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## Comings & Goings

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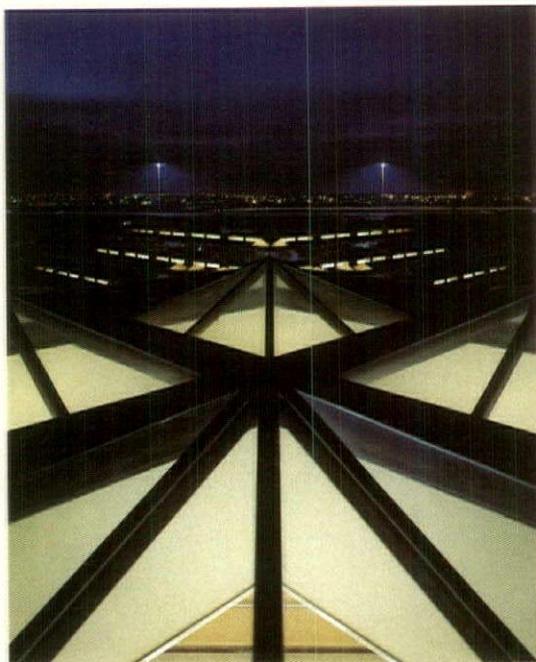
Philips Lighting



**PHILIPS**

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MAY 1991  
VOLUME 5, NUMBER 5



COVER PHOTO BY R. GREG HURSLEY

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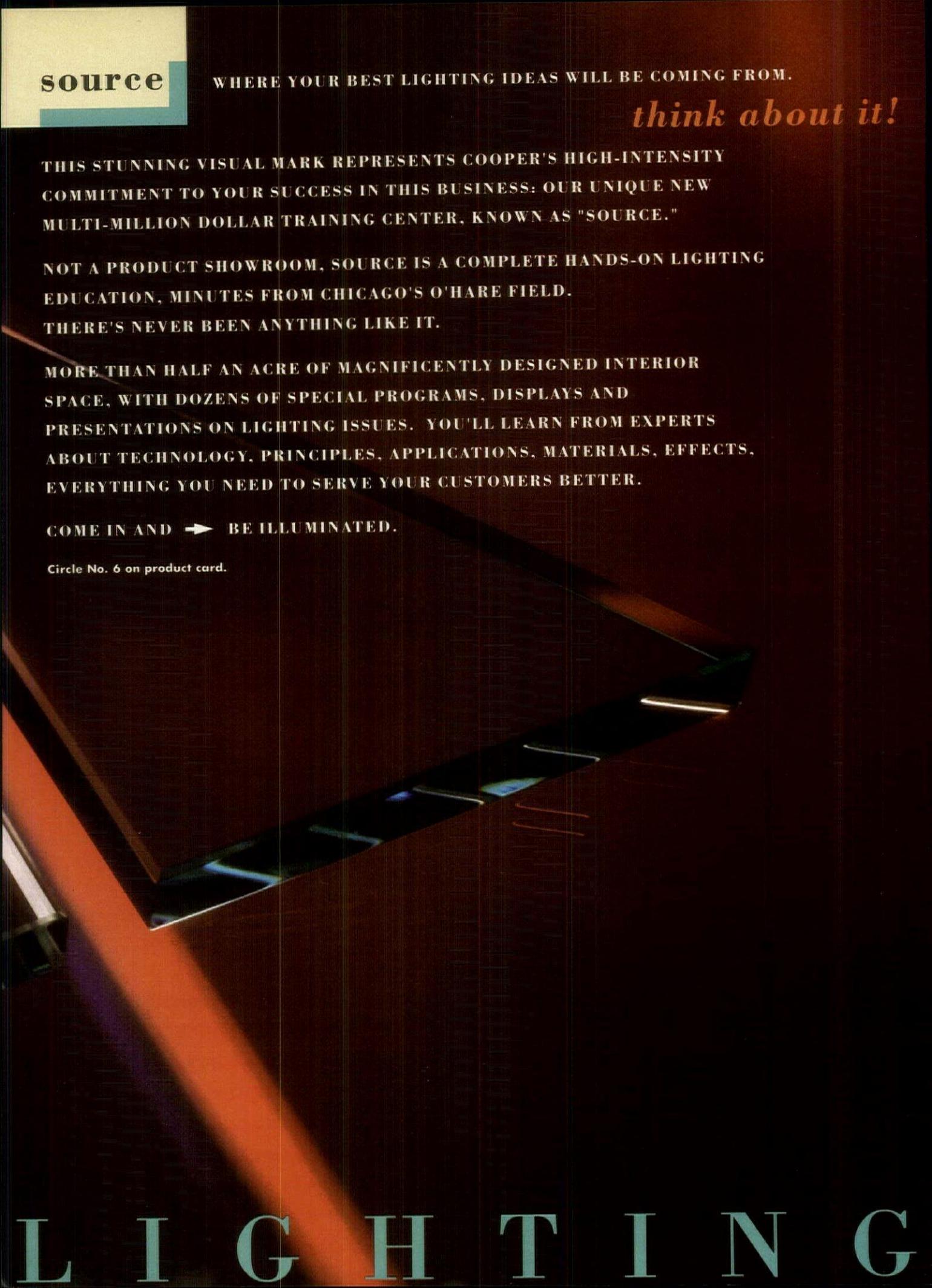
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L I G H T I N G

## **ARCHITECTURAL LIGHTING WINS EDITORIAL AWARD**



**AUTHOR, AUTHOR:** Wanda Jankowski, left, accepts Jesse H. Neal Certificate of Merit for *Architectural Lighting's* landscape columns authored by Janet Lennox Moyer, right. Ms. Moyer is currently working on a landscape lighting book scheduled for publication in fall 1992 by John Wiley & Sons.

The Jesse H. Neal Award is presented annually by the American Business Press (ABP) for articles exhibiting editorial excellence. This year, 709 entries competed for this national award, deemed the "Pulitzer Prize" of trade journalism.

I am proud to announce that Janet Lennox Moyer and the staff of *Architectural Lighting*, including Catherine Schetting Salfino, Christina Lamb, and Ronald Gabriel, have received a Jesse H. Neal Certificate of Merit for the series of landscape lighting columns:

- "How To Plan A Focusing Session," November 1989, pages 20-22 and 24
- "Creating A View With Landscape Lighting," February 1990, pages 16, 19, and 20
- "What To Consider In Street Lighting," June 1990, pages 46, 48, 50, and 51
- "Will This Fixture Last?," August 1990, pages 20-23

A total of 30 Neal Awards—15 medals and 15 certificates—were presented to winners at the ABP-sponsored luncheon held at the Sheraton Centre in New York on Wednesday, March 13, 1991. The judging board for the award consisted of noted journalists, educators, and industry experts.

This marks the second major award *Architectural Lighting* has received in the past year. The first was *Magazine Design & Production's* Ozzie Award, Honorable Mention for the Best Redesign of a Trade Magazine, announced in the November 1990 issue of *Architectural Lighting*.

Though we are grateful for the peer recognition these achievements signify, we also value these awards as a demonstration of our commitment to bringing you the best in editorial communication of lighting news, applications, and techniques.

Know that we'll continue to work hard for you.

**WANDA JANKOWSKI**  
EDITOR-IN-CHIEF

## ISSUES IN ANODIZING

## TO THE EDITOR:

Janet Lennox Moyer's response letter to Dr. Hirsch (January 1991, page 9) was much too kind. The anodizing process raises many issues in environmental safety, specifically in the disposal of used chemicals. (We know; we do anodizing.)

Powder-applied finishes have no volatile organic compounds. That's why they're applied as a powder.

In addition, there are a host of other issues that Dr. Hirsch didn't mention:

- Duranodic finishes are not guaranteed in Los Angeles smog.

- They are also not recommended near refineries or chemical plants.

- They dissolve to nothing when in contact with any acid solution. (Cardboard leaches out a sulfuric acid solution when wet and destroys anodizing.)

- There is a range of color density within any specific anodized color. (Exact color matching is not possible.)

- Duranodic colors are alloy dependent: the same part made from three different alloys will come out three different colors from the same anodizing tank.

- Aluminum castings generally do not anodize to a proper color.

- An anodized product must be designed with anodizing in mind. For example, welds cannot be exposed because the filler material used in the weld will not anodize the same color; areas adjacent to the weld will have a "heat halo" or area of lighter color; exterior metal surfaces must be mechanically brushed or sanded because anodizing accentuates surface blemishes; and there must be a place on the part designed for clamping to the anodizing rack (this area will not get anodized).

Thus, it is the design and preparation of the fixtures prior to anodizing that raise the cost. Also, anodizers prefer to pre-anodize rather than post-anodize.

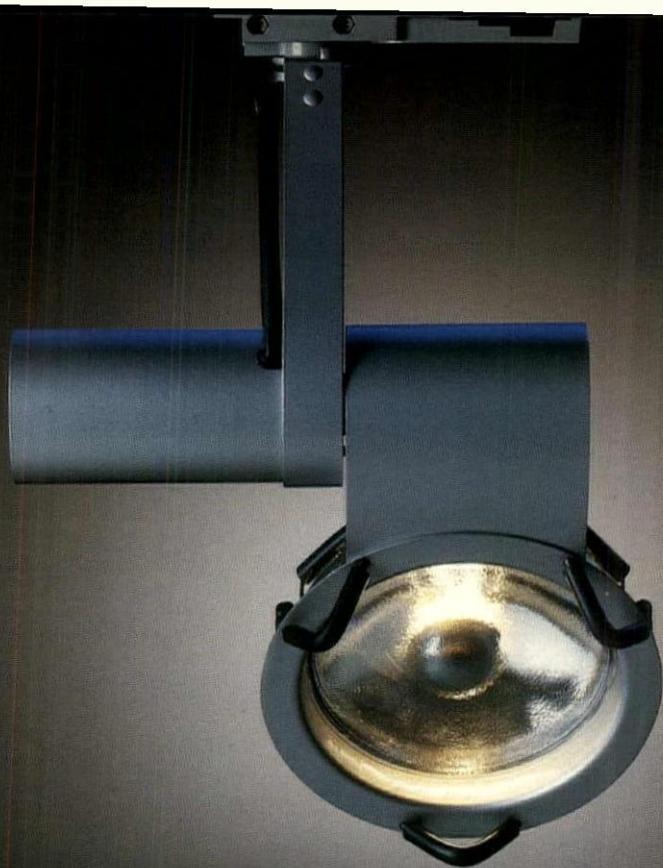
There are many different kinds of anodizing. California anodizers are all switching from Duranodic or Kalcolor, to "two-step," which is better for the environment and more profitable for the anodizer, although it is harder to color control.

We like powder-paint finishes. There are more types of paint finishes available in powder than there are types of anodizing. The most popular choices seem to be acrylic and polyester. The former is glossier, the latter doesn't chip as easily.

Janet Lennox Moyer's article ("Will This Fixture Last?" in the August 1990 issue, pages 20-23) and rebuttal to the letter to the editor were much applauded here in Crawfordsville.

DOUG PALIN

Product Marketing Manager  
Architetectural Outdoor Lighting  
*Lithonia Lighting*  
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## MORE THAT MEETS THE EYE THAN GLARE?

### TO THE EDITOR:

The letter to the editor from Mr. Mark Ricketson of Lithonia Lighting (January 1991, page 10) does make a valid point with respect to "state of the art" parabolic lighting. However, Mr. Ricketson has chosen only to address one issue with regard to the overall office environment.

The Cornell Study addressed several issues regarding the office environment as affected by lighting. Issues regarding psychological impact are equally important in an office lighting design. For example, in the Cornell Study, ratings were acquired regarding the subjective lighting quality as it relates to good vs. bad, pleasant vs. unpleasant, satisfying vs. dissatisfying, comfortable vs. uncomfortable, likeable vs. dislikeable, glaring vs. non-glaring, and harsh vs. soft. In each case, the evidence showed a favorable response for lensed indirect lighting over parabolic lighting.

The categories of bright vs. dim, stimulating vs. subdued, and drab vs. colorful show a slightly favorable response for parabolic lighting over lensed indirect.

While the Lithonia Optimax system may well address the problem of VDT screen glare, it is possible that it may fall short in addressing other concerns in the overall design concept of office lighting. Additional concerns are surface glare, shadow patterns, and overall cavity illumination. The indirect lighting system addresses the additional concerns with favorable results when compared to even "state of the art" parabolic systems.

The article entitled "Direct vs. Indirect Lighting in the Electronic Office" appeared in the January/February 1985 issue of *Corporate Design & Realty*. The article covered an independent study performed by the University of Colorado, Boulder, where indirect lighting was compared to parabolic recessed fluorescent lighting. The experiment was designed to determine *subjective* differences, not *performance* differences. The conclusions drawn from this study were:

1. Less reflected glare reaches the VDT screen from the

CONTINUED ON PAGE 47

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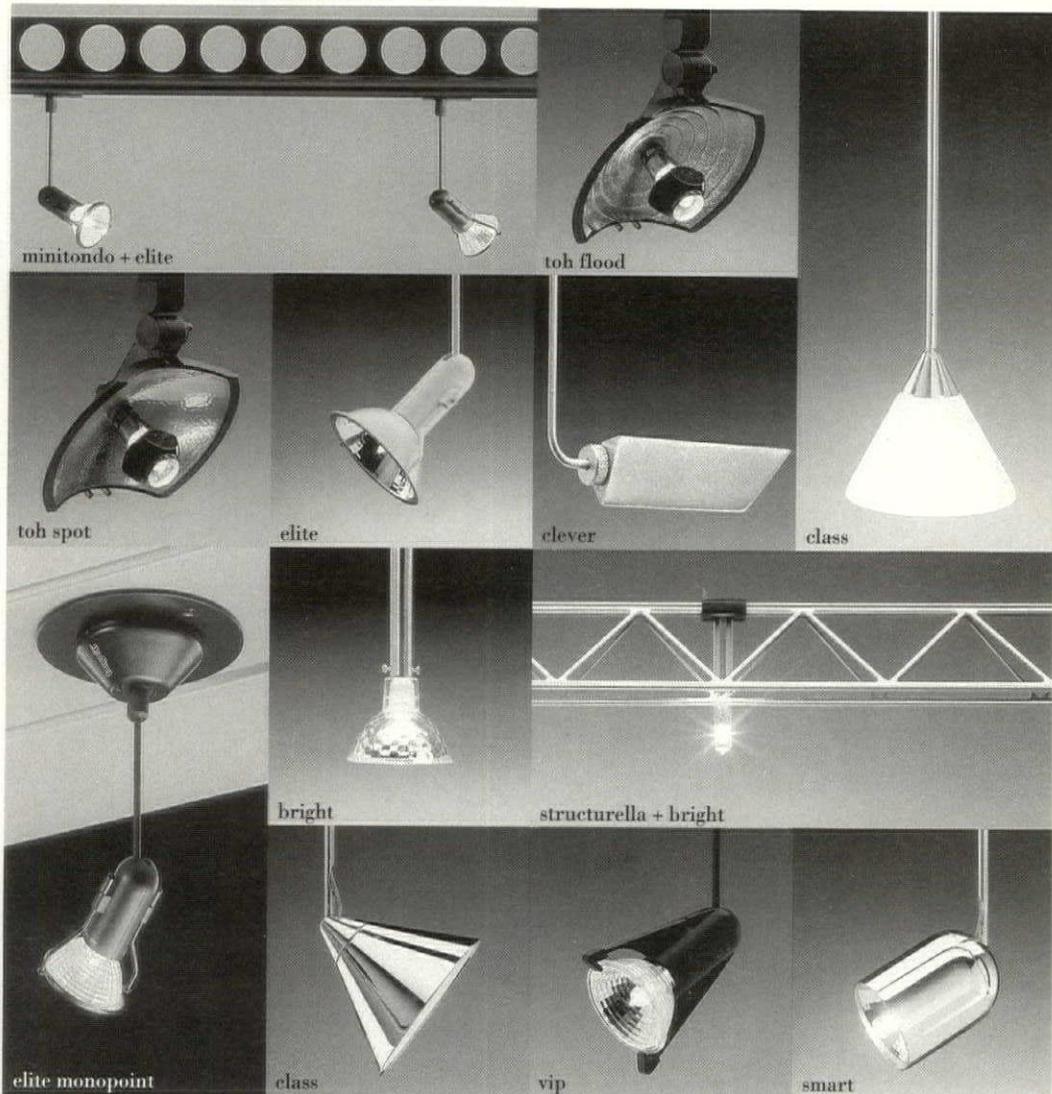


