

# <text>

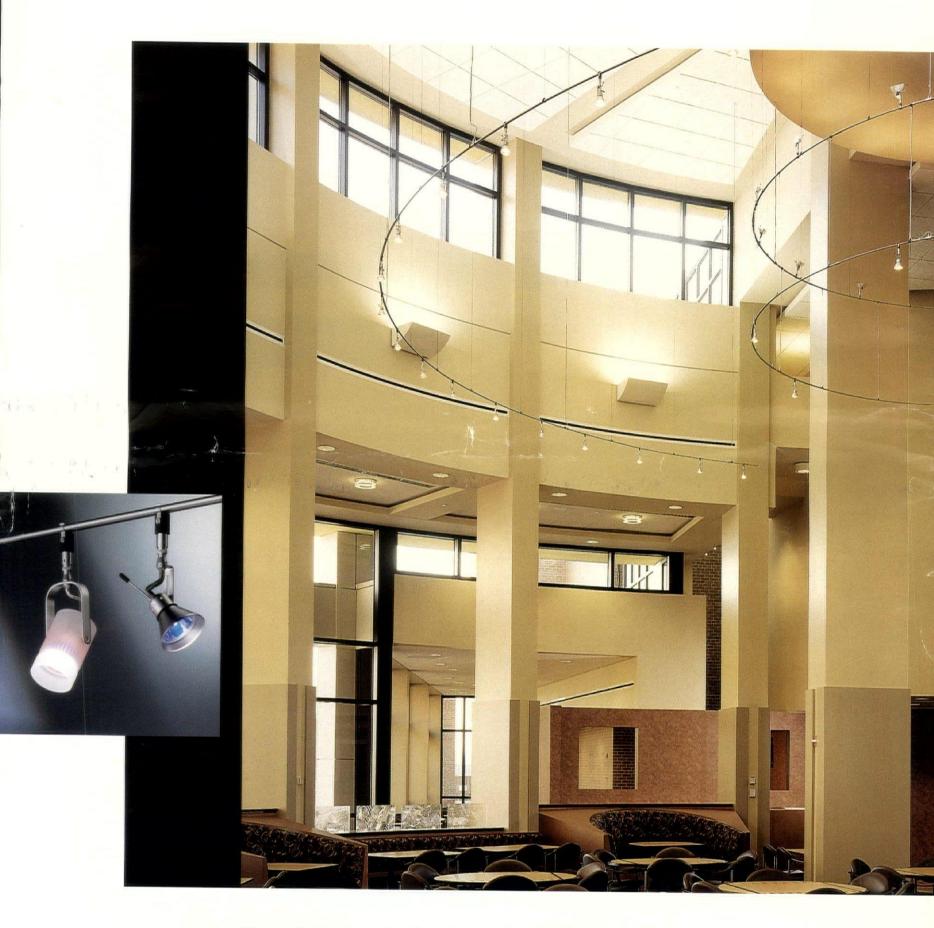


# **Above the Fold**

2002 Applications Issue Projects & Products

VNU Business Publications USA U.S. \$7.00



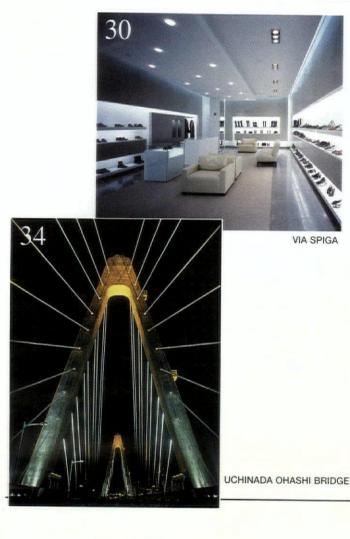


**Y/A**, one of eight systems from Bruck, is a low profile track system that can easily change directions and elevations. Available in straight or curved segments, in chrome, matte chrome, or gold finish.

#### architectural lighting

September/October 2002

# contents



#### DESIGN FEATURES

#### 26 Media Presence

This news and media powerhouse is making headlines with a bold new headquarters in McLean, VA

#### 30 Fashion Statement

Leather and luxury take center stage in the lighting of this ultra-sleek shoe store

#### 32 High Lighting

Two new buildings on this Texas high school's campus get top-grade lighting treatment

34 A Span for All Seasons

Traditional culture and a love of nature convene in the illumination of this bridge near Kanazawa City, Japan

#### 38 Sign Language

A new base in San Francisco gives this software developer a home with personality and a way to get around

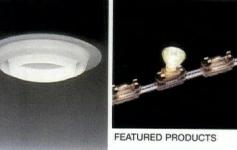
#### PRODUCTS USED IN ...

- 42 Gannett/USA Today
- 46 Via Spiga
- 49 Episcopal High School
- 50 Uchinada Ohashi Bridge
- 51 Intershop North American Headquarters

#### DEPARTMENTS

- 8 Editor's Note
- 10 News
  - 10 The Inbox
  - 21 People
  - 23 Datebook
  - 24 Web





Architectural Lighting (Vol. 17, No. 6 USPS 000-846, ISSN 0894-0436) is published seven times per year (Birnonthly except Monthly in March and June) by VNU Business Media, Inc., 770 Broadway, New York, NY 10003-9595 and is distributed free of charge to individuals or firms engaged in the specification of lighting products in the US and territories. The cost of all other subscriptions in the US and territories is \$48 per year. A one-year Canadian subscription, payable in US dollars, costs \$60 and all other foreign, \$96. Canada Post Publications Mail Agreement No. 40031729. Periodicals Postage Paid at New York, NY and additional mailing offices. Printed in the USA. POSTMASTER: See changes of address to Architectural Lighting, PO Box 1061, Skokie, IL 60076-8061.

Architectural Lighting is a trademark owned exclusively by VNU Business Media, Inc. Copyright 2002 VNU Business Media, Inc. All rights reserved. Reproduction of this magazine, in whole or in part, is prohibited unless authorized by the publisher. Editorial and advertising offices: 770 Broadway, New York, NY 10003. Phone (646) 654-4500. Customer Service Inquiries: For address changes, single copy sales (\$7 in the US, \$7 + postage outside the US, payable in advance) and subscription inquiries, write to Architectural Lighting, PO Box 1061, Skokie, IL 60076-8061 or call Customer Service at (847) 647-7987 outside the US.



Remember when the sky was so dark you could see all the stars in the constellations?

We do. That's why we're introducing LiteShield, a new line of luminaires that will project more light toward the ground and less toward the sky where it would contribute to the growing problem of light intrusion.

It may seem unusual that advanced lighting technology would come from the leader in traditional lamppost designs. But, like you, we want the skies to be as dark as they were when we made our first lamp posts 160 years ago.

Call 610-948-4000 for information.

Circle No. 3 on reader service card or visit lightforum.com





Traditional design, forward thinking.



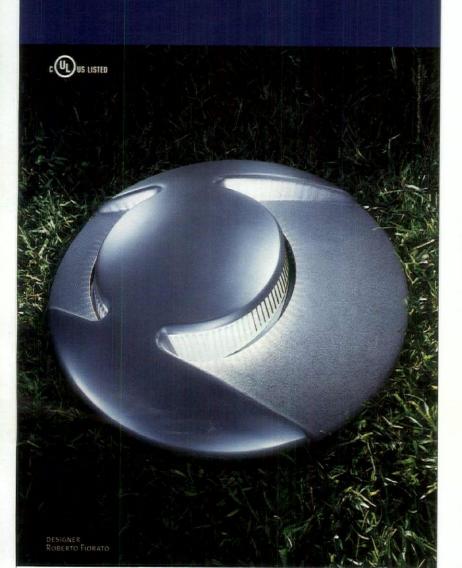
# 1% Dimming for Compact Fluorescents

The rules have changed. Yesterday, creating an inviting visual environment meant using incandescent sources. Today, Lutron's Hi-lume. 1<sup>%</sup> dimming technology lets you create ambiance in architectural lighting with energy-saving compact fluorescent lamps and Lutron lighting control systems.

For more information: call 877.258.8766 ext. 105 www.lutron.com/Hilume/105



# [CYCLO]





CYCLOPLAT 23/30



CYCLOCAR 23



CYCLOBAT 16/23/30

CYCLOWALL BAT 30

#### DISTINCTIVE EUROPEAN DESIGN TRANSFORMING THE LANDSCAPE

Series of walk-over and drive-over inground luminaires UL and cUL listed for wet locations, IP67. Bold designs constructed from durable materials. Choose from three sizes and two standard finishes, polished aluminum and black anodized. Complete family includes accent, wall mount and pathway fixtures conceptualized to carry the space. Lamp sources include Incandescent, Halogen, Compact Fluorescent and HID.

PRISMA NORTH AMERICA, INC. 300 PETTY ROAD, SUITE C LAWRENCEVILLE, GA 30043 VOICE 770.822.2115 - FAX 770.822.9925 EMAIL: INFO@PRISMALIGHTING.COM



#### architectural lighting

SEPTEMBER/OCTOBER 2002

#### EDITORIAL STAFF

#### EDITOR-IN-CHIEF

CHRISTINA TRAUTHWEIN (646) 654-4481 fax (646) 654-5816 ctrauthwein@vnubuspubs.com

ART DIRECTOR JONATHAN MARSLAND (646) 654-4472 fax (646) 654-4480 jmarsland@vnubuspubs.com

> SENIOR EDITOR ALICE LIAO (646) 654-4482 fax (646) 654-5816 aliao@vnubuspubs.com

#### **CONTRIBUTING EDITORS**

Wanda Jankowski, Jean Nayar, David Houghton, PE, Craig DiLouie, MARK NEWMAN

EDITORIAL ADVISERS RENEE COOLEY, COOLEY MONATO STUDIO HOWARD BRANDSTON, LC. FIALD FIES, BRANDSTON PARTNERSHIP GARY STEFFY, LC, FIALD, GARY STEFFY LIGHTING DESIGN

#### SUPPORT

PRODUCTION VINCE HABICK (646) 654-7238 fax (646) 654-7317

CIRCULATION MANAGER MOLLIE MURRAY (646) 654-7254 fax (646) 654-7265

> LIST RENTAL (845) 620-9000 fax (845) 620-9035

CUSTOMER SERVICE (847) 647-7987 fax (732) 380-2422

REPRINTS HEATHER OSBORNE PARS INTERNATIONAL, INC. (212) 221-9595 Ext. 333 heather@parsintl.com PUBLISHER SUZANNE TRON HABER (646) 654-5756 fax (646) 654-4484 sthaber@vnubuspubs.com

VOL17, NUMBER 6

GROUP MARKETING MANAGER KELLY CARSON (646) 654-7654 fax (646) 654-7365 kcarson@vnubuspubs.com

#### ADVERTISING SALES

NORTHEAST/INTERNATIONAL CLIFF SMITH National Business Development Manager (646) 654-4478 fax (646) 654-5816 csmith@vnubuspubs.com

MIDWEST/CENTRAL ROB BROCKLEY (312) 583-5505 fax (312) 583-5507 rbrockley@architecture mag.com

WEST JON HENG / PATRICIA OLAIZ HENG (626) 799-3610 fax (626) 799-5853 patsbea@msn.com

TEXAS MITCH DUFFY (281) 895-9229 fax (281) 895-9209 mduffy@vnubuspubs.com

SPECIAL PROJECTS, ADVERTISING CLASSIFIED ADVERTISING MICHAEL PARRISH (646) 654-5763 fax (646) 654-5816 mparrish@vnubuspubs.com



770 Broadway, New York, NY 10003

Real Estate and Design Group Richard O'Connor, President Stan Itzkowitz, VP of Operations

Real Estate and Design Group Publications: Architectural Lighting, Architectu Real Estate and Design Group Publications: Architectural Lighting, Architecture, Commercial Property News, Contract, Facilities Design & Management, Hospitality Design, Kitchen & Bath Business, Multi-Housing News Other VNU Business Publications Groups General and Specialty Retailing; Retail and Food Media; Retail Design; Travel, Performance and Healthcare

#### wnu business publications

President & CEO: Michael Marchesano: Chief Operating Officer: Howard Lander: Executive Vice Presidents: Mark Dacey (Marketing, Media & Retail), Richard O'Connor (Travel, Performance, Real Estate/Design and Food Service); Senior Vice President: Toni Nevitt (Marketing Information); Vice Presidents: Joellen Sommer (Business Management), Joanne Wheatley (Circulation)

#### vnu business media

President & CEO: Michael Marchesano; Chief Operating Officer: Howard Lander; /tce President/Business Development: John van der Valk; Vice President/Human Resources: Sharon Sheer; Chief Financial Officer: Joe Furey; President – VNU Expositions: Greg Farrar; President – VNU eMedia: Jeremy Gravzel

WBPA

Copyright © 2002 by VNU Business Media, Inc. All rights reserved

Circle No. 5 on reader service card or visit lightforum.com

ARCHITECTURAL LIGHTING/www.lightforum.com

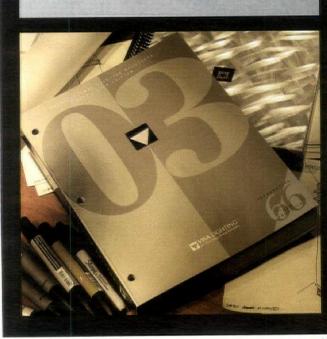




CYCLOWALL SPOT 30







**Hot-Off-The-Press**, the 2002/2003 Edition of the Visa Lighting catalog includes 66 all-new designs. Some are outrageous, some are elegant, others are simply drop-dead gorgeous– we'll let you decide which is which.



800.788.VISA www.visalighting.com



# editor'snote

Our 2002 Applications Issues, better known to many as the "Products & Projects" issue, features five lighting design projects—from office to educational to retail spaces—and many of the lamps and fixtures specified on the respective projects. It's easy. Read the story, turn to the appropriate page and find out just what, how and where a product was used. This particular annual issue has always been one of the most popular, as readers always tell me they just can't get enough information about designers' techniques and manufacturers' offerings.

Speaking of reader involvement, we're heading to the end of 2002 with one more issue to wrap up and plans for 2003 quickly approaching. Here are some things you should know and can do to make sure your suggestions, informa-



Christina Trauthwein, Editor-in-Chief

tion and opinions are considered within the pages of *Architectural Lighting*: *Now!* 

 $\sqrt{16}$  Jf you're a manufacturer or know of one who was not included in last year's annual December Lighting Source Directory and would like to be, contact us for the appropriate forms to list your company name, vital contact information, product offerings and everything you need to be included among 1,000+ of your peers and competitors. The deadline is November 1!

Soon.

 $\sqrt{\text{Send in your nominations for the third annual Hall of Fame issue, which pays tribute to lighting designers, industry professionals and educators—past and present—who've influenced the industry. We need a name/names and brief reason why you believe they're worthy of this honor. Please send them in by January 15.$ 

 $\sqrt{\text{Send in your office, retail, hospitality and residential projects. We're planning something new for next year—Design Focus Reports—that will cover the news, products and trends in those markets and spotlight the projects. These special sections are planned for January/February, March, April and July/August.$ *Always*...

 $\sqrt{}$  Let us know about your promotion, your move, the award you just won. Are you angry, disillusioned, grateful, supportive? Write us your perspective on something that's happening in the industry. Our Endpoints column is an industry "soapbox" and has generated many discussions and action within the lighting community.

My email is ctrauthwein@vnubuspubs.com and my phone number is (646) 654-4481. Alice's email is aliao@vnubuspubs.com and number is (646) 654-4482. Keep in touch!

# letters

To the Editor:

When I see the many awards for excellent interiors given by associations that **violate critical lighting principles**, I shake my head in sadness! Are they ignorant of the critical lighting principles? Probably.

When I teach lighting to architects and interior designers who are **sometimes ignorant about critical lighting principles**, I know I have done a good thing.

When I see an award given for excellent interior lighting by a lighting association that **should never be ignorant about critical lighting principles**, I know this is a bad thing.

A critical lighting principle is that no screen-based task (computer screen in the case of the IALD 2002 Awards: Glowing Walls, Zurich, Switzerland) should ever face a brightly lit surface or be seen against a surface brighter than the screen task. However, the illustrious judges deemed it appropriate to award the aforementioned project even though every laptop computer on the long desk either faces a window (typically bright) or an illuminated wall (sometimes bright) or is seen against these bright surfaces.

If we in the lighting community cannot demonstrate applications that are appropriate, who can?

Jane Grosslight, lighting designer Tallahassee, FL

#### www.eLumit.com

Search Engine: fast free intuitive comprehensive product database new product updates spec-building tools ...the future of light

# light magnate

100, 120, 220, 240, 277 3

m) UL/CUL/CE listed

Seductive and powerful, the MT6 Series features an optically precise reflector, simple re-lamping from the rear, and an internal accessory cartridge. Ceramic Metal Halide technology makes this a brighter, and more efficient light to enhance any interior space.

Lighting Services Inc The premier specialty lighting manufacturer.



Your outdoor lighting options just got a lot brighter.



Forms+Surfaces

www.forms-surfaces.com 800.451.0410 Circle No. 14 on reader service card or visit lightforum.com

#### ARCHITECTURAL LIGHTING PARTNERS WITH ALMC

Architectural Lighting will partner with award-winning lighting industry veterans Sonny Sonnenfeld, Paul Gregory and Jonathan Speirs to produce Architectural Lighting Master Classes 2003, to be held at John Jay College in New York City on February 20-21. The New York Chapter of the American Institute of Architects (AIA) will cosponsor the event and all those attending both sessions will receive 16 Continuing Education Unit (CEU) credits.

This event is designed to train architects, interior designers, lighting designers, electrical engineers, owners and anyone else interested in the creative use of light to enhance their projects and maintain an edge in a competitive design market. The classes will address architectural lighting design philosophies to provide a creative and inspirational experience for all attendees. The faculty selected to teach the classes will include some of the world's foremost lighting designers. Additionally, there will be a manufacturers' showcase featuring some of the latest products. For more information, contact Christina Mendez at (646) 654-4581 or email cmendez@vnubuspubs.com.

#### **IIDA ANNOUNCES WINNERS**

The winners of the 2002 International Illumination Design Awards were announced August 7 during the IES conference in Salt Lake City, UT.

This year, a Paul Waterbury Award of Distinction for Outdoor Lighting Design was presented to Jonathan Speirs and Associates for the Gateshead Millennium Bridge. The Paul Waterbury Award of Excellence for Outdoor Lighting Design was awarded to Randy Burkett Lighting Design for the Gateway Arch and Ross De Alessi Lighting Design for the Forth Bridge. Special Citations in the outdoor lighting category were given to Uchihara Creative Lighting Design, Ushio Spax and Akatsuki Art & Technology for Japan Expo in Fukushima 2001; James Carpenter Design Associates and Tanteri & Associates for the Luminous Arc, San

#### LIGHTFAIR WILL RETURN TO NYC IN 2003

Lightfair International 2003 will be held at the Jacob Javits Convention Center in New York City. The trade show and conference will take place May 6-8 and will be preceded by the pre-conference on May 5. For exhibit information, contact Libby Morley, VP, trade shows at (404) 220-3315 (libbym@lightfair.com). For conference information, contact Renee Gable, VP, conference and marketing manager, at (404) 220-2217 (reneeg@lightfair.com) or Angela Stewart, conference and marketing manager at (404) 220-2221 (angelas@lightfair.com). For general information, contact Tiffany Wiederhold, department coordinator at (404) 220-2205 (tiffanyw@lightfair.com). Further information on the 2003 event will be posted when available on www.lightfair.com.

Diego Convention Center; and Fisher Marantz Stone for the Mickey and Friends Parking Structure.

Receiving a 2002 Edwin F. Guth Memorial Award of Excellence for Interior Lighting Design were Light Solutions, Trivers Associates and St. Louis Antique Lighting for the Holy Family Chapel; George Sexton Associates for Herz Jesu Kirche; and Kugler Tillotson Associates for the Bank of China Head Office. Edwin F. Guth Memorial Award for Interior Lighting Design Special Citations were awarded to Ann Kale Associates for Suba Restaurant and Speirs and Major for the Magna Science Adventure Centre. This year, the Aileen Page Cutler Memorial Award for Residential Lighting Design was not awarded.

