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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 affecter 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 I'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
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 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.'"
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 150-watt 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 HERSHERGER

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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**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 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 re-lamping 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 A19 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 T6.5 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
- **INTERIOR DESIGNER:** DENNIS BROCKMAN
- **PHOTOGRAPHER:** FRANK RITTER
- **MANUFACTURERS:** EDISON PRICE: 100-watt recessed fixtures; LIGHTOLIER: PAR 36 and PAR 38 lampholders; NORBERT BELFER: strip lights, T6.5 lamps; ELECTRO CONTROLS: dimming controls

---

**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.
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In Light Of Things

Recessed fixtures emphasize artwork in a Beverly Hills home

BY CATHERINE SCHETTING SALFINO
MANAGING EDITOR

When 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 onyx-colored 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, Chatsworth, CA, installed 175-watt mercury 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 12-volt, 50-watt halogen lamps in the planters and shrubs for low-level 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 spot-lighting 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 wanted to keep the illumination from being overwhelming.

"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: EV LANE
LIGHTING LANDSCAPE DESIGNER: PAT SKINNER, SKINNER LIGHTING
ARCHITECT: JOE MATTHEWS, JOE MATTHEWS & ASSOC
ELECTRICAL CONTRACTOR: ALBINO MARTINEZ, ALBINO CONSTRUCTION, INC
ELECTRICIAN: LAUZO PARDISAN
PHOTOGRAPHER: DAVID GLOMB, DAVID GLOMB PHOTOGRAPHY
LIGHTING MANUFACTURERS: CAPRI low • collage tpol and Hood fixtures, OSRAM 50-watt, 75-watt MR 16 lamps, Lutron preset dimmers, GREENLEE mercury vapor lamps, NIGHTSCAPING low-voltage outdoor halogen lamps

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).
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

Smooth, 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.

In the bedroom, a continuous line-voltage strip of candleabra-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 pin spots 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
LOCATION: MALIBU, CA
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
RESIDENTIAL

Mastering The Suite

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

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

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

Tapaz-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 ore unified b> horizontal bonds of wood placed at varied heights throughout. Wall surfaces, when not mirrored, are light oak or pole silk fabric.

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 cr 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.

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 recessed luminaires to enhance the warmth of the space. The wood columns and accessories on top of the cabinets are highlighted with small-aperture, recessed MR 16 downlights. Tempered, pale tapaz, glass filters bring the relatively cool-white 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 cr 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

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.
ARGO

Classical motifs play contemporary rhythms against smooth, white faux-stone. Detailed with sand-cast brass, bronze or aluminum trim in high relief, or integrally molded faux-stone dentil, these sconces contour interiors with incandescent or fluorescent indirect and semi-indirect illumination. UL Listed. Designed by Kevin von Kluck.

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AILD Lighting Awards 1991

Program Description
Each year the IALD recognizes lighting that displays high aesthetic achievement backed by technical expertise and exemplifies a synthesis of the architectural and lighting design processes. As an ongoing collection of work, the awarded projects represent varied approaches to outstanding lighting design.

Awards
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.

Judging
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.

Registration form.
A self-addressed stamped envelope for the return mailing of your submission; otherwise it will become property of the IALD.

Address entries to:
IALD
International Association of Lighting Designers
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Deadline
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—SAY IT WITH NEON

INTERIOR DESIGN
The clients wanted to keep their 20-foot x 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 low-voltage 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 under-cabinet fluorescent lighting illuminates the work areas.

DETAILS
PROJECT: HARRIS KITCHEN
LOCATION: WASHINGTON, DC
ARCHITECT AND LIGHTING DESIGNER: DHIRU A. THADANI, AIA, 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 under-cabinet 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
THE NEW POINTS OF DIFFERENCE.
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For immediate service, call 1-800-BALLAST.
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 peachesy 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 CONY
LIGHTING MANUFACTURERS: CAPRI LIGHTING, FIBERSTARS

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 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, capsule-shaped 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-BLANDON, RICHARD ORTIC, AND DONNA WEST, DAVID S. GAST & ASSOCIATES
PHOTOGRAPHER: WILLIAM HELSEL
LIGHTING MANUFACTURERS: IPI, BOYD LIGHTING CO., ALKCO, PRESCHOOLIE, HALO LIGHTING, LIGHTSIDE
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A New Generation Of Sources Challenges Tungsten Halogen

BY CHARLES LINN, AIA
EXECUTIVE EDITOR

Until 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 efficiency, 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 a 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.