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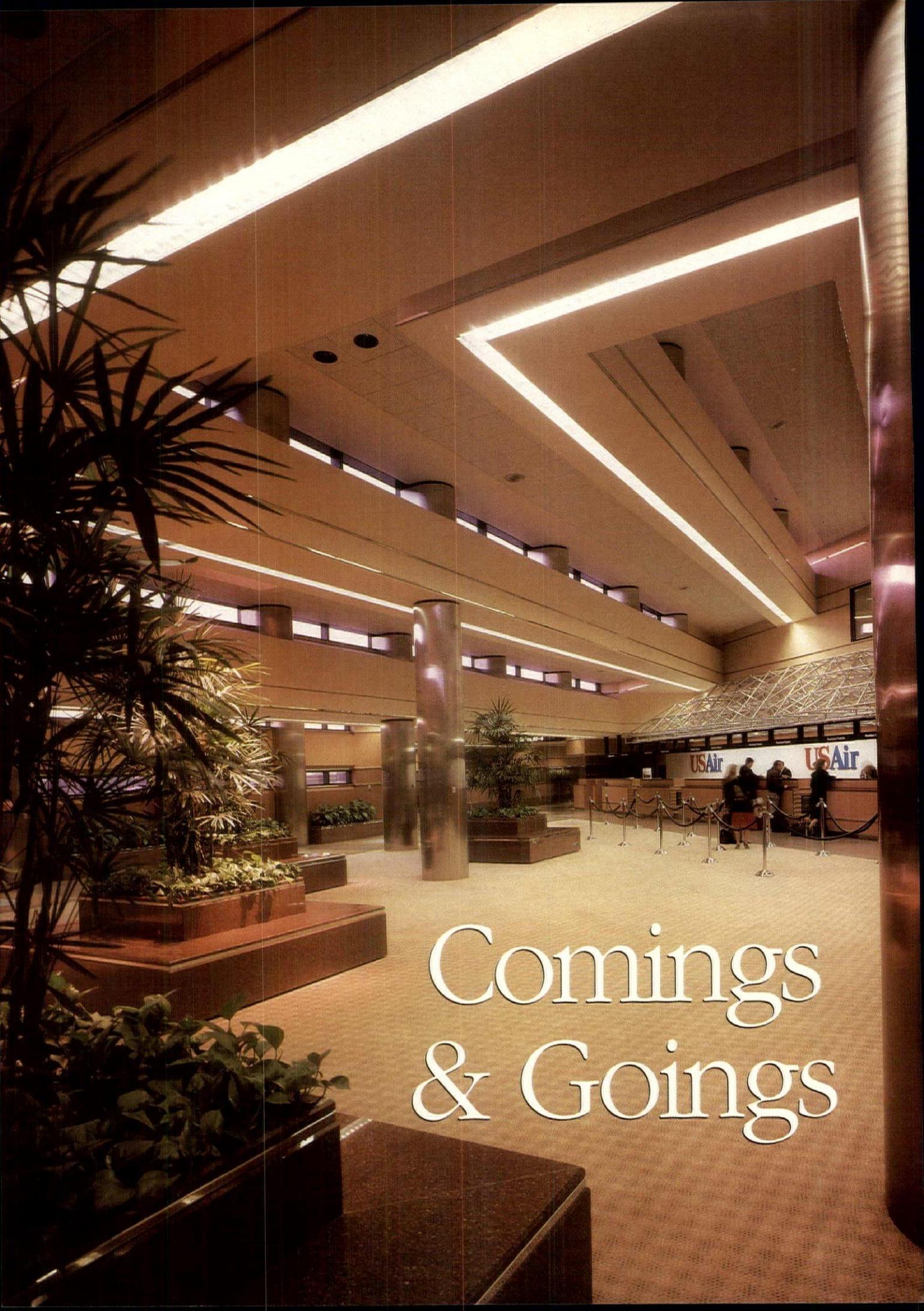
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A photograph of a modern airport terminal interior. The space is characterized by a multi-level design with recessed lighting in the ceiling and walls. Several large, cylindrical columns support the structure. In the foreground, there are several large indoor plants in wooden planters. In the background, a check-in counter is visible with the "US Air" logo. A few people are standing near the counter, and a stanchion system with black ropes is set up in front of it. The overall atmosphere is warm and professional.

# Comings & Goings

# Energy-efficient and architecture-integrated lighting enhances San Jose International Airport's image as the Gateway to Silicon Valley

WANDA JANKOWSKI  
EDITOR-IN-CHIEF

**M**ore and more people are finding out the answer to the question posed by that popular song of the 60s, "Do You Know The Way To San Jose?" In 1989, 6.7 million people passed through San Jose International Airport, a 17 percent increase over the number of travelers in 1988. Experts predict that could increase to 18 million passengers by the year 2006.

The airport, owned and operated by the City of San Jose, is not only a vital link to Southern California and the Pacific rim, but also the gateway to Silicon Valley, home of hi-tech electronics and computer industries. In planning the Terminal A addition, intended to house US Air and American Airlines, city fathers made it clear that they wanted a structure that would reflect the city's upscale image as the center of industries on the forefront of technology. This challenge came with the added restrictions of strict state and city energy requirements, and the budget limitations that typically face public projects.

Larry Keller, corporate director of design, HTB Architects, Oklahoma City, OK, believed that this standard budget project could be transformed into something out of the ordinary by closely integrating what needed to be highly functional and energy-efficient lighting with the architecture. Consequently, early in the project, Horton•Lees Lighting Design Inc., was called in to be a member of the design team.

"We tried to conform the lighting to the architectural concept, rather than just do a typical lighting job," says Keller. "And that led to our relationship with Horton•Lees—a real lighting design firm, rather than just an electrical engineer. This way we could have that kind of close coordination between an architectural concept and the ability to perform functional tasks with lighting."

The linear orientation of Terminal A begins with the exterior, where threads of stainless steel trim run between horizontal stretches of red granite. The linear theme is continued inside with stepped ceiling treatments and continuous fluorescent troffers.

"I think the lighting in an airport has to direct you, in a certain sense, as to where you're supposed to go. Airports are filled with fast-moving activity. You're always running toward your plane, and if the lighting pattern doesn't direct you to

where you have to go, a lot of the lighting's impact is lost," Keller says.

"It's a different problem than when you come into an office building where people are sitting much of the time and you have a more static situation.

"At an airport, the lighting has to be dynamic," says Keller. "There are a variety of ways that it can be done, but you can't get into things like neon with flashing arrows. The general lighting that passengers immediately see was developed in a linear fashion so it focuses them toward the places they have to go



**DOWN TO EARTH:** (Left and above) Decor for Terminal A is in warm, restful earth tones. Flooring is patterned terrazzo tile for heavy circulation areas; carpeting in waiting areas. Higher light levels are used in areas like the ticket counter.

"We used a continuous 9-inch wide troffer fixture with a parabolic louver, and specular reflectors and fins," explains Larry Lee, project manager, Horton•Lees. The fluorescent lamps have been staggered to overlap and eliminate socket shadows.

"The fixtures run continuously throughout the building," Lee says. "They don't have any short stops. They form "L" channels and 45 degree shapes depending upon the architecture. They look like long ribbons of light, with very low brightness."

"If you look at the photos, you can see that the lights curve so that they look quite natural in the ceiling," Keller says. "We used the lighting as a kind of breakline between those various planes, and tried not to get ourselves in a situation in which the lighting became or looked arbitrary."

"The louver systems for the parabolic troffers have iridescent suppressant materials, to avoid a rainbowing effect.

The choice of light sources was influenced not only by strict Title 24 energy code requirements, but by restrictions created by the City of San Jose.

"The requirement from the City of San Jose was that public buildings must use electronic ballasts, which were on the forefront of technology at the time the requirement was originally conceived in 1985 or 1986," Lee says. "Terminal A, which began being planned in 1985, was one of the first projects in which it was mandated."

"We paired T8 lamps with the electronic ballasts, rather than T 12 lamps, because T8s only come in the high color rendition types, and so it was guaranteed that replacements

PHOTOS BY R. GREG HURSLEY



**PLANT LIFE:** Metal halide fixtures give good color rendering and keep foliage green and healthy.

would always provide good color rendition," Lee says.

"A second type of lighting was needed for areas that weren't easy to handle with the linear lighting," Keller says. "Those areas were kept very subtle, so they don't take away from this main traffic pattern of linear lighting."

"To maintain adherence to California's energy code, the downlights have compact fluorescents in them for all general areas," Lee says. "The only places that have any sort of incandescent lighting are those where plants or special architectural features need to be accented."

Keller says the strict California energy codes forces lighting specifiers to seriously consider light source alternatives to incandescent.

"But the effect can be very much the same as long as you're careful about the color rendition in the type of lights you use," Keller says.

"We chose 3,000-degree Kelvin sources because the color schemes revolved around warm peach and salmon hues," says Lee. "In the baggage claim tower, recessed metal halide accent light and downlights are used to keep the plants alive that are down at the ground floor. The 3,000-degree Kelvin, phosphor-coated metal halide lamps are not only good for color rendition, but we believe are the best ones for the health of the plant material. Once the plants go in, they're very hard to get out because they're fairly large."

The use of varied light levels creates an important hierarchy.

"For example, there is a lot of light at the ticketing counters, at the security areas, and in the main circulation areas. The lighting tails off and gets subdued at the departure lounges, where passengers can be in a more restful atmosphere," says Keller.

"This is not a very expensive lighting job for an airport," Keller says. "As with any public project, there were strict cost limitations that had to be met, but I don't think we sacrificed anything in this job. Although the fixtures are off the shelf, they are applied in ways that give the feeling that it's not the same old lighting job." ■

#### DETAILS

**PROJECT:** TERMINAL A, SAN JOSE INTERNATIONAL AIRPORT

**LOCATION:** SAN JOSE, CA

**CLIENT:** CITY OF SAN JOSE

**LIGHTING DESIGNER:** LAWRENCE D. LEE, HORTON•LEES LIGHTING DESIGN INC.

**ARCHITECT AND INTERIOR DESIGNER:** HTB, INC.: P.G. WILSON, Jr., PE, principal in charge; LARRY J. KELLER, AIA, corporate director of design; ED RILEY, AIA, ASID, and LES ELLASON, AIA, project managers; DOUG LUDWIG, AIA, and JAMES HOWARD, project architects; WES BRITSON, PE, structural engineer

**CONTRACTOR:** CONTINENTAL HELLER

**ELECTRICIAN:** ROSENDIN ELECTRIC

**PHOTOGRAPHER:** R. GREG HURSLEY

**LIGHTING MANUFACTURERS:** LINEAR LIGHTING: recessed



parabolic fluorescent troffers in gate, ticketing, baggage claim, & circulation areas; KURT VERSEN CO.: recessed metal halide accent and downlights in baggage claim tower, and recessed low-voltage accent lights; STAFF LIGHTING: space frame integrated parabolic downlights at ticketing counter, and recessed compact fluorescent downlights in baggage claim tower; DAYBRITE: recessed 2 x 2 parabolic fluorescent troffer in corridors; GTE SYLVANIA: 9-watt per linear foot, 35-watt, and 100-watt fluorescent lamps, and 175-, 250- and 400-watt phosphor coated metal halide lamps; GENERAL ELECTRIC: 50-watt PAR 36 and 240-watt PAR 56 lamps; MAGNETEK-TRIAD: electronic ballasts

**GOING MY WAY:** Linear fluorescent fixtures provide a sense of direction in the airport where everybody is always going someplace fast.

## THE MASTER PLAN

### SIDE LIGHTS

The planning for Terminal A began in 1985, the design was completed in 1986-87, and the construction was finished in February 1990. The first US Air flight took

off from there February 11, 1990. American Airlines moved into the terminal in the Fall of 1990 after an eight-gate addition.

Terminal A marked the first major construction at San Jose International Airport since Terminal C was completed in 1965. Terminal A is the first of three new terminals that are part of the master plan to serve the anticipated 18 million travelers by the year 2006.

The new terminal is the prototype for Terminals B and C to follow. It is composed of two structures—one for arriving and one for departing traffic—connected by a pedestrian walkway above Terminal Drive. The airfield side of the terminal contains departing functions, such as ticketing, baggage check, and departure lounges. The opposite side houses baggage claim, parking, car rental, and ground transportation. The lower level has airport operational offices. The upper floor contains security and emergency operations and training rooms.

The first phase of construction cost \$126 million and included Terminal A, a parking garage, two new parking lots, aircraft ramp, the extension of Airport Boulevard and Terminal Drive, and a new bridge over the Guadalupe River to a parking lot.

No taxpayer funds were used for the development or operation of San Jose International Airport. It is a self-sustaining operation with revenues from user fees and federal grants.



**FOYER FANTASY:** The entrance (above and opposite page) glows with the help of strip lights that circle the dome. Display niches, which are illuminated with 20-watt reflector lamps, hold a sampling of the owner's art collection.

# Domed Illusions

A glorious foyer offers a  
luminous welcome

BY MARY ELIZABETH NAEGELE  
CONTRIBUTING EDITOR

**W**hen residents or visitors enter the domed, skylit foyer of this Dallas penthouse, they're immediately captivated by its warmth and exceptional luminance. Bill Booziotis, Booziotis & Company Architects, and Tully Weiss, Tully Weiss Lighting Design, want people to feel as if they've "entered a lamp"—that they're at the heart of the space's radiant glow.

In the rotunda, four display cases provide just a sampling of the owner's expansive art collection—and the special lighting that accents it. The cases are internally lit with 20-watt AR 48 reflector lamps.

"Like stage controls, these reflector lamps—which come two to a strip—can light from the top, or the right or left sides of the case," Booziotis says.

The circular skylight, which is in the center of the dome, is encircled by 3.75-watt strip lights with medium-blue silicone filters.

"We chose this color to create the effect of moonlight shining through the glass," says Weiss, who designed the illumination for the entrance foyer, as well as the lighting control system for the entire apartment.

Four 25-watt PAR 36 pinlight spots with anti-dazzle shields are placed evenly around the skylight's perimeter so that their beams splash over the geometrically patterned floor. This enhances the richness and beauty of the wood and adds brilliance to the space.

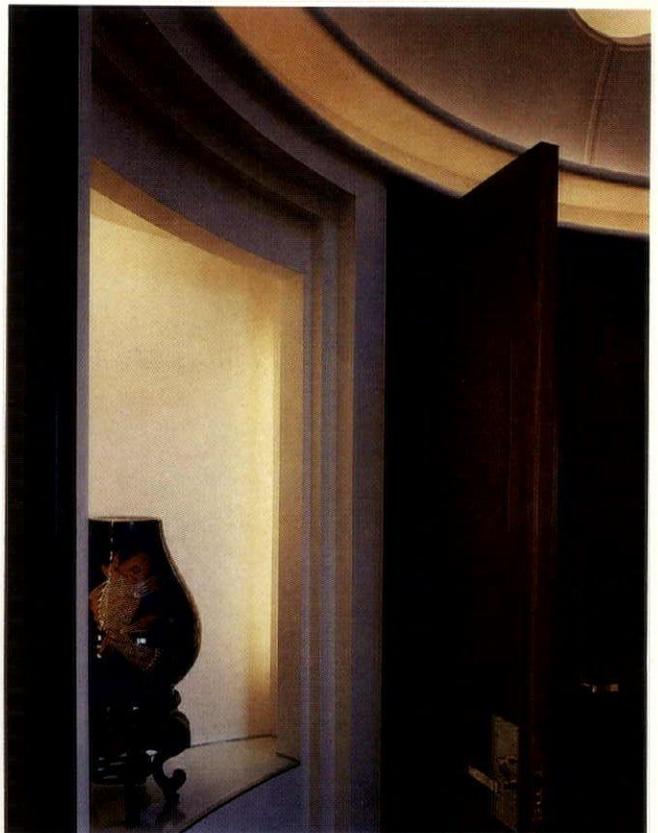
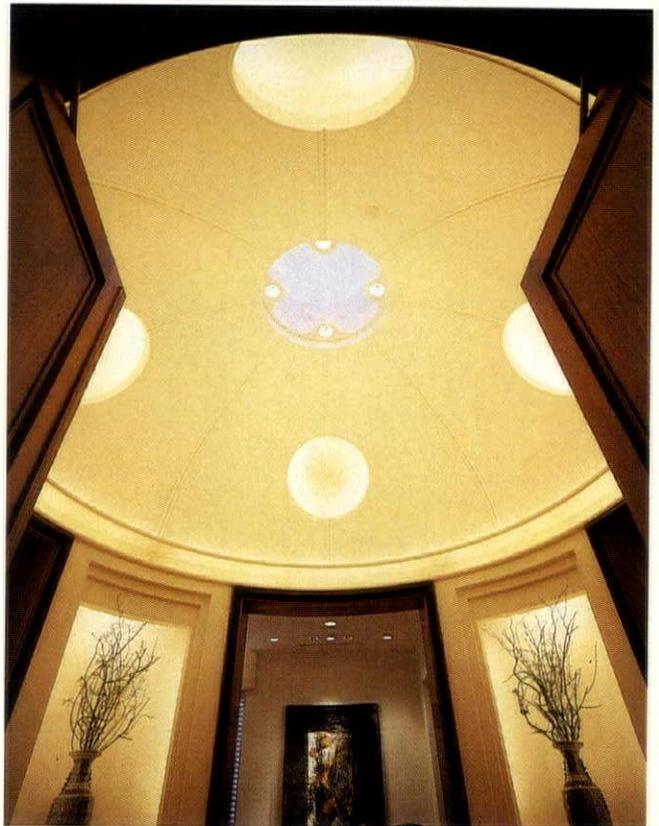
Positioned in line with the pinspots are four coves that will eventually become the canvasses for murals. For now, though, 3.75-watt strip lights evenly illuminate the bare surfaces of these recessed ceiling cavities.

