessi used a warm color palette that created the overall effect of a soft, golden light to reveal the rich texture of the stucco and sandstone facade. All incandescent floodlights are dimmed to warm their color, so they blend better with the improved high pressure sodium (HPS) wash and graze. Bega US donated the floodlights from its new fixture line to Santa Barbara for one dollar.

Vignetting achieves a balanced application of light on the asymmetrical facade. Features are highlighted with quartz and PAR sources laid on top of a sodium wash and graze. In addition, the building



wash also serves as security lighting, keeping the fixture count down.

PAR spotlights from the roof and ground level highlight clock faces, feature keystones, medallions and decorative tiles.

Distinctive landscape lighting separates the palm trees and foliage from the building facade—quartz and mercury color in the foreground, and amber HPS in the background. The lush palm fronds are illuminated, punctuated by dramatic bursts of green.

The “Spirit of the Ocean” fountain at the Courthouse is footlighted from halogen PAR36 submersibles carefully placed for concealment and maximum water undulation effect. The tower entry to the right is softly washed and balanced by relamped, authentic, amethyst Spanish-style lanterns that add sparkle.

The total load for the three-block-long facade and landscaping is 29.6 kW. Security lighting draws only 4.9 kW. The previous system, which washed the facade only, drew as much as 60 kW.

Lighting scenes are scheduled on a simple astronomical timeclock, easily overridden for special events.

CREDITS

■ **PROJECT NAME** SANTA BARBARA COUNTY COURTHOUSE ■ **LOCATION** SANTA BARBARA, CA ■ **OWNER** COUNTY OF SANTA BARBARA ■ **LIGHTING DESIGNER** ROSS DE ALESSI LIGHTING DESIGN (ROSS DE ALESSI, IALD) ■ **ELECTRICAL CONTRACTOR** DEL MAY ELECTRIC ■ **CURATOR/ARCHIVIST** MARJORIE HAYES ■ **PHOTOGRAPHER** DOUG SALIN ■ **LIGHTING MANUFACTURERS** BEGA; GE

The Santa Barbara County Courthouse (below and opposite) not only attracts visitors during the day but now at night, too, thanks to an eye-catching lighting design by Ross De Alessi. Warm, golden facade washes have a mellowing effect on the Spanish-Colonial-style historic landmark, and PAR field and beam angles graze palm tree trunks and highlight tree canopy undersides.

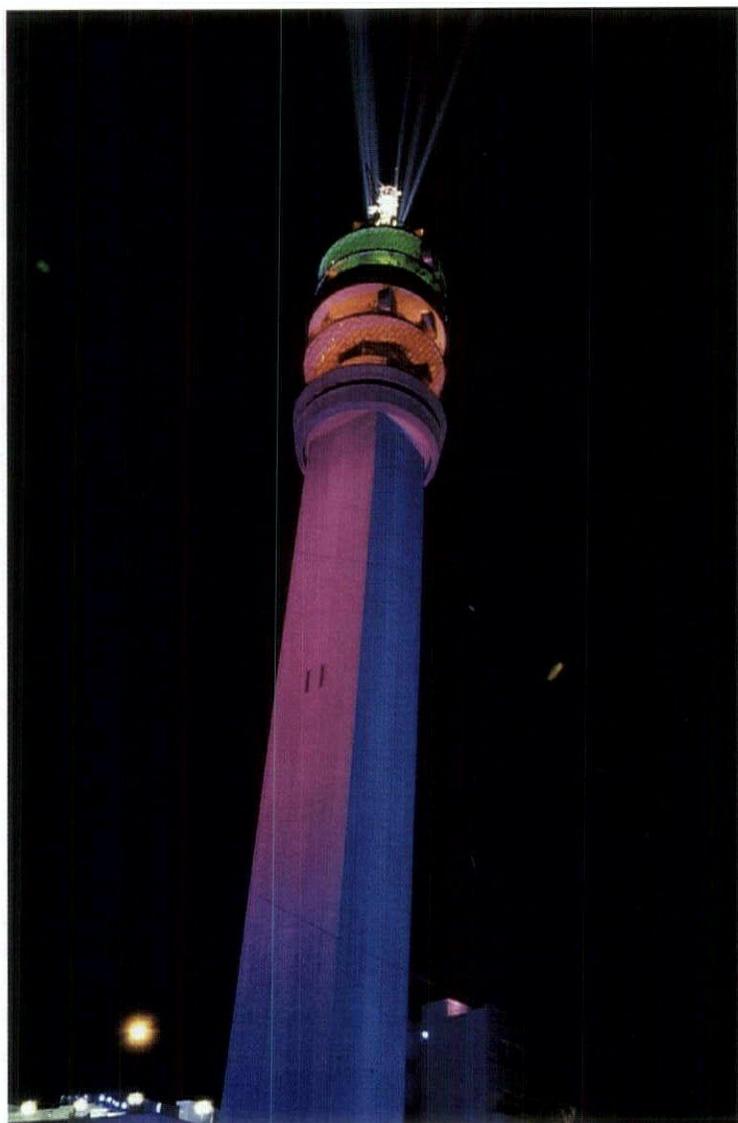


Citation Awards

Vibrant colors and pastels dramatically illuminate the Entel Tower (below). The colors change automatically via exterior fixtures with computer-controlled dichroic color filters.

ENTEL TOWER SANTIAGO, CHILE

Although the 40-story headquarters and telecommunications tower of Entel Chile—the country's largest telephone company—was already an official aviation landmark, it now offers the people of Santiago a feast of colors that lights up the night skyline. With dramatically colorful new exterior lighting, the Entel Tower, looming over nearby buildings that are only three to four stories high, has furthered its prestige and attraction.



The colors change automatically, enhancing their effect, leading IALD Awards judges to praise the "creative use of new technology and bold colors that turn the Tower's exterior into a veritable lighting spectacular."

To provide color for the Tower, New York City-based Focus Lighting devised two solutions:

On the upper circular platforms, 250 400W metal halide fixtures are used with custom glass color filters in red, green and blue. Tests were also made to select colors that blended into yellow, gold, pink, magenta and cyan. To make up for low light transmission, the number of blue fixtures was doubled. The platforms are open metal grillwork, which was painted white for the project.

The square, lower portion of the Tower is illuminated with 80 700W exterior fixtures with computer-controlled dichroic color filters used to produce a full spectrum of 20 color choices. The colors are set to change every half-hour, but changes can be programmed to occur every half-second.

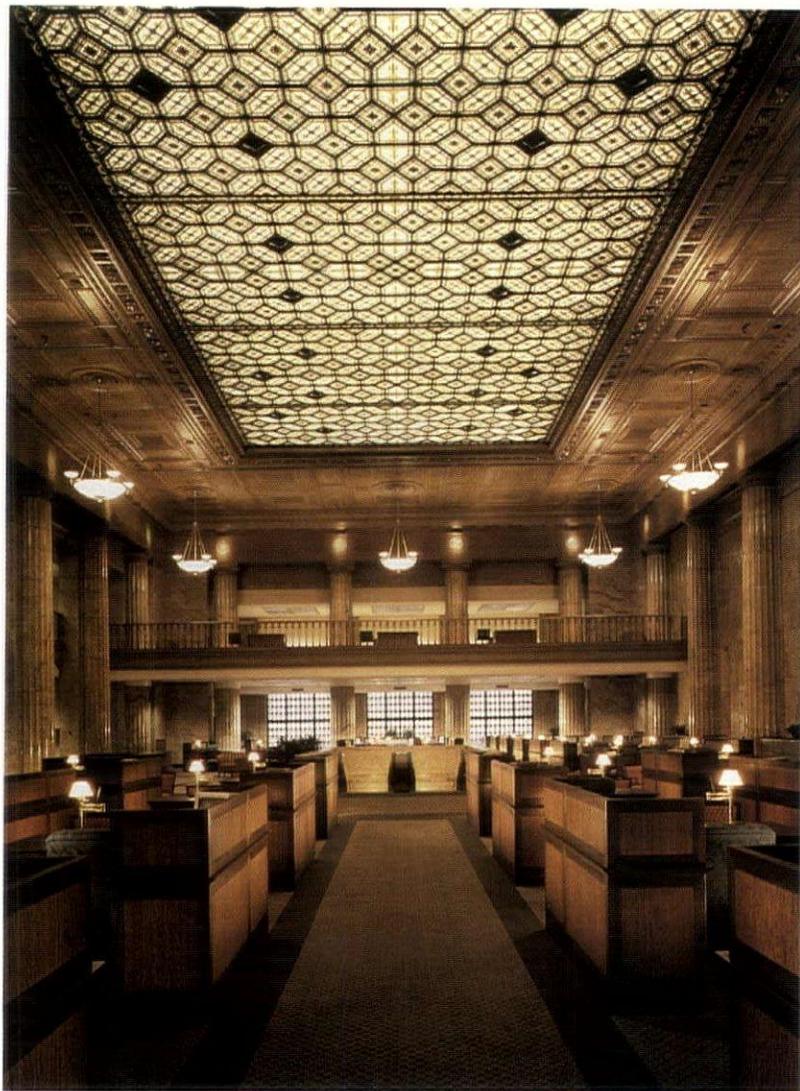
Focus Lighting's next task was to emphasize the unique height and profile of the Tower. This was accomplished by mounting six 7000W Xenon searchlights at the highest point of the Tower. A motorized motion control moves the searchlights every two minutes to 0°, 45° or 90° angles, combining at 0° into a one-mile beam of light. The searchlights were carefully positioned in coordination with local aviation authorities because of the Tower's status as an aviation landmark.

The Tower's lighting includes a broad palette of colors, from pastels to bright hues, ranging from gradations up the Tower to sharp delineations from side to side. The timings in the computer programming provide another exciting kinetic element, with the color changing every half-hour and the searchlights moving every two minutes.

Entel Chile is delighted with the result—seeing the company's headquarters become one of the most prominent landmarks of the country and a symbol of its technological expertise.

CREDITS

■ **PROJECT** ENTEL TOWER ■ **LOCATION** SANTIAGO, CHILE ■
■ **OWNER** ENTEL CHILE ■ **LIGHTING DESIGNER** FOCUS LIGHTING, INC. (PAUL GREGORY, DOUGLAS COX) ■ **LIGHT ARTISTS** A+M SINA (ALEJANDRO SINA, MOIRA SINA) ■ **DESIGN CONSULTANTS** DISEÑADORES ASOCIADOS (ALEX GONZALEZ, MICHELE LABARTHE) ■
■ **ELECTRICAL CONTRACTOR** ELICO ■ **PHOTOGRAPHER** JUAN PABLO LIRA ■ **LIGHTING MANUFACTURERS** IRIDEON, INC. (VARI*LITE); QUALITY LIGHTING, INC.; XENOTECH, INC.; ELECTRONIC THEATER CONTROLS, INC.; SPECIAL F/X LIGHTING, INC.



The 2,200-sq.-ft. skylight at LaSalle National Bank, left, is illuminated with a mix of SPX30 and SPX41 fluorescent lamps. Custom-designed fixtures supplement general lighting and restore an elegant feeling to the 1928 building.

LASALLE NATIONAL BANK CHICAGO

Today, the character of Chicago's LaSalle National Bank lends itself to the elegance it once expressed when the building was completed in 1928. And carefully selected lighting accounts for much of the charm. Chicago-based lighting designer Schuler & Shook, Inc. helped save the institution's original ambiance by reintroducing detailed lighting elements in the new and restored main banking floor. Now, its rich detail glows once again through lighting that "creates harmony and balance of color," according to the IALD Awards judges.

Originally, the main banking hall was filled with architectural details, elegant chandeliers and an art glass skylight that filled the hall with daylight. In 1961, however, common to many 20th century landmarks at that time, the skylight was roofed over, the chandeliers removed and more than 150 recessed incandescent downlights were installed.

The technical challenge facing the lighting designers was to artificially illuminate the 2,200-

sq.-ft. subtly colored skylight. To provide as much of a full light spectrum as possible, a mix of SPX30 and SPX41 fluorescent lamps were suspended in the skylight, accessible via catwalks. A layer of white Lexan was added above the skylight to protect it and to prevent fixture reflection.

New custom-designed, direct/indirect chandeliers uplight the ceiling and supplement the general lighting. The center bowl houses two 500W quartz uplights and eight 39W biax lamps. Four smaller outer bowls use 16W 2D fluorescent lamps. The center and outer bowls have white metal covers to increase internal reflection and keep dirt out. To correct the problem of mismatched color temperature between the biax lamps, which are 3000K, and the 2D lamps, which are 2700K, the inside surfaces of the metal covers on the outer bowls were painted a pale purple.