#### UPCOMING EVENTS ADDRESS LEDS AND LIGHT & HEALTH

Lighting Emitting Diodes 2002-The Strategic Summit for LEDs in Illumination will take place at the Hyatt Islandia Hotel in San Diego, CA on October 21-23, 2002. The summit, the third of its kind, will feature more than 35 expert speakers who will discuss the opportunities and obstacles in existing and new markets for high-brightness LEDs in illumination applications. Expected to draw 200 attendees, this year's event will include a panel discussion on "LEDs, Energy and the Environment" and provide a comprehensive appraisal of LED market developments, new applications, regulatory drivers and competing technologies as well as the latest material advances for white, red, yellow and blue highbrightness LEDS. The conference is preceded by two seminars on October 21, "The Fundamentals of White LEDs" and "System Lighting Design

with High Power LEDs." For more information, visit www.intertechusa.com/leds.html or phone (207) 781-9800.

More than 20 topics addressing light and human health are scheduled for the **Fifth Lighting Research Office (LRO) International Lighting Research Symposium**, which will occur November 3-5 at the Grosvenor Resort in Orlando, FL. This year's keynote speaker, Dr. Mark Rea of the Lighting Research Center will speak on "Light Isn't Just for Vision Anymore!" to kick off a series of presentations by internationally known speakers, authors, lighting and medical researchers and technical experts. Subjects covered include new medical applications of light, using light to treat mental disorders, therapeutic lighting, human circadian rhythms, light and the aging eye and the hazards of UV. For more information, visit www.lightingresearchoffice.org.

#### martinarchitectural

# Alien 05

### Create a spectacle...

www.martin-architectural.com • Tel. +1 954 858 1800

Circle No. 16 on reader service card or visit lightforum.com





Color changing do

ownlight

#### the inbox

#### LIGHTSHOW/WEST 2003 WILL DEBUT IN SAN FRANCISCO

Atlanta-based Exponation has announced the launch of LightShow/West, a regional "order writing" trade show for buyers and sellers of architectural and commercial lighting products. LightShow/West 2003 will take place September 25-26 at the Concourse Exhibition Center in San Francisco and feature over 30,000 sq. ft. of exhibit space and host more than 3,000 attendees from the West-coast specification market. Also offered is the opportunity to write business on-site, an option not currently available on the North American-based architectural and commercial lighting trade show circuit. For more information or to reserve exhibit space, contact Christopher Gibbs at (770) 690-7469, fax (770) 690-0142 or email cfgibbs@bellsouth.net.

#### LEI OPENS IN PHILADELPHIA

After a 20-year career in lighting education at Penn State University, Dr. Craig A. Bernecker, FIESNA, LC has founded the Lighting Education Institute (LEI) in Philadelphia. LEI provides direct-to-theprofessional/industry lighting education programs on a national basis to design professionals, manufacturers and building owners. Programs offered include courses for individuals and tailored programs for companies available in formats such as workshops and seminars at company locations, interactive videoconferencing, geographically based seminars and Internet learning activities. Course content ranges from specific design applications such as retail, healthcare, office and industrial lighting to special topics such as emergency lighting, lighting field measurements and sustainable lighting design. Participants will be awarded with certificates and CEUs for course completion including those available from IESNA, AIA, ASID and NCQLP. For more information, contact the LEI at (610) 524-7969, fax (610) 524-8969 or email cbernecker@lightingeducation.com.

#### LIGHTOLIER OFFERS SEMINAR

Lightolier will host a seminar, "Energy-Efficient Lighting Systems for Retail Spaces" November 4-6 at its TechCenter in Fall River, MA. The course will stress the importance of installing quality lighting systems comprised of luminaires, lamps, ballasts and controls to satisfy the lighting requirements of retail spaces. Product management and design teams from Lightolier and lamp product engineers from Osram Sylvania will facilitate the seminar, which will place a particular emphasis on general, accent and display lighting. The seminar is certified by the American Lighting Association (ALA) and the American Institute of Architects (AIA). Seating is limited to 25, so early registration is encouraged. The fee is \$250. For more information, contact Earl R. Print, director, sales development and lighting education at (508) 646-3103.

#### ROME PRIZE INVITES APPLICATIONS

The American Academy in Rome invites applications for the 2003 Rome Prize competition. A center for independent study and advanced research in the arts and humanities, the Academy offers up to 30 residential fellowships for periods ranging from six months to two years. Fellowships are offered in subjects such as architecture, design, landscape architecture and visual arts. Winners reside at the Academy's 11-acre center in Rome and receive room and board, a study or studio and a stipend. The deadline for applications is November 1, 2002. For information, visit www.aarome.org or contact the American Academy in Rome, 7 East 60th Street, New York, NY 10022, Att: Programs; phone (212) 751-7200, fax (212) 751-7220, email info@aarme.org. Please state specific field of interest when requesting information. The second annual Luraline "It's Your Light" competition will once again offer a student the opportunity to have his/her original design for a lighting fixture put into production. The 2002-2003 contest, which solicits new concepts for lighting fixtures from design and architecture students, features a hospitality theme. Fixtures should be suitable for interior or exterior use in an upscale hotel or resort. Entries will be judged by a panel of industry experts based on creativity and feasibility of the design. The winner will receive a cash prize of \$1,500 and the winning design may be put into production as part of Luraline's Designer Series. Last year's winning submission, "Overgrown Weed," by Takeshi Ohara of the Art Institute in Fort Lauderdale, FL is currently in development at Luraline. The deadline for entries is November 29. Entry forms may be downloaded at www.luraline.com. For more information, phone (800) 940-6588.

#### USGBC CHOOSES PARTICIPANTS FOR LEED EB PILOT PROGRAM

The U.S. Green Building Council (USGBC) has selected 65 buildings representing 51 companies and organizations for participation in the LEED for Existing Buildings (LEED EB) pilot program. These buildings comprise more than 17 million sq. ft. of floor space and include commercial buildings as well as schools, government buildings, university facilities and a hospital. In addition, the companies and organizations represented own or lease more than 400 million sq. ft. of buildings, making this the largest pilot of a LEED product due to market demand in USGBC history.

LEED EB (Leadership in Energy and Environmental Design) was developed to recognize and certify environmental performance in more than 4.6 million buildings already standing. During the past two years, the USGBC developed a draft version of the LEED EB by taking LEED NB for new construction and major renovations and turning its focus to building upgrades and building operations. During the recruitment process, more than 2.000 invitations for participation in the pilot program were sent out to USGBC members, various government agencies and other interested parties. Building owners that would like their building project to be considered for participation in the LEED EB pilot program may visit www.usgbc.org for more information.

#### EXHIBIT HONORS ARNE JACOBSEN

An exhibit at the Scandinavia House in New York City is celebrating the 100th birthday of Danish architect Arne Jacobsen and his contributions to both modern architectural and industrial design. Louis Poulsen Lighting was one of the sponsors of the exhibit, which opened September 27 and will run through November 9.

A graduate of the School of Architecture at the Royal Danish Academy of Fine Arts in Copenhagen in 1927, Jacobsen was the recipient of a silver medal

at the World Exhibition in Paris when he was only 23. The following year, he was awarded the Gold Medal from the Danish Academy. His impressive body of work includes Bellevue in Klampenborg, Denmark; City Halls in Soelleroed, Aarhus, Roedovre and Glostrup, all in Denmark; SAS Royal Hotel in Copenhagen; the National Bank in Copenhagen; City Hall in Mainz, Germany and



St. Catherine's College in Oxford, UK. Jacobsen's cooperation with Louis Poulsen Lighting dates back to the beginning of the 1930s, when he created landmark designs, some of which are still sold today. (*Above: AJ Eklipta was designed in 1965 for the City Hall in Roedovre, Denmark.*)



#### DESIGN FOR THE FUTURE OF LIGHT



#### If you could get a lighting product that...

#### ... uses the technology of the future

As with all of the Destiny Series of Solid State Lighting (SSL) products, the ColorWash is powered by state-of-the-art Luxeon™ LED's, that combined with TIR Systems' leading edge design, provide performance to challenge traditional lighting products.

#### ...looks like the future

... is timeless

Quality, design, and artistic

inspiration never go out of style ...

The new Destiny ColorWash features a flatscreen "notebook computer" design for a low profile that can disappear into space or add a touch of technology to your design.

#### ...has as many possibilities as the future

"Key 37" unlocks a colorful universe of design possibilities brought to life with a full range of dynamic color options while proprietary optics enable virtually any wash lighting application.

What **will you** do with it?

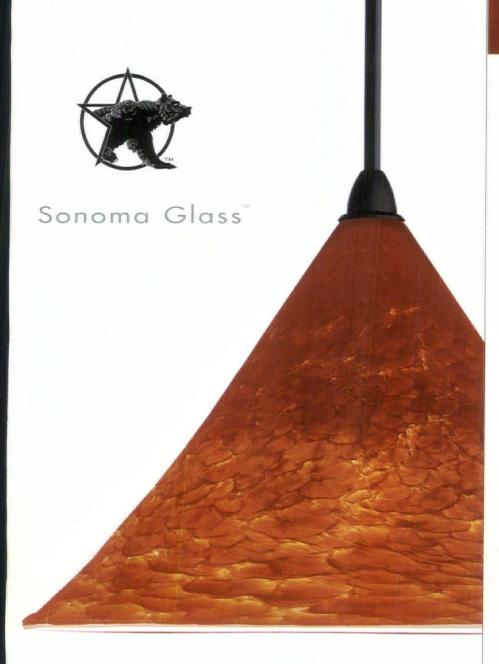
#### The **future**... it's our **destiny**

now it's here

Circle No. 21 on reader service card or visit lightforum.com



TIR Systems Ltd. 3350 Bridgeway St, Vancouver BC, Canada V5K 1H9 1 800 633 2036 www.tirsys.com



The beauty of hand blown glass making, its fluid motions, its heat and chemistry transcends all other production methods. Our unique color textures are achieved by hand applying crushed colored frit to molten glass. The glass is then blown into wood and graphite molds. Individual characteristics of color, finish, and texture in each piece are what give our hand blown glass its distinctive quality. Designed and hand crafted in the United States.

#### TRANSLITE : SONOMA

technology art architecture



Mt. Vernon Red Ultra Blue

Sausalito White Turner Gold

toll free 888.999.4540 : Call us for your local sales representative. 22678 Broadway Suite One : Sonoma, California 95476

Circle No. 22 on reader service card or visit lightforum.com

#### the inbox

#### ENERGIZE AMERICA HAS NEW SPONSORS

Energize America Educational Institute (EAEI) recently welcomed three new sponsors to the Institute's public awareness program, Energize America (EA). The new sponsors are Magnaray International Division, U.S. Energy Capital Corp. and Energy Conservation Corp. EAEI is a nonprofit institute that was developed by industry leaders—who form the advisory board—and is dedicated to promoting the use of energy-efficient products and technologies. The EA awareness initiative serves to bring together energy users and energy service companies, manufacturers of energy-efficient products, sources of project financing, utilities and environment and government agencies to facilitate implementation of energy-efficiency projects. The initiative's website at www.energizeamerica.org functions as an electrical industry resource for business and residential audiences by providing energy costsaving information and energy-efficient ideas and by helping to locate assistance and products for implementing energy-efficient solutions for businesses. For more information about EAEI, EA and the varying levels of sponsorships available, visit the website, email nchan@energizeamerica.org or phone (866) 561-5129.

#### IESNA SCHEDULES EVENT IN MEXICO

The Mexico section of the Illuminating Engineering Society of North American has announced an event to be held November 7-8 at the Palacio de Mineria or Mining Palace in Mexico City. Currently, speakers scheduled to present at the event, which is titled "Light, Energy and Architecture," include Jonathan Speirs, Gilles Darkin, Julie Oksanen, Vessa H. Castiglioni, Lisa Ishii, Charles Stone and Philip Gabriel. For more information, email Pedro Garza at garbec@prodigy.net.mx.

#### **MERGERS & ACQUISITIONS**

**Light Corp.** has purchased the assets of the office lighting product line of the Garcy/SLP Lighting Division from RHC/Spacemaster Corp. This includes all task, ambient and desktop lighting products. The Garcy division of RHC/Spacemaster Corp. will continue to design, manufacture and sell Garcy store fixtures and store fixture lighting products.

The Texas practice of Chicago-based **Perkins & Will** and Dallas-based **Collins/Reisenbichler Architects (CRA)** have joined forces to form Perkins & Will/CRA, a healthcare- and education-focused architecture, interior design and planning firm with more than 85 employees working from existing offices in Dallas and Houston. Named principals are Tom Reisenbichler, David Collins and Steve Milner, formerly of CRA, and Doug Demers and Wayne Cage, formerly of Perkins & Will. Phil Callison, Paul Donaldson and Randy Hood, formerly of CRA, and Rick Polvino, formerly of Perkins & Will, are associate principals.

#### NATIONAL STUDY OF LIGHTING ENERGY CONSUMPTION RELEASED

Navigant Consulting, Inc. has released a report estimating the energy used in approximately 7 billion lamps throughout the U.S. This report, funded by the Department of Energy (DOE), estimates that lighting consumed approximate-ly 8 percent of the total U.S. energy consumption in 2001.

The study found commercial buildings used the largest share of lighting energy (51 percent), followed by residential (27 percent), industrial (14 percent) and outdoor stationary fixtures (8 percent). From a lamp-type perspective, incandescent lamps were found to be the highest energy user, accounting for 42 percent of the nation's electricity used for lighting. This is followed by fluorescent with 41 percent and HID with 17 percent.

Copies of the report, U.S. Lighting Market Characterization, Volume I: National Lighting Inventory and Energy Consumption Estimate, are available on the DOE's website at www.eren.doe.gov/buildings/documents. Project : Del Webb Anthem Country Club, Arizona Lighting Designer: Greg Gapen CDL Photographer : Robert Reck

Alluminating Design

When design professionals create signature projects, they demand solid and reliable fixtures like our K2 Series<sup>™</sup> H.I.D Floodlight. Hand Crafted. Hermetically Sealed. Highly Machined. Classically Styled. There is no substitute for Quality.



www.bklighting.com

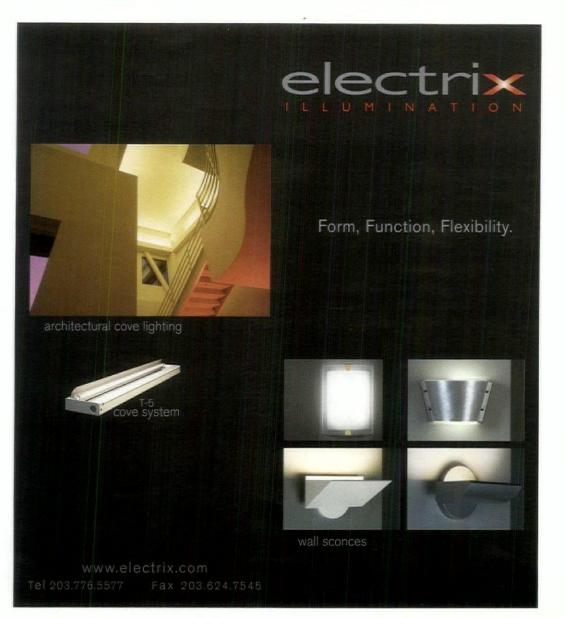
#### the inbox

#### PILOT PROGRAM PROMOTES ENERGY STAR

New England electric utility, National Grid, has introduced the National Grid Lighting Showroom Fixture Pilot Program, which seeks to provide lighting showrooms with incentives for promoting, displaying and selling Energy Star-labeled fixtures. The program is open to customers of National Grid's Massachusetts Electric Co. and Narragansett Electric Co. in Rhode Island and is the first of its kind in the nation. National Grid will provide participating showrooms with co-operative advertising dollars, employee sales training, ongoing field support and incentives to pass along to consumers such as discount coupons on Energy Star-labeled fixtures and compact fluorescent lamps. The program was designed by National Grid in conjunction with its contractor, Applied Proactive Technologies, Inc. (APT). For more information, contact APT at phone (800) 491-1077.

#### SHAPER TURNS 50

Richmond, CA-based Shaper Lighting is celebrating its 50th Anniversary. The company was formed by Hans Shaper in 1952 and has been a major custom manufacturer for the U.S. West-coast region, as well as a national manufacturer of standard specification-grade, commercial-quality architectural decorative fixtures for both commercial and residential applications. Shaper was purchased by architects Randy Borden and Allen Reaves in 1983 and by Cooper Lighting in 2000.



#### COMPANIES OPEN AND EXPAND

**IO**, a new venture focusing on the utilization and advancement of LED technology in commercial indoor and outdoor lighting, has opened for business in Skokie, IL. Led by president and CEO Ann Reo, the company launched operations on September 1 with an initial product offering of two architectural lighting fixtures, Plane and Tile. For more information, contact IO at 3712 West Jarvis Avenue, Skokie, IL 60076; phone (847) 626-6000, fax (847) 626-6100, email info@iolighting.com, www.iolighting.com.

Available Light has opened an office in New York City at 504 La Guardia Place, 5th floor, New York, NY 10012. To contact Available Light NY, phone (212) 473-9797, fax (212) 473-4708 or email Abhay Wadhwa, IES, ISLE, principal at abhay@availablelight.com.

**North American Light Spectrum** (NALS) has launched operations in Danbury, CT. Headed by Frank Fitzgerald, a partner and president of the company, NALS will provide sales and distribution networks and marketing programs for European manufacturers of original-design, high-performance lighting products and cover both commercial and residential markets throughout the U.S., Canada and Mexico. NALS currently distributes Foscarini, Luxo Italian's Luxit brand of task and ambient lighting designs and Oluce, a producer of portable and hard-wired accent and ambient lighting. The company is located at 15 Old Sherman Turnpike, Danbury, CT 06810; phone (800) 713-282, fax (800) 713-2481, email tallienals@aol.com.

FC Lighting has moved into its new 50,000-sq.-ft. combination manufacturing, office and warehousing headquarters located in the western suburb of Addison, IL. To contact the company, phone (800) 800-1730.

**Burke Lighting Design** has relocated to the India Street Design Center at 2171 India Street, Suite J, San Diego, CA 92101. To contact the firm, phone (619) 231-7097, fax (619) 231-7017 or visit www.burkelighting.com.

