

Brilliant Innovations

With an eye toward innovation and new technological advances, Venture Lighting International has developed the broadest line of Metal Halide lamps in the industry. Advances in the Metal Halide product line include:



Glare Guard Lamps: reduce glare from fixtures by utilizing an opaque highly reflective aluminum coating on the top of the bulb.

Horizontal High Output Lamps: provide up to 25% greater light output in a horizontal burning position.

Special Outer Jacket Lamps: smaller outer jacket assemblies for use in compact low-profile fixture designs. Low Wattage Lamps: our 70 and 100 watt lamps deliver approximately the same lumens as 250 and 300 watt tungsten halogen lamps, respectively.

Instant Restart Lamps: instant relighting capabilities with 90% light output if relit within 15 seconds.

Double Ended Lamps: Smaller envelope size lets these lamps be utilized in very compact fixtures.



Compact Arc Lamps: short arc gap allows higher level of beam lumens from standard fixtures.

To see how brilliant these innovations can be, contact us at:





A subsidiary of Advanced Lighting International 625 Golden Oak Parkway, Cleveland, Ohio 44146 (216) 232-5970 1-800-338-6161

LOW-VOLTAGE GARDEN LIGHTING SEEN IN A DIFFERENT LIGHT.

Luma's After-Sunset Series combines innovative design with energy-efficient lighting. The unique, cost-saving two circuit system, together with Luma's special features of quality and style, make it like no other system you've ever seen. And new from Luma, is a companion outdoor track

lighting system. A first in the industry!

For more information, please contact your local landscape architect, wholesale distributor or landscape/irrigation whole-

saler. For a free color poster, write to Luma Lighting Industries.

MA





THE RIVIERA

2165 South Grand Avenue, Santa Ana, California 92705, (714) 662-2871

LIGHTING INDUSTRIES, INC.



BIG BERTHA

Remember Big Bertha? WWI's secret weapon that could lob a shell 20 miles? Of course you don't. Our Big Bertha spotlight with its integral transformer uses surprisingly little power to blast a hole in your wall 20 yards away. For an information kit, write on your letterhead to: Lighting Services Inc, Industrial Park Rt. 9W, Stony Point, NY 10980-1996 (914) 942-2800

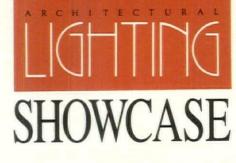


Circle 190



MOUSE

A table-top version of our miniature track light, it uses the same miniaturization techniques to achieve a great variety of intensities and beam spreads. We catalogued it as MRXG. But we call it "mouse" For an information kit, write on your letterhead to: Lighting Services Inc, Industrial Park Rt. 9W, Stony Point, NY 10980-1996 (914) 942-2800



Architectural Lighting is published monthly by Aster Publishing Corporation.

Editorial Offices:

859 Willamette Street P.O. Box 10460 Eugene, OR 97440-2460 (503) 343-1200 Fax: (503) 343-3641

Sales Offices:

195 Main Street Metuchen, NJ 08840-2737 (201) 549-3000 Telex: 139308 Fax: (201) 549-8927

Circulation Offices:

(503) 343-1200 **Publisher** Edward D. Aster **Associate Publisher** Michael Aster

P.O. Box 10955

Eugene, OR 97440-9895

Editor Charles Linn, AIA Associate Editor M. Jane Ganter Senior Assistant Editor Gareth Fenley Assistant Editor Susan Degen

Art Director Lee Eide Production Manager Stephen Roberts Advertising Coordinator Helen Hornick

Director of Advertising Robert Joudanin National Sales Representative Arthur S. Rosenberg

SUBSCRIPTIONS: U.S.: 1 year (12 issues), \$49; 2 years (24 issues), \$90; 3 years (36 issues), \$129. Foreign surface rates: 1 year (12 issues), \$89; 2 years (24 issues), \$170; 3 years (36 issues), \$249. Foreign airmail: add \$60 per year to foreign surface rates. Single copy price: U.S., \$5; foreign countries, \$10.

REPRINTS: Reprints of all articles in this issue and past issues are available (250 minimum). Write or call: Aster Marketing Services, 859 Willamette Street, P.O. Box 10460, Eugene, OR 97440-2460, USA, (503) 343-1200.

CHANGE OF ADDRESS: Allow 4 to 6 weeks for change; provide old mailing label and new address, including ZIP or postal code. POSTMASTER: Send address changes to *Architectural Lighting*, P.O. Box 10955, Eugene, OR 97440-9895.

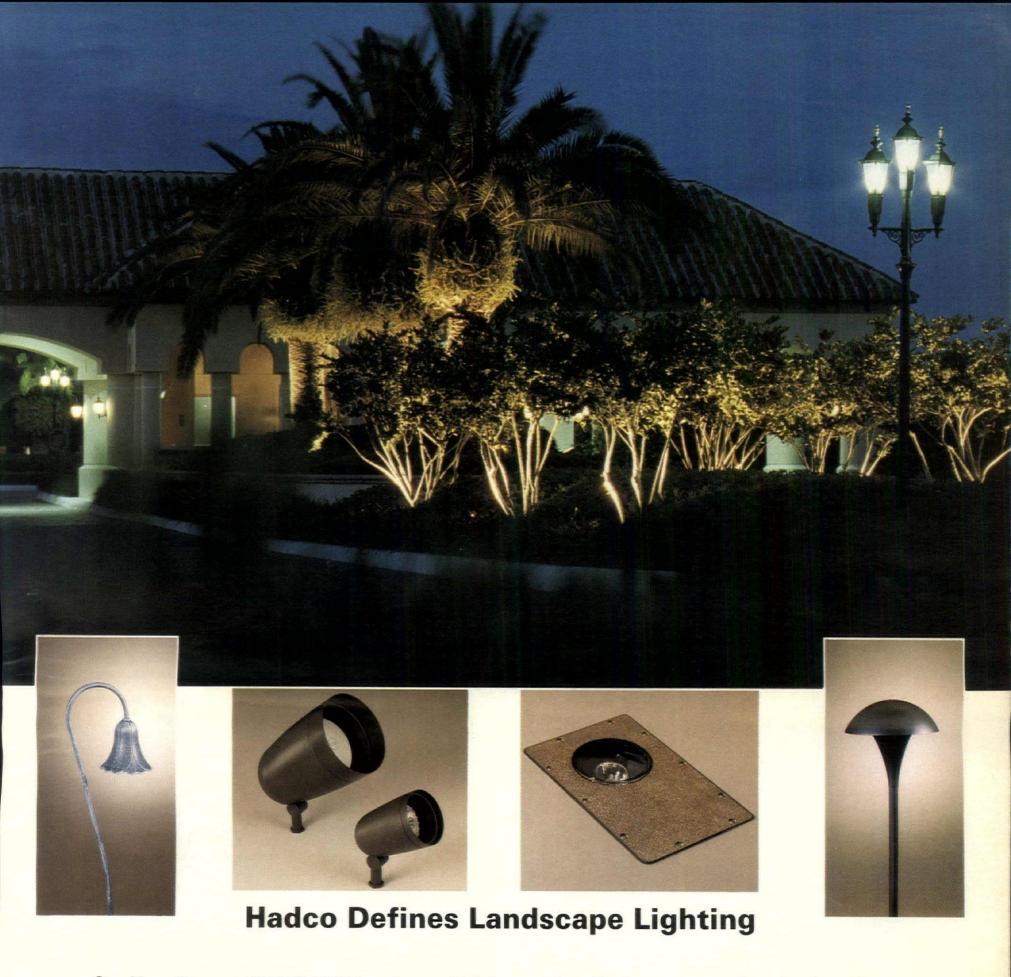
© 1988 Aster Publishing Corporation. All rights reserved. Reproduction in part or whole without written permission is strictly prohibited. *Architectural Lighting* and the logo appearing on the cover of this magazine are registered trademarks of Aster Publishing Corporation.

VBPA (ISSN 0894-0436)

Second class postage paid at Eugene, Oregon, and at additional mailing offices.

Aster Publishing Corporation:

Chief Executive Officer, Edward D. Aster; Senior Vice President, Michael Aster; Editorial Director, David Webster; Senior Production Editor, Karen Carlson; Production Director, L. Ghio Imburgio; Circulation Director, Linda Pierce; Marketing Manager, Archie A. Anderson; Marketing Services Director, Richard P. Scheckenbach.



Our New 60 page NIGHTLIFE[™] Landscape Lighting catalog displays a comprehensive line of landscape luminaires for residential, commercial, and general applications.

147 innovative and wide-ranging fixtures offer the engineer uncompromising quality and the architect unsurpassed design.

Add to this the flexibility of multiple power systems including line voltage and low voltage with incandescent, fluorescent and H.I.D. lamping options. It's easy to see that HADCO's written the book on landscape lighting.

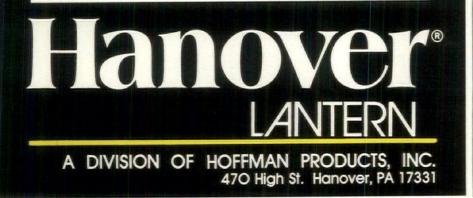
FOR YOUR COPY, CONTACT YOUR HADCO SALES REPRESENTATIVE OR WRITE FOR NIGHTLIFE: THE CURRENT DEFINITION OF LANDSCAPE LIGHTING.







- Heavy duty all aluminum construction.
- High impact clear acrylic body.
- Weatherproof ballast compartment.
- Variety of H.I.D. lighting sources.
- Decorative aluminum anchor base poles.



From the Editor



This editor strives to maintain a nondiscriminatory policy toward editorial submissions: I'll look at anything. No matter how many times we have already run stories about a particular kind of job, no matter how wacky or far out it may be, if it lands on my desk, I guarantee it'll get a viewing.

Recently, I received a submission that was so perfect it was scary. In the package were the traditional slides, of course, but the write-up of the project was something else: laid out to match our page style perfectly, complete with graphics, credits, and title.

KATHLEEN MEHLING

Los Angeles designers Brian Lane and Bob Dinetz cloned our editorial style so convincingly that I've been unable to muster the courage to ask them if their article is really a send-up of one of the Statements pages we feature in each issue of *Architectural Lighting*.

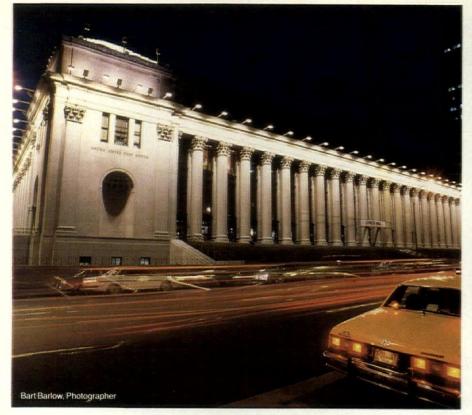
Their article, "Prime Time TV," features the good design intentions we continually promote. It recognized that the "need to examine lighting ideas is open not only to those with sophisticated equipment or trusting clients," but to any designers who are willing to try out "a few ideas on a small scale and a tight budget." That couldn't be closer to the way we'd say it, if we'd written it ourselves. Or did we? I can't remember.

Their project features a suspended, stripped-out television cabinet, riddled with 893 light-emitting holes, complete with blinking paper-mache eyeball and a new "cord" of bent copper tubing. Indirect light comes from the back of the set, filtered by blue gels. According to the designers, "The benefits of this experiment are an increased awareness of various elements of light as well as a pleasant and entertaining light source."

I, for one, believe that's certainly true. This project meets most of my criteria for deciding whether a project is indeed publishable. It's just more bizarre than most. Which is not a good enough reason to reject it, especially considering the fact that my publisher is extremely anti-elitist, and constantly reminds me that projects need not necessarily be beautiful to be good — if they do a superior job of doing what they are intended to do. This project does. These guys are right out there on the cutting edge with this inspiring design, which challenges the intellectual snobbery that plagues so many design publications.

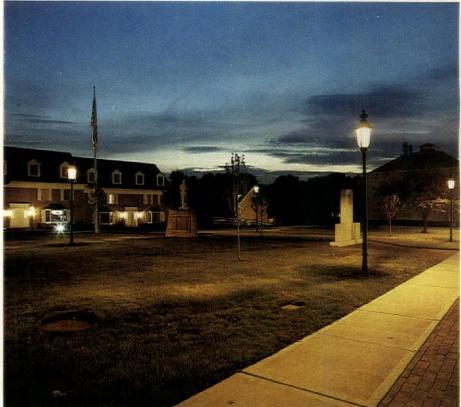
So, I'd like to publicly thank Mr. Dinetz and Mr. Lane for submitting such a stimulating project. Unfortunately, it does not meet our editorial needs at this time.

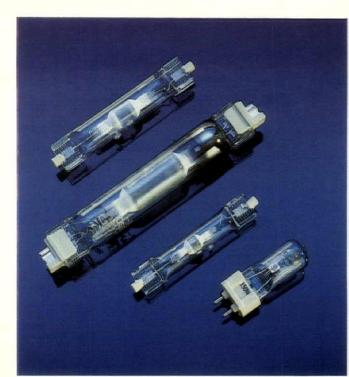
Sincerely, Charles Linn, AIA











Lighting is the Signature on Your Work. Write OSRAM HQI.

Whether your clients need to pinpoint a one-carat diamond in a showroom... or floodlight a baseball diamond in a stadium, OSRAM HQI metal halide lamps create dramatic impact.

These OSRAM exclusive lamps help you make a personal design statement because of their high efficacy, compact size and superior color rendering. Showcase your work in a truer color, a brighter sparkle, a livelier glow. Available in a variety of colors, OSRAM HQI metal halide lamps give you one-of-a-kind solutions to your lighting needs.

Put your work in OSRAM lights and you're sure to make your mark. Write or call today for more information: OSRAM Corporation, P.O. Box 7062, Jeanne Drive, Newburgh, NY 12550, (914) 564-6300; Toll-free, 1-800-431-9980.



12114 Sherman Way, North Hollywood, CA 91605, (818) 982-4723; Toll-free, 1-800-458-5584; In So. CA, 1-800-247-8675; OSRAM Canada Limited, 6185 Tomken Road, Mississauga, ONT. L5T 1X6, Canada, (416) 673-1996; Fax: 416 673 3281 Circle 6

ARCHITECTURAL LIGHTING SHOWCASE

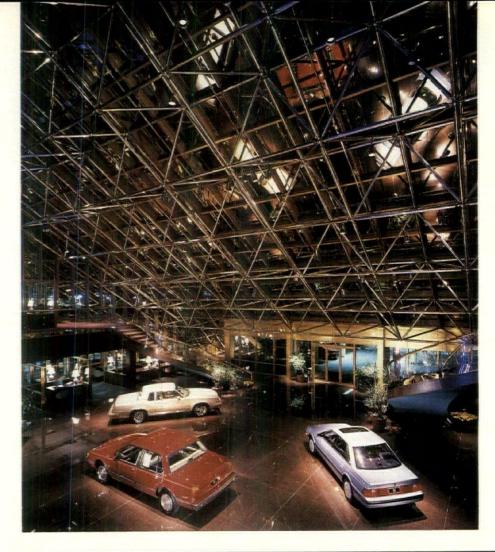
July 1988 Volume 2, Number 7





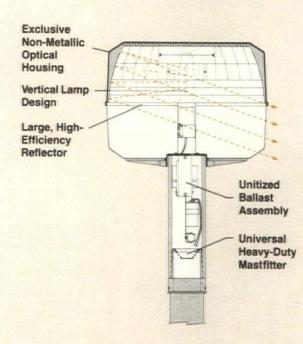






	Treak and Assant Lighting
	Track and Accent Lighting
	Accent lights animate autos in Texas showroom C. Linn
	Track and accent lighting products
	Decorative Luminaires
	Handmade luminaires relax, stimulate diners G. Fenley
	Decorative luminaire products
	Ambient Lighting Systems
	Lighting design helps create '50s ambience in hotel C. Linn
	Ambient lighting systems products
	Landscape and Area Lighting
	Problems and potential of lighting lakes and rivers G. Fenley
	Landscape and area lighting products
	Components and Accessories
	A/E headquarters shows off lighting technology G. Fenley
	Components and accessories
	Departments
	From the Editor
	Classified Directory
	Product Literature
	Manufacturers
	Photographers Advertisers
	Auverusers

LOOK AT ENERGY EFFICIENCY IN A NEW LIGHT.



NEW SUPRA-LYTE FROM WIDE-LITE.

Maximize the performance and efficiency of your area lighting designs with the new Supra-Lyte from Wide-Lite. It's superior to typical post-top luminaires because it offers initial and life-cycle cost savings, easy installation and exceptional durability.

MAXIMUM EFFICIENCY.

Supra-Lyte has an extra large reflector and vertical lamp configuration to provide maximum peak intensities for HID light sources. Its optics are so effective that a 250 watt HPS lamp produces the same peak intensities as a 400 watt HPS lamp in typical post-top luminaires. And for higher light levels, an optional energy efficient dual lamp Supra-Lyte is available.

Additional energy savings can be achieved when Supra-Lyte is ordered with the optional Bi-level switching system. During offpeak hours, luminaires can be switched to provide low level illumination and reduce operating costs up to 75%. Typically, the energy savings can pay for the system within the 3 year Wide-Lite warranty period.

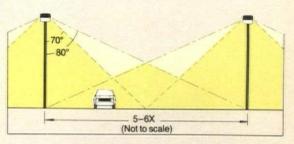
SUPERIOR PERFORMANCE.

Engineered to provide the optimum square Type V light pattern, Supra-Lyte maximizes light at a peak beam angle of 70°. This provides better control of light intensity and distribution with cut-off that minimizes spill light on adjacent property. Areas are illuminated smoothly and uniformly without glare, shadows or hot spots near the poles.

Supra-Lyte offers an excellent spacing-to-mounting height ratio of 5–6 mounting heights. Fewer poles are needed so visual clutter and overall expenses are reduced.

FUNCTIONAL STYLING.

Supra-Lyte features an exclusive lightweight non-metallic housing that is both attractive and exceptionally durable. Plus it has no structural arms or supports to cast shadows or detract from its stylish appearance.



Supra-Lyte provides maximum light output at 68°-70° to illuminate areas between poles spaced up to six mounting heights.

