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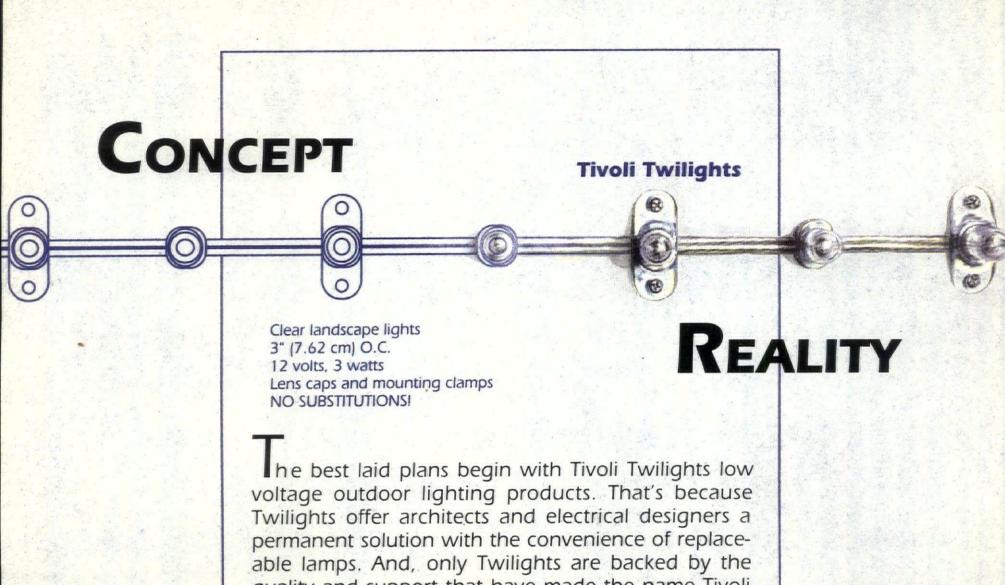
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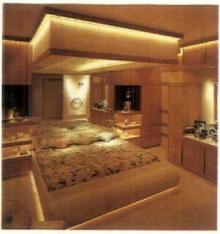
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COVER PHOTO BY DAVID GLOMB 2 IN LIGHT OF THINGS



4<sup>MALIBU</sup> VIEW



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**Catherine Schetting Salfino** Assistant Editor

Christina M. Lamb Art Directo **Ronald M. Gabriel** 

Production Director: Barry Miller Assistant Production Director: Susan Benvenuto

Production Manager: Jody Neblett Group Circulation Manager: Brenda Boothby Classified Ad Director: Nancy Leffler Berman Corporate Art Director: Richard Zoehrer Marketing Manager: Phillip A. Russo Market Research Assistant: Christine Lafemina Central Marketing Services Director: Gloria Marshall Merchandising Services Manager: Jennie Clay

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Advertising Representatives

Art Golden, Publisher Gralla Publications 1515 Broadway New York, NY 10036 (212) 869-1300 FAX 212-302-6273 TELEX #6973314GRAL

Ileen Riskin, Midwest/Eastern Regional Manage Gralla Publications 1515 Broadway New York, NY 10036 (212) 869-1300 FAX 212-302-6273 TELEX #6973314GRAL

Doyle Peck, West Coast Regional Manager Gralla Publications 6355 Topanga Boulevard Suite 246 Woodland Hills, CA 91367 (818) 348-1943 FAX: (818) 346-7222

Kay A. Morrow, International

Gralla Publications 34 Boulevard Haussmann Paris, France 75009 (1) 47.70.47.70 TELEX #MBI 290266

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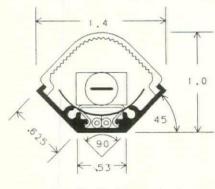
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#### EDITORIAL

#### **Playing Catch-Up**

## When will lighting design come home sweet home?

Sources and systems available for residential spaces have exploded in the past decade. Options have progressed way beyond the simple, single-switch fluorescent tube over the bathroom medicine cabinet, and the incandescent bulbs in living room table lamps. It is time for the consumer to catch up to the technology.

This issue is, in part, a celebration of possibilities in residential lighting design. Projects featured use neon, low-voltage miniature lamps, halogen, fiber optics and other sources in standard fixtures and custom designed systems that exploit the beneficial qualities of lighting design for the home:

• *Light as revealer*—brings out the textures and patterns of black artwork in a West coast home

• Light as a flexible design tool—illuminates a variety of functions in kitchens, a bedroom and bath suite, and an East coast home art gallery

• Light as an affector of the human psyche—integrates with interiors and architecture to create a relaxing environment ideal for appreciating an ocean view, and combines with nature outdoors to enhance the breathless beauty of a nighttime winter landscape.

Residential lighting has been a stepchild of the lighting design field. Though the amount of time spent designing lighting for a residential project can equal or even exceed that devoted to a commercial project, the financial rewards have been considerably less.

That is changing. More and more clients of high-end residential projects are asking for unusual and interesting spaces that integrate architecture, and interior and lighting design. The number of lighting consultants, interior designers and architects who handle residential projects with elaborate lighting systems is growing.

Some designers l've spoken with have even speculated that lighting will provide the consumer "toys" of the future. We've seen a boom in consumer interest in sophisticated knowledge of complex electronics, audio equipment, and computers.

Why not lighting? Why not an avid interest in a vital facet of the environment that can influence how one enjoys the all too few and precious hours spent at home?

Perhaps the '90s will be the decade when lighting design comes home sweet home.

WANDA JANKOWSKI EDITOR



## HOW A DESIGNER BECOMES A FIXTURE.

The following excerpts are from an interview with Juan Montoya.

"Lighting is neglected by the schools. And any student who doesn't know lighting will be handicapped in becoming an architect or designer."

"When I attended Parsons, they were looking to go beyond being strictly a decorating school. Consequently, they hired architects who had studied with Louis Kahn. They hired people who were interested in color, who had studied with Josef Albers. And I became very intrigued by how color or pigment is affected by light. An interest I was actively encouraged to pursue." "You must understand how the natural light penetrates into a room, and how it changes at night. Then you can determine where and how the lighting will be incorporated. Because a complete change in terms of atmosphere isn't always effective. You may, for instance, want to conceal the source of light architecturally, but still provide full illumination."

"The possibilities are incredible. I did an apartment where I utilized lighting as a divider of space. It was between the dining room and the living room. When the servants were preparing dinner, the intensity of the light would almost blind you completely and create a kind of curtain. As soon as they were finished, and the meal was ready, the light would disappear. And the guests would walk into the room.''

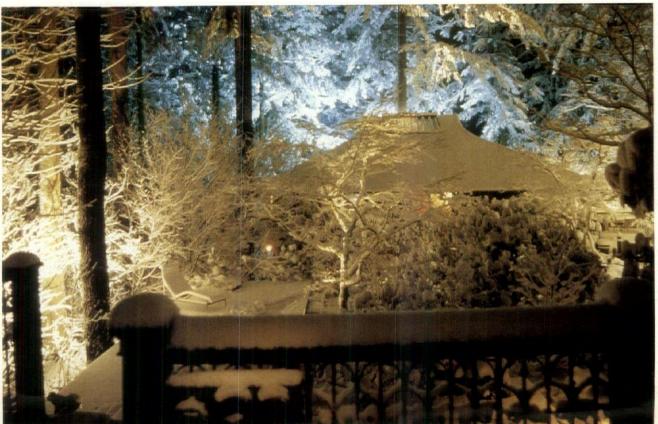
"I am not afraid to make mistakes. I sense what I'm doing. I feel what I'm doing. I visualize. And I have been lucky that there have been people around who say, 'Do your thing. Create...And we will pay you.'"

Mr. Montoya is lighted by Tiered Rings from the Lytegems System. To learn more about Lightolier products and designing with light, the "Lightstyles" catalogue is available for \$5.00 plus shipping. To order, or for your nearest Lightolier Authorized Dealer, call 1-800-526-8928.



#### **RESIDENTIAL SPOTLIGHT**

# Oregon Snow Wonder



BY CHRISTINA LAMB ASSISTANT EDITOR

**CHALLENGE** The home of Howard Hermanson, ASID, IES, lighting designer for this project, overlooks Portland, OR, and is set amidst two-and-a-half acres of native maples and 150-foot fir trees. The residence required a lighting system that would enhance the natural beauty of the surroundings.

**DESIGN/TECHNICAL CONSIDERATIONS** It was important that the lighting commune with the natural setting and the architecture, while illuminating areas of activity and providing security.

**METHOD** Concealed by the deck are 500-watt quartz lamps whose reflected light softly illuminates the deck and marks the boundaries of the platform. Quartz lamps are also aimed horizontally and vertically below the deck to throw light into the surrounding trees and shrubbery. The tall fir trees are illuminated by a 500-watt quartz lamp mounted on the chimney. A 1500-watt metal halide lamp shines light to the tops of the



fir trees and silhouettes the house in cool light. This cool effect is regulated with 150watt incandescent floods, which are placed below the floor level. These provide human scale lighting and produce a warm mix of color. Ground cover is accented with 30- and 50-watt MR 16 and PAR 36 lamps; 50-watt MR 16, 15-watt R 14, and 18-watt S 8 lamps are used primarily as path lighting, but also accent some small trees and shrubs.

**CONCLUSION** The dramatic lighting system illuminates the view so that those looking through the glass from inside the house may appreciate the enchanting woodlands, be it day or night.

#### DETAILS

PROJECT: RESIDENCE OF HOWARD AND FRAN HERMANSON LOCATION: PORTLAND, OR LIGHTING DESIGNER: HOWARD HERMANSON, ASID, IES INTERIOR DESIGNER: HOWARD HERMANSON, ASID, IES PHOTOGRAPHER: ED HERSHBERGER MANUFACTURERS: LUMA: MR 16 lamps; NIGHTSCAPING: MR 16, R 14, and S 8 lamps; HUBBELL: T-3 quartz lamps; DAY-BRITE: 1500-watt metal halide lamp



NATURAL LIGHT: Quartz lamps, placed beneath the deck, outline its form and illuminate the surrounding area. A lighting system including metal halide and incandescent sources animates the scenery.





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#### RESIDENTIAL SPOTLIGHT



BAFFLED SYSTEM: Installed behind the baffles, low-voltage PAR 36 fixtures focus on details (below), while PAR 38s wash the walls (below right). ARTISTIC APPROACH: The lighting system for this private gallery (left) illuminates the interior, highlights the artwork and complements the clean lines of the architecture.

# Accent On Art

#### BY CHRISTINA LAMB ASSISTANT EDITOR

**CHALLENGE** The gallery addition to a private residence in New Jersey consists of three adjacent rooms: an entry gallery, an upper seating area, and a lower hexagonal living room with a cupola ceiling. A lighting system was designed to integrate the general illumination of these three spaces with luminaires that would accent the art collection.

**DESIGN/TECHNICAL CONSIDERATIONS** Sculpture and paintings are frequently out on loan for shows, so the ensuing space is furnished with other pieces from the extensive collection. This means the system must be flexible so that re-aiming and relamping light fixtures with lamps of alternate distributions can be accomplished with ease. Also, the lighting and the artwork had to blend aesthetically with the interior form, design, and furnishings since the rooms are also used for entertaining.

**METHOD** A custom pendant-mounted baffle system with a two-circuit track provides lighting for the artwork. The track circuits are divided into multiple zones on a centralized dimming system to accommodate different pieces of art that require varied

levels of illumination. To highlight and accent individual details in the paintings and sculpture, 50-watt PAR 36 low-voltage lamps, located behind the baffle, are used.

Also located behind the baffle, and used to wash the walls, are 120-watt PAR 38 fixtures with spread lenses. Downlighting is provided by recessed 100-watt A 19 fixtures, which are angled for the 40-degree slope of the main living room's ceiling. Low-voltage 3.75-watt strip lights uplight the cupola in the living room, and T 6.5 lamps are recessed and concealed in the sides of the niches in the entry gallery.

**CONCLUSION** The lighting system installed in the gallery creates warmth and balances ambient and accent lighting to produce comfortable, yet stimulating spaces.