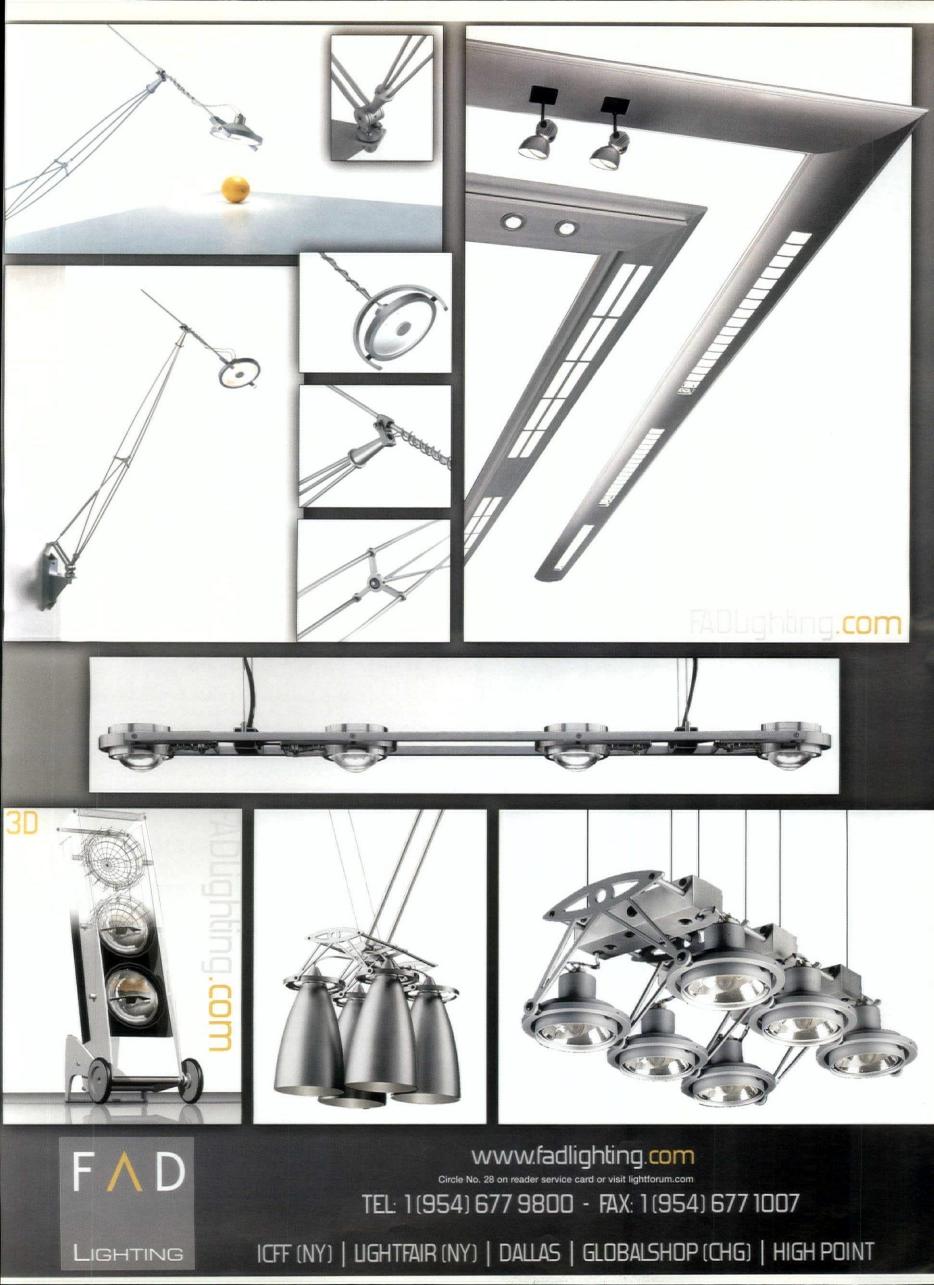
**Unilight Ltd.** has broken ground for a new 85,000-sq.-ft. manufacturing facility located at 4500 Hickmore in Montreal, Quebec, Canada. The new building will accommodate up to 600 employees over three shifts, if required, in the future and allow for an additional 60,000-sq.-ft. expansion. The facility is expected to open in November of 2003. To contact Unilight Ltd., phone ((514) 769-1533 or visit www.unilight.com.

**W.A.C. Lighting** has completed construction of a new 130,000-sq.-ft. building, the latest addition to its 120,000-sq.-ft. manufacturing facility in China. The new building will include manufacturing operations, an assembly department, offices and a warehouse. In the U.S., the company has relocated its West-coast warehousing and distribution operations to a new 50,000-sq.-ft. facility located at 168 Brea Canyon Road, City of Industry, CA 91789; phone (877) 810-6695, fax (866) 810-6615. W.A.C. Lighting has also remodeled and expanded its warehouse at its Garden City, NY headquarters.

LSI Lightron has completed its new state-of-the-art facility in Hudson Valley World Trade Center. The facility houses all operations, including stocking essential product for immediate shipment, customer pick-up and an Image Center for customer meetings and product demonstration. LSI Lightron is a part of LSI Industries' lighting group.

Brennan Beer Gorman/Architects and Brennan Beer Gorman Monk/Interior (BBG-BBGM) has opened a new office in Beijing, China. Partner Jeffrey Williams, AIA will oversee the operation and Gong Zhang, a native of Beijing, will serve as general manager for the new office, which is located in the heart of the Chaoyang central business district. Zhang can be contacted directly at Beijing Kerry Centre, 3/F North Tower, 1 Guanghua Road, Chaoyang District, Beijing 100020, People's Republic of China; phone (86-10) 8529-8938, fax (86-10) 8529-8939, email GongZ@bbg-bbgm.com.

Annexl5 has been launched to serve as the in-house architecture and planning design studio of Chicago-based architecture and engineering firm, A. Epstein and Sons International. The design studio is spearheaded by senior design principal Mike Damore, who is also senior executive VP of A. Epstein and Sons International and a core group of local architects such as Andrew Metter, John Slatans, Jack Naffziger and Dean Mamlakis. To contact Annexl5, phone (312) 454-9100, fax (312) 599-1217 or visit www.annex5.net.



#### the inbox

#### EXHIBIT EXPLORES NEW HOTELS

Opening October 29 in New York City, Cooper-Hewitt, National Design Museum's "New Hotels for Global Nomads" explores the contemporary hotel as design laboratory and fantasy experience. The exhibition combines architecture, interior design, photography, film and works of art in a showcase of more than 35 real and conceptual examples of modern hotels and their services, as well as legendary historic hotels. Exhibits are organized into five themes derived from the evolution of hotels: Urban Hotels; Hotels as Global Business; Hotels on the Move; Natural Hotels; and Fantasy Hotels.

Highlights include site-specific installations commissioned by Cooper-Hewitt, National Design Museum, featuring Tom Sachs' room-sized "Compact Full Feature Hotel Room"; Joel Sanders' "24/7 Hotel Room," a new model for accommodating today's business travel and the premiere of "Private Dancer," by artist Toland Grinell. A specially commissioned project by Architecture Research Office, "New York Nature Hotel," will be built in the museum's Arthur Ross Garden in the summer of 2002. Works by architects Jean Nouvel, Diller + Scofidio, artist Sophie Calle, Phillippe Starck and film director Spike Jonze will also be on display. "New Hotels for Global Nomads" will run until March 2, 2003. For more information, contact the museum at (212) 849-8400 or visit www.si.edu/ndm.

#### CIE CONSIDERS DRAFT STANDARD FOR GLOBAL UV INDEX

Increasing public concern over declining ozone levels and the resultant UV radiation reaching the earth has prompted a need to communicate daily information to the public in a credible and understandable manner. While several countries have implemented a variety of UV programs, a single scale for communicating UV dose rate to the public has been proposed and endorsed by the World Health Organization, the World Meteorological Organization, the United Nations Environment Programme and International Non-Ionizing Radiation Protection Commission. The scale may also prove useful for communication within the scientific community.

Currently being reviewed by CIE National Committees, the proposed standard establishes a quantitative index for reporting the level of harmful ambient solar UV radiation reaching the surface of the earth to the general public and categorizes the index according to the level of exposure. The draft standard is still subject to changes and may not yet be referred to as a CIE standard. When approved by the CIE National Committees, it will be published as a CIE standard and then eventually as a joint standard with ISO. To obtain copies, contact T. Lemons at TLA, 7 Pond Street, Salem, MA 01970 or email tmlattla@aol.com.

#### NCIDQ PUBLISHES LIGHTING MONOGRAPH

The National Council for Interior Design Qualification (NCDIQ) has published *Lighting to Protect*, the second title in a series of continuing education monographs that are intended to provide interior designers a valuable and easy-to-acquire method for gaining continuing education credits. *Lighting to Protect* was written by Fran Kellogg Smith, FASID, the founder of Luminæ Lighting Consultants and the 1988 winner of the Polsky Award for Literature in Interior Design. The monograph addresses lighting design issues that relate to public health, safety and welfare and follows on the heels of *Ethics and the Design Professions*. For more information on both publications, visit www.ncidq.org.

### More Light. No Hum. Low-Voltage Perfection.

Q-Tran Power Supply Centers<sup>™</sup> increase the light output of low-voltage systems by up to 50 percent. They also eliminate transformer hum, reduce wiring costs, and increase design flexibility. Call Q-Tran today to learn more about how our Power-Supply Centers<sup>™</sup> can enhance the quality, performance, and functionality of your low-voltage lighting installations.



304 Bishop Avenue, Bridgeport, Connecticut 06610 203.367.8777 www.q-tran.com

#### ICON CREATES NEW DIVISIONS

In order to accommodate increased sales and to better serve its customer base, ICON International has announced plans to create two new business divisions: ICON Architectural Lighting Systems and ICON National Accounts. The divisions will function as separate profit centers and will be wholly owned by ICON International. ICON Architectural Lighting Systems will be headed by president, John S. Marshall, who has served as COO of ICON International. To contact ICON International, phone (401) 295-2533 or visit www.iconintl.net.

#### LIGHTOLIER AND LRC AWARD STUDENTS

Lightolier and the Lighting Research Center (LRC) have announced the winners of the Student Luminaire Design Competition, which received more than 100 entries and was offered at 150 colleges and universities. Titled, "Packaged Daylight: An Integrated Daylight/Electric Light Fixture," the competition challenged students to design an integrated product that delivers daylighting and electric lighting to an interior building space. This year's first-place winner is Hillary Sanderlin of University of Bridgeport who received \$5,000. The second prize of \$2,000 was awarded to Brian Fuller, Rensselaer Polytechnic Institute, while Ramon Torres of Rhode Island School of Design took third place and received \$1,000. Honorable mentions were presented to Hongy Cai, University of Michigan; Betty Ng, Rhode Island School of Design; Feng Zhao, Rensselaer Polytechnic Institute; and Susan Teal, University of Cincinnati.

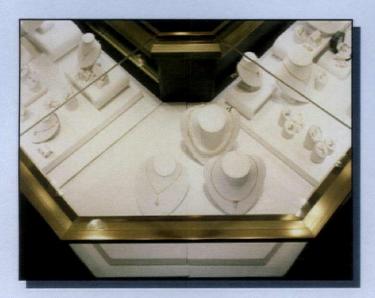
#### CORRECTIONS

On page 36 of the July/August issue of *Architectural Lighting*, Bright Lighting's website was incorrectly listed as www.brightlights.com. The correct address is www.brightlighting.com. Bright Lighting, incidentally, received the Award for Design Excellence in lighting for Color Stream at the recent PLASA show in London. *Architectural Lighting* regrets the error.

# **BARTCO** Leading the Way...and Lighting It!

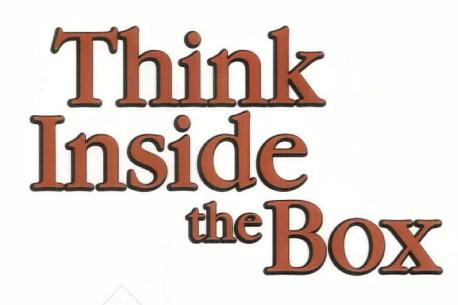


Specializing in Luminaires for: Display Case Lighting, Cabinet Lighting, Shelf Lighting, Undercounter Lighting, Cove Lighting and Task Lighting





Phone 714/848-0892 Fax 714/848-6843 Web www.bartcolighting.com SUSTAINING Visit us at Globalshop & Lightfair 2002 green peppers sun-dried tomatoes mushrooms sausage onions olives recessed parabolic RP-1 low glare shallow 2'/2" profile "Euro" styling high efficiency soft perf glow







3808 North Sullivan Road • Spokane, Washington 99216 tel: 509.924.7000 • www.columbialighting.com/brio

100 TEA 100 TEA

Circle No. 1 on reader service card or visit lightforum.com

#### people

Acuity Lighting Group has appointed **Ken Honeycutt** president and CEO and **John K. Morgan** COO and senior executive VP of Acuity Brands.

Ruggiero Messina has been named CEO of Luceplan USA.

W.A.C. Lighting has appointed **Richard Kurtz** to VP of operations; **Dave Lombardo** to the product support depart-

ment; John Pilato to customer sales and service department; and Christopher Verone to account manager in southern California.

Osram Sylvania has named Francis J. Santiago executive VP and general manager of Precision Materials & Components Worldwide and Jeffrey A. Hoffman VP of operations for General Lighting. Francis M. Piscitelli has been promoted to senior VP of sales and customer service for lighting. Robert Nigrello has been appointed VP of the Sylvania Lighting Services division and Dwight Kitchen, director of sales. Jim Jubb has been promoted to VP of Special Markets and Tod Besse to VP of the OEM channel.

The International Association of Lighting Designers (IALD) has announced that **Morag Fullilove**, executive VP, will leave the organization by the end of December 2002. Fullilove has served over five years with the IALD. An executive search team has been established to identify a successor by mid-November.

Nelson Jenkins has joined Thompson & Sears Lighting.

Lucifer Lighting has appointed **Rick Gottlieb** national sales director.

High End Systems has appointed **Peter Duff** CFO and **Deanna Parnell** controller; **Dan Rizzotti** joins as director of sales operations. Flying Pig Systems/High End Systems Europe and UK has named **David Catterall** managing director; **Chris Hunt**, director of operations; **Phil Mercer**, sales manager for UK/Ireland; and **Richard Mead** product manager.

The SPI Group has named **Robert Marta** VP of finance and administration. **Janet Storment** has been appointed western regional sales manager for SPI and Advent Lighting.

Robert Hemple has been named director of sales for Quality Lighting.

Unilight Limited founder and president Jerry Hruby-Holy has retired. Michael I. Holy has been appointed the new president. Universal Lighting Technologies has appointed **Peter Shackle, Ph.D.** director of product development.

Baldinger Architectural Lighting has named Joseph J. Gigl VP of engineering and Ira Minkoff VP of sales.

Abhay Wadhwa, IES, ISLE has joined Available Light as principal designer.

Axis Lighting has appointed Wilson Dau, LC to the position of director, SMED/Haworth Lighting Solutions.

Nora Lighting has named **Rick Satterfield** southeast regional manager.

Michael A. Barber, IES has been named an associate of The Lighting Practice.

#### **One Source for Decorative Poles**



To order Envision, contact us at 1-800-VALMONT, ext. 3034 or visit us at www.valmont.com.



Circle No. 13 on reader service card or visit lightforum.com



The MTR Column provides an intriguing marriage of the column luminaire form to the se'lux patented MTR (Multi-prisms for Total Reflection) refractor technology. The result is a classic form distributing light precisely where it is needed, reducing lumen levels at critical viewing angles, and providing "glare free" illumination. Available at heights of 12, 14 and 16 feet, this luminaire comes in painted finishes; stainless steel and galvanized material are available to meet project requirements.

#### Architectural Exterior Lighting





Shopping Center

Circle No. 31 on reader service card or visit lightforum.com

A M A

SELUX CORPORATION 800.735.8927 • 845.691.7723 • Fax 845.691.6749 • e-mail: seluxus@selux.com • www.selux.com/usa

#### datebook

#### 2002 SCHEDULED EVENTS

October 17-18 The Fundamentals of OLED Fabrication, Hyatt Islandia Hotel, San Diego, CA. Contact: (207) 781-9800, fax (207) 781-2150, www.intertechusa.com/oled-fab.html.

October 18-20 LDI 2002, Las Vegas Convention Center, Las Vegas, NV. Contact: (800) 288-8606, fax (720) 489-3101, email trade\_shows@primediabusiness.com.

October 21-23 Light Emitting Diodes 2002, Hyatt Islandia Hotel, San Diego, CA. Contact: (207) 781-2150, fax (207) 781-9800, email register@intertechusa.com, www.intertechusa.com/leds.html.

October 29-March 2, 2003 New Hotels for Global Nomads, Cooper-Hewitt National Design Museum, New York. Contact: (212) 849-8400, www.si.edu/ndm.

November 3-5 Fifth Lighting Research Office Symposium: Light and Human Health, Grosvenor Resort, Orlando, FL. Contact: (216) 291-1884, email lighting@ieee.org, www.lightingresearchoffice.org.

November 7-8 International Lighting Design Journey: Light, Energy and Architecture, Mining Palace, Mexico City, Mexico. Contact: Pedro Garza at garbec@prodigy.net.mx

November 7-8 LED Lighting Institute, Lighting Research Center, Troy, NY. Contact Dan Frering, manager of education, at (518) 687-7100, email frerid@rpi.edu, www.lrc.rpi.edu/LEDInstitute/LEDform.html.

November 13 IESNY Seminar: "When the Lights Go Out-Emergency Lighting," New York. Contact: admin@iesny.org, www.iesny.org.

**November 13-14** International Conference: "Constructing Beijing 2008," Beijing, China. Contact Dora Tsang at fax (852) 2598-8771, email dora.tsang@hongkong.messe-frankfurt.com.

November 15-16 Third IALD Education Conference and 33rd Annual Meeting, Hyatt Regency, Chicago. Contact: (312) 527-3677, fax (312) 527-3680, www.iald.org.

November 20-21 NeoCon West, Los Angeles Convention Center, Los Angeles. Contact: www.merchandisemart.com.

December 11 IESNY Seminar: "Urban Landscape," New York. Contact: admin@iesny.org, www.iesny.org.

#### 2003

January 8 IESNY Seminar: "New York City Codes Update," New York. Contact: admin@iesny.org, www.iesny.org.

February 3 IESNY Seminar: "Lighting Fixture Renovation," New York. Contact: admin@iesny.org, www.iesny.org.

March 13-14 NeoCon East, Baltimore Convention Center, Baltimore. Contact: (312) 527-7598, www.merchandisemart.com.

April IESNY Seminar: "Sustainability and Lighting Design," New York. Contact: admin@iesny.org, www.iesny.org.

April 9-11 The TFM Show, McCormick Place, Chicago. Contact: (800) 524-0337, www.FacilityCity.com.

April 26-29 Lightstyle 2003, International Trade Fair for Domestic Lighting, Frankfurt Fair and Exhibition Centre, Frankfurt am Main, Germany. Contact Eva Behrendt at (770) 984-8016, ext. 24, fax (770) 984-8023, email eva.behrendt@usa.messefrankfurt.com, www.lightstyle.messefrankfurt.com.

May 6-8 Lightfair International 2003, Jacob Javits Convention Center, New York City. Contact: (404) 220-2205, email tiffanyw@lightfair.com, www.lightfair.com.

# Specification Grade Pars Metal Halide Pars and ED17s Pattern and Framing Projectors

Theatrical Display Fixtures

> In the past fifteen years, **Times Square Lighting** has added numerous products for the architectural and display fields.

Please take time to visit our website, www.tslight.com. There you will find complete specifications on our entire line of equipment. A full line binder or CD is also available upon request.



5 Kay Fries Drive Stony Point, NY 10980 (845) 947-3034 Fax: (845) 947-3047 www.tslight.com

Circle No. 18 on reader service card or visit lightforum.com

#### NEW SITES PUSH LIGHTING SPECIFICATION FIRMLY INTO THE INTERNET AGE

"Ask any lighting designer what the most tedious and least rewarding part of their job is and the likely answer will be: finding products and spec data. This is not surprising given that the tools for doing this task include outdated and incomplete catalogs and a slew of often idiosyncratic websites with inconsistent product data—and that's assuming you know exactly what you're looking for." —Barbara Horton, founder of eLumit

"Today's lighting specifier must sift through binders in various formats, representing thousands of products, to find the right solution. Even when you find the product you want in the print catalog, you may not have the most current information." —Craig DiLouie, founder of SearchSpec

The complaints are the same and yet while the rest of the world has discovered the pleasures (and sometimes pitfalls) of researching and ordering online, lighting specifiers had only the hope and dream for an almighty one-stop cyber shop that would give them the speed of access and the breadth of information they need to make the trip to the web truly worthwhile. Has it happened? Maybe so. With eLumit and SearchSpec (see sidebar) debuting this fall, perhaps the dream has found a happy ending and finally, lighting specifiers can ditch their catalogs and comfortably immerse themselves in the world of the web.

eLumit is a website that provides centralized, free access to lighting product data and resources from a wide range of architectural lighting manufacturers. The site has two main components from the user's perspective: a powerful parametric search engine and an online workspace for assembling project specifications from found products. Participating manufacturers, who financially support the site through annual subscription, gain access to detailed site statistics about their product lines and project specifications released by eLumit users. "We feel our 'formula' of services and features creates a win-win scenario for everybody," said Barbara Horton, eLumit Inc. marketing and sales manager and president of HLB Lighting Design. And, according to the company, manufacturers and specifiers seem to agree. Currently, eLumit is on schedule to launch the site in October 2002 and on track with their goals to have 20 manufacturers signed on by launch date and 100 or more by second quarter 2003.