It also features an integral ballast/mastfitter assembly located far away from lamp heat for longer component life, with a full-

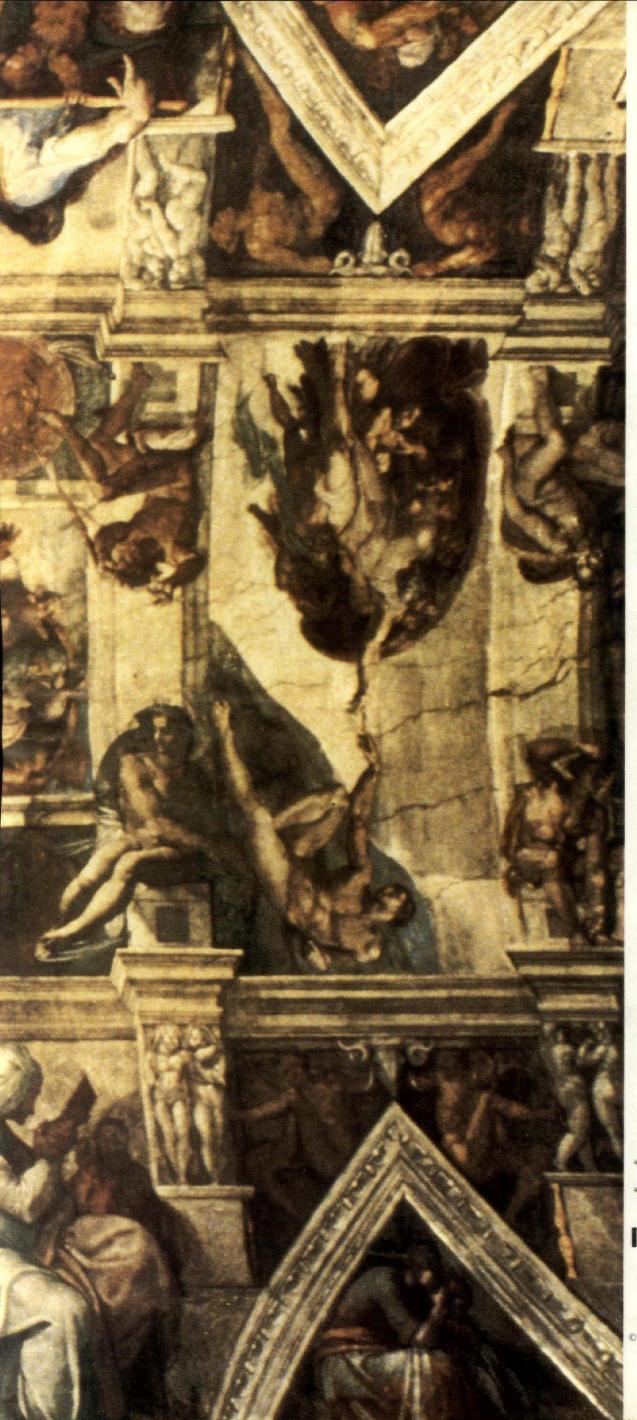
length access door for easy maintenance. This universal mastfitter assembly can be mounted to round tapered poles and 5" and 6" square poles with 4" O.D. tenons, making Supra-Lyte the perfect choice for new and retrofit projects.

A BRIGHT IDEA.

Ask your Wide-Lite representative for more information, including a free energy savings analysis. Or, contact: Wide-Lite, P.O. Box 606, San Marcos, TX 77667; (512) 392-5821.







PRESENTING THE BEST THING TO HAPPEN TO CEILINGS IN 479 YEARS.

Philips introduces Advantage X. A renaissance in fluorescent lighting.

"The science of design," according to Michelangelo, "is the source and very essence of all the works of the human brain and hand."

By creating the Advantage Xfluorescent lamp, the people at Philips Lighting have raised the concept of design to new heights.

Advantage X not only provides greater flexibility in lighting layout, it enables you to render each new design in a richer light.

With 17% more light output than standard fluorescents of the same wattage and a remarkably high color rendering index of 80, Advantage X opens up a whole new age of lighting design opportunities.

And to help keep your client's operating costs from going through the roof, it lasts a full 20% longer than standard lamps.

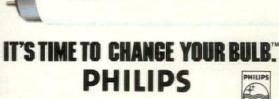
For more information about the new Advantage X, call Philips at 1-800-631-1259, ext. 932, and see how we've taken fluorescent lighting out of the dark ages.

The new Philips Advantage X fluorescent lamp.

1-3

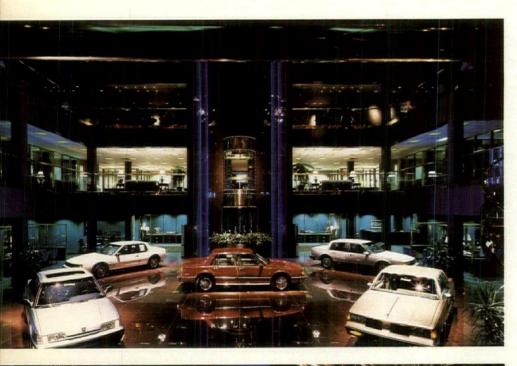
PHILIPS

MINANTAGEN

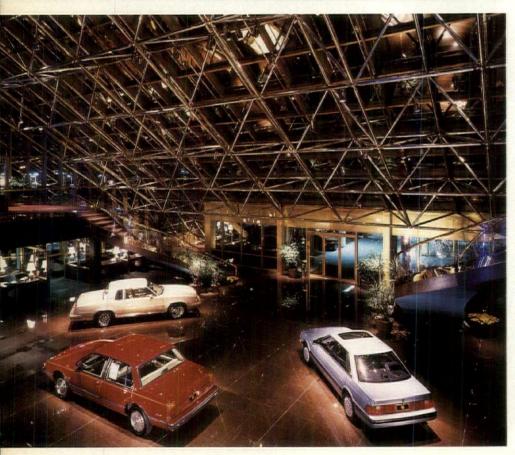


© 1988 Philips Lighting Co. - A Division of North American Philips Corp.

Accent lights animate autos in Texas showroom







"Sparkle catches the eye," says lighting designer Craig Roeder. "The more everything sparkles, the better the chance the merchandise will sell." Accent lighting, bouncing off specular glass, polished granite, and brass surfaces gives new automobiles in this showroom so much sparkle the eye can hardly resist them.

"The design dictated that they show only five cars in this showroom,' Roeder says. "I wanted to isolate each car with light, so that it would really pop up, which took about eight or ten lights per car. You can also see that the problem of maintaining 150 footcandles on each car was compounded by the fact that light fixtures had to be clamped onto a space frame that sloped from 0 to 62 feet." To compensate for the various distances between the cars and the fixtures on the space frame, Roeder used five different lamps, ranging from 120-watt 6-volt PAR 64 very narrow spots to 150-watt 120-volt PAR 38 spots.

Roeder also evened out differences in footcandles caused by the differing lamp types and their heights and provided the cars with animation by using an automated preset dimming system. All of these lights are on a cross-fader, which works on a 60-second cycle. "Without the customers really noticing it," says Roeder, "the light on the cars is constantly changing. We've lit their tops and sides so that at times the tops are going darker and the sides lighter; at other times the opposite is slowly happening. It's my feeling that it really creates some excitement and drama - it makes the cars look like they're alive." Other 120-watt PAR 64 very narrow spots within the space frame are focused on the space frame itself, and are also connected to the cross-fader to animate the entire showroom.

Purple neon coves can be seen for miles through glass roof (top). Light tubes between slabs of granite (middle) give showroom floor extra sparkle. PAR lamps in fixtures clamped to space frame isolate autos in islands of light.

Project: Henry Butts Oldsmobile **Location:** Dallas, Texas **Architect:** J. Roger Crownrich and Associates, Inc.

Interior Designer: Jerry D. Oden Interiors; Don Roth, project manager **Lighting Designer:** Craig A. Roeder and Associates, Inc.; Bob Oakes, project manager

Photos: Robt. Ames Cook

The dimming system also extends lamp life dramatically. Even so, Roeder has persuaded his clients to have the showroom completely relamped every two years. The light fixtures themselves are held to the space frame by clamps custom made for this project. Both the clamps and the fixtures were brass-plated to match the space frame.

Roeder had low-voltage tube lighting installed in the joints between slabs of polished Texas granite flooring. "Too often tube lighting is used on 2- or 6- or 12-inch centers. We drew every lamp that went into the floor, and placed them totally at random — some of them are as far apart as 6 or 8 feet. There's another nice thing about their being placed in a random fashion. If one of the lamps burns out in the next 10 years, nobody's going to notice. And, the lights chase. So the floor, being a completely specular surface itself, just sparkles."

Client identification was one of the reasons for using the purple neon concealed in coves next to the elevator shaft: it can be seen through the glass roof of the showroom up to 10 miles away. "We chose that color because we wanted something that would be really elegant. We put off making a decision on the color until the very last minute, which was fortunate. The purple neon is brand new, and our vendor had just gotten it in from Europe that very week."

Roeder's lighting design also shows that control is the key to energyefficient incandescent accent lighting - putting the light exactly where it is needed. Many lighting designers consider incandescent lighting to be wasteful in comparison with the efficacy of high intensity discharge sources, but HID sources are not as easy to control, either optically or with dimming systems. The final energy tab for lighting this 25,000square-foot showroom is 1.2 watts per square foot, competitive with many high intensity discharge schemes. On clear days, electric lighting is unneeded in the daylit atrium.

"We're all looking for a little magic in life," says Roeder. "Anytime a lighting designer can augment that by making something sparkle or glimmer or have a beautiful sheen — whether it's a fabric or diamonds or whatever it is — and we create that magic, I think it helps make the products sell." — Charles Linn, AIA

-Charles Lini, AlA

For product information, see Manufacturers on page 62. Products for track and accent lighting are displayed on pages 14–17. For lamps and controls, see pages 52–58.



It's amazing how something so small can cause such a commotion.

Of course, the miniature, low-voltage track Starline Series from Luma, does a full size job. With an Outdoor Series offering the first track lighting for all-weather use. And the Avanti Series, a collection of superbly finished lamp styles suitable for any decor. Plus the Bare Lamp Series, advanced high tech designs.

Perhaps it's our unique 3-wire track system that allows for two 12-volt circuits which yield a maximum of 500 watts of power and run distances of up to

200 feet. Our complete range of transformers for applications such as remote, ceiling mount, recessed, outdoor, mono/duo



Or the extensive selection of louvers, barn doors, hood extensions and color filters.

But we don't think so.

People are simply amazed that we've been able to reduce this quality of advanced design and finish into fixtures small enough to accommodate the new low-voltage halogen lamps. Yet powerful enough to outperform the high-voltage big boys.

The new Starline Series, from Luma. Sometimes, being small is a very big deal. For more information please contact your local



lighting consultant, lighting fixture showroom or electrical wholesaler. For a free color poster write to Luma Lighting Industries, Inc.



CAT. #: TLA-23-V



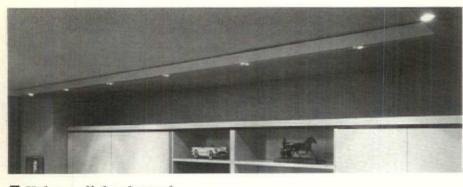
CAT. #: TLA-22

LOW-VOLTAGE TRACK LIGHTING





Track and accent lighting



Halogen light channel

Starfire Lighting's Techtrac is a compact 2-inch-square aluminum channel system with MR11 lamps in recessed miniature gimbal housings that allow precise beam adjustment at almost any desired angle. Miniature low-voltage transformers are built into the channel. Standard lamp spacings are 12 and 24 inches on center. Channels come in standard and custom finishes and in lengths up to 8 feet, with connectors for longer runs or other configurations. Starfire Lighting, Inc., Jersey City, NJ.

Circle 60

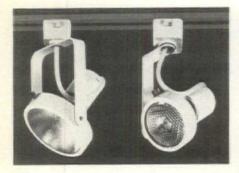


Merchandise lighting

Gim Metal Products' model 3521 surfacemounted accent and merchandising light uses single- and double-ended 70-watt metal halide lamps. The rotatable, diecast unit has a vertical adjustment arc of 110 degrees. The unassembled unit is sold for OEM use with all necessary hardware; barn doors and colored finishes are optional. Gim Metal Products, Carle Place, NY.

Circle 61

Circle 62



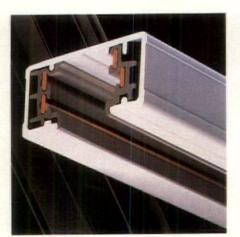
Gimbal ring lamp holders The Gimbal Ring Series of lamp holders from Con-Tech Lighting features an open style for a high-tech look, excellent heat dissipation, and full horizontal and vertical rotation. Line-voltage and lowvoltage models are available. Con-Tech Lighting, Northbrook, IL.



Universal lamp holders

Con-Tech Lighting offers HyTech Universal Series lamp holders and shades for track systems. The CTL1600 lamp holders can be used with a lamp alone or with a variety of add-on shades, including a silver bowl reflector and baffled models for R and PAR lamps. The lamp holder includes an adjustable socket for proper seating of various lamps. Con-Tech Lighting, Northbrook, IL.

Circle 63



Two-circuit track The Halo-2 two-circuit track provides two separate 20-ampere circuits in a miniature ¹¹/₁₆- by 1³/₈-inch profile. Each independently switched and dimmed circuit can accommodate 2400 watts. Connectors push into the ends of the track sections, eliminating the need for splicing. Halo Lighting, Elk Grove Village, IL. **Circle 64**



Track, accessories

Lighting Services Inc. offers accessories for its MR Series track and task lighting fixtures: glass color filters, colored swivel caps, light beam conditioners, louvers, light-blocking screens, and UVblocking safety glass. The die-cast fixtures use MR16 lamps of all beam spreads. Track versions come with or without integral transformers. Lighting Services Inc., Stony Point, NY.





Picture light

Pictura halogen luminaires from CSL Lighting are designed to illuminate works of art 6 inches to 32 inches wide. They come with one to four 7-watt halogen lamps for works of various widths. A hidden pivoting slot mechanism adjusts the beam; contemporary or traditional bracket arms rotate 110 degrees. CSL Lighting, Inc., Los Angeles, CA. **Circle 66**



Directional track fixture

Norbert Belfer Lighting offers a stemmounted version of the model 5200 Primo Hi Beam, which comes supplied with Osram's PAR 36 metal reflector halogen lamp. The directional track unit requires a remote 12-volt transformer. Individual and multiple units for mounting on tracks or canopies and units for raceway mounting are available. Norbert Belfer Lighting, Ocean, NJ. **Circle 67**



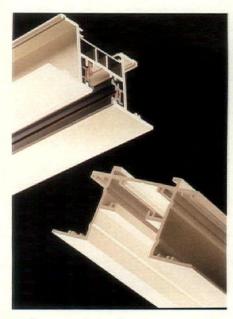
Wall-washing downlight

Lithonia Downlighting's Gotham R series adjustable eyelid wall washer produces controlled lighting on vertical surfaces with an R40 lamp and a kicker reflector. The 6-inch aperture has a white aluminum trim and a black microgroove baffle. A semispecular Alzak reflector attaches to a rotatable die-cast eyelid that extends below the ceiling plane. Lithonia Downlighting, division of Lithonia Lighting, Conyers, GA.



Spotlight

Lighting Services' 280 Series compact, specification-grade fixture for 50- and 75-watt screw-base PAR 30 halogen lamps has a standard track fitting and a range of mounting devices. Features include a self-locking steel yoke, an on-off switch on most models, and clips for a variety of accessories. It is suitable for applications requiring a moderateintensity spot or flood beam. Lighting Services Inc., Stony Point, NY. **Circle 69**



Recessed tracks

Halo Lighting offers two recessed track versions. The Recessed Raceway Power Trac (right) for plasterboard ceilings with straight runs has a live-end connector and a straight connector that links straight track sections. The Recessed Power Trac housing (left) encloses miniature one- and two-circuit track sections and is compatible with standard Tgrid and most other ceiling materials. It accommodates straight runs and has a series of connectors for other configurations. Halo Lighting, Elk Grove Village, IL. **Circle 70** The Beauty of Track Lighting... without the Beasts!

RECESSED • TRAKTM From ALKCO

Track systems for accent lighting used to mean that the most noticeable (and distracting) accents were the track fixtures themselves!

Those days are over. New Recessed • Trak™ fits flush into any ceiling system...turns corners, runs to any length you desire. It tracks without distraction!

Totally concealed inside the housing, lightmodules can be placed anywhere along the track, rotated 380° and adjusted up to 40° from vertical.

You can pinspot, accent, highlight or flood, Optional lenses and filters produce special effects and vivid colors, Twin circuits allow individual control of lightmodules for maximum flexibility.

Miniaturized quartz halogen lamps emit true white light with exceptional color rendering.

Now, when your accent lighting message isn't the system itself, your medium most surely should be Recessed• Trak, from Alkco.

For your copy of Alkco's new condensed Space Enhancers catalog, write to the address below.

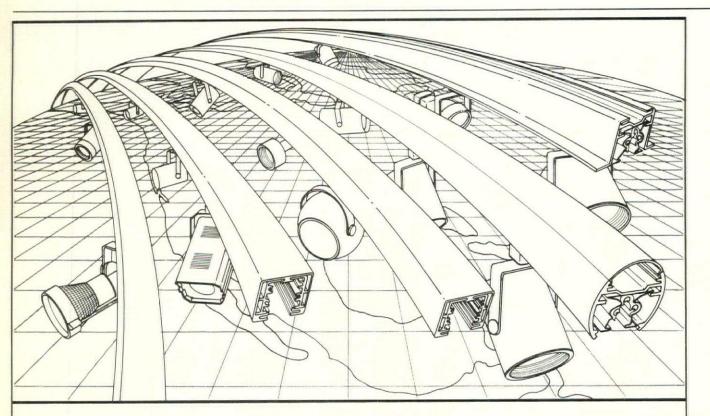




ALKCO A SUBSIDIARY OF JAC JACOBSEN INDUSTRIES, INC. 11500 West Melrose Avenue, Franklin Park, Illinois 60131 (312) 451-0700

16







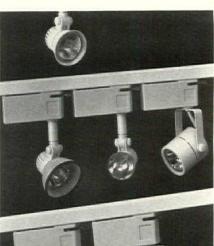
NL CORPORATION 14901 BROADWAY CLEVELAND, OHIO 44137 (216) 662-2080 FAX: (216) 662-9069

Fashions the world around us. 20, 30 & 60 Amp Accentrak Systems.



MR16 track fixture

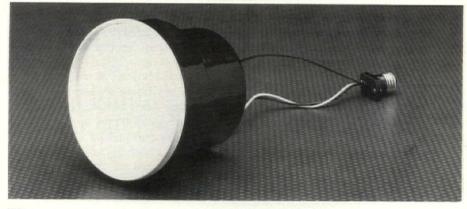
The ventilated construction of the Siena track fixture from Luma Lighting keeps operating temperatures low by causing convection currents to flow over the lamp and release heat. Its extruded aluminum body functions as a heat sink; its two-circuit track allows for remote transformer placement. It is the smallest 75-watt MR16 track fixture available, according to the manufacturer. Luma Lighting Industries, Inc., Orange, CA. **Circle 71**





Low-voltage track components

Max Groups offer a complete line of compact, lightweight, low-voltage track lighting components and fixtures for 12-volt MRI6 lamps. More than 20 styles are included in the line, which features built-in solid-state transformers. The fixtures attach to standard tracks. They come in matte white and matte black finishes. Max Groups, Burlingame, CA. **Circle 72**

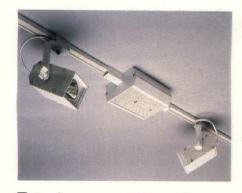


Track light retrofit

The X18 Track Light Retrofit fixture from Scientific Component Systems fits housings 5¹/₈ inches in diameter and larger and accepts two compact fluorescent lamps. The aluminum housing comes in a choice of standard and custom finishes;

the polycarbonate diffusers come in three colors. Scientific Component Systems, Anaheim, CA.

Circle 73

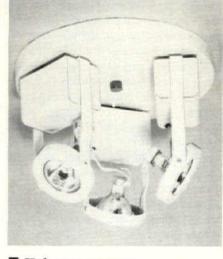


■ Surface-mounted transformer A slim, surface-mounted transformer for Luma Lighting's two-circuit low-voltage track system has fuses that protect each circuit from overloads. The toroidally wound transformer is silent, according to the manufacturer, and comes in 150- and 300-watt versions. Luma Lighting Industries, Inc., Orange, CA. Circle 74

Drafting board luminaire

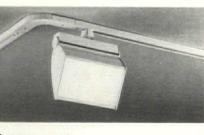
Waldmann Lighting's ZLS drafting board luminaire lights a board from edge to edge, while permitting unrestricted carriage movement. Its counterbalancing system and adjustable head keep the light where the user positions it, regardless of board inclination. Options include a parabolic louver instead of the standard prismatic diffuser. Waldmann Lighting Company, Wheeling, IL.