#### DETAILS

PROJECT: PRIVATE NEW JERSEY RESIDENCE ARCHITECT: JAMES TIMPSON LIGHTING DESIGNER: CORINNE STRUMPF, IALD INTERIOR DESIGNER: DENNIS BROCKMAN PHOTOGRAPHER: FRANK RITTER MANUFACTUREES: EDISON PRICE: 100-world recess

MANUFACTURERS: EDISON PRICE: 100-watt recessed fixtures; LIGHTOLIER: PAR 36 and PAR 38 lampholders; NORBERT BELFER: strip lights, T 6.5 lamps; ELECTRO CONTROLS: dimming controls





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#### RESIDENTIAL

# In Light Of Things

#### Recessed fixtures emphasize artwork in a Beverly Hills home

#### BY CATHERINE SCHETTING SALFINO MANAGING EDITOR

hen someone spends a tremendous amount of time and money acquiring a collection of artwork for their home, presenting it in its best possible light becomes as important as if it were appearing in a gallery. Perhaps even more so, since the owner will want to view the pieces with intensity, and show them off unabashedly.

Such was the reasoning behind the lighting of Sandy Gallin's home in Beverly Hills, CA, where a gallery's-worth of onyxcolored wall art and sculpture is displayed against the clean lines of the lightly-hued residence.

"The main requirement for the lighting was to illuminate these great pieces of artwork," says Bill Lane, interior designer, Los Angeles. "It's mostly black, so the lighting had to be bright enough to bring out the textured patterns of the wall art. To make sure that the lighting would be positioned precisely where we wanted it, Sandy, the electrical contractor Albino Martinez, and I went into the home when it was in its framing stages and planned where the furniture would be, and which would be the main walls for art."

The group even went so far as to construct mock furniture for

the positioning of the lights.

"The carpenters thought we were out of our minds," Lane says. "We would put our plywood couch in place, look up, and say, 'OK, there's got to be downlighting on this side for the couch, and there's got to be lighting over there for the coffee table. And we'll need fixtures pointing at the wall over there for a piece of art.""

None of the fixtures were installed on a grid system, since, Lane says, the placement of each was based on the position of the piece of art or furniture it was to illuminate. The ceiling downlights consist of 75-watt MR 16 halogen lamps, which are housed in miniature, low-voltage spot and flood fixtures. All are aimed straight down. The art pieces are lit with 50-watt, recessed adjustable MR 16s, which are mounted at a 45-degree angle.

Lane says that since the house was designed with entertaining in mind, the lighting for each room has individual preset dimmers. Lane says this way, whether Gallin is holding a dinner party for 12 or an indoor/outdoor bash for 300 people, the lighting can be easily changed to match the mood.

When Gallin does entertain outdoors, the guests can admire the landscape as clearly at night as during the day. Landscape lighting designer Pat Skinner, of Skinner Lighting, Chadsworth, CA, installed 175-watt mecury vapor lamps on the roof and *PHOTOS BY DAVID GLOMB* 





aimed them down for a moonlighting effect. He mounted several more mercury vapor lamps in the trees and on the ground to light above and below the foliage. Skinner says he placed 12volt, 50-watt halogen lamps in the planters and shrubs for lowlevel illumination. The indoor and outdoor environments complement each other—one lighting scheme blending gracefully with the other.

Lane says the decision to predominantly use downlighting throughout the home was the result of wanting the drama that comes with halogen spotlighting techniques.

"You can spot a bouquet and you can accentuate a piece of art," he says. "It creates highlights and shadows and so on. We softened the look with the wider floods and added ambient light with table lamps and torchieres."

Although there is an abundance of light sources in the home, Lane says he worked to keep the illumination from being overwhelming.

EMPHASIS ON ART: Client Sandy Gallin hand-picked the black artwork for his home in Beverly Hills, which is why he placed a special emphasis on the lighting for it. Throughout the home, freestanding sculpture and wall pieces bask in the light of 50-watt recessed, adjustable MR 16 lamps. About 40 recessed MR 16 downlights illuminate the grand entry hall (right). The same 75-watt lamps, which are housed in spot and flood mini fixtures, are used to illuminate other areas of the home, including the living room and bar area (left), and passageways and library (above).



"We never, never want the lighting to be too bright—or lit up like a football field," he says. "It's always subdued to some extent. The main point of the application is to make everything look stunning."

#### DETAILS

PROJECT: SANDY GALLIN RESIDENCE LOCATION: BEVERLY HILLS, CA CLIENT: SANDY GALLIN

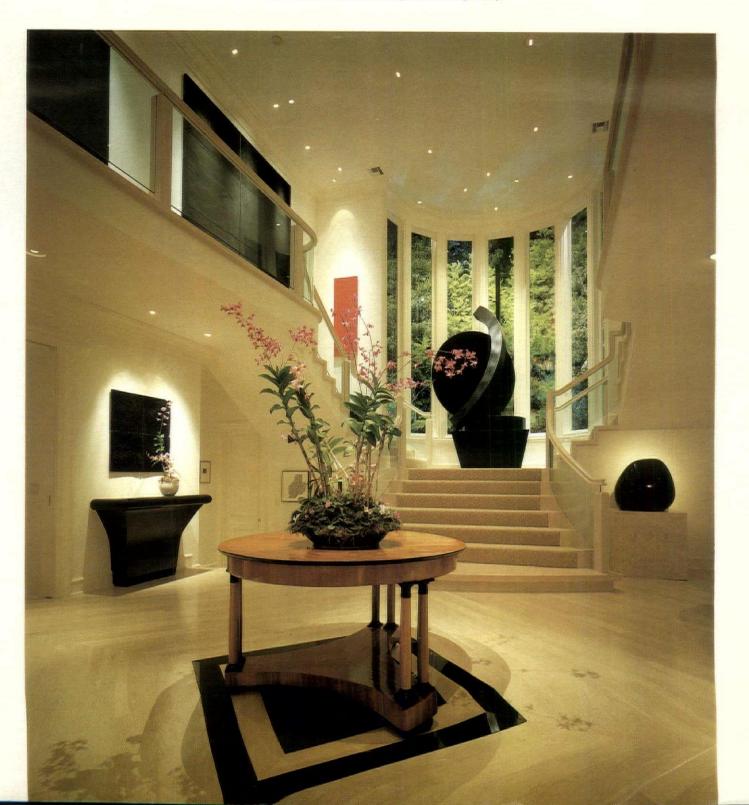
LIGHTING/INTERIOR DESIGNER: BILL LANE

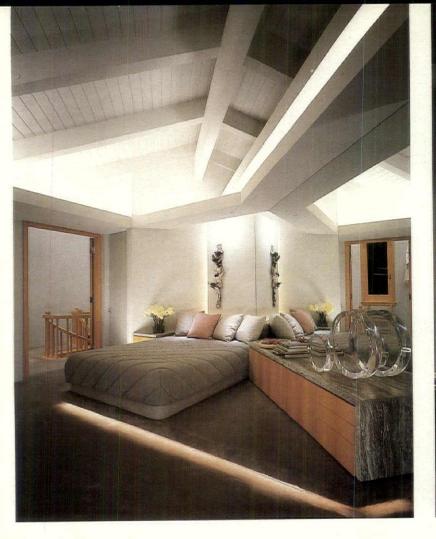
LANDSCAPE LIGHTING DESIGNER: PAT SKINNER, SKINNER LIGHTING

ARCHITECT: LISE MATTHEWS, LISE MATTHEWS & ASSOC. ELECTRICAL CONTRACTOR: ALBINO MARTINEZ, ALBINO CONSTRUCTION, INC ELECTRICIAN: LASZLO FAERSTAIN

PHOTOGRAPHER: DAVID GLOMB, DAVID GLOMB PHOTOGRAPHY

LIGHTING MANUFACTURERS: CAPRI: low-voltage spot and flood fixtures, OSRAM: 50-watt, 75-watt MR 16 lamps, LUTRON: preset dimmers; GREENLEE: mercury vapor lamps; NIGHTSCAPING: low-voltage outdoor halogen lamps

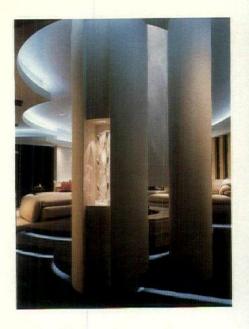






PHOTOS BY DAVID GLOMB

POINTS OF VIEW: Views of natural beauty at the front and back of the house (right) dictated the use of concealed sources and a flexible dimming system to minimize reflections of the interior space in windows. In the living room (top below), a low-voltage spotlight highlights the glass sculpture in the niche. One of two skylights (bottom below) is above the multi-planed walls.







REVEALING BY CONCEALING: In the bedroom (far left), recessed indirect lighting emphasizes and reveals the peaked, beamed ceiling. Mercury vapor fixture fitted with a blue-green filter creates a haunting play of light on trees outside the bedroom window (left). View from outside the home looking in (right) shows the multi-layered ceiling joined at the front of the house to a sloped glass ceiling and wall.





RESIDENTIAL

# Malibu View

#### Concealed sources allow residents to take in ocean beauty

#### BY WANDA JANKOWSKI EDITOR

mooth, layered geometric shapes are enlivened with light in the interior of a 2,500 square foot Malibu home designed by Robert Ross, Robert Ross Inc., Los Angeles.

"No matter where you sit in the living room, you have a view," Ross says. The residents wanted to be able to relax and enjoy the ocean view not only during the day, but at night without intense reflections in the glass windows. Ross has used concealed and recessed sources, and avoided portable and decorative fixtures to minimize distracting reflections and glare. "We also lit foreground landscape elements to further reduce reflections at night caused by interior lighting, and to add a certain human, poetic scene to the view," Ross says.

The house had formerly been ranch-style, with the roof sloped at a slight angle.

"The owner liked the idea of geometric shapes, and we discussed the positioning of round elements," Ross says. "Once I set up the large circle in the living room, all the forms grew and became defined from that. The lighting complements the forms."

Ross overlaps and intersects horizontal and vertical elements, and continues the concept in the lighting with layers of light.

"I usually design the lighting system in layers: low levels equivalent to candlelight for relaxing; ambient and fill light; and task and accent light," Ross says.

The living room is built on two distinct planes or levels. The upper level is marked by a circular ceiling cove that contains two skylights. The shaft above the fireplace runs vertically up through one of the skylights. The other skylight is recessed in the opposite side of the cove.

The circular soffit is lit, by client request, with neon concealed in its perimeter. Ross has added 50-watt MR 16 downlights. Some downlights can be individually switched for use as reading or other task light. The locations of these fixtures were predetermined in conjunction with the client.

The non-window wall is actually two unconnected, overlapping walls, one placed in back of the other. The artwork is hung on the back wall, and sidelighted with strips concealed behind the front wall, as well as accented by recessed downlights, which continue along either side of the wall to create scallop patterns.

Steps leading down to the second, lower level of the living room are underlit also with neon. The lower level of the room is at the front of the house, and is distinguished by an all-glass wall and ceiling, ideal for taking in the ocean view.

"The principal lighting is low-voltage," Ross says, "chosen for its appropriate color temperature, ability to be focused and good switching and dimming control.

"There is no light that is not dimmable," Ross says. "I build in controls to integrate all functions. And to allow clients to create special relationships; that is, to emphasize their preference in what they can choose to see and, as a result, feel. I am always concerned with aspects of feeling as related to lighting and its magic, being no less important than function."

In the bedroom, a continuous line-voltage strip of candelabra-based lamps is placed at 6 inches on center to uplight the white, peaked ceiling. Vertical strip lights are placed next to the artwork at the head of the bed to highlight the overlapping facades. Task lighting is provided by low-voltage recessed pinspots located through the room. The bed platform is visually "floated" by low-voltage strip lights mounted under the platform.

"Using layers of light," Ross says, "insures choice, and human contentment with the environment is influenced greatly by one's ability to control light." Since Ross created not only the lighting design, but the architecture and interior design of the spaces as well, he envisioned the space with light as an integral element from the start. The result is a space that flows like the waves of the ocean that surround it.

#### DETAILS

PROJECT: PRIVATE RESIDENCE

DESIGNER: ERIC FURAN, associate and ROBERT ROSS, president, ROBERT ROSS INC. Robert Ross Inc. was responsible for the architecture, interior and lighting design of the remodelled home.