Two rows of strip lights rim the base of the ivory dome, lighting the vault itself.

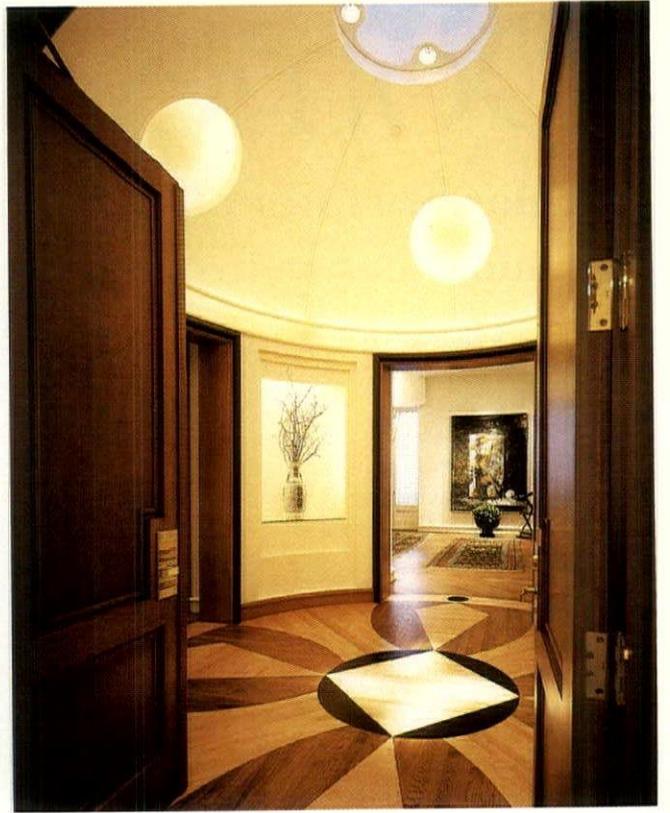
Wall-washers and open reflector downlights housing 150-watt PAR 38 lamps highlight paintings and sculpture in the living and dining rooms. Ceiling coves above the marble fireplace and shuttered windows house the same lamps in adjustable spots on tracks, Booziotis says.

"The light shapes the fireplace so it does not look flat," he says. Decorative sconces holding slender white tapers frame the hearth.

In the dining room, an elaborate cast iron and crystal chandelier is suspended above the table. Twelve 15-watt flame-shaped bulbs in half-inch bases provide warm illumination. The ornate, custom-made luminaire is shown off by two adjustable pinlights. That functional pair also highlights flowers or other items of interest on the table, Booziotis points out.



PHOTOS BY R. GREG HURSLEY





**LAYERS OF LIGHT:** Downlights and wall washers with 150-watt PAR 38 lamps highlight paintings and sculpture in the living and dining rooms (opposite page). A custom chandelier and sconces add decorative elements to the rooms. In the kitchen (left), a mixture of luminaires brings out the silver tones of the granite countertop. Soft indirect light comes from low-voltage lamps recessed in the bathroom dome (below).

A second dome can be found in the woman's windowless bath. Here, the designers sought to "create a glowing feeling," Booziotis says. "The client doesn't put on her make-up in the tub, obviously, so she wanted very soft, indirect lighting. The multi-faceted dome is uplit with 24-volt strip lights with reflectors."

At the vanity, several 150-watt PAR 38 open reflector downlights offer optimum illumination.

Variable lighting is the feature of the kitchen.

"We wanted shades and shadows," Booziotis says. "It's more interesting to have layers of lighting."

He notes, however, that even lighting was provided over food preparation areas. Open reflector 100-watt A 19 downlights were used, as well as 150-watt PAR 38 wall-washers and 50-watt adjustable accent lights. ■

#### DETAILS

**PROJECT:** PRIVATE DALLAS RESIDENCE

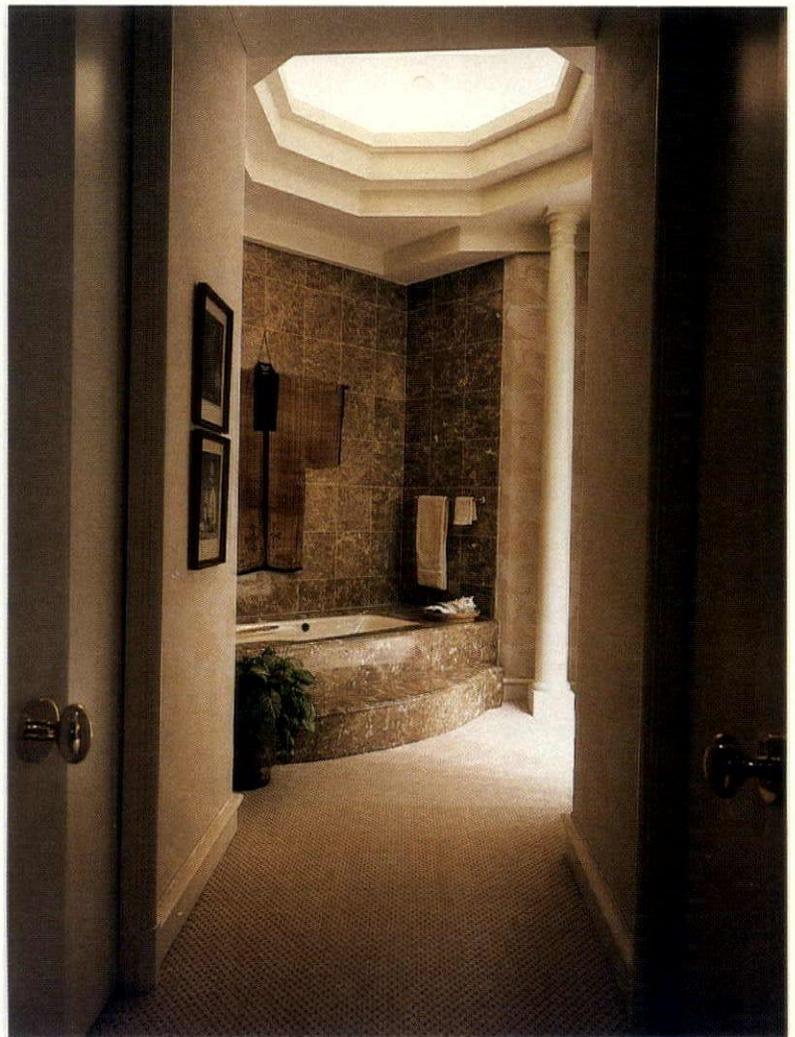
**ARCHITECT:** BILL BOOZIOTIS, BOOZIOTIS & COMPANY ARCHITECTS, DALLAS—Booziotis designed the lighting for all rooms but foyer

**LIGHTING DESIGNER:** TULLY WEISS, TULLY WEISS LIGHTING DESIGN, DALLAS—Foyer lighting

**INTERIOR DESIGNER:** JERRY ODEN, PHOENIX, AZ

**PHOTOGRAPHER:** R. GREG HURSLEY, INC., AUSTIN, TX

**LIGHTING MANUFACTURERS:** LIGHTOLIER: wall-washers, open reflector downlights, recessed track lighting, accent lights; ALESCO: adjustable spots; LITE CYCLE: strip lights; LUCIFER: strip lights; LUTRON: Grafik eye system in entrance foyer and entertaining areas



# Pillar of Society

## Houston's Jesse Jones Theatre renews appreciation for a Texas battle site

BY MICHAEL JOHN SMITH, AIA, IES, IALD

*The author, who is president of his own lighting consulting firm in Houston and a member of Architectural Lighting's editorial advisory board, served as lighting designer for the project.*

**L**ike most memorials, the San Jacinto Monument in La Porte, TX, stands as a reminder of the price that was paid for independence.

In only 18 minutes of a battle, filled with shouts of "Remember the Alamo!" the Texas Army waged a surprise attack against Mexican troops in a move to become an independent nation. On this day, April 21, 1836, 630 members of the Mexican army were killed. The next day Mexican President Antonio Lopez Santa Anna surrendered to General Sam Houston.

Within 10 years, Texas joined the United States and in 1846, the nation prevailed in another battle with Mexico to define their common border.

To honor those Texans who fought, ground was broken April 21, 1936, to erect the San Jacinto Monument. Three years later the world's tallest masonry monument was dedicated. At 570 feet from the ground to its peak, the monument is 15 feet taller than the Washington Monument.

It is here that the Jesse H. Jones Theatre for Texas Studies was completed in fall 1990. Named after the Houston philanthropist, the theater, designed by Ray Bailey Architects, is housed in one of two original galleries in the base of the monument. The space was designed so that all modifications could be removed at a future date without marring the original monument structure.

The Texas Historical Commission posed a challenge when it disallowed any penetrations in the original plaster ceiling, the shellstone wainscot, or terrazzo floor. Following careful studies to develop maximum screen size and seating capacity, the solution chosen was to insert a virtually free-standing theater into the gallery.

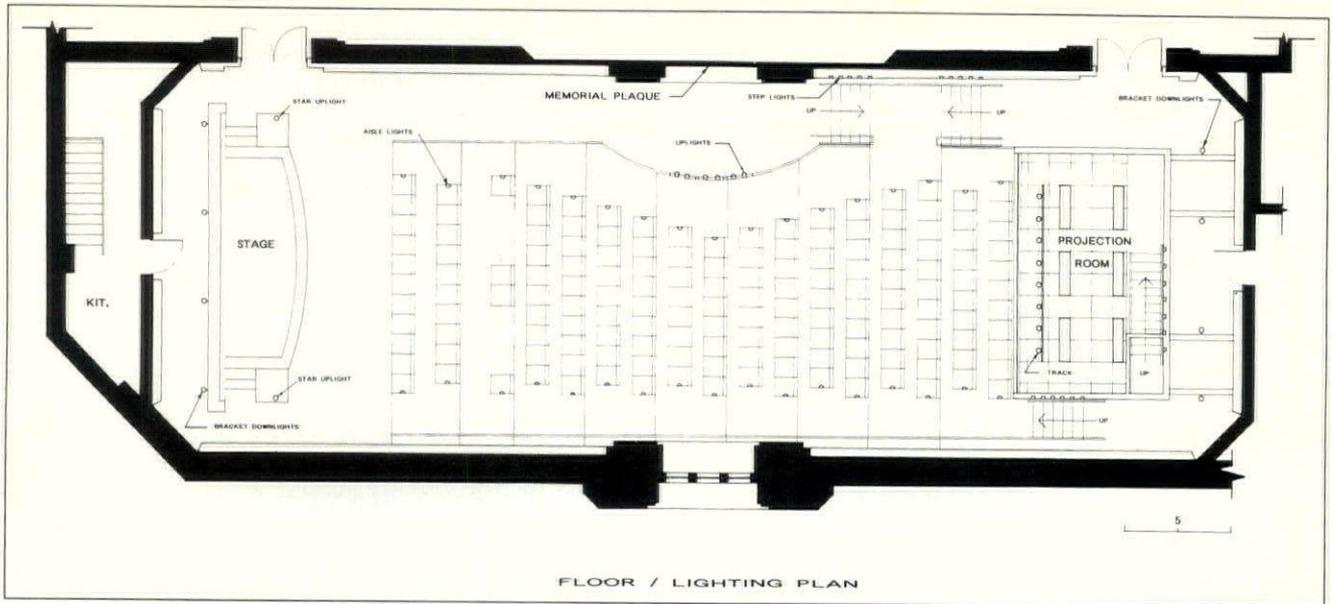
A 225-square-foot screen, which acts as a backdrop for the stage, and a full-width projection room anchor the front and back of the space. They stand free from the gallery's original walls and ceilings, as do the fabric-panelled acoustical walls, which have reveals at key locations so the original limestone walls can be viewed. The acoustical walls are



PHOTOS BY RICK GARDNER

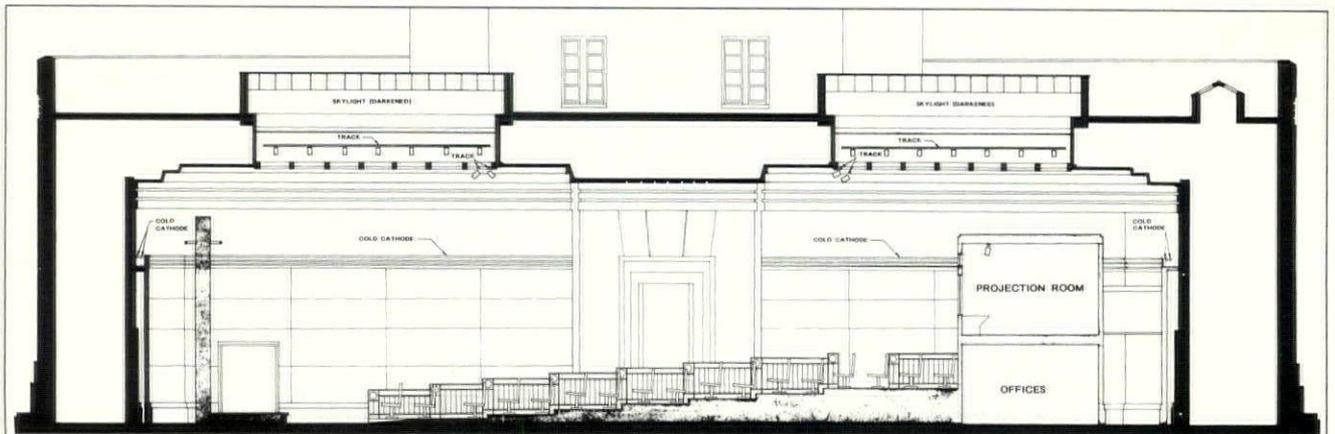
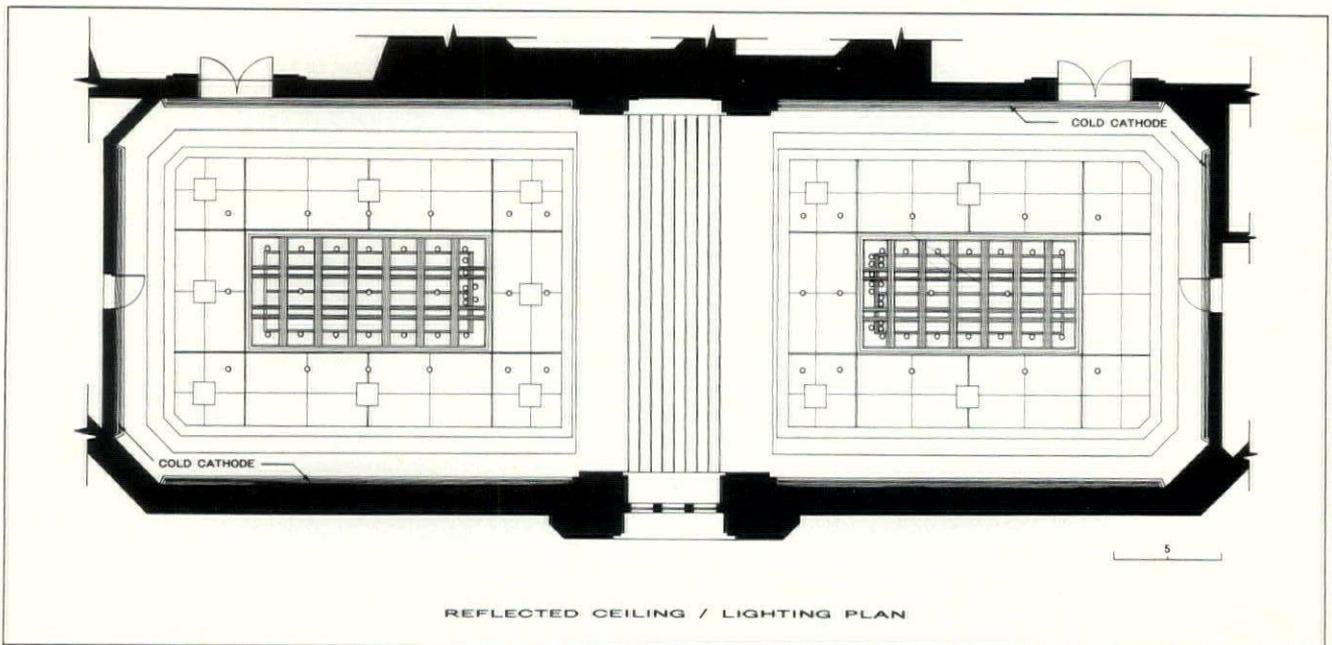


**THEATER DISTRICT:** The Jesse H. Jones Theatre's complex system of PAR lamps, cold-cathode, step lights and candelabra base lamps is controlled via a 23-zone, eight-scene dimming system.