The idea of a centralized product search and spec-building tool is not a new one in the lighting industry. However, previous ventures were undermined by a lack of searching detail, cost to end users, use of proprietary or unadopted technology and most importantly, a lack of understanding of lighting specifier's needs. Developed by HLB Lighting Design, eLumit was created by and for specifiers, built from the ground up with years of specification experience and lighting product knowledge. HLB's eight years of in-house development of a database-driven spec assembly program have yielded a simple yet robust methodology for defining the critical components and performance criteria of lighting fixtures. The result is a consistent and logical way of defining luminaires at a meaningful level of granularity for specifiers. For eLumit, the level of granularity is key: There is just enough depth of information to do meaningful searches but not so much detail as to make management and assimilation of the data impractical or too costly. "Part of the value of the eLumit data is that we are assimilating it ourselves through a highly refined interface," said

Robyn Mierzwa, eLumit and HLB Lighting Design IT director. "There is intelligence and quality-control inherent in that process, but just as important, it removes for the manufacturer the cost, headache and inaccuracies of doing the data aggregation themselves."

eLumit's search interface has been designed to meet the needs of many different types of lighting specifiers, including lighting designers, architects, interior designers, engineers, landscape architects and contractors. Users start with basic search criteria such as fixture type (e.g. downlight), source type (e.g. compact fluorescent) and mounting (e.g. recessed). Then, based on the basic criteria entered, more detailed search refinements appear. For example, selecting "recessed" as the mounting would produce "max. recessed depth" as an available search refinement. The context-sensitive nature of the search refinements provides a robust search tool for lighting professionals and acts as a guide for novice lighting specifiers.

Search results are presented with similar fixtures grouped together for easy browsing and comparison. When users click on a product in the search results, they can view a product detail showing a larger image with a summary of spec data and links to additional resources. With the consistent layout and content of the data on the product detail, users can quickly browse among many products to find the one that meets their needs. When more detail is needed, users can open links to the product's spec sheets, photometric data, installation instructions and application guides.

eLumit's spec-building workspace allows registered users to save and organize the products they find on eLumit as projects. Once saved, additional custom attributes can be entered such as budget pricing and quantity, notes, detailed catalog numbers for the fixture and lamps, etc. From this project-based workspace, users can create and print fixture schedules, specifications and budgets for their projects. "The workspace part of the site is packed with many valuable, time-saving features," said Carrie Knowlton, eLumit business development manager. "We wanted to make using eLumit a no-brainer for specifiers." Other features include a suite of email tools for automatically generating email requests for pricing and information for a project and sending project specs to local reps (with the option of displaying only that rep's products in the email.) An integrated address book allows users to save and easily access email addresses for their reps, manufacturers and colleagues.

In addition to the search tool and spec-building workspace, eLumit will also have parts of the site dedicated to "Featured Products" and "Resources." Every two weeks, a dozen or so new or notable products by eLumit manufacturers will be showcased in Featured Products. "Recently the IALD surveyed its members about aspects of online product info and found that 68 percent of respondents ranked 'new product information' as their top need," explained Knowlton. "Our Featured Products section is designed to address that." The Resources page is basically a links page organized into groups such as Professional Organizations, Codes and Standards, etc. providing shortcuts to sometimes hard-to-find online lighting resources.

While the eLumit team is busily preparing for their October launch, they also are focusing on the future of the site and have many plans for expansion in the works. These include extending the search capabilities to cover decorative lighting fixtures and fiber-optics systems, enhancing the workspace with additional spec-building tools and adding detailed rep finding capabilities. For more information, visit the eLumit site at www.eLumit.com.

SearchSpec.com was launched by ZING Communications, Inc. at www.SearchSpec.com to support specifiers who want fast, easy access to lighting product choices and critical product information. This new, free service provides a standard interactive format for accessing specification information among a multitude of products and is also available as an advanced search feature incorporated into www.Lightsearch.com, the online directory of lighting manufacturers used regularly by industry professionals.

SearchSpec is the brainchild of Craig DiLouie, former publisher of Architectural Lighting and principal of ZING Communications, Inc. (www.zinginc.com). Lighting specifiers who will benefit from SearchSpec include architects, lighting designers, corporate designers, engineers, interior designers, contractors, distributors and other professionals. To "specify" a product at SearchSpec.com, the lighting specifier: 1) chooses a product category; and 2) designates the product he or she is looking for using six menu boxes. The specifier can perform from one to thousands of possible search combinations using this simple system. For example, the specifier can select track lighting, then choose low-voltage + halogen/incandescent + AR70 + MR16 + chrome + brass + aluminum + gimbal + cube—or Lighting Services Inc + Lithonia + line-voltage + metal halide + PAR30 (MH) + black + cylinders – flatback—and get a range of choices for each search.

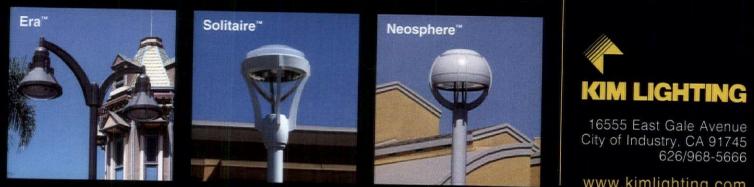
After the specifier tells SearchSpec what product he or she is looking for and clicks, "Find It!" SearchSpec generates a "dynamic product catalog" in a standard photo/text format for easy comparison. Once a product catches the specifier's eye, he or she can then download the manufacturer's specification sheet, see select products in projects and/or contact the manufacturer or manufacturer's local sales representative. "SearchSpec saves time and increases choice by making and keeping one simple promise: You tell SearchSpec what you want, SearchSpec shows you choices, and you access information required for specification," said DiLouie. "As a result, specifiers can enjoy a broad, fast information tool with which to solve problems for clients." DiLouie pointed out that most specifiers are very familiar with the largest manufacturers who dominate the market. He said, "This system will provide a point of access to the major players but also many other manufacturers who make thousands of great products—but often don't get enough attention from specifiers dealing with the time demands of highly compressed project schedules. As a result, SearchSpec is suited for architects and other lighting specifiers." Use of the site is free to specifiers and also currently free for manufacturers, so as to offer a greater breadth of products.

SearchSpec is currently available as a fully functioning demo covering track lighting fixtures, with more than 700 products from 15 manufacturers including Juno, W.A.C. Lighting, Amerlux, Lithonia, Lightolier, Cooper, Lighting Services Inc, Bartco, Nora, Ruud, Prescolite, Con-Tech, Edison Price, Lucifer and Times Square Lighting. A survey has been posted on the site to gain feedback from the specifier community. No registration is required.

"Lighting practitioners have been telling me that they want a system like SearchSpec since the Internet first caught on," said DiLouie. "By testing the waters with a few categories such as track lighting and generating feedback via a survey, we hope to fine-tune it to their needs and validate its usefulness. I've wanted to do something like this for years—to hardwire all the great product information on the Web into a standard search tool—and so SearchSpec could best be called a labor of love for me. It's an exciting project."

A second category, linear indirect pendant-mounted fixtures, will be added by the end of the fall, followed by downlights and other categories. According to DiLouie, by the Lightfair of 2003, SearchSpec will offer access to thousands of products. Said DiLouie, "The key to SearchSpec is that we will focus on specification-driven product categories, offer a very flexible, easy search tool, and provide fast-loading choices in a standard format from which specifiers can get the information they need for research or specification."

#### Pedestrian Zone Luminaires





# Media Presence

A comprehensive lighting design brings dramatic power and 24/7 functionality to the headquarters of a newspaper giant

BY JEAN NAYAR, CONTRIBUTING EDITOR

At night, interior and exterior light—along with the flow of people through perimeter corridors and up and down glass-enclosed elevators—enlivens the Gannett/USA Today headquarters. Each of the building's two wings contains a tower that glows with everchanging colored light. The colorful towers serve as signature beacons for the structure. *Photos:* © *Michael Dersin Photography* 

APCHITECTURAL LIGHTING/www.lightforum.com

181

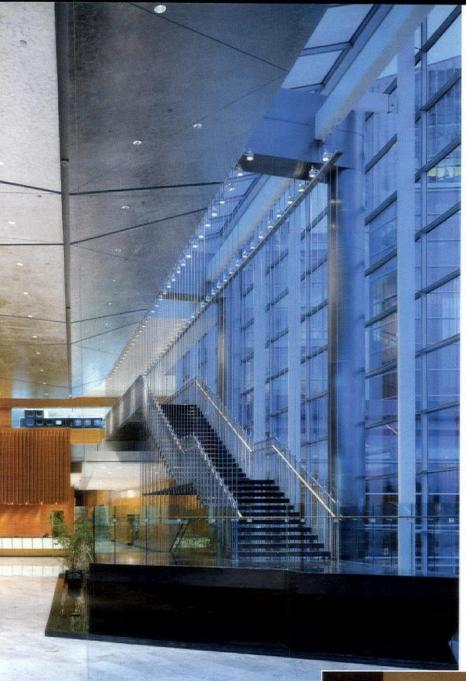
he new Gannett/USA Today headquarters, with its asymmetrical peaks and masses, broad terraces and intersecting planes, stretches out from its suburban McLean, VA site like a spectacular crystalline rock formation or great glacial mountain ridge. Appearing to rise from and merge with the earth as if it were a byproduct of nature's whims over centuries, it is, at the same time, a highly conscientious and pristine human construction designed—by the many parties involved in its development—to bring the notion of the suburban office building to a new level.

A sweeping look at its constituent parts begins to reveal how the new facility pushes the defining envelope of this particular building type. The materials and composition of the structure's base building, which was completed last fall and designed by Kohn Pedersen Fox Architects (KPF), both embrace and reflect the landscape and the sun and in so doing, explore and diffuse boundaries—between indoors and out, between building and environment. Its interior spaces, created by Lehman-Smith + McLeish Architects in close collaboration with KPF, enhance a round-the-clock work environment with rich and varied finishes as well as interesting and generous volumes, allowing access to spirit-enriching views and daylight. The surrounding landscape and integrated terraces, developed by Michael Vergason and Doug Hays of Michael Vergason Landscape Architects, animate the structure and graciously link it to its context. And the headquarters'

- GTERRE

interior and exterior lighting, designed by Fisher Marantz Stone (FMS), serves as a vital thread that ties all of these elements together and, along with the building's occupants, gives the facility energy and life throughout the day and night.

"KPF's base building design raised the bar for beltway office building projects," said lighting designer and FMS principal Charles Stone. "Because there was a single tenant for this building and an intention to create a collegial, campus-like atmosphere, we all went to great pains to develop exterior circulation to serve the goal of connecting the various pieces: Our task was to unify the site and the building with light." The lighting designers were also charged with enriching the building's presence within its suburban context, enlivening the building and making its grounds amenable by night, enhancing nocturnal safety and circulation, and giving the building and its environs a signature identity-one that would reflect the news-reporting nature of Gannett/USA Today's business. "News is constantly changing," said Stone. "The two wings of the building each had great unoccupied elevator tower tops, which we chose to make into lanterns by filling them up with light that slowly changes color." As Stone suggests, these luminous transformations abstractly represent the shifting reported events of any given day and also function as identifying beacons to motorists and passersby as well to staffers arriving to serve night-shift duty in the building.



a mind-clearing midnight jog, high-intensity, metal-halide floodlights bring light to a softball field, and recessed low-voltage, tungsten-halogen adjustable floodlights illuminate canopies of selected trees while 70W grade-recessed ceramic metal halides fixtures graze their trunks throughout the grounds.

While exterior lighting is deployed to enhance the sense that the building and grounds are occupied at night, it is also carefully controlled in consideration of its neighbors, according to Jerri Smith, an architect from the KPF team who worked closely with the landscape and lighting designers in fine-tuning the relationships among exterior elements. "There are light pollution issues in suburban neighborhoods," she said, "and we didn't want the building to be blazing on the horizon at night, but we did want to make it as inviting as possible for the employees who work the late shift." As a result, she explains, the lighting of a basketball court on top of the parking garage via clusters of 1000W polemounted metal halide floodlights is controlled by a timer switch and shuts off when players leave the court. And the parking garage itself, which must be illuminated throughout the night, was designed with both employees and neighbors and passersby in mind, according to Smith. "It was clad with a perforated aluminum wall that's covered with plants and vines, which make it more pleasant to view from outside," she said. The light that the plants shield from view from the street also helps them to grow.

Additionally, light adds to the beauty of the exterior with delightful notes of surprise that abound around the entrance courtyard, where the two irregular linear wings of the vaguely U-shaped building converge. Adjacent to the lobby at the top of a series of shallow terraces, for example, sparkling light emanating from candle-like fountains sprinkled among lotus plants in a reflecting pool animates this otherwise serene water feature. In tandem with the landscape architects, the lighting designers employed a mix of "metal halide sources and fiber-optic cables to produce a delicate glow of small, single points of light that create sparkle and movement," according to Enrique Garcia, FMS's lead lighting designer on the project. These points appear at the tops of a series of slender 3-ft.-tall pipes that rise from of the pool like reeds. "Some of the pipes glow at night like fireflies," said Smith. "Some spritz water, which creates a mist over the trembling leaves of the lotus plants, then gathers and rushes around them like a roulette wheel. The lighting and play of water in the pool are reflected in the glass of the building and seem to go on forever." Added Garcia, "Other fountains in the courtyard contain underwater fixtures housing lowvoltage 75W MR16 flood lamps to uplight a waterfall."

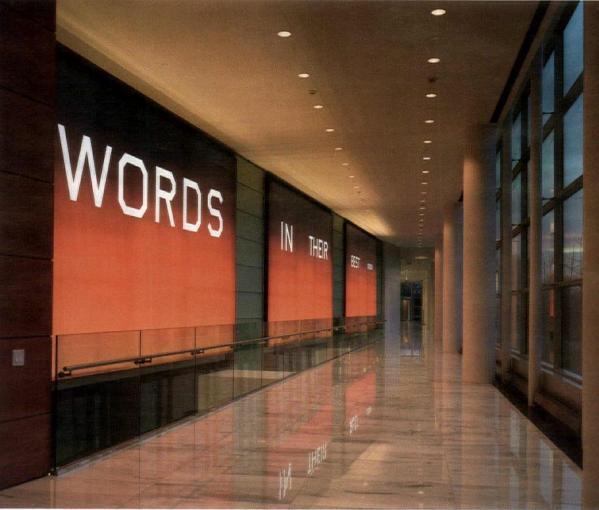
#### INNER LIFE

The architects opted to clad the 800,000-sq.-ft. building's two wings—one houses the Gannett employees, the other contains the USA Today staff—in glass curtain walls, which reflect the sky and landscape by day. To soften its connection with the landscape,

Above: The illumination of every room of the Gannett/USA Today headquarters was programmed to adjust automatically throughout the day with appropriate light levels, according to FMS principal Charles Stone. In the entrance lobby, light from adjustable PAR38 tungsten-halogen fixtures flanking the staircase above and spaced 26 in. on center bathes the grand stair. Interspersed within the silver-leaf ceiling, halogens wash the wood walls in warm light. Hidden in perimeter coves, overlapping linear fluorescent striplights wrap the room in warm illumination. Right: A reproduction of a work of art by Ed Ruscha in the corridor linking the health club to the lobby was accented with lowvoltage tungsten halogens for good colorrendering and safety. The corridor looks through to a lower level containing three fountains, which are illuminated with submersible narrow spot MR16s.

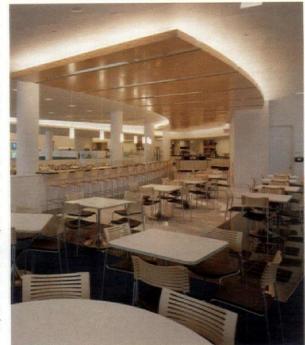
#### OUTSIDE SOURCES

Set on sequenced dimmers, the ever-changing illumination emanating from the towers and produced by 24 rows of colored sleeved fluorescents is but one of the exterior lighting elements that brighten and animate the headquarters' exterior by night. Recessed amid the 25-acre campus setting, 100W ceramic metal halide, pedestrian-scale lighting poles illuminate serpentine running paths for reporters in need of



the architects employed fieldstone at the base of the building and to articulate the appearance of its angular volumes, detailed the building surface with projecting glass fins that refract the sunlight and seem to "dematerialize" the building when viewed obliquely. According to Smith, these details also produced a surprising yet appealing effect at night. "The beveled edges of the fins act like prisms and pick up the night illumination to create a rainbow effect," she said.

Knowing that the building would glow from within with electric light at night, the architects also opted to locate horizontal circulation at the perimeter of the building to give it a sense of liveliness and movement at night. Animating the vertical circulation was also part of the plan and so influenced their choice of materials—a mix of clear and frosted glass—for the elevator cabs that rise and descend through the towers during the course of the night. The lighting designers layered a variety of integrated fixtures and techniques in the circulation zones, especially the entrance lobby, to further enrich and enliven the ambience of these communal core spaces.



Left: In the employee dining area, a floating canopy illuminated from above with linear fluorescent sources serves as an orientation device in the large space. In addition, low-voltage MR16 downlights in the floating wood ceiling provide sparkle and accent the tables below. One-foot squares punctuating the ceiling are fitted with compact fluorescents to accent tables and are covered with cross-parabolic baffles to minimize glare. "Because the floor is dark, we provided higher illuminance values than we would if the floor were white," said lighting designer Enrique Garcia. Banquettes contain integral lighting units that backlight white acrylic covers. Below left: A higher-than-usual ceiling in the newsroom allowed the lighting designers to respond to the interior architects' request for an environment with pendant-free, indirect illumination. A custom shelf system, suspended 30 ft. on center and containing compact fluorescent sources provides soft, uniform glare-free light.

#### SHELF HELP



"Within this glass-enclosed environment, the interior lighting also becomes exterior illumination, which creates a jewel-like glow," said Garcia, noting that the metal bollards marking the entrance are uplighted with recessed in-grade fixtures containing compact fluorescent sources, while a series of white glass strips in the entrance canopy is backlit with fluorescent T8 lamps. In the long corridor leading from the entrance lobby to dining areas, the lighting designers uplighted the enlarged vinyl murals reproduced from an original work of art by Ed Ruscha through the floor opening with submersible low-voltage accent lights located within the waterfall below. The panels, which present the phrase, "Words/in their/best order," run the length of the corridor and when illuminated at night, resemble a massive billboard from the adjacent courtyard and roadway.

To maintain a sense of uniformity in the illumination, the lighting designers aimed for a CRI of around 80 or more in most spaces, Garcia explained, and generally specified fluorescents with a color temperature of 3500K. But in the lobby, which often serves as "a party space," noted Garcia, the lighting designers employed mostly incandescent light (the light load in this space is about 2.6W/sq. ft. versus 1.5W/sq. ft. in the office spaces). Here, the lighting designers arranged two strips of 36 track-mounted 100W tungsten-halogen downlights along both sides of a grand staircase suspended by stainless-steel rods within the double-height space.

"By day, the sunlight shines through the glass walls and reflects off the lobby's white Georgia Cherokee marble floor and uplights the ceiling with natural light," said Smith. "At night, the downlights light the emerald pearl granite treads of the staircase, which seems to drop from the skylight above, so that it becomes the focus of the lobby—and its harp-like steel rods shimmer like a kind of scrim." In order not to "compete with the rich silver-leaf finish of the lobby's angled ceiling, yet provide sufficient light on the floor, we punctuated the ceiling with a grid of 100W tungsten-halogen adjustable sources fitted with low-brightness reflectors," said Garcia. In addition, the lighting designers used asymmetric-distribution tungsten-halogen floodlights to wash the cherry veneer-paneled walls of the lobby with warm light.