PHOTOGRAPHER: DAVID GLOMB, DAVID GLOMB PHOTOGRAPHY

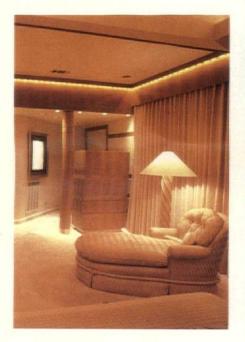
LIGHTING MANUFACTURERS: AMERICAN NEON: neon; CAPRI: downlights; LUCIFER: low-voltage strips; SENTINEL: strip fixtures; SYLVAN: recessed accent lights; LUTRON: controls.

#### RESIDENTIAL

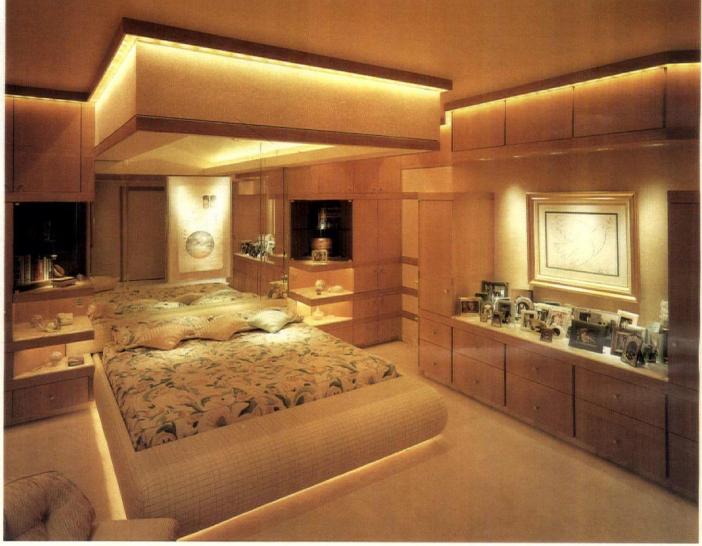
# Mastering The Suite

Flexible lighting system visually unifies remodeled bedroom and bath areas in a Houston home





IN THE BEDROOM; (Above top) Lamps beneath shelves are baffled to prevent "dazzle" at the bed. Relays master the remote, preset wallbox dimmers. (Above) In the foyer, recessed adjustable accent fixtures illuminate wall-hung artwork and any art objects to be placed on top of the cabinets. (Right) The perimeter cove eliminates dark corners, and provides a warm glow without violating the integrity of the architect's design.



#### BY MICHAEL JOHN SMITH, AIA, IES, IALD LIGHTING CONSULTANT

The author is president of Michael John Smith Lighting Consultant, Houston.

opaz-filtered MR 16s, baffled 5-watt festoon lights, and a complex dimming system are some of the elements integrated into the lighting scheme for a remodeled master suite in the home of a Houston couple.

After the architectural design had been established by Calvin Powitzky, PBR Architects, Houston, the owners called in my firm to furnish the lighting design. Our challenge was to illuminate the spaces creatively, but compatibly with the architect's intent, as well as the interior design. Grace Green, Greenfield Interiors, Houston, coordinated the furniture, fabrics, and finishes.

The suite consists of the foyer, bedroom, walk-in closet, dressing room, and bathroom. The spaces are unified by horizontal bands of wood placed at varied heights throughout. Wall surfaces, when not mirrored, are light oak or pale silk fabric.

The foyer is defined by a pair of round wood columns and two fixed cabinets—one houses a television; the other is for storage.

Wall-hung artwork is illuminated with 12-volt PAR 36 wide floods in recessed adjustable accent fixtures. Lighting elements established here are also continued throughout the suite: louvers are specified on all adjustable fixtures to minimize source brightness, and gold Alzak trims are specified on all recessed luminaires to enhance the warmth of the space.

PHOTOS BY FRANK MARTIN

The wood columns and accessories on top of the cabinets are highlighted with small-aperture, recessed MR 16 downlights. Tempered, pale topaz, glass filters bring the relatively coolwhite quartz MR 16s into color balance with the rest of the warm incandescent lighting in the space.

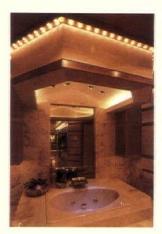
The bedroom, which opens onto a patio and swimming pool, contains a built-in bed, a built-in dresser, and additional storage cabinetry.

The wood banding has been pulled out at the ceiling line, 3 inches from the wall, to house 5-watt, 12-volt festoon lamps spaced at 5 inches on center around the room's perimeter. This miniature cove creates a warm, ambient glow. Square metal baffles, painted to blend with the oak paneling, have been placed between each of the lamps to minimize source brightness, while adding a subtle richness to the space.

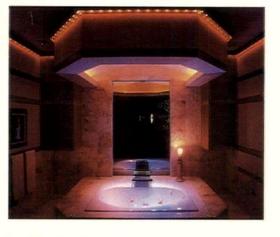
The 5-watt festoon lamps are inserted beneath the bed to reinforce the architect's "floating" effect, and in the canopy above the bed to cast an indirect glow. Five-watt lamps at 3.5 inches on center are also tucked under the bedside shelving. Metal baffles have been added between each lamp to prevent source glare from reaching the bed.

Bedtime reading light comes from two recessed adjustable accent lights that house 12-volt PAR 36 very narrow spots focused directly onto reading material. Individually controlled, they allow one to read without disturbing another's rest.

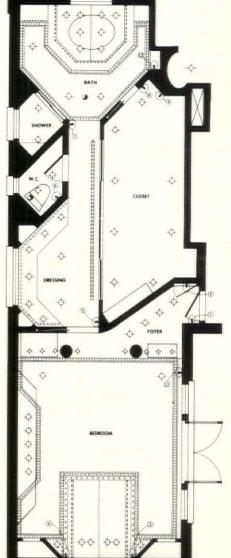
Artwork over the bed is highlighted with two 12-volt, 50-watt



Flexible lighting creates mood changes in the bath from purely functional to intimate and relaxing.









PAR 36 narrow spots. A floor lamp provides reading light at the chaise lounge and fill light for the entire room.

In the dressing room, two rows of bare, 24-volt, 6-watt bayonet base lamps bring sparkle into the space and illuminate the occupant's face, hair, and outfit of the day or evening. One row is recessed into the oak band over the lavatory mirrors. The other is suspended in a brass tube over the mirrored closet doors.

Louvered 12-volt, 50-watt PAR 36 narrow spots in recessed adjustable housings complete the task lighting at the pink marble countertop. Two 50-watt PAR 36 wide floods are strategically placed to create a crowning glow for those looking into the mirror.

The bath area carries the same architectural detailing as the bedroom. The lighting vocabulary is similar, with one exception: the introduction of color over the whirlpool tub.

Three 12-volt, 50-watt, narrow spots are filtered with a dark blue, tempered glass filter between the lamp and the louver. Three additional narrow spots are filtered with a pale rose, tempered glass filter. Each color group is controlled by its own low-voltage dimmer that allows for strong or subtle changes in the mood of the space.

Miniature relay activating switches control groups of dimmers for simplified lighting control. Dimmers for the bedroom lighting are located behind a concealed panel in the foyer. Dimmers for the bath and dressing areas are located in the closet.

The dimmers are preset for everyday use via button panels at the foyer entrance, each side of the bed, and each end of the dressing area. Push buttons activate "scenes" ranging from night light to full intensity. All dimmers are sized according to the amount and type of load (low voltage, line voltage, or fan speed control).

Current changes cause a dimmed lamp's filament to vibrate and hum or buzz. The larger the filament, the louder the hum. The PAR 36 and PAR 38 lamps are the loudest; the MR 16s and the bare strip lamps are the quietest.

Lamp filament hum has been minimized in this project by installing filter chokes that reduce the sharp changes in current resulting from the use of electronic dimming equipment. The filter chokes, because they also buzz, have been placed remotely, along with the transformer, in a rain-tight box on the outside of the building. Lamp life is greatly increased using dimmers and chokes, which slightly reduce line voltage.

#### DETAILS

PROJECT: KRIST RESIDENCE MASTER SUITE LOCATION: HOUSTON, TX CLIENT: RONALD AND CAROL KRIST LIGHTING DESIGNER: MICHAEL JOHN SMITH, AIA, IES, IALD ARCHITECT: CALVIN POWITZKY, PBR ARCHITECTS INTERIOR DESIGNER: GRACE GREEN, GREENFIELD INTERIORS ELECTRICIAN: RULON ELECTRIC PHOTOGRAPHER: FRANK MARTIN LIGHTING MANUFACTURERS: PRESCOLITE: adjustable 12-volt accent lights:

LIGHTING MANUFACTURERS: PRESCOLITE: adjustable 12-volt accent lights; MINIATURE LIGHTING PRODUCTS: MR-16 12-volt downlights; LIGHTOLIER: 120-volt adjustable accent lights; NOVA INDUSTRIES: PAR 38 louvers; NORBERT BELFER: dressing room strips; ILLUMINATIONS "PHANTOM": concealed and baffled strips; LUTRON: dimming systems; LITE TOUCH: switching equipment. IN THE BATH: (Upper left) The lighting vocabulary of the bedroom is continued in the bath. (Upper right) Rose and blue filters on individually controlled luminaires facilitate a touch of drama. (Above) A greater intimacy is created through further reduction in ambient light levels. (Above left) The dressing area is illuminated with 6-watt, 24-volt lamps over the mirrors, a suspended tube over the closet doors, and recessed downlights over the countertop.

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Two categories of awards will be given: Award(s) of Excellence and Citation(s). Awards will be presented at the IALD dinner in March 1991 at Lightfair International in Chicago. Projects will be published in leading architectural and design publications, and included in the IALD slide library.

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Judging will take place after presentation of the projects to the jury and an open discussion. Projects will be judged individually, based on aesthetic achievement, technical merit and according to the designer's concepts and goals.

#### Eligibility

Anyone may submit a project. The project must be a permanent architectural lighting design solution, interior or exterior, for which construction was completed since 1 June 1988. Lighting products, lighting equipment and lighting design for theatrical performances are not eligible.

#### **Submission Requirements**

All submissions must be in an 8 1/2 x 11 format and, for impartial judging, must be without designer and firm identification. Please include all of the following:

*Photographs*: A maximum of ten 35mm slides of the project. Originals or high quality duplicates are required. The quality of the photography is important in the judging process. Professional photography is advisable. If plans and drawings are required to describe the lighting solution, we recommend photographing essential information and including them as slides.

*Written statement*: A written statement of the visual presentation keyed to each slide. In addition, a summary describing the architectural and lighting design concept, design criteria, special energy constraints, and the solution, not to exceed one page. Please use blank paper, not letterhead.

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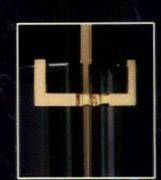


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# Fun Joins Function In The Kitchen

Special lighting effects are a fun and clever way to add spice to the kitchen, where many hosts like to entertain. Neon accents, fiber optics, and fixtures that cast interesting shadows are the "special effects" used in these kitchens







BY MARY ELIZABETH NAEGELE CONTRIBUTING EDITOR

#### THE HARRIS KITCHEN —SAY IT WITH NEON

**INTERIOR DESIGN** The clients wanted to keep their 20-foot  $\times$  8-foot kitchen clean, uncluttered, and simple so nothing would detract from its beautiful park view, says Dhiru Thadani, AIA, Thadani Hetzel Partnership, Washington, DC.

**LIGHTING** Thadani felt a focal element was needed to make the kitchen special, so he convinced his clients to add a touch of neon to the room.

"It was a compromise," he says. "You can turn the neon off and on."

The clients' young grandchildren inspired the designer to seek a neon design of simple, colorful forms. Taking care that no one color "jumped out," Thadani and neon fabricator Marty King, of Light'n'Up in Washington, DC, chose colors that share an even value. A ballast and lowvoltage dimmer are in the cabinet to the right of the neon.

A suspended fixture over the breakfast table is made of three horizontal planes of glass so that the view is not obstructed. It holds three 12-volt halogen lamps. Providing general ambient lighting is a suspended warm-white fluorescent fixture that casts 40 percent of its light up and 60 percent down. Continuous undercabinet fluorescent lighting illuminates the work areas.