Circle 75



Halogen accents

Roxter's compact low-voltage sealedbeam fixture swivels a full 360 degrees and has individual transformers housed in each lamp holder. The 8½-inch-high fixture comes in single, double, and triple lamp models with canopy diameters from 5 to 10 inches. A 50-watt halogen spot lamp is standard; 25- and 50-watt lamps in other beam spreads are optional. Roxter Mfg. Corp., Long Island City, NY. **Circle 76**



HID track

Guth Lighting's Q-Trak fixtures accommodate 150-watt metal halide lamps. They can be moved laterally to any location along their track, swiveled 60 degrees, and locked into position. Their extruded Alzak reflectors have computerpositioned prisms for uniform light distribution free of scallops, striations, and hot spots, according to the manufacturer. Guth Lighting, St. Louis, MO. Circle 77



■ Recessed low-voltage fixture The Recessed Orb II from the Alesco line of Sylvan Designs is a miniature recessed luminaire for 20- and 50-watt halogen lamps. It measures less than 6 inches in diameter, including trim ring. The luminaire can be rotated 360 degrees horizontally, adjusted as much as 30 degrees from vertical, and locked in place. Sylvan Designs, Inc., Northridge, CA. Circle 78



Ambient accent lighting

Lightolier's modular ADA ambient, decorative, and accent lighting system allows users to combine modules with various light sources into rectangular, circular, or zigzag patterns. The system's linear segments, arcs, and intercepts join in a variety of configurations. An interlock mechanism ensures a hairline seam between modules. Buyers can choose from fluorescent, low-voltage MR16, glitter light, and neon sources. Lightolier, Secaucus, NJ.

Circle 79



Low-voltage fixture

CSL Lighting's Miniatura low-voltage fixtures are designed especially for MR11 halogen lamps. The 1½-inch-diameter solid aluminum fixtures range from 5¾ to 7 inches in length. The series includes ceiling fixtures, broad spots, and framing and iris projectors. CSL Lighting, Inc., Los Angeles, CA. Circle 102



■ Suspended track system Flos offers Arteluce's Expanded Line, a low-voltage suspended track system designed by Perry A. King and Santiago Miranda. Each narrow aluminum track hangs from two stainless-steel cables and is powered by one or two surfacemounted or remote transformers. Four fixture styles are available to mix or match for MR16 and miniature bipin quartz lamps. Tracks come in two lengths with outlets for four or six fixtures. Flos Incorporated, Huntington Station, NY. Circle 103



HID display light

Amerlux offers the SP 600, a highperformance spotlight/floodlight with an integral metal shield and safety glass that prevents emission of ultraviolet rays. The fixture uses Osram HQI-TS metal halide lamps for exceptional color rendering and for lamp life substantially longer than that of incandescent sources. Amerlux, Fairfield, NJ. ■ Circle 104

onoic io4

DECORATIVE LUMINAIRES Handmade luminaires relax, stimulate diners







The Buckhead Diner, which features eight custom decorative luminaire designs, offers a stimulating refuge. A modified bood ornament crowns the sconce at left.

Project: The Buckhead Diner **Location:** Atlanta, Georgia **Client:** Buckhead Life Restaurant Group

Architect: Patrick Kuleto, Kuleto Consulting and Design Lighting Consultant: Pam Morris

Photos: © 1988 E. Alan McGee/ Atlanta People may tolerate harsh lighting in a post office or bank, but customers visit a full-service restaurant to enjoy the experience. "If it's not a really special space, one that meets the needs of a human being, it doesn't work," says Pam Morris. "Owners get the feedback really quickly: they go bankrupt."

Morris was lighting consultant for Atlanta's Buckhead Diner, which offers gourmet dining in a comfortable, classy environment. The old roadside diners never looked like this. Inspired by an Orient Express luxury rail car, the opulent Buckhead cost \$1.5 million to build. One patron told a *New York Times* reporter, "This place appeals to my lower-class roots on one level and my six-figure income on another."

Architect Pat Kuleto points out that the Buckhead is not a gimmicky contrivance. "It feels real," he says. Handmade decorative luminaires — in eight commissioned custom designs — contribute to the atmosphere of quality.

"Lighting is part of all the places where people find themselves in love or in a romantic mood," Kuleto explains. "Think of a sunset, for example, or a cabin with a fireplace." He intended the Buckhead to be a romantic place where people feel secure, yet transported to a special and exciting environment.

Kuleto calls his approach *apparent lighting.* Unobtrusive, recessed lowvoltage downlights provide crisp, clean task light where it's needed to navigate aisles, read the menu, and see the food. To the customers, however, elegant decorative fixtures appear to be the light sources.

"Decorative fixtures have a presence," says Morris. "They are very noticeable, and people think they light the room. Yet if these fixtures were actually turned up to the brightness required to do that, their artistic quality would be washed out.

"I work with the feeling that light can produce," she continues. "A lot of times, a design will stumble, alternating between usefulness and fantasy. Or, it tries to balance the two artificially — trying to make an artistic light useful in a way that ruins the artistry, or to make a useful light artistic in a way that really is cluttery and distracting. A considerable amount of sensitivity is required to create a harmonious balance. It's not merely a simple formula with a working light and a mood light.

"Often when people are creating a mood, they just think in terms of dimming the lights. That would be like playing the same music all the time, just at different volumes," Morris says. The materials, shape, and color of a decorative luminaire all help to evoke feelings that are appropriate to a specific setting.

For the Buckhead, Morris personally designed the booth sconces. Kuleto recalls that when he commissioned them, he specified only approximate physical dimensions and a lighting effect. "I asked her to make something vertical," he says, "a soft, sleek fixture with a warm glow that would reflect off people's faces and light up the wood. I had no idea what she was going to come up with."

Morris chose to modify and cast a vintage 1940s Pontiac hood ornament for the sconce. "The old diners were drive-up restaurants that had a vital relationship with automobiles, so the hood ornament vestige is particularly appropriate," she says.

A narrow vertical channel and a plastic insert pierced the original ornament. Morris enlarged the channel, then inserted a patterned piece of dichroic acrylic that transmits light from inside the sconce. The photo shown here falls short of capturing the effect: "The insert is mercurochrome orange on the lit edge and hot pink from the side," says Morris.

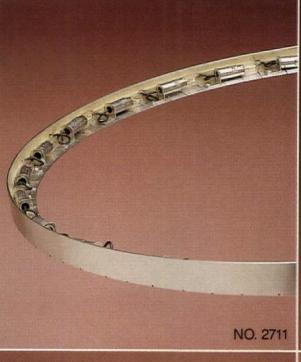
To blush the white glass diffuser with an apricot tint, Morris placed a pink backplate behind the flameshaped chamber. The 130-volt linear incandescent lamp inside operates on 120-volt power for long life. Although turned up to full output in the photos, the lamp is normally dimmed for a gentle transition from the shadowy base to the brighter upper body. A flame-shaped extension of light flares through an open heat vent at the top, enhancing the warmth of the booth's hand-rubbed cherry wood.

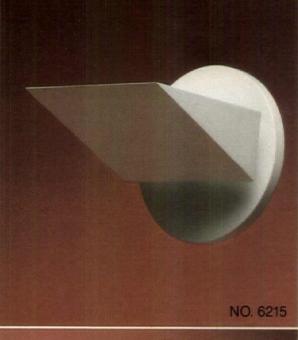
"Pat's restaurants are as trendy as you can get in terms of the people they attract, and yet they're not trendy in appearance," Morris says. "They have a timeless quality; they're institutions. People need a place to return to — a place to find excitement, but also comfort and rest."

-Gareth Fenley

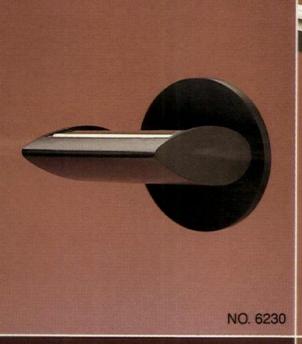
For product information, see Manufacturers on page 62. Decorative luminaires are displayed on pages 24–29.

norbert belfer lighting





gucturer





orbert Belfer Lighting, the architectural lighting designers source for specification grade linear and specialty lighting . . . products that curve, twist and flex . . . that pinpoint, highlight and accent.

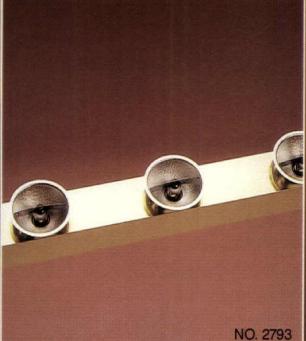
- Low voltage lighting products
- Cove and valance light strips
- Marguee and facade accents
- Halogen wall and ceiling luminaires

We offer staff engineers for technical and planning assistance and a reputation for timely delivery, quality workmanship and budget cost control.

We invite your inquiry. Call or write.

norbert belfer lighting

1703 Valley Road, Ocean, NJ 07712 FAX (201) 493-2941 • (201) 493-2666





GE IS THE LIGHT THAT WILL RESHAPE THE WAY

\$2

-



GE BIAX lamps make everybody and everything, including operating costs, look better. It won't take you long to discover that with GE BIAX[™] 40-watt lamps, the design possibilities are endless.

Because they're only 22.5 inches long, yet deliver all the light of standard four-foot fluorescents, you can design with smaller fixtures. And that means more attractive ceilings.

And because BIAX lamps make colors look richer and more vibrant than standard fluores-

YOU DESIGN LIGHTING.

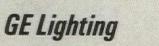
cents can, the lighting you design will make the environment and the people who work in it more attractive.

Equally attractive is the amount your clients will save on operating costs. GE BIAX 40-watt lamps, you see, last up to 8,000 hours longer than conventional U-shaped tubes. And 13 times longer than incandescents.

Feast your imagination on the endless pos-

sibilities of the GE BIAX family of lamps. For more product or application information, call your local GE Lighting Specialist. Or call the GE Lighting Information Center at 1-216-266-3900.

GE is Light.

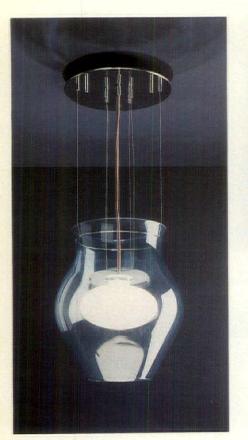


SHOWCASE Decorative luminaires



Marquee lights

Sunset Strip marquee lights from New Horizons Lighting come in straight and curved extruded aluminum strips for outlining indoor and outdoor features. They come in two sizes and a variety of finishes for Edison- or candelabra-base



Blown glass pendant

VeArt's Sorpresa pendant of transparent aquamarine blown glass has a white opaline glass centerpiece and hangs on chrome cables from a chrome-finished canopy. The 14½-inch-diameter, 34-inch-long luminaire takes one 150- or 250-watt E14 halogen lamp. VeArt International Inc., Pte. Claire, Quebec, Canada. **Circle 81** incandescent lamps. Versions for wedgebase and compact fluorescent lamps can be custom ordered. New Horizons Lighting, Inc., Palm City, FL.

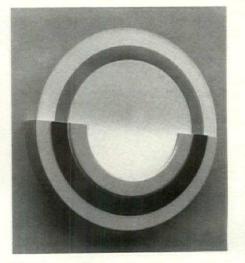
Circle 80



Alabaster pendant

Gary Cross designed the Cirrus pendant from Boyd Lighting to match a wall bracket. Each 17-inch-diameter pendant is individually quarried and turned from solid natural white alabaster and accommodates two 75-watt incandescent lamps. The brass stem is available in three lengths and four finishes. Boyd Lighting Company, San Francisco, CA. **Circle 82**

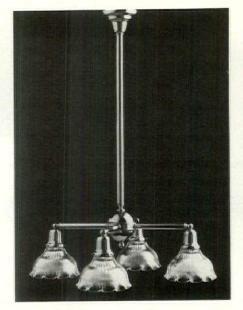
Decorative pendant lamp Tech Lighting offers the Floppi pendant lamp from the Foscarini line of floor, task, wall, and pendant lamps. It has a 25½-inch-diameter frosted glass disk with a blown and ground glass diffuser in blue or gray. Metal parts are lacquered black or white. The lamp accommodates a 300- or 500-watt halogen lamp. Matching wall- and ceiling-mounted models are available. Tech Lighting, Chicago, IL. **Circle 83**



Decorative wall sconce

The G9000 wall sconce from Gross Chandelier is 12 inches in diameter, projects 2¾ inches from the wall, and takes two 9-watt compact fluorescent lamps. Its metal frame and trim support a glass disk with a pattern of frosted and clear concentric circles. Gross Chandelier Company, St. Louis, MO.

Circle 84



Stem-mounted luminaire

The Santa Barbara from Brass Light Gallery's Continental Collection is a stem-mounted solid brass luminaire with four prismatic shades. It takes four incandescent lamps up to 150 watts each; two- and three-lamp versions are available, as are other widths, glass shades, and various finishes. Brass Light Gallery, Milwaukee, WI.

Circle 85



Wall sconce

Art Directions offers a solid brass wall sconce that takes a 60-watt incandescent lamp. The sconce shown here has a clear ribbed glass shade; many other shades and finishes are available. Art Directions, St. Louis, MO.

Circle 86



Wall sconces

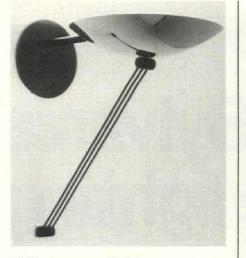
Gross Chandelier has introduced a series of wall sconces as companion pieces to the series 12000 chandeliers with inverted acrylic diffusers. The sconces come in models for incandescent and compact fluorescent lamps. Gross Chandelier Company, St. Louis, MO. **Circle 87**





Solid brass chandelier

Rejuvenation Lamp & Fixture offers the Alameda four-arm chandelier with a design based on motifs from the Arts and Crafts Movement. It is available in seven authentic metal finishes; its art glass lantern panels come in several colors. Rejuvenation Lamp & Fixture Company, Portland, OR. **Circle 88**



Designer uplight

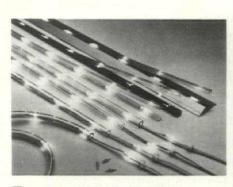
Three painted metal stems and a canopy support a metal dish to form the Arkos wall luminaire from Tech Lighting, which is 12 inches high and projects 12 inches from the wall. The light source is a 300or 500-watt T3 halogen lamp. Finishes are combinations of black, white, chrome, and brass. Tech Lighting, Chicago, IL.

Circle 89



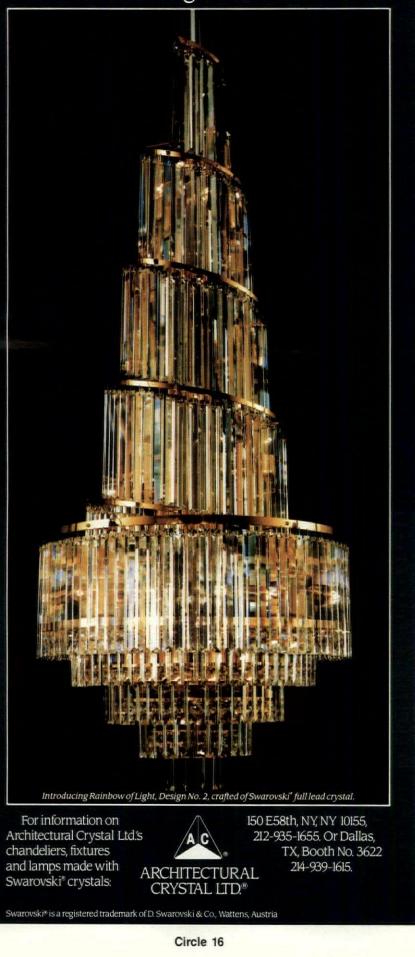
Wall-mounted luminaire

Brass Light Gallery's Sherman Park double-lamp wall sconce is part of the Goldenrod Collection of luminaires based on original Arts and Crafts, Mission, and Prairie designs. The sconce comes in a variety of finishes, can be mounted up or down, and takes two incandescent lamps up to 150 watts each. A matching singlelamp model is available. Brass Light Gallery, Milwaukee, WI. **Circle 90**

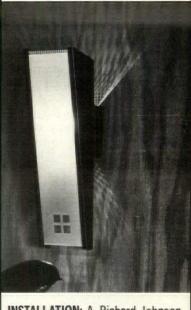


■ Relampable light tubes Users can replace the miniature incandescent lamps in E-Z Streams light tubes from Sylvan Designs by sliding the 12-volt light string out of its flexible channel or removing the clear plastic cover from the rigid channels to expose individual sockets. Options include stan-

A reminder that all great works of art do not hang on the wall.



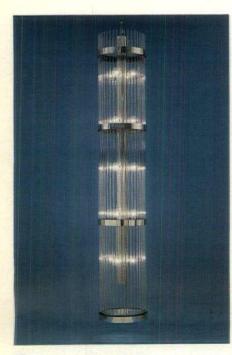
Custom lighting is more than making alterations in a stock item. It is the skilled interpretation of design which retains the integrity of the original intent. That skill comes through training, discipline and commitment at Appleton Lamplighter.



INSTALLATION: A. Richard Johnson Nashville, TN ARCHITECT & DESIGN: Manvel Zeitlin Nashville, TN APPLETON Lamplichter.

P.O. Box 1434 • Appleton, Wisconsin 54913 FAX 414-739-1656 Phone 414-739-9001

dard and custom on-center lamp spacing, colored and frosted tubes, and tubes and extrusions in various shapes and sizes. Sylvan Designs, Inc., Northridge, CA. Circle 91



Custom chandelier

Appleton Lamplighter manufactures custom luminaires such as this 12-foot chandelier made for the World Computer Center in Auburn Heights, Michigan. Tiers of 4-foot-long, ¾-inch-diameter glass rods are held together with polished chrome bands. A highly polished aluminum tube hanging down through the center supports 20 G40 lamps. Appleton Lamplighter, Appleton, WI.

Glass-shaded luminaires Gemma Studios offers handcrafted incandescent luminaires from the Library/ Torch series. Their multifaceted shades of domestic and European glass are assembled by the Tiffany copper foil technique. Bases and fittings are of pure copper and brass. Gemma Studios, Northampton, MA.

Once again Sylvania the lighting

Introducing Metalarc[®] 100: The only 100 watt metal halide lamp that will operate up, down and any position in between.

Up until now, if you wanted to take advantage of metal halide technology in a compact 100 watt lamp, you'd find yourself in a tough position-straight up and down. Sylvania engineers just hated limiting your lighting options, so they put their heads together and came up with a universal Metalarc 100 lamp. It can light anywhichway. So suddenly 100 watt Metalarc lamps can go where less efficient 200, 300, or even 500 watt incandescents went before. They can replace mercury or sodium lamps and get you all the advantages of metal halide lighting. And the advantages are many. Metalarc and Super Metalarc lamps produce full color spectrum light. So when you have anything where color quality and fidelity are important, they're the only way to light. Outdoors, these lamps have a lot of things going for them. For example, sodium lighting lacks blue in the spectrum. So in a parking lot, a blue car is harder to see. From a safety standpoint Metalarc lighting does a better job on all colors.