Close collaboration with interior architects allowed the architects and lighting designers to adapt their efforts to produce a unified whole, which according to Smith, "was much greater than the sum of its parts." This is particularly evident in the office areas and various public spaces, such as conference rooms, dining areas and break-out spaces, which were designed with acute sensitivity to the needs of the employees. Because the interior architects wanted all employees to have access to views and as much natural light as possible, for example, KPF designed the wings to span 65 ft. wide at the upper floors-narrower than is typical-and 95 feet wide at the larger newsroom floors with floor-to-floor heights of 16 ft. in the newsroom areas (as opposed to the 12 ft. usually employed in suburban office buildings) to let light and views into the deepest recesses of each floor. The taller ceiling heights also enabled the lighting designers to more easily fulfill the interior architects' request for indirect illumination in the office areas with uninterrupted ceiling planes. Here, the lighting designers and interior architects devised custom light shelves, which suspend from the taller ceiling and contain high-wattage compact fluorescent sources that uplight the smooth ceiling plane above and provide soft, glare-free ambient illumination throughout the newsroom office spaces. "The upfront collaboration allowed everyone to create a building that was really in tune with the work the employees do," said Ron Fiegenschuh, a principal with Lehman-Smith + McLeish and lead designer for the public/employees amenities spaces. "The building was designed to enhance the quality of light and create a wonderful working environment-no one is ever more than 45 ft. away from a window wall."

The harmony of elements in public spaces was also developed with user-friendliness in mind. For example, down- and uplights in employee breakout areas were adapted to integrate with a 30-in. bay module, which is 6 in. larger than the 24-in. standard ceiling grid. An illuminated stainless-steel and wood suspended ceiling element serves as an orienting device in an employee dining area. And an enclosed 20,000-sq.-ft. employee health club features clerestory windows to allow in as much natural light as possible and incorporates uplight coves to eliminate the harsh downlight typical of such spaces.

"We wanted the interiors to both relate to the architecture and integrate with the lighting to enhance the aesthetics of specific spaces and enrich their finishes," said Fiegenschuh. "Throughout the programming, we collectively established what would be most beneficial to the users, and the result really is a seamless integration of base building to the interiors and the lighting." Garcia concurs. "Because we had the opportunity to work on the design of the site as well as the interiors, we could help bring out a seamless transition between the base building and interiors," said Garcia. "We bridged both disciplines and helped establish a commonality that wouldn't have otherwise been there."

Turn to page 42 for information on fixtures and sources specified on this project.

#### DETAILS

PROJECT Gannett/USA Today headquarters LOCATION McLean, VA ARCHITECT Kohn Pedersen Fox (base building and site); Lehman-Smith + McLeish (interiors) LIGHTING DESIGNER Fisher Marantz Stone—Charles Stone, Enrique Garcia, Brian Mosbacher ELECTRICAL ENGINEER Tolk PHOTOGRAPHER Michael Dersin Photography LIGHTING MANUFACTURERS Edison Price; Day-O-Lite; Zumtobel Staff; Lightolier, Columbia; Linear Lighting; Neoray; Hydrel; Visa Lighting; Starfire; Lutron; Fiberstars; Bega



# The interior of this upscale shop provides a sharp, yet delicate contrast between ultra-modern store design and high-fashion leather goods

BY CHRISTINA TRAUTHWEIN, EDITOR-IN-CHIEF

t's often the accessories that make the outfit. And a great pair of shoes can do just the trick. In fact, it's been said that shoes tell a lot about the person wearing them—specifically, the well-heeled person is one who attentions even the finest detail. Designer shoes should be noticed. Subtle textures, rich colors, detailed craftsmanship should be seen. So why not apply that same approach when designing the retail venue that sells them? Via Spiga at Tyson's Galleria in McLean, VA does just that. Against a clean and unadorned architectural backdrop, the shoes command the attention of the retailer's fashionable clientele. And the lighting, which is somewhat simple and straightforward in technique and application, is instrumental in creating that response. What's even better: The solution was accomplished on a shoestring budget—if you'll forgive the pun—without sacrificing lighting quality.

"A clean, crisp, 'European' feel was the concept for this upscale store," said lighting designer Andrew Powell of Lighting Design Alliance, "reminiscent of a modern museum whose architecture, almost devoid of color and ornamentation, serves as a backdrop for the artwork." Shoes of course, rather than painting and sculpture, are the objects on display in this 2,082-sq.-ft. space and achieving a simple, clean appearance proved to be a rather complicated lighting challenge.

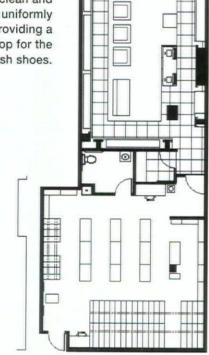
The interior of the store is illuminated in warm tones with incandescent recessed fixtures and quartz halogen highlights. To reinforce the European aesthetic, AR111 lamps were chosen for high-tech-looking multi-head recessed slot fixtures. Primarily for general lighting, these can easily be relamped and reaimed to provide accent lighting, if needed, at future displays in the center of the room.

Low-voltage downlights with frosted glass trims provide general downlight and add sparkle to the ceiling, providing juxtaposition to the very uniformly lit display cavities. "These really are the only decorative elements in the space, which is a nice contrast to the overall simplicity," said Powell.

#### SHOE MAKER

While the ambient light is sufficient and comfortable, upon entering the store, the customer is immediately drawn to the displays located along the outer walls. These display niches, aside from the functional aspect of showing merchandise, add dimension to the otherwise flat space. And lighting had to be integrated into the shelving system not only to highlight the items for sale but to make the slots glow evenly, crisply defining the planes of the outer wall and the wall beyond the cut outs.

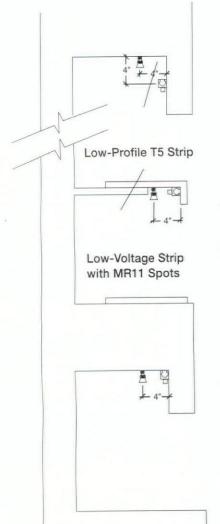
Via Spiga lures shoppers not only with its fine merchandise but with how the upscale store displays its goods. Display niches, which line the clean and simple space, are uniformly illuminated, providing a luminous backdrop for the stylish shoes.



Photos: © Paul Turang Photography



A combination of T5 striplights and low-voltage strips with 20W MR11 lamps is nestled into each of the display shelves and hidden from view. The lighting system not only reveals the streamlined architecture but adds punch to the shoes by highlighting their colors and textures.





"There is a Via Spiga store in the Los

Angeles area that served as a model for this location, but it was just a starting point," said Powell. "They had incorporated some of the initial ideas about the shelf display system into the design but were not entirely satisfied with the results." It was at this point that the clients realized they needed a professional lighting consultant to implement their plans and turn the concept into reality. "We tweaked the design and refined the lighting, taking the concept to the next level—and did it in a very cost-effective way," said Powell.

The existing West-coast store was particularly useful insofar as it provided a life-size mockup, which helped determine precise setbacks for continuous linear T5 fixtures to uniformly light the display cavities top to bottom—providing a cool, modern effect while avoiding any chance of socket shadow. With careful placement, inexpensive striplights achieve the design criteria, eliminating the need for expensive reflector systems. The mockup also confirmed that fluorescent alone would not produce the quality of

that fluorescent alone would not produce the quality of light desired for the shoes. "One of the biggest challenges we faced was highlighting the store's merchandise without sacrificing the amount of ambient lighting needed within the displays themselves," explained Powell. "The sole use of fluorescent achieved an adequate lighting effect for the in-wall shelving system, but rendered the finish detail and polish texture unique to Via Spiga products dull and flat."

Halogen MR lamps proved to add the needed punch, richness of color and sparkle, giving the texture and finish of the leather goods inside the displays a dramatic shine without discomforting glare. A continuous low-voltage strip (run parallel to the T5 strips and concealed from view) with 20W MR11 spots was chosen for ease of installation, aiming and relamping. The miniature cross-section of both fluorescent and halogen sources allowed shelf depths to be minimized and still conceal all lighting equipment.

"The lighting is very uniform, very even," stated Powell. "It almost appears as if the wall behind the displays is backlighted and the wall in the foreground is suspended—as if floating—which is the kind of the effect they were looking for." And that could have been an approach to lighting the space. But a backlighted luminous wall would have been difficult to detail and would have been rather inac-

cessible (as far as fixture maintenance), not to mention Via Spiga would have lost critical retail space. Said Powell, "This really was a perfect and reasonable solution."

To enhance the dimensional, floating effect, wall slots and vertical reveals also utilize concealed T5 strips and help to further define the silhouetted outer wall plane with subtle, reflected light.

Turn to page 46 for information on fixtures and sources specified on this project.

#### DETAILS

PROJECT Via Spiga LOCATION Tyson's Galleria, McLean, VA ARCHITECT Robinson Hill Architecture, Inc.—Michael Robinson, principal-in-charge; Alex Arie, project manager LIGHTING DESIGNER Lighting Design Alliance— Andrew Powell, LC PHOTOGRAPHER Paul Turang Photography LIGHTING MANUFACTURERS Lightolier; Leucos; Nora Lighting; Bartco; Osram Sylvania; GE Lighting

# The lighting design for new facilities at a Houston-area secondary school combines form & function with a touch of class for a well-rounded design

BY CHRISTINA TRAUTHWEIN, EDITOR-IN-CHIEF

REFERENCE

ight has always been a metaphor for education. Just look at the words we use to describe academics: brilliant, enlightened, bright, luminary. Even the generation of an idea is depicted as, what else—a light bulb clicking on in someone's head. And lighting design—really solid, functional design—is so critical to educational facilities, where an abundance of activities occurs. There's reading and researching and socializing to be done, not to mention athletics and rallys and performances. Many times, under one roof. And as schools today head deeper into the technology age, the design must reflect that progression.

"We gave them something more modern to tie in with some of the more up-to-date philosophies and curriculum they offer," said John Bos about the lighting design of two new buildings at Episcopal High School in Bellaire, TX. Both the Crum Field House and the Learning Resource Center (LRC) are new additions to the campus, which consists of a historic convent, chapel and administration building and a more contemporary classroom building complex that was constructed in the 1960s.

The 35,000-sq.-ft. LRC houses the 13,000-sq.-ft. Underwood Library, which holds about 15,000 volumes, and a classroom building. "The library is completely wired for data reception and transmission which will permit students—who, by the way, are required to have laptop computers—to connect to Internet," said Bos, illustrating the private school's commitment to advancement, a goal at the core of the institution's mission to "provide a superior education in preparation for college and a significant life thereafter." A prominent architectural theme in this building, which originates at the lobby and emanates throughout, is a curvilinear ceiling plane that can be viewed not only upon entering the LRC, but

also from the exterior. The carefully selected and located lighting fixtures are paramount to defining the form and to creating a dramatic presence at night. Inside the library, it *is* the lighting that creates spatial rhythm by patterning a circular motif that is reinforced throughout the room. The circulation desk, in this case, becomes more like a true circulation point, distributing light and directing furniture from its radius. From the structural—yet almost decorative—central column to the exterior window walls, linear lighting fixtures, stacks and carrels follow that theme, creating circular motion.

#### HOME COURT ADVANTAGE

The "Home of the Knights" is a full-sized competition gymnasium in the school's 36,000-sq.-ft. field house that includes bleacher seating for 1,500 spectators and basketball and volleyball courts, among other spaces. "The traditional solution for lighting a gym is to employ a series of high-bay fixtures and to downlight," said Bos. "One of the biggest challenges with designing that type of scheme is the issue of visual interference. Quite simply, a white volleyball thrown high into the air can easily be obscured by the light." The lighting designer opted instead for a series of fixtures that would provide both uplighting and downlighting. Noted Bos, "Not only did this solution negate that concern, it resulted in consuming about 20 percent less energy and providing significantly more light." Sounds like a winning formula for this Texas high school.

Turn to page 49 for information on fixtures and sources specified on this project.



Opposite: The stunning entrance to Episcopal High School's Learning Resource Center is marked by a dramatic rolled ceiling, which is immediately noticeable even before one enters the space. "We didn't want to pepper the tremendous ceiling with a bunch of downlights," said lighting designer John Bos. "So as not to disturb the curved plane, we chose to uplight the ceiling with metal halide fixtures and then suspend a grid of tracklights to light the floor and illuminate periodic art exhibits that are on display in this lobby space." The glass walls remain virtually transparent at all hours so that the ceiling plane visually continues beyond them and appears to seamlessly integrate with the exterior environment.

"We designed a lot of uplighting throughout the building, even into the corridors and into the classrooms," noted Bos. (Top right) Here, the curved ceiling is still the key architectural element and the space is indirectly lighted from the window wall to the ledge where the addition of a wall slot illuminates the entry to the classroom and chalkboards, achieving an overall level of 60 fc. The circular column that demarcates the circulation area of the library (above) is illuminated to bathe its surface in a warm glow, create a patterned play of "light stripes" on the ceiling and project radial shadows on the floor. "Everything in this library radiates off this column—all of the downlight patterns and suspended lighting and recessed fluorescent linear fixtures seem to disperse from the column and into the stacks," said Bos. At the exterior wall, a slot system washes the wall so as to diminish the light contrast on the surface.

The gym (above right) is evenly illuminated and "brighter overall," according to Bos, with the installation of an up-/downlighting system that consists of a dual covelight on the bottom cord of the trusses and a strip of downlight fixtures parallel to that. "There are actually three light fixtures in cross section," said Bos, "but the overall appearance is sleek and streamlined." This system, unlike typical systems used in gymnasiums, distributes light evenly to the walls and floor so there are no hot spots.

#### DETAILS

PROJECT Episcopal High School LOCATION Bellaire, TX ARCHITECT Ford Powell & Carson Architects and Planners, Inc. LIGHTING DESIGNER Bos Lighting Design—John F. Bos, IALD and Lance Gandy, IALD PHOTOGRAPHER Rick Gardner Photography LIGHTING MANUFACTURERS Peerless Lighting; Elliptipar; Kim Lighting; Venture; Day-Brite; Indy Lighting; Lightolier



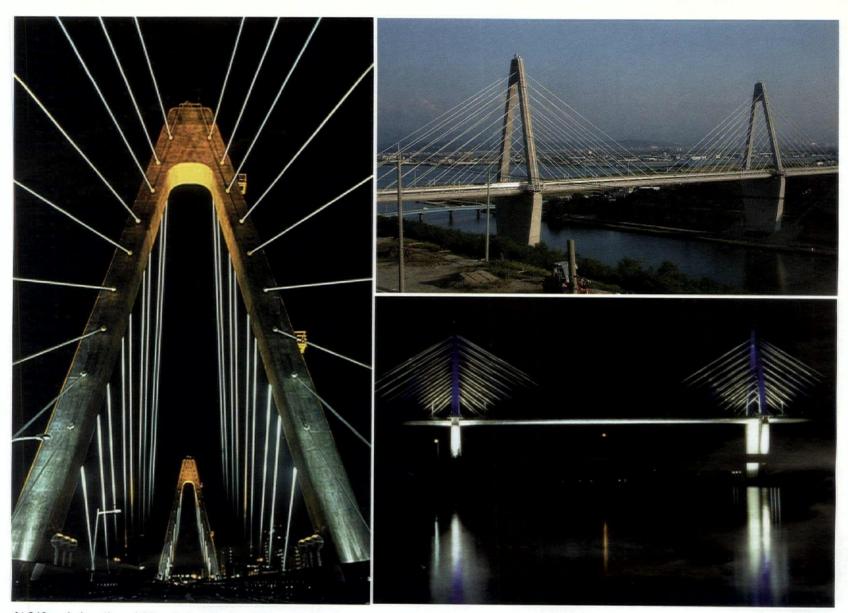
# A Span for All Seasons

## With perfect timing and vibrant color, the lighting of this bridge revels in the seasonal wonders of nature

BY ALICE LIAO, SENIOR EDITOR

hey say that one is acutely aware of the changing seasons in Kanazawa, Japan. In fact, local residents acknowledge not four but *Nijushi Sekki* or 24 seasons a year, often celebrating with rituals of color, custom, art and cuisine. The phrase refers to the 24 divisions of the sun's longitude, each of which is named to describe the seasonal phenomena that occur in the natural world throughout the year. Consequently, it is only fitting that the lighting of the Uchinada Ohashi Bridge, which spans the Kahokugata drainage canal nearby, reflects this deep reverence for and sensitivity to the mutability of nature. Illuminated by Tokyo-based lighting design firm Lighting Planners Associates Inc., the bridge cycles through a program that expresses the essence of each season, acknowledges special holidays and events and cuts a striking figure against the inky backdrop of night.

Touted as the largest diagonal suspension bridge in the Hokoriku region, Uchinada Ohashi boasts twin 80-m.-high towers connected by girders totalling 340 m. in length. It was completed in September of last year and serves as a conduit for pedestrians and vehicles between Kahokugun Uchinada-cho Miyasaka and Daigaku itchome, two boroughs in the Ishikawa prefecture. In devising a lighting plan that would draw attention to the bridge's skeletal beauty, heighten its architectural grandeur and transform it into a nighttime tourist attraction. Kaoru Mende, principal of Lighting Planners Associates Inc., considered views of the bridge from close, medium and remote distances, while contending with issues of spill light and glare. "With a hospital and home for the elderly located near the bridge, we were careful to select fixtures that minimized stray light into the neighboring areas." said Mende. "We were equally conscious of and wanted to avoid creating glare for motorists on the bridge." Further compounding the challenge were the bridge's dramatic diagonal suspension, environmental concerns such as snow and sand, and the migratory habits of local wildlife. "Swans fly to the canal under the bridge every winter and the vicinity is home to many animals," said Mende. "Therefore, we were limited in terms of the period of time the bridge could be illuminated each night, which ended up being from sunset to 10:00 pm."



At 340 m. in length and 80 m. in height, the Uchinada Ohashi Bridge is the largest diagonal suspension bridge in the Hokoriku region. Inspired by traditional customs and culture, which celebrate seasonal change with a variety of festivals, foods and art, Kaoru Mende and his team crafted a lighting program that expresses this sensitivity to nature's mutability with a battery of colors and patterns. In addition to the four seasons, Christmas and the blooming of cherry blossoms are acknowledged with special effects.

To respond to these challenges, as well as those related to any government project, Mende and his team conducted numerous tests, built several models and gave a series of presentations to arrive at an appropriate solution that would also pass muster with the Ishikawa prefecture. "We ran a number of CG simulations to grasp the surrounding situation, pinpoint an adequate luminance level and explore various methods of illumination," explained Mende. "The simulations alone, however, were not sufficient in helping us to resolve problems of glare, color and timing." Extensive on-site experimentation proved critical in establishing the operational timetable and more importantly, in determining the color of the light, because, as Mende noted, "the impression of a colored light can differ vastly when illuminating such an expansive area." Mende's solution received approval only after a committee organized by a professor from the University of Kanazawa and composed of representatives from the Ishikawa prefecture, Uchinada township and residents from the neighborhood consulted on and reviewed the final color selection and program.

#### THE NATURAL LOOK

The resulting lighting concept evokes the region's traditions and deep appreciation for seasonal change with a variety of palettes drawn from the natural world. At the heart of the complex program of lighting effects, a "regular" schedule blends white light and colored lights in hues inspired by the four seasons. For spring, the bridge takes on the yellow-green of new leaves. In summer, it is suffused with the cooling ultramarine of the Japan Sea. Autumn washes the bridge in a gold that is expressive of falling leaves and a bountiful harvest and in winter, the bridge stands ablaze with the colors of fire, imparting visual warmth to an otherwise cold and snowy landscape. The seasonal program is interjected with short cycles of 10 colors at 1.5 seconds each to mark the passing of time. These mini-programs occur daily at one minute before the hour.