CREDITS

■ **PROJECT NAME** LASALLE NATIONAL BANK MAIN BANKING HALL (RENOVATION) ■ **LOCATION** CHICAGO ■ **OWNER** LASALLE NATIONAL BANK ■ **LIGHTING DESIGNER** SCHULER & SHOOK, INC. (ROBERT SHOOK, IALD; ALLYN BENNETT) ■ **ARCHITECT** VOA ARCHITECTS ■ **ELECTRICAL ENGINEER** ENVIRONMENTAL SYSTEMS DESIGN ■ **PHOTOGRAPHER** JIM HEDRICH/HEDRICH-BLESSING ■ **LIGHTING MANUFACTURERS** MICHAEL'S LIGHTING; DURAY; HALO

ACKERMAN MCQUEEN ADVERTISING

TULSA, OK

Lighting shapes forms and surfaces in Ackerman McQueen Advertising (below). A mix of daylight and electric illumination creates a dramatic studio for imaginative thought.

There's no better place to blend imagination, thought and a bit of flair than in an ad agency. In a cutting-edge business where innovation is key to daily operation and success, what could be more inspiring than an environment that fosters creativity through a carefully planned design?

For the offices of Ackerman McQueen Advertising in Tulsa, OK, Oklahoma City-based lighting designer Hunzicker Brothers and Elliott + Associates Architects joined forces to create an interior lighting design that is "perfectly integrated into the architecture," according to IALD Awards judges.

Ackerman McQueen's offices are located in a building constructed in 1917. The 12th floor is positioned in such a way that it is the highest level of the north and south wings of the building and is intersected by a vertical tower, added in 1927.

The space features 14- and 18-ft.-high ceilings, skylight openings, clerestory windows

and structural braces, which were added as the building evolved.

The light, structure and volume of the space were enhanced by lighting designer Phil Easlon and architect Rand Elliott, FAIA, to design a dramatic studio representing the "inside of an idea," reflecting creativity and thought. Lighting is consciously used to shape forms and surfaces with levels of transparency. The company logo, projected onto a concrete X-brace, immediately communicates the message and the medium.

Cantilevered glass shelves and surgical lighting provide a backdrop to display print campaigns and three-dimensional products the agency represents. Along one perimeter wall is a series of once-covered 18-in.-diameter portholes, set 12 in. off the floor, which move orbs of sunlight through the space.

The video/conference center was conceived as a stage set where moods can be created through lighting effects. Clerestory windows are fitted with doors for light "tuning." The room can also be dark, with only the 18-ft.-tall etched glass light towers glowing. Blue rope lighting attached to pendant fixtures "float" down from the black ceiling. A unistrut grid at the ceiling allows the agency to have infinite flexibility for lighting.

In the creative department, natural light pours from clerestory windows and two 10-ft.-square skylights. Suspended fabric lights hang from small steel trusses to illuminate the central spaces.

CREDITS

PROJECT ACKERMAN MCQUEEN ADVERTISING ■ LOCATION TULSA, OK ■ OWNER ACKERMAN MCQUEEN ADVERTISING ■ LIGHTING DESIGNERS HUNZICKER BROTHERS LIGHTING (PHIL EASLON) AND ELLIOTT + ASSOCIATES ARCHITECTS (RAND ELLIOTT, FAIA) ■ ARCHITECT ELLIOTT + ASSOCIATES ARCHITECTS ■ ELECTRICAL CONTRACTOR JERRY BUYSSE, BUYSSE ELECTRIC ■ PHOTOGRAPHER BOB SHIMER/HEDRICH-BLESSING ■ LIGHTING MANUFACTURERS HALO, METALUX, CSL, SUNNEX, IPI LIGHTING SYSTEMS; PEERLESS; NATIONAL SPECIALTY LIGHTING; SURE LITES; NORBERT BELFER; SLD

SEIJI OZAWA HALL LENOX, MA

One of the many great performances at Tanglewood Music Center's new Seiji Ozawa Hall in Lenox, MA, is the one mastered by Douglas Baker Lighting Consultant of Newport, RI. "The lighting designer faced numerous challenges in lighting the performance space; the creative solutions are truly equal to the music-making it will illuminate," IALD Awards judges commented.

The nearly perfect acoustics of the hall imposed three major, non-negotiable requirements that affected Baker's lighting design. First, there could be absolutely no penetration of the walls or ceiling; second, the ceiling had to be heavily articulated; and furthermore, except for a few fluorescent strips backstage and in the attic spaces—which are always off during performances and recording sessions—the lighting had to be entirely incandescent. This



would enable dimming, but would also eliminate the possibility of any electronic interference or acoustical distraction with the audio and video recording equipment.

The interior measures 128 ft. long x 67 ft. wide x 50 ft. high, approximating the "show box" proportions of a classic concert hall. Ambient lighting in the hall is provided by PAR lamps aimed through heavy, tempered-glass plates fixed in the ceiling, shielded by a black louver.

Other general lighting, as well as decorative accent lighting, is provided by square and round custom pendant fixtures consisting of clusters of incandescent lamps with white acrylic diffusers. Some of these are accessible for relamping from the attic, while others are lowered on cables to the floor level.

Accent washes on small areas beneath the high windows emanate from coves equipped with A-lamp strips, as well as uplights and downlights on the upstage shutters. Furthermore, columns supporting the balcony girders are lit by small, narrow-beam PAR lamps on short stems.

Audience members sitting under the balconies receive light from the front by bare, tubular lamps in simple, twin-socket fixtures installed in the under-edge of the balconies.

CREDITS

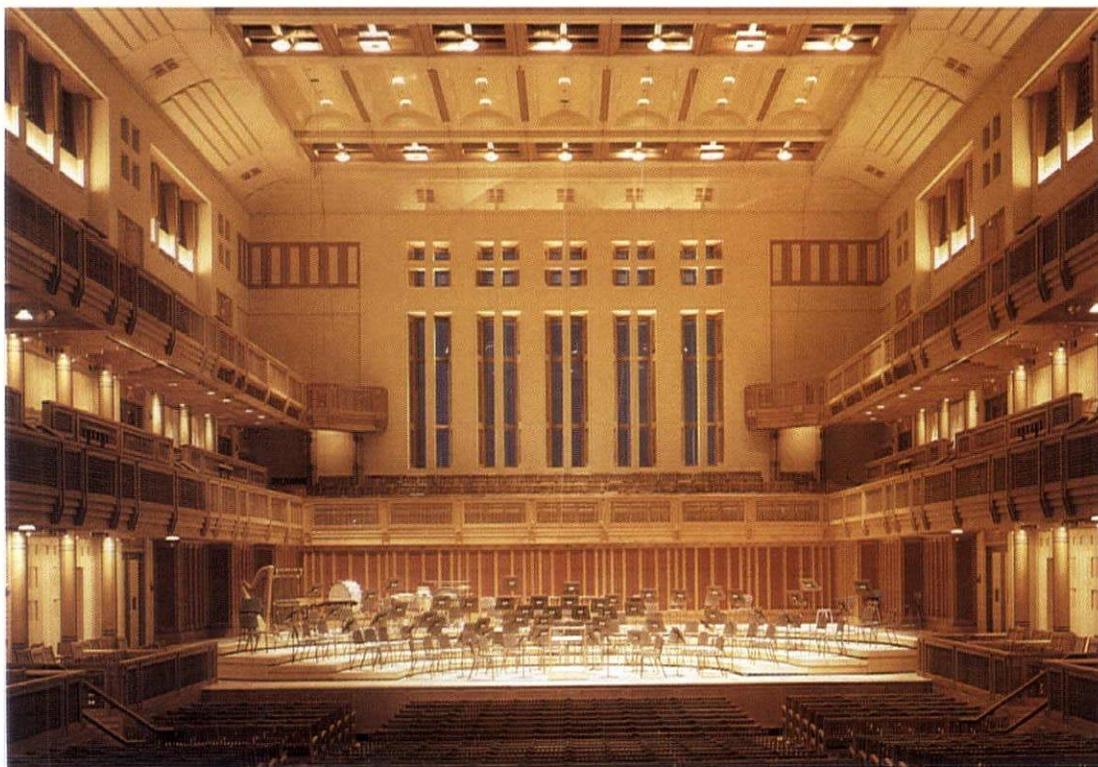
■ **PROJECT** SEIJI OZAWA HALL AT TANGLEWOOD MUSIC CENTER ■
■ **LOCATION** LENOX, MA ■ **OWNER** BOSTON SYMPHONY ORCHESTRA
■ **LIGHTING DESIGNER** DOUGLAS BAKER LIGHTING CONSULTANT
(DOUGLAS BAKER, IALD) ■ **ARCHITECT** WILLIAM RAWN ASSOCIATES ■
■ **ELECTRICAL ENGINEER** LOTTERO + MASON ASSOCIATES INC. ■
■ **PHOTOGRAPHER** STEVE ROSENTHAL ■ **LIGHTING MANUFACTURERS** LIGHTING SERVICES INC.; COLE CO.; LITHONIA; EDISON PRICE; MOLD CAST; NORBERT BELFER; STRAND; SWIVELIER



BASILICA NEUSTRA SEÑORA DEL PILAR

BUENOS AIRES, ARGENTINA

The Basilica Nuestra Señora del Pilar cathedral, boasting soaring arches, gold ornamentation, altars and images of saints, is rich in architecture and history. As part of its restoration, Leonor Bedel, IALD provided a design that is flexible to permit a variety of moods for different occasions, efficient to reduce costs, and unobtrusive to emphasize the cathedral's architectural majesty. The project is an example of a design that "banishes the night," noted IALD Awards judges.



PAR lamps aimed through glass plates provide ambient light in Seiji Ozawa Hall (left). Carefully shielded low-voltage lamps light the interior of this restored cathedral in South America (above).

According to Bedel, choice of fixture represented a difficult challenge. Many were reviewed. The fixture had to be highly efficient, low-voltage (to economize on electricity), include long-life lamps for maintenance and be carefully shielded and positioned to minimize glare. It also had to offer good chromatic light definition and a complete spectrum of color. Various sizes had to be available to accommodate different spaces.

For general illumination, the curved ceiling was lighted with metal halide 150/250W lamps in direct and indirect fixtures mounted on the cornice because of its optimum available fixture positions and space. Fixtures used for general and accent illumination were carefully positioned to avoid glare.

To accent key spaces and architectural features, several fixtures were specified. One key feature is the altar. It is framed by a curved ceiling, lateral access 13 meters above the floor, and arches. A combination of flood and halospot fixtures illuminate the colonial antique images, cross and altar. The floodlights are low-voltage (50W/12V) with dichroic reflectors. The halospotlights are narrow-beam low-voltage fixtures with metal reflectors. The fixtures are specially mounted on

both sides of the altar in decorative plane trays, fitted to prevent glare.

Another key feature, a series of large images of saints situated on the wall between the secondary lateral altars, are illuminated with specially designed halospot narrow-beam fixtures, developed and fitted in cases and positioned on the opposite cornice 13 meters away to prevent glare.

The entire system is integrated with a computerized system that controls 45 circuits and nine pre-set scenes to allow the cathedral to be specially lighted for every occasion—and further the experience for the many visitors who come to the cathedral every day.

CREDITS

■ **PROJECT** BASILICA NUESTRA SEÑORA DEL PILAR ■ **LOCATION** BUENOS AIRES, ARGENTINA ■ **OWNER** BASILICA NUESTRA SEÑORA DEL PILAR ■ **LIGHTING DESIGNER** LEONOR BEDEL & ASOCIADOS (LEONOR BEDEL, IALD) ■ **ARCHITECT** POMBO & LAMARCA ARQS. ■ **ELECTRICAL ENGINEER** EGER S.R.L. ■ **PHOTOGRAPHER** HECTOR Y JORGE VERDECCHIA S.A. ■ **LIGHTING MANUFACTURERS** REGGIANI ILLUMINAZIONE; OSRAM (ARGENTINA); DIMERSON S.A.C.I.

The voluminous atrium of the Hyatt Regency (below) is now illuminated by daylight-like lighting. Spotlights mounted high in the space graze the walls of the atrium.