26

engineers have turned world upside down.

How you make a Big Mac[®] look even better: McDonald's in St. Louis is using Metalarc 100 lamps. Now that's food for thought.

The advantages of Metalarc lighting made good sense to the folks at McDonald's in St. Louis. They wanted to increase store visibility and create a safe, inviting look. Lighting played a major role in the project. Southco

Lighting of St. Louis designed McDonald's new soffit light fixtures specifically around the 100 watt Metalarc lamp. Their decision was based on a full menu of benefits—from color rendering to energy efficiency to low maintenance.

Inside or out, stores find that the colors you get with Metalarc lamps are warm and vivid. And because a Metalarc lamp is a

Stop unsightly yellowing.

point source, the light can be better controlled and directed. Which is why Metalarc lamps are just the ticket for putting merchandise in the best possible light. In fact, they are preferred for commercial interiors of all kinds. Not only for color performance but also for energy efficiency.

At sports stadiums and arenas, Metalarc lighting can make it a whole new ball game, with an

abundance of natural looking white light that enhances color telecasts, improves safety, and helps security.

We offer more energy saving lighting and best of all it's made right here.

The fact is that Sylvania engineers have turned the lighting world upside down with more energy saving lamps than anyone



else. So if you're concerned with the bottom line, turn to us. Or if you want to be seen in the best possible light, talk to us. As a matter of fact, if you're looking for the latest in lighting advances, call us. Our obsession with lighting can only help you look better.

Call us at 1-800-LIGHTBULB or contact your Sylvania Independent Electrical Distributor.





■ Linear incandescent fixtures Alkco's Lincandescent fixtures for linear incandescent lamps come in three finishes with etched or hand-polished specular surfaces. The linear light source is mounted on a continuous 45-degree beveled platform and operates without the hum associated with fluorescent lamps. Triangular side reflectors can be added to conceal electrical boxes. Alkco, Franklin Park, IL. Circle 94



Wall sconce

The MA-C2 20-inch wall sconce from Odyssey Illuminations has Art Deco styling and matches the company's MA chandelier. A molded acrylic lens shields an incandescent or a compact fluorescent lamp. The housing can be painted one of several standard metallic finishes or a combination of colors. Odyssey Illuminations, division of RWL Corporation, New Haven, CT.

Circle 95



Alabaster wall bracket

Boyd Lighting offers an alabaster version of the Brayton Wall Bracket; it features a linear armature with a translucent cylinder of Spanish alabaster. The optical system has an asymmetric reflector and a Pyrex shield. The bracket takes one RSC-base halogen lamp up to 300 watts. Boyd Lighting Company, San Francisco, CA. **Circle 96**





Uplight

The Circon uplight from Norbert Belfer Lighting is an 8-inch-diameter hemisphere of 1/8-inch-thick spun aluminum. The luminaire accommodates a 150-watt halogen lamp. Norbert Belfer Lighting, Ocean, NJ. Circle 97



Brass wall sconce

The Jewell solid brass oval wall sconce from Rejuvenation Lamp & Fixture comes in seven finishes and a choice of shades. The 9-inch-high, 5-inch-wide sconce projects 7 inches from the wall and accepts a 60-watt incandescent lamp. Rejuvenation Lamp & Fixture Company, Portland, OR.



Flush-mount luminaire Fredrick Ramond offers the model 305-FM, a 10-inch-diameter, 81/2-inchhigh flush-mount luminaire from the Riva collection. The acrylic disk comes in clear, frosted, white, and a laminated version of clear and opaque white panels that transmits a neonlike blue or red

29

glow from its edges. The luminaire accepts a PAR 38 lamp. Fredrick Ramond, Inc., Cerritos, CA. Circle 99



Torchere, wall bracket

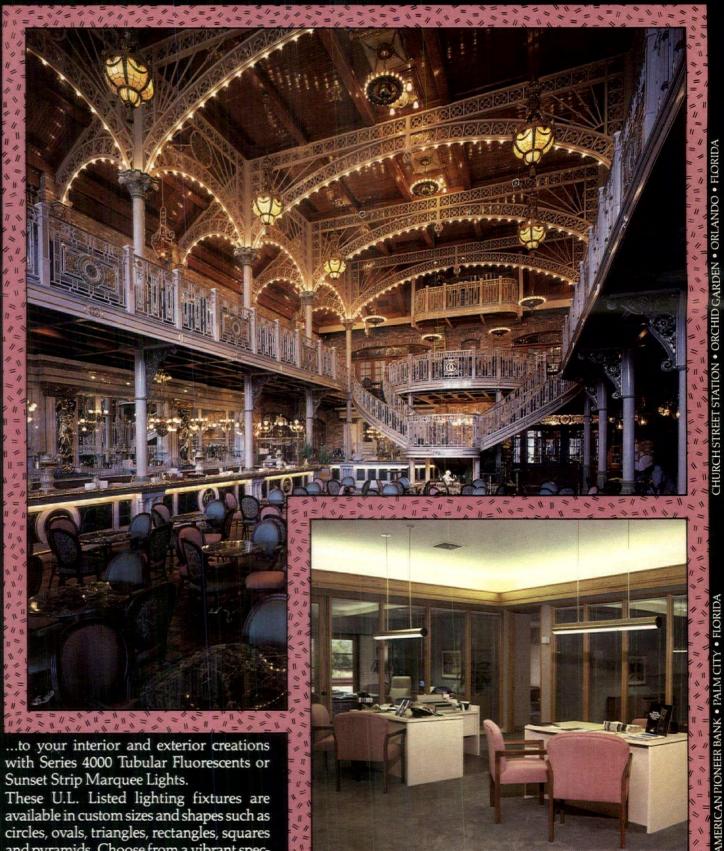
Boyd Lighting's Trigon series includes a wall bracket and a torchere designed by Doyle Crosby that feature triangular porcelain and aluminum castings. The 12 ¼-inch glazed porcelain shade comes in four finishes, the textured aluminum parts in two finishes. The torchere has a full-range cord line dimmer and accepts a 150-watt halogen lamp; the bracket accepts an incandescent or halogen lamp. Boyd Lighting Company, San Francisco, CA. Circle 100



Pendant luminaire

The model 355 pendant luminaire from Fredrick Ramond's Riva collection features a 22-inch-diameter acrylic disk in a choice of three solid colors and a laminated version that has the appearance of a blue or red neon edge. It comes in three finishes and takes three 50-watt MR16 halogen lamps. Fredrick Ramond, Inc., Cerritos, CA. Circle 101

ADD NEW DIMENSION



...to your interior and exterior creations with Series 4000 Tubular Fluorescents or Sunset Strip Marquee Lights.

These U.L. Listed lighting fixtures are available in custom sizes and shapes such as circles, ovals, triangles, rectangles, squares and pyramids. Choose from a vibrant spectrum of colors. Finishes include paint, powder coating, natural, Anodized Chrome or Anodized Brass.

At New Horizons Lighting, Inc. we take a futuristic approach to lighting where usage is "Limited Only By Your Imagination."

RIŹONS LIGHTING, INC. 3397 SW 42ND AVE. PALM CITY, FL 34990 (407)283-7772 FAX:407 283 1744 Circle 23

> // 11 -

* 11 *

AMBIENT LIGHTING SYSTEMS

Lighting design helps create '50s ambience in hotel







When extremely strong design elements are used to simulate an architectural epoch, appropriate lighting helps reinforce the illusion. Even simple ambient lighting, used in the right amount, can do the trick. Although a few relics of the 1950s remain — hourglass-shaped wall washers, and an original satelliteinspired light fixture — the Nevele Hotel lobby uses only spare washes of ambient light combined with judiciously placed cove lighting to evoke

the period. Built in the early 1900s, the hotel has been remodeled many times. Remnants of a major renovation in the 1950s provided some interesting elements — such as round ceiling recesses, sputnik chandeliers, and a kidney-shaped fountain — that inspired the architect to follow this period throughout the rest of the recent lobby renovation.

"The existing lobby was very chaotic," says architect Marc L'Italien. "Things had been added piece by

piece and year to year, and there was no continuity. Our first priority was to establish some common ground to link everything together. So, in tying everything together we decided to create a focal point of the lobby registration desk and increase the desk's perimeter area. That's where the serpentine form originated."

"When you walk into the space, the visual emphasis is on the reception area," says lighting designer Bill Schwinghammer. "We backlit the doors behind the desk, and we washed the front of the blond maple mailboxes

The lobby's focal point is the registration desk (top photo) with its serpentine form and increased area; the brass fascia (also bottom right) is blasted from behind by metal halide floodlights, a tribute to 1950s lighting. The refurbished sputnik chandelier is flanked by quatrefoilshaped columns washed by downlights (middle). Original wall washers relocated from elsewhere in the hotel add to the Nevele's low-key ambience.

Project: Nevele Hotel and Country Club

Location: Ellenville, New York Architect: Alan Buchsbaum Project Architect and Designer: Marc L'Italien

Project Coordinator: Corey Delany Lighting Designer: Johnson Schwinghammer, Inc.

Electrical Contractor: Herb Kaplan Photos: Elliott Kaufman and the fluted glass walls behind them with adjustable low-voltage downlights. The desk top is illuminated with them as well."

The designers wanted the brass fascia above the desk to look "starry and jet-age," Schwinghammer says, "but we didn't want the cost and maintenance problems of wiring up a lot of light bulbs. Instead, we just perforated it with hundreds of tiny holes, and blasted it from behind with five exterior metal halide floodlights. They don't use a lot of energy, they have a long lamp life, and they weren't expensive. We applied a scrim material to the back side of the fascia to diffuse the light and make the dots glow."

The existing columns in the lobby were replastered to achieve their current tapered quatrefoil form and painted aqua. "The form is outlined at the ceiling with concealed cold cathode. We used recessed PAR 36 spotlights to streak down the sides and emphasize the shape of the columns. These had to be retrofit-type fixtures that could be installed from below, so that we could install the fixtures without ripping out the existing ceiling."

There is an area of the ceiling between the columns that pops up, which was also a product of the 1950s renovation, but no fixture was hanging there. "We took the sputnik chandelier from another area in the hotel, had it cleaned and rewired, and hung it to fill the recess," says Schwinghammer. Elsewhere in the lobby was another existing teardropshaped recess in the ceiling, which had once been lit by cold cathode in a cove. But that had burned out long ago. "We thought it would be worth it to relamp the shape. It was painted the same turquoise blue as the columns, and a rather cool 4300 degree Kelvin tube was built into the cove to bring out that blue, which it does quite nicely." Elsewhere, refurbished up-down wall washers from the period dot the walls near seating groups.

"At night, the lighting really takes over the space and can display what we were really after," says L'Italien. "It has a very low-keyed kind of ambience. With the accent features punched out in a certain way, you really read them when you walk into the space, and you're really drawn to them." —C.L.

For product information, see Manufacturers on page 62. Products for ambient lighting applications are displayed on pages 34–37.

21st Century

lateral mode fiber optic lighting

You will find the Fiberstars Lighting System cost effective vs. conventional strip lighting products. The Light Box draws only 2.5 amps. It is U.L. listed for exposed environments. Installation is easy, and maintenance consists of changing one quartz halogen light bulb. Fiberstars takes lighting into the 21st century. For more information call today: 800-FBR-STRS.



47456 Fremont Blvd., Fremont, CA 94538 (415) 490-0719 FAX#: (415) 490-3247



Ambient lighting systems



Parabolic troffer

The Paramax fluorescent parabolic troffer from Lithonia Lighting comes in a choice of fixture and lamp sizes, number and depth of louver cells, louver finishes, air functions, and mounting configurations. The line includes a variety of recessed and surface-mounted models. Lithonia Lighting, Conyers, GA. **Circle 110**



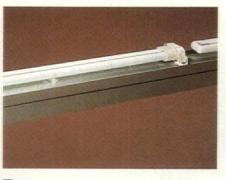
Wood-framed luminaires

Wood Classics fluorescent luminaires from H.E. Williams feature ¾-inch-thick solid oak and walnut frames with mitered corners and a hand-rubbed oil finish. Diffusing panels, louvers, and doorframes come in several styles and finishes. H.E. Williams, Inc., Carthage, MO. **Circle 111**



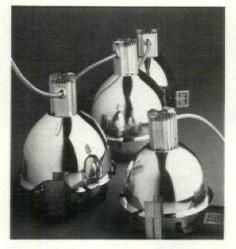
Wall-mount fluorescent

Woodline fixtures from Alkco integrate the beauty of natural oak with highquality indirect lighting. Models come with the wood shield angled for primarily indirect uplighting or for equally distributed up- and downlighting with optional separate switching. Alkco, Franklin Park, IL. **Circle 112**



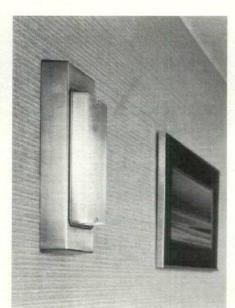
■ Compact fluorescent strip Norbert Belfer Lighting's compact fluorescent light strip features an extruded aluminum continuous raceway in factorymitered runs and custom lengths. The quiet, self-starting ballast is housed in the raceway; lift-up sockets allow for easy relamping. Three models are available to accommodate lamps from 18 to 39 watts. Norbert Belfer Lighting, Ocean, NJ. Circle 113 frames. They are available with flat or drop white acrylic diffusers and the miniparacube diffuser shown. Three sizes, each with several lighting configurations, are available. Brodwax Lighting, Island Park, NY.

Circle 115



Incandescent downlights

Perfectite's incandescent downlights have a spun aluminum aperture collar attached to a specular Alzak reflector. A die-cast frame supports the reflector-collar assembly. The collar houses a one-piece specular reflector and cone trim for NQMEA units or a one-piece matte black multigroove baffle and trim for NQMRB units. Perfectite Company, Cleveland, OH. **Circle 116**



Security light

The model 3384 die-cast security light from Gim Metal Products has separate lamp, ballast, and igniter compartments and a vandal-resistant, injection-molded polycarbonate lens. Models are made for compact fluorescent, high pressure sodium, and low pressure sodium lamps. The luminaire can be wall- or ceilingmounted; it is sold unassembled with all necessary hardware for OEM use. Gim Metal Products, Inc., Carle Place, NY. **Circle 117**



Designer fluorescents

Metalux Lighting has introduced the Sierra Series of surface-mounted designer fluorescent lighting fixtures for residential and commercial applications. The manufacturer is merchandising the fixtures with advanced, high color rendering lamps. Buyers can choose from five sizes, seven designs, and 11 finishes. Metalux Lighting, Americus, GA. **Circle 118**



Pendant

A simple pendant from Art Directions accommodates a 100-watt incandescent A lamp. In addition to the opal translucent globe shown here, various shade styles, finishes, and lengths are available. Art Directions, St. Louis, MO. **Circle 119**

Wide-Lite's AisleLyter HID luminaire for warehouse aisles has a four-position field-adjustable lamp socket for tailoring



■ Portable HID uplights SPI Lighting's SPD portable HID indirect luminaires are 14½-inch-high cubes with rounded corners and either rubber feet (for flat surfaces) or mounting brackets (for office panels). They have multifaceted specular reflectors for symmetrical or asymmetrical distribution. SPI Lighting Inc., Mequon, WI. Circle 114



■ Fluorescent luminaires Brodwax Lighting's Venicianaire fluorescent luminaires have lacquered wood

35

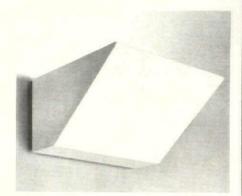
light patterns to various aisle widths and ceiling heights. Its optical assembly provides vertical illumination and minimizes glare; auxiliary kick-blade reflectors direct light up and reduce dark scallops between luminaires. Options include switching ballasts and motion detectors. Wide-Lite. San Marcos, TX. **Circle 120**



Tubular fluorescents

Circle 121

New Horizons Lighting offers the Series 4000 tubular fluorescent system in sizes from 2 to 9 inches across and in six custom-extruded shapes. Versions are available for direct, indirect, and combination direct-indirect lighting; some also have tracks. They can be mounted on walls or suspended on stems or cables. New Horizons Lighting, Inc., Palm City, FL.



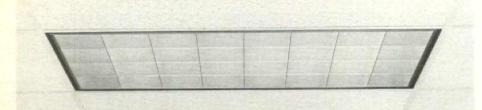
■ Indirect lighting sconce Elliptipar's Ensconce lighting line now includes models for 250- and 400-watt metal halide lamps with remote or integral ballasts in addition to those for halogen and double-ended metal halide lamps. The module features an asymmetric reflector that provides a visually even wash of light across a surface. It lets designers provide indirect lighting from a wall sconce, even at ceiling heights of 10 feet or more. Elliptipar, West Haven, CT. Circle 122 Now...the superior visibility, visual com fort, luminance and economy of H.I.D. indirect lighting in a elegant suspended

Natural Evolution

Now...the superior visibility, visual comfort, luminance and economy of H.I.D. indirect lighting in an elegant suspended luminaire. Here are lasting aesthetics and advanced lighting technology that have evolved as one: the Renaissance. Naturally, from SPI Lighting.

Lighting Inc.

SPI Lighting Inc. 10400 North Enterprise Drive Mequon, WI 53092 414-242-1420 414-242-6414 FAX



Retrofit louver

Columbia Lighting's Retrolume kit converts lensed fluorescent fixtures to accept deep cell parabolic louvers. The recessed and surface 1-by-4, 2-by-2, and 2-by-4 converters feature aluminum louvers

METAL PRODUCTS INC.

164 GLEN COVE RD., CARLE PLACE, N.Y. 11514

OSRAM & HQI are registered trademarks of OSRAM GmbH.

in a variety of cell configurations and finishes. Columbia Lighting, Spokane, WA.

Circle 123

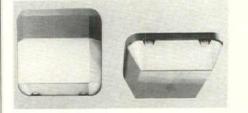


FACTORY: (516) 741-3005 Telex: 6502834036 MCI UW CALIFORNIA: (818) 240-6395 NEW ENGLAND: (617) 631-8608 MID WEST: (219) 484-0364 PENNSYLVANIA: (215) 885-8580 FLORIDA: (305) 391-6191 Circle 27 © 1987 GIM Metal



Fluorescent task light

The STD-32 twin task light from SPI Lighting distributes more light yet consumes less energy than a 40-watt fluorescent tube, according to its manufacturer. Its steel housing has vacuum-metallized reflectors at each end that are designed to produce asymmetrical light patterns

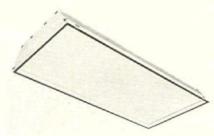


Low-level light fixture

Devine Design's DL System Ten luminaire series combines task-oriented optical systems with housings of a common design to maintain visual consistency for low-level lighting projects. The cast aluminum units feature concealed hinges and latches and have a ribbed back for maximum heat dissipation. The low-glare linear lenticular lenses are formed of injection-molded, UV-stabilized polycarbonate to resist impact and vandalism. A variety of mountings, including pedestal and parapet, are available for all models. The fixtures accommodate incandescent, compact twin-tube fluorescent, and HID sources. The fixtures are suitable for stairways, courtyards, tunnels, parking decks, terraces, and similar locations. Devine Design, Kansas City, MO. Circle 125

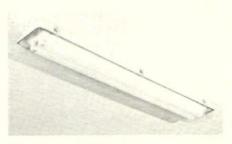
without glare or reflections. It can be used with standard 120-volt outlets and takes two 13-watt compact fluorescent lamps. SPI Lighting Inc., Mequon, WI.