#### DETAILS

PROJECT: HARRIS KITCHEN LOCATION: WASHINGTON, DC ARCHITECT AND LIGHTING DESIGNER: DHIRU A. THADANI, A.I.A., THADANI HETZEL PARTNERSHIP PHOTOGRAPHER: GORDON BEALL NEON FABRICATOR: MARTY KING, LIGHT'n'UP LIGHTING MANUFACTURERS: ATELIER INTERNATIONAL, ALKCO, LUTRON

PLEASING COMBINATION: This kitchen (above and left) combines sources and fixture types—an indirect/direct fluorescent pendant, concealed undercabinet fluorescents, a low-voltage halogen pendant, and striking neon. Hardware for the neon is housed in the bottom of a kitchen cabinet.

CONTINUED ON PAGE 26



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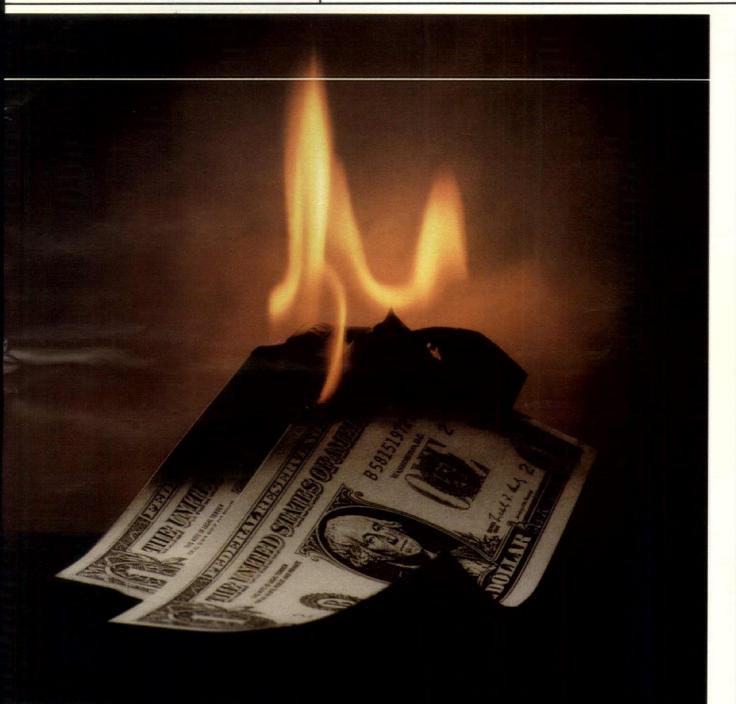
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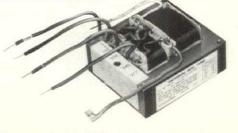




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#### THE WOODS KITCHEN —FIBER OPTICS

**INTERIOR DESIGN** Created for a bachelor who had specific ideas about severity, this kitchen has a clean, utilitarian look. To keep the countertops clear, the appliances are recessed into the backsplash, explains James Blakeley, Blakeley-Bazeley Ltd., Beverly Hills, CA.

**LIGHTING** To soften the starkness, fiber optics above and below the wall cabinets create the illusion of "floating." An MR 16 lamp illuminates the fiber optic system. The bulb is reached easily for relamping by pulling out a ceiling recessed fixture next to it. He continued the fiber optics in the dining room, where the lighting casts a peachy glow. That hue is the result of a colored gel that is placed in front of the lamp in the tube.

"Sometimes the gel fades in color, but it's simple to replace," Blakeley says.

Recessed downlights complete the kitchen's lighting.

#### DETAILS

PROJECT: WOODS KITCHEN LOCATION BEVERLY HILLS, CA DESIGNER: JAMES BLAKELEY, BLAKELEY-BAZELEY LTD. PHOTOGRAPHER: CHRIS COVEY LIGHTING MANUFACTURERS: CAPRI LIGHTING, FIBERSTARS





CARRYING ON: Fiber optic systems are used over and under cabinets (far left) and throughout the apartment. In the living room (left), a filter has been placed over the source to project colored light through the fibers. A playful touch of neon (above).



#### THE COLLINSWORTH KITCHEN—PATTERNS

**INTERIOR DESIGN** This kitchen was being remodeled for a house built in the 1920s, so the desired modernity required moderation. Blond wood cabinets with ebonized trim were chosen to maintain the house's design integrity and to create a comfortable environment where the owner could entertain. **LIGHTING** To play off the strong black horizontal slashes in the cabinets, lighting designer Randall Whitehead, IES, Light Source, San Francisco, specified a pendant fixture whose grill projects linear shadows.

Recessed incandescent downlights highlight decorative items on top of the cabinets and provide ambient light.

The existing windows looked out onto a storage area and the side of another

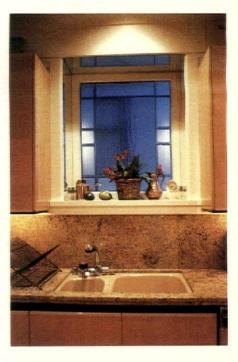
CATCHING RAYS: Pendant fixture (left) projects linear patterns. Illumination outside windows (right above) avoids "black hole" effect. Under cabinet task lights (right below) highlight rich granite. home, so Whitehead worked with the architect to create textured windows. Thus, natural light was not lost and a sense of privacy was added. "So we wouldn't have black holes at night, we illuminated the outside of the windows by mounting vertically oriented, capsuleshaped fixtures in between the windows to bounce light off the alley way wall," Whitehead explains.

#### DETAILS

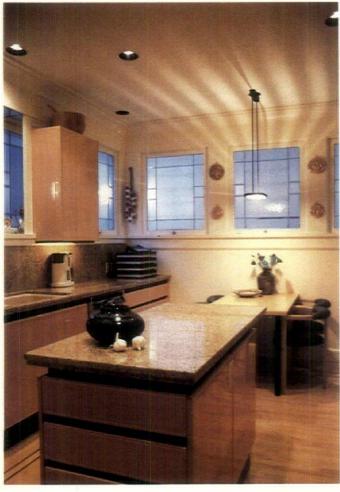
PROJECT COLLINSWORTH KITCHEN LOCATION: SAN FRANCISCO LIGHTING DESIGNER: RANDALL WHITEHEAD, IES, LIGHT SOURCE

ARCHITECT: DAVID S. GAST, ANNE LAIRD-BLANTON, RICHARD GRYZIEC, AND DONNA WEST, DAVID S. GAST & ASSOCIATES PHOTOGRAPHER: WILLIAM HELSEL

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#### VIEWS AND OPINIONS

# Lamp Contenders

#### A New Generation Of Sources Challenges Tungsten Halogen

#### BY CHARLES LINN, AIA EXECUTIVE EDITOR

ntil recently, no manufacturer had come up with a light source that could challenge the appropriateness of the halogen PAR lamp for the two requirements designers demand in display and accent lighting: good color and narrow, precisely controlled beamspreads. Although halogen is only 20-30 percent more efficient than ordinary incandescent, and lamp life still hovers around 2,000 hours, there are still many applications where more designers won't consider anything else.

Within the last year, two different lamp technologies have been introduced in the market, their makers intent on knocking tungsten halogen off the pedestal as king of the display lamps. One of the products, the infrared halogen PAR lamp, is the next step in the natural evolution of existing tungsten halogen lamp technology. The other development in high-pressure sodium lamp and ballast technology has resulted in high efficacy, low wattage lamps that are optically controllable, and almost indistinguishable in color from halogen.

#### THE INFRARED HALOGEN PARS

For some users, it will be a long time before the disadvantages of the relatively short life and low energy efficiency of halogen sources begin to outweigh the sticker shock that'll initially be associated with the longer life and higher efficacy of white HPS lamps, electronic ballasts, and fixtures. For these folks, there is General Electric's Halogen IR PAR lamps.

GE will never have to worry about whether anybody will build fixtures that will accept the Halogen IRs. Just about anything with a medium screw base and line voltage will do. So, what's the big deal about a new PAR lamp?

Precisely this: the infrared halogen lamp is so energy efficient that, for the first time, the efficacy of a halogen light source starts coming close to the efficacy of fluorescent. A 60-watt infrared halogen PAR does the work of a 150-watt incandescent PAR.

How does it do it? It starts with basic tungsten halogen

lamp technology. Current is applied to a tungsten filament, locked inside a halogen gas-filled quartz envelope. The tungsten burns off the filament and forms tungsten halogen gas. Eventually, the tungsten separates from the halogen, and is redeposited on the filament. This "halogen cycle" keeps the filament from getting too thin and breaking because the tungsten is constantly being redeposited on it.

This allows the filament of a tungsten halogen lamp to be burned at a much higher temperature for far longer than the filament of a regular incandescent lamp. So, the filament can be redesigned to give off more light, but at a lower energy cost than regular incandescent.

When enough current is applied to a tungsten filament to make it glow, a lot of heat is manufactured besides. Most of that heat is wasted. But, if it could be reflected back onto the

filament to keep it hot, the amount of electricity that is applied to the lamp in the first

place could be lessened. WHITE SON HPS

Enter the infrared envelope coating. It reflects most of the heat back onto the filament, while allowing the light to escape.

So, why isn't everybody making infrared halogen lamps? It's harder than it sounds. First, the filament must be in exactly the right location within the quartz envelope. Second, the shape of the quartz envelope must be perfect. If the heat energy misses the filament and is focused on the side of the envelope insteadkapop! You've got one dead PAR lamp.

Finally, the infrared coating itself has to be a perfect thickness. Wherever an imperfection in the coating occurs, a hot or cool spot develops. The temperature difference that develops between that spot and the rest of the envelope when the unit heats up is enough to make the envelope break.

Infrared halogen is not a new idea—it's one of those ideas that was theoretically possible, but had always been commercially impractical. For the moment, GE appears to

have the market locked up. None of the other lamp manufacturers are willing to say they're planning to go into production anytime soon.

GE has introduced three models of this lamp: 60- and 100-watt PAR 38s, and a small 50-watt PAR 30. The cost is about 20 percent more than GE's regular halogen PARs. These lamps dim like any other PAR lamp, and have similar initial lumens and lamp life ratings.

#### WHITE HPS LAMPS

GE INFRARED

HALOGEN PAR

Within the last year, both Philips and GE have introduced high-pressure sodium (HPS) lamps whose color rendering is almost indistinguishable from halogen. That sounds awesome until you look at the efficacies: 40

to 47 lumens per watt. This is excellent compared to conventional tungsten halogen, at 12 to 14 lumens per watt, but doesn't come close to metal halide's 70 lumens per watt, or regular HPS's 80 to 90 lumens per watt. How about color rendering? The new white HPS

lamps have CRIs around 80, and color temperature of around 2700K. Some metal halide lamps in the 70-watt range have CRIs around 81 but color temperature that is noticeably cooler, at 3000K.

There are already a multitude of display fixtures made for these metal halide lamps. As long as you're going to spend more for a high-intensity discharge source, why go for the white HPS, instead of the extra efficacy of metal halide? There are two reasons: to get the warmer color that is consistent from lamp to lamp, and for optical control.

HPS lamps don't have the complicated chemistry that the metal halide lamps do. From start to finish, their color is more consistent than metal halide's.

The white HPS lamps also use sophisticated, proprietary electronic ballasts. The electrical waveforms that are applied to the lamp are part of the secret of getting the light to look white and not yellow-orange. One point of interest here is that the word "proprietary" means, in this case, "incompatible with other manufacturers' lamps." At this time, you can't plug a GE white HPS lamp into a Philips ballast, or vice versa.

HPS also has a smaller arc tube than metal halide, and therefore, tight optical control can be achieved using smaller reflectors. Many reflector designs for GE's White Lucalox lamp already exist, and Philips has designed a variety of reflectors for this line of new White SON lamps. These are being made available to fixture manufacturers through a third party (OEM) in order to accelerate the process of getting fixtures to market. GE's White Lucalox is available only in a clear, 95-watt T 10 medium base version at this time, while Philips has introduced 35-, 50-, and 100-watt T 10 versions, and diffusion-coated 50and 100-watt elliptically-shaped versions.

You can't look at any lamp catalog that's more than a few years old without seeing how quickly things change in the lamp business. The new infrared halogen and white HPS lamps are important tools for designers who must meet the biggest challenge wrought by today's stringent energy codes: providing quality lighting at a fraction of the energy of conventional sources. Technologies that meet this challenge will survive.