HYATT REGENCY HOTEL ATRIUM SAN FRANCISCO

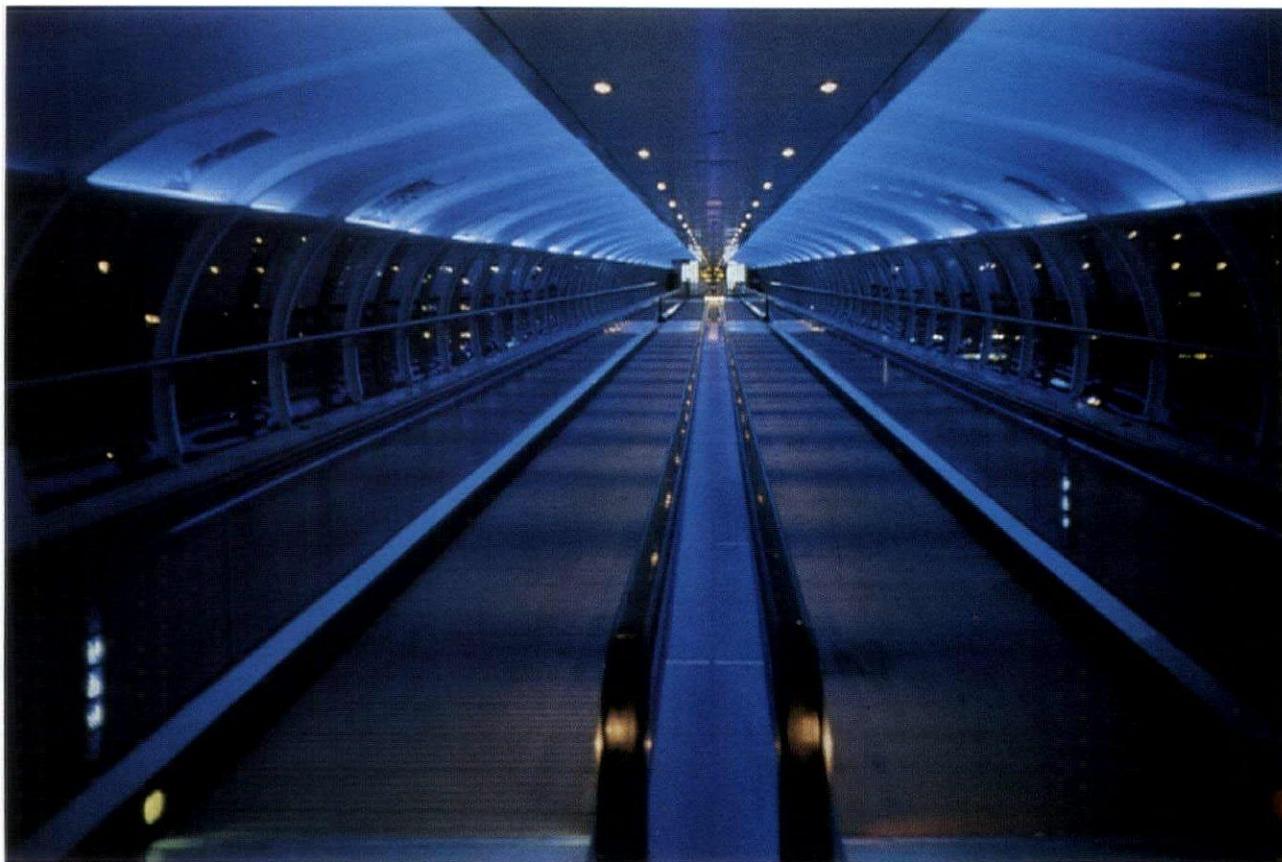
When San Francisco-based S. Leonard Auerbach & Associates relighted the atrium of San Francisco's Hyatt Regency Hotel, the design firm helped the 17-story-high space soar to even newer heights of visual appeal and functional excellence.

Although the atrium had always been architecturally dramatic, the lighting never fully addressed the enormous volume and objects within the space: objects had been poorly illuminated with linear channels of exposed G-lamps and occasional PAR38 fixtures on low poles; the volume itself had never been addressed.

After a four-month renovation, a dynamic lighting plan, created by principal lighting designers Patricia Glasow, IALD and Len Auerbach in conjunction with lighting designer Virva Kokkonen Nilson, was integrated into the existing architecture, transforming the atrium and "bringing new life to a renovated space," according to the IALD Awards judges. For the first time, the vertical surfaces, stepped ceilings and pedestrian paths were illuminated.

Though the atrium is topped with a skylight, direct sunlight enters the space only briefly during the day so electric illumination is a key factor both during the day and into the evening. Walls are raked with light that simulates daylight. Angles change on each wall depending upon the dramatic effect desired and mounting positions. Mounted high in the space, narrow-spot lamps aimed high, and very-narrow-spot lamps aimed low, graze the south and west walls at an angle.

Adjustable PAR64 lamps with a permanently



attached louver, safety cable and custom bracket control the beam, beam options and preferred color rendering. 120W/6V very-narrow-spot PAR64 lamps used for object lighting are supplemented by 1000W/120V narrow-spot and medium-flood lamps for area lighting. The 6V incandescent lamp effectively provides required footcandle levels and beam control for the pedestrian paths, trees and sculpture within the 170-ft.-high atrium.

A custom-designed, stainless-steel curving pendant, fitted with MR16 fixtures, lights the registration desk and bar counters. All lighting is on a programmable computerized dimming system.

CREDITS

■ **PROJECT** HYATT REGENCY HOTEL ATRIUM ■ **LOCATION** SAN FRANCISCO ■ **OWNER** EMBARCADERO CENTER ASSOCIATES ■ **LIGHTING DESIGNER** S. LEONARD AUERBACH & ASSOCIATES (PATRICIA GLASOW, IALD; LEN AUERBACH; VIRVA KOKKONEN NILSON) ■ **ARCHITECT** ELS/ELBASANI & LOGAN ARCHITECTS ■ **INTERIOR DESIGNER** HIRSCH/BEDNER & ASSOCIATES ■ **ELECTRICAL ENGINEER** GLUMAC & ASSOCIATES ■ **PHOTOGRAPHER** JOHN SUTTON ARCHITECTURAL PHOTOGRAPHY ■ **LIGHTING MANUFACTURERS** LUTRON; SHAPER; B-K LIGHTING; PRESCOLITE; LIGHTING SERVICES INC.; KURT VERSEN; TRANSUTE

MANCHESTER AIRPORT

MANCHESTER, ENGLAND

For travelers on Manchester Airport's pedestrian causeway, "getting there is half the fun." Designers Barry Hannaford, IALD and Tim Downey of London-based Lighting Design Partnership have

turned the 250-meter travel length into a strong visual experience from the inside and out with an imaginative, economical lighting scheme.

The glass-walled tubular causeway receives plenty of natural light during the day. When natural light isn't available, fluorescent lamps, concealed in perimeter cove details above the suspended "ribbon" ceiling, automatically provide a smooth blue wash across the ceiling's curve with the help of custom-designed reflectors. The causeway is instantly transformed into a tube of blue light, serene and welcoming while still permitting an external view. Blue cold cathode in the passenger conveyor handrails subtly reinforces the color, while "arches" of white cold cathode, housed within architectural details, contrast with the blue theme to signal the approach of the main terminal.

A kinetic element is added to the environment with a rippling effect achieved using a photocell and time clock-linked system. Both the rich color experience and kinetic element are enhanced by custom-designed floor-recessed compact fluorescent fixtures. These employ blue dichroic glass inserts that offer subtle color variation through the blue/magenta spectrum as travelers graze the scene with their eyes. Static circulation lighting provided by recessed low-voltage downlights in the central "ribbon" ceiling add small, sparkling points of light across the causeway's entire length.

"The unexpected use of color and kinetic movement creates a futuristic, surprisingly serene atmosphere," said IALD Awards judges.

CREDITS

■ **PROJECT** MANCHESTER AIRPORT FIXED LINK ■ **LOCATION** MANCHESTER, ENGLAND ■ **OWNER** MANCHESTER AIRPORT PLC ■

The pedestrian causeway of Manchester Airport (above) uses colorful and kinetic lighting systems to create a comfortable and futuristic environment for travelers.



Lava lamps, spirals and architectural columns are all lighting elements in this Seattle bagel cafe (above). The fun design is a visual experience for customers.

The exterior lighting design at Biloxi's Casino Magic (opposite, bottom) is playful, using color shifts to draw people in. Custom fixtures respect the architecture of the Riverside Memorial Chapel (opposite, top) and provide plenty of light for the congregation.

LIGHTING DESIGNER LIGHTING DESIGN PARTNERSHIP LTD. (BARRY HANNAFORD, IALD; TIM DOWNEY) ■ **ARCHITECT** AUKETT ASSOCIATES ■ **ELECTRICAL ENGINEER** TRAVERS MORGAN ■ **PHOTOGRAPHER** BARRY HANNAFORD, IALD ■ **LIGHTING MANUFACTURERS** THORN; ARTEMIDE; OLDHAM; GE; LUTRON

SPoT BAGEL BAKERY SEATTLE

Funky and whimsical, SPoT Bagel Bakery truly reflects Seattle's growing reputation as a hotbed for retail marketing trends that succeed through unique design. And in this case, it's particularly the full-flavored lighting design, created by Seattle-based Adams/Mohler Architects, that puts the eating establishment in the spotlight.

In this unusual space, lighting becomes the architecture. Architects and lighting designers Rik Adams and Rick Mohler created an off-center identity that the client refers to as "Bagel Theater." Prehistoric and futuristic imagery, combined with customized lava lamps and industrial materials, make the 1,400-sq.-ft. bakery/cafe an exciting visual adventure for customers.

An existing structural column and plumbing risers at the center of the space are set within an X-shaped enclosure, which serves as a decorative light fixture. Bowed sheets of galvanized metal attached to the column are lit from within by continuous strip fluorescent fixtures.

A continuously tapering spiral of sheet metal, suspended from the ceiling, emanates from the column. Stock circline fluorescent fixtures mounted to black-painted fiberboard provide general lighting as well as highlights within the spiral.

Beneath the spiral, custom tables are lit by what could be called a retro cable-suspended fixture. Each fixture consists of a standard lava lamp fitted with a piece of galvanized sheet metal supporting brackets and a metal shade with a tungsten halogen flood lamp that lights the table below.

Low-voltage track lights highlight the sales counter, menu and product display area. The dark walls, covered with abstracted images, are illuminated by commercial energy-code-required recessed compact fluorescent fixtures.

CREDITS

■ **PROJECT** SPoT BAGEL BAKERY/NEWMARK ■ **LOCATION** SEATTLE
 ■ **OWNER** SPoT BAGEL BAKERY ■ **ARCHITECT/LIGHTING DESIGNER** ADAMS/MOHLER ARCHITECTS (RIK ADAMS, RICK MOHLER)
 ■ **PHOTOGRAPHER** ROBERT PISANO ■ **LIGHTING MANUFACTURERS** LIGHTOLIER; LAVA SIMPLEX INTERNATIONAL

CASINO MAGIC @ BILOXI BILOXI, MS

For Northridge, CA-based Gallegos Lighting Design, winning this award for the exterior lighting of Casino Magic @ Biloxi in Biloxi, MS, was cer-

tainly no luck of the draw. Rather, the design team is lauded for its skillful approach to “developing dramatic, kinetic exterior lighting without using a ‘Las Vegas approach,’” according to IALD Awards judges. “Furthermore, the project shows a playful use of choreographed color shifts that are masterfully achieved with exterior floodlighting.”

Lighting designers Patrick Gallegos and Karl Haas developed a simple, flexible solution for the Gulf Coast casino by combining existing technology with cutting-edge fixtures.

The fabric porte cochere was underlighted with 80 650W halogen lamps covered with custom dichroic color filters. Two independently controlled colors were programmed to allow color changes across the translucent canopy, where reflected light provides the primary lighting at the casino entry. Additional 1000W PAR64 lamps create focal accents to the escalator and elevator entry paths to Casino Magic @ Biloxi.

Metal halide downlights illuminate the automobile drop-off. The towers and planes of the rest of the structure are illuminated with 14 programmable, color-changing MSD700 700W short arc metal halide lamps.