Deviations in the "regular" programming celebrate holidays and special events such as the blooming of cherry blossoms, which is well feted in the Hokuriku area. From April 1 to 25, blossom patterns projected onto the bridge and used in tandem with the colors of spring, chart the progress of the flowers by shifting from a light pink at the onset of the season to a deeper shade at full bloom. For Christmas, the lighting design offers two festive patterns: The first illuminates the bridge with a combination of green and red, painting the towers as if trees, while the second recreates them as a kind of ice candle with blue light.

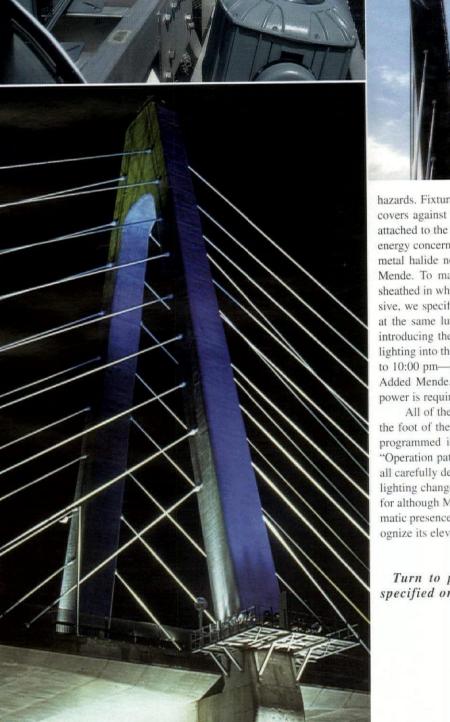
To produce the multitude of effects, the lighting designers conceived of the bridge in three sections-the main towers, the diagonal suspension and the girder and legs of the bridge-while factoring in the reflective quality of water. Said Mende, "In designing the lighting scheme, we imagined the illuminated bridge and its surrounding landscape mirrored in the canal." Because of the technical constraints imposed by the diagonal suspension cables, which give the bridge its distinct architectural flavor but are tricky to illuminate, the lighting strategy relies on groups of floodlights to articulate each of the three sections. For the main towers, narrow-beam floodlights equipped with 575W metal halide lamps and color changers are mounted on poles situated roadside and tilted upward to bathe the top portion of the arches in a gradated wash of color. The sides of the towers are illuminated by additional color-changing washlights located in four balconies that hug the base of the arches. Delineating the diagonal suspension, a second series of narrow-beam floodlights is also contained in the balconies and lamped with 700W metal halide sources. The fixtures are aimed to cross-light the suspension cables, which fade in light intensity as they extend outward from the towers. The result lends the bridge the appearance of two upended fans glowing against the night sky. The "fans" are underscored with a streak of light formed by the girder whose underside is illuminated from below by a third group of floodlights. Supported on braces attached to the piers, the fixtures are lamped with 1kW metal halide sources and aimed at acute angles to splash light onto the bridge's girder and legs. Dichroic glass filters were selected for all of the color changers to ensure durability.

#### UNDER COVER

In addition to establishing precise aiming angles, the lighting design team employed a variety of accessories to address problems of glare and environmental



Left & below: The lighting concept separates the bridge into three sections with fixtures located on balconies, by the roadway and at the piers. Floodlights equipped with color changers paint the towers in seasonal hues while white light articulates the suspension cables for added drama. Fixtures mounted on poles and placed roadside are encased in mesh to protect against the elements.



hazards. Fixtures positioned on poles by the roadway are protected with mesh covers against sand infiltration, and at the balconies, hoods and louvers were attached to the floodlights to prevent glare and ensure motor safety. To address energy concerns, metal halide was used exclusively in the design. "We selected

covers against sand minimation, and at the baconics, noods and fourers were attached to the floodlights to prevent glare and ensure motor safety. To address energy concerns, metal halide was used exclusively in the design. "We selected metal halide not only for its high CRI, but also for its long lamp life," said Mende. To maximize brightness at the diagonal suspension, the cables are sheathed in white covers. Mende noted, "Although black covers are less expensive, we specified white, because the higher reflectance would save us energy at the same luminance level." Energy consumption was further tempered by introducing the partial use of wind power and dividing daily operation of the lighting into three phases—sunset to 7:00 pm, 7:00 pm to 9:00 pm and 9:00 pm to 10:00 pm—in which electric light is gradually increased as daylight wanes. Added Mende, "The issue of energy was important, as considerable electric power is required to illuminate the bridge."

All of the lighting is controlled from an electronic control room set up at the foot of the bridge. The variety of scenes and the intricacies of timing are programmed into a computer to operate automatically throughout the year. "Operation patterns for weekday, weekend, holiday and time scheduling were all carefully detailed into the final programming, which was difficult, since the lighting changes every hour," said Mende. However, the effort seems worth it, for although Mende's design has graced the Uchinada Ohashi Bridge with dramatic presence and an unmistakable monumentality, plans are underway to recognize its elevated status by designating it an official landmark.

Turn to page 50 for information on fixtures and sources specified on this project.

#### DETAILS

PROJECT Uchinada Ohashi Bridge LOCATION Uchinada-cho, Ishikawa, Japan LIGHTING DESIGNER Lighting Planners Associates Inc.—Kaoru Mende, Rumi Izumi LIGHTING MANUFACTURERS Iwasaki Electric; Ushio U-Tech Inc./High End Systems

Alleviating the summer heat, the bridge is awash in the cooling blue light of the Japan Sea.

# Sign Language

Hip interiors and a dramatic lighting scheme help an e-commerce company find its way

BY ALICE LIAO, SENIOR EDITOR

ith travel such an integral part of conducting business today, it seems only logical and even compassionate—to want to provide corporate envoys who regularly cross continents, oceans and time zones with as much orientation help as possible. This compassion and the issue of corporate identity formed the key inspirations behind the design for Intershop's North American headquarters in San Francisco. Executed by Mark Harbick, principal of the Huntsman Architectural Group, these bright and cheery digs serve as a welcome and somewhat familiar sight for the many highly mobile Intershop employees who frequently shuffle between the company's offices in Germany, San Francisco and New York. Harbick's lighting solution, which fulfills functional requirements typical of any office

environment while enhancing the architecture, aids this endeavor by infusing the headquarters with an atmosphere of comfort and ease and by creating a system of way-



finding understandable to the company's multinational staff.

The North American headquarters served as the prototype for other Intershop offices. Certain spaces, such as the kitchen, are similarly designed so as to be easily identifiable to traveling Intershop employees. Lightboxes strategically located at entrances to different spaces announce the room's function. Photos: © David Wakely Photography



European headquarters in Jena, which at the time was also undergoing a major overhaul. Said Harbick, "They were expanding and wanted to develop a universal language for the offices based on their culture and identity that they could then roll out to other offices around the country and the world." Although the much publicized death of the dot.com industry eventually stemmed Intershop's growth, Harbick did go on to model a Long Island, NY branch after the office in San Francisco and exported design motifs, elements of the "universal language" to Jena for implementation in the European headquarters. As to how closely the two base offices resemble each other, Harbick is unclear, as he joked, "Unfortunately, I never did get that trip to Germany."

As with most dot.coms, Intershop's culture is dynamic, energetic and often frenetic, but as Harbick is quick to add, "theirs is more of a planned chaos." With different employees teaming up on different projects that often last for a week or two, Harbick's design solution offers office space and furniture situations that are flexible and fluid to accommodate the frequent reconfigurations of people and desks. "They truly are very interactive," said Harbick. "A lot of dot.coms and new technology companies say that they're interactive, but when you put them in interactive offices, they find them to be too noisy." This flexibility also extends to the overall design of the headquarters and layout of spaces, which enable an expanding company to evolve, organize and reorganize, and to the lighting, which is simple and effective while adding verve and punch. "Because they were growing so much, they were still trying to decide how their departments would run," said Harbick. "As we worked on the project, some of the departments were merging or dissolving, so we tried to make things as fluid as possible to allow them to adjust on a day-to-day basis.'

Factored into the interior design and lighting scheme is the high mobility of Intershop personnel who circulate among the different branch offices to assist on projects. To ease the orientation process, spaces are differentiated with specific design elements and signed with lightboxes containing images that refer to the space's function. For example, the kitchen is indicated with a coffee cup and the office



Above: A ceiling slot is equipped with lowvoltage trackheads to illuminate an upstairs lounge area. In the background, tracklights on a curved monorail intensify the vivid red of a two-story wall and lend the reception area a feeling of brightness Right: In the office area where employees work primarily on computers, indirect pendants lamped with T5 fluorescent sources supply glare-free VDT illumination.

"As a company, Intershop was frustrated by their history of office environments," said Harbick, who worked with the company in not only shaping an office environment appropriate to its needs but also in nailing down and translating into physical terms the essence of the Intershop identity. "Because they had always occupied sublet space that was designed for different types of companies, they were always trying to fit into someone else's environment and really didn't have an idea of what their own culture could be." To assist in the effort, Harbick presented the executives at Intershop with a challenge: "Let's reinvent your company and make you perform the way your company should be performing." "This wasn't necessarily an architecture project, although architecture was part of it." said Harbick. "This was really one of corporate branding or corporate re-imaging-trying to figure out, for example, what kind of desk do we work at or what kind of chairs do we sit in. With the lighting and design, we had carte blanche to try to mold them, uncover their psychology and figure out who they really were."

Although Intershop, who specializes in software for e-commerce transactions, was founded in Jena, Germany in 1994, the 55,000-sq.ft. North American headquarters is the first location designed to reflect the company brand and consequently, served as a prototype for other offices around the world, including the



Above left: Lighted by 75W PAR36 tracklights, the red wall serves as a vibrant backdrop to a downstairs lounge where pendant-mounted wall washers provide ambient light. Wall-mounted accentlights add spots of drama to the staircase. Above right: Over the main circulation path, circular fixtures in varying diameters are recessed in dropped ceilings to break up the monotony of the corridor. Wall-mounted uplights contribute visual interest by adding pop to tilted ceiling planes.

area, with a hand typing on a keyboard. "We tried to come up with identifying features and signage that would be universal and not necessarily language-based," said Harbick. "The staff is international and not everyone speaks English." Mounted at the entrance to the different spaces and internally lit with 32W T8 fluorescent lamps, the boxes not only help newcomers to navigate the headquarters, but also infuse the interiors with a liveliness and character appropriate to the nature of Intershop's business. "Because they used to call themselves 'the shopping cart of the Internet,' we started looking at imagery from retail stores that was fun," said Harbick. "We found a company in Los Angeles that makes these backlit fluorescent boxes for places like Old Navy, supermarkets and bus stops and decided to transplant them to an office environment." The imagery selected for the boxes was supplied by Intershop's in-house marketing department, which was in the process of redoing the graphics for corporate brochures.

#### CORE BUSINESS

Although new arrivals may find the lightboxes a handy tool, the headquarters is actually laid out along a simple idea: All of the "solid functions" such as reception, kitchen and meeting rooms are arranged around the building's core and encircled by a major circulation corridor, while the open-plan offices are located at the perimeter. Because much of the chaos occurs in the office area, the colors and finishes in this space are subdued and the lighting, as Harbick remarked, is "very general, good VDT lighting." "We decided to use indirect lighting throughout the office because everyone works on computers and we wanted to make sure that we had a glare-free environment," said Harbick. "It's very functional." Sliding market boards, which track the progress of different Intershop branches, line the wall of the circulation corridor in the office area and are lighted with wall washers mounted to the ceiling and lamped with 42W compact fluorescent sources. According to Harbick, illuminating the boards breaks up the monotony of the wall and, as the boards are located near the building core where ceiling heights are lower, contributes visual height. "This building has really large floor plates, but was designed for low ceilings," said Harbick. "In a 35,000-40,000-sq.-ft. open space, an 8-ft. ceiling would feel like 5 ft., so we raised the ceilings in the open office area to get a slab-to-slab space of 12 ft.'

In the core spaces, where the 8-ft.-high ceilings conceal HVAC systems and ductwork, light and color are applied to create the illusion of greater height and to enliven the various functions. Over the main circulation corridor, circular fluorescent troffers punctuate sections of dropped T-bar grid ceilings for a touch of whimsy. Ranging from 2 ft. to 4 ft. in diameter, the troffers are lamped with fluorescent sources and recessed flush with the ceiling plane. "The ceilings where these fixtures are recessed are only the thickness of a tile, so the fixtures protrude about 6 to 8 in. above," said Harbick, "but they're tucked back enough to remain hidden from view."

40

Where the corridor opens onto functional rooms, the ceiling is painted in vibrant hues for easy spotting and tilted upward again to suggest greater visual height. The angled ceiling planes are accented by wall-mounted uplights, but also contain adjustable MR16 downlights, which light the path with pools of light.

Visitors to the headquarters are met in the informal reception area where a lightbox displaying a shot of a steep incline with a cable car immediately places one in San Francisco. Fluorescent strips tucked in a ceiling slot above the reception desk silhouette the greeter for dramatic effect while stem-mounted wall washers graze a sandblasted concrete wall to enhance its natural beauty. Tracklights, lamped with 75W PAR36 sources, are mounted on a curved monorail and add pop to a towering red wall that extends down to an employee lounge. Staff members access the lounge via a set of stairs where wall-mounted halogen accentlights highlight the landing and form a spot of interest. Wall washers lamped with 42W compact fluorescent sources supply ambient light.

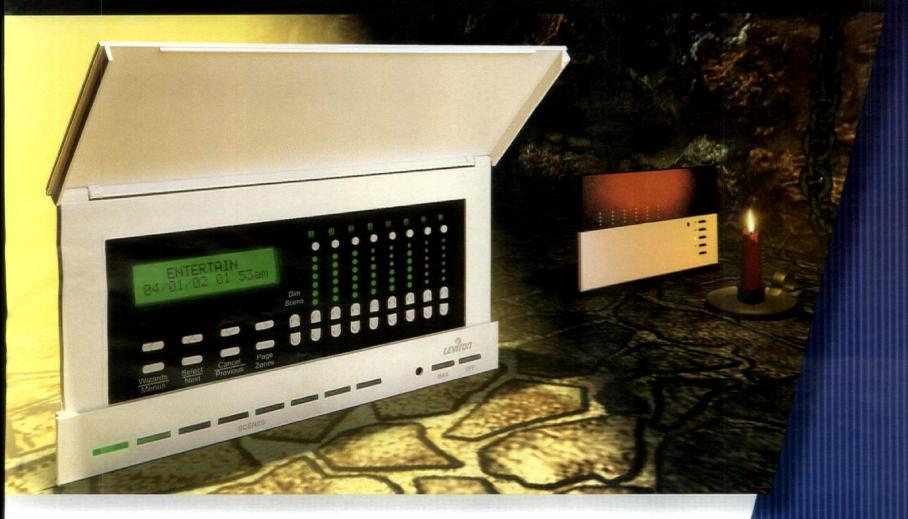
Other highlights of the lighting design include an upstairs lounge where a ceiling cutout concealing low-voltage trackheads provides visual relief from the oppressiveness of the 8-ft. ceiling. In the kitchen, low-voltage tracklighting and striplights combine to provide employees with a comfortable and, as Harbick noted, "almost hospitality-like setting."

To address energy concerns, Harbick kept light levels to a minimum—35-40 fc in the office area and 25 fc in the core spaces—but then used spots of drama to create a greater sense of brightness. "When designing space for offices, one should really spend time with the people to determine what they require in terms of brightness levels, because you can save a lot of energy and money, if in fact, you do have a user who doesn't need 50 or 75 fc," said Harbick. "Just because they're used to it doesn't mean that that's the best thing for them."

Turn to page 51 for information on fixtures and sources specified on this project.

#### DETAILS

PROJECT Intershop North American Headquarters LOCATION San Francisco, CA ARCHITECT/LIGHTING DESIGNER Huntsman Architectural Group—Mark Harbick, AIA, design principal, Erich Melé, job captain CONTRACTOR BCCI PHOTOGRAPHER David Wakely Photography LIGHTING MANUFACTURERS Peerless Lighting; Lithonia Lighting; Winona Lighting: Prudential Lighting; Tech Lighting; RSA; Systemalux; DSA Phototech (light boxes); Osram Sylvania Leviton's new advanced lighting control system puts the competition in the Dark Ages.



Feature	Leviton D3208	Brand "G"
Max. no. of scenes, zone-controller accessible	32	4
Max. no. of linkable zone controllers	31	8
Max no. of zones per system	248	48
Max no. of zones controlled from one zone controller	248	6
Max. no. of control points/system	n 100	24
Scheduled scene changes	64	0
Astronomical clock	yes	none

With Leviton's new D3208 Multizone Dimmer/ Controller, architectural lighting control systems enter the Age of Enlightenment. It's that far ahead of the competition! With the power and capability once found only in "big box" cabinet systems, the D3208 offers such progressive features as join/separate functions, astronomical clock for event scheduling, PC interface and unprecedented networking capability that can link up to 31 units together. And where other units kept you in the dark, the D3208 keeps you informed,

spelling out zone, channel and programming information in plain English on its bright 2-line, 32-character display. What's more, on-screen wizards guide you step-by-step through set-up functions. Whether commercial or the most demanding residential application, the D3208 brings lighting control to a new age of power, convenience and capability. 
To learn more, visit www.Leviton.com/d3208.

LIGHTING CONTROL DIVISION



©2002 Leviton Manufacturing Co., Inc. Circle No. 42 on reader service card or visit lightforum.com



Pole-mounted downlight luminaires (Model 8071) from **Bega/US** illuminate exterior circulation paths at night. Available in two sizes, the fixtures can be grouped in single or twin configurations and feature asymmetrical light distribution, internal twin optical system, stippled tempered glass lens and die-cast aluminum hinged trim. Housing is one-piece die-cast aluminum with two specular anodized aluminum main beam reflectors. Pole extension is extruded aluminum with a die-cast aluminum cap. Standard finish is an eight-step process consisting of two coats of black or white polyurethane. **Circle No. 53** 



#### coming this summer...

## USHIO'S PulseStrike<sup>™</sup> metal halide lamp

- high efficacy
- better color performance & consistency
- faster starting time
- improved hot re-strike capability
- longer life

formed arc tube body

800.838.7446

www.ushio.com

medium base 70W – 100W – 150W

mogul base 250W - 320W - 350W - 400W A semi-custom fiber-optic lighting system from **Fiberstars** illuminates the fountains to animate the sprays of water, add sparkle and create visual interest. Instead of one large, solid-core fiber, strands of fiber were used in each fountain to distribute light evenly through the water, producing a more subtle and natural-looking effect. The system uses Fiberstar's Crescent Series 1103 fixtures and 405 illuminators, which are equipped with 150W metal halide lamps and color wheels and power five groupings of eight fixture clusters. **Circle No. 54** 



Two strips of Sightline track and 36 Minima 38 trackheads from Edison Price Lighting are mounted in the lobby to illuminate a staircase. An adjustable accentlight designed for use with PAR38 spot or flood lamps, Minima 38 features 385degree horizontal rotation, 0-to-180degree vertical adjustment and permanently tensioned swivels to maintain the aiming angle. Fixtures may be used alone or with one of three snap-on optical assemblies: lensholder, cross-baffle or wallwasher. All three accept up to two optical accessories and are keyed to retain their orientation during relamping. Additional accessories are available. Circle No. 55



A grid of Edison Price Lighting's Darklite 38/6 downlights punctuates the ceiling in the lobby. Accepting PAR38 spot and flood lamps up to 250W maximum, the fixture is equipped with a 6-in. aperture and features a precise reflector design that minimizes aperture brightness with a shielding angle of 40 degrees and a 88-percent efficiency. Reflectors are offered in clear (natural aluminum), semi-specular etch clear, champagne gold or black Alzak. Other reflector finishes are available on special order. Circle No. 56

(Gannett products continued on page 44)

# The Magic and Impact of Great Lighting.



From retail. . .



to commercial...