Circle 124



Air-handling troffer

H.E. Williams offers the Series EPG-A, a NEMA type G air-handling troffer with a floating door. The standard version features a ½-inch-deep recessed aluminum door with a full reveal; a flat door is optional. The doorframe hinges from either side and has fully enclosed, spring-loaded cam action latches. H.E. Williams, Inc., Carthage, MO. **Circle 126**



Industrial luminaires

H.E. Williams offers Series 86 and 87 industrial luminaires with fully enclosed fiber glass housings. Tension clamp latches hold the acrylic lens in place for relamping without tools. Models are available

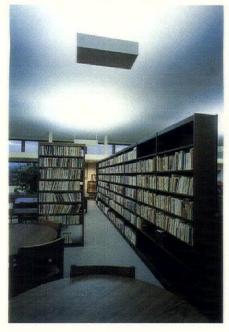
37

for one or two rapid start, slimline, or high-output fluorescent lamps; options include a National Sanitation Foundationlisted enclosure and a model for wet locations. H.E. Williams, Inc., Carthage, MO. Circle 127



Ceiling fluorescent

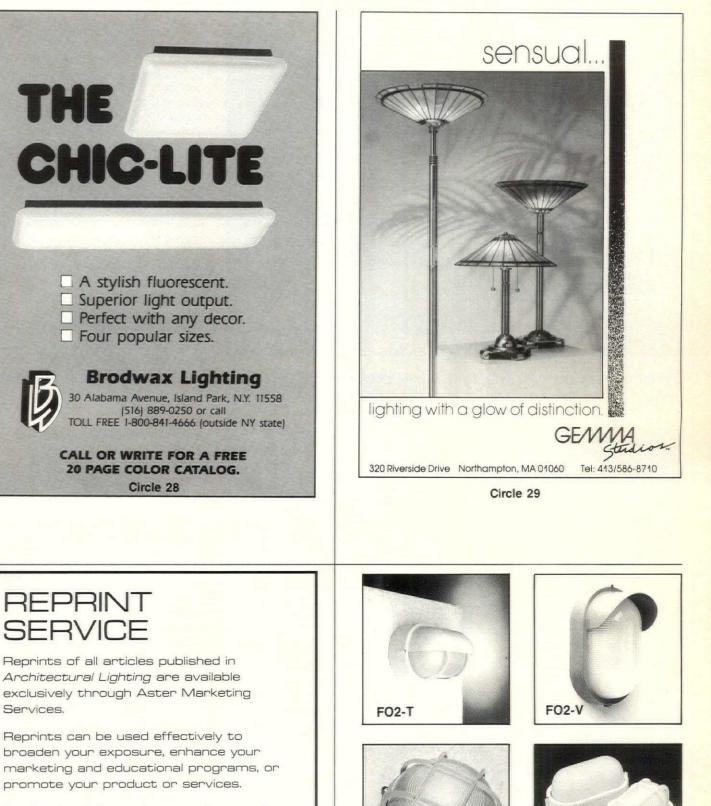
The series 25-28 fluorescent ceiling fixture from H.E. Williams has a removable cubed white acrylic diffuser and can be surface- or pendant-mounted. A solid oak wood diffuser frame is optional; the wireaway cover can be removed without tools. H.E. Williams, Inc., Carthage, MO. Circle 128



HID indirect luminaire

SPI Lighting offers the SDE series of dual-lamp fixtures for economical indirect lighting and good color rendering in spaces with high ceilings. The rectangular, suspended luminaires use a metal halide lamp and a high pressure sodium lamp and have an integral ballast and an enclosed optical assembly with a symmetric or an asymmetric reflector. They can be mounted on ceilings, walls, or display gondolas. SPI Lighting Inc., Mequon, WI.

Circle 129



For further information on volume orders, please contact:



Services.

SERVICES 859 Willamette St. P.O. Box 10460

Eugene, OR 97440

(503) 343-1200

TER

PUBLISHING

MARKETING

5 A

FT2-G

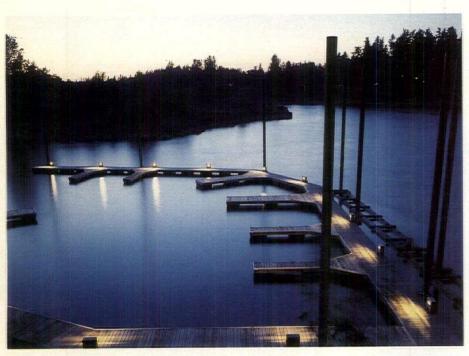


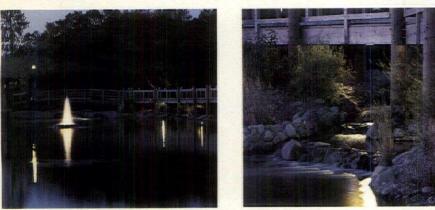
Cast Aluminum & Glass • UL Wet Label Available in Mercury & H.P.S. 50 Watts

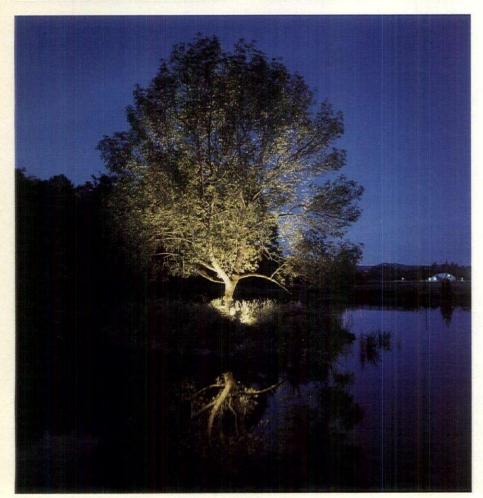
Caribean Worldwide Inc. 2056 N.W. 23rd Ave., Miami, FL 33142 (305) 633-2323

LANDSCAPE AND AREA LIGHTING

Problems and potential of lighting lakes and rivers







Light reflecting off water can create astonishing beauty or intolerable glare. The reflection of an attractive lighted object, such as an uplit tree, enhances a waterfront scene. The blazing glare of a directly reflected light source detracts from the view. Tight cutoffs can prevent, or at least minimize, this glare. Careful attention to fixture placement and beam distribution is especially important with high intensity discharge lamps. Two residential developments near Portland, Oregon - one fronting a river, the other encompassing a small lake - demonstrate the problems and potential of landscape and area lighting near water.

Functional night lighting provides safety and security at the Old River Woods community's private marina. The developer, sensitive to landscape concerns, wanted the fixtures to be architecturally integrated with the marina. He wanted the river view from both water and land to be free of glare and other visual interference. That ruled out pole-mounted fixtures, a common choice for outdoor area lighting.

Lighting consultant Cheryl Johnson devised a way to provide safety for the marina walkway and security for the moored boats. The most difficult part of the assignment, she says, was to prevent light trespass into the navigable waterway and intrusion on the view from the opposite riverbank.

Johnson designed an architecturally compatible pedestrian bench that incorporates a floodlight and a power source for the boat slips. The lowprofile bench fixtures, mounted on the marina walkway, light only the boat moorage area without affecting

Fixtures light marina, not river channel (top photo). Fountain and bridge at Jenne Lake (middle); waterfall under bridge remains bright in the evening. Uplit ash (bottom) and its reflection in Jenne Lake have become an emblem for the development.

Project: Old River Woods Marina **Location:** West Linn, Oregon **Electrical Engineer:** OTAK Engineers & Planners

Project: Jenne Lake at Waterhouse **Location:** Beaverton, Oregon **Landscape Architect:** Wilsey & Ham **Electrical Engineer:** Waker & Associates

Client (both projects): BenjFran Development

Lighting Designer: Cheryl L. Johnson, MIES, The Blueridge Agency Photos: © 1988 Ed Hershberger the waterway or facing properties. Washes of light from the regularly spaced fixtures illuminate the walkway with a golden glow.

The custom-built bench has a standard 120-volt louvered steplight fixture with a 35-watt high pressure sodium lamp. The combination is durable and energy efficient and promises low maintenance and long lamp life in a wet environment. In addition to the everyday rough treatment that an outdoor fixture can expect, it's even designed to withstand boat tie-ups.

Johnson used more high pressure sodium lighting at Jenne Lake, a private park in the Waterhouse development. "The HPS light source complements the natural landscape colors of the setting," she says. All outdoor fixtures in the park use HPS lamps, except a few in a fountain and a gazebo.

At Jenne Lake, the owner wanted to create a relaxing, nostalgic environment reminiscent of the 1920s. For a nighttime stroll down memory lane, period fixtures mounted on direct-buried fiber glass poles light the way. The fluted poles look like the cast iron poles of yesteryear, but they require no painting or other maintenance.

To further brighten the environment and enhance the residents' sense of security, timer-controlled landscape lighting around the lake includes illumination of a waterfall area under a bridge. Instead of becoming a pit of spooky shadows, the waterfall remains a pleasant view at night, thanks to 35-watt floodlights hidden under the bridge. A nearby fountain is lit by 500-watt quartz underwater fixtures.

Another key visual element at Jenne Lake is an ash tree on its own tiny island. The tree, which was growing on the same spot long before the lake was built, survived the inundation and appears to be thriving. At night, three surface-mounted floodlights make the tree and its reflection visible from every direction. Underwater PVC conduit brings power to the island without visual interruption of the lake scene. The glowing ash tree at night - an image created entirely by landscape lighting - has become an emblem of the Waterhouse development.

-G.F.

For product information, see Manufacturers on page 62. Products for landscape and area lighting applications are displayed on pages 40–49.

RUUD LIGHTING

QUALITY

FOR LESS Buy Direct

Six Reasons Why You Enjoy Doing **Business With Ruud Lighting, Inc.**

You receive personalized service. Our trained Customer Service personnel and Application Engineers are available to assist you in proper ordering and applying Ruud Lighting fixtures to your projects.

You get the best product with a one year quality guarantee. Every product is fully computerized tested to assure trouble-free operation. All products are manufactured with the highest quality materials and manufacturing techniques.

You get the best price. The best price is made possible by selling the highest quality products direct to the electrical contractor or electrical distributor. In fact, the more you buy, the more you save with our cumulative volume discount.

You get fast delivery. High inventory levels and flexible manufacturing techniques assure the best possible delivery.

You have 30 days to make up your mind. Our no-risk Sample Order policy assures you of guaranteed satisfaction.

You may call our Application Engineers for layout assistance or

technical information.



Canopy Lights



Industrial Lights



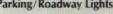
Floodlights

Security Lights



Parking Structure Lights





RUUD LIGHTING

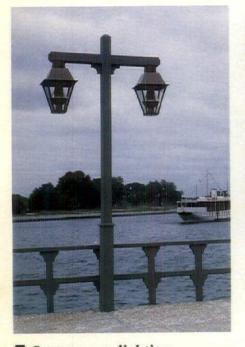
Quality for Less - Buy Virect

CALL FOR FREE CATALOG 1-800-558-7883 In Wisconsin Call 414-886-1900

7003



Landscape and area lighting



Custom area lighting TrimbleHouse designed and manufactured the area luminaire shown here for Shelter Cove at Hilton Head, South Carolina. The energy-efficient luminaire produces controlled light with a sharp cutoff for maximum performance and improved vertical illumination. Pole spacing can be in excess of three times the mounting height with uniformity ratios below 10 to 1. TrimbleHouse, Norcross, GA.

Circle 130

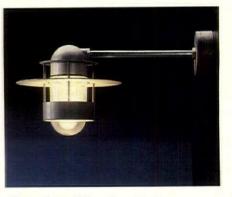
Custom-made bollard Ryther-Purdy makes custom bollards to individual design specifications. The one shown is of kiln-dried western red cedar, which resists insects and decay. The wood can be stained or left to weather to a silver gray. The bollard comes in pedestal-mounted and direct-burial models, most of which accommodate an incandescent, fluorescent, or low-wattage HID source. Ryther-Purdy Lumber Co., Inc., Old Saybrook, CT. Circle 131



Outdoor HID lighting The Grande Jefferson luminaire from

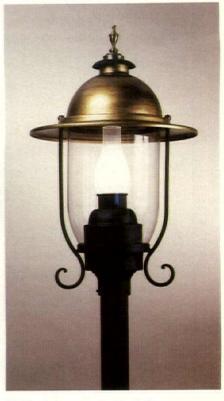
Hanover Lantern is constructed of cast aluminum. A bracket arm of heavy-duty aluminum tubing is welded to the luminaire's roof to form a one-piece unit. The hinged cage has removable panels of clear UV-stabilized, prismatic polycarbonate. Models are available for HID and incandescent lamps; refractors and reflector systems are optional. Hanover Lantern, Hanover, PA.

Circle 132



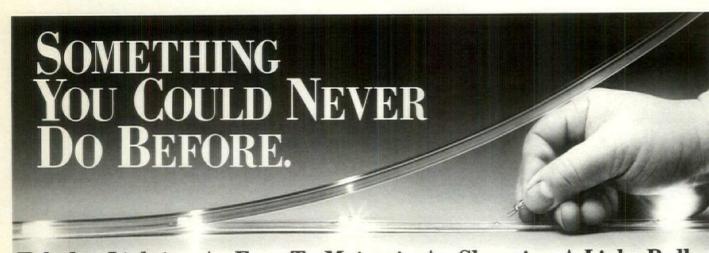
Wall, ceiling luminaire

Poulsen Lighting's Orbiter extended wall/ceiling luminaire has a cast aluminum housing and a clear glass enclosure; an antiglare shield surrounds the light source. The wall-mount model has a 191/2-inch extender arm and a flat steel reflector ring; the ceiling model comes without a reflector ring. Both models take incandescent lamps, up to 100 watts for the wall-mount model and 75 watts for the ceiling model. The company recommends clear A19 lamps. Poulsen Lighting, Inc., Miami, FL. Circle 133



Outdoor area lighting

The Nob Hill outdoor area luminaire has hand-forged side arms and a white or clear lens. The top frame is treated with a natural compound finish in a choice of four colors. Old World Lighting, division of RWL Corporation, Solvang, CA. Circle 134



Tubular Lighting As Easy To Maintain As Changing A Light Bulb.

Forget the frustrations of having to live with dark spots.

Now there's E-Z STREAMS. The new clear tubular lighting from Sylvan Designs that, for the first time lets you replace lamps on-site. You simply slip out the old lamp and slip in the new.

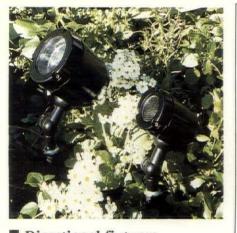
E-Z STREAMS comes in both square and round styles and installs easily. The lamps are twice as bright as most other tubular systems.

And they are wired in parallel, which means only one lamp goes out at a time. E-Z STREAMS standard sizes also makes it easy to upgrade your present system, without having to start over from scratch.

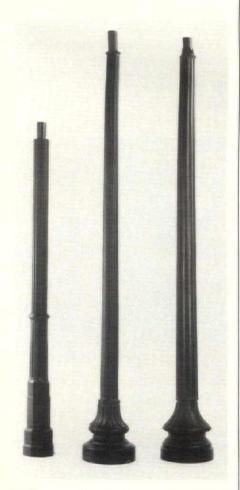
Powered by UL Listed, Class 2 transformers for safe installation.

For full details call or write today: Sylvan Designs, Inc., 8921 Quartz Ave., Northridge, CA 91324, Tel: (818) 998-6868.





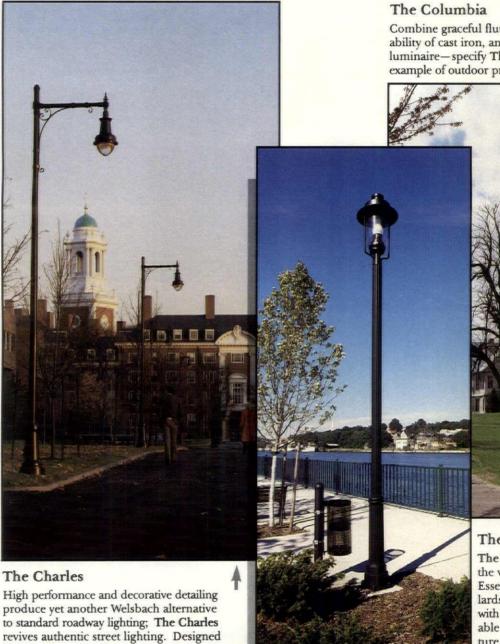
Directional fixtures Luma Lighting's Newport and Balboa cast-aluminum directional fixtures have an air space between the outer body and the inner lamp housing that helps cool the fixture, according to the manufacturer. Other features include a tempered lens and a cast-aluminum swivel with a lock knob. The fixtures can be mounted to an outlet or transformer box, or they can be stake-mounted if connected to a two-circuit low-voltage distribution system. The Newport takes an MR16 lamp, the Balboa an MR11 lamp. Luma Lighting Industries, Inc., Orange, CA. Circle 135



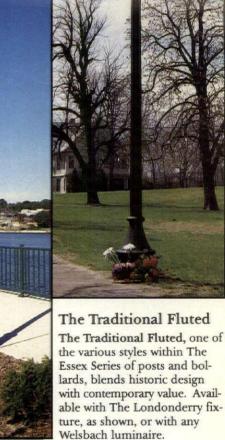
Decorative poles

Emco's decorative aluminum light poles with fluted sides come in several styles. Heights for some styles range from 8 to 12 feet, for others from 10 to 16 feet. Emco Environmental Lighting, Milan, IL. **Circle 136**

The Designer's WEISBACH SINGLE LIGHT SOURCE



Combine graceful fluted styling, the durability of cast iron, and the classic Parklane luminaire—specify **The Columbia**, a sound example of outdoor promenade post lighting.



Welsbach Lighting-Building Quality Street Lighting Since 1877



240 Sargent Drive, New Haven, CT 06511 • 800/243-2101 1230 Mission Drive, Solvang, CA 93463 • 805/688-6681

Circle 33

for retrofit applications too.

のないないないない



Landscaping with Lighting!

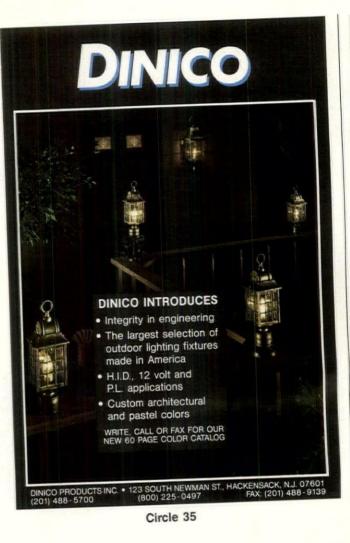
The "Junior Jefferson" enhances any low level lighting site. Custom selected Western Red Cedar is kiln dried and fabricated with care. Direct burial or wall mounted. Wide selection of globes for incandescent to 60 watt.