CREDITS

- **PROJECT NAME** CASINO MAGIC @ BILOXI ■ **LOCATION** BILOXI, MS ■ **OWNER** CASINO MAGIC ■ **LIGHTING DESIGNER** GALLEGOS LIGHTING DESIGN (PATRICK GALLEGOS, KARL HAAS)
- **ARCHITECT** LUND & ASSOCIATES ■ **SHOW PRODUCER** SPECTRAFAX ■ **ELECTRICAL ENGINEER** CANON ENGINEERING
- **PHOTOGRAPHER** PATRICK GALLEGOS ■ **LIGHTING MANUFACTURERS** ALTMAN; IRIDIUM; ORGATEC/OMEGALUX

**RIVERSIDE
MEMORIAL CHAPEL**
NEW YORK CITY

Manhattan-based Ann Kale Associates, Inc. lighted the interior of the restored Riverside Memo-





The sea is a big influence on the design of the National Yokohama Convention Center (above), and even makes an impact on the lighting with a fluorescent backlit "shell" and blue and sand-colored light.

rial Chapel in New York City, creating a delicate balance between aesthetics and function. Lighting designer Ann Kale, IALD developed lighting that not only improved the beauty of the landmark space but increased light levels at the pews from 8 to 25 fc. In addition, Kale illuminated the soaring Gothic stained-glass windows so they could be enjoyed from the street at night.

Kale adapted the original aluminum chandeliers by dipping them into gold-colored resin and adding a lower brass tier. Each chandelier houses five 300W R40/FL lamps for downlighting and uplighting and eight 60W A-19 lamps for general illumination. New custom sconces are mounted on the window wall and support 50W AR70 spot lamps behind quatrefoil-shaped spread lenses. The "clever use of hidden accent lighting" in these fixtures, which highlight the murals on the opposite wall, was praised by IALD Awards judges.

Sconces on the mural wall illuminate the windows. The altar glows from eight recessed adjustable accent fixtures containing 50W MR16 narrow floods hidden behind the arched beam in front. The night lighting for the stained glass windows is controlled by an astronomical time clock.

In restoring the exterior of the building, the architects also added six new false windows; mounted behind white opal plastic and glass are 3500K fluorescent lamps. Concealed window screening reduces the brightness of the lamps.

CREDITS

■ PROJECT RIVERSIDE MEMORIAL CHAPEL ■ LOCATION NEW YORK CITY ■ OWNER RIVERSIDE MEMORIAL CHAPEL ■ LIGHTING

DESIGNER ANN KALE ASSOCIATES, INC. (ANN KALE, IALD) ■ ARCHITECT FREEMAN & PIZER ■ ELECTRICAL ENGINEER ATKINSON KOVEN FEINBERG ENGINEERS ■ PHOTOGRAPHER CHRISTOPHER WESNOFSKE/WESNOFSKE PHOTOGRAPHY ■ LIGHTING MANUFACTURERS BERGEN ART METAL; CSL; EDISON PRICE; LIGHT SOLUTIONS EAST

NATIONAL YOKOHAMA CONVENTION CENTER YOKOHAMA, JAPAN

Visitors to the National Yokohama Convention Center, nestled at Yokohama's harbor, are likely to observe the influence of the sea on the facility's design. The architectural profile evokes the image of a giant sailing ship, with lobbies "fore and aft" framing a 5,000-seat conference hall. In turn, the interior of the hall evokes the image of the inside of an exotic sea shell.

A five-year collaboration between an American and Japanese lighting design team, a Japanese architect and an American interior designer resulted in a project that demonstrates, according to IALD Awards judges, "a wonderful use of light emanating from varying architectural sources."

The design team wanted to provide quality illumination that respects the facility's seafaring theme, while including energy-efficient light sources wherever possible to minimize operating costs.

BRITISH AIRWAYS COMPASS CENTRE LONDON

The lobbies are lighted to respect the convention center's seafaring profile. The "aft" (seaside) lobby's plaza level is a bright lantern. A mixture of 20W column uplights, reserved downlighting, a low reflective structure and a soft coffer of four stories above make this area ideal for harbor viewing. The lights here can be dimmed so that on the three intermission levels, visitors can enjoy a clear view of the harbor.

The "fore" (front entrance) lobby is dominated by an arching fluorescent-backlighted art glass "shell." Blue and sandy-colored light pay homage to the sea. The ambient lighting is provided by compact fluorescent sources, though the soft and large flux from the art glass "shell" is the primary source of illumination.

Inside the 5,000-seat conference hall, the elongated arched and stepped ceiling houses fluorescent coves that switch on and off in a single-stepped rapid cascade, creating an exciting and graceful fade-up and fade-down, as well as a base level of 200 lux. Dimmable 120V Q500W PAR56 downlights provide an additional 200 lux for reading and note-taking tasks. Decorative shell motif wall sconces line the sides of the conference hall.

CREDITS

■ **PROJECT** NATIONAL YOKOHAMA CONVENTION CENTER ■
■ **LOCATION** YOKOHAMA, JAPAN ■ **OWNER** CITY OF YOKOHAMA ■
■ **LIGHTING DESIGNERS** FISHER MARANTZ RENFRO STONE, INC.
(CHARLES G. STONE III) AND LIGHTING PLANNERS ASSOCIATES, INC.
(KAORU MENDE) ■ **ARCHITECT/ENGINEER** NIKKEN SEKKEI, LTD. ■
■ **INTERIOR DESIGNER** MANCINI-DUFFY

"The lighting design is the architecture," said IALD Awards judges of the exterior lighting design of the British Airways Compass Centre at London's Heathrow Airport. For London-based Equation Lighting Design Ltd., there is no better compliment for exemplary integration of architecture and lighting.

Lighting the exterior of an office building situated prominently at an international airport presented a set of unusual challenges for Equation Lighting Design. One of the many severe design constraints required that the exterior lighting not affect the judgment of pilots. Thus Bullock and the other designers held early discussions with the Civil Aviation Authority and conducted on-site testing with the support of Air Traffic Control and incoming pilots.

The main (south) facade of the building is completely glazed. Because site restrictions did not allow the use of fixtures off-building, and to reduce the inevitable reflections that would result from the lighting the glazed cladding, lighting equipment was located close to the building.

The top of the south and north elevations are lined with louvered sunshades that add an impressive mechanical aspect to the building. Compact fluorescent projectors placed on either side of each of the outriggers that support the shades create a luminous "weld"

Compact fluorescent projectors and T8 fluorescent lamps light the exterior of the British Airways Compass Centre (below).



Incandescent and natural light give the TV Film Production Company office space (below) a museum-like feel. Skylights, wall sconces and downlights provide an interior glow.

where the outrigger meets the building.

A continuous line of T8 fluorescent lamps housed in a specially designed "kerbstone" fixture provides a band of illumination along the base of the building. This creates the impression that the building is sitting on a bed of light, which is particularly dramatic when seen from the air.

Uplight from the ground fluorescents and the downward spill from the projectors "wash" the remainder of the building's elevation.

By using the natural energy of the building structure as the basis for the lighting design, and by understanding the surrounding landscape, Equation Lighting Design produced a lighting scheme that is an excellent example of integrating the architectural and lighting designs.

CREDITS

■ **PROJECT** THE BRITISH AIRWAYS COMPASS CENTRE ■ **LOCATION** HEATHROW AIRPORT, LONDON ■ **OWNER** HEATHROW AIRPORT C/O LYNTON PLC ■ **LIGHTING DESIGNERS** EQUATION LIGHTING DESIGN LTD. (JOHN BULLOCK) ■ **ARCHITECT** NICHOLAS GRIMSHAW & PARTNERS ■ **ENGINEER** J. ROGER PRESTON & PARTNERS ■ **PHOTOGRAPHER:** NICK MERES

TV FILM PRODUCTION COMPANY NEW YORK CITY

TV Film Production Company was set to occupy a 19th century two-story warehouse building in New York City's Lower Manhattan. The structure is 127 ft. long and 25 ft. wide, with a cast-iron front to the street, the only exposed facade. The project called for the warehouse to be transformed into office space, while respecting the existing architecture. The owners requested that lighting designer Lynn Redding provide a residential, museum-like quality to the long and narrow interior space using incandescent and natural light.

To capture natural light and distribute it throughout the space, several steps were taken. A central staircase and terrace of diffuse glass pavers was built to help filter in more natural light from window walls surrounding the terrace. Skylights are provided in individual offices, and an existing skylight was restored in the cupola. A portico was formed by the creation of a new glass-block entry wall.

Redding used sconces and downlights to complement the glow of the entry wall. The conference room, directly below the terrace, is lit at night by portable low-voltage fixtures that also cause the terrace to glow.

Interior walls are continuously lit by recessed wall washers or cove with track and adjustable PAR38 fixtures.

The result is a lighting design that is "picture perfect"—offering new life to the building and neighborhood through "masterful integration of architecture with electrical and natural light sources," according to IALD Awards judges.

CREDITS

■ **PROJECT** TV FILM PRODUCTION COMPANY ■ **LOCATION** NEW YORK CITY ■ **OWNER** TV FILM PRODUCTION COMPANY ■ **LIGHTING DESIGNER** LYNN REDDING LIGHTING DESIGN (LYNN REDDING) ■ **ARCHITECT** V. POLSINELLI ARCHITECTS ■ **MECHANICAL/ELECTRICAL ENGINEER** PAVANE ASSOCIATES ■ **PHOTOGRAPHER** PAUL WARCHOL PHOTOGRAPHY ■ **LIGHTING MANUFACTURERS** EDISON PRICE; ELLIPTIPAR; ARTEMIDE; ALKCO; LIGHTOLIER; FLOS; BRYANT; HALO; STAFF; LIGHTALARMS



"Shifting InterPlan to the Coliseum was an excellent strategic move. The scale is appropriate, location is great, and their facility people seem eager to help...our customers will approve!"

— Julie Blanton,
Manager, Industry Events, Herman Miller

"The move to the New York Coliseum is favorable from Haworth's perspective. In addition to the cost advantages that we can achieve as an exhibitor, the location of the facility is preferable to the design community."

— Kevin Schuitema,
Manager, Marketing Communications, Haworth

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METAMORPHOSIS STEP 2: THE ROAD TO THE GOAL

BY GARY MARKOWITZ, MIES

In our last issue, Gary described the conceptual stages of the renovation of the grand lobby at a prominent corporate address belonging to a cost-conscious Fortune 100 organization. In the second part of this series, he describes fixture selection, staying in a tight budget and selling the design team's vision to the client's senior management. —ED

The renovation of our grand lobby has progressed from the drafting board to its next stage. Reconciling the budget is the next logical step in the process. There are no "cost-plus" projects in this organization—what you ask for is all you get (in other words, the wishing-well can only be visited once).

The tight electrical budget includes a scope of work involving far more than lighting system alterations. Refining prices, therefore, requires shrewd bargaining techniques and knowing all the alternatives. In previous projects, the policy of this organization encouraged contacting a minimum of three alternate sources to ensure a truly competitive bid. In this case, six manufacturer representatives were contacted to present pricing and detailed fixture information based on our fixture schedule.

The payoff for the additional effort was manifested in the submittal and pricing phase of the project. The custom-manufactured fixtures were of particular interest as the highest budgetary prices that were submitted were more than double the price of the lowest. The manufacturer representatives stated that the quality of their entries were virtually identical (as one might expect).

We resolved the issue by adopting a philosophy well known to our readers from Missouri: "Show me!" The most effective way to ascertain the high-quality McCoy from the nemesis "snake oil" product lines was to carefully examine each of the units being considered. Photographs are only two-dimensional—they cannot fully portray the quality (or lack) of custom craftsmanship. We requested that we see some of this custom work close up.

The methodology employed in our product review involved that we:

- Request that each of the manufacturer representatives produce a local installation of their product so that we could touch the fixture and observe its construction (after all, it's a light fixture, not a museum piece). It should be able to withstand the test of time and possible rough handling by maintenance personnel.
- Review the submittal to ensure the fixture has durable, accessible parts for ease of maintenance.

- Examine the submittal to ensure that the ballast is ventilated properly, mechanically fastened and correctly wired.
- Require that all parts of the fixture bear the familiar approval stamps of UL, ETL and CSA.
- Request that the submittal demonstrate that the fixture was made with the specified photometric distribution.

We also requested a photometric report from an accredited independent testing laboratory as an insurance policy to ensure that the attractive fixtures of glass, acrylic, brass and bronze would distribute light according to recognized standards.

After making sure the electrical distributors and the subcontractors had sharpened their bid pencils, the budget was finally set. The pricing would be held for 60 days (not the typical 30)—just enough time to ensure completion of our passage to the project's construction phase.