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castings, protective coatings, silicone gaskets, wire seals and reflectors are state-of-the-art and built to last. Optional half-shields and internal louvers add superb glare control, while the rock guard provides protection in vandal-prone areas. Call your local Kim representative for a 8" demonstration of these exciting new landscape lighting tools, or fax us for more



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# SH DECORATIVE ASE

#### **GLASS FIXTURES**

The Limburg Glass octagonal cones are available for wall mounting, ceiling mounting, and as pendant fixtures. The handcrafted, blown glass fixtures are available with incandescent or compact fluorescent light sources. Bega/FS, Santa Barbara, CA *Circle 50* 

#### LOW-VOLTAGE FIXTURE

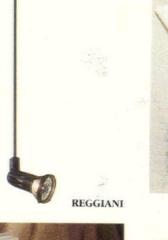
Glamour, in a series of six lighting fixtures, consists of a cylindrical tube supporting a decorative glass lens, and uses a low-voltage MR 16 lamp. The units are constructed of die-cast aluminum components and include a patented screw disconnect socket. Giamour offers models for recessed, canopy, monopoint, track, and pendant mounting. Reggiani USA, New Windsor, NY. **Circle 51** 

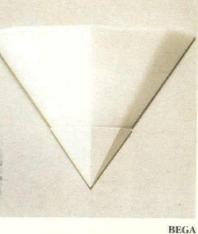
#### HANGING LIGHT

The Hanging Mack is 22 inches tall and features a 23-inch diameter shade, a 15inch adjustable wire and cable, and a 5inch canopy. Finishes are available in solid black, black with brass rim, or jade patina with gold rim and frosted glass. The fixture uses three 75-watt A bulbs. George Kovacs Lighting, Inc. *Circle 52* 

#### **GLASS BLOCK DIFFUSERS**

The Ice Light is a handmade fixture with a base available in ash, mahogany, or oak, and black or white lacquer. The Ice Light features a slide dimmer and glass block diffusers available in a white striped pattern or a fine grid pattern of white, green, or smoke-tinted glass. Each glass block is frosted. Decolumia, Inc., East Orange, NJ. *Circle 53* 







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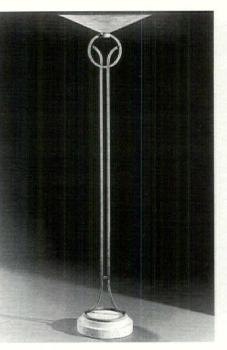
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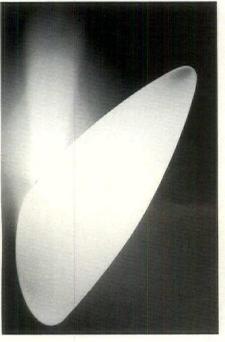
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FINE ART LAMPS

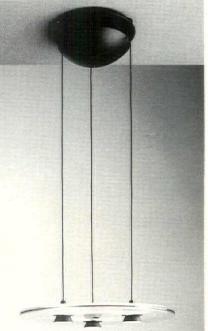


ARCHITECTURAL RARITIES



FLOS





ATELIER







WALL SCONCE

The Baton wall sconce features a f glass cylinder lined with a white, filter, and diffuses incandescent or rescent lamp sources for direct illun tion. The fixture has a polished ch backplate and polished brass, s brass, or satin chrome accents. The E is available in three heights and h width of 4.5 inches with a 33/8-inch ection. Boyd Lighting Co., San Franc Circle 54

#### **IRON TORCHIERE**

The Iron Torchiere lamp with a politan patina finish is part of the A Iron Collection. This fixture is mounted marine stone and stands 70 inches Fine Art Lamps, Hialeah, FL. Circl

#### WALL LANTERN

Part of the Eastlake Collection, this wall lantern is handcrafted of remo leaded stained glass and natural v This fixture features a design remin of the early 1900's American Arts Crafts movement. The lantern inclu 19-inch × 5-inch wall bracket w recessed brass backplate and mea 8.75 inches  $\times$  6.5 inches  $\times$  10.5 in They are available as wall and har lanterns, chandeliers, and alcove tures, and may be custom designed chitectural Rarities, Ltd., a division a Anderson & Associates, Inc., N Grove, MN. Circle 56

#### **CEILING PENDANT**

Aurora, designed by Perry A. King Santiago Miranda, is a circular glas ing pendant fixture that uses direc diffused light. Three 50-watt rece halogen bulbs create a concentrati light downward, and light emitted the fixture's open sides illuminates cent surfaces. A ceiling canopy, us house a low-voltage transformer, m directly to a standard 4-inch octa junction box. Atelier International ing, New York. Circle 57

#### PORCELAIN TABLE LAMP

The Classic Column lamp featu sculptured leaf pattern and is acc by brass fount and mounting. D 1250, shown, is 30 inches in heigh has a handsewn, French draped s This porcelain white fixture is one of than 30 ceramic lamps recently duced by the company. Royal He Lamp Company, Macomb, IL. Circ.

#### **GLASS DIFFUSER**

Luci Fair has a horn-shaped dif blown from white opal glass, and vides direct upward illumination v soft glow. It has a wall-mounted de 9.5 inches, a height of 11.8 inches, a 4.4 inches wide at its base. Flos Inc rated, Huntington Station, NY. Circ

#### BRASS FIXTURES

Each lamp in the Nessen/Pragma a tion is handcrafted in solid brass fixtures use a 100-watt, 120-volt ha lamp and feature a built-in din Pyrex protective glass, and pol chrome and black finishes on spec ders. Nessen Lamps, Port Cheste Circle 120

NESSEN

Circle No. 17 on product card.

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PAT. PEND.

#### SCONCES AND COLUMNS

ORAC DECOR WALL LIGHTING SCONCES AND HALF COLUMNS are made of high density polyurethane, making the fixtures strong yet lightweight. The L-502 wall sconce measures 5½ inches × 7% inches × 4% inches, and the K-1101 half column is 11 inches × 79 inches and has a 4%-inch projection. Outwater Plastic/Industries, Wood-Ridge, NJ. **Circle 60** 

#### STONELIKE SCONCE

Lucere, one of five new fixtures in the Tribble collection of wall sconces, is molded of Corian, a stonelike solid surfacing material. The fixture is available in a variety of sizes and may be used with incandescent, halogen, or fluorescent lamps. Aamsco Manufacturing, Inc., Jersey City, NJ. *Circle 61* 

#### STARLIGHT CHANDELIER

A FOUR-LIGHT CHANDELIER, PART OF THE STARLIGHT line, features translucent faux granite shades and center column with a black finish. The fixture measures 22 inches in diameter, 17.5 inches in height and is available in lengths to 44 inches. The Starlight line also includes a pulldown pendant and matching wall sconce. Thomas Industries Inc., Louisville, KY. **Circle 63** 



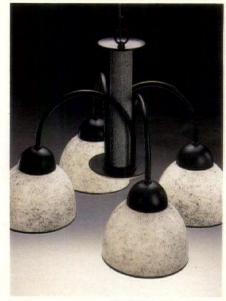
AAMSCO

#### PENDANT LUMINAIRE

The SFO Series of single-stem pendant luminaires can accommodate horizontal metal halide, HPS, or incandescent lamps from 100 to 400 watts. A baffle is integrated in the fixture to permit five percent downlighting. The fixtures come with a white finish although other finishes are available. SPI Lighting Inc., Mequon, WI. *Circle 62* 

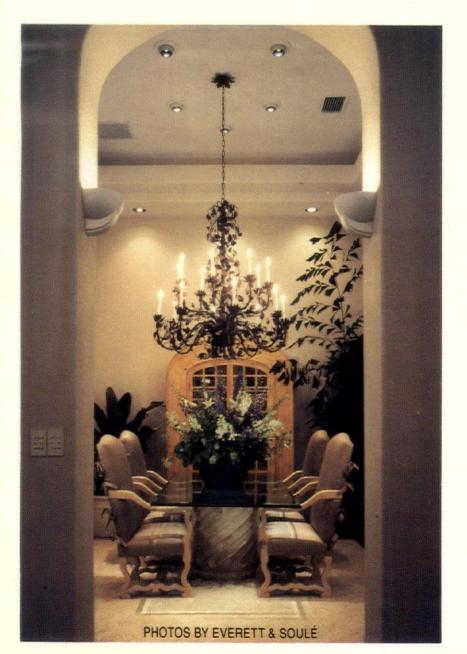






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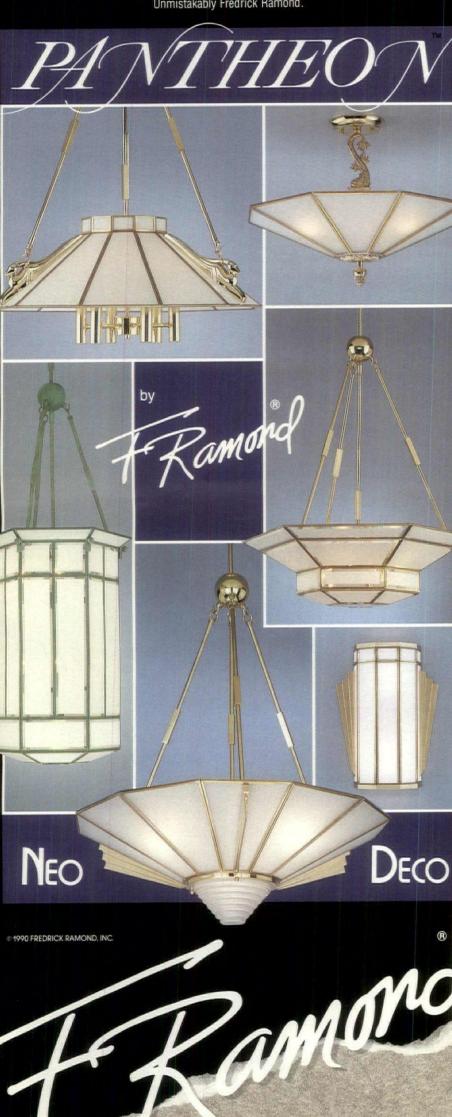


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#### ALABASTER FIXTURE

Hunter-Royalyte alabaster fixtures are hand-carved from stone and come in many designs. The styles include a variety of wall sconces and a hanging chandelier. The company also manufactures crystal glass dome pendants, bar lights, flush mount fixtures, wall brackets, sconces, and chandeliers. Hunter Fan Co., Memphis, TN. **Circle 67** 

#### **CRYSTAL CHANDELIER**

The Viola chandelier features European styling and is made of Heritage Handcut crystal. Shown is the 1993–15 light chandelier (14 candles and one light). It measures 33 inches in diameter and is 36 inches long. The Viola is also available in other diameters and lengths, with fewer lights. Schonbek Worldwide Lighting Inc., Plattsburgh, NY. *Circle 65* 

#### FLUTED GLASS FIXTURE

The fluted glass Classic Cafe Collection features options such as pendant, wall and sconce mountings, brass and chrome finishes, and cone, dome, and railroad style glass. Other new collections are Tempo (factory shades), School House (period glass), and Sophisticate (designer glass). Each collection includes a selection of mounting, finish, shade, and hanging options. Gross Chandelier Co., St. Louis. **Circle 66** 

#### COVE DOWNLIGHTING

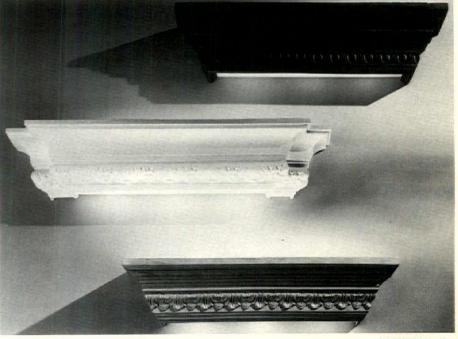
Architectural cove lighting fixtures provide downlight with a maximum halogen output of 750 watts. The fixtures are available in a wide range of finishes including limestone, washed pine, verdigris, and also unfinished to accommodate custom finishing. All models are cast in reinforced Hydrocal. Murray Feiss, Bronx, NY. **Circle 64** 