**LANDMARK LIGHTING:** The design of the theatre must satisfy historical constraints established by the Texas Parks and Wildlife Department, the Texas Antiquities Commission and the Texas Historical Commission. The new construction had to be

removable without damage to the gallery's original condition. Seventeen groups of lights are controlled by a digital dimming system, with eight pre-set lighting scenes controlled by signals incorporated into the multi-image production.



anchored at the floor with silicone adhesive and above the wainscot through the original plaster wall to the structure. The profile of the mahogany base on the new acoustical walls echoes the form of the original wall behind.

The existing terrazzo floor acts as a border for the stepped, carpeted seating platform accommodating an audience of 162.

Two computer-activated slide presentations are planned for the theater. The first program presents the history and importance of the San Jacinto battleground, and the second delves into the history of the city of Houston. Forty-two carousel projectors utilizing 3,200 slides create both still and animated images on the 26-foot by 9-foot screen. An electronic data stream on an eight-track reel-to-reel tape recorder cues lights, draperies, the projectors, and a six-track surround-sound system. Each of the speakers housed in the acoustical walls has its own amplifier and equalizer. A subwoofer is located behind the screen.

The lighting for the space is controlled via a 23-zone, eight-scene, solid-state dimming system. The lighting scenes for each presentation are automatically cued by the audiovisual controller.

Quartz PAR adjustable accent lights recessed into the fabric-wrapped ceiling panels provide downlight for the rows of seating. These can be refocused to wash the perimeter walls if the function of the space changes again (three of these units on their own dimming zone wash the screen drapery). A series of tracks installed in the two skylight wells complete the overhead system. The 250-watt PAR 38 track heads fill in the downlighting over the seating. Accent light-



ing for three podium locations and occasional panel discussions is achieved with PAR 36, PAR 56, and PAR 65 track heads, which range from 50-500 watts and have various beamspreads.

Accent lighting for the donor and honor roll plaques is implemented with 50-watt, low-voltage PAR 36 track heads. Uplight for the honor roll plaque comes from canopy-mounted, 50-watt PAR 36 units in slots beneath the stepped seating platform. Additional track heads of various beamspreads allow for flexibility in lighting future live productions on stage, since they have unprogrammed dimming zones with two unassigned scenes.

**LOOKING BACK:** Cold-cathode tubes recessed into the acoustical wall add indirect light to the theater space. A series of PAR track fixtures fill out the overhead system.

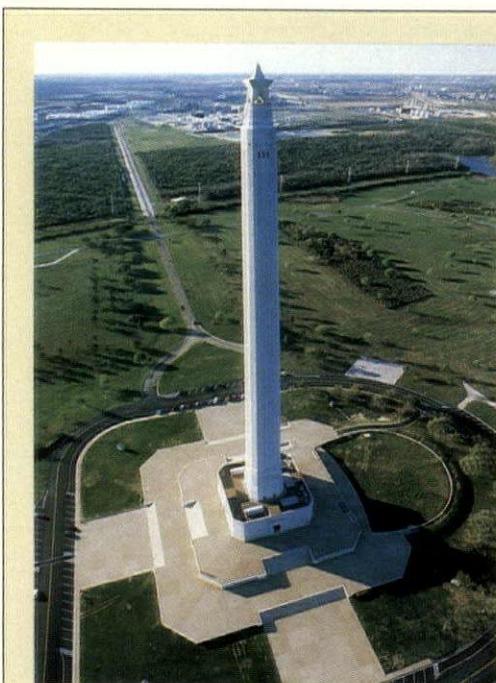


PHOTO BY FRANK MARTIN

## STANDING TALL

### SIDE LIGHTS

This grand Art Deco monument was designed by architect Alfred C. Finn. Its

square base and octagonal tower are finished with a rich fossil-filled natural limestone called Texas Cordova shellstone. The base originally housed two museum galleries and a lobby for the elevator to the observation floor. Four 34-foot-high concrete and stone stars cap the tower. The observation area affords expansive views of the battleground, the Houston Ship Channel, and upper Galveston Bay.

A strongly imaged carved stone frieze encircles the tower 90 feet above the ground. This 15-foot-high band depicts the history of Texas in a series of deeply chiseled vignettes created by William McVey.



**LONE STAR SCREENING:** Above, quartz PARs downlight the theater's seating, while accent lighting washes the podium. Illuminated etched glass lone stars flank the stage.

Dimmable, warm-white, cold-cathode tubes recessed into coves at the top of the acoustical walls lift the ceiling and provide indirect light. Ambient light in the space is reflected in 20 etched glass "lone stars" set into the bronze railings. Two larger versions, illuminated from below, flank the stage. Candelabra base lamps in the seats along the aisles light walkways, and low-voltage step lights recessed into adjacent walls illuminate level changes.

At the moment the honor roll plaque appears on the screen, near the close of the production, the real plaque is dramatically illuminated, pulling the audience back to the reality of the monument, just before the house lights brighten.

The Jesse H. Jones Theatre for Texas Studies opened to the public on October 7, 1990, with the production entitled "Texas Forever!! The Battle of San Jacinto." With major funding by Houston Endowment Inc. and The Wortham Foundation Inc., the project represents a fund-raising effort totaling \$2.5 million.

It is expected that this new theater will be instrumental in renewing appreciation for the historical events that occurred at this site. ■

## DETAILS

**PROJECT:** JESSE H. JONES THEATRE FOR TEXAS STUDIES  
**LOCATION:** SAN JACINTO MONUMENT, LA PORTE, TX  
**CLIENT:** SAN JACINTO MUSEUM OF HISTORY ASSOCIATION

**LIGHTING DESIGNER:** MICHAEL JOHN SMITH, AIA, IES, IALD

**ARCHITECT:** RAY BAILEY ARCHITECTS, INC.; *project team:* RAY BAILEY, FAIA, *design director;* JAMES THOMAS, AIA, *interior designer;* BOBBY LIM, *project architect;* PETER EICHENLAUB, *construction administration architect*

**INTERIOR DESIGNER:** RAY BAILEY ARCHITECTS

**ELECTRICAL ENGINEER, MEP:** MAS ENGINEERS

**ELECTRICAL CONTRACTOR:** FISK ELECTRIC

**GENERAL CONTRACTOR:** W.S. BELLOWES CONSTRUCTION CORPORATION

**GRAPHICS:** DOUGLAS HARDING GROUP

**AUDIO/VISUAL CONSULTANT:** WATTS SILVERSTEIN

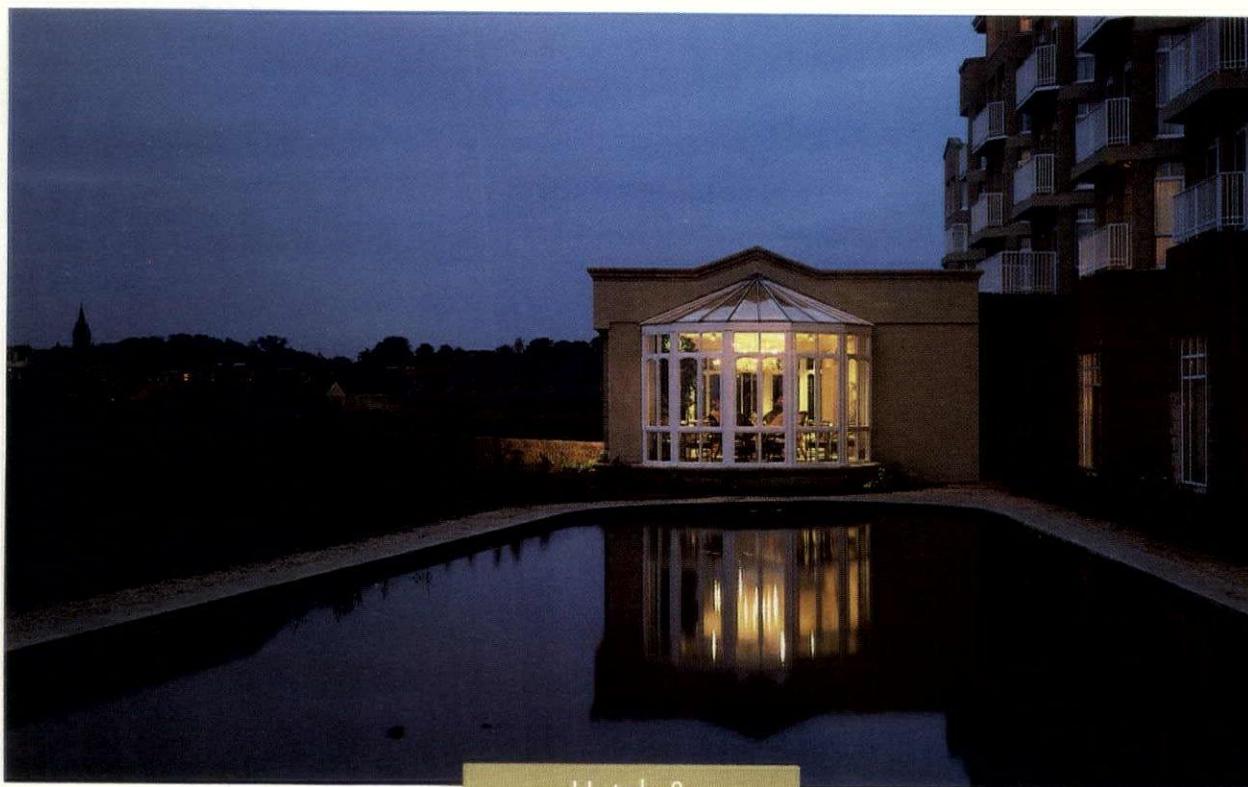
**PHOTOGRAPHER:** RICK GARDNER, HOUSTON; *one photo (indicated) by* FRANK MARTIN

**LIGHTING MANUFACTURERS:** LIGHTING SERVICES, INC.: *track lighting;* METALUX: *parabolic fluorescents;* NATIONAL CATHODE: *cove lighting;* NORBERT BELFER: *step lights;* PRESCOLITE: *recessed adjustable accent lights, bracket downlights*

ARCHITECTURAL

# LIGHTING

## DESIGN FOCUS REPORT



Hotels &  
Hospitality

## COMFORTS OF HOME, PLUS

**WHAT DO MOST TRAVELERS WANT** from a first-class hotel? Ideally, a dose of excitement and drama, mixed with a touch of the comforts of home. The two hotels featured here fill the bill: the St. Andrews Old Course Hotel's (above) quiet residential quality is made grand with elegant pendants and decorative sconces; and Reno's El Dorado Hotel expansion recreates the romance of relaxed outdoor cafe dining indoors. —WJ

## ST. ANDREWS OLD COURSE HOTEL

# A GREAT SCOTS INN



**F**or many Americans, it's difficult imagining anything more than 200 years old. And a spot dating back to 1400 is nearly incomprehensible. But such is the historical nature of the town of St. Andrews, a sandy headland jutting into the North Sea about 40 miles north of Edinburgh, Scotland.

It is here that the St. Andrews Old Course Hotel overlooks the natural formations of the Scot's fabled golfing fairway, which plays host to the British Open, the oldest of the world's four major championships. However, the establishment, which was constructed in the 1960s, didn't reflect the historical nature of the area.

The job then of lighting designer Craig Roberts, Dallas, interior designers Susan Seifert and Mary Maclay of Wilson & Associates, Dallas, and the architectural team from the Dallas office of RTKL Associates Inc. was making the hotel's interior look as rich as its history.

"Before the renovation, which was completed in the summer of 1990, the place looked dreadful," Roberts says. "It looked like it was built in the '60s, being utilitarian at best."

Add to that the grayness that surrounds the bonny, bonny banks of Scotland, and one found a dark and dreary space, Seifert says, one that was not very cheery, and didn't take advantage of the incredible golf course outside.

"Two major changes took place," Seifert says. "Circulation corridors were moved toward the back of the building and a glass conservatory was added. This allowed a lot of natural light to pour in, plus it afforded a view of the golf course."

Also, Seifert says, it was very important that the light counteract the gray skies and coolness of Scotland, so a lot of emphasis was placed on warming up the mood.

A change then was called for in the materials and detailing of the hotel. Since it's located in a very old country, Seifert says, a lot of detailed finishes and millwork were incorporated into the new interior. Also, giving the interior an antiquated look mandated that the lighting not be seen in many areas.

"Most of my business is working on top quality hotels," Roberts says. "So I understand the very quiet residential quality that they were looking for. The space had to look warm and very rich—it couldn't be filled with just a lot of downlights."

"In the main public spaces, the recessed

downlighting that is used exists at axis points or entries where it's hitting a stone floor or a rug," he says. "Otherwise, most of the lighting is coming from a reflected source like the ceiling, murals, or artwork. Decorative fixtures provide much of the ambient light."

Since it is preceded by the glass portecochere, the entrance hall was given an exterior look with faux limestone wall treatments, an outdoor lantern, and a softly illuminated ceiling cove.

"The cove adds a warm, rich feeling without alerting people to the light source," Roberts says. "Here we used 3.75-watt, 24-volt lamps that are 3 inches on center."

The Great Hall has very elaborate walls and coves that are illuminated with a similar low-voltage incandescent system. Roberts says the cove lighting system used here runs the length of the tremendous corridor, which he estimates to extend about 300 feet.

"A unique aspect of this project is the fact that the long, long corridors, which could have been the most unattractive space in the building, are very special because of their finishes and way they're lit," Roberts says.

The pendants in the Great Hall are traditional in styling, but there is a contemporary feeling about them, Seifert says.

"The lamps here needed to be grand," she says, "because it is the room that leads everyone into the hotel. The scale of them had to be fairly big, but they also had to have an old feeling to them."

The result is a pendant composed of an alabaster dish and iron work that is coated with a special aged finish, both of which are reminiscent of antique objects. The hall's sconces add to the warmth with 40-watt candelabra lamps.

Another large fixture makes a dramatic showing in the center of the glazed vestibule.

"Since it is the conservatory, we wanted this custom chandelier to look somewhat leafy and tree like," Seifert says. "If you look closely, there are even little birds in it."

The chandelier's 20-watt incandescent candelabra lamps provide most of the ambient lighting in the room, Roberts says. The columns at the room's perimeter are grazed with light from PAR 38 lamps recessed on a 35-degree angle. The plants in the bays are washed with MR 16s mounted on a 30-degree angle. Three 200-watt ellipsoidal downlights fill out the space with soft, wide beams.



The focal point of the library is the illuminated crown molding. It's uplit with a 24-volt, 3.75-watt cove lighting system, the lamps of which are 3 inches on center. The chandelier, with its 75-watt A 19s, and the wall sconces housing 40-watt candelabra lamps provide additional ambient light. Nine recessed 50-watt MR 16s act as accent lighting. The fixtures are all on a dimming system, providing a warmer degree of illumination, Roberts says.

"We wanted a light level that is down to a more human scale," he says. "So instead of a lot of overhead lighting, we used the sconces and chandelier. It also makes it a bit better to read by."

Seifert wanted to give the cozy space a look in keeping with an Englishman's private reading quarters.

"It's a more masculine kind of room, with

**SCOTTISH SPLENDOR:** The detailed ceiling in the Great Hall of the St. Andrews Old Course Hotel (opposite page) is brought to light with a low-voltage linear strip system. Similar 3.75-watt incandescent lamps add warmth to the entrance hall (above).



**MAKING A SPLASH:** The wall mural in the hotel's pool area grabs the attention of bathers with light from 75-watt R lamps. Recessed accent lights and sconces finish the crisp look.

a fireplace, the horned chandelier, and the darker colors," she says.

A break from the residential milieu comes from the clean lines of the pool area. The contemporary space, which is part of an enlarged 8,000-square-foot spa, was constructed under a new glass-domed pavilion. The most powerful point of illumination is in the area of the wall mural, which is grazed by a series of 75-watt R lamps hidden in a continuous ceiling cove.