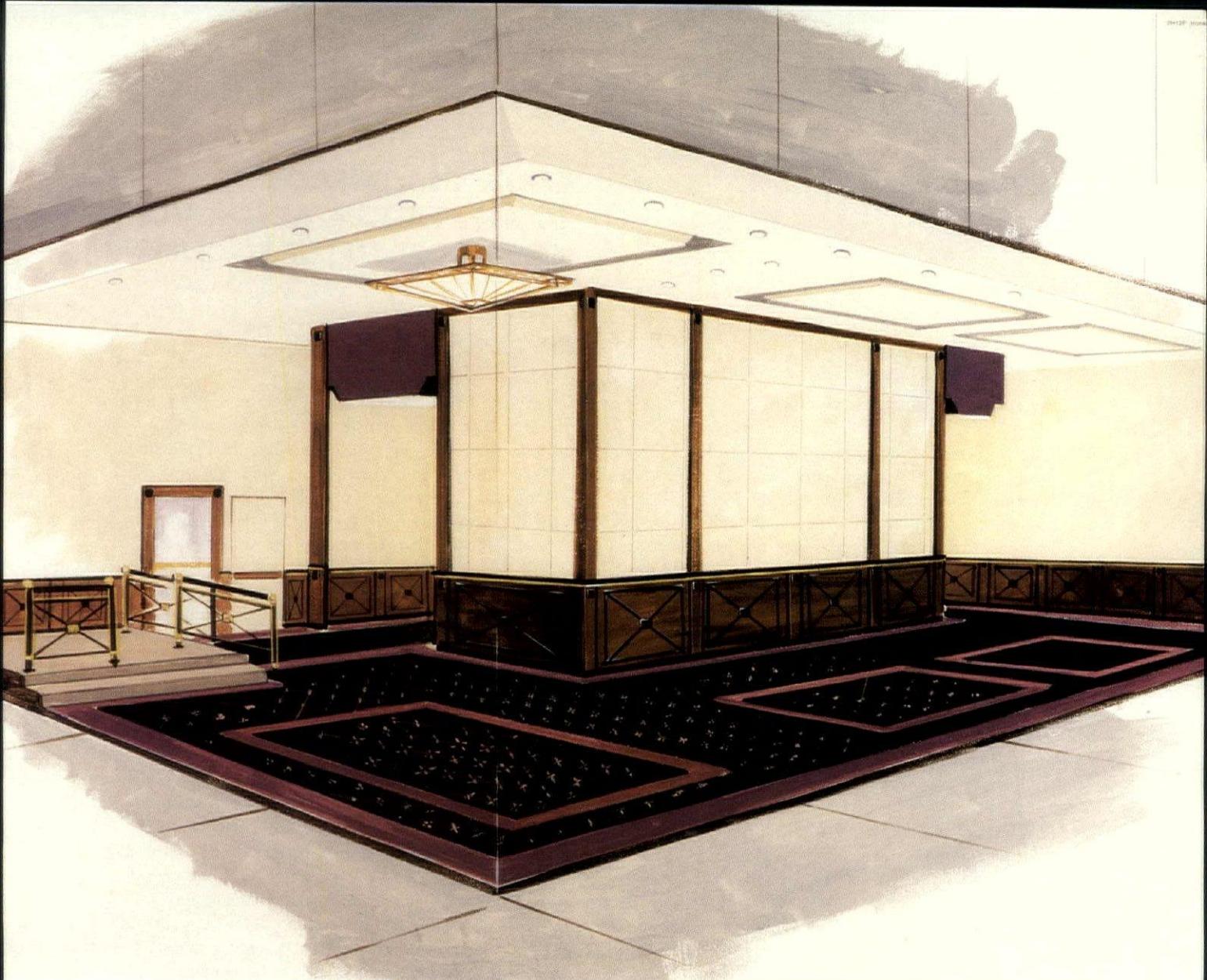
THE MAIN EVENT

The time finally arrived for our team's visit to the wishing-well. Although the budget was arranged at the beginning of the fiscal year, succeeding in the final approval cycle is the only way to guarantee the irreversible allocation of funds to a project. This is a vehicle of transformation from paper dreams to a true form shaped by the allocation of resources, a confirmed schedule and purchase orders.

To go from the sidelines of the conceptual stage to the next, the design team must run the gauntlet. The presentation must take to the airwaves via the latest video conference technology. The audience is no longer made up of managers running interference for upper management. This time, the attending individuals are paying full fare for the entertainment.

The CEO's presentation boardroom is a forum that is best suited for the seasoned interior design professional—for only he or she can tie all of the design elements together effectively. While the shared vision of the design team still matters, the interior designer is the spokesperson, awakening the imagination of his audience. His descriptions must whet the appetite of the "design-review board" to see the finished product.

The interior designer's poetic narration starts with the complex contours of the new ceiling, moving to the calming hues and durability of finishes and fabrics. He dwells on the richness of the finest grade cherry woods and the subtle complement of solid brass details. And for the finale, he ties in the importance of the elaborate high-efficiency illumination system. He weaves this



tale, hoping to catalyze the release of the controllers' chokehold on the corporate checkbook. The interior designer's task is seemingly monumental as he must be able to convince the design review board the proposed design can stand the test of time, conform to the conservative corporate image and evoke a progressive high-tech look.

Overall, the finished design must succeed in fulfilling its ultimate aspiration, which is to attract and close long-term lease agreements with financially solvent clientele.

THE OUTCOME

The presentation was positive due to the thorough preparation of the design team. The combination of story boards, full-sized material samples and transparently layered flip-chart floor-ceiling plans of the space all worked well.

The true seeing vehicle, though, was the visionary conceptual representation of the finished space. The illustration accompanying this article (above), a painting of the finished space by James Ryan, definitely wowed the audience.

The design team, comprised of the author and an interior designer, "wowed" corporate decision-makers during a presentation with this painting (above) of how the finished space will appear. Artwork by James Ryan.

WHAT'S NEXT?

The next phase of the project will take us down the trail of fruition—scheduling labor resources, planning the logical construction phases and placing material orders. The renovation of this grand entrance will, with hope, proceed according to plan. Some changes always occur during the actual field construction, however.

We hope you will be with us in the third and final parts of this series to discover just how this magnificent transformation turns out.

Gary Markowitz, MIES, is a contributing editor and a member of the Editorial Advisory Board of Architectural Lighting.

CONTROLS: ENERGY CONSERVATION, AESTHETICS AND ADDED VALUE TO CLIENTS

BY CRAIG DILOUIE, EDITOR-IN-CHIEF

An essential component of all lighting systems, controls provide automatic or manual on-off and dimming capabilities. But controls, like ballasts, are sometimes thought of as "meat and potatoes" lighting—integral to lighting, perhaps, but not integral to quality lighting. This perception has begun to change. Advancing technology offers today's lighting professional powerful options to enhance lighting quality, conserve energy, provide more localized control and integrate lighting with other important building systems. A quick glance at technological trends reveals centralization, integration and increased capabilities. Capitalizing on these opportunities not only helps the designer to meet client goals, but can help him to build even more value into his professional services.

ENERGY CONSERVATION

Corporations, viewing their buildings as assets, have embarked on wholesale lighting retrofit of existing lighting systems to reduce operating costs and thereby improve financial performance and marketability since the 1980s. In recent years, meeting the energy conservation challenge has become a fact of life for many designers in new construction and renovation projects. Meeting a strict client goal or energy code can require a balancing act between aesthetics and efficiency.

A variety of automated control strategies—time scheduling, discretionary on-off, task tuning, lumen maintenance, daylight dimming and load shedding—offer a solution by turning lights off when they are not needed (or dimming them when less light is needed). The key is recognizing that while a power budget may be expressed

during design as load in watts per square foot, the real energy cost to the client is the billed kilowatt-hour—the product of power and time. According to a 1988 study by L. A. Carrière and Mark Rea of the Lighting Research Center, turning fixtures off when not in use offers the largest energy savings potential. This is not surprising, as it is estimated that 40 percent of office workers leave their lights running day and night, including weekends.

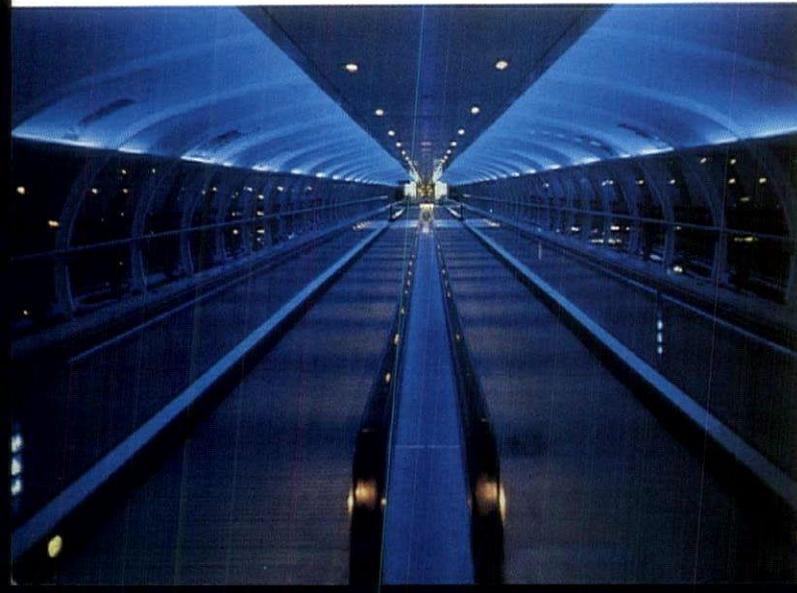
Automatic on-off controls. Today's most advanced control method is a programmable microprocessor-based time scheduling and/or centralized control system that offers preset on-off and/or dimming capabilities. These systems save energy by scheduling lighting use in large buildings where occupancy is predictable, such as office buildings, shopping malls, schools and industrial facilities. By extinguishing the lights when they are not needed, savings of 10-35 percent have been documented. Certain centralized lighting control systems can also dim the lights in non-essential areas during brownouts and blackouts in cooperation with the local utility in exchange for various benefits, or dim the lights in most areas for a given period of time during peak demand hours.

For early-bird and night-owl employees, local overrides can be built into the system to activate local lighting. In addition, centralized lighting control systems can be integrated with other building systems—a step toward the intelligent buildings dream many corporations are now pursuing—where an employee comes to work over the weekend, runs his security card through an access control, and finds his lights, HVAC and office equipment on by the time he reaches his workstation.

Time scheduling systems, however, are only as energy-effective as their schedule. In areas that are infrequently trafficked, such as conference rooms and lavatories, or where occupancy is unpredictable, such as private offices, local discretionary controls such as

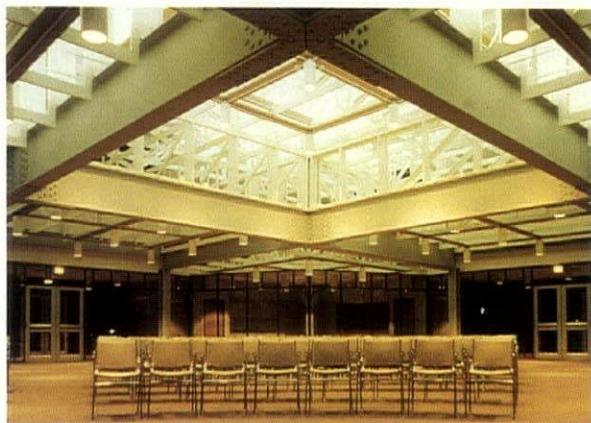
Designers Barry Hannaford, IALD and Tim Downey of London-based Lighting Design Partnership wanted to create the effect of movement in a pedestrian causeway at Manchester Airport (left). A kinetic element in the form of a rippling effect was provided by a photocell and time clock-linked system. Combined with other lighting effects, Hannaford and Downey's project won a 1995 IALD Award of Citation and the judges' praise of "the unexpected use of kinetic movement ..." (see "Manchester Airport," IALD Awards p. 11, in this issue).