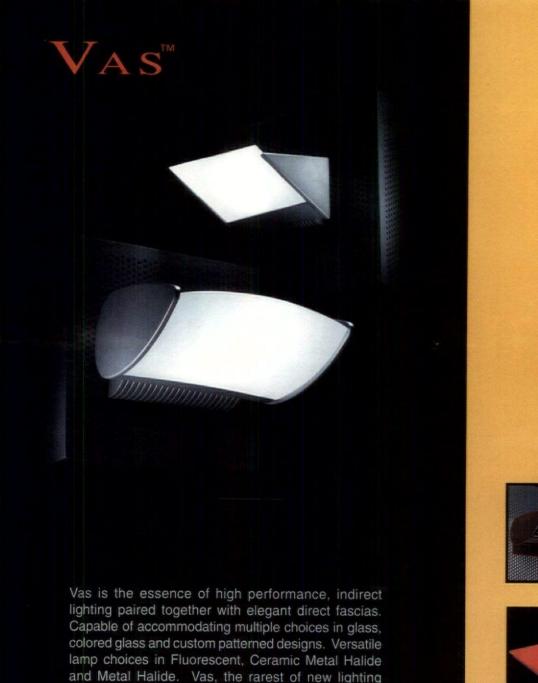
to residential.

For over 98 years, Lightolier has been committed to great lighting, lighting that makes a difference for people, places and business. More than just hardware, Lightolier delivers the "magic and impact" of lighting. We accomplish this with a unique blend of people, expertise and a drive for excellence and innovation in everything we do.

www.lightolier.com



A custom product from **Day-O-Lite** provides indirect illumination in the open-plan office area. The fixture's modular housing measures  $16 \times 5^{1/2} \times 60$  in., is formed of die-formed and welded aluminum and was designed with regressed aluminum intermediate endcaps. The intermediate joints are located to align with all of the ceiling grids. The housings were then crossed-braced at the intermediate joints and at the end of the row with  $1^{1/2}$ -x-60-in.-long channels to produce a rectangular module with a span of 7 ft., 6 in. across and 5 ft. longitudinally. The housing modules were suspended with cantilever stems located at 5 ft., 10 in. across the fixture module at 5 ft. or 7 ft. 6 in. longitudinally, meeting the stringent requirement of placing each stem at the center of the 30-in.-sq. ceiling tile module. Illumination is provided by F54T5/HO lamps. **Circle No. 57** 



Please contact your local Insight representative for literature and details.

solutions from Insight.











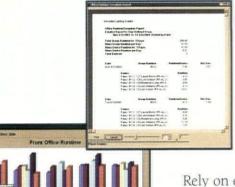
Lightolier's Calculite compact fluorescent open downlights illuminate circulation areas in the offices. Calculite accepts 4-pin 18W tripletube compact fluorescent lamps, is equipped with a 41/2-in. aperture and 16-gauge Alzak aluminum reflector providing 50-degree visual cutoff to lamp and lamp image with medium distribution. The reflector is offered in various low-iridescent finishes and in self-flanged or flangeless models with molded white trim ring that can be field-painted. Die-cast aluminum socket cup dissipates heat, positions lampholder and snaps onto reflector neck to ensure correct optical alignment without tools. Mounting frame is die-cast aluminum for dry or plaster ceilings. Circle No. 58



Total building control was provided by Lutron Electronics' Grafik 6000 system. Grafik 6000 manages lighting for an entire building via a single central control panel in which scenes are preset by a personal computer and can also interface with audiovisual equipment and stage, security and building management systems. Grafik 6000 features a built-in capacity for a maximum of 512 zones or circuits with independent control for up to 60 local and four master areas. Local areas can have up to 16 zones and 16 scenes, plus off. Each master area has four scenes and off and is made up of zones from any or all local areas. Other features include zone adjustable fade times, astronomic timeclock, RS232 interface and status feedback. Preset scenes can be accessed via wireless infrared controls. Circle No. 59

## Complete lighting control is at your fingertips . .





Rely on easy programming, monitoring, and reporting to optimize lighting control goals

Click

Click



Streamline system administration with optional graphics that mirror

Although your lighting system is complex, controlling it doesn't have to be. The Watt Stopper's Complete Control lighting control panels offer comprehensive control and reporting capabilities that couldn't be simpler to use.

You'll have reliability with distributed processing supported by robust network communication. And system administration and programming is a snap with user-friendly WinControl software. Just select the control strategy that's right for you,

from blink warnings and common area control to special cleaning scenarios or load shedding functions with quick, fill-in-the-blank menus. Optional

WinControl Graphics software enables control via a customized, graphical environment that uses actual facility floor plans. It all adds up to Complete Control.

So whether you're responsible for an airport, convention center, corporate or university campus, or sports complex, you'll have the lighting control you need to satisfy your occupants and your energy management goals.

Circle No. 27 on reader service card or visit lightforum.com

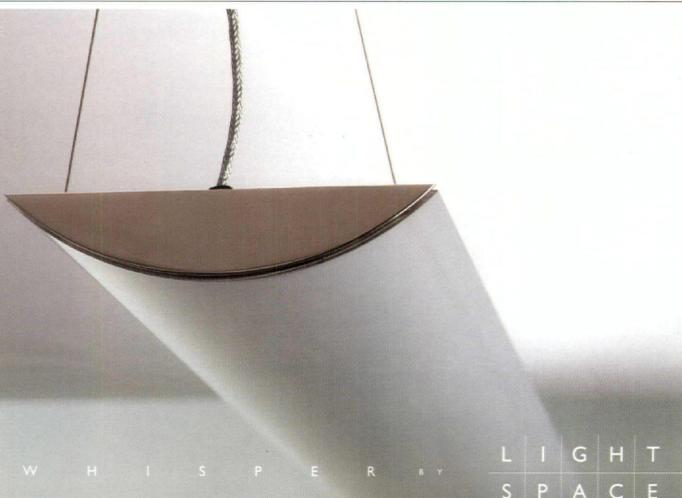
Member of the BACnet Manufacturer's Association 800-879-8585 • www.wattstopper.com

Putting a Stop to Energy Waste®

#### Via Spiga — story on page 30

**Bartco's** BFL281 series, part of broad family of miniature light fixtures, operates standard and high-output T5 lamps in nominal lengths of 1 to 5 ft. Its overall height of 2<sup>1</sup>/<sub>16</sub> in. and thin width of 1 in. make this fixture ideal for use in display, signage, under-shelf and architectural applications. For this project, the fixtures are concealed within the display shelves to light the shoes. The specification-grade BFL281 features heavy-gauge, welded steel that is post powder coated in a high-reflectance white finish. A variety of electronic ballasts, including some dimming models, are available for voltages from 120V to 277V. The fixture series is UL-listed for dry or damp location and can also be fitted with a power cord for portable use. Options include a variety of reflectors, lenses and aircraft suspension systems. **Circle No. 60** 





LIGHTSPACE, BOYD'S NEW ARCHITECTURAL LIGHTING DIVISION. MAKES ITS DEBUT WITH THE WHISPER. ITS SUPERSLIM 1.2" PROFILE AND EXCELLENT TECHNICAL PERFORMANCE MEET THE REQUIREMENTS OF TODAY'S DISTINGUISHED OFFICES. FEATURES INCLUDE A HIGHLY POLISHED SOLID NICKEL ENDCAP AND SLENDER BRAIDED STAINLESS STEEL POWER CORD. AVAILABLE IN UPLIGHT, HALOGEN DOWNLIGHT AND LOUVERED ACCENT VERSIONS. LIGHTSPACE®, A DIVISION OF BOYD LIGHTING. 944 FOLSOM STREET SAN FRANCISCO CALIFORNIA 94107 T 800.276 2693 F 415.778.4319 WWW.LIGHTSPACEBYBOYD.COM





**Osram Sylvania's** AR111 lowvoltage halogen lamps are used with Lightolier ProSpec fixtures to produce exceptional beam performance—tightly controlled beam with sharp cut-off. The aluminum reflectors contain a low-pressure halogen light source made with UV-stop quartz. The result of this capsule construction is that the lamps do not require shielding. The lamps are rated for 3,000 hours and are fully dimmable. They can be used in downlight, track and accent fixtures. **Circle No. 61** 



For general downlighting with some added sparkle, the lighting designer specified Sun from **Leucos**, a semi-recessed fixture designed by Renato Toso and Noti Massari. Sun is comprised of concentric glass rings with the option of either Sun/C (crystal) or Sun/B (frosted white) glass and is created as a completely open downlight. Each low-voltage fixture uses an MR16 lamp and is UL/CSA approved and damp-location listed. **Circle No. 62** 

(Via Spiga products continued on page 48)

# miniFlex™

Isn't it about time you had one fixture that could readily change from an up light, to a down light, or to a 50/50 up/down wall sconce?

A fixture rated for exterior use yet elegantly detailed to compliment an interior.

Incandescent, compact fluorescent and metal halide sources, including electronic metal halide, for perfectly crafted color.

With the flexibility to add dichroic filters...





stainless steel hoods...



rings, struts, conical glass...



for a design to call your own



It's all about choice, and it's all possible with the new miniFlex from AAL. www.aal.net/miniflex

HUBBELL

R

A RCHITECTURAL A REA L IGHTING

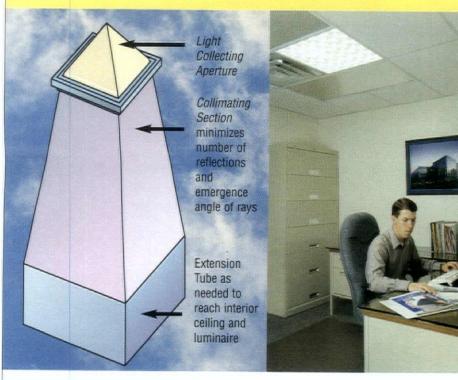
Lighting, Inc.

#### Via Spiga — continued from page 46



Lightolier's 3 Light AR111 ProSpec Linear Downlight is a recessed fixture used, in this project, for general downlighting and to add a European feel to the space. The aperture frame provides clean support for lamp holders and overlapping flange or trimless installation. Made of extruded aluminum, it is rigidly welded together on all corners. An adjustable ring allows 360-degree horizontal and 40-degree (on width) and 45-degree (on diagonal) vertical adjustment. Circle No. 63

#### Here comes the sun.



#### Daylight was the inspiration. Solar Megaphone is the result.

#### INTRODUCING THE NEW COLLIMATING SKYLIGHT FROM NATURALITE".

The Solar Megaphone is a simple solution to a simple problem ... reaping the benefits of natural daylighting effectively and inexpensively.

Specially designed for applications utilizing a drop ceiling, it uses cutting-edge collimating technology to help bring the positive benefits of the sun into your design.



Naturalite. It's who we are, it's what we do.

(800) 527-4018

For specifications and detail information visit:

www.naturalite.com/solarmeg.html

Naturalite is a member of the Vistawall Group. A division of Butler Manufacturing

SKYWALL



The lighting designer chose linear low-voltage lighting-in conjunction with Bartco's fluorescent fixtures-to illuminate the display shelves. Nora Lighting's Decolume incandescent strip lighting system is hidden alongside the compact fluorescents to give the texture and finish of the leather goods inside the display case a dramatic shine without discomforting glare. The Decolume fixtures are completely hidden from view, eliminating obtrusive and distracting profiles associated with even the smallest available track lighting fixtures common to many retail applications. The low-voltage, flexible strip features bulb sockets that can simultaneously accommodate festoon bulbs and either 20W or 35W MR11 halogen lamps. Circle No. 64



Used in the Leucos Sun fixtures, **GE Lighting's** ConstantColor MR16 lamps feature precise beam control and no color shift. The series is available in a range of spotlight and floodlight versions. Average rated lamp life is 3,000 to 6,000 hours, depending on the model. **Circle No. 65** 

#### VISTAWALL

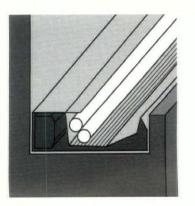
#### MODULINE

#### NATURALITE

Circle No. 37 on reader service card or visit lightforum.com

#### Episcopal High School — story on page 32





Envision Cove fixtures from **Peerless Lighting** are used in the classrooms, turning the ceiling into a glowing surface that illuminates without glare or uncomfortable contrast. The optical system provides soft, even light for visual effectiveness and comfort. Envision is offered in two sizes (7 in. x 4 in. and 9 in. x 3 in.) and three lamping options (T8 and compact fluorescent). **Circle No. 76** 



Lightolier's ProSpec track fixtures suspend from a grid system in the entry to the Learning Resource Center to provide some general downlighting and accent lighting for displays. ProSpec track fixtures feature horizontal aiming from 0-350 degrees and vertical aiming from 0-90 degrees; aiming can be locked. All painted finishes (matte white and black) are powder-coated baked enamel. Accessories, including filters, lenses, screens and louvers are available. The fixture accepts both 50W and 75W PAR30 lamps. Circle No. 79

SEPTEMBER/OCTOBER 2002

Style M103 fixtures with fluted housing from **Elliptipar** are used in the Learning Resource Center lobby to uplight the ceiling and provide general illumination. The fixtures are available with a silver yoke, mounting plate and perforated visor. The fixture features die-cast end plates; machined aluminum knobs with no exposed fasteners; precured silicone gaskets; optimum metal halide performance; and a yoke set screw to securely lock aiming. This surface-mounted asymmetric distribution uplight uses a 400W metal halide lamp. **Circle No. 75** 

Kim Lighting's AFL21 fixtures, part of the AFL20 Series, are used on the exterior of this project to produce a very wide horizontal beam pattern that delivers uniform illumination, even when the units must be located close to the lighted surface. The hous-



ing and door frame are precision die-cast with integral cooling ribs that dissipate heat, allowing the electrical components to operate well below their allowable limits. A variety of optical accessories is available to control glare and increase the visual effectiveness of the lighting scheme. Shielding devices are engineered to prevent shadows and preserve beam efficiency while reducing undesirable transient brightness. **Circle No. 77** 



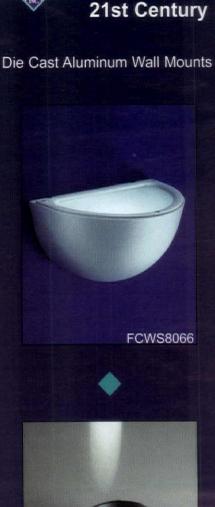
The 616R from **Indy Lighting** is a 6-in.-aperture, triple-tube vertical lamp, compact fluorescent downlight that features a highoutput reflector. The reflector was designed to maximize light output while maintaining excellent bright-

ness control. The highly effective reflector design and electronic ballast ensure consistent performance from either 26W or 32W units. Wallwash, lensed and cross-baffle versions are also available. The 32W fixture is the primary downlight used throughout the project. **Circle No. 78** 



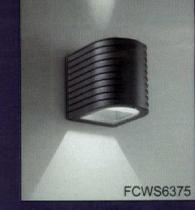
Used with Kim Lighting's AFL21 fixtures, Venture Lighting's 400W Uni-Form pulse-start metal halide lighting system offers increased initial light output and better

maintained lumens than the standard pinched-body lamp. An installation using the 400W pulse-start lamp requires fewer fixtures to achieve design footcandles than one using standard metal halide technology. The complete 400W line of Uni-Form pulse-start lamps is available with a mogul base in clear or coated versions. Both open and enclosed styles are offered with 3700K and 4000K color temperatures and a CRI of 65 or 70. Unlike standard 400W lamps rated for open fixtures, the 400W open-rated lamp contains a protective shroud and can be safely used in a wide range of fixtures without cover glass, thereby lowering fixture costs and improving lumen maintenance. **Circle No. 80** 



Architectural Lighting

for the

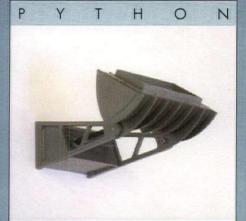




FCWS8050

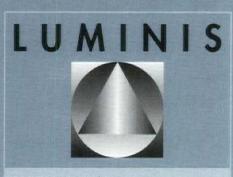
1-888-FCLIGHT www.fclighting.com

# LUMINIS





ENGINEERED WITH STYLE, DESIGNED WITH PASSION



3555 N.W. 53rd Court Fort Lauderdale, Florida 33309 Tel.: 954-717-4155 Fax: 954-717-4157

For a complete product overview, visit us at: www.luminis.com

Circle No. 23 on reader service card or visit lightforum.com  $50\,$ 

### Uchinada Bridge — story on page 34

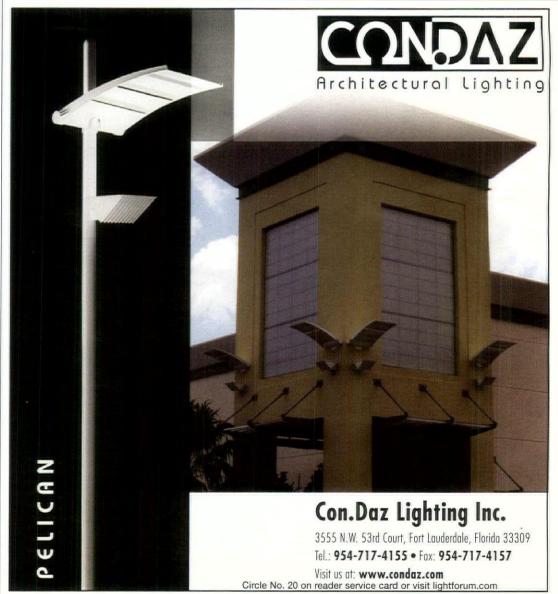


Bathing the bridge in light are EC-1 (Environmental Color) architectural wash lights, which are distributed by **Ushio U-Tech** in Japan and created by **High End Systems** for outdoor environments. Sporting a completely sealed, weatherized design, the fixture uses an MSD 575 discharge light source with a 5900K-6200K color temperature. Rotatable, variable beam shaping provides control over soft-edge shuttering and selected beam angles range from 8 to 22 degrees. An integrated heatsink and reflector combination allows convection cooling for quiet operation. Other features include a dichroic subtractive color mixing

system, a six-position color wheel with replaceable dichroic filters, programmable color spins, sequences, random colors and strobe functions and an LED display accessible through tamper-resistant, weatherized display cover. All functions are controllable via DMX-512 protocol. Accessory PAR-type lenses providing WFL and XWFL PAR beams are available. EC-1 weighs 130 lbs. and measures (with head in upright position) 25<sup>1</sup>/s in. high, 20 in. wide and 13<sup>1</sup>/s in. in depth. **Circle No. 66** 

All of the fixtures are lamped with metal halide sources from **Iwasaki Electric**. Lamps used include EYE Multi-Metal (right), which is Iwasaki's highest quality metal halide lamp as well as EYE Multi-Hi Ace and EYE Multi Super Ace high-performance metal halide lamps, which are equipped with internal ignitors (far right) that allow the lamps to operate on reactor-type ballasts. These lamps are available from 100W to 2000W in Japan, 50W to 2000W in North/South America and 125W to 2000W in Europe. The lamps feature reliable long life, a CRI of 65 to 75 and superior lamp-to-lamp color uniformity. **Circle No. 67** 