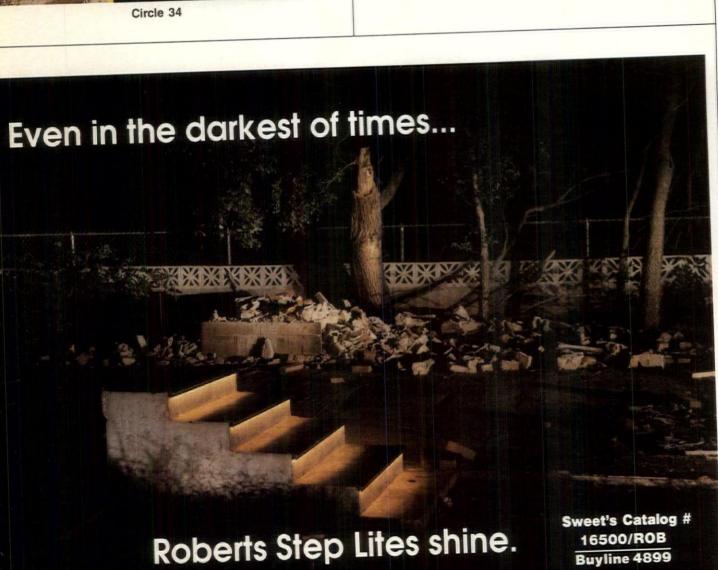
Write on letterhead for catalog of wood lighting standards and accessories.

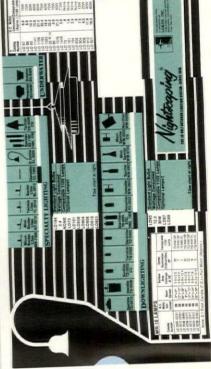
Ryther-Purdy Lumber Company, Inc.

607 Elm Street P.O. Box 622 Old Saybrook, CT 06475 Phone (203) 388-4405

Lighting Standards • Fixtures Guide Railings • Benches Custom Millwork • Signs Trash Receptacles







Landscape lighting chart

A compact slide chart from Nightscaping provides key installation information on landscape lighting fixtures and applications. Areas covered include backlighting, uplighting, downlighting, and path, specialty, and underwater lighting. Data include low-voltage lamp characteristics, wattages, wire sizing, and comparisons of lumens for line- and low-voltage lamps. Nightscaping, division of Loran, Inc., Redlands, CA. Circle 137



HID bollards

McGraw-Edison offers bollards for locations where low mounting heights are preferred. The seamless, heavy-duty aluminum bollards are gasketed to out external contaminants. A truncated octagonal collecting reflector above and dispersing reflector below produce efficient, low-glare illumination from height as low as 24 inches. The remote ballast assembly contributes to cool operation and long ballast life. McGraw-Edison, Vicksburg, MS.

Circle 138

Buyline 4899



Cast-iron post

The fluted sides and decorative 21-inchdiameter base of RWL's Columbia post are reminiscent of styles from the early 1900s. The cast-iron post accepts any of the company's outdoor luminaires — including the Parklane II in the photo — in single or multiple configurations. RWL Corporation, New Haven, CT.

Circle 139



HID floodlighting fixture The Standard Electric Fixture Co. offers the WS high intensity discharge floodlighting fixture for 70- and 150-watt double-ended metal halide quartz lamps. The fixture has a versatile swivel arm and is available in a bronze finish with either 120- or 277-volt ballasts. Options include tamper-proof screws and photocells for automatic day and night on-off control. A model for high pressure sodium lamps is also available. Standard Electric Fixture Co., Inc., Miami, FL.

Circle 140

A Light For All Reasons

The Luxmaster Classic. Precision Design. Versatile Construction. Complementary Form. Superior Performance. An American Lighting product.



AMERICAN ELECTRIC FL Industries, Inc.

Circle 39



FROM THE HOUSE THAT RUTH BUILT TO THE HOUSE THAT JACK BUILT

Incandescent, HID and Fluorescent. Cooper Lighting is the single source that offers a virtually limitless choice of lighting products. The choice for Yankee Stadium, the choice for millions of homes, and the choice for your next project.

Halo, Metalux, Crouse-Hinds, Lumark, McGraw-Edison and Sure-Lites are all part of Cooper Lighting. We are an unparalleled resource for manufacturing, engineering, marketing, design and research. Seven regional showrooms provide an opportunity to experience first-hand the effects of lighting.

Brilliance from a single light source. Cooper Lighting, 400 Busse Road, Elk Grove Village, IL 60007.

COOPER LIGHT SOURCE



Landscape and area lighting



Landscape lighting

Hadco's Night Life collection of cast aluminum landscape lighting fixtures includes the Mushroom, shown here. It comes in three sizes and is available in low- and line-voltage models. Hadco, Littlestown, PA.

Circle 143



Area luminaire

Holophane's ParkLane area luminaire has a prismatic borosilicate glass reflector with a metallized rear surface, an optical system that eliminates the need for refractors or a large number of fixtures, according to the manufacturer. A clear one-piece prismatic cube-cone of seamless acrylic provides low-brightness definition, eliminates hot spots and dark holes, and offers optimum horizontal light cutoff. The pole- or wall-mounted luminaire accommodates a vertically burning HID lamp. Holophane, Newark, OH. **Circle 144**



Outdoor area luminaire

The Aktra III architectural outdoor area luminaire from Wide-Lite has a polycarbonate secondary lens for a softly glowing security light from high pressure sodium or metal halide lamps. The highefficiency reflector system's cutoff distribution restricts glare and spill light. A hinged top allows full access for easy relamping and maintenance. Wide-Lite, San Marcos, TX.

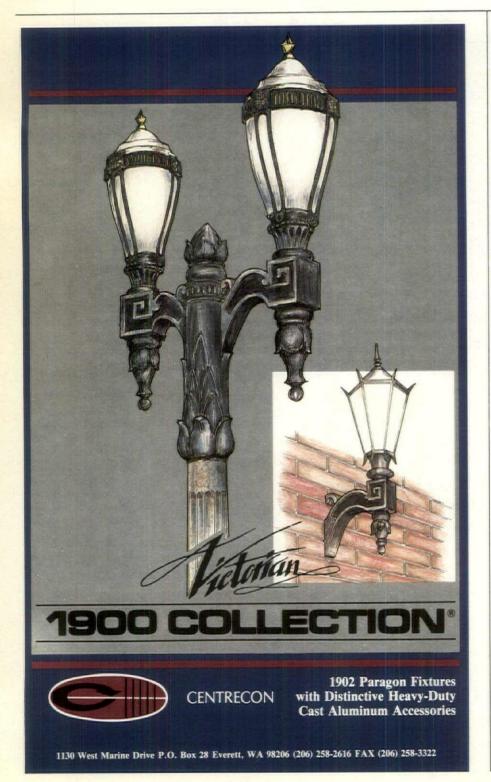
Circle 145



Concrete light poles

CPI Concrete Products offers prestressed concrete light poles up to 65 feet high in 14 colors and exposed aggregate finishes. The colors are cast throughout the concrete for a permanent maintenance-free finish that requires no paint and neither peels nor rusts. CPI Concrete Products, Memphis, TN.

Circle 146



Let there be Log up to the set of the set

> Articulight flexibility and versatility make it the premiere architectural floodlight—for showcasing signage, downlighting details and beautifully illuminating facades and greenery. Articulight can be pole, pedestal base, wall, soffit or roof mounted; offers lamping up to 250 watts; and is smaller, sleeker than other floods.

Let there be floodlight fantastic—Articulight from EMCO!



LIGHTING

EMCO ENVIRONMENTAL LIGHTING QUAD CITY INDUSTRIAL AIR PARK P.O. BOX 1640 MILAN, ILLINOIS 61264 (309) 799-3111 FAX: (309) 799-7647



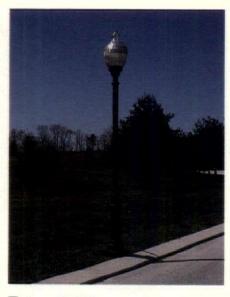
Period lamppost

Classic Lamp Posts offers the W9, a polysteel Washington lampost and a polyethylene acorn globe. The post has a double-fluted base and a tapered shaft, and comes in heights of 7 and 9 feet. Classic Lamp Posts, Miami, FL. **Circle 147**



Outdoor lanterns

ELA's cast aluminum Pageant lantern has a hinged hood for easy relamping. The one-piece dome on the hood comes in opal or clear glass; a metal dome is optional. The lantern is available in three sizes and comes with a cluster of three or five 60-watt incandescent candle lamps; the two larger sizes are adaptable for HID sources. Environmental Lighting for Architecture, Inc., City of Industry, CA. **Circle 148**



Area lighting

Hadco's Victorian II luminaire produces a Type III light distribution pattern with an Alzak aluminum reflector and a prismatic refractor globe of UV-stabilized polycarbonate. The cast-aluminum fixture base is coated with a thermoset powder coat finish. HID lamp options and matching pole assemblies are available. Hadco, Littlestown, PA.

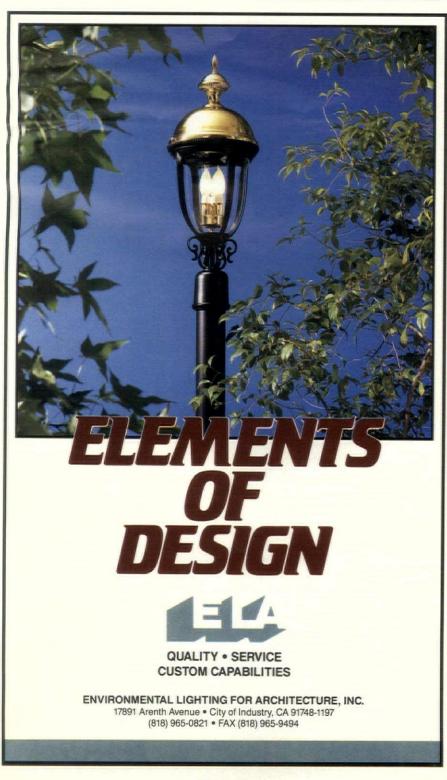
Circle 149

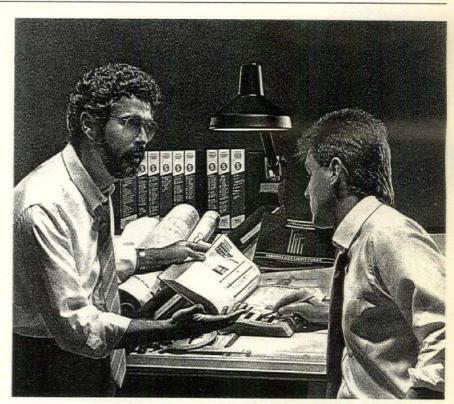


Copper wall-mounted luminaire

The PH extended wall-mounted luminaire from Poulsen Lighting is crafted of pure untreated copper that will develop a verdigris patina outdoors. The wall plate and lamp holder assembly are fabricated from heavy-gauge solid copperplated brass. Inner reflecting surfaces are finished in baked matte white enamel. The luminaire uses an incandescent lamp up to 100 watts. Poulsen Lighting, Miami, FL.

Circle 150





"Incredible!"

Up until now Shakespeare's fiberglass light poles have been the best-kept secret in the industry!

But, the word's getting around. Attractive fiberglass light poles complement any architectural design. They can endure the elements for generations of dependable

service and require virtually no maintenance. Unlimited design flexibility. Contractors appreciate their light weight, ease of installation and ready availability. Unlimited versatility is derived from a variety of shapes, finishes, sizes and colors.

Let yourself in on our little secret. Our new brochure is now available to give you all the facts and when the facts Q are known, fiberglass poles are *the logical choice*.

Send for your FREE Shakespeare Light Pole Brochure and information, now!
NAME
ADDRESS
CITY/STATE/ZIP
PHONE
©1988 The Shakespeare Co.

See us in Sweet's 16503/5HK BuyLine 2476

Fiberglass ...the logical choice!

Shakespeare

SINCE 1897 ELECTRONICS AND FIBERGLASS DIVISION P.O. Box 733, Newberry, SC 29108 (800) 845-7750 (803-276-5504 IN S.C.) (803-276-5504 IN S.C.)

COMPONENTS AND ACCESSORIES

A/E headquarters shows off lighting technology





Anderson DeBartolo Pan, a Tucson architectural engineering firm, pulled out all the stops when designing headquarters for its own staff. The building shows off ADP's design expertise and serves as an operating laboratory of energy conservation techniques. Lighting designer John Jolly specified a comprehensive array of components to illuminate the 50,000-square-foot building and its site.

For Jolly, lighting design begins with lamps. "If you want to stay on the leading edge of technology, you have to keep up with lamps," he says. "Then, the fixture needs to be designed around the lamp, and it needs a good quality ballast. When comparing light sources, you need to look at the total efficiency of the system — lamp, ballast, fixture, and lens — to see how efficient that whole combination is in getting the light where you need it."

The ADP headquarters interior is lit almost exclusively with energysaving fluorescent sources that have a high color rendering index (CRI). The open office areas use 32-watt T8 lamps in air-handling troffers with deep cell parabolic louvers. All troffers have energy-saving core-and-coil ballasts. Both desk-mounted task lights and recessed downlights use compact fluorescents. The downlights remain on after hours to provide emergency and security illumination, as well as architecturally attractive night lighting.

The warm 2700K compact fluorescents have a CRI of 81 and complement the somewhat cooler 3000K, 75 CRI lamps in the troffers. Both offer much more flattering light than the all-too-common 4100K, 56 CRI cool whites; Jolly calls them "cruel whites." As part of the ADP team, Jolly acquired samples of the specified lamps so that other designers could evaluate interior finishes in their light.

The firm's boardroom has a coffered indirect fluorescent system.

Compact fluorescent task lamps supplement two-lamp troffers (top). The boardroom (middle) has a versatile combination of sources. After hours, a control system douses most of the lights seen in bottom photo.

Project: Anderson DeBartolo Pan corporate office headquarters **Location:** Tucson, Arizona **Architects and Engineers:** Anderson DeBartolo Pan **Lighting Designer:** John Jolly, Anderson DeBartolo Pan Cool-beam PAR 38 and low-voltage MR16 lamps are used in adjustable downlighting that provides a rare touch of incandescent sparkle and versatility. The fluorescent fixtures are separately switchable to provide three light levels, and the incandescent lights are independently dimmable on two circuits.

The building's lighting, office communication, security, heating, and cooling systems are all tied into a central computer for energy-efficient operation. A power line carrier system injects lighting control signals into the 277-volt power distribution lines. Some minor additional wiring was required, however: "jumpers" transmit control signals to 120-volt task lights.

After regular working hours, the system automatically sweeps the building at three-hour intervals, turning off all lights except preprogrammed night lighting. "We have one of the low-cost systems," Jolly admits. "If you're in the building at night, suddenly you hear clicks and the lights go out. Then you have to go to a wall switch to reactivate the lights in your area." In his current projects, Jolly is specifying more sophisticated systems - such as lowvoltage multiplex systems that blink the lights to remind building users to dial a local override on a touch-tone phone.

Other energy-saving features at the headquarters include passive daylighting design along with photocell switching controls for fixtures adjacent to windows. Site lighting is controlled on two circuits, both photocellactivated at dusk. A preset controller turns off part of the parking lot lighting at the end of the CADD late shift; the remaining lights stay on until the photocell detects dawn.

"Before specifying a new system or component, I always do a lifecycle cost analysis to see what the payback is," Jolly concludes. "If savings pay for a system within three or four years, it's usually worth the money — especially with energy costs going up. I have to throw in product life, too: if a part pays for itself in five years, but its average life is five years, I'd look again."

-G.F

For product information, see Manufacturers on page 62. Lighting components and accessories are displayed on pages 52–58.

Which comes first an electronic ballast you can depend on or energy savings you can crow about?

Ballastar[®] electronic ballasts lower lighting energy costs by a significant degree... up to 36% in most applications.

Our light-level switching ballast can raise that to as much as 50%.

Compound those savings with an average ballast life twice that of conventional ballasts and Ballastar becomes a very valuable investment... with a very short payback time.

Ballastar electronic ballasts have been proving themselves for years... in schools and universities, office buildings, banks, hospitals, retail stores, shopping centers, restaurants and factories.



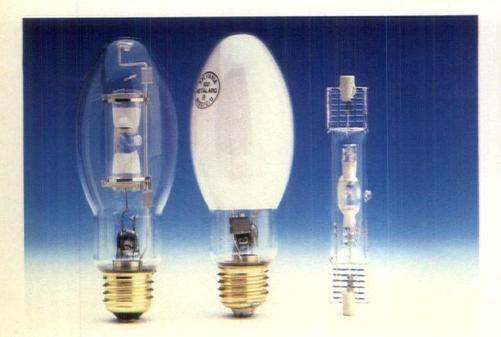
So for savings *and* reliability you can crow about in new or renovated buildings or as retrofit or replacement of existing ballasts, get the details on Ballastar electronic ballasts. Call us at (219) 356-7100. Or write 1124 E. Franklin St., Huntington, IN 46750.



We're making MagneTek the new first name in electrical equipment.



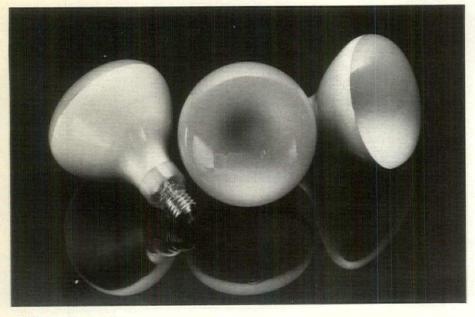
Components and accessories



Metal halide lamp

GTE's 100-watt Sylvania Metalarc lamp now has an average rated life of 10,000 hours. The lamp comes in clear and coated versions with a medium screw base and can be burned in any position. Its compact size permits its use in smaller fixtures and in applications with low to medium ceiling heights. The lamp has a 3200K color temperature and a color rendering index of 65. A tubular, doubleended model is also available. GTE/ Sylvania, Danvers, MA.

Circle 160



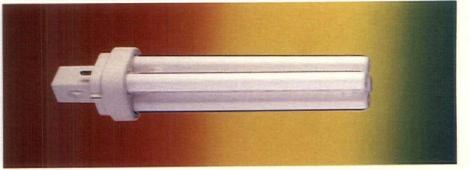
Reflector lamps

Pro-Arc metal halide reflector lamps from Venture Lighting International have a universal burning position and come in four sizes. The lamps' average life ranges from 5000 hours for the 70-watt lamp to 20,000 hours for the 400-watt lamp. Venture Lighting International, Cleveland, OH.

Lamp holders

Circle 161

Leecraft now offers its Series MLH high intensity lamp holders for RSC-base metal halide, halogen, and high pressure sodium lamps. Available as single-ended units with or without mounting brackets, they can also be custom manufactured as double-ended assemblies. Leecraft Manufacturing Co., Inc., Long Island City, NY. **Circle 162**



Quad-tube fluorescents

PLC* quad-tube compact fluorescent lamps from Philips Lighting come in two diameters and have a starter in the base. They are said to be four times more energy-efficient than comparable 40- to 100-watt incandescent lamps and last up to 10 times longer. All have a color rendering index of 82 and a color temperature of 2700K. The 10-millimeter models come in wattages from 10 to 26 and offer greater point-source control than the shorter 14- and 20-watt 15millimeter lamps, which produce a more diffused light. Philips Lighting Company, Somerset, NJ.

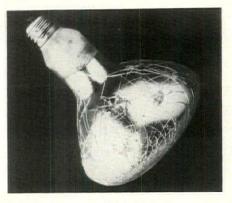
Circle 163



Edge-lit exit sign

Alkco's Edge-Glo edge-lit exit sign features concealed fasteners on the panels and faceplate, polished panel edges, cleanly routed letters, and a satinfinish brushed aluminum separator panel. Color-enhanced T5 fluorescent lamps are available so that signs can match general room light sources. Options include a battery pack and various color combinations. Alkco, Franklin Park, IL.