CONTROL MANUFACTURER: LUTRON
PHOTOGRAPHER: BARRY HANNAFORD

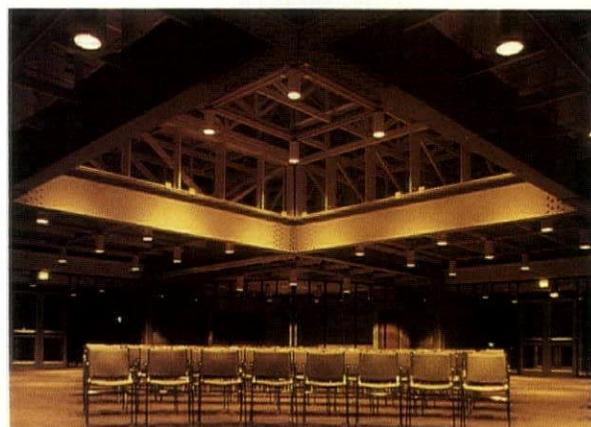




R. Gregory Turner, AIA of RG Turner Architects received an IES International Illumination Design Award for his design of St. Laurence Parish's all-purpose building in Sugar Land, TX (left). Building upon a bright and lofty atmosphere created by skylights, various lighting scenes can be created via dimming to create different lighting effects for performances, weddings, small bible study classes and other uses (see "A Plan for All Seasons," Jan/Feb issue, pp. 38-39). "The lighting system had to give users of the space a tremendous variety and range of options," said Turner, "so that they could create different feelings for whatever functions are taking place."
PHOTOGRAPHER: JORGE JOSSERME



In April of this year, Sensor Switch of Wallingford, CT unveiled the Sensor Switch Passive Dual Technology (PDT) ceiling-mounted occupancy sensor. Occupancy sensors may be passive infrared, ultrasonic, microwave or sonic, with passive infrared and ultrasonic being predominantly used. The PDT sensor integrates passive infrared with sonic technology, resulting in a sensor that can both "see" and "hear" occupancy—particularly effective in areas where partitions can cause extinguishing of the lights while the space is still occupied (such as lavatories).



In June, Novitas of Culver City, CA introduced the SuperSwitch Mini Automatic Wall Switch that won an Award of Distinction for innovation in the Lightfair New Product Showcase. It is the first completely flush-mounted occupancy sensor, and provides a built-in optional manual-on switch, bi-level control and heightened sensitivity.

Also in June, Lightolier of Fall River, MA unveiled the Advanced Lighting System line that is designed to support productivity and energy conservation. "Vision Smart" fixtures are designed with special reflectors that reduce reflection problems on computer screens. The fixtures are integrated with "Energy Smart Controls," occupancy-sensing and daylight dimming controls that can reduce energy consumption. The line was developed as part of a three-year collaboration between Lightolier, EPRI and Niagara Mohawk, a utility. "Bringing the critical variables together in a single system makes good and reliable lighting much easier to achieve," said Zia Eftekar, president of Lightolier.

occupancy sensors can be used to automatically extinguish the lights after a preset time delay, eliminating waste. According to the EPA, energy savings of 25-50 percent are possible in some office spaces, while the Electric Power Research Institute (EPRI) indicates a broader 18-80 percent range.

Here is just a taste of several new developments in automatic lighting controls:

Karl Johnson, EPRI's manager of commercial building systems, added: "The Advanced Lighting System product

Michael John Smith, AIA, IES, IALD selected preset dimming controls for his design of the lighting system for Compaq Computer Corp.'s conference center in Houston (right). Lighting for three podium locations can be established by selecting one of several preset scene options. The auditorium space is divided into two zones, with each zone able to be controlled separately or together. A portable dimming board can be plugged into the system for manual control of the entire lighting system (see "Corporate Agenda," Apr/May issue, pp. 34-37). Said Smith, "Our main challenge was to provide excellent light levels with lots of flexibility."

**CONTROL MANUFACTURER: LUTRON
 PHOTOGRAPHER: COMPAQ**



line is part of a broader EPRI plan to encourage an integrated approach to lighting by combining efficiency with lighting quality and controls, and by making these systems more reliable and affordable."

Dimming controls. Lumen maintenance control eliminates waste the moment the lighting system is commissioned. Lighting systems are traditionally designed to produce high initial light levels to account for predictable light loss that occurs over time due to dirt and age. Lumen maintenance control ensures that the proper light level is supplied at the outset, then continuously as more and more power is applied to the lamps as they experience light loss over time.

Daylight dimming entails providing a photocell in the layout to measure incoming natural light from windows. As the ambient light level exceeds a certain level, the photocell signals a dimmable electronic ballast that reduces power to fluorescent lamps, reigning in light level to the appropriate amount. Photocells can also be

incandescent and halogen fixtures in lobby areas, corridors lined with paintings, and other spaces where unhampered aesthetics is crucial to the design vision.

"Originally, our energy code put restrictions on load," said Fred Berryman, Energy Commission Specialist with the California Energy Commission. "That was the original 1978 Title 24 standard, which emphasized power with only limited requirements for manual on-off switching to conserve energy. Now, because Title 24 more directly addresses the use of the system, it is a true energy standard, and this allowed us to aggressively incorporate automatic controls.

"In the years since we implemented the new Title 24, the use of lighting controls has picked up significantly in our state, particularly in discretionary controls," he added.

The flexibility of Title 24's approach to control credits may get this technology more attention as Title 24 is updated and possibly imitated by other state energy codes. The current ASHRAE/IES 90.1 standard also includes control credits, but may go even further in the future. The standard is currently being updated and will be available for public comment in the near future.

"One thing that Title 24 has done is to bring controls to the forefront," Berryman said. "Controls have been an often overlooked opportunity for designers to save energy and enhance the appearance and quality of the lighting system—thereby providing enhanced service to clients—using a growing variety of high-quality products."

AESTHETICS

Both manual and automatic switching and dimming controls can be specified to create a wide range of lighting effects for mood-sensitive applications such as restaurants, lounges, conference centers and rooms, retail displays, showrooms, hotels, offices, houses of worship, discotheques, entertainment centers and residential applications.

Controls can be used to assemble a functional lighting package that inspires a desired mood, creates a dynamic atmosphere or both. This can be as simple as adjusting a wall-box dimmer, or more complex by using theatrical techniques and programmable controls to create a sense of action or to time lighting effects with music or other cues.

To create mood, controls can permit a variety of illuminances to be programmed or manually determined in a space, without the need for additional fixtures—for example, dimming the light level in a restaurant dining area to create a romantic atmosphere, then smoothly increasing light output to a suitable light level for cleanup activities. Manufacturers of dimming controls provide a wide range of light levels so that the human eye can detect a distinct change.

In yet another service to aesthetics, controls can be used to adjust brightness to reduce shadows and glare. Some controls themselves, when visible, are becoming more decorative, a continuing trend with wall dimmers and occupancy sensors. Intelectron of Hayward, CA offers a motion detector control that is hidden in decorative brass fixtures, including hex-style lanterns.

Preset dimming controls. A popular arrival in recent years to the control scene is found in preset

"CONTROLS HAVE BEEN AN OFTEN OVERLOOKED OPPORTUNITY FOR DESIGNERS TO SAVE ENERGY AND ENHANCE THE APPEARANCE AND QUALITY OF THE LIGHTING SYSTEM," SAID BERRYMAN.

used as part of an on-off mechanism; when light levels exceed a preset amount, the photocell signals the ballasts to extinguish two lamps in each four-lamp fixture, reducing light output by 50 percent.

Title 24. California's Title 24 energy code includes both mandatory control requirements and enticement to the designer to use controls. If a new building will be more than 3,000 sq. ft., an automatic on-off time scheduling system must be incorporated into the design. Regarding areas where discretionary local control can produce significant additional energy savings during operating hours using occupancy sensors, dimming and other controls, control credits are assigned, which impact the amount of power considered used in the space.

Based on the application, use of the space and the type of device used, a factor is applied. If 1,000 watts of load are connected to a control and a factor of 0.15 is assessed, then 150 watts are "credited," or considered removed from the load. While certain applications such as statuary may be permitted higher power allowances under Title 24, other aesthetically sensitive spaces may not qualify for additional power allowance. By obtaining a load reduction credit through use of controls in office and similar spaces, therefore, more of the building's total budget is available for high-wattage

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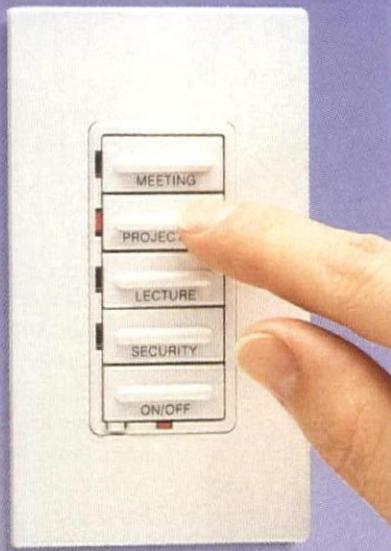
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For more information, write to Leviton Manufacturing Co., Inc., 59-25 Little Neck Parkway, Little Neck, New York 11362. Or call 1-800-323-8920.



One touch of SCENE SELECT and it's meeting time!



Affordable

Leave it to Leviton to come up with breakthrough technologies, elegance of design, and ease of use—all wrapped up in significant cost savings for you. See for yourself. Our new generation of Decora-Style MicroDim Scene Controls gives you so much more, for a lot less. Actually, about half the cost of our competition.

For more information, write to Leviton Manufacturing Co., Inc., 59-25 Little Neck Parkway, Little Neck, New York 11362. Or call 1-800-323-8920.





Paul Gregory and assistant Douglas Cox, Focus Lighting, with A+M Siña light artists and design consultants Diseñadores Asociados, developed an innovative system of computer controls and automated fixtures to bathe Chilean landmark Entel Tower in soft pastels and vibrant hues (left). This project, combining color with exciting kinetic elements, led to a 1995 IALD Award of Citation and judges' praise for the "creative use of new technologies and bold colors ..." (see "Bold & Beautiful," Apr/May issue, pp. 42-43 and IALD Awards p. 6 in this issue).

CONTROL MANUFACTURER: ELECTRONIC THEATER CONTROLS, INC.

PHOTOGRAPHER: JIM HEDRICH/HEDRICH-BLESSING

dimming controls. A typical preset dimming control system consists of a master control linked by low-voltage wiring to a series of local controls, which in turn are hardwired to local fixtures. Each local control presents a series of buttons that are programmed into the master by the designer to establish a range of effects and moods—"scenes." By merely pressing a button at the local control, each fixture in the space is directed to produce a different preset light output (in virtually any combination) that together blend to effect a unique atmosphere. For easy use, scenes can be labeled on the control. In residential applications, preset dimming controls are often marketed as home automation, integrating lighting with home security, media and other systems.

"Preset dimming presents a stimulating creative opportunity for today's designer," said Michael John Smith, AIA, IES, IALD of Michael John Smith Lighting. "Designers can create a layout that produces multiple environments, each with its own atmosphere." He noted that in addition to increased capabilities, falling prices are making preset dimming systems a popular and competitive alternative to wall-box dimmers.

Smith's most recent work with preset dimming controls is with several high-end residences and Compaq Computer Corp.'s Conference Center in Houston (see page 37). He attributes his success to grasping client needs and how the space would be used—critical with any project, says Smith, but especially critical when creating atmosphere with a range of precise lighting requirements.

He went on to say that where special aesthetic effects

are desired with preset dimming controls, the lighting professional should take an active role in shaping how the illuminated space will function. "If the use of controls is integral to the design vision—and to ensure that this vision is realized—the lighting designer should follow the control design through drawings and specifications," he said.

John Green, product manager, Lighting Controls Electrical Distribution for Leviton Manufacturing Co. of Little Neck, NY, believes that designers should be aware of cost and simplicity when selecting a system. "In the era of value engineering, complicated controls can run into problems if they present a high cost. The trend is to keep it simple, not only for cost, but to make the system easy to install and use."

At the same time, another trend appears to be increased centralization. Vantage of Orem, UT, for example, offers full centralization and integration of residential building systems in the form of home automation systems. After reviewing customer requirements, an automation package is customized to meet those requirements. Vantage's control system can be linked to and programmed to control lighting, media, telephone, curtains and thermostats. One accessory can control motorized lifts, activate screens and other components of a home theater system.

Local control. In April, Lutron Electronics Co. Inc. of Coopersburg, PA was the first to market a product that permits individual control over light output from overhead fixtures via a hand-held infrared remote control device. Lutron's Personna system, which includes the remote, an infrared receiver and a dimmable electronic ballast, allows occupants to dim local lighting to taste. This method can be particularly effective in reducing glare on work surfaces such as computer screens and may produce a productivity gain.

WHAT ELSE?

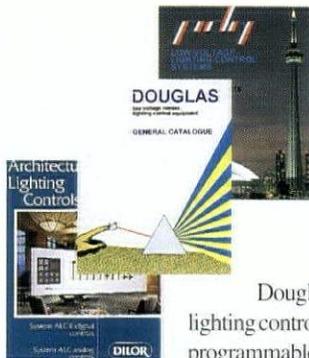
Lighting controls are becoming accepted as an active participant in energy conservation and aesthetics. Capabilities, reliability and the number of products are increasing from a growing base of manufacturers. Look for controls to become an even more important feature of *Architectural Lighting* in future issues, and be sure to look for opportunities to build value and increased innovation into design services through the latest and greatest advancements.