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 instead—kapoof! 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: 65- 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

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 50- and 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.
Introducing a new generation of compact below-grade luminaires employing the latest miniature lamp technology. Specifically designed to operate 12 Volt MR-16, 12 Volt PAR-36 or medium base H.I.D. lamps, these fixtures generate tremendous light output in relation to their size and wattage. For example, the 70 Watt Metallic Halide "narrow spot" produces 70,000 peak candlepower; capable of lighting the tallest palm trees, building features or flags up to 70' in height. Lamps and reflectors tilt 22°, rotate 360° and are available with optional internal louvers. As for construction, Kim wrote the book on below-grade luminaires beginning 32 years ago. These fixture designs, including aluminum or brass 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 demonstration of these exciting new landscape lighting tools, or fax us for more information.
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. Glamour offers models for recessed, canopy, monopoint, track, and pendant mounting. Reggiani, USA. New Windsor, NY. Circle 51

HANGING LIGHT
The Hanging Mock is 22 inches tall and features a 23-inch diameter shade, a 15-inch adjustable wire and cable, and a 5-inch 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 block or white lacquer. The Ice Light features a slide dimmer and glass block diffusers available in a white striped pattern or a line 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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IRON TORCHIERE
The Iron Torchiere lamp with a patina patina finish is part of the Artichar Collection. This fixture is mounted on a marble stone and stands 70 inches tall. Fine Art Lamps, Hialeah, FL. Circle 55

WALL LANTERN
Part of the Easdale Collection, this wall lantern is handcrafted of repurposed leaded stained glass and natural wood. This fixture features a design reminiscent of the early 1900's American Arts & Crafts movement. The lantern includes a 19-inch x 5-inch wall bracket with a recessed brass backplate and measures 8.75 inches x 6.5 inches x 10.5 inches. They are available as wall and hanging lanterns, chandeliers, and sconces, and may be custom designed to architectural Rarities, Ltd., a division of Anderson & Associates, Inc., Minneapolis. Circle 56

CEILING PENDANT
Aurora, designed by Perry A. King and Santiago Miranda, is a circular glass pendant fixture that uses direct/diffused light. Three 50-watt incandescent or fluorescent bulbs create a concentration of light downward, and light emitted from the fixture's open sides illuminates surfaces. A ceiling canopy, used to house a low-voltage transformer, mounts directly to a standard 4-inch octagonal junction box. Atelier International Lighting, New York. Circle 57

PORCELAIN TABLE LAMP
The Classic Column lamp features a sculpted leaf pattern and is accented by brass fount and mounting. D1250, shown, is 30 inches in height, has a handsewn, French draped shade. This porcelain white fixture is one of more than 30 ceramic lamps recently produced by the company. Royal Haeger Lamp Company, Macomb, IL. Circle 58

GLASS DIFFUSER
Luci Fair has a horn-shaped diffuser blown from white opal glass, and provides direct upward illumination with a soft glow. It has a wall-mounted depth of 9.5 inches, a height of 11.8 inches, and 4.4 inches wide at its base. Flos Inc., Huntington Station, NY. Circle 59

BRASS FIXTURES
Each lamp in the Nessen/Progma collection is handcrafted in solid brass, featuring a 100-watt, 200-watt halogen lamp and feature a built-in dimmer. Pyrex protective glass, and polished chrome and black finishes on specifications. Nessen Lamps, Port Chester. Circle 120

Circle No. 17 on product card.
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 5 3/4 inches X 7 3/4 inches X 4 3/4 inches, and the K-1101 half column is 11 inches X 29 inches and has a 4 3/4-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 stone-like solid surfacing material. The fixture is available in a variety of sizes and may be used with incandescent, halogen, or fluorescent lamps. Aamsoo 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