Circle 164



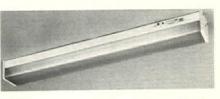
Shatterproof lamp

The Teflon coating on Shat-R-Shield's infrared heat lamps protects the surroundings from shattered glass. Virtually all glass remains inside the coated envelope if the lamp is broken by accident or thermal shock, according to the manufacturer. Shat-R-Shield, Inc., Shrewsbury, NJ.



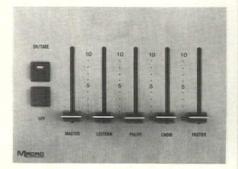
Dock light

Phoenix Products offers an overhead truck and rail loading dock light with a protective Lexan polycarbonate lens. The high pressure sodium unit is recommended for use in the food processing industry and other locations where glass fragments could be a problem. Phoenix Products Co., Inc., Milwaukee, WI. **Circle 166**



■ Fluorescent emergency light A dual-purpose fluorescent emergency fixture from Lightalarms Electronics incorporates emergency lighting and area lighting into a single unit. The Series FFAM fixture's high-efficiency battery pack comes complete with inverter, charger, and sealed nickel cadmium battery to provide 90 minutes of emergency

power to one lamp in a fixture. The tamper-proof, vandal-proof fixture is suitable for stairwells, halls, and bathrooms. Lightalarms Electronics Corporation, Baldwin, NY. **Circle 167**



Dimmers

Macro Electronics' PDQ dimmers for incandescent, fluorescent, and low-voltage lighting have been designed for quick layout and installation. The flush-mount panels have an on-off switch and up to six slide controllers for intensity adjustment. They come in units with one to four gangs in a choice of finishes. The high-power dimmers are available for load capacities up to 5000 watts. Macro Electronics Corporation, Austin, TX. **Circle 168**

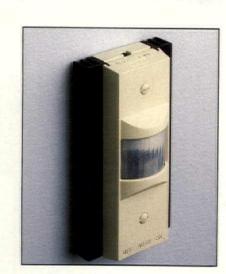




Wireless remote control

Lutron's infrared wireless remote control accessory for the Grafik Eye preset dimming control can be used up to 50 feet from the nearest wall- or ceiling-mounted receiver. Four touch-buttons correspond to preset lighting scenes, and a fifth turns the system off. An LED indicator lights when a scene is activated. Identical systems can be used in adjacent rooms without interference. Lutron Electronics Co., Inc., Coopersburg, PA. **Circle 169**

IN 80% OF THESE OFFICES THE LIGHTS ARE ON BUT NOBODY'S HOME.



The Hubbell H-MOSS® 500 Automatic Wall Switch can save up to 60% of your lighting bills each month.

Now there is a fast, cost-effective solution to

the high cost of lighting offices—when nobody's home. The H-MOSS® 500 from Hubbell. The automatic wall switch that easily replaces the manual wall switch in most offices. Consider the advantages:

- Conserves energy
 10-minute
- installationSafe, reliable
- performance Fast payback
- Aesthetic design

Unfortunately, offices aren't the only places energy is wasted. Lights are left on in hallways and conference rooms, too. For these and other applications Hubbell has a complete line of motion sensing/switching devices.

For details on how you can start saving big on all your lighting costs, write or call today for your free H-MOSS product selection guide, H4298. Hubbell Incorporated, State Street, & Bostwick Avenue, Bridgeport, CT 06605. (203) 333-1181.



Wiring Device Division

MINOLTA METERS THE MEASURE OF EXCELLENCE



WE MAKE LIGHT WORK OF PRECISE COLOR MEASUREMENT.

Minolta has two incredibly easy and accurate ways to show you the light. Two Chroma Meters that will determine chromaticity or color temperature of light sources, measure color differences between two light sources and help you adjust source output to industry standards or any reference you choose.

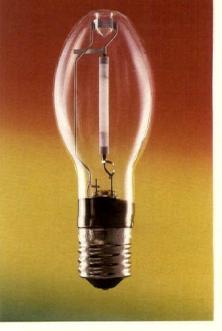
The xy-1, Minolta's lightest and most compact tristimulus colorimeter, brings you digitally-displayed readings at the touch of a button. The CL-100 can be used by remote control or interfaced with our DP-100 Data Processor to become even more versatile and convenient.

And these are just two of Minolta's full line of light and color measurement instruments. For more information, including our 21 page booklet "Precise Color Communications," please call (201) 825-4000 or write: Minolta Corporation Industrial Meter Division, 101 Williams Dr., Ramsey, New Jersey 07446.

What you learn will make your light work even lighter. ONLY FROM THE MIND OF MINOLTA.



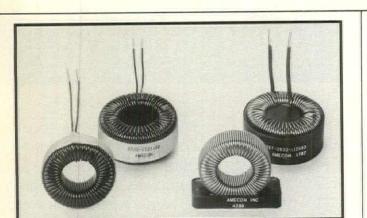
MINOLTA



HPS lamps

Ceramalux high pressure sodium lamps from Philips Lighting are designed to operate uniformly during their entire life cycle. Features include a thick arc-tube end seal, a braze-covered electrode rod, a voltage-controlling emitter material, and a nickel-plated brass base. The arc tube structure has positive centering supports at both tube ends to maintain arc tube alignment and reduce potential weld breaks under vibration. Philips Lighting Company, Somerset, NJ. **Circle 170**





New Filter Inductors...

- Minimum Noise
- Miniature Size
- Maximum Savings

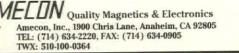
Amecon's new Series 22 and 27 filter inductors effectively lower noise in dimmers, lamps and fixtures. They're under 21/2" and 3" in diameter and are priced under \$4.00 and \$7.00 each respectively in

quantity. These high quality inductors are available from 3 to 30 Amps in a wide range of part

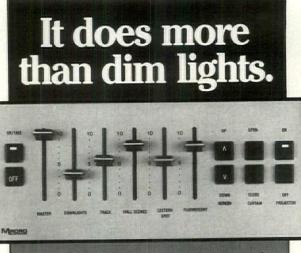
numbers . . . many from stock.

They offer a full 400 microsecond rise time (ranging from 200 to 600) depending on load and voltage conditions. Manufactured from UL recognized materials, they are available in semi- or full epoxymolded configurations.

Applications recommended for all types of professional light dimmers: arcfitectural, touring, theatre, low voltage, and nearly anywhere a noiserejection system is required. Call or write for updated catalog.



Circle 50



The Macro Electronics custom design control system can draw the curtains, lower the screen for presentations and roll the projector. Oh, and yes, dim your lights. All from a single panel. All custom designed by

All from a single parter. All custom designed by Macro Electronics for your restaurant, conference room, theatre, hotel ballroom or residence, for dimming HID, neon, cold cathode, fluorescent, low voltage, and incandescent lights. Call for your manual or automatic lighting

control system needs, large or small.



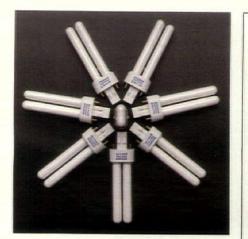
4711 East Fifth St., Austin, Texas 78702, (512) 385-6800

Circle 51



Structural skylights

Bristolite structural skylight designs feature custom-extruded members of architectural-grade aluminum alloys. Structures are welded or bolted together. Glass, acrylic, fiber glass, and polycarbonate glazings are available. Stainless steel fasteners and extruded silicone gaskets make designs leakproof, according to the manufacturer. The frames come in a variety of painted and anodized finishes. Bristolite Skylights, Santa Ana, CA. **Circle 171**

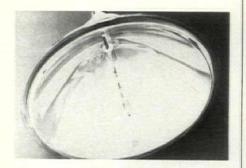


3500K compact fluorescents GTE now offers Sylvania compact fluorescent lamps with a color temperature of 3500K. The lamps are intended to help lighting designers and specifiers provide consistent color in offices and retail stores, where 3500K lamps are growing in popularity for general fluorescent lighting. The new color is available in three sizes. GTE/Sylvania, Danvers, MA. **Circle 172**



Miniature ballast

Radionic Industries has introduced a miniature ballast that operates 6- to 9-watt T5 and compact fluorescent lamps. Its small size — slightly more than 1 inch square — suits the ballast for use in compact fixtures and areas with limited space. Radionic Industries Inc., Chicago, IL. **Circle 173**

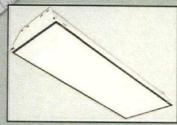


■ Metal halide PAR lamp Osram's Metallogen HMI 1200-watt PAR metal halide lamp for stage and studio lighting has an arc gap shorter than those in earlier stage and studio lamps, yielding up to 30 percent higher luminance efficiency, according to the manufacturer. The 5600K lamp's 90+ color rendering index remains constant for the lamp's life. Osram Corporation, Newburgh, NY. Circle 174 Tomorrow's trends are on the drawing boards today at H.E. Williams. Our engineers' concepts, teamed with your needs and suggestions are what go into some of the most creative fluorescent lighting available.

Williams goes beyond basics in providing efficient, attractive, quality products. The beauty of the Wood Classics, the versatility of THE BLADE® and the labor-saving design of the popular LS series are a few of the ongoing innovations.

H.E. Williams is known for dedication to excellence in lighting. Find out why it's the company you'll want in your future plans.

H.E. WILLIAMS, INC.



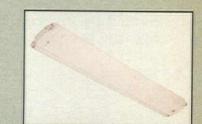
Series EPG-A. NEMA type "G" troffer, air-handling luminaire with floating door. 1/2" deep regress aluminum door with full reveal standard; flat door optional. Door frame hinges from either side and has fully enclosed, spring-loaded cam action latches.





0

Series 25-28. Surface or pendant mount with easily removable, cubed white acrylic diffuser. Solid oak wood diffuser frame is optional, and wireway cover removes without tools.

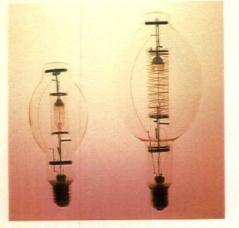


Series SM76. Surface or pendant mount with side-mounted strip lamps. Low-profile lighting available in rapid-start and slimline models. Tombstone-type lampholders have plated contacts. Wireway cover removes without tools.

H.E. WILLIAMS, INC.

Dedicated to Excellence in Lighting Circle 52 831 W. Fairview Ave., Box 837, Carthage, MO 64836-0837 General Office: 417-358-4065 Sales: 417-358-4034 FAX: 417-358-6015

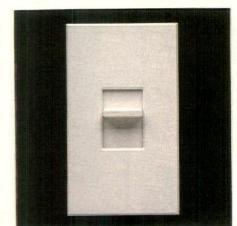
55



Open-fixture metal halide lamps

GTE's 400- and 1000-watt Sylvania Metalarc lamps have been improved to reduce the possibility of the outer jacket shattering if the arc tube ruptures. Although the company continues to recommend enclosure of all metal halide lamps, these lamps can be used where enclosing the lamp is impractical. They operate in a vertical burn position and come in clear and coated versions. The 400-watt lamp is also available in a high color rendering 3000K coated version. GTE/Sylvania, Danvers, MA.

Circle 175



Low-voltage dimmer

The Nova T-Star NTEVL-300 dimmer from Lutron Electronics can control lowvoltage fixtures with electronic transformers and combination systems with low- and line-voltage incandescent fixtures. Features include protection from circuit overloads and short circuits. Lutron Electronics Co., Inc., Coopersburg, PA.

Circle 176



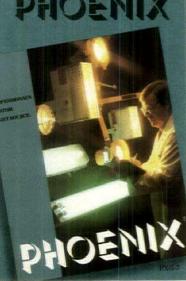
Send for your free custom lighting brochure today.

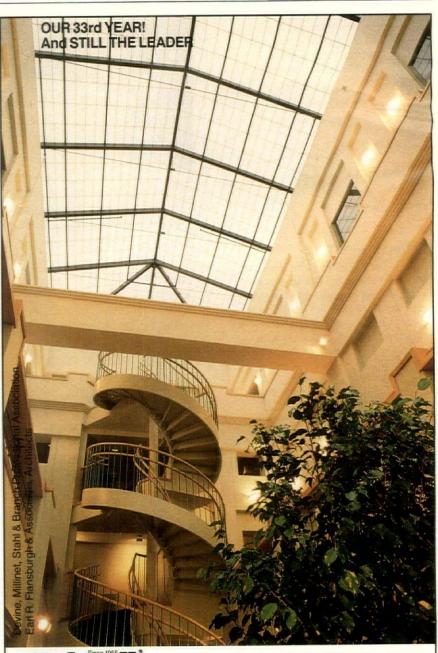
TTLE		-		-
PHONE ()			TUT. PROPERSIENAL CESTUM CRATTSOLIN
COMPANY		_		-
ADDRESS			-	- 1
TTV		STATE	ZIP	

4781 N. 27th St. Milwaukee, WI 53209

PHOENIX BRINGS YOUR MOST CHALLENGING IDEAS TO LIGHT.

Give us your most demanding custom lighting requirements – interior or exterior – and our custom lighting engineering team will rise to the challenge. From computer-aided analysis and design to extensive quality assurance testing, Phoenix delivers effective, efficient solutions to your custom lighting problems. For more information, and your free Phoenix custom lighting brochure, fill out and mail the coupon below. Or contact PHOENIX PRODUCTS CO., INC., 4781 N. 27th St., Milwaukee, WI 53209. Phone 414-445-4100; TELEX 910-262-3389; FAX 414-445-0289.

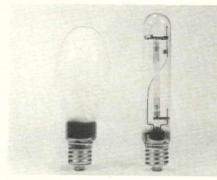




Kalwall' THE DAYLIGHTING EXPERIENCE!

The Most Highly Insulating Light Transmitting, Light Diffusing System. For Skylights, Skyroofs, Clearspan Structures.

> Kalwall Corporation, PO. Box 237, Manchester, NH 03105. Phone 800-258-9777 or 603-627-3861. Kalwall: A High-Tech Building Systems Company.



HPS lamps

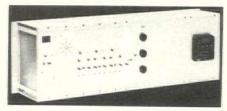
Osram's HPS Super lamps offer 22 percent higher lumen efficacy than do standard high pressure sodium lamps, according to the manufacturer. They can be used in existing fixtures with appropriate igniters. Versions are available with clear or coated envelopes in wattages from 70 to 400. Osram Corporation, Newburgh, NY. **Circle 177**



MR16 lamps

MR16 tungsten halogen lamps from Osram Corporation are highly efficient low-voltage sources with excellent color rendition for display lighting of heatsensitive products. Their multifaceted dichroic reflectors direct heat to the rear of the fixture, lowering beam temperature; their color temperature is 3000K, and average rated life is 2000 hours. The 75-watt model has a 450-degree Celsius pinch temperature limit, designed to reduce contact problems. Osram Corporation, Newburgh, NY.

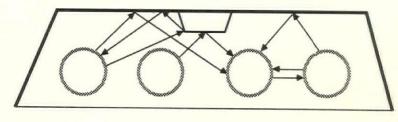
Circle 178



Automatic shade controller AM Source International's Otto-Matic shade control automatically raises, lowers, opens, and closes individual window coverings from a central location; a command module can tilt blind slats according to the season and to the sun's elevation. Other features include a fire alarm tie-in, local override switches, and a time module that raises and lowers blinds at preset times for added security. AM Source International, Wauconda, IL. **Circle 179**

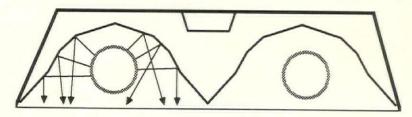
The Problem

Conventional lighting systems are inefficient and costly— 40 to 60 percent of the light from fluorescent lamps can be trapped inside your fixture.



The Solution

An Optical Reflector System from Maximum Technology —to effectively reflect trapped light and redirect it to the work surface, eliminating costly excess lamps and ballasts.



The Benefits

- 40 to 50 percent lower lighting energy costs
- Fewer lamps and ballasts to replace
- Optimum light levels
- Illumination uniformity
- Glare control
- Cooling system load reduction

The Company

The oldest, largest, most experienced reflector manufacturer in the industry.



60 Industrial Way Brisbane, CA 94005 (415) 468-2560



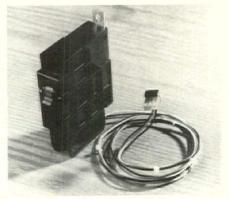
Recessed exit signs

Lithonia's Signature Series of cast aluminum specification-grade exit signs includes new recessed models with concealed mounting hardware. Electronic components are recessed in a steel universal mounting box the depth of a standard stud wall. Models are available for incandescent and fluorescent lamps and for emergency and nonemergency operation; lamps are furnished with the unit. AC and DC remote lamp kits, flashing and audible emergency signals, and a fire alarm interface are among the options available. Lithonia Emergency Systems, division of Lithonia Lighting, Conyers, GA.

Circle 180



■ Metal halide lamps Low-wattage metal halide lamps from Venture Lighting International all have the same compact bulb size and medium screw base. Clear and coated lamps come in six wattages, from 35 to 175. Venture Lighting International, Cleveland, OH. Circle 181



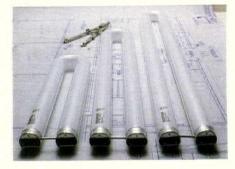
Solenoid circuit breaker Westinghouse Electric's solenoidoperated circuit breakers provide overcurrent protection and remote switching capabilities. They are suitable for new and retrofit installations, including utility-controlled peak load management, commercial and industrial lighting and energy management, and security lighting systems. The 277-volt breakers operate at 15 and 20 amperes, providing a highly visible trip indication. Westinghouse Electric Corporation, Pittsburgh, PA. Circle 182

11-	
[n-	
6-	

Compact fluorescent lamps Dulux L compact fluorescent lamps from

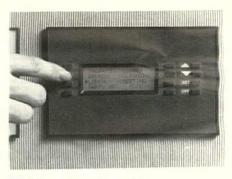
Osram are one-third the size of the F20, F30, and F40 lamps they are designed to replace. They come in sizes from 18 to 40 watts, last up to 20,000 hours, have a color rendering index of 85, and operate on rapid start, preheat, or electronic ballasts. They can be used in combination with high color rendering metal halide lamps of the same color temperature. Osram Corporation, Newburgh, NY.





■ U-shaped fluorescents GTE/Sylvania's Octron Curvalume fluorescent lamps are 1-inch-diameter, Ushaped lamps designed for use in square fixtures. Their average rated life is 18,000 hours. They come in cool and warm versions (4100K and 3100K) and have a color rendering index of 75. GTE/Sylvania, Danvers, MA.

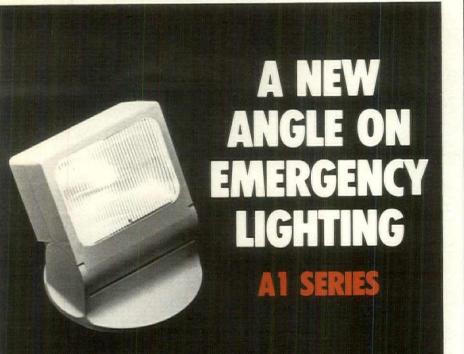
Circle 184



Dimmer, controller

The Viewpoint lighting control system from Lee Environmental Lighting can be adapted and expanded as needs change. A station can control one to 14 preset levels, and the system can control up to 40 stations. A three-digit combination code locks the unit to prevent unauthorized use. System components include an entry station for on-off switching in a space, an LCD station for selecting and changing presets and channels, and an LED station for selecting or adjusting preset levels in a space. Lee Environmental Lighting, division of Lee Colortran, Inc., Burbank, CA. Circle 185

tran,



This slim profile lighting unit features a completely automatic solid state charger with long-life pure lead batteries. The A1 mounts to either ceiling or wall and pivots 90° for extended or retracted positioning and is available in white, neutral beige or black.