Beta Lighting
 1200 92nd St.
 Sturtevant, WI 53177
 Tel.: (414) 886-2800
 Fax: (414) 886-2779
 Contact: Steve Morelli

Beta Lighting's Bi-Level System offers reduced energy cost, simplified installation and ease of operation. The Bi-Level System has no switch gear, transmitter/receivers or phase couplers for ease of installation. Light levels are kept at lower levels for safety and security until activity is sensed, bringing illumination up to full power almost instantly.

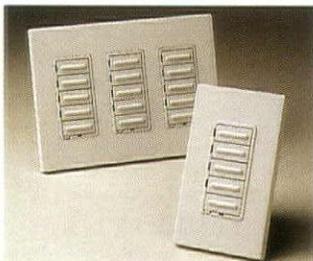
Circle No. 100



Douglas Lighting Controls
 2077 Alberta St.
 Vancouver, B.C. V5Y 1C4;
 345 Isabey, St. Laurent
 Quebec H4T 1Y2 Canada
 Tel.: 800-665-6581
 Fax: 514-342-0133
 Contact: Les Satov

Douglas features a range of low-voltage lighting control devices and systems. PDM offers programmable stand alone and network control systems, and Dilor features architectural dimming systems. Douglas offers a wide range of products including latching relays, switches, time clocks, indoor/outdoor photo sensors, occupancy detectors, computer graphics for complete building lighting control systems and dimmers with programmable controls stations.

Circle No. 101



Leviton
 59-25 Little Neck Pkwy.
 Little Neck, NY 11362
 Tel.: (800) 824-3005

Leviton's Scene Select lighting controls, a revolutionary family of products, allows lighting design specialists to create unique lighting scenes that correspond to the many ways in which a residential and commercial space is used. Any lighting system—even those comprised of multiple fixtures that draw power from different phases—can instantly be turned on at a user-specified brightness level with a single tap of the keypad.

Circle No. 102



Lutron Electronics Co., Inc.
 7200 Suter Rd.
 Coopersburg, PA
 18036-1299
 Tel.: (610) 282-3800
 Contact: Rick Angel

The Persona system permits fluorescent lighting fixtures to be independently adjusted from a hand-held infrared (IR) wireless remote control. The system consists of a dimmer with an integral IR receiver, Lutron's Hi-Lume or Eco10 electronic fluorescent dimming ballast and a hand-held infrared wireless remote.

Circle No. 103



Motorola Lighting Inc.
 887 Deerfield Pkwy.
 Buffalo Grove, IL 60089
 Tel.: (708) 215-6300
 Contact: Karin Summers

Helios electronic dimming ballast from Motorola Lighting is designed for cost-effective, high performance architectural dimming for fluorescent lighting systems. Helios controls light levels from 100 to 10 percent and increases energy savings. The ballast is compatible with 0-10V DC dimming controls, ambient light sensors and occupancy sensors. Helios is suited for applications including classrooms, conference rooms, presentation centers, board rooms and executive offices.

Circle No. 104



Thomas Controls Systems
 1015 South Green St.
 Tupelo, MS 38801
 Tel.: (601) 842-7212
 Fax.: (601) 841-5596
 Contact: Al Bradbury

Matrix Lighting Management System provides modular, application-specific lighting control/management including time-of-day power switching and dimming; daylight harvesting; telephone and switch inputs/overrides; remote access; and demand control. Also featured is controllable breaker technology—"stand-alone, intelligent" panel boards communicate globally over two networks enabling compliance with existing and future energy legislation.

Circle No. 105

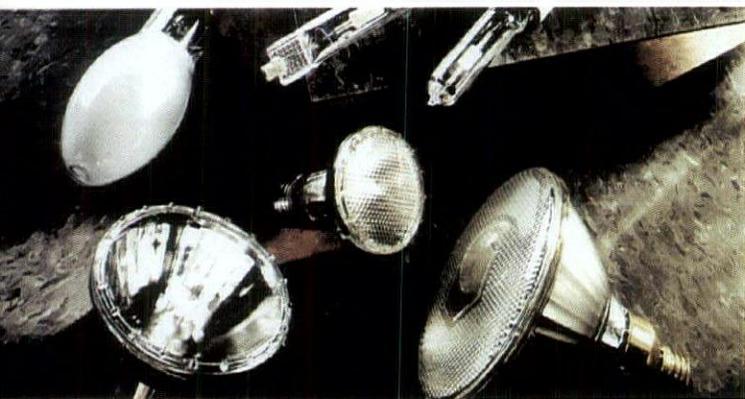
LIGHTFAIR NEW PRODUCT SHOWCASE

Architectural Lighting is proud to sponsor for another year the well-attended New Product Showcase at Lightfair International in Chicago. A total of 89 of the industry's most innovative new products were presented with style and humor by Craig Roeder, IALD, IESNA of Craig A. Roeder Associates and Gary Dulanski, IESNA of Stan Deutsch & Associates.

Out of all the products submitted, nine were chosen for providing exemplary benefits to today's lighting professional. Each received an Award of Distinction, and they are shown

here. Philips Lighting Company was further singled out for its Master Color Metal Halide Lamps family with the first-ever Best New Product of the Year Award.

The Lightfair New Product Showcase Advisory Committee included Jim Benya, FIES, IALD of Professional Lighting Design Studio; Jeffrey Brown, IALD of Colorlume; Carol Chaffee, IALD of Carol Chaffee Associates; Boyd Corbett, IESNA of LiteTronics International; Franz Euler, IESNA of Litecontrol; Mitchell Kohn, IALD, IESNA of Mitchell Kohn Lighting Design; and Craig Roeder, IALD, IESNA.

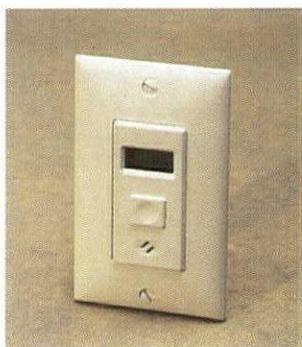


BEST NEW PRODUCT OF THE YEAR AWARD

PHILIPS LIGHTING COMPANY

Master Color Metal Halide Lamps

Master Color Metal Halide Lamps from Philips Lighting Company are designed to combine the best of metal halide and high pressure sodium technology. By incorporating a ceramic arc tube, Philips Lighting delivers efficiently produced white light with exceptional color stability and color rendering. This expanding product family offers consistent color, lamp-to-lamp and over time, at 3000K, 85 CRI and 95 lumens per watt. Master Color Metal Halide Lamps are available in ED17, PAR20, PAR30, PAR38, T6, tubular double-ended and protected ED17 bulb shapes in low wattages from 35 to 150 watts. **Circle 50**

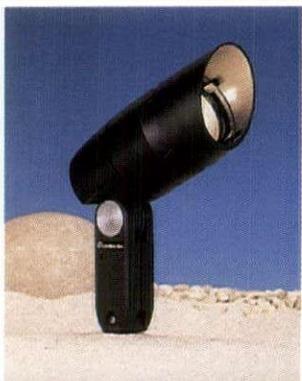


AWARDS OF DISTINCTION

WATT STOPPER, INC.

InteliSwitch Digital Time Switch

Watt Stopper, Inc.'s IntelliSwitch Digital Time Switch automatically turns lights off after a preset amount of time via user-programmable settings that include a time-out period of five minutes to 12 hours, time-scroll option and one-minute light flash warning. Features: Low-profile enclosure, push-button operation, time remaining displayed with back-lit LCD, 120/277V. **Circle 58**



LUMIERE DESIGN & MANUFACTURING, INC.

Cambria #253

Lumiere Design & Manufacturing, Inc.'s Cambria #253 combines composite technology developed for the U.S. space exploration program with a new product design to offer advanced thermal, mechanical, physical and electrical properties that include exceptional chemical and corrosion resistance. Designed to perform as required over a broad range of applications. **Circle 52**

NOVITAS

SuperSwitch Mini-Low Profile Automatic Wall Switch

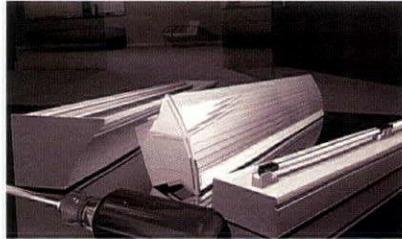
Novitas' SuperSwitch Mini-Low Profile Automatic Wall Switch is the first completely flush-mounted occupancy sensor, offering benefits of cost-efficiency via bi-level lighting control and a built-in optional manual-on switch. Other features include detection of minor motion and separate entry and space controls to prevent false activation from corridors. **Circle 54**



STARFIRE LIGHTING

Tru Lux

Starfire Lighting's Tru Lux fixture series utilizes a T2 lamp—literally the size of an unsharpened pencil—to produce the same light output as an equivalent-wattage compact fluorescent lamp, which is approximately four times larger. By using the lamp's small size and other characteristics, the basic scale of fixtures in many applications can be redesigned. **Circle 56**



THE BODINE COMPANY

RediTest B50ST

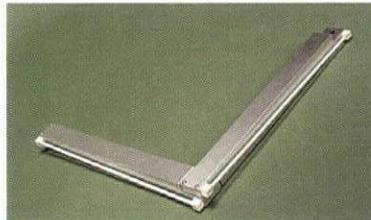
The Bodine Company's RediTest B50ST is a self-testing fluorescent emergency ballast that automatically tests emergency lighting according to NEC® and Life Safety Code requirements. The product continually monitors ballast performance, automatically performs scheduled testing and alerts maintenance personnel if service is needed for emergency units. **Circle 57**



NORBERT BELFER LIGHTING MFG. CO.

T2 Micro Flex System

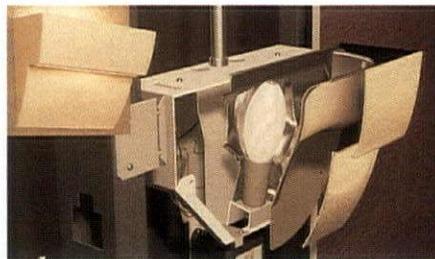
Norbert Belfer Lighting Mfg. Co.'s new T2 Micro Flex System combines the flexibility and size of low-voltage lighting with the light output of fluorescent fixtures by utilizing sub-miniature T2 lamps. The system is available both with remote or integrated ballasts, which can be formed to fit virtually any curved application. **Circle 53**



SPI LIGHTING INC.

Phaces

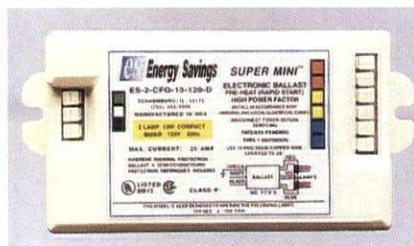
SPI Lighting Inc.'s Phaces series of low-profile ADA-compliant wall sconces are designed for low-ceilinged or narrow spaces. The fixtures—accommodating many lamp types, electronic ballasts and available in a variety of materials—incorporate a new dual-chambered reflector system that provides a wide indirect lateral pattern of balanced light that is 65 percent efficient. **Circle 55**



ENERGY SAVINGS, INC.

Super Mini Electronic Ballast

Energy Savings, Inc.'s Super Mini Electronic Ballast was created specifically for downlighting and decorative lighting applications. The ballast is one inch in height and weighs six ounces. The leads are inserted into a connector, either at the bottom for downlighting or the side for decorative. It shuts off automatically when the lamp nears end of life. **Circle 51**



DIVERSITY

Metal, glass, paper. Round, angular, crescent. Today's selection of decorative fixtures offers an even wider variety of styles, shapes, sizes, materials and finishes. And while there are fixtures to fit just about any interior or exterior design motif—whether sleek contemporary or elegant traditional—two significant trends have emerged in recent years. Many decorative fixtures are now available in models designed for compact fluorescent lamps in addition to mod-

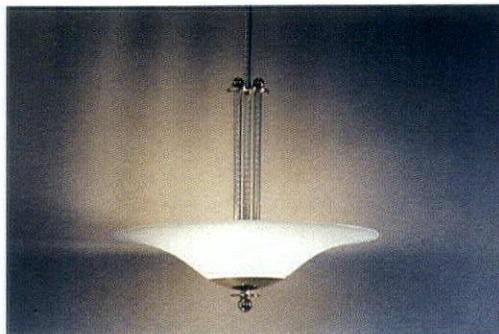
els designed for incandescent lamps—another sign that energy conservation has grown in importance in the list of client goals. Another trend is the multitude of fixtures designed to comply with the American with Disabilities Act (ADA), which sets a 4-in. maximum projection for wall-mounted fixtures.