The planters along one side of the pool are lit with recessed accent lights of adjustable 50-watt MR 16s, which are mounted on a 30-degree angle. The lattice work on the other side of the pool is washed with 100-watt A 19s. The artful frosted glass sconces use 60-watt A 19 lamps.

"This hotel views one of the most important golf courses anywhere, and there's a lot of tradition here," Roberts says. "It offers an extraordinary level of service and quality—and we were called on to make it look that way."

—Catherine Schetting Salfino

## DETAILS

**PROJECT:** ST. ANDREWS OLD COURSE HOTEL  
**LOCATION:** ST. ANDREWS, SCOTLAND  
**CLIENT/OWNER:** THE OLD COURSE LTD.  
**LIGHTING DESIGNER:** CRAIG ROBERTS, CRAIG ROBERTS ASSOCIATES, INC.  
**INTERIOR DESIGNER:** SUSAN SEIFERT and MARY MACLAY, WILSON & ASSOCIATES; WILSON, GREGORY, AEBERHARD, LONDON, ENGLAND  
**ARCHITECT:** RTKL ASSOCIATES INC.  
**ASSOCIATE ARCHITECT:** HURD ROLLAND PARTNERSHIP, BURNTISLAND, SCOTLAND  
**PHOTOGRAPHER:** SCOTT MCDONALD, HEDRICH-BLESSING  
**LIGHTING MANUFACTURERS:** NORBERT BELFER: linear strip lighting; GREGORIUS PINEO: Great Hall sconces; GORGE GUTIERREZ: Great Hall chandelier; WINONA: pool sconces; CHAPMAN: library sconces; KEITH SKEEL, LONDON: antique library chandelier; BRUCE EICKER: conservatory chandelier & sconces; ERCO: 50-WATT MR 16S, 60-, 100-, 150-WATT A 19S, 150-WATT PARs; CONCORD: single circuit track

DESIGN  
FOCUS REPORT

**EL DORADO HOTEL**  
**STARLIGHT,**  
**STARBRIGHT**

**A**mid the flashy signs, flamboyant costumes, and showy splendor of Nevada's casinos, there's a haven where one can leave the extravagant displays behind and seek relaxation, good food, and a refreshing atmosphere.

Tucked away in Reno's El Dorado Hotel is a new expansion that boasts a lobby, centrally located plaza, and the El Dorado Grill & Rotisserie and La Strada restaurants. The addition consists of approximately

35,000-square feet of casino area, 30,000-square feet of restaurant and public area, and a 400-room hotel tower.

The hotel lobby is uncharacteristic of a typical casino-designed lobby in that it possesses a refined, not splashy, interior.

"The design and the decor are more upscale—not so glitzy," says Roger Charles, Genesis Associates, interior design consultant for the project.

A side-lit, etched glass logo, illuminated with fluorescent lamps, welcomes guests to the front desk. The only downlighting in the space, over the task area, is provided by 75-watt MR 16s recessed in the ceiling plane.

Palm trees in planters add an exotic flair to the lobby and play a significant role in the creation of drama. Concealed in the trees' containers are MR 16 uplights, which add depth and shadow to the space.

"The light catches the palm fronds and plays with them to produce a wispy effect on the soffits above. The contrasting light levels give a relaxed and moody feel to the lobby," Charles says.

The Plaza Bar, the hub of the two restaurants, is marked by a sign backlit with neon. The letters stand boldly against the architecture, the neon giving them character and

**GRAPHIC DESIGN:** Aqua-colored neon, placed in the coves, creates a progressive image in the Grill & Rotisserie (below). This contemporary look attracts a generally younger crowd, making this their restaurant of choice at the El Dorado Hotel.





**THOUSAND POINTS OF LIGHT:** A "starlit" sky, achieved with fiber optics, creates a soothing atmosphere for restaurant (opposite page) and bar (above) patrons. The dark ceiling creates a strong contrast to the twinkle lights and the surrounding architecture, making the spaces look exceptionally defined.

dimension. A 22-foot diameter dome is the focal point of the space, and the bar's central attraction. A continuous cove lines the circumference of the smooth, rounded surface.

"What we did was put blue neon in the cove," says Mitchell Cohan, project designer and architect. It's on a dimmer to provide flexibility in creating different levels of light.

"We were trying to create the illusion of a setting sun inside the domed area," Cohan says. "The dome is approximately 6-7 feet high in the center, and as the light radiates from the bottom of the cove, it slowly fades up to the top surface, producing this sunset effect."

Groups of columns situated along the bar platform's perimeter add a classical element to the architecture. These are illuminated by 50-watt MR 16 narrow spot downlights with adjustable slot apertures.

A mural depicting Portofino, Italy, on a wall opposite the bar area is enhanced by five 75-watt narrow-spot MR 16 lamps in recessed framing projectors. Tables are placed underneath this Italian scene, on a floor with brick grids, creating the aura of a sidewalk cafe. The circular plaza acts as a street that leads to La Strada and the El Dorado Grill.

"We decided to put custom-fabricated incandescent street lights on either side of the mural. They help complete the design of a streetscape," Charles says.

The La Strada patio is a continuation of the plaza area and is directly behind the bar platform. Here, an exhibition cooking

area that is part of both restaurants, adds even more charm to the dining space. The 50-watt MR 16s in the architectural soffits on both sides of the patio, and 75-watt incandescent downlights provide illumination for the tables.

"Some of the uplighting that softly grazes the architecture in this space was 'accidental,'" Cohan says. "What happens is the downlights around the border of the soffits shine directly on top of 6-foot-high, decorative brass railings, causing the light to reflect back up."

A suspended track system at the end of the patio accents stained glass art on the wall. The 75-watt MR 16 lamps form scallops of light on the surface, framing the wall on each side of the work.

In the main dining room of La Strada, carefully recessed ceiling downlights provide ambient light. Again, foliage from the many plants and trees that decorate this space interacts with the beams, casting images on the architecture. Wine display cases, illuminated by 75-watt incandescent downlights, line the wall. Concealed light strips with 5-watt lamps, located inside the cases, and those framing the cabinet doors highlight the vintage bottles and add a warm glow to the dining area.

While the Italian eatery caters to a more established clientele, the El Dorado Grill & Rotisserie is designed to serve younger patrons and a more contemporary crowd.

"With the exception of the white plaster architectural soffits, this restaurant possesses a fairly conservative feeling," Charles says. "So we placed aqua-colored neon in the coves to add some very strong graphic shapes to the space, creating an eclectic style."

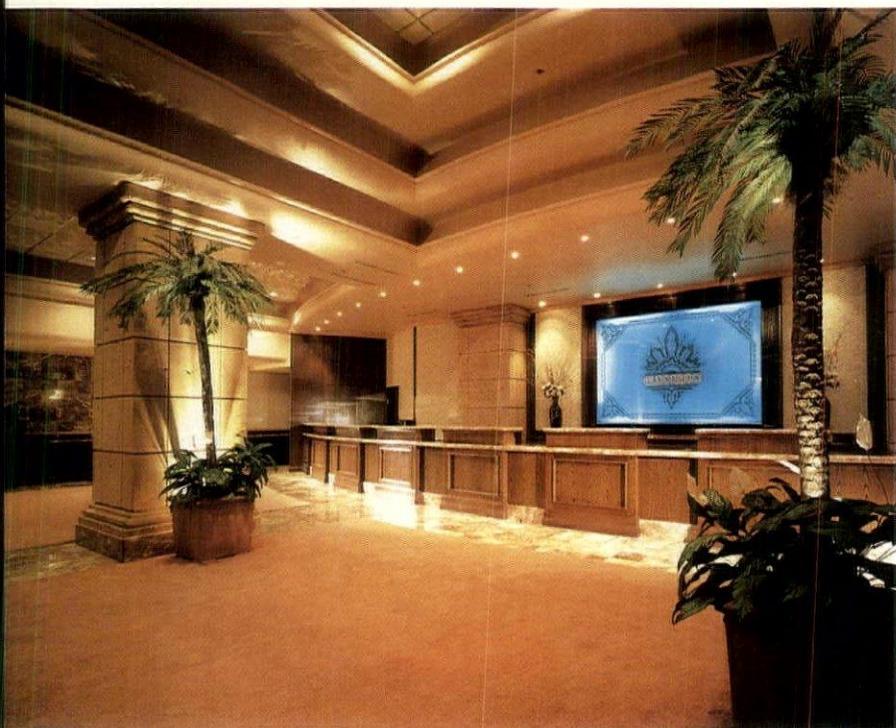
Aside from the indirect neon accents, MR 16 lamps uplight the five potted apple trees that occupy the space, and 75-watt incandescent downlights are located in the soffits.

"These downlights are carefully placed so that the beams hit each of the wooden pediments behind the trees. They highlight the design and bring out the richness and texture of the wood," says Charles.

The client wanted an outdoor atmosphere created within the confines of the hotel, which was partly accomplished through the use of the connecting path that leads from one open space to the next, and the decorative elements interspersed throughout the design.

However, the bar and restaurants are in





**DARK SHADOWS:** In the lobby (above), MR 16 uplights softly illuminate the palm trees, dramatically creating shadows and patterns on the architectural soffits. As a result, the space is warm and mellow, unlike many casino hotel lobbies known for their glitz.

the center of a space far removed from any daylight.

"It's a completely enclosed area," Charles says. "So it was important to develop a design that would compensate for the lack of natural light."

It was also important to the client that the bar and restaurants be away from the activity of the casino area so that people could relax in a comfortable atmosphere over dinner or drinks.

"We started tossing around ideas of how to expand this outdoor image and, at the same time, achieve a tranquil setting," Charles says. "That's when Greg Shubin, a member of our design team, came up with the concept of a nighttime sky."

This idea of stars scintillating in a midnight sky, unifying the entire space, is perhaps more than anything else, what makes the project work—and definitely, what makes it unique.

"We experimented a lot to achieve the starlight effect, and decided that a fiber optic ceiling was the way to go," Cohan says.

"The original concept was to have static light above a ceiling grille so as people walk underneath, they would experience an on/off effect," Cohan says. "What we actually wound up doing, though, was going to Fibertech. They came up with the actual design and fabrication of the ceiling."

The starlit sky is created with black 2-foot

x 4-foot acoustical panels. Each consists of 20 fiber optic strands, which are gathered and slipped into a plastic sleeve in the panel.

"This creates a kind of umbilical cord about 25 feet long," says Cohan.

All of the cables and fiber optic cords are above the ceiling, and only a small portion of the fiber optic that is stuck through the panel is visible beneath the surface.

"So, all you see is the tip of a fiber optic cable," Charles says.

The "sky" is composed of a number of these panels, and the fiber optic light source is a custom 50-watt MR 16. Approximately 15-20 panels are illuminated by a single lamp. All of the umbilicals are funnelled and gathered to a point where they're connected in a special housing (about one-inch in diameter) and the MR 16 shines directly on this.

"To create the shimmering effect of the 'stars' we have a small motor with a screened wheel that slowly rotates. As it rotates in front of the light, it causes the light output at the end of the fiber optic to turn on and off. It twinkles. So it truly is a realistic looking effect," Cohan says.

"You have to keep in mind that this is a casino as well as a hotel," Charles says. "We wanted to create an open-air feeling for patrons to get away from the often pretentious casino scene. The blacked-out sky just makes all of the architecture stand out so dramatically—it's like a backdrop for the structures."

And so the 10,000-square feet of this meandering night sky becomes the overriding aesthetic element for the central lounge and the dining rooms.

"The lines contrast so heavily that it gives real definition to the space," Cohan says.

—Christina Lamb

## DETAILS

**PROJECT:** EL DORADO HOTEL AND CASINO

**LOCATION:** RENO, NV

**ARCHITECT:** JERRY PONCIA ARCHITECT; MITCHELL COHAN, PROJECT DESIGNER & ARCHITECT (Cohan is now the principal of Mitchell Cohan Architect)

**INTERIOR DESIGN CONSULTANT:** GENESIS ASSOCIATES; ROGER CHARLES

**INTERIOR DESIGNERS:** RAYGAL DESIGN; GREG SHUBIN, KIM TUCKER, project designers (Shubin is now a principal with Genesis Associates; Tucker, with Kim Tucker Interiors)

**PHOTOGRAPHER:** DAVID GLOMB

**LIGHTING MANUFACTURERS:** HALO: Framing projectors, MR 16 NSP, MR 16 lamps; FIBERTECH: custom MR 16s; LUCIFER: light strips

## INDIRECT APPROACH TO LEARNING

BY CHRISTINA LAMB

ASSISTANT EDITOR

**CHALLENGE** Lighting a classroom requires choosing a system that will both fulfill an assortment of illumination requirements and blend with the design of the architecture and the interior. Furthermore, in accordance with recent trends in energy efficiency and savings, educational facilities are confronted with the growing pressure to reduce the systems' operating expenses.

The Will C. Wood High School, Vacaville, CA, which was completed and opened for the September 1989 school year, required a lighting system that would take into account luminances of significant surfaces (desks, boards), while providing glare-free illumination.

**DESIGN/TECHNICAL CONSIDERATIONS** "We wanted one type of system that could basically be used throughout the main classrooms, and that would be acceptable for standard paper and pencil tasks as well as computer functions," says Jeffrey Kelly, lighting designer. "We were faced with a relatively low ceiling—9 feet, 6 inches—and we wanted to use indirect lighting if possible."

**METHOD** Installed in the classrooms of this West Coast academic institution is an LCI (low ceiling indirect) lighting system.

"We opted for this fixture primarily due to our desire to use indirect, and to give good even light and still maintain sufficient vertical and horizontal illumination without glare," Kelly says. Adequate vertical illumination was needed so the blackboards, and marker and pin-up boards could be used effectively. Since vertical footcandles were to remain high, parabolics were eliminated as a choice, according to Kelly.

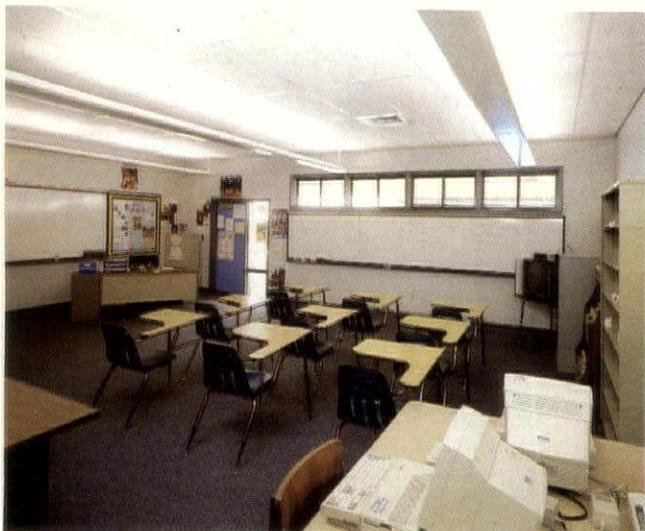
There are three rows of the LCI fixtures in each classroom, and they run the length of the space. Both 6- and 8-foot long units are suspended 12 inches below the ceiling. These fixtures use 3,100K, 25- and 32-watt T8 fluorescent lamps.

"Once we arrived at the decision to install indirect lighting, lensed troffers were eliminated because we wanted good computer lighting," Kelly says.

"Low ceiling height was no longer a problem since this fixture can be suspended fairly close to the surface, and still produce an excellent even distribution across the ceiling plane," Kelly says.

Also, the fixtures are completely open on the top and without lensing, so the system is easily maintained.

**CONCLUSION** The indirect system is highly efficient to meet the low-cost operating needs of the school and provides classroom illumination free of glare and shadows. It also brightens the rooms' surfaces, creating a positive space in which to work and learn.



**PASSING THE TEST:** The LCI lighting system installed in these classrooms provides indirect lighting while maintaining good vertical and horizontal illumination, allowing students to work at their desks or on computers without glare or shadow.