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**GROSS CHANDELIER** 



#### PHOTOCONTROL

The Series 6600H Sky Scanner is a utility grade locking-type photocontrol that features an optical sensing system within a translucent frosted globe. This permits the control to sense light levels across a wide, upward angle. The device is supplied with a low-level on/off switch and a time delay option. Fisher Pierce, a division of Sigma Instruments, Weymouth, MA. Circle 70

#### **OUTDOOR LANTERNS**

A series of outdoor traditional lanterns are handcrafted from brass and beveled glass. The fixtures are available in five design styles and two sizes, and are offered in a selection of mounting options including wall mount, post top, or chain hung. American Lantern Co., Newport, AR. Circle 71

#### QUARTZ LIGHT

This portable quartz light has a 15-foot, three-wire conductor cord that allows the lamp to provide 300 to 500 watts of halogen light. Electrical Specialties, Philadelphia. Circle 72

#### METAL HALIDE FLOOD

White Nite, a new addition to the American Lighting Products line, is a compact metal halide floodlight available in 70, 100, and 150 watts. The fixture has an aluminum reflector that provides a wide beamspread and features a dark bronze acrylic enamel finish on a diecast aluminum housing. It also features a fullygasketed hinged captive bezel secured by twin latches and a .5-inch threaded mounting knuckle. American Electric, Memphis, TN, Circle 73

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13" ROUND/DOME



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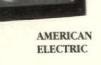


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#### FOLIAGE ILLUMINATION

The TSL Luminaire is constructed of spun copper and cast bronze. The tree and shrub fixture uses HID sources up to 100 watts and incandescent up to 150 watts. The tempered glass domed lens is available coated with Sterner—FX filtration systems providing color correct light or a wide variety of accent colors. Sterner Lighting Systems Inc., Winsted, MN. *Circle 74* 

#### **BULLET LAMPHOLDER**

The 38 Special or 3800 series, part of the Bullet Series Architectural Lampholders, offers good color rendition, instant-on, and dimming capabilities. The series comes in a variety of finishes and is available in open-lamp or enclosedlamp units. The open lamp unit accepts PAR 38 lamps and the enclosed lamp unit accepts PAR 38 or R 40 lamps. Stonco Lighting, a Genlyte Co., Union, NJ. *Circle 75* 

#### HID LUMINAIRE

DecPro is designed for low mount, high traffic deck applications and produces a square light pattern for even illumination. The fixture is available with either an HPS or metal halide lamp and features a high strength polycarbonate lens and a corrosion resistant baseplate. Kenall, Gurnee, IL. **Circle 76** 

#### ALUMINUM BOLLARD

The Terralight Bollard model 6346 is constructed from aluminum, and features a gasketed screw-type glass body, 120-volt medium base socket, and uses a 100watt maximum standard A lamp; other light sources are available. The fixture measures 6 inches in diameter and stands 31% inches tall. Hanover Lantern, Hanover, PA. **Circle 77** 



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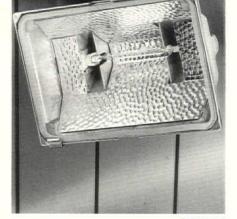
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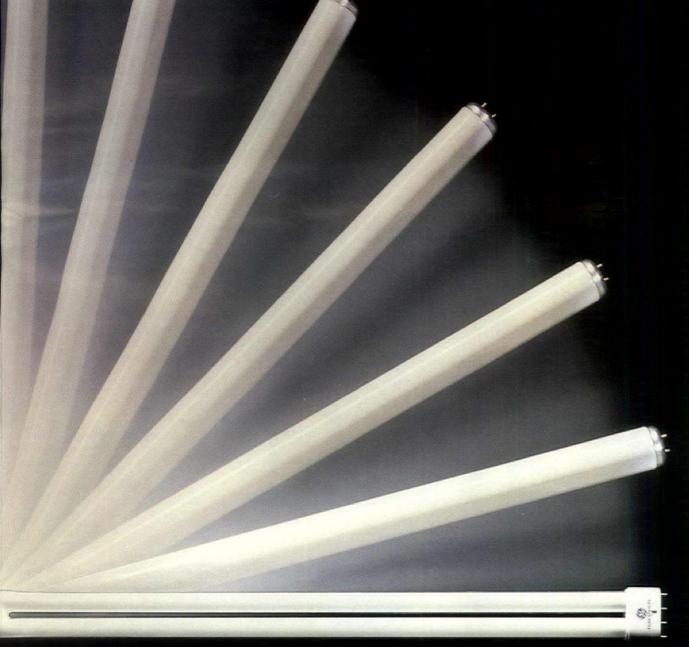




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LOW-VOLTAGE SPOT/FLOOD

The Terralight miniature low-voltage spot/flood light, model LV119, can be used for uplighting, accent lighting, and security lighting. The fixture is constructed from cast aluminum, and has a fully-gasketed clear tempered glass lens, a cast aluminum glare shield, and a fully-adjustable swivel. The fixture houses an MR 16 bi-pin 12-volt lamp with a maximum of 50 watts. Hanover Lantern, Hanover, PA. Circle 78

#### SIGN LIGHTING

Panel-Vue sign lighting fixtures provide a broad lighting distribution suited to wide, medium-height signs. Using a 250-watt DX mercury lamp, the fixture gives a maximum-to-minimum uniformity of 4.1:1 on an 8-inch × 16-inch sign. The lamp types and wattages for this fixture range from 100-watt mercury to 400-watt HPS or metal halide. Holophane Co., Inc., Newark, OH. Circle 79

#### QUARTZ FLOOD

Wedge, a compact, lightweight quartz floodlight is available in 300-watt, 500watt, or two-way 300/500-watt HID lamp sources. Its die-cast aluminum housing measures 3 inches front to back and its face is 61/8 inches top to bottom, and 9 inches across. The fixture is available as a wall or pole mounted unit. Lumark Lighting, Vicksburg, MS. Circle 80

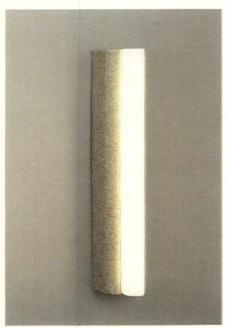
#### **ORNAMENTAL LUMINAIRE**

A fixture designed by Eric Fulford, Browning Day Mullins Dierdorf Inc., for the new Indianapolis Lower Canal, has been incorporated into Sentry's line of ornamental luminaires. The fixture uses a variety of HID lamp sources: HPS (70-, 100-, 150-watt), metal halide (175-watt), mercury (175, 250-watt), and measures 39 inches in height and 19.5 inches in diameter. The fixture is available in a wide range of finishes. Sentry Electric Corp., Freeport, NY. Circle 81



SENTRY ELECTRIC

SH ACCINE ASF



AAMSCO

#### LINEAR LAMP

Alinea II, controlled by a standard incandescent dimmer, radiates a warm soft light. The fixture needs no transformer or ballast and works off standard line voltage. Alinea II is offered in solid surfacing materials and features end-to-end mounting. Aamsco Manufacturing, Inc., Jersey City, NJ. Circle 82

#### TRACK LIGHTING KIT

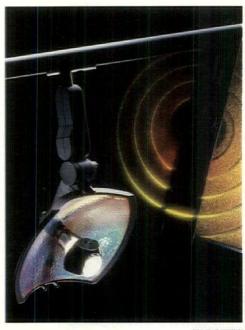
LTK 3120-P, a track lighting kit, contains three CTL120-P baffled lampholders used with 75-watt R 20 or 50-watt PAR 20 lamps; one 4-foot long LT4P track section; and one LA7P floating power feed. The three components come in a white finish. Con-Tech Lighting, Deerfield, IL. Circle 83

#### MINI CYLINDER FIXTURES

The New Decade Series miniaturized track lights utilize energy efficient tungsten halogen PAR 16 lamps and provide 350-degree rotations. Both model CTL 2116 and CTL 2117 are 4 inches long and have a 25/16-inch lamp holder diameter and a 71/2-inch swing. Con-Tech Lighting, Deerfield, IL. Circle 84

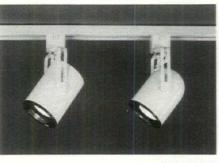
#### **ROUNDBACK LAMPHOLDER**

The Power Trac line of roundback lampholders has been expanded with painted finishes that feature brass accents. Available lampholders include: the L-1550, a 75-watt R 30, 75-watt PAR 30, 100-watt A 19, and a 100-watt R 25 cylinder in brass, almond and brass, and white paint and brass; and the L-1551, a 50-watt R and PAR 20, and 55-watt PAR 16 in the same finishes. Both models have a banded cap with coilex baffles. Cooper Lighting, Elk Grove Village, IL. Circle 85



TARGETTI







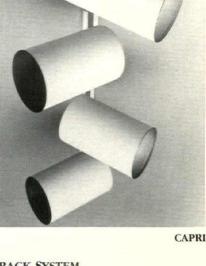


COOPER

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#### TRACK SYSTEM

Smart Start is an electronically controlled track lighting system that uses a memory chip to activate its two-circuit programming. It works from a single wall switch and doesn't require new wiring to install. The system allows the track light to be turned on from two circuits simultaneously, or from each of the two circuits separately. Capri Lighting, Los Angeles. Circle 86

#### LOW-VOLTAGE SPOT

Toh, a low-voltage spotlight, is the most recent addition to the Minitondo and Structurella systems. Accent lighting is achieved with special dichroic reflector and focus adjustability. Toh is available as a spot reflector with an 8-degree beam-spread, or a flood reflector with a 32-degree beamspread. The wireless low-voltage stem allows for orientation on a 95-degree vertical plane with unrestricted rotation on the horizontal plane. Targetti Inc., New York. Circle 87

#### HALOGEN SPOT

Model 7004 12-volt, 50-watt MR 16 halogen spotlight has a transformer integrated in its metal base. The fixture is available in black or white. Electrix Inc., New Haven, CT. Circle 88

#### ELECTRONIC TRANSFORMER

The 1538N, a compact 12-volt electronic transformer piece, provides power for all of this company's low-voltage track fixtures. The transformer can be used with one or two circuit Trac-Master or Vector sections and is available in black or white finish. The T538N can be used with low-voltage MR 16 fixtures up to 75watts. Juno Lighting, Inc., Des Plaines, IL. Circle 89



#### **ENERGY EFFICIENT LIGHTING**

A high-performance ballast has been added to the Little Inch undercabinet lighting fixtures. The new ballast operates completely without a starter and will start any T 5 lamp without flickering. The ballast componentry is tailor fit inside an injection molded case, minimizing the fluorescent "buzz." The new ballast also make the Little Inch more energy efficient and cooler. Alkco, Franklin Park, IL. Circle 90

#### **RECESSED ACCENT LIGHT**

Anglux AR is a recessed low-voltage adjustable accent light. The unit allows easy adjustment of both rotation and tilt after the lamp is installed, eliminating the need to refocus after replacing a burned-out lamp. The light provides options for 24 different lighting distributions through combinations of six lamp types and four lenses (clear, diffuse, spread, and prismatic), and accepts a flat glass color filter. The Anglux AR has a 6.75-inch deep housing and has a companion fixture, the Darklite AR/4, for controlled, glare-free downlighting. Edison Price Lighting, New York. Circle 91

#### **GIMBAL RINGS**

Gimbal Ring fixtures designed for the PAR 30 and PAR 38 lamp as well as the 60 PAR and 100 PAR HIR lamps, are available in black or white. Clips to accommodate standard 45%-inch diameter color lenses are also offered. Inlite Corp., Berkeley, CA Circle 92

#### **PROJECTION SPOTLIGHT**

The MicroSpot, a lighting fixture that projects images and colors, uses a lowvoltage quartz halogen lamp with 3500 hours. The fixture measures 9 inches in length and is available in a variety of brushed finish anodized aluminum colors. RazTech Lighting, Crete, IL. Circle 93



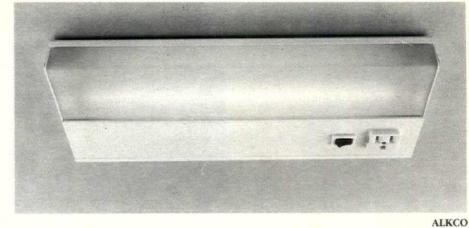
INLITE

Dept. CA

Post Office Box 34470 Louisville, KY 40232-4470

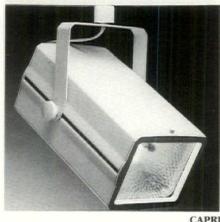




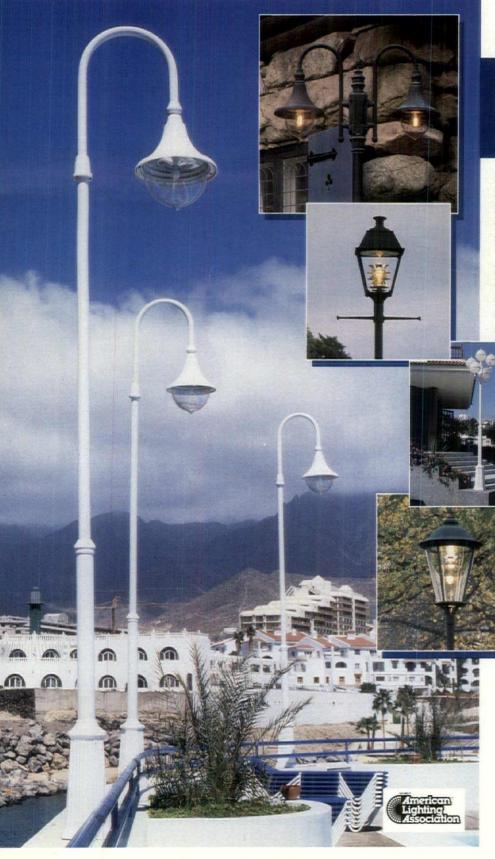




Circle No. 23 on product card.