ARCHITECTURAL LIGHTING/www.lightforum.com

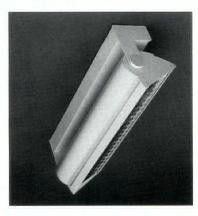
#### Intershop — story on page 38



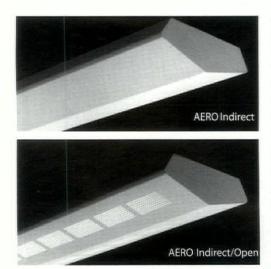
Suspended on stems from a monorail, **Tech Lighting's** Elvis fixtures accent architectural features and add visual punch in the public spaces. Elvis is equipped with an adjustable head measuring 2<sup>1</sup>/<sub>2</sub> in. in diameter, accepts one MR16 lamp up to 50W and can hold up to two lenses or louvers. The head swivels 360 degrees around the stem and pivots 330 degrees to direct the beam. The black-ringed socket attaches to the body with a black spring coil. Adjustment handle is coated. Several stem lengths are available. Available finishes are chrome, gold and satin nickel. Accessories include MR16 round glass shield, backlight shield, MR16 snout, glass lens, eggcrate louver, colored lens, diffuser lens, spread lens and soft focus lens. **Circle No. 68** 



The direct/indirect linear fixtures in the office area are equipped with **Osram Sylvania's** Pentron T5/HO linear fluorescent lamps, which are available in 3000K, 3500K and 4100K color temperatures and 24W, 39W, 54W and 80W versions. Pentron has a CRI rating of 82 and linear lamps are offered in 2-, 3-, 4- and 5-ft. lengths. When coupled with Quicktronic PS ballasts, the Pentron system can deliver from 95 LPW (at 77 degrees Fahrenheit operating temperature) to 104 LPW at the 95 degrees Fahrenheit operating temperature typical of many T5 luminaires. The Pentron family also includes the Pentron Circline, which is available in 9- and 12-in.diameter versions. **Circle No. 69** 



Throughout the public areas, Windirect wallwashers from Winona Lighting are suspended via stems to graze walls and supply ambient light. In the office area, the fixtures are ceiling-mounted to illuminate market boards. Windirect is a small-profile wall washer featuring an anodized, extruded aluminum specular reflector with solid aluminum endcaps and stainless-steel hardware. Three standard mounts are fully adjustable and lockable. Fixtures are designed for remote ballast and integral ballast and use fluorescent lamps. Finish is an electrostatically applied wet paint system utilizing a multi-stage process to provide an acrylic enamel available in various colors. Options include short visor, parabolic blade baffle (internal mount) and emergency battery (remote). Circle No. 70



In the open office area, Peerless Lighting's Peerlite Aero direct/indirect linear pendants provide glare-free illumination. The fixtures use T5/HO fluorescent lamps (included) and are equipped with die-formed, white reflectors, which feature a minimum 85-percent reflectance. Aero measures 6 in. wide and 2 in. deep and is offered in indirect and indirect/open models as well as one- and two-lamp versions. Single sections are available in 4-, 8- and 12-ft. lengths for exact spacing of 4-, 8- and 12 ft. Sections can be joined with internal joiners to form longer fixtures. Housing is one-piece coldrolled steel with flat endplate and on indirect/open models, the shielding features a die-punched perforated hole pattern. Circle No. 71

(Intershop products continued on page 52)





#### LIGHTING THROUGH THE AGES

From classic designs to

contemporary and modern

Luminaires Poles Bollards Accessories



styles, for over 50

years Sentry has

offered designers,

architects and engineers

#### superior quality and service

in a comprehensive line of

luminaires, poles, bollards

and accessories, as well as

custom design services.

For more information, call Sentry Electric Corp. at 516.379.4660, or visit us at www.sentrylighting.com.

#### Sentry Electric Corp.

185 Buffalo Avenue Freeport, New York, 11520 telephone: 516.379.4660 fax: 516.378.0624 www.sentrylighting.com

#### Intershop — continued from page 51



Big Elvis fixtures from **Tech Lighting** are also used in public spaces to highlight architectural details and contribute drama. Big Elvis features an adjustable head measuring 4<sup>1</sup>/<sub>2</sub> in. in diameter and uses one PAR36 AR111 lamp up to 75W. The fixture can hold up to two lenses or louvers. The head can swivel 360 degrees around the stem and pivot 260 degrees to direct the beam. Eggcrate louver and PAR36 snout are included with Big Elvis. A variety of stem lengths is available. Available finishes are chrome, gold and satin nickel. **Circle No. 72** 

Both Elvis and Big Elvis are mounted on **Tech Lighting's** Two-Circuit MonoRail, a low-voltage conductor formed of three individual conductive metal pieces that are fused together with plastic separators. The Two-Circuit MonoRail is horizontally hand-bendable and field-cuttable. Custom factory bends are available as well. The rail is rated for 300W at 12V and offered in 24-, 48- and 96-in. section lengths. Each piece of rail is



shipped with conductive connectors to join rail pieces end to end. Available finishes are chrome, gold or satin nickel. Insulator is available in a variety of colors. **Circle No. 73** 



Prudential Lighting's P-8900 series fixtures are recessed in dropped ceilings located above the circulation corridor. Available in 24-, 36-, 48-, 60- and 72in. diameters, the fixtures fea-

ture a round aperture in a square body troffer. The regressed aluminum splay trim is secured to the body by means of torsion springs that act as hinges and latches. Diffuser is domed white acrylic with optional flat white or flat lens. Construction is die-formed, prime quality steel finished in baked white enamel. Illumination is provided by fluorescent lamps arranged in rows. **Circle No. 74** 

## Architectural Lighting Master Class 2003

### February 20 - 21, 2003

John Jay College Auditorium New York City

#### Produced by: Sonny Sonnenfeld,

# and architecture lighting

In association with Paul Gregory and Jonathan Speirs

co-sponsored by the American Institute of Architects



16 AIA CEU credits

Circle No. 40 on reader service card or visit lightforum.com

## **"Lighting** is the most powerful tool of architects, interior designers and lighting designers.

This event is designed to train architects, interior designers, lighting designers, electrical engineers, owners and anyone else interested in the creative use of light to enhance their projects.

Maintain your competitive edge... Use lighting to enhance designs

Classes will address architectural lighting design philosophies -

experienceinform

inspire

The ALMC is not about lighting sources and fixtures, efficacy and efficiency or lamp and ballast combinations. It's all about creative lighting design.

For more information please contact Christina Mendez at 646-654-4581 or e-mail cmendez@vnubuspubs.com

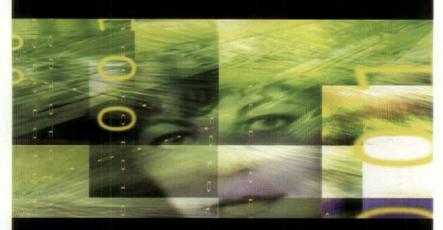
Q	
C	5
Č	
C	5
T	ł

ADVERTISER	PAGE	CIRCLE NO.	
Alanod- GmbH & Co. KG	1	2	Luminis
Architectural Area Lighting	47		Luraline Products Co
Architectural Lighting Master Classses		40	Lutrex
B-K Lighting	15	7	Lutron Electronics
Bartco Lighting	19		Martin Professional
Boyd Lighting	46		Naturalite Skylight Syste
Bruck Lighting	Cov. 2	15	Prisma North America
Columbia Lighting	20	1	Q-Tran
Con.Daz Lighting		20	Se'lux Corp
Electrix, Inc	16	24	Sentry Electric Corp
eLumit	8		Spring City Electrical
Erco Lighting	Cov. 4	44	TIR Systems
F.A.D. Lighting	17		Times Square Lighting .
FC Lighting	49, 51		Translite Sonoma
Forms+Surfaces	10	14	Tridonic
Holophane	Cov. 3	43	Ushio America
Insight Lighting	44		Valmont Industries
Kim Lighting	25	9	Visa Lighting
Leucos USA	55	11	The Watt Stopper
Leviton Mfg	41		
Lighting Services Inc	9	12	
Lightolier			Publisher is

Luminis		23
Luraline Products Co		41
Lutrex		19
Lutron Electronics		
Martin Professional	11	16
Naturalite Skylight Systems		
Prisma North America		
Q-Tran		
Se'lux Corp		
Sentry Electric Corp		
Spring City Electrical		
TIR Systems		
Times Square Lighting		
Translite Sonoma		
Tridonic		25
Ushio America		
Valmont Industries		13
Visa Lighting	7	8
The Watt Stopper		27

is not liable for errors or omissions.

## Part of creating a superior lighting system is understanding the subject.

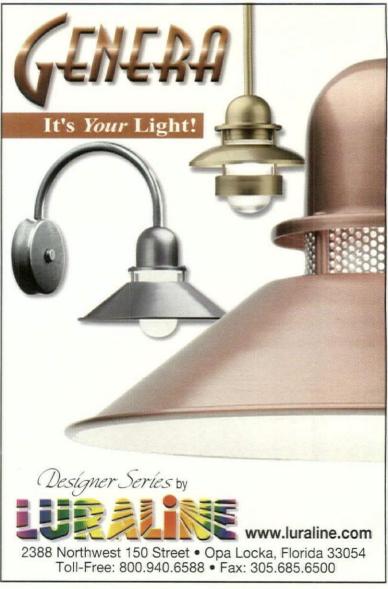


The subject being the worker. We know that for every worker there is a preferred lighting environment. We also know the more comfortable the surroundings for an individual, the more performance increases. With Tridonic's fully-digital ballast technology we've created a product and system that allow maximum flexibility in individual lighting

control. Using a PC, Palm, or standard wall switch, individuals can dim their fluorescent lighting, from 100% to 1%, avoiding screen glare, excess lighting or to prevent unnecessary eyestrain. The result: simply keeping workers' productivity at its best. Whether your lighting needs are for more flexibility, efficient energy usage, or better maintenance management, Tridonic is the solution for

you. For more information, call us at 1-866-TRIDONIC or contact us by email at sales\_usa@tridonic.com

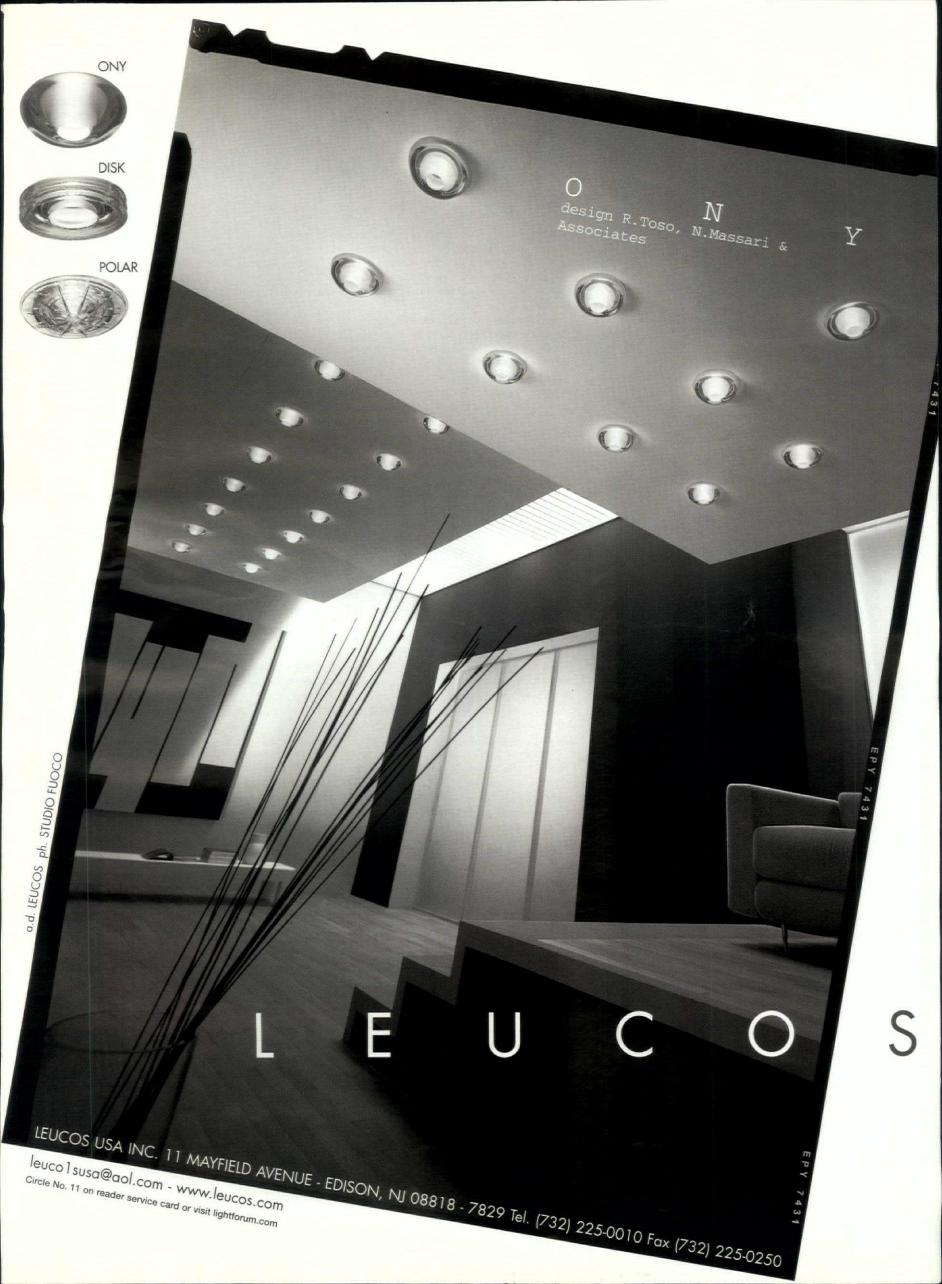
TRIDONIC ATCO

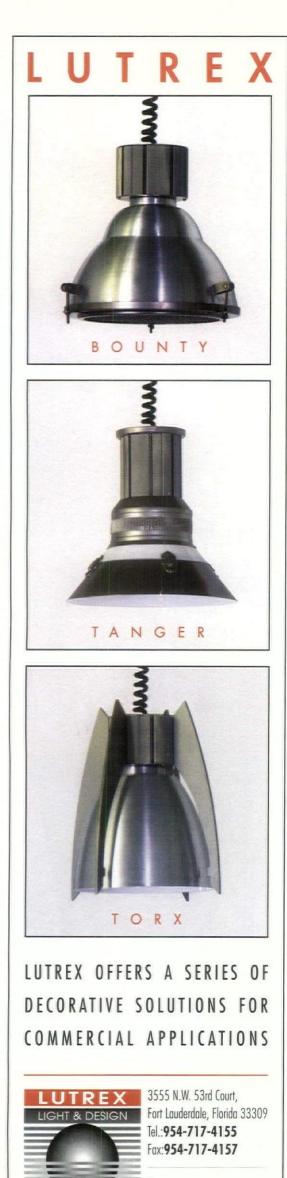


Circle No. 41 on reader service card or visit lightforum.com

ARCHITECTURAL LIGHTING/www.lightforum.com

Circle No. 25 on reader service card or visit lightforum.com





Visit us at: www.lutrex.com

# endpoint

### Criteria Hysteria: A Plea

BY MICHAEL TORTORA, IES

n any lighting design project, the presence of municipal design guidelines is a distinct advantage for lighting designers. Thoughtful consideration of how to effectively illuminate outdoor areas while minimizing light pollution and trespass helps lighting designers understand a township's lighting intentions and provides a framework for the designers' ideas. When these standards are unclear, the lighting ordinance can frustrate the lighting designer. As a profession, lighting designers can help correct this situation by assisting townships in creating succinct lighting ordinances.

On a recent project undertaken by my employer, I was called upon to design the lighting scheme for two mediumsized, low-activity, open parking lots situated on a large corporate campus in a suburb of Philadelphia. I asked my project manager if the township had a lighting ordinance. Ordinances establish lighting design guidelines for a municipality and express the township's concerns for limiting light pollution and trespass. For this project, I received a sixpage document entitled simply, "Lighting Ordinance." I discovered that only one half-page actually dealt with concrete lighting criteria, while the rest of the document contained amendments. Although the document did represent an effort on the township's part to develop local lighting rules, unfortunately, some of these rules were vague. For example, one rule stated that "Poles can be no higher than 14 ft. above finished grade, and fixtures must meet the IES classification for full-cutoff distribution." Some leeway in the standard for an increased pole mounting height would allow for a reduction in the overall fixture inventory, an increase of fixture spacing and a decrease of electrical conduit runs. The greater pole height could have realized the benefits noted above while still holding true to the township's design intent.

I proceeded to the ordinance's footcandle requirements, which called for lighting to "provide a minimum illumination level of 1.0 minimum maintained average footcandles and shall not exceed a maximum of 3.0 minimum maintained footcandles." Although I realized what the Board of Supervisors was trying to say, the language was unclear. Did the rule call for a "minimum" or an "average"? On occasion, township ordinances recommend referring to IES standards if information is missing. This ordinance, however, did not refer to any other source for additional information. As the lighting designer, it was obviously important that I understand the criteria. But the township's requirements were unclear. I imagine that these particular rules, which contained technical design terms along with the liberal use of the word "bulbs" in place of "lamps," were the result of a Board of Supervisors that understood the importance of protecting their local night skies, but lacked the technical information and training to convey their goal. Confusing as these jargon errors are, this township at least considered the concerns and needs of its residents. The township wanted adequate light for their community. They wanted this light to be consistently controlled and shielded and the local illumination to demonstrate a respect for the night sky. This message was clear in the ordinance. Unfortunately, the lighting rules written to realize this goal were not clear.

Like many lighting designers, I insist on having complete design parameters to produce my best work. Design parameters allow me to focus on the client's and township's lighting concerns. Without clear lighting requirements, the design proceeds without a specific direction, like a stage lighting designer trying to work with a script full of missing pages. Lighting professionals, whether as individuals or as part of a lighting design or architecture/engineering design firm, need to work hand-in-hand with townships to improve upon existing ordinances and to create clear, effective new ordinances that will best realize their design objectives, as well as aid the lighting professionals who use these ordinances.

Whether the ordinances are adapted from the existing IES Recommended Practice reference guides or from recommended standards from the *IES Lighting Handbook*, accepted industry standards should be referred to. By insisting on some baseline uniformity to local lighting criteria, lighting designers can also help townships avoid situations where one community supports the "Dark Skies' pledge," while their neighboring township allows for designs without regard to shielding and/or advanced optical control. The development of such ordinances need not restrain the lighting designer's artistic expression. As a lighting professional with more than 10 years of design experience in a variety of venues and project types, I understand the gratification in creating and observing a successful application of light and how an artistic lighting design benefits everyone. Thoughtful, well-considered lighting rules will help lighting designers produce their best work, not constrain them.

The lighting department of the firm where I practice offers a helping hand to township board members in shaping lighting ordinances. When working for our clients in a municipality that has a lighting ordinance or expresses a concern for safe, clean light, we can help the township create or clarify their lighting rules. In time, these efforts will influence standards from one community to the next. This will help alleviate confusion and frustration during the design phase for all parties involved and ultimately result in stronger designs. Granted, not every township will comply with a universal set of rules, nor should they. Communities have a variety of reasons for customizing and adapting lighting ordinances, such as a nearby observatory, wildlife migration concerns, residential lighting professional's specific lighting limitations and/or desires.

A foundation for complete lighting criteria to which the majority of communities can conform would set precedents for lighting design that supports the community's needs. Lighting professionals must communicate with township officials and help them write their lighting ordinances accordingly. The more fully townships understand lighting, the more widely accepted these criteria will be. These are ambitious goals, but as a profession we must address this issue or else continue to deal with the frustration, confusion and costs caused by unclear lighting rules. The lighting discipline needs to work with every township we practice in and help these communities establish a common language to communicate their design guidelines to our profession. After all, we are lighting professionals. We have a duty to educate the people we work with and work for, especially Boards of Supervisors struggling to state their design intentions.

In closing, I ask that the profession commit itself to helping townships create clear lighting ordinances. We can assist these townships and put an end to the criteria hysteria. After all, we live within these communities and should help our townships understand the nuances and requirements of good lighting design. These efforts will help us, our neighbors and our clients to enjoy safe, creative lighting designs that leave our night skies clear.

Michael A. Tortora, IES is senior project lighting designer for Kling, an integrated architecture, engineering and interior design firm in Philadelphia.