### DETAILS:

**PROJECT:** WILL C. WOOD HIGH SCHOOL

**LOCATION:** VACAVILLE, CA

**CLIENT:** VACAVILLE UNIFIED SCHOOL DISTRICT

**ARCHITECT:** TOMICH, SHEEHAN, VAN WOERT

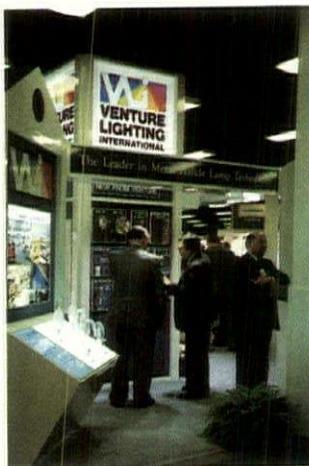
**LIGHTING DESIGNER:** JEFFREY KELLY, PETERS ENGINEERING

**ELECTRICAL DESIGNER:** TOM WILSON, PETERS ENGINEERING

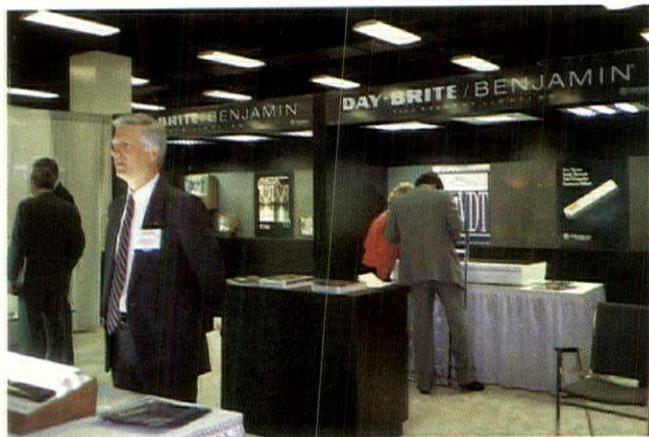
**PHOTOGRAPHER:** ED ASMUS

**LIGHTING MANUFACTURERS:** LITECONTROL CORP.: indirect fixtures;  
SYLVANIA: T8 lamps

## LIGHTFAIR'S TRIUMPH



**SHOW & TELL:** The new offerings in lighting were easy to see at the ExpoCenter during LightFair, where over 100 exhibitors displayed their wares (candid photos above and below). The next LightFair will be held May 5-7, 1992, at the Jacob Javits Convention Center in New York.



In the war between trade shows, LightFair has triumphed. Last February 12, *Architectural Lighting* received a fax from the Lighting World camp announcing the beginning of that show's end.

"With some regret, we have decided to close the show for this year," wrote group show director, Cathy Walters, of National Expositions Company, Inc. Lighting World had been scheduled for April in New York.

Meanwhile, LightFair—co-sponsored by the Illuminating Engineering Society of North America (IESNA) and the International Association of Lighting Designers (IALD), and managed by AMC Trade Shows East—carried on March 5-7, 1991, in Chicago's ExpoCenter.

In spite of the recession, attendance was brisk, and included, according to several manufacturers, many "serious" specifiers. Some speculated that the halting of the war in Iraq resulted in a collective sigh of relief in the lighting industry and got the wheels of industry rolling again in time to make LightFair a good show.

Though I sensed no hot controversies brewing at the show, the buzzword was energy. Rather than excitement though, the spirit was one of acceptance and resignation that energy will be the force driving future product advancements and developments in design techniques.

Included in the show highlights that follow are details on the federal government's new Green Lights program, and by contrast, Emma Price's tips on what you need to do battle against state government regulatory agencies.

—Wanda Jankowski



**IALD HONOREES:** Left, winners (from left) Stefan Graf, Robert Prouse, Ross DeAlessi, and Stephen Margulies display the awards given to them by Helen K. Diemer, the IALD president (center). Below, Robert Newell and Diemer congratulate Robert Prouse on a job well done and present him with an IALD Award of Excellence.

## Top Lighting Designers Honored At IALD Dinner

**T**he International Association of Lighting Designers (IALD) and *Architectural Lighting* co-sponsored a celebration for the presentation of the annual IALD lighting design awards. The gala event was held at The Art Institute of Chicago on March 6 at 7:30 p.m. in the richly textured and ornate Stock Exchange trading room, designed by Louis Sullivan.

The evening's festivities, attended by 200 guests, began with cocktails and hors d'oeuvres, providing a chance for people to mingle and meet, and view the art gallery.

Opening remarks were made by Helen K. Diemer, IALD president. Robert Newell, IALD chairman, welcomed all attendees on behalf of the awards committee. A banquet and awards presentation followed, honoring designers whose work displays high aesthetic achievement backed by technical expertise.

Awards of Excellence were presented to: Robert Prouse and Randy Sabedra, H.M. Brandston & Partners for Bulgari, New York; and Ross DeAlessi, Luminae Souter Lighting Design, for the Palace of Fine Arts, San Francisco.

Citations were given to the following designers: Jeffrey T. Berg, Berg/Howland Associates for St. Agatha's Sanctuary, Milton, MA; Andre Tammes, Lighting Design Partnership, for the Imperial War Museum Extension, London; Stefan Graf, Illuminart, for Regent Court, Dearborn, MI; Francesca Bettridge, Carroll Cline, Cline Bettridge Bernstein Lighting Design, Inc., for the Union Bank of Switzerland, New York; and Stephen

Margulies, Herbert Schlossberg, and David Facenda, Cosentini Lighting Design for 745 Fifth Avenue, New York.

The awards committee consisted of: Robert Newell, IALD, Robert Newell Lighting Design; Wanda Jankowski, editor-in-chief, *Architectural Lighting* magazine; Ann Kale, Architectural Lighting Design; Bill M. Sherman, Jules Fisher & Paul Marantz, Inc.; Suzanne Tillotson, IALD, Jerry Kugler Associates; and Kenneth Yarnell, IALD, The Kling-Lindquist Partnership, Inc.



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**EDISON PRICE LIGHTING**

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**FINE ARTS PALACE  
EDISON AWARD WINNER**

**R**oss DeAlessi, principal, Luminae Souter Lighting Design, San Francisco, has won the 1990 GE Edison Award for excellence in lighting design for the complex illumination of San Francisco's Palace of Fine Arts. (See April *Architectural Lighting*, pages 22-25 for coverage of the project.) DeAlessi was presented with the award, a circular glass sculpture on an engraved base, at a dinner sponsored by GE Lighting on March 4 in Chicago.

Finalists in the competition were: second place—Chip Israel, principal-in-charge, Grenald Associates Ltd., Culver City, CA, for the Morrison and Foerster law offices in Irvine, CA; third place—Mark Ramsby and Robert Dupuy, principals, Ramsby, Dupuy and Seats, Inc., Portland, OR, for Nike Town in Portland; and Barbara Cianci, vice president, Horton•Lees Lighting Design, New York, for the A.C. Nielsen offices in Bannockburn, IL. The finalists received engraved Award of Excellence plaques.

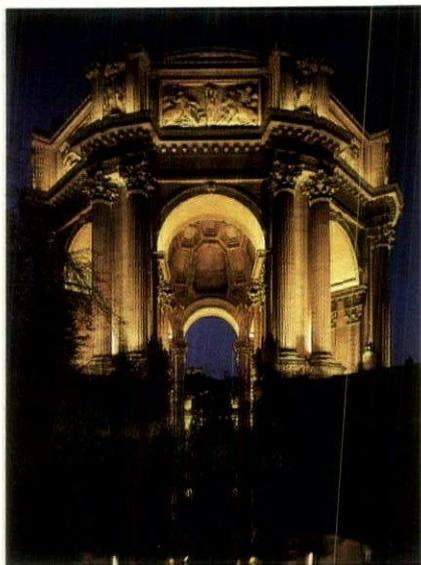
Awards of Merit were presented to two semifinalists: Bernard Bauer, vice president of design, Integrated Lighting Concepts, Agoura, CA, for the Harris Company department

store in San Bernadino, CA; and David Doubek, senior lighting designer, Grenald Associates, Ltd., Narberth, PA, for Emmanuel's Court in Philadelphia.

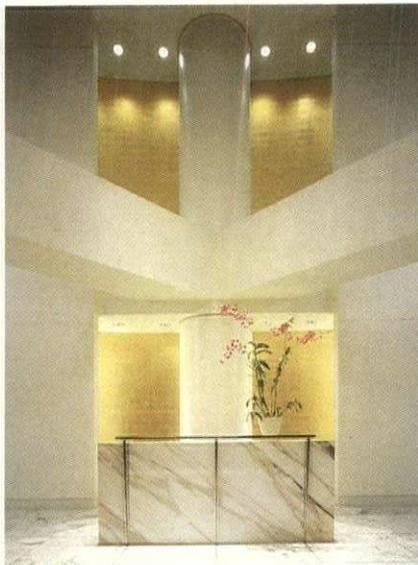
GE Lighting sponsors the Edison Award competition annually to recognize excellence and quality in lighting designs that use GE Lighting products. The panel of judges for the 1990 entries were:

- Frank Florentine, Smithsonian Institute's National Air and Space Museum, Washington, D.C., representing the Illuminating Engineering Society;
- Patricia Yorks, Lighting by Patricia Yorks, Wayzata, MN, representing the American Society of Interior Designers;
- Gary Steffy, Gary Steffy Lighting Design, Ann Arbor, MI, representing the International Association of Lighting Designers;
- Edward Francis, William Kessler and Associates, Detroit, representing the American Institute of Architects; and
- Frank LaGiusa, GE Lighting, Cleveland.

For information on the 1991 Edison Award competition, contact Frank LaGiusa, GE Edison Award, GE Lighting, Nela Park, Cleveland, OH 44112.



DOUGLAS SALIN



HEDRICH BLESSING



**AND THE WINNERS ARE:** The winning lighting designs of GE's Edison Award, clockwise from above: DeAlessi's Palace of Fine Arts; Israel's Morrison and Foerster law offices; Cianci's A.C. Nielsen offices; Ramsby and Dupuy's Nike Town.



STRODE ECKERT



# V I S A

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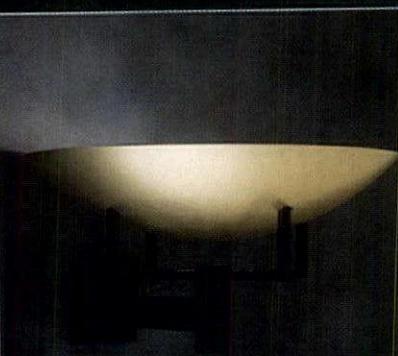
*NEW Wet Location Quartersphere*

NEW



*Luminous Bowl with  
NEW stepped trim ring and chain*

CB1232



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NEW



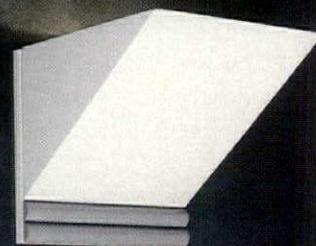
*NEW 45" 1000 Watt Metal Halide  
Luminous Bowl without trim ring*



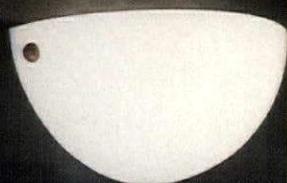
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# How's Business?...What Recession?

HOW HAS THE RECESSION affected your business? What's the best thing that's happened to your business this past year? What have been the most important recent developments in the lighting industry? These are the questions *AL* put to LightFair attendees to find out how architects, lighting designers, and manufacturers are doing these days.



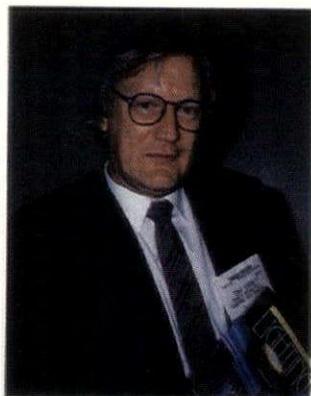
**RICHARD SHAVER**  
VICE PRESIDENT  
RESEARCH & DEVELOPMENT  
EDISON PRICE LIGHTING  
NEW YORK

"Business is good. We are expanding our sales efforts. For example, Ben Sparenberg has joined us as sales manager for the Eastern region. Edison Price Lighting also advertised for the first time in 1990. Fortunately, the advertising efforts began before sales began to get tough in the recession."



**ERNEST COWELL**  
PRINCIPAL  
LIGHTING DESIGN  
LOS ANGELES

"Business has been very good. I haven't felt any adverse effects of the so-called recession, which I think was press-created for the most part. In fact, we took on added staff this year. Something we have looked toward working with are the energy codes that are now being instituted in various states. It's a big step that I think most states will probably soon take."



**TONY CORBETT**  
MANAGING DIRECTOR  
CORBETT DESIGN  
ASSOCIATES  
SINGAPORE, HONG KONG,  
BANGKOK

"Business is good, particularly for resort projects. Asia's been booming for the past two years—especially Thailand and Indonesia. The world has only started to get to know about these places."



**ROBERT A. MCCULLY**  
VICE PRESIDENT  
SALES AND MARKETING  
SIMKAR LIGHTING  
FIXTURE CO., INC.  
PHILADELPHIA

"One of the best developments of the year was that we were one of the first companies to be associated with the Green Lights program. I think it's a great program that will help not only the lighting industry, but the world."



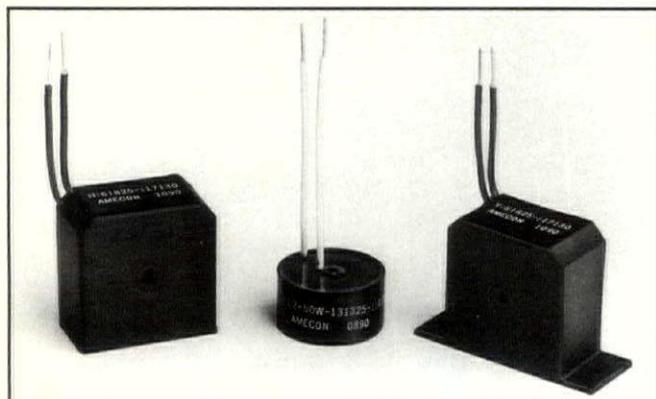
**STEPHEN COLE**  
PRESIDENT  
C.W. COLE & CO.  
SOUTH EL MONTE, CA

"Business is pretty poor. We had a big hole in business during the middle of last year. It was rough, but we started turning up at the end of the year. We're small, so big custom jobs can really turn things around for us—one job could change our entire year. Currently, we're doing Water Gardens at the Austin Building at MacArthur Place in California. And we want to bolster our standard line of products. In general, we're optimistic about this next year, but right now we're feeling the pinch."



**STEFAN GRAF**  
OWNER AND FOUNDER  
ILLUMINART  
YPSILANTI, MI

"I've noticed an increasing awareness of good lighting both because of its energy-saving implications, and because it is being recognized as influencing productivity, sales, moods, attitudes, and performance. Owners and developers are coming around, not just because good lighting is being touted by manufacturers, but because there are more published reports on the benefits of good lighting and they can see it. Once a client is introduced to good lighting, they never go back."



### TECHNOLOGY BREAKTHROUGH: Improve Light Intensity and Debuzz, too

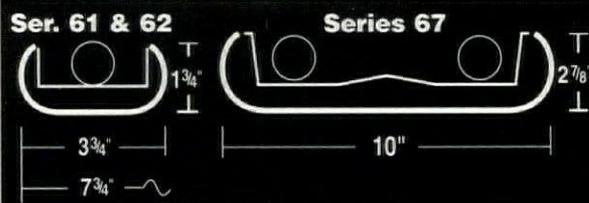
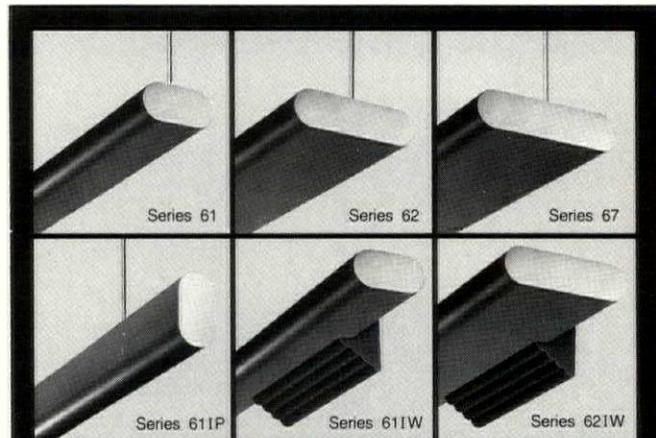
Due to a newly developed core material, Ameccon's new debuzzing chokes increase light intensity by 50% and reduce temperature by 25% over present technology. And they essentially eliminate noise in your lighting systems. Designed for OEM and retrofit applications, the new chokes are packaged for quick and easy installation into standard fixtures, wall boxes and compact areas. They're built with high temperature, high impact, fire retardant

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# How's Business?...What Recession?



**RON HARWOOD**  
PRINCIPAL AND SENIOR  
DESIGNER  
ILLUMINATING CONCEPTS  
FARMINGTON HILLS, MI

"The most important development for me this past year was being immersed enough in lighting design and manufacturing techniques to discern the wants and needs of clients from mainland China through the Far East. I'm seeing what we as American lighting designers can do for the world. The Illuminating Engineering Society of North America (IESNA) will need to address global lighting. I will be proposing to the IESNA the formation of a global lighting committee."