# NORAL ORCHESTRATES AN EXCITING NEW LOOK.



#### Tuba, Trumpet Models Lead The Way.

#### **20-YEAR LIMITED** WARRANTY AGAINST CORROSION

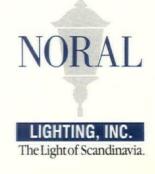
Noral, The Light of Scandinavia, is not just for residential use anymore. American-made Noral lanterns can now be specified for commercial outdoor lighting applications as well.

Landscaping ... Public Spaces ... Streets ... Commercial Buildings ... the distinct design and unprecedented quality of Noral (20-year limited warranty against corrosion) can now be utilized to bring out the best in your next project.

All Noral outdoor lanterns and poles are constructed of noncorrosive, polyester-coated cast aluminum with singlepiece lenses. Most commercial lanterns accommodate a variety of wattages, voltages and light sources, including mercury vapor, high-pressure sodium, and metal halide. Combine the rugged

beauty of Scandinavian design with quality and long-lasting weatherability for your next commercial-or residential-outdoor lighting project.

For more information contact Noral Lighting, Inc., P.O. Box 360532, Cleveland, Ohio 44136. Telephone: (216) 273-7155; Telefax: (216) 273-5007.



#### METAL HALIDE FIXTURE

Soft Square (KQ800) is a thin profile HQI metal halide fixture that produces white light and swivels in any direction with its 25-degree beamspread. The fixture features a tempered glass faceplate and an interlock switch for relamping safety. The KQ800 is made of extruded aluminum and is designed for a 70-watt, clear, double-ended HQI lamp. Capri Lighting, Los Angeles. Circle 94

CSL

#### MINIATURE ACCENT LIGHT

Quadra is a miniaturized low-voltage accent light with a built-in transformer that uses a 20- or 35-watt MR 11 halogen lamp. The fixture is designed for stem or surface mounting and for all track installations. Quadra offers precise beam control and is available in polished chrome, black and matte white. CSL Lighting, Los Angeles. Circle 95

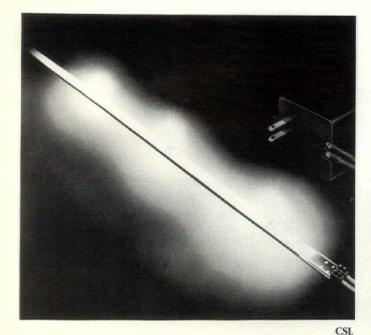
#### LOW-VOLTAGE-SYSTEM

The SF 12V system of suspended fixtures with diffused light, is portable and may be custom engineered. The halogen system is based on two horizontally-tensioned parallel cables, known as the halogen bridge, which are powered by 12-volt 500-watt transformers. SF 12V, San Francisco. Circle 96



**SF 12V** 

SH ( AMBIENT ASF



#### LIGHT STRIP

Invizilite is a light strip that uses miniature 7-watt tungsten-halogen bulbs on 8-inch or 4-inch centers. The strip is low voltage, low heat, has a long lamp life and allows for curves up to 180 degrees and right angle installations. The strip is .5 inches wide and comes in lengths of up to 20 feet. CSL Lighting, Los Angeles. *Circle 40* 

#### **TRUSS SYSTEM**

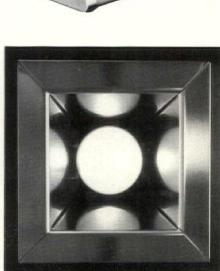
Powertruss can be wired for up to three single circuits or combined for threephase power, and has a rating of 277/480 volts. Fixtures can be placed anywhere along the strut and then locked in place. If a fixture is removed, the conductors have a self-healing coating that seals over old termination points. The truss system is available in lengths to 10 feet and comes in standard finishes of black or white powdered epoxy. Interlock, Maple Grove, MN. **Circle 41** 

#### **DOWNLIGHT SYSTEM**

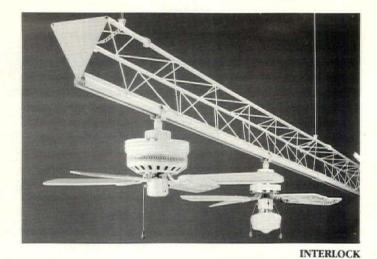
Lustre-Lite is a low-voltage, recessed downlight system designed for elevator cab ceilings. The reflective bezel is available in muntz, polished aluminum, and black anodized finishes. The fixture uses a coated 20R12 lamp, and it measures 4.25 inches square. Nylube Products Co., Rochester Hills, MI. **Circle 42** 

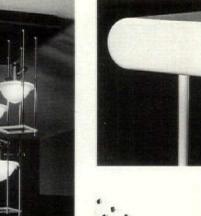
#### SUSPENSION SYSTEM

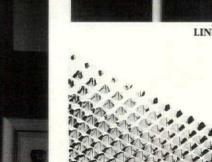
Lytesystem 12 is a low-voltage suspension system designed to produce tiers, rings, or parallel paths of diffused halogen light. Polished chrome components such as square Lytetile reflective ceiling pans and circular and linear chassis have a 12-volt power feed, which is carried through metal suspension rods into light-forms that utilize a 20-watt, 12volt T3 halogen lamp. Lightolier, Secaucus, NJ. **Circle 43** 



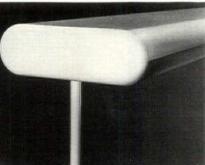
NYLUBE



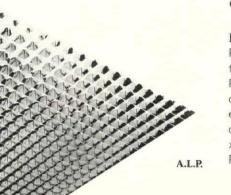


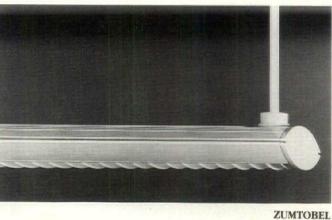


LIGHTOLIER



LINEAR LIGHTING





#### LOMIOD

KEENE (KLP)

#### WALL LAMP

The Classic wall lamp for horizontal lighting applications features lowbrightness, an opalescent white lens, and emits soft, even illumination. The fixture is available in both one- and twolamp versions and comes in lengths of 18, 24, 36, and 48 inches. Electrical options include special wiring, fusing, dimming, or energy saving ballasts. Keene Lighting Products (KLP), a Genlyte Co., Wilmington, MA. **Circle 44** 

#### INDIRECT/DIRECT FIXTURE

Spheros is an indirect/direct fixture made of extruded aluminum. Its reflectors feature highly specular aluminum, and lenses are made of extruded, highly transparent, acrylic. The luminaire accommodates T8 or compact fluorescent lamps and is equipped with 120- or 277volt electronic ballasts. Zumtobel Lighting, Garfield, NJ. *Circle* 45

#### INDIRECT FIXTURE

The Slimlite indirect fixture has a maximum light output between 125 degrees and 135 degrees with reduced light diverted directly above the fixture. The fixture is made of ½-inch thick aluminum and perforated steel sides backed with a white acrylic diffuser. It is available in one, two, or three T8 fluorescent lamp configurations, 120 or 277 volts. Linear Lighting Corp., Long Island City, NY. **Circle 46** 

#### PARABOLIC LOUVER

Para-Lite 3 is a plastic parabolic louver that features a double wedge design. The PL-3 has a shielding angle of 35 degrees and is available in a 2-foot x 4-foot panel. The fixture features high efficiency cells that measure .75 inches x .75 inches x .5 inches. A.L.P. Lighting and Ceiling Products, Inc., Nile, IL. **Circle 47** 

#### **REFLECTOR/REFRACTOR**

The acrylic prismatic Reflexor measures 22 inches in diameter. The model 822 reflector/refractor suits lighting applications up to 400-watts. The Reflexor can be installed in industrial medium and low bay applications that call for low brightness and high vertical footcandles. The component can achieve a wide range of lighting distributions. Lexalite International Corp., Charlevoix, MI.**Circle 150** 



LEXALITE

#### Appleton Lamplighter.

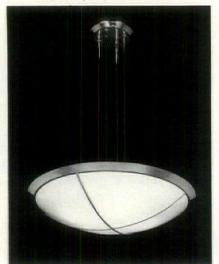
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AL 414 WS 1'2" x 7" x 7" • Two PL-13 lamps Opal acrylic, polished brass



Symphony Towers San Diego, CA 3'0" x 6" x 3'0" • Polished brass, opal acrylic lens Polished stainless steel stems • Four PL-13 lamps Architect: Skidmore, Owings & Merrill • San Francisco, CA Lighting Design: Horton Lees • San Francisco, CA



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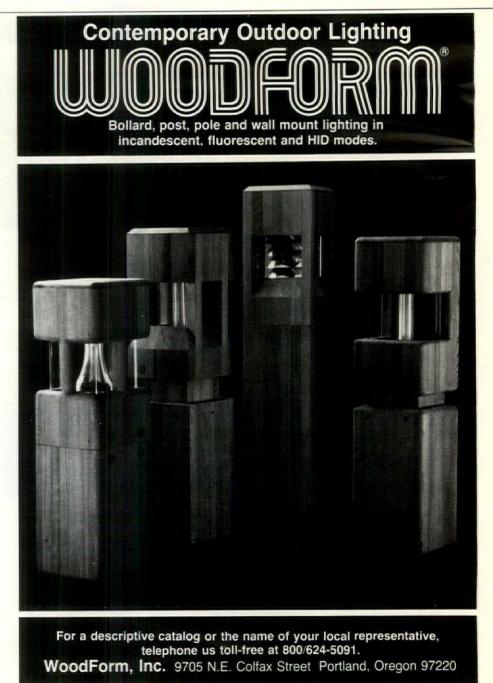
#### SURFACE MOUNTED FIXTURE

The Staggered Strip surface-mounted fixture is designed for perimeter cove and other applications where continuous, even illumination is needed. The fixture features a heavy duty die-formed channel housing and is available in both one and two lamp versions for a variety of lighting level requirements. KLP, a Genlyte Co., Wilmington, MA. **Circle 151**  KLP GENLYTE

USI LIGHTING

#### DECORATIVE FLUORESCENT FIXTURE

The Classic Collection of decorative fluorescent fixtures feature solid American oak, contemporary colors, brass and chrome trim pieces, and white acrylic diffusers for soft, uniform illumination. These fixtures are available in many styles. A decorative oak retrofit frame kit for the conversion of an installed troffer into a decorative unit is also offered. Keystone Lighting, a member of the USI Lighting Group, Spokane, WA. **Circle 152** 



Circle No. 18 on product card.