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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Circle No. 19 on product card.
ALABASTER FIXTURE
Hunter-Royalite 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., Pittsburgh, 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 Hydrocol. Murray Feiss, Bronx, NY. Circle 64

HUNTER FAN
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GROSS CHANDELIER
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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 fully-gasketed hinged captive bezel secured by twin latches and a 5-inch threaded mounting knuckle. American Electric, Memphis, TN. Circle 73

DURABLE LIGHTING - Dome Top Bollards constructed of reinforced precast concrete with a cast aluminum grill and an inner high impact acrylic diffuser encloses a variety of H.I.D. lighting. Choose from (3) standard mounting heights and (2) textured finishes. Concrete colors and ceramic tiles are available.

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Circle No. 21 on product card.
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 enclosed-lamp 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 100-watt maximum standard A lamp; other light sources are available. The fixture measures 6 inches in diameter and stands 31 1/2 inches tall. Hanover Lantern, Hanover, PA. Circle 77

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cents can, the lighting you design will make the environment and the people who work in it more attractive.

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For more product or application information, call your local GE Specification Area Manager. Or call the GE Lighting Information Center at 1-800-523-5520.

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LINEAR LAMP
Alineo 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. Alineo 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 lamp holders used with 75-watt R20 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 2⅝-inch lamp holder diameter and a 7½-inch swing. Con-Tech Lighting, Deerfield, IL. Circle 84

ROUNDBACK LAMPHOLDER
The Power Trac line of roundback lamp holders has been expanded with painted finishes that feature brass accents. Available lamp holders 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 colixx baffles. Cooper Lighting, Elk Grove Village, IL. Circle 85

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 reflectors and focus adjustability. Toh is available as a spot reflector with an 8-degree beam spread, or a flood reflector with a 32-degree beam spread. 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 T538N, 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 75-watts. 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 T5 lamp without flickering. The ballast component is tailor fit inside an injection molded case, minimizing the fluorescent "buzz." The new ballast also makes the Little Inch more energy efficient and cooler. Alko, 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 4-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 low-voltage 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

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Circle No. 24 on product card.

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

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

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

Circle No. 94 on product card.

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

Circle No. 95 on product card.

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

Circle No. 96 on product card.
AMBIENT

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 three-phase 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 Lyterlite 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, 12-volt T3 halogen lamp. Lightolier, Secaucus, NJ. Circle 43

WALL LAMP
The Classic wall lamp for horizontal lighting applications features low-brightness, an opalescent white lens, and emits soft, even illumination. The fixture is available in both one- and two-lamp 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
Spheres 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 277-volt 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 .02-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

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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

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
EMERGENCY LIGHT
The Cavolier emergency light features an injection-molded, corrosion resistant, thermo-plastic housing; a maintenance-free battery; AC line latch; brownout circuit; and low-voltage disconnect. Lightralms 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 Powertronics 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 x 3.39 inches x 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 Lumolux 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.
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, IL. 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-hour models 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 x 4-inch wall box. Each dimmer can directly control up to 50 electronic ballasts. Honeywell Inc., Golden Valley, MN. Circle 107

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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 Power-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 Way Lighting, London, England. Circle 121

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

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
Novo 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

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 lensless 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

Safety/Security Lighting
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

Decorative Sconces
A four-page color brochure features decorative sconces in many styles and colors. LaMarbl' sconces look like natural marble and alabaster, but are made from a durable polymer. The sconces use 13-watt PL fluorescent lamps and feature heavy gauge steel housings with a white baked enamel finish. Many custom design possibilities are also offered. LaMar Lighting Co., Inc., Freeport, NY. Circle 127

Track And Recessed Fixtures
The ParStor 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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AUGUST 8-11 American Society of Interior Designers (ASID) Conference. Atlanta; (212)944-9220.

AUGUST 11-13 RHDEC, 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; (210)563-3600.

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

OCTOBER 18-20 Lighting WorldLos Angeles. Los Angeles Convention Center, (212)391-9111.

OCTOBER 27-30 ASLA Conference. San Diego; (202)636-2752.

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.


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


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

Correction

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