Classified Directory

ACCENT AND DISPLAY LIGHTING (INTERIOR)

MIROFLECTOR CO., 40 Bayview Ave., Inwood, Long Island, NY 11696 516/371-1111 Full line of recessed accent lights, down lights & wall washers. Architectural cylinders for HQI, incandescent compact quad fluorescents and HID lamp sources.

NL CORP., 14901 Broadway, Cleveland, OH 44137 FAX 216/662-9069 or 216/662-2080 Recessed HID and incandescent; decorative; custom; church; 20, 30, & 60 amp track; fluorescent lighting systems. Call for more information.

ACCESSORIES AND COMPONENTS

AMERICAN LOUVER CO., Skokie, IL, Louvers and Lenses 800/323-4250 or 312/470-3300

AMBIENT LIGHTING SYSTEMS (INTERIOR)

AREA LIGHTING (EXTERIOR)

- AMERICAN ELECTRIC, 1555 Lynnfield Rd., Memphis, TN 38119 901/682-7766 HID luminaires for area, facade, roadway, sports, and industrial lighting applications C.P.I. CONCRETE PRODUCTS, P.O. Box 13324, Memphis, TN 38113 FAX 901/775-9883 or 901/775-9880
- Concrete light poles & bollards. Fourteen decorative colors & exposed aggregate finishes such as dark bronze, black, & granite to match any setting, Square tapered design up to 65 ft. ELA CO., 17891 Arenth Ave., City of Industry, CA 91748 . 818/965-0821 FAX 818/965-9494
- Mtgs. of decorative outdoor fixtures, poles and arms for the commercial and residential mkts. Custom gning and mfg. of decorative interior/exterior fixtures. J.H. BAXTER & COMPANY, P.O. Box 10797, Eugene, Oregon 97440 503/689-3020 Manufacturer of Timberwood Lighting Standards. A superior pressure-treated Douglas fir laminate for
- decorative outdoor lighting support. Contact Richard Baxter. PEMCO CORP., Philadelphia, PA, Exterior HID & Custom Lighting & Poles 215/236-9020 STONCO, 2345 Vauxhall Rd., Union, NJ 07083. Contact Phil Henry at . 201/964-7000 Outdoor lighting; fixtures and accessories for industrial, commercial and residential markets.
- UNION METAL CORP., 1022 9th St. SW, Canton, OH 44707 216/456-7653 Steel, aluminum and concrete poles for area, roadway and sports lighting. Hi-mast raise-lower systems. Ornamental nostalgia lighting poles and luminaires.
- W.F. HARRIS LIGHTING, 4015 Airport Ext. Rd., Monroe, NC 28110 704/283-7477 Indoor/outdoor decorative & vandal-resistant rustproof lighting for wall, ceiling, post & landscape ap-
- plications. U.L. listed H.I.D., FL, INC & emergency fixtures.

CONTROLS

LEE COLORTRAN, 1015 Chestnut St., Burbank, CA 91506 FAX 818/954-8520 or 818/843-1200 VIEWPOINT, a field-configurable system of off-the-shelf Architectural Dimming and Control Components from Lee Environmental Lighting-a division of Lee Colortran, Inc.

DAYLIGHTING PRODUCTS

DECORATIVE LUMINAIRES (INTERIOR)

DESIGN SOFTWARE & TESTING/MEASURING INSTRUMENTS

INTERNATIONAL LIGHT, Dexter Industrial Green, Newburypost, MA 01950 617/465-5923 Radiometers, photometers, spectroradiometers, laser power meters for radiometry, photometry, UV curing, UVA/B phototherapy, germicidal radiometry & UV hazard use,

LAMPS

VENTURE LIGHTING INTL., 625 Golden Oak Pkwy., Cleveland, OH 44146 800/437-0111 Metal Halide, High and Low Pressure Sodium, Mercury, MR-16 and MR-11 Display Lamps. Many new and unique products not available from other manufacturers.

LANDSCAPE LIGHTING

ABEC LIGHTING, 4084 Arnold Ave., #8, Naples, FL 33942 813/643-4242 or 813/643-3305 Quality outdoor landscape & security lighting. PVC construction. Fluorescent/low voltage available—all styles. Custom color & design. Commercial, residential, marine.

IDAHO WOOD, Sandpoint, ID, Landscape Lighting (Wood) .800/635-1100 or 208/263-9521 WESTERN LIGHTING INDUSTRIES, 354 W. Valhalla Dr., Burbank, CA 91505 818/841-7896 OMEGALUX 1200, a series of specification grade floodlights utilizing high-intensity fluorescent PL/Dulux lamps. Sizes 7, 9, 13, & 26 watt. All wet location approved.

LIGHTING DESIGNERS AND CONSULTANTS

FREDRICK RAMOND INC., 16121 S. Carmenita Rd., Cerritos, CA 90701 FAX 926-1015 213/926-1361

OEM MANUFACTURERS

GAYNOR CO., 200 Charles St., Stratford, CT 06497 203/378-5545 or FAX 203/381-9019 For more information about fluorescent wiring devices, switches and lamp holders, call and ask for Jill Sapak

OTHER LIGHTING SYSTEMS AND LUMINAIRES

CUSTOM NEON Mfg., Install interior neon. Portable & wall-mount art & signs. 213/937-6366 PARADISE DESIGN & MFG. INTL., 2633 E. 28th, #602, Signal Hill, CA 90806 213/427-5756 Portable neon fixtures, custom cove lighting & neon art, stock figures for residential, commercial, & architectural applications. For information call Don Narbone.

OTHER SERVICES

REPS WANTED/REPS AVAILABLE

IMERO FIORENTINO ASSOC., 7060 Hollywood Blvd., L.A., CA 90028 Wanted: Full-time Lighting Professional-Project responsibility, wide variety of projects. Architectural

background & organizational ability a must. Contact John Levy. REPRESENTATIVES WANTED/Lighting wholesale exclusive high-end contemporary lighting.

Residential and commercial. Great opportunity with highly respected growing company. Send resume in strict confidence to: CAREER DEV. CENTER, P.O. Box 10460, Dept. AL-788, Eugene, OR 97440

213/467-5020

THEATRICAL/STAGE LIGHTING

The Classified Directory is a monthly feature of Architectural Lighting, offering readers easy access to lighting products and services for commercial, industrial, and institutional applications. Listings in this reference section are sold on an annual basis at the rates outlined below. For full information and closing dates, contact Gordon Exe, (800) 822-6678 or (503) 343-1200.

VISA'

MasterCarc

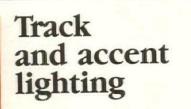
FIRST LINE-\$990/12 issues BOLDFACE, ALL-CAP ITALIC LISTING or Boldface, Upper/Lower Case Italic.

ADDITIONAL LINES-\$690/12 issues REGULAR, ALL-CAP LISTING or Regular, Upper/Lower Case.





59



Track and accent lighting products are featured on pages 14-17.



SHOWCASE

Track-mounted projector A data sheet from Wendelighting's product catalog profiles the Model 1180 optical projector, which has a yoke and adapter for track mounting in new or existing systems. Wendelighting, Burbank, CA.

Circle 200



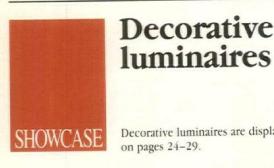
Indirect, direct lighting Silhouette luminaires, designed for the Osram HQI lamp, produce an asymmetric beam pattern for direct and indirect lighting. Floor units and wall-mounted models are available. Miroflector Company, Inc., Inwood, NY.

Circle 201

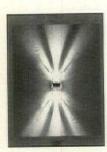


Fresnel fixtures A data sheet tells how LTM's Designer Fresnel fixture uses a spherical reflector and a prismatic fresnel lens for spot-to-flood control of its focusing range. LTM Corporation of America, Sun Valley, CA.

Circle 202



Decorative luminaires are displayed



Wall luminaire The Light Tapestry luminaire projects a spray of light rays in a fanlike pattern. A brochure contains cutaway sketches and color photos of applications for single- and double-spray models. Nessen Lamps Inc., Port Chester, NY.

Circle 203



Architectural lighting An updated product digest from Sylvan Designs describes low- and line-voltage architectural lighting fixtures, including flexible and rigid light strings, and landscape systems. Sylvan Designs, Inc., Northridge, CA.

Circle 204

SHOWCASE

Product Literature



Hand-crafted glass lamps A full-color catalog from Gemma Studios provides information on contemporary glass lamps. It includes color samples, application photos, and descriptions of features. Gemma Studios, Inc., Northampton, MA.

Circle 205

Decorative luminaires A 44-page color catalog profiles Casablanca Lighting's decorative ceramic, Murano glass, and Irish lead crystal pendants, ceiling lamps, sconces, and table lamps. Casablanca Lighting, Valley Forge, PA.

Circle 206



Ambient lighting products are featured on pages 34-37.

Linear fluorescent system

A brochure shows how the compact SLX Series mounts 12 inches from the ceiling, allowing for combinations of direct and indirect fluorescent lighting. Illumination Concepts & Engineering, North Kingstown, RI.

Circle 207

Nonmetallic luminaires A brochure illustrates Hazlite M1 nonmetallic fixtures designed for corrosion protection. It includes a list of hazardous atmospheres where the fixtures can be used. American Electric, Memphis, TN.

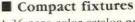
Circle 208



Small office light

Peerless Lighting offers an 8-footlong indirect lighting system that produces even, glare-free illumination in small offices and can be mounted 12 inches from the ceiling. Peerless Lighting Corporation, Berkeley, CA.

Circle 209



A 36-page color catalog profiles a complete line of fixtures designed for compact fluorescent lamps, including downlights, cylinders, wall sconces, and brackets. Marco/Marvin Electric, Los Angeles, CA.



Landscape and area lighting

Landscape and area lighting products are featured on pages 40-49.



Lumière

SHOWCASE

A brochure depicts cast-iron posts

Cast-iron posts

in 22 traditional styles, some dating back to the 18th century, with matching post adaptations and bollards. Spring City Electrical Manufacturing Company, Spring City, PA.

Circle 211

Landscape lighting

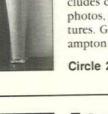
Low- and line-voltage landscape lighting fixtures, some with builtin transformers, are shown in a color brochure. A chart lists features. Lumiere Design and Manufacturing, Inc., Westlake Village, CA.

Circle 212

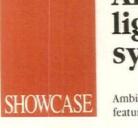


Airport lighting A color brochure describes airport applications for the AktraFlood cutoff luminaire and the Bi-Level Switching system. Photometric data for FAA requirements are listed. Wide-Lite, San Marcos, TX.

Circle 213







SLX SERIES 🖪

ite M1



Landscape lighting

Kim Lighting's full-color brochure of landscape lighting products contains drawings and photographs of outdoor lighting techniques and suggests fixtures for achieving various effects. Kim Lighting, City of Industry, CA.

Circle 214



Lighting poles

A catalog from Emco Environmental Lighting contains descriptions and sketches of a variety of decorative aluminum and steel poles. Emco Environmental Lighting, Milan, IL.

Circle 215



Fiber glass poles

A color brochure compares Shakespeare's decorative, round, and square fiber glass light poles with poles made of other materials. Shakespeare, Newberry, SC.

Circle 216



Landscape lighting

A 60-page color catalog introduces Hadco's Night Life collection of more than 140 low- and linevoltage landscape lighting fixtures and suggests ways to achieve desired lighting effects. Hadco, Littles-



town, PA. Circle 217

Custom lighting Phoenix Products describes its capabilities for developing custom lighting fixtures from rough concept to finished product in a color brochure that shows examples. Phoenix Products Company, Inc., Milwaukee, WI.

Circle 218



Outdoor area luminaire Wide-Lite's Supra-Lyte Type V luminaire is designed for efficiency and energy savings. A brochure describes reflector design, nonmetallic optical housing, and energy-saving features. Wide-Lite, San Marcos, TX.

Circle 219





Deck lighting

An illustrated color brochure from Dinico Products features a selection of luminaires for lighting decks, landscapes, and other outdoor entertainment areas. Dinico Products Inc., Hackensack, NJ.

Circle 220



Gaslights A brochure from U.S. Gaslight shows 24 cast aluminum gas lan-

terns with heat-tempered glass lenses. Sketches and dimensions for each model are included. U.S. Gaslight, Norcross, GA.

Circle 221

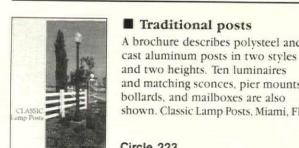
Bollards



Gardco's bollards are built to resist

damage from vandals, weather, and insects. A 12-page color brochure contains descriptions and photos of three models and detailed cutaway drawings. Gardco Lighting, San Leandro, CA.

Circle 222



SHOWCASE

and matching sconces, pier mounts, bollards, and mailboxes are also shown. Classic Lamp Posts, Miami, FL.

Traditional posts

Circle 223

Components and accessories

Lighting components and accessories are featured on pages 52-58.

Emergency systems Siltron's 48-page 1988 catalog includes exit signs, emergency and regular lighting fixtures, hazardous area and explosion-proof fixtures, and inverter and power systems. Siltron Illumination, Inc., Cucamonga, CA.

Circle 224

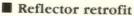




Fluorescent reflector Megalux reflectors help reduce glare and cut lighting and maintenance costs. A data sheet describes features, installation, and payback

for the custom-made reflectors. Badger USA, Inc., Baraboo, WI.

Circle 225



A case study describes the benefits of retrofitting Everbrite reflective sheets in fluorescent fixtures at the corporate headquarters of the Chubb Group of Insurance Companies. Alcoa, Sheet & Plate Division, Bettendorf, IA.

Circle 226

Dimming controls

A brochure from Macro Electronics describes capabilities of the company's architectural dimming control systems. Macro Electronics Corporation, Austin, TX.

Circle 227

Fluorescent lamps

A color brochure profiles Advantage X fluorescent lamps from Philips. Features include a T10 tube, three color temperatures, and a color rendering index of 80. Philips Lighting Company, Somerset, NJ.

Circle 228

Commercial wiring

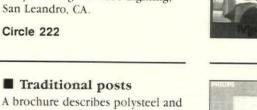
A six-page color brochure describes commercial specification-grade receptacles, AC wall switches, ground fault circuit interrupters, and wall plates. Hubbell Incorporated, Wiring Device Division, Bridgeport, CT.

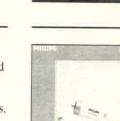
Circle 229



Halogen PAR lamps

A data sheet from GE Lighting lists features of the PAR 20 and PAR 30 Halogen Performance Plus lamps. A chart shows beam patterns and average CBCP for eight versions. GE Lighting, Cleveland, OH.





In This Issue

Manufacturers

Page 12. Accent lights animate autos in Texas showroom (Henry Butts Oldsmobile, Dallas, Texas). Litelab: Accent lighting and custom mounting clamps. Neotek: Purple neon. Omega: Office lighting. Strand Lighting: Control systems. Sylvan Designs: 2½-inch aperture lights. Vista: Low-voltage light tube.

Page 18. Handmade luminairesrelax, stimulate diners (The BuckheadDiner, Atlanta).Pam Morris, Exciting Lighting: Wallsconces.Farallon Studios: Entry bowl-type

chandeliers. Kim Hix, Near Future Traders: Bar,

ceiling, bathroom, and exterior fixtures.

Jim Lundberg, Lundberg Studios: Small round ceiling lights. Kuleto Consulting & Design: Booth aisle lights.

Page 30. Lighting design helps create '50s ambience in hotel (Nevele Hotel and Country Club, Ellenville, New York).
Alkco: Under-cabinet lighting.
Appleton Electric: Rear fascia lighting.
Lewis Signs: Neon.
Lightolier: Recessed downlights.
Neon City: Cold cathode.

Page 38. Problems and potential of lighting lakes and rivers.
(Old River Woods Marina, West Linn, Oregon.)
Devine: Steplight fixture.
Timberworks Oregon: Custom fabricated wood housing.
(Jenne Lake, Beaverton, Oregon.)

American Electric: Floodlights. Kim: Fountain lights.

Page 50. A/E headquarters shows off lighting technology (Anderson DeBartolo Pan corporate office headquarters, Tucson, Arizona). Lightolier: Compact fluorescent downlights, low-voltage incandescent accent lights, customized mercury vapor sconces. Metalux: Fluorescent troffers. Integralite: Indirect fluorescent fixtures in boardroom. Luxo: Compact fluorescent task lights. Kim: Site lighting. GE; GTE/Sylvania; Philips; Osram: Lamps. Advance Transformer; Universal: Ballasts. Sterner: Photoelectric daylighting controls. Leviton: Power-line carrier control

system, dimmers for executive offices. Lutron: Dimmers for boardroom. York-Lite: Exit signs.

Manufacturer credits reflect the products specified for the projects; it is possible that other products were installed during construction or maintenance.

Photographers

Robt. Ames Cook, 6207 Aberdeen Avenue, Dallas, TX 75230, (214) 430-0888

Michael French, P.O. Box 32439, Tucson, AZ 85751, (602) 886-7749 **Ed Hershberger**, 3415 SW Spring Garden Street, Portland, OR 97219, (503) 245-4158

Timothy Hursley, The Arkansas Office, 1911 West Markham, Little Rock, AR 72205, (501) 372-0640

Elliott Kaufman, 255 West 90th #5C, New York, NY 10024, (212) 496-0860

E. Alan McGee, E. Alan McGee Photography, Inc., 1816 Briarwood Industrial Court, Atlanta, GA 30329, (404) 633-1286

Advertisers

Alkco				 		. 15
Amecon, Inc.						
American Electric						
Appleton Lamplighter					•	.25
Architectural Crystal, Ltd	,	•	• •	 •		.25
Art Directions		•	•			. 28
Aster Marketing Services	•	•		 •		.37

Conservation Technology, Ltd. 16 EMCO Environmental Lighting 48 Environmental Lighting for

Gross Chandelier Company	
GTE/Sylvania Lighting	
Hadco	
Hanover Lantern	
Hubbell Incorporated, Wiring Device	
Division	
Kalwall Corporation	
Lighting Services Inc	
Lithonia Lighting	
Luma Lighting Industries, Inc 3,13	
Lutron Electronics Co., Inc	
Macro Electronics Corporation 54	
MagneTek Inc.	
MagneTek Triad	
Maximum Technology	
Minolta Corporation	
New Horizons Lighting, Inc 29	
NL Corporation16	

Philips Lighting Company 10-11
Phoenix Products Co., Inc
Poulsen Lighting Inc
Rejuvenation Lamp & Fixture
Company
Roberts Step-Lite Systems
Ruud Lighting, Inc
RWL Corporation
Ryther-Purdy Lumber Company 42
Shakespeare Company
SPI Lighting
Sylvan Designs, Inc
Tech Lighting
Venture Lighting International2
Wide-Lite
H.E. Williams, Inc
York-Lite Electronics, Inc

10 - 11

Dhilling Lighting Company