Take a look at the decorative fixtures here, designed for a variety of applications, that represent today's diverse options.



ARTE DE MEXICO

This rustic faux antler chandelier retains the details of the company's original and authentic naturally shed deer antler collection. This fixture is suitable for a wide variety of hospitality applications. **Circle 30**



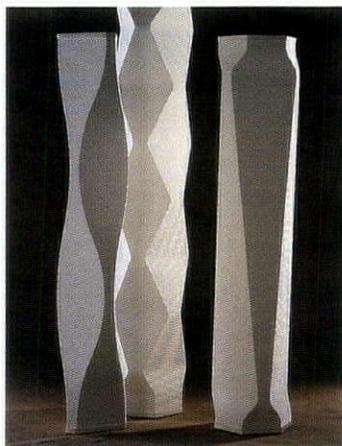
TSAO + CLS

Ceiling-suspended pendant fixtures and wall-mounted sconces in the G-8 collection feature a cluster stem of tubular metal rods and white glass globe diffusers. The pendant, shown, has a 32-in. diameter and comes equipped with four 60W A-19 lamps or four 13W compact fluorescents. **Circle 31**



BOYD

The French-inspired Cord and Tassel Collection includes two pendants and three wall sconces that feature silk cords/tassels in midnight blue, cream, claret, harvest gold and mushroom, as well as solid cast brass details and hand-blown etched glass. The fixtures are designed for residential and hospitality applications. **Circle 32**



INTERFOLD

Roland Simmons' Lumalights are sculpture by day, soft light by night. The artistic fixtures are constructed of corrugated white paper—making them translucent when lighted—and range in height from 32 in. to 90 in. **Circle 33**



DON'T DISTURB THE NEIGHBORS

Great light control with 10:1 mounting height to spacing ratio achieved by new recessed wall light from Hydrel

Avoid annoying glare and invasive light trespass with Hydrel's 9600 Series Recessed Wall Lights

Innovative Light Control - Glarefoil®, a unique internal glare screen, was developed especially for the new Hydrel 9600 Series Recessed Wall Light. A thin laser-cut metal louver designed to mount behind the lens, Glarefoil® provides exceptionally sharp cutoff, effectively eliminating undesirable glare and light trespass.



Sharp Cutoff - Cutoff effectiveness is apparent when viewing the internal louver from below horizontal, and from straight on (see below).



Louver from below



and from straight on

Improved Beam Patterns - Precise tuning of lamp/reflector/lens and the new internal glare screen give the 9600 Series its extraordinary light control and remarkable beam range. A 9600 with horizontal wide distribution and 100 watt HID lamp is capable of a 10:1 mounting height to spacing ratio, compared to the usual 3:1 spacing for common small step and wall fixtures. The series is available in three lateral distributions and three forward distributions as well as left or right skew for stair installations.

Compact, No Condensation - patented sealing technology and modular construction provide air cooling to allow reduced size and simple installation/maintenance. Dry air purged lamp modules eliminate condensation.

The 9600 Series is available in a variety of styles and lamp options. For more information contact your area Hydrel sales representative or the factory.



Sealed lamp and power modules install easily into non-corrodible backbox.



HYDREL 12881 BRADLEY AVENUE SYLMAR CALIFORNIA 91342 TEL 818/362-9465 FAX 818/362-6548

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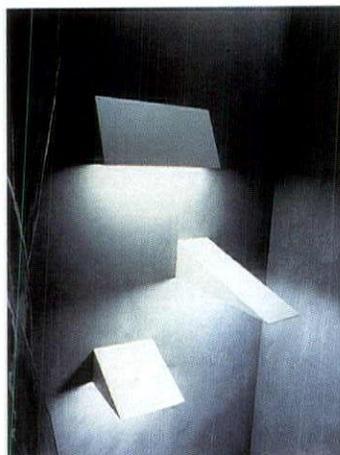
LEUCOS USA, INC.

The Luna wall sconce, created by Roberto Pamio, is designed to meet ADA requirements. The fixture measures 12-1/4 in. wide x 11 in. high x 3-3/8 in. deep. The opal glass diffuser is available with a blue, gray or crystal band. **Circle 34**



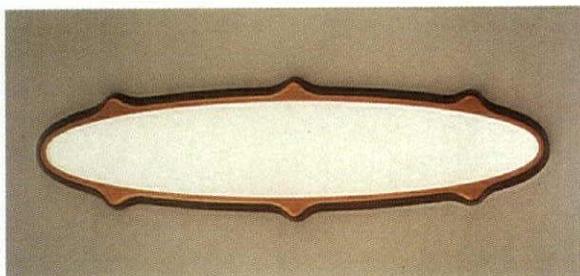
JUSTICE DESIGN GROUP

The Radiance Collection of ceramic pendants includes 16 styles and shapes for commercial and residential use. The fixtures are made of Ceramalight, a kiln-fired composite, and are available in faux patinas and marbles. The curve and ziggurat models are shown. **Circle 35**



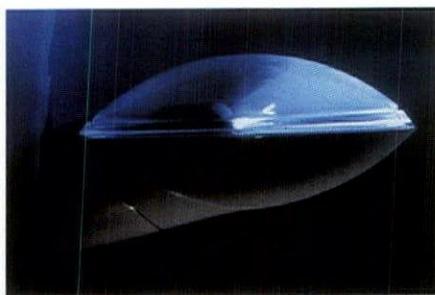
ARTEMIDE

Wedges wall sconce, designed by Ron Rezek, is available in three dimensions: 10 in. wide x 5 in. high x 10 in. deep; 6 in. x 6 in. x 20 in.; and 19 in. x 9 in. x 4 in. (which meets ADA requirements). Wedges accepts three types of fluorescent lamping, and is available in a variety of finishes, including custom colors. **Circle 36**



FLOS INC.

ADA-compliant Geco, part of the Arteluce collection, is designed for both indoor and outdoor use. Geco, which resembles a "magic mirror," is available in two sizes with a choice of incandescent or fluorescent sources. The diffuser is made of acid-etched molded glass; a metal ring, offered in various finishes, surrounds the diffuser. **Circle 37**



REGGIANI USA INC.

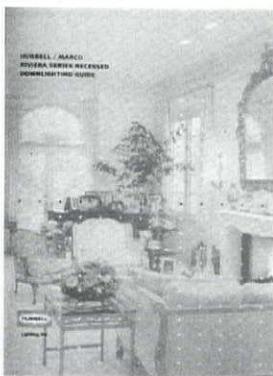
Scoop, an interior/exterior fixture, is available for surface mount, recessed or post mounted applications. Scoop accepts a range of light sources including 70W and 150W HQI lamps, 50W and 100W WhiteSON lamps and linear quartz lamps up to 300 watts. Scoop's asymmetric reflector allows the light to be aimed without changing the position of the fixture. Computer-designed optical assembly conceals the light source. **Circle 38**



LIGHTOLIER

Each ADA Wall and Corridor Fixture features a low profile to meet the requirements of the ADA for new construction in commercial and residential applications. The fixtures are available in a range of styles, sizes, shapes and finishes. The fixtures, which use compact fluorescents, are suitable for interior and exterior lighting. **Circle 39**

PRODUCT LITERATURE



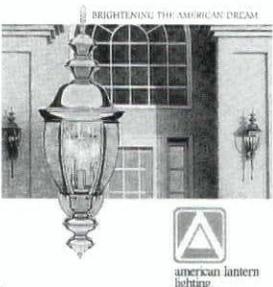
DOWNLIGHTS

Hubbell Lighting, Inc.'s new 52-page *Hubbell/Marco Recessed Downlighting Guide* reviews the company's residential and commercial recessed downlights. Including color photography and illustrations, it is designed to allow easy review and selection of the best housing and trims to meet each application. Hubbell Lighting, Inc., Christiansburg, VA. **Circle 60**



BALLASTS

Advance Transformer Co.'s 160-page *Advance Atlas* contains comprehensive specification data, dimensional drawings and wiring diagrams for the company's hundreds of models of HID ballasts and fluorescent electromagnetic, low-frequency electronic and high-frequency electronic ballasts. Advance Transformer Co., Rosemont, IL. **Circle 61**



INDOOR/OUTDOOR

American Lantern Company's complete collection of more than 1,200 indoor and outdoor light fixtures is showcased in *Brightening the American Dream*, a 154-page full-color catalog designed for reader ease in locating fixtures by design and application. The catalog also features a new, expanded line of aluminum styles. American Lantern Company, Newport, AR. **Circle 62**



HOME LIGHTING INFO

Design Light Communications' *Bringing Light Home: Designer Classroom/Site Solutions* is a quarterly newsletter published for designers, architects and other building trades interested in residential lighting. The series focuses on technology and issues linking color, light and design. Design Light Communications, Norwell, MA. **Circle 63**

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ARCHITECTURALLY STUNNING. YET PRACTICAL.

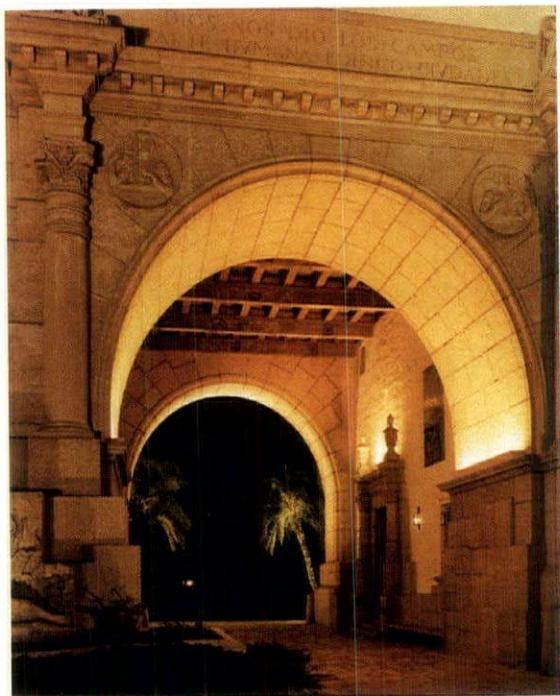
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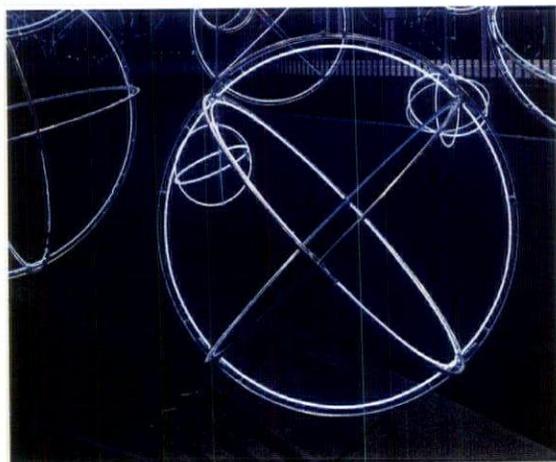
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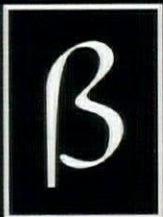
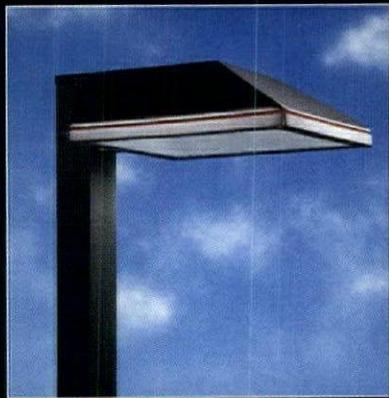
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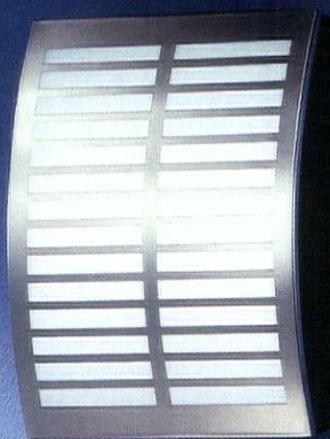
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