**DAMON PETERSON**  
PRESIDENT  
SF 12V INC.  
SAN FRANCISCO

"Business has been great. There's been nothing but growth—we grew substantially in sales last year. It's great working with new designers around the country and seeing the actual results and installations of design projects where our products are the dominant lighting source. Our goal is to work on new products with a contemporary design and quality construction. I hope that they'll be real mainstays."



**STEPHEN MARGULIES**  
LIGHTING DESIGN DIRECTOR  
COSENTINI LIGHTING DESIGN  
NEW YORK

"Our group is doing very well, but our engineering division could be doing better. There's just not many large projects out there. A lot of work is on the books, but it's just sitting there. Everyone's talking about going to Kuwait and the Middle East to rebuild from this war. Currently, we're doing a lot of work that we picked up a year or so ago. But the climate for new business right now stinks."



**ALBERT S.C. CHONG**  
PRESIDENT  
ALBERT CHONG  
ASSOCIATES, INC.  
HONOLULU

"Trying to find good, qualified help is difficult. Candidates have to show their colors. If they can't make it with us, I want to know now. Fortunately, we've got projects going all the time. There are a lot of design and construction firms moving to Hawaii, and we're always busy. It's a lot of fun...but it's not the lighting that keeps you young, it's golf!"

## **ON WORKING WITH THE GOVERNMENT: PRICE'S LESSONS LEARNED**

**P**lay politics and have money. This was what Emma Price suggested to those who will do battle with state energy offices over code revisions in order to stand a chance of making a difference. Emma Price, president of Edison Price Lighting, is a board member of the New York State Lighting Manufacturers Association (NYSLMA). She worked with other lighting professionals and the New York State Energy Office to incorporate revisions into the state lighting code update, which was originally proposed without input from the lighting community. Price's closing remarks offered advice to current and future lighting code-shapers at a luncheon

held on Wednesday, March 5, at LightFair and sponsored by Edison Price Lighting.

Price's "three conclusions from the New York State energy code fight are:

1. The New York State Energy Office (NYSEO) was not interested in the technical arguments of the lighting consultants, whom the NYSEO sees as having no political clout.

2. The NYSEO listened to the New York State manufacturers because we could make a political argument: that this code would cost jobs.

3. Even the compromise position we were able to reach cost money. We raised over \$25,000 for lobbying costs—if a state energy office is hostile

to the lighting community, it takes a considerable amount of money to effectively fight the pending legislation."

Other panelists at the luncheon included lighting designer James Benya, Luminae Souter Lighting Design, who outlined the workings of California's Title 24, and Peter Bleasby, manager of application engineering, Osram Corp., who outlined changes in the Massachusetts lighting energy codes. (For more information on energy code revisions in New York, California, and Massachusetts, refer to the "Special Report—Energy Code Update" on pages 17-24 of the May 1990 *Architectural Lighting*.)

## **1992 LightFair Targeted For Global Market**

LightFair International will forge ahead in a new direction as eastern trade barriers and global markets open. The 1992 trade show and conference will be held May 5-7 at the Jacob Javits Convention Center in New York.

LightFair will be celebrating its third anniversary. In even-numbered years, the show is held in New York, one of the most prominent international markets in the world. In odd-numbered years, it alternates between the Midwest and the West Coast, focal points of the American market.

LightFair is cosponsored by the Illuminating Engineering Society of North America (IESNA), and the International Association of Lighting Designers (IALD). It is managed by AMC Tradeshows, an Atlanta-based division of The John Portman Companies. For further information, contact Carole Carley, communications manager, AMC Tradeshows, 240 Peachtree Street, N.W., Suite 2200, Atlanta, GA 30303, or call (404) 220-2115.



## **The Art of Projection**



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## EPA'S "GREEN LIGHTS" PROMISES COMPANIES PROFITS, PUBLICITY

**T**hree hundred pounds of carbon dioxide, 1.4 pounds of sulfur dioxide, 0.8 pounds of nitrogen oxides, 45 watts, and 157 kilowatt hours—that's what is saved per year, coupled with a 37.5 percent annual return on investment, by replacing a common incandescent bulb with a compact fluorescent.

The Environmental Protection Agency (EPA) threw these numbers out in the LightFair keynote address: Green Lights: Environmental Protection at Profit." In a move to draw Corporate America into its newly established (January 1991) Green Lights program, the EPA is offering companies the opportunity to do the environment some good, gain positive publicity, and make a profit at the same time.

The EPA's Robert Kwartin and Jerry Lawson presented details on the voluntary program that's aimed to encourage the installation of energy-efficient lighting designs and technologies—but, they say, only where they are profitable, and maintain or improve lighting quality.

The program operates largely through an "honor system" in which "partner" corporations, and lighting manufacturer "allies" sign good faith "memos of understanding." Requirements that corporate partners agree to include: retrofitting wherever profitable within five years, designing new buildings to meet good energy practices, and educating employees.

In return, the EPA will, among other things, publicize corporate participation, offer workshops and training courses, develop the Green Lights Allies Programs, and assist distributors in marketing and upgrading their products. The EPA is also funding the development of a product testing program at Rensselaer Polytechnic Institute's Lighting Research Center (see "Rensselaer Starts Product Testing Program" *Architectural Lighting*, March 1991).

According to the EPA, lighting manufacturers who are interested in becoming Green Lights Allies agree to various conditions including: publicizing the environmental benefits of energy-efficient lighting, helping to establish a national

product information program, and meeting "memo of understanding" lighting standards in corporate facilities.

"We're trying to call attention to what is in the marketplace right now, without regard to enforcing energy codes whatsoever," claims Jerry Lawson, chief of energy productivity & pollution prevention at the EPA. "We're strictly looking at what meets a cost effectiveness or a return on investment standard. If we are successful on a voluntary basis, it could even decrease a momentum towards regulation."

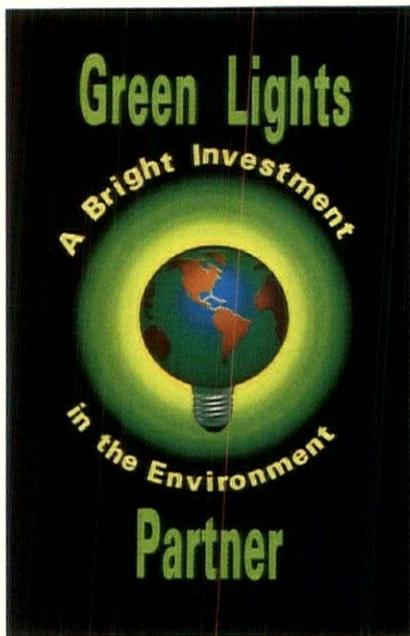
The Green Lights product information database is intended not to endorse products, the EPA says, but to present available product information to corporate partners in a manageable format. For manufacturers' products to be included by name in the database listings, the company must be part of the Allies Program. Otherwise, the product is represented generically.

"The memos that are signed are not enforceable under law," Lawson says. "We make clear to the companies when they're making this commitment that it's very public. So if they're not going to do what they've committed to do publicly, a reporter or a citizens group, or even their own investors or board may ask them what's going on."

The program has over 40 corporate partners, including American Express Company, Bell Atlantic, Boeing, Citicorp/Citibank, Johnson and Johnson, Nike Corporation, Polaroid Corporation, and Xerox Corporation. The goal is to reach 400 corporate partners by the end of December 1991.

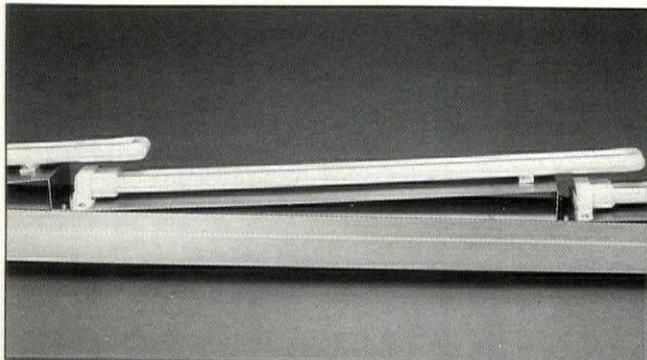
Many lighting manufacturers have already signed up to be allies and displayed the Green Lights logo at their LightFair booths. And, Lawson reports, the trade show proved to be a valuable source for manufacturers and electric utilities wanting information on how to participate in the program.

For more information, contact Bob Kwartin, program manager, Global Change Division, U.S. Environmental Protection Agency, 401 M Street, SW (ANR-445), Washington, D.C. 20460, (202)-382-4992, fax (202)-475-7010.

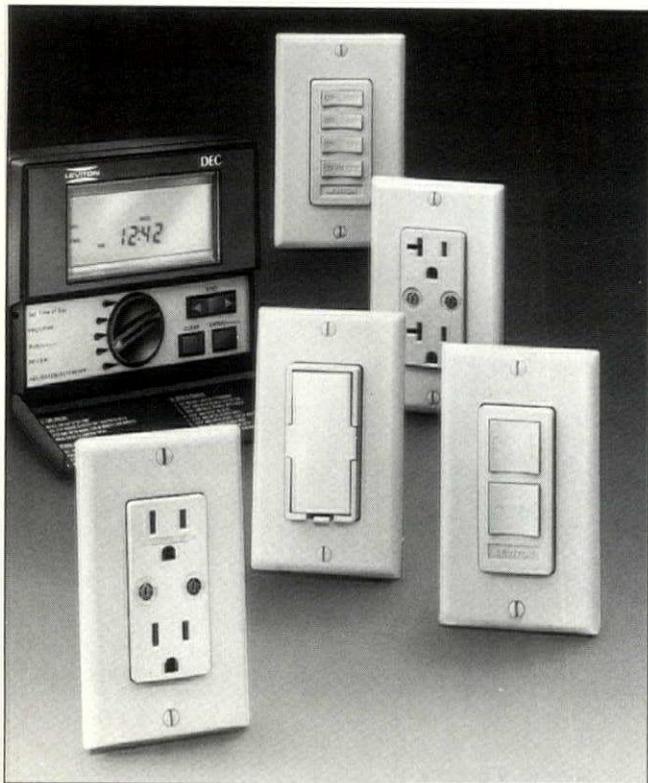


**GREEN LIGHTS:** The EPA's energy-saving program aims to preserve the planet by reducing and preventing pollutants from reaching the air.

**NEW  
PRODUCTS**



**NORBERT BELFER RAMP**



**LEVITON DECORA CONTROLS**

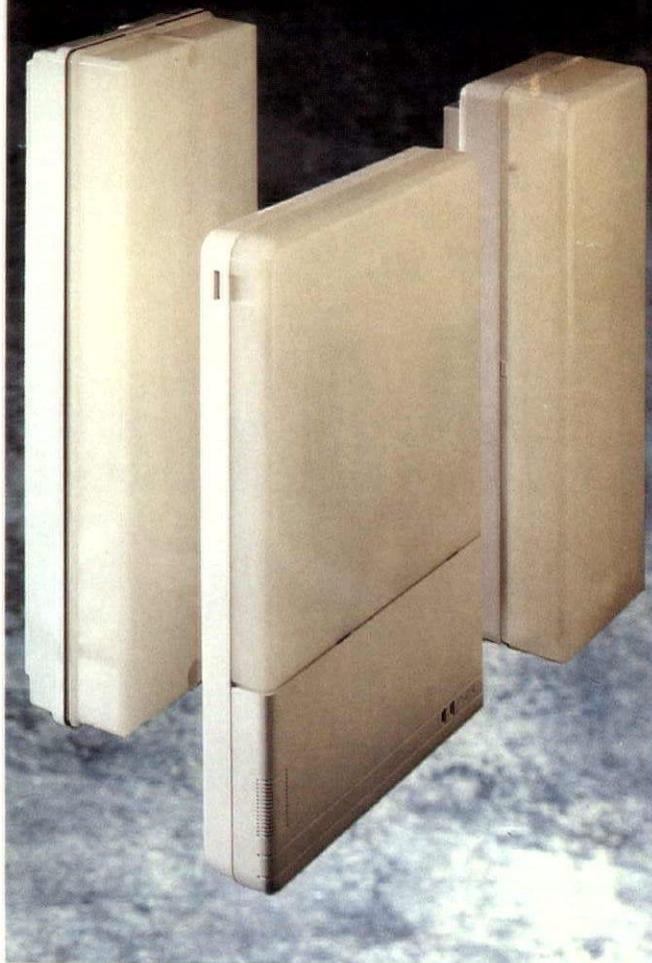
**PERIMETER LIGHTING**

The Ramp provides shadowless, high lumen, cost-efficient perimeter lighting. One compact fluorescent lamp overlaps the socket of the next lamp to provide 1,920 lumens per foot. The sockets are mounted on an extruded aluminum raceway. Norbert Belfer Lighting, Ocean, NJ. **Circle 41**

**CONTROLLERS & RECEIVERS**

A new group of advanced-technology controllers and receivers has been added to the Decora line of electronic controls. These switching controls provide lighting security, convenience, and energy savings for residential installations. Modular controllers and receivers allow programmable control for many indoor and outdoor applications, while also providing complete manual control. Powerline carrier technology transmits switching commands in existing 120-volt AC wires, and modules are easily installed in standard electrical wall boxes. Leviton Manufacturing Co., Inc., Little Neck, NY. **Circle 42**

# EMERGENCY LIGHTING



## Pratica

Beghelli has captured a new concept in emergency lighting through a series of products known as PRATICA.

This product line utilizes state-of-the-art technology, is aesthetically appealing, satisfies modern lighting requirements, and is easy to install and maintain.

The Beghelli products, along with a commitment to quality, assistance, and service, are now available all over the United States.

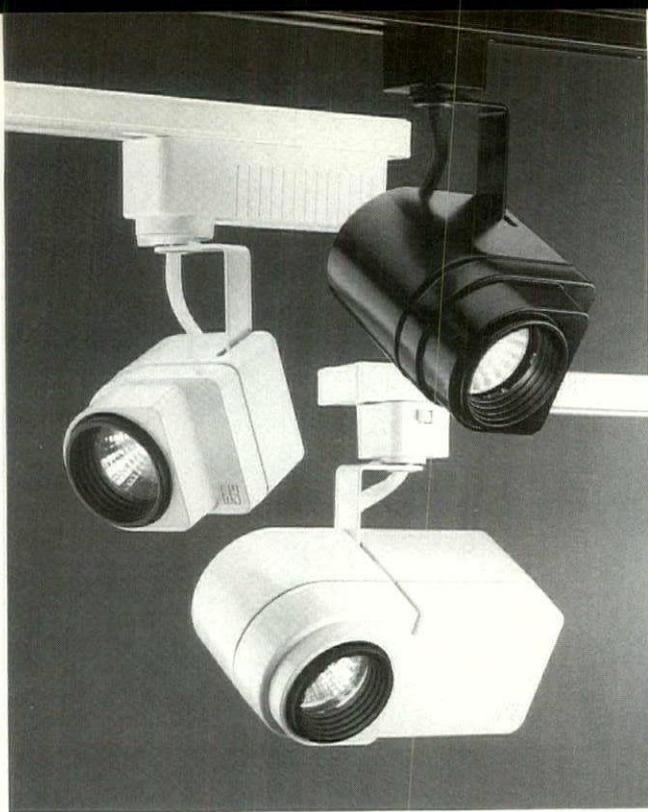
So, when you are looking for an emergency unit, remember Beghelli, remember PRATICA.