LIGHTALARMS





OSRAM

#### **EMERGENCY LIGHT**

The Cavalier emergency light features an injection-molded, corrosion resistant, thermo-plastic housing; a maintenancefree battery; AC line latch; brownout circuit; and low-voltage disconnect. Lightalarms Electronics Corp., Baldwin, NY. *Circle 100* 

#### HID BALLAST

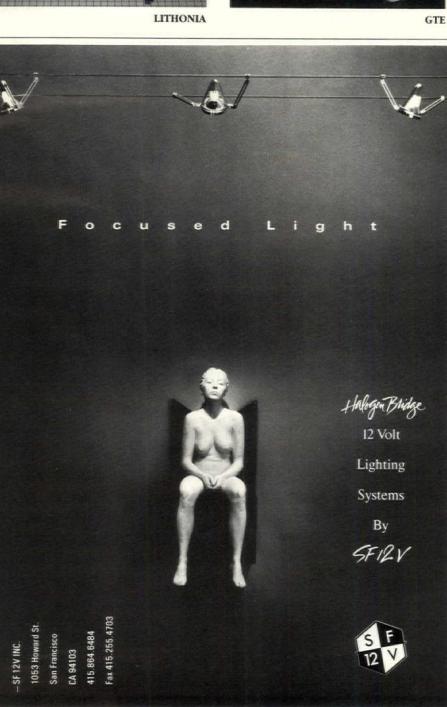
An electronically regulated HID ballast for Osram's HQI 70-watt and LU 70-watt double-ended lamps senses line fluctuations and lamp aging. The Powertronic features a low-voltage safety starter, and an electronic chip that monitors the line and the lamp, and furnishes light while protecting against brownout. The device measures 4.75 inches × 3.39 inches × 1.5 inches and weighs less than one pound. Osram Corporation, Trenton, NJ. **Circle 101** 

#### BATTERY PACK

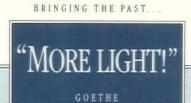
Power Sentry Plus model PSP500 is a fluorescent battery pack that requires only five wiring connections. Wiring is simplified by the use of push-nuts, insulation displacement connectors, and fewer wires, allowing the unit to easily fit into the fixture ballast channel. Lithonia Lighting, Conyers, GA. *Circle 102* 

#### HPS LAMP

The HPS 750-watt Lumalux lamp offers a high efficiency of 145 lumens per watt and has a rated life of 16,000 hours. The lamp has a reduced-size arc tube that allows for more compact fixture designs. GTE, U.S. Lighting Division, Danvers, MA. *Circle 103* 



Circle No. 26 on product card.







iew Craftsman, Victorian and Neoclassic lamps and fixtures in a whole new light. Request our catalog of fine, solid brass reproductions.



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INTO THE PRESENT

Circle No. 25 on product card.

#### **EMERGENCY LIGHTING**

A series of fluorescent emergency lighting fixtures provide a mounting bracket system for easy installation and maintenance. All fixtures are available in PL and 9 watts, 120, and 277 volts. Beghelli Inc., Jacksonville, FL. Circle 104

#### **POWER PACK**

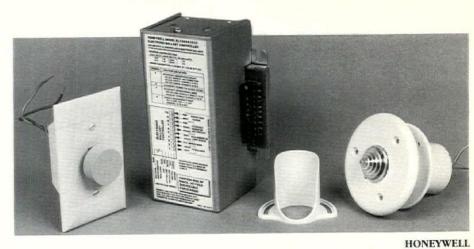
The Malibu power pack with photo control plus, automatically turns Malibu low-voltage lights on and off, and is programmable. Designed for outdoor use, the power pack plugs into a standard outlet and reduces current to 12 volts. All controls are top-mounted for easy access, and it features a circuit breaker for overload protection. Intermatic Inc., Spring Grove, II. Circle 105

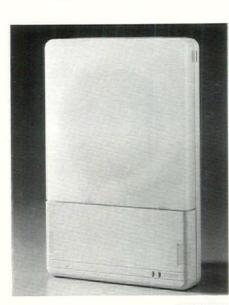
#### **TIME CONTROLS**

The P Series time controls combine electromechanical design with non-metallic components. The models are corrosion resistant and have either a 24-hour or seven day time schedule. The 24-hourmodels feature 40-amp contacts and numerous switching and voltage arrangements, and the seven-day controls feature seven sets of trippers, 40-amp contacts, and a choice of voltages. Paragon Electric Co., Inc. Two Rivers, WI. Circle 106

#### MANUAL DIMMER

An electronic ballast manual dimmer provides dimming for fluorescent lamps, and an on/off control when used with the EL7305 electronic ballast controller. It includes a knob to adjust the light level from 20 percent to 100 percent and mounts in a standard 2-inch × 4-inch wall box. Each dimmer can directly control up to 50 electronic ballasts. Honeywell Inc., Golden Valley, MN. Circle 107





BEGHELLI





INTERMATIC

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#### On track with the Nineties ... NEW DECADE

track lights are specifically designed to use the most advanced tungsten-halogen lamps. The modern 120 V. Mini-PAR16, MR16 low voltage and T4 flood lamps provide brilliant, energy efficient task or accent lighting for practically any application.

Cost effective, yet top-quality constructed, these NEW DECADE track lights are commercial grade throughout. Select from contemporary square or cylindrical shapes. Low voltage models feature an integral transformer. A complete line of accessories and track is available.

Just call or write for complete specifications and prices.

> This 6-page, 4-color brochure shows the complete Con-Tech **NEW DECADE Series** track lights



Circle No. 27 on product card.

#### **PRODUCT LITERATURE**



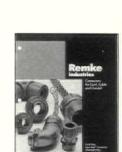
#### Indoor/Outdoor Flood

The LSP-1054 brochure provides information about the Powr.Spot III floodlight for sports, facade, and industrial lighting. The fixture uses 400-, 750-, and 100-watt metal halide lamps. The brochure details the features of the floodlight, possible applications, dimensions, and ballast and photometric data. GE Lighting Systems, Hendersonville, NC. *Circle 130* 



#### **Decorative Fixtures**

A range of decorative fixtures, from chandeliers to table lamps, is featured in this catalog. Custom designed fixtures are also available. A 32-page Specifiers' and Buyers' Guide with a price list accompanies the catalog. Christopher Wray Lighting, London, England. *Circle 121* 



#### **Undercabinet Fixtures**

Undercabinet lighting fixtures are displayed in a 24-page, four color catalog. Also included are fixtures that feature adjustable light levels, lensing and louvers for brightness and glare control, accent lighting modes and lenseless designs for indirect over-cabinet lighting. Alkco, Franklin Park, IL *Circle 129* 

#### **Electrical Connectors**

A complete line of connectors for cord, cable, and conduit is featured in a 32-page catalog. More than 1,000 items are included in this catalog, and charts simplify the process of finding specific products. Custom design for special applications is also provided. Remke Industries, Inc. Wheeling, IL. *Circle 125* 



#### **High-frequency Ballasts**

Charts for specifying high-frequency ballasts for use with compact fluorescent lamps are featured in a two-page flyer. Also offered are typical values for input voltage, current, and watts for open air and parabolic fixtures. MagneTek, Huntington, IN. *Circle 122* 



#### Safety/Security Lighting

**Decorative Sconces** 

Freeport, NY. Circle 127

The Life safety and security lighting line consists of emergency and exit signs as well as other security related products such as motion sensors, indoor and outdoor area, and hallway lighting. Also included is the LED series exit sign, designed to provide years of service without relamping. Hubbell Lighting, Christiansburg, VA. *Circle 126* 

A four-page color brochure features decorative sconces in many

styles and colors. LaMarbl' sconces look like natural marble and

use 13-watt PL fluorescent lamps and feature heavy gauge steel

alabaster, but are made from a durable polymer. The sconces

design possibilities are also offered. LaMar Lighting Co., Inc.,

housings with a white baked enamel finish. Many custom



#### Security Lights

A 28-page product guide features the Life Sentry product series of luminaires for detention environments. All of the lighting fixtures are designed for use with energy efficient fluorescent lamps and offer options and accessories to meet specific applications or project requirements. Kenall, Gurnee, IL. *Circle 123* 



#### Selection And Specification

Nova T\* Thin-Profile Lighting Controls and Accessories are featured in a pair of brochures. The Nova T\* Selection Guide provides photos, descriptions, a color selection chart, and ordering information for the entire line. The Nova T\* Specification Guide contains the information necessary to specify an installation. This 48-page brochure allows specifiers to select the product, complete the control station detail, and write specifications. Lutron Electronics Co., Inc., Coopersburg, PA. **Circle 124** 



**Track And Recessed Fixtures** The ParStar series is offered as a family of track and recessed fixtures. This series allows specifiers to take advantage of line voltage halogen capsule PAR lamps, including PAR 16, PAR 20, PAR 30, and PAR 38 designs. ParStars accommodates them all from 50 to 150 watts, from VWFL to VNSP. ParStars is a complete lighting instrument with a full range of control accessories such as louvers, color filters, scrims, and barndoors. Staff Lighting Corp., Highland, NY. *Circle 128* 

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Woodform, Inc. Circle 18

# Marketplace

#### AMBIENT LIGHTING SYSTEMS (INTERIOR)

404-922-9000 Fax: 404-922-1841 LITHONIA LIGHTING. We cover the lighting spectrum . PEERLESS LIGHTING CORP., P.O. Box 2556, Berkeley, CA 94702 Fax 415-845-2776, Phone 415-845-2760

#### ACCENT AND DISPLAY LIGHTING (INTERIOR)

DANALITE, 16392 Gothard St., #A, Huntington Beach, CA 92647 Fax 714-848-1669 714-841-4325 Low voltage/slim profile linear lighting system/high intensity halogen lamps/extensive apps. ... 213-583-6551 MARCO LIGHTING, 6100 S. Wilmington Ave., Los Angeles, CA 90001 Recessed Architectural Lighting: Compact Fluorescents-Low Voltage Capsylite-HID-Incandescents.

#### AREA LIGHTING (EXTERIOR)

309-799-3111 EMCO LIGHTING, 7300 50th St., P.O. Box 1640, Milan, IL .... SPRING CITY ELECTRICAL MFG. CO., Spring City, PA 19475 Call 215-948-4000 or Fax 215-948-5577 Historically authentic, cast iron ornamental lighting posts, bollards and adaptations.

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AUGUST 1-4 AIA 1990 Northwest & Pacific Regional Conference. Juneau, AK; (907)586-1371.

AUGUST 8-11 American Society of Interior Designers (ASID) Conference. Atlanta; (212)944-9220.

AUGUST 11-13 RHIDEC, Restaurant Hotel International Design Exposition and Conference. Los Angeles Convention Center; (212)391-9111.

SEPTEMBER 9-12 World Store. Miami; (212)391-9111.

**OCTOBER 3-5** Lighting Conference for Utility Representatives. The Lighting Center, Philips Lighting Co., Somerset, NJ; (201)563-3600.

OCTOBER 11-13 Designer's Saturday. New York City; (212)249-5237.

OCTOBER 18-20 Lighting World/Los Angeles. Los Angeles Convention Center; (212)391-9111.

OCTOBER 27-30 ASLA Conference. San Diego; (202)686-2752.

OCTOBER 28-31 IFMA '90: "A Decade of Leadership." Baltimore Convention Center, Baltimore; (713)623-4362.

#### Seminars & Workshops

SEPTEMBER 5-7 Contract Interior Designers Conference. GE Lighting Institute, Cleveland; (800) 255-1200.

SEPTEMBER 10-14 Lighting Design and Applications Workshop. The Lighting Center, Philips Lighting Co., Somerset, NJ; (201)563-3600.

SEPTEMBER 17-19 Industrial Lighting seminar. The Lighting Center, Philips Lighting Co., Somerset, NJ; (201)563-3600.

**OCTOBER 8-12** Fundamentals of Commercial and Industrial Lighting. GE Lighting Institute, Cleveland; (800) 255-1200.

**OCTOBER 15-17** Lighting Conference for Consultants. The Lighting Center, Philips Lighting Co., Somerset, NJ; (201)563-3600.

**OCTOBER 31-NOVEMBER 2** Lighting Designers Conference. GE Lighting Institute, Cleveland; (800) 255-1200.

#### Correction

"Rooms With A View," May 1990 issue, page 36-Broadwax Lighting was the manufacturer of the fluorescent fixtures used in the Hilton Hawaiian Village Hotel. We apologize for the inadvertent omission.

Phone # \_