# Beghelli

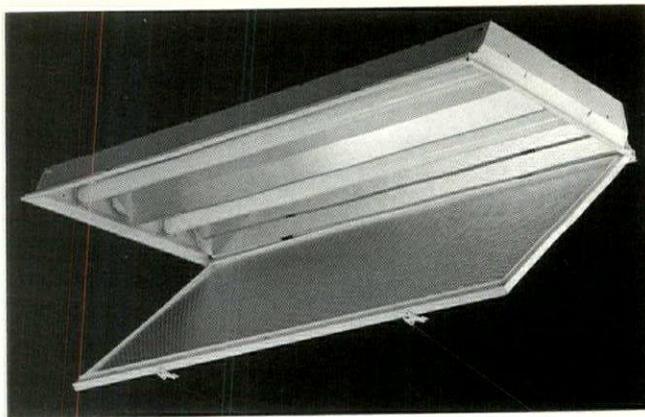
*in the darkness, a light.*

Beghelli Inc. - P.O. Box 8053 - Jacksonville, FL 32216  
Phone (904) 6464416

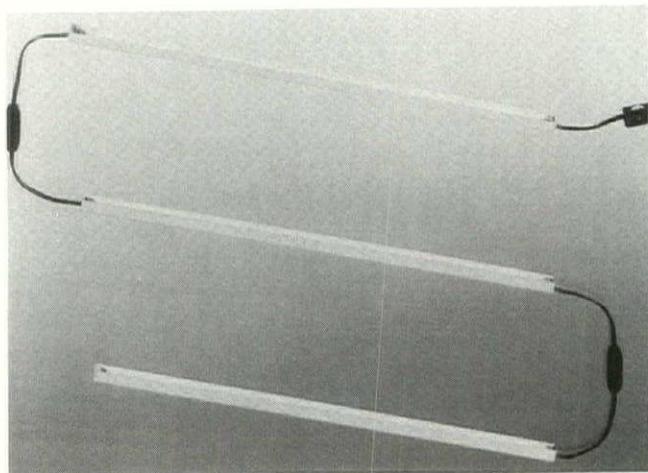
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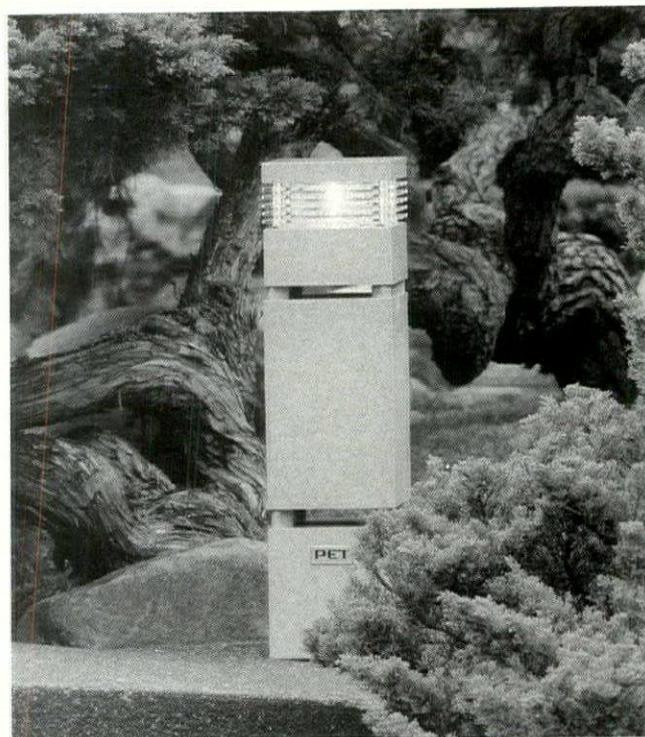
JUNO CAST 16



LAMAR TROFFER



OUTWATER CONNECT-A-LIGHT



PET SPEAKERS

#### CONNECT-A-LIGHT

This interconnecting light system uses standard line voltage and can be used for a variety of applications, including cabinet and display accents. Using polarized mating connectors with 18-inch wire leads, it can connect as many as 150 lamps on 30 10-inch modules in one run. Connect-a-Light measures .5 inch x .5 inch, and is available in polished brass, polished chrome, black, and white. Outwater Plastic/Industries, Wood-Ridge, NJ. **Circle 43**

#### TRACK FIXTURES

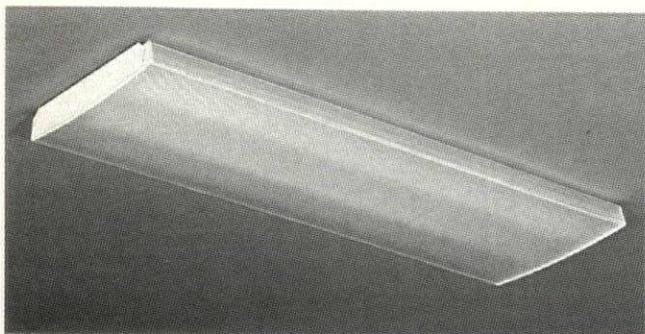
The Cast 16 series of track lights features a rectangular or cube-shaped format with rounded corners and integral miniature black baffles. These die-cast fixtures produce a controlled optical beam that is suited for pinspotting and other display applications. The series is available in three models: the T350, a low-voltage rectangle with integral transformers; the T447, a low voltage cube used with Juno's electronic power pack transformer; and the T419, a line-voltage cube utilizing the 55-watt PAR 16 lamp. All models are available in black or white finishes. Juno Lighting, Inc., Des Plaines, IL. **Circle 47**

#### RECESSED TROFFER

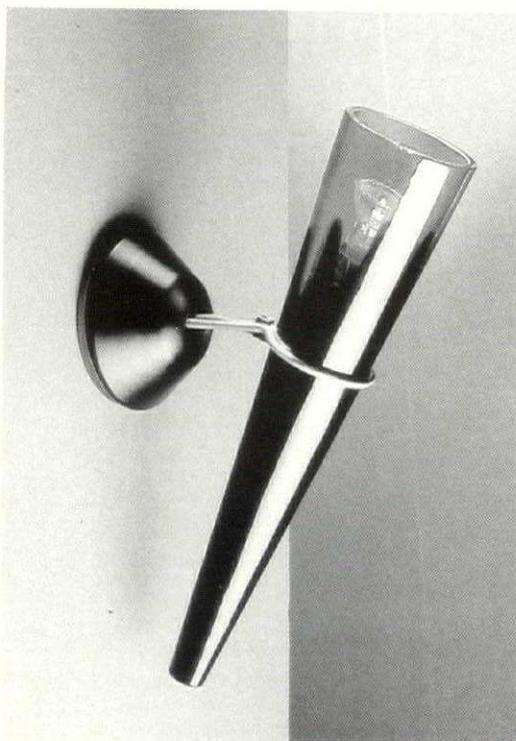
This 2-foot x 4-foot recessed troffer with specular reflector features a two-lamp electronic ballast. Highly specular anodized aluminum reflector provides excellent photometrics. The fixture provides comparable light output to a conventional four-lamp fixture, but saves more energy. LaMar Lighting Co., Inc., Freeport, NY. **Circle 44**

#### LIGHTED GARDEN SPEAKERS

The CSL series garden speakers combine a high-fidelity speaker and light in a freestanding, acrylic polymer resin, weather-resistant cabinet suitable for a variety of indoor and outdoor installations. Two models are available: the CSL-1000 in a rectangular enclosure, and the CSL-2000 in a triangular enclosure. The unit includes a built-in, 12-volt, long-lasting light source, and is available in summer dusk, midnight granite, and desert sandstone. Pioneer Electronics Technology, Inc., Pomona, CA. **Circle 40**



**LITHONIA 3-LAMP WRAPAROUND**



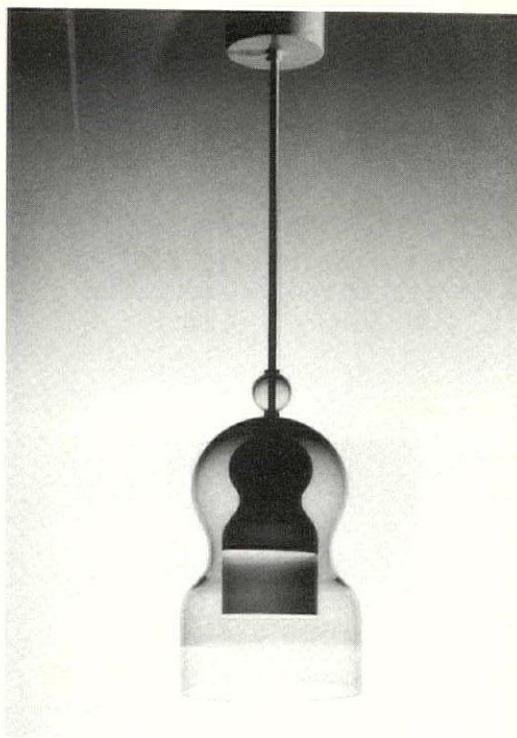
**DIBIANCO ZEN**

### **3-LAMP WRAPAROUND**

The LB Wraparound family has been expanded by adding a series of new three-lamp models. The three-lamp LB features linear side prisms to control brightness and pyramidal bottom prisms to minimize lamp image. They can be used with 32-watt T8 or 40-watt T12 lamps. All fixtures are designed for unit or row installation. Lithonia Lighting, Conyers, GA. **Circle 51**

### **WALL FIXTURE**

Zen is a low-voltage sconce with a white or black blown glass diffuser with decoration in blue, green, orange, or crystal. The fixture measures 4 inches in diameter, 16.5 inches in height, and is 11 inches deep. The Zen wall fixture uses a maximum of 50 watts dichroic, and has an embossed anthracite gray lacquered metal finish. DiBianco Lighting, Brooklyn, NY. **Circle 53**



**HAMPSTEAD MANDOLA**



**G.E. CONSTANT COLOR**

### **SUSPENSION LAMP**

Mandola, designed by Johanna Grawunder and manufactured by Salviati, has two structures made of blown glass. The interior structure is available in green and aquamarine opaline, while the similarly shaped exterior is available in dark and light amber. The fixture is 15 inches in height, has a 9-inch diameter, and houses a 100-watt milk-white bulb. Hampstead Lighting and Accessories, Inc., Irvine, CA. **Circle 49**

### **COLOR COATING**

The MR16 Precise lamps with Constant Color coating are available in 20-, 35-, 50-, and 75-watt versions. Constant Color coating is dichroic, to help eliminate the discoloration of the reflector when viewed from the front. Also, the coating produces a white beam of light and provides a subdued blue light from the back of the lamp or fixture. Rated at 4,000 hours average life, the lamps with the coating will maintain more of their beam lumens and will not suffer gradual lumen depreciation due to a degraded reflector. G.E. Lighting, Cleveland. **Circle 50**

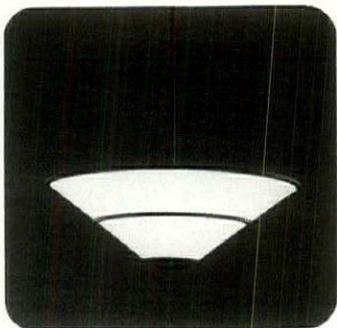
## NEW PRODUCTS

### Appleton Lamplighter.

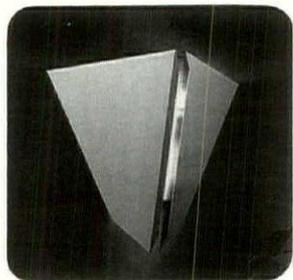
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- Engineering • Quality materials & products
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Owatonna High School  
Owatonna, MN  
3'0" x 1'0" x 3'6"  
Opal acrylic cone • Painted steel  
Six 26 watt PLC lamps  
Architect: Hammel, Green and  
Abrahamson, Inc.  
Minneapolis, MN



Central Park of Lisle • Lisle, IL  
1'3" x 1'5.75" x 10"  
Brushed #4 stainless steel  
One 250 watt halogen lamp  
Architect: Lohan Associates  
Chicago, IL

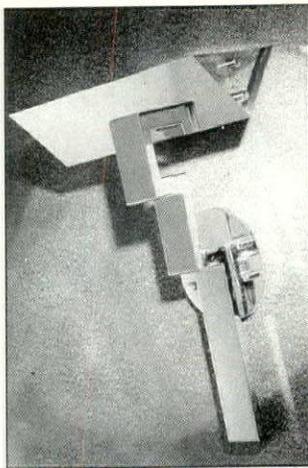
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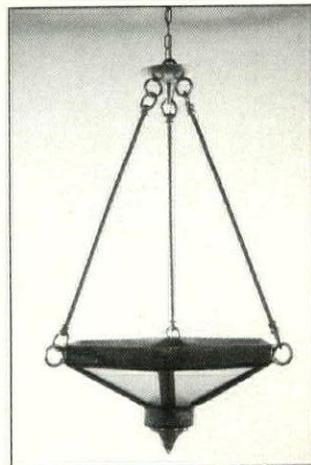
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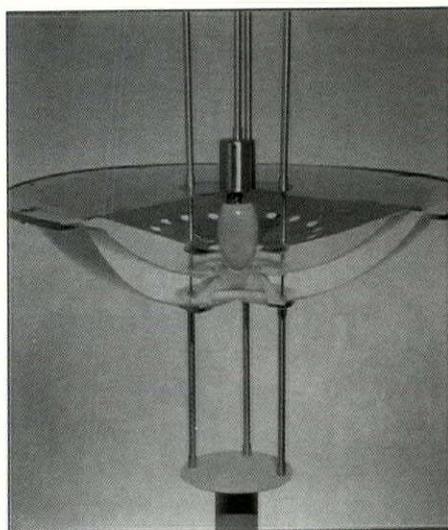
Circle No. 18 on product card



WINONA ZIGGARAT



ACCESSORIES INT'L CHELSEA



WINONA H.I.D. LAMP REFLECTOR

#### WALL SCONCES & BRACKETS

Ziggurat, an addition to the Metropolis series, features a stepped front face and is made of a combination of brass, bronze, and stainless steel. The sconce measures 120 inches wide x 14.25 inches high, has a 5.5-inch projection, and uses a 120-volt quartz halogen lamp. Winona Lighting, Winona, MN. **Circle 52**

#### DECORATIVE FIXTURE

The Chelsea Hanging Light, designed by Salman Shah, is available in five finishes—natural iron, verdigris, rust, sand, and antique gilt. The fixture is equipped with a 300-watt halogen lamp and can be used with a maximum of 500 watts. It measures 46 inches wide x 42 inches high. Accessories International, Inc., Houston. **Circle 48**

#### H.I.D. LAMP REFLECTOR

This new reflector design improves the applications of H.I.D. lamp sources in decorative fixtures. A computer-aided reflector design has created the shallowest profile while maintaining efficiency. A unique center-cut hole and acrylic diffuser lights translucent materials with a soft, even glow. Lamping options include 100 and 175 watts for pendants less than 30 inches in diameter, and 175, 250, and 400 watts for larger diameters. Winona Lighting, Winona, MN. **Circle 54**

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LETTER CONTINUED FROM PAGE 10

indirect lighting.

2. The indirect fixtures create a more pleasant environment.
3. There is less reflected glare from walls, ceilings, and other surfaces with indirect lighting.
4. Subjects prefer the overall light distribution (pattern) of the indirect lights.
5. The indirect system makes the subjects feel more productive.
6. The general impression was that indirect systems create a higher quality visual environment.
7. Preference for indirect systems was 3-1 over the direct

parabolic.

In summary, we may be wise to consider all concerns in designing today's electronic office lighting systems. While VDT screen glare is the most widely discussed and addressed problem in today's office environment, we can ill afford to overlook other valid concerns. The end results may very well be a more productive staff producing a healthier bottom line.

MICHAEL W. O'RYAN

King Lighting, Inc.  
Covington, KY

## MARKETPLACE

### LAMPS

SYLVANIA LIGHTING DIVISION, US, Sylvania Lighting Center, Danvers, MA 1-800-544-4828.

USHIO AMERICA, 20101 S. Vermont Ave., Torrance, CA 90502 .....Fax 800-776-3641 or 800-326-1960  
Manufacturer of MR11, MR16, T3 Quartz, Minican and DC Bayonet Halogen Lamps.

### LIGHTING POLES (WOODEN)

J.H. BAXTER & COMPANY, P. O. Box 10797, Eugene, Oregon 97440 .....503-689-3020  
Manufacturer of Timberwood Lighting Standards. A superior pressure treated Douglas fir laminate for decorative outdoor lighting support. Contact Beryl Roberts.

### AREA LIGHTING (EXTERIOR)

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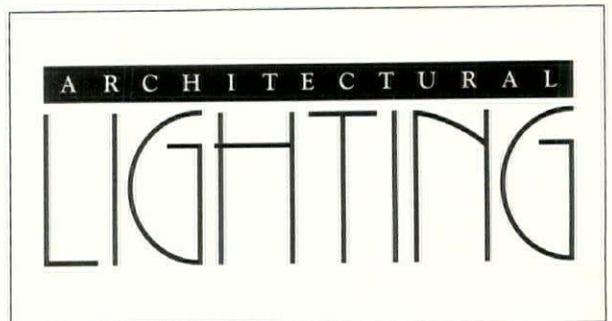
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Beghelli Inc.	904-646-1949	Carrie Morris	Philips Lighting	201-563-3229	Chris Domalewski
Con-Tech Lighting	708-945-0096	Al Grossman	Rejuvenation Lamp & Fixture	503-281-7948	Jim Kelly
Cooper Lighting	312-956-1537	Frank Bruno	Targetti Sankey S.P.A.	212-982-8548	Nan Bakley
CSL Lighting, Inc.	805-257-1554	Richard Stellar	3M Construction		
Edison Price Inc.	212-888-7981	Emma Price	Markets Department	612-736-0611	Kay Syverson
Frederick Ramond	213-926-1015	Sam Strickland	Times Square Lighting	914-947-3047	Robert Riccardella
Kim Lighting	818-330-3861	Henry Glover	Visa Lighting	414-354-7436	Amy Gress
Leviton	718-631-6439	Ross Kotarski			
Lighting Services, Inc.	914-942-2177	Customer Service			